



CITY OF MOUNT PLEASANT

PROPOSED

CAPITAL IMPROVEMENT PLAN

2017 - 2021

CITY COMMISSION

Kathleen L. Ling, Mayor
Allison Quast-Lents, Vice-Mayor
Lori Gillis, Commissioner
Jim Holton, Commissioner
Tony Kulick, Commissioner
Nicholas Madaj, Commissioner
Mike Verleger, Commissioner



Memo To: City Commission
From: Nancy Ridley, City Manager
Date: April 11, 2016

The Charter of the City of Mt. Pleasant requires the City Manager submit a five-year Capital Improvement Plan (CIP) to the City Commission each April. The Capital Improvement Plan is a planning tool and is comprised of projects that are tentatively planned over the next five years which have a useful life of at least ten years and cost in excess of \$5,000.

Although it is not possible to adequately predict every infrastructure need over the next five years, this document develops a plan to measure new or different projects against. It also attempts to predict the amount of funds available for projects to identify the shortfalls that are likely to occur. As the City of Mt. Pleasant's infrastructure ages, we see growing maintenance needs. It is necessary to balance the ongoing maintenance needs with current staffing along with any new and improved infrastructure requests.

When developing this proposed plan, staff utilizes information from the strategies and priorities in the approved Master Plan, the City Commission approved vision statements, the Parks and Recreation Master Plan, the Tax Increment Finance Authority's development plans and input from the City's various Boards and Commissions.

The following items are noteworthy during the discussion and review of the proposed plan:

- Complete Streets
 - This is the first CIP developed after the approval of the Complete Streets Ordinance. The Major Streets and Local Streets section of the plan includes additional information to summarize the primary components of a complete streets review. Particular attention should be paid to those charts during the review.
- Alleys
 - As a result of discussion during 2015, significant attention was paid to the condition of alleys throughout the City. The 2016 Operating Budget includes additional funds for the maintenance of the gravel alleys. This CIP begins to

address the 3.9 miles of paved alleys throughout the City. Paved alleys are addressed in the Downtown Development section, the Economic Development section for Mission Street and residential alleys in the Local Streets section of the plan.

- Street (Act 51) Funding
 - A significant number of street projects have been added for 2017-2021 due to the anticipated increase in State ACT 51 monies as a result of the state legislation passed in 2015 to increase road funding for repairs statewide. According to projections provided by the State, it is anticipated the City will receive an additional \$2.7 million over the 5 years beginning in State fiscal year 2017. The additional state funding is phased in starting with \$390,000 in 2017 increasing to \$1,117,000 in 2021.
- Wastewater Treatment-Stormwater Asset Management and Wastewater Grant Program
 - Data is still being received from the \$2 million grant that was awarded to the City. Much of the plant infrastructure has been re-prioritized in this plan as a result of the analysis from the data. The remaining item from the grant that will affect future priorities is the video of the underground sewer lines which will set priorities for appropriate underground lines to be relined or reconstructed.
- Mt. Pleasant Center
 - The Water and Wastewater sections of this plan include estimated dollars for providing water and sewer service to the west side of the Mt. Pleasant Center property where the vacant Mt. Pleasant Public School buildings are located. The infrastructure will be needed as plans are made by the Mt. Pleasant Public Schools for the use of those buildings.
 - It is anticipated that significant infrastructure will be needed at the site for future development, however until a development plan is put together, no funds have been allocated
- Tax Increment Districts
 - This plan depicts a shortage of funding for infrastructure needs in both the Tax Increment Finance Authority (TIFA) for the Central Business District (CBD) as well as the Mission Street Downtown Development Authority (DDA). Each board will need to conduct some priority discussions of where the limited funds should be best invested over the next five years. In addition, the Mission Street DDA expires at the end of 2017. As that plan extension is considered, it will be an appropriate time to prioritize the appropriate future funding needs for that district.
- Capital Improvement Fund
 - This plan assumes the continuation of the dedicated two mills of the millage rate for infrastructure projects over the five years of the plan.

If all of the projects over the five years were to occur, approximately \$26 million would be invested into our infrastructure between 2017 and 2021. Specific attention is always paid to the first year of the Capital Improvement Plan in regard to affordability, as this plan becomes

the basis for the 2017 operating budget. Any planning document changes over time and Tables 1 and 2 in the appendices of the document attempt to provide an overview of the changes in projects from the Capital Improvement Plan approved in 2016.

Timeline

The following chart outlines the steps over the next few months to finalize the approval of the Capital Improvement Plan as required by City Charter.

Submission of Capital Improvement Plan	April 11
Presentation to the City Commission and Citizenry	April 25
Work Session on the Plan	May 9 and 23, if needed
Public Hearing	May 23
Required Adoption Deadline per Charter	June 13
Submission of 2017 Annual Operating Budget	September 12

We look forward to your input, discussion and final approval of the important planning document.

TABLE OF CONTENTS

	<u>Page</u>
Narrative	1
Estimated Cash Balances Available (2017-2021)	5
General Fund	
Public Safety	15
Economic Development	25
Downtown	37
Parks	57
Public Works	79
Major Streets	89
Local Streets	97
Airport Fund	107
Wastewater Fund	113
Water Fund	125
Status Report on Specific 2016 Projects from 2016-2020 Capital Improvement Plan (Table 1)	149
Changes in 2017-2020 Projects from 2016-2020 Capital Improvement Plan (Table 2)	151
Taxable Value 2006 – 2021 (Table 3)	153
Schedule of Capital Outlay 2012 - 2016 (Table 4)	154
Summary of Debt Payments (Table 5)	156
Summary of Estimated Tax and Bonding Funds Available (Table 6)	157
Tax Levy to Retire General Obligation Debts (Table 7)	158
Projects Considered But Not Planned in Next 5 Years (Table 8)	159

CAPITAL IMPROVEMENT PLAN

Background

Article VII of the Charter of the City of Mt. Pleasant establishes the requirement that a Capital Budget be prepared annually. On or before the first meeting of April each year, the City Manager submits the proposed Capital Improvement Plan for the next five (5) fiscal years to the City Commission for their review and adoption on or before the first meeting in June.

Capital budgeting has two (2) elements. The first is a Capital Improvement Plan and the second is an annual Capital Budget. The Capital Improvement Plan is a five (5) year schedule of all proposed major capital improvement projects including project priorities; cost estimates; methods of financing; and annual estimated operating and maintenance costs for the proposed projects. Each year the Capital Improvement Plan is revised for another fiscal year.

The annual update is primarily for the purpose of adjusting the multi-year plan of improvements to changing circumstances. At the end of each fiscal year, the projects completed during that year are removed from the plan and an additional year's projects are added. Adjustments to each year are made based on current priorities, needs and anticipated funding levels. A new year's project list is added so that the Capital Improvement Plan will be an effective and continuous process for project planning and implementation. Changing circumstances sometimes result in new projects being added and some projects being deleted or re-prioritized. Table 2 at the back of this document provides a summary of changes from the prior Capital Improvement Plan.

The annual Capital Budget is the detailed list of those capital expenditures expected to be incurred during the next fiscal year. The annual Capital Budget, used to implement the five (5) year capital plan, shows project priorities; cost estimates; financing methods; and estimated annual operating and maintenance costs. The information presented in the Capital Budget is incorporated to the extent possible based on projected revenues and expenditure priorities into the annual Operating Budget. Table 1 provides a status report of the projects that were listed for 2016 in the 2016-2020 Capital Improvement Plan.

