



# CAPITAL IMPROVEMENTS PROGRAM 2019 – 2025

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**City of Mason Planning Commission**

**Approved: Month X, 2019**

**Received: February 12, 2019**

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# Introduction

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A Capital Improvements Program (CIP) is a multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the community of Mason's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment to ensure the efficient delivery of services to the community. The CIP is also utilized to ensure that capital improvements are fiscally sound and consistent with the goals and policies of the governing body and the residents of the community.

A comprehensive CIP is an essential tool for the planning and development of the social, physical, and economic wellbeing of the community. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; provide a framework for the realization of community goals and objectives; and provide a sound basis on which to build a healthy and vibrant community.

The CIP informs Mason residents and stakeholders on how the municipality plans to address significant capital needs over the next six years. The CIP provides visual representations of the community's needs including maps that detail the timing, sequence, and location of capital projects. The CIP can also influence growth because infrastructure can impact development patterns.

Some of the many benefits the CIP provides for the residents and stakeholders include:

- Optimize the uses of revenue
- Focus attention on community goals, needs, and capabilities
- Guide future growth and development
- Encourage efficient government
- Improve intergovernmental and regional cooperation
- Help maintain a sound and stable financial program
- Enhance opportunities for the participation in federal and/or state grant programs

The projects identified in the CIP represent the community's plan to serve residents and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the planning commission, governing body, and administration.

Plans and policies include:

- 20-Year Masterplan
- Downtown Development Authority Plan
- Local Development Finance Authority TIF Plan
- Administrative Policies
- Five-Year Parks and Recreation Plan

### Definition of a Capital Improvement

The CIP allows for responsible and thoughtful planning of future major expenditures that are not necessarily financed or automatically included in the annual budgeting process. All capital projects that fit the description under the policy (see Page 4) should be part of this CIP.

### Legal Basis of the Capital Improvements Program

The CIP has been authorized by the Michigan Planning Enabling Act (Public Act 33 of 2008). This mandate gives responsibility for preparing a CIP for local Planning Commission bodies, and reads as follows:

**125.3865 Capital Improvements program of public structures and improvements/ preparation; basis. Sec. 65. (1)** To further the desirable future development of the local unit of government under the Masterplan, a planning commission, after adoption of a Masterplan, shall annually prepare a capital improvements program of public structures and improvements, unless the planning commission is exempted from this requirement by charter or otherwise. If the planning commission is exempted, the legislative body either shall prepare and adopt a capital improvements program, separate from or as a part of the annual budget, or shall delegate the preparation of the capital improvements program to the chief elected official or a nonelected administrative official, subject to final approval by the legislative body. The capital improvements program shall show those public structures and improvements, in the general order of their priority, that in the commission's judgment will be needed or desirable and can be undertaken within the ensuing 6-year period. The capital improvements program shall be based upon the requirements of the local unit of government for all types of public structures and improvements. Consequently, each agency or department of the local unit of government with authority for public structures or improvements shall upon request furnish the planning commission with lists, plans, and estimates of time and cost of those public structures and improvements.

### Planning and Benefits of the Capital Improvements Program

The CIP is, first and foremost, a planning tool and is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, and adjustments are made to existing projects arising from changes in the amount of funding required, conditions, or time line. A new year of programming is also added each year to replace the year funded in the annual operating budget. With thoughtful foresight and review as a result of a CIP, the many outstanding capital projects that Mason is faced with implementing every year can be viewed as one package, rather than as small, fragmented groups or lists, with no unified sense of focus and direction.

When capital improvements begin with careful planning and study, the City of Mason's chances for receiving state and federal grants are greatly enhanced. Some grants require the inclusion of a CIP with their application. Formulation of a CIP helps those involved to look at alternative funding mechanisms that might not have been considered before. Instead of relying on local revenue sources alone, the CIP allows the City to think more creatively to fulfill Masterplan for Land Use goals and policies. The CIP will continue to develop over time by adding features to gradually improve quality and sophistication. Greater attention shall be devoted to provide more detailed information about individual project requests, program planning, fiscal analysis, fiscal policies, and developing debt strategy. The CIP often avoids reactive planning, and instead replaces it with balanced growth initiatives.

## Impact of Capital Budget on the Operating Budget

As new policies and programs are approved, both the operating and capital budgets are impacted. For example, an increase in service levels approved as part of the operating budget would have long-term effects on the Capital Improvements Program. Conversely, a restrictive change to the use of long-term debt would slow capital programs. Regardless of the difference between the operating and capital budgets, the two are interdependent.

Approval of the CIP by the Mason Planning Commission does not mean they grant final approval of all projects contained within the plan. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget.

The community of Mason strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget. A direct link can be seen between the two documents, as there should be in a strategic planning environment.

## Process

**Mason Leadership Team:** reviews all projects recommended from various areas of expertise, evaluates the prioritization of projects based on established criteria, considers funding options, and presents the recommendation to the Planning Commission.

- City Manager
- City Clerk/Human Resources Director
- Community Development Director
- Finance Director/Treasurer
- Fire Chief
- Police Chief
- Public Works Director

**City Manager:** clarifies any issues, finalizes the ratings and approves the CIP draft. The City Manager recommends the CIP draft at the Planning Commission workshop and presents the CIP at the Planning Commission public hearing.

**Mason Planning Commission:** reviews the Policy Group's recommendation, conducts workshops (if necessary), receives public input, conducts public hearings, adopts the plan, and requests the governing body to consider incorporating funding for the first-year projects into the budget plan.

**Mason City Council:** is encouraged to use the CIP as a tool in the adoption of the annual budget process in accordance with the governing body goals and objectives.

**Mason Residents:** are encouraged to participate in plan development by working with various boards and commissions at the Planning Commission workshops, the Planning Commission public hearings, and at the governing body's budget workshops and public hearings. As always, communication is open between residents, governing body representatives, Planning Commission representatives, and staff.

# Policy

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As used in the City of Mason Capital Improvements Program, a capital improvements project is defined as a major, nonrecurring expenditure that includes one or more of the following:

1. Any construction of a new facility (i.e., a public building, water/sanitary sewer mains, storm sewers, major/local roadways, recreational facilities), an addition to, or extension of, such a facility, provided the cost is \$5,000 or more and that the improvement will have a useful life of three years or more.
2. Any nonrecurring rehabilitation of all or part of a building, its grounds, a facility, or equipment, provided the cost is \$5,000 or more and the improvement will have a useful life of three years or more.
3. Any purchase or replacement of major equipment to support community programs provided the cost is \$5,000 or more and will be coded to a capital asset account.
4. Any planning, feasibility, engineering, or design study related to an individual capital improvements project or to a program that is implemented through individual capital improvements projects provided the cost is \$5,000 or more and will have a useful life of three years or more.
5. Any planning, feasibility, engineering, or design study costing \$10,000 or more that is not part of an individual capital improvements project or a program that is implemented through individual capital improvements projects.



# Funding Overview

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Capital improvements projects involve the outlay of substantial funds making numerous sources of funding necessary to provide financing over the life of the project. Most capital funding sources are earmarked for specific purposes and cannot be transferred from one capital program to another. The CIP has to be prepared with some projections as to the amount of money available. The following is a summary of the funding sources for projects included in the CIP:

## Bonds

When the community of Mason sells bonds, purchasers are, in effect, lending the community money. The money is repaid, with interest, from taxes or fees over the years. The logic behind issuing bonds (or “floating a bond issue”) for capital projects is that the citizens who benefit from the capital improvements over a period of time should help the community pay for them.

**General Obligation (G.O.) bonds:** Perhaps the most flexible of all capital funding sources, G.O. bonds can be used for the design or construction of any capital project. These bonds are financed through property taxes. In financing through this method, the taxing power of the community is pledged to pay interest and principal to retire the debt. Voter approval is required if the community wants to increase the taxes that it levies and the amount is included in Mason’s state-imposed debt limits. To minimize the need for property tax increases, the community makes every effort to coordinate new bond issues with the retirement of previous bonds. G.O. bonds are authorized by a variety of state statutes.

- *Mason currently has one outstanding bond related to the infrastructure put in place on Temple Street. The bond has a remaining payment balance of \$105,000 with a final payment estimated in 11/2020.*
- *Mason also has one outstanding bond related to the City Hall/Police Station. The bond has a remaining payment balance of \$3,415,000 with a final payment estimated in 04/2040.*

**Revenue bonds:** Revenue bonds are sold for projects that produce revenues such as water and sewer system projects. Revenue bonds depend on user charges and other project-related income to cover their costs. Unlike G.O. bonds, Revenue bonds are not included in the community state-imposed debt limits because the full faith and credit of the community backs them. Revenue bonds are authorized by Public Act of 1933, the Revenue Bond Act. The City of Mason currently has no outstanding revenue bonds.

## Building Authority

The Mason Building Authority was established for the purpose of acquiring, furnishing, equipping, owning, improving, enlarging, operating, and maintaining a building or buildings, automobile parking lots or structures, recreation facilities and the necessary site or sites therefore thereof, and the payment of the bond principal and interest for any related debt incurred. The Building Authority functions as a mechanism to facilitate the selling of bonds to finance public improvements.

## Enterprise Fund (Water and Sewer Fund)

In enterprise financing, funds are accumulated in advance for capital requirements. Enterprise funds not only pay for capital improvements, but also for the day-to-day operations of community services and the debt payment on revenue bonds. The community can set levels for capital projects; however, increases in capital expenditures for water mains, for example, could result in increased rates. Enterprise fund dollars can only be used on projects related to that particular enterprise fund.

The revenues generated from the Mason's Water and Sewer system must be set aside and collected in accounts as designated by existing revenue bond ordinances. These revenues are pledged for the specific purposes and transferred in a manner specified by those ordinances.

The City of Mason charges for water service supplied by the system based on a rate schedule measured by water usage. These charges must be sufficient to provide adequate revenues for operations, maintenance, replacements, improvements, and debt retirement. The last utility rate study was completed in 2014, with an update planned in 2019.

- *Mason currently has one outstanding loan with the State of Michigan Drinking Water Revolving Fund (DWRF) related to the Water Treatment Plant. The loan has a remaining payment balance of \$4,213,674 with a final payment estimated in 04/2028.*

### **Federal and State Funds**

The federal and state governments make funds available to communities through numerous grants and aid programs. Some funds are tied directly to a specific program. The community has discretion (within certain guidelines) over the expenditure of others. For the most part, the community has no direct control over the amount of money received under these programs.

### **Millages**

The property tax is a millage that is one of the most important sources of community revenue. The property tax rate is stated in mills (one dollar per \$1,000 of valuation). This rate is applied to a property's net value, following the application of all exemptions and a 50% equalization ratio. Mason is authorized to utilize millages under Public Act 279 of 1909, the Home Rule Cities Act. The City of Mason's current millage rate is 15.25. Under the Headlee Amendment, the City of Mason City Council is authorized to raise the millage up to 18.0865 without a vote of the people.

### **Special Assessments**

Capital improvements that benefit particular properties, rather than the community as a whole, may be financed more equitably by special assessment, i.e., by those who directly benefit. Local improvements often financed by this method in Mason are sidewalk and drive approach improvements.

### **State Shared Revenue**

The City of Mason receives its share of various taxes and fees from programs and requirements by the State of Michigan. This refers to both constitutional and statutory Revenue Sharing payments.

- The Constitutional portion consists of 15% of gross collections from the 4% sales tax distributed to cities, villages, and townships based on their population. The Legislature cannot reduce or increase this amount.
- The Statutory portion is distributed by a formula, set in Public Act 532 of 1998. The Act calls for 21.3% of the 4% sales tax collections to be distributed in accordance with the formula. The Legislature has the ability to reduce the statutory portion based on the State's priorities for the State's budget.

### **Tax Increment Financing (TIF)**

TIF is a municipal financing tool that can be used to renovate or redevelop declining areas while improving their tax base. TIF applies the increase in various state and local taxes that results from a redevelopment project to pay for project-related public improvements.

- *For purposes of financing activities within the community of Mason's downtown district, the Downtown Development Authority adopted a 30-year TIF plan in 1984 (extended to expire in 2030) that generates roughly \$70,000 in revenue annually.*
- *For purposes of financing activities related to Mason's south industrial area, the Local Development Finance Authority Act adopted a 30-year TIF plan in 1989 that generates roughly \$500,000 in revenue annually.*

### **Weight and Gas Tax**

Based on a formula set by the State of Michigan, the community of Mason receives a portion of the tax placed on motor fuel and highway usage in the state. The restrictions placed on the expenditure of these funds insure that they will be spent on transportation-related projects or operations and services. These are commonly called Act 51 funds.

- *Mason on average receives \$700,000 split between the Major and Local Street Funds.*



# **CAPITAL IMPROVEMENTS PROGRAM 2019-2025**

## **LIST OF PROJECTS**

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# Streets, Sidewalks, Bridges (S)

## OVERVIEW

Transportation-related issues are a high priority for the City of Mason. The City of Mason contains both public and private roadways. Public roads are owned and operated by the Michigan Department of Transportation (MDOT), the Ingham County Road Commission, and the City of Mason. Private roads are owned and operated by private developments and homeowner groups. The City currently maintains 12.25 miles of major streets, 19.78 miles of local streets, 2.21 miles of cemetery drives, and 2.5 miles of non-motorized trail.

In order to define priorities for the local street and major road rehabilitation programs, the City has a formal asset management program that categorizes roads based on their Pavement Surface Evaluation and Rating (PASER) first. Table 1 illustrates PASER ratings for asphalt pavements.

**Table 1. PASER Rating Overview**

| Rating         | Visible Distress  | General Treatment and Conditions  |
|----------------|---|---|
| <b>10 Good</b> | None  | New construction.   |
| <b>9 Good</b>  | None  | Recent overlay.   |
| <b>8 Good</b>  | No longitudinal cracks except reflection of paving joints. Occasional transverse cracks, widely spaced (40' or greater). All cracks sealed or tight (open less than 1/4").  | Recent sealcoat or new cold mix. Little or no maintenance required.   |
| <b>7 Fair</b>  | Very slight or no raveling, surface shows some traffic wear. Longitudinal cracks (open 1/4") due to reflection or paving joints. Transverse cracks (open 1/4") spaced 10' or more apart, little or slight crack raveling. No patching or very few patches in excellent condition.   | First signs of aging. Maintain with routine crack filling.  |
| <b>6 Fair</b>  | Slight raveling (loss of fines) and traffic wear. Longitudinal cracks (open 1/4"– 1/2"), some spaced less than 10'. First sign of block cracking. Sight to moderate flushing or polishing. Occasional patching in good condition.   | Shows signs of aging. Sound structural condition. Could extend life with sealcoat.                                  |
| <b>5 Fair</b>  | Moderate to severe raveling (loss of fine and coarse aggregate). Longitudinal and transverse cracks (open 1/2") show first signs of slight raveling and secondary cracks. First signs of longitudinal cracks near pavement edge. Block cracking up to 50% of surface. Extensive to severe flushing or polishing. Some patching or edge wedging in good condition. | Surface aging. Sound structural condition. Needs sealcoat or thin non-structural overlay (less than 2").            |
| <b>4 Poor</b>  | Severe surface raveling. Multiple longitudinal and transverse cracking with slight raveling. Longitudinal cracking in wheel path. Block cracking (over 50% of surface). Patching in fair condition. Slight rutting or distortions (1/2" deep or less).  | Significant aging and first signs of need for strengthening. Would benefit from a structural overlay (2" or more).  |
| <b>3 Poor</b>  | Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. Severe block cracking. Some alligator cracking (less than 25% of surface). Patches in fair to poor condition. Moderate rutting or distortion (1" or 2" deep). Occasional potholes.  | Needs patching and repair prior to major overlay. Milling and removal of deterioration extends the life of overlay. |
| <b>2 Poor</b>  | Alligator cracking (over 25% of surface). Severe distortions (over 2" deep). Extensive patching in poor condition. Potholes.  | Severe deterioration. Needs reconstruction with extensive base repair. Pulverization of old pavement is effective   |
| <b>1 Poor</b>  | Severe distress with extensive loss of surface integrity.   | Failed. Needs total reconstruction.   |

The lowest-rated roads in each of these categories would generally be addressed first. However, the last PASER evaluation was completed in 2017 so staff takes into account changes in conditions. PASER ratings will be scheduled and completed on a two-year cycle beginning in 2019.

