



# CAPITAL IMPROVEMENTS PROGRAM 2020 – 2026

Adopted October 19, 2020 – City Council  
Prepared October 14, 2020 – Planning Commission



**City of Mason City Council**

**Adopted: October 19, 2020**

Russell Whipple, Mayor  
Marlon Brown, Mayor Pro Tem

Jon Droscha	Jerry Schaffer
Elaine Ferris	Rita Vogel
Angela Madden	

**City of Mason Planning Commission**

**Prepared: October 14, 2020**

John Sabbadin, Chairperson  
Seth Waxman, Vice Chairperson  
Anne Klein Barna, Secretary

Jon Droscha, Council Liaison	Scott Shattuck
Mark Howe	John Vercher
Mitch Perrault	Meg Wren

**Prepared by:**

Deborah Stuart, City Manager  
Don Hanson, Chief of Police  
Don Heck, P.E., City Engineer  
Elizabeth Hude, AICP, Community Development Director  
Sarah Jarvis, City Clerk  
Kerry Minshall, Fire Chief  
Michelle Pietsch, Finance Director/Treasurer

---

# Table of Contents

---

<b>Introduction .....</b>	<b>1</b>
<b>Process .....</b>	<b>4</b>
<b>Policy .....</b>	<b>5</b>
<b>Funding Overview.....</b>	<b>6</b>
<b>CIP List of Projects .....</b>	<b>9</b>
Streets, Bridges, Signals (S).....	11
Utilities: Sanitary Sewer, Storm Water, and Water Distribution (U) .....	21
Parks, Cemetery, Forestry, Non-Motorized (P).....	29
Motor Vehicle Pool (MVP) .....	39
Building, Property, Equipment (B).....	45
<b>CIP Budget and Resolutions.....</b>	<b>57</b>

## **Tables and Figures**

Table 1: PASER Rating Overview .....	11
Table 2: Road Appropriation Summary: 1998-2018 .....	13
Table 3: City of Mason Inventory of City Parks .....	29
Table 4: City of Mason Fleet Summary and Replacement Schedule .....	40
 Figure 1: City of Mason 1940 Road Plan .....	 18
Figure 2: Non-motorized Program: Sidewalks .....	38

---

THIS PAGE INTENTIONALLY LEFT BLANK.

# Introduction

---

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

### 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 5) 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 key implementation tool for a community's planning efforts and is dynamic. Each year all projects included within the CIP are reviewed for consistency with planning documents, 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.

Preparation of the CIP by the Planning Commission does not mean they grant final approval of all projects contained within the plan. Rather by recommending approval of the CIP by the City Council, 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

**Project Submission:** New projects are submitted with the Project Application Form that outlines how projects will be evaluated and prioritized:

- Does the project contribute to health, safety and welfare?
- Is the project required to comply with a law?
- Does the project conform with adopted programs, policies, or plans?
- Does the project remediate an existing or projected deficiency?
- Will the project upgrade facilities?
- What is the service area impact of the project?
- Does the project deliver a level of service desired by the community?

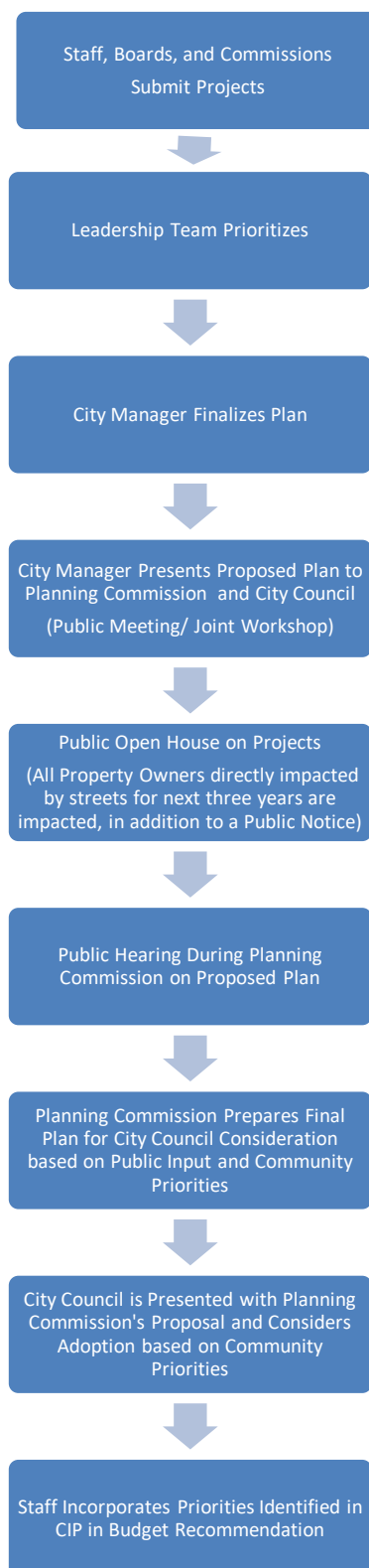
**Mason Leadership Team:** reviews all projects recommended from various areas of expertise, evaluates the prioritization of projects based on established criteria above, considers funding options, and presents the recommendation to the Planning Commission.

**City Manager:** clarifies any issues, finalizes the ratings and approves the CIP draft. The City Manager recommends the CIP draft at the Joint Workshop, presents any clarification of the CIP at the Planning Commission and City Council meetings.

**Mason Planning Commission:** reviews the Policy Group's recommendation, conducts workshops (if necessary), receives public input, conducts public hearings, prepares the plan, and requests the governing body to consider adoption.

**Mason City Council:** is encouraged to adopt the CIP and 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, attending the Open House and/or 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

---

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

---

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 \$3,305,000 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 \$3,833,674 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 \$80,000 in revenue annually.*
- *For purposes of financing activities related to Mason's south industrial area, the Local Development Finance Authority Act adopted a TIF plan in 1989 that generates roughly \$450,000 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 ensure that they will be spent on transportation-related projects or operations and services. These are commonly called Act 51 funds.

- *Mason on average receives \$800,000 split between the Major and Local Street Funds.*

**NOTE: Numbers in this section are current per the audited financial statements dated June 30, 2019.**



# **CAPITAL IMPROVEMENTS PROGRAM 2020-2026**

## **LIST OF PROJECTS**

THIS PAGE INTENTIONALLY LEFT BLANK.

# Streets, Bridges, Signals (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 2019 so staff takes into account changes in conditions. Our staff will be trained this year on PASER and the next PASER evaluation will in house or by Wolverine to ensure it meets our timelines and goals.

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: 1998-2020**

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	263,750.95	(631,293.05)
19/20***	895,460.00	572,927.76	(322,532.24)
<b>Totals</b>	<b>17,814,422.30</b>	<b>19,071,036.31</b>	<b>1,256,614.01</b>

\* Note: 5 Mill to 4 Mill Requirement

\*\* Note: Street Construction Waived

\*\*\* Note: Partial Year includes up to 12/31/19

## Proposed Project Year: 2020-21

**Project Number: 2018-S1**      Temple Street Pedestrian Crossing (Middle School)      *(Moved from 19-20)*

---

**Description:** Project includes a rapid rectangular flashing beacon installation.

**Justification:** The school district has continued to express concern regarding the crosswalk on Temple Street and has agree to partner with the city with to make improvements. The city will contribute \$20,000, the district would contribute the remaining \$10,000.

**Project Number: 2017-S17**      Center Street – Walnut Street to N. Bush Street      *(Moved from 21-22)*

---

**Description:** Mill and fill. The Street was last worked on in 2001. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a PASER rating of 5. Normal maintenance is no longer adequate. Project moved to allow for consistent road budget. Eighteen homes will be directly impacted by this improvement.

**Project Number: 2017-S18**      Brookdale Street - W. South St to Willow Street      *(Moved from 21-22)*

---

**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. Project moved to allow for consistent road budget. Twenty-two homes will be directly impacted by this improvement.

**Project Number: 2017-S19**      Cherry Street - McRoberts St to Henderson St      *(Moved from 21-22)*

---

**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. Project moved to allow for consistent road budget. Twenty-six homes will be directly impacted by this improvement.

**Project Number: 2017-S21**      Eaton Drive - All      *(Moved from 21-22)*

---

**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. Project moved to allow for consistent road budget. Twenty-four homes will be directly impacted by this improvement.

**Project Number: 2017-S22**      W. Elm Street – McRoberts St to S. Lansing St.      *(Moved from 21-22)*

---

**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. Project moved to allow for consistent road budget. Ten homes will be directly impacted by this improvement.

**Project Number: 2019-S5** Henderson Street– Entire Length *(Moved from 24-25)*

**Description:** Pulverize, shape and repave. The Street was last worked on in 1998. Sidewalks will be evaluated and replaced as necessary. Moved up due to other streets coming in under budget.

**Justification:** The road had a current PASER rating of 4. Six (6) homes will be directly impacted by this improvement.

**Project Number: 2019-S9**

E. Maple St – S. Jefferson St. to S. Barnes St. and Signal Evaluation *(Moved from 24-25)*

**Description:** Pulverize, shape and repave. The street was last worked on in 2001. Sidewalks will be evaluated and replaced as necessary. The staff will also evaluate the need for a traffic signal at this location.

**Justification:** The road had a current PASER rating of 4. Project moved to allow for consistent road budget. 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. Ingham County Road Commission has concerns about the existing signal. There is also concern that a traffic light is not necessary at this location instead a four-way stop may be more appropriate. The City will complete a traffic study to determine the need. If the signal needs to be replaced, it is estimated to cost \$250,000 and will be coordinated with this project.

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

**Project Number: 2017-S23** Rayner Street – Randolph Street to Columbia St *(Moved from 22-23)*

**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. Project moved to allow for consistent road budget. Eleven homes will be directly impacted by this improvement.