Benefits

An effective and ongoing Capital Improvement Plan is beneficial to elected officials, staff, and the general public. Among the benefits that can be received from an adopted and well-maintained Capital Improvement Plan and annual Capital Budget are:

1. Coordination of the community's physical planning with its fiscal planning capabilities;
2. Ensuring that public improvements are undertaken in the most desirable order of priority;
3. Assisting in stabilization of tax rate over a period of years;
4. Producing savings in total project costs by promoting a "pay as you go" policy of capital financing thereby reducing additional interest and other extra charges;

5. Providing adequate time for planning and engineering of proposed projects;
6. Ensuring the maximum benefit of the moneys expended for public improvements; and
7. Permitting municipal construction activities to be coordinated with those of other public agencies within the community.

These benefits are important to the Mt. Pleasant community. Capital improvement planning and capital budgeting allow officials and citizens to set priorities for capital expenditures and accrue maximum physical benefit for a minimum of capital expenditure through an orderly process of project development, scheduling and implementation.

Definitions

A capital improvement is a project that involves the original construction or purchase of real property or any substantial improvement or addition to real property or equipment with an estimated useful life of ten (10) years or more and a minimum cost of \$5,000. This would include major replacement items that would either change or materially improve a service as well as major rehabilitation to existing facilities.

Project Priority and Review Criteria

A wide range and variety of capital improvements could be included in the Capital Improvement Plan. Listed below are several criteria, not necessarily in priority order, to aid in the review of potential projects:

1. Required to fulfill any federal or state judicial administrative requirements;
2. Linkage to Community vision and goals;
3. Relationship to source and availability of funds;
4. Impact on annual operating and maintenance costs;
5. Relationship to overall fiscal policy and capabilities;
6. Project's readiness for implementation;
7. Relationship to overall community needs;
8. Relationship to other projects;
9. Distribution of projects throughout City;
10. Relationship to other community plans.

The proposed projects resulting from a consideration of these criteria are ranked in their order of importance to the community.

After the priority is determined, it is necessary for the Department and Division Directors and others preparing and reviewing the priorities among the individual projects to remember that not all proposed projects are competing for the same moneys. Different types of projects may be funded from different revenue sources.

Source of Funding

The following codes are used throughout the document to indicate the potential source of funding for the proposed projects:

AF- Airport Fund	PD- Private Developer
CI- Capital Improvement Fund	RB- Revenue Bond
DDA- Downtown Development Authority	RF- Recreation Fund
DF- Downtown Fund	SA- Special Assessment
DO- Donations	SF- Sewer Fund
EDF- Economic Development Fund	SCR- Sewer Collection Reserve
GF- General Fund	TIFA- Tax Increment Finance Authority
FTR- Fire Truck Reserve	WF- Water Fund
GO- General Obligation Bonds	WDR- Water Distribution Reserve
GR- Grant	WWPR- Wastewater Plant Reserve
LS- Local Street Fund	WLR- Water Lagoon Reserve
MP- Motor Pool Fund	WPR- Water Plant Reserve
MS- Major Street Fund	

Schedule of Numbers

While developing the Capital Improvement Plan, consideration is given to the amount of funds likely available for capital projects, but final tradeoff decisions are not made due to the uncertainty of funding sources. The Estimated Cash Balances Available summary shows the estimated funds available to meet the capital needs and the items of highest priority over the next five (5) years based on current information.

This document identifies the likely funding source for each project and depicts the five (5) years estimated balances of each of those funding sources. The actual projects to be completed for 2017 will be determined during the 2017 operating budget development.

The appendices are provided as additional background on changes from the prior plan, historical spending, and current debt information.

This Page Left Blank Intentionally.

**City of Mt. Pleasant
 Estimated Cash Balances Available for Capital Expenditures
 All Funds Except Water and Wastewater**

Description	Page Number	Project Amount	FUNDING SOURCES							Specific Funding Source For "Other"
			Capital Improvement Fund	TIFA CBD	DDA	Major Streets	Local Streets	Airport Fund	Other	
12/31/2015 Available Balance			\$297,270	\$451,530	\$526,830	\$1,334,350	\$455,100	\$5,896		
Expected 2016 Additions (Allocations)			162,880	(57,590)	(214,550)	144,010	(310,260)	2,420		
Estimated 2016 Ending Balance			\$460,150	\$393,940	\$312,280	\$1,478,360	\$144,840	\$8,316		

2017

Expected Additions			\$837,880	\$110,000	\$140,000	\$412,000	\$334,000	\$0		
---------------------------	--	--	-----------	-----------	-----------	-----------	-----------	-----	--	--

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lockers/Restroom Facilities (DPS)	19	\$16,000	(\$16,000)							
Overhead Garage Door Replacement (DPS)	20	35,000	(35,000)							
Alley Maintenance/Mission St	27	5,000			(5,000)					
Corridor Improvement Study/Mission St	30	90,000			(90,000)					
Reinv Capital Support/Mission St	33	60,000			(60,000)					
Traffic/Ped. Safety/Mission St	35	40,000			(40,000)					
Banner Poles (Downtown)	42	20,000		(20,000)						
Bike Shelters & Corrals (Downtown)	44	5,000		(5,000)						
Downtown Improvement Program	46	30,000		(30,000)						
Parking Lot Renovations (Downtown)	48	335,000		(335,000)						
Pedestrian Street Lighting (Downtown)	51	100,000		(100,000)						
Wayfinding (Downtown)	55	50,000						(50,000)		GF/Downtown
Chippewa River Protection Program	59	50,000						(50,000)		Grant
Medium Size Project (Parks)	63	35,000	(10,000)					(25,000)		Recreation Fund
Mission Creek Improvements	68	319,000	(319,000)							
Nelson Park Walkway	70	28,000	(14,000)					(14,000)		Donations
Park Partnership Program	71	5,000	(5,000)							
Playground Equip/Universal Access	73	35,000	(35,000)							
Renovate Park Roads, Parking, Trails	75	50,000	(50,000)							
Neighborhood Pedestrian Lighting	83	120,000	(120,000)							
Sidewalk Replacement	87	100,000	(100,000)							

Description	Page Number	Project Amount	FUNDING SOURCES							Specific Funding Source For "Other"
			Capital Improvement Fund	TIFA CBD	DDA	Major Streets	Local Streets	Airport Fund	Other	
Crack Sealing (Major Street)	91	12,000				(12,000)				
Resurfacing/Reconstruction (Major Street)	92	1,273,000				(597,000)			(676,000)	Grant
Alley Reconstruction and Resurfacing	99	18,000					(2,000)		(16,000)	Special Assessment
Crack Sealing (Local Street)	101	26,000					(26,000)			
Resurfacing/Reconstruction (Local Street)	103	372,000	(75,000)				(297,000)			
Runway 9 Tree Abatement	110	415,000						(20,750)	(394,250)	Grant
Assigned for Building Reserve Funding		20,000	(20,000)							
Assigned for New Sidewalk		50,000	(50,000)							
Total 2017 Projects		\$3,714,000								

ESTIMATED 2017 ENDING BALANCE \$449,030 \$13,940 \$257,280 \$1,281,360 \$153,840 (\$12,434)