Following the PASER evaluation, the City looks at underground utilities and considers whether the condition of those utilities would move a street project up in priority. This is followed by the impact to residents and how many property owners would be impacted positively due to the improvement.

Finally, the City considers the budget and how many streets can be completed within a year based on the resources available. Mason voters have approved that a minimum value equal to 4 mills must be used for road projects every year. Due to the construction season crossing fiscal years and unforeseen factors impacting the ability for a project to be completed, the City maintains a rolling summary to assure the City is meeting this requirement (see Table A). This allocation can be funded by numerous resources to meet this requirement.

The City's policy is to evaluate sidewalks on any road that is being improved and replace them as needed.

Once prioritized the road work will typically be completed in one of the three following ways:

- **Mill and Fill:** Consists of grinding the surface layer with a milling machine, hauling and disposing of the milled bituminous pavement. A new lift of hot mix asphalt (HMA) is placed over the milled surface. This treatment methodology can facilitate up to 10 years of additional service life without full reconstruction. This method of surface rehabilitation provides the greatest value in areas where the base layers of pavement do not have extensive cracking and utility repairs or replacements are not warranted. Sidewalks are evaluated and replaced as necessary.
- **Pulverize, Shape and Repave:** Consists of pulverizing the full depth of the existing pavement and intermixing the pulverized HMA with the aggregate base. This pulverized material is then graded and compacted to the original cross slope of the street. Any excess material is hauled off site. New HMA is placed upon this pulverized section in as many as three lifts. This method provides the equivalent of a new street cross-section without the added expenses of removing and replacing all of the concrete curb and gutter. In addition, the pulverized material can be temporarily stockpiled on the adjacent lane to facilitate any utility repairs or replacements. Sidewalks are evaluated and replaced as necessary.
- **Reconstruction:** Consists of the complete removal and replacement of all components of the street, including but not limited to concrete curb and gutter, existing pavement and gravel section. This method of construction is limited to areas deteriorated beyond the scope of the Mill and Fill or Pulverize, Shape and Repave methods. After removal, the street is completely rebuilt by re-grading the base, placing new aggregate, placing new concrete curb and gutter, and repaving the road. Often new drainage structures and storm sewer are installed as a reconstruction project. Typically, this method is reserved for circumstances such as a road widening or narrowing or the complete replacement or reconstruction of underground infrastructure such as sanitary sewer or water main. This is the costliest, most time-consuming and disruptive street construction.

**Table 2. Road Appropriation Summary: 1998-2018**

| Fiscal Year   | Required Appropriation | Actual Spent         | Over/(Under)        |
|---------------|------------------------|----------------------|---------------------|
| 98/99         | 521,918.00             | 862,454.56           | 340,536.56          |
| 99/00         | 558,522.00             | 477,509.15           | (81,012.85)         |
| 00/01         | 629,313.00             | 858,359.18           | 229,046.18          |
| 01/02         | 666,271.00             | 1,658,096.87         | 991,825.87          |
| 02/03         | 764,684.00             | 454,414.70           | (310,269.30)        |
| 03/04         | 792,587.00             | 888,647.89           | 96,060.89           |
| 04/05         | 828,705.00             | 976,705.77           | 148,000.77          |
| 05/06*        | 739,970.00             | 1,045,585.41         | 305,615.41          |
| 06/07         | 824,935.00             | 648,943.35           | (175,991.65)        |
| 07/08         | 871,830.00             | 1,042,490.52         | 170,660.52          |
| 08/09         | 916,258.08             | 2,876,791.12         | 1,960,533.04        |
| 09/10         | 967,322.26             | 539,350.61           | (427,971.65)        |
| 10/11         | 896,553.96             | 823,558.74           | (72,995.22)         |
| 11/12**       | 871,232.00             | 3,573.02             | (867,658.98)        |
| 12/13         | 860,205.00             | 68,164.78            | (792,040.22)        |
| 13/14         | 869,376.00             | 1,477,869.35         | 608,493.35          |
| 14/15         | 853,096.00             | 480,704.23           | (372,391.77)        |
| 15/16         | 864,892.00             | 1,509,285.83         | 644,393.83          |
| 16/17         | 853,788.00             | 369,815.29           | (483,972.71)        |
| 17/18         | 872,460.00             | 1,172,037.23         | 299,577.23          |
| 18/19***      | 895,044.00             | 40,987.88            | (854,056.12)        |
| <b>Totals</b> | <b>16,918,962.30</b>   | <b>18,275,345.48</b> | <b>1,356,383.18</b> |

\* **Note:** 5 Mill to 4 Mill Requirement

\*\* **Note:** Street Construction Waived

\*\*\* **Note:** Partial Year



## Proposed Project Year: 2019-20

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### Project Number: 2017-S5 Walnut Street - Columbia Street to North End

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**Description:** Pulverize, shape and repave. The road was last worked on in 1989 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 3. Normal maintenance is no longer adequate. Eight homes will be directly impacted by this improvement.

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### Project Number: 2017-S10 Sidewalk Program: Northwest Quadrant of the City

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete-specific project.

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### Project Number: 2017-S11 Kerns Road – Cedar Street to Howell Road

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**Description:** Full reconstruction of the road with the addition of sidewalks.

**Justification:** The road has a PASER rating of 1. Normal maintenance is no longer adequate. No reconstruction records could be found for this street. It does not have curb and gutter and the base of the road is failing due to the limited drainage system in place to serve the road. Eight businesses will be directly impacted by this improvement. This project has been delayed to 2019-2020 in order to coordinate work with the Hayhoe Trail Extension to Kerns and Howell Roads. (2018-P3)

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### Project Number: 2017-S12 W. Elm Street - Henderson Street to Jefferson Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Undersized water main replacement and aged sanitary sewer repairs will be completed as a part of the street reconstruction. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Seven homes will be directly impacted by this improvement.

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### Project Number: 2017-S13 Park Street – Elm Street to Oak Street

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**Description:** Pulverize, shape and repave. 1998 had total reconstruction in that year. Sidewalks will be

evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. The project was moved back due to cost estimates increasing for Jefferson project (2017-S9).

### **Proposed Project Year: 2020-21**

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#### **Project Number: 2017-S10      Sidewalk Program: Northeast Quadrant of the City**

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete-specific project.

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#### **Project Number: 2017-S14      East Cherry Street – Rogers Street to End**

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**Description:** Mill and fill. The road was last worked on in 1997 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Thirty-two homes will be directly impacted by this improvement.

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#### **Project Number: 2017-S15      S. Barnes Street – Ash Street to Kipp Road**

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**Description:** Mill and fill. The road was last worked on in 1988 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Fifty-six homes will be directly impacted by this improvement.

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#### **Project Number: 2017-S16      Maple Street Bridge Repair**

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**Description:** Bridge repair due to safety concerns. These repairs are only for the top of the bridge and further repairs will need to be done in the future.

**Justification:** Bridge was evaluated and the report shows that the concrete head walls have severe spalling and are in need of repair and hand rails on the bridge are not safe.

## Proposed Project Year: 2021-22

### Project Number: 2017-S10 Sidewalk Program: Southeast Quadrant of the City

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete-specific project.

### Project Number: 2017-S17 Center Street – Walnut Street to N. Bush Street

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**Description:** Mill and fill. Staff does not have any records indicating when the road was constructed. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Eighteen homes will be directly impacted by this improvement.

### Project Number: 2017-S18 Brookdale Street - Judy Court to Willow Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1997 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Sixteen homes will be directly impacted by this improvement.

### Project Number: 2017-S19 Cherry Street - McRoberts Street to Henderson Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Twenty-six homes will be directly impacted by this improvement.

### Project Number: 2017-S20 Columbia Street – Orchard Lane to Walnut Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 2009 and was a mill and fill. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Thirteen homes will be directly impacted by this improvement.

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**Project Number: 2017-S21**      Eaton Drive - All

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**Description:** Pulverize, shape and repave. The road was last worked on in 1979 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-four homes will be directly impacted by this improvement.

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**Project Number: 2017-S22**      W. Elm Street – McRoberts Street to Henderson Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-five homes will be directly impacted by this improvement.

**Proposed Project Year: 2022-23**

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**Project Number: 2017-S10**      Sidewalk Program: Southwest Quadrant of the City

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete specific project.

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**Project Number: 2017-S23**      Rayner Street – Randolph Street to Columbia Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 3. Normal maintenance is no longer adequate. Eleven homes will be directly impacted by this improvement.

---

**Project Number: 2017-S24**      Eugenia Drive – Northbrook Street to End

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**Description:** Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Fifty homes will be directly impacted by this improvement.

---

**Project Number: 2017-S25**      Hall Blvd - Ash Street to South Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1980 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Twenty-seven homes will be directly impacted by this improvement.

---

**Project Number: 2017-S26**      Columbia Street - Park Street to Jefferson Street to South Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1999 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Four homes will be directly impacted by this improvement.

### **Proposed Project Year: 2023-24**

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**Project Number: 2017-S10**      Sidewalk Program: North West Quadrant of the City

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete specific project.

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**Project Number: 2018-S27**      Peachtree Place - Columbia Street to South Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1997 and had a mill and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Sixty-three homes will be directly impacted by this improvement.

---

**Project Number: 2018-S29**      McRoberts Street - Columbia Street to Maple Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1998 and had mill and fill work done. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Nine homes will be directly impacted by this improvement.

---

**Project Number: 2018-S30**      Steele Street – Ash Street to Elm Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1996 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 4. Normal maintenance is no longer adequate. Seven homes will be directly impacted by this improvement.

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**Project Number: 2018-S31**      West Oak Street- McRoberts Street to Lansing Street

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**Description:** Pulverize, shape and repave. The road was last worked on in 1998 and had a total reconstruction in that year. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Seventeen homes will be directly impacted by this improvement.

## **Proposed Project Year: 2024-25**

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**Project Number: 2017-S10**      Sidewalk Program: Northeast Quadrant of the City

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**Description:** This program will evaluate the sidewalks in a designated area of the City. This may be included in our Special Assessments as appropriate. The City will let a bidding package specifically for sidewalk work. See Figure 1.

**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes a safety hazard. This program will allow us to address affected areas proactively and receive the cost savings of bidding it with a concrete specific project.

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|--------------------------------|---|------------|
| <b>Project Number: 2019-S1</b> | Walnut Court- Columbia Street to Ash Street | <b>NEW</b> |
|--------------------------------|---|------------|

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Twenty-four (24) homes will be directly impacted by this improvement.

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|--------------------------------|--|------------|
| <b>Project Number: 2019-S2</b> | Coppersmith Drive – Sanctuary Street to Wildemere Street | <b>NEW</b> |
|--------------------------------|--|------------|

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Ten (10) homes will be directly impacted by this improvement.

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|--------------------------------|---|------------|
| <b>Project Number: 2019-S3</b> | South Street – Barnes Street to Rogers Street | <b>NEW</b> |
|--------------------------------|---|------------|

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Eight (8) homes will be directly impacted by this improvement.

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| <b>Project Number: 2019-S4</b> | Foxview Street – Entire Length | <b>NEW</b> |
|--------------------------------|--------------------------------|------------|

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Nine (9) homes will be directly impacted by this improvement.

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**Project Number: 2019-S5****Henderson Street– Entire Length****NEW**

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Six (6) homes will be directly impacted by this improvement.

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**Project Number: 2019-S6****Middlebury Street – Entire Length****NEW**

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Fifteen (15) homes will be directly impacted by this improvement.

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**Project Number: 2019-S7****McRoberts Street – Maple Street to South Street****NEW**

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. Thirty-three (33) homes will be directly impacted by this improvement.

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**Project Number: 2019-S8****Maple Street – Lansing Street to Park Street****NEW**

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. This project will impact the Business District.

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**Project Number: 2019-S9****Maple Street – Jefferson Street to Barnes Street****NEW**

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**Description:** Pulverize, shape and repave. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. This street is scheduled for six (6) years out and it anticipated that the maintenance demands will continue to escalate over those six (6) years. This project will impact the Business District and County Offices.



**Description:** Acquire land, design and construct an extension to Franklin Farms Drive south over Willow Creek to Kipp Rd.

**Justification:** A parcel of land was dedicated for the purpose of extending Franklin Farms south to Kipp Road in the 1990s but the project was never completed. There are currently 264 households with only one means of ingress/egress and emergency vehicle access via South Street to Northbrook Street, far exceeding the standards for residential development within the City of Mason which states in Sec. 94-17(e)(5) that no more than 25 dwellings shall be served by a single access point except upon finding that a second alternative and reasonable means of emergency vehicle access is available. When South Street is closed, residents and emergency responders must take a longer route via Columbia/College/Sitts or Kipp/College/Sitts to reach the area. If Northbrook were to be closed for any reason, there is no second alternative or reasonable means of access to/from the neighborhood.

Creating a second means of access by way of the Franklin Farms extension will significantly improve public safety for residents. The idea for connecting this neighborhood across Willow Creek to Kipp Rd is nearly 80 years old as it appears on the City's 1940 Road Plan, extending Eugenia Drive to Kipp Rd. As part of the future update to the Master Plan and CIP, extensions in other areas of the city will be recommended to support emergency access to neighborhoods with limited access; future residential developments will be required to provide secondary access when necessary.

