



Town of Tecumseh Asset Management Plan Version 2.0 2018





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1. Executive Summary

This document represents the first update to the Town's original Asset Management Plan (AMP v1) which was adopted by Council on December 10, 2013 (RCM-457/13). The AMP update (AMP v2) was again produced in-house, with contribution from the Public Works and Environmental Services, Finance, Information & Communication Services and Parks and Recreation departments.

The Town's AMP v2 was adopted by Council on May 8, 2018 (RCM-157/18) and replaces AMP v1 in the annual budget process and preparation of the Five Year Capital Works plans.

The AMP is an active document that will be updated on a regular basis and will eventually be expanded to include all municipal capital assets.

The AMP includes:

- 1. Executive Summary High level overview of the plan.
- 2. Introduction Provides the framework for what the plan is, why it is necessary, how it ties into municipal goals, the scope and purpose and requirements under the new legislation.
- 3. Roadways 4. Bridges 5. Culverts < 3m 6. Storm Sewer 7. Water 8. Sanitary 9. Fleet 10. Facilities These are detailed sections which address State of the Local Infrastructure, Desired Levels of Service and Asset Management Strategy by asset category. Information on what the Town has and what state it's in, the desired level of service and how it will be met are analysed.</p>
- 11. Financing Strategy Provides background on what our current approach includes as well as highlighting projected financial estimates.
- 12. Conclusion Provides summary comments and highlights next steps in enhancing and refining the AMP.

Highlights of the AMP

The Town has \$691 million (2016 replacement cost) in infrastructure assets which translates to \$30,000 per resident or \$78,000 per household.

AMP v2 accounts for the vast majority of the Town's assets and includes the following categories: Water, Wastewater, Stormwater, Roadways, Streetlights, Traffic Signals, Bridges and Culverts, Culverts < 3m, Fleet and Town Buildings.

Funding sources for asset management include the General Tax Levy via the Town's Lifecycle program and New Infrastructure Levy, Water and Wastewater Rates based on the Town's 2015 Water and Wastewater Study and Senior Government Grants. Total annual funding for known revenues is \$11.6 million.



Projected expenditures are based on strategic priorities, planning studies, engineering studies, forecasting models and asset management strategies (maintenance/rehabilitation/replacement programs). Detailed 20-year plans using current replacement costs can be found in the appendices.

Section 11, Financing Strategy, provides estimated reserve balances by taking into account beginning balances, known funding sources, and the 20-year plan expenditures inflated by a factor of 2% annually.

Projected total reserve balances over the course of this 20-year plan, holding annual funding allocations at 2018 levels, are expected to drop significantly. This is due primarily to three large capital projects planned to occur during the 20-year period, including: CIP streetscape works, a new Multi-Use Sportsplex and continued sanitary service expansion in the Oldcastle area.

	2018	2019	2020	2037
Year End Balance	\$23,416,000	\$19,998,000	(\$9,372,000)	(\$59,900,000)

Continued financial commitment to the Lifecycle program, New Infrastructure Levy and implementation of recommendations from the 2015 Water and Wastewater Rate Study **should address the bulk of the projected deficit** as detailed in section 11 Financing Strategy.

There are however some areas of concern. Wastewater and Stormwater reserves are projected to be in significant negative balances throughout the entire term of this plan. Large expenditures are projected within these categories due to the following major projects:

- Oldcastle Hamlet North Talbot Sanitary Sewer Trunk connections three phases remaining
- Oldcastle Hamlet 8th Concession Rd. Sanitary Service Area eighteen phases remaining
- St. Clair Beach aging infrastructure to be replaced and service levels to be increased
- Manning Road drain enclosure
- Stormwater Master Plan to be completed in 2018 and expected to recommend significant capital improvements

These projects, among others, are necessary in order to achieve strategic priorities established by the Town for 2017-2018.

A component of the financing strategy is Senior Government Grants. The Town will continue to urge senior levels of government to adopt a multi-year stable grant determination system to allow municipalities to be able to plan for government support with some degree of reliability. Long term planning will assist all three levels of government to optimally coordinate infrastructure investments.



The planned course of action for the continuous improvement of the AMP is as follows:

- 2018: Review requirements and conduct research on O. Reg. 588/17
- 2018: Begin work on the Asset Management Policy as required under O. Reg. 588/17
- 2019: Incorporate results from Stormwater Master Plan into AMP v2
- 2019: Finalize the Asset Management Policy by July 1
- 2020: Work on update to the AMP to meet Phase 1 requirements of O. Reg. 588/17
- 2021: Complete update to AMP by July 1



2. Introduction

Community Profile

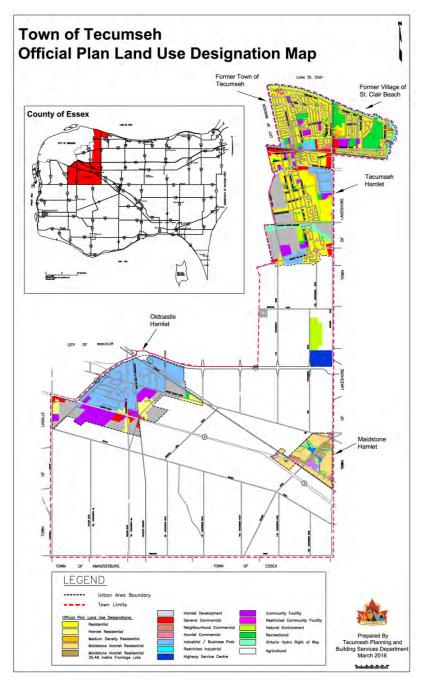
The Town of Tecumseh, located in the northwest corner of Essex County on the south shoreline of Lake St. Clair, has a combination of both urban and rural characteristics. The Town continues to enjoy a small town ambiance, notwithstanding its location adjacent to the City of Windsor and the rapidly urbanizing communities of the Towns of LaSalle and Lakeshore. The 2016 Census Canada population for the Town of Tecumseh was 23,229.

While a majority of its 94.7 square kilometers of land area in the Town continues to be used for agricultural production, three distinct and separate settlement areas contain the community features typical of an urban area, including residential, recreational, institutional, commercial and industrial development.

The former Town of Tecumseh, along with the former Village of St. Clair Beach and the Tecumseh Hamlet (which is situated within the former Township of Sandwich South) form the main urban centre of the Town. This urban area is located at the northerly end of the Town and is situated adjacent to and east of the City of Windsor.

Maidstone Hamlet and Oldcastle Hamlet

are the only other settlement areas within the Town. Maidstone Hamlet formed as a rural service area along old Highway No. 3 and has a modest population of approximately 350. The Oldcastle Hamlet consists primarily of the Oldcastle Business Park – a major regional employment area – but also contains a small residential population. It is positioned at the convergence of significant provincial and regional transportation routes including King's Highways 401 and 3 and County Roads 9, 11 and 46.





Background

The Town of Tecumseh's Asset Management Plan (AMP) is a long-range, holistic planning tool for the care of existing and new infrastructure assets. The AMP will guide investment decisions to maximize benefits, manage risk and provide satisfactory levels of service to the public in a financially sustainable manner.

This revision marks the first update to the initial AMP, which was adopted by Council in December 2013.

AMP development is a complex exercise utilizing multiple disciplines which includes Engineering, Finance, Information & Communication Services, Planning and Facilities Management. It takes into consideration:

- Strategic priorities
- Expected levels of service
- Risk
- Maintenance strategies
- Asset integration
- Financing strategies

<u>Importance of Asset Management</u>

The Town of Tecumseh manages infrastructure, fleet and facilities tangible capital assets (TCAs) with a total replacement cost of \$691 million. This represents approximately \$30,000 total TCAs per resident, or \$78,000 per household. These assets support the delivery of services that have a direct impact on resident quality of life.

Services the Town provides include, but are not limited to:

- Municipal Buildings
- Police
- Information & Communication Systems
- Crossing Guards
- Animal Control
- Culture
- Fire
- Emergency Measures
- Transportation Services

- Garbage Collection & Disposal
- Storm Sewers
- Parks
- Arena
- Outdoor Pool
- Recreation Programs
- Transit
- Water
- Wastewater

Municipal taxes are the main source of funding for the maintenance and replacement of these assets, excluding water and wastewater, which are funded by user rates. It is important to ensure that the Town's assets, which in turn support municipal services, are managed in a way that strikes a balance between affordability, service level, and risk.



As part of the 2005 budget process, Council approved an increase to the tax levy for a Lifecycle Program. The intent was to provide the Town the resources for infrastructure replacement. The program was phased-in over a ten-year period in order to meet the target requirement of \$6.9 million.

Further, the 2015 budget introduced a special New Infrastructure Levy (NIL) to begin addressing the funding requirements for asset additions. The original target of \$1.3 million was to be phased-in over a five-year period. Subsequently, the 2018 budget proposed an additional \$450,000 to fund the Multi-Use Sportsplex project, with increases staggered over five years.

Asset Management takes capital/lifecycle budgeting one-step further by incorporating actual TCA inventory replacement requirements. Additionally, recommendations from various plans and studies were considered to ensure the plan provides for growth. Ultimately, the goal of the AMP is to ensure that the Town does 'the right thing at the right time' concerning asset investment and planning.

Municipal Goals

The Town's Strategic Priorities form the framework for municipal policies and direction, work plans and resource allocations. The Strategic Priorities for 2017-2018 adopted by Council are as follows:

- 1. Make the Town of Tecumseh an even better place to live, work and invest through a shared vision for our residents and newcomers.
- 2. Ensure that the Town of Tecumseh's current and future growth is built upon the principles of sustainability and strategic decision-making.
- 3. Integrate the principles of health and wellness into all of the Town of Tecumseh's plans and priorities.
- 4. Steward the Town's "continuous improvement" approach to municipal service delivery to residents and businesses.
- 5. Demonstrate the Town's leadership role in the community by promoting good governance and community engagement, by bringing together organizations serving the Town and the region to pursue common goals.

Strategic Priority 2 underscores the importance of long term planning with regards to infrastructure assets. Completion of an AMP is directly in line with this Strategic Priority.

Relationship to Other Municipal Strategic Documents

In addition to the Strategic Priorities, the Asset Management Plan must take into account the various master plans and studies, as shown in the following illustration.



Council Strategic Tecumseh Official **Priorities** Rd Plan Mainstreet Manning Rd Parks & CIP Secondary Plan Recreation Capital Area Functional Master Plan Works Plan Water/ **Design Study** Wastewater Rate Study Traffic Signal Infrastructure Transportation Asset Assessment Master Plan Management Plan Pump & Metering Roads **Station Condition** Fire Needs Assessment Master Bridge & Study Plan **Culvert Needs** Culvert Study Need Tecumseh Hamlet Bridge Study Roadside (<3m)Secondary Development Safety Plan **Charge Study** Review Lifecycle Program

Figure 2-1 - Relationship of the Asset Management Plan to Other Municipal Strategic Documents

Recommendations from these various documents are consolidated and factored into the AMP. Consequently, AMP analyses will be considered as part of the annual budget process.

Senior Government Support

The Province released a long-term infrastructure plan, Building Together, in June 2011. This plan called on all three levels of government to work together to address the municipal infrastructure deficit. In response to the requirements set forth in Ministry of Infrastructure's publication *Building Together – Guide for Municipal Asset Management Plans*, an Asset Management Plan was prepared in-house and presented to Council in December, 2013.

Senior Government financial support is a crucial element of an AMP. Long term planning is essential for the coordination of infrastructure investment among all three levels of government.

To illustrate the significant role senior levels of government play; the Town's 2018 Capital budget projects expenditures of \$17.9 million, with senior levels of government contributing \$4.3 million of the required funding.

In the past decade, the Town has been the recipient of approximately \$23.9 million in provincial grant funding and \$15.7 million in federal grant funding for capital investments.



Scope

The Town's first AMP included projections for the following asset categories: Water, Wastewater, Stormwater, Roads, Bridges and Culverts. Enhancements to Version 2 include the addition of Streetlights, Traffic Signals, Culverts < 3m, Storm Facilities, Water Facilities, Sanitary Sewer Facilities, Fleet and Town Buildings.

Purpose

To provide detailed information to assist Council and Administration with planning and decision-making in order to:

- Guide the management and funding of the Town's infrastructure assets
- Ensure availability of resources to accommodate growth
- Provide acceptable levels of service
- Ensure the safety and well-being of Town of Tecumseh residents and visitors
- Protect the environment

Future of Municipal Asset Management

The Ontario government recently passed O. Reg. 588/17, which is an asset management planning regulation under the Infrastructure for Jobs and Prosperity Act, 2015, S.O. 2015, c.15. Full adoption is required by July 1, 2024. The regulation allows for phasing in of the AMP to be completed by the following dates:

July 1, 2019 – Strategic Asset Management Policy - Requires municipalities to outline commitments to best practices and continuous improvement. The policy must include:

- ✓ Municipal goals, plans and policies the AMP will support
- ✓ Process for how the AMP affects the development of the municipal budget
- ✓ Principles that guide the AMP
- ✓ Process for alignment with land-use planning framework
- ✓ Commitment to consider climate change mitigation and adaptation
- ✓ Approach taken for continuous improvement
- ✓ Identification of executive lead and involvement of Council
- ✓ Commitment to public engagement

Clearly, the expectation is that each municipality must produce a robust and detailed policy that supports their asset management planning process. A review and potential update of the policy is required **every five years**.

July 1, 2021 – Phase I – An AMP for core assets must be completed which includes the following components:



- ✓ Asset inventory by category, which includes a summary of assets, replacement costs, average age, condition information, and a description of the approach used to assess the asset condition
- ✓ Current levels of service measured by standard metrics
- ✓ Lifecycle activities and costs required to maintain levels of service for each category
- ✓ Assumptions regarding future changes in population or economic activity (for municipalities with populations of less than 25,000)

Core assets for Phase I can be defined as: roads, bridges and culverts, water, wastewater and stormwater assets.

July 1, 2023 – Phase II – Building upon the previous phase, the AMP must include all assets.

July 1, 2024 – Phase III – AMP requirements are enhanced to include the following:

- ✓ Proposed levels of service and justification
- ✓ Proposed performance for each asset category over a ten year period
- ✓ Lifecycle management and financing strategy
- ✓ Integration of population and economic activity assumptions with lifecycle management and financing strategy (for municipalities with populations of less than 25,000)
- ✓ Disclosure and explanation of other key assumptions

Post 2024 – Requirements following the adoption of the AMP under Phase III are as follows:

- ✓ The AMP must be reviewed and updated every five years
- ✓ The AMP must be endorsed by the executive lead of the municipality
- ✓ Reviewed by Council on or before July 1 of each year
- ✓ The AMP and Policy must be posted on the website and a hard copy must be provided to individuals upon request.

Next Steps

Research, education and collaboration will be critical going forward given the ever-increasing legislated demands placed upon municipalities with regard to asset management.

The planned course of action going forward is as follows:

- 2018: Review requirements and conduct research on O. Reg. 588/17
- 2018: Begin work on the Asset Management Policy as required under O. Reg. 588/17
- 2019: Incorporate results from Stormwater Master Plan into AMP v2
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3. Roadways

3.1 State of the Local Infrastructure

Inventory:

Roads:

The Town of Tecumseh maintains an extensive network of urban, semi-urban and rural roads of all classes, with the exception of Class 1 roads such as County Road 22.

The Town commissioned a Roads Needs Study in 2014 to assess the existing road system and railway crossings in the Town and to prepare a comprehensive plan for improving and maintaining the road systems.

Prior Roads Needs Studies classified the road inventory into three main categories:

Urban: Roads having curb and gutter and storm sewer drainage
Semi-Urban: Roads without curb and gutter in built-up urban areas
Rural: Roads without curb and gutter outside built-up urban areas

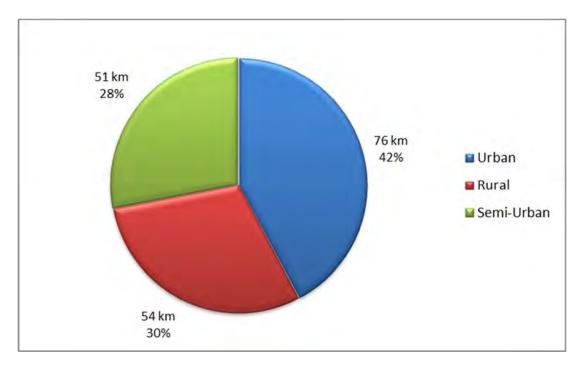


Figure 3-1: Road Inventory by Road Classification

A centerline-kilometer is a measure of one kilometer of road, regardless of the number of lanes. A lane kilometer is a measure of one kilometer of road multiplied by the number of lanes. The



Town maintains approximately 180 centerline-kilometers of roadway (varying from two to four lanes), consisting of varying materials such as asphalt, concrete, and tar and chip.

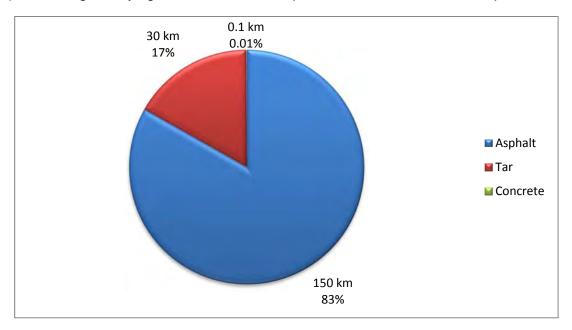


Figure 3-2: Road Inventory by Material (excludes Connecting Links)

Detailed information on the roads asset infrastructure is maintained in the Town's GIS system. Roads are split into segments, usually intersection to intersection. Each segment is assigned a unique GIS ID.

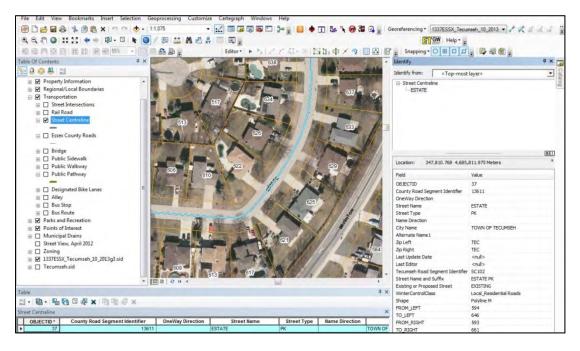


Figure 3-3: GIS screenshot of Road Segment SC102 - Estate Park



Some roads under the Town's jurisdiction serve to connect the County road system, and are referred to as Connecting Links. The Town of Tecumseh and the County of Essex have entered into a Connecting Link Agreement to share the costs of maintaining and reconstructing these roads. The Town is responsible for keeping in a proper state of repair all necessary curbs, gutters, catch basins, combined sewers, storm sewers or drains, sidewalks, traffic signal systems, street lighting and road signing or any other special work. The County maintains the pavement and roadway by performing or arranging for the following work whenever necessary or required: spray patching, cold and hot mix patching, surface sealing, routing and sealing of cracks, centreline pavement marking, and snow removal.

The Connecting Links have been included in the Town's asset inventory; however it should be noted that the Town is responsible for a portion of the Connecting Links in the following percentages:

County	Local Name	Distance (m)	Area (m²)	County's Share	Town's Share
County Road 2	Tecumseh Road	4,325.9	53,629.5	61.4%	38.6%
County Road 19	Manning Road	1,681.8	19,973.1	56.7%	43.3%
County Road 21	Brighton Road	332.0	2,079.9	100.0%	0.0%

Streetlights:

As part of the 2015 Capital Works Program, Council approved the conversion of the Town's existing streetlights to energy efficient LED technology. A comprehensive streetlight inventory was completed as part of this project. Currently, the Town owns a total of 2,276 streetlights with poles of varying material such as wood, concrete, or steel.

Traffic Signals:

The Town owns traffic signal infrastructure located at 11 intersections and one mid-block cross walk. Traffic signal infrastructure includes poles, luminaires, mast arms, traffic signal heads, pedestrian signal heads, pedestrian push buttons, hand holes, loop detectors, cabinets, controllers, wiring and conduit.

Valuation:

An inventory and historical cost valuation of the roads was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on deflated replacement costs at the time. The expected useful life for accounting amortization purposes is 50 years for roads, 40 years for streetlights, and 20 years for traffic signals.



Detailed asset accounting data is maintained in CityWide software. Although CityWide assigns its own unique identifier, each asset can be cross-referenced to a GIS ID. The database is updated annually prior to financial statement preparation.

Roads infrastructure asset accounting valuations as of the 2016 year end are as follows:

	Roads	Streetlights	Traffic Signals	Total
Historical Cost	\$95,335,733	\$4,448,636	\$1,079,902	\$100,864,271
Accumulated Amortization	\$45,172,549	\$2,059,117	\$638,960	\$47,870,626
Net Book Value	\$50,163,184	\$2,389,519	\$440,942	\$52,993,645

Replacement costs were updated for the preparation of this Asset Management Plan. The total replacement cost of the roads network is \$162,025,000.



Total road replacement cost is \$162 million!

Asset Age:

As per the Town's Tangible Capital Asset Accounting Policy, the single asset approach is used for the capitalization of all linear assets. What that means for roads assets is that the surface and base are capitalized as one asset. Therefore roads assets are only updated in the CityWide database when both the surface and base are reconstructed.

As shown in the following graph, accounting records indicate that over 1/3 of the Town's roads are over 41 years old. This means that 1/3 of the road network is close to or has surpassed the expected useful life. While the accounting perspective on road age indicates that over one third of our roads are older, the limitation to this approach is that the installation or reconstruction year is the only variable taken into account. Roads may age differently depending on traffic and maintenance activities. Therefore, road segments that are older "on paper" may actually be in decent shape.



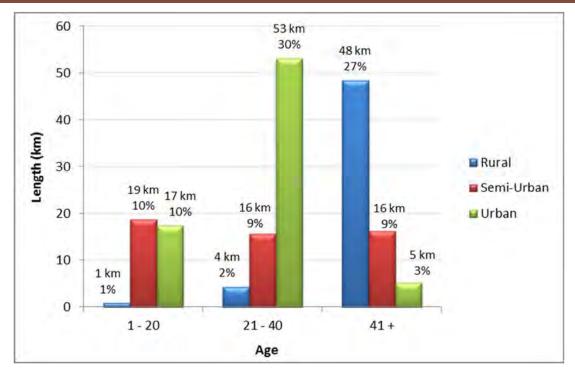


Figure 3-4: Age distribution from an accounting perspective

Streetlights are also recorded as single assets. Notably the age of the streetlights in the accounting database is based on the installation year of the pole, even if the arm and fixture have been replaced. Streetlights are pooled by acquisition year, and asset pools are deemed disposed once fully depreciated. In other words, streetlights are not tracked individually.

The single asset approach is used for the capitalization of traffic signals as well. As noted above, traffic signals are comprised of many components. For the purpose of financial reporting, the total of the component costs is recorded in the database.

This underscores the importance of looking beyond accounting records in the preparation of an asset management plan! That was the rationale behind the establishment of a multi-disciplinary Asset Management committee that includes members of Finance, Public Works and Environmental Services, Information Technology (IT), and Planning Departments.

Asset Condition:

Roads:

In order to effectively manage and maintain the state of Tecumseh's roads, Public Works staff utilize Roads Needs Studies conducted approximately every five years.

The Roads Needs Study provides an evaluation of the Town's roads, identifies needed improvements and recommends timing of works. Each road segment is assigned a Pavement Condition Index (PCI). The PCI is a numerical rating between 0 and 100 which factors in a



measured Ride Condition Index (RCI) and surface defects in the pavement such as surface deformations and cracking.

The Roads Needs Study allows staff to analyze and prioritize road rehabilitation strategies and assist in planning for funding needs. The Study also serves as a measuring tool for the five year period prior with respect to the work that was accomplished.

Figure 3-5: Examples of various 2014 PCI ratings





In the 2014 Roads Needs Study, it was noted that the overall PCI rating was 74.1.

The 2014 Road Needs Study indicated that 17% of the road system was found to be in need of some form of repair within the next 1-5 year timeframe. This statement would equate to a PCI of less than 60. During that study the average PCI in the Town was established at 74.

This improvement can be attributed to the aggressive approach that the Town undertook in the first 3 years after the 2008 Roads Needs Study was completed. The highest priority roads were addressed in the annual asphalt program where approximately \$1,000,000 was spent on repaving roads only. This effort was also bolstered by a funding period by different levels of Government that allowed the Town to move forward on a number of full reconstruction projects that encompassed all aspects of infrastructure, not just the roads. This PCI indicates that on average Tecumseh roads are in a state of repair that can be described "6-10 year" window for required improvement with greater emphasis on the fact that a large number of roads rate within the "beyond 10 year" window for a time of improvement. This statement is of course based on average and all situations are reviewed individually.

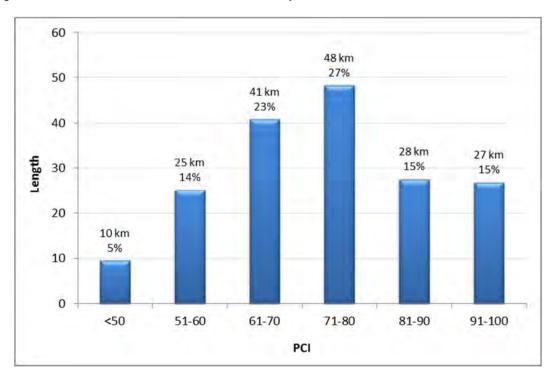


Figure 3-6: 2014 Pavement Condition Index (excludes Connecting Links)

The above graph shows that 55 km's or 30.0% of the Towns roads are rated at PCI 81 or above. It also shows that 89.0 km's or 50% of the Towns roads are rated between PCI of 60 to 80. That means 80% of the Towns roads fall within a 6-10+ year time of improvement window.

In the 2014 Roads Needs Study it was found that 9.6km or 5% of the Town roads were rated at a PCI below 50. That is described as "Now" for time of improvement. The key to managing



the Town of Tecumseh roads is to apply the correct rehabilitation strategy at the correct time. This includes applying preventative maintenance strategies to roads in the early stages of deterioration (e.g. crack sealing), then applying rehabilitation strategies at later dates and ultimately reconstructing the road when the useful life has expired.

Road reconstruction is closely coordinated with other infrastructure replacements such as sewer and water in order to achieve a level of cost saving. Initiatives such as these help to increase the customers' level of service as well as reduce frequency of large scale construction activities. This is a key factor to achieving improvements while achieving overall benefits to the customer through the use of sound planning.

Streetlights:

Many municipalities have recently commenced converting existing streetlight inventory to more energy efficient LED technology. LED streetlights consume less energy than traditional lighting technologies, resulting in lower energy costs. Beyond the energy savings derived from the overall decrease in power consumption, LED streetlights can result in additional operations and maintenance savings.

The Town of Tecumseh undertook a town wide conversion in 2015 with installation completed in 2016.

Future maintenance programs will focus on the streetlight pole infrastructure replacement as the LED fixtures have an expected longer lifespan

Traffic Signals:

A condition assessment was conducted for all traffic signal infrastructure owned and maintained by the Town, including 11 intersections and one mid-block cross walk (see Attachment No.1). Traffic signal infrastructure includes poles, luminaires, mast arms, traffic signal heads, pedestrian signal heads, pedestrian push buttons, hand holes, loop detectors, cabinets, controllers, wiring and conduit.

The traffic signal condition assessment was used as the basis for identifying the recommended priority, scope and cost for related infrastructure improvements, which could be utilized by the Town to develop a long-term, comprehensive maintenance and capital replacement strategy.

Asset Management Policies

The Roads Condition Assessment Policy discusses the use of Roads Needs Studies to determine the condition of the Town's inventory of roads. The Policy further designates an acceptable time frame for updating road condition assessments i.e. how often Roads Needs Studies are to be conducted. Refer to Appendix A for a copy of the Roads Condition Assessment Policy.



The draft Data Verification Policy provides a guideline for the review of data that is collected or provided to the Town. Refer to Appendix B for a copy of the Data Verification Policy.

3.2 Desired Levels of Service

The Town of Tecumseh has aggressively pursued road rehabilitation strategies over the last nine years in order to get to the current state of the road conditions. The Town has an average PCI of 74.1. The town actively spent in excess of \$10,000,000 on roads projects since the Roads Needs Study in 2008 in order to arrive at this PCI.

It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service, which can be qualified as;

- A PCI of 70 on average throughout the Town
- Any road rated as a "Now" time of improvement (PCI of less than 50) in the current Roads Needs Study are slated for some form of work within a two year window
- Any road rated as a "1-5 year" time of improvement (PCI 50-60) is addressed in some manner within the timeframe
- All roads as rated are actively reviewed in conjunction with other infrastructure Projects in order to achieve efficiencies of Town dollars
- The Road Needs Study to be renewed on a five year basis in order to set these levels of service.

Administration recommends that in order to stay at or above the level of service as described above, the Town continue the annual programs as implemented today. The current program consists of spending approximately \$800,000 - \$900,000 dollars per year in various activities ranging from crack sealing to mill and paving of roads. These annual lists are developed through the use of the Roads Needs Study and through staff observations.

The Town proposes to renew the Roads Needs Study in three years (2019) in order to gauge the Town effectiveness in the replacement/rehabilitation strategies to date. This will be reviewed on a five year basis going forward.

3.3 Asset Management Strategy

3.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted.

Maintenance

These maintenance activities will be undertaken by Public Works forces or competent contractors under the guidance of Public Works and are intended to find any deficiencies and or



issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.

MAINTENANCE (cont'd)

Activity	Program Descriptions	Frequency	Measures
Signs	PW inspects the condition of Town signs weekly, annually or as defined in MMS. Yearly, Town staff reviews reflectivity through the use of the manual method. PW has contracted a third party consultant to perform a comprehensive sign inventory and retro reflectivity analysis. Results will be available shortly. The analysis will indicate a percentage of the Town's signs that meet current regulations.	As needed	Internal/contractor checks
Street Marking	Annually, PW tries to contract approximately 10-20 km of centerline painting from the local County Works department. Approximately 5-15 km of edge lines are repainted annually. PW forces strive to repaint approximately 5 intersections yearly as well as to replace traffic arrows and stop bars on an as needed basis. A consistent yearly tender should be considered.	Annual	Number of complaints
Christmas Lights	Annually, PW places approximately 100 large Christmas decorations on Town poles and lights. Prior to placement, all lights are inspected for use. Lights are reviewed for damage when stored at the end of the season.	Annual	Fewer complaints of lights not working
Street Banners	The Town places approximately 90 banners twice yearly for the local BIA. The Town poles and banner mounts are inspected for wear during the placement and changeover of the banners.	Bi-annual	Frequency of bracket failure decreases
Snow and Ice Control	The Town actively plows and maintains 181 km's of roadway during the winter control season. All major roads are plowed within the timeframes set out in MMS. In fact, history has shown that PW actually exceeds MMS on every timeframe given for the classification of roads. Public Works also strives to clear all side streets and cul-de-sacs within the timeframe designated by MMS for that road classification. Almost all work is handled by PW forces using some rented equipment and assistance from other departments. Public Works also plows and maintains 35 km's of sidewalks throughout the winter control season using Town forces and equipment.	As needed	Fewer occurences of frost heave of sidewalks and roads



Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the asset must be replaced. This strategy is used in roadways quite extensively due to the large costs and significant disruptions associated with a total replacement. Work such as this could be employed more than once during an asset's lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Activity	Program Descriptions	Frequency	Measures
Road Maintenance & Surface Repairs	Public Works will either repair small sections or deficiencies using in house forces or contract this work out. These repairs usually are relatively small in size and have been maintained for some time using maintenance techniques such as cold	Annual	PCI increases when assessed
Asphalt Patching-Minor	Annually, PW coordinates with Water Services and watermain breaks and sewer repairs are asphalt patched by own forces or contracted out.	As needed	Fewer complaints
Asphalt Patching-Major	Annual asphalting contract; annual tar & chip contract. PW spends approximately \$700,000 annually on resurfacing asphalt and tar & chip roads.	Annual tender	Fewer road sections progressing to renewal
Roadside Maintenance- Shouldering	Annually PW places new shoulder stone on the roadside shoulder with the aid of grader.	Annual in the spring	Amount of stone dictates stone lost from plowing operations
Crack Sealing	As part of the annual Capital Works Plan, \$50,000 is spent on crack sealing various roads within the municipality in order to proactively extend service life.	Annual tender	Road sections achieve additional useful years
Preventative Maintenance	Crossover culverts are checked prior to tar and chip jobs. Catch basins are checked and repaired prior to any surface asphalt replacement contracts.	As needed	Fewer repairs in roads that are not at a major rehabilitative stage
Curbing/Shoulders	PW repairs or replaces sections of curb that are damaged from winter control, as well as replaces or repairs sections of curb that are removed as part of another repair.	Annual review	Number of complaints
Sidewalks & Walkways	Annually, PW spends approximately \$70,000 repairing or replacing concrete sidewalks that are deemed to be a trip hazard or have reached its service life (i.e. cracks). A company has been contracted to cut trip hazards that are	As needed	Increase in pedestrian activities and fewer trip and fall lawsuits
Traffic Signals	The Town manages the traffic signals through the use of an outside contractor. Town forces attend to these signals on an as needed basis and request the Contractor should the work entail more specific knowledge of the equipment.	As needed	Contractor checks and replaces equipment that fails testing
Signs	PW inspects the condition of Town signs weekly, annually or as defined in MMS. Yearly, Town staff reviews reflectivity through the use of the manual method. PW has contracted a third party consultant to perform a comprehensive sign inventory and retro reflectivity analysis. Results will be available shortly. The analysis will indicate a percentage of the Town's signs that meet current regulations. PW has actively been replacing all warning signs as well as regulatory signs in the last 3 years. Budget has been \$26,000/yr.	Annual reflectivity assessment and post assessment	Signs and posts straightened as needed



Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/rehabilitation will approach the full replacement cost or where it is beneficial to carry out a reconstruction in conjunction with renewal or replacement of other infrastructure. This strategy is usually reserved for assets that have had very little maintenance work performed during its lifespan and for which remedial methods will not be adequate.

REPLACEMENT

Activity	Program Descriptions	Frequency	Measures
Asphalt Patching-Major	Capital works planning incorporates roads that are or have reached useful life for total replacement in conjunction with other infrastructure (watermain, sewer).	Annual	Fewer road sections progressing to replacement
Curbing/Shoulders	PW repairs or replaces sections of curb that are damaged from winter control.	As needed	Number of complaints
Sidewalks & Walkways	Annually, PW performs a comprehensive inspection of every sidewalk in the municipality. PW spends approximately \$70,000 each year to repair or replace concrete sidewalks that are deemed to be a trip hazard or have reached its service life (i.e. cracks). Every 3-5 years, the plan is to have a third party review the conditions to give an assessment of in house inspection and replacement effectiveness.	Annual	Fewer trip and fall lawsuits
Streetlights	During capital works planning, streetlights are reviewed and targeted for replacement to newer energy efficient models.	Annual	Reduced operational costs
Traffic Signals	Capital projects that may incorporate traffic signals are reviewed and infrastructure is assessed for replacement.	Annual	Reduced contractor costs for repair and maintenance
Signs	PW inspects the condition of all Town signs weekly, annually or as defined in MMS. Yearly, the Town reviews reflectivity through the use of the manual method. Signs are replaced as necessary.	Annual-as required	Compliance with MMS Regs
Street Banners	The Town places approximately 90 banners twice yearly for the local BIA. The Town poles and banner mounts are inspected for wear during the placement and changeover of the banners.	As needed	Fewer complaints
Snow and Ice Control	The Town actively plows and maintains 181 km's of roadway during the winter control season. All major roads are plowed within the timeframes set out in MMS. In fact, history has shown that PW actually exceeds MMS on every timeframe given for the classification of roads. Public Works also strives to clear all side streets and cul-de-sacs within the timeframe designated by MMS for that road classification. Equipment is reviewed and recommended for replacement on a Council approved 7-10 year schedule.	As approved by Council	Fewer downtimes results include safer roads and sidewalks



Disposal

This strategy is employed typically as part of larger infrastructure projects. The Town of Tecumseh achieves little to no value for disposal of any materials associated with roadways. Newer technologies are being explored that maximize the use of disposed of materials and reuse them in the reconstruction process.

DISPOSAL

Activity	Program Descriptions	Frequency	Measures
	During repairs that are initiated by PW, our forces actively		
Road Maintenance &	strive to recycle materials that are available in order to take	As performed	Smaller in house
Surface Repairs	advantage of cost savings. Stone road base is recycled and	As perionned	repairs cost less
	reused in other applications or the same application.		
	Sidewalks or pathways removed for disposal are stockpiled at		
	the Town yard and disposed of at a dumpsite for a fee.		
Sidewalks & Walkways	Concrete used to be recycled but recently aggregate	As removed	Nil
	companies have stopped accepting. It is not cost effective for		
	PW to stockpile and crush in house.		
	Public Works contracts Essex Power for the maintenance of		
	street lights. PW maintains the decorative street lights		Annual maintenance costs decrease
Streetlights	located on Tecumseh Road and Manning Rd. When these	As repaired	
	lights are totally replaced, PW tries to salvage any fixtures for		
	parts for possible future repairs.		
	The Town manages the traffic signals through the use of an		Service cost savings
	outside contractor. Town forces attend to these signals on an		
Traffic Signals	as needed basis and request the contractor should the work	As repaired	
Traffic Signals	entail more specific knowledge of the equipment. When	As repaired	
	theses signals are replaced, PW and/or the contractor will		
	salvage any fixtures and parts for possible future repairs.		
Signs	A sign that is removed from service that cannot serve any	As removed	Nil
Signs	purpose is salvaged for scrap metal value.	As removed	INII
	The Town does not try and recycle snow melt in any form for		Trade-ins reduce
	brine making. We do however, dispose of snow removal		
Snow and Ice Control	equipment as needed. Trucks and plow equipment go to	As replaced	purchase price; income for PW
	auction. Specific equipment is also auctioned or traded in,		
	whatever is more of a benefit to the Town.		operating budget

3.3.2 20 Year Plan

A detailed 20 Year Plan was generated for the entire Roads network that includes both rehabilitation and replacement schedules. Please refer to Appendix C for detail by road segment and Appendix D for detail by traffic signal.

Rehabilitation

Dillon Consulting finalized the Towns 2014 Road Needs Study (RNS) on the Town's road infrastructure in March of 2015. Each road segment was assigned a PCI rating.



Recommended treatment types and estimated unit costs were provided. The RNS report indicated that the Town's roads are in good shape overall, with an average PCI of 74 for the entire network.

Road segments were ranked according to the PCI assigned by RNS, lowest to highest. Total works for each year ranged from \$600,000 to \$1,000,000, with the average being \$800,000 which is the amount traditionally budgeted for the Asphalt Program.

Under this plan, all road segments with PCIs of less than 70 will strive to be addressed in the next five years. This is in line with the Town's Desired Levels of Service as discussed earlier.

Replacement

The Town of Tecumseh normally replaces (reconstructs) municipal roadways when it is no longer economically feasible to carryout rehabilitation or where it is beneficial to carry out a reconstruction in conjunction with renewal or replacement of other infrastructure.

There have been a number of municipal roadways that have been identified in Environmental Assessments, the Roads Needs Study, and other Planning Studies that require reconstruction within the next five years. Some of the roads are (but not limited to): Arlington Boulevard, Manning Road. The vast majority of the remaining municipal roads that will need reconstruction in the future will be dictated by combining infrastructure replacement projects with the pavement condition in order to optimize cost savings by minimizing disruption and restoration costs.

Growth

<u>Transportation Master Plan</u>

The Town's Transportation Master Plan was completed at the end of 2016. An analysis of the Town's road network and intersection performance did not identify any capacity related issues. However, an analysis of the regional road network performance identified several regional (i.e. County and MTO) roads and intersections which are approaching or are at capacity in the existing conditions. The County, MTO and the City of Windsor are planning to undertake a number of significant capital projects before the end of the planning period which will address the identified road network deficiencies. Operational issues may need mitigation measures (minor change to the geometric conditions of the approaches and /or optimization of the traffic control) to alleviate operational and safety concerns if the planned major capital projects are delayed. These intersections are primarily under the ownership of MTO and/or the County and, as such, mitigation measures would be the responsibility of senior levels of government. Project implementation will need to be monitored to determine the potential need for local intersection modifications in the future.

The Plan also identified minor non-capacity recommended works to Lesperance Road to make it more bicycle user-friendly and significant streetscape works to Tecumseh Road within the



Tecumseh Road CIP to make this section of Tecumseh a more pedestrian-friendly destination place.

Development

New roads will be constructed as part of proposed residential and industrial developments, which will eventually be assumed, owned and maintained by the Town. As these roads are constructed they will be added to the Town's list of assets and included in future versions of the Asset Management Plan.

The majority of the Town's future (residential) growth will be limited to areas referred to as (i) The Manning Road Secondary Plan Area, and (ii) The Tecumseh Hamlet Secondary Plan Area. Functional Design Studies for the Manning Road Secondary Plan Area and the Tecumseh Hamlet Area will be completed, which will include the preliminary design of road infrastructure within each study areas.

There are a number of current proposals, along with future opportunities for industrial development within the Oldcastle Hamlet Area. These roads will be installed at the cost of the developer, which will in turn be assumed by the Town at the end of the maintenance period.



4. Bridges

4.1 State of the Local Infrastructure

Inventory:

The Town of Tecumseh owns and maintains thirteen (13) bridges and three (3) culverts. All structures (bridges and large culverts) having a clear span of 3.0 meters or more were inventoried and appraised in accordance with the requirements established in the Ontario Structure Inspection Manual (OSIM).

In 2016, the Town of Tecumseh undertook a Bridge and Culvert Needs Study, which was an update to previous studies performed in 2014, 2008 and 2003. It should be noted that since earlier versions of the Study, the East Townline Drain at Riverside Drive Bridge (Structure 1030) was replaced with a storm sewer as part of the Manning/Riverside Pumping Station improvements.

Table 4-1: Summary of Assets identified in the 2016 Bridge & Culvert Needs Study

Structure ID	Asset Name	Length (m)	Structure Type
Culvert / 1010	West Townline Drain at Malden Road Culvert	4.8	Corrugated Steel Pipe Arch
Culvert / 1021	Pike Creek at Twelfth Concession Culvert	6.5	Corrugated Steel Pipe Arch
Culvert / 2001	Townline Rd Drain at Eighth Concession Culvert	3.0	Corrugated Steel Pipe Arch
Bridge / 1002	Pike Creek at Twelfth Concession Bridge	15.8	Concrete Rigid Frame
Bridge / 1003	Pike Creek at Twelfth Concession Bridge	15.7	Concrete Slab on Steel Girder
Bridge / 1004	Sullivan Drain at Twelfth Concession Bridge	5.5	Concrete Rigid Frame
Bridge / 1005	Pike Creek at Baseline Road Bridge	15.0	Concrete Slab on Steel Girder
Bridge / 1006	Sullivan Creek at Baseline Road Bridge	4.6	Concrete Rigid Frame
Bridge / 1009	Pike Creek at Malden Road Bridge	4.8	Concrete Rigid Frame
Bridge / 1011	Malden Road Drain at South Talbot Road Bridge	3.7	Concrete Rigid Frame
Bridge / 1013	Webster Drain at Eighth Concession Bridge	3.6	Concrete Rigid Frame
Bridge / 1014	Townline Road Drain at Sixth Concession Bridge	3.7	Concrete Rigid Frame
Bridge / 1015	Merrick Creek Drain at Sixth Concession Bridge	5.5	Concrete Rigid Frame
Bridge / 1016	Collins Drain at Outer Drive Bridge	3.1	Concrete Rigid Frame
Bridge / 1028	East Townline Drain at St. Thomas Street Bridge	4.9	Concrete Rigid Frame
Bridge / 1029	East Townline Drain at Little River Bridge	4.9	Concrete Rigid Frame



Detailed information on the bridge asset infrastructure is maintained in the Town's GIS system. Each asset is assigned a unique GIS ID.

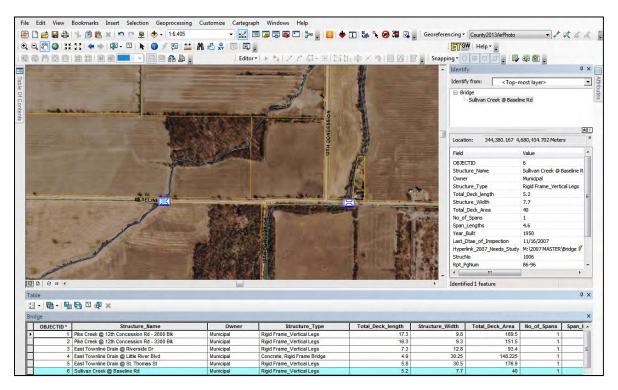


Figure 4-1: GIS screenshot of Structure 1006 - Sullivan Creek at Baseline Road bridge

Valuation:

An inventory and historical cost valuation of bridges and large culverts was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on deflated replacement costs at the time. The expected useful life for accounting amortization purposes is 50 years for bridges and 25 years for large culverts.

Detailed asset accounting data is maintained in CityWide software. Although CityWide assigns its own unique identifier, each asset can be cross-referenced to a GIS ID. The database is updated annually prior to financial statement preparation.

Bridge and large culvert asset accounting valuations as of the 2016 year end are as follows:

	Bridges	Cu	lverts > 3m	Total	
Historical Cost	\$ 5,432,619	\$	220,334	\$ 5,652,953	
Accumulated Amortization	\$ (1,324,794)	\$	(198,988)	\$ (1,523,783)	
Net Book Value	\$ 4,107,825	\$	21,346	\$ 4,129,170	



Current replacement costs were obtained from a structural engineering consultant and reviewed by the Town's engineer. The total replacement cost of the bridge and culvert network is \$12,325,000.



Total bridge and large culvert replacement cost is \$12.3 million!

Asset Age:

The age for the Town's Bridges and Culverts has been summarized in the table below.

Table 4-2: Summary of Asset's age identified in the 2016 Bridge & Culvert Needs Study

Structure ID	Asset Name	Structure Type	Construction Year/Last Major Rehab
1002	Pike Creek at Twelfth Concession Bridge	Concrete Rigid Frame	1961/2016
1003	Pike Creek at Twelfth Concession Bridge	Concrete Slab on Steel Girder	1965/2013
1004	Sullivan Drain at Twelfth Concession Bridge	Concrete Non-Rigid Frame	1965
1005	Pike Creek at Baseline Road Bridge	Concrete Slab on Steel Girder	1955/2014
1006	Sullivan Creek at Baseline Road Bridge	Concrete Rigid Frame	2015
1009	Pike Creek at Malden Road Bridge	Concrete Rigid Frame	2007
1010	West Townline Drain at Malden Road Culvert	Corrugated Steel Pipe Arch	1995
1011	Malden Road Drain at South Talbot Road Bridge	Concrete Rigid Frame	2007
1013	Webster Drain at Eighth Concession Bridge	Concrete Non-Rigid Frame	1965
1014	Townline Road Drain at Sixth Concession Bridge	Concrete Non-Rigid Frame	1955
1015	Merrick Creek Drain at Sixth Concession Bridge	Concrete Rigid Frame	2007
1016	Collins Drain at Outer Drive Bridge	Concrete Rigid/Non-Rigid Frame	1975/2005
1021	Pike Creek at Twelfth Concession Culvert	Corrugated Steel Pipe Arch	1965
1028	East Townline Drain at St. Thomas Street Bridge	Concrete Rigid Frame	1975
1029	East Townline Drain at Little River Bridge	Concrete Rigid Frame	1975
2001	Townline Road Drain at Eighth Concession Culvert	Corrugated Steel Pipe Arch	2012

Notes:

- Bridge 1016 - repaired and extended in 2005 as part of the Hwy #3 and Hwy 401 improvements

A per the Town's Tangible Capital Asset Accounting Policy, the single asset approach is used for the capitalization of all linear assets. What that means for bridge assets is that the deck, superstructure and substructure are capitalized as one asset.



As shown in the graph below, accounting records indicate that over 1/2 of the Town's bridges/large culverts have surpassed the expected useful life.

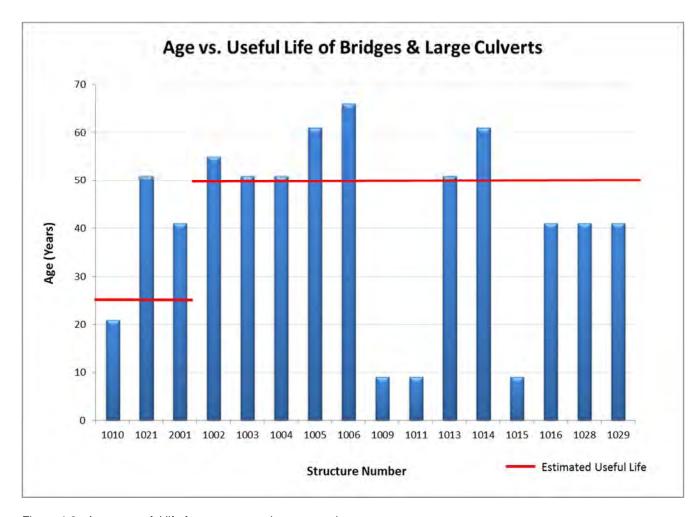


Figure 4-2: Age vs. useful life from an accounting perspective

While the accounting perspective on bridge age indicates that over one half of our bridges have surpassed the estimated useful life, the limitation to this approach is that the installation or reconstruction year is the only variable taken into account. Bridges may age differently depending on traffic, maintenance activities, rehabilitation and other factors.



Asset Condition:

In 2007/2008, the Town of Tecumseh commissioned a Bridge and Culvert Needs Study. The results were that 12 structures or 70% of the total bridges and culverts were deemed deficient or to become deficient in the study period. Ten (10) of the twelve (12) identified structures were deemed to be urgent, requiring works in less than one year.

Then in 2012, the Town undertook a condition review of five (5) structures requiring capital works in order to determine a 5 year capital plan for repair/replacement of the structures. Work was prioritized as follows:

2013 - Rehabilitation of structures 1003 and 1005 and engineering for structure 1006

2014 - Replacement of structure 1006 and engineering for structure 1002

2015 - Rehabilitation of structure 1002.

In 2014, the Town of Tecumseh commissioned a Bridge and Culvert Needs Study, which was an update to previous studies performed in 2008 and 2003. The Study reported an average Bridge Condition Index (BCI) of 74.9, a significant improvement from the 2003 BCI of 66.0. (Please refer to the 'Bridge Condition Index' section for detail on this measure).

Based on the 2014 assessment, the following bridge work was undertaken:

- Structure 1006 Sullivan Creek at Baseline Road Bridge Engineering was completed in 2014. Bridge replacement coordinated with Baseline Road remedial works in 2015.
- Structure 1002 Pike Creek at 12th Concession Bridge Engineering was completed in 2014. Major bridge rehabilitation coordinated with Baseline Road remedial works in 2015.
- Structure 1028 East Townline Drain at St. Thomas Street Bridge Minor bridge repairs completed in 2016. Structure scheduled to be removed as part of the Manning Road Improvements Phase 2 project scheduled for 2019.
- Structure 1029 East Townline Drain at Little River Bridge Minor bridge repairs completed in 2016. Structure scheduled to be removed as part of the Manning Road Improvements Phase 2 project scheduled for 2019.

The Study was updated in 2016 as per the Bridge Condition Assessment Policy # 82.2 which requires renewal on a two year basis. Condition assessments from the 2016 Study are summarized in the following table:



Table 4-3: Bridge & Culvert Condition Assessments

Structure ID	Asset Name	Assessment Year	Condition / Comments
1002	Pike Creek at Twelfth Concession Bridge	2016	Major rehabilitation completed in July 2016. No capital works necessary.
1003	Pike Creek at Twelfth Concession Bridge	2016	Bridge rehabilitated in 2013. Recommended routine maintenance includes installation of additional erosion protection. No capital works required.
1004	Sullivan Drain at Twelfth Concession Bridge	2016	Recommended work includes: replacement of asphalt paving and waterproofing; deck, soffit, abutment and wingwalls concrete repairs; embankment work and erosion protection. Timeline: 1-5 years.
1005	Pike Creek at Baseline Road Bridge	2016	Bridge rehabilitated in 2014. Recommended routine maintenance includes erosion protection. No capital works required.
1006	Sullivan Creek at Baseline Road Bridge	2016	Fully replaced in 2015. No capital works required.
1009	Pike Creek at Malden Road Bridge	2016	New structure constructed in 2007. No capital works necessary. Recommend monitoring of hairline cracks at both headwalls. Removal of debris blocking flow towards the west elevation should be removed as part of routine maintenance.
1010	West Townline Drain at Malden Road Culvert	2016	Recommended maintenance includes repairs to guiderail and installation of object signs. No capital works required.
1011	Malden Road Drain at South Talbot Road Bridge	2016	New structure constructed in 2007. No capital works required.
1013	Webster Drain at Eighth Concession Bridge	2016	Recommended work includes: replacement of asphalt paving and waterproofing; deck, soffit, abutment and wingwalls concrete repairs; stream realignment and erosion protection. Timeline: 1-5 years.
1014	Townline Road Drain at Sixth Concession Bridge	2016	Recommended work includes: replacement of asphalt paving and waterproofing; deck, soffit, abutment and wingwalls concrete repairs; replacement of retaining walls. Timeline: 1-5 years.
1015	Merrick Creek Drain at Sixth Concession Bridge	2016	New structure constructed in 2007. No major work item concerns. Recommended maintenance includes removal of debris in waterway and road shoulder repairs.
1016	Collins Drain at Outer Drive Bridge	2016	Major rehabilitation in 2005 which included extension for the Hwy #3 and Hwy 401 improvements. No major work item concerns. Monitoring of cracks at soffit recommended.
1021	Pike Creek at Twelfth Concession Culvert	2016	Recommended maintenance includes repair of road surface and improving erosion protection of embankments.
1028	East Townline Drain at St. Thomas Street Bridge	2016	Temporary repairs completed in July 2016. The existing structure is scheduled to be fully replaced as part of the Manning Road Improvements Phase 2 project.
1029	East Townline Drain at Little River Bridge	2016	Temporary repairs completed in July 2016. The existing structure is scheduled to be fully replaced as part of the Manning Road Improvements Phase 2 project.
2001	Townline Road Drain at Eighth Concession Road Culvert	2016	Monitor deformation and corrosion of CSP to be monitored. No capital works required.



Based on the 2016 assessments, the following three structures have been identified for rehabilitation within a 1-5 year time frame:

- Pike Creek at 12th Concession Road Bridge No. 1004: \$327,000 est.
- Merrick Creek at 8th Concession Road Bridge No. 1013: \$326,500 est.
- Colchester Townline Drain at 6th Concession Road Culvert No. 1014: \$347,500 est.

The plan is to carry out engineering in 2018 with construction proceeding in 2019.

Public Works staff utilizes Bridge and Culvert Needs Studies conducted every two years in order to effectively manage and maintain the state of Tecumseh's bridges and culverts. The Town will continue to engage the services of a Consulting firm with specialized training in analysis of structure and deterioration. These tools allow staff to analyze and prioritize road/infrastructure rehabilitation strategies and assist in planning for funding needs based on forecasted deterioration. The Town will continue to utilize Bridge and Culvert Needs Studies going forward to help prioritize projects. The Bridge and Culvert Needs Study will also serve as a measuring tool for the two year period prior with respect to the work that was accomplished.

Bridge Condition Index

The 'Bridge Condition Index' (BCI) was developed by the Ministry of Transportation as a means of combining the inspection information obtained through the OSIM data into a single value. The BCI is calculated using asset management principals based upon the remaining economic worth of the bridge. The index is essentially a planning tool to assist the Town in scheduling improvements and is the approximate ratio of current value of a structure to its estimated replacement cost, and should not be used to rate or indicate the safety of a bridge. The BCI is organized into ranges of 0 to 100, where 100 would represent a newly constructed bridge. Generally the BCI ratings are considered as:

- (i) 70 to 100 'good' condition
- (ii) 60 to 70 'fair' condition
- (iii) less than 60 'poor' condition

The average BCI of 78.4 as calculated from the results of the 2016 Bridge and Culvert Needs Study indicates that the Town is maintaining the bridge infrastructure in overall good condition.

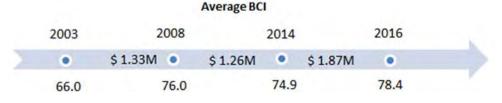


Figure 4-3 Impact of Town investment on average BCI

The BCI for each structure was back calculated from the previous 2003, 2008, and 2014 Needs Study reports and the results are summarized in the following table.



Structure ID	2003	2008	2014	2016
1002	73.9	73.4	61.5	85.8
1003	66.8	63.0	97.7	92.6
1004	74.1	74.1	71.8	70.1
1005	59.8	55.4	88.9	86.0
1006	68.1	68.2	42.6	100.0
1009	42.0	98.8	97.4	97.1
1010	73.2	71.7	71.1	70.4
1011	58.8	100.0	92.5	91.7
1013	74.9	71.2	60.6	58.8
1014	65.9	65.1	56.4	53.5
1015	53.5	100.0	99.4	96.4
1016	71.3	88.7	87.5	77.5
1021	75.0	75.0	68.9	67.4
1028	73.8	70.1	67.3	63.6
1029	74.1	72.7	67.9	64.8
2001	50.1	68.6	67.4	79.2
BCI _{Avg}	66.0	76.0	74.9	78.4

Table 4-4: Bridge Condition Index Trends

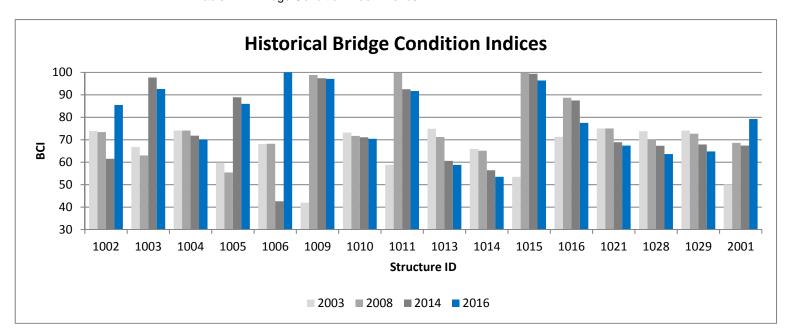


Figure 4-4: Historical BCIs by Structure



Asset Management Policies

The Bridge Condition Assessment Policy discusses the use of Bridge Needs Studies to determine the condition of the Town's bridge and large culvert structure inventory. The Policy further designates an acceptable timeframe for updating bridge condition assessments i.e. how often Bridge Needs Studies are to be conducted. Refer to Appendix E for a copy of the Bridge Condition Assessment Policy.

The Data Verification Policy provides a guideline for the review of data that is collected or provided to the Town. Refer to Appendix B for a copy of the Data Verification Policy.

4.2 Desired Levels of Service

The Town of Tecumseh has pursued differing bridge and culvert rehabilitation strategies over the last nine years in order to get to the current state of the bridge and culvert conditions. The Town actively spent in excess of \$4,000,000 on bridge and culvert projects since the Bridge and Culvert Needs Study in 2003 in order to arrive at the current conditions. It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service, which can be qualified as;

- Annual Inspection and maintenance programs established and put in place
- Any bridge or culvert rated as a "Now" time of improvement in the current Needs Study are slated for some form of work within a two year window
- Any bridge or culvert rated as a "1-5 year" time of improvement is addressed in some manner within the timeframe
- All bridges and culverts as rated are actively reviewed in conjunction with other infrastructure Projects in order to achieve efficiencies of Town dollars
- The Bridge and Culvert Needs Study to be renewed on a two year basis in order to set these levels of service. This is also a legislative requirement.

Administration recommends that in order to stay at or above the level of service as described above, the Town establish the annual programs as described. A program consisting of annual review of the factors detailed in the last Consultants review will be reviewed and examined. These inspections and any resulting maintenance can be undertaken by Town of Tecumseh forces or tendered out on an annual basis with Public Works overseeing the program. A commitment of funds will need to be established for this ongoing program of which the initial costs may be higher than the future realized costs.

The Town proposes to renew the Bridge and Culvert Needs Study in 2018 in order to gauge the Town effectiveness in the replacement/rehabilitation strategies to date. This will be reviewed on a two year basis going forward.

Performance Indicators- These are the main activities within each operating budget. These activities (Pl's) link directly to the level of service provided to the customer. The Pl's also



include tasks that help extend useful life. A good balance between asset replacement through capital funding and ongoing maintenance provides the best cost efficiency and service productivity.

4.3 Asset Management Strategy

4.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

These maintenance activities will be undertaken by Public Works forces and are intended to find any deficiencies and or issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.

MAINTENANCE

Performance	Program Descriptions	Frequency	Measures
Maintenance & Repairs	Complete maintenance work on bridges as noticed by PW forces. A bridge needs study was conducted in 2003, 2008, 2014 and 2016.	As needed	Extends useful life
		,	Compliance with legislation

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the structure must be replaced. This strategy is used on bridges quite extensively due to the large costs and significant disruptions associated with a total replacement. Work such as this could be employed more than once during an asset's lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Maintenance & Repairs	land 2016. The 2017 Five Year Capital Works Plan identifies	As identified through	Extends useful life



Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/rehabilitation will approach the cost of full replacement. This strategy is usually reserved for assets that have had very little maintenance work performed during its lifespan and for which remedial methods will not be adequate.

REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
Maintenance & Repairs	demolition and replacement. Newer techniques or designs are explored and used to help reduce future maintenance cost to	Bridges approx 50 years or as required; Culverts approx 25 years or as required.	Useful lifespan renewed

Disposal

This strategy is employed typically as part of larger infrastructure projects. When a bridge asset is converted to an enclosed storm sewer, the Town would eliminate it from the bridge asset inventory (and add it to another asset category). Typically, conversion of bridges to enclosed drains will result in overall lower costs for maintenance, however, the initial disposal cost is quite expensive.

DISPOSAL

Performance	Program Descriptions	Frequency	Measures
Enclosure	When possible and economically feasible, conversion of the structure to an enclosed storm sewer is explored. By enclosing the drain and removing the bridge, the asset essentially is removed from the bridge category. The East Townline Drain at St. Thomas Street bridge and the East Townline Drain at Little River bridge, structures 1028 and 1029 respectively, are to be replaced with a new storm sewer system as part of the Manning Rd Improvements Phase 2.	Where possible	Less frequent and intensive safety assessment (bi-annual inspection).

4.3.2 20 Year Plan

Rehabilitation/Replacement

In order to formulate the 20 Year Plan, the condition review was used to rank the work required for the next ten years. The 2016 Bridge and Culvert Needs Study was used to estimate the timeline of work required for the remaining structures. Generally, it was assumed that a major rehab would occur halfway through the structure lifecycle. Costs were based on engineering estimates in reference to the 2016 Bridge and Culvert Needs study.

Please refer to Appendix F for the detailed 20 Year Plan.



5. Culverts < 3 metres

5.1 State of the Local Infrastructure

Inventory:

A culvert is defined as a structure that is typically embedded in soil which allows the flow of water under a road, trail etc. The Town of Tecumseh owns and maintains 73 culvert structures having spans less than or equal to or less than 3.0 metres, consisting of varying types and materials.

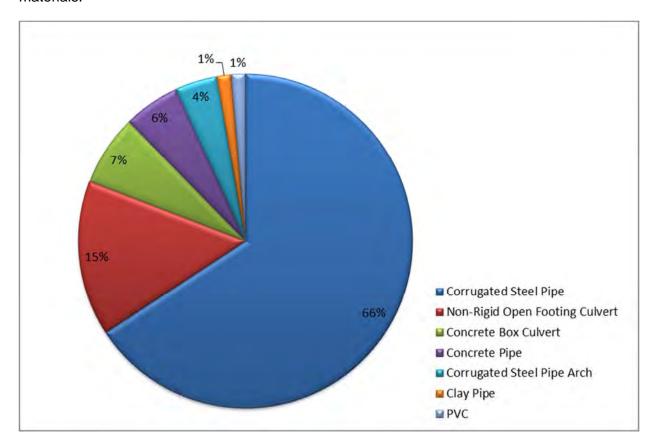


Figure 5-1: Culvert types

In 2016, the Town of Tecumseh undertook a Culvert Needs Study (Structures with Spans < 3.0m). The purpose of the study was to identify all existing culverts with spans less than three metres, conduct a condition assessment, and to prepare a comprehensive plan for improving and maintaining these structures for the next 10 year period.

There are a total of 71 existing culverts with a span less than three metres that were inspected in accordance with the latest version of the Ontario Structure Inspection Manual (OSIM)



published by the Ministry of Transportation (MTO). Two additional culverts identified since the completion of the report will be included in the next Culvert Needs Study.

Detailed information on the culvert inventory is maintained in the Town's GIS system. Each culvert is assigned a unique identifier.

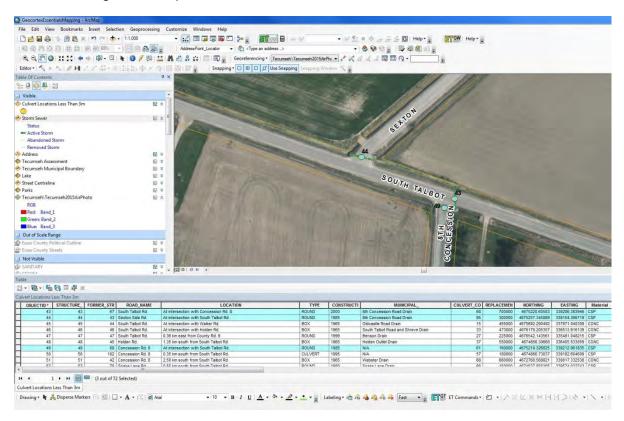


Figure 5-2: GIS screenshot of Culvert Structures 43, 44 and 49

Valuation:

In 2009, an inventory and historical cost valuation of the culverts <3 m was completed in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets.

Asset accounting valuations for culverts < 3 metres as of the 2016 year end are as follows:

\$ 2,516,916	Historical Cost
\$ 794,082	Accumulated Amortization
\$ 1,722,834	Net Book Value



Historical costs were based on deflated replacement costs at the time. The expected useful life for accounting amortization purposes was assumed to be 25 years for steel and 50 years for concrete culverts.

Detailed asset accounting data is maintained in the CityWide software. The database is update annually prior to financial statement presentation.

Replacement costs were updated for the preparation of this Asset Management Plan. Based on the 2016 Culvert Needs Study and engineering estimates, it was determined that the total replacement cost for culverts < 3 m is \$20,263,000.



Total Culverts < 3 m replacement cost is \$20 million!

Asset Age:

The age for the Town's Culverts < 3m has been summarized in the table below.

	# of Culverts					
Age (Years)	Corrugated Steel Pipe (CSP)	Concrete	Open Footing Box	Precast Rigid Box	Clay Pipe	Polyvinyl Chloride (PVC)
0-10	5	-	-	1	-	-
11-20	13	-	1	1	1	1
21-30	15	-	-	-	-	-
31-40	12	1	2	1	1	-
41-50	8	3	-	ı	ı	-
51-60	-	-	8	-	-	-
61-70	-	1	-	1	ı	-
Total	53	4	11	3	1	1
Average Age	26	40	48	23	16	19

Table 5-1: Average age by culvert type

As shown above, the average age is 26 years for Corrugated Steel Pipe (CSP) culverts and 40 years for concrete culverts. However, culverts may age differently depending on traffic, maintenance activities and other factors, so it is important to take asset condition into account when planning capital works.



Asset Condition:

Culvert Condition Index (CCI)

The 'Bridge Condition Index' (BCI) was developed by the Ministry of Transportation as a means of combining the inspection information obtained through the OSIM data into a single value. The BCI is essentially a planning tool to assist the Town in scheduling improvements for the structure. However, the BCI was not exactly the right metric to use due to the small sizes of some of the culvert structures. Therefore, the Town's engineering consultant has provided a 'Culvert Condition Index'(CCI) which is calculated in a similar manner as the BCI where only the culvert element (barrel or concrete frame) is considered for condition indexing.

The CCI is categorized into a range of 0 to 100, where a rating of **80 to 100** in 'Excellent' condition would represent a newly constructed culvert free of any immediate repair needs, **60 to 80** in 'Good' condition; **40 to 60** in 'Fair' condition, and a rating **less than 40** in 'Poor' condition where immediate repairs would be required.

Poor	Fair	Good	Excellent
0 – 40	40 – 60	60 – 80	80 - 100

Table 5-2: Culvert Condition Index Range

The replacement value of the culverts in each CCI is depicted graphically below.

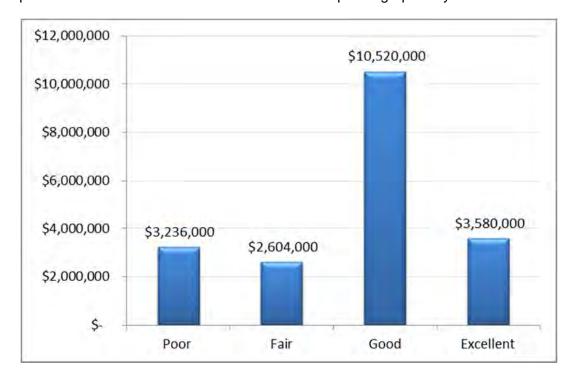


Figure 5-3: Culvert Inventory Condition



An average CCI of 63.0 calculated from the results of the 2016 investigation reveals that the overall inventory average is at the lower end of the 'Good' condition range. This indicates that there is some work to be done to maintain the condition of the inventory.

One third of the inventory is categorized as being 'Poor' or 'Fair'. The Culvert Study identified 25 structures with deficiencies that should be addressed within the next year or in certain cases a maximum of ten years. The following table presents a summary of the Town's culvert construction needs for the next ten years.

Timing	Replacement/ Rehabilitation	Roadside Safety	Total	# Culverts
< 1 Year	\$ 680,000	\$ -	\$ 680,000	2
1 – 5 Years	3,669,500	200,000	3,669,500	19
6 – 10 Years	1,396,000	-	1,396,000	4
Total	\$ 5,745,500	\$ 200,000	\$ 5,945,500	25

Table 5-3: Ten Year Construction Needs

Asset Management Policies

The Culvert Condition Assessment Policy discusses the use of Culvert Needs Studies (Structures with Spans less than 3.0m) to determine the condition of the Town's culvert structure inventory. The Policy further designates an acceptable timeframe for updating culvert condition assessments i.e. how often Culvert Needs Studies are to be conducted. Refer to Appendix G for a copy of the Culvert Condition Assessment Policy.

The Data Verification Policy provides a guideline for the review of data that is collected or provided to the Town. Refer to Appendix B for a copy of the Data Verification Policy.

5.2 Desired Levels of Service

It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service, which can be qualified as;

- Annual Inspection and maintenance programs established and put in place
- Any culvert rated as a "Now" time of improvement in the current Needs Study is slated for some form of work within a two year window
- Any culvert rated as a "1-5 year" time of improvement is addressed in some manner within the timeframe
- All culverts as rated are actively reviewed in conjunction with other infrastructure
 Projects in order to achieve efficiencies of Town dollars
- The Culvert Needs Study to be renewed on a five year basis in order to set these levels
 of service.



Administration recommends that in order to stay at or above the level of service as described previously, the Town establish the annual programs as described.

A program consisting of annual review of the factors detailed in the last Consultants review will be reviewed and examined. These inspections and any resulting maintenance can be undertaken by Town of Tecumseh forces or tendered out on an annual basis with Public Works overseeing the program. A commitment of funds will need to be established for this ongoing program of which the initial costs may be higher than the future realized costs.

The Town proposes to renew the Culvert Needs Study in 2021 in order to gauge the Town effectiveness in the replacement/rehabilitation strategies to date. This will be reviewed on a five year basis going forward.

Performance Indicators- These are the main activities within each operating budget. These activities (Pl's) link directly to the level of service provided to the customer. The Pl's also include tasks that help extend useful life. A good balance between asset replacement through capital funding and ongoing maintenance provides the best cost efficiency and service productivity.

5.3 Asset Management Strategy

5.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

These maintenance activities will be undertaken by Public Works forces and are intended to find any deficiencies and or issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.

MAINTENANCE

Performance	Program Descriptions	Frequency	Measures
I Maintenance & Renairs	Complete maintenance work on culverts as noticed by PW forces. A culvert needs study was conducted in 2016.	As needed	Extends useful life
Inspections	PW strives to conduct inspections of all culverts in the Municipality every five years. PW reviews culvert decks as part of monthly, weekly, daily road patrols.	As needed	Extends useful life

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the structure must be replaced. Work such as this could be employed more than once during an asset's



lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Maintenance & Repairs	IFIVE Year Capital Works Plan did not identify any culverts to be	As identified through inspections	Extends useful life

Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/rehabilitation will approach the cost of full replacement. This strategy is usually reserved for assets for which remedial methods will not be adequate.

REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
	demolition and replacement. The 2017 Five Year Capital Works	Concrete box culverts approx 50 years or as required; CSP culverts approx 25 years or as required.	

Disposal

This strategy is employed typically as part of larger infrastructure projects. This may occur with the installation of a storm sewer network, where existing culverts/ditches are removed/filled in.

DISPOSAL

Performance	Program Descriptions	Frequency	Measures
	When possible and economically feasible, conversion of the structure to an enclosed storm sewer is explored. By enclosing the drain and removing the culvert, the asset essentially is removed from the culvert category. These opportunities will arise with road reconstructions to an urban cross-section and the installation of storm sewers.	Where possible	Less frequent and intensive safety assessment.

5.3.2 20 Year Plan

Rehabilitation/Replacement

In order to formulate the 20 Year Plan, the condition review was used to rank the work required for the next ten years. The 2016 Culvert Needs Study was used to estimate the timeline of work required. Costs were based on engineering estimates in reference to the 2016 Culvert Needs study. Please refer to Appendix H for the detailed 20 Year Plan.



6. Storm Sewer Collection System

6.1 State of the Local Infrastructure

Inventory:

A storm collection system is designed to drain excess rain or ground water from paved streets. A storm sewer collection system consists of sewer gravity pipes, services and pumping stations. The majority of the storm water flows are directed to one of eight storm water pumping stations and pumped directly to Lake St. Clair. The rest of the storm water collection system is directed to local drains which ultimately discharge into Lake St. Clair.

Storm Sewers:

There are a total of 138 km of storm sewers, varying in size from 200mm to 2400mm diameter. Pipe materials generally consist of Asbestos Cement (AC), Reinforced Concrete (RC), Polyvinylchloride (PVC) and Polyethylene (PE).

Storm Manholes:

There are a total of 1,414 storm manholes, varying in size from 1200mm to 3600mm diameter. The manhole material consists of precast reinforced concrete.

Storm Services:

There are a total of 6,120 storm services equating to an approximate length of 62 km from the trunk storm sewer to the property line (for which the Town is responsible for). These services are generally 150mm diameter, with material consisting of Asbestos Cement (AC), Reinforced Concrete (RC), and Polyvinylchloride (PVC).

Storm Pumping Stations:

There are eight pumping stations (PS) located within the Town that are operated and maintained by the Town's Public Works staff:

- a) Lesperance Road Pumping Station Located at 12280 Lesperance Road (Riverside Drive/Lesperance Road intersection).
- b) West St. Louis Pumping Station Located at 12924 Riverside Drive (between Centennial Drive and Barry Avenue).
- c) East St. Louis Pumping Station Located at 13079 Riverside Drive (east of Centennial Drive).
- d) Manning Road Pumping Station Located at 13400 Riverside Drive (Riverside Drive/Manning Road intersection).
- e) Scully Pumping Station Located at 13698 Riverside Drive (Riverside Drive/Edgewater Boulevard intersection).
- f) St. Mark's Pumping Station Located at 13770 Riverside Drive (Riverside Drive/St. Mark's intersection).



- g) Peter Cecile Pumping Station Located at 14080 Riverside Drive (Riverside Drive/Kensington Boulevard intersection).
- h) Brighton Road Pumping Station Located at 511 Brighton Road.

Stormwater Management Facilities

There are a total of eight (8) stormwater management facilities located within the Town that are operated and maintained by the Town's Public Works staff:

- a) Stormceptor Manhole STC 2000 Located at 12215 Westlake Drive
- b) Stormceptor Manhole STC 1500 Located at 262 Starwood Lane
- c) Water Quality Unit ADS 3620WQA (off-line) Located at 1402 Carmelita Court
- d) Water Quality Unit ADS 4840WQA00 (in-line) Located on Elderberry Court adjacent to 2670 Wildberry Crescent
- e) Stormwater Pond (dry, quantity only) Located behind 13120 Elderberry Court
- f) Stormwater Pond (wet, quality only) Located in Lakewood Park (off Hayes Ave.)
- g) Stormwater Pond (dry, quantity only) Located in the northeast corner of Buster Reaume Park (off of Lanoue Street)
- h) Stormwater Pond (dry, quantity only) Located west of 1100 Highway No.3
- i) Overland Grassed Swale & French Drain Located behind 12127 Emma Maria Crescent

Detailed information on the storm sewer assets is maintained in the Town's Geographic Information Systems (GIS) system. Storms sewers are split into segments, manhole to manhole, with each segment assigned a unique GIS ID.

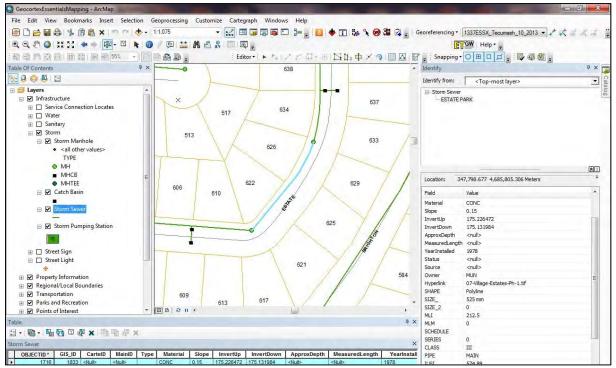


Figure 6-1: GIS screenshot of GIS ID # 1833 - Estate Park storm sewer segment



Valuation:

An inventory and historical cost valuation of the storm sewer system was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on deflated replacement costs at the time. The expected useful lives for accounting amortization purposes are as follows: storm sewers 65 years; pumping station structure 50 years; roof 20 years; mechanical/electrical 20 years; SCADA 10 years.

Detailed asset accounting data is maintained in CityWide software. Each asset found in CityWide can be cross-referenced to a GIS ID. The database is updated annually prior to financial statement preparation.

Storm sewer system asset accounting valuations as of the 2016 year end are as follows:

	St	torm Sewers	Sto	rm Facilities¹	Total Storm
Historical Cost	\$	57,046,995	\$	17,846,797	\$ 74,893,792
Accumulated Amortization	\$	(20,715,779)	\$	(4,312,748)	\$ (25,028,527)
Net Book Value	\$	36,331,216	\$	13,534,049	\$ 49,865,265

¹ Includes storm pump stations, backup generators

Replacement costs were updated for the preparation of this Asset Management Plan. The total standalone replacement cost of storm sewers, manholes and storm services is \$147,233,900. Cost savings could be incurred if storm sewer replacements were combined with road work; resulting in a reduced replacement cost of \$130,977,600.



Total storm sewer replacement cost is \$147 million!

Asset Age:

Storm Sewers, Manholes, and Services:

The age of the storm sewer segments (sewers, manholes and services) can be found in the Town's GIS database.



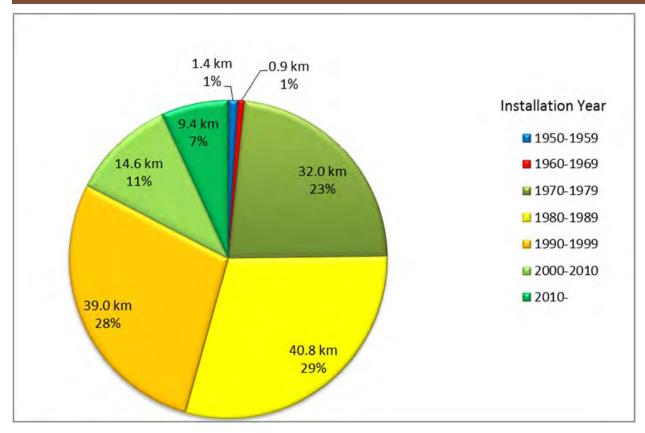


Figure 6-2: Storm Sewer installation year (as recorded in the GIS database)

From the above graph, it can be seen that only 2.3 km of the Town's storm sewers were installed in the 1950's and 1960's. Almost 1/3 of the storm sewers were installed in the 1970's. Relatively speaking that means that 1/3 of the Town storm piping system is between 37 and 46 years old. Traditionally, an expected lifespan of a storm sewer is anywhere from 50 -75 years depending on conditions. Conversely, this also highlights that 75% of the Town's storm sewer system is relatively 'new' with 46% of the system being installed since 1990.

The following graph shows the average age and remaining useful life by storm sewer material. Asbestos Cement (AC) storm sewers are the oldest with an average age of 50 years. Polyethylene (PE) and polyvinylchloride (PVC) storm sewers are the newest with 41 and 51 average years remaining respectively.



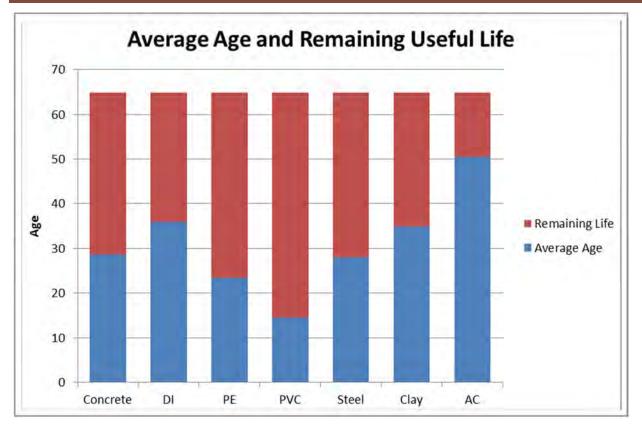


Figure 6-3: Average age by material type compared to remaining useful life

Storm Pumping Stations:

- a) Lesperance Road Pumping Station Originally installed in 1957; upgrades completed in 1976; expanded in 2002.
- b) West St. Louis Pumping Station Originally installed in 1991.
- c) East St. Louis Pumping Station Originally installed in 1980.
- d) Manning Road Pumping Station Reconstruction completed in 2015.
- e) Scully Pumping Station Originally installed in 1984.
- f) St. Mark's Pumping Station Originally installed in 1988.
- g) Peter Cecile Pumping Station Originally installed in 1974.
- h) Brighton Road Pumping Station -reconstruction completed in 2010.

Backup power generators were installed for all storm pumping stations in 2014.

Stormwater Management Facilities:

 a) Stormceptor Manhole STC 2000 – Installed in 1996 as part of the Westlake Residential Subdivision.



- b) Stormceptor Manhole STC 1500 Installed in 1995 as part of the Silverman Residential Subdivision.
- c) Water Quality Unit ADS 3620WQA (off-line) Installed in 2015 as part of the Arbour Grove Valente Townhomes Development.
- d) Water Quality Unit ADS 4840WQA00 (in-line) Installed in 2014 as part of the Strawberry Ridge Phase 4 Residential Development.
- e) Stormwater Pond (quantity only) Installed in 2014 as part of the Strawberry Ridge Phase 4 Residential Development.
- f) Stormwater Pond (quality only) Installed in 2015 as part of the Estates of Lakewood Park.
- g) Stormwater Pond (dry, quantity only) Installed in 1996 as part of the Greenhills Development.
- h) Stormwater Pond (dry, quantity only) Installed in 2000 as part of the Rosati Blackacre Industrial Park Development.
- i) Overland Grassed Swale & French Drain Installed in 1997 as part of the Dimu Subdivision Phase 1 Residential Development.

Asset Condition:

Storm Sewers:

Town staff have reviewed a representative amount of video collected on the storm sewer system and given it a Sewer Performance Grade (SPG) to assist in determining the condition of the sewers. The total length of storm sewer video the Town has is approximately 8.43 km. The Town has reviewed all of the video available. It consisted of concrete pipe installed in the 1970's through to PVC pipe and concrete pipe installed in the 1980's to present day. The video available is approximately 6.1% of the entire infrastructure network. Typically the Town does not actively collect video inspections of storm sewer unless there is an operational issue to be addressed. The condition assessment of the storm sewers based on the review of these videos will be used to assist in the assessments over the entire collection system in order to arrive at an overall SPG ranking.

Tecumseh staff reviewed video data in order to assign grades to the sections of storm sewer within the Town. A representative sample, which is all the video available, was chosen with the results to be used to assist in evaluating the overall system.

The sewer condition classification was undertaken using the Sewer Performance Grade, or SPG method of classification. This method is based on the Water Resource Centre (WRc) pipe condition classification method. It provides ratings for the sewer sections ranging from a SPG 1 to a SPG 5.



Sewer Condition Assessment

SPG 1- No Defects

SPG 2- Minor Defects

SPG 3- Likely to Deteriorate

SPG 4- Likely to Collapse in Future

SPG 5- Collapse Imminent

Ratings for sewer sections are always based on the worst defect found in the section.

Overall, storm sewers installed since 1980 appear to have an SPG rating of 2 or 1 which is regarded as an above acceptable rating. The sewers installed in the 1970's had noticeable defects and an associated SPG rating of SPG 2 to SPG 3. Using the reviewed video data to arrive at an estimated cost of repair would not be a fair representation of the overall condition within the collection system. Operational observations can indicate that there are areas of the Town that have deficient or in some cases non-existent storm sewer systems. There are two older areas of the Town of Tecumseh that have a variety of materials that have been installed over the years to create some type of storm water collection system.

As for an overall rating of the storm collection system it would be Administration's assessment that the system is at or about an SPG 3. This rating is arrived mostly based on the observations of the Town's Public Works staff. As the older areas are addressed with rehabilitation efforts, the overall rating of the system will increase.