2018

Expected Additions \$846,300 \$110,000 \$140,000 \$483,000 \$388,000 \$0

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Breathing Air Compressor Replacement	18	\$50,000	(\$50,000)							
Overhead Garage Door Replacement (DPS)	20	35,000	(35,000)							
Replace/Update Records Cubicles (DPS)	22	14,000	(14,000)							
Alley Maintenance/Mission St	27	50,000			(50,000)					
Reinv Capital Support/Mission St	33	100,000			(100,000)					
Traffic/Ped. Safety/Mission St	35	200,000			(200,000)					
Banner Poles (Downtown)	42	20,000		(20,000)						
Bike Shelters & Corrals (Downtown)	44	5,000		(5,000)						
Downtown Improvement Program	46	30,000		(30,000)						
Parking Lot Renovations (Downtown)	48	10,000		(10,000)						
Wayfinding (Downtown)	55	235,000	(70,000)	(165,000)						
Chippewa River Protection Program	59	200,000	(100,000)						(100,000)	Potential Grant
Island Park Fitness Trail	61	153,000	(113,000)						(40,000)	Recreation Fund
Island Park South Restroom Improvement	62	130,000	(130,000)							
Mission Creek Improvements	68	25,000	(25,000)							
Park Partnership Program	71	5,000	(5,000)							
Renovate Park Roads, Parking, Trails	75	150,000	(150,000)							
Neighborhood Pedestrian Lighting	83	120,000	(120,000)							
New Sidewalk	85	200,000	(50,000)						(150,000)	CI FB & SA
Sidewalk Replacement	87	100,000	(100,000)							

Description	Page Number	Project Amount	FUNDING SOURCES							Specific Funding Source For "Other"
			Capital Improvement Fund	TIFA CBD	DDA	Major Streets	Local Streets	Airport Fund	Other	
Crack Sealing (Major Street)	91	12,000				(12,000)				
Resurfacing/Reconstruction (Major Street)	92	435,000				(435,000)				
Crack Sealing (Local Street)	101	26,000					(26,000)			
Resurfacing/Reconstruction (Local Street)	103	563,000	(75,000)				(488,000)			
Papi/Reil/Taxiway Lighting	109	315,000						(15,750)	(299,250)	Grant
Runway 9 Tree Abatement	110	105,000						(5,250)	(99,750)	Grant
Assigned for Building Reserve Funding		20,000	(20,000)							
Total 2018 Projects		\$3,308,000								
ESTIMATED 2018 ENDING BALANCE			\$238,330	(\$106,060)	\$47,280	\$1,317,360	\$27,840	(\$33,434)		

2019

Expected Additions	\$854,800	\$110,000	\$140,000	\$569,000	\$453,000	\$0
---------------------------	-----------	-----------	-----------	-----------	-----------	-----

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Apparatus Bay Floors	17	\$28,000	(\$28,000)						
Roofing Project (DPS)	23	72,000	(72,000)						
Alley Maintenance/Mission St	27	97,000			(97,000)				
Reinv Capital Support/Mission St	33	100,000			(100,000)				
Traffic/Ped. Safety/Mission St	35	40,000			(40,000)				
Banner Poles (Downtown)	42	20,000		(20,000)					
Bike Shelters & Corrals (Downtown)	44	5,000		(5,000)					
Downtown Improvement Program	46	30,000		(30,000)					
Parking Lot Renovations (Downtown)	48	185,000		(185,000)					
Pedestrian Lighting (Downtown)	51	160,000		(160,000)					
Wayfinding (Downtown)	55	205,000	(100,000)	(105,000)					
Chippewa River Protection Program	59	48,000	(24,000)					(24,000)	Potential Grant
Medium Size Project (Parks)	63	65,000	(65,000)						
Park Partnership Program	71	5,000	(5,000)						
Playground Equip/Universal Access	73	150,000	(150,000)						
Renovate Park Roads, Parking, Trails	75	25,000	(25,000)						
Building Maintenance (DPW)	81	70,000						(70,000)	Motor Pool
Neighborhood Pedestrian Lighting	83	120,000	(120,000)						
New Sidewalk	85	117,000	(58,500)					(58,500)	Special Assessment
Sidewalk Replacement	87	100,000	(100,000)						

Description	Page Number	Project Amount	FUNDING SOURCES							Specific Funding Source For "Other"
			Capital Improvement Fund	TIFA CBD	DDA	Major Streets	Local Streets	Airport Fund	Other	
Taxiway A Rehab	112	1,371,000						(68,550)	(1,302,450)	Grant
Assigned for Building Reserve Funding		20,000	(20,000)							
Total 2020 Projects		<u>\$4,293,000</u>								
ESTIMATED 2020 ENDING BALANCE			\$271,930	(\$516,060)	(\$447,720)	\$1,418,360	\$327,840	(\$107,434)		

2021

Expected Additions	\$871,900	\$110,000	\$140,000	\$825,800	\$647,000	\$0
---------------------------	-----------	-----------	-----------	-----------	-----------	-----

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lockers/Restroom Facilities (DPS)	19	\$35,000	(\$35,000)							
Alley Maintenance/Mission St	27	\$151,000			(151,000)					
Reinv Capital Support/Mission St	33	100,000			(100,000)					
Traffic/Ped. Safety/Mission St	35	40,000			(40,000)					
Alleyway Renovations (Downtown)	39	102,000		(102,000)						
Bike Shelters & Corrals (Downtown)	44	5,000		(5,000)						
Downtown Improvement Program	46	30,000		(30,000)						
Parking Lot Renovations (Downtown)	48	285,000		(285,000)						
Pedestrian Lighting (Downtown)	51	160,000		(160,000)						
Streetscape Improvement (Downtown)	53	75,000		(75,000)						
Chippewa River Protection Program	59	200,000	(100,000)					(100,000)		Potential Grant
Medium Size Project (Parks)	63	20,000	(20,000)							
Mid-Mich./GKB Pathway Connection	65	450,000	(450,000)							
Park Partnership Program	71	5,000	(5,000)							
Playground Equip/Universal Access	73	35,000	(35,000)							
Riverside Cemetery Columbarium	77	80,000	(80,000)							
Building Maintenance (DPW)	81	110,000						(110,000)		Motor Pool
Neighborhood Pedestrian Lighting	83	120,000	(120,000)							
New Sidewalk	85	100,000	(50,000)						(50,000)	Special Assessment
Sidewalk Replacement	87	100,000	(100,000)							
Crack Sealing (Major Street)	91	12,000			(12,000)					
Resurfacing/Reconstruction (Major Street)	92	874,000			(874,000)					
Crack Sealing (Local Street)	101	26,000						(26,000)		
Industrial Area Street Improvement	102	250,000						(250,000)		

**City of Mt. Pleasant
 Estimated Cash Balances Available for Capital Expenditures
 Water and Wastewater Only**

Description	Page Number	Project Amount	FUNDING SOURCES						
			Wastewater Plant Reserve	Wastewater Collection Reserve	Wastewater Operations	Water Plant Reserve	Water Distribution Reserve	Water Lagoon Reserve	Water Operations
12/31/2015 Available Balance			\$696,960	\$131,630		\$745,900	\$480,050	\$235,400	
Expected 2016 Additions (Allocations)			(73,000)	190		25,000	(13,000)	50,000	
Estimated 2016 Ending Balance			\$623,960	\$131,820		\$770,900	\$467,050	\$285,400	

2017

Expected Additions			\$90,000	\$240,000		\$100,000	\$185,000	\$50,000	
---------------------------	--	--	----------	-----------	--	-----------	-----------	----------	--

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lift Station Improvements	115	\$75,000	(\$75,000)						
Manhole Rehab	116	100,000			(100,000)				
Meter Replacement (WWTP)	117	125,000			(125,000)				
Plant Improvements (WWTP)	119	232,000	(232,000)						
Rear Yard Lead Rehabilitation	121	13,000			(13,000)				
Reconstruction/Reline (Sewer)	122	230,000		(230,000)					
1MG Reservoir Bypass	127	20,000							(20,000)
Chemical Tank Rehab	130	5,000				(5,000)			
Clarifier Repair	131	150,000				(150,000)			
Deerfield Well Generator Building	132	8,000					(8,000)		
Distribution System Replacement	133	15,000					(15,000)		
Elevated Tank Construction	134	15,000							(15,000)
High Service Pump Rehabilitation	136	19,000				(19,000)			
Meter Replacement (Water)	138	125,000							(125,000)
Roof Replacement (Water)	142	65,000				(65,000)			
Well Rehabilitation	145	110,000							(110,000)
Total 2017 Projects		\$1,307,000							