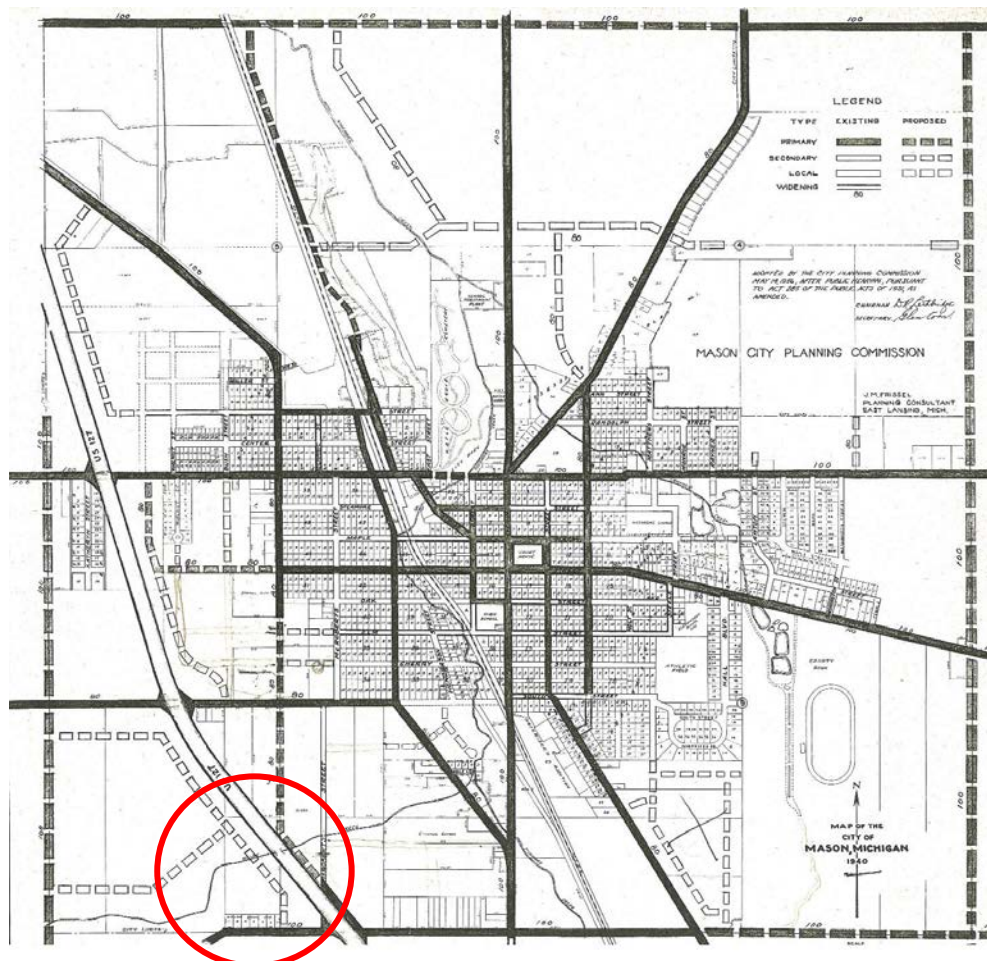
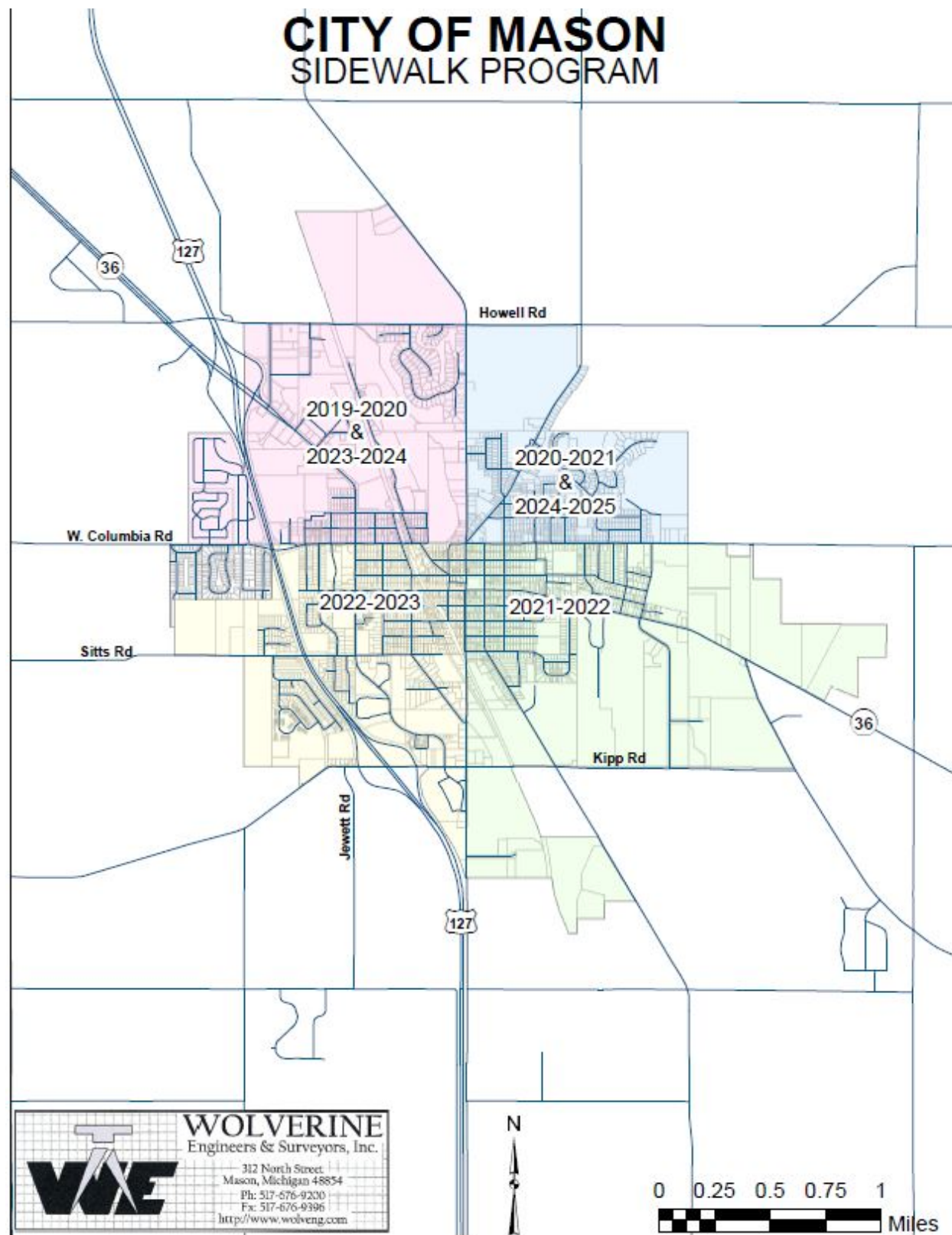


Figure 1

City of Mason  
1940 Road Plan

Figure 2 - Sidewalk Program



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# Utilities: Sanitary Sewer, Storm Water, and Water Distribution (U)

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## OVERVIEW

**Sanitary Sewer:** The sewage collection and treatment system consist of a 1.5 Million Gallons per Day (MGD) activated sludge treatment plant, 32 miles of sewer line including interceptors, and four lift stations. The City, like most other communities in Michigan, operates under a National Pollutant Discharge Elimination System permit (NPDES) administered by the MDEQ. This permit establishes the allowable effluent levels to be discharged to the receiving waters, namely Sycamore Creek.

A study was completed by Wolverine Engineers to determine the best method of providing sewer service to areas on the undeveloped east side of Mason. The feasibility study has identified six districts, known as the Rayner Creek Utility Districts, which are served via a common lift station and force main. During 2005, as part of the Temple Street extension from M-36 to Kipp Road, the sewer and pump station were constructed to serve District 3 as this area develops.

**Storm Water System:** The State of Michigan Department of Environmental Quality regulates Municipal Separate Storm Sewer Systems (MS4). The goal of the MS4 program is to reduce the discharge of pollutants to surface waters of the state. The current gravity system consists of concrete drainage pipes ranging from 6 inches to 42 inches in diameter, along with corrugated metal pipes up to 72 inches in diameter. These pipes are connected to the street network through a series of catch basins. Eventual outflow is to one of the three creeks flowing through town - Sycamore, Willow or Rayner - since the system is separated from the sanitary sewer system.

Maintenance of the storm water system is divided between the City and the Ingham County Drain Commission. The county has designated drains that flow through the City such as the Willow and Rayner Creek Drains.

**Water Distribution:** The City's water system consists of seven wells, two 500,000-gallon elevated storage towers, 600 fire hydrants and one one-million-gallon ground storage tank and approximately 45 miles of water main in various sizes (4" to 16"). The City has a centralized treatment facility; the water is pumped through raw water mains to the treatment plant to remove Radium 226 and 228 as well as iron.

The development of the proposed sanitary sewer and water projects is funded through the Water and Sewer Fund and is based upon system deficiencies and needed improvement to the treatment plant.

Utilities in streets are planned for the first three years of the CIP. The plan is to extend the Utility estimates out to six years next year.

**Lead and Copper:** The recent rule changes enacted by State of Michigan has resulted in an unfunded mandate in the water distribution system. The new rules state that the water utility will at its expense replace the entire water service beginning at the corporation valve to 18" inside the house if it is found to contain a "lead service line" (LSL). Lead service lines have been expanded to include services with lead

“goosenecks” and galvanized lines that are or were connected to LSLs. There is no longer any distinction between the municipal and customer owned portion of the water service where lead is concerned.

At present, the issue of spending public dollars on private property has not been solved and is the focus of a lawsuit against the State. For planning purposes, we are moving forward on the assumption that this issue will be solved.

To start, the city is required to do a preliminary distribution system material inventory that is due to the State by 1/1/2020. This involves compiling information from available records that will predict with reasonable certainty which service lines may be a lead service line. This process is under way. The next step will be undertaking a field verification of possible lead service lines in the distribution system material inventory. The completion deadline for this phase is 1/1/2025.

Over the years, during water main replacement, there has been a number of partial lead service lines replaced. At this time, it is being interpreted that the city will be required to replace the customer’s side of the water service if it is determined to be made of lead/galvanized pipe.

It is estimated that the city has 600 to 800 suspected full lead service lines and 300 to 500 partial lead service lines in inventory of live water service lines. These figures have been derived from records of service line repairs, study of the records of home construction by year, and records of water main construction by year. The records do not indicate the specific makeup of materials used. Therefore, an estimate must be made to predict the likelihood of where to field verify for lead service lines.

By January 1, 2020, the city must provide an estimate to the Michigan Department of Environmental Quality (DEQ) of the number of suspected lead service lines that will need to be replaced. The City must then investigate and confirm the actual number of lead service lines to be replaced. This is to be documented in an asset management plan with a comprehensive materials list approved by the State by January 1, 2025. The plan must also show a schedule of the replacements that must be made at a minimum of 5% per year avg, however, all lead service line replacements must be complete within 20 years (2045) unless an alternate schedule for replacement is approved in the asset management plan. This project could require us to replace approximately 65 lead service lines a year with an average cost of \$5-8,000 per lead service line (or \$325,000- 520,000 total). This would be a significant impact on the City’s dedicated water fund and could result in a rate increase.

At this time, we are still developing a strategy to address this new legislation. This may change the CIP priorities significantly in the next year for this category. The City will coordinate necessary replacements with roadwork to help reduce costs.



## Proposed Project Year: 2019-20

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### Project Number: 2017-U11 Turbine Aeration Blower at POTW (Publicly Owned Treatment Work)

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**Description:** Variable speed turbine blower used to supply oxygen to the activated sludge process. This project was pushed back to year 2019-2020 because the study has not been completed yet.

**Justification:** The Hoffman Blowers currently in use supply oxygen to the activated sludge process. These blowers have become worn and less productive. During hot weather events these blowers do not supply enough oxygen to aeration tanks to maintain the desired dissolved oxygen levels needed to provide adequate ammonia removal. Ammonia removal is a critical process in treating waste water and must be achieved to maintain compliance with the NPEDS permit. It has been estimated that the electrical cost savings on this variable speed turbine blower could show a payback to the City within five years.

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### Project Number: 2017-U15 Replace Two Fire Hydrants Behind Mason Plaza **MOVED FROM 18/19**

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**Description:** Replace two fire hydrants behind Mason Plaza. This project was carried over from previous CIP as it was discovered that additional research was necessary regarding easements on the property to access the hydrants.

**Justification:** These hydrants break easily and parts are difficult to source. It has also been determined by Fire Chief Minshall that the hydrants are too close to the building for safety during firefighting operations.

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### Project Number: 2017-U19 Kerns Road – Cedar Street to Howell Road

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**Description:** New storm sewer and extend sanitary sewer to Cedar Street.

**Justification:** There are currently no storm sewer pipes on this street and the sanitary sewer only goes 3/4 of the way down the street. While we are putting in curb and gutter, it is the ideal time to address these issues. This project is connected to project number 2017-S11

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### Project Number: 2017-U20 W. Elm Street - Henderson Street to Jefferson Street

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**Description:** Replace 4" water main under the bridge to Park Street then up to Oak Street with new 8" main and valves.

**Justification:** The water main that went under this bridge was washed out in the 1970s and there is very poor fire flow. This will also improve water quality as the current main is 4". This project is connected to project number 2017-S12.

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### Project Number: 2017-U21 Park Street – Elm Street to Oak Street

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**Description:** New 8" water main from the bottom of the hill at Elm and Oak. This is part of the W. Elm to Henderson Project.

**Justification:** This is part of the water main loop from W. Elm to Oak and will eliminate a dead end. This will increase fire flow to the west side of town. This project is connected to project number 2017-S13.

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**Project Number: 2017-U23**      Well No. 6 Rebuild and New Variable Frequency Drive (VFD)

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**Description:** Franklin Farm Well No. 6 rebuild and new VFD

**Justification:** History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2015. Well maintenance and replacement are critical to maintaining the water supply for our residents. Original VFD installed in 2008 on all other wells in 2008 have failed. Life cycle for VFDs of this size are 10 years. We have changed the VFD brand for better service.

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**Project Number: 2017-U24**      Study of Sewer Flow on Mason Street

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**Description:** Study of sewer flow on Mason Street.

**Justification:** This sewer is running over 80% full most of the time and the City needs to plan for the future of this line. The City will have to either upsize this line or put a second line in to relieve some flow off this line. This line takes the flow from Cedar Street and could be a limiting factor for future growth.

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**Project Number: 2017-U25**      Gutters for Water Treatment Plant

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**Description:** Rain gutters for entire Water Treatment Plant.

**Justification:** The Water Treatment Plant was constructed in 2008. In an effort to control construction costs, the rain gutters on the plant were reduced to installation over the doors. Water management for the administration portion of the Water Treatment Plant is essential to keep the foundation and sidewalk of the building stable. The process end of the Water Treatment Plant is in need of rainwater management to keep the asphalt around the plant from excessive wear and tear.

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**Project Number: 2019-U1**      Waste Water Treatment Plant –Design **PROJECT SPLIT**

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**Description:** Contingency, legal, engineering, and fiscal of a six million gallons per day (MGD) wastewater treatment plant.

**Justification:** The Waste Water Treatment Plant, formally known as the Publicly Owned Treatment Works (POTW) was originally constructed in the 1958 with additional improvements added in 1975, 1977, and 2011 and in 2016. Many of the tanks and building structures are approximately 60 years old. This includes the primary clarifiers, aeration tanks, and the blower building that are still in use. Much of the equipment in these structures was upgraded in the 1976 project. Therefore, most pumps and the aeration blowers are approximately 40 years old. An engineering firm is needed to perform the professional services required in constructing a wastewater treatment plant.

**Description:** A new facility will need to be built to allow for the Waste Water Plant to be expanded and because the existing facility is reaching the end of its useful life. This new facility will house all public works activities and equipment for the future needs of the City of Mason.

**Justification:** When the City upgrades the Waste Water Treatment Plant the DPW facilities may need to be relocated. This anticipated relocation provides the opportunity to consolidate all operations to a single point including streets, water, sewer, parks and cemeteries. The conceptual DPW facility will put all facets of the City Physical Plant operations under one roof. This will aid in streamlining the operations, supervision and coordination of the DPW.

The greatest amount of space will likely be dedicated to housing all vehicles and equipment indoors. This will reduce stresses particularly in the winter months and could result in an increase in vehicle longevity and/or salvage values. In addition, greater controls of consumable items, such as vehicle parts and water fittings, will be gained through the elimination of multiple storage areas. As was the case with the recently constructed Water Treatment Plant, an understanding of future needs and expansion will be given to the overall dimensions of the proposed DPW building. The building will also include storage currently housed at Fire Station 2, so that property can be sold and provide for additional document storage needed for the City Hall facility.

### **Proposed Project Year: 2020-21**

**Description:** Supervisory Control and Data Acquisition (SCADA) Control Work Upgrades on PLC, power supply and any control panel issues from the original installation. This project is to do three wells at a time to help reduce costs on this project.

**Justification:** Control Wave Programmable Logic Computer boards are the originals installed in 2002. These PLCs are not available or repairable. The low voltage power supplies for the control panels are experiencing stability issues. There are control issues at all three sites. The upgrades to sites will allow staff to be more effective and efficient with system operations. This is the first phase of the three-year replacement cycle for the three controllers plan.

**Description:** A new facility will need to be built to allow for the Waste Water Plant to be expanded and because the existing facility is reaching the end of its useful life. This new facility will house all public works activities and equipment for the future needs of the City of Mason.

**Justification:** When the City upgrades the Waste Water Treatment Plant the DPW facilities may need to be relocated. This anticipated relocation provides the opportunity to consolidate all operations to a single point including streets, water, sewer, parks and cemeteries. The conceptual DPW facility will put all facets



of the City Physical Plant operations under one roof. This will aid in streamlining the operations, supervision and coordination of the DPW.

The greatest amount of space will likely be dedicated to housing all vehicles and equipment indoors. This will reduce stresses particularly in the winter months and could result in an increase in vehicle longevity and/or salvage values. In addition, greater controls of consumable items, such as vehicle parts and water fittings, will be gained through the elimination of multiple storage areas. As was the case with the recently constructed Water Treatment Plant, an understanding of future needs and expansion will be given to the overall dimensions of the proposed DPW building. The building will also include storage currently housed at Fire Station 2, so that property can be sold and provide for additional document storage needed for the City Hall facility.