Storm Manholes:

The conditions of the existing manholes have not yet been reviewed as part of the Asset Management Plan. Typically precast concrete manholes have a life expectancy that surpasses the life of the adjacent sewers and services. Leaks and failures observed in manholes are usually at the point of connections, and are repaired concurrently with other trenchless repairs that are being completed on the sewer trunk and services.

Storm Services:

The conditions of the storm services were not reviewed as part of the Asset Management Plan. Typically the services are not videoed unless they are part of the Town's Inflow and Infiltration (I&I) Program. The age, material and condition of the sewer trunk are key indicators that provide insight where potential issues may be.

Storm Sewer Catch Basins & Leads:

The conditions of the storm catch basins and leads were not reviewed as part of the Asset Management Plan. Typically the conditions of the catch basins are not assessed as part of storm sewer or roads condition assessment. The catch basins and leads are



replaced as part of the road reconstruction works, and their associated costs have been incorporated into the Roads Section of the Asset Management Plan.

Storm Pumping Stations:

- a) Lesperance Road Pumping Station Originally installed in 1957; Upgrades completed in 1976; Expanded in 2002.
- b) West St. Louis Pumping Station Originally installed in 1991.
- c) East St. Louis Pumping Station Originally installed in 1980.
- d) Manning Road Pumping Station Reconstruction completed in 2015.
- e) Scully Pumping Station Originally installed in 1984.
- f) St. Mark's Pumping Station Originally installed in 1988.
- g) Peter Cecile Pumping Station Originally installed in 1974.
- h) Brighton Road Pumping Station Originally installed in 1985; Reconstructed 2010.

In 2016, the Town conducted an assessment of the storm pumping stations to understand the condition and to effectively prioritize rehabilitation and replacement work in the future. The work conducted included a visual site inspection of all structures, identification of deficiencies, preparation of preliminary estimates, and identification of priority/suggested timing to address the noted deficiencies.

Rating methodologies were developed and applied to the conditions of the metering stations. The following tasks were completed in conducting the condition assessments:

- Creation of a catalogue of equipment, services and building components including mechanical, electrical, structural and architectural.
- Assessment of each component for replacement cost and life expectancy.
- Identification of any violations to existing codes.
- Categorizing required repairs and maintenance needs based on urgency.

Each condition rating was assigned condition indicators to assist in the consistent evaluation of assets. The condition ratings of asset components were used in determining an overall condition index, indicating the general condition of the asset as a whole. The condition index was determined using a weighting of each asset component and associated condition rating.

Condition	Rating
Critical	5
Poor	4
Fair	3
Good	2
Very Good	1

Table 6-1: Storm Sewer Condition Ratings

Determining a score for condition alone does not provide sufficient information to prioritize improvements. A poor condition rating on a less essential asset will not equate to an essential asset in need of imminent rehabilitation.



The risk drivers that affect the stormwater infrastructure include the percentage of system impacted, asset failure, environmental or social impacts, and population impacted. Each factor has been attributed a range of values to help describe the anticipated impacts and severity of each of the risk factors.

A composite risk value was determined using a formula derived to reflect the specific asset risks. Development of the formula considered the particular assets being evaluated, and each risk factor's interconnection and influence on the overall system.

Prioritized recommendations arising out of the facilities assessment are as follows:

Station Name	Risk Rating	Condition Rating	Combined Rating	Immediate Costs	Longer Term Costs	Totals
Lesperance Road PS	7	1.9	8.9	\$80,200		\$524,200
West St. Louis PS	8	1.8	9.8	\$50,950	. ,	
(East) St. Louis PS	5	1.8	6.8	\$65,000	\$39,500	
Manning Road PS	10	1.0	11.0	\$0	\$0	\$0
Scully (Edgewater) PS	4	1.8	5.8	\$12,000	\$6,500	\$18,500
St. Mark's PS	5	2.2	7.2	\$525,000	\$0	\$525,000
Peter Cecile (Kensington) PS	3	1.7	4.7	\$13,000	\$86,500	\$99,500
Brighton Road PS	4	1.0	5.0	\$0	\$0	\$0
Totals for Storm Pumping St	ations			\$746,150	\$604,500	\$1,350,650

Table 6-2: Storm Pumping Stations Prioritized Recommendations

Asset Management Policies

The Storm Sewer Collection System Condition Assessment Policy discusses the review of camera inspection videos in order to assign an SPG. The Policy further designates an acceptable timeframe for the review of the sewer network. Refer to Appendix I for a copy of the Storm Sewer Collection System Condition Assessment Policy.

The Data Verification Policy provides a guideline for the review of data that is collected or provided to the Town. Refer to Appendix B for a copy of the Data Verification Policy.

6.2 Desired Levels of Service

With respect to the collection system and the current state of all pumping stations, it would be conservatively described as acceptable. Currently, two PS are considered 'new' or reconstructed. Six other stations are approximately between 25 and 50 years old. Continued investment and vigorous Preventative Maintenance (PM) will keep these stations running for their useful lifespans.

With respect to the mainline collection system the overall rating is appropriate for its age. An overall rating of SPG 3 is indicative of needed investment. Continued investment in mainline sewer repairs will continue to keep the collection system at an acceptable range. The areas that are below acceptable range need to be identified and appropriately scheduled for major



reconstruction or rehabilitation, whichever fits the program. Mainline rehabilitation programs realized from this Asset Management Plan need to be established and implemented for a period of time before any significant gains can be fully realized system wide.

The Town of Tecumseh will need to establish aggressive storm sewer rehabilitation strategies over the next coming years in order to strive to achieve higher than the current rating conditions. It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service (LOS) and this LOS can be qualified as;

- Yearly tenders to flush and camera inspect storm sewers. Goal of inspecting all sewers once within a 20 year time frame
- All SPG 5 defects scheduled for some kind of remedial attention within 6 months
- All SPG 4 defects scheduled to receive remedial attention within 2 years
- An overall average SPG 3 for the Town's collection system, based on current assessments
- Yearly review of all facility assets with annual inspections and reports
- Once every 5 years a full scope condition assessment is performed and remedial works
 planned and carried out with respect to any urgent needs identified.

Storm Sewer Assessment: The storm sewer system continues to be monitored and assessed to determine opportunities for improvements to the system that could increase the level of service and reduce the risk of basement flooding. The collection system is maintained by Roads & Fleet staff by responding to public complaints.

6.3 Asset Management Strategy

6.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

These maintenance activities will be undertaken by Public Works forces or competent contractors under the guidance of Public Works and are intended to find any deficiencies and or issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.



MAINTENANCE

Performance	Program Descriptions	Frequency	Measures
Storm Sewer Main Flushing	Mainline sewers flushed on an as needed basis through the course of the year. Manholes are inspected and sewer levels gauged in areas of known problems during periods of high flows. Sewers are flushed and cleared of all possible buildup. Annual tender with a goal of flushing every sewer in the Town in a twenty year period is a goal to work towards. Budgetary constraints will be an issue.	As Needed	Less backups and claims
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis. All videos are loaded and filed in the GIS database and are accessed for review periodically. Locations identified for repair are accomplished through trenchless technologies (grouting, lining, sleeve).	As needed	Maximization of maintenance efforts
Catch Basins	The Town annually strives to flush catch basins in high risk areas prone to flooding as well as in areas of high traffic flow. PW strives to establish a catch basin flushing routine in order to flush and inspect every catch basin in the Town within a 5 year period. During road patrols, the PW patroller identifies catch basins that are in need of rehabilitation and documents them for action. PW staff strive to repair this list within a year of identification. The catch basin is inspected to determine if repair or replacement is the correct rehabilitative measure. This process is accelerated for roads that are being considered for pavement rehabilitation or slowed down for roads being targeted for full rehabilitative measures.	Annually/ coordinated with road works	Maximization of storm system, re-establish sumps, less debris into sewer
Service Call Outs	Town staff is available to respond and attend to customer requests 24/7 on call coverage.	24 hrs/7 days	Number of calls
Monitoring	Public Works currently maintains SCADA on one storm pumping station within the Town with plans for SCADA at the new Manning pumping station as well. This is accessed at the Town offices for review of the daily data to observe and evaluate any maintenance possibilities (i.e. high or low flows). These records are also used to gauge success of any repairs completed that can be possibly measured.	Daily	Access to historical trends for analysis
Storm Sewer Pump Stations	The Town actively maintains eight (8) storm water PS within the Town. Currently one of these is being entirely reconstructed to meet current standards and design parameters at a cost of \$8,000,000. Public Works maintain all the storm PS with weekly inspections for operation defects or deficiencies. These deficiencies are addressed immediately unless they are of a major nature (i.e. main pump or screw replacement) which would entail Council decisions. These stations undergo annual ESA inspections as well as routinely are adjusted to allow all pumps to be exercised to maximize lifespan of the infrastructure. These six stations are currently due to have back up power generators installed to facilitate operation during periods of hydro disruption. This installation will require the staff to attend the stations at least monthly to exercise and operate the stand by generators as we currently do with the one station outfitted. Annually this one station receives an entire stand by generator inspection which includes maintenance on the generator, motor and all electrical switches and operators. The unit undergoes an entire load test to ensure it will operate as intended when needed. This will need to be undertaken with the six (6) new stations.	Weekly	Fewer breakdowns and unexpected costs



MAINTENANCE (cont'd)

Performance	Program Descriptions	Frequency	Measures
PDC (Private Drain Connections) Inspections	The Town has been actively camera inspecting PDCs on an as requested basis. If any issues are found, they are directed to be repaired in one of two ways. If it is on the private side, the homeowner is requested to repair it. If it is in the ROW, it is considered for replacement.	As Requested	Fewer unexpected future costs due to timely repair
Ditch Cleaning	Public Works receives ditch cleaning requests and acts on them as appropriate. If it is a roadside drain, it is reviewed and scheduled for maintenance if necessary. If it is a Municipal Drain, it is directed to our Drainage Superintendent. Public Works strives to maintain these ditches within a timely fashion but does not have a set guideline for a repair timeframe. It is really addressed on a priority basis as deemed in the field. Work is generally accomplished by Town Staff.	As Identified	Less flooding complaints, proper storm water flow
Culverts	Generally small culverts, such as driveway culverts, are maintained through flushing by PW staff. Again these are serviced on primarily an as requested basis. A formalized flushing program is something that PW strives to establish but currently does not have. If the culvert requires repair or replacement, PW request the owners of the culvert to do so. It is the Town's policy that ownership of the culvert lies with the property that the culvert provides access to.	As identified	Less flooding complaints, proper storm water flow

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the asset must be replaced. This strategy is used for storm sewers quite extensively due to the large costs and significant disruptions associated with a total replacement. Work such as this could be employed more than once during an asset's lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Storm Sewer Main	When identified through regular maintenance, mainline sewers may warrant some rehabilitative measures. These are usually in the form of grouting of joints.	As Identified	Extend useful life, limit possibilities of sinkholes above pipe and costly repair work
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis. All videos are loaded and filed in the GIS database and are accessed for review periodically.	As Identified	Upgrade of Sewer condition assesment rating
Catch Basins	Catch basins identified as requiring rehabiltative work through maintenance and inspection. Work usually consists of rebuilding the top of the manhole and sealing incoming and outgoing pipes. Sometimes lids are replaced due to damage or deterioration.	As Identified	Reset useful life



RENEWAL/REHABILITATION (cont'd)

Performance	Program Descriptions	Frequency	Measures
Storm Sewer Pump Stations	The Town actively maintains eight (8) storm water PS within the Town. Public Works maintain all the storm PS with weekly inspections for operation defects or deficiencies. These deficiencies are addressed immediately unless they are of a major nature (i.e. main pump or screw replacement) which would entail Council decisions. When rehabilitative work is undertaken it is usually considered with other work in the area first in order to capitalize on Capital Project funding. Typically renewal work consists of work on the pumps and motors. PW will start to institute electrical rehab as part of the program.	Project Driven	Extended useful life; reduce O&M costs
PDC (Private Drain Connections) Inspections	The Town has been actively camera inspecting PDCs on an as requested basis. If any issues are found, they are directed to be repaired in one of two ways. If it is on the private side, the homeowner is requested to repair it. If it is in the ROW, it is considered for replacement.	As Identified	Reduced claims for sewage backup
Ditch Cleaning	Public Works receives ditch cleaning requests and acts on them as appropriate. Typical renewal or rehab work involves re-establishing grades and slopes of the ditch. Work is generally accomplished by Town Staff.	As requested/ identified	Reduced flooding complaints, improved storm water flow
Culverts	Generally small culverts, such as driveway culverts, are maintained through flushing by PW staff. If the culvert requires repair or replacement, PW request the owners of the culvert to do so. It is the Town's policy that ownership of the culvert lies with the property that the culvert provides access to. If the culvert is a roadside drain, then rehab methods are explored. PW has used CIPP relining methods in order to repair aged culverts.	As Identified	Reset useful life

Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/ rehabilitation will approach the cost to fully replace. This strategy is usually reserved for assets that have had very little maintenance work performed during its lifespan and remedial methods will not be adequate.

REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
Storm Sewer Main	Mainline sewers are typically considered for replacement as part of larger capital projects. These replacements usually are required in order for an increase in flow or for new development.	As Identified	Increased storm capacity, fewer flooding compliants
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis.	As Identified	Upgrade of sewer condition assessment rating
	Public Works will replace catch basins that are constructed of CSP when the useful life is reached. CSP is replaced with concrete catchbasins and cast iron lids.	As Identified/ required	New useful life



REPLACEMENT (cont'd)

Performance	Program Descriptions	Frequency	Measures
Storm Sewer Pump Stations	The Town actively maintains eight (8) storm water PS within the Town. Currently one of these is being entirely reconstructed to meet current standards and design parameters at a cost of \$8,000,000. When capital funding opportunities arise, the replacement of aging stations is explored, such as with the Arlington Rd. project for which a new PS is proposed as part of the work.	As Identified/ funding available	Increased pumping capacity; development potential; decreased flooding
PDC (Private Drain Connections) Inspections	The Town has been actively camera inspecting PDCs on an as requested basis. If any issues are found, they are directed to be repaired in one of two ways. If it is on the private side, the homeowner is requested to repair it. If it is in the ROW, it is considered for replacement.	As Identified	Fewer flooding claims
Culverts	PW will consider replacement for culverts which belong to the Town. Typically this is explored prior to any major road restoration or reconstruction, and the opportunity to complete the work together is reviewed. If a culvert is found to be beyond restoration or too complex, replacement will be considered.	As Identified	Better storm water management (flow)

Disposal

This strategy is employed typically as part of larger infrastructure projects. The Town of Tecumseh achieves little to no value for disposal of any storm sewer collection system piping. There can be costs associated with disposal of any facility assets associated with storm sewer pumping stations although they are typically limited to residual scrap value.

DISPOSAL

Performance	Program Descriptions	Frequency	Measures
	Mainline storm sewer is only ever disposed if it is totally structurally deficient. It may be removed and disposed due to inadequate size, but typically this is not the case.	As required	Nil
Storm Sewer Pump Stations	Typically as PW has replaced PS, the salvaged equipment is past its useful lifespan and only retains scrap value. In the future, as stations are disposed of during replacement, the gensets will be recovered and reused.	As Required	Nil

6.3.2 20 Year Plan

A detailed 20 Year Plan was generated for the storm sewer system includes both rehabilitation and replacement schedules. Please refer to Appendix J for detail by asset ID.

Storm Water Master Plan

The Town is currently undertaking two Storm Drainage Master Plans. The first Master Plan in the north end of Town (Wards 1, 2, 3) is for the areas serviced by the Town's eight storm pumping stations (north of County Road 42). The plan will explore any and all improvements



that may be considered for the storm water storage, collection and pumping systems. It will be used to assist with future capital works plans moving forward.

The plan is expected to be completed by the end of 2018 with presentation to Administration and adoption by Council within the first half of 2019.

The second Master Plan is for the Oldcastle Hamlet. The Plan will assess the storm infrastructure within the three distinct watersheds (in Oldcastle Hamlet) and will set the framework for how stormwater is addressed for new and re-developments. It will also be used to assist with future capital works plans moving forward.

The plan is expected to be completed by the end of 2019.

Rehabilitation

The Town would like to implement a work plan on the storm sewers similar to what was initiated in 2011 to address areas within the Town's sanitary sewer system that are subject to high inflow and infiltration (I & I) over the next 20 years. The first phase of the work plan includes flushing of sewers, video inspection, and sewer repairs to alleviate the inflow and infiltration occurring within the sewer system.

The Town has set the following targets to maintain the storm sewer system at the desired level of service:

- Yearly tenders to flush and camera inspect storm sewers
- All SPG 5 defects scheduled for some kind of remedial attention within 6 months
- All SPG 4 defects scheduled to receive remedial attention within 2 years
- An overall average SPG 3 for the Town's collection system, based on current assessments
- Yearly review of all facility assets with annual inspections and reports
- Once every 5 years a full scope condition assessment is performed and remedial works planned and carried out with respect to any urgent needs identified.

Under this plan, all of the storm sewers will be flushed, video inspected, and repaired in keeping with the Town's desired level of service. Costs were derived from recent tenders received for similar works completed in 2011, 2012, and 2013 as part of the current sanitary sewer I & I program.

Traditionally, approximately \$250,000 has been budgeted for the sanitary sewer I & I program. The Town would like to implement a similar program for the storm sewers. Works were planned each year based on the age of the asset, type of material, and location. The works for the storm sewers coincide with works to be performed on the sanitary sewers in an attempt to reduce costs and address the most critical assets. The planned works over the 20 year work plan have an average cost of \$360,000 each year.



Growth

The Town of Tecumseh has completed, or is currently in the process of completing a number of studies pertaining to stormwater management and how it directly relates to future development and growth within the Town.

- ➤ The Upper Little River Master Plan, Environmental Assessment has been completed in cooperation with the City of Windsor and the Essex Region Conservation Authority. The Upper Littler River Creek watershed is located in the southeast part of the City of Windsor and the west part of the Town of Tecumseh and is approximately 45 km². The study commenced to document existing conditions and to recommend stormwater management measures to protect existing resources as development continues within the upper reaches of the Little River watershed. This study is currently the subject of a Part II Order.
- A Functional Design Study for the Manning Road Secondary Plan Area, dated October 2013 included the preliminary design of the storm sewers and a regional stormwater management facility within the study area. Development is anticipated to progress in a number of phases at the discretion and cost of the developers.
- A Functional Design Study for the Tecumseh Hamlet Secondary Plan Area is currently being completed, and will be comprised of a preliminary design for the storm sewers and a regional stormwater management facility.
- ➤ The Tecumseh Hamlet/Tecumseh Road Community Improvement Plan (CIP) is currently being completed, and addresses the need for storm sewer upgrades with the study area, which would allow the development of vacant lands within the area to be developed.



7. Water Distribution System

7.1 State of the Local Infrastructure

Inventory:

Under the terms and conditions of the 2004 Water Agreement executed among the Windsor Utilities Commission (WUC), City of Windsor and Town of Tecumseh, Tecumseh water is currently supplied by the Windsor Water System. The Town is responsible for its own distribution system within the boundaries of Tecumseh and is responsible for any new storage works that may be required to supply its flow of water. Storage for equalization and peak hour flow of water for Tecumseh is the responsibility of the WUC.

Watermains:

The Town owns approximately 215 km of watermain, varying in size from 50mm to 600mm diameter. The pipe materials consist of Cast Iron (CI), Ductile Iron (DI), Concrete, Polyethylene (PE), and Polyvinylchloride (PVC).

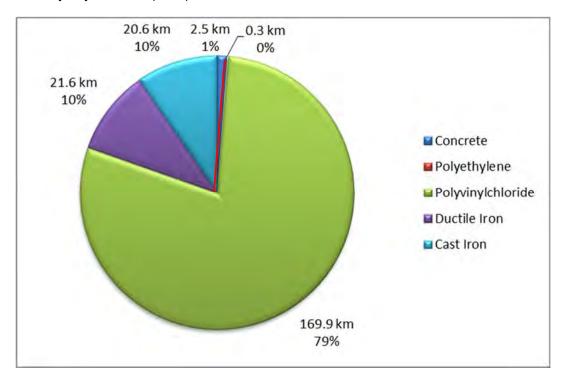


Figure 7-1: Watermain inventory by material type

As shown above, the majority of the Town's watermain inventory consists of PVC pipes, which are expected to outlast cast iron and ductile iron watermains. PVC has a longer life expectancy than ductile or cast iron because it does not break down in soil conditions or through



electrolysis. With PVC, there is no deposit build up in the watermain which improves water quality and flow.

Water Services:

There are a total of 7,445 water services equating to an approximate length of 75 km from the trunk watermain to the property line (for which the Town is responsible for). These services range in size from 19mm to 50mm diameter with service materials generally consisting of copper or polyethylene (PE). There are a small number of lead services which are connected to cast iron mains.

Water Meters:

Water meters are an important component of the Town's water distribution system. Every residential, industrial, commercial and institutional customer is equipped with a water meter to ensure that each individual customer is being billed for only the water consumed. The Town owns approximately 8,800 water meters of varying sizes.

Metering Stations:

There are a total of eleven metering stations (boundary meters) which are monitored using SCADA, measuring flow, volume and pressure. Locations are as follows:

- a) Dillon Drive between the intersections Rendezvous Drive and Gauthier Drive
- b) McNorton Street west of the St. Thomas intersection
- c) Tecumseh Road between the intersection of Southfield Drive and Banwell Road
- d) County Road 22 located on Mulberry Drive between the intersection of Arpino Avenue and Southfield Drive, north of County Road 22
- e) County Road 42 on the south side of County Road 42, east of the Concession 11 intersection
- f) Baseline Road on the north side of Baseline Road, between the intersection of Concession 10 and Concession 11.
- g) 8th Concession Road east of 8th Concession Road, south of Highway 401
- h) County Road 46 on the south side of County Road 46, south of the Highway 401 eastbound on and off ramps
- i) Walker Road west side of Walker Road, south of the Highway 401 overpass
- j) North Talbot Road north side of North Talbot Road, west of the Dumouchelle Street intersection
- k) Talbot Road located on Talbot Road, east of Howard Road.

Storage Facility:

The Town owns and operates one elevated storage facility (water tower) with a capacity of 4,540 m³.



Service Areas and Distribution System Components

The north Tecumseh water service area (north of Highway 401) includes the urban settlement areas of Tecumseh, St. Clair Beach and Tecumseh Hamlet, and rural areas north of Highway 401; and is supplied from the Windsor Water System through metering facilities at the Town boundary on Dillon Drive, McNorton Street, Tecumseh Road, County Road 22, County Road 42 and, in the future, on Intersection Road.

The south Tecumseh water service area (south of Highway 401) includes urban settlement areas of Oldcastle Hamlet, and Maidstone Hamlet, and rural areas south of Highway 401; and is supplied from the Windsor Water System through existing supply connections at the Town boundary on Baseline Road, and at the Town boundary in Oldcastle Hamlet on the 8th Concession Road, County Road 46, Walker Road, North Talbot Road and Talbot Road (Highway 3).

North Tecumseh Water Service Area

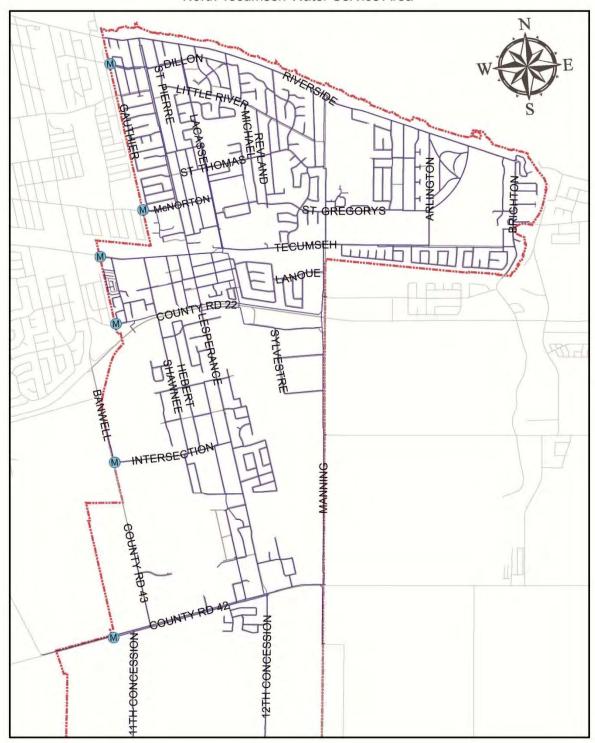
The distribution system in the north Tecumseh water service area is operated by the Town of Tecumseh and consists of approximately 134.9 km of watermains ranging in size from 100 mm (4") to 600 mm (24") in diameter as detailed in Table 7-1. The north service area boundary is identified on Map 7-1.

Table 7-1: Distribution System in North Tecumseh Water Service Area

	Watermain Length (km)						
Pipe Size (mm)	Tecumseh (Planning Area 1)	St. Clair Beach (Planning Area 2)	Tecumseh Hamlet (Planning Area 3)	Rural Area	Total		
<100	-	0.5	ı	-	0.5		
150	33.7	18.5	16.3	1.4	69.9		
200	15.3	1.0	12.5	4.2	33.0		
250	7.1	4.6	1.2	-	12.9		
300	2.6	-	4.5	-	7.1		
400	8.4	-	0.7	-	9.1		
600	1.3	-	1.1	-	2.4		
Total	68.4	24.6	36.3	5.6	134.9		



North Tecumseh Water Service Area



Map 7-1: North Service Area Boundary



The north distribution system is currently supplied from the Windsor Water System through the following metering connections:

- 400 mm diameter feedermain on Dillon Drive
- 300 mm diameter feedermain on McNorton Street
- 400 mm diameter feedermain on Tecumseh Road
- 600 mm diameter feedermain on County Road 22
- 600 mm diameter feedermain on County Road 42
- (future) 600 mm diameter feedermain on Intersection Road

The feedermains on Dillon Drive, McNorton Street and Tecumseh Road extend from the Town boundary through the centre of Tecumseh (Planning Area) to the elevated water tank on Tecumseh Road, and are interconnected through a new 300 mm feedermain on Lesperance Road and the existing 400 mm trunk watermain on Lacasse Boulevard. The 600 mm diameter feedermain on County Road 22 extends from the Town boundary to Manning Road (County Road 19) and is connected to the 400 mm diameter feedermain on Tecumseh Road. The 600 mm diameter feedermain on County Road 42 extends from the Town Boundary to Lesperance Road and is connected to the 300 mm diameter distribution mains on St. Alphonse Avenue and on Lesperance Road.

South Tecumseh Water Service Area

The distribution system in the South Tecumseh water service area is operated by the Town of Tecumseh and consists of approximately 80.1 km of watermains ranging in size from 100 mm (4") to 600 mm (24") in diameter as detailed in Table 7-2. The south service area boundary is identified on the Map 7-2.

Table 7-2: Distribution System in South Tecumseh Water Service Area

	Watermain Length (km)						
Pipe Size (mm)	Oldcastle Hamlet (Planning Area 4)	Maidstone Hamlet (Planning Area 5)	Rural Areas	Total			
<100	1	1	1.0	1.0			
150	4.9	0.2	13.8	18.9			
200	20.5	2.7	24.3	47.5			
250	-	-	2.0	2.0			
300	3.7	1.2	5.1	10.0			
600	0.7	•	•	0.7			
Total	29.8	4.1	46.2	80.1			





Map 7-2: South Service Area Boundary

The south distribution system is currently supplied from the Windsor Water System through the following connections:

- 200 mm diameter feedermain on Baseline Road
- 200 mm diameter feedermain on 8th Concession Road
- 600 mm diameter feedermain on County Road 46
- 300 mm diameter feedermain on Walker Road
- 300 mm diameter feedermain on North Talbot Road
- 200 mm diameter feedermain on Talbot Road.

The feedermains on 8th Concession Road and County Road 46 supply the north east end of Oldcastle Hamlet. The 300 mm diameter feedermain on Walker Road and North Talbot Street connect to the 300 mm diameter trunk watermain on Talbot Road (Highway 3) which supplies Oldcastle Hamlet, the rural areas south of Highway 401, and Maidstone Hamlet.



Consolidated Water Distribution System

The existing water distribution system will be operated as a single distribution system with connections through the Windsor Supply System. In the future, the Town intends to extend trunk watermains from County Road 42 to connect to the south service area to improve system performance.

Valuation:

An inventory and historical cost valuation of watermains was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on deflated replacement costs at the time. The expected useful life for accounting amortization purposes was assumed to be 60 years for ductile and cast iron pipes and 80 years for concrete and PVC mains.

Detailed asset accounting data is maintained in CityWide software. Although CityWide assigns its own unique identifier, each asset is cross-referenced to a GIS ID. The database is updated annually for capital works prior to financial statement preparation.

Water infrastructure asset accounting valuations as of the 2016 year end are as follows:

		Metering			
	Watermains	Stations	Water Tower	Water Meters	Total Water
Historical Cost	\$ 49,772,801	\$ 2,014,584	\$ 1,486,681	\$ 1,819,803	\$ 55,093,869
Accum. Amortization	\$ (13,955,615)	\$ (606,208)	\$ (703,953)	\$ (620,457)	\$ (15,886,233)
Net Book Value	\$ 35,817,186	\$ 1,408,376	\$ 782,728	\$ 1,199,346	\$ 39,207,636

Replacement costs were updated for the preparation of this Asset Management Plan. The total standalone replacement cost of the watermain network is \$120,196,900. Cost savings could be incurred if watermain replacements were combined with road work; resulting in a reduced replacement cost of \$101,233,100.



Total watermain replacement cost is \$120 million!

Asset Age

As shown in the following graph, GIS records indicate that 85% of the Town's watermains are less than 40 years old, with 43% under 20 years old.



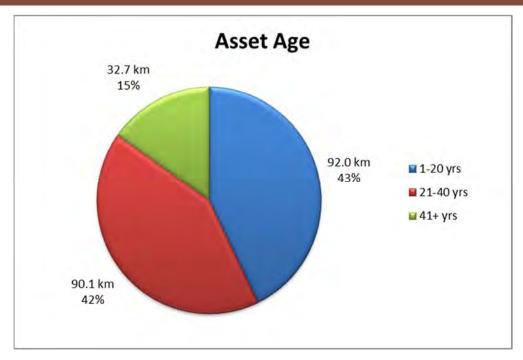


Figure 7-2: Age distribution (as recorded in the GIS database)

As mentioned earlier, 79% of the Town's watermain inventory is comprised of PVC pipes. Most of the newer mains are made of PVC.

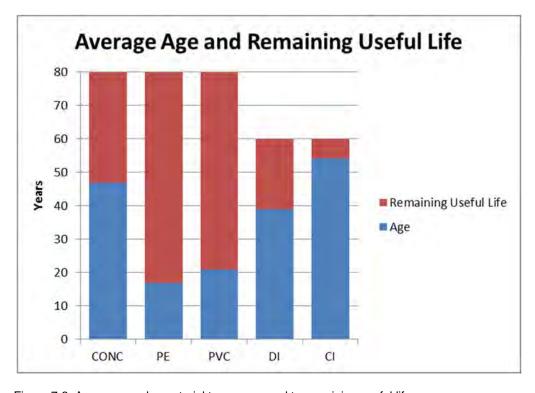


Figure 7-3: Average age by material type compared to remaining useful life



Figure 7-3 shows that PVC watermains, the majority of the inventory, have an average age of 21 years. While polyethylene watermains are the newest with an average age of 17 years, there is only 256m of this material type.

The previous graph is a good representation of where assets are in terms of lifecycle. Cast iron and ductile iron are the oldest and should be targeted for replacement first.

Asset Condition:

Watermains:

The straight line, age-based method was used to assign asset condition for watermain infrastructure. The rationale behind this is that cast iron and ductile iron pipes, which are the oldest, have the highest frequency of watermain breaks. Cast iron mains over time have mineral deposit buildups which can cause lower water flows for fighting fires and possibly water quality issues. What is happening in the field coincides with the useful life data as shown in Figure 7-3. Thus it makes sense that those asset types that are nearing the end of their lifecycles should be replaced first.

The watermain asset condition grade was determined using the following formula:

Condition = Service Life Remaining / Useful Life

The condition grades were grouped as follows:

Condition	Grade Range
Critical	0 - 20
Poor	21 - 40
Fair	41 - 60
Good	61 - 80
Excellent	81 - 100

Table 7-3: Watermain Condition Grades

Grouping the assets in such a manner makes it easier to prioritize watermain replacements. Obviously, watermains that are deemed to be in critical condition should be addressed first. It should be considered whether any of those watermain replacements could be combined with road works in order to achieve cost savings.



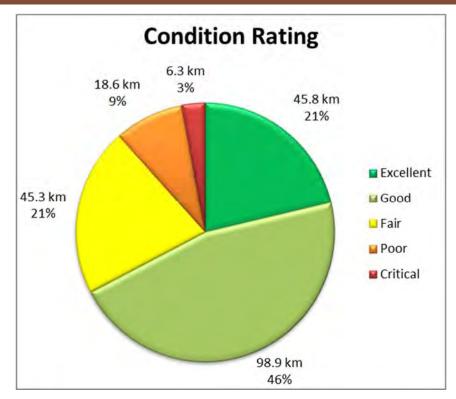


Figure 7-4: Watermain Asset Condition

The above graph shows that 3%, or 6.3 km, of the Town's watermains are in critical condition. All of these watermains are cast iron, and should be prioritized for replacement.

Metering Stations:

In 2016, the Town conducted an assessment of water facilities to understand the condition and to effectively prioritize rehabilitation and replacement work in the future. The work conducted included a visual site inspection of all structures, identification of deficiencies, preparation of preliminary estimates, and identification of priority/suggested timing to address the noted deficiencies.

Rating methodologies were developed and applied to the conditions of the metering stations. The following tasks were completed in conducting the condition assessments:

- Creation of a catalogue of equipment, services and building components including mechanical, electrical, structural and architectural.
- Assessment of each component for replacement cost and life expectancy.
- Identification of any violations to existing codes.
- Categorizing required repairs and maintenance needs based on urgency.

Each condition rating was assigned condition indicators to assist in the consistent evaluation of assets. The condition ratings of asset components were used in determining an overall



condition index, indicating the general condition of the asset as a whole. The condition index was determined using a weighting of each asset component and associated condition rating.

Condition	Rating
Critical	5
Poor	4
Fair	3
Good	2
Very Good	1

Table 7-4: Metering Station Condition Ratings

Risk associated with operation of the water metering facilities is consistent across all metering stations, so only a condition rating is required.

Prioritized recommendations arising out of the facilities assessment are as follows:

Station Name	Condition Rating	Immediate Costs	Longer Term Costs	Totals by Station	
Dillon Drive	2.9	\$ 1,700	\$ 1,600	\$ 3,300	
McNorton Street	2.8	2,700	1,600	4,300	
Tecumseh Rd.	2.8	3,000	1,600	4,600	
County Road 22	2.9	4,050	16,600	20,650	
County Road 42	2.8	7,500	1,000	8,500	
Baseline Road	2.7	3,300	1,200	4,500	
8th Concession Road	2.8	16,300	1,200	17,500	
County Road 46	2.9	9,500	1,200	10,700	
Walker Road	2.8	4,500	2,200	6,700	
North Talbot Road	3.0	28,500	1,200	29,700	
Talbot Road	1.2	2,000	1,200	3,200	
G	rand Totals	\$ 83,050	\$ 30,600	\$ 113,650	

Table 7-5: Water Metering Stations Prioritized Recommendations

Asset Management Policies

The Water Distribution System Condition Assessment Policy discusses the use of a straight line, age-based method to assign asset condition for watermain infrastructure. The policy discusses other indicators used to assess the condition of the distribution system. Refer to Appendix L for a copy of the Water Distribution System Condition Assessment Policy.

The Data Verification Policy provides a guideline for the review of data that is collected or provided to the Town. Refer to Appendix B for a copy of the Data Verification Policy.



7.2 Desired Levels of Service

Flow tests measure the amount of water that will flow through the watermain when a fire hydrant is opened fully. This test is performed by the Town approximately every five years. Fire department industry standards look for a minimum of 500 gallons per minute (GPM). Hydrants in the Town that fall below this amount are colour coded black and the Fire Department is notified. These areas (watermain and fire hydrant) are listed for replacement or upgrade when an opportunity is available.

Watermain breaks are documented and filed. During watermain repairs, the Water Operator examines the external condition and if possible the internal condition of the watermain and will note the condition on the repair sheet. Excessive watermain breaks, over 7 within 1km length of watermain, are noted and reviewed for possible replacement by the Manager Water & Wastewater and the Manager Engineering Services.

Water quality is measured weekly by Town Water Operators and water quality concerns from water customers are documented and reviewed weekly. Poor water quality (discoloured water or low chlorine residuals) are used to measure the internal quality of the watermain. Water quality is measured with equipment that gives a value (#) of chlorine residual (free chlorine left in the water) in parts per million (ppm). Ministry of the Environment (MOE) minimum standards are set at 0.20 ppm. Chlorine residual reads of less than 0.05 ppm must be reported to the local health unit. Water quality indicators are also used to assist in determining the life of the watermain.

Every fire hydrant is operated and inspected at least 3 times a year and painted every 4 years. Fire hydrants that become too costly to repair or maintain are replaced (some of the replacement parts of a fire hydrant can and will add up to more than the cost to replace the hydrant).

A Town Water Operator does an internal and external visual inspection of the water tower weekly. In addition, the water tower is inspected by Landmark (the company that built the water tower) every 5 years as per AWWA recommendations. These inspection reports and recommendations are reviewed to determine how to protect and extend the life of this asset.

Boundary Water Meters are inspected twice a year by the company that built the stations. Recommendations are given in a report to the Manager Water & Wastewater. In addition, there is a 24/7 computer monitoring system built into each station that allows the Manager Water & Wastewater to review data/problems that might affect the life of this asset. For example, a cold temperature alarm could indicate possible damage to electronic equipment if the temperature issue is not resolved. Another example is an illegal entry alarm triggers the immediate dispatch of a Water Operator to prevent or reduce damage to the asset.



In summary, it is Administration's intent to ensure that the Town continue to maintain acceptable levels of service, which can be specifically qualified as;

- Watermain flow tests performed every 5 years
- Watermain flow test result greater than 1,000 gallons per minute (GPM)
- Less than 3 watermain breaks per km
- Meet or exceed the MOE minimum standard for water quality of 0.20 ppm chlorine residual
- Fire hydrant inspection 3 times/year; painting every 4 years
- Water tower inspections every 5 years
- Boundary water meter inspections twice/year.

7.3 Asset Management Strategy

7.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

These maintenance activities will be undertaken by Water Services Division or competent contractors under the guidance of Water Services and are intended to find any deficiencies and or issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.

MAINTENANCE

Performance	Program Descriptions	Frequency	Measures
Watermain, Valves & Service Breaks	Repairs to watermains, water valves and services as quickly as needed during the course of the year.	As needed	Compliance with SOP's and Reg's, number of incidents
Water Valves	Operate all water valves in the distribution system. Work off mapping system so that every valve is checked and operated over the course of a 5 year period. This type of maintenance work usually takes place in the spring, summer or fall months.	Annual	Operation of valve
Fire Hydrants	All fire hydrants are completely operated and flushed between the months of May and July every year. All fire hydrants are winterized (water removed for the barrel of the hydrant) and rechecked a 2nd time during the course of the winter months. Winterizing takes place from November until April every year.	Annual	Operation of hydrant, leaks
Auto Flushers	Auto Flushers are used to flush water in the distribution as needed. These units required maintenance on a "as needed" basis and undergo visual checks/tests every fall.	As needed and annually for calibration	Water quality
Metering Chambers	Metering chambers are large above/underground units used to house water measuring equipment. These chambers need to be checked for water damage, leaks and calibration.	As needed and annually for calibration	Visual inspection for ground settlement



MAINTENANCE

Performance	Program Descriptions	Frequency	Measures	
	Backflow valves in the water distribution require testing and	As needed and	Tested by licenced	
Backflow Valves	general repairs as needed.	annually for	Technician including	
	general repairs as needed.	calibration	recommendations	
	There are a number of pieces of equipment that are used in the	As needed and	Tested by licenced	
Equipment Calibration	water distribution that require testing/calibration maintenance on a	annually for	Technician including	
	yearly basis.	calibration	recommendations	
	The Town water tower is maintained to ensure the area is secure,	Weekly and a 5	Inspected by builder	
Water Tower	clean, and that the lighting and room heating system is working.	year cycle for the	including maintenance	
water rower	The structure is maintained on a five year cycle by the same	structure	recommendations	
	company that built it.	structure	recommendations	
	Take weekly bacteria samples from water sampling station and the			
Weekly Bacteria Sampling	water distribution system. Samples are taken to a MOE accredited	Weekly	Water sample readings	
	lab.			
	Take weekly bacteria samples from water sampling station and the			
Weekly Chlorine Sampling	water distribution system. Results taken by the water operator are	Weekly	Water sample readings	
	measured in parts per million (PPM).			
Lead sampling	Take water samples to test for lead. These samples are taken to a	Twice a year	Water sample readings	
Leau samping	MOE accredited lab.	i wice a year	water sample readings	
	There are approximately 8,000 water meters in the water			
Water Meter Upgrade	distribution system. All the water meters are in the process of an			
, ,	upgrade to a electronic reading system. This program should be	Daily	Water volume	
Program	completed by 2017. Water meters will still be added and			
	maintained every year as this program is completed.			
	Locate watermains, water services, water valves and fire hydrant as			
Water Asset Locating	requested by consultants or contractors. Water assets are located to		Number of water locates	
	provide correct information so that the asset may not get damaged	Daily/weekly	requested	
	when excavation takes place.			

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the asset must be replaced. This strategy is used in water distribution systems quite extensively due to the large costs and significant disruptions associated with a total replacement. Work such as this could be employed more than once during an asset's lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Watermain Breaks	Watermain renewal/rehabilitation is based on age/type of material, amount of breaks and any water quality or flow problems.	Reviewed yearly	Number of breaks and complaints
Water Valves	Repaired as necessary or as part of the renewal program.	Reviewed yearly	Operation of valve
Fire Hydrants	Repaired as necessary or as part of the renewal program.	Reviewed yearly	Operation of hydrant, leaks
Auto Flushers	Repaired as necessary or as part of the renewal program.	Reviewed yearly	Water quality
Metering Chambers	Long term replacement - 75 plus years.	Reviewed yearly	Visual inspection for ground settlement



RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Backflow Valves	Repaired as necessary or replaced whatever is more cost effective.	Reviewed yearly	Tested by licenced Technician including recommendations
Equipment Calibration	Repaired as necessary or replaced whatever is more cost effective.	Reviewed yearly	Tested by licenced Technician including recommendations
Water Tower	Long term replacement - 75 plus years.	5 year review	Inspected by builder including rehabilitative recommendations
Water Meter Upgrade Program	Replaced every 15 to 20 years or as needed.	15 to 20 years	Water volume

Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/rehabilitation will approach the full replacement cost. This strategy is usually reserved for assets that have had very little maintenance work performed during its lifespan and for which remedial methods will not be adequate.

REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
Watermain Breaks	Watermain replacement is based on age/type of material, amount of breaks and any water quailty or flow problems.	Reviewed yearly	Number of breaks and complaints
Water Valves	Water valve replaced during watermain replacement or if repairs cost more than replacement.	Reviewed yearly	Operation of valve
Fire Hydrants	Fire hydrants replaced during watermain replacement or if repairs cost more than replacement.	Reviewed yearly	Operation of hydrant, leaks
Auto Flushers	Auto flushers replaced during watermain replacement or if repairs cost more than replacement.	Reviewed yearly	Water quality
Metering Chambers	Very long service life, only replaced if problems occur.	Reviewed yearly	Visual inspection for ground settlement
Backflow Valves	Tested every year and replaced only when cost of repairs is more than replacement.	Reviewed yearly	Tested by licenced Technician including recommendations
Equipment Calibration	Hand held equipment tested every year, only replaced when cost of repairs is more than replacement.	Reviewed yearly	Tested by licenced Technician including recommendations
Water Tower	Long life expected - 75 years - complete inspection by manufacturer every 5 years.	5 years	Inspected by builder including major reconstruction recommendations
Water Meter Upgrade Program	Water meters are replaced as needed but have a life expectancy of 15 to 20 years.	Daily	Water volume

Disposal

This strategy is employed typically as part of larger infrastructure projects. The Town of Tecumseh achieves little to no value for disposal of any water distribution system piping. There can be costs associated with disposal of any facility assets associated with the water distribution system although they are typically limited to residual scrap value.



DISPOSAL

Performance	Program Descriptions	Frequency	Measures
Watermain Breaks	Watermain is taken out of service as it is replaced. Sold for scrap	As required	Nil
Waterman Breaks	where possible, otherwise disposed at Town cost.	As required	INII
	Water valves are replaced when a problem is found or during		
Water Valves	watermain replacement. Sold for scrap where possible, otherwise	As required	Nil
	disposed at Town cost.		
	Fire hydrants are replaced when a problem is found or during		
Fire Hydrants	watermain replacement. Sold for scrap where possible, otherwise	As required	Nil
	disposed at Town cost.		
Auto Flushers	Auto flushers are replaced when a problem is found or during	As ma musima d	NI:1
Auto Flushers	watermain replacement.	As required	Nil
Mataria - Charahara	During watermain replacement/relocation project. Sold for scrap	A a require d	Nil
Metering Chambers	where possible, otherwise disposed at Town cost.	As required	
Backflow Valves	Backflow valves are replaced when there is a problem.	As required	Nil
Water Tower	Replaced or removed when the Tower has met its useful life.	As required	Nil

7.3.2 20 Year Plan

A detailed 20 Year Plan was generated for the water distribution system that includes watermain replacements and reconstruction works. Please refer to Appendix M for detail by asset ID.

Replacement

The Town would like to implement a work plan with replacing all of the cast iron and ductile iron watermain pipes, starting with the watermains that are subject to a higher number of breaks; have been identified as approaching their life expectancy; and have been identified as being in "critical" or "poor" condition based on the Town's assessment.

Costs were derived from recent tenders received for similar works completed within Essex County over the last few years. Approximately \$400,000 to \$600,000 annually will be budgeted for the replacements of cast iron and ductile iron watermains over the 20 year work plan. Yearly totals may exceed this range when works have been coordinated with other infrastructure projects (i.e. sanitary sewers, road reconstruction, etc.). The works were planned each year based on the age of the asset, type of material, location, and assessed condition. Under this plan, the majority of cast iron and ductile iron watermain pipes will be replaced over the next 20 years.

Growth

Background

Municipalities can recognize the benefit of comprehensive long-range planning exercises that examine problems and solutions for an overall system of municipal services. Master Plans are not intended to address specific local problems or to plan for projects on a project-by-project basis.



The Class Environmental Assessment process defines Master Plans as:

"Long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. These plans examine an infrastructure system(s) or group of related projects in order to outline a framework for planning for subsequent project and/or developments."

2002 Water & Wastewater Master Plan

The Town of Tecumseh completed a Water and Wastewater Master Plan in June 2002. It is recommended practice to review a Master Plan at least every five years to determine the need for a formal review and update to the Master Plan. Since the Plan was completed in 2002, several changes have occurred which have had significant impacts to the assumptions used in preparing the Plan and, as a result, it was identified that the Plan needs to be updated.

2008 Water & Wastewater Master Plan Update

The Purpose of the Water and Wastewater Plan Update (2008) was to use revised best planning population estimates for the Town of Tecumseh within the 2028 planning horizon to provide a technical review of the 2002 wastewater servicing strategies. The review recommended necessary strategy changes, updates to project phasing and updates to capital cost estimates which in turn feed into the Development Charges process. This update is a critical component in the integrated planning process and was intended to consolidate and harmonize the Town's water and wastewater servicing strategies; and capital program for the North and South Service Areas based on updated planning information, new water and wastewater service agreements with the City of Windsor, updated design criteria and updated project information.

2010 Water & Wastewater Master Plan Update

A further review was conducted in 2010 which resulted in the updated Wastewater Servicing Strategy.

The Town of Tecumseh Water and Wastewater Master Plan Update (2008) and the 2010 Updated Water Servicing Strategy consolidated the Town's servicing strategies for the north and south service areas to make best use of available capacities provided in the Servicing Agreements with the City of Windsor. It should be recognized that the water and wastewater projects should be implemented concurrently wherever possible.

The alignments of new trunk facilities have been planned based on the location of existing road allowances and/or servicing corridors in order to ensure that servicing can proceed without undue delays resulting from the need to acquire property. However, the Town has the option to conduct the trunk facilities through new development lands if it can be shown to be cost effective to do so. In this event, the alignment of the trunk facilities may be altered based on approved Secondary Plans and/or Approved Draft Plans of Subdivision. Should the trunk facilities be implemented through new development lands, additional notification to the Public would be provided through the Planning Act notifications.



It should also be noted that the timing of the various projects has been established based on anticipated growth rates in Tecumseh and on a fiscally responsible capital works program. The Town will have the option to advance or defer specific projects depending upon the rate of growth experienced in Tecumseh, or upon the petition by a developer (or group of developers) provided that the financial impacts of advancing certain projects are reviewed and mitigated through collection of Development Charges or through Front-End Financing arrangements.

The servicing strategies and capital programs were also updated based on projects currently underway, whether in study, design or construction stage. This led to more detailed project information, schedules and capital cost estimates.

2010 Recommended Servicing Strategy

The Updated Water Servicing Strategy includes a number of separate and distinct projects that will provide an ultimate consolidated servicing scheme to maximize the use of existing infrastructure and provide capacity for new growth in designated growth areas of the Town. A brief description of each of the Projects is provided below:

W-1A – West Tecumseh Trunk Watermain from County Road 22 to CP Railway

This trunk watermain will provide direct servicing for new development lands within the Tecumseh Hamlet West Planning Area, and will improve the flow of water for fire hydrants in existing developments south of County Road 22. The alignment of this trunk watermain should be established through approved Secondary Plans and coordinated through proposed Plans of Subdivision.

Based on Preliminary Design, a 400 mm trunk watermain from County Road 22 to Intersection Road and 600 mm diameter trunk watermain from Intersection Road to CP Railway is required within the Tecumseh Hamlet West Planning Area. In addition, 600 mm and 300 mm diameter trunk watermains are required on Intersection Road from Banwell Road to Shawnee Road.

W-1B (added in 2010 Revised Water Servicing Strategy)

This trunk watermain will provide servicing for new development within the Tecumseh Hamlet West Planning Area, and will improve the flow of water for fire hydrants in existing developments south of County Road 22. The alignment of this trunk watermain should be established through approved Secondary Plans and coordinated through proposed Plans of Subdivision.

Based on Preliminary Design, a 600 mm diameter trunk watermain from Intersection Road to CP Railway is required within the Tecumseh Hamlet West Planning Area.

W-2A - East Tecumseh Hamlet Watermain Connection

This trunk watermain will provide servicing for new development lands within the Tecumseh Hamlet East Planning Area, and will improve the flow of water for fire hydrants in existing developments south of County Road 22. Based on a Preliminary Design, a 300 mm diameter trunk watermain along CP Railway line from Lesperance Road to Manning Road is required.



W-2B - Trunk Watermain on Manning Road from County Road 22 to CP Railway

This trunk watermain will provide servicing for new development lands within the Tecumseh Hamlet East Planning Area south of County Road 22. Construction of this watermain could be coordinated with future Manning Road upgrades. Based on a Preliminary Design, a 400 mm diameter trunk watermain on Manning Road from CR 22 to CP Railway is required.

W-4 - West Tecumseh Trunk Watermain from CP Railway to County Road 42

Similar to W-1, this trunk watermain will provide direct servicing for new development lands within the Tecumseh Hamlet West Planning Area, and will improve the flow of water for fire hydrants in existing developments south of CP Railway. It will also connect the feedermain on County Road 22 to the feedermain on County Road 42, to provide looping for the main potable water feed lines from the Windsor system into the Town of Tecumseh. The alignment of this trunk watermain should be established through approved Secondary Plans and coordinated though proposed Plans of Subdivision.

Based on a Preliminary Design, a 600 mm diameter trunk watermain from CP Railway to County Road 42 is required within the Tecumseh Hamlet West Planning Area. In addition, a 300 mm diameter watermain connection to the exiting watermain on St. Alphonse Avenue is proposed.

W-5 – Trunk Watermain on Manning Road south of CP Railway

Similar to W-4, this trunk watermain will provide servicing for new development lands within the Tecumseh Hamlet East Planning Area, and will improve the flow of water for fire hydrants in existing developments south of CP Railway. Construction of this watermain could be coordinated with future Manning Road upgrades.

Based on a Preliminary Design, a 400 mm trunk watermain on Manning Road from CP Railway to County Road 42 is required. In addition, a 400 mm diameter watermain on County Road 42 from 12th Concession Road to Manning Road is proposed.

W-6 - South Tecumseh Trunk Watermain from County Road 42 to Highway 401

Construction of the South Tecumseh trunk watermain from County Road 42 to Highway 401 will provide water supply for new growth south of County Road 42 including the designated Highway Commercial lands located adjacent to Manning Road just north of Highway 401. The alignment of this watermain is proposed to extend along 11th Concession Road south of County Road 42 to Baseline Road, then easterly along Baseline Road from 11th Concession to 12th Concession Road, then south on 12th Concession Road from Baseline Road to Highway 401. Consideration may be given to an Alternative Route for this trunk watermain during preparation of Secondary Plans for the future development areas south of County Road 42, should these lands be designated for growth in future Official Plan Updates.

Based on Preliminary Design, a 600 mm diameter trunk watermain from County Road 42 to Highway 401 is proposed for the areas south of County Road 42.



W-7 - South Tecumseh Trunk Watermain from Highway 401 to Maidstone

Construction of the South Tecumseh trunk watermain from Highway 401 to Maidstone Hamlet will provide water supply for new growth south of Highway 401 including Maidstone Hamlet. The alignment of this watermain will be along 12th Concession Road from Highway 401 to North Talbot Road, then easterly along Middle Road to Malden Road.

W-8 – Maidstone Hamlet Trunk Watermain

Construction of the Maidstone Hamlet trunk watermain will provide servicing for existing development and new growth within Maidstone Hamlet. The preliminary alignment of the watermain is along Malden Road from Middle Road to Talbot Road (County Road 34). On a preliminary basis, a 400 mm diameter trunk watermain has been selected for this watermain.

W-9 – Zone 2 Booster Pumping Station

Construction of the Zone 2 Booster Pumping Station will permit the Town to operate the water system in the southeast area of Tecumseh at a higher pressure zone, in order to provide adequate pressures throughout the full range of demand scenarios. Four (4) alternative sites including the Town owned lands near the Manning Road/Baseline Road have been identified for the location of the proposed booster pumping station. The rated capacity of the booster pumping station is estimated at 100 L/s.

W-10 - Zone 2 Water Storage Facility

Construction of the Zone 2 Water Storage Facility will supplement the existing water storage for fire hydrants already provided within the Tecumseh Elevated Tank, will provide Tecumseh with minimum water storage required for fire hydrants for an integrated Tecumseh system, and will provide storage for pump control for the booster pumping station. For (4) alternative sites including the Town owned lands near the manning Road/Baseline Road have been identified for the location of the proposed water storage facility. The storage capacity requirement is estimated at 4.55 ML (1.0 MIG).

W-11 - County Road 46 Trunk Watermain

This project includes construction of a trunk watermain on County Road 46 (North Talbot Road) from 12th Concession Road to Sexton Sideroad and local distribution watermains on Sexton Sideroad. Construction of the trunk watermain will provide water supply for the southeast service area and will provide an emergency back-up to the southwest service area in the event supply through the Windsor system is disrupted. The trunk watermain will also permit Tecumseh to provide water storage for fire hydrants for the southwest service area in the event that the Windsor system cannot provide the flow of water for fire hydrants in the area.

Based on a Preliminary Design, a 400 mm diameter trunk watermain on County Road 46 is required. In addition, 250 mm diameter watermain on Sexton Sideroad is required to complete the watermain looping.



W-12 - Southwest Tecumseh Trunk Watermain

This project involves construction of trunk watermain on 8th Concession Road from Highway 401 to North Talbot Road, on North Talbot Road from 8th Concession Road to Sexton Sideroad and on Provincial Road (CR 46) from Highway 401 to 8th Concession Road. This project will strengthen the overall distribution network for the southwest service area. The actual timing of the watermain works on 8th Concession Road and on Provincial Road will be dependent upon Windsor completing the watermain extensions to the Tecumseh boundary.

Based on Preliminary Design, 600 mm diameter trunk watermain 8th Concession Road and Provincial Road, and 400 mm diameter trunk watermain on North Talbot Road are required.

2018 Water & Wastewater Master Plan Update

Since the completion of the 2008 Water and Wastewater Master Plan Update, further planning studies and discussion papers related to the preparation of a new Official Plan have been completed. In order to ensure that the Town implements the most cost effective infrastructure servicing strategies required to support new growth and maintain a high level of service into the future, an update to the current Master Plan is being planned in accordance with the Class Environmental Assessment (EA) process for water and wastewater projects. The purpose of the Master Plan Update is to re-examine water and wastewater infrastructure timing and costing requirements for the existing settlement areas in the Town of Tecumseh. This is anticipated to be completed in the Fall of 2018.



8. Sanitary Collection System

8.1 State of the Local Infrastructure

Inventory:

The sanitary collection system consists of sewer gravity pipes, services, pumping stations, forcemains, and metering stations. The majority of sanitary sewage flows are treated at the Lou Romano Water Reclamation Plant (LRWRP) and the Little River Pollution Control Plant (LRPCP) both of which are owned and operated by the City of Windsor.

Sanitary Sewers:

There are a total of 115.6 km of sanitary sewers, varying in size from 200mm to 1200mm diameter. The pipe materials consist of Asbestos Cement (AC), Reinforced Concrete (RC), and Polyvinylchloride (PVC).

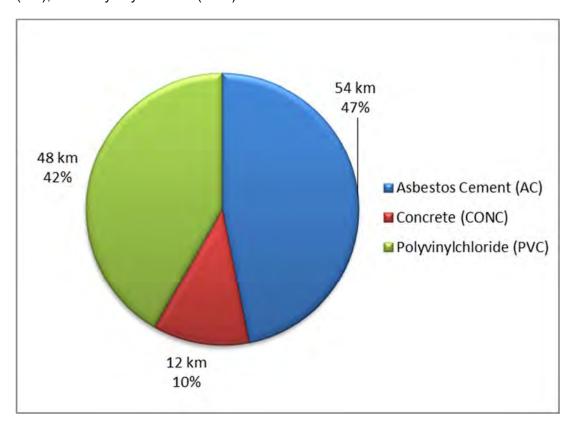


Figure 8-1: Sanitary Sewer Inventory by Material

Sanitary Manholes:

There are a total of 1,522 sanitary manholes, varying in size from 1200mm to 3000mm diameter. The manhole material consists of precast reinforced concrete.



Sanitary Services:

There are a total of 7,682 sanitary services equating to an approximate length of 77 km from the trunk sanitary sewer to the property line (for which the Town is responsible for). These services are generally 125mm diameter, with material consisting of Asbestos Cement (AC), Reinforced Concrete (RC), and Polyvinylchloride (PVC).

Sanitary Forcemains:

There is a total of 0.8 km of sanitary forcemains, varying in size from 150mm to 250mm diameter. The pipe materials consist of Reinforced Concrete (RC) and Polyvinylchloride (PVC).

Pumping Stations:

There are four pumping stations located within the Town that are operated and maintained by the Ontario Clean Water Authority (OCWA):

- a) Cedarwood Pumping Station Located at 345 Gauthier Drive (Gauthier/Cedarwood intersection).
- b) Lakewood Pumping Station Located at the Manning Rd/Little River intersection (Lakewood Park).
- Sylvestre Pumping Station Located at 1600 Sylvestre Drive (Sylvestre west of Desro).
- d) St. Alphonse Pumping Station Located at 2571 St. Alphonse Street (St. Alphonse/County Road 42 intersection).

Metering Stations:

There are a total of five metering stations located within the Town that are being monitored using a Supervisory Control and Data Acquisition (SCADA) system. This provides the Town with historic flow and volume data. These five stations have all been constructed or retrofitted into existing stations in the Town of Tecumseh since 2010. These SCADA systems consist of flow meters and electronics to provide real time accurate data to Town staff to assist in daily operational work. Locations are:

- a) Meter #1 WP 01 Cedarwood Pumping Station
- b) Meter #2 TSM 02 County Road 22 at Shawnee Flume
- c) Meter #3 WP 03 Lakewood Pumping Station
- d) Meter #4 TSM 04 North Talbot Road Flume
- e) Meter #5 TSM 05 8th Concession Road at Hwy #401 Flume

Detailed information on the sanitary sewer assets is maintained in the Town's Geographic Information Systems (GIS) system. Sanitary sewers are split into segments, manhole to manhole, with each segment assigned a unique GIS ID.



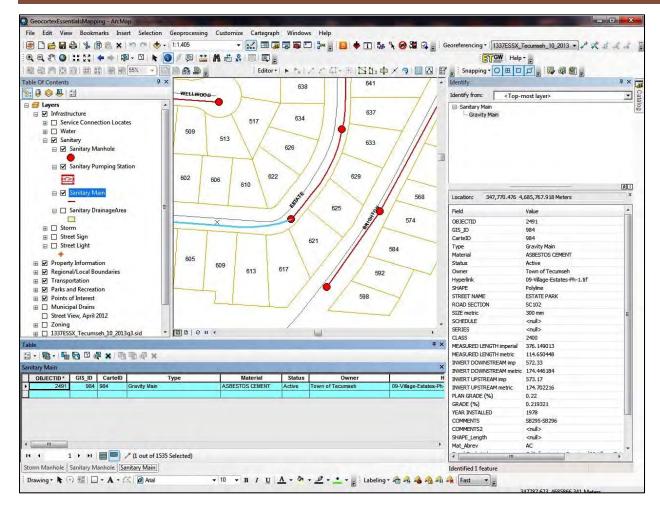


Figure 8-2: GIS screenshot of GIS ID # 2491 - Estate Park sanitary sewer segment

Valuation:

An inventory and historical cost valuation of the sanitary sewer system was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on deflated replacement costs at the time. The expected useful lives for accounting amortization purposes are as follows:

Sanitary sewers - 65 years
Pumping station (PS) structure - 50 years
PS roof - 20 years
PS mechanical/electrical - 20 years
SCADA - 10 years.



Detailed asset accounting data is maintained in CityWide software. Each asset found in CityWide can be cross-referenced to a GIS ID. The database is updated annually prior to financial statement preparation.

As of the 2016 year end, sanitary sewer system asset accounting valuations are as follows:

	Sanitary Sewers		Sanitary Facilities		Total Sanitary	
Historical Cost	\$	28,650,374	\$	3,389,314	\$	32,039,688
Accumulated Amortization	\$	(9,323,641)	\$	(917,312)	\$	(10,240,953)
Net Book Value	\$	19,326,733	\$	2,472,002	\$	21,798,735

Replacement costs were updated for the preparation of the Asset Management Plan. The total standalone replacement cost of sanitary sewers, forcemains, manholes and services is \$123,164,600. Cost savings could be incurred if sanitary sewer replacements were combined with road work; resulting in a reduced replacement cost of \$110,397,900.



Total sanitary sewer replacement cost is \$123 million!

Asset Age:

Sanitary Sewers, Manholes, and Services:

The age of the sanitary sewer segments (sewers, manholes and services) can be found in the Town's GIS database.

From the following graph, it can be seen that 55% of the Town's sanitary sewers were installed in the 1970's. Relatively speaking, that means that over half of the Town sanitary piping system is between 37 and 46 years old. Traditionally, an expected lifespan of a sanitary sewer is anywhere from 50 -75 years depending on conditions. Conversely, this also highlights that 45% of the Town's sanitary sewer system is relatively 'new' with 36% of the system being installed since 1990.



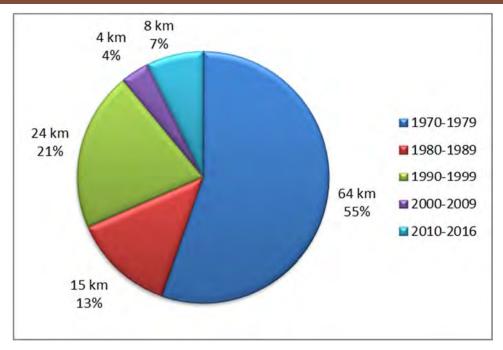


Figure 8-3: Sanitary Sewer installation year (as recorded in the GIS database)

The following graph shows the average age and remaining useful life by sanitary sewer material. Asbestos Cement (AC) sanitary sewers are the oldest with an average age of 41 years. Polyvinylchloride (PVC) and reinforced concrete (RC) sanitary sewers are the newest with over half of the asset lifecycle remaining.

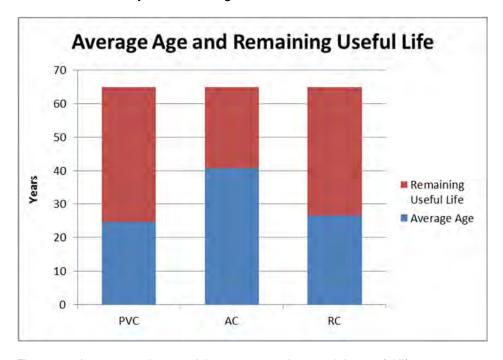


Figure 8-4: Average age by material type compared to remaining useful life



Sanitary Pumping Stations & Forcemains:

- a) Cedarwood Pumping Station Originally installed in 1974.
- b) Lakewood Pumping Station Constructed in 2015.
- c) Sylvestre Pumping Station Originally installed in 1995.
- d) St. Alphonse Pumping Station Originally installed in 1975. Reconstructed and upgraded in 2010.

Metering Stations:

The five metering stations located within the Town have all been constructed or retrofitted into existing stations starting in 2010.

Asset Condition:

Sanitary Sewers:

The Town has reviewed a representative amount of video collected on the sanitary sewer system and given it a Sewer Performance Grade (SPG) to assist in determining the condition of the sewers. The total length of sanitary sewer video the Town has is approximately 60.7 km. The video available is just more than half of the entire infrastructure network. A representative sample of the videos available was selected to review with respect to the various pipe materials. The Town has reviewed approximately 8.4 km of sewer video, or 14% of the total sanitary sewer video available.

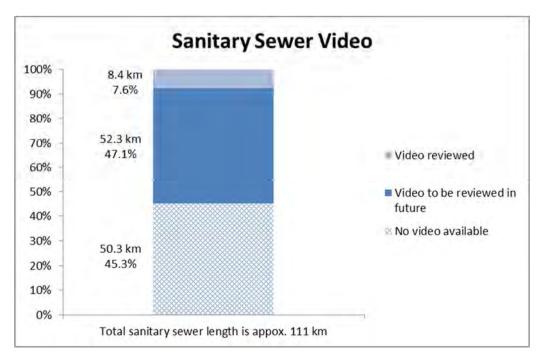


Figure 8-5: Sanitary sewer video sample size



The condition assessment of the sanitary sewers based on the review of these videos will be used to prorate the assessments over the entire collection system in order to arrive at an overall SPG ranking.

The Town of Tecumseh reviewed video data in order to assign grades to the sections of sanitary sewer within the Town. A representative sample was chosen with the results to be used to gauge the overall system. The sewer condition classification was undertaken using the Sewer Performance Grade, or SPG method of classification. This method is based on the Water Resource Centre (WRC) pipe condition classification method. It provides ratings for the sewer sections ranging from a SPG1 to a SPG 5.

Sewer Condition Assessment

SPG 1- No Defects

SPG 2- Minor Defects

SPG 3- Likely to Deteriorate

SPG 4- Likely to Collapse in Future

SPG 5- Collapse Imminent

Ratings for sewer sections are always based on the worst defect found in the section.

Overall, sewers installed since 1980 appears to have a SPG rating of 1 or 2 which is regarded as an above acceptable rating. The sewers installed in the 1970's had noticeable defects and an associated SPG rating of SPG 2 to SPG 3. Extrapolating the estimated costs of repair to achieve an acceptable rating of SPG 2 for the videos reviewed to the remaining sewer infrastructure installed in the 1970's results in an estimated cost of \$2.2M.

It should be noted that these repair amounts are estimated from the video available. They account for an SPG rating of the mainline sewer only. There exists the portion of all sanitary services that fall under the Town responsibility and they ultimately account for some remedial repair as well. For the sake of this project, the sanitary services PDC's were not reviewed because the available video is insufficient compared to main line sewer video.

As for an overall Rating of the sanitary collection system, it would be Administration's assessment that the system is at or about a SPG 2 for anything installed since 1980. The portion of the Town's sewer that was installed in the 1970's can be expressed as an SPG 3 with the possibility of achieving an SPG 2 with an aggressive program to find and repair sanitary sewer defects. Ratings are based on the SPG ratings above as well as observational and collection staff experience.



Sanitary Manholes:

The conditions of the existing manholes have not yet been reviewed as part of the Asset Management Plan. Typically, precast concrete manholes have a life expectancy that surpasses the life of the adjacent sewers and services. Leaks and failures observed in manholes are usually at the point of connections, and are repaired concurrently with other trenchless repairs being completed on the sewer trunk and services.

Sanitary Services:

The conditions of the sanitary services were not reviewed as part of the Asset Management Plan. Typically, the services are not videoed unless they are part of the Town's Inflow and Infiltration (I&I) Program. Typically the age, material and condition of the sewer trunk are key indicators that provide insight where potential issues may lie.

Sanitary Pumping Stations & Metering Stations:

- a) Cedarwood Pumping Station Originally installed in 1974.
- b) Lakewood Pumping Station Construction completed in 2015.
- c) Sylvestre Pumping Station Originally installed in 1995.
- d) St. Alphonse Pumping Station Originally installed in 1975. The Town conducted facility upgrades and rebuilt the pumping station in 2010.

In 2016, the Town conducted an assessment of the sanitary metering and pumping stations to understand the condition and to effectively prioritize rehabilitation and replacement work in the future. The work conducted included a visual site inspection of all structures, identification of deficiencies, preparation of preliminary estimates, and identification of priority/suggested timing to address the noted deficiencies.

Rating methodologies were developed and applied to the conditions of the metering stations. The following tasks were completed in conducting the condition assessments:

- Creation of a catalogue of equipment, services and building components including mechanical, electrical, structural and architectural.
- Assessment of each component for replacement cost and life expectancy.
- Identification of any violations to existing codes.
- Categorizing required repairs and maintenance needs based on urgency.

Each condition rating was assigned condition indicators to assist in the consistent evaluation of assets. The condition ratings of asset components were used in determining an overall condition index, indicating the general condition of the asset as a whole. The condition index was determined using a weighting of each asset component and associated condition rating.



Condition	Rating
Critical	5
Poor	4
Fair	3
Good	2
Very Good	1

Table 8-1: Sanitary Facility
Condition Ratings

Determining a score for condition alone does not provide sufficient information to prioritize improvements. A poor condition rating on a less essential asset will not equate to an essential asset in need of imminent rehabilitation.

The risk drivers that affect the wastewater infrastructure include the percentage of system impacted, asset failure, environmental or social impacts, and population impacted. Each factor has been attributed a range of values to help describe the anticipated impacts and severity of each of the risk factors.

A composite risk value was determined using a formula derived to reflect the specific asset risks. Development of the formula considered the particular assets being evaluated, and each risk factor's interconnection and influence on the overall system.

Prioritized recommendations arising out of the facilities assessment are as follows:

Station Name	Condition Rating	Combined Rating	Immediate Costs	Longer Term Costs	Totals
Meter #1 - WP 01 - Cedarwood PS	1.9	1.9	\$4,000	\$0	\$4,000
Meter #2 - TSM 02 - CR22 at Shawnee Flume	1.8	1.8	\$0	\$0	\$0
Meter #3 - WP 03 - Lakewood PS	1.0	1.0	\$0	\$0	\$0
Meter #4 - TSM 04 - North Talbot Road Flume	1.9	1.9	\$6,000	\$0	\$6,000
Meter #5 - TSM 05 - 8th Con Rd @ HWY401 Flume	2.2	2.2	\$4,000	\$0	\$4,000
Totals for Sanitary Metering Stations			\$14,000	\$0	\$14,000

Table 8-2: Sanitary Metering Stations Prioritized Recommendations

Station Name	Risk Rating	Condition Rating	Combined Rating	Immediate Costs	Longer Term Costs	Totals
	Rating	Katiliy	Kaung	COSIS	COSIS	
Cedarwood PS	11	2.7	13.7	\$351,500	\$370,000	\$721,500
Lakewood Sanitary PS	10	1.1	11.1	\$0	\$0	\$0
Sylvestre PS	5	2.6	7.6	\$12,500	\$30,000	\$42,500
St. Alphonse PS	3	1.8	4.8	\$1,500	\$0	\$1,500
Totals for Sanitary Pur	nping Statio	ons		\$365,500	\$400,000	\$765,500

Table 8-3: Sanitary Pumping Stations Prioritized Recommendations



Metering Stations:

Since 2010, these five stations have all been constructed or retrofitted into existing stations with the Town of Tecumseh and are all in good condition. OCWA performs annual calibrations on the flumes and magmeters.

Asset Management Policies

The Sanitary Sewer Collection System Condition Assessment Policy (Appendix O) discusses the review of camera inspection videos in order to assign an SPG. The Policy further designates an acceptable timeframe for the review of the sewer network.

The Data Verification Policy (Appendix B) provides a guideline for the review of data that is collected or provided to the Town.

8.2 Desired Levels of Service

With respect to the collection system and the current state of all pumping stations it would be conservatively described as acceptable. Currently, two PS are approximately 40+ years old and one other is in the 20 year timeframe. Two stations have been completely rehabilitated, which renews their useful life. Continued investment and vigorous Preventative Maintenance (PM) will keep these stations running for their useful lifespans.

With respect to the mainline collection system, the overall rating is appropriate for its age. An overall rating of SPG 3 is indicative of needed investment. That is shown in the suggested repair amounts listed previously. Continued investment in mainline sewer repairs will continue to keep the collection system at or above an acceptable range. The Town of Tecumseh has been focused in the short term on solving the Inflow & Infiltration problem which results in sewers being overtaxed due to storm water entering the sanitary system. As the Town realizes gains from this program the sewers will see an increased or fully utilized capacity for actual sewage. The Town has applied for and received Government funding that will be used to advance the rehabilitation of the sanitary sewers at an accelerated rate based on the amount of funding received. Work will begin in 2017 and be completed by the end of 2018. Administration expects at the end of the advanced I&I Program the Towns sanitary sewers should be well within Asset Management goals developed.

It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service and this LOS can be qualified as;

- Yearly tenders to flush and camera inspect sanitary sewers. Goal of inspecting all sewers once within a 15 year time frame
- All SPG 5 defects scheduled for some kind of remedial attention within 6 months
- All SPG 4 defects scheduled to receive remedial attention within 2 years
- An overall average SPG 3 for the Towns collection system, based on current assessments
- A current plan to achieve a SPG 2 rating within a 5 year period, revised once per year



- Continued investment in the I&I Program as detailed in the ten year plan started in 2011
- Yearly review of all facility assets with annual calibrations and reports.

Sanitary Sewer Assessment: The sanitary sewer system continues to be monitored and assessed to determine opportunities for improvements to the system that could increase the level of service and reduce the risk of basement flooding. Sanitary modeling continues to be carried out to provide additional data and information on the performance of the system.

The collection system is maintained by Roads & Fleet staff by responding to public complaints.

8.3 Asset Management Strategy

8.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

These maintenance activities will be undertaken by Public Works forces or competent contractors under the guidance of Public Works and are intended to find any deficiencies and or issues at the onset in order to address them in an adequate timeframe and also limit the extent of remedial repairs.

MAINTENANCE

WAINTENANCE				
Performance	Program Descriptions	Frequency	Measures	
Sewer Main Flushing	Mainline sewers flushed on an as needed basis through the course of the year. Manholes are inspected and sewer levels gauged in areas of known problems during periods of high flows. Sewer is flushed and cleared of all possible buildup. Annual tender with a goal of flushing every sewer in the Town in a fifteen year period is a goal to work towards. Budgetary constraints will be an issue.	As Needed	Less backups and claims	
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis. All videos are loaded and filed in the GIS database and are accessed for review periodically. Again, an annual tender with a fifteen year goal is suggested.	As needed	Maintenance efforts can be concentrated for maximization	
I&I Program	The Town has embarked on a ten year I&I Program to flush, camera and seal mainline sewers in defined areas annually. A budget of \$150,000 was established to begin. Service laterals that are a cause of inflow and infiltration are also investigated and repaired through this program. Currently the Town has repaired approximately 100 plus locations of inflow and infiltration.	Annually	Reduction in unaccounted flow	
Service Call Outs	Town staff is available to respond and attend to customer requests 24/7 on call coverage.	24 hrs/7 days	Number of calls	



MAINTENANCE

Performance	Program Descriptions	Frequency	Measures
Monitoring	Public Works maintains SCADA on all sanitary pumping stations within the Town. This is accessed at the Town offices for review of the daily data to observe and evaluate any maintenance possibilities (i.e. high or low flows). These records are also used to gauge any success of any repairs completed that can be possibly measured. The Town also contracts AMG Environmental to provide flow monitoring service throughout the year. Town staff uses this technology to assess possible areas of issue and direct any rehabilitative work to that area.	Daily	Maintenance efforts can be concentrated for maximization
Sewer Pump Stations	OCWA operates and maintains the Town's sanitary PS and attends sites and maintains operational maintenance of the equipment such as: emergency generator testing; pump rotations; electrical and electronic inspections of the equipment; weekly station review and documentation.	Weekly	Fewer breakdowns and unexpected costs
PDC (Private Drain Connections) Inspections	The Town has been actively camera inspecting PDCs on an as requested basis. If any issues are found, they are directed to be repaired in one of two ways. If it is on the private side, the homeowner is requested to repair it. If it involves infiltration, it must be repaired and inspected by Town forces. If the repair is on the Town ROW, the repair is put into queue based on severity and either repaired by Town forces or contracted out for repair. PW has actively repaired approximately 3-10 PDCs each year for the last 3 years.	As Requested	Fewer unexpected future costs due to timely repair

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the asset must be replaced. This strategy is used in sanitary sewers quite extensively due to the large costs and significant disruptions associated with a total replacement. Work such as this could be employed more than once during an asset's lifespan and extend it past the estimated lifespan if the work is performed within a reasonable timeframe.

RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
Sewer Main	Mainline sewer identified through regular maintenance and inspection that still has some useful life left is considered for rehab or renewal operations. Lining and testing and sealing can rehab the pipe back to almost new characteristics.	As Identified	Extended useful life and delay of full cost replacement. Cost is usually less than replacement
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis. Locations identified for repair are accomplished through trenchless technologies (grouting, lining, sleeve).	As Identified	Upgrade of sewer condition assessment rating



RENEWAL/REHABILITATION

Performance	Program Descriptions	Frequency	Measures
I&I Program	The Town has embarked on a ten year I&I Program whereas we flush, camera and seal mainline sewers in defined areas annually. A budget of \$150,000 was established to begin and it will escalate over the period. Service laterals that are a cause of inflow and infiltration are also investigated and repaired through this program. Currently the Town has repaired approximately 100 plus locations of inflow and infiltration.	Yearly	Reduction in treatment cost for non wastewater
Monitoring	Public Works maintains SCADA on all sanitary pumping stations within the Town. The Town also contracts AMG Environmental to provide flow monitoring service throughout the year. Town staff uses this technology to assess possible areas of issue and direct any rehabilitative work to that area. The SCADA system is annually tested and certified and remedial repairs addressed at that time.	24 hrs/7 days	Upgrade of sewer condition assessment rating
Sewer Pump Stations	OCWA operates and maintains the Towns sanitary PS and attends site and maintains operational maintenance of the equipment such as; emergency generator testing; pump rotations; electrical and electronic inspections of the equipment; weekly station review and documentation. When feasible, the Town incorporates rehab efforts to existing stations as part of larger Capital Projects.	Project Driven	Extended Useful life; reduce O&M Costs from OCWA
PDC (Private Drain Connections) Inspections	The Town has been actively camera inspecting PDC on an as requested basis. Defects in the PDC's sometimes can be relined using CIPP technology and the existing connection is rehabilitated and useful life restored. PW has actively repaired approximately 3-10 PDC each year for the last 3 years.	As Identified	Reduced claims for sewage backup

Replacement

This strategy is employed when the asset has reached its useful lifespan and the costs associated with renewal/rehabilitation will approach the full replacement cost. This strategy is usually reserved for assets that have had very little maintenance work performed during its lifespan and for which remedial methods will not be adequate.

REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
Sewer Main	Mainline sewers identified for replacement usually are done through larger capital works projects where the synergy with other infrastructure replacements can be realized.	50-80 yrs	Renewed useful life
Video Inspection	Locations of suspected problems are investigated and video inspected on an as needed basis. All videos are loaded and filed in the GIS database and are accessed for review periodically. Again, an annual tender with a fifteen year goal is suggested. Upon review strategies are identified and replacement is an option if rehab cannot be accomplished.	As Needed	Reduced back up complaints
Sewer Pump Stations	OCWA operates and maintains the Town's sanitary PS and attends sites and maintains operational maintenance of the equipment such as: emergency generator testing; pump rotations; electrical and electronic inspections of the equipment; weekly station review and documentation. Replacement is considered when Rehab costs rise to a certain level. New technologies can be explored with possible lower future costs to be achieved due to replacement.	As Identified	Newer more efficient technology, lower O&M costs



REPLACEMENT

Performance	Program Descriptions	Frequency	Measures
	If the repair is on the Town ROW, the repair is put into queue based on severity and either repaired by Town forces or contracted out for repair. PW has actively repaired approximately 3-10 PDCs each year for the last 3 years. If repair is not an option, then total replacement is completed.		Fewer claims in future

Disposal

This strategy is employed typically as part of larger infrastructure projects. The Town of Tecumseh achieves little to no value for disposal of any sanitary sewer collection system piping. There can be costs associated with disposal of any facility assets associated with sanitary sewer pumping stations although they are typically limited to residual scrap value.

DISPOSAL

Performance	Program Descriptions	Frequency	Measures
Sewer Main	Mainline sewer is removed through the replacement process. Usually the new sewer is placed where the existing sewer is located. The removed asset is disposed of at the Town's cost.	50-80 yrs	No recovery costs associated
	OCWA operates and maintains the Town's sanitary PS and attends sites and maintains operational maintenance of the equipment such as: emergency generator testing; pump rotations; electrical and electronic inspections of the equipment; weekly station review and documentation.	As Replaced	Equipment is identified for possible reuse or sale

8.3.2 20 Year Plan

A detailed 20 Year Plan was generated for the sanitary sewer system that includes sewer replacements and reconstruction works. Please refer to Appendix P for detail by asset ID.

Rehabilitation

The Town would like to extend their current 10 year work that was initiated in 2011 to address areas within the Town's sanitary sewer system that are subject to high inflow and infiltration (I&I) over the next 20 years. The first phase of the work plan included flushing of sewers, video inspection, and sewer repairs to alleviate the inflow and infiltration occurring within the sewer system. The Town has set the following targets to maintain the sanitary sewer system at the desired level of service:

- Yearly tenders to flush and camera inspect sanitary sewers.
- All SPG 5 defects scheduled for some kind of remedial attention within 6 months.
- All SPG 4 defects scheduled to receive remedial attention within 2 years.
- An overall average SPG 3 for the Towns collection system, based on current assessments.
- A current plan to achieve a SPG 2 rating within a 5 year period, revised once per year.



- Continued investment in the I&I Program.
- Yearly review of all facility assets with annual calibrations and reports.

Under this plan, all of the sanitary sewers will be flushed, video inspected, and repaired in keeping with the Town's desired level of service.

The Town has applied for and received Government funding that will be used to advance the rehabilitation of the sanitary sewers at an accelerated rate based on the amount of funding received. Work will begin in 2017 and be completed by the end of 2018. Administration expects at the end of the advanced I&I Program the Towns sanitary sewers should be well within Asset Management goals developed.

Growth

Background

Municipalities can recognize the benefit of comprehensive long-range planning exercises that examine problems and solutions for an overall system of municipal services. Master Plans are not intended to address specific local problems or to plan for projects on a project-by-project basis. The Class Environmental Assessment process defines Master Plans as:

"Long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. These plans examine an infrastructure system(s) or group of related projects in order to outline a framework for planning for subsequent project and/or developments."

2002 Water & Wastewater Master Plan

The Town of Tecumseh completed a Water and Wastewater Master Plan in June 2002. It is recommended practice to review a Master Plan at least every five years to determine the need for a formal review and update to the Master Plan. Since the Plan was completed in 2002, several changes have occurred which have had significant impacts to the assumptions used in preparing the Plan and, as a result, it was identified that the Plan needs to be updated.

2008 Water & Wastewater Master Plan Update

The Purpose of the Water and Wastewater Plan Update (2008) was to use revised best planning population estimates for the Town of Tecumseh within the 2028 planning horizon to provide a technical review of the 2002 wastewater servicing strategies. The review recommended necessary strategy changes, updates to project phasing and updates to capital cost estimates which in turn feed into the Development Charges process. The update is a critical component in the integrated planning process and was intended to consolidate and harmonize the Town's water and wastewater servicing strategies; and capital program for the North and South Service Areas based on updated planning information, new water and wastewater service agreements with the City of Windsor, updated design criteria and updated project information.



2010 Water & Wastewater Master Plan Update

A further review was conducted in 2010 which resulted in the updated Wastewater Servicing Strategy.