**Project Number: 2017-S24** Eugenia Drive – Northbrook Street to End *(Moved from 22-23)*

**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. Project moved to allow for consistent road budget. Fifty homes will be directly impacted by this improvement.

**Project Number: 2017-S25** Hall Blvd - Ash Street to South Street *(Moved from 22-23)*

**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. Project moved to allow for consistent road budget. Twenty-seven homes will be directly impacted by this improvement.

**Project Number: 2017-S26** Columbia St- Park St to Jefferson St to South St *(Moved from 22-23)*

---

**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. Project moved to allow for consistent road budget. Four homes will be directly impacted by this improvement.

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

**Project Number: 2017-S14** East Cherry Street – Rogers Street to End *(Moved from 20-21)*

---

**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. This road projects would impact utilities and needed to be moved to later year. Thirty-two homes will be directly impacted by this improvement. This project will be coordinated with construction of improvements at Steele Street School.

**Project Number: 2017-S15** S. Barnes Street – Ash Street to Kipp Road *(Moved from 20-21)*

---

**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. Water main construction for a significant portion of S. Barnes is expected.

**Justification:** The road had a PASER rating of 5. Project moved to account for impacts to utility budgets and to even out road budgets. This road projects would impact utilities and needed to be moved to later year. Fifty-six homes will be directly impacted by this improvement.

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

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

---

**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. Sixty-three homes will be directly impacted by this improvement.

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

---

**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. Nine homes will be directly impacted by this improvement.

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

---

**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. Utility work, including sanitary sewer and water main is expected.

**Justification:** The road had a PASER rating of 4. Seven homes will be directly impacted by this improvement.

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

---

**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. Utility work, including sanitary sewer and water main is expected.

**Justification:** The road had a PASER rating of 5. Seventeen homes will be directly impacted by this improvement.

**Project Number: 2019-S1**      Walnut Court- Columbia Street to Ash Street      *(Moved from 24-25)*

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1999. Sidewalks will be evaluated and replaced as necessary. Utility work, including sanitary sewer and water main is expected.

**Justification:** The road had a current PASER rating of 5. Twenty-four (24) homes will be directly impacted by this improvement. Project moved to allow for consistent road budget.

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

**Project Number: 2019-S2**      Coppersmith Drive – Sanctuary Street to Wildemere Street

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1980. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Ten (10) homes will be directly impacted by this improvement.

**Project Number: 2019-S3**      South Street – Barnes Street to Rogers Street

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1998. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. Eight (8) homes will be directly impacted by this improvement.

**Project Number: 2019-S4**      Foxview Street – Entire Length

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 2006. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Nine (9) homes will be directly impacted by this improvement.

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

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 2006. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Fifteen (15) homes will be directly impacted by this improvement.

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

**Description:** Pulverize, shape and repave. The Street was last worked on in 1998. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Thirty-three (33) homes will be directly impacted by this improvement.

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

**Description:** Pulverize, shape and repave. The Street was last worked on in 1996. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. This project will impact the Business District, trail users and access to the park and downtown by neighborhood to the west of the bridge.

**Proposed Project Year: 2025-26**

**Project Number: 2017-S16**      Maple Street Bridge Replacement

*(Moved from 20-21)*

**Description:** Bridge replacement due to bridge deteriorating and safety concerns.

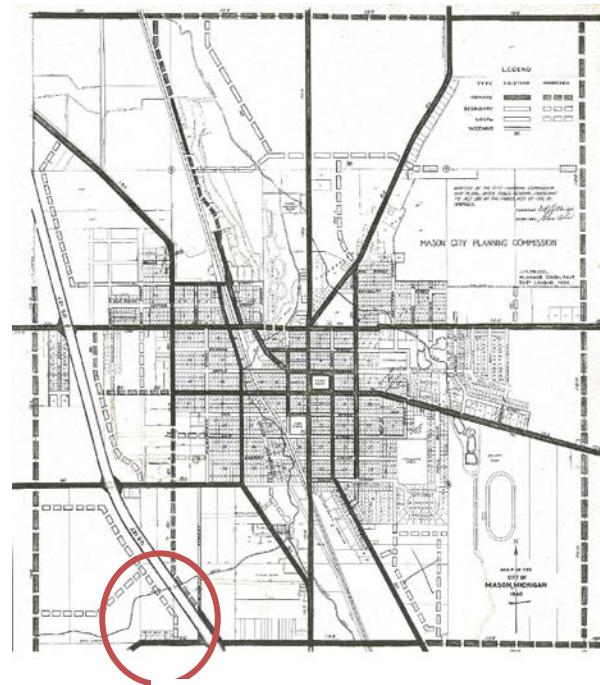
**Justification:** Bridge was evaluated and the report shows that the concrete head walls have severe spalling and are in need of repair/replacement and hand rails on the bridge are not safe. Project will be timed with adjacent park improvements to minimize impact to citizens.

**Project Number: 2019-S10**      Franklin Farms Extension

*(Moved from 24-25)*

**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



*Figure 1: City of Mason 1940 Road Plan*



alternative or reasonable means of access to/from the neighborhood. 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.

---

**Project Number: 2020-S1**      Rogers Street – Ann Street to Columbia **(NEW)**

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1991. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Thirteen (13) homes will be directly impacted by this improvement.

---

**Project Number: 2020-S2**      South Street – Rogers Street to Hall Blvd. **(NEW)**

---

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

**Justification:** The road had a current PASER rating of 4. Twenty-Eight (28) homes will be directly impacted by this improvement.

---

**Project Number: 2020-S3**      State Street – Sycamore Street to Maple Street **(NEW)**

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 2004. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Ten (10) homes will be directly impacted by this improvement.

---

**Project Number: 2020-S4**      Steele Street – Sycamore Street to Maple Street **(NEW)**

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 2001. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 4. Six (6) homes will be directly impacted by this improvement.

---

**Project Number: 2020-S5**      Stratford Drive – Eaton Drive to Columbia Street **(NEW)**

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1979. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Fifteen (15) homes will be directly impacted by this improvement.

---

**Project Number: 2020-S6**      Wildemere Drive – Coppersmith to Stratford Drive **(NEW)**

---

**Description:** Pulverize, shape and repave. The Street was last worked on in 1980. Sidewalks will be evaluated and replaced as necessary.

**Justification:** The road had a current PASER rating of 5. Fifty-One (51) homes will be directly impacted by this improvement.

THIS PAGE INTENTIONALLY LEFT BLANK.



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

---

## 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 Environment, Great Lakes, and Energy (EGLE) 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.

**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.

To start, the city was required to complete a preliminary distribution system material inventory that was due to the State by January 1, 2020. This involves compiling information from available records that will predict with reasonable certainty which service lines may be a lead service line. The City completed the

required preliminary material assessment of the distribution system materials and reported the following for our 2918 water service lines:

- 601: Likely (but not visibly confirmed) to contain some level of lead (including galvanized previously connected to lead)
- 885: Unknown but may contain lead
- 530: Unknown but unlikely to contain lead
- 902: Confirmed to NOT contain lead.

The City now 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. The City plans to match our street construction schedule and prioritize lead likely areas. Based on the preliminary data, the City will be targeting 75 line per year. That process will be to either visibly confirm they do not contain lead or removing the line. Currently these expenditures will be covered in our operating budget. However, they may be shifted to the CIP at a later time.

Please note: Street utility work for years four through six (2023-2026) are not included. These will be added in next year's CIP.

## Proposed Project Year: 2020-21

---

### Project Number: 2017-U8      Replace Programmable Logic Controllers (PLC) on 3 Wells

---

**Description:** Supervisory Control and Data Acquisition (SCADA) Control Work Upgrades on PLC, power supply and any control panel issues form the original instillation. 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.

---

### Project Number: 2017-U23      Well No. 6 Rebuild and Replacement of VFD *(Moved from 19-20)*

---

**Description:** Franklin Farm Well No 6 Rebuild and replace Variable Frequency Drive (VFD)

**Justification:** History of this well indicates the need to rebuild this well every 5-6 years and this well was last serviced in 2015. Original VFD installed in 2008 with a lifecycle of 10 years. Well maintenance and replacement are critical to maintaining the water supply for our residents.

---

### Project Number: 2017-U25      Gutters for Water Treatment Plant *(Moved from 19-20)*

---

**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. Water management 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. *This project was delayed so funds could be shifted to the emergency purchase of an OSEC Chlorine generation Cell for the water treatment plant. City Council was informed of this change.*

---

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

---

**Description:** Clean out the inside of the bowl, 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 needs to be fixed.

---

### Project Number: 2019-U1      Wastewater Treatment Plant –Design *(Moved from 19-20)*

---

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

**Justification:** The Wastewater 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.

---

**Project Number: 2019-U4**      **Study – Wastewater Solids System Handling Rate**      *(Moved from 21-22)*

**Description:** Perform a study to provide a cost / benefit analysis and 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. Project was moved up to allow findings to be incorporated into plant construction.

---

**Project Number: 2020-U2**      **Cherry Street – McRoberts St to Henderson St Utilities**      **(NEW)**

**Description:** Replace two (2) hydrants, two (2) valves along with 80 feet of 6" water main as necessary or needed to facilitate those repairs/replacements.

**Justification:** The hydrants and valving in this portion of Cherry Street are aged to the point where repairs are no longer feasible. The hydrants, valves and some ancillary pipe work needs to be completed to bring these appurtenances back into a serviceable condition.

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

---

**Project Number: 2017-U15**      **Replace Two Fire Hydrants Behind Mason Plaza**      *(Moved from 19-20)*

**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.

---

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

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

**Justification:** History of this type of well indicates the need to rebuild 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-U3**      **Wastewater Treatment Plant – Construction**      *(Moved from 20-21)*

**Description:** Construct an activated sludge wastewater treatment plant.

**Justification:** The Publicly Owned Treatment Works (POTW) was originally constructed in the late 1940s and into 1958 with additional improvements added in 1975, 1977, and 2011 and in 2016. Most of the unit processes in the 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. Project was moved back to allow for project coordination.