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**Project Number: 2017-U26****New Well at Franklin Farms****MOVED FROM 19/20**

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**Description:** New well at Franklin Farms site. The proposal is to drill a small-bore deep well at the Franklin site and case off the bore past the zone of collapse. A submersible pump would be installed to pull water from the lower formation. If approved, the original vertical turbine pump of Well No. 6 would be reengineered and a more economical submersible pump would be installed during the well rebuild scheduled for this year. This would be similar to the setup of Wells No. 9 and No. 10. This will save considerable funds as opposed to building a new well site. The configuration will likely yield more water from this site than current production.

**Justification:** The well bore for the Franklin well is compromised. There is screen in the bottom of this well to stabilize the bore from collapse. The bore is also not aligned with the screen so total well cleaning is not possible. The production has fallen off from the original level to approximately 30%. An additional well at the Franklin Well No. 6 site is being requested.

The likelihood of the City of Mason utilizing Well No. 3 at the north tower site is unlikely. It will be too expensive to install a water main to pump to the Water Plant or install treatment on site. To keep this well on standby status is also expensive. Monthly and quarterly testing is a draw on resources that will bear no fruit.

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**Project Number: 2017-U27****Cherry Street – Rogers Street to End**

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**Description:** Sewer main replacement and manhole replacement.

**Justification:** The sanitary sewer was constructed in 1940 and needs to be replaced. It has clay tile and inflow problems. The sanitary manholes are brick and in poor shape, requiring replacement.

---

**Project Number: 2017-U28****S. Barnes Street – Ash Street to Kipp Road**

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**Description:** New water main and valves to replace existing 4" and dual mains.

**Justification:** This is an old water main from the early 1900s from Ash Street to Bond. Upsizing to 8" water mains and eliminating places where dual mains exist will help with firefighting ability and water quality. It

will also allow staff to isolate for water main breaks.

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**Project Number: 2017-U29**      Generators for ISD\* and Curtis Street Lift Stations

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**Description:** Install standby generators for ISD and Curtis Street lift stations.

**Justification:** Staff gets called out to these locations multiple times a year for power-related problems. This requires them to have a bypass pump or set up portable generators for as long as three days at a time for power outages.

*\*ISD = Ingham Intermediate School District. When this station was originally installed, ISD was the only user. While the users have changed, the name of the lift station has remained.*

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**Project Number: 2018-U32**      South Water Tower Interior Maintenance and Repair

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**Description:** Clean out inside the bowl and sand blast and repaint the wet interior of the south water tower.

**Justification:** The South water tower was inspected in 2017 and was found to have some paint flaking and bare metal showing on the interior of the bowl where the water is stored. It was recommended to have the interior wet section of the bowl sand blasted and repainted to extend the life of the tower. There was also ice damage to the ladder inside the bowl that will need to be fixed.

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**Project Number: 2018-U33**      Well No. 4 Rebuild

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**Description:** Hayes Park Well No. 4 Rebuild

**Justification:** History of this well indicates the need to rebuild this well every 5-6 years and this well was last serviced in 2015. Pump efficiency testing will be another tool to use for indicating the need to rebuild this well at the time. Well maintenance and replacement are critical to maintaining the water supply for our residents.

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**Project Number: 2019-U3**      Waste Water Treatment Plant – Construction      **PROJECT SPLIT**

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**Description:** Construct a 6 MGD activated sludge wastewater treatment plant.

**Justification:** The Publicly Owned Treatment Works (POTW) was originally constructed in 1958 with additional improvements added in 1975, 1977, and 2011 and in 2016. Most of the unit processes in the City of Mason's wastewater treatment plant are operating beyond their typical useful lifespan. Maintaining compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements, the current system creates significant challenges and under certain conditions does not provide adequate capacity to handle full treatment of the City's wastewater. High flows entering the wastewater treatment plant have caused sanitary sewer overflows (SSO's) which is a violation of the City's NPDES permit and has also caused damage to the primary tanks. The current wastewater treatment plant

is designed to treat a maximum of 1.5 million gallons of wastewater per day (MGD). The average flow of the wastewater entering the plant is approximately 1.13 MGD and during certain weather events the recorded wastewater flows have been as high as 6 MGD.

### **Proposed Project Year: 2021-22**

**Project Number: 2018-U34**      Well No. 5 Rebuild

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**Description:** Ash Street Well No. 5 Rebuild

**Justification:** History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

**Project Number: 2019-U4**      Study – Wastewater Solids System Handling Rate **NEW**

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**Description:** Perform a study to provide a cost / benefit analyses and /or options for the handling and disposal of the solids generated by the wastewater treatment plant.

**Justification:** The digesters at the wastewater treatment plant have operated beyond their typical useful lifespan. Currently the digesters are operating properly with no issues, but they will have to be replaced in the future. There are now different options available in the handling of the biosolids that should be considered before the digesters are in need of being replaced.

### **Proposed Project Year: 2022-23**

**Project Number: 2018-U37**      Well No. 10 Rebuild

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**Description:** Temple Street Well No. 10 Rebuild

**Justification:** History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

**Project Number: 2019-U5**      Post-Construction Demolition of Unused Structures **NEW**

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**Description:** Remove unused buildings and / or structures after the wastewater treatment plant construction.

**Justification:** After the wastewater treatment construction there will be buildings and structures that will have to be removed.

**Description:** Construction of a wastewater solids handling system to dispose of the solids that are generated from the wastewater treatment plant.

**Justification:** The two digesters operating at the wastewater treatment plant will have to be replaced in the future. There are now other options available in solid handling other than digestion. These other options should be investigated to determine if the cost and safety issues would benefit the City.

### **Project Year: 2023-24**

**Description:** Supervisory Control and Data Acquisition (SCADA) Control Work- Upgrades on PLC, power supply and any control panel issues from the original installation. Wells are improved on a three-year cycle, three wells at a time, which helps to reduce project costs. This is the second phase of the three-year replacement plan for three controllers.

**Justification:** Control Wave Programmable Logic Computer boards are the originals installed in 2002. These PLCs are not available or repairable. The low voltage power supplies for the control panels are experiencing stability issues. There are control issues at all three sites. The upgrades to sites will allow staff to be more effective and efficient with system operations.

**Description:** Temple Street Well No. 9 Rebuild.

**Justification:** History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2016. Well maintenance and replacement are critical to maintaining the water supply for our residents.

**Description:** This is a place holder and estimate for a repaint for the North water tower.

**Justification:** During the last inspection of the North water tower it was suggested that the City plan for a tower repaint in 20 years. This is only a recommendation from the inspector; the tower will be inspected every five years and this time line may be extended.

**Description:** Convert some unused POTW property to public open space or a Riverwalk Trail access.

**Justification:** When the DPW is relocated, and after the wastewater treatment plant construction, there may be some property to the North of the POTW that will not be used. This property could be utilized as a green area or a Riverwalk Trail access for the public

### **Proposed Project Year: 2024-25**

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|                                |  |            |
|--------------------------------|--|------------|
| <b>Project Number: 2019-U8</b> | <b>Wastewater Plant Office Building Re-model</b> | <b>NEW</b> |
|--------------------------------|--|------------|

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**Description:** Remodel and upgrade existing laboratory, restrooms and offices at the wastewater plant.

**Justification:** After the wastewater treatment plant construction there will be areas of the administration/laboratory building that can be utilized for other uses. The laboratory area, restroom, offices and break area are old and need of an upgrade

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|                                |                               |            |
|--------------------------------|-------------------------------|------------|
| <b>Project Number: 2019-U9</b> | <b>New Chlorine Generator</b> | <b>NEW</b> |
|--------------------------------|-------------------------------|------------|

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**Description:** This is a place holder and estimate for a new chlorine generator at the water plant.

**Justification:** The current chlorine generator is 10 years old we have up till this point been able to obtain parts for this system. We have over the years up-dated the current system by replacing two of the three operating cells and the third being done in fiscal year 2019-2020. Past that, the manufacturer has indicated that parts will at some point not be available for the current system. The manufacturer's warranty for the anode cells is seven years.

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|                                 |   |            |
|---------------------------------|---|------------|
| <b>Project Number: 2019-U10</b> | <b>Water Plant Filter Media Replacement</b> | <b>NEW</b> |
|---------------------------------|---|------------|

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**Description:** This is a place holder and estimate for the filter system at the water plant.

**Justification:** The current filter media is ten years old. According to the latest radiological survey from MDEQ 5/15/2018 the residual radium in the filter media may approach a level of concern in the next five to ten years regarding disposal options in the future. The water department will do regular testing to predict the proper replacement timetable.

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|                                 |                           |            |
|---------------------------------|---------------------------|------------|
| <b>Project Number: 2019-U11</b> | <b>Well No. 8 Rebuild</b> | <b>NEW</b> |
|---------------------------------|---------------------------|------------|

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**Description:** Ash Street Well No. 8 Rebuild

**Justification:** History of this well indicates the need to rebuild this well every five-to-six years and this well was last serviced in 2017. Well maintenance and replacement are critical to maintaining the water supply for our residents.

# Parks, Cemetery and Forestry (P)

## OVERVIEW

The City of Mason operates Mason's only cemetery, Maple Grove Cemetery, located in the central portion of the City within the northern sector. Established in 1844, it comprises approximately 38 acres with additional acreage available for expansion. Sycamore Creek flows along the eastern edge of the property which is important to the development of the Hayhoe Riverwalk Trail throughout the City. Approximately 50 burials are performed on average per year. The older portion of the cemetery has been listed on the National Register of Historic Places.

The City of Mason owns and operates eight municipal parks within the City limits totaling 92.74 acres and includes a wide variety of seasonal recreation activities.

**Table 3. City of Mason Inventory of City Parks**

| Property               | Park Type* | Service Area** | Acres     | Description/Facilities   |
|------------------------|------------|----------------|-----------|--|
| Laylin Park            | NP         | CQ             | 7.2       | Two stocked fishing ponds w/fishing docks, catch/release, picnic shelter, restrooms, picnic tables, grills, playground equipment   |
| Lee Austin Park        | NP         | N              | 0.9       | Sycamore Creek/Hayhoe Riverwalk Trail, picnic tables, grill, workout equipment   |
| Hayes Park             | CP         | VS             | 9.22      | Lighted softball field, basketball court, two tennis courts, sledding hill, playground equipment, shelter, restrooms, picnic tables, grills  |
| Bond Park              | NP/SU      | N              | 5.3       | Lighted softball field, skateboard park, roller hockey rink, drinking fountain, restrooms, Rayner Creek  |
| Griffin Park           | NP         | N              | 0.65      | Historical markings, landscape plantings, picnic table, gazebo   |
| Bicentennial Park      | SU         | VS             | 2.27      | Pink school house, serves as one of Mason Historical Society museums   |
| Maple Grove Park       | NRA        | CQ             | 5.2       | Undeveloped property, Sycamore Creek, used for nature walking  |
| Rayner Park            | CP         | EC             | 62        | Playground, one large soccer playing field, one small soccer practice field, basketball court, one baseball field, picnic shelter, picnic tables, grills, nature area  |
| Hayhoe Riverwalk Trail | PT         | VS             | 2.5 miles | Nature walk/trail heads  |
| Community Garden       | CF         | CQ             |           | Community garden plots, water service for irrigation; plots can be rented by a Mason resident for a small fee. Surplus harvest from the designated Donation plot is offered to the community and local food bank for free. |

\*Park types: NP (Neighborhood Park), CP (Community Park), NRA (Natural Resource Area), SU (Special Land Use), PP (Private Park), PT (Park Trail), CF (Community Facility)

\*\*Service area: N (Neighborhood), CQ (City Quadrant), VS (Village/Surrounding Townships), EC (Entire County)

## Proposed Project Year: 2019-20

### Project Number: 2017-P8

### Laylin Park Improvements – Phase II to 2018-2019 Project

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**Description:** Rebuild two bridges over open drain. Enhance existing walking path with a new walking path entrance off Columbia St. Upgrade pavilion with rest room improvements, new roof and electrical. Add permanent handicap accessible picnic tables and grills to north side of park.

**Justification:** Final design estimates came back higher than anticipated. An additional \$200,000 is required to complete the full list of improvements. All the above listed improvements were presented to and discussed at a neighborhood forum in December 2017. The attendees voted on improvements offered during the forum.

### Project Number: 2018-P3

### Kerns Road - Hayhoe Riverwalk Trail Extension

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**Description:** Extension of Hayhoe Riverwalk Trail along the east side of Kerns Road from Howell to Cedar Street, due to land constraints on the west side. This will connect to the Howell Road Extension CIP 2018-P1 anticipated to be completed in the Summer of 2018. This project would be done in coordination with the complete reconstruction of Kern Road. During the ongoing analysis of the Howell Road extension, it became clear that many pedestrians, especially from Angel House, are currently walking on Kerns Road to Howell to get to the trail. Based on that, the City believes a better solution would be a wider 10' extension of the trail instead of the planned sidewalk.

**Justification:** No sidewalks currently exist along this road and it is one of the few City roads remaining that does not have pedestrian access. This extension will address safety concerns along Kerns Road where no sidewalk exists and encourage use of the trail to get to business establishments. The City is currently pursuing grant funding to help offset the costs of this extension.

## Proposed Project Year: 2020-21

### Project Number: 2017-P10

### Bond Park Improvements

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**Description:** This project has been moved from 2019-2020. Public input was received during several community events in 2018 – Spring Fling, Down Home Days and the City Open House. Neighbors adjacent to the park received information and survey questions by mail. Staff is summarizing the input received and will carry it forward into the update of the Parks and Recreation Plan that will be updated this year. A final recommendation for proposed improvements will be made once that work is complete.

**Justification:** Parks play an important role in the economic, environmental and social welfare of a community. The standard for access to recreational facilities is a 3-5-minute walk. Bond Park is an important location for residents in the northeast quadrant of Mason, however, it does not provide the standard park amenities necessary to accommodate shared use for families and children of different ages, interests and abilities that live in the area. Staff is currently working with a potential sponsor on a grant to support the purchase and installation of playground equipment.

## **Proposed Project Year: 2021-22**

**Project Number: 2017-P11** Hayes Park Improvements

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**Description:** TBD based upon Recreation Plan recommendations

**Justification:** Evaluate usage and input from the neighborhood to determine improvements.

## **Proposed Project Year: 2022-23**

**Project Number: 2017-P4** Lee Austin Park Improvements

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**Description:** TBD based upon Recreation Plan recommendations.

**Justification:** Evaluate usage and input from the neighborhood to determine improvements.

**Project Number: 2017-P14** Griffin Park Improvements

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**Description:** TBD based upon Recreation Plan recommendations.

**Justification:** Evaluate usage and input from the neighborhood to determine improvements.

**Project Number: 2019-P1** Pavilion/Parking Improvements (adjacent to Lee Austin Park) **NEW**

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**Description:** Replace pavilion and improve parking on the Consumers Energy lot adjacent to Lee Austin park (top of the hill).

**Justification:** The pavilion was constructed in the 1950s. The structure has exceeded its useful life. City staff is working with Consumers Energy and the Railroad to examine alternatives for replacing the pavilion and improving parking on the lot.

## **Proposed Project Year: 2023-24**

**Project Number: 2017-P12** Rayner Park Improvements

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**Description:** TBD based upon Recreation Plan recommendations.

**Justification:** Evaluate usage and input from the neighborhood to determine improvements.

**Project Number: 2018-P3** Planning: Parks/Recreation Plan – 5-Year Update

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**Description:** The City of Mason Parks/Recreation plan outlines the plan for operations, maintenance,



capital improvements and programming of the City's parks and trails. Public engagement is a critical component of the planning process and community input will be obtained to inform decisions about park and trail improvements. A major update is recommended to account for changes related to the Master Plan update and the 2020 Census data.

**Justification:** The Parks/Recreation plan is required by statute in order to be eligible for grants, in particular, the Michigan Department of Natural Resources (DNR). An update should occur every five years and be coordinated with the update to the Masterplan. The plan provides detailed descriptions of our parks spending and ensure that the community members' vision for and usage of the parks is considered in the decision-making process for improvements. The plan also serves as documentation of our compliance with State and Federal requirements such as the Americans with Disabilities Act.