ESTIMATED 2017 ENDING BALANCE			\$406,960	\$141,820		\$631,900	\$629,050	\$335,400	
--------------------------------------	--	--	-----------	-----------	--	-----------	-----------	-----------	--

Description	Page Number	Project Amount	FUNDING SOURCES						
			Wastewater Plant Reserve	Wastewater Collection Reserve	Wastewater Operations	Water Plant Reserve	Water Distribution Reserve	Water Lagoon Reserve	Water Operations

2018

Expected Additions \$90,000 \$240,000 \$100,000 \$185,000 \$50,000

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lift Station Improvements	115	\$80,000	(\$80,000)						
Manhole Rehab	116	100,000			(100,000)				
Meter Replacement (WWTP)	117	125,000			(125,000)				
Plant Improvements/Replacmts (WWTP)	119	160,000	(160,000)						
Rear Yard Lead Rehabilitation	121	13,000			(13,000)				
Reconstruction/Reline (Sewer)	122	150,000		(150,000)					
1MG Reservoir Bypass	127	100,000							(100,000)
Chemical Tank Rehab	130	50,000				(50,000)			
Distribution System Replacement	133	50,000					(50,000)		
Meter Replacement (Water)	138	125,000							(125,000)
Pavement Replacement (Water)	140	50,000				(50,000)			
Roof Replacement (Water)	142	5,000				(5,000)			
Valve Actuators	143	100,000				(100,000)			
Well Rehabilitation	145	47,000							(47,000)

Total 2018 Projects \$1,155,000

ESTIMATED 2018 ENDING BALANCE \$256,960 \$231,820 \$526,900 \$764,050 \$385,400

2019

Expected Additions \$90,000 \$240,000 \$100,000 \$185,000 \$50,000

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lift Station Improvements	115	\$50,000	(\$50,000)						
Manhole Rehab Sanitary Sewer	116	100,000			(100,000)				
Meter Replacement (WWTP)	117	10,000			(10,000)				
Plant Improvements (WWTP)	119	110,000	(110,000)						
Rear Yard Lead Rehabilitation	121	15,000			(15,000)				

			FUNDING SOURCES							
Description	Page Number	Project Amount	Wastewater Plant Reserve	Wastewater Collection Reserve	Wastewater Operations	Water Plant Reserve	Water Distribution Reserve	Water Lagoon Reserve	Water Operations	
Reconstruction/Reline (Sewer)	122	150,000		(150,000)						
Boiler Replacement	128	75,000				(75,000)				
Distribution System Replacement	133	50,000					(50,000)			
Elevated Tank Painting	135	100,000							(100,000)	
High Service Pump Rehabilitation	136	19,000				(19,000)				
Meter Replacement (Water)	138	10,000							(10,000)	
Well 8 Abandonment	144	25,000							(25,000)	
Well Rehabilitation	145	47,000							(47,000)	
Total 2019 Projects		\$761,000								
ESTIMATED 2019 ENDING BALANCE			\$186,960	\$321,820		\$532,900	\$899,050	\$435,400		
2020										
Expected Additions			\$90,000	\$240,000		\$100,000	\$185,000	\$0		
Proposed Uses/Allocations:			Note: uses/allocations are shown as negative to reduce the balance							
Lift Station Improvements	115	\$30,000	(\$30,000)							
Manhole Rehab	116	100,000			(100,000)					
Meter Replacement (WWTP)	117	10,000			(10,000)					
Mt. Pleasant Center Sewer Improvement	118	80,000			(80,000) (priv dev or EDF)					
Plant Improvements/Replacmts (WWTP)	119	559,000	(559,000)							
Rear Yard Lead Rehabilitation	121	15,000			(15,000)					
Reconstruction/Reline (Sewer)	122	150,000		(150,000)						
Boiler Replacement	128	75,000				(75,000)				
Clarifier Repair	131	100,000				(100,000)				
Distribution System Replacement	133	50,000					(50,000)			
Elevated Tank Construction	134	2,000,000							(2,000,000) Bond	
Lime Residuals Removal	137	200,000						(200,000)		
Meter Replacement (Water)	138	10,000							(10,000)	
Mt. Pleasant Center Water	139	106,000							(106,000) (priv dev or EDF)	
Reservoir Valve Replacement	141	40,000				(40,000)				
Well Rehabilitation	145	40,000							(40,000)	
Total 2020 Projects		\$3,565,000								

Description	Page Number	Project Amount	FUNDING SOURCES						
			Wastewater Plant Reserve	Wastewater Collection Reserve	Wastewater Operations	Water Plant Reserve	Water Distribution Reserve	Water Lagoon Reserve	Water Operations

ESTIMATED 2020 ENDING BALANCE			(\$312,040)	\$411,820		\$417,900	\$1,034,050	\$235,400	
--------------------------------------	--	--	-------------	-----------	--	-----------	-------------	-----------	--

2021

Expected Additions			\$90,000	\$240,000		\$100,000	\$185,000	\$0	
---------------------------	--	--	----------	-----------	--	-----------	-----------	-----	--

Proposed Uses/Allocations:

Note: uses/allocations are shown as negative to reduce the balance

Lift Station Improvements	115	\$40,000	(\$40,000)						
Manhole Rehab	116	100,000			(100,000)				
Meter Replacement (WWTP)	117	10,000			(10,000)				
Plant Improvements/Replacmts (WWTP)	119	200,000	(200,000)						
Rear Yard Lead Rehabilitation	121	\$18,000			(\$18,000)				
Reconstruction/Reline (Sewer)	122	150,000		(150,000)					
Cast Iron Watermain Replacement	129	144,000					(144,000)		
Distribution System Replacement	133	50,000					(50,000)		
High Service Pump Rehabilitation	136	20,000				(20,000)			
Meter Replacement (Water)	138	10,000							(10,000)
Well Rehabilitation	145	47,000							(47,000)
Total 2021 Projects		\$789,000							

ESTIMATED 2021 ENDING BALANCE			(\$462,040)	\$501,820		\$497,900	\$1,025,050	\$235,400	
--------------------------------------	--	--	-------------	-----------	--	-----------	-------------	-----------	--

Total 2017-2021 Projects \$7,577,000

SUMMARY OF PROJECTS
PUBLIC SAFETY

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
Apparatus Bay Floors	CI	\$0	\$0	\$28,000	\$0	\$0	\$28,000
Breathing Air Compressor Replcmt	CI	0	50,000	0	0	0	50,000
Locker Room and Restroom Facil	CI	16,000	0	0	0	35,000	51,000
Overhead Garage Doors	CI	35,000	35,000	0	0	0	70,000
Parking Lot Replacement	CI	0	0	0	82,000	0	82,000
Replace/Update Records Cubicals	CI	0	14,000	0	0	0	14,000
Roofing Project	CI	0	0	72,000	0	0	72,000
Totals		\$51,000	\$99,000	\$100,000	\$82,000	\$35,000	\$367,000

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Apparatus Bay Floors

Department Public Safety **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$28,000	-0-	-0-

1. Description and Location

The apparatus bays were designed with a bay for washing apparatus and equipment. This design has proven to be successful as it has reduced wear on the floor of the other apparatus bays. However, due to the age and use of these bays the epoxy flooring system is deteriorating. The abrasive top surface is worn making the floor slippery when wet presenting a slip and fall hazard to fire fighters. The epoxy flooring is also losing adhesion and is separating, exposing bare concrete in areas. These bare spots allow moisture under the epoxy coating causing more separation of the floor coating from the concrete. This project would re-surface 3700 square feet of apparatus bay flooring (Bays 1,2,3,7,8,9).