---

**Project Number: 2019-U6**      **Wastewater Solids Handling System**      *(Moved from 22-23)*

---

**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 was moved back to allow for project coordination.

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

---

**Project Number: 2017-U26**      **New Well at Franklin Farms**      *(Moved from 20-21)*

---

**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. 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 Farms 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%.

---

**Project Number: 2017-U27**      **Cherry Street – Rogers Street to End**      *(Moved from 20-21)*

---

**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**      *(Moved from 20-21)*

---

**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

---

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

---

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

**Justification:** History of this type of well indicates the need to rebuild 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**

---

**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 that are not part of the actual project. This will ensure the site is left in an appropriate condition.

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

---

**Project Number: 2017-U8**      **Replace Programmable Logic Controllers (PLC) on Three (3) Wells**

---

**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.

---

**Project Number: 2018-U39**      **Well No. 9 Rebuild**

---

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

**Justification:** History of this type of well indicates the need to rebuild 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: 2018-U40**      **North Water Tower Exterior/Interior Evaluation and Repaint**

---

**Description:** Repaint 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. The tower will be inspected every five years and this time line may be extended.

---

**Project Number: 2019-U7**      **Convert DPW Property to Public Space**

---

**Description:** Convert some unused DPW 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 WWTP 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**

---

#### **Project Number: 2019-U9      New Chlorine Generator**

**Description:** New chlorine generator at the Water Treatment Plant.

**Justification:** The current chlorine generator is 10 years old and we have, up until 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.

---

#### **Project Number: 2019-U10      Water Treatment Plant Filter Media Replacement**

**Description:** Filter system replacement at the Water Treatment Plant.

**Justification:** The current filter media is ten years old. According to the latest radiological survey from EGLE done May 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.

---

#### **Project Number: 2019-U11      Well No. 8 Rebuild**

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

**Justification:** History of this type of well indicates the need to rebuild 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.

### **Proposed Project Year: 2025-26**

---

#### **Project Number: 2017-U29      Generators for ISD\* and Curtis Street Lift Stations      *(Moved from 20-21)***

**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 staff to have a bypass pump or set up portable generators, for as long as three days at a time, for power outages. This project has been moved due to the fact that it is a lower priority. *\*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.*

---

#### **Project Number: 2019-U8      WWTP Office Building Remodel      *(Moved from 24-25)***

**Description:** Remodel and upgrade existing laboratory, restrooms and offices at the Wastewater Treatment Plant.

**Justification:** The WWTP construction will free up 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. Project was moved due to status as a lower priority.

---

**Project Number: 2020-U1**      Flow Meters for Water Treatment Plant**(NEW)****Description:** Replacement of the 3-16" and 1-2" flow meters at the Water Treatment Plant.

**Justification:** The meters are starting to fail and it is difficult to get replacement parts. We were able to find suitable replacement parts from a different manufacturer, but during the calibration process the technician indicated the internal parts are also slowly starting to fail. This project may be moved up depending on if the meters need to be replaced sooner.

---

**Project Number: 2020-U2**      Cedarwoods Retention Pond Cleaning**(NEW)**

**Description:** Improvements at Cedarwoods retention ponds which accept water from the City storm water system on Cedar St.

**Justification:** In a 2001, the City committed to assuming 15% cost of cleaning/maintaining the drainage system. Residents on McRoberts have reported concerns related to the condition of the ponds and are experiencing drainage issues on the rear of their property which abuts the Cedarwoods development.



# Parks, Cemetery, Forestry, Non-Motorized (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. The City currently maintains sidewalks along most of the 12.25 miles of major streets and 19.78 miles of local streets. There are 2.21 miles of cemetery drives, and 2.5 miles of non-motorized trail with three trailheads that make up the Hayhoe Riverwalk Trail.

**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)

The City of Mason’s five-year Parks, Recreation, and Non-motorized Plan 2020-2024 evaluated parks and prioritized needs using the 5C’s: Compliance (ADA), Condition, Capacity, Cost, and Community Input. The following projects listed in the section were identified and prioritized as the action steps necessary to meet the Plan’s Objective and Goals:

OBJECTIVE	GOALS
Sustain Existing Facilities	<ol style="list-style-type: none"><li>1. Bring 100% of facilities into a state of good repair within 10 years through renovation or replacement.</li><li>2. Ensure 100% of neighborhoods have non-motorized connectivity to facilities within 10 years by connecting sidewalk and trail gaps between parks.</li></ol>

Projects will be expedited as funding becomes available. Funding for the projects listed here will come from the General Fund, Act 51, DDA funds, the Iva Bond (IB) Fund, Grants, private donations, and, potentially, a dedicated Park Millage. Projects in later years of the CIP may be moved up and completed sooner if additional funds become available.

*All projects have been renamed, numbers and descriptions are based on the 2020 Parks, Recreation, and Non-Motorized Plan.*

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

---

### **Project Number: 2017-P8**

### **Laylin Park Improvements – Phase II**

*(Moved from 19-20)*

**Description:** Enhance existing walking path with new walking path extensions; one connecting the pavilion to the playground, and the other connecting the current path to the entrance off Columbia St. Upgrade pavilion either with restroom improvements, new roof and electrical, or demolish and replace with a new structure.

**Justification:** Walking path and restroom improvements are a priority of the Park Plan to address accessibility to and within our parks. The pavilion continues to deteriorate from age and requires major repair to avoid closing bathrooms permanently, shutting off electricity, and further roof damage. The budget request includes an estimate of \$200,000 for demolishing the existing pavilion and replacing it with bathrooms and a pavilion structure similar to what we have at Hayes Park. Laylin Park has the third highest pavilion rental rate after Rayner and Hayes Parks (See Park Plan for pavilion usage data – Appendix page lxxviii). Prior to a final decision regarding the pavilion, staff will seek additional input from the community, and further evaluate the best option to achieve our goal of ensuring taxpayers' investment will result in a structure that lasts for a period of 20 years with routine maintenance.

---

### **Project Number: 2020-P2**

### **Columbia Street Bridge Over US-127: Pedestrian Crossing Design**

**Description:** Prepare preliminary construction drawings for review by MDOT to create marked pedestrian pathway over US-127 on Columbia Street Bridge, sidewalk connections from existing sidewalks east and west of bridge to address safety concern.

**Justification:** Currently, residents that live west of US-127 have no non-motorized access across US-127. Pedestrians are currently walking in traffic lanes and access to the shopping center and park are restricted and unsafe due to lack of infrastructure. This crossing would provide access from the western neighborhoods to parks, schools, the downtown district and the rest of the city. Staff met with MDOT to discuss a solution to providing non-motorized access over US-127 on Columbia St. Bridge. It was determined that a short-term possibility was to work within the existing ROW of the bridge; there may be room to mark a small path and install lightweight bollards for separating non-motorized from motorized traffic. Sidewalks would need to be installed on the land in the gaps on either side of the bridge.

---

### **Project Number: 2020-P5**

### **Jefferson Street – Railroad Pedestrian Crossing**

**Description:** Coordinate with the railroad to construct a sidewalk that crosses the railroad tracks along Jefferson Street, between Griffin Park and the Silver Respite Trailhead.

**Justification:** Currently, the sidewalk stops short of the railroad tracks on both the north and south sides. This forces pedestrians, specifically disabled persons out into the road to cross the railroad tracks. This is a serious safety concern and potential liability issue for the City.

---

### **Project Number: 2020-P6**

### **Lee Austin Park Improvements – Plan/ Design**

**Description:** Design and development of construction plans for Lee Austin Park. Planning will need to be coordinated with the Downtown Development Authority, Consumers Energy, and the railroad, and with

the Maple Street roadway and bridge repairs scheduled for 2024-2025 and 2025-2026 fiscal years (2025 spring-fall construction season).

**Justification:** Lee Austin Park tied for the highest priority by the 5Cs parameters. It does not currently meet ADA standards and there are significant safety concerns about the trail grades and the state of the current shelter, which sits on property owned by Consumers Energy. The plan/design will also consider opportunities and needs for this park related to stormwater detention and soil erosion. The plan will consider timing of improvements with the Maple Street roadway and bridge repairs scheduled for 2024-2025 and 2025-2026 fiscal years (2025 spring-fall construction season).

---

**Project Number: 2020-P7**      **Non-Motorized Program: Northeast Quadrant of the City**

---

**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 2.

**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: 2020-P8**      **Rayner Park Improvements – Develop Master Park Plan**

---

**Description:** Development of a master plan for Rayner Park.

**Justification:** The playground and restroom building are in need of major repair or replacement. A master plan needs to be developed to ensure the best layout and use of space within the park while also accounting for the surrounding properties and their connectivity with the fairgrounds and high school. The plan will also consider the best way to phase improvements in coordination with the Ingham County Drain Commission and the dredging of the ponds.

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

---

**Project Number: 2020-P3**      **Hayhoe Riverwalk Trail – Evaluation and Repair**      *(Moved from 20-21)*

---

**Description:** Conduct an evaluation of the full length of the Hayhoe Riverwalk Trail and repair any sections deemed to be in need of repair.

**Justification:** The Hayhoe Riverwalk Trail tied for the highest priority by the 5Cs parameters. There are several areas along the trail that are in need of repair. According to the public opinion survey, the trail is one of Mason’s most utilized assets and many respondents expressed concerns about the condition of the trail.

---

**Project Number: 2020-P4**      **Hayhoe Riverwalk Trail –Trail Signage**      *(Moved from 20-21)*

---

**Description:** Install gateway, wayfinding and emergency mile marker signage along the Hayhoe Riverwalk Trail.

**Justification:** Additional signage will increase visibility, navigability and safety along the trail. The markers will serve as a means of location identification in the event of an emergency where first responders may

need to be dispatched or for reporting other safety or maintenance related issues.