The Town of Tecumseh Water and Wastewater Master Plan Update (2008) and the 2010 Updated Wastewater Servicing Strategy consolidates the Town's servicing strategies for the north and south service area to make best use of available capacities provided in the Servicing Agreements with the City of Windsor. It should be recognized that the water and wastewater projects should be implemented concurrently wherever possible.

The alignments of new trunk facilities have been planned based on the location of existing road allowances and/or servicing corridors in order to ensure that servicing can proceed without undue delays resulting from the need to acquire property. However, the Town has the option to construct the trunk facilities through new development lands if it can be shown to be cost effective to do so. In this event, the alignment of the trunk facilities may be altered based on approved Secondary Plans and/or approved Draft Plans of Subdivision. Should the trunk facilities be implemented through new development lands, additional notification to the Public would be provided through the Planning Act notifications.

It should also be noted that the timing of the various projects has been established based on anticipated growth rates in Tecumseh and on a fiscally responsible capital works program. The Town will have the option to advance or defer specific projects depending upon the rate of growth experienced in Tecumseh, or upon the petition by a developer (or group of developers) provided that the financial impacts of advancing certain projects are reviewed and mitigated through collection of Development Charges or through Front-End Financing arrangements.

The servicing strategies and capital programs were also updated based on project currently underway, whether in study, design or construction stage. This led to more detailed project information, schedules and capital cost estimates.

The new strategy incorporates flexibility for the Town to divert all or part of peak wet weather flows from existing trunk sewers south of County Road 22 to the new Northwest Windsor Trunk Sanitary Sewer, which outlets to the Little River Pollution Control Plant (LRPCP). This flexibility will permit Tecumseh to comply with their servicing agreement with the City of Windsor to limit peak flow discharge to the Cedarwood Outlet to the maximum approved rate, while maximizing the potential development areas to be serviced though the new outlet sewer.

2010 Recommended Servicing Strategy

The Updated Wastewater Servicing Strategy includes a number of separate and distinct projects that will provide an ultimate consolidated servicing scheme to maximize the use of existing infrastructure and provide capacity for new growth in designated growth areas of the Town. A brief description of each of the Projects is provided below:



WW-1 - West Tecumseh Trunk Sewer from County Road 22 to CP Railway

The West Tecumseh Trunk Sewer is proposed to provide direct servicing for new development lands within the Tecumseh Hamlet West Planning Area, and will provide an outlet for existing and new growth south of CP Railway. The alignment of this sewer should be established through Approved Secondary Plans and coordinated through proposed Plans of Subdivision.

This facility should be designed to accommodate a projected ultimate peak flow rate of 935 (1,260) L/s. The alignment of the sewer should be kept as low and deep as possible to maximize the gravity service area of the pipeline. Based on Preliminary Design, a 1200 mm diameter sewer is required at a design gradient of 0.07%.

In order to comply with the Wastewater Agreement between the City of Windsor and the Town Tecumseh, a flow measurement facility will be required on this trunk sewer prior to discharging to the outlet sewer on County Road 22. The design of the flow measurement facility will be subject to the approval of the City of Windsor.

WW-2 - Diversion Sewer South of CP Railway

In order to alleviate system surcharges in the Lesperance Road trunk sewer between CP Railway and County Road 22, a new diversion sewer will be constructed through the Hydro corridor south of CP Railway from the West Tecumseh Trunk Sewer to the trunk sewer on St. Alphonse Avenue. All flows from the St. Alphonse sewer will be diverted to the new outlet.

This facility should be designed to accommodate a projected interim peak flow rate of 173 L/s, and an ultimate projected peak flow rate of 85 L/s. The ultimate projected peak flow rate is lower than the interim projected peak flow rate due to the planned diversion of flows at County Road 42 (Project WW-7). On a preliminary basis, a new 525 mm diameter sewer will be required.

WW-3 - East Tecumseh Trunk Sewer

In order to provide an outlet for new development lands south of the Baillargeon Drain and north of County Road 42, a new trunk sewer will be extended easterly from St. Alphonse Avenue through existing road allowances or through the hydro corridor to the new development lands.

The East Tecumseh Trunk Sewer should be designed to accommodate a projected ultimate peak flow of 58 L/s. On a Preliminary basis, a 525 mm diameter trunk sewer has been selected.

WW-4 – Sylvestre Pumping Station Upgrade

New development lands located east of the existing developed areas in Tecumseh Hamlet, west of Manning Road and north of the Baillargeon Drain will be serviced through local sewers to outlet to the trunk sewer on Westlake Drive. As part of the development of this area, the existing forcemain from the Sylvestre Pumping Station should be realigned to discharge to the Westlake Drive trunk sewer.

In order to ensure continuity of service during emergency situations or power outages, the existing Sylvestre Pumping Station should be upgraded with the provision of Stand-by power. A new building enclosing a generator set and system controls will be required. On a Preliminary



basis, it is anticipated that a block of land approximately 25 m wide by 30 m deep will be required for construction of the generator building; however, the specific land requirements and stand-by power facility requirements will be subject to further review prior to implementation. Property for the Pumping Station Upgrade should be acquired through the Development Approvals process.

In the southern portion of this drainage area, the alignment of the local sewers may preclude provision of sanitary sewer service to full depth basements. Should development proponents in the southern portion of this drainage area propose to utilize the Sylvestre Pumping Station to lower the local sewers in order to allow for basement servicing, realignment of the existing sewers on Sylvestre Drive may be required. The local developers will be responsible to confirm the available capacity of the existing sewers on Sylvestre Drive and upgrade the sewers, if necessary, and will be responsible to upgrade the pumping station, as necessary, beyond the existing rated capacity for the Sylvestre Pumping Station.

WW-6 - West Tecumseh Trunk Sewer from CP Railway to County Road 42

Similar to WW-1, this trunk sewer will provide direct servicing for new development lands within the Tecumseh Hamlet West Planning Area south of CP Railway, and will provide an outlet for existing and new growth south of CP Railway. The alignment of this sewer should be established through Approved Secondary Plans and coordinated through proposed Plans of Subdivision.

This portion of the West Tecumseh Trunk Sewer should be designed to accommodate a projected ultimate peak flow rate of 773 (1,098) L/s. The alignment of the sewer should be kept as low and deep as possible to maximize the gravity service area of the pipeline. Based on Preliminary Design, a 1200 mm diameter sewer is required at a design gradient of 0.07%.

WW-7 - County Road 42 Diversion Sewer

This project involves the construction of a new diversion sewer on County Road 42 from St. Alphonse Avenue to Odessa Drive to outlet to the new West Tecumseh Trunk Sewer in the same alignment as the existing sewer on County Road 42. All flows generated by existing development south of County Road 42 will be diverted through this sewer to the new outlet. Provision of this Diversion Sewer will permit the Town to decommission the St. Alphonse pumping station, and thereby eliminate the ongoing operation and maintenance costs for this station.

The County Road 42 Diversion sewer should be designed for a projected peak ultimate flow rat e of 90 L/s. A 450 mm diameter sewer has been selected on a preliminary basis.

WW-8 - South Tecumseh Trunk Sewer from County Road 42 to Highway 401

Construction of the South Tecumseh Trunk Sewer from County Road 42 to Highway 401 will provide a wastewater outlet for the designated Highway Commercial lands located adjacent to Manning Road just north of Highway 401, and will provide an outlet for wastewater generated in existing and new developments in Maidstone Hamlet. The alignment of this sewer is proposed



to extend along 11th Concession Road south of County Road 42 to Baseline road, then easterly along Baseline Road from 11th Concession to 12th Concession Road, then south on 12th Concession Road from Baseline Road to Highway 401. Consideration may be given to an Alternative Route for this trunk sewer during preparation of Secondary Plans for the future development areas south of County Road 42, should these lands be designated for growth in future Official Plan Updates.

The portion of the South Tecumseh Trunk Sanitary sewer north of Baseline Road should be designated to accommodate a projected ultimate peak flow rate of 591 (916) L/s., and should be designed to be installed deep as possible in order to facilitate extension of gravity drainage to Maidstone Hamlet. Projected ultimate peak flows on Baseline Road will be 525 L/s, and on 12th Concession Road will be 450 L/s. On a Preliminary basis, a 1200 mm diameter trunk sewer has been selected for the portions on 11th Concession Road and Baseline Road, and a 900 mm diameter on 12th Concession Road.

WW-9 - South Tecumseh Trunk Sewer from Highway 401 to Maidstone Hamlet

Construction of the South Tecumseh Trunk Sewer from Highway 401 to Maidstone Hamlet will provide an outlet for existing and new growth within Maidstone Hamlet. The alignment of this sewer will be along 12th Concession Road from Highway 401 to North Talbot Road, then easterly along Middle Road to Malden Road.

The South Tecumseh Trunk sewer should be designed to accommodate a projected peak ultimate flow rate of 400 L/s for the portion on 12th Concession Road, and a projected peak flow rate of 125 L/s for the portion on Middle Road. On a Preliminary basis, a 900 mm diameter trunk sewer has been selected for the portion on 12th Concession road and a 600 mm diameter sewer on Middle Road.

WW-10 - Maidstone Hamlet Trunk Sewer

Construction of the Maidstone Trunk Sanitary sewer will provide servicing for existing development and new growth within Maidstone Hamlet. The preliminary alignment of the sewer is along Malden Road from Middle Road to Talbot Road (County Road 34).

This sewer should be designed to accommodate the projected ultimate peak flows from Maidstone Hamlet of 90 L/s, plus an allowance for future growth beyond the current Maidstone Hamlet urban area. On a preliminary basis, an ultimate peak design flow of 125 L/s has been considered for this sewer, and a 600 mm diameter sewer has been selected.

2018 Water & Wastewater Master Plan Update

Since the completion of the 2008 Water and Wastewater Master Plan Update, further planning studies and discussion papers related to the preparation of a new Official Plan have been completed. In order to ensure that the Town implements the most cost effective infrastructure servicing strategies required to support new growth and maintain a high level of service into the future, an update to the current Master Plan is being planned in accordance with the Class Environmental Assessment (EA) process for water and wastewater projects. The purpose of



the Master Plan Update is to re-examine water and wastewater infrastructure timing and costing requirements for the existing settlement areas in the Town of Tecumseh. This is anticipated to be completed in the Fall of 2018.



9. Fleet

9.1 State of the Local Inventory

Inventory:

The Town owns vehicle and equipment fleet ("Fleet") assets to facilitate provision of services and maintain the Town's infrastructure.

The Fleet inventory consists of on-road and off-road units. It is comprised of 94 assets which includes pickup trucks, dump trucks, trailers, fire trucks, buses and some larger pieces of equipment such as lawn mowers and backhoes. Fleet assets service the following departments: Public Works, Parks, Water, Building, Administration, Fire, Arena and Transit.

Valuation:

Detailed asset accounting data is maintained in CityWide software in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Estimated useful lives vary depending on the vehicle type as shown in Table 9-1.

The database is updated annually prior to financial statement preparation. The Fleet accounting valuation as of the 2017 year end is as follows:

	Equipment	Vehicles	Total
Historical Cost	\$1,975,566	\$5,556,447	\$7,532,013
Accumulated Amortization	\$811,924	\$3,335,508	\$4,147,432
Net Book Value	\$1,163,643	\$2,220,939	\$3,384,582

Replacement costs used in this Asset Management Plan were obtained from the Town's Fleet Replacement Schedule, which is used as a guideline for purchasing new vehicles in designated years. The following table shows the replacement values of the vehicles and equipment totalled by asset type.



Туре	Useful Life	Quantity	Replacement Cost
Vehicles:			
Light duty vehicle	7-10 years	28	\$ 1,007,000
Heavy duty truck	7-10 years	10	\$ 2,170,000
Bus	5 years	2	\$ 200,000
Fire truck	15-20 years	6	\$ 3,307,000
Equipment:	•		
Mower	3-5 years	8	\$ 199,000
Utility vehicle	5 years	5	\$ 61,000
Tractor	15 years	1	\$ 60,000
Zamboni	10 years	2	\$ 220,000
Backhoe	15 years	3	\$ 298,000
Street sweeper	20 years	1	\$ 250,000
Misc. equipment	3-40 years	28	\$ 1,222,900
Total		94	\$ 8,994,900

Table 9-1: Useful Lives and Replacement Value by Asset Type



Total fleet replacement cost is \$9.0 million!

Asset Age:

Table 9-2 shows the average age by asset type. Equipment is replaced when it is at or near the end of its useful life and before the failure of any major components. With the exception of the bus, the average age for each group falls within the useful life range.

Туре	Useful Life	Avg. Age
Vehicles:		
Light duty vehicle	7-10 years	5.1
Heavy duty truck	7-10 years	4.7
Bus	5 years	6.5
Fire truck	15-20 years	13.2
Equipment:		
Mower	3-5 years	2.4
Utility vehicle	5 years	3.6
Tractor	15 years	5.0
Zamboni	10 years	7.5
Backhoe	15 years	4.7
Street sweeper	20 years	4.0
Misc. equipment	3-40 years	5.1
Average	Age All Fleet	5.6

Table 9-2: Average Age by Asset Type



Asset Condition:

All Town Fleet assets are maintained in sound operating condition in order to minimize downtime and ensure residents receive services in a timely and professional manner. Maintenance costs represent a significant portion of the total cost to own and operate a vehicle or piece of large equipment. Preventative maintenance is the key to avoiding the repair or replacement of costly major vehicle components such as engines, transmissions, and drive trains.

Fleet assets are generally replaced as per the Fleet Replacement Schedule under the authorization of Council.

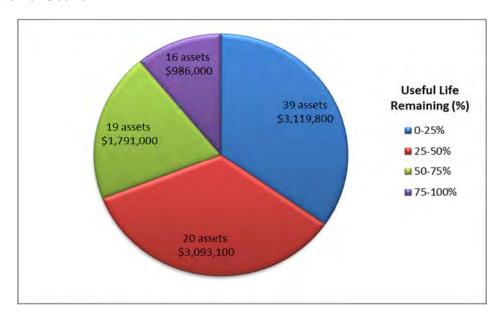


Figure 9-1: Lifecycle of Fleet Assets with Replacement Values

The above graph shows the distribution of assets at various points in their lifecycles. There are 39 assets with a combined replacement cost of \$3.1 million that are in the last quarter of their estimated useful lives. Keeping in mind that the Fleet assets have varying useful lives, replacement of assets as per the Fleet Replacement Schedule is staggered where possible to smooth the annual budgetary requirement and reduce the impact to specific year cost fluctuations.

Asset Management Policies

The Manager Roads and Fleet is responsible for the management of fleet and equipment ensuring preventative maintenance practices are adhered to, with the objective of maintaining low repair costs and keeping fleet and equipment active.

While there is no formal Fleet policy in place, the longstanding practice has been that the Manager Roads and Fleet updates the Fleet Replacement Schedule on an annual basis. A



report detailing replacements/transfers/disposals as per the Fleet Replacement Schedule is brought forth to Council for their consideration and approval.

9.2 Desired Levels of Service

It is Administration's intent to ensure that the Town continue to maintain acceptable levels of service, which can be qualified as a combination of the utilization of the fleet vehicles without interruption and the Town's maintenance and performance targets required to meet legislative requirements.

The Town must establish performance objectives for the Asset Management Plan. Typical objectives are listed below:

- Fleet vehicles are safe, legally compliant and properly insured
- Maximize functionality and utilization
- Minimize user complaints
- Conduct vehicle replacements at the optimum point in lifecycle
- Reduce accelerated deterioration due poor maintenance

Performance objectives may be based on legislative requirements or industry best practices and goals agreed upon by the Town and user departments, through internal policies.

Some suggested levels of service are as follows:

- Minimization of fleet down time, such that
 - Number of unplanned maintenance events <4 per asset/year</p>
 - Number of planned maintenance events <7 per asset/year</p>
 - Average time per service event <3 hours</p>
- Fewer than (x) complaints per (time) from Town staff, regarding condition of fleet
- Fleet assets are running with (x%) reliability

9.3 Asset Management Strategy

9.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town. It should be noted that this AMP deals with investments associated with purchasing, maintaining and replacing the fleet vehicles.

The stages in an asset's lifecycle can be broken down into four separate activities. These can be described as detailed in the following table.



Activity	Definition	Remaining Useful Life
Minor Maintenance	Planned activities such as scheduled oil changes, cleaning etc.	75-100%
Major Maintenance	Maintenance and repair activities that are generally unplanned but should be expected in the life of the vehicle, these costs should be accounted for within the operating budget. Examples of these events are brake replacements, shock replacement, tire replacement etc.	0-75%
Refurbishment	Major activities required so that the asset can continue to provide the service required. This activity is generally for larger service vehicles and equipment due to the replacement cost of the asset.	25-50%
Replacement	Vehicles will eventually reach their useful life and require replacement. Experience shows that the useful life of different vehicles can vary on a number of factors. The Town will conduct condition assessments periodically to better understand the useful age of certain vehicles.	0-25%

Table 9-3: Fleet Lifecycle Activities

Maintenance

Minor - These maintenance activities will be undertaken by individual departments for vehicles within the department. They will be scheduled and performed with accepted service providers.

Major - These activities will be reviewed and budgeted for in the yearly operating budget where possible. Unplanned events will be reviewed between the department manager and Manager Roads and Fleet to assess the work required.

Refurbishment

This strategy is intended to address significant issues in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the asset must be replaced. This activity will be reviewed between the department manager and Manager Roads and Fleet to coordinate service.

Replacement

This strategy is employed when the asset has reached its useful lifespan or the costs associated with refurbishment will approach the full replacement cost.

This activity will be reviewed between the department manager and Manager Roads and Fleet for coordination.



Disposal

The Town reviews annual costs associated with maintaining the Fleet and assets that may be approaching useful life are assessed for disposal or re-assignment. These reviews are used to decide the optimum point to dispose of an asset and maximize the disposal value in return.

9.3.2 20 Year Plan

A detailed 20 year plan was generated for the Fleet assets based on the Asset Replacement Schedule. Please refer to Appendix R for detail by individual asset.

Growth

The Town expect modest growth in the future and investment in the Towns fleet will be required. This growth is reflected in various Town master plans. All major purchases of new assets will be proposed and evaluated in conjunction with attention to necessity of expansion, requirements of the new asset and the overall impact expected in return for expansion.



10. Facilities

10.1 State of the Local Inventory

Inventory:

The Town of Tecumseh owns and maintains thirty-five (35) facilities as shown in the table below:

Asset Name	Sq. Ft.	Facility Type
Arena	77,250	Recreational
Cada Library	8,900	Library
Carling Park Washroom/Canteen	360	Recreational
Fire Hall No. 1	4,800	Offices/ Garage
Fire Hall No. 2	4,300	Offices/ Garage
Fire Training Smoke House	800	Misc.
Fire Training Tower	1,000	Misc.
Fire Confined Space Facility	10,000	Misc.
Golden Age Community Centre	3,800	Community Center
Green Acres Park Community Centre and Washroom	5000	Community Center/ Recreational
Historical Society Building	1,200	Museum
Lacasse Environmental Services Building	11,100	Offices/ Garage
Lacasse Park Baseball Storage Building	350	Recreational
Lacasse Park Clubhouse	3,000	Recreational
Lacasse Park Pool Complex	5,300	Recreational
Lacasse Park Storage Building and Concession	500	Garage
Lacasse Park Washroom (by playset)	690	Washroom
Lacasse Park Washroom (by ball diamond)	340	Washroom
Lakewood Park Cart Building	3,800	Storage Garage
Lakewood Park Irrigation Pump House	290	Misc.
Lakewood Park North Washrooms/Storage	3,300	Washrooms/Storage
Lakewood Pro Shop	2,300	Washrooms/Storage
McAuliffe Park Storage Building (Field House)	1,000	Storage
McAuliffe Park Storage Shed (Old Firehall)	1,900	Storage Garage
OPP Police Station	6,100	Offices/Garage
Parks Operations Center	5,700	Offices/Garage
Public Works North Office/Garage	5,600	Offices/Garage
Public Works North Salt Shed	3,900	Storage
Public Works South Garage	4,800	Offices/ Garage
Public Works South Salt Shed	5,600	Storage
Public Works South Storage Barn	2,400	Storage Garage
St. Mary's Park Washrooms/Concession/Picnic Shelter	1,400	Recreational
St. Mary's Storage Shed	480	
Town Hall	13,000	Office Building
Weston Park Washrooms/Concession/Picnic Shelter	2,000	Recreational

Table 10-1: Summary of Facility Assets



All non-infrastructure enclosed structures were identified. All facilities with a replacement cost of over \$20k have been included in the inventory for the purpose of this AMP.

Valuation:

A complete inventory and historical cost valuation of buildings was completed in 2009 in order to comply with the Public Sector Accounting Board's requirements for the reporting of tangible capital assets. Historical costs were based on actuals, or where unavailable, deflated replacement costs. The expected useful life for accounting amortization purposes is 50 years for the building structure, 20 years for the roof and HVAC system.

Detailed asset accounting data is maintained in CityWide software. The database is updated annually prior to financial statement preparation.

Asset accounting valuations as of the 2016 year end are as follows:

Historical Cost	\$ 18,289,196
Accumulated Amortization	\$ (6,426,322)
Net Book Value	\$ 11,862,874

Replacement costs were largely obtained from recent historical costs where available, Means Construction Data and/or Manager Facilities' estimates. The current replacement cost is \$41,795,273.



Total facilities replacement cost is \$42 million!

Asset Age:

The age for the Town's Facilities has been summarized in the following table. The age of the facilities varies, with the majority having construction years in the 1980's and 1990's. Construction years are shown for each section of a building that has had an expansion.



Asset Name	Construction Year	Facility Type
Arena	1995/1998	Recreational
Cada Library	1983	Library
Carling Park Washroom/Canteen	2014	Recreational
Fire Hall No. 1	2002	Offices/ Garage
Fire Hall No. 2	1979	Offices/ Garage
Fire Training Smoke House	1985	Misc.
Fire Training Tower	2013	Misc.
Fire Confined Space Facility	2016	Misc.
Golden Age Community Centre	1975/1982	Community Center
Green Acres Park Community Centre and Washroom	1996/2015	Community Center/ Recreational
Historical Society Building	1960	Museum
Lacasse Environmental Services Building	1985/1996	Offices/ Garage
Lacasse Park Baseball Storage Building and Concession	1995	Recreational
Lacasse Park Clubhouse	1968	Recreational
Lacasse Park Pool Complex	2004	Recreational
Lacasse Park Storage Building	2010	Garage
Lacasse Park Washroom (by playset)	1983	Washroom
Lacasse Park Washroom (by ball diamond)	1965	Washroom
Lakewood Park Cart Building	2001 est.	Storage Garage
Lakewood Park Irrigation Pump House	2001 est.	Misc.
Lakewood Park North Washrooms/Storage	2012	Washrooms/Storage
Lakewood Pro Shop	1961/1981 est.	Washrooms/Storage
McAuliffe Park Storage Building (Field House)	2011	Storage
McAuliffe Park Storage Shed (Old Firehall)	1967	Storage Garage
OPP Police Station	2002	Offices/Garage
Parks Operations Center	1988 est.	Offices/Garage
	1979/1982/	
Public Works North Office/Garage	1990/2005	Offices/Garage
Public Works North Salt Shed	2015	Storage
Public Works South Garage	2005	Offices/ Garage
Public Works South Salt Shed	2015	Storage
Public Works South Storage Barn	1989	Storage Garage
St. Mary's Park Washrooms/Concession/Picnic Shelter	1983	Recreational
St. Mary's Storage Shed	1947	Storage Garage
Town Hall	1960/1980/1991	Office Building
Weston Park Washrooms/Concession/Picnic Shelter	1976	Recreational

Table 10-2: Construction Years of Town Facilities

Asset Condition

There has been no formal assessment of the Town's facilities other than a roof assessment in 2008. It is recommended a qualified contractor be engaged to complete a formal assessment in order to determine the remaining lifecycle of building components and provide cost estimates.



All Town facilities are structurally sound. Visual inspections are done by Town staff when regular maintenance is performed. Deficiencies are noted and an action plan is derived at that time, with recommendations brought forth to correct or upgrade the asset. In addition, the main office buildings are cleaned by contract or Town staff. If any lighting or other maintenance issues are observed at that time, repairs are scheduled by the Manager Facilities.

Asset Management Policies

At this time there has been no formal policy developed for asset management.

10.2 Desired Levels of Service

It is the intent of The Town of Tecumseh to develop a more detailed plan to ensure that the Town continues to maintain acceptable levels of service, which can be qualified as;

- Annual Inspection and maintenance programs established and put in place
- Any building asset deemed in need of improvement is targeted for rehabilitation in the appropriate year to prevent major disruptions in service to the operation of that building.

Administration recommends that in order to develop an appropriate level of service the Town should establish an asset management program. This program should consist of an initial inspection/ review by an expert service provider to formulate an approach to have an accurate time line on lifecycles. Then the department would be able to follow recommended schedules for individual components of each building far more accurately. These inspections/ reviews and any resulting maintenance requirements can be undertaken by Town of Tecumseh forces or tendered out on an annual basis with the Facilities Department overseeing the program. A commitment of funds will need to be established for this ongoing program of which the initial costs may be higher than the future realized costs.

A good balance between asset replacement through capital funding and ongoing maintenance provides the best cost efficiency and service productivity.

10.3 Asset Management Strategy

A strategy is in the development stages

10.3.1 Asset Management Programs

The following provides an overview of the types of Asset Management programs conducted by the Town.

Maintenance

There is a maintenance program with an HVAC contractor at the present time to inspect/ review each piece of HVAC equipment on all Town facilities. There are other aspects of building



operations that have scheduled maintenance performed i.e. hot water boilers are inspected annually. The Arena's refrigeration equipment is under a contract with a refrigeration contractor to ensure proper operation and maintenance of those pieces of equipment. It is also the hope of Administration to be able to link this program to lifecycle, to track costs of each unit and to be able to report on abnormalities for any particular unit.

Renewal/Rehabilitation

This strategy is intended to address issues of a significant proportion in order to extend the useful lifespan of the asset before its condition deteriorates to a degree such that the different aspects of our buildings must be replaced. For example, in 2008 a roof study of the main buildings was conducted and a lifecycle replacement/ rehabilitation was then implemented.

Replacement

Replacement rarely happens; rehabilitation is more likely. Administration regularly tours facilities and conducts visual inspections. During those inspections, recommendations are made to maintain or upgrade facilities to maintain standards.

10.3.2 20 Year Plan

Rehabilitation/Replacement

In order to formulate the 20 Year Plan, the 2017 RS Means median square foot cost factor was used to estimate rehabilitation/replacement costs of the mechanical, roof and structural components of the Town's facilities.

Please refer to Appendix S for the detailed 20 Year Plan.



11. Financing Strategy

11.1 Background

The main sources of funding for infrastructure investment are the Town's general tax levy, the Town's water and wastewater rates and senior government grants.

General Tax Levy

Funds are allocated to Lifecycle (LC) reserves and New Infrastructure Levy (NIL) reserve from the general tax levy. The general tax levy supports all municipal services with the exclusion of water and wastewater services, which are supported by water and wastewater user rates.

Lifecycle Program

Allocations to Lifecycle reserves are based on the Town's Lifecycle Program, with the primary purpose to accumulate funds to be used for **capital asset replacement**. The Lifecycle Program consists of 20 reserves based on asset type. Annual requirements for each of these reserves were established in 2004 based on a study by a peer municipality. These amounts are adjusted when new assets are added, removed and not replaced or to reflect updated replacement costs. Lifecycle expenditures are then approved by Council based on works programs proposed by various departments.

Lifecycle Program	2005 Annual	LC Funding	2005	2018 Annual	LC Funding	2018
	Requirement	2005	Deficiency	Requirement	2018	Deficiency
Arenas	80,000	80,000	-	140,000	140,000	-
Bridges and culverts	800,000	101,100	698,900	390,000	390,000	-
Buildings	150,000	150,000	-	185,000	185,000	-
Community Trails	7,700	7,700	-	50,000	50,000	-
Drains	40,000	40,000	-	100,000	100,000	-
Election	34,500	20,000	14,500	16,000	16,000	-
Fire apparatus	-	-	-	174,000	174,000	-
Fire equipment	-	-	-	45,000	45,000	-
Fleet	248,900	240,900	8,000	525,000	525,000	-
ITS infrastructure	134,000	134,000	-	128,000	128,000	-
New LC Issues	-	-	-	100,000	100,000	-
Outdoor pool	13,500	13,500	-	55,000	55,000	-
Park development & play equipment	370,000	270,000	100,000	350,000	350,000	-
Reforestation	4,600	4,600	-	30,000	30,000	-
Roads	4,300,000	2,047,900	2,252,100	4,160,000	4,160,000	-
Sidewalks	53,700	53,700	-	74,000	74,000	-
Storm sewers	170,300	157,300	13,000	864,700	864,700	-
Strategic Issues - one-time	7,700	7,700	-	50,000	50,000	-
Transit	-	-	-	100,000	100,000	-
Railroad Crossings	7,600	2,600	5,000	-	-	-
	6,422,500	3,331,000	3,091,500	7,536,700	7,536,700	-
Debt payments	-	-		1,505,800	1,505,800	-
Small equipment	-	_		150,000	150,000	-
	-	-	-	1,655,800	1,655,800	-
	6,422,500	3,331,000	3,091,500	9,192,500	9,192,500	-



The 2018 budget includes an allocation of \$6.6 million towards nine Lifecycle reserves that support the Town's AMP. Projected net asset additions for the AMP planning period total \$142 million; \$37 million of which belongs to general tax rate supported services (the remaining \$105 million relates to water and wastewater rate supported services). This translates into an annual funding requirement of \$7.4 million by the end of the plan period to cover future replacements (Note – The initial purchase cost for new assets is not funded through the Lifecycle Program). Adherence to the Lifecycle Program would require an annual increase of approximately 0.75% for each of the 20 years in this planning period.

Lifecycle Program - AMP	2005 Annual	LC Funding	2005	2018 Annual	LC Funding	2018
	Requirement	2005	Deficiency	Requirement	2018	Deficiency
Arenas	80,000	80,000	-	140,000	140,000	-
Bridges and culverts	800,000	101,100	698,900	390,000	390,000	-
Buildings	150,000	150,000	-	185,000	185,000	-
Fire apparatus	-	-	-	174,000	174,000	-
Fleet	248,900	240,900	8,000	525,000	525,000	-
Roads	4,300,000	2,047,900	2,252,100	4,160,000	4,160,000	-
Sidewalks	53,700	53,700	-	74,000	74,000	-
Storm sewers	170,300	157,300	13,000	864,700	864,700	-
Transit	-	-	-	100,000	100,000	-
Railroad Crossings	7,600	2,600	5,000	-	-	-
	5,810,500	2,833,500	2,977,000	6,612,700	6,612,700	-

Additional pressure on Lifecycle reserves and annual requirements comes from early replacement and/or enhancement of existing capital assets. A particular case in point is the Town's Community Improvement Plan (CIP), which includes enhanced streetscape works in the CIP area that will expedite the replacement of existing infrastructure and is expected to cost in excess of \$30 million if fully implemented. Current LC reserves and annual allocations are insufficient to fully fund a replacement/enhancement project of this magnitude.

New Infrastructure Levy

The New Infrastructure Levy (NIL) reserve was created in 2015 with the purpose of accumulating funds to be used for the funding requirements of **new capital assets**. The NIL was established in recognition of significant new capital infrastructure projects on the horizon at that time, some of which include Parks Master Plan, County Wide Active Transportation Study (CWATS), Fire Master Plan, and Development Charge (DC) Study growth projects - Town portion (i.e. costs which are typically associated with works that have some measureable benefit to existing benefit).

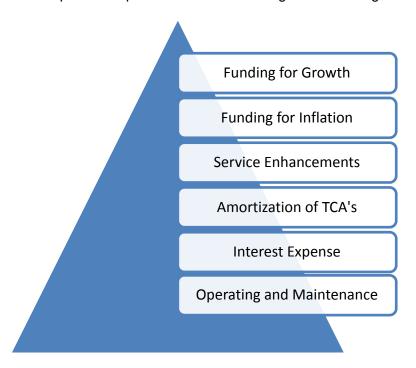
The 2018 budget includes an allocation of \$1.2 million, with recommendations to increase this allocation over the next few years to reach the current annual requirement of \$1.75 million. Notwithstanding, it is recognized that the NIL target level of \$1.75 million is probably not sufficient to fully fund all new infrastructure projects, particularly considering results pending from a soon-to-be completed Stormwater Master Plan.

Accumulated NIL reserve as at December 2017 totals \$3.0 million. As stated previously, new asset additions for general tax supported categories within this AMP total \$37 million over the



course of the 20-year planning period. (Note – Some smaller asset categories, such as trails, are NOT included within this AMP, however are planned to be funded through the NIL reserve). Senior government grants and/or debt will be required to help finance the new assets identified within this AMP if they are to be constructed when planned.

The diagram below depicts best practice for asset management funding.



The Town's Lifecycle Program established in 2004, set annual requirement targets for asset categories that were intended to replace existing assets based on replacement costs. The annual requirement targets were reached with the adoption of the 2014 budget. As can be visualized with the diagram above, this accomplishment, although quite significant, was still lacking best practice as it failed to fund for service level enhancements and growth.

The establishment of the NIL in 2015 was intended to address funding for service level enhancements and growth. The initial NIL annual requirement was estimated at \$1.3 million. Since that time, a new Multi-Use Sportsplex has been approved in principal. Administration has recommended a funding mix consisting of senior government grant funding, donations and debt should this proceed in the near future. Debt servicing under the recommended proposal would amount to about \$450,000 per year. The NIL annual target has thus been increased to \$1.75 million.

NIL Program	2015 Annual	NIL Funding	2015	2018 Annual	NIL Funding	2018
	Requirement	2015	Deficiency	Requirement	2018	Deficiency
New Infrastructure Levy	1,300,000	200,000	1,100,000	1,750,000	1,200,000	550,000



The AMP will be used as one of the tools to assist in determining enhancements to the Lifecycle Plan beyond 2018. Consideration will be given to determine the feasibility of a Pay As You Go Plan so that all revenues are used for Lifecycle and/or NIL purposes as opposed to debt; the key element of such a plan requires a proactive approach to providing funding in the lead up to capital expenditure requirements.

Water and Wastewater User Rates

In 2015, a Water and Wastewater Rate Study was completed in-house to update rates to ensure full cost recovery of water and wastewater services. Full cost recovery is the generation of sufficient revenues to cover the cost of providing water and wastewater services which includes operations, capital works and the appropriate reserve contributions necessary for asset lifecycle replacement and growth. The Town follows the study recommendations when setting user rates.

The 2018 budget includes a transfer to capital reserves of \$3.5 million from water and wastewater rates. Projected water and wastewater rate supported net asset additions for the AMP planning period total \$105 million. This translates into an annual funding requirement of \$5.6 million by the end of the planning period. Following the recommendations of the 2015 Water and Wastewater Rate Study, which extends to 2024, plus an annual increase of 0.5% for years 2025-2037 is necessary to reach the annual requirement by the end of the 20-year planning period.

2015 Water and Wastewater Rate Study

Wastewater expenditures have surpassed expected expenditures from previous studies while revenues through user rates have been less than expected due to various factors, including the advancement of the North Talbot Sanitary Sewer Connection project to take advantage of available grant funding, inflow and infiltration problems experienced by the Town and service level increases required for development. This has resulted in depleted reserves for Wastewater with insufficient funding available to support capital expenditures.

Water reserves have faired better, with net expenditures falling below expectations of previous studies.

The net result is that the Water reserves are healthy and the Wastewater reserves are underfunded.

To address this situation, Administration adjusted the user rates for water and wastewater in the 2014 budget. Water user rates were reduced by \$0.165, while wastewater user rates were increased by \$0.200 which shifted \$0.5 million in funding from water to wastewater.

Further, the 2015 Water and Wastewater Rate Study highlighted the downward trend in water usage. This has caused issues with funding costs for these services as costs are not reduced proportionally with a reduction in usage. The Study recommended a greater increase to the



fixed rate relative to the variable rate thereby ensuring a larger portion of the revenue stream is not dependent on volume variability.

Despite this shift in funding and the fact that user rates have increased annually based on the recommendations of previous Water and Wastewater Studies, Wastewater reserves continue to be significantly underfunded based on the requirements of the AMP.

The AMP process has verified the need to review the assumptions and factors used in developing the Water and Wastewater Rate Study. This study will be updated in 2019. The study will again take into account an appropriate mix of debt, user charges, local improvement charges, development charges and developer contributions to support a stable long term water and wastewater infrastructure system.

Senior Government Grants

Senior levels of government have acknowledged shared responsibility among the three levels of government for the care of municipal infrastructure assets and as such will be relied upon to financially support municipalities by way of grant programs for the foreseeable future.

Announced grant funding has been included within this AMP. A summary is shown below.

Known/Expected Senior Government grants					
	2018	2019	2020	2021	2037
Federal gas tax	752,001	752,001	752,001	752,001	752,001
Federal gas tax - from County	430,692	430,692	430,692	430,692	430,692
CWWF	1,118,912				
MCIP	175,000				
OSRCF - Federal					
OCIF - formula	699,909	1,076,989	1,175,703	1,175,703	
OCIF - application	806,149				
CWWF - provincial	559,456				
Provincial transit gas tax					
OSRCF - Provincial					
Total Sr. Gov't grants	4,542,119	2,259,682	2,358,396	2,358,396	1,182,693

Senior levels of government have contributed close to \$40 million towards Town infrastructure investments in the past decade, with the Town receiving \$23.9 million in provincial grants and \$15.7 million in federal grants during 2008-2017.

The Town's Federal Gas Tax allocation is included in the Lifecycle Roadways revenue mix and has enabled the Town to reach our Lifecycle Roadways annual requirement much sooner than were we to fund entirely on our own. Federal Gas Tax is assumed to be a perpetual source of funding and has been incorporated in the Town's Lifecycle Roadways program.

The Ontario Communities Infrastructure Fund (OCIF) grant program is expected to be a reliable source of funds for a ten-year period extending to 2026. Town use of OCIF funds is determined on an annual basis and has been used for different asset categories in its first three years of



existence (2014-2017). OCIF funding for years 2018-2026 has not been allocated to a particular asset category, however is reflected within this AMP in the Summary schedule.

The financing strategy for the Town's Multi-Use Sportsplex includes contributions from senior government levels. No grants have been secured to date, however this AMP includes Summary schedules for a scenario achieving grant funding and a scenario without grant funding.

Two major factors allowing the Town to access these grants include the current practice of having projects engineered and ready to go on short notice and the fact our lifecycle funding program allows us to provide the Town's share of funding required.

Support from senior levels of government can often be irregular with respect to timing, qualification and amount. Long term planning will assist all three levels of government to optimally coordinate infrastructure investments. The Town will continue to urge senior levels of government to adopt a multi-year stable grant determination system to allow municipalities to be able to plan for government support with some degree of reliability.

Development Charges

Development charges (DC's) provide for the recovery of growth-related capital expenditures from new development. The *Development Charges Act* is the statutory basis to recover these charges.

Development Charges are another source of funding, however have not been a significant source of funds for the Town and are restricted in their use. As such, DC revenues have not been factored in this financing strategy.

Debt

The Town's 10-year Lifecycle Plan, initiated in 2005, incorporated long-term debt in its strategy to address its annual lifecycle funding deficit. The 10-year plan included increases to the general tax levy of 3.9% in 2005 and 2.9% in each of years 2006-2014, gas tax grant funding allocated to support lifecycle, certain existing reserves drawn down over the 10-year period to help smooth tax increases and long-term debt incurred for Roads and Bridges to ensure full funding was available for those two services.

Borrowing funds to advance the timing of a project is also a funding option. Debt is ultimately repaid through general tax levy allocated funds, water and wastewater rate funds or, in some cases where allowed, senior government grants.

The use of debt is the least preferred financing option as the Town and its residents essentially forgo service benefits in lieu of interest charges.

Furthermore, municipalities are restricted to the amount of debt burden they can assume. The Town's 2017 year-end long-term debt obligation for general tax rate supported services is \$18.8 million. The annual repayment limit is a Ministry formula which limits the amount of debt repayment a Municipality can commit to without requiring OMB approval. The limit is based on



a maximum of 25% of municipal (own purposes) revenues based on the Financial Information Return and as adjusted by the Treasurer. The Town's current ratio of Net Debt Charges to Own Purposes Revenue is 9.9% (2016 FIR).

11.2 Projections

Projected reserve balances to 2037 are provided by asset type and a summary of all asset categories.

Lifecycle contributions are based on 2018 Budget amounts for all categories except Water and Wastewater, i.e. annual allocations are held static at 2018 levels. Water and Wastewater Lifecycle contributions are based on the 2015 Water and Wastewater Rate Study, which extends to 2024. Annual allocations for 2025-2037 are held static at 2024 levels.

Expenditures are based on 2018 replacement costs plus an annual inflationary factor of 2%.

Roadways

Roadways	2018	2019	2020	2021	<u></u>
Reserve Beginning Balance	7,353,000	8,278,957	6,221,121	3,823,563	-27,493,537
Lifecycle cont'n	3,739,927	3,739,927	3,739,927	3,739,927	3,011,500
Federal Gas Tax	1,182,693	1,205,200	1,205,200	1,205,200	1,205,200
Internal Debt	196,864	196,864	99,042	-	-
Available Funds	12,472,484	13,420,948	11,265,290	8,768,690	-23,276,837
Lifecycle expenditure	3,465,100	6,471,400	6,713,300	3,087,000	2,896,200
Growth expenditure	-	-	-	-	-
Debt repayment	728,427	728,427	728,427	728,427	-
Total expenditures	4,193,527	7,199,827	7,441,727	3,815,427	2,896,200
Reserve Ending Balance	8,278,957	6,221,121	3,823,563	4,953,263	-26,173,037

Lifecycle Program	
Lifecycle funding	4,611,009
Average annual requirement	6,100,566
Annual surplus/(deficit)	-1,489,557

Lifecycle and Growth	
Average annual funding	4,611,009
Average annual requirement	6,287,311
Annual surplus/(deficit)	-1,676,302

The significant drop in reserve ending balance is due primarily to the Tecumseh Main Street CIP streetscape works. Estimated reconstruction costs for this project total \$34.5 million with work being completed in multiple phases commencing in 2024 and completing in 2035.



Bridges

Bridges	2018	2019	2020	2021	j 2037
Reserve Beginning Balance	1,204,000	1,354,000	-549,300	-1,571,600	-10,545,000
Lifecycle cont'n	470,936	470,936	470,936	470,936	390,000
Available Funds	1,674,936	1,824,936	-78,364	-1,100,664	-10,155,000
Lifecycle expenditure	240,000	2,293,300	1,412,300	17,000	517,200
Growth expenditure	-	-	-	-	-
Debt repayment	80,936	80,936	80,936	80,936	-
Total expenditures	320,936	2,374,236	1,493,236	97,936	517,200
Reserve Ending Balance	1,354,000	-549,300	-1,571,600	-1,198,600	-10,672,200

Lifecycle Program	
Lifecycle funding	431,200
Average annual requirement	1,025,010
Annual surplus/(deficit)	-593,810

Lifecycle and Growth	
Average annual funding	431,200
Average annual requirement	1,025,010
Annual surplus/(deficit)	-593,810

The average annual requirement is based on the latest Bridge Needs Study and Culverts <3m Study. The Culverts <3m Study, completed in 2016, was the first study of its kind for the Town and is the cause of the significant jump in average annual requirement.

Based on the results of these two studies, the average annual requirement is now in excess of \$1 million. Administration increased the annual lifecycle contribution by \$120,000 in 2017 following the Culverts study, however will refrain from additional increases until some projects are undertaken to assess actual costs.



Stormwater

Stormwater	2018	2019	2020	2021	J 2037
Reserve Beginning Balance	100,000	-426,400	-2,917,800	-2,999,000	-24,809,500
Lifecycle cont'n	864,700	864,700	864,700	864,700	864,700
Available Funds	964,700	438,300	-2,053,100	-2,134,300	-23,944,800
Lifecycle expenditure	1,391,100	3,356,100	945,900	8,828,300	675,400
Growth expenditure					
Debt repayment	-	-	-	-	-
Total expenditures	1,391,100	3,356,100	945,900	8,828,300	675,400
Reserve Ending Balance	-426,400	-2,917,800	-2,999,000	-10,962,600	-24,620,200

Lifecycle Program	
Lifecycle funding	864,700
Average annual requirement	2,100,710
Annual surplus/(deficit)	-1,236,010

Lifecycle and Growth	
Average annual funding	864,700
Average annual requirement	2,100,710
Annual surplus/(deficit)	-1,236,010

The Town was successful in attaining grant funding from Federation of Canadian Municipalities (FCM – Federal funds) in the amount of \$175,000 in 2017 to be used towards the completion of a Stormwater Master Plan. The Master Plan was initiated in 2017 and is expected to be finalized in 2018.

One asset type absent from the Town's first AMP was pumping stations. This has been rectified with the Town's second AMP and is partly the cause of the significant deficit balance throughout the planning timeframe.

Stormwater Pump Station projects are expected to cost \$17 million over the course of the 20-year planning period, including two major pump station reconstructions. Pump stations at Edgewater (Scully) and St. Mark's are due to be replaced by one new pump station in 2021, while the Kensingtom (Cecile) pump station is due for reconstruction in 2023.

Major rehabilitation/reconstruction works planned for the next 20-year period include:

- Stormwater works in relation to Oldcastle sanitary sewer connections are expected to total \$4.2 million with work occurring in phases throught the planning period
- Manning Road Phase 2 East Townline Drain relocation is planned for 2019 and expected to cost \$1.7 million in stormwater costs
- St. Clair Beach "Dish area" stormwater reconstruction planned in phases commencing
 2024 through to the end of the planning period with estimated cost of \$4.8 million



Water

Water	2018	2019	2020	2021	J 2037
Reserve Beginning Balance	9,726,000	9,398,128	8,932,030	8,381,740	11,208,212
Rate Study allocation	1,842,028	1,964,502	2,085,510	2,216,773	2,668,469
Sr Gov't Grant formula	-	-	-	-	-
Sr Gov't Grant application	-	-	-	-	-
Debt contribution	-	-	-	-	-
Transfer from Operations	-	-	-	-	-
Available Funds	11,568,028	11,362,630	11,017,540	10,598,513	13,876,681
Lifecycle expenditure	2,169,900	2,430,600	461,400	55,200	897,300
Growth expenditure	-	-	2,174,400	-	-
Debt repayment	-	-	-	-	-
Total expenditures	2,169,900	2,430,600	2,635,800	55,200	897,300
Reserve Ending Balance	9,398,128	8,932,030	8,381,740	10,543,313	12,979,381

Lifecycle and Growth	
Rate funding	2,516,609
Average annual requirement	2,353,940
Annual surplus/(deficit)	162,669

Rate funding in future years is based on user rate increases recommended in the Town's 2015 Water and Wastewater Rate Study. The Study extends out to 2024. For the purposes of this AMP, the recommended study rates are incorporated in estimated funding for years 2018-2024 (Rate Study allocation). For years 2025-2037, the annual funding is held constant at the 2024 level.



Wastewater

Wastewater	2018	2019	2020	2021	.; 2037
Reserve Beginning Balance	-2,019,000	-2,989,141	-2,347,179	-1,165,052	-13,939,536
Rate Study allocation	1,654,109	1,827,188	2,008,801	2,180,614	2,758,067
Land owner contribution	699,200	1,829,800	1,384,900	886,600	2,330,900
Sr. Government Grants	2,484,517	-	-	-	-
Transfer from Operations	36,879	36,879	36,879	22,712	-
Available Funds	2,855,705	704,726	1,083,401	1,924,874	-8,850,569
Lifecycle expenditure	4,015,600	124,300	19,600	1,307,900	-
Servicing expenditure	699,200	1,829,800	1,384,900	886,600	2,330,900
Growth expenditure	-	175,400	299,200	10,251,300	-
Debt repayment	1,130,046	922,405	544,753	158,823	-
Total expenditures	5,844,846	3,051,905	2,248,453	12,604,623	2,330,900
Reserve Ending Balance	-2,989,141	-2,347,179	-1,165,052	-10,679,749	-11,181,469

Lifecycle and Growth	
Rate funding	4,159,183
Average annual requirement	4,741,532
Annual surplus/(deficit)	-582,349

Rate funding in future years is based on user rate increases recommended in the Town's 2015 Water and Wastewater Rate Study. The Study extends out to 2024. For the purposes of this AMP, the recommended study rates are incorporated in estimated funding for years 2018-2024 (Rate Study allocation). For years 2025-2037, the annual funding is held constant at the 2024 level.

Wastewater reserves have been in a deficit position for some time primarily due to the advancement of sanitary sewer connections in the Oldcastle area. Connections in Oldcastle will continue in a phased-manner throughout the 20-year planning period with an estimated cost of \$32 million. Most of this expense will be recovered through land owner contributions of benefitting properties.

Significant growth costs are reflected in the 20-year period based on the Town 2014 Development Charges Study, which predict expansion costs of \$49 million, including nearly \$20 million in costs to purchase additional treatment capacity at City of Windsor treatment stations.



Facilities

Facilities	2018	2019	2020	2021	J 2037
Reserve Beginning Balance	1,452,000	1,239,000	17,709,000	-2,924,500	-12,065,900
Lifecycle cont'n	325,000	325,000	325,000	325,000	325,000
NIL cont'n	400,000	-	387,600	387,600	387,600
Sr Gov't Grant Federal	-	8,250,000	-	-	-
Sr Gov't Grant Provincial	-	8,250,000	-	-	-
Debt contribution	-	-	6,600,000	-	-
Transfer from Operations	-	-	1,650,000	-	-
Available Funds	2,177,000	18,064,000	26,671,600	-2,211,900	-11,353,300
Lifecycle expenditure	338,000	355,000	523,600	464,700	490,900
Growth expenditure	600,000	-	28,684,900	-	-
Debt repayment	-	-	387,600	387,600	387,600
Total expenditures	938,000	355,000	29,596,100	852,300	878,500
Reserve Ending Balance	1,239,000	17,709,000	-2,924,500	-3,064,200	-12,231,800

Lifecycle Program	
Lifecycle funding	693,840
Average annual requirement	970,610
Annual surplus/(deficit)	-276,770

Lifecycle and Growth (known funds only)				
Average annual funding	693,840			
Average annual requirement 2,615,530				
Annual surplus/(deficit) -1,921,690				

The Facilities category was added to the Town's AMP for this version.

The construction of a new Multi-Use Sportsplex has been approved in principal by Council. Lifecycle funds have been allocated for 2018 towards architectural concept designs.

Timing of construction and financing of this significant addition have yet to be determined. The availability and amount of senior government grant funding and community fundraising will play important roles towards the achievement of this endeavour.

Administration has recommended, through Parks & Recreation Council Report 06-2017, that construction proceed upon receipt of 2/3 senior government funding and 20% of the remaining amount raised through community fundraising activities. The balance would be financed through long-term debt. The long-term debt would be funded through the NIL reserve, for which the annual requirement was increased to \$1.75 million to accommodate this debt.



Fleet

Fleet	2018	2019	2020	2021	ے۔۔۔ 2037
Reserve Beginning Balance	2,223,000	1,854,400	2,339,000	2,406,100	-1,647,400
Lifecycle cont'n	799,000	799,000	799,000	799,000	799,000
Available Funds	3,022,000	2,653,400	3,138,000	3,205,100	-848,400
Lifecycle expenditure	1,167,600	314,400	731,900	486,000	386,100
Growth expenditure	-	-	-	-	-
Debt repayment	-	-	-	-	-
Total expenditures	1,167,600	314,400	731,900	486,000	386,100
Reserve Ending Balance	1,854,400	2,339,000	2,406,100	2,719,100	-1,234,500

Lifecycle Program	
Lifecycle funding	799,000
Average annual requirement	906,050
Annual surplus/(deficit)	-107,050

Lifecycle and Growth	
Average annual funding	799,000
Average annual requirement	971,875
Annual surplus/(deficit)	-172,875

The Fleet category was added to the Town's AMP for this version.

The Town has employed a 10-year Fleet planning schedule since 2007. This schedule is updated annually and is used during the annual budget process to assess the adequacy of lifecycle funding.

During the 2018 budget process, the lifecycle allocation was increased by \$28,000 primarily to account for increasing replacement costs, which were expected to move the reserve into deficit position towards the end of the 10-year planning period.

Significant cost drivers during this planning period include:

- Fire Apparatus replacement of four major pieces of equipment between 2018-2026 totalling an estimated \$3.7 million
- Fire Apparatus additional piece of equipment based on the 2014 Development Charges Study – to be required within the 20-year planning period with estimated cost of \$1.3 million



Summary – All Categories

Summary - All Categories	2018	2019	2020	2021	2037
Reserve beginning balance	23,071,000	23,415,853	19,998,263	-9,371,762	-67,398,871
Lifecycle Program	6,199,563	6,199,563	6,199,563	6,199,563	5,390,200
New Infrastructure Levy	1,200,000	1,350,000	1,550,000	1,650,000	1,750,000
Water/Wastewater Rate Study	3,496,137	3,791,690	4,094,311	4,397,387	5,426,536
Land owner contribution	699,200	1,829,800	1,384,900	886,600	2,330,900
Senior Gov't contribution	4,542,119	2,259,682	2,358,396	2,358,396	1,182,693
Other	233,743	233,743	135,921	22,712	-
Annual contributions	16,370,762	15,664,478	15,723,091	15,514,658	16,080,329
Available funds	39,441,762	39,080,331	35,721,354	6,142,896	-51,318,542
Lifecycle expenditure	12,787,300	15,345,100	10,808,000	14,246,100	5,863,100
Growth expenditure	1,299,200	2,005,200	32,543,400	11,137,900	2,330,900
Debt repayment	1,939,409	1,731,768	1,741,716	1,355,786	387,600
Annual expenditure	16,025,909	19,082,068	45,093,116	26,739,786	8,581,600
Reserve ending balance	23,415,853	19,998,263	-9,371,762	-20,596,890	-59,900,142

Asset category specific funding	14,075,540
General funding	1,499,909
Average annual requirement	18,198,417
Annual surplus/(deficit)	-2,622,968

Some of the Town's NIL funding and the province's OCIF funding have not been dedicated to a specific asset category and so are identified as "General funding" in the table above. Overall, the Town's annual funding deficit is \$2.6 million.

Summary – All Categories – includes Grant funding for Multi-Use Sportsplex

Summary - All Categories	2018	2019	2020	2021	_i 2037
Reserve beginning balance	23,071,000	23,415,853	19,998,263	15,378,238	-42,648,871
Lifecycle Program	6,199,563	6,199,563	6,199,563	6,199,563	5,390,200
New Infrastructure Levy	1,200,000	1,350,000	1,550,000	1,650,000	1,750,000
Water/Wastewater Rate Study	3,496,137	3,791,690	4,094,311	4,397,387	5,426,536
Land owner contribution	699,200	1,829,800	1,384,900	886,600	2,330,900
Debt contribution	-	-	6,600,000	-	-
Donations	-	-	1,650,000	-	-
Senior Gov't contribution	4,542,119	2,259,682	18,858,396	2,358,396	1,182,693
Other	233,743	233,743	135,921	22,712	-
Annual contributions	16,370,762	15,664,478	40,473,091	15,514,658	16,080,329
Available funds	39,441,762	39,080,331	60,471,354	30,892,896	-26,568,542
Lifecycle expenditure	12,787,300	15,345,100	10,808,000	14,246,100	5,863,100
Growth expenditure	1,299,200	2,005,200	32,543,400	11,137,900	2,330,900
Debt repayment	1,939,409	1,731,768	1,741,716	1,355,786	387,600
Annual expenditure	16,025,909	19,082,068	45,093,116	26,739,786	8,581,600
Reserve ending balance	23,415,853	19,998,263	15,378,238	4,153,110	-35,150,142



The following chart summarizes annual funding by asset category. One-time funding sources are excluded from this summary. Specifically, OCIF Top-up grant and CWWF grant, both used towards Wastewater projects and applicable to 2018 only, have been excluded in this summary.

		2018 Average Annual Funding					
	Avg Annual	General	Federal	Provincial			
	Requirement	Tax & Rates	Gas Tax	OCIF	Debt	Total	Deficit
Roadways	6,100,566	3,428,316	1,182,693	-	-	4,611,009	1,489,557
Bridges & Culverts	1,025,010	431,200	-	-	-	431,200	593,810
Stormwater	2,100,710	864,700	-	-	-	864,700	1,236,010
Facilities	970,610	693,840	-	-	-	693,840	276,770
Fleet	906,050	799,000	-	-	-	799,000	107,050
Water	2,353,940	2,516,609	-	-	-	2,516,609	-162,669
Wastewater	4,741,532	4,159,183	-	-	-	4,159,183	582,349
Unallocated	-	800,000	-	699,909	-	1,499,909	-1,499,909
Total	18,198,417	13,692,847	1,182,693	699,909	-	15,575,449	2,622,968

Overall, the Town's AMP annual funding requirement is approximately 86% achieved.

This assumes that water and wastewater user rates will be adjusted in accordance with the 2015 Water and Wastewater Rate Study (2015-2024).

Increasing the annual allocation to the Lifecycle Program by 0.75% per year for each of the twenty years in the AMP planning period will further improve the average annual funding requirement to approximately 90%.

Approximately \$809,000 of annual debt payments will expire during the course of this 20-year plan. This debt was incurred for the Roads and Bridges Lifecycle categories in order to achieve target funding for these two categories at the outset of the Lifecycle Program. Originally anticipated to be a temporary Lifecycle budget allocation, and reflected as such in this AMP, electing to maintain this funding in the Lifecycle Program is an additional funding source and could be used to help reduce the projected funding deficits in those two categories.

Senior Government grant funding opportunities will be sought after. Any grant funding earned will help to either reduce increases to user rates and/or general tax rate and/or improve the annual funding percentage.

The Town's current debt burden is low to moderate. There is some room to incur debt as a tool to expedite construction works. Long term debt can also be used strategically to spread costs over a longer timeframe in order to match costs with asset useful life. The use of debt is generally not a preferred option to the Town as it exposes the Town to interest rate risk and interest charges may jeopardize or limit future opportunities.

Deferring or delaying projects is also an option for non-essential projects, should financing options not be achievable and/or desirable.



12. Conclusion

The 20-year projected reserve balances that support infrastructure investment appear to be in good shape in the short term, assuming grant funding for the Multi-Use Sportsplex can be attained. However, there are specific asset categories, Roadways, Bridges, Stormwater and Wastewater, that are not funded sufficiently over the term of the AMP and are expected to create **funding shortfalls by the end of the study period** as illustrated below.

Summary – All Categories

Summary - All Categories	2018	2019	2020	2021	2037
Reserve beginning balance	23,071,000	23,415,853	19,998,263	-9,371,762	-67,398,871
Lifecycle Program	6,199,563	6,199,563	6,199,563	6,199,563	5,390,200
New Infrastructure Levy	1,200,000	1,350,000	1,550,000	1,650,000	1,750,000
Water/Wastewater Rate Study	3,496,137	3,791,690	4,094,311	4,397,387	5,426,536
Land owner contribution	699,200	1,829,800	1,384,900	886,600	2,330,900
Senior Gov't contribution	4,542,119	2,259,682	2,358,396	2,358,396	1,182,693
Other	233,743	233,743	135,921	22,712	-
Annual contributions	16,370,762	15,664,478	15,723,091	15,514,658	16,080,329
Available funds	39,441,762	39,080,331	35,721,354	6,142,896	-51,318,542
Lifecycle expenditure	12,787,300	15,345,100	10,808,000	14,246,100	5,863,100
Growth expenditure	1,299,200	2,005,200	32,543,400	11,137,900	2,330,900
Debt repayment	1,939,409	1,731,768	1,741,716	1,355,786	387,600
Annual expenditure	16,025,909	19,082,068	45,093,116	26,739,786	8,581,600
Reserve ending balance	23,415,853	19,998,263	-9,371,762	-20,596,890	-59,900,142

Summary – All Categories – includes Grant funding for Multi-Use Sportsplex

Summary - All Categories	2018	2019	2020	2021	2037
Reserve beginning balance	23,071,000	23,415,853	19,998,263	15,378,238	-42,648,871
Lifecycle Program	6,199,563	6,199,563	6,199,563	6,199,563	5,390,200
New Infrastructure Levy	1,200,000	1,350,000	1,550,000	1,650,000	1,750,000
Water/Wastewater Rate Study	3,496,137	3,791,690	4,094,311	4,397,387	5,426,536
Land owner contribution	699,200	1,829,800	1,384,900	886,600	2,330,900
Debt contribution	-	-	6,600,000	-	-
Donations	-	-	1,650,000	-	-
Senior Gov't contribution	4,542,119	2,259,682	18,858,396 ¹	2,358,396	1,182,693
Other	233,743	233,743	135,921	22,712	-
Annual contributions	16,370,762	15,664,478	40,473,091	15,514,658	16,080,329
Available funds	39,441,762	39,080,331	60,471,354	30,892,896	-26,568,542
Lifecycle expenditure	12,787,300	15,345,100	10,808,000	14,246,100	5,863,100
Growth expenditure	1,299,200	2,005,200	32,543,400	11,137,900	2,330,900
Debt repayment	1,939,409	1,731,768	1,741,716	1,355,786	387,600
Annual expenditure	16,025,909	19,082,068	45,093,116	26,739,786	8,581,600
Reserve ending balance	23,415,853	19,998,263	15,378,238	4,153,110	-35,150,142

¹ See pages 122 and 129 (\$2,358,396 + 8,250,000 + 8,250,000)



With respect to the financing strategy, the Town has a sincere commitment to asset management. The Lifecycle Program demonstrates willingness to address funding requirements for the replacement of existing assets. Further, the special New Infrastructure Levy was established to begin to address the funding requirements for asset additions.

The Town will continue its commitment to the Lifecycle Program, where new assets initiate increases to lifecycle requirements. Federal Gas Tax funding is incorporated into the Lifecycle Program and is therefore a key funding component.

The AMP will be used as one of the tools to assist in determining enhancements to the Lifecycle Plan beyond 2018. Consideration will be given to determine the feasibility of a Pay As You Go Plan; the key element of such a plan requires a proactive approach to providing funding in the lead up to capital expenditure requirements.

The Town employs asset management strategies for all infrastructure assets. These strategies incorporate industry best practices, recurring engineering studies, maintenance programs and long term planning to ensure the right infrastructure investments are made at the right time providing residents with acceptable and sustainable levels of service.

Senior government financial support is an essential component of any municipality's AMP. However, government funding can often be irregular with respect to timing, qualification and amount. The Town will continue to advocate for a multi-year stable grant determination system to allow municipalities to be able to plan with some degree of reliability.



Appendices



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.1	EFFECTIVE DATE: January 28, 2014					
SUPERCEDES: N/A	APPROVAL: RCM-46/14					
SUBJECT: Roads Condition Assessment Policy						

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of all roads within the Town of Tecumseh.

SCOPE:

2.1 The Town has an inventory of approximately 180 centerline-kilometers of roadway (from two to four lanes), consisting of varying materials such as asphalt, concrete, and tar and chip. All Town roads shall be assessed as outlined in this policy.

BACKGROUND:

3.1 Roads Needs Studies are used to assess the existing road system in the Town and to assist in preparing comprehensive plans for improving and maintaining the road systems. The Road Needs Study classifies the road inventory into three main categories:

Urban: Roads having curb and gutter and storm sewer drainage
Semi-Urban: Roads without curb and gutter in built-up urban areas
Rural: Roads without curb and gutter outside built-up urban areas

The Roads Needs Study incorporates the use of pavement condition indices (PCI) in rating individual road segments.

3.2 The Town also uses in-house software which analyzes the Pavement Condition Index (PCI) to create asset management strategy scenarios. These ratings range from 0-100, where 0 is the worst rating possible and 100 is the best rating possible. These ratings are consistent with the rating system used in the traditional Road Needs Study.

PROCEDURE:

- 4.1 Acceptable levels of service (ALS) are service qualities for given activities approved by Council that balance desired service levels with cost and risk. ALS is often documented as commitments to carry out given action(s) within a specified time frame in response to asset condition data.
- 4.2 Roads Needs Studies shall be conducted within an approximate 3-5 year time frame, with no more than five years between studies.
- 4.3 The Director Public Works & Environmental Services shall ensure that the Town continues to maintain acceptable levels of service, which shall be qualified as:
 - A PCI of 70 on average throughout the Town.
 - Any road rated as a "Now" time of improvement (PCI of less than 50) in the current Roads Needs Study are slated for some form of work within a two year window.
 - Any road rated as a "1-5 year" time of improvement (PCI 50-60) is addressed in some manner within the timeframe.
 - All roads as rated are actively reviewed in conjunction with other infrastructure projects in order to achieve efficiencies of Town dollars.
- 4.4 Staff observations shall be reported and included in the annual review of the Town's roads network.
- 4.5 Roads Needs Studies shall be awarded to consulting engineering firms who have a demonstrated ability to evaluate the local road network as well as a demonstrated ability to produce a report in an acceptable format.

RESPONSIBILITY:

- 5.1 The Director Public Works & Environmental Services shall be responsible for the implementation of the Roads Condition Assessment Policy.
- 5.2 The Manager Roads & Fleet and/or the Manager Engineering Services shall be responsible for the review and use of information gathered from condition assessments.
- 5.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services shall award the Roads Needs Study to a consulting engineering firm in a process consistent with the Town's Purchasing Policy.

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REFERENCE:	
Purchasing By-law 2006-03, which includes the Purchasing Policy	
137	



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82	EFFECTIVE DATE: January 28, 2014
SUPERCEDES: N/A	APPROVAL: RCM-46/14
SUBJECT: Data Verification Policy	

PURPOSE:

1.1 The purpose of this policy is to provide a guideline for the review of data that is collected or provided to the Town of Tecumseh for use in asset management.

SCOPE:

2.1 The policy is applicable to all data used by Town staff for asset management purposes.

PROCEDURE:

- 3.1 Identify the records to be reviewed.
- 3.2 Determine the location and source of the records. The data may be produced by more than one employee or may come from an external source such as a consultant. Data may be present in a number of formats. For example, engineering firms may submit a Needs Study electronically or provide hard copies.
- 3.3 Determine the criteria against which the data will be checked. For example: Will the data be tested for Reasonability? Accuracy? Completeness?
- 3.4 Determine an appropriate sample size keeping in mind the purpose of the data and the testing criteria identified in the previous step. For example, a reasonability test would have a smaller sample size than a check for completeness which might involve a review of the entire sample.

- 3.5 Once the testing criteria have been determined, complete the data review. For example, the verification of a Needs Study submitted by an engineering consultant might be checked for completeness by comparing the number of records in the Study to the number found in GIS. The same study may be checked for reasonability by comparing findings and recommendations to those in the previous study.
- 3.6 Once the data review has been completed, note and follow up on any inconsistencies to ensure the data is corrected.

RESPONSIBILITY:

4.1 Users of data shall be responsible to ensure that the data he/she is reporting on has been verified as per this policy.

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	C	osting	Subt	otal by Year
Studies:											
Roads Needs Study						Engineering	2019	\$	90,000	\$	90,000
Roads Needs Study						Engineering	2024	\$	90,000	\$	90,000
Roads Needs Study						Engineering	2029	\$	90,000	\$	90,000
Roads Needs Study						Engineering	2034	\$	90,000	\$	90,000
Rehabilitation:		•					20 Ye	ar Tota	l Studies	\$	360,000
Alden Cres	St Marks Rd	St Marks Rd	SC051	2014	47	Resurfacing	2018	\$	15,400		
Fasan Dr	Blackacre Dr	Blackacre Dr	SS271	2014	51	Resurfacing	2018	\$	252,365		
Malden Rd	S Talbot Rd	County Rd 8	SS371	2014	55	Resurfacing	2018	\$	430,400		
Oldcastle Rd	Talbot Rd	S Talbot Rd	SS332	2014	31	Resurfacing	2018	\$	191,000		
Papineau Crt	Lesperance Rd	Lesperance Rd	T124	2014	58	Resurfacing	2018	\$	44,900		
Roxbury Cres	Gauthier Dr	Gauthier Dr	T111	2014	59	Resurfacing	2018	\$	39,100		
Ruston Rd	Canada South Rlwy	Talbot Rd	SS313	2014	57	Resurfacing	2018	\$	44,500		
Argent St	St Thomas St	Ballard St	T206	2014	59	Resurfacing	2018	\$	16,600		
Ballard St	Lacasse Blvd	Argent St	T205	2014	59	Resurfacing	2018	\$	38,900		
Edgewater Blvd	Lenore Ave	St Gregorys Rd	SC035	2014	58	Resurfacing	2018	\$	45,300		
Edgewater Blvd	Riverside Dr	Hayes Ave	SC039	2014	58	Resurfacing	2018	\$	58,800		
Edgewater Blvd	Hayes Ave	Lenore Ave	SC036	2014	59	Resurfacing	2018	\$	45,100	\$	1,222,365
Coronado Dr	Mason Pl	Little River Blvd	T078	2014	54	Resurfacing	2019	\$	13,800		
Coronado Dr	Dillon Dr	Percy Pl	T067	2014	54	Resurfacing	2019	\$	16,100		
Coronado Dr	Percy Pl	Keith Ave	T068	2014	54	Resurfacing	2019	\$	16,100		
Coronado Dr	Keith Ave	Mason Pl	T073	2014	54	Resurfacing	2019	\$	15,500		
Cumberland Crt	Dresden Pl	Dresden Pl	SC074	2014	56	Resurfacing	2019	\$	12,300		
Birkdale Crt	Dresden Pl	Dresden Pl	SC076	2014	55	Resurfacing	2019	\$	13,700		
Cambridge Crt	Dresden Pl	Dresden Pl	SC072	2014	55	Resurfacing	2019	\$	11,200		
Dresden Pl	Tecumseh Rd	Oakfield Crt	SC069	2014	53	Resurfacing	2019	\$	38,000		
Dresden Pl	Regent Rd	Regent Rd	SC081	2014	53	Resurfacing	2019	\$	56,400		
Dresden Pl	Oakfield Crt	Cambridge Crt	SC071	2014	53	Resurfacing	2019	\$	18,400		
Dresden Pl	Birkdale Crt	Rostrevor Crt	SC077	2014	54	Resurfacing	2019	\$	17,400		
Dresden Pl	Rostrevor Crt	Regent Rd	SC079	2014	54	Resurfacing	2019	\$	18,300		
Dresden Pl	Cumberland Crt	Birkdale Crt	SC075	2014	54	Resurfacing	2019	\$	16,100		
Hayes Ave	St Marks Rd	Mack Crt	SC046	2014	49	Resurfacing	2019	\$	7,700		
Hayes Ave	Mack Crt	Arlington Blvd	SC048	2014	51	Resurfacing	2019	\$	16,500		
Oakfield Crt	Dresden Pl	Dresden Pl	SC070	2014	55	Resurfacing	2019	\$	9,900		
Oakpark Dr	Dube Dr	Dube Dr	T139	2014	52	Resurfacing	2019	\$	25,500		
Oakpark Dr	Dube Dr	Regal Crt	T138	2014	53	Resurfacing	2019	\$	19,100		
Oakpark Dr	Regal Crt	Lacasse Blvd	T136	2014	53	Resurfacing	2019	\$	47,900		
Regal Crt	Oakpark Dr	Oakpark Dr	T137	2014	67	Resurfacing	2019	Ś	11,800		

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing		Subtotal by Year
Percy Pl	Lacasse Blvd	Coronado Dr	T066	2014	54	Resurfacing	2019	\$ 20,4	00	
Regent Rd	Tecumseh Rd	Dresden Pl	SC082	2014	54	Resurfacing	2019	\$ 12,3	00	
Regent Rd	Dresden Pl	Dresden Pl	SC080	2014	55	Resurfacing	2019	\$ 18,2	00	
Rostrevor Crt	Dresden Pl	Dresden Pl	SC078	2014	56	Resurfacing	2019	\$ 15,3	00	
Wellwood Crt	Talthorpe Pl	Talthorpe Pl	SC104	2014	51	Resurfacing	2019	\$ 14,8	00	
Dillon Dr	Barry Ave	Michael Dr	T034	2014	57	Resurfacing	2019	\$ 41,9	00	
Dillon Dr	Keith Ave	Barry Ave	T032	2014	61	Resurfacing	2019	\$ 7,6	00	
Green Valley Dr	St Thomas St	Amberly Cres	T238	2014	56	Resurfacing	2019	\$ 10,0	00	
Green Valley Dr	St Gregorys Rd	Meadowland Cres	T259	2014	57	Resurfacing	2019	\$ 15,4	00	
Green Valley Dr	Amberly Cres	Brunelle Cres	T236	2014	57	Resurfacing	2019	\$ 10,8	00	
Green Valley Dr	Meadowland Cres	Harvest Ln	T256	2014	57	Resurfacing	2019	\$ 29,9	00	
Green Valley Dr	Brunelle Cres	St Gregorys Rd	T233	2014	57	Resurfacing	2019	\$ 24,9	00	
Green Valley Dr	Harvest Ln	Tecumseh Rd	T254	2014	58	Resurfacing	2019	\$ 29,3	00	
Green Valley Dr	Meadowland Cres	Meadowland Cres	T258	2014	58	Resurfacing	2019	\$ 17,0	00	
Green Valley Dr	Brunelle Cres	Brunelle Cres	T234	2014	59	Resurfacing	2019	\$ 45,6	00	
Hebert St	Maisonneuve St	Intersection Rd	SS021	2014	55	Resurfacing	2019	\$ 83,9	00	
Hebert St	Gouin St	Maisonneuve St	SS023	2014	55	Resurfacing	2019	\$ 76,7	00	
Hebert St	West Lake Dr	Gouin St	SS025	2014	56	Resurfacing	2019	\$ 127,8	00	\$ 1,003,500
Jelso Pl	Kimberly Dr	Kimberly Dr	T143	2014	55	Resurfacing	2020	\$ 31,1	00	
Kavanagh Dr	Mayrand Cres	Mayrand Cres	SS017	2014	57	Resurfacing	2020	\$ 18,7	00	
Kimberly Dr	Lacasse Blvd	Jelso Pl	T142	2014	54	Resurfacing	2020	\$ 23,3	00	
Kimberly Dr	Jelso Pl	Shawn Ave	T144	2014	56	Resurfacing	2020	\$ 61,2	00	
St Gregorys Rd	Green Valley Dr	Primrose Pl	T239	2014	57	Resurfacing	2020	\$ 16,9	00	
St Gregorys Rd	Juniper Crt	Manning Rd	T243	2014	57	Resurfacing	2020	\$ 14,1	00	
St Gregorys Rd	Revland Dr	Green Valley Dr	T232	2014	58	Resurfacing	2020	\$ 73,2	00	
St Gregorys Rd	Primrose Pl	Juniper Crt	T241	2014	58	Resurfacing	2020	\$ 20,2	00	
Hayes Ave	Edgewater Blvd	St Marks Rd	SC038	2014	60	Resurfacing	2020	\$ 18,2	00	
Kavanagh Dr	Mayrand Cres	Mayrand Cres	SS016	2014	59	Resurfacing	2020	\$ 19,0	00	
Lesperance Rd	Renaud St	Highway 2	T299	2014	59	Resurfacing	2020	\$ 57,7	00	
Mayrand Cres	Kavanagh Dr	Kavanagh Dr	SS015	2014	55	Resurfacing	2020	\$ 79,1	00	
Mei-Lin Cres	Brighton Rd	Brighton Rd	SC111	2014	58	Resurfacing	2020	\$ 15,5	00	
Shields St	Docherty Dr	Lesperance Rd	SS136	2014	59	Resurfacing	2020	\$ 22,9	00	
Shields St	St Alphonse St	Docherty Dr	SS137	2014	60	Resurfacing	2020	\$ 22,2	00	
Wood St	Lesperance Rd	St Pierre St	T058	2014	59	Resurfacing	2020	\$ 17,9	00	
Woodridge Dr	Little River Blvd	St Thomas St	T168	2014	59	Resurfacing	2020	\$ 74,6		
Michael Dr	Little River Blvd	St Thomas St	T164	2014	60	Resurfacing	2020	\$ 110,4	00	
Mason Pl	Burdick Cres	Barry Ave	T076	2014	60	Resurfacing	2020	\$ 17,3		
Meander Cres	Lacasse Blvd	Clapp St	T131	2014	60	Resurfacing	2020	\$ 76,7	-+	
Dube Dr	Oakpark Dr	Lacasse Blvd	T140	2014	61	Resurfacing	2020	\$ 30,1		
Lessard St	Lesperance Rd	Lesperance Rd	SS043	2014	61	Resurfacing	2020	\$ 41,20		\$ 861,500