2. History and Plans

The epoxy floor coating was installed with the remodel and expansion of the public safety building and has lasted about fifteen years. An epoxy floor-coating specialist was consulted and he indicated that for the type of use the floor has been subjected to, it has reached the life expectancy of the floor coating system. In 2013 we re-surfaced the wash bay area of the apparatus floor (1600 Square feet). The plan is to re-surface an additional 3700 square feet in 2019 that would leave the last 2700 square feet to be completed at a later date.

3. Need and Impact

Slip resistant floors are required in wet locations and our floor has lost most of the slip resistance. The top sealant has deteriorated and the floor covering is now impregnated with fluids that leak from apparatus and debris washed from equipment following firefighting operations presenting a potentially unsafe environment.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Great Lakes Concrete Restoration (previously Venture Specialty Products), the original floor coating installers, submitted a quote in the amount of \$27,500.00 for total replacement of 3700 square feet of epoxy floor covering for the apparatus bay.

5. Future Funds Needed

An additional 2700 square feet would need to be re-surfaced in the future. It is projected the floor coating will again need to be replaced ten years from the completion date of this project.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Breathing Air Compressor Replacement				
Department	Public Safety	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$50,000	-0-	-0-	-0-

1. Description and Location

This project would purchase a new breathing air cascade system.

2. History and Plans

Our current breathing air compressor is a Mako brand purchased in approximately 1995. We received information that Mako has been sold in the last few years and the new company is phasing out several of the Mako compressors and parts.

The Isabella County Fire Chiefs Association, Inc. by resolution and vote of the membership have elected to submit an Assistance to Firefighters Grant application for replacement of self-contained breathing apparatus. A match totaling 15% of the total grant award will be required. It is agreed that each participating department will be responsible financially for their percentage of the match to be determined by total dollar value of the SCBA's and related equipment received by that department.

The value of the equipment that The Mt. Pleasant Fire Department has submitted for is \$287,600, The City of Mt. Pleasants financial responsibility would be 15% or \$43,140. This grant would allow us to receive the following equipment: 34 SCBA's with bottles, 33 spare air bottles, 2 Rapid Intervention Team packs, 16 additional SCBA face pieces, 4 cascade bottles, 1 cascade air filling station, 6 ten minute escape packs, 1 tool maintenance kit, 1 SCBA fit tester. Our current SCBA's were purchased in 2003 with a county wide tribal 2% allocation.

The Capital Improvement Plan includes the replacement of the cascade air filling station (Breathing air compressor) in 2018 at a cost of \$50,000.00. If the grant is awarded we would need to move the project forward and reprioritize projects to provide our matching funds.

3. Need and Impact

Typically Breathing air compressors need to be rebuilt around 1000 to 1200 hours of run time. Our compressor has 952 hours of run time on it; we put approximately 48 hours of run time on the compressor each year.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

Annual testing and certification of the air quality and the periodic maintenance of the equipment.

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Locker Room(s) and Restroom Facilities				
Department	Public Safety	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$16,000	-0-	-0-	-0-	\$35,000

1. Description and Location

Replace or install fixtures, showers and faucets in men’s and women’s both police and fire locker rooms, three building restrooms and one public restroom.

2. History and Plans

The current fixtures, faucets and showers were installed with the remodel/addition to the current Public Safety building approximately 12 years ago, some of this equipment is failing and in a state of needed repair. The plan is to replace/repair facilities in the following order, those in need of replacement/repair (both men’s locker rooms-2016) followed by the facilities that receive less demand (women’s police locker room and five bathrooms, proposed-2017).The women’s fire locker room (proposed-2021) is a continuation to complete the building, proposal used is from a previous request.

3. Need and Impact

This project is needed as some of the plumbing, pumps and fixtures are failing or anticipated to fail and need to be replaced. The repairs and enhancement will provide safe and sanitary environment for employees and visitors. Would also ready the facility for a female firefighter.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

General maintenance for upkeep, to be budgeted in Public Safety Building Operating budget.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Overhead Garage Door Replacement				
Department	Public Safety	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$35,000	\$35,000	-0-	-0-	-0-

1. Description and Location

The paint is peeling and the gaskets and window glazing on the overhead garage doors to the fire bays are deteriorating.

2. History and Plans

When the building was renovated in 2001 the garage doors were delivered without being painted. The contractor had the interior and exterior of the doors painted. At this time the doors are peeling paint and the gaskets and glazing are deteriorating. We are planning to replace the doors on the front of the building in 2017 and the doors on the rear of the building in 2018.

3. Need and Impact

The new doors being proposed would be insulated with an R value of 18.1 with a single full view section of glass. The existing doors have an estimated R value of 1.0 . This project would improve our energy efficiency in the fire bay area of the public safety building. The new doors would also contain less glass; the cleaning of the glass in the current doors is contracted as part of the building cleaning contract.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Continued maintenance in the form of door alignment, lubrication and spring repair.

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Parking Lot Replacement

Department Public Safety **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$82,000	-0-

1. Description and Location

Front and rear parking areas and vehicle access drives to the public safety building.

2. History and Plans

Each year one third of the parking areas and access drives are crack sealed, seal coated and restriped. This expense is covered by the public safety building operating budget.

3. Need and Impact

The parking areas and access driveways were inspected by the City engineering staff and it was their professional opinion that a mill and overlay of the parking areas and access drives will be needed in approximately five years. (Paser is a 6)

Linkage to Vision: We will work together toward being a community . . .

Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Continued maintenance in the form of crack sealing, seal coating and restriping will be required.

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Replace/Update Records Cubicles

Department Public Safety **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$14,000	-0-	-0-	-0-

1. Description and Location

Office Professionals work stations/cubicles located in the Records Sections of the Department of Public Safety Building.

2. History and Plans

The Public Safety Building renovation was completed in 2003. At that time the existing used cubicles were moved to the new front office area. The desk layout needs to be reconfigured and updated to reflect our current work processes. This project would update these worn and faded cubicles and continue to maintain a professional looking building.

3. Need and Impact

The current cubicles have weakened with age. They are faded and worn with scuffs, dents and chips of paint missing in several areas.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Roofing Project				
Department	Public Safety	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$72,000	-0-	-0-

1. Description and Location

Phased planning for updates and/or restoration of the roofing materials on the Public Safety building.

2. History and Plans

The City contracted with the Garland Company and IRT, Infrared Roofing Technologies, in late 2015, to evaluate conditions of the roofing system on the DPS facility and to help assist staff with developing a schedule for "restoration" and/or a replacement. (Restoration is a material that is applied to EPDM to extend the life of the roof system. The system provides a 10 year warranty)

Spring of 2016

Continue to research and evaluate products that are utilized for roof membrane restoration or replacement. Gather cost data on associated products and recommend the product and process to be used.