### **Proposed Project Year: 2024-2025**

**Project Number: 2018-P5,6,7,8** Hayhoe Trail Internal Loops

**MOVED FROM 23/24**

**Description:** TBD based upon Recreation Plan recommendations.

**Justification:** Dependent upon final plans.

**Project Number: 2018-P15** Second Drive - Cemetery

**MOVED FROM 23/24**

**Description:** Put second entrance into the Cemetery on East Street.

**Justification:** This project was moved from 2023-20234 to coincide with the restroom improvements (2019-P2). This is a second entrance into the Cemetery that will help with traffic and give our residents a second entrance.

**Project Number: 2019-P2** Cemetery/Trailhead Restroom

**NEW**

**Description:** Install a new public restroom at the trail head in front of the cemetery off Jefferson Street to replace existing use of deteriorating restroom.

**Justification:** The current restroom behind the cemetery building is deteriorating and in need of replacement. Staff came up with an idea of a new restroom that could be put at the trail head that would allow the public to have a restroom half way along the Riverwalk trail and still have a restroom for the staff that work in the cemetery.

# Motor Vehicle Pool (MVP)

The City of Mason maintains a motor vehicle pool (MVP) consisting of over 59 trucks, cars, and pieces of motorized equipment. Each vehicle has a lifespan determined by a combination of information from the manufacturers, condition based upon maintenance records including number of miles/hours between repairs, and the trade-in value compared to estimated maintenance costs. The primary goals are that the vehicles in the MVP are safe, reliable and provide the necessary functionality at an economical cost.

Most motor vehicle fleets use one of three options in determining a vehicle's replacement point:

- 1) Replacement is determined based on established intervals of age and mileage. This method is simple to implement but may not result in the most economical cost because it does not consider variability among vehicles.
- 2) Replacement is made when repairing exceeds the value of the vehicle. This method is often referred to as the "drive it till it dies" approach, which typically occurs when a major component fails, such as a transmission or engine. Major components tend to start failing on vehicles in the 100,000 miles range.
- 3) Replacement is based on lifecycle costing analysis. This method considers the point in the vehicle or equipment's life when the sum of all ownership and operating costs reaches a minimum. Typical parameters included in these analyses are depreciation, cost of repairs, insurance, fuel and maintenance.

The City's current guidelines target vehicle replacement at approximately 10 years or 100,000 miles on pickup trucks and ¾ ton trucks. The police fleet replacement schedule is 5 years for front line police cars and 8-10 years or 100,000 miles on administrative cars. Large equipment like dump trucks, vactors and street sweepers, the goal is 20 years for replacement, however these have to be planned for as they are large impact items on the MVP budget.

The City mechanic reviews all MVP equipment annually and prepares a report detailing the condition of the vehicles in the fleet. This report is helpful when preparing for the budget and impacts the decision-making process when updating the replacement schedule.

In the next CIP plan the public works department will be reviewing the MVP replacement plan to adapt it to the American Public Works Association model for asset management, which bases replacement on lifecycle costing analysis (number three above).

**Table 4. City of Mason Fleet Summary and Replacement Schedule**

| Department | Type   | Units     | Lifespan      | # of Years Between Replacement | # of Replacements Per Rotation |
|------------|--|-----------|---------------|--------------------------------|--------------------------------|
| Police*    | Patrol Cars  | 5         | 5             | 1                              | 1                              |
| Police     | Detective Car  | 1         | 10            | 10                             | 1                              |
| Fire       | Command Truck  | 2         | 10            | 5                              | 1                              |
| Fire       | Brush Truck  | 1         | 5             | 5                              | 1                              |
| Fire       | Rehab truck  | 1         | 20            | 20                             | 1                              |
| DPW        | Mowers   | 5         | 5             | 1                              | 1                              |
| DPW        | 5-yard Dump/Plow Truck   | 4         | 20            | 5                              | 1                              |
| DPW        | Salt Spreaders   | 2         | 20            | 20                             | 2                              |
| DPW        | 3/4 Ton 4x4 Front V-plow Pick-up                                 | 2         | 10            | 5                              | 1                              |
| DPW-WTP    | 3/4 Ton 4x4 Front V-plow Pick-up                                 | 1         | 10            | 10                             | 1                              |
| DPW-WWTP   | Mower  | 1         | 5             | 1                              | 1                              |
| DPW        | ½ Ton 2x4 Pickup Trucks  | 9         | 10            | 1                              | 1                              |
| DPW        | SUV-Personnel  | 1         | 8             | 8                              | 1                              |
| DPW        | 1 1/4 ton Front Plow Dump Truck                                  | 1         | 15            | 15                             | 1                              |
| DPW        | Man lift truck   | 1         | 25            | 25                             | 1                              |
| DPW        | Street Sweeper   | 1         | 25            | 25                             | 1                              |
| DPW        | Vactor/Sewer Rodding Truck                                       | 1         | 25            | 25                             | 1                              |
| DPW        | Front End Material Loader  | 1         | 3             | 3                              | 1                              |
| DPW        | Back Hoe   | 1         | 25            | 25                             | 1                              |
| DPW        | 4x4 Universal Terrain Vehicle (UTV) - Tool Cat                   | 1         | 15            | 15                             | 1                              |
| DPW        | 6x4 UTV (currently JD Gator, to be replaced with Tool Cat)       | 1         | 15            | 15                             | 1                              |
| DPW        | 20-yard Leaf Loader  | 2         | 25            | 25                             | 2                              |
| DPW        | Utility Tractor with Front Loader and Belly Mower                | 1         | 25            | 25                             | 1                              |
| DPW        | Utility Tractors with Brush Hog                                  | 1         | 25            | 25                             | 2                              |
| DPW        | High Cubic Feet per Minute (CFM) Air Compressor with Jack Hammer | 1         | 25            | 25                             | 1                              |
| DPW        | Trailers in various configurations                               | 6         | 20            | 20                             | 6                              |
| DPW        | 75 kilowatt (kw) Stand By Portable Generators                    | 2         | 40            | 40                             | 2                              |
| DPW        | Other equipment  |           | 20            | as needed                      | as needed                      |
|            | <b>Total Vehicles/Equipment</b>                                  | <b>59</b> | <b>17</b>     |                                |                                |
|            | plus Other Equipment   |           | Avg. Lifespan |                                |                                |

## Proposed Project Year: 2019-2020

### Project Number: 2017-MVP11

### Vehicle No. 13 Replacement

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**Description:** Replacement of vehicle number 13, 1/2 Ton 2x4 Pickup Truck utilized for general maintenance use by the DPW for hauling trash, checking wells, etc.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle.

### Project Number: 2017-MVP12

### Mower No. 75 Replacement

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**Description:** Replacement of mower number 75, utilized for parks and cemetery.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

### Project Number: 2017-MVP13

### Vehicle No. 6 Replacement

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**Description:** Replacement of vehicle number 6, with a 1/2 Ton 2x4 Pickup Truck utilized for general use by the DPW.

**Justification:** Police vehicle number 85 needs to be replaced due to life of vehicle. Our current police vehicles are pursuit-rated Ford Taurus that are being discontinued. Staff has evaluated alternative vehicles including Chargers, Mustangs, and Explorers. The Explore provided the best utilization of space for our officers and passengers with minimal increase in cost. Police vehicle number 5 (Detective and pursuit rated) will replace 85. DPW vehicle number 6 (DPW Admin) will be equipped and replace 5 for Detective use, as it does not need to be pursuit rated. Vehicle 6 will be replaced with a Pickup Truck which is a better fit for the uses required of DPW. \$6,000- equipping 6 and \$24,000 for the Pickup Truck.

### Project Number: 2019-MVP1

### Vehicle No. 25 Equipping

### PROJECT SPLIT

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**Description:** Equipping of plow truck that was replaced in 2018-2019 budget.

**Justification:** This is for the outfitting of truck number 25 with plows, salter and dump body.

## Proposed Project Year: 2020-2021

### Project Number: 2017-MVP15

### Vehicle No. 16 Replacement

---

**Description:** Replacement of vehicle number 16, 1/2 Ton 2x4 Pickup Truck utilized for facility maintenance/code enforcement.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle

**Project Number: 2017-MVP16****Mower No. 77 Replacement**

---

**Description:** Replacement of mower number 77, utilized for general maintenance of cemetery, parks and forestry.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Project Number: 2017-MVP17****Vehicle No. 86 Replacement**

---

**Description:** Replacement of vehicle number 86 with a 4-door Explorer police utility vehicle utilized as a police car.

**Justification:** Replacement due to life of equipment. Replacement will be with an Explorer. Our current police vehicles are pursuit-rated Ford Taurus that are being discontinued. Staff has evaluated alternative vehicles including Chargers, Mustangs, and Explorers. The Explorer provided the best utilization of space for our officers and passengers with minimal cost increase.

**Project Number: 2017-MVP18****Vehicle No. 24 Replacement**

---

**Description:** Replacement of vehicle number 24, 5-yard Dump/Plow Trucks utilized by DPW for plowing, salting streets and water main breaks.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Proposed Project Year: 2021-2022****Project Number: 2017-MVP20****Vehicle No. 18 Replacement**

---

**Description:** Replacement of vehicle number 18, 1/2 Ton 2x4 Pickup Truck utilized for general maintenance of cemetery, parks and forestry.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle

**Project Number: 2017-MVP21****Mower No. 66 Replacement**

---

**Description:** Replacement of mower number 66, utilized for general maintenance of cemetery, parks and forestry.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Project Number: 2017-MVP22****Vehicle No. 83 Replacement**

---

**Description:** Replacement of vehicle number 83 with a 4-door Explorer police utility vehicle utilized as a police car.

**Justification:** Replacement due to life of equipment. Replacement will be with an Explorer. Our current police vehicles are pursuit-rated Ford Taurus that are being discontinued. Staff has evaluated alternative vehicles including Chargers, Mustangs, and Explorers. The Explorer provided the best utilization of space for our officers and passengers with minimal cost increase.

**Project Number: 2017-MVP23****Vehicle No. 21 Replacement**

---

**Description:** Replacement of vehicle number 21, 3/4 Ton Pickup Truck utilized by DPW winter maintenance and cemetery, parks and forestry for summer maintenance.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Project Number: 2018-MVP24****Vehicle No. 59 Replacement**

---

**Description:** Replacement of an asphalt roller and trailer, vehicle number 59 utilized by DPW for street maintenance.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Proposed Project Year: 2022-2023****Project Number: 2017-MVP25****Vehicle No. 6 Replacement**

---

**Description:** Replacement of vehicle number 6 with a 4-door Explorer police utility vehicle utilized as a police car.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle

**Project Number: 2017-MVP26****Mower No. 69 Replacement**

---

**Description:** Replacement of mower number 69, utilized for cemetery, parks and forestry.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Project Number: 2017-MVP27****Vehicle No. 84 Replacement**

---

**Description:** Replacement of vehicle number 84 with a 4-door Explorer police utility vehicle utilized as

a police car utilized as police cars.

**Justification:** Replacement due to life of equipment. Replacement will be with an Explorer. Our current police vehicles are pursuit-rated Ford Taurus that are being discontinued. Staff has evaluated alternative vehicles including Chargers, Mustangs, and Explorers. The Explorer provided the best utilization of space for our officers and passengers with minimal cost increase.

---

**Project Number: 2018-MVP29**

**Equipment No. 69 Replacement**

---

**Description:** Purchase of John Deere Gator, vehicle number 37 utilized cemetery, parks and forestry winter and summer maintenance.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2019-MVP2**

**Addition of Vehicle No. 82**

**NEW VEHICLE**

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**Description:** Addition of vehicle number 82 with a 4-door Explorer police utility vehicle utilized as a police car to be utilized as police vehicle.

**Justification:** The City plans to add a specialized school and traffic safety officer at this time which would bring our full-time sworn staffing would be back to 13. An addition vehicle will need to be added to the fleet at that time.

**Proposed Project Year: 2023-2024**

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**Project Number: 2018-MVP1**

**Vehicle No. 22 Replacement**

---

**Description:** Replacement of vehicle number 22, 1/2 Ton 2x4 Pickup Truck utilized for cemetery, parks and forestry general use.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle

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**Project Number: 2018-MVP2**

**Mower No. 75 Replacement**

---

**Description:** Replacement of mower number 75, utilized for cemetery, parks and forestry.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2018-MVP3**

**Vehicle No. 85 Replacement**

---

**Description:** Replacement of vehicle number 85 with a 4-door Explorer police utility vehicle utilized as a police car.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2018-MVP4**                      **Vehicle No. 31 Replacement**

---

**Description:** Replacement of vehicle number 31, 3/4 Ton Pickup Truck utilized by DPW winter maintenance and cemetery, parks and forestry summer maintenance.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2018-MVP5**                      **Back Hoe No. 30 Replacement**

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**Description:** Replacement of Back Hoe number 30 utilized by multiple departments – DPW, storm water, sanitary sewer, and cemetery burials

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Proposed Project Year: 2024-25**

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**Project Number: 2019-MVP3**                      **Vehicle No. 15 Replacement** **NEW**

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**Description:** Replacement of vehicle number 15, 1/2 Ton 2x4 Pickup Truck utilized by Water Treatment Plant staff for general travel and site inspections.

**Justification:** Replacement due to life of vehicle. Replacement will be with like vehicle.

---

**Project Number: 2019-MVP4**                      **Mower No. 74 Replacement** **NEW**

---

**Description:** Replacement of mower number 74, utilized for cemetery, parks and forestry.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2019-MVP5**                      **Vehicle No. 86 Replacement** **NEW**

---

**Description:** Replacement of vehicle number 86 with a 4-door Explorer police utility vehicle utilized as a police car.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

---

**Project Number: 2019-MVP6**                      **Vehicle No. 802 Replacement** **NEW**

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**Description:** Replacement of vehicle number 802, Expedition utilized by the Assistant Chief of the Fire Department for emergency services.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

**Project Number:** 2019-MVP7

Vehicle No. 28 Replacement

**NEW**

**Description:** Purchase of 5-yard Dump Truck with Plow number 28 utilized by DPW for winter maintenance and water main breaks.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment.

# Building, Property and Equipment (B)

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## OVERVIEW

**Administrative Services and City Hall:** The current City Hall was built in 2010 and houses the following Departments: Administration, Clerk/Customer Service/Human Resources, Assessing/ Finance, Police, and Community Development. The building also includes Mason Public Schools as a tenant.

The Sycamore Room is located on the main floor of City Hall and can be divided into two meeting rooms by tract walls, facilitating more than one event at a time. It is primarily used for City Council meetings, various other board and commission meetings, election precincts for all elections, as well as the Mason Area Seniors Club. This room is used by a variety of groups and residents for various functions.

**Fire Services and Fire Stations:** The Fire Department operates out of two stations. Station 1 (12,403 square feet) was built in 1998 and is located at 221 West Ash Street adjacent to City Hall. The building houses the administrative offices as well as most of the firefighting equipment. Station 2 is located at 615 Curtis Street and was built in 1976. The 1,800 square-foot building currently houses reserve firefighting equipment, training equipment and a DPW pump. The City plans to relocate the items in Station 2 to the new DPW facility and sell the property to reduce maintenance costs. The fire service area includes the City of Mason, Aurelius Township and Vevay Township, and a portion of Alaiedon Township for a total of 85 square miles serving a population of approximately 16,000 residents.

**Library:** The Mason Library at 145 West Ash is owned by the City of Mason and operated by the Capital Area District Library as part of its 13-branch library system serving 13 communities and 23 municipalities. The building was commissioned by Mr. Albert Hall and constructed in 1938 as a memorial to his wife, Ada. Through the years it has undergone two expansions/renovations bringing the total area used to 6,424 square feet on three floors.