---

**Project Number: 2020-P9**      City-wide Signage Plan: Install Wayfinding in the DDA/Historic District

---

**Description:** Install wayfinding signage per the City-wide Signage Plan in the Downtown Development District/Historic District.

**Justification:** The City is in need of a more cohesive wayfinding system. Wayfinding signage improves safety, navigability, and economic growth. The signage design plan reinforces the brand and community vision, ‘Mason is a community founded upon a respect for our historic past...’ and provides visitors and new residents to Mason with better access to all that we have to offer – businesses, civic buildings/serviced, cemetery/parks, schools, parking. . Signage will be installed along the Hayhoe Riverwalk Trail (safety and directional) and in the DDA/Historic District as part of the first phase of implementation.

---

**Project Number: 2020-P10**      Non-Motorized Program: Southeast Quadrant of the City

---

**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: 2020-P11**      Rayner Park Improvements – Phase 1 Construction

---

**Description:** Repair or replace current playground structure and construct additional features outlined as Phase I in the Rayner Park Master Plan.

**Justification:** The playground and restroom building are in need of major repair or replacement. The previously developed Rayner Park Master Plan will inform improvements to ensure the best layout and use of space within the park while also accounting for the surrounding properties and their connectivity with the fairgrounds and high school. Construction of Phase 1 will be coordinated with the Ingham County Drain Commission and the dredging of the ponds.

*NOTE: Rayner Park Improvements – Phase 2 Construction will be determined by the Rayner Park Master Plan and added to the future CIP 2021-2027 to occur in 2026-27 unless funding becomes available sooner.*

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

---

**Project Number: 2020-P12**      Bond Park Improvements – Plan/Design

---

**Description:** Design and development of construction plans for Bond Park.

**Justification:** Bond Park has several existing issues such as lack of accessibility to and from the restrooms and parking areas, and a lack of seating. The hockey rink is also underutilized and in a poor state of repair. Bond Park is an important location for residents in the northeast quadrant of Mason, and is unique in that it offers a skate bowl and roller hockey rink. 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. 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. Input included suggestions for replacing the hockey rink with a play structure, adding shade sails over the skate bowl, allowing graffiti as public art in the skate area; and, reducing the size of the park, relocating the softball field and selling outlots for residential development. This input was included in the update of the Parks, Recreation, and Non-motorized Plan 2020-2024. A Bond Park Master Plan is necessary to finalize decisions about the future of this park.

---

**Project Number: 20207-P13**      Griffin Park Improvements – Plan/Design

---

**Description:** Develop a plan for Griffin Park.

**Justification:** The future of Griffin park needs to be explored. Should Griffin Park be leased to a private entity to be used as parking, should it be converted to a natural area, or should it continue to operate as is? These are the questions that should be answered in this planning effort.

---

**Project Number: 2020-P14**      Hayes Park Improvements – Plan/Design

---

**Description:** Design and development of construction plans for Hayes Park improvements.

**Justification:** Hayes Park has several existing issues such as poor drainage, lack of restroom accessibility, and features that are in a poor state of repair. The tennis courts are in need of major repair/replacement and community input suggests converting them or creating additional capacity for their use as Pickle Ball courts. Plans need to be developed to address these issues.

---

**Project Number: 2020-P15**      Jefferson Trailhead / Cemetery / Community Garden

---

**Description:** Construct restrooms (vault toilet), shade, and drinking fountain at the Jefferson Trailhead which also serves the Cemetery and Community Garden.

**Justification:** The current cemetery restrooms are difficult to find, not ADA Accessible, have deteriorated beyond good repair and are in need of replacement. A drinking fountain and shade is needed for community gardeners, trail users and their dogs.

---

**Project Number: 2020-P16**      Non-Motorized: Kipp Rd./Cedar St.

---

**Description:** Construct sidewalks along the north side of Kipp road from Cedar St. to the US-127 overpass and construct sidewalks from the Kipp Rd./Cedar St. intersection to Meijer. Coordination is required through planning with MDOT and Ingham County Road Department who have jurisdiction over the right of way and will be a major focus of the Sidewalk Program for the Southwest quadrant scheduled in this fiscal year.

**Justification:** Currently there is no non-motorized connection to the businesses west of Cedar St. on Kipp Rd. or to Meijer. Meijer is where most residents purchase their groceries. It is also a major employer in the city, and also the sites of an MDOT commuter lot and CATA transit stop. Therefore, providing safe non-motorized access to the area is very important for maintaining walkability in Mason, and for serving those without vehicles. This project will be coordinated with outcomes of the City of Mason Master Plan update which includes sub-area corridor studies for Cedar St. from US-127 to Kipp Rd and Kipp Rd from US-127 to Temple St.

---

**Project Number: 2020-P17**      **Non-Motorized Program: Southwest Quadrant of the City**

---

**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 2.

**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.

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

---

**Project Number: 2020-P18**      **Bond Park Improvements - Construction**

---

**Description:** Implement decisions and construct improvements based upon the Bond Park Master Plan.

**Justification:** Bond Park has several existing issues such as lack of accessibility to and from the restrooms and parking areas, and a lack of seating. The hockey rink is also underutilized and in a poor state of repair. Bond Park is an important location for residents in the northeast quadrant of Mason, and is unique in that it offers a skate bowl and roller hockey rink. 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. 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. Input included suggestions for replacing the hockey rink with a play structure, adding shade sails over the skate bowl, allowing graffiti as public art in the skate area; and, reducing the size of the park, relocating the softball field and selling outlots for residential development. This input was included in the update of the Parks, Recreation, and Non-motorized Plan 2020-2024.

---

**Project Number: 2020-P19**      **City-Wide Signage Plan: Install Wayfinding Along Major Corridors**

---

**Description:** Install wayfinding signage per the City-wide Signage Plan along major corridors in Mason. Coordination is required through planning with MDOT and Ingham County Road Department who have jurisdiction over the right of way.

**Justification:** The City of Mason is in need of a more cohesive wayfinding system. Wayfinding signage improves safety, navigability, and economic growth. The signage design plan reinforces the brand and community vision, ‘Mason is a community founded upon a respect for our historic past...’ and provides visitors and new residents to Mason with better access to all that we have to offer – businesses, civic buildings/serviced, cemetery/parks, schools, and parking. This phase of installation will be coordinated with outcomes of the City of Mason Master Plan update which includes sub-area corridor studies for Cedar St. from US-127 to Kipp Rd and Kipp Rd from US-127 to Temple St.

---

**Project Number: 2020-P20**      **Non-Motorized Program: Northwest Quadrant of the City**

---

**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 2.



**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.

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

### **Project Number: 2020-P21** Hayes Park Improvements – Construction

---

**Description:** Construction of Hayes Park improvements.

**Justification:** Hayes Park has several existing issues such as poor drainage, lack of restroom accessibility, and features that are in a poor state of repair. The tennis courts are in need of major repair/replacement and community input suggests converting them or creating additional capacity for their use as Pickle Ball courts. Plans need to be developed to address these issues.

### **Project Number: 2020-P22** Non-Motorized Program: Northeast Quadrant of the City

---

**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 2.

**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: 2018-P23** Planning: Parks/Recreation Plan – 5-Year Update

---

**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. This update will be a progress check on implementation of projects in the past five years and outline projects for the next five. It will also incorporate goals identified in the City of Mason Master Plan update which includes sub-area corridor studies that will inform future land use and non-motorized projects.

**Justification:** The Parks/Recreation plan is required by statute in order to be eligible for grants and for coordination with other jurisdictions, in particular, the Michigan Department of Natural Resources (DNR), Michigan Department of Transportation (MDOT), and Ingham County – Drain Commission and Road Department (ICDC and ICRD). 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: 2025-2026

### Project Number: 2020-P24      Lee Austin Park Improvements- Construction

---

**Description:** Implement construction plans for Lee Austin Park. Construction will need to be coordinated with the Downtown Development Authority, Consumers Energy and the railroad, and with the Maple Street roadway and bridge repairs scheduled for 2024-2025 and 2025-2026 fiscal years (2025 spring-fall construction season).

**Justification:** Lee Austin Park tied for the highest priority by the 5Cs parameters. It does not currently meet ADA standards and there are significant safety concerns about the trail grades and the state of the current shelter, which sits on property owned by Consumers Energy. 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. The design/plan will also consider opportunities and needs for this park related to stormwater detention and soil erosion.