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Riverside Dr	Kensington Blvd	Pentilly Rd	SC008	2014	65	Resurfacing	2021	\$ 68,300	
St Pierre St	Little River Blvd	Wood St	T059	2014	63	Resurfacing	2021	\$ 18,000	
St Pierre St	Clapp St	St Thomas St	T151	2014	64	Resurfacing	2021	\$ 49,800	
St Pierre St	St Thomas St	McNorton St	T197	2014	64	Resurfacing	2021	\$ 68,500	
St Pierre St	Wood St	Clapp St	T129	2014	64	Resurfacing	2021	\$ 122,200	
St Pierre St	McNorton St	St Denis St	T214	2014	64	Resurfacing	2021	\$ 68,700	
St Pierre St	Riverside Dr	Dillon Dr	T024	2014	67	Resurfacing	2021	\$ 57,600	
St Pierre St	Dillon Dr	Little River Blvd	T060	2014	70	Resurfacing	2021	\$ 50,200	
Cada Cres	St Gregorys Rd	Fairway Cres	SC018	2014	66	Resurfacing	2021	\$ 15,100	
Cada Cres	Fairway Cres	Gordon Ave	SC130	2014	66	Resurfacing	2021	\$ 16,200	
Cada Cres	Lenore Ave	Fairway Cres	SC019	2014	67	Resurfacing	2021	\$ 33,900	
Cada Cres	Gordon Ave	Lenore Ave	SC021	2014	67	Resurfacing	2021	\$ 46,800	
Brenda Cres	St Thomas St	Clarice Ave	T203	2014	69	Resurfacing	2021	\$ 40,800	
Brenda Cres	Brenda Cres	St Thomas St	T160	2014	69	Resurfacing	2021	\$ 16,400	
Brenda Cres	Brenda Cres	Brenda Cres	T162	2014	69	Resurfacing	2021	\$ 39,100	
Brenda Cres	Brenda Cres	Brenda Cres	T161	2014	73	Resurfacing	2021	\$ 21,900	
9th Concession Rd	Highway 401	County Rd 46	SS206	2014	69	Resurfacing	2021	\$ 203,100	
Collier Cres	Dorset Pk	Dorset Pk	SC091	2014	69	Resurfacing	2021	\$ 64,600	\$ 1,001,200
Dillon Dr	Coronado Dr	Burdick Cres	T030	2014	63	Resurfacing	2022	\$ 17,100	
Dillon Dr	Burdick Cres	Keith Ave	T031	2014	64	Resurfacing	2022	\$ 28,700	
Dillon Dr	McColl Ave	Lacasse Blvd	T026	2014	65	Resurfacing	2022	\$ 16,800	
Dillon Dr	Lacasse Blvd	Coronado Dr	T028	2014	65	Resurfacing	2022	\$ 23,200	
Dillon Dr	Lesperance Rd	St Pierre St	T023	2014	65	Resurfacing	2022	\$ 20,900	
Dillon Dr	Centennial Dr	Shannon Pl	T038	2014	66	Resurfacing	2022	\$ 30,700	
Dillon Dr	Shannon Pl	Salich Crt	T043	2014	66	Resurfacing	2022	\$ 21,800	
Dillon Dr	Jasper Pl	Little River Blvd	T047	2014	67	Resurfacing	2022	\$ 31,600	
Dillon Dr	St Pierre St	McColl Ave	T025	2014	67	Resurfacing	2022	\$ 25,200	
Dillon Dr	Salich Crt	Jasper Pl	T045	2014	67	Resurfacing	2022	\$ 15,300	
Dillon Dr	Veronica Crt	St Thomas St	T172	2014	68	Resurfacing	2022	\$ 13,100	
Dillon Dr	Little River Blvd	Veronica Crt	T174	2014	70	Resurfacing	2022	\$ 32,000	
Dillon Dr	Michael Dr	Woodbridge Dr	T035	2014	73	Resurfacing	2022	\$ 68,300	
Dillon Dr	Kenney Crt	Kenney Crt	T017	2014	74	Resurfacing	2022	\$ 19,000	
Fairway Cres	Gordon Ave	Cada Cres	SC022	2014	65	Resurfacing	2022	\$ 17,300	
Fairway Cres	Hayes Ave	Cada Cres	SC025	2014	66	Resurfacing	2022	\$ 18,300	
Fairway Cres	Gordon Ave	Cada Cres	SC024	2014	66	Resurfacing	2022	\$ 88,700	
Docherty Dr	Holmes Cres	Lesperance Rd	SS140	2014	66	Resurfacing	2022	\$ 14,300	
Docherty Dr	Holmes Cres	Shields St	SS138	2014	69	Resurfacing	2022	\$ 83,400	
Dorset Pk	Collier Cres	Tecumseh Rd	SC093	2014	69	Resurfacing	2022	\$ 59,300	
Dorset Pk	Tecumseh Rd	Harbourne Cres	SC087	2014	69	Resurfacing	2022	\$ 51,700	
Dorset Pk	Harbourne Cres	Harbourne Cres	SC089	2014	69	Resurfacing	2022	\$ 16,800	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Dorset Pk	Collier Cres	Collier Cres	SC092	2014	69	Resurfacing	2022	\$ 17,600	
Dorset Pk	Harbourne Cres	Collier Cres	SC090	2014	70	Resurfacing	2022	\$ 18,300	
Funaro Cres	Funaro Cres	Funaro Cres	SS066	2014	67	Resurfacing	2022	\$ 64,900	
Funaro Cres	Funaro Cres	Funaro Cres	SS065	2014	67	Resurfacing	2022	\$ 35,500	
Funaro Cres	Meconi Dr	Funaro Cres	SS067	2014	68	Resurfacing	2022	\$ 21,400	
Funaro Cres	Roxanne Cres	Funaro Cres	SS427	2014	69	Resurfacing	2022	\$ 18,400	
Funaro Cres	Funaro Cres	Funaro Cres	SS426	2014	70	Resurfacing	2022	\$ 26,000	
St Thomas St	Centennial Dr	Dillon Dr	T171	2014	62	Resurfacing	2022	\$ 17,800	
St Thomas St	Dillon Dr	Rideau Pl	T175	2014	62	Resurfacing	2022	\$ 15,800	
St Thomas St	Lacasse Blvd	Argent St	T158	2014	65	Resurfacing	2022	\$ 47,400	
St Thomas St	Argent St	Brenda Cres	T159	2014	65	Resurfacing	2022	\$ 32,900	
St Thomas St	Revland Dr	Woodbridge Dr	T167	2014	66	Resurfacing	2022	\$ 19,800	
St Thomas St	Woodbridge Dr	Centennial Dr	T169	2014	67	Resurfacing	2022	\$ 20,900	
St Thomas St	Michael Dr	Revland Dr	T165	2014	67	Resurfacing	2022	\$ 19,400	
St Thomas St	Amberly Cres	Green Valley Dr	T179	2014	71	Resurfacing	2022	\$ 20,000	
St Thomas St	Rideau Pl	Amberly Cres	T177	2014	71	Resurfacing	2022	\$ 17,900	
St Thomas St	Grace Rd	Manning Rd	T182	2014	73	Resurfacing	2022	\$ 21,000	
St Thomas St	Green Valley Dr	Grace Rd	T180	2014	73	Resurfacing	2022	\$ 14,600	\$ 1,163,100
Lesperance Rd	Valente Crt	Evergreen Dr	T121	2014	72	Resurfacing	2023	\$ 39,600	
Lesperance Rd	Papineau Crt	Gauthier Dr	T123	2014	72	Resurfacing	2023	\$ 22,700	
Lesperance Rd	Papineau Crt	Clapp St	T125	2014	69	Resurfacing	2023	\$ 6,800	
Lesperance Rd	Evergreen Dr	Clapp St	T126	2014	71	Resurfacing	2023	\$ 19,500	
Lesperance Rd	Gauthier Dr	St Thomas St	T149	2014	72	Resurfacing	2023	\$ 31,300	
Lesperance Rd	St Thomas St	Orchard Dr	T187	2014	70	Resurfacing	2023	\$ 37,400	
Lesperance Rd	Orchard Dr	Baillargeon Dr	T190	2014	70	Resurfacing	2023	\$ 23,700	
Lesperance Rd	Baillargeon Dr	McNorton St	T195	2014	68	Resurfacing	2023	\$ 23,300	
Lesperance Rd	Arbour St	Renaud St	T307	2014	61	Resurfacing	2023	\$ 30,500	
Harbourne Cres	Dorset Pk	Dorset Pk	SC088	2014	69	Resurfacing	2023	\$ 57,700	
Harvest Ln	Green Valley Dr	Green Valley Dr	T255	2014	65	Resurfacing	2023	\$ 44,800	
Maisonneuve St	Hebert St	St Anne St	SS030	2014	62	Resurfacing	2023	\$ 43,600	
Maisonneuve St	St Anne St	Lesperance Rd	SS035	2014	64	Resurfacing	2023	\$ 24,100	
Malden Rd	Canada South Rlwy	Highway 3	SS344	2014	68	Resurfacing	2023	\$ 66,100	
Estate Pk	Tecumseh Rd	Talthorpe Pl	SC106	2014	69	Resurfacing	2023	\$ 12,100	
Estate Pk	Lexham Gdn	Lexham Gdn	SC097	2014	71	Resurfacing	2023	\$ 66,100	
Estate Pk	Lexham Gdn	Canterberry Crt	SC099	2014	71	Resurfacing	2023	\$ 15,600	
Estate Pk	Canterberry Crt	Talthorpe Pl	SC101	2014	72	Resurfacing	2023	\$ 18,500	
Estate Pk	Talthorpe Pl	Talthorpe Pl	SC102	2014	72	Resurfacing	2023	\$ 72,000	
Holmes Cres	Docherty Dr	Docherty Dr	SS139	2014	69	Resurfacing	2023	\$ 27,500	
Odessa Dr	County Rd 42	County Rd 42	SS118	2014	71	Resurfacing	2023	\$ 29,700	
Parkland Cres	Revland Dr	Woodbridge Dr	T229	2014	72	Resurfacing	2023	\$ 18,400	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Parkland Cres	Woodbridge Dr	Woodbridge Dr	T231	2014	74	Resurfacing	2023	\$ 27,600)
Pentilly Rd	Beach Grove Dr	Beach Grove Dr	SC120	2014	64	Resurfacing	2023	\$ 29,300)
Piccadilly Ave	Trafalgar Crt	Oldcastle Rd	SS301	2014	63	Resurfacing	2023	\$ 20,000	
Piccadilly Ave	Trafalgar Crt	Trafalgar Crt	SS302	2014	65	Resurfacing	2023	\$ 21,600	
Pinewood Cres	Riverside Dr	Riverside Dr	T009	2014	73	Resurfacing	2023	\$ 29,600)
Amberly Cres	St Thomas St	Green Valley Dr	T237	2014	71	Resurfacing	2023	\$ 119,800)
Arbour St	Lesperance Rd	Bedell St	T308	2014	71	Resurfacing	2023	\$ 45,900	
Arbour St	Bedell St	Lanoue St	T310	2014	73	Resurfacing	2023	\$ 43,700)
Lesperance Rd	McNorton St	St Jacques St	T211	2014	69	Resurfacing	2023	\$ 72,700)
Lesperance Rd	St Jacques St	St Denis St	T212	2014	67	Resurfacing	2023	\$ 11,300	\$ 1,152,500
Horwood Cres	Lacasse Blvd	Horwood Cres	T220	2014	70	Resurfacing	2024	\$ 19,800	
Horwood Cres	Horwood Cres	St Gregorys Rd	T221	2014	72	Resurfacing	2024	\$ 80,200)
Horwood Cres	Horwood Cres	St Gregorys Rd	T222	2014	72	Resurfacing	2024	\$ 59,600)
Baseline Rd	12th Con Rd	Manning Rd	SS169	2014	79	Resurfacing	2024	\$ 98,900)
Baseline Rd	12th Con Rd	12th Con Rd	SS167	2014	80	Resurfacing	2024	\$ 38,100)
Beach Grove Dr	Pentilly Rd	Pentilly Rd	SC119	2014	71	Resurfacing	2024	\$ 16,500)
Beach Grove Dr	Pentilly Rd	Brighton Rd	SC118	2014	72	Resurfacing	2024	\$ 20,000)
Blueberry Crt	Wildberry Cres	Wildberry Cres	SS151	2014	72	Resurfacing	2024	\$ 21,800)
Brouillette Crt	Brouillette Crt	Brouillette Crt	T281	2014	69	Resurfacing	2024	\$ 9,800)
Brouillette Crt	Southfield Dr	Fieldcrest Ln	T278	2014	77	Resurfacing	2024	\$ 17,300	1
Brouillette Crt	Fieldcrest Ln	Brouillette Crt	T280	2014	78	Resurfacing	2024	\$ 42,000	
Candlewood Dr	Deslippe Dr	Vickery Ln	SS087	2014	79	Resurfacing	2024	\$ 37,000)
Candlewood Dr	St Agnes Dr	St Agnes Dr	SS082	2014	79	Resurfacing	2024	\$ 24,500)
Candlewood Dr	Lesperance Rd	Vickery Ln	SS085	2014	79	Resurfacing	2024	\$ 23,000)
Cedarwood Dr	Gauthier Dr	Lesperance Rd	T105	2014	71	Resurfacing	2024	\$ 60,900)
Centennial Dr	Riverside Dr	Dillon Dr	T037	2014	70	Resurfacing	2024	\$ 49,000	
Centennial Dr	Dillon Dr	Little River Blvd	T096	2014	70	Resurfacing	2024	\$ 59,000)
Charlene Ln	Lesperance Rd	St Agnes Dr	SS078	2014	77	Resurfacing	2024	\$ 25,000)
Charlene Ln	St Agnes Dr	Eugeni St	SS075	2014	78	Resurfacing	2024	\$ 69,700	
Charlene Ln	Eugeni St	Eugeni St	SS073	2014	79	Resurfacing	2024	\$ 37,100	,
Charlene Ln	Eugeni St	Meconi Dr	SS072	2014	80	Resurfacing	2024	\$ 19,300	
Chornoby Cres	Hebert St	West Lake Dr	SS047	2014	78	Resurfacing	2024	\$ 26,700	
Chornoby Cres	West Lake Dr	Calvary Crt	SS041	2014	78	Resurfacing	2024	\$ 105,200	-
Christy Ln	Riverside Dr	Riverside Dr	SC002	2014	71	Resurfacing	2024	\$ 58,800	
Cortina Cres	Lanoue St	Heatherglen Cres	T330	2014	79	Resurfacing	2024	\$ 61,800	
Cranbrook Cres	Shiff Dr	Emma Maria Cres	SS174	2014	77	Resurfacing	2024	\$ 90,800	
Cranbrook Cres	Shiff Dr	Emma Maria Cres	SS175	2014	80	Resurfacing	2024	\$ 19,400	
Demarse Crt	Demarse Crt	Demarse Crt	T303	2014	77	Resurfacing	2024	\$ 17,600	
Demarse Crt	Renaud St	Demarse Crt	T301	2014	78	Resurfacing	2024	\$ 26,600	
Demarse Crt	Demarse Crt	Demarse Crt	T302	2014	79	Resurfacing	2024	\$ 19,000	
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Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Lacasse Blvd	Riverside Dr	Dillon Dr	T027	2014	69	Resurfacing	2025	\$ 37,200	
Lacasse Blvd	Dillon Dr	Percy Pl	T065	2014	71	Resurfacing	2025	\$ 20,900	
Lacasse Blvd	Percy Pl	Little River Blvd	T064	2014	72	Resurfacing	2025	\$ 48,500	
Lanoue St	Lanoue St	Arbour St	T316	2014	71	Resurfacing	2025	\$ 8,100	
Lanoue St	Heatherglen Cres	Cortina Cres	T328	2014	71	Resurfacing	2025	\$ 22,200	
Lanoue St	Lemire St	Heatherglen Cres	T326	2014	71	Resurfacing	2025	\$ 18,400	
Lanoue St	Heatherglen Cres	Manning Rd	T332	2014	72	Resurfacing	2025	\$ 50,300	
Lanoue St	Cortina Cres	Heatherglen Cres	T329	2014	72	Resurfacing	2025	\$ 19,600	
Lanoue St	Bedell St	Lanoue St	T315	2014	72	Resurfacing	2025	\$ 39,400	
Lanoue St	Northfield Way	Lemire St	T325	2014	73	Resurfacing	2025	\$ 24,400	
Lanoue St	Ryegate Dr	Northfield Way	T317	2014	73	Resurfacing	2025	\$ 119,800	
Lanoue St	Arbour St	Ryegate Dr	T408	2014	79	Resurfacing	2025	\$ 43,700	
Desro Dr	Manning Rd	Manning Rd	SS100	2014	78	Resurfacing	2025	\$ 125,500	
Eugeni St	Charlene Ln	Charlene Ln	SS074	2014	72	Resurfacing	2025	\$ 71,100	
Fieldcrest Ln	Brouillette Crt	Brouillette Crt	T279	2014	76	Resurfacing	2025	\$ 29,600	
Gauthier Dr	Little River Blvd	Cedarwood Dr	T104	2014	74	Resurfacing	2025	\$ 28,600	
Gauthier Dr	Cedarwood Dr	Oliver Dr	T107	2014	74	Resurfacing	2025	\$ 23,700	
Gauthier Dr	Oliver Dr	Roxbury Cres	T110	2014	75	Resurfacing	2025	\$ 23,300	
Gauthier Dr	Evergreen Dr	Lesperance Rd	T122	2014	79	Resurfacing	2025	\$ 98,900	
Gordon Ave	Cada Cres	Fairway Cres	SC023	2014	72	Resurfacing	2025	\$ 63,700	
Gouin St	Lesperance Rd	Deslippe Dr	SS089	2014	80	Resurfacing	2025	\$ 33,700	
Grace Rd	Little River Blvd	St Thomas St	T181	2014	68	Resurfacing	2025	\$ 54,500	
Grace Rd	Riverside Dr	Little River Blvd	T101	2014	73	Resurfacing	2025	\$ 108,900	
Heatherglen Dr	Lanoue St	Cortina Cres	T327	2014	79	Resurfacing	2025	\$ 111,000	
Heatherglen Dr	Lanoue St	Cortina Cres	T331	2014	79	Resurfacing	2025	\$ 52,500	
Jacie Crt	Northfield Way	Northfield Way	T321	2014	78	Resurfacing	2025	\$ 34,100	
James Cres	James Cres	James Cres	T086	2014	68	Resurfacing	2025	\$ 22,400	
James Cres	Michael Dr	James Cres	T085	2014	80	Resurfacing	2025	\$ 28,000	
Jamsyl Dr	Sylvestre Dr	Manning Rd	SS097	2014	79	Resurfacing	2025	\$ 110,100	
Kavanagh Dr	Mayrand Cres	Shawnee Rd	SS014	2014	72	Resurfacing	2025	\$ 24,000	\$ 1,496,100
Lexham Gdns	Tecumseh Rd	Estate Pk	SC096	2014	69	Resurfacing	2026	\$ 12,600	
Lexham Gdns	Estate Pk	Estate Pk	SC098	2014	71	Resurfacing	2026	\$ 31,100	
McNorton St	William St	Lacasse Blvd	T200	2014	68	Resurfacing	2026	\$ 30,200	
McNorton St	St Pierre St	William St	T198	2014	70	Resurfacing	2026	\$ 20,500	
Le Boeuf Ave	St Alphonse St	County Rd 42	SS121	2014	79	Resurfacing	2026	\$ 59,300	
Lemire St	Lanoue St	Northfield Way	T318	2014	73	Resurfacing	2026	\$ 23,500	
Lemire St	Northfield Way	Lanoue St	T319	2014	78	Resurfacing	2026	\$ 93,900	
Lenore Ave	Cada Cres	Edgewater Blvd	SC020	2014	71	Resurfacing	2026	\$ 23,300	
Lesperance Rd	Maisonneuve St	Intersection Rd	SS034	2014	79	Resurfacing	2026	\$ 56,000	
Lesperance Rd	Gouin St	Maisonneuve St	SS036	2014	73	Resurfacing	2026	\$ 57,800	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Lesperance Rd	Calvary Crt	Gouin St	SS038	2014	73	Resurfacing	2026	\$ 62,000	
Lesperance Rd	Lessard St	Calvary Crt	SS042	2014	72	Resurfacing	2026	\$ 27,500	
Lesperance Rd	West Lake Dr	Lessard St	SS044	2014	71	Resurfacing	2026	\$ 27,000	
Lesperance Rd	Highway 2	West Lake Dr	SS048	2014	71	Resurfacing	2026	\$ 27,200	
Lesperance Rd	North Pacific Ave	Canadian Pacific Railway	SS054	2014	75	Resurfacing	2026	\$ 11,000	
Lesperance Rd	Meconi Dr	North Pacific Ave	SS062	2014	78	Resurfacing	2026	\$ 22,900	
Lesperance Rd	Charlene Ln	Meconi Dr	SS076	2014	80	Resurfacing	2026	\$ 59,500	
Lesperance Rd	Intersection Rd	Charlene Ln	SS077	2014	78	Resurfacing	2026	\$ 12,000	
Lesperance Rd	Shields St	Wildberry Cres	SS135	2014	77	Resurfacing	2026	\$ 17,200	
Lesperance Rd	Docherty Dr	Shields St	SS141	2014	79	Resurfacing	2026	\$ 54,200	
Lesperance Rd	South Pacific Ave	Docherty Dr	SS142	2014	79	Resurfacing	2026	\$ 41,100	
Little River Blvd	Grace Rd	Manning Rd	T103	2014	64	Resurfacing	2026	\$ 22,400	
Little River Blvd	Barry Ave	Michael Dr	T083	2014	68	Resurfacing	2026	\$ 16,300	
Little River Blvd	Donalda Crt	Grace Rd	T100	2014	70	Resurfacing	2026	\$ 28,500	
Little River Blvd	St Pierre St	McColl Ave	T061	2014	72	Resurfacing	2026	\$ 37,600	
Little River Blvd	McColl Ave	Lacasse Blvd	T063	2014	72	Resurfacing	2026	\$ 24,000	
Little River Blvd	Woodbridge Dr	Centennial Dr	T095	2014	73	Resurfacing	2026	\$ 15,700	
Little River Blvd	Woodbridge Dr	Woodbridge Dr	T094	2014	74	Resurfacing	2026	\$ 13,500	
Little River Blvd	Windsor Border	Gauthier Dr	T048	2014	80	Resurfacing	2026	\$ 10,000	
Mason Pl	Coronado Dr	Burdick Cres	T074	2014	70	Resurfacing	2026	\$ 16,300	
McCord Ln	Di Cocco Crt	McCord Ln	SS292	2014	73	Resurfacing	2026	\$ 14,300	
McCord Ln	Walker Rd	Di Cocco Crt	SS290	2014	74	Resurfacing	2026	\$ 53,900	
Meadowland Cres	Green Valley Dr	Green Valley Dr	T257	2014	70	Resurfacing	2026	\$ 102,200	
Meconi Dr	Roxanne Cres	Charlene Ln	SS071	2014	77	Resurfacing	2026	\$ 36,000	
Meconi Dr	Lesperance Rd	Roxanne Cres	SS063	2014	79	Resurfacing	2026	\$ 41,100	
Michael Dr	James Cres	Little River Blvd	T084	2014	71	Resurfacing	2026	\$ 17,700	
Michael Dr	Simard Cres	James Cres	T087	2014	73	Resurfacing	2026	\$ 18,700	
Michael Dr	Dillon Dr	Simard Cres	T089	2014	73	Resurfacing	2026	\$ 20,800	
Michael Dr	St Thomas St	St Gregorys Rd	T224	2014	79	Resurfacing	2026	\$ 90,800	\$ 1,349,600
Mulberry Dr	Windsor Border	Southfield Dr	T SS001	2014	64	Resurfacing	2027	\$ 23,300	
Murray Cres	Shawnee Rd	North Pacific Ave	SS058	2014	68	Resurfacing	2027	\$ 98,400	
North Pacific Ave	Shawnee Rd	Murray Cres	SS059	2014	72	Resurfacing	2027	\$ 21,400	
North Pacific Ave	Murray Cres	St Anne St	SS057	2014	78	Resurfacing	2027	\$ 55,700	
North Pacific Ave	St Anne St	Lesperance Rd	SS055	2014	79	Resurfacing	2027	\$ 33,900	
Northfield Way	Lanoue St	Jacie Crt	T320	2014	78	Resurfacing	2027	\$ 23,600	
Northfield Way	Shelley Crt	Lanoue St	T324	2014	79	Resurfacing	2027	\$ 69,500	
Northfield Way	Jacie Cres	Shelley Crt	T322	2014	80	Resurfacing	2027	\$ 19,600	
Poisson St	Reme St	Arbour St	T293	2014	76	Resurfacing	2027	\$ 23,300	
Poisson St	Tecumseh Rd	Reme St	T297	2014	78	Resurfacing	2027	\$ 34,000	
Revland Dr	St Thomas St	Parkland Cres	T228	2014	79	Resurfacing	2027	\$ 85,200	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing		Subtotal by Year
Revland Dr	St Gregorys Rd	St Gregorys Rd	T226	2014	79	Resurfacing	2027	\$ 9,4	00	
Revland Dr	Parkland Cres	St Gregorys Rd	T227	2014	79	Resurfacing	2027	\$ 19,5	00	
North Talbot Rd	County Rd 46	Malden Rd	SS217	2014	64	Resurfacing	2027	\$ 64,5	00	
North Talbot Rd	Highway 401	Dumouchelle St	SS231	2014	77	Resurfacing	2027	\$ 68,7	00	
North Talbot Rd	Pulleyblank Dr	Walker Rd	SS237	2014	77	Resurfacing	2027	\$ 25,4	00	
North Talbot Rd	Brendan Ln	C O Roadway	SS240	2014	78	Resurfacing	2027	\$ 9,6	00	
North Talbot Rd	Walker Rd	Brendan Ln	SS239	2014	78	Resurfacing	2027	\$ 49,0	00	
North Talbot Rd	Hennin Dr	O'Neil Dr	SS246	2014	78	Resurfacing	2027	\$ 43,2	00	
North Talbot Rd	O'Neil Dr	Ure St	SS250	2014	78	Resurfacing	2027	\$ 50,9	00	
North Talbot Rd	Ure St	Oldcastle Rd	SS254	2014	79	Resurfacing	2027	\$ 47,5	00	
North Talbot Rd	C O Roadway	Hennin Dr	SS242	2014	79	Resurfacing	2027	\$ 53,6	00	
North Talbot Rd	Dumouchelle St	Burke St	SS233	2014	79	Resurfacing	2027	\$ 31,2	00	
North Talbot Rd	Halford Rd	Pulleyblank Dr	SS236	2014	80	Resurfacing	2027	\$ 16,3	00	
North Talbot Rd	Burke St	Halford Rd	SS234	2014	80	Resurfacing	2027	\$ 48,3	00	
Riverside Dr	Chene St	Lesperance Rd	T006	2014	77	Resurfacing	2027	\$ 23,9	00	
Riverside Dr	Arlington Blvd	Kensington Blvd	SC007	2014	79	Resurfacing	2027	\$ 73,4	00	
Riverside Dr	Winclare Dr	Catalina Cove	T003	2014	80	Resurfacing	2027	\$ 18,7	_	
Riverside Dr	Catalina Cove	Chene St	T005	2014	80	Resurfacing	2027	\$ 21,6	00	\$ 1,162,600
Roxanne Cres	Meconi Dr	Funaro Cres	SS064	2014	71	Resurfacing	2028	\$ 21,4	00	
Roxanne Cres	St Martin Cres	Meconi Dr	SS068	2014	71	Resurfacing	2028	\$ 19,4	00	
Roxanne Cres	St Martin Cres	St Martin Cres	SS069	2014	72	Resurfacing	2028	\$ 33,3	00	
Service Rd	Service Rd	County Rd 34	SS312	2014	71	Resurfacing	2028	\$ 57,6	00	
Shawn Ave	Kimberly Dr	Kimberly Dr	T145	2014	71	Resurfacing	2028	\$ 21,6	00	
Shawn Ave	Little River Blvd	Kimberly Dr	T147	2014	73	Resurfacing	2028	\$ 19,9	00	
Shawnee Rd	Kavanagh Dr	Gouin St	SS013	2014	70	Resurfacing	2028	\$ 41,7		
Shawnee Rd	West Lake Dr	Kavanagh Dr	SS018	2014	71	Resurfacing	2028	\$ 49,2	00	
Shelley Crt	Northfield Way	Northfield Way	T323	2014	78	Resurfacing	2028	\$ 32,1		
Shiff Dr	County Rd 42	Cranbrook Cres	SS180	2014	79	Resurfacing	2028	\$ 11,3	00	
Simard Cres	Michael Dr	Michael Dr	T088	2014	79	Resurfacing	2028	\$ 17,8	00	
Snake Ln	S Talbot Rd	9th Con Rd	SS366	2014	63	Resurfacing	2028	\$ 424,0	00	
South Talbot Rd	8th Con Rd	Snake Ln	SS338	2014	78	Resurfacing	2028	\$ 77,7	00	
South Talbot Rd	Snake Ln	9th Con Rd	SS339	2014	78	Resurfacing	2028	\$ 163,3	_	
South Talbot Rd	10th Con Rd	Malden Rd	SS341	2014	80	Resurfacing	2028	\$ 238,4	_	
South Talbot Rd	9th Con Rd	10th Con Rd	SS340	2014	80	Resurfacing	2028	\$ 237,5		\$ 1,466,200
Southwind Cres	Brighton Rd	Starwood Ln	SC127	2014	73	Resurfacing	2029	\$ 54,1	_	
St Agnes Dr	Verdant Crt	Charlene Ln	SS079	2014	69	Resurfacing	2029	\$ 39,7	_	
St Agnes Dr	Verdant Crt	Candlewood Dr	SS081	2014	72	Resurfacing	2029	\$ 28,1		
St Gregorys Rd	Michael Dr	Revland Dr	T225	2014	71	Resurfacing	2029	\$ 24,7	_	
St Gregorys Rd	Horwood Cres	Michael Dr	T223	2014	72	Resurfacing	2029	\$ 20,1	_	
St Gregorys Rd	Edgewater Blvd	St Marks Rd	SC040	2014	77	Resurfacing	2029	\$ 22,6	_	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
St Gregorys Rd	St Marks Rd	Arlington Blvd	SC053	2014	78	Resurfacing	2029	\$ 30,600	
St Martin Cres	Roxanne Dr	Roxanne Dr	SS070	2014	71	Resurfacing	2029	\$ 67,700	
St Thomas Cres	Appletree Cres	Lesperance Rd	T148	2014	71	Resurfacing	2029	\$ 84,800	
St Thomas Cres	Appletree Cres	Orchard Dr	T184	2014	72	Resurfacing	2029	\$ 18,600	
St Thomas Cres	Baillargeon Dr	McNorton St	T191	2014	72	Resurfacing	2029	\$ 15,800	
St Thomas Cres	Orchard Dr	Baillargeon Dr	T188	2014	73	Resurfacing	2029	\$ 18,900	
Starwood Ln	Brighton Rd	Southwind Cres	SC126	2014	73	Resurfacing	2029	\$ 78,400	
Strawberry Dr	Wildberry Cres	County Rd 42	SS146	2014	69	Resurfacing	2029	\$ 27,300	
Strawberry Dr	Wildberry Cres	Wildberry Cres	SS149	2014	70	Resurfacing	2029	\$ 43,500	
Strawberry Dr	Wildberry Cres	Strawberry Dr	SS147	2014	71	Resurfacing	2029	\$ 42,300	
Sylvestre Dr	Jamsyl Dr	Jamsyl Dr	SS098	2014	77	Resurfacing	2029	\$ 112,500	
Talthorpe Pl	Wellwood Crt	Estate Pk	SC103	2014	68	Resurfacing	2029	\$ 18,300	
Talthorpe Pl	Estate Pk	Wellwood Crt	SC105	2014	70	Resurfacing	2029	\$ 39,900	
Tecumseh Rd	Manning Rd	Dresden Pl	SC067	2014	69	Resurfacing	2029	\$ 38,500	
Tecumseh Rd	Dresden Pl	Regent Rd	SC068	2014	78	Resurfacing	2029	\$ 94,500	
Tecumseh Rd	Via Rail	Lacasse Blvd	T251	2014	80	Resurfacing	2029	\$ 18,200	
Trafalgar Crt	Piccadilly Ave	Piccadilly Ave	SS303	2014	70	Resurfacing	2029	\$ 51,100	
Verdant Crt	St Agnes Dr	St Agnes Dr	SS080	2014	71	Resurfacing	2029	\$ 8,000	
Westlake Dr	Chornoby Cres	Lesperance Rd	SS045	2014	61	Resurfacing	2029	\$ 42,200	
Westlake Dr	Lesperance Rd	Westlake Dr	SS388	2014	70	Resurfacing	2029	\$ 34,100	
Wildberry Cres	Lesperance Rd	Blueberry Crt	SS152	2014	70	Resurfacing	2029	\$ 29,600	
Wildberry Cres	Strawberry Dr	Strawberry Dr	SS148	2014	70	Resurfacing	2029	\$ 76,100	
Wildberry Cres	Blueberry Crt	Strawberry Dr	SS150	2014	71	Resurfacing	2029	\$ 27,000	
William St	Clapp St	St Thomas St	T153	2014	72	Resurfacing	2029	\$ 47,400	
William St	McNorton St	St Denis St	T216	2014	72	Resurfacing	2029	\$ 56,400	
William St	St Thomas St	McNorton St	T199	2014	72	Resurfacing	2029	\$ 65,200	\$ 1,376,200
11th Concession Rd	S Talbot Rd	County Rd 8	SS373	2014	85	Resurfacing	2030	\$ 372,300	
12th Concession Rd	Dimu Dr	Baseline Rd	SS168	2014	85	Resurfacing	2030	\$ 299,100	
12th Concesson Rd	S Talbot Rd	County Rd 8	SS375	2014	80	Resurfacing	2030	\$ 264,500	
9th Concession Rd	Snake Ln	County Rd 8	SS365	2014	85	Resurfacing	2030	\$ 106,200	
Appletree Cres	St Thomas Cres	Orchard Dr	T183	2014	82	Resurfacing	2030	\$ 58,300	
Baillairgeon Dr	St Thomas Cres	Lesperance Rd	T189	2014	84	Resurfacing	2030	\$ 61,700	
Baseline Rd	10th Con Rd	11th Con Rd	SS164	2014	80	Resurfacing	2030	\$ 115,500	\$ 1,277,600
Bedell St	Tecumseh Rd	Lanoue St	T314	2014	82	Resurfacing	2031	\$ 24,500	
Bedell St	Arbour St	Renaud St	T306	2014	83	Resurfacing	2031	\$ 19,900	
Bedell St	Lanoue St	Arbour St	T309	2014	83	Resurfacing	2031	\$ 25,500	
Bellaire Woods Dr	Malden Rd	Malden Rd	SS319	2014	83	Resurfacing	2031	\$ 33,200	1
Calvary Crt	Chornoby Cres	Calvary Crt	SS429	2014	84	Resurfacing	2031	\$ 16,000	
Calvary Crt	Calvary Crt	Calvary Crt	SS428	2014	85	Resurfacing	2031	\$ 9,400	
Candlewood Dr	Vickery Ln	St Agnes Dr	SS083	2014	80	Resurfacing	2031	\$ 20,500	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Candlewood Dr	Vickery Ln	Deslippe Dr	SS086	2014	81	Resurfacing	2031	\$ 18,100	
Catalina Cove	Riverside Dr	Riverside Dr	T004	2014	84	Resurfacing	2031	\$ 19,000	
Centennial Dr	Little River Blvd	St Thomas St	T170	2014	84	Resurfacing	2031	\$ 61,000	
Champ Cres	Southfield Dr	Southfield Dr	T276	2014	81	Resurfacing	2031	\$ 23,300	
Corbi Ln	Gouin St	Maisonneuve St	SS010	2014	80	Resurfacing	2031	\$ 69,300	
Corbi Ln	Maisonneuve St	Maisonneuve St	SS009	2014	81	Resurfacing	2031	\$ 51,300	
Deslippe Dr	Gouin St	Candlewood Dr	SS088	2014	80	Resurfacing	2031	\$ 93,100	
Deslippe Dr	Gouin St	Gouin St	SS090	2014	82	Resurfacing	2031	\$ 19,300	
Dillon Dr	Windsor Border	Kenney Crt	T016	2014	81	Resurfacing	2031	\$ 10,400	
Dimu Dr	Emma Maria Cres	12th Con Rd	SS170	2014	82	Resurfacing	2031	\$ 19,900	
Dimu Dr	Emma Maria Cres	Emma Maria Cres	SS171	2014	83	Resurfacing	2031	\$ 30,700	
Emma Maria Cres	Dimu Dr	Dimu Dr	SS172	2014	82	Resurfacing	2031	\$ 55,200	
Emma Maria Cres	Cranbrook Cres	Dimu Dr	SS173	2014	83	Resurfacing	2031	\$ 19,500	
Gauthier Dr	Valente Crt	Evergreen Dr	T119	2014	82	Resurfacing	2031	\$ 28,000	
Gauthier Dr	Roxbury Cres	Valente Crt	T112	2014	83	Resurfacing	2031	\$ 19,700	
Green Crt	Shiff Dr	Shiff Dr	SS177	2014	83	Resurfacing	2031	\$ 27,500	\$ 714,300
Jillian Crt	St Alphonse St	Jillian Crt	SS124	2014	81	Resurfacing	2032	\$ 11,600	
Kimberly Dr	Shawn Ave	Shawn Ave	T146	2014	81	Resurfacing	2032	\$ 73,600	
Labute St	Clapp St	St Thomas St	T155	2014	84	Resurfacing	2032	\$ 47,300	
Lacasse Blvd	Little River Blvd	Dube Dr	T141	2014	83	Resurfacing	2032	\$ 21,700	
Lacasse Blvd	Meander Cres	Clapp St	T133	2014	83	Resurfacing	2032	\$ 34,400	
Lacasse Blvd	Oakpark Dr	Meander Cres	T134	2014	83	Resurfacing	2032	\$ 18,400	
Lacasse Blvd	Dube Dr	Oakpark Dr	T135	2014	84	Resurfacing	2032	\$ 36,500	
Lachance Crt	Lesperance Rd	Lesperance Rd	T246	2014	83	Resurfacing	2032	\$ 22,600	
Lanoue St	Lesperance Rd	Bedell St	T313	2014	85	Resurfacing	2032	\$ 43,200	
Lesperance Rd	Canadian Pacific Railway	South Pacific Ave	SS144	2014	83	Resurfacing	2032	\$ 7,500	
Lesperance Rd	Wildberry Cres	County Rd 42	SS134	2014	84	Resurfacing	2032	\$ 55,600	
Maisonneuve St	Corbi Ln	Shawnee Rd	SS008	2014	80	Resurfacing	2032	\$ 34,200	
McNorton St	Laramie St	Lesperance Rd	T194	2014	84	Resurfacing	2032	\$ 68,500	
McNorton St	Windsor Border	St Thomas Cres	T192	2014	85	Resurfacing	2032	\$ 6,100	
Mickaila Cres	Southfield Dr	Southfield Dr	T274	2014	81	Resurfacing	2032	\$ 33,600	
Orchard Dr	St Thomas Cres	Appletree Cres	T185	2014	84	Resurfacing	2032	\$ 43,900	
Orchard Dr	Appletree Cres	Lesperance Rd	T186	2014	85	Resurfacing	2032	\$ 21,500	
Paisley Cir	St Thomas St	St Thomas St	T178	2014	82	Resurfacing	2032	\$ 13,100	
Pentilly Rd	Riverside Dr	Beach Grove Dr	SC121	2014	84	Resurfacing	2032	\$ 87,300	
Poisson St	St Anne Blvd	St Anne Blvd	T292	2014	84	Resurfacing	2032	\$ 46,600	
Pulleyblank St	Rossi Dr	Blackacre Dr	SS273	2014	82	Resurfacing	2032	\$ 48,300	\$ 775,500
Renaud St	St Anne Blvd	Lesperance Rd	T289	2014	83	Resurfacing	2033	\$ 18,900	
Renaud St	Bedell St	Bedell St	T305	2014	83	Resurfacing	2033	\$ 24,900	
Renaud St	Demarse Crt	Bedell St	T304	2014	84	Resurfacing	2033	\$ 9,500	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Renaud St	Lesperance Rd	Demarse Crt	T300	2014	85	Resurfacing	2033	\$ 25,500	
Revland Dr	Little River Blvd	St Thomas St	T166	2014	82	Resurfacing	2033	\$ 94,800	
Rideau Pl	St Thomas St	St Thomas St	T176	2014	83	Resurfacing	2033	\$ 12,200	
Riverside Dr	Grace Rd	Manning Rd	T015	2014	84	Resurfacing	2033	\$ 43,400	
Riverside Dr	Windsor Border	Winclare Dr	T001	2014	84	Resurfacing	2033	\$ 12,800	
Riverside Dr	Christy Ln	Grant Ave	SC003	2014	85	Resurfacing	2033	\$ 74,900	
Shiff Dr	Cranbrook Cres	Green Crt	SS176	2014	80	Resurfacing	2033	\$ 11,400	
Shiff Dr	Cranbrook Cres	Cranbrook Cres	SS179	2014	81	Resurfacing	2033	\$ 16,900	
Shiff Dr	Green Crt	Green Crt	SS178	2014	82	Resurfacing	2033	\$ 34,300	
St Anne Blvd	Arbour St	Renaud St	T290	2014	83	Resurfacing	2033	\$ 21,200	
St Gregorys Rd	Manning Rd	Village Grove Dr	SC013	2014	81	Resurfacing	2033	\$ 29,100	
St Gregorys Rd	Village Grove Dr	Jason Crt	SC014	2014	83	Resurfacing	2033	\$ 33,000	
St Gregorys Rd	Cada Cres	Edgewater Blvd	SC034	2014	85	Resurfacing	2033	\$ 26,900	
St Gregorys Rd	Jason Crt	Cada Cres	SC017	2014	85	Resurfacing	2033	\$ 43,400	
St Gregorys Rd	Jason Crt	Jason Crt	SC016	2014	85	Resurfacing	2033	\$ 42,600	
St Jacques St	Laramie St	Lesperance Rd	T210	2014	84	Resurfacing	2033	\$ 43,500	
St Thomas St	Brenda Cres	Michael Dr	T163	2014	80	Resurfacing	2033	\$ 18,900	
Sylvestre Dr	County Rd 22	Sylvestere Dr	SS380	2014	80	Resurfacing	2033	\$ 37,200	
Tecumseh Rd	Bedell St	Via Rail	T268	2014	80	Resurfacing	2033	\$ 15,400	
Tecumseh Rd	Windsor Border	Southfield Dr	T261	2014	82	Resurfacing	2033	\$ 36,100	
Tecumseh Rd	Green Valley Dr	Manning Rd	T260	2014	83	Resurfacing	2033	\$ 66,700	
Tecumseh Rd	Dorset Pk	Lexham Gdn	SC094	2014	84	Resurfacing	2033	\$ 31,700	
Tecumseh Rd	Lexham Gdn	Estate Pk	SC095	2014	84	Resurfacing	2033	\$ 53,100	
Tecumseh Rd	Lacasse Blvd	Green Valley Dr	T253	2014	84	Resurfacing	2033	\$ 113,800	
Tecumseh Rd	Regent Rd	Dorset Pk	SC083	2014	84	Resurfacing	2033	\$ 33,400	
Tecumseh Rd	Arlington Blvd	Dorset Pk	SC086	2014	84	Resurfacing	2033	\$ 49,600	
Tecumseh Rd	Dorset Pk	Arlington Blvd	SC084	2014	84	Resurfacing	2033	\$ 32,400	\$ 1,107,500
Valente Crt	Valente Crt	Valente Crt	T113	2014	83	Resurfacing	2034	\$ 19,800	, ,
Valente Crt	Valente Crt	Valente Crt	T117	2014	83	Resurfacing	2034	\$ 22,000	
Valente Crt	Valente Crt	Valente Crt	T115	2014	84	Resurfacing	2034	\$ 21,300	
Veronica Crt	Dillon Dr	Dillon Dr	T173	2014	83	Resurfacing	2034	\$ 18,700	
Vickery Ln	Candlewood Dr	Candlewood Dr	SS084	2014	80	Resurfacing	2034	\$ 53,800	
Wedgewood Ln	Dillon Dr	Dillon Dr	T042	2014	83	Resurfacing	2034	\$ 36,700	
Winclare Dr	Riverside Dr	Riverside Dr	T002	2014	84	Resurfacing	2034	\$ 20,500	
Riverside Dr	St Pierre St	Pinewood Cres	T008	2014	86	Resurfacing	2034	\$ 21,000	
Caritas Crt	Brighton Rd	Brighton Rd	SC116	2014	86	Resurfacing	2034	\$ 21,500	
Riverside Dr	Lacasse Blvd	Coronado Dr	T011	2014	86	Resurfacing	2034	\$ 32,100	
Riverside Dr	Pinewood Cres	Lacasse Blvd	T010	2014	87	Resurfacing	2034	\$ 34,800	
Riverside Dr	Coronado Dr	Barry Ave	T012	2014	87	Resurfacing	2034	\$ 67,200	
Riverside Dr	Centennial Dr	Grace Rd	T014	2014	87	Resurfacing	2034	\$ 91,600	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Canterberry Crt	Estate Pk	Estate Pk	SC100	2014	87	Resurfacing	2034	\$ 12,700	
Riverside Dr	Barry Ave	Centennial Dr	T013	2014	87	Resurfacing	2034	\$ 104,500	
Evergreen Dr	Gauthier Dr	Lesperance Rd	T120	2014	89	Resurfacing	2034	\$ 65,300	
Hayes Ave	Grant Ave	Edgewater Blvd	SC037	2014	89	Resurfacing	2034	\$ 22,700	
Tecumseh Rd	Brighton Rd	Pike Creek	SC114	2014	90	Resurfacing	2034	\$ 35,900	
Border Cres	Southfield Dr	Southfield Dr	T271	2014	90	Resurfacing	2034	\$ 31,600	
Westlake Dr	Shawnee Rd	Hebert St	SS026	2014	90	Resurfacing	2034	\$ 23,100	
Brighton Rd	Tecumseh Rd	Via Rail	SC109	2014	90	Resurfacing	2034	\$ 66,900	
South Talbot Rd	Malden Rd	11th Con Rd	SS347	2014	91	Resurfacing	2034	\$ 17,800	
Chene St	Little River Blvd	Little River Blvd	T054	2014	91	Resurfacing	2034	\$ 8,800	
Manning Rd	Tecumseh Rd	Via Rail	T_SC006	2014	91	Resurfacing	2034	\$ 53,500	
Brighton Rd	Mei_Lin Cres	Tecumseh Rd	SC110	2014	91	Resurfacing	2034	\$ 16,400	
Hayes Ave	Fairway Cres	Grant Ave	SC026	2014	91	Resurfacing	2034	\$ 37,100	
Westlake Dr	Hebert St	Chornoby Cres	SS046	2014	91	Resurfacing	2034	\$ 20,200	
Brighton Rd	Starwood Ln	Aloha Dr	SC124	2014	91	Resurfacing	2034	\$ 23,700	
Brighton Rd	Aloha Dr	Beach Grove Dr	SC122	2014	92	Resurfacing	2034	\$ 11,500	\$ 1,012,700
Brighton Rd	Beach Grove Dr	Caritas Crt	SC117	2014	92	Resurfacing	2035	\$ 13,200	
Southfield Dr	Border Cres	Highway 2	T270	2014	92	Resurfacing	2035	\$ 26,500	
Brighton Rd	Tecumseh Rd	Derby Rd	SC113	2014	92	Resurfacing	2035	\$ 12,000	
Brighton Rd	Riverside Dr	Southwind Cres	SC128	2014	92	Resurfacing	2035	\$ 37,500	
Aloha Dr	Brighton Rd	Brighton Rd	SC123	2014	92	Resurfacing	2035	\$ 41,700	
Brighton Rd	Derby Rd	Mei Lin Cres	SC112	2014	92	Resurfacing	2035	\$ 16,200	
Brighton Rd	Caritas Crt	Tecumseh Rd	SC115	2014	93	Resurfacing	2035	\$ 6,800	
Valente Crt	Valente Crt	Tecumseh Rd	T114	2014	93	Resurfacing	2035	\$ 12,700	
Brighton Rd	Southwind Cres	Starwood Ln	SC125	2014	93	Resurfacing	2035	\$ 13,800	
Calvary Crt	Calvary Crt	Calvary Crt	SS039	2014	93	Resurfacing	2035	\$ 24,000	
Clapp St	Meander Cres	Lacasse Blvd	T132	2014	93	Resurfacing	2035	\$ 17,600	
Little River Blvd	Somerville St	Chene St	T052	2014	93	Resurfacing	2035	\$ 20,800	
Manning Rd	Village Grove Dr	St Gregorys Rd	T SC004	2014	93	Resurfacing	2035	\$ 32,900	
St Thomas St	Labute St	Lacasse Blvd	T156	2014	93	Resurfacing	2035	\$ 16,900	
Shannon Pl	Amanda Crt	Amanda Crt	T040	2014	93	Resurfacing	2035	\$ 21,200	
Jasper Pl	Dillon Dr	Dillon Dr	T046	2014	93	Resurfacing	2035	\$ 16,400	
Little River Blvd	Dillon Dr	Donalda Crt	T098	2014	93	Resurfacing	2035	\$ 23,600	
South Talbot Rd	Sexton Side Rd	8th Con Rd	SS337	2014	93	Resurfacing	2035	\$ 11,500	
Gauthier Dr	Dillon Dr	Little River Blvd	T049	2014	93	Resurfacing	2035	\$ 62,500	1
Donalda Crt	Little River Blvd	Little River Blvd	T099	2014	94	Resurfacing	2035	\$ 24,800	
McNorton St	Lesperance Rd	St Pierre St	T196	2014	94	Resurfacing	2035	\$ 21,000	1
Kensington Blvd	Rutland Rd	Riverside Dr	SC137	2014	94	Resurfacing	2035	\$ 11,600	1
St Thomas St	St Pierre St	William St	T152	2014	94	Resurfacing	2035	\$ 21,600	
Tecumseh Rd	Derby Rd	Brighton Rd	SC108	2014	94	Resurfacing	2035	\$ 22,500	
	20.01	0	00200				_000	,500	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Derby Rd	Tecumseh Rd	Brighton Rd	SC107	2014	94	Resurfacing	2035	\$ 39,200	
Primrose Pl	St Gregorys Rd	St Gregorys Rd	T240	2014	94	Resurfacing	2035	\$ 28,600	
Lacasse Blvd	St Denis St	Tecumseh Rd	T252	2014	94	Resurfacing	2035	\$ 55,000	
St Thomas St	Lesperance Rd	St Pierre St	T150	2014	94	Resurfacing	2035	\$ 22,100	
Little River Blvd	Centennial Dr	Dillon Dr	T097	2014	94	Resurfacing	2035	\$ 33,000	
Valente Crt	Valente Crt	Valente Crt	T116	2014	94	Resurfacing	2035	\$ 12,800	
Sommerville St	Dillon Dr	Little River Blvd	T051	2014	94	Resurfacing	2035	\$ 54,000	
Jeffrey Pl	David Cres	David Cres	SC030	2014	94	Resurfacing	2035	\$ 20,800	\$ 794,800
Halford Dr	N Talbot Rd	Halford Dr	SS235	2014	94	Resurfacing	2036	\$ 96,400	
South Talbot Rd	11th Con Rd	12th Con Rd	SS348	2014	94	Resurfacing	2036	\$ 219,300	
Clapp St	William St	Labute St	T130	2014	94	Resurfacing	2036	\$ 17,300	
South Talbot Rd	12th Con Rd	Manning Rd	SS349	2014	94	Resurfacing	2036	\$ 148,400	
Lacasse Blvd	Ballard St	Clarice Ave	T204	2014	94	Resurfacing	2036	\$ 14,100	
Little River Blvd	Gauthier Dr	Somerville St	T050	2014	94	Resurfacing	2036	\$ 16,700	
Riverside Dr	Pentilly Rd	Brighton Rd	SC009	2014	94	Resurfacing	2036	\$ 21,000	
Lacasse Blvd	Horwood Cres	St Denis St	T218	2014	94	Resurfacing	2036	\$ 26,400	
Southfield Dr	Border Cres	Brouillette Crt	T272	2014	94	Resurfacing	2036	\$ 13,400	
Riverside Dr	Lesperance Rd	St Pierre St	T007	2014	94	Resurfacing	2036	\$ 27,300	
Laramie St	St Jacques St	First St	T208	2014	94	Resurfacing	2036	\$ 7,100	
Southfield Dr	Brouillette Crt	Mickaila Cres	T273	2014	94	Resurfacing	2036	\$ 16,300	
South Pacific Ave	St Alphonse St	Lesperance Rd	SS143	2014	94	Resurfacing	2036	\$ 36,200	
Calvary Crt	Chornoby Cres	Calvary Crt	SS040	2014	94	Resurfacing	2036	\$ 26,800	
Dillon Dr	Kenney Crt	Chene St	T019	2014	94	Resurfacing	2036	\$ 22,200	
Salich Crt	Dillon Dr	Dillon Dr	T044	2014	94	Resurfacing	2036	\$ 18,200	
Lacasse Blvd	St Thomas St	Ballard St	T207	2014	94	Resurfacing	2036	\$ 20,300	
Clapp St	St Pierre St	William St	T128	2014	95	Resurfacing	2036	\$ 19,100	
Southfield Dr	Tecumseh Rd	Champ Cres	T277	2014	95	Resurfacing	2036	\$ 71,900	
St Thomas St	William St	Labute St	T154	2014	95	Resurfacing	2036	\$ 16,800	\$ 855,200
Dillon Dr	Chene St	Lesperance Rd	T021	2014	95	Resurfacing	2037	\$ 24,400	
Little River Blvd	Chene St	Lesperance Rd	T055	2014	95	Resurfacing	2037	\$ 24,200	
Woodridge Dr	St Thomas St	Parkland Cres	T230	2014	95	Resurfacing	2037	\$ 83,300	
Lesperance Rd	Oliver Dr	Valente Crt	T118	2014	95	Resurfacing	2037	\$ 51,600	
Shields St	Banwell Rd	Shields St	SS422	2014	95	Resurfacing	2037	\$ 76,200	
Chene St	Dillon Dr	Little River Blvd	T053	2014	95	Resurfacing	2037	\$ 50,000	
8th Concession Rd	Highway 401	County Rd 46	SS204	2014	95	Resurfacing	2037	\$ 100,500	
David Cres	Jeffrey Pl	David Cres	SC031	2014	95	Resurfacing	2037	\$ 62,100	
Lesperance Rd	Riverside Dr	Dillon Dr	T022	2014	95	Resurfacing	2037	\$ 82,400	
Lacasse Blvd	Clarice Ave	McNorton St	T201	2014	95	Resurfacing	2037	\$ 38,400	
Oldcastle Crt	Oldcastle Rd	Oldcastle Crt	SS424	2014	95	Resurfacing	2037	\$ 37,100	
Kenny Crt	Dillon Dr	Dillon Dr	T018	2014	95	Resurfacing	2037	\$ 54,600	

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subt	otal by Year
Dillon Dr	Woodbridge Dr	Centennial Dr	T036	2014	95	Resurfacing	2037	\$ 20,600		
Lesperance Rd	Cedarwood Dr	Oliver Dr	T109	2014	95	Resurfacing	2037	\$ 30,300		
Clapp St	Lesperance Rd	St Pierre St	T127	2014	95	Resurfacing	2037	\$ 24,600		
Lacasse Blvd	Clapp St	St Thomas St	T157	2014	95	Resurfacing	2037	\$ 45,800		
Shannon Pl	Dillon Dr	Dillon Dr	T039	2014	95	Resurfacing	2037	\$ 12,600		
Lesperance Rd	Dillon Dr	Little River Blvd	T056	2014	95	Resurfacing	2037	\$ 58,700		
David Cres	David Cres	Grant Ave	SC032	2014	95	Resurfacing	2037	\$ 31,600		
Lacasse Blvd	McNorton St	Horwood Cres	T219	2014	95	Resurfacing	2037	\$ 37,400		
St Alphonse St	Shields St	Jillian Crt	SS125	2014	95	Resurfacing	2037	\$ 45,000		
St Alphonse St	Lessard St	Shields St	SS128	2014	95	Resurfacing	2037	\$ 44,400		
David Cres	Jeffrey Pl	Grant Ave	SC029	2014	95	Resurfacing	2037	\$ 16,300	\$	1,052,100
	•	•					20 Year To	tal Resurfacing	\$	22,098,965

Reconstruction:

					Engineering	2018	\$	521,492		
					Engineering	2018	\$	88,298		
r Dr	Pulleyblank Dr	SS274	2014	78	Reconstruction	2018	\$	1,075,000		
					Engineering	2018	\$	74,000		
				P	Pavement Marking	2018	\$	110,000		
nts					Engineering	2018	\$	40,000	\$	1,908,790
side Dr	Little River Blvd	T_SC001	2014	55	Reconstruction	2019				
River Blvd	St Thomas St	T_SC002	2014	57	Reconstruction	2019				
omas St	Village Grove Dr	T_SC003	2014	57	Reconstruction	2019	\$	682,580		
e Grove Dr	St Gregorys Rd	T_SC004	2014	93	Reconstruction	2019				
en	Walker Rd	SS330	2014	64	Reconstruction	2019	\$	564,000		
ty Rd 9	Holden	SS329	2014	95	Reconstruction	2019	\$	1,676,500		
yl Dr	Manning Rd	SS095	2014	53	Reconstruction	2019	\$	1,155,500		
se Blvd	Green Valley Dr	T253	2014	84	Rehabilitation	2019	\$	439,000		
					Reconstruction	2019	\$	100,000		
2					Engineering	2019	\$	45,000		
wer Extension					Reconstruction	2019	\$	227,500		
					Engineering	2019	\$	45,600	\$	4,935,680
egorys Rd	Tecumseh Rd	T_SC005	2014	92	Reconstruction	2020	\$	4,589,160		
ty Rd 46	County Rd 46	SS202	2014	73	Reconstruction	2020	\$	227,500		
erance Rd	east of Deslippe	SS089	2014	80	Reconstruction	2020	\$	236,000	\$	5,052,660
2					Reconstruction	2021	\$	705,000		
l Dr	O'Neil Dr	SS249	2014	54	Reconstruction	2021	\$	189,563		
t	Ure St	SS252	2014	55	Reconstruction	2021	\$	198,736		
l Dr	Ure St	SS253	2014	55	Reconstruction	2021	\$	326,101		
ry					Engineering	2021	\$	58,125		
					Engineering	2021	\$	40,000		
	nts side Dr River Blvd omas St e Grove Dr n cy Rd 9 d Dr se Blvd over Extension egorys Rd cy Rd 46 rance Rd d Dr it	nts ide Dr Little River Blvd River Blvd St Thomas St omas St Village Grove Dr e Grove Dr St Gregorys Rd n Walker Rd Lor Manning Rd Green Valley Dr ver Extension ggorys Rd Tecumseh Rd Lor Rd Parance Rd Lor County Rd 46 Lor Cou	Ints Intis Intis Intide Dr Ititle River Blvd I	Ints Ints Ints Ints Ints Ints Interpolate	See Blvd Tecumseh Rd Tec	Engineering Dr Pulleyblank Dr SS274 2014 78 Reconstruction Engineering Pavement Marking Engineering Pavement Marking Engineering	Dr	Dr	Dr	Dr

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
County Road 42 (Town Share)	County Road 43	Lesperance Rd				Reconstruction	2021	\$ 50,000	\$ 1,567,525
Ure St	Delduca Dr	N Talbot Rd	SS251	2014	94	Reconstruction	2022	\$ 627,000	
County Road 42 (Town Share)	Lesperance Rd	CR19				Reconstruction	2022	\$ 50,000	
O'Neil Street Sanitary Sewer						Engineering	2022	\$ 46,300	\$ 723,300
Kensington Storm PS/Riverside Drive	Sanitary						2023	\$ 690,625	
O'Neil Dr	Delduca Dr	Moynahan St	SS248	2014	93	Reconstruction	2023	\$ 478,352	
O'Neil Dr	Moynahan St	N Talbot Rd	SS247	2014	94	Reconstruction	2023	\$ 247,348	
Moynahan/Henin/Regal Sanitary Sev	wer					Engineering	2023	\$ 56,650	\$ 1,472,975
Regal Dr	Moynahan St	Moynahan St	SS378	2014	56	Reconstruction	2024	\$ 42,700	
Hennin Dr	Moynahan St	N Talbot Rd	SS243	2014	65	Reconstruction	2024	\$ 253,400	
Moynahan St	Hennin Dr	O'Neil Dr	SS245	2014	60	Reconstruction	2024	\$ 148,700	
Moynahan St	Regal Dr	Hennin Dr	SS244	2014	63	Reconstruction	2024	\$ 98,700	
Arlington Blvd	Riverside Dr	Hayes Ave	SC066	2014	49	Reconstruction	2024	\$ 207,800	
Arlington Blvd	Hayes Ave	Burlington Rd	SC065	2014	49	Reconstruction	2024	\$ 205,100	
Arlington Blvd	St Gregorys Rd	Tecumseh Rd	SC085	2014	50	Reconstruction	2024	\$ 219,900	
Arlington Blvd	Burlington Rd	St Gregorys Rd	SC056	2014	50	Reconstruction	2024	\$ 71,800	
Tecumseh Rd (CIP Phase 1)	St Anne Blvd	Lesperance Rd	T265	2014	77	Reconstruction	2024		
Tecumseh Rd (CIP Phase 1)	Lesperance Rd	Bedell St	T267	2014	84	Reconstruction	2024		
Lesperance Rd (CIP Phase 1)	Lanoue St	Arbour St	T311	2014	62	Reconstruction	2024		
Lesperance Rd (CIP Phase 1)	Tecumseh Rd	Lanoue St	T312	2014	60	Reconstruction	2024		
Lesperance Rd (CIP Phase 1)	Via Rail	Tecumseh Rd	T266	2014	80	Reconstruction	2024	\$ 12,128,668	
Lesperance Rd (CIP Phase 1)	First St	Lachance Crt	T247	2014	82	Reconstruction	2024		
Lesperance Rd (CIP Phase 1)	St Denis St	First St	T249	2014	68	Reconstruction	2024		
Lesperance Rd (CIP Phase 1)	Lachance Crt	Via Rail	T245	2014	70	Reconstruction	2024		\$ 13,376,768
Intersection Rd (DC-1)	St Anne St	Lesperance Rd	SS033	2014	63	Reconstruction	2025		
Intersection Rd (DC-1)	Hebert St	St Anne St	SS028	2014	63	Reconstruction	2025	\$ 2,504,000	
Intersection Rd (DC-1)	Shawnee Rd	Hebert St	SS020	2014	72	Reconstruction	2025		
Intersection Rd (DC-1)	Banwell Rd	Shawnee Rd	SS006	2014	74	Reconstruction	2025		
Oldcastle Rd (8th Conc Serv/DC-7)	Piccadilly Ave	Talbot Rd	SS300	2014	67	Reconstruction	2025		
Oldcastle Rd (8th Conc Serv/DC-7)	N Talbot Rd	Talbot Rd	SS306	2014	67	Reconstruction	2025	\$ 2,644,000	
Oldcastle Rd (8th Conc Serv/DC-7)	Wedgewood Crt	Piccadilly Ave	SS304	2014	67	Reconstruction	2025		
Gouin St (DC-10)	St Anne St	Lesperance Rd	SS037	2014	70	Reconstruction	2025		
Gouin St (DC-10)	Hebert St	St Anne St	SS032	2014	60	Reconstruction	2025	\$ 1,162,000	
Gouin St (DC-10)	Shawnee Rd	Hebert St	SS024	2014	61	Reconstruction	2025		
Gouin St (DC-10)	Corbi Ln	Shawnee Rd	SS012	2014	84	Reconstruction	2025		
Shields expansion (DC-13-1)	Across public land east of	Banwell				Growth	2025	\$ 485,000	
Street 'A' at CR 19 (and Little Baselin	•					Growth	2025	\$ 100,000	
Castlewood Crt	Oldcastle Rd	Oldcastle Rd	SS305	2014	84	Reconstruction	2025	\$ 209,200	\$ 7,104,200
Riverside Dr	Kensington Blvd	Pentilly Rd	SC008	2014	65	Reconstruction	2026	\$ 419,300	
Tecumseh Rd (CIP Phase 2)	Poisson St	St Anne Blvd	T264	2014	78	Reconstruction	2026		

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subtotal by Year
Tecumseh Rd (CIP Phase 2)	Shawnee Rd	Poisson St	T263	2014	79	Reconstruction	2026	\$ 6,829,242	\$ 7,248,542
Malden Rd (DC-8)	County Rd 34	Canada South Rlwy	SS346	2014	66	Reconstruction	2027		
Malden Rd (DC-8)	Bellaire Woods Dr	County Rd 34	SS318	2014	53	Reconstruction	2027	\$ 2,920,000	
Malden Rd (DC-8)	N Talbot Rd	Bellaire Woods Dr	SS320	2014	97	Reconstruction	2027		
Malden Rd (DC-8)	Manning Rd	North Talbot	SS383	2014		Reconstruction	2027		
Malden Rd at CR19 - Road compone	nt of intersection works (DC-1	5)				Growth	2027	\$ 384,000	
Street 'B' at CR 19 - Road componen	t of intersection works (DC-14)					Growth	2027	\$ 100,000	
Collector Road at CR46 (UC 2 Lanes)	- Road component of intersect	tion works (DC-16)				Growth	2027	\$ 821,000	
Olympia Dr	Astor Cres	Walker Rd	SS286	2014	73	Reconstruction	2027	\$ 164,400	
Olympia Dr	Solar Cres	Astor Cres	SS288	2014	74	Reconstruction	2027	\$ 101,000	
Astor Cres	Olympia Dr	Olympia Dr	SS287	2014	70	Reconstruction	2027	\$ 82,100	
Solar Cres	Olympia Dr	Solar Cres	SS289	2014	70	Reconstruction	2027	\$ 80,400	
St Anne St	Intersection Rd	North Pacific Ave	SS056	2014	71	Reconstruction	2027	\$ 272,000	\$ 4,924,900
Tecumseh Rd (CIP Phase 3)	Southfield Dr	Shawnee Rd	T262	2014	84	Reconstruction	2028	\$ 3,658,078	
Burlington Rd	Warwick Rd	Clovelly Rd	SC059	2014	53	Reconstruction	2028	\$ 125,300	
Burlington Rd	Arlington Blvd	Warwick Rd	SC057	2014	56	Reconstruction	2028	\$ 73,100	
Kensington Blvd	Clovelly Rd	Rutland Rd	SC055	2014	93	Reconstruction	2028	\$ 151,700	
Kensington Blvd	Arlington Blvd	Clovelly Rd	SC054	2014	94	Reconstruction	2028	\$ 246,400	\$ 4,254,578
Essex Rd	Rutland Rd	Clovelly Rd	SC061	2014	55	Reconstruction	2029	\$ 154,000	
Blackacre Dr	Pulleyblank Dr	Fasan Dr	SS272	2014	68	Reconstruction	2029	\$ 321,800	
Blackacre Dr	Fasan Dr	Walker Rd	SS270	2014	69	Reconstruction	2029	\$ 189,800	
Clovelly Rd	Burlington Rd	Kensington Blvd	SC060	2014	69	Reconstruction	2029	\$ 13,700	
Rutland Rd	Clovelly Rd	Essex Rd	SC063	2014	52	Reconstruction	2029	\$ 178,300	
Tecumseh/Southfield intersection (0	CIP Phase 4)			2014		Reconstruction	2029	\$ 3,779,522	\$ 4,637,122
North Talbot Rd (8th Con Serv/DC-3	8th Conc	CR46	SS257	2014	73	Reconstruction	2030	\$ 2,968,000	
Oldcastle Rd at 8th Concession - Roa	nd component of intersection v	vorks (DC-17)				Reconstruction	2030	\$ 980,000	
St Anne St	Maisonneuve St	Intersection Rd	SS029	2014	69	Reconstruction	2030	\$ 193,000	
St Anne St	Gouin St	Maisonneuve St	SS031	2014	69	Reconstruction	2030	\$ 182,700	
Fasan Dr	Blackacre Dr	Blackacre Dr	SS271	2014	51	Reconstruction	2030	\$ 560,200	
Warwick Dr	Clovelly Rd	Burlington Rd	SC058	2014	63	Reconstruction	2030	\$ 169,000	
Clovelly Rd	Essex Rd	Burlington Rd	SC136	2014	63	Reconstruction	2030	\$ 18,000	
Clovelly Rd	Rutland Rd	Essex Rd	SC062	2014	65	Reconstruction	2030	\$ 121,000	
Clovelly Rd	Arlington Blvd	Rutland Rd	SC064	2014	66	Reconstruction	2030	\$ 122,100	\$ 5,314,000
Percy Pl	Lacasse Blvd	Coronado Dr	T066	2014	54	Reconstruction	2031	\$ 74,400	
Keith Crt	Coronado Dr	Coronado Dr	T072	2014	71	Reconstruction	2031	\$ 212,500	
Coronado Dr	Riverside Dr	Riverside Dr	T029	2014	53	Reconstruction	2031	\$ 59,200	
Coronado Dr	Mason Pl	Little River Blvd	T078	2014	54	Reconstruction	2031	\$ 50,600	
Coronado Dr	Dillon Dr	Percy Pl	T067	2014	54	Reconstruction	2031	\$ 58,900	
Coronado Dr	Percy Pl	Keith Ave	T068	2014	54	Reconstruction	2031	\$ 58,900	
Coronado Dr	Keith Ave	Mason Pl	T073	2014	54	Reconstruction	2031	\$ 56,700	\$ 571,200

Full Name	Road From	Road To	GIS Road ID	Survey Year	PCI	Work Type	Year of Work	Costing	Subto	otal by Year
Blackacre Dr	Roscon Industrial Dr	Pulleyblank Dr	SS282	2014	71	Reconstruction	2032	\$ 179,800		
Blackacre Dr	Outer Dr	Roscon Industrial Dr	SS284	2014	72	Reconstruction	2032	\$ 217,700		
Roscon Industrial Dr	Blackacre Dr	Blackacre Dr	SS283	2014	96	Reconstruction	2032	\$ 268,300	\$	665,800
Barry Ave	Riverside Dr	Dillon Dr	T033	2014	59	Reconstruction	2033	\$ 66,500		
Barry Ave	Dillon Dr	Mason Pl	T077	2014	60	Reconstruction	2033	\$ 160,600		
Barry Ave	Mason Pl	Little River Blvd	T082	2014	61	Reconstruction	2033	\$ 63,200	\$	290,300
Keith Ave	Coronado Dr	Burdick Cres	T069	2014	71	Reconstruction	2034	\$ 59,500		
Keith Ave	Burdick Cres	Dillon Dr	T071	2014	73	Reconstruction	2034	\$ 71,200		
Burdick Cres	Dillon Dr	Keith Ave	T070	2014	47	Reconstruction	2034	\$ 90,800		
Burdick Cres	Keith Ave	Mason Pl	T075	2014	47	Reconstruction	2034	\$ 116,600		
Mason Pl	Burdick Cres	Barry Ave	T076	2014	60	Reconstruction	2034	\$ 62,100		
Mason Pl	Coronado Dr	Burdick Cres	T074	2014	70	Reconstruction	2034	\$ 58,800	\$	459,000
Outer Dr (8th Con Serv)	Blackacre Dr	Hwy 3	SS264	2014	57	Reconstruction	2035	\$ 754,000		
Outer Dr (DC-4)	Blackacre Dr	Hwy 3	SS264	2014	57	Growth	2035	\$ 302,000		
Lesperance Rd (CIP Phase 5)	McNorton St	St Jacques St	T211	2014	69	Reconstruction	2035			
Lesperance Rd (CIP Phase 5)	St Jacques St	St Denis St	T212	2014	67	Reconstruction	2035	\$ 2,186,168	\$	3,242,168
St Marks Rd	Riverside Dr	Alden Cres	SC052	2014	91	Reconstruction	2036	\$ 149,900		
St Marks Rd	Cedar Cres	St Gregorys Rd	SC041	2014	91	Reconstruction	2036	\$ 73,900		
St Marks Rd	Hayes Ave	Willow Crt	SC045	2014	91	Reconstruction	2036	\$ 93,200		
St Marks Rd	Willow Crt	Cedar Cres	SC043	2014	92	Reconstruction	2036	\$ 105,700		
St Marks Rd	Alden Cres	Hayes Ave	SC050	2014	92	Reconstruction	2036	\$ 38,300		
St Marks Rd	Hayes Ave	Hayes Ave	SC049	2014	92	Reconstruction	2036	\$ 53,600	\$	514,600
Edgewater Blvd	Lenore Ave	St Gregorys Rd	SC035	2014	58	Reconstruction	2037	\$ 163,100		
Edgewater Blvd	Riverside Dr	Hayes Ave	SC039	2014	58	Reconstruction	2037	\$ 212,000		
Edgewater Blvd	Hayes Ave	Lenore Ave	SC036	2014	59	Reconstruction	2037	\$ 162,400	\$	537,500

20 Year Total Reconstruction \$ 68,801,608

20 Year Grand Total \$ 91,260,573

Town of Tecumseh Traffic Signals 20 Year Plan

Traffic Signal #	Traffic Intersection	Description of Work	Year	Cost	Subt	otal by Yea
3	Tecumseh Rd E and Lesperance Rd Intersection	Traffic poles	2018	\$ 14,375		
4	Lesperance Rd and Arbour St Intersection	Poles	2018	\$ 14,375		
12	Tecumseh Rd E and Southfield Dr. Intersection	Signal heads	2018	\$ 4,388	\$	33,138
3	Tecumseh Rd E and Lesperance Rd Intersection	Traffic poles	2019	\$ 14,375	\$	14,375
2	Lesperance Rd and McNorton St Intersection	Reconstruction	2020	\$ 165,000		
6	Manning Rd and St. Gregory's Rd Intersection	Loop detector	2020	\$ 11,250		
7	Manning Rd at Green Valley Plaza Intersection	Loop detector, UPS	2020	\$ 20,625		
8	Tecumseh Rd E and Manning Intersection	Loop detector	2020	\$ 20,625		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Signal heads	2020	\$ 3,213		
12	Tecumseh Rd E and Southfield Dr. Intersection	Loop detector, UPS	2020	\$ 16,875	\$	237,588
5	13465 Riverside Dr. Pedestrian Crossing	UPS	2021	\$ 9,375		
6	Manning Rd and St. Gregory's Rd Intersection	UPS	2021	\$ 9,375		
9	Tecumseh Rd E and Green Valley Dr. Intersection	Loop detector, UPS	2021	\$ 16,875		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Loop detector	2021	\$ 3,750	\$	39,375
1	Lesperance Rd and Riverside Dr	Loop detector	2022	\$ 1,875	\$	1,875
5	13465 Riverside Dr. Pedestrian Crossing	Signal heads	2023	\$ 1,425	\$	1,425
3	Tecumseh Rd E and Lesperance Rd Intersection	Reconstruction (CIP Phase 1)	2024	\$ 180,000		
4	Lesperance Rd and Arbour St Intersection	Reconstruction (CIP Phase 1)	2024	\$ 180,000	\$	360,000
2	Lesperance Rd and McNorton St Intersection	Signal heads, handhole, loop detector	2025	\$ 17,325		
6	Manning Rd and St. Gregory's Rd Intersection	Loop detector	2025	\$ 11,250		
7	Manning Rd at Green Valley Plaza Intersection	Signal heads, control cabinet	2025	\$ 36,250		
8	Tecumseh Rd E and Manning Intersection	Signal heads, loop detector, control cabinet, UPS	2025	\$ 67,250		
12	Tecumseh Rd E and Southfield Dr. Intersection	Loop detector	2025	\$ 7,500		
DC-13	Street 'A' at CR19 (and little Baseline)	New Traffic Signal	2025	\$ 180,000	\$	319,575
1	Lesperance Rd and Riverside Dr	Signal heads	2026	\$ 3,275		
6	Manning Rd and St. Gregory's Rd Intersection	Signal heads, push button	2026	\$ 30,250		
7	Manning Rd at Green Valley Plaza Intersection	Loop detector	2026	\$ 55,000		
9	Tecumseh Rd E and Green Valley Dr. Intersection	Signal heads, push button, loop detector	2026	\$ 37,375		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Loop detector	2026	\$ 3,750		
11	Tecumseh Rd E and Shawnee Road Intersection	Reconstruction (CIP Phase 2)	2026	\$ 129,750	\$	259,400
1	Lesperance Rd and Riverside Dr	Push button, loop detector	2027	\$ 15,938		
12	Tecumseh Rd E and Southfield Dr. Intersection	Signal heads, push button, control cabinet, wiring	2027	\$ 99,125		
DC-14	Street 'B' at CR19	New Traffic Signal	2027	\$ 180,000		
DC-15	Malden Road at CR19	New Traffic Signal	2027	\$ 180,000		
DC-16	Collector Road at CR46 (UC 2 Lanes)	New Traffic Signal	2027	\$ 180,000	\$	655,063
1	Lesperance Rd and Riverside Dr	Arms	2028	\$ 9,375	\$	9,375
3	Tecumseh Rd E and Lesperance Rd Intersection	Loop detector	2029	\$ 11,250		
4	Lesperance Rd and Arbour St Intersection	Loop detector	2029	\$ 3,750		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Signal heads, control cabinet, UPS	2029	\$ 44,250	\$	59,250
2	Lesperance Rd and McNorton St Intersection	Loop detector	2030	\$ 5,625		
6	Manning Rd and St. Gregory's Rd Intersection	Loop detector	2030	\$ 11,250		
7	Manning Rd at Green Valley Plaza Intersection	Poles, push button, handhole, wiring	2030	\$ 87,500		
8	Tecumseh Rd E and Manning Intersection	Poles, push button, handhole, loop detector, wiring	2030	\$ 106,875		
12	Tecumseh Rd E and Southfield Dr. Intersection	Loop detector	2030	\$ 7,500		
DC-17	Oldcastle at 8th Concession Intersection (UC 2 Lanes)	New Traffic Signal	2030	\$ 180,000	\$	398,750
6	Manning Rd and St. Gregory's Rd Intersection	Poles, handhole, control cabinet, wiring	2031	\$ 98,750		
7	Manning Rd at Green Valley Plaza Intersection	Wiring	2031	\$ 11,250		
9	Tecumseh Rd E and Green Valley Dr. Intersection	Poles, handhole, loop detector, control cabinet, wiring	2031	\$ 96,250		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Loop detector	2031	\$ 3,750		
11	Tecumseh Rd E and Shawnee Road Intersection	Loop detector	2031	\$ 1,875	\$	211,875
1	Lesperance Rd and Riverside Dr	Loop detector	2032	\$ 1,875		
12	Tecumseh Rd E and Southfield Dr. Intersection	Poles, handhole	2032	\$ 24,375	\$	26,250
5	13465 Riverside Dr. Pedestrian Crossing	Signal heads, push button, control cabinet, wiring	2033	\$ 57,750	\$	57,750
3	Tecumseh Rd E and Lesperance Rd Intersection	Loop detector	2034	\$ 11,250		,
4	Lesperance Rd and Arbour St Intersection	Signal heads, push button, loop detector	2034	\$ 33,500		
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Poles, push button, handhole, wiring	2034	\$ 87,813	\$	132,563
2	Lesperance Rd and McNorton St Intersection	Arms, loop detector	2035	\$ 20,625		
6	Manning Rd and St. Gregory's Rd Intersection	Loop detector	2035	\$ 11,250		
8	Tecumseh Rd E and Manning Intersection	Loop detector	2035	\$ 20,625		
12	Tecumseh Rd E and Southfield Dr. Intersection	Loop detector	2035	\$ 7,500	\$	60,000
1	Lesperance Rd and Riverside Dr	Signal heads	2036	\$ 8,500	_	23,000

Appendix D

Town of Tecumseh Traffic Signals 20 Year Plan

Traffic Signal #	Traffic Intersection	Description of Work	Year	Cost	Subtotal by Year
2	Lesperance Rd and McNorton St Intersection	Signal heads, push button	2036	\$ 13,500	
6	Manning Rd and St. Gregory's Rd Intersection	Push button	2036	\$ 2,500	
7	Manning Rd at Green Valley Plaza Intersection	Signal heads, push button, loop detector	2036	\$ 16,950	
8	Tecumseh Rd E and Manning Intersection	Signal heads, push button	2036	\$ 7,200	
9	Tecumseh Rd E and Green Valley Dr. Intersection	Push button, loop detector	2036	\$ 10,000	
10	Tecumseh Rd E and Lacasse Blvd. Intersection	Loop detector	2036	\$ 3,750	
11	Tecumseh Rd E and Shawnee Road Intersection	Loop detector	2036	\$ 1,875	\$ 64,275
1	Lesperance Rd and Riverside Dr	Push button, wiring, control cabinet	2037	\$ 87,813	
6	Manning Rd and St. Gregory's Rd Intersection	Signal heads	2037	\$ 4,450	
7	Manning Rd at Green Valley Plaza Intersection	Signal heads	2037	\$ 1,125	
9	Tecumseh Rd E and Green Valley Dr. Intersection	Signal heads	2037	\$ 4,263	\$ 97,650

20 Year Grand Total \$ 3,039,551



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.2	EFFECTIVE DATE: January 28, 2014
SUPERCEDES: N/A	APPROVAL: RCM-46/14
SUBJECT: Bridge Condition Assessment	Policy

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of all bridges within the Town of Tecumseh.

SCOPE:

2.1 The Town of Tecumseh has an inventory of fifteen (15) bridges and two large (2) culverts. All bridge and culvert structures having a clear span of 3.0 meters or more shall be inventoried and appraised in accordance with the requirements established in the Ontario Structure Inspection Manual (OSIM) in order to comply with current legislation, under the *Public Transportation and Highway Improvement Act*.

PROCEDURE:

3.1 Acceptable levels of service (ALS) are service qualities for given activities approved by Council that balance desired service levels with cost and risk. ALS is often documented as commitments to carry out given action(s) within a specified time frame in response to asset condition data.

- 3.2 The Town's ALS for Bridges can be qualified as:
 - Any bridge or culvert rated as a "Now" time of improvement in the most recent Bridge Needs Study shall be slated for some form of work within a two year window.
 - Any bridge or culvert rated as a "1-5 year" time of improvement shall be addressed in some manner within the timeframe.
 - All bridges and culverts as rated shall be actively reviewed in conjunction with other infrastructure projects in order to achieve efficiencies of Town dollars.
- 3.2 The Director Public Works & Environmental Services shall ensure that the Town's program to maintain acceptable levels of service will include:
 - The establishment of annual inspection and maintenance programs
 - Renewal of the Bridge Needs Study on a two year basis in order to address the ALS.
- 3.3 Bridge Needs Studies shall be conducted using consulting engineering firms familiar with the Ontario Structural Inspection Manual (OSIM). These firms shall have specialized training in the analysis of structure deterioration. The assessment program shall utilize engineering expertise and follow guidelines set forth in the OSIM manual in order to arrive at condition assessments for all Town bridge and large culvert structures.
- 3.4 Bridge Needs Studies shall be awarded to consulting engineering firms that have a demonstrated ability to evaluate the local bridge network as well as a demonstrated ability to produce a report in an acceptable format.
- 3.5 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services shall award the Bridge Needs Study to a consulting engineering firm in a process consistent with the Town's Purchasing Policy.

RESPONSIBILITY:

- 4.1 The Director Public Works & Environmental Services shall be responsible for the implementation of the Bridge Condition Assessment Policy.
- 4.2 The Manager Roads & Fleet and/or the Manager Engineering Services shall be responsible for the review and use of information gathered from the condition assessments.

4.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services, shall assign urgent repairs identified in the condition assessments to contractors that have the capabilities and resources to carry out repairs within the above prescribed timeframes. Awarding of work shall be consistent with the Town's Purchasing Policy.

REFERENCE:

Purchasing By-law 2006-03, which includes the Purchasing Policy

Town of Tecumseh Bridges & Large Culverts 20 Year Plan

Structure ID	Asset Description	Historical Cost	Year of Construction	Year of Last Rehab	Estimated Useful Life (Years)	Replacement Cost	Year of Recommended Work	Work Recommended	Cost	Year of Recommended Work	Work Recommended		Cost
All	Bridge & Culvert Needs Study - renewed every two years						2018		\$ 75,000	2020		\$	75,000
							2022		\$ 75,000	2024		\$	75,000
							2026		\$ 75,000	2028		\$	75,000
							2030		\$ 75,000	2032		\$	75,000
							2034		\$ 75,000	2036		\$	75,000
1002	Pike Creek at Twelfth Concession bridge	\$ 669,066	1961	2016	50	\$ 1,475,000							
1003	Pike Creek at Twelfth Concession bridge	\$ 735,690	1965	2013	50	\$ 1,225,000							
1004	Sullivan Drain at Twelfth Concession bridge	\$ 44,937	1965		50	\$ 600,000	2018	engineering	\$ 43,000	2019	rehabilitation	\$	284,000
1005	Pike Creek at Baseline Road bridge	\$ 701,300	1955	2014	50	\$ 1,150,000							
1006	Sullivan Creek at Baseline Road bridge	\$ 696,516	2015		50	\$ 750,000							
1009	Pike Creek at Malden Road bridge	\$ 352,280	2007		50	\$ 625,000	2032	rehabilitation	\$ 206,250				
1010	West Townline Drain at Malden Road culvert	\$ 152,470	1995		25	\$ 350,000	2020	roadside safety	\$ 68,000	2027	rehabilitation	\$	115,000
1011	Malden Road Drain at South Talbot Road bridge	\$ 934,219	2007		50	\$ 1,100,000	2032	rehabilitation	\$ 363,000				
1013	Webster Drain at Eighth Concession bridge	\$ 35,527	1965		50	\$ 375,000	2018	engineering	\$ 43,000	2019	rehabilitation	\$	283,500
1014	Townline Road Drain at Sixth Concession bridge	\$ 49,294	1955		50	\$ 525,000	2018	engineering	\$ 43,000	2019	rehabilitation	\$	304,500
1015	Merrick Creek Drain at Sixth Concession bridge	\$ 465,755	2007		50	\$ 750,000	2032	rehabilitation	\$ 247,500				
1016	Collins Drain at Outer Drive bridge	\$ 231,618	1975		50	\$ 1,000,000	2030	rehabilitation	\$ 333,000				
1021	Pike Creek at Twelfth Concession culvert	\$ 19,288	1965		25	\$ 200,000	2027	replacement	\$ 200,000				
1028	East Townline Drain at St. Thomas Street bridge	\$ 281,024	1975		50	\$ 1,050,000	To be replaced v	vith new storm sewer	system as part of	Manning Rd Impro	vements Phase 2 (2	019+/	-)
1029	East Townline Drain at Little River bridge	\$ 235,393	1975		50	\$ 1,050,000	To be replaced v	vith new storm sewer	system as part of	Manning Rd Impro	vements Phase 2 (2	019+/-	-)
2001	Townline Road Drain at Eight Concession culvert	\$ 48,576	2012		25	\$ 100,000	2020	roadside safety	\$ 41,000	2025	rehabilitation	\$	33,000

\$ 1,962,750 \$ 1,395,000

\$ 5,652,953 \$ 12,325,000 20 Year Grand Total \$ 3,357,750



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.6	EFFECTIVE DATE: January 1, 2017
SUPERCEDES: N/A	APPROVAL: RCM-XX/17
SUBJECT: Culvert Condition Assessme	nt Policy

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of all culverts (with spans less than 3.0m) within the Town of Tecumseh.

SCOPE:

2.1 The Town of Tecumseh has an inventory of seventy three (73) culverts (with spans less than 3.0m). All culvert structures having a clear span of less than 3.0 meters shall be inventoried and appraised in accordance with the requirements established in the Ontario Structure Inspection Manual (OSIM).

PROCEDURE:

3.1 Acceptable levels of service (ALS) are service qualities for given activities approved by Council that balance desired service levels with cost and risk. ALS is often documented as commitments to carry out given action(s) within a specified time frame in response to asset condition data.

- 3.2 The Town's ALS for Culverts can be qualified as:
 - Any culvert rated as a "Now" time of improvement in the most recent Culvert Needs Study (Structures with Spans less than 3.0m) shall be slated for some form of work within a two year window.
 - Any culvert rated as a "1-5 year" time of improvement shall be addressed in some manner within the timeframe.
 - All culverts as rated shall be actively reviewed in conjunction with other infrastructure projects in order to achieve efficiencies of Town dollars.
- 3.2 The Director Public Works & Environmental Services shall ensure that the Town's program to maintain acceptable levels of service will include:
 - The establishment of annual inspection and maintenance programs.
 - Renewal of the Culvert Needs Study on a five year basis in order to address the ALS.
- 3.3 Culvert Needs Studies shall be conducted using consulting engineering firms familiar with the Ontario Structural Inspection Manual (OSIM). These firms shall have specialized training in the analysis of structure deterioration. The assessment program shall utilize engineering expertise and follow guidelines set forth in the OSIM manual in order to arrive at condition assessments for all Town culvert structures.
- 3.4 Culvert Needs Studies shall be awarded to consulting engineering firms that have a demonstrated ability to evaluate the local culvert network as well as a demonstrated ability to produce a report in an acceptable format.
- 3.5 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services & Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services shall award the Culvert Needs Study to a consulting engineering firm in a process consistent with the Town's Purchasing Policy.

RESPONSIBILITY:

- 4.1 The Director Public Works & Environmental Services shall be responsible for the implementation of the Culvert Condition Assessment Policy.
- 4.2 The Manager Roads & Fleet and/or the Manager Engineering Services shall be responsible for the review and use of information gathered from the condition assessments.

4.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services & Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services, shall assign urgent repairs identified in the condition assessments to contractors that have the capabilities and resources to carry out repairs within the above prescribed timeframes. Awarding of work shall be consistent with the Town's Purchasing Policy.