## Proposed Project Year: 2019-20

**Project Number: 2017-B5**      **Building: Library Improvements – Phase 1**

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*Based on preliminary results of the Library Facilities Evaluation, this line restores the original project description (2017) into phases - Phase I and Phase II. Phase 2 is subject to modification pending the results of the Library Facilities Evaluation to be completed in 2019.*

**Description:** Improvements to the first floor of the library building necessary to meet safety and accessibility requirements, and to improve utilization. Phase 1 work\* will result in a new front entrance with a ramp, two handicapped bathrooms on the first floor, interior renovation of the first floor to relocate the circulation desk, staff area, computers and materials, create a reading area centered around the fireplace, restore the fireplace to working condition (gas or water vapor), and to create an area for teens. One of the new bathrooms will be accessible through the external door of the library. When the library is closed and the interior door is locked, the external door can remain open and the bathroom made available to the public. All improvements will meet the standards of the Americans with Disabilities Act (ADA).

**Justification:** The building is nearly 80 years old and in need of upgrades that will support prolonged use and accessibility for all community members of all abilities. Investment in the building and its use as a library in downtown is consistent with the community vision, policy and laws adopted through the Master Plan, Sections 2-4 (Community Character, Historic Preservation and the Environment) and 5-6 (Capital Improvements Programming); the City's ordinance Ch. 31 Historic Preservation which, in 1976, establishes the Historic District Commission specifically to provide for preservation of historic and within historic districts; and the commitment made in 2004, through the Certified Local Government (CLG) Agreement, which requires Mason to enforce appropriate federal, state and local legislation for the designation and protection of historic properties. The CLG program offers grants that can be used as a match to support improvements. Staff is researching further how the City's investment can be leveraged to match other grants and private funding sources.

As an economic generator, the library is one of the busiest civic institutions in Mason with over 84,000 visitors per year. Those visitors also support the banks, post office, restaurants and retail shops.

In 2018, the library provided the following support to community members:

- Circulation of materials – 140,225 items
- Attendance at events/programs – 6,114 people
- Computer sessions – 8,570
- Wireless sessions – 12,484

**Project Number: 2017-B7**      **Building: Parking Lot Repairs**

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**Description:** Repairs to City Hall parking lot including additional curb, curb and asphalt repair

**Justification:** Over time, parking lot surfaces and curb shrink and expand with changing weather systems. The parking lot asphalt surface at City Hall is showing signs of settling and cracking. Crack sealing has been performed for the past few years. However, there are a few areas that are beginning to crumble to the point where sealing will no longer provide the required fix. Also, there are several curbs with

significant chunks broken out. There isn't any curb or gutter at the west end allowing the water runoff to erode the dirt onto the railroad tracks. Some of the parking lot is very old and broken and was not replaced at the time of the City Hall project and was not built to withstand the fire trucks.

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**Project Number: 2017-B10**      Fire: Station 1- Furnace/AC, Office Area and Training Room

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**Description:** Replacement of furnaces and air conditioners. Fire Station 1 has two furnaces and air conditioners - one for the basement training room and the other for the office areas.

**Justification:** The furnaces are original to the station in 1998 and will likely need replacing in the near future.

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**Project Number: 2017-B11**      Fire: Station 1- Commercial Washing and Drying Machines

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**Description:** Replacement of Heavy-Duty Commercial Washing and Drying Machines located within Fire Station 1

**Justification:** NFPA 1851: Standard on Selection, Care, and Maintenance of Structural Firefighting Protective Ensembles requires the regular cleaning and advanced cleaning of all turnout gear every six months or sooner depending on use to help prevent exposures to toxins and carcinogens. Our commercial washer and dryer were purchased in 1994 and have been repaired several times. They should be considered for replacement.

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**Project Number: 2017-B12**      IT: New Servers

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**Description:** New Windows and Exchange Servers

**Justification:** The servers need to be upgraded on a five-year rotation to keep up with the technology changes and meet the needs of both the staff and citizens. Microsoft begins limiting updates to older servers as new versions are released.

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**Project Number: 2018-B10**      IT: BS&A Module for Online Permitting

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**Description:** Software module to allow for building permits and development applications to be submitted and paid for online, and processed for internal review.

**Justification:** The City of Mason is growing as a place for new and renewed investment. The need to expedite permit applications at higher volumes will require additional support. The Online Permitting module will allow our customers to submit applications and plans online, pay permit fees, receive permits and inspection results by email, and check on the status of permits - all at their convenience 24/7/365. The Planning module automates the review process, serves as a central database of permits and development applications, reviewer comments, inspection results, and code enforcement activity connected with Assessors property records and searchable by any staff member with BS&A access. By using these modules in BS&A, data will be more readily available for the purposes of monitoring

development activity in the City, meeting statutory reporting requirements (Census), and providing leadership with better information for planning and decision making.

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**Project Number: 2018-B12**      Building: City Hall Carpet Replacement

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**Description:** Replace foyer/Community Room and worn/stained areas

**Justification:** The carpeting in these areas gets the most use and is getting worn and stained. The Community Room gets rented often with food and drinks getting spilled. This is part of a regular replacement program to keep the facility updated.

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**Project Number: 2018-B13**      Fire: Extrication Tools (Jaws of Life) Replacement

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**Description:** New extrication tools (Jaws of Life) to replace 20-year-old set in Engine 809's

**Justification:** Extrication tools are primarily used by the Fire Department to cut patients out of their vehicles that have been involved in a serious accident. The current set of extrication tools is our oldest set and was purchased about 20 years ago. It only allows us to run one tool at a time and doesn't have the strength to cut through some of the newer vehicles. The new sets allow for simultaneous tool operation and have more cutting power.

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**Project Number: 2018-B15**      Fire: Sprinkler System in Truck Bay

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**Description:** Install new automatic sprinkler system for truck bay.

**Justification:** The Mason Fire Station was built in 1998 and at the time the fire sprinkler system was not extended from the office to the apparatus bays. The Mason Fire Station currently houses roughly 3.2 million dollars in vehicles along with other costly equipment. Staff recommends that the fire sprinkler system in Station 1 be expanded from the office area to include the apparatus bays. This fire station provides essential services to the community which should be protected in order to avoid interruption of emergency response service capabilities. The time and future cost to repair or rebuild the Fire Station as well as replace or repair the damaged vehicles and equipment would be difficult. Automatic sprinkler protection should be considered a means for protecting the community's investment in the Fire Station.

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**Project Number: 2018-B16**      Fire: Station 1 Rear Approach

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**Description:** Rebuild rear approach to Fire Station 1

**Justification:** The rear approach of Fire Station 1 currently has the original concrete from 1998 when the building was built. The concrete is worn, crumbling and in need of repair. The rear approach is used by fire trucks as they enter the garage. The concrete approach needs to be stable, bear heavy weight and create a safe driving condition for the parking of the fire apparatus.

**Project Number: 2018-B19**

IT: Wireless connectivity - City Hall to Jefferson Street (DPW/POTW) and to Avery Lane (Water)

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**Description:** Install equipment on the City Hall radio tower and three buildings to provide wireless connection with the city's server to DPW, POTW and Water.

**Justification:** Current connectivity speed at City facilities on Jefferson Street and Avery Lane (DPW, POTW and Water) is less than 3 megabits per second (mpbs). This upgrade will increase the speed to at least 400 mbps. Staff negotiated with T-Mobile to assure the tower was structurally capable of supporting the radio antenna equipment necessary to make this connection. The negotiation also led to a payment of \$8,000 to support the purchase and installation of equipment. During the feasibility study for this project, it was discovered that the tree line interfered with connection between City Hall and Avery Lane. Staff has inquired with the middle school regarding placement of a radio antenna on their roof that directs the signal from City Hall to Avery Lane. Given that the City Hall radio tower currently supports school district radio equipment for transportation services at no charge, we anticipate a successful reciprocal arrangement to allow the City to place equipment at the middle school.

Note: This estimate is subject to change based upon plans for the new DPW/Wastewater Treatment Plant on Jefferson Street.

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**Project Number: 2019-B1**

Clerk: Election Tabulator Machines

**NEW**

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**Description:** Precinct tabulator machine or high-speed tabulator

**Justification:** Due to the passing of State Proposal 18-3 which will allow for "No Reason" Absentee Ballot requesting, this has the potential to increase the number of absentee ballot requests for the 2020 election year. Currently we have one tabulator assigned to our Absent Voter Counting Board. This tabulator can only process about 1200 ballots during election day. With over 6000 registered voters in the City of Mason we have the potential for a higher number of voters requesting absentee ballots.

Since this proposal only recently passed it is difficult to determine whether two regular ICX Tabulator Machines can be programmed for one Absentee Voter Counting Board or if it will be required for us to purchase one High-Speed Tabulator. Once State Election processes have been updated and the Election Vendors have had more time to prepare for these changes with the law, a determination of what type of tabulator to purchase will be made.

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**Project Number: 2019-B2**

Building: City Hall - Phase I

**NEW**

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**Description:** Improvements focused on first floor to accommodate staffing changes and optimum utilization of space

**Justification:** Due to realignment of staff and a focus on customer service, the first floor requires a redesign. Having utilized the space for a significant amount of time, it is clear we are at consistent staffing levels and understand the improvements required to work most effectively in the space. This

would include making the customer service desk viable as a workspace and addressing our customer windows that are no longer utilized. Creating confidential spaces as needed for both the Clerk and Police. Creating a shared space and conference area for customer interactions that are sensitive in nature. Materials used would be movable in the future, so as the organization evolves the space can continue to adapt. This phase will not complete the first floor, but will provide for high priority items.

## **Proposed Project Year: 2020-21**

**Project Number: 2018-B14**      Fire: Rehab 815 Replacement

**MOVED FROM 19/20**

**Description:** Mason Fire Rehab 815, formerly Squad 815, is a Chevrolet 3500 HD Ambulance Body. It is used to bring extra equipment, manpower and rehabilitation supplies to fire incidents. Rehab is important to help keep our firefighters rested and safe from heat stroke and dehydration. It provides a place to get vitals checked, get out of the weather and get air tanks changed.

**Justification:** The vehicle is currently 26 years old and is becoming unreliable. It is an ambulance box and is not user friendly as a rehab truck. Staff recommends replacing it with a vehicle more conducive to rehab operations and also with the capacity to transport more personnel to and from fire incidents.

**Project Number: 2017-B17**      Fire: Self-Contained Breathing Apparatus (SCBA) units

**Description:** Air Packs-SCBA 24 units were purchased in 2008 through a FEMA grant and are required by our Fire Department for entering into atmospheres immediately dangerous to life and health. Each pack is required to have an extra cylinder for a total of 48. The confined entry cart is used for more constricted areas where an SCBA won't fit or where we may have need for a longer work time. It must be compatible with the SCBA's being used.

**Justification:** The Self-Contained Breathing Apparatuses (SCBA) and the confined entry cart are currently sufficient and in good working order. SCBA packs are flow-tested annually and repaired as necessary. Many of components on the packs were originally warranted for 10 years. They are now 10 years old the costs to service them has gone up. Availability of parts will begin to become more difficult. The cylinders have service life of 15 years from the manufacture date and cost about \$1,000 each today.

**Project Number: 2018-B20**      Fire: Carpet Replacement for Station 1

**Description:** Replace the carpet in the office building at Fire Station 1. It is the original carpet that was laid when the building was built in 1998.

**Justification:** The carpet in Fire Station 1 is 20 years old and suffers from general wear and tear. The walking paths are worn and the general meeting areas are worn and stained. It is now at the point of being unable to clean at an acceptable level. The Fire Station is used regularly for fire training classes, bi-weekly meetings and firefighter training, other local meetings and is open to the public. Staff recommends re-carpeting Fire Station 1 to maintain an appearance of excellence in our community.

**Description:** The City of Mason Masterplan is a 20-year roadmap for how the City of Mason wishes to evolve over time, and the basis for future budget, policy and ordinance decisions. The Masterplan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent with the community's vision. This phase will focus on community engagement and technical analysis.

**Justification:** The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. As development pressures challenge Mason's desire to retain its "small town character," it is critical that we proactively identify ways to harness economic opportunity to support the community's vision. In order to implement the Masterplan, the City's Zoning Ordinance will need to be updated to ensure alignment between the ordinances and the Masterplan. The Masterplan will also serve as an important foundation for the City's Capital Improvement Program.

Further, a Masterplan is required by State of Michigan statute for communities that have adopted the Michigan Zoning Enabling Act, which Mason has. The Masterplan is required to be updated every five years. Staff recommends that investment in this effort be made to make a major update following the 2020 Census. The City of Mason's boundary will also be expanding as the 425 Agreements expire, resulting in more land and infrastructure to be managed.

A professional master planning process will position Mason to maximize capital funding, grants, zoning, private investment, and partnerships with economic partners, Michigan Department of Transportation and Ingham County to ensure changes in the community over time are well-planned and carefully coordinated.

Note - The Masterplan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

**Description:** Continued improvements to first floor and second floor to accommodate staffing changes and optimum utilization of space

**Justification:** Due to realignment of staff and a focus on customer service, the first floor and second floor (East Side) requires a redesign. Having utilized the space for a significant amount of time, it is clear we are at consistent staffing levels and understand the improvements required to work most effectively in the space. This would include more efficient use of finance area and determining if there is additional usable space for small tenant. This redesign would address the customer window that has been closed. Materials used would be movable in the future, so as the organization evolves the space can continue to adapt. This phase will not complete the project, but will provide for high priority items.

**Proposed Project Year: 2021-22**



**Description:** Replacement of failing audio, video, and camera equipment by which meetings of City Council, boards and commissions may be recorded, televised and streamed.

**Justification:** Staff continues to have challenges with the existing equipment due to the programs no longer being supported and the aging technology. We will need to upgrade the equipment in the near future to assure we continue to provide public viewing of our meetings through the website and the cable access channel. This project would include comprehensive system design, equipment selection, bid packets, bid analysis, integration, testing, training, and as-built documentation.

**Description:** One Rescue Boat and Motor

**Justification:** The boat is used for ice and water rescues in lakes, ponds, or streams by the Fire Department. This equipment was initially purchased in reaction to a double drowning in Columbia Lakes that the Fire Department did not have the equipment to respond to. This was originally purchased by the Fire Association, but will need to be replaced in the near future.

**Description:** Purchase and update two existing interview room camera systems in both the non-secure interview room (near Customer Service) and the secure interview room (within the PD). These are the two primary areas where both complainants/citizens and suspects are interviewed and quality equipment that is user-friendly, reliable and which meets statutory standards should be purchased and installed. Our current system is actually an older in-car system converted to be used indoors and are several years old and even a generation older than our last in-car system. Another goal is to research and purchase equipment using a systems approach making it part of either our in-car system or facility system. Both of which are possibilities.

**Justification:** The State of Michigan, by statute, mandates interrogations involving major felonies and some serious misdemeanors. The Mason Police Department requires all interviews and or contacts, with rare exception, identified by policy be recorded. This is a critical technology the Department must maintain in order to comply with SOM statute.

**Description:** Body Worn Camera which have redaction capable software.

**Justification:** The City's current BWCs were purchased in 2015. In 2016, L3 MobilVision recognized a factory defect and replaced each unit under warranty. The cameras when working perform well, but are overall unreliable and were an early version of BWCs and break often. In addition, although they download to the same server as our in-car systems footage cannot be redacted. By the 2021 – 2022 Fiscal Year BWCs will be common and more reliable due to technology advances. Our goals are to spend

fewer police hours on repairs, warranty claims, sending units in for repairs and move to a robust user-friendly system. The BWCs are critical to the functions of the Department for a myriad of reasons including, but not least, as best evidence in criminal and internal quality controls, personnel audits and both internal and external transparency. The Michigan Municipal Risk Management Authority considers BWCs a high quality and effective risk management tool. The internal auditing, quality control and evidentiary features alone insure their value of these tools. (16) BWCs will provide one for each sworn personnel, (3) reserve officers and the CEO.

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**Project Number: 2018-B23**      Planning: Masterplan/Zoning 5-year Update (Major): Phase II

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**Description:** The City of Mason Masterplan is a 20-year roadmap for how the City of Mason wishes to evolve over time, and the basis for future budget, policy and ordinance decisions. The Masterplan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent with the community's vision. This phase will focus on technical analysis and city ordinance updates.