### Project Number: 2020-P25      Non-Motorized Program: Southeast Quadrant of the City

---

**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 2.

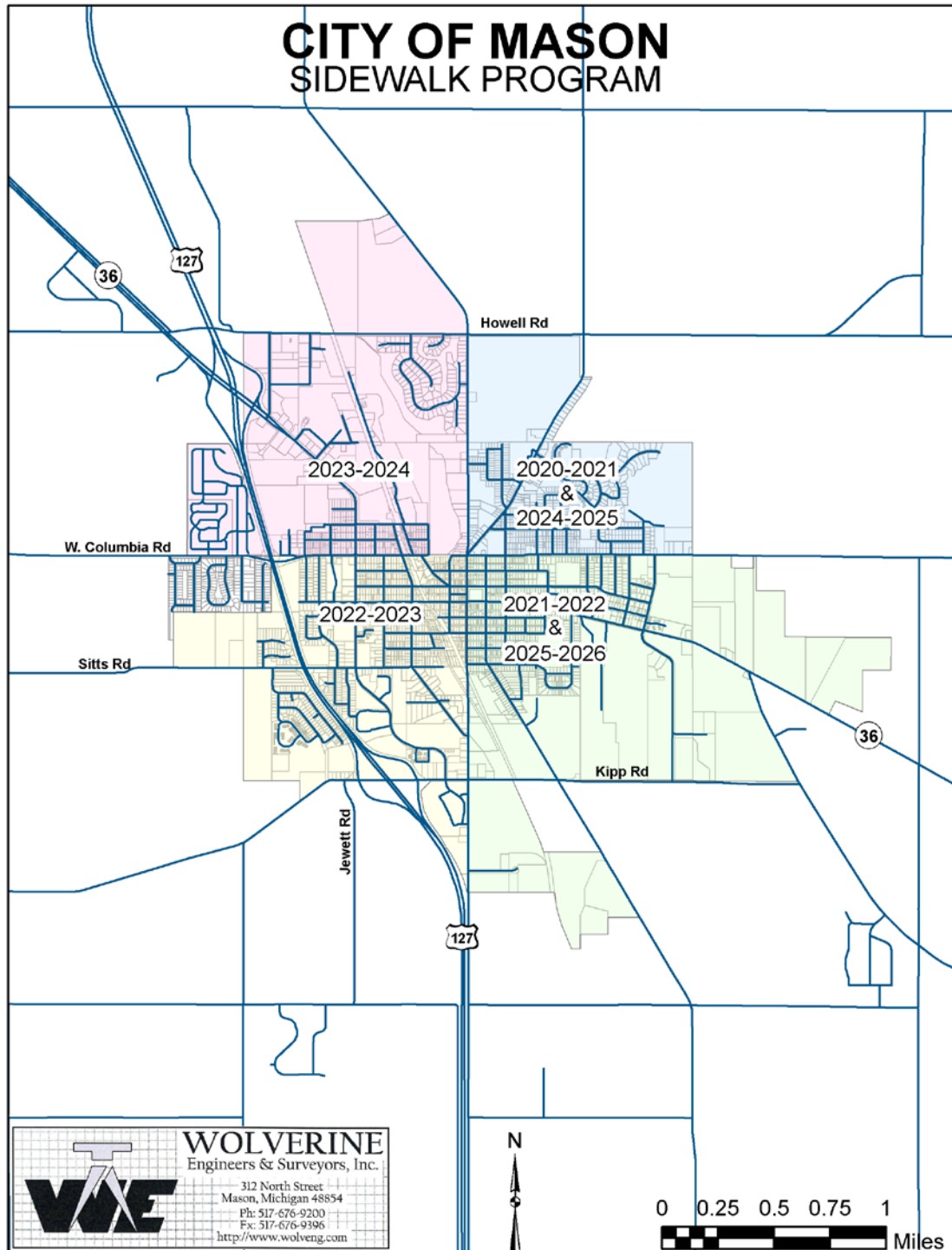
**Justification:** The current evaluation of sidewalks only occurs when a street is being worked on, which can result in 20 years before that sidewalk is evaluated again. Without a systematic review of the sidewalks, we are currently only allocating resources on a spot basis when the problem becomes 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: 2020-P26      Second Drive - Cemetery

---

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

**Justification:** This is a second entrance into the Cemetery that will improve traffic circulation and emergency access in the event the main entrance is closed or obstructed for any reason.



*Figure 2 – Non-Motorized Program*

# 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	4	4	1	1
Police	Detective Car/Admin Car	2	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: 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. 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 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-MVP20

### Vehicle No. 18 Replacement

*(Moved from 21-22)*

**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. Purchase moved to allow for consistent and sustainable MVP budget.

### Project Number: 2017-MVP21

### Mower No. 66 Replacement

*(Moved from 21-22)*

**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. Purchase moved to allow for consistent and sustainable MVP budget.

### Project Number: 2017-MVP29

### Mower No. 69 Replacement

*(Moved from 22-23)*

**Description:** Replacement of mower number 69, utilized cemetery, parks and forestry winter and summer maintenance.

**Justification:** Replacement due to life of equipment. Replacement will be with like equipment. Purchase moved to allow for consistent and sustainable MVP budget.

**Project Number: 2018-MVP1**      **Vehicle No. 22 Replacement**      *(Moved from 23-24)*

---

**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. Purchase moved to allow for consistent and sustainable MVP budget.

### **Proposed Project Year: 2021-2022**

**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.

**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: 2017-MVP27**      **Vehicle No. 86 Replacement**      *(Moved from 22-23)*

---

**Description:** Replacement of vehicle number 86 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.

**Project Number: 2018-MVP24**      **Equipment 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-MVP18a**      **Vehicle No. 24 Replacement**      *(Moved from 20-21 and Split)*

---

**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. Purchase moved and split to allow for consistent and sustainable MVP budget.

---

**Project Number: 2020-MVP1**                      **Equipment No. 91 Replacement**                      **(NEW)**

---

**Description:** Replacement of Leaf Machine, number 91 utilized by Cemetery, Parks, Forestry and DPW for leaf pick up.

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

### **Proposed Project Year: 2023-2024**

---

**Project Number: 2017-MVP18b**                      **Vehicle No. 24 Equipping**                      **(Moved from 20-21 and Split)**

---

**Description:** Equipping 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. Purchase moved and split to allow for consistent and sustainable MVP budget.

---

**Project Number: 2018-MVP3**                      **Vehicle No. 84 Replacement**

---

**Description:** Replacement of vehicle number 84 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.

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

---

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

---

**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-MVP5**                      **Vehicle No. 86 Replacement**

---

**Description:** Replacement of vehicle number 86 with a 4-door Explorer police utility vehicle utilized as a police car. *This purchase will be at the end of year 3 and follow the 4 year replacement cycle. Purchase in this fiscal year is necessary to accommodate purchase of Large Equipment No. 26 in 2025-26 fiscal year.*

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

---

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

---

**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: 2020-MVP2**                      **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.

**Proposed Project Year: 2025-26**

---

**Project Number: 2019-MVP2**                      **Vehicle No. 83 Replacement**                      *(Moved from 22-23)*

---

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

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

---

**Project Number: 2020-MVP3**                      **Large Equipment No. 26 Replacement**                      **(NEW)**

---

**Description:** Replacement of vehicle number 26 Vactor Truck.

**Justification:** Replacement due to life of vehicle. Truck is utilized by DPW for sanitary sewer cleaning, sewer backups, cleaning storm water basins, and many other tasks. Replacement will be with like vehicle.



# Building, Property and Equipment (B)

---

## 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: 2020-21

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

*(Moved from 19-20)*

**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.

**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 the components on the packs were originally warranted for 10 years. They are now 10 years old and the costs to service them has gone up. Availability of parts will begin to become more difficult. The cylinders have a service life of 15 years from the manufacture date and cost about \$1,000 each today.

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

**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: 2018-B22**      Police: Body Worn Cameras & Redaction Software      *(Moved from 21-22)*

**Description:** Purchase Body Worn Camera with Integrated Redaction Capable Software and cloud-based storage, security, management and sharing capability.

**Justification:** The City's current BWCs were purchased in 2015. Mobile Vision recognized a factory defect and replaced each unit under warranty. Since then our BWCs have been sent for repair or Replacement on a regular basis. The cameras when working perform adequately, but are unreliable and were an early version of a new technology. In addition, although they download to the same server as our in-car systems, footage cannot be redacted which causes significant issues regarding protection of privacy, FOIA requests and efficiencies in operations. By the 2020 – 2021 Fiscal Year BWCs will have improved in their reliability and include integrated redaction capability. Our goals are to deploy BWCs in the field as a risk management tool, collaborate with the City Clerk, City Attorney and Prosecutor's Office to meet legal mandates for FOIA and Discovery; and spend fewer hours on repairs, send fewer units for warranty claims and move to a robust user-friendly system with strong redaction capability. The new BWCs also interface with our newly purchased ECW (Tasers) to record deployments for digital evidence purposes and risk management. The BWCs are critical to the functions of the Department for a myriad

of reasons including: best evidence in criminal matters, internal quality controls, personnel audits, transparency and digital evidence storage. The Michigan Municipal Risk Management Authority considers BWCs an effective risk management tool and partnership funds are available. 13 BWCs will provide one for each full-time sworn personnel and 1 reserve officers.

---

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

---

**Description:** The City's Masterplan is a 20-year roadmap for how the City 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 resulting in a technical report of existing conditions, stakeholder engagement and internal workshops with City Council and Planning Commission, Draft Master Plan and summary of proposed ordinance revisions.

**Justification:** The City 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 now phased over two fiscal years - community engagement, technical analysis and a draft Masterplan in phases one and two (FY2020-21) with the final adoption and city ordinance updates taking place in Phase 2 two (FY2021-22).

---

**Project Number: 2019-B1b**      **Clerk: Election Tabulator Machines** **(SPLIT)**

---

**Description:** Precinct tabulator machine or high-speed tabulator (one in FY 19/20 and one in FY 20/21)

**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. Project split to allow for purchase of one in fiscal year 19/20 and to text during May election. This would allow the second to be purchased in Fiscal Year 20/21, only if needed.

---

**Project Number: 2019-B2a**      **Building: City Hall – Design for Phase I and Security** *(Moved from 19-20)*

---

**Description:** Improvements focused on first floor to accommodate staffing changes and optimum utilization of space. Replacement of keyless access system.

**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.

The City's keyless access system is failing and no longer allows users to change levels of access and many entrances no longer work. This is a critical item that we are partnering with Mason Public Schools on a joint contract with their other facilities to reduce costs for this system to the City.

---

**Project Number: 2020-B4a**      **Dept of Public Works (DPW) Facility - Design** *(Moved from 19-20)*

---

**Description:** This new facility will house all public works activities and equipment for the future needs of the City. The greatest amount of space will likely be dedicated to housing vehicles and equipment indoors or under cover. 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. Staff will also evaluate opportunities for partnership with other entities.

**Justification:** A new facility will need to be built to allow for the Wastewater Treatment Plant to be expanded and because the existing facility is reaching the end of its useful life. This anticipated relocation provides the opportunity to consolidate operations.

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

---

**Project Number: 2017-B5b**      **Building: Library Improvements, Phase I, Part I** *(Moved from 20-21)*

---

**Description:** Improvements to the first floor of the library building necessary to meet safety and accessibility requirements, and to improve utilization. Phase 1, Part 1 will focus on a new entrance, utilities (electrical, plumbing, mechanical), one interior ADA compliant bathroom.