Spring 2019

Phase 1 -release bid for "restoration" of EPDM (Area A)

Spring 2022

Phase 2 -release bid for "restoration" and/or replacement of PVC (Area B)

Spring 2025

Phase 3 -release bid for "restoration" of EPDM (Area C)

3. Need and Impact

The DPS Building was originally constructed in the late 80's, with an addition that was placed on the site in 2001. While sections of the more than 32,000 square foot of roof membrane have been repaired and/or replaced since the original installation, it will be necessary over the next few years to consider restoring the materials and/or replace the membrane to insure that structural problems or damage to the substrate will occur due to a leaking condition.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Restoration of the EPDM material may be considered at \$5-7 per square foot:

2019

Area A (Double Eastern Section) 10,175 square feet or \$72,000

2022

Area B (Center Section) 12,000 square feet or \$84,000

2025

Area C (Westward Section) 10,000 square feet or \$70,000

5. Future Funds Needed

From each installation, the roof section should be evaluated five years from installation, and programmed back into the CIP 8-10 years from the install.

**SUMMARY OF PROJECTS
ECONOMIC DEVELOPMENT**

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
Alley Maintenance/Mission St	DDA	\$5,000	\$50,000	\$97,000	\$123,000	\$151,000	\$426,000
Corridor Imprv Study/Mission St	DDA	90,000	0	0	0	0	90,000
Reinv Captl Support/Mission St	DDA	60,000	100,000	100,000	100,000	100,000	460,000
Traffic/Ped. Safety/Mission St	DDA	40,000	200,000	40,000	315,000	40,000	635,000
Totals		\$195,000	\$350,000	\$237,000	\$538,000	\$291,000	\$1,611,000

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Alley Maintenance/ Mission Street

Department Economic Development **Source of Funding** Downtown Development Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$5,000	\$50,000	\$97,000	\$123,000	\$151,000

1. Description and Location

Alleys along the west side of Mission Street are in need of a variety of maintenance treatments in order to allow them to be a viable alternate mode of access for those travelling north and south primarily to local destinations. The City historically has not earmarked funds dedicated specifically toward these maintenance activities. It is important to identify, plan, and budget for the maintenance and repair of the alleys in the district.

2. History and Plans

There has been no history of previous actions of this nature since the alleys were constructed and paved. Many locations are in need of repaving or at least crack sealing in order to extend their useful life. The City's DPW staff have conducted an analysis of the alleys in the DDA district using PASER ratings and generated the attached map. A higher paser rating indicates the pavement is in better condition. They also estimated the total number of feet of each alley by PASER rating and estimated the cost of treatment according to the observed rating. The following summarizes these findings based on the attached map:

PASER Rating	Estimated Distance	Estimated Cost
4-5	2,800 Feet	\$420,000
6	1,000 Feet	\$3,000
7	1,200 Feet	\$2,400

Additional information indicated that alleys with PASER ratings of 4-5 should be repaved, while those with a 6 or 7 could be crack sealed. Repaving is estimated at \$150/linear foot, including engineering and contingency fees. Crack sealing alleys with a rating of 6 would cost \$3/linear foot, while those with a 7 were estimated at \$2/linear foot. The above CIP schedule attempts to reflect the alleys and their respective ratings as shown on the map with the estimated costs over the next five years.

3. Need and Impact

The alleys along Mission Street have not had scheduled maintenance activities since their installation and paving. Some need minor maintenance work while others require more extensive resurfacing in the near future. This project would help protect the investment in public infrastructure the City made years ago, as well as provide routes for residents making short local trips as an alternative to using Mission Street, thereby reducing congestion and improving safety in the corridor.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

There will be future costs for maintaining the alleys, including the eventual resurfacing of those sections of the alleys that are currently only requiring crack sealing. These future costs can be anticipated by applying the cost guidelines described above and adjusting for inflation at the time the work is required.

5. Future Funds Needed

Future funds might be needed to complete the project as indicated above, but at this time the amount of these future funds is not known. Currently the DDA does not have adequate funds to cover these costs as well as other priorities they have identified; therefore there may be a need to extend the projected timeline beyond 2021. Adding to this uncertainty is the fact that the DDA plan expires at the end of 2017. Assuming the decision is made to continue the DDA district beyond 2017, the new plan will need to identify goals, objectives, and priorities, and make a recommendation regarding the amount of taxes to capture in the new plan. If that amount increases in response to additional projects, more funds could be available prior to 2021 to complete the alley maintenance activities.

DDA Alley PASER Map

City of Mt. Pleasant



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-

0 0.125 0.25 Miles



INDIVIDUAL PROJECT DESCRIPTION

Project Title Corridor Improvement Study/ Mission Street

Department Economic Development **Source of Funding** Downtown Development Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$90,000	-0-	-0-	-0-	-0-

1. Description and Location

Mission Street is the major north/south business corridor bisecting the City of Mt. Pleasant, effectively creating a barrier between primarily residential neighborhoods on the east side (including two elementary schools, a high school, and community hospital) and destinations such as downtown Mt. Pleasant, Central Michigan University, and residential neighborhoods to the west. Lining both sides of Mission are a variety of commercial uses which significantly contribute to the economy of the community. This project would create a community-envisioned plan that would build upon recent efforts to recognize the role Mission Street plays as a business corridor and economic generator of the City and suggest design improvements that would allow the safe use by all legal users of the roadway, reduce traffic speeds, and encourage additional investment along the corridor.

2. History and Plans

In response to a plan by MDOT to redevelop Mission Street as a boulevard in about 2008 that was subsequently rejected by the community, the City hired a consultant to assess the challenges posed by the current configuration of the street (and specifically South Mission) and suggest design improvements that could be made to enhance its role as a business corridor. Initial issues to address included the following observations:

- The street poses a safety concern to all those who use it (i.e., pedestrians, cyclists, and motorists) and functionally creates a barrier in the community. There is a lack of a well-developed street network in the area allowing for alternative routes of travel to destinations. Mission Street is a main business corridor, yet stakeholder interviews revealed that it is generally avoided by locals, especially in the area of South Mission Street.
- Recognize that the city was bypassed for high speed motor vehicle and truck traffic decades ago by the construction of US 127. Recognize that, after the bypassing, the main purpose of Mission Street changed to “business” which in transportation terms translates to “access”, not throughput and not speed. The purpose is: access to services, businesses, US 127, Central Michigan University, downtown, and general access in the City. The purpose of Mission Street in its current role is to provide access for pedestrians, cyclists, local deliveries, visitors, and motorists.
- Recognize that the primary safety culprit on Mission Street is excessive speed. There are plenty of busy, safe, business-oriented, streets in North America that allow access. The high speeds violate the business function, access function, and context of the street in the city. There is simply too much activity on the street for drivers to consistently make good decisions at any speed above 30 mph. Redesign, rebuild, and post the street at no more than 30 mph. 35 mph, 40 mph, and 45 mph design speeds are too fast.

As a result of this study of South Mission Street, the City and the DDA committed to using an incentive approach to try to address the above and other identified short comings of the corridor. This resulted in the *Design Considerations for Mission Street* plan adopted by the City Commission in July, 2009; the creation of the Mission Overlay District as an amendment to the existing zoning ordinance; and the development of the *Mount Pleasant Mission Grid Streets* plan created in 2012 as part of the update to the City's Master Plan. This latter study has been the document the DDA has been using as a reference guide when prioritizing the construction of grid streets along the Mission Street corridor and has resulted in the implementation of four grid streets or cross connections to date with another one planned for 2016.

As good as these previous efforts to identify issues and suggest solutions have been they still rely on the cooperation of MDOT as well as the voluntary agreement to embrace the design considerations by developers when proposing a project. The City will likely be moving more to a *requirement* for certain designs as it begins to revise its zoning ordinance in 2016/2017. Combined with a targeted market analysis currently underway which considers the market potential of "missing middle" housing opportunities and the recent completion of a campus master plan at CMU that relies on improvements to Mission Street in order to allow some parts of that plan to function, the timing is right to consider a more comprehensive, community-based design for the Mission Street corridor that can then be used by MDOT to assist the City in developing a more vibrant and viable business corridor. This proposed plan will incorporate the entire Mission Street corridor and will build upon the earlier 2009 plan for South Mission Street.