REFERENCE:

Purchasing By-law 2006-03, which includes the Purchasing Policy



Town of Tecumseh Culverts < 3m 20 Year Plan

Structure ID	Road Name	Location	Туре	Construction Year	Culvert Condition Index	Estimated Useful Life	Length (m)	Year	Cost	Tota	al by Year
35	Rossi Dr.	0.30 km east from Outer Dr.	Corrugated Steel Pipe	1988	60	25		2018	\$ 36,000	\$	36,000
46	South Talbot Rd.	At intersection with Holden Rd.	Non-Rigid Open Footing Culvert	1965	33	50	12.03	2019	\$ 370,500		
47	South Talbot Rd.	0.36 km east from County Rd. 9	Corrugated Steel Pipe	1999	27	25	14.39	2019	\$ 175,410		
54	Snake Lane Rd.	2.15 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	48	50	8.82	2019	\$ 26,000		
53	Snake Lane Rd.	1.2 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1960	38	50	8.13	2019	\$ 26,500		
54	Snake Lane Rd.	2.15 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	48	50	8.82	2019	\$ 423,000		
42	Snake Lane Rd.	At intersection with South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	37	50	9.42	2019	\$ 29,000		
45	South Talbot Rd.	At intersection with Walker Rd.	Non-Rigid Open Footing Culvert	1965	15	50	10.71	2019	\$ 326,000	\$:	1,376,410
39	Concession Rd. 10	At intersection with South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	75	50	8.17	2020	\$ 54,000		
53	Snake Lane Rd.	1.2 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1960	38	50	8.13	2020	\$ 431,500		
57	Concession Rd. 9	At intersection with County Rd. 8	Corrugated Steel Pipe	1995	95	25	25.22	2020	\$ 54,000		
63	Concession Rd. 10	At intersection with County Rd. 8	Corrugated Steel Pipe Arch	1990	75	25	26.93	2020	\$ 54,000		
64	Malden Rd.	At intersection with County Rd. 8	Corrugated Steel Pipe	2002	75	25	26.68	2020	\$ 54,000		
69	Concession Rd. 11	At intersection with County Rd. 8	Corrugated Steel Pipe	1995	57	25	12.66	2020	\$ 54,000		
42	Snake Lane Rd.	At intersection with South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	37	50	9.42	2020	\$ 472,000	\$ 1	1,173,500
51	Concession Rd. 8	2.50 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	68	50	8.33	2021	\$ 7,500		
70	Concession Rd. 12	At intersection with South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	62	50	10.84	2021	\$ 8,500	\$	16,000
All	Culvert Condition Ass	sessment (<3m Span) - renewed every five years						2022	\$ 75,000		
22	Ure St.	At intersection with North Talbot Rd.	Corrugated Steel Pipe	1990	75	25	23.92	2022	\$ 200,000		
23	Ure St.	0.30 km north from North Talbot Rd.	Corrugated Steel Pipe	1981	75	25	17.86	2022	\$ 225,000		
51	Concession Rd. 8	2.50 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	68	50	8.33	2022	\$ 122,500		
61	Concession Rd. 10	1.0 km south from South Talbot Rd.	Corrugated Steel Pipe	1994	10	25	11.30	2022	\$ 500		
70	Concession Rd. 12	At intersection with South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	62	50	10.84	2022	\$ 135,500	\$	758,500
7	Desro Dr.	At intersection with Manning Rd.	Corrugated Steel Pipe	1985	41	25	24.11	2023	\$ 23,000		
8	Jamsyl Dr.	At intersection with Manning Rd.	Corrugated Steel Pipe	1985	52	25	29.29	2023	\$ 332,000		
25	O'Neil Dr.	North of intersection with Moynahan St.	Corrugated Steel Pipe	1975	70	25	25.48	2023	\$ 150,000		
26	O'Neil Dr.	South of intersection with Moynahan St.	Corrugated Steel Pipe	1970	70	25	25.57	2023	\$ 160,000		
48	Holden Rd.	1.35 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	37	50	7.84	2023	\$ 32,000	\$	697,000
48	Holden Rd.	1.35 km south from South Talbot Rd.	Non-Rigid Open Footing Culvert	1965	37	50	7.84	2024	\$ 550,000		
9	Sylvestre Dr.	At intersection with Manning Rd.	Corrugated Steel Pipe	1990	53	25	23.32	2024	\$ 253,000		
14	Intersection Rd.	At intersection with Banwell Rd.	Corrugated Steel Pipe	1990	42	25	31.28	2024	\$ 231,000		
27	Moynahan St.	0.12 km west from O'Neil Dr.	Corrugated Steel Pipe	1975	70	25	18.07	2024	\$ 170,000		
28	Moynahan St.	West of intersection with Hennin St.	Corrugated Steel Pipe	1975	53	25	18.57	2024	\$ 135,000		
29	Moynahan St.	East of intersection with Hennin St.	Corrugated Steel Pipe	1975	10	25	18.56	2024	\$ 110,000		
30	Moynahan St.	0.10 km west from Hennin St.	Corrugated Steel Pipe	1990	48	25	11.57	2024	\$ 120,000	\$ 1	1,569,000
32	Oldcastle Rd.	1.10 km south from North Talbot Rd.	Corrugated Steel Pipe	1985	70	25	15.36	2025	\$ 180,000		
69	Concession Rd. 11	At intersection with County Rd. 8	Corrugated Steel Pipe	1995	57	25	12.66	2025	\$ 606,000		786,000
68	Concession Rd. 11	1.3 km south from South Talbot Rd.	Corrugated Steel Pipe	2005	57	25	7.99	2026	\$ 115,000	_	115,000
All		sessment (<3m Span) - renewed every five years	<u> </u>	1				2027	\$ 75,000		
17	North Talbot Rd.	At transition from N. Talbot Rd. to Concession Rd. 9	Non-Rigid Open Footing Culvert	2000	69	50	10.12	2027	\$ 550,000		

Town of Tecumseh
Culverts < 3m 20 Year Plan

Structure ID	Road Name	Location	Туре	Construction Year	Culvert Condition Index	Estimated Useful Life	Length (m)	Year	Cost	Tota	al by Year
18	North Talbot Rd.	1.10 km east from Oldcastle Rd.	Corrugated Steel Pipe	2000	67	25	13.65	2027	\$ 225,000		
49	Concession Rd. 8	At intersection with South Talbot Rd.	Corrugated Steel Pipe	1985	61	25	17.84	2027	\$ 160,000		
50	Concession Rd. 8	0.35 km south from South Talbot Rd.	Corrugated Steel Pipe	2005	57	25	16.44	2027	\$ 180,000		
55	Concession Rd. 9	0.90 km south from South Talbot Rd.	Corrugated Steel Pipe	2000	57	25	10.64	2027	\$ 160,000	\$	1,350,000
3	Burlington Rd.	At intersection with Arlington Blvd.	Concrete Pipe	1976	61	50	12.46	2028	\$ 100,000		
10	Tecumseh Rd. E.	1.0 km east from Manning Rd.	Corrugated Steel Pipe	1986	64	25	12.28	2028	\$ 135,000		
52	Snake Lane Rd.	0.55 km south from South Talbot Rd.	Corrugated Steel Pipe	1980	66	25	11.14	2028	\$ 150,000		
56	Concession Rd. 9	1.75 km south from South Talbot Rd.	Corrugated Steel Pipe	1990	62	25	11.05	2028	\$ 225,000	\$	610,000
16	Tecumseh Rd. E.	0.30 km east from Manning Rd.	Corrugated Steel Pipe	1986	68	25	16.18	2029	\$ 130,000		
41	Concession Rd. 9	At intersection with South Talbot Rd.	Corrugated Steel Pipe	1990	68	25	18.53	2029	\$ 220,000		
65	Concession Rd. 11	At intersection with South Talbot Rd.	Corrugated Steel Pipe	1995	67	25	16.42	2029	\$ 250,000	\$	600,000
2	Warwick Rd.	0.10 north from Burlington Rd.	Corrugated Steel Pipe	1976	70	25	5.36	2030	\$ 50,000		
43	South Talbot Rd.	At intersection with Concession Rd. 8	Corrugated Steel Pipe	2000	68	25	15.85	2030	\$ 700,000	\$	750,000
1	Riverside Dr. E.	0.37 km west from Lesperance Rd	Concrete Box Culvert	1950	70	50	18.31	2031	\$ 350,000	\$	350,000
All	Culvert Condition Ass	essment (<3m Span) - renewed every five years						2032	\$ 75,000		
1	Riverside Dr. E.	0.37 km west from Lesperance Rd	Concrete Box Culvert	1950	70	50	18.31	2032	\$ 400,000		
21	Concession Rd. 8	0.50 km north from North Talbot Rd.	Corrugated Steel Pipe	1970	70	25	13.84	2032	\$ 50,000		
36	Blackacre Dr.	At intersection with Outer Dr.	Corrugated Steel Pipe Arch	1995	75	25	86.76	2032	\$ 200,000	\$	725,000
31	Picadilly Ave.	At intersection with Oldcastle Rd.	Corrugated Steel Pipe	2000	70	25	18.37	2033	\$ 190,000		
37	Outer Dr.	At intersection with Outer Dr. connector	Corrugated Steel Pipe	2005	95	25	40.22	2033	\$ 200,000	\$	390,000
19	North Talbot Rd.	0.60 km east from Oldcastle Rd.	Corrugated Steel Pipe	1999	71	25	20.49	2034	\$ 270,000		
59	Concession Rd. 10	0.65 km south from South Talbot Rd.	Corrugated Steel Pipe	2009	70	25	10.43	2034	\$ 100,000		
66	Concession Rd. 11	0.75 km south from South Talbot Rd.	Clay Pipe	2001	70	50	16.69	2034	\$ 100,000		
72	Concession Rd. 8	0.35 km north from North Talbot Rd.	Corrugated Steel Pipe	1991	70	25	19	2034	\$ 50,000	\$	520,000
40	South Talbot Rd.	0.10 km west from Concession Rd. 10	Non-Rigid Open Footing Culvert	1979	74	50	11.78	2035	\$ 500,000	\$	500,000
4	Hayes Ave.	East of intersection with Edgewater Blvd.	Corrugated Steel Pipe	1976	75	25	19.86	2036	\$ 150,000		
5	Hayes Ave.	West of intersection with Edgewater Blvd.	Concrete Pipe	1976	75	50	20.91	2036	\$ 135,000		
6	Lenor Ave.	At intersection with Edgewater Blvd.	Concrete Pipe	1976	75	50	45.96	2036	\$ 230,000	\$	515,000
13	Sylvestre Dr.	At exit from County Rd. 22	Corrugated Steel Pipe	2002	75	25	22.25	2037	\$ 220,000		
15	Estate Park	At intersection with Tecumseh Rd. E.	Concrete Pipe	1980	75	50	24.32	2037	\$ 135,000	\$	355,000

20 Year Grand Total \$ 13,192,410



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.3	EFFECTIVE DATE: January 28, 2014
SUPERCEDES: N/A	APPROVAL: RCM-46/14
SUBJECT: Storm Sewer Collection System	n Condition Assessment Policy

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of the Town's storm sewer collection system.

SCOPE:

2.1 The storm sewer collection system, which consists of sewer gravity pipes, services, and eight pumping stations, shall be assessed as outlined in this policy.

BACKGROUND:

- 3.1 The Town's Geographic Information Systems (GIS) system maintains detailed information on the storm sewer assets. These storm sewers are split into segments, manhole to manhole, with each segment assigned a unique GIS ID.
- 3.2 Camera inspection videos are reviewed in order to assign a Sewer Performance Grade (SPG) to the viewed segments to assist in assessing the storm sewer condition. The SPG method of classification is based on the Water Resource centre (WRc) pipe condition classification method. It provides a rating for a sewer segment ranging from SPG 1 to SPG 5. Assessed ratings are always based on the worse defect found in the segment.

The SPG ratings are as follows:

- SPG 1- No Defects
- SPG 2- Minor Defects
- SPG 3- Likely to Deteriorate
- SPG 4- Likely to Collapse in Future
- SPG 5- Collapse Imminent

PROCEDURE:

- 4.1 The Town of Tecumseh will use video inspection methods to determine the condition of the storm sewers.
- 4.2 The Director Public Works & Environmental Services shall ensure that the Town continues to maintain acceptable levels of service, which shall be qualified as:
 - All SPG 5 defects scheduled for some kind of remedial attention within 6 months.
 - All SPG 4 defects scheduled to receive remedial attention within 2 years.
 - Urgent needs identified in the full scope condition assessments of storm pumping stations shall have remedial works planned and carried out within 1 year.
- 4.3 The Director Public Works & Environmental Services shall ensure that the Town's program to maintain acceptable levels of service will include:
 - Yearly tenders to flush and camera inspect storm sewers. Goal of inspecting all sewers once within a 20 year time frame.
 - Yearly review of all facility assets with annual inspections and reports.
 - Full scope condition assessments of storm pumping stations including structural, electrical and mechanical systems shall be performed. At no time shall 5 years pass since the last assessment.

RESPONSIBILITY:

- 5.1 The Director Public Works & Environmental Services shall be responsible for the implementation of the Storm Sewer Collection System Condition Assessment Policy.
- 5.2 The Manager Roads & Fleet and/or the Manager Engineering Services shall be responsible for review and use of the information gathered from the condition assessments.
- 5.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Roads & Fleet and/or the Manager Engineering Services, shall assign urgent repairs as identified in the condition assessments to contractors that have the capabilities and resources to carry out repairs

within the above prescribed timeframes. with the Town's Purchasing Policy.	This awarding of work shall be in accordance
REFERENCE:	
Purchasing By-law 2006-03, which includes the	Purchasing Policy
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Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
1828	1945	MAIN	CONC	Town of Tecumseh	ALDEN CRES	SC051	250		ST MARK'S RD	ST MARK'S RD	57.2	\$ 70		2018	
1912	2051	MAIN		Town of Tecumseh	MACK CRT	SC046	250		ST MARK'S RD	MACK CRT	60.2	\$ 70		2018	
2102	2241	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	300		ARLINGTON BLVD	KENSINGTON BLVD	145.1	\$ 70		2018	
1838	1955	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	300		ARLINGTON BLVD	KENSINGTON BLVD	3.7	\$ 70		2018	
3762	4091	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	375		ARLINGTON BLVD	KENSINGTON BLVD	140.2	\$ 70		2018	
2101	2240	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	375		ARLINGTON BLVD	KENSINGTON BLVD	66.8	\$ 70		2018	
2331	2501	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	450		ARLINGTON BLVD	KENSINGTON BLVD	88.4	\$ 70		2018	
2332	2502	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	450	1976	ARLINGTON BLVD	KENSINGTON BLVD	103.9	\$ 70		2018	
2329	2499	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	900	1976	ARLINGTON BLVD	KENSINGTON BLVD	112.4	\$ 100		2018	
748	778	MAIN	CONC	Town of Tecumseh	DILLON DR	T030	150	1950	CORONADO DR	BURDICK CRES	62.9	т		2018	
4481	769	MAIN	CONC	Town of Tecumseh	DILLON DR	T030	150	1990	CORONADO DR	BURDICK CRES	26.2	\$ 70		2018	
1125	1177	MAIN	OTHER	Town of Tecumseh	DILLON DR	T032	200	1974	KEITH AVE	BARRY AVE	45.3	\$ 70	\$ 3,168	2018	
755	785	MAIN		Town of Tecumseh	DILLON DR	T031	250	1974	BURDICK CRES	KEITH AVE	40.8	\$ 70	\$ 2,853	2018	
758	788	MAIN	CONC	Town of Tecumseh	DILLON DR	T031	250	1974	BURDICK CRES	KEITH AVE	115.6	\$ 70	\$ 8,093	2018	
1220	1272	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	250	1988	BARRY AVE	CENTENNIAL DR	264.0	\$ 70	\$ 18,479	2018	
1658	1732	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	250	1989	BARRY AVE	CENTENNIAL DR	204.3	\$ 70	\$ 14,302	2018	
1794	1911	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T027	250	1981	RIVERSIDE DR E	DILLON DR	91.5	\$ 70	\$ 6,405	2018	
39	39	MAIN	CONC	Town of Tecumseh	DILLON DR	T035	300	1980	MICHAEL DR	WOODBRIDGE DR	81.8	\$ 70	\$ 5,726	2018	
749	779	MAIN	CONC	Town of Tecumseh	DILLON DR	T030	300	1990	CORONADO DR	BURDICK CRES	91.0	\$ 70	\$ 6,372	2018	
761	791	MAIN	CONC	Town of Tecumseh	DILLON DR	T031	300	1974	BURDICK CRES	KEITH AVE	19.0	\$ 70	\$ 1,329	2018	
792	822	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T012	300	1990	CORONADO DR	BARRY AVE	100.8	\$ 70	\$ 7,053	2018	
1664	1738	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T012	300	1987	CORONADO DR	BARRY AVE	124.6	\$ 70	\$ 8,722	2018	
1699	1816	MAIN	PVC	Town of Tecumseh	DILLON DR	T035	300	1992	MICHAEL DR	WOODBRIDGE DR	33.4	\$ 70	\$ 2,335	2018	
1702	1819	MAIN	PVC	Town of Tecumseh	DILLON DR	T035	300	1992	MICHAEL DR	WOODBRIDGE DR	87.9	\$ 70	\$ 6,152	2018	
664	672	MAIN	CONC	Town of Tecumseh	SIMARD CRES	T088	300	1980	MICHAEL DR	MICHAEL DR	74.2	\$ 70	\$ 5,193	2018	
668	676	MAIN	CONC	Town of Tecumseh	JAMES CRES	T085	300	1980	MICHAEL DR	JAMES CRES	128.9	\$ 70	\$ 9,024	2018	
1798	1915	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T065	300	1981	DILLON DR	PERCY PL	117.3	\$ 70	\$ 8,211	2018	
1803	1920	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T064	300	1981	PERCY PL	LITTLE RIVER BLVD	111.5	\$ 70	\$ 7,808	2018	
1804	1921	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T064	300	1981	PERCY PL	LITTLE RIVER BLVD	85.2	\$ 70	\$ 5,967	2018	
2440	2613	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T064	300	1981	PERCY PL	LITTLE RIVER BLVD	21.9	\$ 70	\$ 1,532	2018	
4572	1813	MAIN	PVC	Town of Tecumseh	LITTLE RIVER BLVD	T092	300	1992	REVLAND DR	WOODBRIDGE DR	37.1	\$ 70	\$ 2,594	2018	
674	682	MAIN	CONC	Town of Tecumseh	JAMES CRES	T086	300	1996	JAMES CRES	JAMES CRES	67.8	\$ 70	\$ 4,746	2018	
2453	2626	MAIN	CONC	Town of Tecumseh	DILLON DR	T028	300	1981	LACASSE BLVD	CORONADO DR	134.4	\$ 70	\$ 9,408	2018	
2456	2629	MAIN	VCLAY	Town of Tecumseh	DILLON DR	T028	300	1981	LACASSE BLVD	CORONADO DR	81.1	\$ 70		2018	
673	681	MAIN	CONC	Town of Tecumseh	JAMES CRES	T086	300	1996	JAMES CRES	JAMES CRES	33.1	\$ 70	\$ 2,316	2018	
756	786	MAIN	OTHER	Town of Tecumseh	DILLON DR	T031	300	1990	BURDICK CRES	KEITH AVE	68.7	\$ 70	\$ 4,811	2018	
33	33	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	375	1988	BARRY AVE	CENTENNIAL DR	24.3	\$ 70	\$ 1,701	2018	
791	821	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T011	375	1990	LACASSE BLVD	CORONADO DR	46.6	\$ 70	\$ 3,262	2018	
1660	1734	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T012	375	1987	CORONADO DR	BARRY AVE	65.6	\$ 70	\$ 4,591	2018	
25	25	MAIN		Town of Tecumseh	RIVERSIDE DR E	T013	450		BARRY AVE	CENTENNIAL DR	3.0	\$ 70		2018	
32	32	MAIN		Town of Tecumseh	RIVERSIDE DR E	T013	450	1988	BARRY AVE	CENTENNIAL DR	14.1	\$ 70		2018	
34	34	MAIN		Town of Tecumseh	RIVERSIDE DR E	T013	450		BARRY AVE	CENTENNIAL DR	120.5	\$ 70		2018	
785	815	MAIN		Town of Tecumseh	RIVERSIDE DR E	T011	450		LACASSE BLVD	CORONADO DR	73.0	\$ 70		2018	
789	819	MAIN		Town of Tecumseh	RIVERSIDE DR E	T011	450		LACASSE BLVD	CORONADO DR	88.8	\$ 70		2018	
1671	1745	MAIN		Town of Tecumseh	RIVERSIDE DR E	T010	450		PINEWOOD CRES	LACASSE BLVD	120.1	\$ 70		2018	
1697	1814	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T090	450		MICHAEL DR	MICHAEL DR	6.6	\$ 70		2018	
1698	1815	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T091	450		MICHAEL DR	REVLAND DR	104.3	\$ 70		2018	
2389	2562	MAIN		Town of Tecumseh	RIVERSIDE DR E	T013	450		BARRY AVE	CENTENNIAL DR	34.0	\$ 70		2018	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
2391	2564	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	450	1980	BARRY AVE	CENTENNIAL DR	43.2	\$ 70	\$ 3,023	2018	
2392	2565	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	450	1980	BARRY AVE	CENTENNIAL DR	120.2	\$ 70	\$ 8,416	2018	
2401	2574	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	450	1980	BARRY AVE	CENTENNIAL DR	72.9	\$ 70	\$ 5,106	2018	
750	780	MAIN	CONC	Town of Tecumseh	DILLON DR	T031	450	1990	BURDICK CRES	KEITH AVE	4.0	\$ 70	\$ 279	2018	
743	773	MAIN	CONC	Town of Tecumseh	DILLON DR	T028	600	1990	LACASSE BLVD	CORONADO DR	3.7	\$ 85	\$ 317	2018	
751	781	MAIN	CONC	Town of Tecumseh	DILLON DR	T031	900	1990	BURDICK CRES	KEITH AVE	166.4	\$ 100	\$ 16,642	2018	
760	790	MAIN	CONC	Town of Tecumseh	DILLON DR	T032	900	1990	KEITH AVE	BARRY AVE	54.0	\$ 100	\$ 5,402	2018	
1668	1742	MAIN	CONC	Town of Tecumseh	DILLON DR	T034	900	1988	BARRY AVE	MICHAEL DR	120.9	\$ 100	\$ 12,093	2018	
745	775	MAIN	CONC	Town of Tecumseh	DILLON DR	T030	900	1990	CORONADO DR	BURDICK CRES	104.3	\$ 100	\$ 10,433	2018	
1555	1628	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T079	1050	1987	LACASSE BLVD	CORONADO DR	104.0	\$ 120	\$ 12,478	2018	
1559	1632	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T079	1050	1987	LACASSE BLVD	CORONADO DR	106.8	\$ 120		2018	\$ 358,400
1562	1635	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T080	1050	1987	CORONADO DR	SHAWN AVE	124.1	\$ 120		2019	
680	688	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T083	1200		BARRY AVE	MICHAEL DR	46.5	\$ 120		2019	
681	689	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T083	1200		BARRY AVE	MICHAEL DR	153.5	\$ 120		2019	
704	712	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T090	1800		MICHAEL DR	MICHAEL DR	84.0	\$ 135		2019	
28	28	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	2000		BARRY AVE	CENTENNIAL DR	135.3	\$ 135		2019	
30	30	MAIN	CONC	Town of Tecumseh	DILLON DR	T034	2000	1988	BARRY AVE	MICHAEL DR	78.6	\$ 135		2019	
36	36	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T089	2000		DILLON DR	SIMARD CRES	105.1	\$ 135		2019	
37	37	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T084	2000		JAMES CRES	LITTLE RIVER BLVD	77.1	\$ 135		2019	
38	38	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T087	2000		SIMARD CRES	JAMES CRES	95.0	\$ 135	\$ 12,822	2019	
35	35	MAIN	CONC	Town of Tecumseh	DILLON DR	T034	2000	1980	BARRY AVE	MICHAEL DR	92.6	\$ 135	\$ 12,499	2019	
402	381	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T013	2000	1990	BARRY AVE	CENTENNIAL DR	12.6	\$ 135		2019	
3199	3446	MAIN	PVC	Town of Tecumseh	MAISONNEUVE ST	SS030	250	1990	HEBERT ST	ST ANNE ST	60.7	\$ 70		2019	
2963	3199	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	300	1989	MAISONNEUVE ST	INTERSECTION RD	77.8	\$ 70		2019	
2964	3200	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	300		MAISONNEUVE ST	INTERSECTION RD	77.3	\$ 70		2019	
2965	3200	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	300		MAISONNEUVE ST	INTERSECTION RD	70.4	\$ 70		2019	
3025	3261	MAIN	CONC	Town of Tecumseh	INTERSECTION RD	SS028	300	1976	HEBERT ST	ST ANNE ST	100.3	\$ 70		2019	
3473	3772						+	1976	HEBERT ST						
		MAIN	CONC	Town of Tecumseh	INTERSECTION RD	SS028	300		MAISONNEUVE ST	ST ANNE ST	154.4 0.8	\$ 70 \$ 70		2019	
2914	3150	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	375			INTERSECTION RD				2019	
3472	3771	MAIN	CSP	Town of Tecumseh	INTERSECTION RD	SS020	400		SHAWNEE RD	HEBERT ST	90.4	\$ 70		2019	
2932	3168	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	450	2000	MAISONNEUVE ST	INTERSECTION RD	71.4	\$ 70		2019	
2933	3169	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	450		MAISONNEUVE ST	INTERSECTION RD	71.8	\$ 70		2019	
2934	3170	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	450		MAISONNEUVE ST	INTERSECTION RD	69.9	\$ 70		2019	
2585	2758	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS037	450		ST ANNE ST	LESPERANCE RD	55.3	\$ 70		2019	
2839	3075	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS036	600		GOUIN ST	MAISONNEUVE ST	64.1	\$ 85		2019	1
2861	3097	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS036	600		GOUIN ST	MAISONNEUVE ST	594.8	\$ 85		2019	
2873	3109	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS036	600		GOUIN ST	MAISONNEUVE ST	128.3	\$ 85		2019	
3005	3241	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS037	600		ST ANNE ST	LESPERANCE RD	16.7	\$ 85		2019	
3006	3242	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS037	600		ST ANNE ST	LESPERANCE RD	83.8	\$ 85		2019	
3007	3243	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS037	600		ST ANNE ST	LESPERANCE RD	22.1	\$ 85		2019	
2584	2757	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS037	675		ST ANNE ST	LESPERANCE RD	25.5	\$ 85	-	2019	
3030	3266	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	675		MAISONNEUVE ST	INTERSECTION RD	123.7	\$ 85		2019	
2581	2754	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS089	900		LESPERANCE RD	DESLIPPE DR	13.6	\$ 100		2019	
3204	3451	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS021	900		MAISONNEUVE ST	INTERSECTION RD	99.5	\$ 100		2019	
3205	3452	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS021	900		MAISONNEUVE ST	INTERSECTION RD	111.8	\$ 100		2019	
3294	3541	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS023	900		GOUIN ST	MAISONNEUVE ST	135.4	\$ 100		2019	
3298	3545	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS023	900		GOUIN ST	MAISONNEUVE ST	88.6	\$ 100		2019	
3357	3626	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS032	900	1987	HEBERT ST	ST ANNE ST	63.7	\$ 100	\$ 6,373	2019	1

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
3195	3442	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS021	900	1990	MAISONNEUVE ST	INTERSECTION RD	120.6	\$ 100	\$ 12,058	2019	
3192	3439	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS023	900	1990	GOUIN ST	MAISONNEUVE ST	102.0	\$ 100	\$ 10,196	2019	
2935	3171	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	1050	2000	MAISONNEUVE ST	INTERSECTION RD	81.6	\$ 120	\$ 9,790	2019	
2876	3112	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	1200	1999	MAISONNEUVE ST	INTERSECTION RD	13.4	\$ 120	\$ 1,613	2019	\$ 368,694
3351	3620	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS024	1350	1987	SHAWNEE RD	HEBERT ST	120.6	\$ 120	\$ 14,473	2020	
3346	3615	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS012	1500	1987	CORBI LANE	SHAWNEE RD	91.2	\$ 135	\$ 12,315	2020	
2155	2294	MAIN	CSP	Town of Tecumseh	DORSET PARK	SC087	300	1979	TECUMSEH RD	HARBOURNE CRES	20.4	\$ 70	\$ 1,425	2020	
1992	2131	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC093	525	1979	COLLIER CRES	TECUMSEH RD	45.5	\$ 70	\$ 3,184	2020	
2149	2288	MAIN	CONC	Town of Tecumseh	HARBOURNE CRES	SC088	525	1979	DORSET PARK	DORSET PARK	63.8	\$ 70	\$ 4,465	2020	
2151	2290	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC087	525	1979	TECUMSEH RD	HARBOURNE CRES	61.1	\$ 70	\$ 4,275	2020	
2154	2293	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC087	525	1979	TECUMSEH RD	HARBOURNE CRES	105.6	\$ 70	\$ 7,393	2020	
2158	2297	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC087	525	1979	TECUMSEH RD	HARBOURNE CRES	51.3	\$ 70	\$ 3,591	2020	
2179	2318	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC093	525	1979	COLLIER CRES	TECUMSEH RD	67.6	\$ 70	\$ 4,730	2020	
2183	2322	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC093	525	1979	COLLIER CRES	TECUMSEH RD	76.0	\$ 70	\$ 5,317	2020	
2186	2325	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC092	525	1979	COLLIER CRES	COLLIER CRES	129.9	\$ 70		2020	
2189	2328	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC089	525	1979	HARBOURNE CRES	HARBOURNE CRES	87.8	\$ 70		2020	
2595	2768	MAIN	CONC	Town of Tecumseh	COLLIER CRES	SC091	525	1979	DORSET PARK	DORSET PARK	107.7	\$ 70	\$ 7,537	2020	
2598	2771	MAIN	CONC	Town of Tecumseh	COLLIER CRES	SC091	525	1979	DORSET PARK	DORSET PARK	81.7	\$ 70		2020	
4634	2780	MAIN	CONC	Town of Tecumseh	HARBOURNE CRES	SC088	525		DORSET PARK	DORSET PARK	102.5	\$ 70		2020	
4631	2777	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC081	900		REGENT RD	REGENT RD	106.5	\$ 100		2020	
4627	2773	MAIN	CONC	Town of Tecumseh	HARBOURNE CRES	SC088	1050		DORSET PARK	DORSET PARK	89.4	\$ 120		2020	
4629	2775	MAIN	CONC	Town of Tecumseh	HARBOURNE CRES	SC088	1050		DORSET PARK	DORSET PARK	93.8	\$ 120		2020	
4626	2772	MAIN	CONC	Town of Tecumseh	COLLIER CRES	SC091	1050		DORSET PARK	DORSET PARK	94.2	\$ 120		2020	
1986	2125	MAIN	CONC	Town of Tecumseh	COLLIER CRES	SC091	1200		DORSET PARK	DORSET PARK	87.4	\$ 120		2020	
1988	2127	MAIN	CONC	Town of Tecumseh	COLLIER CRES	SC091	1200		DORSET PARK	DORSET PARK	87.4	\$ 120		2020	
234	186	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T007	150		LESPERANCE RD	ST PIERRE ST	7.7	\$ 70		2020	
236	188	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T006	150		CHENE ST	LESPERANCE RD	22.9	\$ 70		2020	
696	704	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T003	150		WINCLARE DR	CATALINA COVE	184.1	\$ 70		2020	
235	187	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T006	150		CHENE ST	LESPERANCE RD	66.8	\$ 70		2020	
564	553	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T005	150		CATALINA COVE	CHENE ST	98.9	\$ 70		2020	
371	350	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	200		PINEWOOD CRES	LACASSE BLVD	16.8	\$ 70		2020	
372	351	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	200		PINEWOOD CRES	LACASSE BLVD	32.5	\$ 70		2020	
373	352	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T008	200		ST PIERRE ST	PINEWOOD CRES	62.8	\$ 70		2020	
2447	2620	MAIN	CONC	Town of Tecumseh	DILLON DR	T025	200		ST PIERRE ST	MCCOLL AVE	11.7	\$ 70		2020	
2448	2621	MAIN		Town of Tecumseh	DILLON DR	T025	200		ST PIERRE ST	MCCOLL AVE	80.0	\$ 70		2020	
2455	2628	MAIN	OTHER	Town of Tecumseh	DILLON DR	T025	200		ST PIERRE ST	MCCOLL AVE	14.2	\$ 70		2020	
93	93	MAIN	CONC	Town of Tecumseh	DILLON DR	T023	250		LESPERANCE RD	ST PIERRE ST	11.5	\$ 70		2020	
1014	1066	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T107	250		CEDARWOOD DR	OLIVER DR	30.9	\$ 70		2020	
1017	1069	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T107	250		CEDARWOOD DR	OLIVER DR	40.6	\$ 70		2020	
366	345	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	300		PINEWOOD CRES	LACASSE BLVD	21.6	\$ 70		2020	
374	353	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	300		ST PIERRE ST	PINEWOOD CRES	29.8	\$ 70		2020	
374	355	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T008	300		ST PIERRE ST	PINEWOOD CRES	49.0	\$ 70		2020	+
380	359	MAIN	CONC	Town of Tecumseh	PINEWOOD CRES	T008	300		RIVERSIDE DR E	RIVERSIDE DR E	68.9	\$ 70		2020	+
432	410	MAIN	CONC	Town of Tecumseh	WOOD ST	T058	300		LESPERANCE RD	ST PIERRE ST	101.8	\$ 70		2020	+
-												\$ 70			+
509	487	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T007	300		LESPERANCE RD	ST PIERRE ST	153.5			2020	
1469	1521	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T144	300		JELSO PL	SHAWN AVE	78.9	\$ 70		2020	
1778	1895	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T146	300		SHAWN AVE	SHAWN AVE	80.9	\$ 70		2020	
4436	498	MAIN	CONC	Town of Tecumseh	DILLON DR	T023	300	1991	LESPERANCE RD	ST PIERRE ST	60.8	\$ 70	\$ 4,259	2020	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
4435	497	MAIN	CONC	Town of Tecumseh	DILLON DR	T023	300	1991	LESPERANCE RD	ST PIERRE ST	28.2	\$ 70	\$ 1,971	2020	
2454	2627	MAIN	CONC	Town of Tecumseh	DILLON DR	T026	300	1981	MCCOLL AVE	LACASSE BLVD	89.8	\$ 70	\$ 6,287	2020	
4434	496	MAIN	CONC	Town of Tecumseh	DILLON DR	T023	300	1991	LESPERANCE RD	ST PIERRE ST	72.0	\$ 70	\$ 5,039	2020	
1775	1892	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T146	300	1981	SHAWN AVE	SHAWN AVE	68.2	\$ 70	\$ 4,775	2020	
375	354	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T008	300	1980	ST PIERRE ST	PINEWOOD CRES	25.2	\$ 70	\$ 1,764	2020	
1131	1183	MAIN	PVC	Town of Tecumseh	LITTLE RIVER BLVD	T061	300	1992	ST PIERRE ST	MCCOLL AVE	130.4	\$ 70	\$ 9,131	2020	
382	361	MAIN	CONC	Town of Tecumseh	PINEWOOD CRES	T009	375	1990	RIVERSIDE DR E	RIVERSIDE DR E	69.5	\$ 70	\$ 4,866	2020	
434	412	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T059	375	1980	LITTLE RIVER BLVD	WOOD ST	102.8	\$ 70	\$ 7,193	2020	
855	885	MAIN	CONC	Town of Tecumseh	CHENE ST	T053	375	1979	DILLON DR	LITTLE RIVER BLVD	116.0	\$ 70	\$ 8,118	2020	
1019	1071	MAIN	CONC	Town of Tecumseh	CEDARWOOD DR	T105	375	1974	GAUTHIER DR	LESPERANCE RD	62.4	\$ 70	\$ 4,366	2020	
1133	1185	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T063	375	1989	MCCOLL AVE	LACASSE BLVD	102.3	\$ 70	\$ 7,164	2020	
1773	1890	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T144	375	1980	JELSO PL	SHAWN AVE	86.2	\$ 70	\$ 6,032	2020	
1774	1891	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T146	375	1981	SHAWN AVE	SHAWN AVE	78.2	\$ 70		2020	
1779	1896	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T146	375	1979	SHAWN AVE	SHAWN AVE	97.4	\$ 70		2020	
862	892	MAIN		Town of Tecumseh	CHENE ST	T053	375	1979	DILLON DR	LITTLE RIVER BLVD	118.0	\$ 70		2020	
866	896	MAIN	CONC	Town of Tecumseh	CHENE CRT	T054	375		LITTLE RIVER BLVD	LITTLE RIVER BLVD	59.6	\$ 70		2020	
2451	2624	MAIN	CONC	Town of Tecumseh	DILLON DR	T026	375		MCCOLL AVE	LACASSE BLVD	118.2	\$ 70		2020	
104	104	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T056	450		DILLON DR	LITTLE RIVER BLVD	6.2	\$ 70		2020	\$ 354,750
240	192	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	450		PINEWOOD CRES	LACASSE BLVD	80.0	\$ 70		2021	, , , , , ,
488	466	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T060	450		DILLON DR	LITTLE RIVER BLVD	95.0	\$ 70		2021	
514	492	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T008	450		ST PIERRE ST	PINEWOOD CRES	83.3	\$ 70		2021	
637	626	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T110	450		OLIVER DR	ROXBURY CRES	31.2	\$ 70		2021	
1021	1073	MAIN	CONC	Town of Tecumseh	CEDARWOOD DR	T105	450		GAUTHIER DR	LESPERANCE RD	80.2	\$ 70		2021	
1782	1899	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T146	450		SHAWN AVE	SHAWN AVE	61.7	\$ 70		2021	
485	463	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T060	450		DILLON DR	LITTLE RIVER BLVD	115.4	\$ 70		2021	
267	219	MAIN	CONC	Town of Tecumseh	CEDARWOOD DR	T105	525		GAUTHIER DR	LESPERANCE RD	8.4	\$ 70		2021	
489	467	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T024	525		RIVERSIDE DR E	DILLON DR	119.4	\$ 70		2021	
636	625	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T107	525		CEDARWOOD DR	OLIVER DR	60.4	\$ 70		2021	
1023	1075	MAIN	CONC	Town of Tecumseh	CEDARWOOD DR	T107	525		GAUTHIER DR	LESPERANCE RD	74.8	\$ 70		2021	
1784	1901	MAIN	CONC	Town of Tecumseh	SHAWN AVE	T145	525		KIMBERLY DR	KIMBERLY DR	112.7	\$ 70		2021	
1022	1074	MAIN	CONC	Town of Tecumseh	CEDARWOOD DR	T105	525		GAUTHIER DR	LESPERANCE RD	80.1	\$ 70		2021	
263	215	MAIN	CONC	Town of Tecumseh	WOOD ST	T058	600		LESPERANCE RD	ST PIERRE ST	12.1	\$ 85		2021	
500	478	MAIN	CONC		ST PIERRE ST	T038	600		RIVERSIDE DR E	DILLON DR	90.3	ć or			
				Town of Tecumseh		T024					88.2	\$ 85		2021	
503	481	MAIN	CONC	Town of Tecumseh	ST PIERRE ST		600		RIVERSIDE DR E CATALINA COVE	DILLON DR CHENE ST	69.8			2021	
562	551	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T005	600				4.6			2021	
262	214	MAIN	CONC	Town of Tecumseh	WOOD ST	T058	600		LESPERANCE RD	ST PIERRE ST				2021	
15	15	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T007	675		LESPERANCE RD	ST PIERRE ST	10.1			2021	
508	486	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T007	675		LESPERANCE RD	ST PIERRE ST	119.2			2021	
571	560	MAIN	CONC	Town of Tecumseh	CHENE ST	T020	675		RIVERSIDE DR E	DILLON DR	105.5	\$ 85		2021	
575	564	MAIN	CONC	Town of Tecumseh	CHENE ST	T020	675		RIVERSIDE DR E	DILLON DR	99.7	\$ 85		2021	
638	627	MAIN	CONC	Town of Tecumseh	OLIVER DR	T108	675		GAUTHIER DR	LESPERANCE RD	50.8	\$ 85		2021	
695	703	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T003	675		WINCLARE DR	CATALINA COVE	180.0	\$ 85		2021	
1787	1904	MAIN	CONC	Town of Tecumseh	SHAWN AVE	T147	675		LITTLE RIVER BLVD	KIMBERLY DR	85.7	\$ 85		2021	
567	556	MAIN	CONC	Town of Tecumseh	CHENE ST	T020	675		RIVERSIDE DR E	DILLON DR	76.9	\$ 85		2021	
17	17	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T022	750		RIVERSIDE DR E	DILLON DR	14.1	\$ 85		2021	
94	94	MAIN	CONC	Town of Tecumseh	DILLON DR	T021	750		CHENE ST	LESPERANCE RD	7.4	\$ 85		2021	
233	185	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T006	750		CHENE ST	LESPERANCE RD	74.2	\$ 85		2021	ļ
561	550	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T006	750	1985	CHENE ST	LESPERANCE RD	30.1	\$ 85	\$ 2,554	2021	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
641	630	MAIN	CONC	Town of Tecumseh	OLIVER DR	T108	750		GAUTHIER DR	LESPERANCE RD	90.9	\$ 85	\$ 7,727	2021	·
723	731	MAIN	CONC	Town of Tecumseh	DILLON DR	T021	750		CHENE ST	LESPERANCE RD	4.7	\$ 85		2021	
724	732	MAIN		Town of Tecumseh	DILLON DR	T021	750	1979	CHENE ST	LESPERANCE RD	108.0	\$ 85		2021	
731	739	MAIN		Town of Tecumseh	DILLON DR	T019	750	1979	KENNEY CRT	CHENE ST	77.0	\$ 85		2021	
734	742	MAIN	CONC	Town of Tecumseh	DILLON DR	T019	750	1987	KENNEY CRT	CHENE ST	49.3	\$ 85		2021	
4349	6258	MAIN	CONC	Town of Tecumseh	DILLON DR	T025	762		ST PIERRE ST	MCCOLL AVE	20.5	\$ 85		2021	
241	193	MAIN		Town of Tecumseh	OLIVER DR	T108	900		GAUTHIER DR	LESPERANCE RD	5.4	\$ 100		2021	
242	194	MAIN		Town of Tecumseh	OLIVER DR	T108	900		GAUTHIER DR	LESPERANCE RD	8.2	\$ 100		2021	
256	208	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T055	900	1987	CHENE ST	LESPERANCE RD	8.5	\$ 100		2021	
642	631	MAIN	CONC	Town of Tecumseh	OLIVER DR	T108	900		GAUTHIER DR	LESPERANCE RD	79.4	\$ 100		2021	
645	634	MAIN	CONC	Town of Tecumseh	OLIVER DR	T108	900		GAUTHIER DR	LESPERANCE RD	72.7			2021	
870	900	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T055	900		CHENE ST	LESPERANCE RD	30.9	\$ 100		2021	
871	901	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T055	900		CHENE ST	LESPERANCE RD	64.7			2021	
1255	1307	MAIN	CONC	Town of Tecumseh	OLIVER DR	T108	900		GAUTHIER DR	LESPERANCE RD	12.0			2021	
257	209	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T055	900		CHENE ST	LESPERANCE RD	16.0	\$ 100		2021	
385	364	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	T010	900		PINEWOOD CRES	LACASSE BLVD	203.5	\$ 100		2021	
836	866	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T052	900		SOMERVILLE ST	CHENE ST	119.3	\$ 100	\$ 11,928	2021	
1556	1629	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T141	1050		LITTLE RIVER BLVD	DUBE DR	9.1	\$ 120		2021	
14	14	MAIN		Town of Tecumseh	LESPERANCE RD	T022	1200		RIVERSIDE DR E	DILLON DR	13.3	\$ 120		2021	
103	103	MAIN		Town of Tecumseh	LESPERANCE RD	T056	1200		DILLON DR	LITTLE RIVER BLVD	7.8	\$ 120		2021	
16	16	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T022	1950	1985	RIVERSIDE DR E	DILLON DR	16.0			2021	
24	24	MAIN		Town of Tecumseh	LESPERANCE RD	T022	1950	1985	RIVERSIDE DR E	DILLON DR	181.3			2021	
95	95	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T022	1950	1985	RIVERSIDE DR E	DILLON DR	169.3			2021	
231	183	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T056	1950		DILLON DR	LITTLE RIVER BLVD	71.4	\$ 135	\$ 9,642	2021	
268	220	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T109	1950		CEDARWOOD DR	OLIVER DR	115.2			2021	
258	210	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T057	1950		LITTLE RIVER BLVD	WOOD ST	151.6			2021	
255	207	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T056	1950		DILLON DR	LITTLE RIVER BLVD	147.5	\$ 135		2021	\$ 375,784
6156	6452	MAIN	PVC	Town of Tecumseh	ST ALPHONSE	SS131	300		SOUTH PACIFIC	SHIELDS	89.8	\$ 70		2022	373,704
3404	3673	MAIN	PVC	Town of Tecumseh	HOLMES CRES	SS139	300		DOCHERTY DR	DOCHERTY DR	58.0	\$ 70		2022	
6142	6346	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS133	300		SOUTH PACIFIC AVE	SHIELDS ST	62.1	\$ 70		2022	
6148	6455	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS131	300	2009	300TH FACIFIC AVE	311111111111111111111111111111111111111	114.4	\$ 70		2022	
6149	6397	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS131	300	2009			116.4	\$ 70		2022	
6150	6398	MAIN	PVC		ST ALPHONSE ST	SS131	300	2009			7.3	ć 70		2022	
6164	6479	MAIN	PVC	Town of Tecumseh Town of Tecumseh	31 ALFITONSE 31	SS131	300	2009			81.7	\$ 70		2022	
3583	3882	MAIN	PVC	Town of Tecumseh	JILLIAN CRT	SS124	375		ST ALPHONSE ST	JILLIAN CRT	98.9	\$ 70		2022	
3577	3876	MAIN	PVC	Town of Tecumseh	SYLVESTRE DR	SS380	375	2001	COUNTY RD 22	SYLVESTERE DR	74.5	\$ 70		2022	
6234	6420	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS125	375	2001	COUNTY RD 22	STEVESTERE DR	24.3	\$ 70		2022	
6235	6457	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS125	375	0			24.3	\$ 70		2022	
					HOLMES CRES				DOCHERTY DR	DOCHERTY DR	48.3	\$ 70		2022	
3405 3408	3674	MAIN	PVC PVC	Town of Tecumseh	HOLMES CRES	SS139	375		DOCHERTY DR	DOCHERTY DR	56.0	\$ 70		2022	
	3677	MAIN		Town of Tecumseh	DOCHERTY DR	SS139	375				60.6				
3516	3815	MAIN	CONC	Town of Tecumseh		SS138	375	-	HOLMES CRES	SHIELDS RD COUNTY RD 42		\$ 70 \$ 70		2022	+
3582 6141	3881 6345	MAIN	CONC	Town of Tecumseh	LE BOEUF AVE ST ALPHONSE ST	SS121 SS131	375		ST ALPHONSE ST SOUTH PACIFIC AVE	LESPERANCE RD	123.3 89.9	\$ 70		2022	
6177	6445	MAIN	CONC PVC	Town of Tecumseh	ST ALPHONSE ST	SS131 SS128	375	2009	3001 II PACIFIC AVE	LESPERAINCE RU	89.9	\$ 70		2022	
		MAIN		Town of Tecumseh			375	-	CANADIAN DACIFIC DAILWAY	SOLITH DACIFIC AVE		\$ 70			
3388	3657 3812	MAIN	CONC	Town of Tecumseh Town of Tecumseh	LESPERANCE RD	SS144	375	2001 1989	CANADIAN PACIFIC RAILWAY HOLMES CRES	SOUTH PACIFIC AVE SHIELDS RD	1.1 62.0	\$ 70		2022	
3513		MAIN			DOCHERTY DR	SS138	375 450	1989	HOLMES CRES			\$ 70		2022	
3519	3818	MAIN	CONC	Town of Tecumseh	DOCHERTY DR	SS138			HOLIVIES CRES	SHIELDS RD	78.9 68.9	\$ 70			
6188	6491	MAIN	PVC	Town of Tecumseh	ST ALPHONSE ST	SS128	450	2009	İ	Ī	00.9	₽ 70	\$ 4,823	2022	ı

288 388 MAN CONC Town of Teament SUCKEY OF S121 AND ROS TAMPROS ET CONVEY DE Q2 72.8 \$ 70 \$ 4.656 222 \$ 82.9 \$ 83.9 MAN CONC Town of Teament SUPPRANDE D S144 40 701 ROS S144 40 ROS ROS S144 40 ROS ROS S144 40 ROS ROS S144 40 ROS ROS ROS S144 40 ROS R	Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subto	tal by Year
3389 3584 MAN CONC Town of Tecument CSPERANCE DI SSEA 450 2001 CANADAN MORTIC RANJAWY 1911 1 5 70 5 1,340 222 1341 3712 MAN CONC Town of Tecument CSPERANCE DI SSEA 400 2001 SOUTH NORTH CAVE CSPERANCE DI 6.4							SS121						\$ 70	_	2022		
3811 MAN CDKC Down of Tecumbe DOCHRETOR SS142 409 200 SOUTH PACIFICAVE DOCHRETOR R. 3442 3772 MAN CDKC Town of Tecumber LESPERMORE DO SS142 409 200 SOUTH PACIFICAVE DOCHRETOR R. 3488 3772 MAN CDKC Town of Tecumber LESPERMORE DO SS142 502 200 SOUTH PACIFICAVE DOCHRETOR R. 3488 3772 MAN CDKC Town of Tecumber LESPERMORE DO SS142 502 200 SOUTH PACIFICAVE DOCHRETOR R. 3488 3772 MAN CDKC Town of Tecumber LESPERMORE DO SS142 502 200 SOUTH PACIFICAVE DOCHRETOR R. 3488 STT MAN CDKC Town of Tecumber LESPERMORE DO SS142																	
3443 3710 MAIN CONC Town of Tecumise LESPERANCE RD 5312 5321 5021 5001 MONTH PACIFIC AVE DOCKETY DR 96 5 70 5 3,345 2022																1	-
3488 3712 MANN CONC Town of Tenumeh SPERANCE 81 SST AUS SST AUS SST AUS CONTINUENCE AUS AU																1	-
3448 3717 AMAN CONC Town of Tecumenh ISPERANCE RD S3142 525 209 S222 209		3712															
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30.27 \$38.1 MANN CONC Town of Tecumesh \$10.00 \$51.06 \$5.3 \$38.8 \$1.00 \$10.00 \$1.00 \$																	
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GOOG GOTZ MANN CONC Town of Terumesh STAPHONES ST S\$123 \$252 2009																1	
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3373 3360 MAIN CSP Town of Trocumsch IESPERANCE RD SS141 5000 1989 DOCHERTY DR SHIELDS RD 0.24 5 8.5 5 .0302 2022										ST ALPHONSE ST	LESPERANCE RD						
3379 3364 3367 3379 3364 3365 3466																1	
3379 3548 MAIN CSP Town OT FECURISH LISPITANCE RD S\$141 600 1989 DOCHETY DR SHIFLDS RD S141 5 85 5 6,920 7022																	
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3510 6189 MAIN CONC Town of Tecumesh SOUTH PACRICA WE S5143 600 1976 ST ALPHONSE ST LESPERANCE RD 34.6 \$ 85 \$ 2,943 2022																	
9311 3830 MAIN CONC Town of Tecumseh LISPERANCE RD SS141 600 2001 COLHERT DR SHIELDS RD 36.5 5 8.7 3.106 2022																	
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6227 6418 MAIN CONC Town of Tecumseh ST ALPHONSE ST S\$125 600 2009																	
6482										2 0 0.1.2111 7 211	02202						
3391 3660 MAIN CONC Town of Tecumseh LESPERANCE RD S\$144 600 2001 DOCHERTY DR SHIELDS RD 81.2 5 85 5 .0.905 2022 3.402 3671 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 679 2003 WILDBERRY CRES COUNTY RD 42 137.6 5 85 5 .10,506 2022 3.543 3842 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 679 2001 DOCHERTY DR SHIELDS RD S1.345 5 85 5 .10,506 2022 3.5434 3842 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 679 2001 DOCHERTY DR SHIELDS RD 109.7 5 85 5 .10,506 2022 3.5434 3842 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 750 2003 WILDBERRY CRES COUNTY RD 42 119.1 5 85 5 .10,107 2022 3.5434 3860 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 750 2003 WILDBERRY CRES COUNTY RD 42 119.1 5 85 5 .10,107 2022 3.5434 3842 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 750 2003 WILDBERRY CRES COUNTY RD 42 128.4 5 85 5 .10,107 2022 3.5434 3842 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 750 2003 WILDBERRY CRES COUNTY RD 42 128.4 5 85 5 .0,910 2022 3.3343 3603 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 825 1989 WILDBERRY CRES COUNTY RD 42 106.3 5 85 5 .5,997 2022 3.3343 3603 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 825 1989 WILDBERRY CRES COUNTY RD 42 106.3 5 100 5 10,631 2022 3.3353 3604 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 825 1989 WILDBERRY CRES COUNTY RD 42 106.3 5 100 5 10,631 2022 3.3353 3604 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 825 1989 WILDBERRY CRES COUNTY RD 42 106.3 5 100 5 10,631 2022 3.3353 3604 MAIN CONC Town of Tecumseh LESPERANCE RD S\$134 825 1989 WILDBERRY CRES COUNTY RD 42 106.3 5 100 5 10,631 2022 3.3354 3604 MAIN CONC Town of Tecumseh WILDW CRT SCO44 250 1976 STMARK'S																	
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3543 3842 MAIN CONC Town of Tecumseh LESPERANCE RD SS141 675 2001 DOCHERTY DR SHIELDS RD 109.7 5 8.85 \$ 9,325 2022																	
3411 3680 MAIN CONC Town of Tecumseh LESPERANCE RD SS134 750 2003 WILDBERRY CRES COUNTY RD 42 119.1 5 85 5 10.127 2022 128.4 14098 4435 MAIN CONC Town of Tecumseh CESPERANCE RD SS134 750 2003 WILDBERRY CRES COUNTY RD 42 128.4 5 85 5 9,264 2022 128.4 12																	
6236 6421 MAIN CONC Town of Tecumseh ST ALPHONSE ST SS123 750 2009																	
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2505 2678 MAIN CONC Town of Tecumseh RIVERSIDE DR E SC003 375 1976 CHRISTY LANE GRANT AVE 72.3 \$ 70 \$ 5,060 2023																1	
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Object ID	GIS ID	Pipe	Material		Road Name	Road ID	Size		From Road	To Road	Length	repair main	Segment Costs	Year	Subtotal by Year
4605	2389	MAIN		Town of Tecumseh	HAYES AVE	SC037	450		GRANT AVE	EDGEWATER BLVD	47.3	\$ 70		2023	
2241	2411	MAIN		Town of Tecumseh	ST GREGORY'S RD	SC034	450		CADA CRES	EDGEWATER BLVD	118.6	\$ 70		2023	
2501	2674	MAIN		Town of Tecumseh	RIVERSIDE DR E	SC003	525		CHRISTY LANE	GRANT AVE	98.8	\$ 70		2023	
2502	2675	MAIN		Town of Tecumseh	RIVERSIDE DR E	SC003	525		CHRISTY LANE	GRANT AVE	60.4	\$ 70		2023	
2757	2961	MAIN		Town of Tecumseh	DAVID CRES	SC032	600		DAVID CRES	GRANT AVE	91.4	\$ 85		2023	
4622	2406	MAIN		Town of Tecumseh	ST GREGORY'S RD	SC053	600		ST MARK'S RD	ARLINGTON BLVD	65.9	\$ 85		2023	
4624	2408	MAIN		Town of Tecumseh	ST GREGORY'S RD	SC053	600		ST MARK'S RD	ARLINGTON BLVD	13.4	\$ 85		2023	
4446	649	MAIN		Town of Tecumseh	CEDAR CRES	SC042	600		ST MARK'S RD	ST MARK'S RD	11.8	\$ 85		2023	
2754	2958	MAIN		Town of Tecumseh	DAVID CRES	SC032	600		DAVID CRES	GRANT AVE	91.1	\$ 85		2023	
4623	2407	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC053	600		ST MARK'S RD	ARLINGTON BLVD	75.5	\$ 85		2023	
2137	2276	MAIN		Town of Tecumseh	GRANT AVE	SC028	1050		DAVID CRES	DAVID CRES	111.9	\$ 120		2023	
2749	2953	MAIN		Town of Tecumseh	RIVERSIDE DR E	SC004	1050		GRANT AVE	EDGEWATER BLVD	52.5	\$ 120		2023	
2750	2954	MAIN		Town of Tecumseh	RIVERSIDE DR E	SC004	1050		GRANT AVE	EDGEWATER BLVD	30.9	\$ 120		2023	
2751	2955	MAIN		Town of Tecumseh	GRANT AVE	SC033	1050		RIVERSIDE DR E	DAVID CRES	113.7	\$ 120		2023	
1455	1507	MAIN		Town of Tecumseh	CLAPP ST	T128	150		ST PIERRE ST	WILLIAM ST	19.0	\$ 70		2023	
475	453	MAIN		Town of Tecumseh	MCNORTON ST	T198	250		ST PIERRE ST	WILLIAM ST	17.6	\$ 70		2023	
408	387	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T217	300		WILLIAM ST	LACASSE BLVD	21.5	\$ 70		2023	
442	420	MAIN		Town of Tecumseh	ST PIERRE ST	T151	300		CLAPP ST	ST THOMAS ST	122.4	\$ 70		2023	
462	440	MAIN		Town of Tecumseh	ST PIERRE ST	T129	300		WOOD ST	CLAPP ST	172.2	\$ 70		2023	
4440	502	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T198	300	1982	ST PIERRE ST	WILLIAM ST	26.4	\$ 70	\$ 1,848	2023	
128	6136	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T200	375	1993	WILLIAM ST	LACASSE BLVD	78.6	\$ 70	\$ 5,503	2023	
422	402	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T129	375	1980	WOOD ST	CLAPP ST	64.7	\$ 70	\$ 4,531	2023	
469	447	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T197	375	1980	ST THOMAS ST	MCNORTON ST	109.7	\$ 70	\$ 7,677	2023	
472	450	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T197	375	1980	ST THOMAS ST	MCNORTON ST	120.7	\$ 70	\$ 8,452	2023	
476	454	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T198	375	1980	ST PIERRE ST	WILLIAM ST	19.3	\$ 70	\$ 1,348	2023	
558	547	MAIN	CONC	Town of Tecumseh	WILLIAM ST	T153	375	1982	CLAPP ST	ST THOMAS ST	106.7	\$ 70	\$ 7,469	2023	
1190	1242	MAIN	CONC	Town of Tecumseh	CLAPP ST	T130	375	1979	WILLIAM ST	LABUTE ST	78.6	\$ 70	\$ 5,504	2023	
1456	1508	MAIN	CONC	Town of Tecumseh	CLAPP ST	T128	375	1980	ST PIERRE ST	WILLIAM ST	56.0	\$ 70	\$ 3,920	2023	
4441	503	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T200	375	1982	WILLIAM ST	LACASSE BLVD	26.0	\$ 70	\$ 1,817	2023	
389	368	MAIN	CONC	Town of Tecumseh	WILLIAM ST	T216	375	1982	MCNORTON ST	ST DENIS ST	94.3	\$ 70	\$ 6,602	2023	
481	459	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T196	375	1980	LESPERANCE RD	ST PIERRE ST	90.0	\$ 70	\$ 6,297	2023	
438	416	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T214	375	1980	MCNORTON ST	ST DENIS ST	121.3	\$ 70	\$ 8,492	2023	
979	1031	MAIN	CONC	Town of Tecumseh	LABUTE ST	T155	375	1982	CLAPP ST	ST THOMAS ST	115.5	\$ 70	\$ 8,088	2023	
403	382	MAIN	CONC	Town of Tecumseh	WILLIAM ST	T153	450	1982	CLAPP ST	ST THOMAS ST	109.2	\$ 70		2023	
415	394	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T252	450	1974	ST DENIS ST	TECUMSEH RD	133.8	\$ 70	\$ 9,368	2023	
437	415	MAIN		Town of Tecumseh	ST PIERRE ST	T214	450	1980	MCNORTON ST	ST DENIS ST	89.8	\$ 70	\$ 6,287	2023	
459	437	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T129	450	1980	WOOD ST	CLAPP ST	121.1	\$ 70	\$ 8,479	2023	
466	444	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T197	450	1980	ST THOMAS ST	MCNORTON ST	98.9	\$ 70		2023	
1192	1244	MAIN	CONC	Town of Tecumseh	CLAPP ST	T132	450	1979	MEANDER CRES	LACASSE BLVD	77.2	\$ 70	\$ 5,407	2023	
1193	1245	MAIN	CONC	Town of Tecumseh	CLAPP ST	T132	450	1981	MEANDER CRES	LACASSE BLVD	24.6	\$ 70		2023	
386	365	MAIN		Town of Tecumseh	WILLIAM ST	T216	450		MCNORTON ST	ST DENIS ST	88.0	\$ 70		2023	
1191	1243	MAIN		Town of Tecumseh	CLAPP ST	T130	450		WILLIAM ST	LABUTE ST	19.7	\$ 70		2023	
441	419	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T151	450		CLAPP ST	ST THOMAS ST	118.1	\$ 70		2023	
982	1034	MAIN		Town of Tecumseh	LABUTE ST	T155	450		CLAPP ST	ST THOMAS ST	109.5	\$ 70		2023	
429	407	MAIN		Town of Tecumseh	ST PIERRE ST	T129	525		WOOD ST	CLAPP ST	112.3	\$ 70		2023	
521	510	MAIN		Town of Tecumseh	WILLIAM ST	T216	525		MCNORTON ST	ST DENIS ST	87.4	\$ 70		2023	
394	373	MAIN		Town of Tecumseh	WILLIAM ST	T199	600		ST THOMAS ST	MCNORTON ST	114.2	\$ 85		2023	
445	423	MAIN		Town of Tecumseh	CLAPP ST	T127	600		LESPERANCE RD	ST PIERRE ST	13.2	\$ 85		2023	
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												Cost/metre to flush, video,			
Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	repair main	Segment Costs	Year	Subtotal by Year
446	424	MAIN	CONC	Town of Tecumseh	CLAPP ST	T127	600	1980	LESPERANCE RD	ST PIERRE ST	79.1	\$ 85	\$ 6,722	2023	
453	431	MAIN	CONC	Town of Tecumseh	CLAPP ST	T128	600	1980	ST PIERRE ST	WILLIAM ST	14.8	\$ 85	\$ 1,260	2023	
454	432	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T129	600	1980	WOOD ST	CLAPP ST	117.8	\$ 85	\$ 10,017	2023	
1169	1221	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T157	600	1974	CLAPP ST	ST THOMAS ST	109.8	\$ 85	\$ 9,333	2023	
1195	1247	MAIN	CONC	Town of Tecumseh	CLAPP ST	T132	600	1974	MEANDER CRES	LACASSE BLVD	20.5	\$ 85		2023	
53	53	MAIN	CONC	Town of Tecumseh	CLAPP ST	T127	600	1999	LESPERANCE RD	ST PIERRE ST	10.2	\$ 85	\$ 868	2023	
482	460	MAIN	CONC	Town of Tecumseh	ST PIERRE ST	T214	600	1980	MCNORTON ST	ST DENIS ST	97.7	\$ 85	\$ 8,306	2023	
1165	1217	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T157	600	1974	CLAPP ST	ST THOMAS ST	51.8	\$ 85	\$ 4,402	2023	
1166	1218	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T157	600	1974	CLAPP ST	ST THOMAS ST	90.1	\$ 85	\$ 7,663	2023	\$ 392,580
66	66	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T150	600	1999	LESPERANCE RD	ST PIERRE ST	11.0	\$ 85	\$ 938	2024	
278	230	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T196	600	1999	LESPERANCE RD	ST PIERRE ST	10.8	\$ 85	\$ 914	2024	
464	442	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T150	600	1982	LESPERANCE RD	ST PIERRE ST	90.5	\$ 85	\$ 7,697	2024	
1188	1240	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T218	600	1974	HORWOOD CRES	ST DENIS ST	127.5	\$ 85	\$ 10,837	2024	
1194	1246	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T157	600	1981	CLAPP ST	ST THOMAS ST	12.7	\$ 85	\$ 1,080	2024	
397	376	MAIN	CONC	Town of Tecumseh	WILLIAM ST	T199	675	1982	ST THOMAS ST	MCNORTON ST	108.9	\$ 85	\$ 9,257	2024	
555	544	MAIN	CONC	Town of Tecumseh	WILLIAM ST	T199	675	1982	ST THOMAS ST	MCNORTON ST	113.0	\$ 85	\$ 9,605	2024	
546	535	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T154	750	1982	WILLIAM ST	LABUTE ST	80.4	\$ 85	\$ 6,831	2024	
344	323	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T217	900	1982	WILLIAM ST	LACASSE BLVD	88.4	\$ 100	\$ 8,835	2024	
404	383	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T217	900	1982	WILLIAM ST	LACASSE BLVD	88.9	\$ 100	\$ 8,887	2024	
407	386	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T217	900	1982	WILLIAM ST	LACASSE BLVD	8.0	\$ 100	\$ 799	2024	
543	532	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T156	900	1982	LABUTE ST	LACASSE BLVD	81.2	\$ 100	\$ 8,120	2024	
1181	1233	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T201	900	1974	CLARICE AVE	MCNORTON ST	106.8	\$ 100	\$ 10,682	2024	
1184	1236	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T219	900	1974	MCNORTON ST	HORWOOD CRES	110.9	\$ 100	\$ 11,093	2024	
340	319	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T215	900	1982	ST PIERRE ST	WILLIAM ST	42.5	\$ 100	\$ 4,247	2024	
410	389	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T217	900	1974	WILLIAM ST	LACASSE BLVD	13.5	\$ 100	\$ 1,351	2024	
411	390	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T252	900	1974	ST DENIS ST	TECUMSEH RD	82.0	\$ 100	\$ 8,199	2024	
335	314	MAIN	CONC	Town of Tecumseh	ST DENIS ST	T213	900	1982	LESPERANCE RD	ST PIERRE ST	148.4	\$ 100	\$ 14,839	2024	
1172	1224	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T207	1050	1974	ST THOMAS ST	BALLARD ST	82.7	\$ 120	\$ 9,929	2024	
1175	1227	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T204	1050	1974	BALLARD ST	CLARICE AVE	61.8	\$ 120	\$ 7,415	2024	
1178	1230	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T201	1050	1974	CLARICE AVE	MCNORTON ST	96.7	\$ 120	\$ 11,601	2024	
1164	1216	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T207	1050	1981	ST THOMAS ST	BALLARD ST	14.8	\$ 120	\$ 1,777	2024	
2128	2267	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC031	300	1974	JEFFREY PL	DAVID CRES	41.8	\$ 70	\$ 2,927	2024	
2619	2823	MAIN	CONC	Town of Tecumseh	GORDON AVE	SC023	300	1974	CADA CRES	FAIRWAY CRES	82.4	\$ 70	\$ 5,767	2024	
2758	2962	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC017	300	1978	JASON CRT	CADA CRES	83.6	\$ 70		2024	
4614	2398	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC025	300	1978	HAYES AVE	CADA CRES	28.0	\$ 70	\$ 1,963	2024	
2239	2378	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC031	300	1974	JEFFREY PL	DAVID CRES	50.1	\$ 70	\$ 3,507	2024	
1959	2098	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC017	375	1978	JASON CRT	CADA CRES	118.0	\$ 70	\$ 8,262	2024	
2599	2803	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC024	375	1974	GORDON AVE	CADA CRES	92.3	\$ 70	\$ 6,459	2024	
2600	2804	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC024	375	1974	GORDON AVE	CADA CRES	87.1	\$ 70	\$ 6,098	2024	
2601	2805	MAIN	CONC	Town of Tecumseh	GORDON AVE	SC023	375	1974	CADA CRES	FAIRWAY CRES	69.5	\$ 70	\$ 4,864	2024	
2616	2820	MAIN	CONC	Town of Tecumseh	GORDON AVE	SC023	375	1974	CADA CRES	FAIRWAY CRES	90.0	\$ 70	\$ 6,303	2024	
2621	2825	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC017	375	1978	JASON CRT	CADA CRES	96.5	\$ 70	\$ 6,757	2024	
2760	2964	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC017	375	1978	JASON CRT	CADA CRES	24.5	\$ 70	\$ 1,714	2024	
4595	2379	MAIN	CONC	Town of Tecumseh	JEFFREY PL	SC030	375	1974	DAVID CRES	DAVID CRES	112.1	\$ 70	\$ 7,846	2024	
4601	2385	MAIN	CONC	Town of Tecumseh	HAYES AVE	SC026	375	1974	FAIRWAY CRES	GRANT AVE	110.4	\$ 70	\$ 7,727	2024	
4616	2400	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC024	375	1974	GORDON AVE	CADA CRES	93.6	\$ 70		2024	
2134	2273	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC031	375	1974	JEFFREY PL	DAVID CRES	86.6	\$ 70		2024	
2606	2810	MAIN	CONC	Town of Tecumseh	GORDON AVE	SC023	375	1974	CADA CRES	FAIRWAY CRES	85.4	\$ 70		2024	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
2145	2284	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC029	450	1974	JEFFREY PL	GRANT AVE	81.8	\$ 70	\$ 5,724	2024	
4598	2382	MAIN	CONC	Town of Tecumseh	HAYES AVE	SC026	450		FAIRWAY CRES	GRANT AVE	103.5	\$ 70		2024	
4653	2799	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC024	450		GORDON AVE	CADA CRES	72.4	\$ 70		2024	
4654	2800	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC024	450		GORDON AVE	CADA CRES	91.8	\$ 70		2024	
2131	2270	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC031	450		JEFFREY PL	DAVID CRES	88.9	\$ 70		2024	
2486	2659	MAIN	CONC	Town of Tecumseh	CADA CRES	SC018	450		ST GREGORY'S RD	FAIRWAY CRES	41.4	\$ 70		2024	
2130	2269	MAIN	CONC	Town of Tecumseh	DAVID CRES	SC031	450		JEFFREY PL	DAVID CRES	56.6	\$ 70		2024	
2146	2285	MAIN	CONC	Town of Tecumseh	FAIRWAY CRES	SC022	525		GORDON AVE	CADA CRES	87.1	\$ 70		2024	
4612	2396	MAIN	CONC	Town of Tecumseh	CADA CRES	SC130	525		FAIRWAY CRES	GORDON AVE	91.8	\$ 70		2024	
2484	2657	MAIN	CONC	Town of Tecumseh	CADA CRES	SC018	525		ST GREGORY'S RD	FAIRWAY CRES	46.7	\$ 70		2024	
1960	2099	MAIN		Town of Tecumseh	ST GREGORY'S RD	SC017	600		JASON CRT	CADA CRES	3.3	\$ 85		2024	
2483	2656	MAIN	CONC	Town of Tecumseh	CADA CRES	SC019	600		LENORE AVE	FAIRWAY CRES	87.0	\$ 85		2024	
4611	2395	MAIN	CONC	Town of Tecumseh	CADA CRES	SC021	600		GORDON AVE	LENORE AVE	82.7	\$ 85		2024	
2480	2653	MAIN	CONC	Town of Tecumseh	CADA CRES	SC019	675		LENORE AVE	FAIRWAY CRES	95.0	\$ 85		2024	
2280	2450	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC016	750		JASON CRT	JASON CRT	77.7	\$ 85		2024	
2609	2813	MAIN	CONC	Town of Tecumseh	CADA CRES	SC021	750		GORDON AVE	LENORE AVE	14.8	\$ 85		2024	
2610	2814	MAIN	CONC	Town of Tecumseh	CADA CRES	SC021	750		GORDON AVE	LENORE AVE	91.1	\$ 85		2024	
2479	2652	MAIN	CONC	Town of Tecumseh	CADA CRES	SC021	750		GORDON AVE	LENORE AVE	91.7	\$ 85		2024	\$ 349,090
2276	2446	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC016	850		JASON CRT	JASON CRT	124.1	\$ 100		2025	7 3.0,000
2141	2280	MAIN	CONC	Town of Tecumseh	GRANT AVE	SC027	900		DAVID CRES	HAYES AVE	107.0	\$ 100		2025	
4610	2394	MAIN	CONC	Town of Tecumseh	CADA CRES	SC021	900		GORDON AVE	LENORE AVE	39.5	\$ 100		2025	
2144	2283	MAIN	CONC	Town of Tecumseh	GRANT AVE	SC027	900		DAVID CRES	HAYES AVE	40.9	\$ 100		2025	
2274	2444	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC014	950		VILLAGE GROVE DR	JASON CRT	125.9	\$ 100		2025	
2140	2279	MAIN	CONC	Town of Tecumseh	GRANT AVE	SC028	1050		DAVID CRES	DAVID CRES	63.7	\$ 120		2025	
2271	2441	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC013	1075		MANNING RD	VILLAGE GROVE DR	100.8	\$ 120		2025	
3051	3287	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	SC013	1075		MANNING RD	VILLAGE GROVE DR	8.0	\$ 120		2025	
3050	3286	MAIN	CONC	Town of Tecumseh	MANNING RD	T SC004	1200		VILLAGE GROVE DR	ST GREGORY'S RD	5.0	\$ 120		2025	
3049	3285	MAIN	CONC	Town of Tecumseh	MANNING RD	T_SC004	1350		VILLAGE GROVE DR	ST GREGORY'S RD	25.5	\$ 120		2025	
9544	6527	MAIN	PE	Town of Tecumseh	in in the rise	1_36001	100	0	VILLA (OL ONO VE DIX	ST CHECONT STID	6.1	\$ 70		2025	
177	129	MAIN	CONC	Town of Tecumseh	FIRST ST	T248	200		LESPERANCE RD	LESPERANCE RD	35.9	\$ 70		2025	
178	130	MAIN	CONC	Town of Tecumseh	FIRST ST	T248	200	1999	LESPERANCE RD	LESPERANCE RD	16.2	\$ 70		2025	
292	244	MAIN	PVC	Town of Tecumseh	LACHANCE CRT	T246	250		LESPERANCE RD	LESPERANCE RD	0.8	\$ 70		2025	
2511	2684	MAIN	CONC	Town of Tecumseh	EVERGREEN DR	T120	300		GAUTHIER DR	LESPERANCE RD	52.5	ć 70		2025	
296	248	MAIN	PVC	Town of Tecumseh	LACHANCE CRT	T246	375		LESPERANCE RD	LESPERANCE RD	123.2	\$ 70		2025	
343	322	MAIN		Town of Tecumseh	LACHANCE CRT	T246	375		LESPERANCE RD	LESPERANCE RD	13.2	\$ 70		2025	
87	87	MAIN	CONC	Town of Tecumseh	ST JACQUES ST	T210	450		LARAMIE ST	LESPERANCE RD	16.5	\$ 70		2025	
100	100	MAIN	PVC	Town of Tecumseh	ST JACQUES ST	T210	450		LARAMIE ST	LESPERANCE RD	112.4	\$ 70		2025	
113	113	MAIN	PVC	Town of Tecumseh	LANOUE ST	T313	450		LESPERANCE RD	BEDELL ST	72.5	\$ 70		2025	
332	311	MAIN	STEEL	Town of Tecumseh	ST DENIS ST	T213	450		LESPERANCE RD	ST PIERRE ST	72.3	\$ 70		2025	
1261	1313	MAIN	CONC	Town of Tecumseh	ST JACQUES ST	T210	450		LARAMIE ST	LESPERANCE RD	50.2	\$ 70		2025	
2512	2685	MAIN	CONC	Town of Tecumseh	EVERGREEN DR	T120	450		GAUTHIER DR	LESPERANCE RD	107.4	\$ 70		2025	+
2517	2690	MAIN	CONC	Town of Tecumseh	EVERGREEN DR	T120	450		GAUTHIER DR	LESPERANCE RD	98.4	\$ 70		2025	+
2520	2693	MAIN	CONC	Town of Tecumseh	EVERGREEN DR	T120	450		GAUTHIER DR	LESPERANCE RD	5.8	\$ 70		2025	+
4088	4425	MAIN	PVC	Town of Tecumseh	LANOUE ST	T313	450		LESPERANCE RD	BEDELL ST	8.7	\$ 70		2025	+
4088	4425	MAIN	CONC	Town of Tecumseh	ST JACQUES ST	T210	450		LARAMIE ST	LESPERANCE RD	8.7	\$ 70		2025	+
4089	4426	MAIN	CONC	Town of Tecumseh	EVERGREEN DR	T1210	450		GAUTHIER DR	LESPERANCE RD	9.0	\$ 70		2025	+
86	86	MAIN	CONC	Town of Tecumseh	ST JACQUES ST	T210	450		LARAMIE ST	LESPERANCE RD	50.9	\$ 70		2025	+
179	131	MAIN		Town of Tecumseh	FIRST ST	T210	600		LESPERANCE RD	LESPERANCE RD	0.6	\$ 85		2025	+
1/3	131	IVIALIN	CONC	10WITOT TECUTION	1 11/31/31	1240	000	エンフフ	LLSI LIVAINCE IND	LEST LIVAINCE IND	0.0	ده ب	٧ 40	2023	

182 134	Year Subtotal	tal by Year
Add 15 279	2025	
228 180	2025	
4420 284 MAIN CONC Town of Tecumseh LESPERANCE RD T299 600 1987 RENAUD ST HIGHWAY 2 43.9 \$ 85 \$ 6,745	2025	
4430 294 MAIN CONC Town of Tecumseh LESPERANCE RD T299 600 1987 RENAUD ST HIGHWAY 2 43.9 5 5 3,734 5 5 5 5 5 5 5 5 5	2025	
S6 S6 MAIN CONC Town of Tecumseh PAPINEAU CRT T124 750 1999 LESPERANCE RD LESPERANCE RD 7.5 \$ 8.5 \$ 6.41	2025	
77	2025	
78 78 MAIN CONC Town of Tecumseh LESPERANCE RD T211 750 1999 MCNORTON ST STJACQUES ST 40.5 \$ 8.5 \$ 3,445 223 175 MAIN CONC Town of Tecumseh LESPERANCE RD 1307 750 1993 ARBOUR ST RENAUD ST 117.6 \$ 8.5 \$ 9,996 1242 1294 MAIN CONC Town of Tecumseh PAPINEAU CRT 1124 750 1977 LESPERANCE RD LESPERANCE RD 143.1 \$ 8.5 \$ 9,996 1247 1299 MAIN CONC Town of Tecumseh PAPINEAU CRT 7124 750 1977 LESPERANCE RD LESPERANCE RD 143.1 \$ 8.5 \$ 5.92 1248 1300 MAIN CONC Town of Tecumseh PAPINEAU CRT 7124 750 1977 LESPERANCE RD LESPERANCE RD 143.1 \$ 8.5 \$ 5,922 1248 130	2025	
223 175 MAIN CONC Town of Tecumseh LESPERANCE RD T307 750 1993 ARBOUR ST RENAUD ST 117.6 \$ 85 \$ 9.996 1242 1294 MAIN CONC Town of Tecumseh PAPINEAU CRT T124 750 1977 LESPERANCE RD LESPERANCE RD T307 T	2025	
1242 1294 MAIN CONC Town of Tecumseh PAPINEAU CRT T124 750 1977 LESPERANCE RD LESPERANCE RD T.0 1971 LESPERANCE RD LESPERANCE RD T.0 1972 1973 1974 1975 197	2025	
1247 1299 MAIN CONC Town of Tecumseh PAPINEAU CRT T124 750 1977 LESPERANCE RD LESPERANCE RD T7.0 \$ 85 \$ 592	2025	
1248 1300 MAIN CONC Town of Tecumseh PAPINEAU CRT T124 750 1977 LESPERANCE RD LESPERANCE RD 76.3 \$ 85 \$ 6,482 1259 1311 MAIN CONC Town of Tecumseh VALENTE CRT T117 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 60.7 \$ 85 \$ 5,159 1600 1674 MAIN CONC Town of Tecumseh VALENTE CRT T116 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1604 1678 MAIN CONC Town of Tecumseh VALENTE CRT T115 750 1978 VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1608 1682 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 41.0 \$ 85 \$ 9,213 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 5,533 14416 280 MAIN CONC Town of Tecumseh LESPERANCE RD T299 750 1993 RENAUD ST HIGHWAY 2 52.8 \$ 85 \$ 9,213 183 135 MAIN CONC Town of Tecumseh FIRST ST T248 900 1999 LESPERANCE RD LESPERANCE RD 7.3 5 100 \$ 728 1933 132 MAIN CONC Town of Tecumseh ST DENIS ST T213 900 1983 LESPERANCE RD ST PIERRE ST 11.9 100 \$ 1,193 1258 1310 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT VALENTE CRT 44.8 5 100 \$ 4,476 1258 1371 MAIN CONC Town of Tecumseh LESPERANCE RD SSO48 900 1987 HIGHWAY 2 WEST LAKE DR 7.0.2 5 100 \$ 7,021 129 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1983 LANOUE ST ARBOUR ST 114.3 5 100 \$ 11,430 14,440 14,4	2025	
1259 1311 MAIN CONC Town of Tecumseh VALENTE CRT T117 750 1978 VALENTE CRT VALENTE CRT C6.7 \$ 85 \$ 5,159 1600 1674 MAIN CONC Town of Tecumseh VALENTE CRT T116 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT C6.9 \$ 85 \$ 5,600 1604 1678 MAIN CONC Town of Tecumseh VALENTE CRT T115 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1608 1682 MAIN CONC Town of Tecumseh VALENTE CRT T113 750 1978 VALENTE CRT V	2025	
1259 1311 MAIN CONC Town of Tecumseh VALENTE CRT T117 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 60.7 \$ 85 \$ 5,159 1600 1674 MAIN CONC Town of Tecumseh VALENTE CRT T116 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 5,600 1604 1678 MAIN CONC Town of Tecumseh VALENTE CRT T115 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1608 1682 MAIN CONC Town of Tecumseh VALENTE CRT T113 750 1978 VALENTE CRT VALENTE CRT VALENTE CRT 41.0 \$ 85 \$ 9,213 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 5,533 183 135 MAIN CONC Town of Tecumseh LESPERANCE RD T299 750 1993 RENAUD ST HIGHWAY 2 52.8 \$ 85 \$ 5 \$ 3,486 \$ 85 \$ \$ 9,213 175 1	2025	
1600 1674 MAIN CONC Town of Tecumseh VALENTE CRT T116 750 1978 VALENTE CRT VALENTE CRT 65.9 \$ 85 \$ 5,600 1604 1678 MAIN CONC Town of Tecumseh VALENTE CRT T115 750 1978 VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1608 1682 MAIN CONC Town of Tecumseh VALENTE CRT T113 750 1978 VALENTE CRT VALENTE CRT 41.0 \$ 85 \$ 9,213 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 3,486 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 3,486 1605 1679 <t< td=""><td>2025</td><td></td></t<>	2025	
1604 1678 MAIN CONC Town of Tecumseh VALENTE CRT 115 750 1978 VALENTE CRT VALENTE CRT 108.4 \$ 85 \$ 9,213 1608 1682 MAIN CONC Town of Tecumseh VALENTE CRT T113 750 1978 VALENTE CRT VALENTE CRT 41.0 \$ 85 \$ 3,486 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT VALENTE CRT 41.0 \$ 85 \$ 3,486 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 3,486 1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 9,213 4416 280 MAIN CONC Town of Tecumseh LESPERANCE RD 1299 1299 LESPERANCE RD <td>2025</td> <td></td>	2025	
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1605 1679 MAIN CONC Town of Tecumseh VALENTE CRT T114 750 1978 VALENTE CRT TECUMSEH RD 65.1 \$ 85 \$ 5,533 4416 280 MAIN CONC Town of Tecumseh LESPERANCE RD T299 750 1993 RENAUD ST HIGHWAY 2 52.8 \$ 85 \$ 4,488 183 135 MAIN CONC Town of Tecumseh FIRST ST T248 900 1999 LESPERANCE RD LESPERANCE RD 7.3 \$ 100 \$ 728 333 312 MAIN CONC Town of Tecumseh ST DENIS ST T213 900 1983 LESPERANCE RD ST PIERRE ST 11.9 \$ 100 \$ 1,193 1258 1310 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 44.8 \$ 100 \$ 100 \$ 7,021 2835 3071 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 <	2025	
4416 280 MAIN CONC Town of Tecumseh LESPERANCE RD T299 750 1993 RENAUD ST HIGHWAY 2 52.8 \$ 85 \$ 4,488 183 135 MAIN CONC Town of Tecumseh FIRST ST T248 900 1999 LESPERANCE RD LESPERANCE RD 7.3 \$ 100 \$ 728 333 312 MAIN CONC Town of Tecumseh ST DENIS ST T213 900 1983 LESPERANCE RD ST PIERRE ST 11.9 \$ 100 \$ 1,193 1258 1310 MAIN CONC Town of Tecumseh VALENTE CRT VALENTE CRT VALENTE CRT 44.8 \$ 100 \$ 1,193 2835 3071 MAIN CONC Town of Tecumseh LESPERANCE RD SS048 900 1987 HIGHWAY 2 WEST LAKE DR 70.2 \$ 100 \$ 7,021 219 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1993 LANOUE ST ARBOUR ST 114.3 <td>2025</td> <td></td>	2025	
183 135 MAIN CONC Town of Tecumseh FIRST ST T248 900 1999 LESPERANCE RD LESPERANCE RD 7.3 \$ 100 \$ 728 333 312 MAIN CONC Town of Tecumseh ST DENIS ST T213 900 1983 LESPERANCE RD ST PIERRE ST 11.9 \$ 100 \$ 1,193 1258 1310 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 44.8 \$ 100 \$ 4,476 2835 3071 MAIN CONC Town of Tecumseh LESPERANCE RD SS048 900 1987 HIGHWAY 2 WEST LAKE DR 70.2 \$ 100 \$ 7,021 219 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1993 LANOUE ST ARBOUR ST 114.3 \$ 100 \$ 11,430 249 201 <td< td=""><td>2025</td><td></td></td<>	2025	
333 312 MAIN CONC Town of Tecumseh ST DENIS ST T213 900 1983 LESPERANCE RD ST PIERRE ST 11.9 \$ 100 \$ 1,193 1258 1310 MAIN CONC Town of Tecumseh VALENTE CRT VALENTE CRT VALENTE CRT 44.8 \$ 100 \$ 4,476 2835 3071 MAIN CONC Town of Tecumseh LESPERANCE RD SS048 900 1987 HIGHWAY 2 WEST LAKE DR 70.2 \$ 100 \$ 7,021 219 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1993 LANOUE ST ARBOUR ST 114.3 \$ 100 \$ 11,430 249 201 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 8.6 \$ 100 \$ 862	2025	
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2835 3071 MAIN CONC Town of Tecumseh LESPERANCE RD SS048 900 1987 HIGHWAY 2 WEST LAKE DR 70.2 \$ 100 \$ 7,021 219 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1993 LANOUE ST ARBOUR ST 114.3 \$ 100 \$ 11,430 249 201 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 8.6 \$ 100 \$ 862	2025	
219 171 MAIN CONC Town of Tecumseh LESPERANCE RD T311 900 1993 LANOUE ST ARBOUR ST 114.3 \$ 100 \$ 11,430 249 201 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 8.6 \$ 100 \$ 862	2025	
249 201 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1978 VALENTE CRT VALENTE CRT 8.6 \$ 100 \$ 862	2025	
	2025	
250 202 MAIN CONC Town of Tecumseh VALENTE CRT T117 900 1987 VALENTE CRT VALENTE CRT 8.6 \$ 100 \$ 857	2025	
76	2025	
276	2025	
50 50 MAIN CONC Town of Tecumseh LESPERANCE RD T126 1950 1999 EVERGREEN DR CLAPP ST 147.6 \$ 135 \$ 19,927	2025	
59 59 MAIN CONC Town of Tecumseh LESPERANCE RD T149 1950 1999 GAUTHIER DR ST THOMAS ST 162.1 \$ 135 \$ 21,884	2025	
67 67 MAIN CONC Town of Tecumseh LESPERANCE RD T187 1950 1999 ST THOMAS ST ORCHARD DR 152.0 \$ 135 \$ 20,522		356,472
73 73 MAIN CONC Town of Tecumseh LESPERANCE RD T195 1950 1999 BAILLARGEON DR MCNORTON ST 154.8 \$ 135 \$ 20,895	2026	,
243 195 MAIN CONC Town of Tecumseh LESPERANCE RD T118 1950 1987 OLIVER DR VALENTE CRT 196.6 \$ 135 \$ 26,540	2026	
253 205 MAIN CONC Town of Tecumseh LESPERANCE RD T121 1950 1999 VALENTE CRT EVERGREEN DR 152.0 \$ 135 \$ 20,524	2026	
4378 6287 MAIN PVC Town of Tecumseh REME ST T296 150 2000 POISSON ST ST ANNE BLVD 42.5 \$ 70 \$ 2,973	2026	
4376 6285 MAIN PVC Town of Tecumseh REME ST T296 150 2000 POISSON ST ST ANNE BLVD 24.3 \$ 70 \$ 1,700	2026	
4050 4387 MAIN PVC Town of Tecumseh RENAUD ST T289 200 2006 ST ANNE BLVD LESPERANCE RD 84.8 \$ 70 \$ 5,935	2026	
4053 4390 MAIN PVC Town of Tecumseh ST ANNE BLVD T290 300 2006 ARBOUR ST RENAUD ST 77.3 \$ 70 \$ 5,410	2026	
206 158 MAIN PVC Town of Tecumseh BEDELL ST T306 300 2007 ARBOUR ST RENAUD ST 90.7 \$ 70 \$ 6,349	2026	
321 300 MAIN PVC Town of Tecumseh LANOUE ST T315 300 2007 BEDELL ST LANOUE ST 8.6 \$ 70 \$ 602	2026	
322 301 MAIN CONC Town of Tecumseh LANOUE ST T315 300 1991 BEDELL ST LANOUE ST 34.5 \$ 70 \$ 2,418	2026	
328 307 MAIN CONC Town of Tecumseh LANOUE ST T315 300 1991 BEDELL ST LANOUE ST 57.0 \$ 70 \$ 3,991	2026	
963 1015 MAIN CONC Town of Tecumseh POISSON ST T297 300 1980 TECUMSEH RD REME ST 39.4 \$ 70 \$ 2,760	2026	
972 1024 MAIN PVC Town of Tecumseh POISSON ST T293 300 1991 REME ST ARBOUR ST 106.8 \$ 70 \$ 7,473	2026	
1206 1258 MAIN CONC Town of Tecumseh POISSON ST T292 300 2000 ST ANNE BLVD ST ANNE BLVD 120.0 \$ 70 \$ 8,402	2026	
1213 1265 MAIN CONC Town of Tecumseh ARBOUR ST T291 300 2000 POISSON ST ST ANNE BLVD 12.4 \$ 70 \$ 869	2026	
1407 1459 MAIN PVC Town of Tecumseh ST ANNE BLVD T295 300 1990 REME ST ARBOUR ST 79.7 \$ 70 \$ 5,580	2026	
4055 4392 MAIN PVC Town of Tecumseh ST ANNE BLVD T290 300 2006 ARBOUR ST RENAUD ST 31.7 \$ 70 \$ 2,222	2026	