**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.

---

**Project Number: 2017-B7**      Building: Parking Lot Repairs      *(Moved from 19-20)*

---

**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.

---

**Project Number: 2017-B10**      Fire: Station 1- Furnace/AC, Office & Training Room *(Moved from 19-20)*

---

**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.

---

**Project Number: 2017-B11**      Fire: Station 1- Commercial Washing Machine      *(Moved from 19-20)*

---

**Description:** Replacement of Heavy-Duty Commercial Washing 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 was purchased in 1994 and have been repaired several times. It should be considered for replacement.

---

**Project Number: 2017-B15**      Fire: Rescue Boat and Motor

---

**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.

---

**Project Number: 2018-B15**      Fire: Sprinkler System in Truck Bay      *(Moved from 19-20)*

---

**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.

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

*(Moved from 19-20)*

**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-B21**      Police: Interview Digital Recording System

**Description:** Purchase and update two existing interview room camera systems in both the non-secure interview room and secure interview room.

**Justification:** Law enforcement officers engage and speak with citizens who are in crisis, who have been victimized and who often require privacy during face-to-face conversations. A non-secure and a secure interview rooms are the primary areas where more private law enforcement-citizen conversations occur, walk-in complainants are taken and where citizen and suspect interviews occur. Quality equipment that is user-friendly, reliable; and which meets statutory standards and Department of Justice oversight should be purchased and installed. Our current system is actually an older in-car system converted to be used indoors and is several years old and a generation older than our last in-car system which was purchased years ago. Another goal is to research and purchase equipment using a systems integrated approach making it part of either our current in-car system or facility security video system, thus with a co-located server capable of proper digital storage CJIN standards and evidence integrity. Both of which are possibilities. 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 statute.

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

**Description:** The City's 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 the adoption of the final Masterplan and city ordinance updates.

**Justification:** The Masterplan investment is now phased over two fiscal years - community engagement,



technical analysis and a draft Masterplan in phases one and two (FY2020-21) with the final adoption and city ordinance updates taking place in Phase 2 two (FY2021-22).

---

**Project Number: 2018-B23a**     **Planning: Cedar/127 Corridor Sub-area Plan**

---

**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 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.

---

**Project Number: 2018-B23b**     **Planning: Kipp Road/Temple Street Sub-area Plan**

---

**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 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.

---

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

---

**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.

---

**Project Number: 2019-B2b**     **Building: City Hall Renovations-Phase 1**     *(Moved from 20-21)*

---

**Description:** Improvements focused on first floor to accommodate staffing changes and optimum utilization of space. This will also include carpet replacement.

**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. Project split to allow for design in fiscal year 19/20 and renovations in 20/21.

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

---

**Description:** Upgrade to Laserfiche Avante software for electronic records storage.

**Justification:** 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. 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.

**Project Number: 2020-B4.b** Dept of Public Works (DPW) Facility - Construction *(Moved from 19-20)*

---

**Description:** A new facility will need to be built to allow for the Wastewater Treatment 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.

**Justification:** When the City upgrades the Wastewater Treatment Plant the DPW facility needs to be relocated. This anticipated relocation provides the opportunity to consolidate operations.

The greatest amount of space will likely be dedicated to housing vehicles and equipment indoors or under cover. 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. Staff will also evaluate opportunities for partnership with other entities.

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

**Project Number: 2017-B5c** Building: Library Improvements, Phase I, Part 2 *(Moved from 20-21)*

---

**Description:** Improvements to the first floor of the library building necessary to meet safety and accessibility requirements, and to improve utilization. Phase 1, Part 2 will relocate the children's area, create an event prep kitchen, second ADA compliant bathroom at new entrance (accessible after hours). This renovation will complete the remaining improvements that increase capacity of the floor area for public access and utilization.

**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.

---

**Project Number: 2018-B20**      Fire: Carpet Replacement for Station 1      *(Moved from 20-21)*

**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.

---

---

**Project Number: 2018-B25**      Police: In-Car Digital Recording System

**Description:** Purchase (4) patrol cars as Replacements or current in-car digital recording systems.

**Justification:** Our L-3 Mobile Vision in-car digital recording systems will be beyond 5-years old and beyond their life expectancy. The Department must replace four (4) in-car digital recording systems. Due to expected technology changes the department will purchase an up-to-date generation system and server to record, store and manage data from the patrol car fleet. An emphasis must be placed on the system being user friendly, robust, and having redaction capabilities. In-Car systems are critical to the functions of the Department for a myriad of reasons including: best evidence in criminal matters, internal quality controls, personnel audits, transparency and for digital evidence storage. The Michigan Municipal Risk Management Authority considers in-car recording systems an effective risk management tool and partnership funds are available. Four (4) in-car systems will provide one per fully marked patrol vehicles. The Department mandates the usage with only few exceptions to protect certain privacies. By the 2022-2023 Fiscal Year, it is somewhat unknown what technology will be available, but we also work to invest in a system that integrates with our existing systems as much as able.

---

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

**Description:** Four (4) 5G Patrol Car Modems

**Justification:** The department intends to upgrade the patrol car modems which were installed in 2017 and will be at the end of their life cycle by 2022-2023. 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. 5G Modems will be needed and are the current standard for data exchange in a modern patrol car. It is expected that higher capacity modems will be the norm to keep the car's systems on-line and operating efficiently.

---

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

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

**Justification:** The City currently has very limited capability with GIS. A variety of key datasets and GIS files exist, but the majority of staff still rely 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.

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

**Project Number: 2019-B7**      **IT: Geographic Information System (GIS) - Phase 2**

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

**Justification:** The City currently has very limited capability with GIS. A variety of key datasets and GIS files exist, but the majority of staff still rely 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.

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

**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 must be operational 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 the already significant investment in vehicles and technology required in modern patrol cars. A (3) unit carport located in the police lot would serve this need, patrol cars can be rotated as needed during unfriendly conditions, which will better serve our citizens.

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

**Project Number: 2019-B4**      Building: City Hall Renovations- Phase 2      *(Moved from 21-22)*

**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.

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

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

**Justification:** The City currently has very limited capability with GIS. A variety of key datasets and GIS files exist, but the majority of staff still rely 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 Masterplan/Zoning/CIP update - improving access to information for developers, residents, businesses and property owners.

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

**Description:** New Windows and Server

**Justification:** The server needs to be upgraded on a 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.

**Project Number: 2020-B1**      Police: Secure Patrol Operations Equipment      **(NEW)**

**Description:** Purchase, integrate and Install quality government/military grade equipment storage cabinets/units into Police Department.

**Justification:** Law enforcement has had to rely more and more on expensive, high technology purchases and equipment to sustain and increase our mission readiness and mission capability. A multi-million dollar radio system with the City owning nearly \$100,000 in hand-held radios, BWC, electronic radar devices, CEWs (Tasers), Naloxone (drugs), patrol rifles and preliminary breath test units which collectively cost hundreds of thousands of dollars and are only authorized to be used by trained professionals in restricted circumstances. All are city assets utilized by our officers and which need to be safely secured and stored to ensure their protections, proper long-term care, security and operational readiness. These items are tax payer owned and require an investment in rugged law enforcement level, modular storage facilities to do so. By fiscal year 2024-2025 the final footprint for the police department for the foreseeable future will be in place and the purchase of storage units is an efficient and responsible purchase for patrol equipment and city assets.

### **Proposed Project Year: 2025-26**

**Project Number: 2017-B13**      **IT: AV Room Technology Replacement Phase 2**      *(Moved from 20-21)*

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

**Justification:** Phase 1 addressed simplifying the system and creating easier to use audio and video recording equipment. Phase 2 will upgrade the cameras and related equipment to assure we continue to provide high quality 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.

**Project Number: 2019-B6**      **Building: Library Improvements – Phase 2**

**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; 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). All improvements would be contingent on designs meeting the standards of the State Historic Preservation Office.

**Justification:** See Project Number: 2017-B5b

**Project Number: 2020-B2**      **Building: Parking Lot Repairs/ Seal Coating**      **(NEW)**

**Description:** Repairs to parking lots including lot behind Courthouse Pub, lot behind Hillard Building, City Hall Parking Lot, lot behind Keans, and Police Parking Lot.

**Justification:** Regular repair required to maintain these lots and extend life of surface.

**Project Number: 2020-B3**      **Building: City Hall Carpet Replacement**      **(NEW)**

**Description:** Replace Community Room and office area carpeting.

**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.

THIS PAGE INTENTIONALLY LEFT BLANK.



# CAPITAL IMPROVEMENTS PROGRAM 2020-2026

## BUDGET and RESOLUTIONS

THIS PAGE INTENTIONALLY LEFT BLANK.