**Justification:** The Masterplan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

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**Project Number: 2018-B23A**      Planning: Cedar/127 Corridor Sub-area Plan      **MOVED FROM 18/19**

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**Description:** Sub-area corridor study along the Cedar/127 Corridor to evaluate transportation infrastructure improvements that support and maximize land-use development opportunities in accordance with the community's vision and Masterplan.

**Justification:** The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. The Cedar/127 Corridor is an area that is served by existing infrastructure, contains undeveloped and under-developed land and is easily accessible to/from highway U.S. 127. This area was identified in the community's Masterplan as an area to incentivize future growth. A professional corridor study will position Mason to maximize capital funding, grants, zoning, and partnerships with Michigan Department of Transportation and Ingham County to ensure changes in this corridor result in a well-planned area that supports quality development for current and future residents and businesses.

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**Project Number: 2018-B23B**      Planning: Kipp Road/Temple Street Sub-area Plan      **MOVED FROM 19/20**

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**Description:** Sub-area corridor study along both Kipp Road and the Temple Street Corridors to evaluate transportation infrastructure improvements that support and maximize land-use development opportunities in accordance with the community's vision and Masterplan.

**Justification:** The City of Mason is growing as a place for new and renewed investment. Available land for development is becoming scarcer. Kipp Road serves as access from US 127 to Temple Street. Both corridors are areas that are served by existing infrastructure, contain undeveloped and under-developed

land and are easily accessible to/from the highway U.S. 127. These areas were identified in the community's Masterplan as an area to incentivize future growth. A professional corridor study will position Mason to maximize capital funding, grants, zoning, and partnerships with Michigan Department of Transportation and Ingham County to ensure changes in this corridor result in a well-planned area that supports quality development for current and future residents and businesses.

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**Project Number: 2018-B24**      Building: Rental Space Furniture Replacement

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**Description:** Replace tables, chairs and other items as necessary in the rental space

**Justification:** The City Hall offers space available to our community for rent to accommodate special events such as parties and club meetings. Average wear and tear on tables, chairs and other furniture in those spaces is to be expected. Chairs that are worn and stained need to be replaced, as well as tables with wear or damage that make them unsafe.

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**Project Number: 2019-B3**      Clerk: Upgrade to Laserfiche Avante Platform      **NEW**

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**Description:** Upgrade to Laserfiche Avante software for electronic records storage. By upgrading the system, we will have the ability to set-up workflows internally for approval or filing purposes of documents. Product will allow web access as well as mobile app access. Product also comes with Forms Essentials which allows the ability to create electronic forms. Product comes with a Records Management Module allowing for pre-determined retention schedules to be set that automatically purge documents. Comes with a three-day on-site training to set up Records Management module.

**Justification:** Currently we are running under and outdated version of Laserfiche. This product is still supported by MCCi but no upgrades will be made to the current version. It is essential for the City to continue moving towards electronic records. This program will also take the manual labor out of determine when to purge documents.

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**Project Number: 2019-B4**      Building: City Hall Renovations- Phase III      **NEW**

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**Description:** Continued improvements to second floor to accommodate staffing changes and optimum utilization of space.

**Justification:** Due to realignment of staff and a focus on customer service, the second floor (East Side) requires a redesign. Having utilized the space for a significant amount of time, it is clear we are at consistent staffing levels and understand the improvements required to work most effectively in the space. This would include more efficient use of finance area and determining if there is additional usable space for small tenant. This redesign would address the customer window that has been closed. Materials used would be movable in the future, so as the organization evolves the space can continue to adapt. This phase should complete the project.

**Proposed Project Year: 2022-23**

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**Project Number: 2018-B23**      Planning: Masterplan/Zoning 5-year Update (Major): Phase III

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**Description:** The City of Mason Masterplan is a 20-year roadmap for how the City of Mason wishes to evolve over time, and the basis for future budget, policy and ordinance decisions. The Masterplan is comprised of professional technical studies, graphics, maps, analysis and recommendations for ensuring that land uses, public facilities and infrastructure investments are well coordinated in a manner that supports the public's health, safety and social/economic/environmental welfare consistent with the community's vision. This final phase will focus on city ordinance updates.

**Justification:** The Masterplan investment is phased over three fiscal years - community engagement and technical analysis in phases one and two (FY2021 and 2022) with the city ordinance updates taking place in phases two and three (FY2022 and 2023).

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**Project Number: 2018-B25**      Police: In-Car Digital Recording System      **MOVED FROM 23/24**

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**Description:** (5) patrol cars to receive replacement in-car digital recording systems.

**Justification:** This project has been moved from 2023-2024. Our L3 MobilVision in-car digital recording systems will be well beyond 5-years old and beyond their life expectancy. The Department must replace (4-5) in-car digital recording systems. Due to expected technology changes the department will purchase an HD system and server to record, store and manage data from the patrol car fleet. An emphasis must be placed on the system being a robust system which is user friendly and has reasonable redaction capabilities. The digital recording system used by patrol operations is a significant tool for mitigating risk to the City, along with the recorded interview rooms and BWCs. The patrol car systems, including impact detectors and back seat recorders are excellent tools for risk management, quality control, training opportunities and evidentiary purposes. The Department mandates usage with only few exceptions to protect certain privacies. By the 2022-2023 Fiscal Year, it is unknown what technology will be available at what cost but we must plan on a technological investment due to our current system being old, unsupported and unreliable by that time.

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**Project Number: 2018-B26**      Police: Patrol Car Modem Upgrades

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**Description:** Six (6) Patrol Car Modems

**Justification:** The department intends to upgrade the patrol car modems which were installed in 2017, and maintain a spare unit for replacement if a unit in use needs to be removed for repairs or maintenance. Modems have a certain amount of data capacity for communications from the car to the recipient and back again. As patrol car technology becomes faster and more efficient, the amount of data produced increases as well. With the amount of data exchange a modern patrol car is expected be capable of higher capacity modems are imperative to keep the car's systems on-line and operating efficiently.

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**Project Number: 2019-B5**      IT: Geographic Information System (GIS) - Phase 1      **NEW**

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**Description:** Implement GIS to support asset management (roads, utilities), public safety, planning and decision making

**Justification:** The City of Mason currently does not have a GIS. A variety of key datasets and GIS files exist, but without GIS, staff cannot open or utilize the data as it is intended and still relies on paper maps and records. GIS is the industry standard for asset management, planning and decision making that utilizes geospatial data for informed decision making and analysis. Phase 1 will include the initial identification of existing datasets, implementation of storage, software and licensing, training for staff on basic use, and the definition of priorities for future phases. Staff will primarily rely on services available through the City Engineer, County and State for technical support but will budget for additional services to provide customized datasets that require additional capabilities. Once in place, GIS files for zoning, tree inventory, roads/PASER ratings, subdivision and development as-built plans, utilities, public safety, and environmental information, can all be accessed from a desktop, and can be layered to improve decision making. Maps can be generated and saved as .pdf files to share on the website or by other electronic means. Implementation of a public access interface to GIS files is suggested for Phase 3 in 2021-2022. This will correspond with the completion of the City of Mason Masterplan/Zoning/CIP update - improving access to information for developers, residents, businesses and property owners.

**Project Number: 2019-B6**

**Building: Library Improvements – Phase 2**

**PROJECT SPLIT**

*Phase 2 is subject to modification pending the results of the Library Facilities Evaluation to be completed in 2019.*

**Description:** Phase 2 work will include the renovation of the basement to create community event space and related storage; first floor renovations to include a building addition to incorporate an elevator and space for the Friends of the Mason Library – Bookwork Heaven, relocation of children’s area to the east side of the building where it will be expanded into the garage, expansion of space and creation of study/meeting rooms for public use; second floor renovations for staff offices and tenant space (Ingham County Genealogical Society). All improvements will meet the standards of the Americans with Disabilities Act (ADA).

**Justification:** See Project Number: 2017-B5.

## **Proposed Project Year: 2023-24**

**Project Number: 2019-B7**

**IT: Geographic Information System (GIS) - Phase 2**

**NEW**

**Description:** Implement GIS to support asset management (roads, utilities), public safety, planning and decision making

**Justification:** The City of Mason currently does not have a GIS. A variety of key datasets and GIS files exist, but without GIS, staff cannot open or utilize the data as it is intended and still relies on paper maps and records. GIS is the industry standard for asset management, planning and decision making that utilizes geospatial data for informed decision making and analysis. Phase 2 will include development and implementation of primary asset inventories and core datasets as determined in Phase 1, as well as the protocols for asset management including customized web applications for field personnel. Staff will primarily rely on services available through the City Engineer, County and State for future technical support but will budget for additional services to provide customized datasets that require additional capabilities. Once in place, GIS files for zoning, tree inventory, roads/PASER ratings, subdivision and

development as-built plans, utilities, public safety, and environmental information, can all be accessed from a desktop, and can be layered to improve decision making. Maps can be generated and saved as .pdf files to share on the website or by other electronic means. Implementation of a public access interface to GIS files is suggested for Phase 3 in 2021-2022. This will correspond with the completion of the City of Mason Masterplan/Zoning/CIP update - improving access to information for developers, residents, businesses and property owners.

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**Project Number: 2019-B8****Police: Car Port (3-bays)****NEW**

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**Description:** A three (3) unit carport in the police parking lot to protect up to (3) patrol vehicles and their technology for police service from the elements to help preserve patrol vehicles, improve response capability and improve overall police efficiency.

**Justification:** Mason patrol cars run 24/7/365 regardless of extreme heat, cold, ice, snow or any other environmental situations. Generally, there are no more than (3) officers, including a sergeant, who would need to respond to an emergency at one time. By protecting up to (3) patrol vehicles, Mason PD will be in a better position to act and respond regardless of environmental conditions and better protect patrol car and technology investments – which will ultimately better serve our citizens. A (3) unit carport located in the police lot would serve this need, and patrol cars can be rotated as needed during unfriendly conditions.

**Proposed Project Year: 2024-25**

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**Project Number: 2019-B9****IT: Geographic Information System (GIS) - Phase 3****NEW**

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**Description:** Implement GIS to support asset management (roads, utilities), public safety, planning and decision making

**Justification:** The City of Mason currently does not have a GIS. A variety of key datasets and GIS files exist, but without GIS, staff cannot open or utilize the data as it is intended and still relies on paper maps and records. GIS is the industry standard for asset management, planning and decision making that utilizes geospatial data for informed decision making and analysis. Phase 3 will include development and implementation of a public online presence, development and implementation of secondary asset inventories and datasets, and completion of city-wide GIS implementation as determined in Phase 1. This final phase will correspond with the completion of the City of Mason Masterplan/Zoning/CIP update - improving access to information for developers, residents, businesses and property owners.

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**Project Number: 2019-B10****IT: New Servers****NEW**

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**Description:** New Windows and Exchange Servers

**Justification:** The servers need to be upgraded on a five-year rotation to keep up with the technology changes and meet the needs of both the staff and citizens. Microsoft begins limiting updates to older servers as new versions are released. According to analyst firm, International Data Corporation (IDC), upgrading your server infrastructure on a regular schedule improves relative performance, consolidation, management efficiency and reliability.

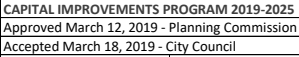


# CAPITAL IMPROVEMENTS PROGRAM 2019-2025

## BUDGET

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City of Mason 201 West Ash Street; Mason, MI 48854-0370  
Office: 517.676.9155; Website: [www.mason.mi.us](http://www.mason.mi.us)