Object I	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
4069	4406	MAIN	PVC	Town of Tecumseh	LANOUE ST	T315	300	2007	BEDELL ST	LANOUE ST	111.8	\$ 70	\$ 7,825	2026	
4075	4412	MAIN	PVC	Town of Tecumseh	LANOUE ST	T315	300	2007	BEDELL ST	LANOUE ST	3.2	\$ 70		2026	
4076	4413	MAIN	PVC	Town of Tecumseh	LANOUE ST	T315	300	2007	BEDELL ST	LANOUE ST	7.8	\$ 70		2026	
4078	4415	MAIN		Town of Tecumseh	LANOUE ST	T313	300	2007	LESPERANCE RD	BEDELL ST	95.3	\$ 70		2026	
4080	4417	MAIN		Town of Tecumseh	LANOUE ST	T315	300	1991	BEDELL ST	LANOUE ST	51.0	\$ 70		2026	
4079	4416	MAIN		Town of Tecumseh	LANOUE ST	T315	300	1991	BEDELL ST	LANOUE ST	34.2	\$ 70		2026	
969	1021	MAIN		Town of Tecumseh	POISSON ST	T297	375		TECUMSEH RD	REME ST	88.9	\$ 70		2026	
1199	1251	MAIN		Town of Tecumseh	POISSON ST	T292	375		ST ANNE BLVD	ST ANNE BLVD	124.8	\$ 70		2026	
1212	1264	MAIN		Town of Tecumseh	ARBOUR ST	T291	375	1950	POISSON ST	ST ANNE BLVD	66.5	\$ 70		2026	
1218	1270	MAIN		Town of Tecumseh	ARBOUR ST	T294	375		ST ANNE BLVD	LESPERANCE RD	104.2	\$ 70		2026	
1404	1456	MAIN		Town of Tecumseh	ST ANNE BLVD	T298	375		TECUMSEH RD	REME ST	99.7	\$ 70		2026	+
319	298	MAIN		Town of Tecumseh	LANOUE ST	T315	375		BEDELL ST	LANOUE ST	51.9	\$ 70		2026	+
4414	278	MAIN		Town of Tecumseh	TECUMSEH RD	T268	375	1981	BEDELL ST	VIA RAIL	59.5	\$ 70		2026	
1211	1263	MAIN		Town of Tecumseh	ARBOUR ST	T291	375	1950	POISSON ST	ST ANNE BLVD	92.0	\$ 70		2026	
105	105	MAIN		Town of Tecumseh	ARBOUR ST	T310	450	1993	BEDELL ST	LANOUE ST	141.0	\$ 70		2026	
304	259	MAIN		Town of Tecumseh	RENAUD ST	T305	450	1991	BEDELL ST	BEDELL ST	110.8	\$ 70		2026	-
964	1016	MAIN		Town of Tecumseh	POISSON ST	T297	450		TECUMSEH RD	REME ST	53.4	\$ 70		2026	-
1077	1129	MAIN		Town of Tecumseh	TECUMSEH RD	T261	450		WINDSOR	SOUTHFIELD DR	62.7	\$ 70		2026	-
4068	4405	MAIN		Town of Tecumseh	BEDELL ST	T309	450		LANOUE ST	ARBOUR ST	111.5	\$ 70		2026	+
				Town of Tecumseh					TECUMSEH RD		24.3	\$ 70		2026	+
1219	1271	MAIN			ST ANNE BLVD	T298	450			REME ST					
1399	1451	MAIN		Town of Tecumseh	ST ANNE BLVD	T298	450		TECUMSEH RD	REME ST	54.0	\$ 70		2026	
195	147	MAIN		Town of Tecumseh	ARBOUR ST	T310	450		BEDELL ST	LANOUE ST	11.2	\$ 70		2026	
962	1014	MAIN		Town of Tecumseh	POISSON ST	T297	450		TECUMSEH RD	REME ST	24.2	\$ 70		2026	
1214	1266	MAIN		Town of Tecumseh	ARBOUR ST	T291	450		POISSON ST	ST ANNE BLVD	94.0	\$ 70		2026	
1216	1268	MAIN		Town of Tecumseh	ARBOUR ST	T294	525		ST ANNE BLVD	LESPERANCE RD	121.6	\$ 70		2026	
196	148	MAIN		Town of Tecumseh	ARBOUR ST	T308	600		LESPERANCE RD	BEDELL ST	120.5	\$ 85		2026	
301	253	MAIN		Town of Tecumseh	RENAUD ST	T300	600		LESPERANCE RD	DEMARSE CRT	100.4	\$ 85		2026	
302	256	MAIN		Town of Tecumseh	RENAUD ST	T300	600		LESPERANCE RD	DEMARSE CRT	43.7	7		2026	
1074	1126	MAIN		Town of Tecumseh	TECUMSEH RD	T261	600		WINDSOR	SOUTHFIELD DR	14.3	\$ 85		2026	
4067	4404	MAIN		Town of Tecumseh	BEDELL ST	T314	600		TECUMSEH RD	LANOUE ST	9.1	\$ 85		2026	
4413	277	MAIN		Town of Tecumseh	BEDELL ST	T314	600		TECUMSEH RD	LANOUE ST	80.0	\$ 85		2026	
834	864	MAIN		Town of Tecumseh	TECUMSEH RD	T262	600		SOUTHFIELD DR	SHAWNEE RD	40.0	\$ 85		2026	
350	329	MAIN		Town of Tecumseh	LESPERANCE RD	T299	600		RENAUD ST	HIGHWAY 2	163.2	\$ 85		2026	
354	333	MAIN	CONC	Town of Tecumseh	RENAUD ST	T300	600		LESPERANCE RD	DEMARSE CRT	76.5	\$ 85		2026	
190	142	MAIN	CONC	Town of Tecumseh	ARBOUR ST	T308	600		LESPERANCE RD	BEDELL ST	26.0	\$ 85		2026	
189	141	MAIN	CONC	Town of Tecumseh	ARBOUR ST	T308	600	1993	LESPERANCE RD	BEDELL ST	70.4	\$ 85		2026	
1073	1125	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T261	675	1980	WINDSOR	SOUTHFIELD DR	89.0	\$ 85	\$ 7,567	2026	
4412	276	MAIN	CONC	Town of Tecumseh	BEDELL ST	T314	675	1981	TECUMSEH RD	LANOUE ST	20.8	\$ 85	\$ 1,770	2026	
216	168	MAIN	CONC	Town of Tecumseh	ARBOUR ST	T294	750	1993	ST ANNE BLVD	LESPERANCE RD	17.7	\$ 85	\$ 1,506	2026	
1069	1121	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T262	750	1980	SOUTHFIELD DR	SHAWNEE RD	87.7	\$ 85	\$ 7,457	2026	
1038	1090	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T262	1050	1980	SOUTHFIELD DR	SHAWNEE RD	69.6	\$ 120	\$ 8,352	2026	
1037	1089	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T262	1200	1980	SOUTHFIELD DR	SHAWNEE RD	58.7	\$ 120	\$ 7,050	2026	
833	863	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T262	1200	1980	SOUTHFIELD DR	SHAWNEE RD	91.7	\$ 120	\$ 10,999	2026	
1382	1434	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T095	200	1974	WOODBRIDGE DR	CENTENNIAL DR	1.1	\$ 70		2026	
1303	1355	MAIN	CONC	Town of Tecumseh	DILLON DR	T036	250	1974	WOODBRIDGE DR	CENTENNIAL DR	31.0	\$ 70	\$ 2,167	2026	\$ 360,830
2436	2609	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T092	250	1974	REVLAND DR	WOODBRIDGE DR	48.9	\$ 70	\$ 3,426	2027	
1345	1397	MAIN		Town of Tecumseh	GRACE RD	T181	300		LITTLE RIVER BLVD	ST THOMAS ST	138.8	\$ 70		2027	
1348	1400	MAIN		Town of Tecumseh	ST THOMAS ST	T182	300		GRACE RD	MANNING RD	86.3	\$ 70		2027	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
1349	1401	MAIN	CONC	Town of Tecumseh	GRACE RD	T181	300	1979	LITTLE RIVER BLVD	ST THOMAS ST	63.6	\$ 70	\$ 4,454	2027	
1355	1407	MAIN	CONC	Town of Tecumseh	GRACE RD	T181	300	1977	LITTLE RIVER BLVD	ST THOMAS ST	129.8	\$ 70	\$ 9,085	2027	
2470	2643	MAIN	CONC	Town of Tecumseh	AMBERLY CRES	T237	300	1979	ST THOMAS ST	GREEN VALLEY DR	34.2	\$ 70	\$ 2,396	2027	
2477	2650	MAIN	CONC	Town of Tecumseh	RIDEAU PL	T176	300	1979	ST THOMAS ST	ST THOMAS ST	76.3	\$ 70	\$ 5,340	2027	
1884	2023	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T100	300	1979	DONALDA CRT	GRACE RD	88.4	\$ 70	\$ 6,187	2027	
1350	1402	MAIN	CONC	Town of Tecumseh	GRACE RD	T181	375	1992	LITTLE RIVER BLVD	ST THOMAS ST	136.8	\$ 70	\$ 9,573	2027	
1393	1445	MAIN	CONC	Town of Tecumseh	DILLON DR	T035	375	1974	MICHAEL DR	WOODBRIDGE DR	48.7	\$ 70	\$ 3,407	2027	
1394	1446	MAIN	CONC	Town of Tecumseh	DILLON DR	T035	375	1974	MICHAEL DR	WOODBRIDGE DR	62.9	\$ 70	\$ 4,404	2027	
1891	2030	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T097	375	1979	CENTENNIAL DR	DILLON DR	118.4	\$ 70	\$ 8,285	2027	
2433	2606	MAIN	CONC	Town of Tecumseh	PAISLEY CIR	T178	375	1979	ST THOMAS ST	ST THOMAS ST	66.6	\$ 70	\$ 4,664	2027	
2471	2644	MAIN	CONC	Town of Tecumseh	AMBERLY CRES	T237	375	1979	ST THOMAS ST	GREEN VALLEY DR	109.4	\$ 70	\$ 7,661	2027	
4555	1796	MAIN	CONC	Town of Tecumseh	CENTENNIAL DR	T170	375	1972	LITTLE RIVER BLVD	ST THOMAS ST	109.9	\$ 70	\$ 7,694	2027	
4558	1799	MAIN		Town of Tecumseh	CENTENNIAL DR	T170	375	1972	LITTLE RIVER BLVD	ST THOMAS ST	117.3	\$ 70		2027	
4562	1803	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T100	375	1979	DONALDA CRT	GRACE RD	81.7	\$ 70		2027	
1318	1370	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T168	375	1974	LITTLE RIVER BLVD	ST THOMAS ST	88.0	\$ 70	\$ 6,162	2027	
2416	2589	MAIN	CONC	Town of Tecumseh	VERONICA CRT	T173	375	1979	DILLON DR	DILLON DR	98.9	\$ 70		2027	
1392	1444	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T093	450		DILLON DR	LITTLE RIVER BLVD	40.8	\$ 70		2027	
2467	2640	MAIN	CONC	Town of Tecumseh	AMBERLY CRES	T237	450	1979	ST THOMAS ST	GREEN VALLEY DR	17.1	\$ 70		2027	
2468	2641	MAIN	CONC	Town of Tecumseh	AMBERLY CRES	T237	450	1979	ST THOMAS ST	GREEN VALLEY DR	75.5	\$ 70		2027	
2474	2647	MAIN		Town of Tecumseh	AMBERLY CRES	T237	450	1979	ST THOMAS ST	GREEN VALLEY DR	69.1	\$ 70		2027	
2544	2717	MAIN		Town of Tecumseh	ST THOMAS ST	T171	450	1979	CENTENNIAL DR	DILLON DR	41.7	\$ 70		2027	
2547	2720	MAIN		Town of Tecumseh	ST THOMAS ST	T171	450		CENTENNIAL DR	DILLON DR	18.2	\$ 70		2027	
2548	2721	MAIN		Town of Tecumseh	ST THOMAS ST	T171	450	1979	CENTENNIAL DR	DILLON DR	43.0	\$ 70		2027	
4554	1795	MAIN		Town of Tecumseh	CENTENNIAL DR	T170	450	1972	LITTLE RIVER BLVD	ST THOMAS ST	116.0	\$ 70		2027	
650	639	MAIN		Town of Tecumseh	GRACE RD	T101	450		RIVERSIDE DR E	LITTLE RIVER BLVD	4.2	\$ 70		2027	
1315	1367	MAIN		Town of Tecumseh	WOODBRIDGE DR	T168	525	1974	LITTLE RIVER BLVD	ST THOMAS ST	110.7	\$ 70		2027	
1344	1396	MAIN	CONC	Town of Tecumseh	GRACE RD	T181	525	1992	LITTLE RIVER BLVD	ST THOMAS ST	126.5	\$ 70	\$ 8,854	2027	
1389	1441	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T093	525	1974	DILLON DR	LITTLE RIVER BLVD	119.4	\$ 70	\$ 8,356	2027	
2464	2637	MAIN		Town of Tecumseh	AMBERLY CRES	T237	525	1979	ST THOMAS ST	GREEN VALLEY DR	100.1	\$ 70		2027	
4559	1800	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T098	525	1979	DILLON DR	DONALDA CRT	107.6	\$ 70		2027	
1311	1363	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T168	600	1974	LITTLE RIVER BLVD	ST THOMAS ST	28.5	\$ 85		2027	
1383	1435	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T093	600	1974	DILLON DR	LITTLE RIVER BLVD	28.9	\$ 85		2027	
1384	1436	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T093	600	1974	DILLON DR	LITTLE RIVER BLVD	106.4	\$ 85		2027	
2457	2630	MAIN		Town of Tecumseh	AMBERLY CRES	T237	600		ST THOMAS ST	GREEN VALLEY DR	77.4	\$ 85		2027	
2460	2633	MAIN		Town of Tecumseh	AMBERLY CRES	T237	600	1979	ST THOMAS ST	GREEN VALLEY DR	60.2	\$ 85		2027	
2461	2634	MAIN	CONC	Town of Tecumseh	AMBERLY CRES	T237	600	1979	ST THOMAS ST	GREEN VALLEY DR	99.0	\$ 85	\$ 8,416	2027	
1312	1364	MAIN		Town of Tecumseh	WOODBRIDGE DR	T168	600	1974	LITTLE RIVER BLVD	ST THOMAS ST	99.9	\$ 85		2027	
2438	2611	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T094	675	1974	WOODBRIDGE DR	WOODBRIDGE DR	62.1	\$ 85		2027	
2439	2612	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T095	675	1974	WOODBRIDGE DR	CENTENNIAL DR	13.5	\$ 85		2027	
1307	1359	MAIN	STEEL	Town of Tecumseh	WOODBRIDGE DR	T168	1200		LITTLE RIVER BLVD	ST THOMAS ST	75.2	\$ 120		2027	
1308	1360	MAIN		Town of Tecumseh	WOODBRIDGE DR	T168	1200		LITTLE RIVER BLVD	ST THOMAS ST	40.4	\$ 120		2027	
1398	1450	MAIN		Town of Tecumseh	GREEN VALLEY DR	T236	1200		AMBERLY CRES	BRUNELLE CRES	38.4	\$ 120		2027	
2550	2723	MAIN	STEEL	Town of Tecumseh	LITTLE RIVER BLVD	T095	1200		WOODBRIDGE DR	CENTENNIAL DR	11.2	\$ 120		2027	
2551	2724	MAIN		Town of Tecumseh	LITTLE RIVER BLVD	T095	1200		WOODBRIDGE DR	CENTENNIAL DR	57.7	\$ 120		2027	
1896	2035	MAIN		Town of Tecumseh	DILLON DR	T174	1350		LITTLE RIVER BLVD	VERONICA CRT	92.0	\$ 120		2027	
2413	2586	MAIN		Town of Tecumseh	DILLON DR	T172	1350		VERONICA CRT	ST THOMAS ST	67.9	\$ 120		2027	
2422	2595	MAIN		Town of Tecumseh	ST THOMAS ST	T177	1350		RIDEAU PL	AMBERLY CRES	90.2	\$ 120		2027	
2427	2600	MAIN		Town of Tecumseh	ST THOMAS ST	T179	1350		AMBERLY CRES	GREEN VALLEY DR	77.3	\$ 120		2027	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
2430	2603	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T179	1350	1979	AMBERLY CRES	GREEN VALLEY DR	30.7	\$ 120	\$ 3,683	2027	
1898	2037	MAIN	CONC	Town of Tecumseh	DILLON DR	T174	1350	1979	LITTLE RIVER BLVD	VERONICA CRT	76.7	\$ 120	\$ 9,205	2027	
2419	2592	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T175	1350	1979	DILLON DR	RIDEAU PL	74.5	\$ 120	\$ 8,940	2027	
1397	1449	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T238	1350	1979	ST THOMAS ST	AMBERLY CRES	63.5	\$ 120		2027	
4145	4499	MAIN	PVC	Town of Tecumseh	LESPERANCE RD	SS048	200		HIGHWAY 2	WEST LAKE DR	16.9	\$ 70		2027	
2	2	MAIN	PVC	Town of Tecumseh	ST AGNES DR	SS081	300	2006	VERDANT CRT	CANDLEWOOD DR	38.8	\$ 70	\$ 2,719	2027	
2969	3205	MAIN	CONC	Town of Tecumseh	CANDLEWOOD DR	SS086	300	1989	VICKERY LANE	DESLIPPE DR	76.6	\$ 70		2027	
3227	3474	MAIN	CONC	Town of Tecumseh	MAISONNEUVE ST	SS008	300	1998	CORBI LANE	SHAWNEE RD	94.7	\$ 70		2027	
3350	3619	MAIN	PVC	Town of Tecumseh	GOUIN ST	SS012	300	1997	CORBI LANE	SHAWNEE RD	15.9	\$ 70	\$ 1,114	2027	\$ 350,085
3212	3459	MAIN	CONC	Town of Tecumseh	KAVANAGH DR	SS016	300	1989	MAYRAND CRES	MAYRAND CRES	50.4	\$ 70	\$ 3,529	2028	
129	6137	MAIN	PVC	Town of Tecumseh	GOUIN ST	SS012	300	1997	CORBI LANE	SHAWNEE RD	240.9	\$ 70	\$ 16,862	2028	
3215	3462	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	375	1989	KAVANAGH DR	KAVANAGH DR	67.6	\$ 70	\$ 4,732	2028	
3222	3469	MAIN	CSP	Town of Tecumseh	CORBI LANE	SS009	375	1999	MAISONNEUVE ST	MAISONNEUVE ST	69.5	\$ 70	\$ 4,862	2028	
4707	3554	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	375	1989	KAVANAGH DR	KAVANAGH DR	133.3	\$ 70	\$ 9,332	2028	
3211	3458	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	375	1989	KAVANAGH DR	KAVANAGH DR	25.4	\$ 70	\$ 1,781	2028	
6	6	MAIN	PVC	Town of Tecumseh	CANDLEWOOD DR	SS082	375	2006	ST AGNES DR	ST AGNES DR	70.4	\$ 70	\$ 4,930	2028	
2575	2748	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS038	450	1997	CALVARY CRT	GOUIN ST	92.1	\$ 70	\$ 6,448	2028	
3001	3237	MAIN	CONC	Town of Tecumseh	CALVARY CRT	SS040	450	1997	CHORNOBY CRES	CALVARY CRT	115.8	\$ 70	\$ 8,104	2028	
3216	3463	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	450	1989	KAVANAGH DR	KAVANAGH DR	75.9	\$ 70	\$ 5,315	2028	
3219	3466	MAIN	CSP	Town of Tecumseh	CORBI LANE	SS009	450	1999	MAISONNEUVE ST	MAISONNEUVE ST	48.1	\$ 70	\$ 3,365	2028	
3283	3530	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS027	450	1987	WEST LAKE DR	CHORNOBY CRES	122.0	\$ 70	\$ 8,537	2028	
3286	3533	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS027	450	1987	WEST LAKE DR	CHORNOBY CRES	35.3	\$ 70	\$ 2,472	2028	
4684	3004	MAIN	RCONC	Town of Tecumseh	LESPERANCE RD	SS042	450	1993	LESSARD ST	CALVARY CRT	105.3	\$ 70	\$ 7,370	2028	
4702	3549	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	450	1989	KAVANAGH DR	KAVANAGH DR	72.0	\$ 70	\$ 5,041	2028	
2998	3234	MAIN	CONC	Town of Tecumseh	CALVARY CRT	SS040	450	1999	CHORNOBY CRES	CALVARY CRT	80.9	\$ 70	\$ 5,666	2028	
4683	3003	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS042	450	1985	LESSARD ST	CALVARY CRT	44.9	\$ 70	\$ 3,143	2028	
2974	3210	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS038	525	1997	CALVARY CRT	GOUIN ST	132.7	\$ 70	\$ 9,286	2028	
3217	3464	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS009	525	1999	MAISONNEUVE ST	MAISONNEUVE ST	38.1	\$ 70	\$ 2,669	2028	
3218	3465	MAIN	CSP	Town of Tecumseh	CORBI LANE	SS009	525	1999	MAISONNEUVE ST	MAISONNEUVE ST	78.7	\$ 70	\$ 5,506	2028	
3280	3527	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS025	525	1987	WEST LAKE DR	GOUIN ST	119.2	\$ 70	\$ 8,341	2028	
2563	2736	MAIN	RCONC	Town of Tecumseh	CALVARY CRT	SS039	600	1993	CALVARY CRT	CALVARY CRT	120.9	\$ 85	\$ 10,275	2028	
2579	2752	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS038	600	1997	CALVARY CRT	GOUIN ST	108.7	\$ 85	\$ 9,235	2028	
2832	3068	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS044	600	1987	WEST LAKE DR	LESSARD ST	80.7	\$ 85	\$ 6,858	2028	
2833	3069	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS044	600	1987	WEST LAKE DR	LESSARD ST	51.5	\$ 85	\$ 4,377	2028	
2875	3111	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS036	600	1998	GOUIN ST	MAISONNEUVE ST	144.2	\$ 85	\$ 12,256	2028	
3277	3524	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS025	600	1987	WEST LAKE DR	GOUIN ST	115.7	\$ 85	\$ 9,837	2028	
4719	3566	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS010	600	1997	GOUIN ST	MAISONNEUVE ST	80.5	\$ 85	\$ 6,842	2028	
3210	3457	MAIN	CONC	Town of Tecumseh	MAYRAND CRES	SS015	600	1989	KAVANAGH DR	KAVANAGH DR	55.7	\$ 85	\$ 4,732	2028	
2569	2742	MAIN	RCONC	Town of Tecumseh	CALVARY CRT	SS040	600	1993	CHORNOBY CRES	CALVARY CRT	56.9	\$ 85	\$ 4,837	2028	
2874	3110	MAIN	CONC	Town of Tecumseh	CANDLEWOOD DR	SS085	600	1998	LESPERANCE RD	VICKERY LANE	11.9	\$ 85	\$ 1,011	2028	
2065	2204	MAIN	CONC	Town of Tecumseh	WESTLAKE DR	SS045	675	1996	CHORNOBY CRES	LESPERANCE RD	78.7	\$ 85	\$ 6,691	2028	
2068	2207	MAIN	CONC	Town of Tecumseh	WESTLAKE DR	SS045	675	1996	CHORNOBY CRES	LESPERANCE RD	4.6	\$ 85	\$ 391	2028	
2069	2208	MAIN	CONC	Town of Tecumseh	WESTLAKE DR	SS045	675	1996	CHORNOBY CRES	LESPERANCE RD	99.2	\$ 85		2028	
4677	2997	MAIN	CONC	Town of Tecumseh	LESSARD ST	SS043	675	1987	LESPERANCE RD	LESPERANCE RD	86.0	\$ 85	\$ 7,312	2028	
4680	3000	MAIN	CONC	Town of Tecumseh	LESSARD ST	SS043	675	1987	LESPERANCE RD	LESPERANCE RD	77.0	\$ 85	\$ 6,546	2028	
4720	3567	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS010	675	1997	GOUIN ST	MAISONNEUVE ST	122.7	\$ 85	\$ 10,425	2028	
2834	3070	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS048	675	1987	HIGHWAY 2	WEST LAKE DR	114.1	\$ 85	\$ 9,699	2028	
2580	2753	MAIN	CONC	Town of Tecumseh	CANDLEWOOD DR	SS083	750	1998	VICKERY LANE	ST AGNES DR	108.5	\$ 85	\$ 9,225	2028	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
3310	3579	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS088	750	1997	GOUIN ST	CANDLEWOOD DR	56.6	\$ 85	\$ 4,809	2028	
3311	3580	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS088	750		GOUIN ST	CANDLEWOOD DR	85.2	\$ 85		2028	
3316	3585	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS088	750	1997	GOUIN ST	CANDLEWOOD DR	86.1	\$ 85		2028	
3319	3588	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS088	750	1997	GOUIN ST	CANDLEWOOD DR	82.7	\$ 85		2028	
3322	3591	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS090	750	1997	GOUIN ST	GOUIN ST	70.3	\$ 85		2028	
3169	3416	MAIN	RCONC	Town of Tecumseh	DESLIPPE DR	SS088	750	1997	GOUIN ST	CANDLEWOOD DR	102.6	\$ 85		2028	
1	1	MAIN	RCONC	Town of Tecumseh	CANDLEWOOD DR	SS087	900		DESLIPPE DR	VICKERY LANE	112.8	\$ 100		2028	
2070	2209	MAIN	CONC	Town of Tecumseh	WESTLAKE DR	SS045	900		CHORNOBY CRES	LESPERANCE RD	50.8	\$ 100		2028	
2072	2211	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS047	900	1996	HEBERT ST	WEST LAKE DR	63.2	\$ 100		2028	
2073	2212	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS041	900		WEST LAKE DR	CALVARY CRT	110.6	\$ 100		2028	
2078	2217	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS041	900		WEST LAKE DR	CALVARY CRT	113.2	\$ 100		2028	
2966	3202	MAIN	CONC	Town of Tecumseh	CANDLEWOOD DR	SS085	900		LESPERANCE RD	VICKERY LANE	84.3	\$ 100		2028	\$ 350,851
2972	3208	MAIN	CONC	Town of Tecumseh	VICKERY LANE	SS084	900		CANDLEWOOD DR	CANDLEWOOD DR	113.2	\$ 100		2029	ψ 333,032
2973	3209	MAIN	RCONC	Town of Tecumseh	CANDLEWOOD DR	SS083	900		VICKERY LANE	ST AGNES DR	87.1	\$ 100		2029	
2988	3224	MAIN	CONC	Town of Tecumseh	VICKERY LANE	SS084	900		CANDLEWOOD DR	CANDLEWOOD DR	134.2	\$ 100	\$ 13,424	2029	
3271	3518	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS025	900		WEST LAKE DR	GOUIN ST	120.9	\$ 100		2029	
3274	3521	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS025	900		WEST LAKE DR	GOUIN ST	118.0	\$ 100	\$ 11,799	2029	
3361	3630	MAIN	CONC	Town of Tecumseh	HEBERT ST	SS025	900		WEST LAKE DR	GOUIN ST	95.1	\$ 100	\$ 9,507	2029	
4668	2988	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS041	900		WEST LAKE DR	CALVARY CRT	116.4	\$ 100	\$ 11,636	2029	
4671	2991	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS041	900		WEST LAKE DR	CALVARY CRT	79.2	\$ 100	\$ 7,921	2029	
4674	2991	MAIN	CONC	Town of Tecumseh	CHORNOBY CRES	SS041	900		WEST LAKE DR	CALVARY CRT	37.5	\$ 100		2029	
4713	3560	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS010	900		GOUIN ST	MAISONNEUVE ST	106.1	\$ 100		2029	
4716	3563	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS010	900		GOUIN ST	MAISONNEUVE ST	30.7	\$ 100		2029	
3168	3415	MAIN	RCONC	Town of Tecumseh	CANDLEWOOD DR	SS087	900		DESLIPPE DR	VICKERY LANE	46.1	\$ 100		2029	
4710	3557	MAIN	CONC	Town of Tecumseh	CORBI LANE	SS010	1050		GOUIN ST	MAISONNEUVE ST	93.1	\$ 100		2029	
3	3	MAIN	RCONC	Town of Tecumseh	CANDLEWOOD DR	SS082	1050		ST AGNES DR	ST AGNES DR	40.7	\$ 120		2029	
5	5	MAIN	RCONC	Town of Tecumseh	CANDLEWOOD DR	SS082	1350		ST AGNES DR	ST AGNES DR	59.9	\$ 120		2029	
3347	3616	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS012	1500		CORBI LANE	SHAWNEE RD	52.1	\$ 135		2029	
3348	3617	MAIN	CONC	Town of Tecumseh	GOUIN ST	SS012	1500		CORBI LANE	SHAWNEE RD	63.4	\$ 135		2029	
												\$ 133			
1013	1065	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T104	250		LITTLE RIVER BLVD	CEDARWOOD DR	49.8			2029	
2510 1767	2683 1884	MAIN MAIN	CONC	Town of Tecumseh	EVERGREEN DR EVERGREEN DR	T120 T120	300	1992	GAUTHIER DR	LESPERANCE RD	4.1 37.4	\$ 70 \$ 70		2029	
			CONC	Town of Tecumseh	EVERGREEN DR		375		GAUTHIER DR	LESPERANCE RD LESPERANCE RD				2029	
1768	1885	MAIN	CONC	Town of Tecumseh		T120	375		GAUTHIER DR		92.9	\$ 70 \$ 70		2029	
687	695	MAIN	PVC	Town of Tecumseh	CATALINA COVE	T004	375		RIVERSIDE DR E	RIVERSIDE DR E				2029	
690	698	MAIN	PVC	Town of Tecumseh	WINCLARE DR	T002	375		RIVERSIDE DR E	RIVERSIDE DR E	96.9	\$ 70		2029	
739	747	MAIN	CONC	Town of Tecumseh	KENNEY CRT	T018	450		DILLON DR	DILLON DR	98.5	\$ 70		2029	
847	877	MAIN	CONC	Town of Tecumseh	SOMERVILLE ST	T051	450		DILLON DR	LITTLE RIVER BLVD	104.2	\$ 70		2029	
854	884	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T049	450		DILLON DR	LITTLE RIVER BLVD	120.2	\$ 70		2029	
1012	1064	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T104	450		LITTLE RIVER BLVD	CEDARWOOD DR	76.1	\$ 70		2029	
4465	753	MAIN	CONC	Town of Tecumseh	KENNEY CRT	T018	450		DILLON DR	DILLON DR	76.8	\$ 70		2029	
4473	761	MAIN	CONC	Town of Tecumseh	SOMERVILLE ST	T051	450		DILLON DR	LITTLE RIVER BLVD	111.2	\$ 70		2029	
4477	765	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T049	450		DILLON DR	LITTLE RIVER BLVD	130.0	\$ 70		2029	
735	743	MAIN	CONC	Town of Tecumseh	DILLON DR	T017	600		KENNEY CRT	KENNEY CRT	82.0	\$ 85		2029	
840	870	MAIN	CONC	Town of Tecumseh	LITTLE RIVER BLVD	T050	600		GAUTHIER DR	SOMERVILLE ST	71.4	\$ 85		2029	
4466	754	MAIN	CONC	Town of Tecumseh	KENNEY CRT	T018	600		DILLON DR	DILLON DR	111.0	\$ 85		2029	
1032	1084	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T194	600		LARAMIE ST	LESPERANCE RD	114.9	\$ 85		2029	
614	603	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	675		EVERGREEN DR	LESPERANCE RD	98.5	\$ 85		2029	
888	918	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	675	1980	APPLETREE CRES	LESPERANCE RD	88.6	\$ 85	\$ 7,535	2029	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtota	l by Year
1266	1318	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T184	675	1980	APPLETREE CRES	ORCHARD DR	68.0	\$ 85	\$ 5,783	2029		
1273	1325	MAIN	CONC	Town of Tecumseh	APPLETREE CRES	T183	675		ST THOMAS CRES	ORCHARD DR	76.1	\$ 85		2029		-
1617	1691	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T110	675	1987	OLIVER DR	ROXBURY CRES	56.7			2029		
1618	1692	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T112	675	1987	ROXBURY CRES	VALENTE CRT	31.4			2029		-
1758	1875	MAIN	CONC	Town of Tecumseh	ROXBURY CRES	T111	675	1988	GAUTHIER DR	GAUTHIER DR	107.0	\$ 85		2029		$\overline{}$
1755	1872	MAIN		Town of Tecumseh	ROXBURY CRES	T111	675		GAUTHIER DR	GAUTHIER DR	96.0	\$ 85		2029		
277	229	MAIN	CONC	Town of Tecumseh	MCNORTON ST	T194	750		LARAMIE ST	LESPERANCE RD	7.5	\$ 85		2029		
885	915	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	750		APPLETREE CRES	LESPERANCE RD	102.9	\$ 85		2029		
1280	1332	MAIN		Town of Tecumseh	ST THOMAS CRES	T188	750		ORCHARD DR	BAILLARGEON DR	80.5	\$ 85		2029		
1285	1337	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T191	750		BAILLARGEON DR	MCNORTON ST	66.6	\$ 85		2029		
1611	1685	MAIN		Town of Tecumseh	VALENTE CRT	T113	750		VALENTE CRT	VALENTE CRT	47.0	\$ 85	\$ 3,993	2029		
1612	1686	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T112	750		ROXBURY CRES	VALENTE CRT	50.0	\$ 85	\$ 4,246	2029		
1685	1759	MAIN	CONC	Town of Tecumseh	BAILLARGEON DR	T189	750		ST THOMAS CRES	LESPERANCE RD	73.0	\$ 85		2029		
1690	1764	MAIN	CONC	Town of Tecumseh	BAILLARGEON DR	T189	750		ST THOMAS CRES	LESPERANCE RD	122.0			2029		
1762	1879	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T119	750		VALENTE CRT	EVERGREEN DR	92.7			2029		
1765	1882	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T119	750		VALENTE CRT	EVERGREEN DR	36.7			2029	Ś	360,983
2521	2694	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	750		EVERGREEN DR	LESPERANCE RD	101.0	\$ 85		2030	7	300,303
2521	2699	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	750		EVERGREEN DR	LESPERANCE RD	97.6	\$ 85		2030		
1030	1082	MAIN	CONC		MCNORTON ST	T194	750		LARAMIE ST	LESPERANCE RD	31.7	\$ 85		2030		
				Town of Tecumseh								\$ 85				
1254	1306	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	750		EVERGREEN DR	LESPERANCE RD	91.2			2030		
1274	1326	MAIN		Town of Tecumseh	APPLETREE CRES	T183	750		ST THOMAS CRES	ORCHARD DR	86.8	\$ 85		2030		
1277	1329	MAIN	CONC	Town of Tecumseh	APPLETREE CRES	T183	750		ST THOMAS CRES	ORCHARD DR	90.6	\$ 85		2030		
60	60	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	900		EVERGREEN DR	LESPERANCE RD	6.7	\$ 100		2030		
72	72	MAIN	CONC	Town of Tecumseh	ORCHARD DR	T186	900		APPLETREE CRES	LESPERANCE RD	7.2	\$ 100		2030		
271	223	MAIN	CONC	Town of Tecumseh	BAILLARGEON DR	T189	900		ST THOMAS CRES	LESPERANCE RD	7.1	\$ 100		2030		
875	905	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	900		APPLETREE CRES	LESPERANCE RD	63.5	\$ 100		2030		
880	910	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	900		APPLETREE CRES	LESPERANCE RD	118.8	\$ 100		2030		
1027	1079	MAIN	CONC	Town of Tecumseh	BAILLARGEON DR	T189	900		ST THOMAS CRES	LESPERANCE RD	77.3	\$ 100		2030		
1674	1748	MAIN	CONC	Town of Tecumseh	ORCHARD DR	T185	900		ST THOMAS CRES	APPLETREE CRES	119.4	\$ 100		2030		
1682	1756	MAIN	CONC	Town of Tecumseh	ORCHARD DR	T186	900		APPLETREE CRES	LESPERANCE RD	93.1	\$ 100		2030		
1761	1878	MAIN	CONC	Town of Tecumseh	ROXBURY CRES	T111	900		GAUTHIER DR	GAUTHIER DR	101.7	\$ 100	\$ 10,171	2030		
65	65	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	900		APPLETREE CRES	LESPERANCE RD	6.8	\$ 100	\$ 681	2030		
246	198	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	T118	900		OLIVER DR	VALENTE CRT	8.7	\$ 100		2030		
1677	1751	MAIN	CONC	Town of Tecumseh	ORCHARD DR	T185	900		ST THOMAS CRES	APPLETREE CRES	106.8	\$ 100		2030		
1251	1303	MAIN	CONC	Town of Tecumseh	GAUTHIER DR	T122	900		EVERGREEN DR	LESPERANCE RD	96.9	\$ 100		2030		
876	906	MAIN	CONC	Town of Tecumseh	ST THOMAS CRES	T148	900	1980	APPLETREE CRES	LESPERANCE RD	41.1	\$ 100		2030		
2850	3086	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	SC067	100	1996	MANNING RD	DRESDEN PL	65.1	\$ 70		2030		
2851	3087	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	SC067	100	1996	MANNING RD	DRESDEN PL	36.7	\$ 70	\$ 2,567	2030		
2841	3077	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	SC067	200	1996	MANNING RD	DRESDEN PL	57.5	\$ 70	\$ 4,027	2030		
3914	4251	MAIN	STEEL	Town of Tecumseh	MANNING RD	T_SC006	200	1995	TECUMSEH RD	VIA RAIL	11.8	\$ 70		2030		
3912	4249	MAIN	PE	Town of Tecumseh	MANNING RD	T_SC006	200	1995	TECUMSEH RD	VIA RAIL	77.0	\$ 70	\$ 5,391	2030		
2848	3084	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	SC067	200	1996	MANNING RD	DRESDEN PL	77.9	\$ 70	\$ 5,456	2030		
3913	4250	MAIN	STEEL	Town of Tecumseh	MANNING RD	T_SC006	200	1995	TECUMSEH RD	VIA RAIL	50.3	\$ 70	\$ 3,523	2030		
2840	3076	MAIN	PVC	Town of Tecumseh	MANNING RD	T_SC005	300	1996	ST GREGORY'S RD	TECUMSEH RD	22.0	\$ 70	\$ 1,543	2030		
2172	2311	MAIN	CONC	Town of Tecumseh	REGENT RD	SC080	300	1983	DRESDEN PL	DRESDEN PL	39.4	\$ 70	\$ 2,761	2030		
1844	1961	MAIN	CONC	Town of Tecumseh	ROSTREVOR CRT	SC078	375	1983	DRESDEN PL	DRESDEN PL	92.5	\$ 70		2030		
2175	2314	MAIN	CONC	Town of Tecumseh	REGENT RD	SC082	375	1983	TECUMSEH RD	DRESDEN PL	53.1	\$ 70		2030		
2305	2475	MAIN	CONC	Town of Tecumseh	OAKFIELD CRT	SC070	375	1984	DRESDEN PL	DRESDEN PL	62.1	\$ 70	\$ 4,346	2030		

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
2302	2472	MAIN	CONC	Town of Tecumseh	CAMBRIDGE CRT	SC072	375	1984	DRESDEN PL	DRESDEN PL	68.6	\$ 70	\$ 4,804	2030	
1855	1972	MAIN	CONC	Town of Tecumseh	BIRKDALE CRT	SC076	375	1984	DRESDEN PL	DRESDEN PL	74.9	\$ 70	\$ 5,246	2030	
1858	1975	MAIN	CONC	Town of Tecumseh	CUMBERLAND CRT	SC074	375	1984	DRESDEN PL	DRESDEN PL	73.2	\$ 70	\$ 5,125	2030	
626	615	MAIN	CONC	Town of Tecumseh	COVE DR	SC011	450	1985	BRIGHTON RD	COVE DR	78.8	\$ 70	\$ 5,513	2030	
1861	1978	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC069	450	1984	TECUMSEH RD	OAKFIELD CRT	89.1	\$ 70	\$ 6,238	2030	
2860	3096	MAIN	PVC	Town of Tecumseh	MANNING RD	T_SC005	450	1996	ST GREGORY'S RD	TECUMSEH RD	1.5	\$ 70	\$ 106	2030	
2299	2469	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC069	450	1984	TECUMSEH RD	OAKFIELD CRT	94.8	\$ 70	\$ 6,635	2030	
623	612	MAIN	CONC	Town of Tecumseh	COVE DR	SC011	525	1985	BRIGHTON RD	COVE DR	50.8	\$ 70	\$ 3,557	2030	
624	613	MAIN	CONC	Town of Tecumseh	COVE DR	SC011	525	1985	BRIGHTON RD	COVE DR	61.8	\$ 70	\$ 4,329	2030	
2162	2301	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC081	525	1983	REGENT RD	REGENT RD	83.6	\$ 70		2030	
616	605	MAIN	CONC	Town of Tecumseh	COVE DR	SC011	600	1985	BRIGHTON RD	COVE DR	59.8	\$ 85		2030	
619	608	MAIN	CONC	Town of Tecumseh	COVE DR	SC011	600	1985	BRIGHTON RD	COVE DR	70.6	\$ 85		2030	
1854	1971	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC073	600		CAMBRIDGE CRT	CUMBERLAND CRT	86.3	\$ 85		2030	
4573	1981	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC071	600	1984	OAKFIELD CRT	CAMBRIDGE CRT	94.4	\$ 85		2030	
3911	4248	MAIN	CONC	Town of Tecumseh	MANNING RD	T SC006	600		TECUMSEH RD	VIA RAIL	20.6	\$ 85		2030	
2380	2552	MAIN	RCONC	Town of Tecumseh	MANNING RD	T SC006	600		TECUMSEH RD	VIA RAIL	8.5	\$ 85		2030	
1848	1965	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC075	675		CUMBERLAND CRT	BIRKDALE CRT	82.8	\$ 85	•	2030	
1851	1968	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC077	675		BIRKDALE CRT	ROSTREVOR CRT	88.0	\$ 85	· · · · · · · · · · · · · · · · · · ·	2030	
2164	2303	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC081	750	1983	REGENT RD	REGENT RD	94.4	\$ 85	•	2030	
2168	2307	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC081	750	1983	REGENT RD	REGENT RD	80.5	\$ 85		2030	
2169	2308	MAIN	CONC	Town of Tecumseh	DRESDEN PL	SC079	750	1983	ROSTREVOR CRT	REGENT RD	95.2	\$ 85		2030	
2381	2553	MAIN	STEEL	Town of Tecumseh	MANNING RD	T SC006	900		TECUMSEH RD	VIA RAIL	7.9	\$ 100		2030	
1990	2129	MAIN	CONC	Town of Tecumseh	DORSET PARK	SC093	1200		COLLIER CRES	TECUMSEH RD	97.9	\$ 120		2030	
2901	3137	MAIN	CONC	Town of Tecumseh	CHARLENE LANE	SS078	300		LESPERANCE RD	ST AGNES DR	50.8	\$ 70		2030	
3070	3306	MAIN	CONC	Town of Tecumseh	ST MARTIN CRES	SS070	300	1979	ROXANNE DR	ROXANNE DR	64.1	\$ 70		2030	
3073	3309	MAIN	CONC	Town of Tecumseh	ST MARTIN CRES	SS070	300	1979	ROXANNE DR	ROXANNE DR	77.2	\$ 70		2030	
3121	3368	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS066	300		FUNARO CRES	FUNARO CRES	58.0	\$ 70		2030	
4740	3752	MAIN	CONC	Town of Tecumseh	NORTH PACIFIC AVE	SS057	300		MURRAY CRES	ST ANNE ST	82.1	\$ 70		2030	
2993	3229	MAIN	CONC	Town of Tecumseh	VERDANT CRT	SS080	300		ST AGNES DR	ST AGNES DR	53.9	\$ 70		2030	
2994	3230	MAIN	CONC	Town of Tecumseh	VERDANT CRT	SS080	300		ST AGNES DR	ST AGNES DR	5.8	\$ 70		2030	
2995	3231	MAIN	CONC	Town of Tecumseh	ST AGNES DR	SS081	300		VERDANT CRT	CANDLEWOOD DR	38.3	\$ 70		2030	
						SS063	300		LESPERANCE RD	ROXANNE CRES		\$ 70		2030	
3156	3403	MAIN	CONC	Town of Tecumseh	MECONI DR EUGENI ST				CHARLENE LANE	CHARLENE LANE	62.2				
3143	3390	MAIN	CONC	Town of Tecumseh		SS074	300				83.7	\$ 70 \$ 70		2030	
3088	3335	MAIN	CONC	Town of Tecumseh	CHARLENE LANE	SS072 SS074	375		EUGENI ST CHARLENE LANE	MECONI DR CHARLENE LANE	84.0 82.9			2030	
3142	3389	MAIN	CONC	Town of Tecumseh	EUGENI ST		375							2030	
3147	3394	MAIN	CONC	Town of Tecumseh	MECONI DR	SS071	375		ROXANNE CRES	CHARLENE LANE	125.7	\$ 70 \$ 70		2030	¢ 202.002
3150	3397	MAIN	CONC	Town of Tecumseh	MECONI DR	SS071	375		ROXANNE CRES	CHARLENE LANE	51.5	\$ 70		2030	\$ 363,882
4738	3750	MAIN	CONC	Town of Tecumseh	NORTH PACIFIC AVE	SS057	375		MURRAY CRES	ST ANNE ST	7.5	\$ 70		2031	
4739	3751	MAIN	CONC	Town of Tecumseh	NORTH PACIFIC AVE	SS057	375		MURRAY CRES	ST ANNE ST	55.3	\$ 70	•	2031	
4742	3754	MAIN	CONC	Town of Tecumseh	MURRAY CRES	SS058	375		SHAWNEE RD	NORTH PACIFIC AVE	103.0	\$ 70	•	2031	
2905	3141	MAIN	CONC	Town of Tecumseh	ST MARTIN CRES	SS070	375		ROXANNE DR	ROXANNE DR	64.3	\$ 70		2031	
3151	3398	MAIN	CONC	Town of Tecumseh	MECONI DR	SS063	375		LESPERANCE RD	ROXANNE CRES	92.8	\$ 70		2031	
2890	3126	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS062	450		MECONI DR	NORTH PACIFIC AVE	74.1	\$ 70		2031	
3067	3303	MAIN	CONC	Town of Tecumseh	ST MARTIN CRES	SS070	450	1980	ROXANNE DR	ROXANNE DR	73.5	\$ 70		2031	
3116	3363	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS065	450	1992	FUNARO CRES	FUNARO CRES	103.9	\$ 70		2031	
3118	3365	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS066	450		FUNARO CRES	FUNARO CRES	53.9	\$ 70		2031	
3125	3372	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS066	450		FUNARO CRES	FUNARO CRES	118.9	\$ 70		2031	
3131	3378	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS076	450	2000	CHARLENE LANE	MECONI DR	135.7	\$ 70	\$ 9,502	2031	

Deptical Display Deptical Di													Cost/metre to			
Description												_	flush, video,			
1976 1976 MARIA CONE Pann of Telement MORTH PERFORM SOST 459 1999 MORRAY CERS STAMPS T 40,11 5 72 5 7,000 2031	Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length		Segment Costs	Year	Subtotal by Yea
APPLIED 1972 MANN CONC Conner Fearment MANNAY CRES 55028 420 1889 SANAYCE CON CONTROL CONTRO	3393	3662	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS054	450	2001	NORTH PACIFIC AVE	CANADIAN PACIFIC RAILWAY	5.1	\$ 70	\$ 358	2031	
\$3.00 \$3.00 \$3.00 \$3.00 \$4.00 \$5.00 \$5.00 \$4.00 \$5.0	3491	3790	MAIN	CONC	Town of Tecumseh	NORTH PACIFIC AVE	SS057	450	1989	MURRAY CRES	ST ANNE ST	40.1	\$ 70	\$ 2,807	2031	
\$3.00 \$3.00 \$3.00 \$3.00 \$4.00 \$5.00 \$5.00 \$4.00 \$5.0	4745	3757	MAIN	CONC	Town of Tecumseh	MURRAY CRES	SS058	450	1989	SHAWNEE RD	NORTH PACIFIC AVE	115.4	\$ 70	\$ 8,076	2031	
2388 3393 MANI CONC Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 495 2001 NECTOR Pown of Featuresh SUPERALE ED SSE2 500 SSE2 1988 SUPANO CRES SSE2 SS	3126	3373	MAIN			FUNARO CRES		450	1992	MECONI DR	FUNARO CRES				2031	
1986 1986	3146	3393	MAIN	CONC		EUGENI ST	SS074	450	1989	CHARLENE LANE	CHARLENE LANE				2031	
3311 3312 MAN CONC Town of Fournest PLANAD CRIS S. 25 198 PLANAD CRIS PLANAD CRIS S. 70 S 7,575 2031																
3117 3346 MARIN CONC Town of Treatment AMABOCRES S5006 S5 73 S 6,192 2011																
3310 3384 AMN CONC Town of Teamenh UNAMO CRES SSUBB \$25 3927 EVANO CRES UNAMO CRES 125.1 \$ 70 \$.6.590 2031																
3489 3788 MARN COK Town of Texturale MORTH PACIFIC AVE S5059 \$227 \$188 SHAWNET D MURRAY CRES 9-31 \$ 70 \$ 6,550 \$2011																
4488 3330 MANN CONC Tenument CHARLEST LANE SS073 32, \$388 USGRIST ELGENIST 651 5 70 5 4,838 2031 124 147 1373 MANN CONC Tenument CHARLEST LANE SS073 32, \$389 USGRIST ELGENIST 1878 5 70 5 7,560 2031 147																
## PROPERTY																
A751 3763 MANN CONC Town of Tecumseh MURRAY CRES \$5053 525 398 SHAWNER RD NORTH PACIFIC AVE 1017 5 77.50 2031 1																
AVAIL 1970																
3316 MAIN CONC Town of Terumeh ILGENIST S074 535 596 DIAMILTER LANE CONC Town of Terumeh LISPERANCE D S076 600 2000 CHARLEN LANE 10.5 5 5 5 5 5 5 5 5 5																
3311 331																
2886 31.00 MAIN CONC Town of Tocumseh LESPERANCE RD S5076 600 2000 CHABLENE LANE MCCON RD 100.5 5 8.5 5 9.222 2031																
2936 3172 MAIN CONC Town of Tecumesh USPREANCE BI SSOF 600 2800 NTRISSCTION RD CHARLENE LANE 10.2 5 \$ 8 5 8,71.2 20.31																
3076 3312 MANN CONC Town of Tecumish ROXANNE CRS SS068 SO0 1980 ST MARTIN CRS MECONI DR 83.5 5.79.00 2031	2884	3120	MAIN	CONC	Town of Tecumseh	LESPERANCE RD					MECONI DR					
3977 3344 MANN CONC Town of Texturshel LESPERANCE RD SSO76 600 1989 CHARLENE LANE MECONI DR 8.3.5 5 7,095 2031		3172	MAIN			LESPERANCE RD			2000	INTERSECTION RD	CHARLENE LANE					
3355 MAIN CONC Town of Tecumesh FUNANC CRES SS066 600 1988 FUNANC CRES CANADIAN PACIFIC RAILWAY 32.4	3076	3312	MAIN	CONC	Town of Tecumseh	ROXANNE CRES	SS068	600	1980	ST MARTIN CRES	MECONI DR	92.9	\$ 85	\$ 7,900	2031	
3302 3361 MAIN CONC Town of Tecumesh ESPERANCE RD \$5054 600 2001 NORTH PACIFIC AVE 3.4 5 8.5 2.756 2031	3097	3344	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS076	600	1989	CHARLENE LANE	MECONI DR	83.5	\$ 85	\$ 7,095	2031	
3300 3347 MAIN CONC Town of Tecumseh LESPERANCE RD SS002 600 1988 MECONI DR NORTH PACIFIC AVE 131.9 5 85 5 1,1210 2031	3108	3355	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS066	600	1988	FUNARO CRES	FUNARO CRES	65.4	\$ 85	\$ 5,561	2031	
3351 MAIN CONC Town of Tecumseh FUNRAG CRES SS066 600 1988 FUNRAG CRES FUNRAG CRES FUNRAG CRES 48.6 5 8.5 4.133 2031	3392	3661	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS054	600	2001	NORTH PACIFIC AVE	CANADIAN PACIFIC RAILWAY	32.4	\$ 85	\$ 2,756	2031	
3351 MAIN CONC Town of Tecumseh FUNANC CRES SS066 600 1988 FUNANC CRES FUNANC CRES 48.6 5 85 5 4.133 2031	3100	3347	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS062	600	1988	MECONI DR	NORTH PACIFIC AVE	131.9	\$ 85	\$ 11,210	2031	
3483 3782 MAIN CONC Town of Tecumseh SHAWNEE RD SS060 600 1989 MURRAY CRES NORTH PACIFIC AVE 166.0 \$ 85 \$ 14,108 2031	3104	3351	MAIN	CONC	Town of Tecumseh	FUNARO CRES	SS066	600	1988	FUNARO CRES	FUNARO CRES	48.6	\$ 85		2031	
3052 3288 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGRES DR EUGENIST 53.2 S 85 5 4,380 2031				CONC												
3055 3291 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 51.5 5 85 4,380 2031																
3056 3292 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 5.1.6 5.8.5 5.4.52 2031 3.9.5 3.9.5 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 4.9.5 5.8.5 5.4.52 2031 3.9.5 3.																
3059 3295 MAIN CONC Town of Tecumseh STAGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 64.1 5 85 5 5.452 2031																
3064 3300 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 48.9 5 85.9 2031 1 1 1 1 1 1 1 1 1																
3065 3301 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGNES DR EUGENI ST 104.6 5 85 \$ 8,890 2031 3081 3317 MAIN CONC Town of Tecumseh ROXANNE CRES SS069 675 1979 ST MARTIN CRES ST MARTIN CRES 70.7 5 85 \$ 6,008 2031 3082 3318 MAIN CONC Town of Tecumseh ROXANNE CRES SS069 675 1979 ST MARTIN CRES ST MARTIN CRES 70.7 5 85 \$ 5 6,008 2031 3082 3318 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENI ST 118.8 5 85 \$ 10,096 2031 3095 3342 MAIN CONC Town of Tecumseh LESPERANCE RD SS076 675 1979 CHARLENE LANE MECONI DR 117.5 5 85 \$ 10,415 2031 3096 3343 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENI ST 96.9 4692 3327 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGNES DR EUGENI ST 96.9 5 85 \$ 8,823 2031 3094 3341 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGNES DR EUGENI ST 96.9 5 85 \$ 8,823 2031 3479 3778 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGNES DR EUGENI ST 96.9 5 85 \$ 14,477 2031 3479 3778 MAIN CONC Town of Tecumseh SHAWNEE RD SS060 675 1989 MURRAY CRES NORTH PACIFIC AVE 166.8 5 85 \$ 14,477 2031 3479 3784 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 48.8 5 85 \$ 4,444 2031 3479 3349 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 48.8 5 85 \$ 5 4,444 2031 3476 3349 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1989 ST AGNES DR EUGENI ST 61.1 5 85 \$ 5 4,444 2031 3476																
3081 3317 MAIN CONC Town of Tecumseh ROXANNE CRES SS069 675 1979 ST MARTIN CRES ST MARTIN CRES TO.7 \$ 85 \$ 6,008 2031																
3082 3318 MAIN CONC Town of Tecumseh ROXANNE CRES SS069 675 1979 ST MARTIN CRES ST MARTIN CRES TO.5 \$ 85 \$ 5.992 2031																
3085 3321 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENI ST 118.8 \$ 85 \$ 10,096 2031																
3095 3342 MAIN CONC Town of Tecumseh LESPERANCE RD SS076 675 1979 CHARLENE LANE MECONI DR 117.5 5 85 9,986 2031																
3096 3343 MAIN CONC Town of Tecumseh LESPERANCE RD SS076 675 1979 CHARLENE LANE MECONI DR 117.5 5 85 \$ 9,986 2031																
A692 3327 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENIST 96.9 \$ 85 \$ 8,237 2031																
2904 3140 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1980 ST AGNES DR EUGENI ST 53.3 5 85 \$ 4,532 2031																
3094 3341 MAIN CONC Town of Tecumseh LESPERANCE RD SS076 675 1979 CHARLENE LANE MECONI DR 120.3 120.	4692	3327	MAIN			CHARLENE LANE	SS075	675			EUGENI ST				2031	
3479 3778 MAIN CONC Town of Tecumseh SHAWNEE RD SS060 675 1989 MURRAY CRES NORTH PACIFIC AVE 166.8 \$	2904	3140	MAIN			CHARLENE LANE	SS075	675	1980	ST AGNES DR	EUGENI ST	53.3			2031	
3060 3296 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 63.9 \$ 85 \$ 5,433 2031	3094	3341	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS076	675	1979	CHARLENE LANE	MECONI DR	120.3	\$ 85	\$ 10,223	2031	
3063 3299 MAIN CONC Town of Tecumseh ST AGNES DR SS079 675 1979 VERDANT CRT CHARLENE LANE 48.8 \$ 8.5 4,144 2031	3479	3778	MAIN	CONC	Town of Tecumseh	SHAWNEE RD	SS060	675	1989	MURRAY CRES	NORTH PACIFIC AVE	166.8	\$ 85	\$ 14,177	2031	
3066 3302 MAIN CONC Town of Tecumseh ST MARTIN CRES SS070 675 1980 ROXANNE DR ROXANNE DR EUGENI ST SS070 675 1980 ST AGNES DR EUGENI ST SS070 SS	3060	3296	MAIN	CONC	Town of Tecumseh	ST AGNES DR	SS079	675	1979	VERDANT CRT	CHARLENE LANE	63.9	\$ 85	\$ 5,433	2031	
3066 3302 MAIN CONC Town of Tecumseh ST MARTIN CRES SS070 675 1980 ROXANNE DR ROXANNE DR 6.8 \$ \$ 85 \$ 582 2031 \$ 4689 3324 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENI ST 61.1 \$ 85 \$ 5,194 2031 \$ 354,316 3102 3349 MAIN CONC Town of Tecumseh FUNARO CRES SS066 750 1988 FUNARO CRES FUNARO CRES 58.9 \$ 85 \$ 5,005 2032 3103 3350 MAIN CONC Town of Tecumseh FUNARO CRES 58.9 FUNARO CRES \$ 85 \$ 5,005 2032 3476 3775 MAIN CONC Town of Tecumseh SHAWNE RD SS061 900 1989 INTERSECTION RD MURRAY CRES 90.1 \$ 9,012 <td>3063</td> <td>3299</td> <td>MAIN</td> <td>CONC</td> <td>Town of Tecumseh</td> <td>ST AGNES DR</td> <td>SS079</td> <td>675</td> <td>1979</td> <td>VERDANT CRT</td> <td>CHARLENE LANE</td> <td>48.8</td> <td>\$ 85</td> <td>\$ 4,144</td> <td>2031</td> <td></td>	3063	3299	MAIN	CONC	Town of Tecumseh	ST AGNES DR	SS079	675	1979	VERDANT CRT	CHARLENE LANE	48.8	\$ 85	\$ 4,144	2031	
4689 3324 MAIN CONC Town of Tecumseh CHARLENE LANE SS075 675 1989 ST AGNES DR EUGENI ST 61.1 \$ 85 \$ 5,194 2031 \$ 354,316 3102 3349 MAIN CONC Town of Tecumseh FUNARO CRES SS066 750 1988 FUNARO CRES FUNARO CRES 5.89 \$ 85 \$ 5,005 2032 \$ 5,005 <t< td=""><td>3066</td><td>3302</td><td>MAIN</td><td>CONC</td><td>Town of Tecumseh</td><td>ST MARTIN CRES</td><td>SS070</td><td>675</td><td>1980</td><td>ROXANNE DR</td><td>ROXANNE DR</td><td></td><td>\$ 85</td><td></td><td>2031</td><td></td></t<>	3066	3302	MAIN	CONC	Town of Tecumseh	ST MARTIN CRES	SS070	675	1980	ROXANNE DR	ROXANNE DR		\$ 85		2031	
3102 3349 MAIN CONC Town of Tecumseh FUNARO CRES SS066 750 1988 FUNARO CRES FUNARO CRES 58.9 \$ 85 \$ 5,005 2032 2032 3103 3350 MAIN CONC Town of Tecumseh FUNARO CRES SS066 750 1988 FUNARO CRES FUNARO CRES 45.4 \$ 85 \$ 3,858 2032 2032 3476 3775 MAIN CONC Town of Tecumseh SHAWNEE RD SS061 900 1989 INTERSECTION RD MURRAY CRES 90.1 \$ 9,012 2032 2032 2032								675			EUGENI ST					\$ 354,31
3103 3350 MAIN CONC Town of Tecumseh FUNARO CRES SS066 750 1988 FUNARO CRES FUNARO CRES 45.4 \$ 85 \$ 3,858 2032 3476 3775 MAIN CONC Town of Tecumseh SHAWNEE RD SS061 900 1989 INTERSECTION RD MURRAY CRES 90.1 \$ 100 \$ 9,012 2032	-															,
3476 3775 MAIN CONC Town of Tecumseh SHAWNEE RD SS061 900 1989 INTERSECTION RD MURRAY CRES 90.1 \$ 100 \$ 9,012 2032																
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Object ID	GIS ID	Pipe	Material		Road Name	Road ID	Size		From Road	To Road	Length	repair r		Segment Costs	Year	Subtotal by Year
2572	2745	MAIN	CSP	Town of Tecumseh	ST AGNES DR	SS079	1200		VERDANT CRT	CHARLENE LANE	62.8	\$	120		2032	
2573	2746	MAIN	CONC	Town of Tecumseh	LESPERANCE RD	SS034	1200		MAISONNEUVE ST	INTERSECTION RD	3.2	\$	120		2032	
2574	2747	MAIN	CSP	Town of Tecumseh	ST AGNES DR	SS079	1200		VERDANT CRT	CHARLENE LANE	106.4	\$	120		2032	
3842	4179	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	T260	250		GREEN VALLEY DR	MANNING RD	11.7	\$	70		2032	
2358	2528	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T243	300	1986	JUNIPER CRT	MANNING RD	32.4	\$	70		2032	
1361	1413	MAIN	CONC	Town of Tecumseh	HARVEST LANE	T255	375		GREEN VALLEY DR	GREEN VALLEY DR	129.6	\$	70		2032	
1371	1423	MAIN		Town of Tecumseh	MEADOWLAND CRES	T257	375		GREEN VALLEY DR	GREEN VALLEY DR	105.5	\$	70		2032	
1378	1430	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	375		GREEN VALLEY DR	GREEN VALLEY DR	45.2	\$	70		2032	
2314	2484	MAIN	CONC	Town of Tecumseh	BRUNELLE CRES	T235	375		GREEN VALLEY DR	GREEN VALLEY DR	110.5	\$	70		2032	
2361	2531	MAIN	CONC	Town of Tecumseh	JUNIPER CRT	T242	375		ST GREGORY'S RD	ST GREGORY'S RD	89.3	\$	70		2032	
2363	2533	MAIN	CONC	Town of Tecumseh	JUNIPER CRT	T242	375		ST GREGORY'S RD	ST GREGORY'S RD	53.8	\$	70		2032	
2649	2853	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T254	375	1989	HARVEST LANE	TECUMSEH RD	88.2	\$	70		2032	
2317	2487	MAIN	CONC	Town of Tecumseh	BRUNELLE CRES	T235	375		GREEN VALLEY DR	GREEN VALLEY DR	121.8	\$	70		2032	
2369	2539	MAIN	CONC	Town of Tecumseh	PRIMROSE PL	T240	375		ST GREGORY'S RD	ST GREGORY'S RD	106.6	\$	70		2032	
3893	4230	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T254	375		HARVEST LANE	TECUMSEH RD	27.8	\$	70		2032	
1374	1426	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	375		GREEN VALLEY DR	GREEN VALLEY DR	118.5	\$	70		2032	
1377	1429	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	375		GREEN VALLEY DR	GREEN VALLEY DR	61.2	\$	70		2032	
1368	1420	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	450		GREEN VALLEY DR	GREEN VALLEY DR	100.1	\$	70	•	2032	
1746	1863	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T232	450	1987	REVLAND DR	GREEN VALLEY DR	81.1	\$	70		2032	
2311	2481	MAIN	CONC	Town of Tecumseh	BRUNELLE CRES	T235	450		GREEN VALLEY DR	GREEN VALLEY DR	122.4	\$	70		2032	
2652	2856	MAIN	CONC	Town of Tecumseh	HARVEST LANE	T255	450	1988	GREEN VALLEY DR	GREEN VALLEY DR	47.8	\$	70		2032	
2653	2857	MAIN		Town of Tecumseh	HARVEST LANE	T255	450	1988	GREEN VALLEY DR	GREEN VALLEY DR	86.0	\$	70		2032	
3901	4238	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	450		LACASSE BLVD	GREEN VALLEY DR	20.7	\$	70		2032	
2366	2536	MAIN	CONC	Town of Tecumseh	PRIMROSE PL	T240	450		ST GREGORY'S RD	ST GREGORY'S RD	51.9	\$	70		2032	
2310	2480	MAIN		Town of Tecumseh	BRUNELLE CRES	T235	450	1986	GREEN VALLEY DR	GREEN VALLEY DR	55.6	\$	70		2032	
2648	2852	MAIN		Town of Tecumseh	GREEN VALLEY DR	T254	450	1989	HARVEST LANE	TECUMSEH RD	33.3	\$	70		2032	
3873	4210	MAIN		Town of Tecumseh	TECUMSEH RD	T253	450		LACASSE BLVD	GREEN VALLEY DR	28.1	\$	70		2032	
1364	1416	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	525	1988	GREEN VALLEY DR	GREEN VALLEY DR	33.8	\$	70		2032	
1367	1419	MAIN	CONC	Town of Tecumseh	MEADOWLAND CRES	T257	525		GREEN VALLEY DR	GREEN VALLEY DR	104.2	\$	70		2032	
1497	1549	MAIN	CONC	Town of Tecumseh	BRUNELLE CRES	T235	525		GREEN VALLEY DR	GREEN VALLEY DR	86.5	\$	70		2032	
1743	1860	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T232	525	1988	REVLAND DR	GREEN VALLEY DR	86.0	\$	70		2032	
1753	1870	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T241	525		PRIMROSE PL	JUNIPER CRT	99.8	\$	70		2032	
3903	4240	MAIN		Town of Tecumseh	TECUMSEH RD	T253	525		LACASSE BLVD	GREEN VALLEY DR	9.8	\$	70		2032	
1739	1856	MAIN		Town of Tecumseh	ST GREGORY'S RD	T232	600		REVLAND DR	GREEN VALLEY DR	86.1	\$	85		2032	
1742	1859	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T232	600		REVLAND DR	GREEN VALLEY DR	82.5	\$	85		2032	
2643	2847	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T256	600		MEADOWLAND CRES	HARVEST LANE	56.7	\$	85		2032	
2646	2850	MAIN		Town of Tecumseh	GREEN VALLEY DR	T256	600		MEADOWLAND CRES	HARVEST LANE	88.8	\$	85		2032	
3904	4241	MAIN	PVC	Town of Tecumseh	TECUMSEH RD	T253	600		LACASSE BLVD	GREEN VALLEY DR	9.8	\$	85		2032	
1750	1867	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T239	675		GREEN VALLEY DR	PRIMROSE PL	85.1	\$	85		2032	
2640	2844	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T258	750		MEADOWLAND CRES	MEADOWLAND CRES	97.9	\$	85		2032	
2325	2495	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T259	900		ST GREGORY'S RD	MEADOWLAND CRES	37.8	\$	100		2032	
2639	2843	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T259	900		ST GREGORY'S RD	MEADOWLAND CRES	33.4	\$	100		2032	
2372	2542	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T260	1050		GREEN VALLEY DR	MANNING RD	118.5	\$	120		2032	
2374	2546	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T260	1050		GREEN VALLEY DR	MANNING RD	117.6	\$	120		2032	
3827	4156	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050		LACASSE BLVD	GREEN VALLEY DR	153.3	\$	120		2032	
3838	4175	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T260	1050		GREEN VALLEY DR	MANNING RD	27.2	\$	120		2032	
3845	4182	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T260	1050		GREEN VALLEY DR	MANNING RD	102.6	\$	120		2032	
3863	4200	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050	2004	LACASSE BLVD	GREEN VALLEY DR	100.1	\$	120	\$ 12,007	2032	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
3894	4231	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050	2004	LACASSE BLVD	GREEN VALLEY DR	91.6	\$ 120	\$ 10,986	2032	
3902	4239	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050	2004	LACASSE BLVD	GREEN VALLEY DR	148.5	\$ 120	\$ 17,816	2032	
3905	4242	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T251	1050	2004	VIA RAIL	LACASSE BLVD	120.9	\$ 120	\$ 14,503	2032	
3906	4243	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T268	1050	2004	BEDELL ST	VIA RAIL	61.1	\$ 120	\$ 7,338	2032	
3872	4209	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050	2004	LACASSE BLVD	GREEN VALLEY DR	68.5	\$ 120	\$ 8,224	2032	
3896	4233	MAIN	CONC	Town of Tecumseh	TECUMSEH RD	T253	1050	2004	LACASSE BLVD	GREEN VALLEY DR	121.8	\$ 120	\$ 14,618	2032	\$ 392,270
1489	1541	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T234	1200	1986	BRUNELLE CRES	BRUNELLE CRES	82.4	\$ 120	\$ 9,889	2033	
1496	1548	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T234	1200	1986	BRUNELLE CRES	BRUNELLE CRES	79.1	\$ 120	\$ 9,497	2033	
1490	1542	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T234	1200	1986	BRUNELLE CRES	BRUNELLE CRES	90.3	\$ 120		2033	
2320	2490	MAIN	CONC	Town of Tecumseh	GREEN VALLEY DR	T233	1200	1986	BRUNELLE CRES	ST GREGORY'S RD	114.5	\$ 120		2033	
2049	2188	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	250	1991	ST THOMAS ST	CLARICE AVE	2.4	\$ 70		2033	
601	590	MAIN	PVC	Town of Tecumseh	HORWOOD CRES	T221	300	1993	HORWOOD CRES	ST GREGORY'S RD	118.6	\$ 70		2033	
1538	1611	MAIN	PVC	Town of Tecumseh	ST GREGORY'S RD	T225	300		MICHAEL DR	REVLAND DR	38.3	\$ 70		2033	
2782	3018	MAIN	PVC	Town of Tecumseh	ST GREGORY'S RD	T223	300	1998	HORWOOD CRES	MICHAEL DR	57.4	\$ 70		2033	
2800	3036	MAIN	PVC	Town of Tecumseh	PARKLAND CRES	T231	300		WOODBRIDGE DR	WOODBRIDGE DR	37.1	\$ 70		2033	
4535	1776	MAIN	PVC	Town of Tecumseh	REVLAND DR	T166	300		LITTLE RIVER BLVD	ST THOMAS ST	86.4	\$ 70		2033	
4564	1805	MAIN	PVC	Town of Tecumseh	REVLAND DR	T166	300		LITTLE RIVER BLVD	ST THOMAS ST	64.4	\$ 70		2033	
4538	1779	MAIN	PVC	Town of Tecumseh	REVLAND DR	T166	300		LITTLE RIVER BLVD	ST THOMAS ST	84.4	\$ 70		2033	
4539	1780	MAIN	PVC	Town of Tecumseh	REVLAND DR	T166	300		LITTLE RIVER BLVD	ST THOMAS ST	70.6	\$ 70		2033	
604	593	MAIN	PVC	Town of Tecumseh	HORWOOD CRES	T221	300	1993	HORWOOD CRES	ST GREGORY'S RD	111.3	\$ 70		2033	
526	515	MAIN	CONC	Town of Tecumseh	ARGENT ST	T206	375		ST THOMAS ST	BALLARD ST	92.4	\$ 70		2033	
531	520	MAIN	CONC	Town of Tecumseh	BALLARD ST	T205	375		LACASSE BLVD	ARGENT ST	79.5	\$ 70		2033	
534	523	MAIN	CONC	Town of Tecumseh	BALLARD ST	T205	375		LACASSE BLVD	ARGENT ST	87.9	\$ 70		2033	
588	577	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T162	375	1991	BRENDA CRES	BRENDA CRES	119.1	\$ 70		2033	
1537	1610	MAIN	PVC	Town of Tecumseh	ST GREGORY'S RD	T225	375		MICHAEL DR	REVLAND DR	33.9	\$ 70		2033	
2788	3024	MAIN	CONC	Town of Tecumseh	HORWOOD CRES	T223	375	1993	HORWOOD CRES	ST GREGORY'S RD	121.3	\$ 70		2033	
4147	4501	MAIN	CONC	Town of Tecumseh	CLARICE AVE	T202	375		LACASSE BLVD	BRENDA CRES	204.9	\$ 70		2033	
4156	4510	MAIN	CONC	Town of Tecumseh	CLARICE AVE	T202	375		LACASSE BLVD	BRENDA CRES	22.4	\$ 70		2033	
4157	4511	MAIN	CONC	Town of Tecumseh	CLARICE AVE	T202	375		LACASSE BLVD	BRENDA CRES	57.9	\$ 70		2033	
4532	1773	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	375	1992	LITTLE RIVER BLVD	ST THOMAS ST	88.8	\$ 70		2033	
4796	4469	MAIN	CONC	Town of Tecumseh	CLARICE AVE	T202	375	1992	LACASSE BLVD	BRENDA CRES	94.1	\$ 70		2033	
584	573		CONC			T161	375	1991	BRENDA CRES			\$ 70		2033	
1237	1289	MAIN MAIN		Town of Tecumseh	BRENDA CRES MICHAEL DR		450		ST THOMAS ST	BRENDA CRES ST GREGORY'S RD	115.2				+
2779			PVC	Town of Tecumseh		T224 T222					72.9 119.8	\$ 70 \$ 70		2033	+
	3015	MAIN	PVC	Town of Tecumseh	HORWOOD CRES		450 450		HORWOOD CRES	ST GREGORY'S RD	119.8	\$ 70		2033	
2785	3021	MAIN	CONC	Town of Tecumseh	HORWOOD CRES	T221	450		HORWOOD CRES	ST GREGORY'S RD				2033	
4565	1806	MAIN	CONC	Town of Tecumseh	REVLAND DR	T166	450		LITTLE RIVER BLVD	ST THOMAS ST	120.2	\$ 70		2033	
581	570	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T160	450		BRENDA CRES	ST THOMAS ST	76.8	\$ 70		2033	
2794	3030	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T230	450		ST THOMAS ST	PARKLAND CRES	52.8	\$ 70		2033	
587	576	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T162	450		BRENDA CRES	BRENDA CRES	87.6	\$ 70		2033	
1692	1766	MAIN	CONC	Town of Tecumseh	REVLAND DR	T226	450		ST GREGORY'S RD	ST GREGORY'S RD	32.8	\$ 70		2033	
1227	1279	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T224	525		ST THOMAS ST	ST GREGORY'S RD	66.3	\$ 70		2033	
1232	1284	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T224	525		ST THOMAS ST	ST GREGORY'S RD	73.1	\$ 70		2033	
1548	1621	MAIN	CONC	Town of Tecumseh	REVLAND DR	T228	525		ST THOMAS ST	PARKLAND CRES	131.3	\$ 70		2033	
1553	1626	MAIN	PVC	Town of Tecumseh	REVLAND DR	T227	525		PARKLAND CRES	ST GREGORY'S RD	125.8	\$ 70		2033	
2407	2580	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T230	525		ST THOMAS ST	PARKLAND CRES	123.4	\$ 70		2033	
2053	2192	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T223	525	1998	HORWOOD CRES	MICHAEL DR	87.6	\$ 70		2033	
580	569	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T163	525		BRENDA CRES	MICHAEL DR	5.4	\$ 70		2033	
2791	3027	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T230	525	1992	ST THOMAS ST	PARKLAND CRES	118.8	\$ 70	\$ 8,313	2033	1

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
2774	3010	MAIN	CONC	Town of Tecumseh	HORWOOD CRES	T222	525	1992	HORWOOD CRES	ST GREGORY'S RD	119.0	\$ 70	\$ 8,327	2033	
1222	1274	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T224	600	1996	ST THOMAS ST	ST GREGORY'S RD	121.0	\$ 85	\$ 10,288	2033	
1545	1618	MAIN	CONC	Town of Tecumseh	REVLAND DR	T228	600	1997	ST THOMAS ST	PARKLAND CRES	130.3	\$ 85	\$ 11,076	2033	
920	950	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T224	600	1996	ST THOMAS ST	ST GREGORY'S RD	123.4	\$ 85	\$ 10,488	2033	
711	719	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	600	1988	LITTLE RIVER BLVD	ST THOMAS ST	12.8	\$ 85	\$ 1,088	2033	
1541	1614	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T167	600	1993	REVLAND DR	WOODBRIDGE DR	98.1	\$ 85	\$ 8,342	2033	
2402	2575	MAIN	CONC	Town of Tecumseh	WOODBRIDGE DR	T230	600	1992	ST THOMAS ST	PARKLAND CRES	120.4	\$ 85	\$ 10,238	2033	
2773	3009	MAIN	CONC	Town of Tecumseh	HORWOOD CRES	T222	600	1992	HORWOOD CRES	ST GREGORY'S RD	17.5	\$ 85	\$ 1,492	2033	
710	718	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	600	1988	LITTLE RIVER BLVD	ST THOMAS ST	54.3	\$ 85	\$ 4,615	2033	
1542	1615	MAIN	CONC	Town of Tecumseh	REVLAND DR	T228	675	1997	ST THOMAS ST	PARKLAND CRES	129.1	\$ 85		2033	
2054	2193	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T223	675	1992	HORWOOD CRES	MICHAEL DR	42.9	\$ 85		2033	
2052	2191	MAIN	CONC	Town of Tecumseh	ST GREGORY'S RD	T223	750	1992	HORWOOD CRES	MICHAEL DR	53.5	\$ 85		2033	\$ 352,737
2039	2178	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900	1991	ST THOMAS ST	CLARICE AVE	152.9	\$ 100		2034	,
2048	2187	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900		ST THOMAS ST	CLARICE AVE	122.6	\$ 100		2034	
2050	2189	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900		ST THOMAS ST	CLARICE AVE	54.4	\$ 100	\$ 5,438	2034	
2051	2190	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900		ST THOMAS ST	CLARICE AVE	16.5	\$ 100	\$ 1,648	2034	
2047	2186	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900		ST THOMAS ST	CLARICE AVE	46.3	\$ 100	\$ 4,635	2034	
2044	2183	MAIN	CONC	Town of Tecumseh	BRENDA CRES	T203	900		ST THOMAS ST	CLARICE AVE	57.5	\$ 100	\$ 5,747	2034	
1539	1612	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T165	1050		MICHAEL DR	REVLAND DR	86.9	\$ 120		2034	
537	526	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T158	1200		LACASSE BLVD	ARGENT ST	109.9	\$ 120		2034	
540	529	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T158	1200		LACASSE BLVD	ARGENT ST	112.6	\$ 120		2034	
663	671	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T159	1200		ARGENT ST	BRENDA CRES	157.3	\$ 120		2034	
579	568	MAIN	CONC	Town of Tecumseh	ST THOMAS ST	T163	1350		BRENDA CRES	MICHAEL DR	110.2	\$ 120		2034	
720	728	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	1650		LITTLE RIVER BLVD	ST THOMAS ST	111.4	\$ 135		2034	
712	720	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	1650		LITTLE RIVER BLVD	ST THOMAS ST	127.0	\$ 135		2034	
719	727	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	1650		LITTLE RIVER BLVD	ST THOMAS ST	123.0	\$ 135		2034	
707	715	MAIN	CONC	Town of Tecumseh	MICHAEL DR	T164	1800		LITTLE RIVER BLVD	ST THOMAS ST	185.6	\$ 135		2034	
1111	1163	MAIN	CONC	Town of Tecumseh	OAKPARK DR	T136	300		REGAL CRT	LACASSE BLVD	76.2	\$ 70		2034	
1111	1170	MAIN	CONC	Town of Tecumseh	OAKPARK DR	T130	300		DUBE DR	DUBE DR	27.2	\$ 70		2034	
1333	1385	MAIN	CONC	Town of Tecumseh	MEANDER CRES	T133	300		LACASSE BLVD	CLAPP ST	58.7	\$ 70		2034	
1466	1518	MAIN	CONC	Town of Tecumseh	JELSO PL	T143	300	1987	KIMBERLY DR	KIMBERLY DR	22.4	\$ 70		2034	
1467	1519	MAIN	CONC	Town of Tecumseh	JELSO PL	T143	300		KIMBERLY DR	KIMBERLY DR	58.6	\$ 70		2034	
1114	1166	MAIN	CONC		OAKPARK DR		300		REGAL CRT	LACASSE BLVD					
1108				Town of Tecumseh		T136			OAKPARK DR		75.8 60.4	\$ 70 \$ 70		2034	
	1160	MAIN	CONC	Town of Tecumseh	REGAL CRT	T137	300		DUBE DR	OAKPARK DR	93.3			2034	
1120	1172	MAIN		Town of Tecumseh	OAKPARK DR	T139	375			DUBE DR				2034	
1461	1513	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T144	375		JELSO PL	SHAWN AVE KIMBERLY DR	108.0 72.6			2034	
1464	1516	MAIN	CONC	Town of Tecumseh	JELSO PL	T143	375		KIMBERLY DR		68.5			2034	
1334	1386	MAIN	CONC	Town of Tecumseh	MEANDER CRES	T131	375		LACASSE BLVD	CLAPP ST				2034	
1137	1189	MAIN	CONC	Town of Tecumseh	OAKPARK DR	T138	450		DUBE DR	REGAL CRT	96.4	\$ 70		2034	
1460	1512	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T142	450		LACASSE BLVD	JELSO PL	57.8	\$ 70		2034	+
1337	1389	MAIN	CONC	Town of Tecumseh	MEANDER CRES	T131	450		LACASSE BLVD	CLAPP ST	77.1	\$ 70		2034	
1457	1509	MAIN	CONC	Town of Tecumseh	KIMBERLY DR	T142	450		LACASSE BLVD	JELSO PL	71.0	\$ 70		2034	
1163	1215	MAIN	CONC	Town of Tecumseh	MEANDER CRES	T131	525		LACASSE BLVD	CLAPP ST	75.5	\$ 70		2034	ļ
1160	1212	MAIN	CONC	Town of Tecumseh	MEANDER CRES	T131	525		LACASSE BLVD	CLAPP ST	74.7	\$ 70		2034	ļ
1327	1379	MAIN	CONC	Town of Tecumseh	DUBE DR	T140	525		OAKPARK DR	LACASSE BLVD	75.7	\$ 70		2034	ļI
3779	4108	MAIN		Town of Tecumseh	LACASSE BLVD	T133	600		MEANDER CRES	CLAPP ST	84.1	\$ 85		2034	ļI
3778	4107	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T133	600		MEANDER CRES	CLAPP ST	84.9	\$ 85		2034	ļI
3780	4109	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T134	750	1987	OAKPARK DR	MEANDER CRES	109.2	\$ 85	\$ 9,281	2034	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
1117	1169	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T135	900	1987	DUBE DR	OAKPARK DR	92.6	\$ 100	\$ 9,262	2034	
3773	4102	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T135	900	1987	DUBE DR	OAKPARK DR	100.0	\$ 100	\$ 9,996	2034	
811	841	MAIN	CONC	Town of Tecumseh	LACASSE BLVD	T141	1050	1987	LITTLE RIVER BLVD	DUBE DR	88.2	\$ 120	\$ 10,584	2034	\$ 329,080
3563	3862	MAIN	CONC	Town of Tecumseh	GREEN CRT	SS177	300	1996	SHIFF DR	SHIFF DR	62.1	\$ 70	\$ 4,345	2035	
3574	3873	MAIN	PVC	Town of Tecumseh	EMMA MARIA CRES	SS172	300	1996	DIMU DR	DIMU DR	52.1	\$ 70	\$ 3,644	2035	
3596	3895	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS148	300	1993	STRAWBERRY DR	STRAWBERRY DR	79.0	\$ 70	\$ 5,529	2035	
3642	3941	MAIN	PVC	Town of Tecumseh	DIMU DR	SS170	300	1995	EMMA MARIA CRES	12TH CON RD	34.1	\$ 70	\$ 2,386	2035	
3645	3944	MAIN	PVC	Town of Tecumseh	EMMA MARIA CRES	SS173	300	1998	CRANBROOK CRES	DIMU DR	43.0	\$ 70	\$ 3,008	2035	
3666	3965	MAIN	PVC	Town of Tecumseh	CRANBROOK CRES	SS174	300	1994	SHIFF DR	EMMA MARIA CRES	63.0	\$ 70	\$ 4,409	2035	
3556	3855	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS152	300	1993	LESPERANCE RD	BLUEBERRY CRT	49.1	\$ 70	\$ 3,440	2035	
3559	3858	MAIN	CONC	Town of Tecumseh	SHIFF DR	SS178	375	1996	GREEN CRT	GREEN CRT	27.8	\$ 70	\$ 1,943	2035	
3573	3872	MAIN	PVC	Town of Tecumseh	EMMA MARIA CRES	SS172	375	1996	DIMU DR	DIMU DR	122.4	\$ 70		2035	
3598	3897	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS148	375		STRAWBERRY DR	STRAWBERRY DR	78.8	\$ 70		2035	
3600	3899	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS148	375		STRAWBERRY DR	STRAWBERRY DR	74.6	\$ 70		2035	
3605	3904	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS148	375		STRAWBERRY DR	STRAWBERRY DR	48.0	\$ 70		2035	
3639	3938	MAIN	PVC	Town of Tecumseh	DIMU DR	SS171	375		EMMA MARIA CRES	EMMA MARIA CRES	110.1	\$ 70		2035	
4735	3747	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS149	375		WILDBERRY CRES	WILDBERRY CRES	119.5	\$ 70		2035	
3661	3960	MAIN	CONC	Town of Tecumseh	SHIFF DR	SS179	375		CRANBROOK CRES	CRANBROOK CRES	76.2	\$ 70		2035	
3550	3849	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS150	375		BLUEBERRY CRT	STRAWBERRY DR	37.5	\$ 70		2035	
3554	3853	MAIN	PVC	Town of Tecumseh	WILDBERRY CRES	SS150	375	1993	BLUEBERRY CRT	STRAWBERRY DR	90.3	\$ 70		2035	
3564	3863	MAIN	CONC	Town of Tecumseh	GREEN CRT	SS177	375		SHIFF DR	SHIFF DR	114.1	\$ 70		2035	
3607	3906	MAIN	CONC	Town of Tecumseh	SHIFF DR	SS177	375	1996	GREEN CRT	GREEN CRT	68.8	\$ 70		2035	
4753	3968	MAIN	CONC	Town of Tecumseh	CRANBROOK CRES	SS174	450	1994	SHIFF DR	EMMA MARIA CRES	120.5	\$ 70		2035	
3562	3861	MAIN	CONC	Town of Tecumseh	SHIFF DR	SS174 SS178	450	1996	GREEN CRT	GREEN CRT	81.6	\$ 70		2035	
3606	3905	MAIN	CONC	Town of Tecumseh	SHIFF DR	SS178	450	1996	GREEN CRT	GREEN CRT	61.1	\$ 70		2035	
3636	3935	MAIN	CONC	Town of Tecumseh	DIMU DR	SS170	450	1995	EMMA MARIA CRES	EMMA MARIA CRES	104.3	\$ 70		2035	
3656	3955	MAIN	CONC	Town of Tecumseh	CRANBROOK CRES	SS174	450	1994	SHIFF DR	EMMA MARIA CRES	101.2	\$ 70		2035	
4756	3971	MAIN	CONC	Town of Tecumseh	CRANBROOK CRES	SS174	525		SHIFF DR	EMMA MARIA CRES	88.1	\$ 70		2035	
3425	3694	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS149	525		WILDBERRY CRES	WILDBERRY CRES	49.3	\$ 70		2035	
3429	3698	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS149	525		WILDBERRY CRES	WILDBERRY CRES	64.1	\$ 70		2035	
3572	3871	MAIN	CONC	Town of Tecumseh	EMMA MARIA CRES	SS172	525	1995	DIMU DR	DIMU DR	40.6	\$ 70		2035	
3594	3893	MAIN	CONC	Town of Tecumseh	BLUEBERRY CRT	SS151	525		WILDBERRY CRES	WILDBERRY CRES	97.4	\$ 70		2035	
3635	3934		CONC	 	EMMA MARIA CRES	-	525		DIMU DR						
3653	3952	MAIN MAIN	CONC	Town of Tecumseh	CRANBROOK CRES	SS172 SS174	525		SHIFF DR	EMMA MARIA CRES	100.6	\$ 70 \$ 70		2035	
3650	3949	MAIN	CONC	Town of Tecumseh Town of Tecumseh	CRANBROOK CRES	SS174 SS174	600		SHIFF DR	EMMA MARIA CRES	73.8	\$ 70		2035	
3424	3693	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS174 SS147	600		WILDBERRY CRES	STRAWBERRY DR	38.2	\$ 85		2035	
						-					4.0	\$ 85			
3595	3894	MAIN	CONC	Town of Tecumseh	WILDBERRY CRES	SS152	600		LESPERANCE RD WILDBERRY CRES	BLUEBERRY CRT				2035	
3420	3689	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS147	600			STRAWBERRY DR	119.6			2035	
3418	3687	MAIN	CONC	Town of Tecumseh	STRAWBERRY DR	SS147	600		WILDBERRY CRES	STRAWBERRY DR	49.0	\$ 85		2035	
3648	3947	MAIN	CONC	Town of Tecumseh	CRANBROOK CRES	SS174	750		SHIFF DR	EMMA MARIA CRES	46.1	\$ 85		2035	
764	794	MAIN	CONC	Town of Tecumseh	CHAMP CRES	T276	375		SOUTHFIELD DR	SOUTHFIELD DR	46.0	\$ 70		2035	
765	795	MAIN	CONC	Town of Tecumseh	CHAMP CRES	T276	375		SOUTHFIELD DR	SOUTHFIELD DR	51.4	\$ 70		2035	
766	796	MAIN	CONC	Town of Tecumseh	CHAMP CRES	T276	375		SOUTHFIELD DR	SOUTHFIELD DR	18.0	\$ 70		2035	
592	581	MAIN	CONC	Town of Tecumseh	BORDER CRES	T271	450		SOUTHFIELD DR	SOUTHFIELD DR	72.1	\$ 70		2035	
778	808	MAIN	CONC	Town of Tecumseh	MICKAILA CRES	T274	450		SOUTHFIELD DR	SOUTHFIELD DR	89.6	\$ 70		2035	
914	944	MAIN	CONC	Town of Tecumseh	BORDER CRES	T271	450		SOUTHFIELD DR	SOUTHFIELD DR	95.0	\$ 70		2035	
924	954	MAIN	PVC	Town of Tecumseh	FIELDCREST LANE	T279	450	1998	BROUILLETTE CRT	BROUILLETTE CRT	48.5	\$ 70		2035	
927	957	MAIN	PVC	Town of Tecumseh	FIELDCREST LANE	T279	450	1998	BROUILLETTE CRT	BROUILLETTE CRT	59.9	\$ 70	\$ 4,193	2035	1