CAPITAL IMPROVEMENTS PROGRAM 2019-2025  
Recommended October 13, 2020 - Planning Commission  
Adopted XXXX xx, 2020 - City Council

STREETS, BRIDGES, SIGNALS (S)								
Project Number	Category	Project Name/Description	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Total Project Cost								
2018-S1	Streets	Temple Street Pedestrian Crossing (Middle School)	\$ 30,000					\$ 30,000
2017-S17	Streets	Center Street - Walnut Street to N. Bush Street	\$ 100,920					\$ 100,920
2017-S18	Streets	Brookdale Street - Judy Court to Willow Street	\$ 84,100					\$ 84,100
2017-S19	Streets	Cherry- McRoberts Street to Henderson Street	\$ 218,660					\$ 218,660
2017-S21	Streets	Eaton Drive - All	\$ 168,200					\$ 168,200
2017-S22	Streets	W. Elm Street - McRoberts Street to Henderson Street	\$ 210,250					\$ 210,250
2019-S5	Streets	Henderson Street - Entire Length	\$ 52,780					\$ 52,780
2019-S9	Streets, Signal	Maple Street - Jefferson Street to Barnes Street (Light Replacement- 250K)	\$ 310,320					\$ 310,320
2017-S23	Streets	Rayner Street - Randolph Street to Columbia Street		\$ 53,430				\$ 53,430
2017-S24	Streets	Eugenia Drive - Northbrook Street to End		\$ 316,680				\$ 316,680
2017-S25	Streets	Hall Blvd - Ash Street to South Street		\$ 422,240				\$ 422,240
2017-S26	Streets	Columbia Street - Park Street to Jefferson Street		\$ 75,690				\$ 75,690
2017-S14	Streets	East Cherry Street - Rogers Street to End			\$ 109,608			\$ 109,608
2017-S15	Streets	S. Barnes Street - Ash Street to Kipp Road			\$ 755,160			\$ 755,160
2018-S27	Streets	Peachtree Place Columbia Street to South Street				\$ 457,720		\$ 457,720
2018-S29	Streets	McRoberts Street - Columbia Street to Maple Street				\$ 84,355		\$ 84,355
2018-S30	Streets	Steele Street - Ash Street to Elm Street				\$ 68,900		\$ 68,900
2018-S31	Streets	W. Oak Street - McRoberts Street to Lansing Street				\$ 130,188		\$ 130,188
2019-S1	Streets	Walnut Court - Columbia Street to Ash Street				\$ 118,940		\$ 118,940
2019-S2	Streets	Coppersmith - Sanctuary Street to Wildemere Street					\$ 126,150	\$ 126,150
2019-S3	Streets	South Street - Barnes Street to Rogers Street					\$ 173,275	\$ 173,275
2019-S4	Streets	Foxview Street - Entire Length					\$ 52,780	\$ 52,780
2019-S6	Streets	Middlebury - Entire Length					\$ 90,480	\$ 90,480
2019-S7	Streets	McRoberts Street - Maple Street to South Street					\$ 278,980	\$ 278,980
2019-S8	Streets	Maple Street - Lansing Street to Park Street					\$ 120,640	\$ 120,640
2017-S16	Bridge	Maple Street Bridge Repair						\$ 250,000
2019-S10	Streets	Franklin Farms Extension						\$ 2,000,000
2020-S1	Streets	Rogers - Ann to Columbia						\$ 126,750
2020-S2	Streets	South Street - Rogers Street to Hall Blvd						\$ 221,000
2020-S3	Streets	State Street - Sycamore Street to Maple Street						\$ 65,000
2020-S4	Streets	Steele Street - Sycamore to Maple						\$ 45,500
2020-S5	Streets	Stratford Drive - Eaton to Columbia						\$ 78,000
2020-S6	Streets	Wildemere Drive - Coppersmith to Stratford						\$ 247,000
			\$ 1,175,230	\$ 868,040	\$ 864,768	\$ 860,103	\$ 842,305	\$ 3,033,250
								\$ 7,613,696

UTILITIES: SANITARY SEWER, STORM WATER, AND WATER DISTRIBUTION (U)								
Project Number	Category	Project Name/Description	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Total Project Cost								
2017-U8	Water	Replace Programmable Logic Controllers (PLC) on 3 Wells	\$ 40,000					\$ 40,000
2017-U14	DPW	Department of Public Works Facility Construction	\$ 4,000,000					\$ 4,000,000
2017-U23	Water	Well No. 6 Rebuild and Replacement of Variable Frequency Drive	\$ 45,000					\$ 45,000
2017-U25	Water	Gutters for Water Treatment Plant	\$ 15,000					\$ 15,000
2018-U32	Water	South Water Tower Interior Maintenance and Repair	\$ 300,000					\$ 300,000
2019-U4	POTW	Study - Wastewater Solids System Handling Rate	\$ 20,000					\$ 20,000
2017-U15	Water	Replace Hydrants at Mason Plaza		\$ 25,000				\$ 25,000
2017-U34	Water	Well No. 5 Rebuild		\$ 40,000				\$ 40,000
2019-U3	POTW	Waste Water Treatment Plant - Construction		\$ 11,002,000				\$ 11,002,000
2019-U6	POTW	Wastewater Solids Handling System- Construction		\$ 1,000,000				\$ 1,000,000
2017-U26	Water	New Well Franklin Farms			\$ 400,000			\$ 400,000
2017-U27	DPW	Cherry Street Utilities - Rogers Street to End			\$ 160,800			\$ 160,800
2017-U28	DPW	S. Barnes Street Utilities - Ash Street to Kipp Road			\$ 546,360			\$ 546,360
2018-U37	Water	Well No. 10 Rebuild			\$ 40,000			\$ 40,000
2019-U5	POTW	Post-Construction Demolition of Unused Structures			\$ 200,000			\$ 200,000
2017-U8	Water	Replace Programmable Logic Controllers (PLC) on Three (3) Wells				\$ 45,000		\$ 45,000
2018-U39	Water	Well No. 9 Rebuild				\$ 40,000		\$ 40,000
2018-U40	Water	North Water Tower Exterior/Interior Evaluation and Repaint 20 Year				\$ 750,000		\$ 750,000
2019-U7	POTW	Convert POTW Property to Public Space				\$ 100,000		\$ 100,000
2019-U9	Water	New Chlorine Generator					\$ 75,000	\$ 75,000
2019-U10	Water	Water Plant Filter Media Replacement					\$ 175,000	\$ 175,000
2019-U11	Water	Well No. 8 Rebuild					\$ 45,000	\$ 45,000
2017-U29	DPW	Generators for ISD and Curtis Street Lift Stations						\$ 40,000
2019-U8	POTW	Wastewater Plant Office Building Remodel						\$ 500,000
2020-U1	Water	Flow Meters for Water Treatment Plant						\$ 50,000
2020-U2	Storm Water	Cedarwoods Retention Ponds Maintenance						\$ 50,000
			\$ 4,420,000	\$ 12,067,000	\$ 1,347,160	\$ 935,000	\$ 295,000	\$ 640,000
								\$ 19,704,160

PARKS/ CEMETERY/ FORESTRY/ NONMOTORIZED (P)								
Project Number	Category	Project Name/Description	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026
Total Project Cost								
2017-P8	Park	Laylin Park, Phase II	\$ 287,000					\$ 287,000
2020-P2	Non-Motorized	Columbia Street Bridge Over US-127- Pedestrian Crossing Design	\$ 10,000					\$ 10,000
2020-P5	Non-Motorized	Jefferson Street - Railroad Crossing	\$ 15,000					\$ 15,000



2020-P6	Park	Lee Austin Park Improvements- Plan/Design	\$ 15,000						\$ 15,000
2020-P7	Non-Motorized	Non- Motorized Program: Northeast Quadrant	\$ 20,000						\$ 20,000
2020-P8	Park	Rayner Park Improvements- Develop Master Park Plan	\$ 20,000						\$ 20,000
2020-P3	Non-Motorized	Hayhoe Riverwalk Trail - Evaluate and Repair		\$ 100,000					\$ 100,000
2020-P4	Non-Motorized	Hayhoe Riverwalk Trail - Construct/Install Trail Signage		\$ 50,000					\$ 50,000
2020-P9	Wayfinding	City-wide Signage Plan: Install Wayfinding in DDA/HDC District		\$ 150,000					\$ 150,000
2020-P10	Non-Motorized	Non- Motorized Program: Southeast Quadrant		\$ 20,000					\$ 20,000
2020-P11	Park	Rayner Park Improvements- Phase I Construction		\$ 350,000					\$ 350,000
2020-P12	Park	Bond Park Improvements - Plan/Design			\$ 20,000				\$ 20,000
2020-P13	Park	Griffin Park Improvements - Plan/Design			\$ 5,000				\$ 5,000
2020-P14	Park	Hayes Park Improvements - Plan/Design			\$ 20,000				\$ 20,000
2020-P15	Non-Motorized	Jefferson Trailhead / Cemetery / Community Garden			\$ 100,000				\$ 100,000
2020-P16	Non-Motorized	Non-Motorized: Kipp Rd/ Cedar St			\$ 80,000				\$ 80,000
2020-P17	Non-Motorized	Non- Motorized Program: Southwest Quadrant			\$ 20,000				\$ 20,000
2020-P18	Park	Bond Park Improvements- Construction				\$ 200,000			\$ 200,000
2020-P19	Wayfinding	City-wide Signage Plan: Install Wayfinding Along Major Corridors				\$ 150,000			\$ 150,000
2020-P20	Non-Motorized	Non- Motorized Program: Northwest Quadrant				\$ 20,000			\$ 20,000
2020-P21	Park	Hayes Park Improvements - Construction					\$ 200,000		\$ 200,000
2020-P22	Non-Motorized	Non- Motorized Program: Northwest Quadrant					\$ 20,000		\$ 20,000
2020-P23	All	Planning: Parks/Recreation Plan - 5 year update					\$ 30,000		\$ 30,000
2020-P24	Park	Lee Austin Park Improvements - Construction						\$ 300,000	\$ 300,000
2020-P25	Non-Motorized	Non- Motorized Program: Northwest Quadrant						\$ 20,000	\$ 20,000
2020-P26	Cemetery	Second Drive - Cemetery						\$ 70,000	\$ 70,000
			\$ 367,000	\$ 670,000	\$ 245,000	\$ 370,000	\$ 250,000	\$ 390,000	\$ 2,292,000