A portion of the plan will also include a strategy to obtain buy-in from MDOT with the concepts developed and will certainly include MDOT input into the final product as one of the stakeholders to be engaged during the planning process. It is estimated that the total cost of the planning project will be approximately \$90,000. Because of the importance of the Mission Street corridor on a number of levels to CMU, a portion of the total cost of this project will be requested from CMU as a partner in this important endeavor.

3. **Need and Impact**

It is anticipated that a well-designed, safe street will help revitalize Mission Street.

Linkage to Vision: We will work together toward being a community...

- ***Where shopping, dining, and entertainment options thrive.***
- ***Where economic opportunity for businesses offering competitive wages is readily available.***
- ***With a reliable and sustainable infrastructure.***

4. **Related Cost Details**

There are a number of costs currently involved that are related to this proposal, including \$100,000 for a new zoning ordinance, \$2,000 as part of a regional targeted residential market analysis, and the on-going funding of grid streets and site amenities by the DDA for projects along Mission Street. Refer to the *Mission Street Re-Investment* and *Mission Street Safety* project forms for additional information on these investments.

In addition, there will be costs associated with the implementation of the plan recommendations which will not be determined until after the study has been completed. Possible sources of funding include the DDA, Economic Development Fund, MDOT, CMU, private property owners, 2% funding from the Saginaw Chippewa Tribe, and the Federal Highway Administration.

5. Future Funds Needed

The costs associated with the implementation of the study recommendations will not be readily known until after the input from the stakeholders during the planning process and the final recommendations have been determined. There are no additional costs associated with the proposed study beyond the anticipated \$90,000 detailed above.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Re-Investment Capital Support/ Mission Street

Department Economic Development **Source of Funding** Downtown Development Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$60,000	\$100,000	\$100,000	\$100,000	\$100,000

1. Description and Location

Capital investment to support private sector re-investment along Mission Street in city limits (roughly north of Bluegrass to Pickard). This support includes funding for pedestrian safety improvements, decorative fencing and screening along right-of-way, parking lot landscape islands, barrier free access, and related items that create a tangible benefit to the public at large. Use of the funds is opportunity based where public investment is needed to encourage private development and redevelopment projects. Unused funds in any calendar year are designated for future years as development occurs.

In 2017 it is proposed to reduce the amount available to incent the types of activities outlined above in order to create a vision and design plan for the Mission Street corridor that reflects the needs of the community, including Central Michigan University. Once completed, the plan will be shared with MDOT to assist with the implementation of that vision over a period of time. Additional details of this activity are outlined in a separate project description.

2. History and Plans

The City has supported the business community on Mission Street with streetscape projects. This funding, supported by the City Commission, Planning Commission, and DDA, will improve the safety, appearance and commercial significance of Mission Street. Typical funded activities have included decorative fencing, utility extensions, cross connector and grid street construction, façade rendering and improvement assistance, and related incentive improvements. Similar incentives are anticipated for future years. Below includes a brief history and plans for funding:

2010

Mt. Pleasant Automotive

2011

First Bank Branch Office
Taco Bell Reconstruction

2012

CVS Pharmacy
High and Mission Intersection Improvements
Basic Communications Building

2013

DQ/Biggby Coffee Improvements
Save-A-Lot Plaza Improvements
McLaren Medical Office Park (between Fairfield and Appian Way)
Mission Mall Reconstruction (after 2012 fire)

2014

Graff Buick/Cadillac site improvements
Popeye's Chicken Site Amenities (Mission & High Street)

2015

Approved proposed site improvements (decorative fencing and driveway closure) for the Campus Commons development to be constructed in 2016.

3. Need and Impact

Mission Street has been identified as a primary focus area for the City's economic development efforts. It is hoped that this support will spur large, medium, and small scale private sector investment.

Linkage to Vision: We will work together toward being a community . . .

- Ø ***Where shopping, dining and entertainment options thrive.***
- Ø ***Where economic opportunity for businesses offering competitive wages is readily available.***
- Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Improvements made in the public right-of-way will require ongoing operating and maintenance costs; these costs will vary depending upon the improvement. When such improvements are proposed, estimated costs will be presented to the DDA for consideration. Eventually, capital replacement costs will be incurred. Improvements funded on private property will be the responsibility of the property owner to maintain and operate. Maintenance of recently funded projects is the responsibility of the individual property owners.

5. Future Funds Needed

Additional funds may be needed in the future to continue to support Mission Street private sector reinvestment as the vision for Mission Street redevelopment continues to be implemented. It is possible that the target area for these incentive opportunities could be recommended to expand east and west on Pickard Street depending on future recommendations by the Planning Commission. Future projects are contingent upon the extension and subsequent approval of the DDA District Plan being approved beyond the expiration of the current plan at the end of 2017.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Traffic and Pedestrian Safety/Mission Street

Department Economic Development **Source of Funding** Downtown Development Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$40,000	\$200,000	\$40,000	\$315,000	\$40,000

1. Description and Location

Funding to support safety improvements for traffic and pedestrians along Mission Street. The project is a response to safety data and stakeholder feedback regarding the need to improve safety along Mission Street to help encourage reinvestment in the properties along this economic corridor.

2. History and Plans

The DDA is focusing on implementing the Mission Grid Streets Plan which is part of the newly adopted Master Plan. This vision creates additional traffic grid patterns on south Mission in order to divert traffic and improve left turn and crossing safety and requires close collaboration with CMU and private property owners in the Mission Street corridor. To date, the following grid and connector streets have been constructed:

2013

Cross connection between Appian Way and Fairfield Drive
 Fairfield Drive grid street extension between Mission Street and East Campus Drive
 Realignment of Fairfield Drive entrance to Mission Street east of Mission
 Cross connection between Mission Mall and Isabella Branch Bank on S. Mission

2014

Construction of Olympic Drive grid street between Mission and East Campus Drive

2015

Relocation and new construction of Campus Drive between Mission Street and E. Campus Drive for new entrance to the Courtyard by Marriott hotel (While part of the DDA's plan for additional grid streets, this project was funded through the City's Economic Development Fund because it was outside of the DDA district boundaries)
 Intersection enhancements at Mission/Broadway and Mission/Michigan

2016

Committed funds for the construction of a new grid street associated with the Campus Commons development project on Mission Street to be completed by the end of 2016.

2017-2021

Additional funding is shown in 2017-2021 for planning and the construction of future improvements. Beginning in 2015, the Capital Plan anticipated a cost for the identification, engineering, and design associated with a new grid street location, followed by the next year of construction (implementation). In this Capital Plan, this philosophy can be seen beginning with 2017. Continuation of this strategy is subject to the recommendations shown on the Mt. Pleasant Mission Grid Streets Plan and the availability of suitable sites on private property for such construction.

3. **Need and Impact**

It is anticipated that a well-designed, safe street will help revitalize Mission Street

Linkage to Vision: We will work together toward being a community...

- ***Where shopping, dining, and entertainment options thrive.***
- ***Where economic opportunity for businesses offering competitive wages is readily available.***
- ***With a reliable and sustainable infrastructure.***

4. **Related Cost Details**

There will be ongoing maintenance costs related to maintaining new public road sections, adding and maintaining landscaping and lighting (where it is deemed appropriate).