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
930	960	MAIN	PVC	Town of Tecumseh	BROUILLETTE CRT	T280	450	2001	FIELDCREST LANE	BROUILLETTE CRT	101.5	\$ 70	\$ 7,103	2035	
1055	1107	MAIN	CONC	Town of Tecumseh	MICKAILA CRES	T274	450	1996	SOUTHFIELD DR	SOUTHFIELD DR	87.2	\$ 70	\$ 6,103	2035	
1428	1480	MAIN	PVC	Town of Tecumseh	FIELDCREST LANE	T279	450	1998	BROUILLETTE CRT	BROUILLETTE CRT	40.3	\$ 70	\$ 2,819	2035	
1427	1479	MAIN	PVC	Town of Tecumseh	BROUILLETTE CRT	T280	450	1998	FIELDCREST LANE	BROUILLETTE CRT	32.5	\$ 70	\$ 2,275	2035	
1420	1472	MAIN	PVC	Town of Tecumseh	BROUILLETTE CRT	T278	450	1998	SOUTHFIELD DR	FIELDCREST LANE	72.4	\$ 70	\$ 5,071	2035	
893	923	MAIN	PE	Town of Tecumseh	SOUTHFIELD DR	T277	600	1992	TECUMSEH RD	CHAMP CRES	49.8	\$ 85	\$ 4,233	2035	
1080	1132	MAIN	PE	Town of Tecumseh	SOUTHFIELD DR	T277	600	1992	TECUMSEH RD	CHAMP CRES	81.2	\$ 85	\$ 6,902	2035	
1086	1138	MAIN	PE	Town of Tecumseh	SOUTHFIELD DR	T277	600	1992	TECUMSEH RD	CHAMP CRES	56.2	\$ 85	\$ 4,773	2035	
899	929	MAIN	PE	Town of Tecumseh	SOUTHFIELD DR	T277	600	1992	TECUMSEH RD	CHAMP CRES	81.7	\$ 85	\$ 6,940	2035	
1103	1155	MAIN	CONC	Town of Tecumseh	SOUTHFIELD DR	T270	750	1997	BORDER CRES	HIGHWAY 2	105.3	\$ 85	\$ 8,951	2035	
1083	1135	MAIN	CONC	Town of Tecumseh	SOUTHFIELD DR	T277	2400	1992	TECUMSEH RD	CHAMP CRES	119.6	\$ 155		2035	
4586	1994	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	200	1992	ARBOUR ST	NORTHFIELD WAY	24.8	\$ 70		2035	
310	262	MAIN	CONC	Town of Tecumseh	COMMUNITY CRES (Private)	T401	250	1992	RYEGATE DR	RYEGATE DR	120.6	\$ 70		2035	
1638	1712	MAIN	PVC	Town of Tecumseh	LANOUE ST	T332	300	1996	HEATHERGLEN CRES	MANNING RD	117.0	\$ 70		2035	
1641	1715	MAIN	PVC	Town of Tecumseh	LANOUE ST	T332	300	1996	HEATHERGLEN CRES	MANNING RD	50.9	\$ 70		2035	
4345	6254	MAIN	PVC	Town of Tecumseh	LANOUE ST	Easement	300		LANOUE ST	LANOUE ST	16.0	\$ 70		2035	
4519	1571	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T327	300		LANOUE ST	CORTINA CRES	52.5	\$ 70		2035	
4591	1999	MAIN	CONC	Town of Tecumseh	LANOUE ST	T328	300		HEATHERGLEN CRES	CORTINA CRES	54.7	\$ 70	-	2035	
298	250	MAIN	PVC	Town of Tecumseh	DEMARSE CRT	T303	300		DEMARSE CRT	DEMARSE CRT	37.6	\$ 70		2035	
362	341	MAIN	PVC	Town of Tecumseh	DEMARSE CRT	T303	375		DEMARSE CRT	DEMARSE CRT	52.8	\$ 70		2035	
1486	1538	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	375	1996	ARBOUR ST	NORTHFIELD WAY	69.7	\$ 70		2035	
1515	1588	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T324	375		SHELLEY CRT	LANOUE ST	88.9	\$ 70		2035	
1518	1591	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T324	375		SHELLEY CRT	LANOUE ST	87.2	\$ 70	-	2035	
1521	1594	MAIN	CONC	Town of Tecumseh	JACIE CRT	T321	375	1994	NORTHFIELD WAY	NORTHFIELD WAY	61.3	\$ 70	-	2035	
1524	1597	MAIN	CONC	Town of Tecumseh	JACIE CRT	T321	375	1994	NORTHFIELD WAY	NORTHFIELD WAY	114.8	\$ 70		2035	\$ 363,144
1865	2004	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T331	375	1996	LANOUE ST	CORTINA CRES	100.7	\$ 70		2036	303,144
1873	2012	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T327	375	1998	LANOUE ST	CORTINA CRES	97.7	\$ 70		2036	
2020	2159	MAIN	CONC	Town of Tecumseh	SHELLEY CRT	T323	375	1994	NORTHFIELD WAY	NORTHFIELD WAY	51.0	\$ 70		2036	
2023	2162	MAIN	CONC	Town of Tecumseh	SHELLEY CRT	T323	375	1994	NORTHFIELD WAY	NORTHFIELD WAY	113.6	\$ 70		2036	
												\$ 70		2036	
2026	2165	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	375	1993 1993	NORTHFIELD WAY	LANGUE ST	51.5			2036	
2029	2168	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	375		NORTHFIELD WAY	LANGUE ST	88.7	\$ 70			
2032	2171	MAIN	CONC	Town of Tecumseh	LANGUE ST	T319	375		NORTHFIELD WAY	LANOUE ST	97.7	\$ 70		2036	
2035	2174	MAIN	CONC	Town of Tecumseh	LANGUE ST	T319	375		NORTHFIELD WAY	LANGUE ST	39.2	\$ 70		2036	
2534	2707	MAIN	CONC	Town of Tecumseh	LANOUE ST	T315	375		BEDELL ST	LANOUE ST	27.2	\$ 70		2036	
4520	1572	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T327	375		LANOUE ST	CORTINA CRES	74.1	\$ 70		2036	
358	337	MAIN	PVC	Town of Tecumseh	DEMARSE CRT	T302	375		DEMARSE CRT	DEMARSE CRT	52.8	\$ 70		2036	
1509	1582	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T324	450		SHELLEY CRT	LANOUE ST	70.0	\$ 70		2036	
1510	1583	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T324	450		SHELLEY CRT	LANOUE ST	90.3	\$ 70		2036	
1650	1724	MAIN	CONC	Town of Tecumseh	CORTINA CRES	T330	450		LANOUE ST	HEATHERGLEN CRES	69.2	\$ 70		2036	
1870	2009	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T327	450		LANOUE ST	CORTINA CRES	95.1	\$ 70		2036	
4514	1566	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T327	450		LANOUE ST	CORTINA CRES	150.4	\$ 70		2036	
4587	1995	MAIN	CONC	Town of Tecumseh	LANOUE ST	T326	450		LANOUE ST	HEATHERGLEN CRES	97.6	\$ 70		2036	
4594	2002	MAIN	CONC	Town of Tecumseh	HEATHERGLEN CRES	T331	450		LANOUE ST	CORTINA CRES	95.3	\$ 70		2036	
4583	1991	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	450		ARBOUR ST	NORTHFIELD WAY	82.7	\$ 70		2036	
1483	1535	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	450		ARBOUR ST	NORTHFIELD WAY	114.8	\$ 70		2036	
1519	1592	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T322	525		JACIE CRT	SHELLEY CRT	91.8	\$ 70		2036	
1642	1716	MAIN	CONC	Town of Tecumseh	LANOUE ST	T329	525		CORTINA CRES	HEATHERGLEN CRES	82.8	\$ 70		2036	
1647	1721	MAIN	CONC	Town of Tecumseh	CORTINA CRES	T330	525	1996	LANOUE ST	HEATHERGLEN CRES	71.1	\$ 70	\$ 4,978	2036	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Cost/metre to flush, video, repair main	Segment Costs	Year	Subtotal by Year
4578	1986	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	525	1992	ARBOUR ST	NORTHFIELD WAY	82.1	\$ 70	\$ 5,749	2036	
1477	1529	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	525	1996	ARBOUR ST	NORTHFIELD WAY	24.7	\$ 70	\$ 1,730	2036	
1478	1530	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	525	1996	ARBOUR ST	NORTHFIELD WAY	118.1	\$ 70	\$ 8,266	2036	
2537	2710	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	600	1991	ARBOUR ST	NORTHFIELD WAY	119.0	\$ 85	\$ 10,111	2036	
357	336	MAIN	CONC	Town of Tecumseh	DEMARSE CRT	T301	600	1995	RENAUD ST	DEMARSE CRT	77.6	\$ 85	\$ 6,592	2036	
1474	1526	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	600	1996	ARBOUR ST	NORTHFIELD WAY	107.7	\$ 85	\$ 9,151	2036	
1645	1719	MAIN	CONC	Town of Tecumseh	CORTINA CRES	T330	600	1996	LANOUE ST	HEATHERGLEN CRES	139.3	\$ 85	\$ 11,836	2036	
2037	2176	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T320	600	1993	LANOUE ST	JACIE CRT	66.4	\$ 85	\$ 5,645	2036	
2528	2701	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T320	600	1993	LANOUE ST	JACIE CRT	50.9	\$ 85	\$ 4,327	2036	
2532	2705	MAIN	CONC	Town of Tecumseh	LANOUE ST	T318	600	1991	LANOUE ST	NORTHFIELD WAY	47.2	\$ 85		2036	
4575	1983	MAIN	CONC	Town of Tecumseh	LANOUE ST	T317	600	1991	ARBOUR ST	NORTHFIELD WAY	109.3	\$ 85	\$ 9,287	2036	
1470	1522	MAIN	CONC	Town of Tecumseh	LANOUE ST	T325	675	1994	NORTHFIELD WAY	LANOUE ST	125.3	\$ 85	\$ 10,652	2036	
2531	2704	MAIN	CONC	Town of Tecumseh	LANOUE ST	T318	675		LANOUE ST	NORTHFIELD WAY	63.0	\$ 85		2036	
4344	6253	MAIN	CONC	Town of Tecumseh	LANOUE ST	Easement	675	1996	LANOUE ST	LANOUE ST	17.2	\$ 85		2036	
1878	2017	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	750	1993	NORTHFIELD WAY	LANOUE ST	124.4	\$ 85		2036	
1876	2015	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	825	1993	NORTHFIELD WAY	LANOUE ST	13.7	\$ 100		2036	
1877	2016	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	825	1993	NORTHFIELD WAY	LANOUE ST	42.5	\$ 100		2036	
170	6177	MAIN	CONC	Town of Tecumseh	LANOUE ST	T319	900	1993		LANOUE ST	71.0	\$ 100		2036	
2036	2175	MAIN	CONC	Town of Tecumseh	NORTHFIELD WAY	T320	900		LANOUE ST	JACIE CRT	65.7	\$ 100		2036	
4343	6252	MAIN	CSP	Town of Tecumseh	LANOUE ST	Easement	900		LANOUE ST	CP RAIL	176.6	\$ 100		2036	
9553	2671	MAIN	PVC	Town of Tecumseh	CHRISTY LANE	SC002	300	1992	RIVERSIDE DR E	RIVERSIDE DR E	28.6	\$ 70		2036	
2495	2668	MAIN	PVC	Town of Tecumseh	CHRISTY LANE	SC002	300	1992	RIVERSIDE DR E	RIVERSIDE DR E	96.7	\$ 70		2036	
3922	4259	MAIN	PVC	Town of Tecumseh	MANNING RD	T SC003	300		ST THOMAS ST	VILLAGE GROVE DR	24.6	\$ 70	-	2036	
1969	2108	MAIN	PVC	Town of Tecumseh	CHRISTY LANE	SC002	300	1992	RIVERSIDE DR E	RIVERSIDE DR E	81.1	\$ 70		2036	
3928	4265	MAIN	STEEL	Town of Tecumseh	MANNING RD	T SC001	450	1996	RIVERSIDE DR E	LITTLE RIVER BLVD	162.3	\$ 70		2036	
2622	2826	MAIN	PVC	Town of Tecumseh	JASON CRT	SC015	450		ST GREGORY'S RD	ST GREGORY'S RD	28.2	\$ 70	-	2036	
2927	3163	MAIN	CONC	Town of Tecumseh	VILLAGE GROVE DR	SC013	450		MANNING RD	ST GREGORY'S RD	22.1	\$ 70	-	2036	
3242	3489	MAIN	CSP	Town of Tecumseh	DESRO DR	SS100	250		MANNING RD	MANNING RD	362.2	\$ 70		2036	
3243	3490	MAIN	CSP	Town of Tecumseh	DESRO DR	SS100	250		MANNING RD	MANNING RD	286.7	\$ 70		2036	
3492	3791	MAIN	CSP	Town of Tecumseh	DESRO DR	SS100	250		MANNING RD	MANNING RD	75.6	\$ 70		2036	\$ 356,830
3373	3642	MAIN	PE	Town of Tecumseh	SYLVESTRE DR	SS095	300	1995	JAMSYL DR	MANNING RD	440.0	\$ 70		2037	330,030
3374	3643	MAIN				SS095	300		JAMSYL DR	MANNING RD		\$ 70		2037	
3374	3510		PE PVC	Town of Tecumseh	SYLVESTRE DR SYLVESTRE DR		375		JAMSYL DR		457.6				
		MAIN		Town of Tecumseh		SS098			JAMSYL DR	JAMSYL DR	32.0 123.3	\$ 70 \$ 70		2037	
3264	3511	MAIN MAIN	PVC	Town of Tecumseh	SYLVESTRE DR SYLVESTRE DR	SS098 SS098	375		JAMSYL DR	JAMSYL DR JAMSYL DR	90.7	\$ 70		2037	
3266	3513		PVC	Town of Tecumseh		SS098 SS008	375								
3267	3514	MAIN	PVC	Town of Tecumseh	SYLVESTRE DR	SS098 SS008	375		JAMSYL DR	JAMSYL DR	163.0	\$ 70		2037	
3268	3515	MAIN	PVC	Town of Tecumseh	SYLVESTRE DR	SS098 SS008	375		JAMSYL DR	JAMSYL DR	162.4	\$ 70		2037	
3327	3596	MAIN	PE	Town of Tecumseh	SYLVESTRE DR	SS098	450		JAMSYL DR	JAMSYL DR	66.2	\$ 70		2037	
3328	3597	MAIN	PE	Town of Tecumseh	SYLVESTRE DR	SS098	450		JAMSYL DR	JAMSYL DR	96.3	\$ 70		2037	
3259	3506	MAIN	CONC	Town of Tecumseh	JAMSYL DR	SS097	675		SYLVESTRE DR	MANNING RD	92.7	\$ 85		2037	
3250	3497	MAIN	CONC	Town of Tecumseh	JAMSYL DR	SS097	900		SYLVESTRE DR	MANNING RD	152.0	\$ 100		2037	
3253	3500	MAIN	CONC	Town of Tecumseh	JAMSYL DR	SS097	900		SYLVESTRE DR	MANNING RD	151.5	\$ 100		2037	
3258	3505	MAIN	CONC	Town of Tecumseh	JAMSYL DR	SS097	900		SYLVESTRE DR	MANNING RD	10.8	\$ 100		2037	
3260	3507	MAIN	CONC	Town of Tecumseh	JAMSYL DR	SS097	900		SYLVESTRE DR	MANNING RD	151.9	\$ 100		2037	
3834	4171	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	100		TRAFALGAR CRT	TRAFALGAR CRT	60.6	\$ 70		2037	
3835	4172	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	100		TRAFALGAR CRT	TRAFALGAR CRT	57.0	\$ 70		2037	<u> </u>
3828	4165	MAIN	PE	Town of Tecumseh	TRAFALGAR CRT	SS303	100		PICCADILLY AVE	PICCADILLY AVE	105.5	\$ 70		2037	
3829	4166	MAIN	PE	Town of Tecumseh	TRAFALGAR CRT	SS303	100	1997	PICCADILLY AVE	PICCADILLY AVE	100.3	\$ 70	\$ 7,019	2037	1

Rehabilitation

												Cost/metre to flush, video,			
Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	repair main	Segment Costs	Year	Subtotal by Year
3836	4173	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	100	1998	TRAFALGAR CRT	TRAFALGAR CRT	51.3	\$ 70	\$ 3,589	2037	
4789	4164	MAIN	PE	Town of Tecumseh	TRAFALGAR CRT	SS303	100	1997	PICCADILLY AVE	PICCADILLY AVE	105.8	\$ 70	\$ 7,405	2037	
3830	4167	MAIN	PE	Town of Tecumseh	TRAFALGAR CRT	SS303	100	1997	PICCADILLY AVE	PICCADILLY AVE	67.1	\$ 70	\$ 4,696	2037	
3998	4335	MAIN	PE	Town of Tecumseh	8TH CON RD	SS256	200	1990	CANADA SOUTH RLWY	N TALBOT RD	142.0	\$ 70	\$ 9,940	2037	
4126	4480	MAIN	CSP	Town of Tecumseh	WEBSTER DR	SS202	200	1981	COUNTY RD 46	COUNTY RD 46	13.9	\$ 70	\$ 975	2037	
9496	4474	MAIN	CSP	Town of Tecumseh	WEBSTER DR	SS202	200	1981	COUNTY RD 46	COUNTY RD 46	91.2	\$ 70	\$ 6,386	2037	
9497	4478	MAIN	CSP	Town of Tecumseh	WEBSTER DR	SS202	200	1981	COUNTY RD 46	COUNTY RD 46	75.1	\$ 70	\$ 5,258	2037	
9499	4476	MAIN	CSP	Town of Tecumseh	WEBSTER DR	SS202	200	1981	COUNTY RD 46	COUNTY RD 46	92.3	\$ 70	\$ 6,458	2037	
9495	4477	MAIN	CSP	Town of Tecumseh	WEBSTER DR	SS202	200	1981	COUNTY RD 46	COUNTY RD 46	70.2	\$ 70	\$ 4,914	2037	
9469	6359	MAIN	PVC	Town of Tecumseh	HALFORD DR	SS235	250	2011	N TALBOT RD	HALFORD DR	20.0	\$ 70	\$ 1,398	2037	
13	13	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	42.2	\$ 70	\$ 2,951	2037	
3726	4055	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	17.6	\$ 70	\$ 1,231	2037	
3734	4063	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	90.4	\$ 70	\$ 6,325	2037	
3735	4064	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	47.8	\$ 70	\$ 3,346	2037	
3736	4065	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	48.3	\$ 70	\$ 3,382	2037	
3788	4117	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	49.5	\$ 70	\$ 3,465	2037	
3789	4118	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	99.4	\$ 70	\$ 6,961	2037	
3791	4120	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	96.2	\$ 70	\$ 6,733	2037	
3792	4121	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	94.4	\$ 70	\$ 6,606	2037	
3794	4123	MAIN	PE	Town of Tecumseh	TRAFALGAR CRT	SS303	300	1998	PICCADILLY AVE	PICCADILLY AVE	100.1	\$ 70	\$ 7,008	2037	
3800	4129	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	90.8	\$ 70	\$ 6,353	2037	
3802	4131	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	102.6	\$ 70	\$ 7,185	2037	
3803	4132	MAIN	PVC	Town of Tecumseh	DI COCCO CRT	SS291	300	1996	MCCORD LANE	MCCORD LANE	108.1	\$ 70	\$ 7,566	2037	
3804	4133	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	49.3	\$ 70	\$ 3,448	2037	
3967	4304	MAIN	PE	Town of Tecumseh	PULLEYBLANK ST	SS273	300	1995	ROSSI DR	BLACKACRE DR	138.9	\$ 70	\$ 9,720	2037	
4035	4372	MAIN	STEEL	Town of Tecumseh	MERO AVE	SS325	300	1979	HOWARD AVE	MERO AVE	46.2	\$ 70	\$ 3,233	2037	
4036	4373	MAIN	STEEL	Town of Tecumseh	MERO AVE	SS325	300	1979	HOWARD AVE	MERO AVE	45.9	\$ 70	\$ 3,214	2037	
4182	4536	MAIN	PVC	Town of Tecumseh	WALKER RD	SS238	300	2000	HIGHWAY 401	N TALBOT RD	42.4	\$ 70	\$ 2,969	2037	
4201	4555	MAIN	PVC	Town of Tecumseh	WALKER RD	SS238	300	2000	HIGHWAY 401	N TALBOT RD	48.6	\$ 70	\$ 3,405	2037	
4361	6270	MAIN	PVC	Town of Tecumseh	CASTLEWOOD CRT	SS305	300	1987			46.9	\$ 70	\$ 3,286	2037	
4375	6284	MAIN	PVC	Town of Tecumseh	CASTLEWOOD CRT	SS305	300	1987	OLDCASTLE RD	CASTLEWOOD CRT	36.2	\$ 70	\$ 2,531	2037	
9069	6356	MAIN	PVC	Town of Tecumseh	HALFORD DR	SS235	300	2011	N TALBOT RD	HALFORD DR	47.2	\$ 70	\$ 3,306	2037	
9468	6360	MAIN	PVC	Town of Tecumseh	HALFORD DR	SS235	300	2011	N TALBOT RD	HALFORD DR	16.5	\$ 70	\$ 1,157	2037	
4244	4598	MAIN	PVC	Town of Tecumseh	N TALBOT RD	SS239	300	1987	WALKER RD	BRENDAN LANE	6.9	\$ 70	\$ 486	2037	
4359	6268	MAIN	PVC	Town of Tecumseh	CASTLEWOOD CRT	SS305	300	1987			34.7	\$ 70		2037	
4360	6269	MAIN	PVC	Town of Tecumseh	CASTLEWOOD CRT	SS305	300	1987			45.4	\$ 70		2037	
3805	4134	MAIN	PE	Town of Tecumseh	PICCADILLY AVE	SS302	300	1998	TRAFALGAR CRT	TRAFALGAR CRT	49.3	\$ 70		2037	
127	6135	MAIN	CONC	Town of Tecumseh	HALFORD DR	SS235	300	1994	N TALBOT RD	HALFORD DR	11.6	\$ 70		2037	\$ 358,081

20 Year Total Rehabilitation \$ 7,218,285

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	 Year Total
Storm Drain	age Master P	lan										Engineering	\$ 300,000	2018	
Oldcastle Sto	orm Drainage	Master Pla	an									Engineering	\$ 120,000	2018	
Tecumseh R	oad CIP Phase	e 1										Engineering	\$ 27,410	2018	
				Town of Tecumseh	ROSSI DR	SS274			OUTER DR	PULLEYBLANK DR	629.2	Reconstruction	\$ 440,800	2018	
					SYLVESTRE DR							Engineering	\$ 4,200	2018	\$ 892,410
Oldcastle Sto	orm Drainage	Master Pla	n									Engineering	\$ 230,000	2019	
Manning Roa	ad/ETLD Drai	n Relocatio	n - Phase 2									Reconstruction	\$ 1,668,830	2019	
					SYLVESTRE DR							Reconstruction	\$ 74,050	2019	
Westlake									LESPERANCE	CR22		Growth	\$ 156,000	2019	
County Road	l 46 Sanitary	Sewer Exte	nsion (LRPCP)								Engineering	\$ 13,400	2019	
Delduca Driv	e Engineerin	g										Engineering	\$ 28,100	2019	\$ 2,170,380
County Road	l 46 Sanitary	Sewer Exte	nsion (LRPCP)								Reconstruction	\$ 218,625	2020	
Manning Roa	ad Reconstru	ction Phase	2 3									Reconstruction	\$ 335,800	2020	\$ 554,425
2761	2965	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC005	600	1976	EDGEWATER BLVD	ST MARK'S RD	39.3	Reconstruction	\$ 43,300	2021	
2762	2966	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC005	600	1976	EDGEWATER BLVD	ST MARK'S RD	51.0	Reconstruction	\$ 56,200	2021	
3670	3999	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC005	600	1976	EDGEWATER BLVD	ST MARK'S RD	33.0	Reconstruction	\$ 36,400	2021	
1834	1951	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC006	375	1976	ST MARK'S RD	ARLINGTON BLVD	128.8	Reconstruction	\$ 142,100	2021	
	1955	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	300	1976	ARLINGTON BLVD	KENSINGTON BLVD	3.7	Reconstruction	\$ 4,100	2021	
	2240	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	375	1976	ARLINGTON BLVD	KENSINGTON BLVD	64.9	Reconstruction	\$ 71,600	2021	
	2241	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	300	1976	ARLINGTON BLVD	KENSINGTON BLVD	145.1	Reconstruction	\$ 160,100	2021	
	2499	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	900	1976	ARLINGTON BLVD	KENSINGTON BLVD	112.4	Reconstruction	\$ 124,000	2021	
	2501	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	450	1976	ARLINGTON BLVD	KENSINGTON BLVD	88.4	Reconstruction	\$ 97,500	2021	
	2502	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC007	450	1976	ARLINGTON BLVD	KENSINGTON BLVD	103.9	Reconstruction	\$ 114,600	2021	
3668	3997	MAIN	CSP	Town of Tecumseh	RIVERSIDE DR E	SC004	300	1976	GRANT AVE	EDGEWATER BLVD	24.0	Reconstruction	\$ 12,600	2021	
3929	4266	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS249	200	1990	O'NEIL DR	O'NEIL DR	138.2	Reconstruction	\$ 54,200	2021	
3930	4267	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS249	300	1990	O'NEIL DR	O'NEIL DR	134.0	Reconstruction	\$ 52,600	2021	
3957	4294	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS252	200	1990	URE ST	URE ST	106.4	Reconstruction	\$ 41,700	2021	
3958	4295	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS252	200	1990	URE ST	URE ST	53.3	Reconstruction	\$ 20,900	2021	
3961	4298	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS252	200	1990	URE ST	URE ST	149.3	Reconstruction	\$ 58,500	2021	
3956	4293	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS252	200	1990	URE ST	URE ST	96.0	Reconstruction	\$ 37,600	2021	
3952	4289	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS253	200	1990	O'NEIL DR	URE ST	124.6	Reconstruction	\$ 48,900	2021	
3953	4290	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS253	200	1990	O'NEIL DR	URE ST	117.9	Reconstruction	\$ 46,200	2021	
3931	4268	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS253	200	1990	O'NEIL DR	URE ST	113.9	Reconstruction	\$ 44,600	2021	
3932	4269	MAIN	PE	Town of Tecumseh	DELDUCA DR	SS253	200	1990	O'NEIL DR	URE ST	88.6	Reconstruction	\$ 34,700	2021	
Ure Street Sa	anitary Sewei	r (LRPCP)										Engineering	\$ 25,000	2021	\$ 1,327,400
3997	4334	MAIN	PE	Town of Tecumseh	URE ST	SS251	200	1990	DELDUCA DR	N TALBOT RD	117.3	Reconstruction	\$ 41,900	2022	
3983	4320	MAIN	PE	Town of Tecumseh	URE ST	SS251	200	1990	DELDUCA DR	N TALBOT RD	102.6	Reconstruction	\$ 36,600	2022	
3984	4321	MAIN	PE	Town of Tecumseh	URE ST	SS251	200	1990	DELDUCA DR	N TALBOT RD	113.7	Reconstruction	\$ 40,600	2022	
3996	4333	MAIN	PE	Town of Tecumseh	URE ST	SS251	200	1990	DELDUCA DR	N TALBOT RD	137.0	Reconstruction	\$ 48,900	2022	
4027	4364	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	118.4	Reconstruction	\$ 42,200	2022	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	Yea	ar Total
4028	4365	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	81.0	Reconstruction	\$ 28,900	2022		
4029	4366	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	99.4	Reconstruction	\$ 35,500	2022		
4030	4367	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	100.1	Reconstruction	\$ 35,700	2022		
4031	4368	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	78.0	Reconstruction	\$ 27,800	2022		
4032	4369	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	52.4	Reconstruction	\$ 18,700	2022		
4033	4370	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	60.6	Reconstruction	\$ 21,600	2022		
4034	4371	MAIN	PE	Town of Tecumseh	URE ST	SS251	250	1981	DELDUCA DR	N TALBOT RD	21.3	Reconstruction	\$ 7,600	2022		
O'Neil Street	Sanitary Sew	ver (LRPCP)										Engineering	\$ 28,500	2022	\$	414,500
2335	2505	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC008	450	1976	KENSINGTON BLVD	PENTILLY RD	61.9	Reconstruction	\$ 73,100	2023		
3768	4097	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC008	450	1976	KENSINGTON BLVD	PENTILLY RD	13.1	Reconstruction	\$ 15,500	2023		
3767	4096	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR E	SC008	450	1976	KENSINGTON BLVD	PENTILLY RD	5.7	Reconstruction	\$ 6,700	2023		
2334	2504	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR	SC008	900	2006	KENSINGTON BLVD	PENTILLY RD	113.3	Reconstruction	\$ 133,900	2023		
2333	2503	MAIN	CONC	Town of Tecumseh	RIVERSIDE DR	SC008	900	2006	KENSINGTON BLVD	PENTILLY RD	144.4	Reconstruction	\$ 170,800	2023		
3981	4318	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS247	200	1990	MOYNAHAN ST	N TALBOT RD	142.5	Reconstruction	\$ 86,400	2023		
3982	4319	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS247	200	1990	MOYNAHAN ST	N TALBOT RD	149.8	Reconstruction	\$ 90,900	2023		
3978	4315	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS248	200	1990	DELDUCA DR	MOYNAHAN ST	110.6	Reconstruction	\$ 67,100	2023		
3980	4317	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS248	200	1990	DELDUCA DR	MOYNAHAN ST	87.2	Reconstruction	\$ 52,900	2023		
3976	4313	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS248	200	1990	DELDUCA DR	MOYNAHAN ST	121.7	Reconstruction	\$ 73,800	2023		
3979	4316	MAIN	PE	Town of Tecumseh	O'NEIL ST	SS248	200	1990	DELDUCA DR	MOYNAHAN ST	93.0	Reconstruction	\$ 56,400	2023		
Moynahan-H	Ienin-Regal S	anitary Sew	er Servicing	(LRPCP)								Engineering	\$ 34,900	2023	\$	862,400
4001	4338	MAIN	PE	Town of Tecumseh	MOYNAHAN ST	SS245	300	1990	HENNIN DR	O'NEIL DR	96.2	Reconstruction	\$ 35,200	2024		
4002	4339	MAIN	PE	Town of Tecumseh	MOYNAHAN ST	SS245	375	1990	HENNIN DR	O'NEIL DR	92.8	Reconstruction	\$ 44,600	2024		
1835	1952	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC066	300	1976	RIVERSIDE DR E	HAYES AVE	15.9	Reconstruction	\$ 10,000	2024		
1837	1954	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC066	375	1976	RIVERSIDE DR E	HAYES AVE	2.8	Reconstruction	\$ 9,900	2024		
2110	2249	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC066	375	1975	RIVERSIDE DR E	HAYES AVE	101.8	Reconstruction	\$ 48,000	2024		
2116	2255	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC066	375	1976	RIVERSIDE DR E	HAYES AVE	132.7	Reconstruction	\$ 60,000	2024		
2104	2243	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC066	375	1976	RIVERSIDE DR E	HAYES AVE	124.8	Reconstruction	\$ 56,900	2024		
2978	3214	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	129.1	Reconstruction	\$ 32,900	2024		
2264	2434	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	120.9	Reconstruction	\$ 42,900	2024		
2265	2435	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	112.8	Reconstruction	\$ 24,000	2024		
2985	3221	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	85.1	Reconstruction	\$ 31,700	2024		
2987	3223	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	136.8	Reconstruction	\$ 47,900	2024		
2124	2263	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	112.2	Reconstruction	\$ 40,200	2024		
2977	3213	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC065	300	1976	HAYES AVE	BURLINGTON RD	93.5	Reconstruction	\$ 20,300	2024		
2267	2437	MAIN	CONC	Town of Tecumseh	ARLINGTON BLVD	SC056	300	1976	BURLINGTON RD	ST GREGORY'S RD	96.1	Reconstruction	\$ 35,100	2024		
				Town of Tecumseh	ARLINGTON BLVD	SC085			ST GREGORY'S RD	TECUMSEH	371.7	Reconstruction	\$ 135,800	2024	\$	675,400
4358	6267	MAIN	PVC	Town of Tecumseh	CASTLEWOOD CRT	SS305	250	1987	OLDCASTLE RD	OLDCASTLE RD	22.5	Reconstruction	\$ 12,100	2025	\$	12,100
3026	3262	MAIN	CONC	Town of Tecumseh	INTERSECTION RD	SS033	450	1976	ST ANNE ST	LESPERANCE RD	159.7	Reconstruction	\$ 80,400	2027		
2954	3190	MAIN	CONC	Town of Tecumseh	INTERSECTION RD	SS033	1050	2000	ST ANNE ST	LESPERANCE RD	18.6	Reconstruction	\$ 40,200	2027		
3165	3412	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS056	300	1974	INTERSECTION RD	NORTH PACIFIC AVE	150.0	Reconstruction	\$ 52,000	2027		

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	Ye	ar Total
3165	3412	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS056	300	1974	INTERSECTION RD	NORTH PACIFIC AVE	364.3	Reconstruction	\$ 119,100	2027		
3167	3414	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS056	300	1974	INTERSECTION RD	NORTH PACIFIC AVE	149.2	Reconstruction	\$ 51,800	2027		
3167	3414	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS056	300	1974	INTERSECTION RD	NORTH PACIFIC AVE	360.8	Reconstruction	\$ 118,000	2027	\$	461,500
Tecumseh Ro	oad CIP Phase	e 3										Engineering	\$ 6,000	2028		
3039	3275	MAIN	CONC	Town of Tecumseh	BURLINGTON RD	SC059	300	1976	WARWICK RD	CLOVELLY RD	1.4	Reconstruction	\$ 5,500	2028		
3034	3270	MAIN	CONC	Town of Tecumseh	BURLINGTON RD	SC059	300	1976	WARWICK RD	CLOVELLY RD	12.2	Reconstruction	\$ 8,900	2028		
3038	3274	MAIN	CONC	Town of Tecumseh	BURLINGTON RD	SC059	300	1976	WARWICK RD	CLOVELLY RD	116.4	Reconstruction	\$ 41,500	2028	1	
3040	3276	MAIN	CONC	Town of Tecumseh	BURLINGTON RD	SC059	300	1976	WARWICK RD	CLOVELLY RD	121.6	Reconstruction	\$ 42,900	2028	1	
3033	3269	MAIN	CONC	Town of Tecumseh	BURLINGTON RD	SC057	300	1976	ARLINGTON BLVD	WARWICK RD	123.1	Reconstruction	\$ 43,600	2028		
2088	2227	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC055	250	1972	RIVERSIDE DR E	CLOVELLY RD	116.4	Reconstruction	\$ 29,300	2028		
2336	2506	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC055	250	1976	RIVERSIDE DR E	CLOVELLY RD	9.0	Reconstruction	\$ 7,900	2028		
2338	2508	MAIN		Town of Tecumseh	KENSINGTON BLVD	SC055	300	1976	RIVERSIDE DR E	CLOVELLY RD	12.2	Reconstruction	\$ 8,900	2028		
2086	2225	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC055	525	1972	RIVERSIDE DR E	CLOVELLY RD	134.1	Reconstruction	\$ 88,000	2028		
2087	2226	MAIN		Town of Tecumseh	KENSINGTON BLVD	SC055	525	1972	RIVERSIDE DR E	CLOVELLY RD	33.0	Reconstruction	\$ 30,300	2028		
1845	1962	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC055	750	1972	RIVERSIDE DR E	CLOVELLY RD	15.2	Reconstruction	\$ 21,700	2028		
2085	2224	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC055	750	1972	RIVERSIDE DR E	CLOVELLY RD	44.9	Reconstruction	\$ 46,900	2028		
2100	2239	MAIN		Town of Tecumseh	KENSINGTON BLVD	SC054	250	1972	ARLINGTON BLVD	CLOVELLY RD	80.7	Reconstruction	\$ 22,400	2028		
2090	2229	MAIN		Town of Tecumseh	KENSINGTON BLVD	SC054	250	1972	ARLINGTON BLVD	CLOVELLY RD	87.3	Reconstruction	\$ 32,400	2028		
2092	2231	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC054	250	1972	ARLINGTON BLVD	CLOVELLY RD	80.9	Reconstruction	\$ 30,100	2028		
2252	2422	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC054	250	1972	ARLINGTON BLVD	CLOVELLY RD	93.7	Reconstruction	\$ 34,400	2028		
2248	2418	MAIN	CONC	Town of Tecumseh	KENSINGTON BLVD	SC054	300	1972	ARLINGTON BLVD	CLOVELLY RD	91.4	Reconstruction	\$ 33,700	2028	\$	534,400
2259	2429	MAIN	CONC	Town of Tecumseh	ESSEX RD	SC061	300	1976	RUTLAND RD	CLOVELLY RD	74.1	Reconstruction	\$ 28,200	2029		
2261	2431	MAIN	CONC	Town of Tecumseh	ESSEX RD	SC061	300	1975	RUTLAND RD	CLOVELLY RD	23.5	Reconstruction	\$ 12,400	2029		
3964	4301	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1995	PULLEYBLANK DR	FASAN DR	65.6	Reconstruction	\$ 25,600	2029		
3965	4302	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1995	PULLEYBLANK DR	FASAN DR	62.0	Reconstruction	\$ 24,500	2029		
3974	4311	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	105.1	Reconstruction	\$ 38,000	2029		
3971	4308	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	105.7	Reconstruction	\$ 38,100	2029		
3972	4309	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	121.3	Reconstruction	\$ 43,000	2029		
3973	4310	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300		PULLEYBLANK DR	FASAN DR	121.2	Reconstruction	\$ 43,000	2029		
3991	4328	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	143.6	Reconstruction	\$ 50,000	2029		
3992	4329	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	177.2	Reconstruction	\$ 60,500	2029		
3993	4330	MAIN	PVC	Town of Tecumseh	BLACKACRE DR	SS272	300	1989	PULLEYBLANK DR	FASAN DR	28.1	Reconstruction	\$ 13,800	2029		
3987	4324	MAIN	RCONC	Town of Tecumseh	BLACKACRE DR	SS272	525	1989	PULLEYBLANK DR	FASAN DR	157.8	Reconstruction	\$ 89,200	2029		
3988	4325	MAIN		Town of Tecumseh	BLACKACRE DR	SS272	525	1989	PULLEYBLANK DR	FASAN DR	24.8	Reconstruction	\$ 19,400	2029		
3985	4322	MAIN	RCONC	Town of Tecumseh	BLACKACRE DR	SS272	600		PULLEYBLANK DR	FASAN DR	13.2	Reconstruction	\$ 17,100	2029		
4007	4344	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS270	300		FASAN DR	WALKER RD	82.4	Reconstruction	\$ 30,800	2029	1	
4008	4345	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS270	300	1989		WALKER RD	63.5	Reconstruction	\$ 24,900	2029	1	
3994	4331	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS270	300		FASAN DR	WALKER RD	165.3	Reconstruction	\$ 56,800	2029	1	
3995	4332	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS270	300		FASAN DR	WALKER RD	156.1	Reconstruction	\$ 53,900	2029		
2726	2930	MAIN		Town of Tecumseh	CLOVELLY RD	SC060	450		ESSEX RD	KENSINGTON BLVD	32.9	Reconstruction	\$ 23,400	2029	1	

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	Yea	ar Total
2254	2424	MAIN	CONC	Town of Tecumseh	RUTLAND RD	SC063	300	1976	CLOVELLY RD	ESSEX RD	55.3	Reconstruction	\$ 22,300	2029		
2255	2425	MAIN	CONC	Town of Tecumseh	RUTLAND RD	SC063	300	1976	CLOVELLY RD	ESSEX RD	5.5	Reconstruction	\$ 6,800	2029		
2256	2426	MAIN	CONC	Town of Tecumseh	RUTLAND RD	SC063	300	1976	CLOVELLY RD	ESSEX RD	55.8	Reconstruction	\$ 22,500	2029		
2258	2428	MAIN	CONC	Town of Tecumseh	RUTLAND RD	SC063	300	1976	CLOVELLY RD	ESSEX RD	63.1	Reconstruction	\$ 24,800	2029		
2253	2423	MAIN	CONC	Town of Tecumseh	RUTLAND RD	SC063	300	1976	CLOVELLY RD	ESSEX RD	53.2	Reconstruction	\$ 21,700	2029		
Tecumseh Ro	oad CIP Phase	e 4										Engineering	\$ 6,000	2029	\$	796,700
3016	3252	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS029	600	1976	MAISONNEUVE ST	INTERSECTION RD	142.6	Reconstruction	\$ 97,300	2030		
3016	3252	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS029	600	1976	MAISONNEUVE ST	INTERSECTION RD	202.8	Reconstruction	\$ 134,600	2030		
3020	3256	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS029	600	1976	MAISONNEUVE ST	INTERSECTION RD	159.1	Reconstruction	\$ 107,500	2030		
3020	3256	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS029	600	1976	MAISONNEUVE ST	INTERSECTION RD	204.6	Reconstruction	\$ 135,700	2030		
3009	3245	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS031	600	1976	GOUIN ST	MAISONNEUVE ST	154.0	Reconstruction	\$ 104,300	2030		
3009	3245	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS031	600	1976	GOUIN ST	MAISONNEUVE ST	175.9	Reconstruction	\$ 117,900	2030		
3013	3249	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS031	600	1976	GOUIN ST	MAISONNEUVE ST	155.0	Reconstruction	\$ 105,000	2030		
3013	3249	MAIN	CONC	Town of Tecumseh	ST ANNE ST	SS031	600	1976	GOUIN ST	MAISONNEUVE ST	174.7	Reconstruction	\$ 117,200	2030		
2975	3211	MAIN	CONC	Town of Tecumseh	WARWICK RD	SC058	300	1976	CLOVELLY RD	BURLINGTON RD	110.9	Reconstruction	\$ 39,700	2030		
3047	3283	MAIN	CONC	Town of Tecumseh	WARWICK RD	SC058	300	1976	CLOVELLY RD	BURLINGTON RD	92.8	Reconstruction	\$ 34,100	2030		
2739	2943	MAIN	CONC	Town of Tecumseh	WARWICK RD	SC058	375	1976	CLOVELLY RD	BURLINGTON RD	14.3	Reconstruction	\$ 14,300	2030		
2742	2946	MAIN	CONC	Town of Tecumseh	WARWICK RD	SC058	375	1976	CLOVELLY RD	BURLINGTON RD	88.9	Reconstruction	\$ 43,100	2030		
2976	3212	MAIN	CONC	Town of Tecumseh	WARWICK RD	SC058	300	1976	CLOVELLY RD	BURLINGTON RD	6.2	Reconstruction	\$ 7,000	2030		
2737	2941	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	300	1976	RUTLAND RD	ESSEX RD	22.8	Reconstruction	\$ 12,200	2030		
2736	2940	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	300	1976	RUTLAND RD	ESSEX RD	35.7	Reconstruction	\$ 16,100	2030		
2732	2936	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	375	1976	RUTLAND RD	ESSEX RD	99.9	Reconstruction	\$ 47,000	2030		
2733	2937	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	375	1976	RUTLAND RD	ESSEX RD	125.9	Reconstruction	\$ 40,400	2030		
2735	2939	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	375	1976	RUTLAND RD	ESSEX RD	9.1	Reconstruction	\$ 12,400	2030		
2731	2935	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC062	375	1976	RUTLAND RD	ESSEX RD	28.1	Reconstruction	\$ 19,700	2030		
2328	2498	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC064	300	1976	ARLINGTON BLVD	RUTLAND RD	145.1	Reconstruction	\$ 50,500	2030		
2106	2245	MAIN	CONC	Town of Tecumseh	CLOVELLY RD	SC064	300	1976	ARLINGTON BLVD	RUTLAND RD	33.1	Reconstruction	\$ 15,400	2030	\$	1,271,400
2443	2616	MAIN	CONC	Town of Tecumseh	KEITH CRT	T072	375	1981	CORONADO DR	CORONADO DR	12.1	Reconstruction	\$ 9,300	2031		
2444	2617	MAIN	CONC	Town of Tecumseh	KEITH CRT	T072	375	1984	CORONADO DR	CORONADO DR	45.6	Reconstruction	\$ 32,000	2031		
2442	2615	MAIN	CONC	Town of Tecumseh	KEITH CRT	T072	375	1984	CORONADO DR	CORONADO DR	74.6	Reconstruction	\$ 42,200	2031		
4482	770	MAIN	CONC	Town of Tecumseh	CORONADO DR	T029	150	1990	RIVERSIDE DR E	RIVERSIDE DR E	58.6	Reconstruction	\$ 30,700	2031		
4483	771	MAIN	CONC	Town of Tecumseh	CORONADO DR	T029	150	1990	RIVERSIDE DR E	RIVERSIDE DR E	47.5	Reconstruction	\$ 23,600	2031		
4484	772	MAIN	CONC	Town of Tecumseh	CORONADO DR	T029	150	1990	RIVERSIDE DR E	RIVERSIDE DR E	4.9	Reconstruction	\$ 6,600	2031		
798	828	MAIN	CONC	Town of Tecumseh	CORONADO DR	T029	300	1990	RIVERSIDE DR E	RIVERSIDE DR E	58.8	Reconstruction	\$ 34,300	2031		
795	825	MAIN	CONC	Town of Tecumseh	CORONADO DR	T029	450	1990	RIVERSIDE DR E	RIVERSIDE DR E	112.2	Reconstruction	\$ 67,800	2031		
1567	1640	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	72.8	Reconstruction	\$ 27,800	2031		
1570	1643	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	61.9	Reconstruction	\$ 24,400	2031		
1571	1644	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	54.9	Reconstruction	\$ 22,200	2031		
1573	1646	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	65.8	Reconstruction	\$ 25,600	2031		
1572	1645	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	64.1	Reconstruction	\$ 25,100	2031		

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	Ye	ar Total
1566	1639	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	150	1950	DILLON DR	PERCY PL	45.8	Reconstruction	\$ 19,400	2031		
744	774	MAIN	CONC	Town of Tecumseh	CORONADO DR	T067	450	1990	DILLON DR	PERCY PL	4.7	Reconstruction	\$ 19,600	2031		
1790	1907	MAIN	CONC	Town of Tecumseh	CORONADO DR	T073	150	1950	KEITH AVE	MASON PL	140.3	Reconstruction	\$ 49,000	2031		
1792	1909	MAIN	CONC	Town of Tecumseh	CORONADO DR	T073	150	1950	KEITH AVE	MASON PL	154.0	Reconstruction	\$ 53,300	2031		
1791	1908	MAIN	CONC	Town of Tecumseh	CORONADO DR	T078	150	1950	MASON PL	LITTLE RIVER BLVD	116.3	Reconstruction	\$ 41,400	2031		
1793	1910	MAIN	CONC	Town of Tecumseh	CORONADO DR	T078	150	1950	MASON PL	LITTLE RIVER BLVD	88.2	Reconstruction	\$ 32,700	2031	\$	587,000
4009	4346	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	10.2	Reconstruction	\$ 8,300	2032		
4010	4347	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	13.2	Reconstruction	\$ 9,200	2032		
4016	4353	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	74.5	Reconstruction	\$ 28,400	2032		
4017	4354	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	150.8	Reconstruction	\$ 52,300	2032		
4018	4355	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	203.8	Reconstruction	\$ 68,800	2032		
4020	4357	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	121.4	Reconstruction	\$ 43,100	2032		
4021	4358	MAIN	PVC	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	10.8	Reconstruction	\$ 8,400	2032		
4023	4360	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	122.2	Reconstruction	\$ 43,300	2032		
4024	4361	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	109.0	Reconstruction	\$ 39,200	2032		
4025	4362	MAIN	PVC	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	12.8	Reconstruction	\$ 9,100	2032		
4026	4363	MAIN	PVC	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	11.6	Reconstruction	\$ 8,700	2032		
4011	4348	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	60.0	Reconstruction	\$ 23,800	2032		
4012	4349	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	55.8	Reconstruction	\$ 22,500	2032		
4013	4350	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	174.6	Reconstruction	\$ 59,700	2032		
4014	4351	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	186.5	Reconstruction	\$ 63,400	2032		
4015	4352	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	69.6	Reconstruction	\$ 26,800	2032		
4019	4356	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	185.2	Reconstruction	\$ 63,000	2032		
4022	4359	MAIN	PE	Town of Tecumseh	FASAN DR	SS271	300	1989	BLACKACRE DR	BLACKACRE DR	108.4	Reconstruction	\$ 39,000	2032	\$	617,000
1126	1178	MAIN	OTHER	Town of Tecumseh	BARRY AVE	T033	300	1974	RIVERSIDE DR E	DILLON DR	17.9	Reconstruction	\$ 16,800	2033		
2659	2863	MAIN	OTHER	Town of Tecumseh	BARRY AVE	T077	150	1974	DILLON DR	MASON PL	87.3	Reconstruction	\$ 36,100	2033		
2665	2869	MAIN	OTHER	Town of Tecumseh	BARRY AVE	T077	150	1974	DILLON DR	MASON PL	167.2	Reconstruction	\$ 57,400	2033		
1127	1179	MAIN	OTHER	Town of Tecumseh	BARRY AVE	T077	300	1974	DILLON DR	MASON PL	82.6	Reconstruction	\$ 30,900	2033		
2660	2864	MAIN	CONC	Town of Tecumseh	BARRY AVE	T077	300	1974	DILLON DR	MASON PL	145.6	Reconstruction	\$ 50,600	2033		
2663	2867	MAIN	STEEL	Town of Tecumseh	BARRY AVE	T082	150	1974	MASON PL	LITTLE RIVER BLVD	137.4	Reconstruction	\$ 48,000	2033		
2667	2871	MAIN	CONC	Town of Tecumseh	BARRY AVE	T082	300	1974	MASON PL	LITTLE RIVER BLVD	124.1	Reconstruction	\$ 43,900	2033		
682	690	MAIN	CONC	Town of Tecumseh	BARRY AVE	T082	375	1979	MASON PL	LITTLE RIVER BLVD	17.9	Reconstruction	\$ 15,700	2033	\$	299,400
3945	4282	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	59.7	Reconstruction	\$ 23,700	2034		
3946	4283	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	56.6	Reconstruction	\$ 22,800	2034		
3947	4284	MAIN	CONC	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	30.1	Reconstruction	\$ 14,500	2034		
3948	4285	MAIN	CONC	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	120.5	Reconstruction	\$ 42,800	2034		
3949	4286	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	58.2	Reconstruction	\$ 23,300	2034		
3951	4288	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	64.6	Reconstruction	\$ 25,300	2034		
3943	4280	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	60.6	Reconstruction	\$ 24,000	2034		
3944	4281	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	47.6	Reconstruction	\$ 20,000	2034		

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	Costing	Year	Yea	ar Total
3963	4300	MAIN	PE	Town of Tecumseh	BLACKACRE DR	SS282	300	1995	ROSCON INDUSTRIAL DR	PULLEYBLANK DR	64.9	Reconstruction	\$ 25,400	2034		
4325	6234	MAIN	PVC	Town of Tecumseh	BLACKACRE DR	SS284	300	1999	OUTER DR	ROSCON INDUSTRIAL DR	63.5	Reconstruction	\$ 24,900	2034		
4328	6237	MAIN	CONC	Town of Tecumseh	BLACKACRE DR	SS284	450	1999	OUTER DR	ROSCON INDUSTRIAL DR	122.2	Reconstruction	\$ 88,200	2034		
4327	6236	MAIN	CONC	Town of Tecumseh	BLACKACRE DR	SS284	600	1999	OUTER DR	ROSCON INDUSTRIAL DR	150.9	Reconstruction	\$ 102,400	2034		
4333	6242	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	375	1999	BLACKACRE DR	BLACKACRE DR	95.3	Reconstruction	\$ 53,600	2034		
4336	6245	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	450	1999	BLACKACRE DR	BLACKACRE DR	118.5	Reconstruction	\$ 74,200	2034		
4339	6248	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	450	1999	BLACKACRE DR	BLACKACRE DR	39.6	Reconstruction	\$ 26,600	2034		
4340	6349	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	600	1999	BLACKACRE DR	BLACKACRE DR	65.6	Reconstruction	\$ 49,500	2034		
4341	6250	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	600	1999	BLACKACRE DR	BLACKACRE DR	83.8	Reconstruction	\$ 60,800	2034		
4342	6251	MAIN	CONC	Town of Tecumseh	ROSCON INDUSTRIAL DR	SS283	600	1999	BLACKACRE DR	BLACKACRE DR	84.8	Reconstruction	\$ 61,500	2034	\$	763,500
				Town of Tecumseh	KEITH AVE	T069			CORONADO DR	BURDICK CRES	100.6	Reconstruction	\$ 37,000	2035		
809	839	MAIN	CONC	Town of Tecumseh	KEITH AVE	T071	150	1979	BURDICK CRES	DILLON DR	104.5	Reconstruction	\$ 37,700	2035		
810	840	MAIN	CONC	Town of Tecumseh	KEITH AVE	T071	300	1979	BURDICK CRES	DILLON DR	50.8	Reconstruction	\$ 21,000	2035		
759	789	MAIN	CONC	Town of Tecumseh	KEITH AVE	T071	675	1990	BURDICK CRES	DILLON DR	8.5	Reconstruction	\$ 22,000	2035		
808	838	MAIN	CONC	Town of Tecumseh	BURDICK CRES	T070	150	1950	DILLON DR	KEITH AVE	176.1	Reconstruction	\$ 60,200	2035		
805	835	MAIN	OTHER	Town of Tecumseh	BURDICK CRES	T075	150	1960	KEITH AVE	MASON PL	133.1	Reconstruction	\$ 46,700	2035		
806	836	MAIN	OTHER	Town of Tecumseh	BURDICK CRES	T075	150	1960	KEITH AVE	MASON PL	135.9	Reconstruction	\$ 47,600	2035		
807	837	MAIN	CONC	Town of Tecumseh	BURDICK CRES	T075	150	1950	KEITH AVE	MASON PL	33.0	Reconstruction	\$ 15,400	2035		
803	833	MAIN	OTHER	Town of Tecumseh	MASON PL	T076	150	1960	BURDICK CRES	BARRY AVE	98.9	Reconstruction	\$ 36,000	2035		
2666	2870	MAIN	OTHER	Town of Tecumseh	MASON PL	T076	150	1960	BURDICK CRES	BARRY AVE	104.7	Reconstruction	\$ 37,800	2035		
2679	2883	MAIN	CONC	Town of Tecumseh	MASON PL	T076	300	1960	BURDICK CRES	BARRY AVE	122.1	Reconstruction	\$ 43,300	2035		
2670	2874	MAIN	CONC	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	14.4	Reconstruction	\$ 9,600	2035		
2672	2876	MAIN	CONC	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	6.7	Reconstruction	\$ 7,100	2035		
2673	2877	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	31.9	Reconstruction	\$ 15,000	2035		
2674	2878	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	41.5	Reconstruction	\$ 18,000	2035		
2675	2879	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	16.8	Reconstruction	\$ 10,300	2035		
2676	2880	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	18.2	Reconstruction	\$ 10,700	2035		
2680	2884	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	71.1	Reconstruction	\$ 27,300	2035		
2668	2872	MAIN	OTHER	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	2.3	Reconstruction	\$ 5,800	2035		
2671	2875	MAIN	CONC	Town of Tecumseh	MASON PL	T074	150	1960	CORONADO DR	BURDICK CRES	70.8	Reconstruction	\$ 27,200	2035		
2681	2885	MAIN	CONC	Town of Tecumseh	MASON PL	T074	300	1960	CORONADO DR	BURDICK CRES	2.7	Reconstruction	\$ 5,900	2035		
800	830	MAIN	CONC	Town of Tecumseh	MASON PL	T074	300	1960	CORONADO DR	BURDICK CRES	2.9	Reconstruction	\$ 6,000	2035		
Tecumseh Ro	oad CIP Phase	e 5										Engineering	\$ 6,000	2035	\$	553,600
2763	2967	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC052	600	1976	RIVERSIDE DR E	ALDEN CRES	102.8	Reconstruction	\$ 73,000	2036		
2765	2969	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC052	600	1976	RIVERSIDE DR E	ALDEN CRES	66.2	Reconstruction	\$ 49,900	2036		
2771	2975	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC052	600	1976	RIVERSIDE DR E	ALDEN CRES	75.1	Reconstruction	\$ 55,400	2036		
1899	2038	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC041	250	1976	CEDAR CRES	ST GREGORY'S RD	8.5	Reconstruction	\$ 9,200	2036		
1738	1855	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC041	300	1976	CEDAR CRES	ST GREGORY'S RD	107.7	Reconstruction	\$ 38,700	2036		
1811	1928	MAIN	PVC	Town of Tecumseh	ST MARK'S RD	SC041	300	1997	CEDAR CRES	ST GREGORY'S RD	11.0	Reconstruction	\$ 8,500	2036		
4449	652	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC045	600	1976	HAYES AVE	WILLOW CRT	152.7	Reconstruction	\$ 104,100	2036		

Reconstruction

Object ID	GIS ID	Pipe	Material	Owner	Road Name	Road ID	Size	Year	From Road	To Road	Length	Work Type	(Costing	Year	Yea	r Total
4448	651	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC045	600	1976	HAYES AVE	WILLOW CRT	3.1	Reconstruction	\$	10,200	2036		
4447	650	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC043	600	1976	WILLOW CRT	CEDAR CRES	181.1	Reconstruction	\$	120,600	2036		
1963	2102	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC050	600	1976	ALDEN CRES	HAYES AVE	92.0	Reconstruction	\$	65,900	2036		
1964	2103	MAIN	CONC	Town of Tecumseh	ST MARK'S RD	SC049	600	1976	HAYES AVE	HAYES AVE	75.6	Reconstruction	\$	55,700	2036	\$	591,200
9533	6541	MAIN	CONC	Town of Tecumseh	EDGEWATER	SC039	300	1980	RIVERSIDE DR	HAYES	322.4	Reconstruction	\$	105,500	2037	\$	105,500

20 Year Total Reconstruction \$ 13,490,215

20 Year Grand Total \$ 20,708,500

\$ 7,217,250

Town of Tecumseh Storm Facilities 20 Year Plan

Asset Name	Description	Location	In-Service Year	Estimated Useful Life	Replacement Cost	Year of Estimated Work		Cost	Year Estimate		Cost	Year of Estimated Work		Cost
Brighton Rd Pump Station	Structure	Brighton Rd	2010	50	\$ 3,198,000	2036	\$	75,000						
Brighton Rd Pump Station	Mechanical	Brighton Rd	2010	20	\$ 696,000	2026	\$	30,000						
Brighton Rd Pump Station	SCADA	Brighton Rd	2010	25	\$ 107,000	2035	\$	107,000						
East St. Louis Pump Station	Structure	Riverside Drive east of Centennial Drive	1981	. 50	\$ 2,953,000	2019	\$	84,500				2027	\$	25,500
East St. Louis Pump Station	Mechanical/Electrical	Riverside Drive east of Centennial Drive	1981	. 20	\$ 1,347,000	2027	\$	14,000				2030	\$	1,347,000
Edgewater (Scully) Pump Station	Structure	Intersection of Riverside Drive and Edgewater Blvd	1978	50	\$ 3,119,000									
Edgewater (Scully) Pump Station	Mechanical/Electrical	Intersection of Riverside Drive and Edgewater Blvd	1978	20	\$ 1,881,000	2019	\$	470,200	202	1	\$ 6,259,700			
St. Marks Pump Station	Structure	Intersection of St. Mark's and Riverside Drive	1960/1988	50	\$ 487,000	Engineering	for recor	nstruction			, , , , , , , , , , , , , , , , , , , ,			
St. Marks Pump Station	Mechanical	Intersection of St. Mark's and Riverside Drive	1960/1988	20	\$ 513,000	(aba	ndonmen	nt) ¹	Recons	truction	(abandonment) ¹			
Kensington Pump Station	Structure	Intersection of Riverside Drive and Kensington Blvd	1978	50	\$ 1,622,000	2019	\$	13,000	202	1	\$ 356,250	2023	\$	5,181,750
Kensington Pump Station	Mechanical/Electrical	Intersection of Riverside Drive and Kensington Blvd	1978	20	\$ 878,000					Engine	eering ¹	Recon	structi	on ¹
West St. Louis Pump Station	Structure	Riverside Drive between Centennial Dr and Barry Ave	1991	. 50	\$ 2,057,000	2019	\$	46,300				2027	\$	22,000
West St. Louis Pump Station	Mechanical	Riverside Drive between Centennial Dr and Barry Ave	1991	. 20	\$ 1,143,000	2019	\$	20,000				2027	\$	6,000
Lesperance Pump Station	Structure	Intersection of Lesperance Road and Riverside Drive	1957/1977/1988/2002	50	\$ 3,812,000	2018	\$	65,000	201	9	\$ 117,200	2026	\$	35,000
Lesperance Pump Station	Mechanical	Intersection of Lesperance Road and Riverside Drive	1988/2002	20	\$ 1,388,000	2018	\$	35,000				2026	\$	600,000
Manning Rd. ETLD Storm Pump Station	Structure	Intersection of Manning Road and Riverside Drive	2015	50	\$ 3,774,000									
Manning Rd. ETLD Storm Pump Station	Mechanical	Intersection of Manning Road and Riverside Drive	2015	20	\$ 3,007,000	2035	\$	650,000						
Manning Rd. ETLD Storm Pump Station	SCADA	Intersection of Manning Road and Riverside Drive	2015	25	\$ 220,000									
Other:														
SCADA Software/Server/Nodes Update						2018	\$	5,250						
Pump Station Emergency Response Plan						2018	\$	35,000						

¹ Dates subject to change based on final Storm Drainage Master Plan report.

Total \$ 32,202,000 20 Year Grand Total \$ 15,600,650

\$ 6,733,150



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.4	EFFECTIVE DATE: January 28, 2014								
SUPERCEDES: N/A	APPROVAL: RCM-46/14								
SUBJECT: Water Distribution System Condition Assessment Policy									

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of the Town's water distribution system.

SCOPE:

2.1 The water distribution system, which consists of watermains, services, fire hydrants, autoflushers, metering chambers and a water tower, shall be assessed as outlined in this policy.

BACKGROUND:

3.1 The Town of Tecumseh uses a straight line, age-based method to assign asset condition for watermain infrastructure. The rationale behind this is that cast iron and ductile iron pipes, which are the oldest, have the highest frequency of watermain breaks.

The watermain asset condition grade is determined using the following formula:

Condition = Service Life Remaining / Useful Life

The condition grades are then grouped as follows:

Condition	Grade
	Range
Critical	0 - 20
Poor	21 – 40
Fair	41 – 60
Good	61 – 80
Excellent	81 – 100

For the condition assessment process, grouping the assets assists in the prioritization of watermain replacements.

PROCEDURE:

- 4.1 Watermain breaks shall be documented and filed. During watermain repairs, the Water Operator shall examine the external condition and if possible the internal condition of the watermain and shall note the condition on the repair sheet. Excessive watermain breaks, over 7 within 1km length of watermain, shall be noted and reviewed for possible replacement by the Manager Water & Wastewater and/or Manager Engineering Services.
- 4.2 Water quality shall be measured weekly by Town Water Operators and water quality concerns from water customers shall be documented and reviewed weekly. Poor water quality (discoloured water or low chlorine residuals) shall be used to measure the internal quality of the watermain. Water quality shall be measured with equipment that gives a value (#) of chlorine residual (free chlorine left in the water) in parts per million (ppm). Ministry of the Environment (MOE) minimum standards are set at 0.20 ppm. Chlorine residual reads of less than 0.05 ppm shall be reported to the local health unit. Water quality indicators shall also be used to assist in determining the life of the watermain.
- 4.3 Every fire hydrant shall be operated and inspected at least 3 times a year and painted every 4 years. Fire hydrants that become too costly to repair or maintain shall be replaced.
- 4.4 A Town Water Operator shall conduct an internal and external visual inspection of the water tower weekly. In addition, the water tower shall be inspected by a qualified contractor every 5 years as per AWWA recommendations. These inspection reports and recommendations shall be reviewed to determine how to protect and extend the life of this asset.
- 4.5 Boundary Water Meters shall be inspected twice a year by a qualified contractor. Recommendations shall be submitted in a report to the Manager Water & Wastewater. In addition, the Manager Water & Wastewater and/or designate shall review data from

- the 24/7 computer monitoring system built into each station that might affect the life of this asset.
- 4.6 The Town of Tecumseh shall, within the asset condition assessment policy, implement the aforementioned inspection methods to assist determining asset conditions.
- 4.7 The Director Public Works & Environmental Services shall ensure that the Town continues to maintain acceptable levels of service, which shall be qualified as:
 - Watermain flow test result greater than 1,000 gallons per minute (GPM)
 - Less than 3 watermain breaks per km
 - Meet or exceed the MOE minimum standard for water quality of 0.20 ppm chlorine residual.
- 4.8 The Director Public Works & Environmental Services shall ensure that the Town's program to maintain acceptable levels of service will include:
 - Watermain flow tests performed every 5 years
 - Fire hydrant inspection 3 times/year; painting every 4 years
 - Water tower inspections every 5 years
 - Boundary water meter inspections twice/year.

RESPONSIBILITY:

- 5.1 The Director Public Works & Environmental Services shall be responsible for the implementation of the Water Distribution System Condition Assessment Policy.
- 5.2 The Manager Water & Wastewater and/or Manager Engineering Services shall be responsible for review and use of the information gathered from the condition assessments.
- 5.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Water & Wastewater and/or the Manager Engineering Services, shall assign urgent repairs as identified in the condition assessments to contractors that have the capabilities and resources to carry out repairs within the above prescribed timeframes. This awarding of work shall be in accordance with the Town's Purchasing Policy.

REFERENCE:

Purchasing By-law 2006-03, which includes the Purchasing Policy

Street Name	Road From	Road To	GIS ID	Material	MainType	Road Section	Year	Size (mm)	Length (m)	Age-Based Condition Rating	Condition	Description of Work	Cost	Year	Subtotal by Year
Master Plan															
Water & Wastewater Master Plan Update												Engineering	\$ 50,000	2018 \$	
- 1 1 m													20 Year Total M	laster Plan \$	50,000
Rehabilitation						I	1	1				Dahahilitati an	ć 27F 000	2010 6	275 000
Anode Protection Program - various												Rehabilitation	\$ 375,000	2018 \$	
Replacement												20) Year Total Reh	abilitation \$	375,000
Mack Crt	St Mark's Rd	Mack Crt	1956	CI	DistMain	SC046	1956	100	51.5	0%	Critical	Replacement	\$ 135,100	2018	
Mack Crt	Hayes Ave	Hayes Ave	1954	CI	DistMain	SC047	1956	100	22.3	0%	Critical	Replacement	\$ 58,600	2018	
Mack Crt	Hayes Ave	Hayes Ave	1955	CI	DistMain	SC047	1956	100	17.5	0%	Critical	Replacement	\$ 46,000	2018	
Lacasse Park watermain replacement					DistMain							Replacement	\$ 350,200	2018	
Tecumseh Rd watermain abandonment	Arlington Blvd	530m westerly		CI	DistMain		1955	150				Abandonment	\$ 222,400	2018	
Alden Cres	St Mark's Rd	St Mark's Rd	1052	CI	DistMain	SC051	1955	150	1.0	-2%	Critical	Replacement	\$ 1,400	2018	
Alden Cres	St Mark's Rd	St Mark's Rd	1053	CI	DistMain	SC051	1955	150	0.9	-2%	Critical	Replacement	\$ 1,400	2018	
Alden Cres	St Mark's Rd	St Mark's Rd	1056	CI	DistMain	SC051	1955	150	48.3	-2%		Replacement	\$ 70,100	2018	
Alden Cres	St Mark's Rd	St Mark's Rd	1957	CI	DistMain	SC051	1956	100	23.6	0%	Critical	Replacement	\$ 34,200	2018	
Alden Cres	St Mark's Rd	St Mark's Rd	1958	CI	DistMain	SC051	1956	100	32.4	0%		Replacement	\$ 47,000	2018	
Roscon Industrial Drive	Highway 3	Roscon Industrial	1962	DI	DistMain	SS283	1999	50	247.8		Good	Replacement	\$ 155,400	2018	
Rossi Dr	Outer Dr	Pulleyblank Dr	1450	DI	DistMain	SS274	1976	200	609.5	33%	Poor	Replacement	\$ 400,000	2018	
Highway 3/Walker Rd watermain replacement												Engineering	\$ 134,600	2018 \$	1,656,400
Manning Rd	Riverside Dr E	Little River Blvd	786	CI	DistMain	T_SC001	1955	150	182.5	-2%		Replacement	\$ 78,800	2019	
Manning Rd	Riverside Dr E	Little River Blvd	787	CI	DistMain	T_SC001	1975	150	239.7	32%		Replacement	\$ 103,500	2019	
Manning Rd Manning Road/ETLD Drain	Little River Blvd	St Thomas St	789	CI	DistMain	T_SC002	1974	150	207.8	30%		Replacement	\$ 89,700	2019	
Manning Rd Relocation - Phase 2	Little River Blvd	St Thomas St	788	CI	DistMain	T_SC002	1975	150	68.2	32%		Replacement	\$ 29,400	2019	
Manning Rd	St Thomas St	Village Grove Dr	1081	PVC	DistMain	T_SC003	2002	150	54.6	83%		Replacement	\$ 23,600	2019	
Manning Rd	St Thomas St	Village Grove Dr	1082	PVC	DistMain	T_SC003	2002	250	141.4	83%		Replacement	\$ 61,000	2019	
Manning Rd —	St Thomas St	Village Grove Dr	1083	PVC	DistMain	T_SC003	1994	250	73.0		Good	Replacement	\$ 31,500	2019	
Highway 3	Outer Dr	Walker Rd	1892	DI	DistMain	SS267	1974	200	395.7	30%		Replacement	\$ 611,600	2019	
Walker Rd Hwy # 3/Walker Road	Mccord Lane	Talbot Rd	1473	PVC	DistMain	SS268	2002	200	211.5	77%		Replacement	\$ 326,800	2019	
Walker Rd Watermain Replacement	Talbot Rd	S Talbot Rd	1875	PVC	DistMain	SS331	1988	200	133.5	65%	Good	Replacement	\$ 206,400	2019	
Highway 3	County Road 11	Oldcastle Rd		PVC	DistMain			300	430.0			New	\$ 664,600	2019	
West Lake Dr	Shawnee Rd	Hebert St	1161	DI	DistMain	SS026	1985	150	4.7	48%	Fair	Replacement	\$ 1,100	2019	
West Lake Dr	Shawnee Rd	Hebert St	1162	DI	Trunk	SS026	1985	300	129.3	48%	Fair	Replacement	\$ 29,000	2019	
West Lake Dr	Chornoby Cres	Lesperance Rd	1158	DI	Trunk	SS045	1985	300	220.3	48%	Fair	Replacement	\$ 49,400	2019	
West Lake Dr	Hebert St	Chornoby Cres	1159	DI	Trunk	SS046	1985	300	140.2	48%	Fair	Replacement	\$ 31,500	2019	
County Rd 46/Webster/Laval Sanitary Sewer Extens	sion (LRPCP)											Engineering	\$ 45,000	2019 \$	2,382,900
County Rd 42/Manning				PVC	TransMain			400				New	\$ 281,000	2020	
CR19@CR46 Advanced Construction (County)												Replacement	\$ 162,500	2020 \$	443,500
CR19@CR34 Advanced Construction												Replacement	\$ 52,000	2021 \$	52,000
County Rd 42	Lesperance Rd	Strawberry Dr	1272	DI	DistMain	SS145	1974	150	166.6	30%		Replacement	\$ 144,700	2022	
County Rd 42	Strawberry Dr	Manning Rd	1271	DI	DistMain	SS153	1974	150	318.9	30%		Replacement	\$ 255,300	2022 \$	400,000
Arbour St	St Anne Blvd	Lesperance Rd	589	CI	DistMain	T294	1955	150	133.3	-2%		Replacement	\$ 59,900	2023	
Argent St	St Thomas St	Ballard St	891	CI	DistMain	T206	1955	150	84.7	-2%		Replacement	\$ 35,900	2023	
Ballard St	Lacasse Blvd	Argent St	890	CI	DistMain	T205	1955	150	242.7	-2%		Replacement	\$ 95,900	2023	
Barry Ave	Riverside Dr E	Dillon Dr	731	CI	DistMain	T033	1955	150	103.6	-2%		Replacement	\$ 43,400	2023	
Dillon Dr	Kenney Crt	Kenney Crt	616	CI	Trunk	T017	1964	400	197.9	13%		Replacement	\$ 169,600	2023	
Dillon Dr	Kenney Crt	Chene St	606	CI	Trunk	T019	1964	400	54.9	13%		Replacement	\$ 44,400	2023	
Dillon Dr	Chene St	Lesperance Rd	425	CI	Trunk	T021	1964	400	3.4	13%		Replacement	\$ 2,800	2023	
Dillon Dr	Chene St	Lesperance Rd	607	CI	Trunk	T021	1964	400	111.8	13%		Replacement	\$ 97,700	2023	
Dillon Dr	Coronado Dr	Burdick Cres	724	CI	DistMain	T030	1955	150	98.1	-2%	Critical	Replacement	\$ 46,000	2023	

										Age-Based		Description of			Subtotal by
Street Name	Road From	Road To	GIS ID	Material	MainType	Road Section	Year	Size (mm)	Length (m)	Condition Rating	Condition	Work	Cost	Year	Year
Dillon Dr	Burdick Cres	Keith Ave	725	CI	DistMain	T031	1955	150	249.5	-2%	Critical	Replacement	\$ 122,400	2023	
Evergreen Dr	Gauthier Dr	Lesperance Rd	697	CI	DistMain	T120	1966	150	72.6	17%	Critical	Replacement	\$ 40,600	2023	
Evergreen Dr	Gauthier Dr	Lesperance Rd	698	CI	DistMain	T120	1966	150	184.0	17%	Critical	Replacement	\$ 82,200	2023	\$ 840,800
Gouin St	St Anne St	Lesperance Rd	1275	CI	DistMain	SS037	1962	150	124.3	10%	Critical	Replacement	\$ 51,600	2024	· · · · · · · · · · · · · · · · · · ·
Hayes Ave	Edgewater Blvd	St Mark's Rd	1057	CI	DistMain	SC038	1955	150	124.2	-2%	Critical	Replacement	\$ 49,100	2024	
Intersection Rd	Hebert St	St Anne St	1278	CI	DistMain	SS028	1962	150	40.2	10%	Critical	Replacement	\$ 15,900	2024	
Lesperance Rd	Highway 2	West Lake Dr	1156	CI	DistMain	SS048	1960	150	7.3	7%	Critical	Replacement	\$ 2,900	2024	
Lesperance Rd	Highway 2	West Lake Dr	1745	CI	DistMain	SS048	1960	150	5.9	7%	Critical	Replacement	\$ 2,400	2024	
Lesperance Rd	Highway 2	West Lake Dr	1746	CI	DistMain	SS048	1960	150	4.4	7%		Replacement	\$ 1,800	2024	
Lesperance Rd	Highway 2	West Lake Dr	2645	CI	DistMain	SS048	1960	150	63.1	7%	Critical	Replacement	\$ 25,000	2024	
Lesperance Rd	Renaud St	Highway 2	645	CI	DistMain	T299	1960	150	107.1	7%	Critical	Replacement	\$ 54,300	2024	
Shawnee Rd	Maisonneuve St	Intersection Rd	1410	CI	DistMain	SS007	1955	150	366.9	-2%	Critical	Replacement	\$ 156,900	2024	
Shawnee Rd	Gouin St	Maisonneuve St	1409	CI	DistMain	SS011	1955	150	314.5	-2%	Critical	Replacement	\$ 141,000	2024	
Shawnee Rd	Kavanagh Dr	Gouin St	1408	CI	DistMain	SS013	1955	150	270.8	-2%	Critical	Replacement	\$ 116,500	2024	
Shawnee Rd	West Lake Dr	Kavanagh Dr	1407	CI	DistMain	SS018	1955	150	279.6	-2%	Critical	Replacement	\$ 117,700	2024	
Shawnee Rd	Highway 2	West Lake Dr	1406	CI	DistMain	SS019	1955	150	192.6	-2%	Critical	Replacement	\$ 76,100	2024	
Shawnee Rd	Highway 2	West Lake Dr	1406	CI	DistMain	SS019	1955	150	192.6	-2%	Critical	Replacement	\$ 76,100	2024	
Shawnee Rd	Highway 2	West Lake Dr	1406	CI	DistMain	SS019	1955	150	192.6	-2%	Critical	Replacement	\$ 76,100	2024	
CIP Phase 1 - Lesperance Rd	Tecumseh Rd	Lanoue St	629	DI	DistMain	T312	1980	150	82.4	40%	Fair	Replacement	\$ 70,300	2024	
CIP Phase 1 - Tecumseh Rd	St Anne Blvd	Lesperance Rd	566	DI	Trunk	T265	1980	400	106.5	40%	Fair	Replacement	\$ 217,300	2024	
CIP Phase 1 - Tecumseh Rd	Lesperance Rd	Bedell St	625	DI	Trunk	T267	1980	400	170.8	40%	Fair	Replacement	\$ 344,000	2024	
CIP Phase 1 - Tecumseh Rd	Lesperance Rd	Bedell St	626	DI	Trunk	T267	1980	400	69.1	40%		Replacement	\$ 125,200	2024	\$ 1,720,200
Arlington Blvd	Burlington Rd	St Gregory's Rd	1029	CI	DistMain	SC056	1955	150	113.2	-2%	Critical	Replacement	\$ 37,900	2025	
Arlington Blvd	Hayes Ave	Burlington Rd	1028	CI	DistMain	SC065	1955	150	347.1	-2%		Replacement	\$ 111,600	2025	
Arlington Blvd	Riverside Dr E	Hayes Ave	1027	CI	DistMain	SC066	1955	150	332.4	-2%	Critical	Replacement	\$ 104,800	2025	
Arlington Blvd	St Gregory's Rd	Tecumseh Rd	1030	CI	DistMain	SC085	1955	150	261.0	-2%	Critical	Replacement	\$ 86,700	2025	
Arlington Blvd	St Gregory's Rd	Tecumseh Rd	2713	CI	DistMain	SC085	1955	150	116.1	-2%	Critical	Replacement	\$ 36,600	2025	
St Denis St	Lesperance Rd	St Pierre St	715	CI	DistMain	T213	1960	150	90.5	7%	Critical	Replacement	\$ 40,600	2025	
St Denis St	St Pierre St	William St	716	CI	DistMain	T215	1960	150	140.0	7%	Critical	Replacement	\$ 57,700	2025	
St Denis St	William St	Lacasse Blvd	714	CI	DistMain	T217	1960	150	137.4	7%	Critical	Replacement	\$ 68,600	2025	
Tecumseh Rd	Tecumseh Rd	Lanoue St	571	DI	DistMain	T312	1980	150	12.5	40%	Fair	Replacement	\$ 4,000	2025	\$ 548,500
12th Con Rd	County Rd 42	Dimu Dr	1182	CI	DistMain	SS181	1966	150	223.4	17%	Critical	Replacement	\$ 97,800	2026	
St Pierre St	Riverside Dr E	Dillon Dr	622	CI	DistMain	T024	1955	150	261.1	-2%	Critical	Replacement	\$ 141,200	2026	
St Pierre St	Clapp St	St Thomas St	539	CI	DistMain	T151	1960	150	246.5	7%	Critical	Replacement	\$ 128,300	2026	
St Pierre St	St Thomas St	McNorton St	540	CI	DistMain	T197	1960	150	304.4	7%	Critical	Replacement	\$ 179,700	2026	
St Pierre St	McNorton St	St Denis St	541	CI	DistMain	T214	1960	150	339.9	7%	Critical	Replacement	\$ 188,900	2026	
CIP Phase 2 - Tecumseh Rd	Shawnee Rd	Poisson St	386	DI	Trunk	T263	1980	400	223.8	40%	Fair	Replacement	\$ 372,100	2026	
CIP Phase 2 - Tecumseh Rd	Poisson St	St Anne Blvd	390	DI	Trunk	T264	1980	400	62.6	40%	Fair	Replacement	\$ 98,600	2026	
CIP Phase 2 - Tecumseh Rd	Poisson St	St Anne Blvd	560	DI	Trunk	T264	1980	400	56.7	40%	Fair	Replacement	\$ 98,800	2026	\$ 1,305,400
Tecumseh Rd	Dresden Pl	Regent Rd	952	CI	DistMain	SC068	1955	250	436.8	-2%	Critical	Replacement	\$ 217,800	2027	
Tecumseh Rd	Dresden Pl	Regent Rd	955	CI	DistMain	SC068	1955	150	181.9	-2%	Critical	Replacement	\$ 71,900	2027	
Tecumseh Rd	Regent Rd	Dorset Park	953	CI	DistMain	SC083	1955	250	0.6	-2%	Critical	Replacement	\$ 400	2027	
Tecumseh Rd	Regent Rd	Dorset Park	956	CI	DistMain	SC083	1955	150	173.2	-2%	Critical	Replacement	\$ 75,700	2027	
Tecumseh Rd	Dorset Park	Arlington Blvd	958	CI	DistMain	SC084	1955	150	171.5	-2%	Critical		\$ 70,200	2027	
Olympia Dr	Astor Cres	Walker Rd	1466	DI	DistMain	SS286	1978	200	242.6	53%		Replacement	\$ 94,400	2027	
Olympia Dr	Solar Cres	Astor Cres	1468	DI	DistMain	SS288	1978	200	157.4	53%	Fair	Replacement	\$ 63,500	2027	<u> </u>
Solar Cres	Olympia Dr	Solar Cres	1469	DI	DistMain	SS289	1978	200	115.6	53%	Fair	Replacement	\$ 51,500	2027	
Astor Cres	Olympia Dr	Olympia Dr	1467	DI	DistMain	SS287	1978	200	126.9	53%	Fair	Replacement	\$ 53,800	2027	\$ 699,200
Astor Cres	Olympia Dr	Olympia Dr	1467	DI	DistMain	SS287	1978	200	126.9	37%	Poor	Replacement	\$ 53,800	2028	
Olympia Dr	Astor Cres	Walker Rd	1466	DI	DistMain	SS286	1978	200	242.6	37%	Poor	Replacement	\$ 94,400	2028	
Olympia Dr	Solar Cres	Astor Cres	1468	DI	DistMain	SS288	1978	200	157.4	37%	Poor	Replacement	\$ 63,500	2028	
Orympia Di	Join Cics	7.3.01 0.03	1400	וט	Distivialii	33200	1370	200	137.4	31/0	1 001	періассіпені	00,500	2020	