| PARKS/ CEMETERY/ FORESTRY/ NONMOTORIZED (P) |                     |   |                          |                 |                  |                 |                 |                 |                 |                    |
|---|---------------------|---|--------------------------|-----------------|------------------|-----------------|-----------------|-----------------|-----------------|--------------------|
| Project Number                              | Category            | Project Name/Description  | Funding Source           | FORECAST        |                  | 2021-2022       | 2022-2023       | PROJECTIONS     |                 | Total Project Cost |
|   |                     |   |                          | 2019-20         | 2020-2021        |                 |                 | 2023-2024       | 2024-2025       |                    |
| 2017-P8                                     | Laylin              | Laylin Park Improvements - Phase II to 2018-2019 Project  | Rayner Bond              | \$ 200,000      |                  |                 |                 |                 |                 | \$ 200,000         |
| 2018-P3                                     | Non-Motorized       | Kerns Road - Hayhoe Riverwalk Trail Extension   | Grant Funding            | \$ 160,000      |                  |                 |                 |                 |                 | \$ 160,000         |
| 2017-P10                                    | Bond                | Bond Park Improvements  | Rayner Bond/Grants       |                 | \$ 300,000       |                 |                 |                 |                 | \$ 300,000         |
| 2017-P11                                    | Hayes               | Hayes Park Improvements   | Rayner Bond/Grants       |                 |                  | \$ 200,000      |                 |                 |                 | \$ 200,000         |
| 2018-P4                                     | Austin              | Lee Austin Park Improvements  | Rayner Bond/Grants       |                 |                  |                 | \$ 100,000      |                 |                 | \$ 100,000         |
| 2017-P14                                    | Griffin             | Griffin Park Improvements   | Rayner Bond/Grants       |                 |                  |                 | \$ 20,000       |                 |                 | \$ 20,000          |
| 2019-P1                                     | Austin-Consumers    | Pavillion/Parking Improvements (adjacent to Lee Austin Park)  | TBD                      |                 |                  |                 | \$ 50,000       |                 |                 | \$ 50,000          |
| 2017-P12                                    | Rayner              | Rayner Park Improvements  | Rayner Bond              |                 |                  |                 |                 | \$ 150,000      |                 | \$ 150,000         |
| 2018-P3                                     | All                 | Planning: Parks/Recreation Plan - 5 year update   | Rayner Bond              |                 |                  |                 |                 | \$ 15,000       |                 | \$ 15,000          |
| 2018-P15                                    | Cemetery            | Second Drive - Cemetery   | General Fund             |                 |                  |                 |                 |                 | \$ 70,000       | \$ 70,000          |
| 2018-P5                                     | Non-Motorized       | Hayhoe Trail: Internal Loop-South Side (Jefferson/High School/Rayner Street) - MOVED TO 2024-2025                 | General Fund             |                 |                  |                 |                 | \$ 150,000      | \$ 150,000      | \$ 150,000         |
| 2018-P6                                     | Non-Motorized       | Hayhoe Trail: Internal Loop North Side- (Howell/ Mason Street/Cemetery) - MOVED TO 2024-2025                      | General Fund             |                 |                  |                 |                 | \$ 150,000      | \$ 150,000      | \$ 150,000         |
| 2018-P7                                     | Non-Motorized       | Hayhoe Trail: Internal Loop West Side- (Columbia 127 pedestrian bridge w/mid-block crossing) - MOVED TO 2024-2025 | General Fund             |                 |                  |                 |                 |                 | \$ 1,675,000    | \$ 1,675,000       |
| 2018-P8                                     | Non-Motorized       | Hayhoe Trail: Internal Loop East Side- (Rayner/Middle School/Laylin) - MOVED TO 2024-2025                         | General Fund             |                 |                  |                 |                 |                 | \$ 15,000       | \$ 15,000          |
| 2019 P2                                     | Cemetery            | Cemetery/Trailhead Restroom   | General Fund             |                 |                  |                 |                 |                 | \$ 75,000       | \$ 75,000          |
|   |                     |   |                          | \$ 360,000      | \$ 300,000       | \$ 200,000      | \$ 170,000      | \$ 165,000      | \$ 70,000       | \$ 1,265,000       |
| MOTOR VEHICLE POOL (MVP)                    |                     |   |                          |                 |                  |                 |                 |                 |                 |                    |
| Project Number                              | Category            | Project Name/Description  | Funding Source           | FORECAST        |                  | 2021-2022       | 2022-2023       | PROJECTIONS     |                 | Total Project Cost |
|   |                     |   |                          | 2019-20         | 2020-2021        |                 |                 | 2023-2024       | 2024-2025       |                    |
| 2017-MVP11                                  | Equipment- DPW      | Vehicle No. 13 Replacement  | MVP                      | \$ 26,000       |                  |                 |                 |                 |                 | \$ 26,000          |
| 2017-MVP12                                  | Equipment- DPW      | Mower No. 75 Replacement  | MVP                      | \$ 11,000       |                  |                 |                 |                 |                 | \$ 11,000          |
| 2017-MVP13                                  | Equipment- DPW      | Vehicle No. 6 Replacement   | MVP                      | \$ 30,000       |                  |                 |                 |                 |                 | \$ 30,000          |
| 2019-MVP1                                   | Equipment- DPW      | Vehicle No. 25 Equipping  | MVP                      | \$ 85,000       |                  |                 |                 |                 |                 | \$ 85,000          |
| 2017-MVP15                                  | Equipment- DPW      | Vehicle No. 16 Replacement  | MVP                      |                 | \$ 26,000        |                 |                 |                 |                 | \$ 26,000          |
| 2017-MVP16                                  | Equipment- DPW      | Mower No. 77 Replacement  | MVP                      |                 | \$ 11,000        |                 |                 |                 |                 | \$ 11,000          |
| 2017-MVP17                                  | Equipment- DPW      | Vehicle No. 86 Replacement  | MVP                      |                 | \$ 39,000        |                 |                 |                 |                 | \$ 39,000          |
| 2017-MVP19                                  | Equipment- DPW      | Vehicle No. 24 Replacement  | MVP                      |                 | \$ 150,000       |                 |                 |                 |                 | \$ 150,000         |
| 2017-MVP20                                  | Equipment- DPW      | Vehicle No. 18 Replacement  | MVP                      |                 |                  | \$ 26,000       |                 |                 |                 | \$ 26,000          |
| 2017-MVP21                                  | Equipment- DPW      | Mower No. 66 Replacement  | MVP                      |                 |                  | \$ 11,000       |                 |                 |                 | \$ 11,000          |
| 2017-MVP22                                  | Equipment- DPW      | Vehicle No. 83 Replacement  | MVP                      |                 |                  | \$ 39,000       |                 |                 |                 | \$ 39,000          |
| 2017-MVP23                                  | Equipment- DPW      | Vehicle No. 21 Replacement  | MVP                      |                 |                  | \$ 35,000       |                 |                 |                 | \$ 35,000          |
| 2017-MVP24                                  | Equipment- DPW      | Vehicle No. 59 Replacement  | MVP                      |                 |                  | \$ 12,000       |                 |                 |                 | \$ 12,000          |
| 2017-MVP25                                  | Equipment- DPW      | Vehicle No. 6 Replacement   | MVP                      |                 |                  |                 | \$ 26,000       |                 |                 | \$ 26,000          |
| 2017-MVP26                                  | Equipment- DPW      | Mower No. 59 Replacement  | MVP                      |                 |                  |                 | \$ 11,000       |                 |                 | \$ 11,000          |
| 2017-MVP27                                  | Equipment- DPW      | Vehicle No. 84 Replacement  | MVP                      |                 |                  |                 | \$ 39,000       |                 |                 | \$ 39,000          |
| 2017-MVP29                                  | Equipment- DPW      | Equipment No. 69 Replacement  | MVP                      |                 |                  |                 | \$ 10,000       |                 |                 | \$ 10,000          |
| 2019-MVP2                                   | Equipment- DPW      | Addition of Vehicle No. 82  | MVP                      |                 |                  |                 | \$ 39,000       |                 |                 | \$ 39,000          |
| 2018-MVP1                                   | Equipment- DPW      | Vehicle No. 22 Replacement  | MVP                      |                 |                  |                 |                 | \$ 26,000       |                 | \$ 26,000          |
| 2018-MVP2                                   | Equipment- DPW      | Mower No. 75 Replacement  | MVP                      |                 |                  |                 |                 | \$ 11,000       |                 | \$ 11,000          |
| 2018-MVP3                                   | Equipment- DPW      | Vehicle No. 85 Replacement  | MVP                      |                 |                  |                 |                 | \$ 39,000       |                 | \$ 39,000          |
| 2018-MVP4                                   | Equipment- DPW      | Vehicle No. 31 Replacement  | MVP                      |                 |                  |                 |                 | \$ 35,000       |                 | \$ 35,000          |
| 2018-MVP5                                   | Equipment- DPW      | Back Hoe No. 30 Replacement   | MVP                      |                 |                  |                 |                 | \$ 130,000      |                 | \$ 130,000         |
| 2019-MVP2                                   | Equipment- DPW      | Vehicle No.15 Replacement   | MVP                      |                 |                  |                 |                 |                 | \$ 29,263       | \$ 29,263          |
| 2019-MVP3                                   | Equipment- DPW      | Mower No. 74 Replacement  | MVP                      |                 |                  |                 |                 |                 | \$ 12,381       | \$ 12,381          |
| 2019-MVP4                                   | Equipment- DPW      | Vehicle No. 86 Replacement  | MVP                      |                 |                  |                 |                 |                 | \$ 43,894       | \$ 43,894          |
| 2019-MVP5                                   | Equipment- DPW      | Vehicle No. 802 Replacement   | MVP                      |                 |                  |                 |                 |                 | \$ 45,000       | \$ 45,000          |
| 2019-MVP6                                   | Equipment- DPW      | Vehicle No. 28 Replacement  | MVP                      |                 |                  |                 |                 |                 | \$ 175,000      | \$ 175,000         |
|   |                     |   |                          | \$ 152,000      | \$ 226,000       | \$ 123,000      | \$ 125,000      | \$ 241,000      | \$ 305,538      | \$ 1,172,538       |
| BUILDING, PROPERTY, EQUIPMENT (B)           |                     |   |                          |                 |                  |                 |                 |                 |                 |                    |
| Project Number                              | Category            | Project Name/Description  | Funding Source           | FORECAST        |                  | 2021-2022       | 2022-2023       | PROJECTIONS     |                 | Total Project Cost |
|   |                     |   |                          | 2019-20         | 2020-2021        |                 |                 | 2023-2024       | 2024-2025       |                    |
| 2017-B5                                     | Building- Library   | Building: Library Improvements, Phase I   | General Fund/Grants/CADL | \$ 330,000      |                  |                 |                 |                 |                 | \$ 330,000.00      |
| 2017-B7                                     | Building- City Hall | Building: Parking Lot Repairs   | General Fund             | \$ 40,350       |                  |                 |                 |                 |                 | \$ 40,350.00       |
| 2017-B10                                    | Building- Fire      | Fire: Fire Station 1- Furnace/AC, Office Area and Training Room   | General Fund             | \$ 20,000       |                  |                 |                 |                 |                 | \$ 20,000.00       |
| 2017-B11                                    | Equipment- Fire     | Fire: Fire Station 1- Commercial Washing and Drying Machines  | General Fund             | \$ 7,500        |                  |                 |                 |                 |                 | \$ 7,500.00        |
| 2017-B12                                    | Equipment- IT       | IT: New Servers   | General Fund             | \$ 30,000       |                  |                 |                 |                 |                 | \$ 30,000.00       |
| 2018-B10                                    | Equipment- IT       | IT: BS&A Module for Online Permitting   | General Fund             | \$ 6,260        |                  |                 |                 |                 |                 | \$ 6,260.00        |
| 2018-B12                                    | Building- City Hall | Building: City Hall Carpet Replacement  | General Fund             | \$ 20,000       |                  |                 |                 |                 |                 | \$ 20,000.00       |
| 2018-B13                                    | Equipment- Fire     | Fire: Extrication Tools (Jaws of Life) Replacement  | General Fund             | \$ 50,000       |                  |                 |                 |                 |                 | \$ 50,000.00       |
| 2018-B15                                    | Building- Fire      | Fire: Sprinkler System in Truck Bay   | General Fund             | \$ 25,000       |                  |                 |                 |                 |                 | \$ 25,000.00       |
| 2018-B16                                    | Building- Fire      | Fire: Station 1 Rear Approach   | General Fund             | \$ 25,000       |                  |                 |                 |                 |                 | \$ 25,000.00       |
| 2018-B19                                    | Equipment- IT       | IT: Wireless connectivity - City Hall to Jefferson Street (DPW and POTW) and Avery Lane via middle school (Water) | General Fund/T-Mobile    | \$ 18,000       |                  |                 |                 |                 |                 | \$ 18,000.00       |
| 2019-B1                                     | Equipment           | Clerk: Election Tabulator Machines  | General Fund             | \$ 11,000       |                  |                 |                 |                 |                 | \$ 11,000.00       |
| 2019-B2                                     | Building- City Hall | Building: City Hall - Phase I   | General Fund             | \$ 100,000      |                  |                 |                 |                 |                 | \$ 100,000.00      |
| 2018-B14                                    | Equipment- Fire     | Fire: Rehab 815 Replacement   | General Fund             |                 | \$ 75,000.00     |                 |                 |                 |                 | \$ 75,000.00       |
| 2017-B18                                    | Equipment- Fire     | Fire: Self-Contained Breathing Apparatus (SCBA) units   | General Fund             |                 | \$ 205,000.00    |                 |                 |                 |                 | \$ 205,000.00      |
| 2018-B20                                    | Building- Fire      | Fire: Carpet Replacement for Station 1  | General Fund             |                 | \$ 15,000.00     |                 |                 |                 |                 | \$ 15,000.00       |
| 2018-B23                                    | Planning            | Planning: Masterplan/Zoning 5-year Update (Major): Phase I  | General Fund             |                 | \$ 25,000.00     |                 |                 |                 |                 | \$ 25,000.00       |
| 2019-B2                                     | Building- City Hall | Building: City Hall - Phase II  | General Fund             |                 | \$ 100,000.00    |                 |                 |                 |                 | \$ 100,000.00      |
| 2017-B13                                    | Equipment- IT       | IT: AV Room Technology Replacement  | General Fund             |                 |                  | \$ 150,000.00   |                 |                 |                 | \$ 150,000.00      |
| 2017-B15                                    | Equipment- Fire     | Fire: Rescue Boat and Motor   | General Fund             |                 |                  | \$ 10,000       |                 |                 |                 | \$ 10,000.00       |
| 2018-B21                                    | Equipment- Police   | Police: Interview & Interrogation Digital Recording System  | General Fund             |                 |                  | \$ 13,308       |                 |                 |                 | \$ 13,308.00       |
| 2018-B22                                    | Equipment- Police   | Police: Body Worn Cameras and Redaction Software  | General Fund             |                 |                  | \$ 15,000       |                 |                 |                 | \$ 15,000.00       |
| 2018-B23                                    | Planning            | Planning: Master Plan/Zoning 5-year Update (Major): Phase II  | General Fund             |                 |                  | \$ 100,000      |                 |                 |                 | \$ 100,000.00      |
| 2018-B23B                                   | Planning            | Planning: Cedar/127 Corridor Sub-area Plan  | General Fund             |                 |                  | \$ 50,000.00    |                 |                 |                 | \$ 50,000.00       |
| 2018-B23A                                   | Planning            | Planning: Kipp Road/Temple Street Sub-area Plan   | General Fund             |                 |                  | \$ 30,000.00    |                 |                 |                 | \$ 30,000.00       |
| 2018-B24                                    | Building- City Hall | Building: Rental Space Furniture Replacement  | General Fund             |                 |                  | \$ 5,000        |                 |                 |                 | \$ 5,000.00        |
| 2019-B3                                     | Equipment-Clerk     | Clerk Upgrade to Laserfiche Avante Platform   | General Fund             |                 |                  | \$ 20,000       |                 |                 |                 | \$ 20,000.00       |
| 2019-B4                                     | Building- City Hall | Building: City Hall - Phase III   | General Fund             |                 |                  | \$ 100,000      |                 |                 |                 | \$ 100,000.00      |
| 2018-B23                                    | Planning            | Planning: Masterplan/Zoning 5-year Update (Major): Phase III  | General Fund             |                 |                  |                 | \$ 25,000.00    |                 |                 | \$ 25,000.00       |
| 2018-B25                                    | Equipment-Police    | Police: In-Car Digital Recording System   | General Fund             |                 |                  |                 | \$ 50,000.00    |                 |                 | \$ 50,000.00       |
| 2018-B26                                    | Equipment-Police    | Police: Patrol Car Modem Upgrades   | General Fund             |                 |                  |                 | \$ 5,000.00     |                 |                 | \$ 5,000.00        |
| 2019-B5                                     | Equipment - IT      | IT: Geographic Information System (GIS) - Phase 1   | General Fund             |                 |                  |                 | \$ 17,000.00    |                 |                 | \$ 17,000.00       |
| 2019-06                                     | Building- Library   | Building: Library Improvements, Phase II  | General Fund/ Grants     |                 |                  |                 | \$ 850,000.00   |                 |                 | \$ 850,000.00      |
| 2019-B7                                     | Equipment - IT      | IT: Geographic Information System (GIS) - Phase 2   | General Fund             |                 |                  |                 |                 | \$ 15,000.00    |                 | \$ 15,000.00       |
| 2019-B8                                     | Equipmet            | Police: Car Port (3-Car Unit)   | General Fund             |                 |                  |                 |                 | \$ 50,000.00    |                 | \$ 50,000.00       |
| 2019-B9                                     | Equipment - IT      | IT: Geographic Information System (GIS) - Phase 3   | General Fund             |                 |                  |                 |                 |                 | \$ 15,000.00    | \$ 15,000.00       |
| 2019-B10                                    | Equipment-IT        | IT: New Servers   | General Fund             |                 |                  |                 |                 |                 | \$ 40,000.00    | \$ 40,000.00       |
|   |                     |   |                          | \$ 683,110.00   | \$ 420,000.00    | \$ 493,308.00   | \$ 947,000.00   | \$ 65,000.00    | \$ 55,000.00    | \$ 2,663,418.00    |
|   |                     |   |                          | FORECAST        |                  | PROJECTIONS     |                 |                 |                 |                    |
|   |                     |   |                          | 2019-20         | 2020-2021        | 2021-2022       | 2022-2023       | 2023-2024       | 2024-2025       | Total Project Cost |
|   |                     |   | GRAND TOTALS             | \$ 6,786,969.88 | \$ 20,158,128.00 | \$ 1,737,308.00 | \$ 3,370,039.60 | \$ 2,167,163.00 | \$ 5,774,883.00 | \$ 39,994,491.48   |

Introduced: Waxman  
Second: Droscha

**CITY OF MASON  
PLANNING COMMISSION RESOLUTION No. 2019-02  
A RESOLUTION APPROVING THE CAPITAL IMPROVEMENTS PROGRAM  
FOR THE FISCAL YEARS 2019-2025**

**March 12, 2019**

**WHEREAS**, the Capital Improvements Program is a result of significant review and consideration by the City of Mason administrative staff, Planning Commission and City Council of the numerous capital project requests from City department heads for the next six fiscal-year periods; and

**WHEREAS**, prioritization of projects listed in the program is based on the overall benefit to the community, especially when improving public health, safety and welfare, and so that the most-needed projects will be accomplished first and scarce financial resources are allocated appropriately; and

**WHEREAS**, the Capital Improvements Program is consistent with the Capital Improvements Programming component of the Master Plan.

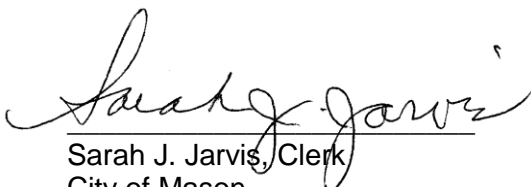
**NOW THEREFORE BE IT RESOLVED**, that the City of Mason Planning Commission does hereby approve the Capital Improvements Program (CIP) for fiscal years 2019-2025.

Yes (6) Droscha, Howe, Perrault, Sabbadin, Shattuck, Waxman

No (0)

Absent (1) Barna

**CLERK'S CERTIFICATION:** I hereby certify that the foregoing is a true and accurate copy of a resolution adopted by the Planning Commission at its regular meeting held Tuesday, March 12, 2019 the original of which is part of the Planning Commission minutes.

  
Sarah J. Jarvis, Clerk  
City of Mason  
Ingham County, Michigan