MOTOR VEHICLE POOL (MVP)									
Project Number	Category	Project Name/Description	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	Total Project Cost
2017-MVP15	Equipment- DPW	Vehicle No. 16 Replacement	\$ 27,000						\$ 27,000
2017-MVP16	Equipment- DPW	Mower No. 77 Replacement	\$ 11,500						\$ 11,500
2017-MVP17	Equipment- Police	Vehicle No. 85 Replacement	\$ 43,000						\$ 43,000
2017-MVP20	Equipment- DPW	Vehicle No. 18 Replacement	\$ 27,000						\$ 27,000
2017-MVP21	Equipment- DPW	Mower No. 66 Replacement	\$ 11,500						\$ 11,500
2018-MVP1	Equipment- DPW	Vehicle No. 22 Replacement	\$ 27,000						\$ 27,000
2017-MVP29	Equipment- DPW	Mower No. 69 Replacement	\$ 11,500						\$ 11,500
2017-MVP22	Equipment- Police	Vehicle No. 83 Replacement		\$ 43,000					\$ 43,000
2017-MVP23	Equipment- DPW	Vehicle No. 21 Replacement		\$ 43,000					\$ 43,000
2017-MVP27	Equipment- Police	Vehicle No. 86 Replacement		\$ 43,000					\$ 43,000
2018-MVP24	Equipment- DPW	Vehicle No. 59 Replacement		\$ 18,000					\$ 18,000
2017-MVP18a	Equipment- DPW	Vehicle No. 24 Purchase (SPLIT)			\$ 85,000				\$ 85,000
2020-MVP1	Equipment- DPW	Equipment No. 91 Replacement			\$ 95,000				\$ 95,000
2017-MVP18b	Equipment- DPW	Vehicle No. 24 Equipping (SPLIT)				\$ 85,000			\$ 85,000
2018-MVP3	Equipment- Police	Vehicle No. 84 Replacement				\$ 44,000			\$ 44,000
2018-MVP4	Equipment- DPW	Vehicle No. 31 Replacement				\$ 44,000			\$ 44,000
2019-MVP3	Equipment- Water	Vehicle No.15 Replacement					\$ 28,000		\$ 28,000
2019-MVP5	Equipment- Police	Vehicle No. 86 Replacement					\$ 44,500		\$ 44,500
2019-MVP6	Equipment- DPW	Vehicle No. 802 Replacement					\$ 51,000		\$ 51,000
2020-MVP2	Equipment- Police	Vehicle No. 85 Replacement					\$ 44,500		\$ 44,500
2019-MVP2	Equipment- Police	Vehicle No. 83 Replacement						\$ 44,500	\$ 44,500
2020-MVP3	Equipment- DPW	Large Equipment No. 26 Replacement						\$ 300,000	\$ 300,000
			\$ 158,500	\$ 147,000	\$ 180,000	\$ 173,000	\$ 168,000	\$ 344,500	\$ 1,171,000

BUILDING, PROPERTY, EQUIPMENT (B)									
Project Number	Category	Project Name/Description	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	Total Project Cost
2017-B12	Equipment- IT	IT: New Servers	\$ 26,000						\$ 26,000
2017-B17	Equipment- Fire	Fire: Self-Contained Breathing Apparatus (SCBA) units	\$ 205,000						\$ 205,000
2018-B14	Equipment- Fire	Fire: Rehab 815 Replacement	\$ 85,000						\$ 85,000
2018-B22	Equipment-Police	Police: Body Worn Cameras and Redaction Software	\$ 58,000						\$ 58,000
2018-B23	Planning	Planning: Masterplan/Zoning 5-year Update (Major): Phase I and II	\$ 125,000						\$ 125,000
2019-B1b	Equipment-Election	Clerk: Election Tabulator Machines	\$ 5,500						\$ 5,500
2019-B2a	Building- City Hall	Building: City Hall - Phase I Design and Security	\$ 40,000						\$ 40,000
2020-B4a	DPW	DPW- Design	\$ 1,000,000						\$ 1,000,000
2017-B5b	Building- Library	Building: Library Improvements, Phase 1, Part I		\$ 550,000					\$ 550,000
2017-B7	Building- City Hall	Building: Parking Lot Repairs		\$ 40,350					\$ 40,350
2017-B10	Building- Fire	Fire: Fire Station 1- Furnace/AC, Office Area and Training Room		\$ 20,000					\$ 20,000
2017-B11	Equipment- Fire	Fire: Fire Station 1- Commercial Washing Machine and Drying Machines		\$ 8,000					\$ 8,000
2017-B15	Equipment- Fire	Fire: Rescue Boat and Motor		\$ 10,000					\$ 10,000
2018-B15	Building- Fire	Fire: Sprinkler System in Truck Bay		\$ 25,000					\$ 25,000
2018-B16	Building- Fire	Fire: Station 1 Rear Approach		\$ 25,000					\$ 25,000
2018-B21	Equipment- Police	Police: Interview Rooms Recording System		\$ 13,308					\$ 13,308
2018-B23	Planning	Planning: Master Plan/Zoning 5-year Update (Major): Phase III		\$ 50,000					\$ 50,000
2018-B23a	Planning	Planning: Cedar/127 Corridor Sub-area Plan		\$ 50,000					\$ 50,000
2018-B23b	Planning	Planning: Kipp Road/Temple Street Sub-area Plan		\$ 30,000					\$ 30,000
2018-B24	Building- City Hall	Building: Rental Space Furniture Replacement		\$ 5,000					\$ 5,000
2019-B2b	Building- City Hall	Building: City Hall Renovations - Phase 1 and Carpet Replacement		\$ 150,000					\$ 150,000
2019-B3	Equipment-Clerk	Clerk Upgrade to Laserfiche Avante Platform		\$ 20,000					\$ 20,000
2020-B4b	Building - DPW	Department of Public Works Facility Construction		\$ 4,000,000					\$ 4,000,000
2018-B20	Building- Fire	Fire: Carpet Replacement for Station 1			\$ 20,000				\$ 20,000
2018-B25	Equipment-Police	Police: In-Car Digital Recording System			\$ 30,000				\$ 30,000
2018-B26	Equipment-Police	Police: Patrol Car Modem Upgrades 5G			\$ 5,000				\$ 5,000
2019-B5	Equipment - IT	IT: Geographic Information System (GIS) - Phase 1			\$ 17,000				\$ 17,000
2019-B7	Equipment - IT	IT: Geographic Information System (GIS) - Phase 2				\$ 15,000			\$ 15,000
2019-B8	Equipmet	Police: Car Port (3-Car Unit)				\$ 20,000			\$ 20,000

2019-B4	Building- City Hall	Building: City Hall - Phase 3						\$	100,000		\$	100,000				
2019-B9	Equipment - IT	IT: Geographic Information System (GIS) - Phase 3						\$	15,000		\$	15,000				
2019-B10	Equipment-IT	IT: New Servers						\$	40,000		\$	40,000				
2020-B1	Equipment-Police	Police: Secure Patrol Operations Equipment						\$	6,000		\$	6,000				
2017-B13	Equipment- IT	IT: AV Room Technology Replacement								\$	150,000	\$	150,000			
2019-06	Building- Library	Building: Library Improvements, Phase 2								\$	850,000	\$	850,000			
2020-B2	Building	Building: Parking Lot Repairs/ Seal Coating								\$	20,000	\$	20,000			
2020-B3	Building	Building: City Hall Carpet Replacement								\$	20,000	\$	20,000			
			\$	1,544,500	\$	4,996,658	\$	72,000	\$	35,000	\$	161,000	\$	1,040,000	\$	7,849,158

	PROJECTIONS						
	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	Total Project Cost
GRAND TOTALS	\$ 7,665,230	\$ 18,748,698	\$ 2,708,928	\$ 2,373,103	\$ 1,716,305	\$ 5,447,750	\$ 38,630,014

Introduced: Barna  
Second: Vercher

**CITY OF MASON  
PLANNING COMMISSION RESOLUTION No. 2020-02  
A RESOLUTION RECOMMENDING THAT  
CITY COUNCIL ADOPT THE CAPITAL IMPROVEMENTS PROGRAM  
FOR THE FISCAL YEARS 2020-2026**

**October 13, 2020**

**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.

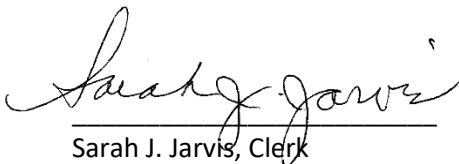
**NOW THEREFORE BE IT RESOLVED**, that the City of Mason Planning Commission does hereby recommend that City Council approve the Capital Improvements Program (CIP) for fiscal years 2020-2026, as amended to remove project 2018-B19: IT Connectivity.

Yes (7) Barna, Howe, Perrault, Sabbadin, Vercher, Waxman, Wren

No (0)

Absent (2) Droscha, Shattuck

**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, October 13, 2020 the original of which is part of the Planning Commission minutes.



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

Introduced: Madden  
Second: Brown

**CITY OF MASON  
CITY COUNCIL RESOLUTION 2020-28**

**ADOPTION OF THE CAPITAL IMPROVEMENTS PROGRAM FOR THE FISCAL YEARS 2020-2026 AND  
AUTHORIZATION FOR THE NECESSARY CAPITAL BUDGET AMENDMENTS**

**OCTOBER 19, 2020**

**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 Planning Commission recommended approval of the Capital Improvements Program on October 13, 2020 as it is consistent with the Capital Improvements Programming component of the Master Plan.

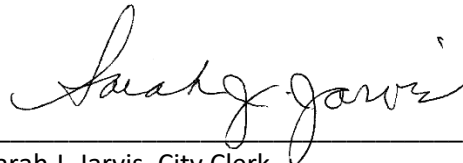
**NOW THEREFORE BE IT RESOLVED**, that the Mason City Council adopt the Capital Improvements Program (CIP) for fiscal years 2020-2026 and authorize the necessary capital budget amendments for the projects to be implemented.

YES: (7) Brown, Droscha, Ferris, Madden, Schaffer, Vogel, Whipple

NO: (0)

ABSENT: (0)

**CLERK'S CERTIFICATION:** I hereby certify that the foregoing is a true and accurate copy of a resolution adopted by the City Council at its regular meeting held Monday, October 19, 2020, the original of which is part of the City Council minutes.



---

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