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Street Name	Road From	Road To	GIS ID	Material	MainType	Road Section	Year	Size (mm)	Length (m)	Condition Rating	Condition	Work	Cost	Year	Year
Solar Cres	Olympia Dr	Solar Cres	1469	DI	DistMain	SS289	1978	200	115.6	37%	Poor	Replacement	\$ 51,500	2028	
St Anne St	Intersection Rd	North Pacific Ave	1236	CI	DistMain	SS056	1962	150	527.1	10%	Critical	Replacement	\$ 179,100	2028	
William St	Clapp St	St Thomas St	548	CI	DistMain	T153	1960	150	222.4	7%	Critical	Replacement	\$ 123,500	2028	
William St	St Thomas St	McNorton St	549	CI	DistMain	T199	1960	150	333.5	7%	Critical	Replacement	\$ 174,600	2028	
William St	McNorton St	St Denis St	547	CI	DistMain	T216	1960	150	153.3	7%		Replacement	\$ 79,600	2028	
William St	McNorton St	St Denis St	2775	CI	DistMain	T216	1960	150	65.2	7%	Critical	Replacement	\$ 35,300	2028	
William St	McNorton St	St Denis St	2776	CI	DistMain	T216	1960	150	75.4	7%	Critical	Replacement	\$ 34,600	2028	
William St	St Thomas St	McNorton St	1711	CI	DistMain	T199	2005	150	4.9	82%	Excellent	Replacement	\$ 2,000	2028	
Willow Crt	St Mark's Rd	St Mark's Rd	1951	CI	DistMain	SC044	1956	100	3.3	0%	Critical	Replacement	\$ 1,200	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	371	DI	Trunk	T262	1980	400	28.7	40%	Fair	Replacement	\$ 29,400	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	372	DI	Trunk	T262	1980	400	73.3	40%		Replacement	\$ 57,100	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	373	DI	Trunk	T262	1980	400	2.1	40%		Replacement	\$ 1,600	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	374	DI	Trunk	T262	1980	400	0.5	40%	Fair	Replacement	\$ 2,600	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	375	DI	Trunk	T262	1980	400	0.5	40%		Replacement	\$ 400	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	376	DI	Trunk	T262	1980	400	2.4	40%		Replacement	\$ 1,800	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	377	DI	Trunk	T262	1980	400	16.5	40%		Replacement	\$ 14,100	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	381	DI	Trunk	T262	1980	400	45.1	40%		Replacement	\$ 36,900	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	382	DI	Trunk	T262	1980	400	21.6	40%		Replacement	\$ 15,600	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	383	DI	Trunk	T262	1980	400	52.7	40%		Replacement	\$ 44,400	2028	
CIP Phase 3 - Tecumseh Rd	Southfield Dr	Shawnee Rd	384	DI	Trunk	T262	1980	400	82.4	40%		Replacement	\$ 76,600	2028	\$ 1,173,600
Burlington Rd	Arlington Blvd	Warwick Rd	1035	CI	DistMain	SC057	1955	150	154.6	-2%		Replacement	\$ 48,700	2029	, -,
Burlington Rd	Warwick Rd	Clovelly Rd	1036	CI	DistMain	SC059	1955	150	217.8	-2%		Replacement	\$ 73,100	2029	
Clapp St	Lesperance Rd	St Pierre St	543	CI	DistMain	T127	1968	200	91.2	20%			\$ 42,800	2029	
Clapp St	St Pierre St	William St	544	CI	DistMain	T128	1968	150	102.9	20%		Replacement	\$ 45,500	2029	
Clapp St	William St	Labute St	545	CI	DistMain	T130	1968	150	83.2	20%		Replacement	\$ 47,200	2029	
Clapp St	Meander Cres	Lacasse Blvd	546	CI	DistMain	T132	1968	150	80.4	20%			\$ 43,700	2029	
Derby Rd	Tecumseh Rd	Brighton Rd	1151	CI	DistMain	SC107	1972	150	2.1	27%		Replacement	\$ 3,300	2029	
Dillon Dr	St Pierre St	McColl Ave	720	CI	DistMain	T025	1976	150	132.5	33%		Replacement	\$ 59,600	2029	
Dillon Dr	McColl Ave	Lacasse Blvd	108	CI	DistMain	T026	1976	150	14.1	33%		Replacement	\$ 5,600	2029	
Dillon Dr	McColl Ave	Lacasse Blvd	721	CI	DistMain	T026	1976	150	95.9	33%		Replacement	\$ 42,700	2029	
Dillon Dr	Lacasse Blvd	Coronado Dr	722	CI	DistMain	T028	1976	150	153.7	33%		Replacement	\$ 70,300	2029	
Kensington Blvd	Arlington Blvd	Clovelly Rd	1031	CI	DistMain	SC054	1955	150	472.9	-2%			\$ 151,200	2029	
Kensington Blvd	Riverside Dr E	Clovelly Rd	1032	CI	DistMain	SC055	1955	150	59.1	24%		Replacement	\$ 20,900	2029	
Kensington Blvd	Riverside Dr E	Clovelly Rd	1033	CI	DistMain	SC055	1955	150	290.9	-2%		Replacement	\$ 93,900	2029	\$ 748,500
CIP Phase 4 - Tecumseh Rd/Southfield Intersectio		,					1980	1			Fair	Replacement	\$ 148,600	2030	,,
Clovelly Rd	Essex Rd	Kensington Blvd	1034	CI	DistMain	SC060	1955	150	37.4	-2%			\$ 11,800	2030	
Essex Rd	Rutland Rd	Clovelly Rd	1119	CI	DistMain	SC061	1955	150	129.3		Critical		\$ 40,800	2030	
Intersection Rd	Hebert St	St Anne St	1279	CI	DistMain	SS028	1969	150	170.0		Poor		\$ 76,700	2030	
Labute St	Clapp St	St Thomas St	542	CI	DistMain	T155	1971	150	115.1		Poor		\$ 78,800	2030	
Labute St	Clapp St	St Thomas St	2035	CI	DistMain	T155	1971	150	123.3		Poor	Replacement	\$ 82,100	2030	
Lesperance Rd	Dillon Dr	Little River Blvd	277	CI	DistMain	T056	1972	150	125.5		Poor		\$ 56,800	2030	
Lesperance Rd	Cedarwood Dr	Oliver Dr	279	Cl	DistMain	T109	1972	150	55.5		Poor	Replacement	\$ 24,400	2030	
Lesperance Rd	Cedarwood Dr	Oliver Dr	394	Cl	DistMain	T109	1972	150	303.6		Poor		\$ 141,400	2030	
Rutland Rd	Clovelly Rd	Essex Rd	1064	Cl	DistMain	SC063	1955	150	260.6	-2%			\$ 86,500	2030	
Rutland Rd	Clovelly Rd	Essex Rd	2069	Cl	DistMain	SC063	1955	150	82.1	-2%			\$ 25,900	2030	\$ 773,800
Clovelly Rd	Rutland Rd	Essex Rd	1063	CI	DistMain	SC062	1955	150	272.7	-2%		Replacement	\$ 88,100	2031	, ,,,,,,,,
Clovelly Rd	Arlington Blvd	Rutland Rd	1118	Cl	DistMain	SC064	1955	150	163.9	-2%			\$ 51,700	2031	<u> </u>
Clovelly Rd	Arlington Blvd	Rutland Rd	2710	CI	DistMain	SC064	1955	150	57.5	-2%			\$ 18,200	2031	<u> </u>
St Anne St	Maisonneuve St	Intersection Rd	1277	Cl	DistMain	SS029	1962	150	334.8	10%		перисеттен	\$ 118,500	2031	<u> </u>
St Anne St	Gouin St	Maisonneuve St	1277	Cl	DistMain	SS031	1962	150	344.4	10%		периссинене	\$ 118,500	2031	<u> </u>
St Affine St St Pierre St	Little River Blvd	Wood St	623	Cl	DistMain	T059	1962	150	120.0		Critical Poor	-1	\$ 108,300	2031	
או רופוופ או	Little River bivu	ขของน 3เ	023	U	DISTIAIGILI	1009	13/9	120	120.0	3/%	FUUI	Replacement	29,300 ډ	2031	I

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Street Name	Road From	Road To	GIS ID	Material	MainType	Road Section	Year	Size (mm)	Length (m)	Condition Rating	Condition	Description of Work	Cost	Year	Subtotal by Year
St Pierre St	Dillon Dr	Little River Blvd	283	CI	DistMain	T060	1978	150	242.7	37%	Poor	Replacement	\$ 124,400	2031	
Warwick Rd	Clovelly Rd	Burlington Rd	1042	CI	DistMain	SC058	1955	150	420.2	-2%	Critical	Replacement	\$ 138,900	2031	\$ 707,600
Coronado Dr	Riverside Dr E	Riverside Dr E	723	CI	DistMain	T029	1955	150	94.6	-2%	Critical	Replacement	\$ 32,000	2032	
Coronado Dr	Percy Pl	Keith Ave	726	CI	DistMain	T068	1955	150	232.9	-2%	Critical	Replacement	\$ 86,400	2032	1
Coronado Dr	Keith Ave	Mason Pl	727	CI	DistMain	T073	1955	150	127.8	-2%	Critical	Replacement	\$ 51,100	2032	1
Coronado Dr	Mason Pl	Little River Blvd	728	CI	DistMain	T078	1955	150	77.3	-2%	Critical	Replacement	\$ 33,100	2032	ı
Coronado Dr	Mason Pl	Little River Blvd	215	CI	DistMain	T078	1980	150	3.9	40%	Fair	Replacement	\$ 1,300	2032	1
Keith Crt	Coronado Dr	Coronado Dr	81	CI	DistMain	T072	1985	150	69.6	48%	Fair	Replacement	\$ 22,000	2032	1
Lacasse Blvd	Percy Pl	Little River Blvd	210	CI	DistMain	T064	1980	150	63.0	40%	Fair	Replacement	\$ 27,300	2032	1
Lacasse Blvd	Percy Pl	Little River Blvd	211	CI	DistMain	T064	1980	150	145.9	40%	Fair	Replacement	\$ 60,100	2032	1
Lacasse Blvd	Percy Pl	Little River Blvd	212	CI	DistMain	T064	1980	150	4.8	40%	Fair	Replacement	\$ 2,000	2032	1
Lacasse Blvd	Dillon Dr	Percy Pl	209	CI	DistMain	T065	1980	150	71.6	40%	Fair	Replacement	\$ 28,300	2032	1
St Pierre St	Wood St	Clapp St	624	CI	DistMain	T129	1978	150	574.9	37%	Poor	Replacement	\$ 329,200	2032	1
St Thomas St	William St	Labute St	550	CI	DistMain	T154	1970	150	81.6	23%	Poor	Replacement	\$ 37,100	2032	1
St Thomas St	Labute St	Lacasse Blvd	553	CI	DistMain	T156	1970	150	92.8	23%	Poor	Replacement	\$ 41,500	2032	1
St Thomas St	Lacasse Blvd	Argent St	710	CI	DistMain	T158	1970	150	213.5	23%		Replacement	\$ 103,400	2032	1
St Thomas St	Argent St	Brenda Cres	711	CI	DistMain	T159	1970	150	142.7	23%		Replacement	\$ 73,100	2032	1
St Thomas St	Grace Rd	Manning Rd	785	CI	DistMain	T182	1974	150	89.3	30%		Replacement	\$ 44,800	2032	1
Tecumseh Rd	Dresden Pl	Regent Rd	2039	CI	DistMain	SC068	1974	250	42.0	30%		Replacement	\$ 23,200	2032	\$ 995,900
Arbour St	Shawnee Rd	Arbour St	2818	CI	DistMain	T286	1993	150	5.4		Good	Replacement	\$ 2,200	2033	·
Arbour St	Poisson St	St Anne Blvd	939	CI	DistMain	T291	1993	150	103.9		Good	Replacement	\$ 43,500	2033	1
Arbour St	Lesperance Rd	Bedell St	682	Cl	DistMain	T308	1996	150	213.5		Good	Replacement	\$ 124,800	2033	ı
Brouillette Crt	Fieldcrest Lane	Brouillette Crt	920	DI	DistMain	T280	1970	150	62.4	23%		Replacement	\$ 24,700	2033	1
Brouillette Crt	Brouillette Crt	Brouillette Crt	919	DI	DistMain	T281	1970	150	85.4	23%		Replacement	\$ 52,800	2033	ı
Cada Cres	St Gregory's Rd	Fairway Cres	1111	DI	DistMain	SC018	1978	250	88.9	37%		Replacement	\$ 51,100	2033	ı
Cada Cres	Lenore Ave	Fairway Cres	1112	DI	DistMain	SC019	1978	250	189.7	37%		Replacement	\$ 126,900	2033	ı
Cada Cres	Gordon Ave	Lenore Ave	1113	DI	DistMain	SC021	1978	250	164.1	37%		Replacement	\$ 114,200	2033	1
Cada Cres	Gordon Ave	Lenore Ave	1114	DI	DistMain	SC021	1978	250	95.2	37%		Replacement	\$ 51,800	2033	1
Cada Cres	Gordon Ave	Lenore Ave	1115	DI	DistMain	SC021	1978	150	92.4	37%		Replacement	\$ 48,400	2033	1
Cada Cres	Fairway Cres	Gordon Ave	1116	DI	DistMain	SC130	1978	150	94.2	37%		Replacement	\$ 49,200	2033	1
Dillon Dr	McColl Ave	Lacasse Blvd	106	CI	DistMain	T026	1999	150	0.6		Good	Replacement	\$ 300	2033	1
Dillon Dr	McColl Ave	Lacasse Blvd	107	CI	DistMain	T026	1999	150	0.8		Good	Replacement	\$ 400	2033	ı
Dillon Dr	Lacasse Blvd	Coronado Dr	103	CI	DistMain	T028	1999	150	0.6		Good	Replacement	\$ 300	2033	ı
Dillon Dr	Lacasse Blvd	Coronado Dr	104	CI	DistMain	T028	1999	150	1.1		Good	Replacement	\$ 500	2033	1
Dillon Dr	Lacasse Blvd	Coronado Dr	105	CI	DistMain	T028	1999	150	0.6		Good	Replacement	\$ 300	2033	i
Gouin St	St Anne St	Lesperance Rd	1171	CI	DistMain	SS037	1997	150	6.5		Good	Replacement	\$ 2,600	2033	
Grace Rd	Little River Blvd	St Thomas St	831	CI	DistMain	T181	1995	150	4.4		Good	Replacement	\$ 1,800	2033	
Lesperance Rd	Riverside Dr E	Dillon Dr	272	CI	DistMain	T022	1985	150	21.3	48%		Replacement	\$ 8,500	2033	
Lesperance Rd	Riverside Dr E	Dillon Dr	275	CI	DistMain	T022	1986	150	214.0	50%		Replacement	\$ 108,400	2033	
Lesperance Rd	Dillon Dr	Little River Blvd	620	CI	DistMain	T056	1986	150	43.9	50%		Replacement	\$ 17,400	2033	
Lesperance Rd	Cedarwood Dr	Oliver Dr	393	CI	DistMain	T109	1986	250	26.2	50%		Replacement	\$ 15,400	2033	
Lesperance Rd	Dillon Dr	Little River Blvd	619	CI	DistMain	T056	1986	150	183.8		Good	Replacement	\$ 86,900	2033	
Shawnee Rd	Gouin St	Maisonneuve St	1335	Cl	DistMain	SS011	1987	150	0.4	52%		Replacement	\$ 200	2033	1
Highway 3	Outer Dr	Walker Rd	1892	DI	DistMain	SS267	1974	200	395.7	30%		Replacement	\$ 179,900	2033	\$ 1,112,500
Barry Ave	Dillon Dr	Mason Pl	732	CI	DistMain	T077	1955	150	286.6		Critical	Replacement	\$ 90,300	2034	· , ,
Cedarwood Dr	Gauthier Dr	Lesperance Rd	360	DI	DistMain	T105	1974	150	296.2	30%		Replacement	\$ 185,900	2034	, .
Centennial Dr	Riverside Dr E	Dillon Dr	766	DI	DistMain	T037	1973	150	37.6	28%		Replacement	\$ 17,300	2034	, .
Centennial Dr	Riverside Dr E	Dillon Dr	768	DI	DistMain	T037	1973	150	241.0	28%		Replacement	\$ 142,700	2034	, .
Centennial Dr	Dillon Dr	Little River Blvd	767	DI	DistMain	T096	1973	150	258.0	28%		Replacement	\$ 149,500	2034	, .
Centennial Dr	Dillon Dr	Little River Blvd	819	DI	Trunk	T096	1975	300	0.4	32%		Replacement	\$ 300	2034	,
Centennial Dr	Dillon Dr	Little River Blvd	820	DI	Trunk	T096	1975	300	0.4	32%		Replacement	\$ 300	2034	,
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Street Name	Road From	Road To	GIS ID	Material	MainType	Road Section	Year	Size (mm)	Length (m)	Age-Based Condition Condition Rating	Description of Work	Cost	Year	Subtotal by Year
Centennial Dr	Little River Blvd	St Thomas St	765	DI	DistMain	T170	1973	150	324.6	28% Poor	Replacement	\$ 197,100	2034	
Centennial Dr	Little River Blvd	St Thomas St	764	DI	DistMain	T170	1975	150	0.5	32% <mark>Poor</mark>	Replacement	\$ 200	2034	\$ 783,600
Chene St	Riverside Dr E	Dillon Dr	603	DI	DistMain	T020	1978	150	269.5	37% <mark>Poor</mark>	Replacement	\$ 168,200	2035	
Clarice Ave	Lacasse Blvd	Brenda Cres	892	DI	DistMain	T202	1968	150	365.0	20% Poor	Replacement	\$ 163,200	2035	
County Rd 34	Malden Rd	Manning Rd	1779	DI	DistMain	SS322	1974	200	710.2	30% Poor	Replacement	\$ 373,500	2035	
County Rd 34	Malden Rd	Manning Rd	2027	DI	DistMain	SS322	1975	200	445.0	32% Poor	Replacement	\$ 249,200	2035	
CIP Phase 5 - Lesperance Rd	McNorton St	St Denis St	189	PVC	DistMain	T211	1999	250	111.4	Good	Replacement	\$ 83,400	2035	
CIP Phase 5 - Lesperance Rd	McNorton St	St Denis St	191	PVC	DistMain	T211	1999	250	56.2	Good	Replacement	\$ 42,100	2035	
CIP Phase 5 - Lesperance Rd	McNorton St	St Denis St	192	PVC	DistMain	T211	1999	250	101.9	Good	Replacement	\$ 76,100	2035	
CIP Phase 5 - Lesperance Rd	McNorton St	St Denis St	185	PVC	DistMain	T212	1999	250	35.0	Good	Replacement	\$ 26,200	2035	\$ 1,181,900
Barry Ave	Mason Pl	Little River Blvd	734	CI	DistMain	T082	1955	150	78.1	-2% Critical	Replacement	\$ 26,800	2036	
Barry Ave	Mason Pl	Little River Blvd	814	CI	DistMain	T082	1980	150	12.1	40% <mark>Fair</mark>	Replacement	\$ 6,100	2036	
Burdick Cres	Dillon Dr	Keith Ave	729	CI	DistMain	T070	1955	150	110.3	-2% Critical	Replacement	\$ 39,200	2036	
Burdick Cres	Keith Ave	Mason Pl	730	CI	DistMain	T075	1955	150	192.6	-2% Critical	Replacement	\$ 80,200	2036	
County Rd 42	11th Con Rd	Banwell Rd	1296	DI	DistMain	SS115	1978	200	11.6	37% <mark>Poor</mark>	Replacement	\$ 5,500	2036	
County Rd 46	9th Con Rd	Sexton Side Rd	1845	DI	DistMain	SS207	1974	200	414.7	30% <mark>Poor</mark>	Replacement	\$ 199,300	2036	
County Rd 46	Sexton Side Rd	10th Con Rd	1518	DI	DistMain	SS209	1974	200	774.5	30% <mark>Poor</mark>	Replacement	\$ 370,500	2036	
Keith Ave	Coronado Dr	Burdick Cres	80	CI	DistMain	T069	1955	150	90.9	-2% Critical	Replacement	\$ 30,900	2036	
Keith Ave	Burdick Cres	Dillon Dr	733	CI	DistMain	T071	1955	150	105.1	-2% Critical	Replacement	\$ 33,200	2036	
Mason Pl	Burdick Cres	Barry Ave	885	CI	DistMain	T076	1955	150	102.6	-2% Critical	Replacement	\$ 45,400	2036	\$ 837,100
David Cres	Jeffrey Pl	Grant Ave	1103	DI	DistMain	SC029	1974	150	91.9	30% <mark>Poor</mark>	Replacement	\$ 50,700	2037	
David Cres	Jeffrey PI	David Cres	1101	DI	DistMain	SC031	1974	150	6.9	30% Poor	Replacement	\$ 12,300	2037	
David Cres	Jeffrey Pl	David Cres	1102	DI	DistMain	SC031	1974	150	358.2	30% Poor	Replacement	\$ 198,500	2037	
David Cres	David Cres	Grant Ave	1100	DI	DistMain	SC032	1974	150	183.6	30% <mark>Poor</mark>	Replacement	\$ 98,700	2037	
St Marks Rd	Cedar Cres	St Gregory's Rd	1094	CI	DistMain	SC041	1955	150	117.8	-2% Critical	Replacement	\$ 37,100	2037	
St Marks Rd	Willow Crt	Cedar Cres	1037	CI	DistMain	SC043	1955	150	166.1	-2% Critical	Replacement	\$ 52,400	2037	
St Marks Rd	Hayes Ave	Willow Crt	1038	CI	DistMain	SC045	1955	150	158.3	-2% Critical	Replacement	\$ 49,900	2037	
St Marks Rd	Hayes Ave	Hayes Ave	1039	CI	DistMain	SC049	1955	150	100.6	-2% Critical	Replacement	\$ 31,700	2037	
St Marks Rd	Alden Cres	Hayes Ave	1040	CI	DistMain	SC050	1955	150	60.4	-2% Critical	Replacement	\$ 19,100	2037	
St Marks Rd	Riverside Dr E	Alden Cres	1041	Cl	DistMain	SC052	1955	150	200.8	-2% Critical	Replacement	\$ 65,500	2037	\$ 615,900
Growth											20	Year Total Re	placement	\$ 18,979,300
West Tecumseh Trunk Watermain (W-1A)											Growth	\$ 1,340,000	2020	
vvest recamsen trank vvaterman (vv-1A)											S.OWLII	· 1,340,000	2020	

West Tecumseh Trunk Watermain (W-1A)	Growth	\$ 1,340,000	2020	
Southwest Tecumseh Trunk Watermain on CR46 (W-12A)	Growth	\$ 750,000	2020 \$	2,090,000
West Tecumseh Trunk Watermain from Intersection to CP Railway (W1-B)	Growth	\$ 530,000	2025	
East Tecumseh Hamlet Watermain Connection (W-2A)	Growth	\$ 319,000	2025	
Trunk Watermain on Manning Road from CR22 to CP Railway (W-2B)	Growth	\$ 1,370,000	2025 \$	2,219,000
West Tecumseh Trunk from CP Railway to CR42 (W-4)	Growth	\$ 906,000	2030	
Trunk Watermain on Manning Road South of CP Railway (W-5)	Growth	\$ 690,000	2030	
CR46 Trunk Watermain (W-11)	Growth	\$ 1,510,000	2030 \$	3,106,000
South Tecumseh Trunk Watermain from CR42 to Hwy 401 (W-6)	Growth	\$ 4,330,000	2035	
Zone 2 Booster Pumping Station (W-9)	Growth	\$ 1,545,000	2035	
Zone 2 Water Storage Facility (W-10)	Growth	\$ 3,811,000	2035 \$	9,686,000

20 Year Total Replacement \$ 17,101,000

20 Year Grand Total \$ 36,505,300

Town of Tecumseh Water Facilities 20 Year Plan

Asset Name	Asset ID	Description	Location	In-Service Year	Estimated Useful Life	Rep	placement Cost	Year of Recommended Work	Cost
SCADA Software/Server/Nodes Update			various					2018	\$ 73,500
Water Meter Reader System Update								2018	\$ 15,000
Dillon Dr Metering Facility	MCT-1	300 mm Metering Facility (boundary meter)	12030 Dillon Dr	2006	50	\$	109,400	2030	\$ 20,000
Dillon Dr Metering Facility	MCT-1	Metering Facility SCADA	12030 Dillon Dr	2006	25	\$	75,000	2030	\$ 75,000
McNorton St Metering Facility	MCT-2	200 mm Metering Facility (boundary meter)	12010 McNorton St.	2007	50	\$	166,800	2030	\$ 30,000
McNorton St Metering Facility	MCT-2	Metering Facility SCADA	12010 McNorton St.	2007	25	\$	75,000	2030	\$ 75,000
Tecumseh Rd Metering Facility	MCT-3	350 mm Metering Facility (boundary meter)	11805 Tecumseh Rd. E.	2006	50	\$	120,000	2030	\$ 24,000
Tecumseh Rd Metering Facility	MCT-3	Metering Facility SCADA	11805 Tecumseh Rd. E.	2006	25	\$	75,000	2030	\$ 75,000
County Rd 22 Metering Facility	MCT-4	500 mm Metering Facility (boundary meter)	11807 Mulberry Dr.	2006	50	\$	140,000	2030	\$ 28,000
County Rd 22 Metering Facility	MCT-4	Metering Facility SCADA	11807 Mulberry Dr.	2006	25	\$	75,000	2030	\$ 75,000
County Rd 42 Metering Facility	MCT-6	150 mm Metering Facility (boundary meter)	10005 County Road 42	2008	50	\$	166,800	2030	\$ 33,000
County Rd 42 Metering Facility	MCT-6	Metering Facility SCADA	10005 County Road 42	2008	25	\$	75,000	2030	\$ 75,000
Baseline Rd Metering Facility	MCT-7	150 mm Metering Facility (boundary meter)	9150 Baseline	2008	50	\$	166,800	2030	\$ 33,000
Baseline Rd Metering Facility	MCT-7	Metering Facility SCADA	9150 Baseline	2008	25	\$	75,000	2030	\$ 75,000
8th Concession Metering Facility	MCT-8	150 mm Metering Facility (boundary meter)	4970 8th Concession Road	2008	50	\$	166,800	2030	\$ 33,000
8th Concession Metering Facility	MCT-8	Metering Facility SCADA	4970 8th Concession Road	2008	25	\$	75,000	2030	\$ 75,000
County Rd 46 Metering Facility	MCT-9	200 mm Metering Facility (boundary meter)	3525 County Road 46	2007	50	\$	166,800	2030	\$ 33,000
County Rd 46 Metering Facility	MCT-9	Metering Facility SCADA	3525 County Road 46	2007	25	\$	75,000	2030	\$ 75,000
Walker Rd Metering Facility	MCT-10	200 mm Metering Facility (boundary meter)	4850 Walker Road	2008	50	\$	109,400	2030	\$ 22,000
Walker Rd Metering Facility	MCT-10	Metering Facility SCADA	4850 Walker Road	2008	25	\$	75,000	2030	\$ 75,000
North Talbot Rd Metering Facility	MCT-11	200 mm Metering Facility (boundary meter)	1730 North Talbot Road	2008	50	\$	166,800	2030	\$ 33,000
North Talbot Rd Metering Facility	MCT-11	Metering Facility SCADA	1730 North Talbot Road	2008	25	\$	75,000	2030	\$ 75,000
Talbot Rd Metering Facility	MCT-12	150 mm Metering Facility (boundary meter)	4800 County Road 9	2014	50	\$	166,800	2030	\$ 33,000
Talbot Rd Metering Facility	MCT-12	Metering Facility SCADA	4800 County Road 9	2014	25	\$	75,000	2030	\$ 75,000
Water Tower		Water Tower Structure	N/S Tecumseh Rd. E.	1992	50	\$	4,100,000	-	
Water Tower		Water Tower SCADA	N/S Tecumseh Rd. E.	2007	10	\$	75,000	2030	\$ 75,000

\$ 6,841,400

20 Year Grand Total \$ 1,310,500



The Corporation of the Town of Tecumseh

POLICY MANUAL

POLICY NUMBER: 82.5	EFFECTIVE DATE: January 28, 2014
SUPERCEDES: N/A	APPROVAL: RCM-46/14
SUBJECT: Sanitary Sewer Collection Syst	tem Condition Assessment Policy

PURPOSE:

1.1 The purpose of this policy is to provide a clear, consistent method for determining the condition rating of the Town's sanitary sewer collection system.

SCOPE:

2.1 The sanitary collection system, which consists of sewer gravity pipes, services, pumping stations, forcemains, and metering stations shall be assessed as outlined in this policy.

BACKGROUND:

- 3.1 The Town of Tecumseh maintains detailed information on the sanitary sewer assets in the Geographic Information Systems (GIS) system. Sanitary sewers are split into segments, manhole to manhole, with each segment assigned a unique GIS ID.
- 3.2 Camera inspection videos are reviewed in order to assign a Sewer Performance Grade (SPG) to the viewed segments to assist in assessing the sanitary sewer condition. The SPG method of classification is based on the Water Resource centre (WRc) pipe condition classification method. It provides a rating for a sewer segment ranging from SPG 1 to SPG 5. Assessed ratings are always based on the worse defect found in the segment. A segment with the rating SPG 3 or higher is indicative of needed investment and should be identified and appropriately scheduled for major reconstruction or rehabilitation.

The SPG ratings are as follows:

- SPG 1- No Defects
- SPG 2- Minor Defects
- SPG 3- Likely to Deteriorate
- SPG 4- Likely to Collapse in Future
- SPG 5- Collapse Imminent

PROCEDURE:

- 4.1 The Town of Tecumseh will use video inspection methods to determine the condition of the sanitary sewers.
- 4.2 The Director Public Works & Environmental Services shall ensure that the Town continues to maintain acceptable levels of service, which shall be qualified as:
 - All SPG 5 defects scheduled for some kind of remedial attention within 6 months.
 - All SPG 4 defects scheduled to receive remedial attention within 2 years.
 - Goal to achieve an overall SPG 2 rating.
- 4.3 The Director Public Works & Environmental Services shall ensure that the Town's program to maintain acceptable levels of service will include:
 - Yearly tenders to flush and camera inspect sanitary sewers. Goal of inspecting all sewers once within a 15 year time frame.
 - Continued investment in the I&I Program as detailed in the ten year plan implemented in 2010.
 - Yearly review of all facility assets with annual calibrations and reports.
 - Sanitary modeling to provide additional data and information on the performance of the system.
 - Full scope condition assessments of the sanitary pumping stations including structural, electrical and mechanical systems shall be performed and remedial works planned and carried out with respect to any urgent needs identified. At no time shall 5 years pass since the last assessment.
- 4.4 Urgent repairs identified in the condition assessments shall be assigned to contractors that have the capabilities and resources to carry out repairs within the above prescribed timeframes.

RESPONSIBILITY:

5.1 The Director Public works & Environmental Services shall be responsible for the implementation of the Sanitary Sewer Collection System Condition Assessment Policy.

- 5.2 The Manager Water & Wastewater and/or the Manager Engineering Services shall be responsible for review and use of the information gathered from the condition assessments.
- 5.3 Administration, consisting of the Director Public Works & Environmental Services, the Director Financial Services/Treasurer, and the Manager Water & Wastewater and/or the Manager Engineering Services, shall assign urgent repairs as identified in the condition assessments to contractors that have the capabilities and resources to carry out repairs within the above prescribed timeframes. This awarding of work shall be in accordance with the Town's Purchasing Policy.

REFERENCE:

Purchasing By-law 2006-03, which includes the Purchasing Policy

Project/Road	From	То	Project Description	Year		Cost	Sub	total by Year
Master Plan								
Water & Wastewater Master Plan Update				2018	\$	50,000	\$	50,000
	<u> </u>			20 \	Year Tota	l Master Plan	\$	50,000
Rehabilitation								
I&I Removal - Town Wide			Rehabilitation	2018	\$	3,637,824	Ś	3,637,824
						Rehabilitation		3,637,824
Replacement								
Manning Road ETLD Relocation - Phase 2			Engineering only	2019	\$	91,880	\$	91,880
CR42 CR19 Roundabout			Reconstruction	2020	\$	18,800		18,800
CR42	CR43	Lesperance	Reconstruction	2021	\$	1,150,000	Ė	,
Riverside Drive	Kensington	Pentilly	Engineering only	2021	\$	<u> </u>	\$	1,232,500
CR42	Lesperance	CR19	Reconstruction	2022	\$	50,000	\$	50,000
Riverside Drive	Kensington	Pentilly	Reconstruction	2023	\$	1,292,500	\$	1,292,500
Tecumseh Rd T265 CIP Phase 1	St Anne Blvd	Lesperance Rd	Reconstruction	2024				
Tecumseh Rd T267 CIP Phase 1	Lesperance Rd	Bedell St	Reconstruction	2024				
Lesperance Rd T311 CIP Phase 1	Lanoue St	Arbour St	Reconstruction	2024				
Lesperance Rd T312 CIP Phase 1	Tecumseh Rd	Lanoue St	Reconstruction	2024				
Lesperance Rd T266 CIP Phase 1	Via Rail	Tecumseh Rd	Reconstruction	2024				
Lesperance Rd T247 CIP Phase 1	First St	Lachance Crt	Reconstruction	2024				
Lesperance Rd T249 CIP Phase 1	St Denis St	First St	Reconstruction	2024				
Lesperance Rd T245 CIP Phase 1	Lachance Crt	Via Rail	Reconstruction	2024	\$	258,603	\$	258,603
Tecumseh Rd T264 CIP Phase 2	Poisson St	St Anne Blvd	Reconstruction	2026				
Tecumseh Rd T263 CIP Phase 2	Shawnee Rd	Poisson St	Reconstruction	2026	\$	399,102	\$	399,102
Tecumseh Rd T262 CIP Phase 3	Southfield Dr	Shawnee Rd	Reconstruction	2028	\$	119,287	\$	119,287
Tecumseh/Southfield Intersection CIP Pha	se 4		Reconstruction	2029	\$	149,610	\$	149,610
Lesperance Rd T211 CIP Phase 5	McNorton St	St Jacques St	Reconstruction	2035				
Lesperance Rd T212 CIP Phase 5	St Jacques St	St Denis St	Reconstruction	2035	\$	230,467	\$	230,467
				20 Ye	ar Total	Replacement	\$	3,842,749
Servicing								
Rossi Drive	Outer Drive	Pulleyblank Street	NTR Servicing	2018	\$	515,000		
Walker Road	North Talbot Road	Hwy 401	NTR Servicing	2018	\$	75,000	1	
Sylvestre Drive	Manning	Westerly 375m	Sylvestre Servicing	2018	\$	109,200	\$	699,200
Walker Road	North Talbot Road	Hwy 401	NTR Servicing	2019	\$	952,000		
Sylvestre Drive	Manning	Westerly 375m	Sylvestre Servicing	2019	\$	682,200	1	
CR46	8th Concession	Hwy 401	8th Con Servicing	2019		•	1	
Webster Drive	CR46	end of Cul-de-sac	8th Con Servicing	2019				
Laval Sanitary Branch	CR46	end of Cul-de-sac	8th Con Servicing	2019	\$	80,175		
Delduca Drive	Entire Length		8th Con Servicing	2019	\$	79,550	\$	1,793,925

Project/Road	From	То	Project Description	Year	Cost	Sub	total by Year
CR46	8th Concession	Hwy 401	8th Con Servicing	2020			
Webster Drive	CR46	end of Cul-de-sac	8th Con Servicing	2020			
Laval Sanitary Branch			8th Con Servicing	2020	\$ 1,256,075		
Delduca Drive	Entire Length		8th Con Servicing	2020	\$ 75,000	\$	1,331,075
Delduca Drive	Entire Length		8th Con Servicing	2021	\$ 804,450		
Ure	Delduca Drive	North Talbot Road	8th Con Servicing	2021	\$ 31,000	\$	835,450
Ure	Delduca Drive	North Talbot Road	8th Con Servicing	2022	\$ 478,000		
O'Neil	Delduca Drive	North Talbot Road	8th Con Servicing	2022	\$ 35,350	\$	513,350
O'Neil	Delduca Drive	North Talbot Road	8th Con Servicing	2023	\$ 530,650		
Hennin Drive	Moynahan Street	North Talbot Road	8th Con Servicing	2023			
Moynahan Street	Regal Drive	O`Neil Drive	8th Con Servicing	2023			
Regal Drive	Moynahan Street	end of Cul-de-sac	8th Con Servicing	2023	\$ 43,250	\$	573,900
Hennin Drive	Moynahan Street	North Talbot Road	8th Con Servicing	2024			
Moynahan Street	Regal Drive	O`Neil Drive	8th Con Servicing	2024			
Regal Drive	Moynahan Street	end of Cul-de-sac	8th Con Servicing	2024	\$ 692,000	\$	692,000
Oldcastle Road	North Talbot Road	Hwy 3	8th Con Servicing	2025			
Castlewood Court	Entire Length		8th Con Servicing	2025	\$ 3,800,000	\$	3,800,000
McCord Lane, Chrysler Greenway	ERCA Trail	CR11	8th Con Servicing	2026	\$ 900,000	\$	900,000
Olympia Drive	Walker Road	Solar Crescent	NTR Servicing	2027			
Astor Crescent	Olympia Drive	end of Cul-de-sac	NTR Servicing	2027			
Solar Crescent	Olympia Drive	end of Cul-de-sac	NTR Servicing	2027	\$ 812,000	\$	812,000
CR11	North Talbot Road	Wolfe Drain	NTR Servicing	2028	\$ 238,000	\$	238,000
CR46	8th Concession	limits of Oldcastle Hamlet	8th Con Servicing	2029	\$ 2,715,000	\$	2,715,000
North Talbot Road	8th Concession	9th Concession	8th Con Servicing	2030	\$ 1,466,000	\$	1,466,000
CR11	McCord Lane	Blackacre Drive	8th Con Servicing	2031			
Blackacre Drive	CR11	Pulleyblank Street	8th Con Servicing	2031	\$ 2,522,000	\$	2,522,000
Fasan Drive	Blackacre Drive	end of Cul-de-sac	8th Con Servicing	2032	\$ 760,000	\$	760,000
CR11	McCord Lane	Hwy 3	8th Con Servicing	2033			
Hwy 3	East of CR11	West of CR11	8th Con Servicing	2033	\$ 1,160,000	\$	1,160,000
Blackacre Drive	Pulleyblank Street	Outer Drive	8th Con Servicing	2034			
Roscon Industrial Drive	Blackacre Drive	end of Cul-de-sac	8th Con Servicing	2034	\$ 1,317,000	\$	1,317,000
Outer Drive	Blackacre Drive	Hwy 3	8th Con Servicing	2035	\$ 840,000	\$	840,000
CR46	9th Concession	730m westerly	8th Con Servicing	2036	\$ 1,400,000	\$	1,400,000
Outer Drive	MTO Section	south of Hwy 3	8th Con Servicing	2037	\$	\$	1,600,000

Growth

Westlake	Lesperance	CR22	New infrastructure	2019	\$ 172,000	\$ 172,000
West Tecumseh Trunk Sanitary (WW-1A) Engine	eering			2020	\$ 220,000	
Diversion Sanitary Sewers (Intersection Rd) (WV	V-2) Engineering			2020	\$ 67,600	\$ 287,600
Purchase Additional Capacity at Little River PCP	Windsor-2			2021	\$ 9,660,000	\$ 9,660,000

Project/Road	From	То	Project Description	Year	Cost		Subt	otal by Year
West Tecumseh Trunk Sanitary (WW-1A)	CR22	Intersection Rd		2024	\$	2,640,000	\$	2,640,000
West Tecumseh Trunk Sanitary (WW-1B)	Intersection Rd	CP Railway		2025	\$	1,290,000		
Diversion Sanitary Sewers (Intersection Rd) (W\	N-2)			2025	\$	582,400		
East Tecumseh Trunk Sewer (WW-3)				2025	\$	1,340,000	\$	3,212,400
West Tecumseh Trunk Sewer WW-6	CP Railway	CR42		2030	\$	1,840,000		
Diversion Sewer on CR42 WW-7				2030	\$	567,000		
South Tecumseh Trunk Sewer WW-8	CR42	Hwy 401		2030	\$	10,733,000	\$	13,140,000
South Tecumseh Trunk Sewer WW-9	Hwy 401	Maidstone		2032	\$	3,720,000	\$	3,720,000
Maidstone Hamlet Trunk Sewer WW-10				2035	\$	1,421,000	\$	1,421,000
Purchase Additional Capacity at Little River PCP	Windsor-4			2036	\$	5,920,000	\$	5,920,000

20 Year Total Growth \$ 40,173,000

20 Year Grand Total \$ 73,672,473

Town of Tecumseh Sanitary Sewer Facilities 20 Year Plan

Asset Name	Asset ID	Component	Location	In-Service Year	Estimated Useful Life	Risk Rating	Condition	Condition Rating		Condition Rating		Condition Rating		Condition Rating		Condition Rating		Condition Rating		Condition Rating		Replacement Cost	Year of Recommended Work	Cost	Year of Recommended Work	Cost
Pump Station Emergency Respo	nse Plan										2018	\$ 35,000														
SCADA Software/Server/Nodes	Update										2018	\$ 26,250														
Cedarwood Pump Station		Structure	Gauthier Drive	1972	50					\$ 1,800,000	2028	\$ 50,000														
Cedarwood Pump Station		Mechanical/Electrical	Gauthier Drive	1986	20	11	2.7	Good	13.7	\$ 990,000	2018	\$ 266,500	2028	\$ 370,000												
Cedarwood Pump Station		SCADA	Gauthier Drive	2010	25					\$ 210,000	2035	\$ 210,000														
Lakewood Pump Station		Structure	Lakewood Park South	2015	50					\$ 800,000	2030	\$ 100,000														
Lakewood Pump Station		Mechanical/Electrical	Lakewood Park South	2015	20	10	1.1	Very Good	11.1	\$ 1,014,000																
Lakewood Pump Station		SCADA	Lakewood Park South	2015	25					\$ 186,000																
St. Alphonse Pump Station		Structure	St. Alphonse/CR 42	1973	50	2	1.0	Very Cood	4.8	\$ 325,000	2030	\$ 75,000														
St. Alphonse Pump Station		Mechanical/Electrical	St. Alphonse/CR 42	2011	20	3	1.8	Very Good	4.8	\$ 375,000	2026	\$ 30,000														
Sylvestre Pump Station		Structure	Sylvestre Drive	1996	50	г	3.6	Cood	7.6	\$ 280,000			2025 (Note 1)	ć 050.000												
Sylvestre Pump Station		Mechanical/Electrical	Sylvestre Drive	1996	20	5	2.6	Good	7.6	\$ 320,000	2019	\$ 30,000	2025 (Note 1)	\$ 950,000												
Cedarwood Metering Station	WP 01	Structure	Access off Rendezvous Drive	1972	50	N/A	1.9	Very Good	1.9	\$ 75,000																
County Road 22 Flume	TSM 02	Structure	County Road 22	2010	50	N1 / A	4.0	\/	4.0	\$ 75,000	2029	\$ 50,000														
County Road 22 Flume	TSM 02	SCADA Equipment	County Road 22	2010	25	N/A	1.8	Very Good	1.8	\$ 81,000	2035	\$ 81,000														
Lakewood Metering Station	WP 03	Structure	Lakewood Park South	2015	50	N/A	1.0	Very Good	1.0	\$ 75,000																
North Talbot Rd Flume	TSM 04	Structure	North Talbot Rd	2012	50	N1 / A	4.0) / C I	1.0	\$ 75,000	2030	\$ 50,000														
North Talbot Rd Flume	TSM 04	SCADA Equipment	North Talbot Rd	2012	25	N/A	1.9	Very Good	1.9	\$ 81,000																
8th Concession Rd Flume	TSM 05	Structure	8th Concession Rd at Hwy 401	2013	50	N1 / A	2.2	Cood	2.2	\$ 110,000	2031	\$ 50,000														
8th Concession Rd Flume	TSM 05	SCADA Equipment	8th Concession Rd at Hwy 401	2013	25	N/A	2.2	Good	2.2	\$ 120,000																
									Total	\$ 6,992,000		\$ 1,053,750		\$ 1,320,000												

Notes:

1. Project WW-4, pump station upgrade. Estimate, timing, subject to change based on the 2017 Water & Wastewater Master Plan Update.

20 Year Grand Total \$ 2,373,750

		1								
Unit Number	Department	Vehicle Type	Make	Rep	placement	Useful Life	Year	Cost	Sul	btotal by
Rescue 1	Fire	Fire Truck	Spartan Engine (Rescue 1)	\$	692,000	(yrs) 20	2018	\$ 692,000		Year
F1-10	Fire	Light Duty Vehicle	Chevrolet Tahoe (Command 1)	\$	45,000	8	2018	\$ 45,000		
F2-10	Fire	Light Duty Vehicle	Chevrolet Tahoe (Command 2)	\$	45,000	8	2018	\$ 45,000		
P30-13	Parks	Mower	Jacobson 9016 Mower	\$	69,000	5	2018	\$ 69,000		
P40-08	Parks	Misc. Equipment	Vermeer Chipper VC1500	\$	50,000	10	2018	\$ 50,000		
PW 02-11	Public Works	Light Duty Vehicle	GMC Ext Cab1500	\$	35,000	8	2018	\$ 35,000		
PW06-08	Public Works	Light Duty Vehicle	Chevy Extended Cab 4 X 4	\$	32,000	10	2018	\$ 32,000		
T02-10	Transit	Bus	Ford E450	\$	100,000	5	2018	\$ 100,000		
W1-10	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2018	\$ 30,000		
W4-12	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2018	\$ 30,000		
W7-12	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	37,000	7 to 10	2018	\$ 37,000		
WE10-04	Water	Misc. Equipment	Utility Trailer	\$	2,600	8	2018	\$ 2,600	\$	1,167,600
PE20-00	Admin	Misc. Equipment	Enclosed Trailer 8 X 22 (from Parks)	\$	20,000	8	2019	\$ 20,000		
AE3-98	Parks	Zamboni	Zamboni	\$	110,000	10	2019	\$ 110,000		
P21-11	Parks	Misc. Equipment	Trailer Landscape 20'	\$	6,000	8	2019	\$ 6,000		
P25-11	Parks	Misc. Equipment	Trailer Dump 5'x10'	\$	5,200	8	2019	\$ 5,200		
P31-16	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2019	\$ 44,000		
P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2019	\$ 15,000		
P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2019	\$ 15,000		
P48-09	Parks	Misc. Equipment	Brillion Overseeder BOS4F2	\$	15,000	10	2019	\$ 15,000		
P6-12	Parks	Light Duty Vehicle	Dodge 2500 Crew Cab	\$	37,000	8	2019	\$ 37,000		
P45-12	Parks	Utility Vehicle	Solar Golf Cart	\$	6,000	10	2019	\$ 6,000		
PW 12-12	Public Works	Light Duty Vehicle	GMC 2500 Crew Cab	\$	35,000	7	2019	\$ 35,000	\$	308,200
B2-10	Building	Light Duty Vehicle	GMC Pick-up Sierra	\$	25,000	10	2020	\$ 25,000		
F3-08	Fire	Fire Truck	FORD 250 (Squad 2)	\$	50,000	12	2020	\$ 50,000		
P32-14	Parks	Mower	Kubota 331 Mower	\$	14,000	3	2020	\$ 14,000		
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2020	\$ 14,000		
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2020	\$ 14,000		
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2020	\$ 14,000		
A34-98	Arena	Zamboni	Zamboni	\$	110,000	10	2020	\$ 110,000		
P22-14	Parks	Misc. Equipment	Trailer Landscape 20' hard side	\$	6,000	8	2020	\$ 6,000		
P23-12	Parks	Misc. Equipment	Tilt Trailer 20'	\$	7,500	8	2020	\$ 7,500		
P41-05	Parks	Misc. Equipment	Aerway Airrator	\$	10,000	15	2020	\$ 10,000		
P44-12	Parks	Utility Vehicle	Solar John Deere Gator	\$	10,000	10	2020	\$ 10,000		
PW 04-10	Public Works	Heavy Duty Vehicle	International (single axle pre wet w/wing)	\$	230,000	10	2020	\$ 210,000		
W2-14	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	24,000	7 to 10	2020	\$ 24,000		
W3-14	Water	Heavy Duty Vehicle	Ford F-450 Service Truck	\$	85,000	7 to 10	2020	\$ 85,000		
WE9-10	Water	Backhoe	John Deere 310D Backhoe	\$	110,000	7 to 10	2020	\$ 110,000	\$	703,500
	Admin	Misc. Equipment	Emergency Generator	\$	27,000	20	2021	\$ 27,000		
M01-12	Parks	Light Duty Vehicle	Dodge Ram 1500	\$	30,000	10	2021	\$ 30,000		
P13-14	Parks	Misc. Equipment	Kubota L5460 Tractor	\$	35,000	8	2021	\$ 35,000		
P26-11	Parks	Misc. Equipment	Trailer Dump 6'x10'	\$	6,000	8	2021	\$ 6,000		
P42-16	Parks	Utility Vehicle	Kubota RTV-X900W Utility Vehicle	\$	15,000	5	2021	\$ 15,000		
P43-16	Parks	Utility Vehicle	Kubota RTV-X1100C Utility Vehicle	\$	15,000	5	2021	\$ 15,000		
P46-16	Parks	Utility Vehicle	Kubota RTV-X900W J19029 Utility Vehicle	\$	15,000	5	2021	\$ 15,000		
PW 03-12	Public Works	Heavy Duty Vehicle	Mack (tandem axle pre wet w/wing)	\$	290,000	10	2021	\$ 250,000		
PW 07-11	Public Works	Light Duty Vehicle	Dodge 3500 Dump Body	\$	65,000	10	2021	\$ 65,000	\$	458,000
P31-16	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2022	\$ 44,000		
P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2022	\$ 15,000		
P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2022	\$ 15,000		
	Fire	Fire Truck	Sutphen Platform (Truck 1)	\$	900,000	20	2022	\$ 900,000		
P24-14	Parks	Misc. Equipment	Flat Bed 8 X 22 Trailer	\$	7,000	8	2022	\$ 7,000		
P5-12	Parks	Light Duty Vehicle	GMC 2500 Crew Cab	\$	31,000	10	2022	\$ 31,000		
PW 05-13	Public Works	Heavy Duty Vehicle	Freightliner SD180 (single axle/pre wet)	\$	230,000	10	2022	\$ 230,000		
PW 08-12	Public Works	Light Duty Vehicle	Dodge 3500 Aluminum Dump Body	\$	65,000	10	2022	\$ 65,000		
PW 11-12	Public Works	Light Duty Vehicle	Dodge Ext Cab1500	\$	35,000	10	2022	\$ 35,000	,	1 553 000
W5-16	Water	Heavy Duty Vehicle	International Tandem Axle	\$	210,000	7 to 10	2022	\$ 210,000	\$	1,552,000
T01-09	Transit	Bus	Ford Diamond VIP2500	\$	100,000	5	2023	\$ 100,000		
	Admin	Misc. Equipment	OPP TRAILER (Graffiti Trailer)	\$	28,600	20	2023	\$ 29,000		
D10 14	Fire	Fire Truck	Smeal (Engine 1)	\$	500,000	15	2023	\$ 500,000		
P10-14	Parks	Misc. Equipment	Kubota L4600 Tractor	\$	20,000	8	2023	\$ 20,000		
P11-15	Parks	Misc. Equipment	Kubota 4701 Tractor	\$	25,000	8	2023	\$ 25,000		
P47-13	Parks	Misc. Equipment	Verti-Drain Rink 2020 Top Dresser	\$	20,000	10	2023	\$ 20,000		
PW 09-12	Public Works	Light Duty Vehicle	Dodge Ext Cab1500	\$	35,000	10	2023	\$ 35,000		
P32-14	Parks	Mower	Kubota 331 Mower	\$	14,000	3	2023	\$ 14,000		
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2023	\$ 14,000		
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2023	\$ 14,000		
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2023	\$ 14,000		

Unit Number	Department	Vehicle Type	Mako	Make		Useful Life	Year	Cost		Su	ibtotal by
Offic Number	Department	venicie rype	IVIANC		Cost	(yrs)	Teal		COST		Year
P9-11	Parks	Misc. Equipment	Bobcat S-650	\$	50,000	6	2023	\$	50,000		
P30-13	Parks	Mower	Jacobson 9016 Mower	\$	69,000	5	2023	\$	69,000	\$	904,000
T02-10	Transit	Bus	Ford E450	\$	100,000	5	2024	\$	100,000	—	
W6-11	Water	Heavy Duty Vehicle	Ford F-550 HD Service Truck	\$	85,000	7 to 10	2024	\$	85,000	<u> </u>	
W8-08	Water	Light Duty Vehicle	Chevy Extended Cab 4 X 4	\$	32,000	7 to 10	2024	\$	32,000	⊢	
92	Fire	Fire Truck	Smeal (Engine 2)	\$	557,000	15	2024	\$	557,000	Ь—	
AM01-02	Parks	Light Duty Vehicle	Dodge Ram 1500	\$	30,000	10	2024	\$	30,000	Ь—	
P02-16	Parks	Light Duty Vehicle	Dodge Ram 1500 Reg Cab	\$	30,000	8	2024	\$	35,000	—	
P03-16 P2-08	Parks Parks	Light Duty Vehicle	Dodge Ram Crew Cab Chevy 1500	\$	30,000	8	2024 2024	\$	30,000	\vdash	
P8-16	Parks	Misc. Equipment Light Duty Vehicle	Dodge Ram 1500 Quad Cab	\$	22,000 35,000	8	2024	\$	22,000 35,000	\vdash	
PW 10-15	Public Works	Light Duty Vehicle	Dodge 1500 4X4	\$	35,000	10	2024	\$	35,000	\vdash	
PW 13-15	Public Works	Heavy Duty Vehicle	Mack (single axle pre wet)	\$	230,000	10	2024	\$	210,000	\$	1,171,000
P12-09	Parks	Misc. Equipment	Kubota B3030 HSDC Tractor	\$	35,000	8	2025	\$	35,000	_	
P20-11	Parks	Misc. Equipment	Trailer Lanscape 20'	\$	6,000	8	2025	\$	6,000		
P4-10	Parks	Light Duty Vehicle	GMC 2500 Extended Cab	\$	29,000	8	2025	\$	29,000		
	Public Works	Heavy Duty Vehicle	Sterling (tandem axle pre wet w/wing)	\$	290,000	8	2025	\$	290,000		
W1-10	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2025	\$	30,000		
W4-12	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2025	\$	30,000		
W7-12	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	37,000	7 to 10	2025	\$	37,000		
P31-16	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2025	\$	44,000		
P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2025	\$	15,000		
P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2025	\$	15,000		
P7-16	Parks	Light Duty Vehicle	Ford 3500 with Dump body	\$	65,000	10	2025	\$	65,000	匚	
	Public Works	Heavy Duty Vehicle	Freightliner SD180 (single axle/pre wet)	\$	230,000	10	2025	\$	230,000	oxdot	
PW 16-15	Public Works	Heavy Duty Vehicle	Mack (tandem axle w/wing)	\$	290,000	10	2025	\$	290,000	<u> </u>	
PWE 05-01	Public Works	Misc. Equipment	Trackless M6	\$	150,000	12	2025	\$	150,000	Ш	
PWE 05-01	Public Works	Misc. Equipment	Trackless Attachment-Flail Boom	\$	150,000	10	2025	\$	150,000	\$	1,416,000
	Parks	Light Duty Vehicle	GMC 2500 H.D. Crew Cab	\$	37,000	9	2026	\$	37,000	Ь—	
P32-14	Parks	Mower	Kubota 331 Mower	\$	14,000	3	2026	\$	14,000	Ь—	
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2026	\$	14,000	⊢	
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2026	\$	14,000	Ь—	
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2026	\$	14,000	\vdash	
F1-10 F2-10	Fire Fire	Light Duty Vehicle	Chevrolet Tahoe (Command 1) Chevrolet Tahoe (Command 2)	\$	45,000 45,000	8	2026 2026	\$	45,000 45,000	\vdash	
PW 02-11	Public Works	Light Duty Vehicle Light Duty Vehicle	GMC Ext Cab1500	\$	35,000	8	2026	\$	35,000	\vdash	
WE10-04	Water	Misc. Equipment	Utility Trailer	\$	2,600	8	2026	\$	2,600		
PW 12-12	Public Works	Light Duty Vehicle	GMC 2500 Crew Cab	\$	35,000	7	2026	\$	35,000	 	
94	Fire	Fire Truck	Rosenbauer Engine Tanker (Rescue 2)	\$	700,000	20	2026	\$	700,000		
F03-16	Fire	Light Duty Vehicle	Dodge Grand Caravan	\$	25,000	10	2026	\$	25,000		
B1-15	Building	Light Duty Vehicle	Dodge Journey	\$	18,000	10	2026	\$	18,000		
P49-14	Parks	Misc. Equipment	Truck Bed Salter	\$	6,000	10	2026	\$	6,000		
	Parks	Misc. Equipment	Rear Dump for 1.5 Ton Tandem Axle	\$	3,000	10	2026	\$	3,000		
P42-16	Parks	Utility Vehicle	Kubota RTV-X900W Utility Vehicle	\$	15,000	5	2026	\$	15,000		
P43-16	Parks	Utility Vehicle	Kubota RTV-X1100C Utility Vehicle	\$	15,000	5	2026	\$	15,000		
P46-16	Parks	Utility Vehicle	Kubota RTV-X900W J19029 Utility Vehicle	\$	15,000	5	2026	\$	15,000		
	Public Works	Misc. Equipment	Emergency Road Closure Trailer	\$	5,000	10	2026	\$	5,000		
	Public Works	Misc. Equipment	Emergency Road Closure Trailer	\$	5,000	10	2026	\$	5,000	\$	1,062,600
	Parks	Light Duty Vehicle	Dodge 2500 Crew Cab	\$	37,000	8	2027	\$	37,000	<u> </u>	
PE20-00	Admin	Misc. Equipment	Enclosed Trailer 8 X 22 (from Parks)	\$	20,000	8	2027	\$	20,000	<u> </u>	
P21-11	Parks	Misc. Equipment	Trailer Landscape 20'	\$	6,000	8	2027	\$	6,000	<u>—</u>	
P25-11	Parks	Misc. Equipment	Trailer Dump 5'x10'	\$	5,200	8	2027	\$	5,200	<u> </u>	
	Public Works	Tractor	Zetor Tractor with Bucket/Snow Box	\$	60,000	15	2027	\$	60,000	—	
	Parks	Misc. Equipment	Tilt Trailer 20'	\$	7,500	8 7 to 10	2027	\$	7,500	 	
W2-14	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	24,000	7 to 10	2027	\$	24,000		
W3-14 WE9-10	Water Water	Heavy Duty Vehicle Backhoe	Ford F-450 Service Truck John Deere 310D Backhoe	\$	85,000 110,000	7 to 10 7 to 10	2027 2027	\$	85,000 110,000	\$	354,700
P40-08	Parks	Misc. Equipment	Vermeer Chipper VC1500	\$	50,000	10	2027	\$	50,000	<u>ب</u>	334,700
	Public Works	Light Duty Vehicle	Chevy Extended Cab 4 X 4	\$	32,000	10	2028	\$	32,000	\vdash	
	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2028	\$	44,000	<u> </u>	
	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2028	\$	15,000		
	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2028	\$	15,000		
P37-16		Misc. Equipment	Trailer Landscape 20' hard side	\$	6,000	8	2028	\$	6,000		
P37-16 P22-14	Parks				5,550	_		_			
P22-14	Parks Parks		·	\$	69,000	5	2028	\$	69.000	•	
P22-14 P30-13	Parks	Mower	Jacobson 9016 Mower	\$	69,000 93,000	5 15	2028 2028	\$	69,000 93,000		
P22-14 P30-13			·	\$ \$ \$	69,000 93,000 1,080,000	5 15 20	2028 2028 2028	\$	69,000 93,000 1,080,000	\$	1,404,000
P22-14 P30-13 PWE 02-13	Parks Public Works	Mower	Jacobson 9016 Mower Cat 420F Backhoe	\$	93,000	15	2028	\$	93,000	\$	1,404,000

								$\overline{}$		Subtotal by
Unit Number	Department	Vehicle Type	Make	Ket	placement Cost	Useful Life (yrs)	Year		Cost	Year
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2029	\$	14,000	icui
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2029	\$	14,000	
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2029	\$	14,000	
P9-11	Parks	Misc. Equipment	Bobcat S-650	\$	50,000	6	2029	\$	50,000	
AE3-98	Parks	Zamboni	Zamboni	\$	110,000	10	2029	\$	110,000	
P48-09	Parks	Misc. Equipment	Brillion Overseeder BOS4F2	\$	15,000	10	2029	\$	15,000	
P45-12	Parks	Utility Vehicle	Solar Golf Cart	\$	6,000	10	2029	\$	6,000	
P13-14	Parks	Misc. Equipment	Kubota L5460 Tractor	\$	35,000	8	2029	\$	35,000	
P26-11	Parks	Misc. Equipment	Trailer Dump 6'x10'	\$	6,000	8	2029	\$	6,000	
W5-16	Water	Heavy Duty Vehicle	International Tandem Axle	\$	210,000	7 to 10	2029	\$	210,000	
PWE 03-14	Public Works	Backhoe	Case 580 WT Backhoe	\$	95,000	15	2029	\$	95,000	\$ 683,000
B2-10	Building	Light Duty Vehicle	GMC Pick-up Sierra	\$	25,000	10	2030	\$	25,000	+ 555,555
T02-10	Transit	Bus	Ford E450	\$	100,000	5	2030	\$	100,000	
A34-98	Arena	Zamboni	Zamboni	\$	110,000	10	2030	\$	110,000	
P44-12	Parks	Utility Vehicle	Solar John Deere Gator	\$	10,000	10	2030	\$	10,000	
PW 04-10	Public Works	Heavy Duty Vehicle	International (single axle pre wet w/wing)	\$	230,000	10	2030	\$	230,000	
P24-14	Parks	Misc. Equipment	Flat Bed 8 X 22 Trailer	\$	7,000	8	2030	\$	7,000	\$ 482,000
W6-11	Water	Heavy Duty Vehicle	Ford F-550 HD Service Truck	\$	85,000	7 to 10	2031	\$	85,000	7 402,000
W8-08	Water	Light Duty Vehicle	Chevy Extended Cab 4 X 4	\$	32,000	7 to 10	2031	\$	32,000	
	Parks			\$			2031			
P31-16		Mower	Jacobson 311 Mower		44,000	3		\$	44,000	
P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2031	\$	15,000	
P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2031	\$	15,000	
M01-12	Parks	Light Duty Vehicle	Dodge Ram 1500	\$	30,000	10	2031	\$	30,000	
P42-16	Parks	Utility Vehicle	Kubota RTV-X900W Utility Vehicle	\$	15,000	5	2031	\$	15,000	
P43-16	Parks	Utility Vehicle	Kubota RTV-X1100C Utility Vehicle	\$	15,000	5	2031	\$	15,000	
P46-16	Parks	Utility Vehicle	Kubota RTV-X900W J19029 Utility Vehicle	\$	15,000	5	2031	\$	15,000	
PW 03-12	Public Works	Heavy Duty Vehicle	Mack (tandem axle pre wet w/wing)	\$	290,000	10	2031	\$	290,000	
PW 07-11	Public Works	Light Duty Vehicle	Dodge 3500 Dump Body	\$	65,000	10	2031	\$	65,000	
P10-14	Parks	Misc. Equipment	Kubota L4600 Tractor	\$	20,000	8	2031	\$	20,000	
P11-15	Parks	Misc. Equipment	Kubota 4701 Tractor	\$	25,000	8	2031	\$	25,000	\$ 666,000
P32-14	Parks	Mower	Kubota 331 Mower	\$	14,000	3	2032	\$	14,000	
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2032	\$	14,000	
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2032	\$	14,000	
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2032	\$	14,000	
W1-10	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2032	\$	30,000	
W4-12	Water	Light Duty Vehicle	GMC Sierra Extended Cab Pick-up	\$	30,000	7 to 10	2032	\$	30,000	
W7-12	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	37,000	7 to 10	2032	\$	37,000	
F3-08	Fire	Fire Truck	FORD 250 (Squad 2)	\$	50,000	12	2032	\$	50,000	
P5-12	Parks	Light Duty Vehicle	GMC 2500 Crew Cab	\$	31,000	10	2032	\$	31,000	
PW 05-13	Public Works	Heavy Duty Vehicle	Freightliner SD180 (single axle/pre wet)	\$	230,000	10	2032	\$	230,000	
PW 08-12	Public Works	Light Duty Vehicle	Dodge 3500 Aluminum Dump Body	\$	65,000	10	2032	\$	65,000	
P02-16	Parks	Light Duty Vehicle	Dodge Ram 1500 Reg Cab	\$	30,000	8	2032	\$	35,000	
P03-16	Parks	Light Duty Vehicle	Dodge Ram Crew Cab	\$	30,000	8	2032	\$	30,000	
P2-08	Parks	Misc. Equipment	Chevy 1500	\$	22,000	8	2032	\$	22,000	
P8-16	Parks	Light Duty Vehicle	Dodge Ram 1500 Quad Cab	\$	35,000	8	2032	\$	35,000	\$ 651,000
P12-09	Parks	Misc. Equipment	Kubota B3030 HSDC Tractor	\$	35,000	8	2033	\$	35,000	
P20-11	Parks	Misc. Equipment	Trailer Lanscape 20'	\$	6,000	8	2033	\$	6,000	
P4-10	Parks	Light Duty Vehicle	GMC 2500 Extended Cab	\$	29,000	8	2033	\$	29,000	
PW 01-09	Public Works	Heavy Duty Vehicle	Sterling (tandem axle pre wet w/wing)	\$	290,000	8	2033	\$	290,000	
P30-13	Parks	Mower	Jacobson 9016 Mower	\$	69,000	5	2033	\$	69,000	
PW 12-12	Public Works	Light Duty Vehicle	GMC 2500 Crew Cab	\$	35,000	7	2033	\$	35,000	
PW 11-12	Public Works	Light Duty Vehicle	Dodge Ext Cab1500	\$	35,000	10	2033	\$	35,000	
P47-13	Parks	Misc. Equipment	Verti-Drain Rink 2020 Top Dresser	\$	20,000	10	2033	\$	20,000	
PWE 04-13	Public Works	Street Sweeper	Elgin Whirlwind Sweeper	\$	250,000	20	2033	\$	250,000	\$ 769,000
F1-10	Fire	Light Duty Vehicle	Chevrolet Tahoe (Command 1)	\$	45,000	8	2034	\$	45,000	+ 100,000
F2-10	Fire	Light Duty Vehicle	Chevrolet Tahoe (Command 2)	\$	45,000	8	2034	\$	45,000	
PW 02-11	Public Works	Light Duty Vehicle	GMC Ext Cab1500	\$	35,000	8	2034	\$	35,000	
WE10-04	Water	Misc. Equipment	Utility Trailer	\$	2,600	8	2034	\$	2,600	
P31-16	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2034	\$	44,000	
P31-16 P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2034	\$	15,000	
P30-16 P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2034	\$	15,000	
P23-12	Parks	Misc. Equipment	Tilt Trailer 20'	\$	7,500	8	2034	\$	7,500	
				\$				\$		
WE9-10 PW 09-12	Water Public Works	Backhoe	John Deere 310D Backhoe Dodge Ext Cab1500	_	110,000	7 to 10	2034	_	110,000	
		Light Duty Vehicle	-	\$	35,000	10	2034	\$	35,000	
AM01-02	Parks	Light Duty Vehicle	Dodge Ram 1500	\$	30,000	10	2034	\$	30,000	
PW 10-15	Public Works	Light Duty Vehicle	Dodge 1500 4X4	\$	35,000	10	2034	\$	35,000	
PW 13-15	Public Works	Heavy Duty Vehicle	Mack (single axle pre wet)	\$	230,000	10	2034	\$	230,000	
W2-14	Water	Light Duty Vehicle	Dodge 1500 Ext Cab	\$	24,000	7 to 10	2034	\$	24,000	

Unit Number	Department	Vehicle Type	Make	Re	eplacement Cost	Useful Life (yrs)	Year	Cost	Sul	btotal by Year
W3-14	Water	Heavy Duty Vehicle	Ford F-450 Service Truck	\$	85,000	7 to 10	2034	\$ 85,000	\$	758,100
P1-10	Parks	Light Duty Vehicle	GMC 2500 H.D. Crew Cab	\$	37,000	9	2035	\$ 37,000		
T01-09	Transit	Bus	Ford Diamond VIP2500	\$	100,000	5	2035	\$ 100,000		
P32-14	Parks	Mower	Kubota 331 Mower	\$	14,000	3	2035	\$ 14,000		
P33-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2035	\$ 14,000		
P34-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2035	\$ 14,000		
P35-14	Parks	Mower	Kubota 326 Mower	\$	14,000	3	2035	\$ 14,000		
P9-11	Parks	Misc. Equipment	Bobcat S-650	\$	50,000	6	2035	\$ 50,000		
PE20-00	Admin	Misc. Equipment	Enclosed Trailer 8 X 22 (from Parks)	\$	20,000	8	2035	\$ 20,000		
P21-11	Parks	Misc. Equipment	Trailer Landscape 20'	\$	6,000	8	2035	\$ 6,000		
P25-11	Parks	Misc. Equipment	Trailer Dump 5'x10'	\$	5,200	8	2035	\$ 5,200		
P6-12	Parks	Light Duty Vehicle	Dodge 2500 Crew Cab	\$	37,000	8	2035	\$ 37,000		
P41-05	Parks	Misc. Equipment	Aerway Airrator	\$	10,000	15	2035	\$ 10,000		
P7-16	Parks	Light Duty Vehicle	Ford 3500 with Dump body	\$	65,000	10	2035	\$ 65,000		
PW 15-16	Public Works	Heavy Duty Vehicle	Freightliner SD180 (single axle/pre wet)	\$	230,000	10	2035	\$ 230,000		
PWE 05-01	Public Works	Misc. Equipment	Trackless Attachment-Flail Boom	\$	150,000	10	2035	\$ 150,000	\$	766,200
P22-14	Parks	Misc. Equipment	Trailer Landscape 20' hard side	\$	6,000	8	2036	\$ 6,000		
T02-10	Transit	Bus	Ford E450	\$	100,000	5	2036	\$ 100,000		
P42-16	Parks	Utility Vehicle	Kubota RTV-X900W Utility Vehicle	\$	15,000	5	2036	\$ 15,000		
P43-16	Parks	Utility Vehicle	Kubota RTV-X1100C Utility Vehicle	\$	15,000	5	2036	\$ 15,000		
P46-16	Parks	Utility Vehicle	Kubota RTV-X900W J19029 Utility Vehicle	\$	15,000	5	2036	\$ 15,000		
W5-16	Water	Heavy Duty Vehicle	International Tandem Axle	\$	210,000	7 to 10	2036	\$ 210,000		
PW 16-15	Public Works	Heavy Duty Vehicle	Mack (tandem axle w/wing)	\$	290,000	10	2036	\$ 290,000		
F03-16	Fire	Light Duty Vehicle	Dodge Grand Caravan	\$	25,000	10	2036	\$ 25,000		
B1-15	Building	Light Duty Vehicle	Dodge Journey	\$	18,000	10	2036	\$ 18,000		
P49-14	Parks	Misc. Equipment	Truck Bed Salter	\$	6,000	10	2036	\$ 6,000		
	Parks	Misc. Equipment	Rear Dump for 1.5 Ton Tandem Axle	\$	3,000	10	2036	\$ 3,000		
	Public Works	Misc. Equipment	Emergency Road Closure Trailer	\$	5,000	10	2036	\$ 5,000		
	Public Works	Misc. Equipment	Emergency Road Closure Trailer	\$	5,000	10	2036	\$ 5,000	\$	713,000
P31-16	Parks	Mower	Jacobson 311 Mower	\$	44,000	3	2037	\$ 44,000		
P36-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2037	\$ 15,000		
P37-16	Parks	Mower	Kubota 331 Mower	\$	15,000	3	2037	\$ 15,000		
P13-14	Parks	Misc. Equipment	Kubota L5460 Tractor	\$	35,000	8	2037	\$ 35,000		
P26-11	Parks	Misc. Equipment	Trailer Dump 6'x10'	\$	6,000	8	2037	\$ 6,000		
PWE 05-01	Public Works	Misc. Equipment	Trackless M6	\$	150,000	12	2037	\$ 150,000	\$	265,000

20 Year Grand Total \$ 16,254,900

Town of Tecumseh Facilities 20 Year Plan

Building Description	Location	Building Area	Year Constructed	Building System	Replacement Cost	Life Cycle Years	Year	Cost	Subtotal by Year
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2018	\$ 166,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2018	\$ 30,000	
Sportsplex Study Architect & Detailed Design							2018	\$ 400,000	
Lacasse Environmental Services Building	1189 Lacasse Blvd.	11,100	1985/1996	Structure	\$ 1,451,060	50	2018	\$ 6,500	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Structure	\$ 1,038,800	50	2018	\$ 25,000	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Mechanical	\$ 180,200	15	2018	\$ 6,500	
Fire Hall No. 2	5520 Walker Road	4,300	1979	Structure	\$ 769,140	50	2018	\$ 30,000	
Fire Hall No. 2	5520 Walker Road	4,300	2008	Mechanical	\$ 72,641	20	2018	\$ 50,000	
McAuliffe Park Storage Building (Field House)	McAuliffe Park	1,000	2011	Structure	\$ 96,000	40	2018	\$ 6,000	
Public Works North Office/Garage	1189 Lacasse Blvd.	5,600	1979/1982/1990/2005	Structure	\$ 504,000	50	2018	\$ 18,000	
Cultural Resource Centre Expansion (at Fire Hall # 2)	5520 Walker Road					50	2018	\$ 200,000	\$ 938,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2019	\$ 85,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2019	\$ 35,000	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Mechanical	\$ 180,200	15	2019	\$ 20,000	
Public Works South Storage Barn	2495 McCord	2,400	1989	Roof	\$ 48,000	20	2019	\$ 48,000	
Public Works South Storage Barn	2495 McCord	2,400	1989	Structure	\$ 160,620	30	2019	\$ 160,000	\$ 348,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2020	\$ 293,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2020	\$ 165,000	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Mechanical	\$ 180,200	15	2020	\$ 20,000	
Lakewood Pro Shop		2,300	1981	Mechanical	\$ 25,300	20	2020	\$ 25,300	
Town Hall Expansion (estimated cost, timing not finalized)							2020	\$ 2,821,000	
Sportsplex (estimated cost, timing not finalized)							2020	\$ 24,750,000	\$ 28,074,300
Cada Library	13677 St. Gregory's Road	8,900	2001	Mechanical	\$ 97,900	20	2021	\$ 97,900	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Mechanical	\$ 180,200	15	2021	\$ 20,000	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Structure	\$ 1,038,800	50	2021	\$ 20,000	
Lakewood Pro Shop		2,300	1961/1981	Structure	\$ 338,092	40	2021	\$ 300,000	\$ 437,900
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2022	\$ 145,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2022	\$ 60,000	
Fire Hall No. 1	985 Lesperance Road	4,800	2002	Mechanical	\$ 81,600	20	2022	\$ 81,600	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Mechanical	\$ 180,200	15	2022	\$ 20,000	
OPP Police Station	965 Lesperance Road	6,100	2002	Mechanical	\$ 268,400	20	2022	\$ 200,000	\$ 506,600
Parks Operations Center	300 Manning	5,700	1988	Mechanical	\$ 57,000	35	2023	\$ 45,000	\$ 45,000
Arena	12021 McNorton St	77,250	2007	Roof	\$ 1,545,000	25	2024	\$ 40,000	\$ 40,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2025	\$ 183,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2025	\$ 150,000	
Historical Society Building	12350 Tecumseh Road E.	1,200	1960	Structure	\$ 180,000	35	2025	\$ 180,000	
Lacasse Park Storage Building		500	1995	Structure	\$ 47,804	30	2025	\$ 47,000	
Public Works South Garage	2495 McCord	4,800	2005	Mechanical	\$ 48,000	20	2025	\$ 48,000	\$ 608,000
McAuliffe Park Storage Shed (old firehall)		1,900	1967	Structure	\$ 127,158	35	2026	\$ 126,000	
Town Hall	917 Lesperance Road	13,000	2006	Mechanical	\$ 208,000	20	2026	\$ 208,000	\$ 334,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2027	\$ 30,000	
Fire Hall No. 1	985 Lesperance Road	4,800	2002	Roof	\$ 96,000	25	2027	\$ 96.000	
Golden Age Community Centre	12421 Tecumseh Road	3,800	2007	Mechanical	\$ 41,800	20	2027	\$ 41,800	\$ 167,800
Arena	12021 McNorton St	77.250	1995/1998	Structure	\$ 19,312,500	50	2028	\$ 18,000	+ 107,000
Lacasse Park Washroom by playset	TEOET MICHOLIOIT DE	690	1993/1998	Structure	\$ 86,940	45	2028	\$ 85,000	
Library - Expansion - Library DC-1	13677 St. Gregory's Road	030	1303	All	00,540	20 - 50	2028	\$ 2,279,300	
Library - Expansion - Library DC-1	13077 St. Gregory S Road	1		All	l .	20 - 30	2020	2,279,300	

Town of Tecumseh Facilities 20 Year Plan

Building Description	Location	Building Area	Year Constructed	Building System	Replacement Cost	Life Cycle Years	Year		Cost	Subtotal by Year
Fire - Provision for additional space - Fire DC-1				All		20 - 50	2028	\$	300,000	
Public Works - Provision for additional space/garage - Roads Do	C-2			All		20 - 50	2028	\$	385,000	\$ 3,067,300
Fire Hall No. 2	5520 Walker Road	4,300	1979	Structure	\$ 769,140	50	2029	\$	760,000	
Golden Age Community Centre	12421 Tecumseh Road	3,800	1975/1982	Structure	\$ 570,000	50	2029	\$	570,000	
Lacasse Park Pool Complex	590 Lacasse Blvd.	5,300	2004	Roof	\$ 106,000	25	2029	\$	106,000	\$ 1,436,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2030	\$	552,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2030	\$	65,000	
Public Works South Garage	2495 McCord	4,800	2005	Roof	\$ 72,000	25	2030	\$	72,000	\$ 689,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2031	\$	40,000	
Arena	12021 McNorton St	77,250	2007	Roof	\$ 1,545,000	25	2031	\$	270,000	
Lacasse Park Clubhouse	590 Lacasse Blvd.	3,000	2011	Roof	\$ 36,000	20	2031	\$	36,000	
Town Hall	917 Lesperance Road	13,000	2006	Roof	\$ 260,000	25	2031	\$	260,000	\$ 606,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2032	\$	30,000	
Arena	12021 McNorton St	77,250	2007	Roof	\$ 1,545,000	25	2032	\$	390,000	
Lakewood Park North Washrooms/Storage		3,300	2012	Mechanical	\$ 49,500	20	2032	\$	49,500	
Public Works North Office/Garage	1189 Lacasse Blvd.	5,600	1979/1982/1990/2005	Structure	\$ 508,050	40	2032	\$	500,000	\$ 969,500
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2033	\$	61,000	
Cada Library	13677 St. Gregory's Road	8,900	1983	Structure	\$ 1,557,500	50	2033	\$	200,000	
Fire Hall No. 2	5520 Walker Road	4,300	2008	Roof	\$ 85,460	25	2033	\$	85,500	\$ 346,500
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2034	\$	8,500	
Cada Library	13677 St. Gregory's Road	8,900	2009	Roof	\$ 160,200	25	2034	\$	160,200	
Weston Park Washrooms/Concession/Picnic Shelter	Concession/Picnic portion	1,300	1976	Roof	\$ 11,700	35	2034	\$	11,000	\$ 179,700
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2035	\$	25,000	
Arena	12021 McNorton St	77,250	1995/1998	Structure	\$ 19,312,500	50	2035	\$	245,000	
Green Acres Washroom (attached to Comm. Centre)	13731 St. Gregory's Road	500	2015	Roof	\$ 6,480	20	2035	\$	7,000	
Green Acres Washroom (attached to Comm. Centre)	13731 St. Gregory's Road	500	2015	Structure	\$ 108,000	50	2035	\$	108,000	
Historical Society Building	12350 Tecumseh Road E.	1,200	2014	Mechanical	\$ 18,000	20	2035	\$	18,000	
Lacasse Environmental Services Building	1189 Lacasse Blvd.	11,100	1985/1996	Structure	\$ 1,451,060	50	2035	\$	700,000	
Lacasse Park Storage Building	590 Lacasse Blvd.	500	1995	Roof	\$ 6,000	20	2035	\$	6,000	
Lacasse Park Washroom by ball diamond		340	1965	Structure	\$ 42,840	40	2035	\$	42,000	
McAuliffe Park Storage Shed (old firehall)		1,900	2015	Mechanical	\$ 7.600	20	2035	\$	7,600	
Town Hall	917 Lesperance Road	13,000	1960/1980/1991	Structure	\$ 2,548,000	50	2035	\$	625,000	\$ 1,783,600
Green Acres Park Community Centre	Comm. Center portion	4,500	1996	Mechanical	\$ 49,368	20	2036	\$	50,000	
Lacasse Environmental Services Building	1189 Lacasse Blvd.	11,100	2007/2011	Mechanical	\$ 122,782	20	2036	\$	120,000	
OPP Police Station	965 Lesperance Road	6,100	2002	Mechanical	\$ 268,400	20	2036	\$	20,000	\$ 190,000
Arena	12021 McNorton St	77,250	1995/1998	Mechanical	\$ 2,317,500	20	2037	\$	20,000	, , , , , , , , , , , , , , , , , , , ,
Lakewood Park North Washrooms/Storage		3,300	2012	Roof	\$ 49,500	25	2037	Ś	49,500	1
Parks Operations Center	300 Manning	5,700	1988	Mechanical	\$ 57,000	35	2037	\$	12,000	1
Public Works North Office/Garage	1189 Lacasse Blvd.	5,600	1979	Mechanical	\$ 112,900	20	2037	\$	5,500	1
Public Works South Salt Shed	2495 McCord	5,600	2012	Structure	\$ 250,000	25	2037	\$	250,000	\$ 337,000

20 Year Grand Total \$ 41,104,200