5. **Future Funds Needed**

To be determined as additional new streets or connectors are identified. The levels of funding will depend on cost sharing partnership opportunities between the City and private property owners on a site by site basis. Currently we anticipate approximately \$40,000 will be needed every other year beginning in 2017 for road design and a larger construction budget will be needed every other year beginning in 2018 for road construction. The \$200,000 for 2018 anticipates the construction of a cross connection between businesses which should be less expensive than the construction of a new grid street connector between Mission and East Campus Drive at \$315,000 as shown for 2020. Future projects are contingent upon the extension and subsequent approval of the DDA District Plan being approved beyond the expiration of the current plan at the end of 2017.

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Alleyway Renovations

Department Downtown **Source of Funding** Tax Increment Finance Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	-0-	\$102,000

1. Description and Location

Milling, overlay, cracksealing, reconstruction and re-striping of various downtown alleyways over time. Alleyway selection is based on need and placement within downtown to best utilize funds.

2. History and Plans

Reconstruction, implement milling, overlay and repainting over a multi-year cycle based on the lot need. PASER system to determine priority of need. State grants will be used when possible for matching situations.

Projected costs include expectation for project management costs. Please see following page for details on what project specific items are included.

2015

PASER alleyways and estimates for reconstruction and cracksealing

2021

Reconstruct alley between Michigan and University. \$102,000

3. Need and Impact

Alleyways with the greatest need should be completed first based upon PASER system. Impact is based on functionality and usage of the alleyways. Alleyways are used by customers, employees, owners and residents within downtown on a daily basis.

PASER Ratings (as of 2015):

<u>Rating</u>	<u>Cost</u>
3.0	\$102,000
4.0	\$141,000
7.0	\$ 660

Not rated in 2015, will be rated spring 2016.

9.0 N/A

Linkage to vision: We will work together toward being a community . . .

- ***Where shopping, dining and entertainment options thrive.***
- ***With a reliable and sustainable infrastructure.***

4. **Related Cost Details**

Per engineering the cost per linear feet is \$300 for reconstruction, \$2 for cracksealing.

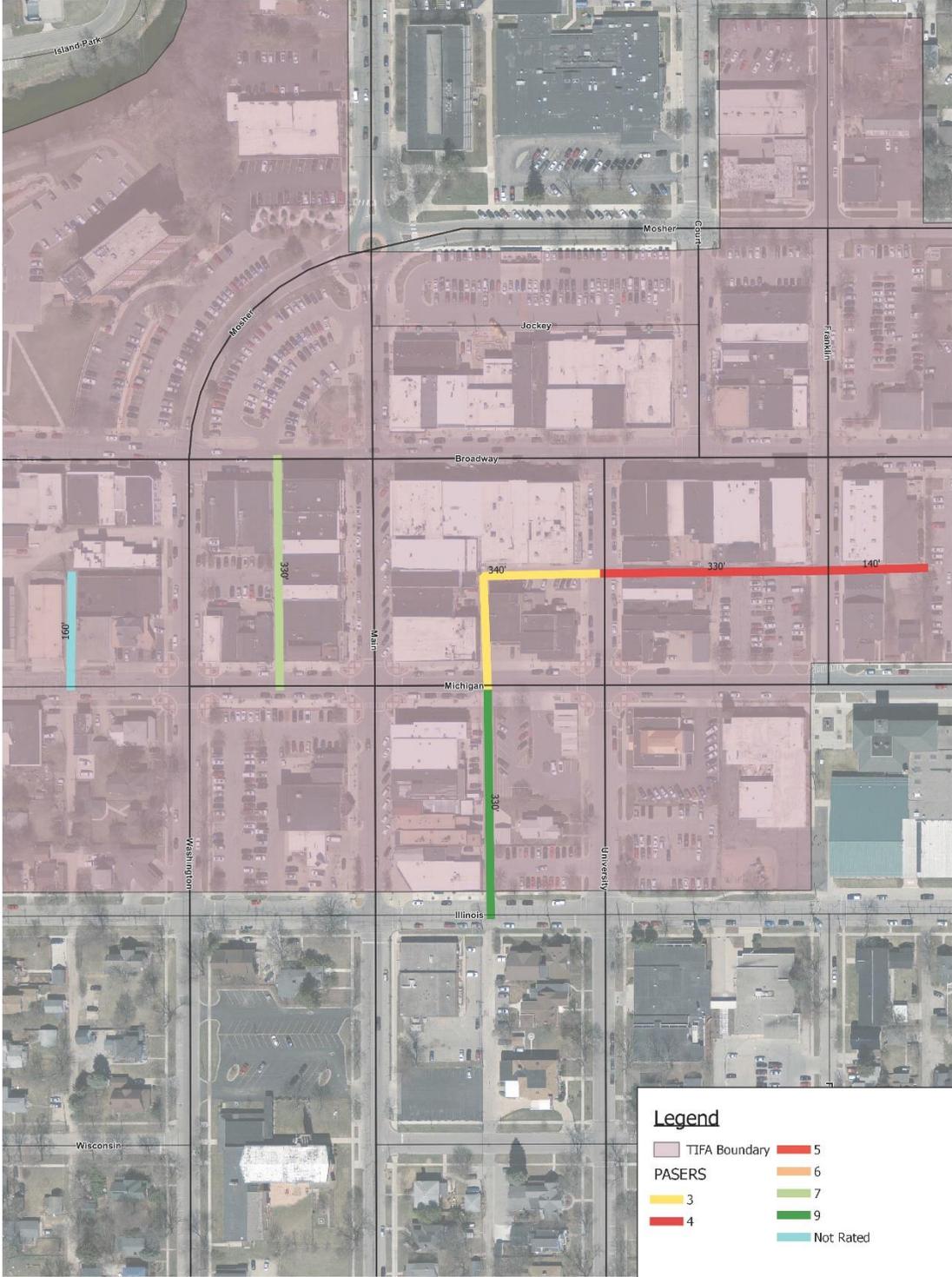
5. **Future Funds Needed**

A systematic review utilizing the PASER system to determine priority of repair of downtown alleyways will take place just as we do for roads, parking lots and paths in our park system.

Future costs will include restriping, patching and repaving and will be dependent on asphalt and labor at that time.

CBD-TIFA Alleyways PASER Map

City of Mt. Pleasant



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-



Legend

TIFA Boundary	5
PASER 3	6
PASER 4	7
	9
	Not Rated

Published: Mar-28-2016
 \\compfile\GIS\

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Banner Poles				
Department	Downtown	Source of Funding	Tax Increment Finance Authority		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$20,000	\$20,000	\$20,000	-0-	-0-

1. Description and Location

Installation of banner poles at entrances into downtown for community banners that are hung across the street.

2. History and Plans

2014

Banners that had been hung on regular streetlight poles have been determined to be damaging to the pole and could pose a danger if banner becomes disconnected. Request from the Downtown Development Board and community organizations to install decorative poles to hang community event banners; discussion held on potential locations have been narrowed down to the following locations:

- Lansing and Broadway
- Broadway at railroad tracks
- Illinois and Main

2017

Install first of three banner poles, similar in design to the decorative light poles, at Lansing and Broadway at the east entrance of downtown. Cost estimated to be \$20,000 - poles are \$8,000 each plus installation costs.

2018

Install second of three banner poles, similar in design to the decorative light poles, at Illinois and Main at the south entrance of downtown. Cost estimated to be \$20,000 - poles are \$8,000 each plus installation costs.

2019

Install third of three banner poles, similar in design to the decorative light poles, at Broadway at railroad tracks at the west entrance of downtown. Cost estimated to be \$20,000 - poles are \$8,000 each plus installation costs.

3. Need and Impact

Downtown is highly visible to both residents and visitors alike, and due to wear and tear on the streetlights poles, which are not designed specifically for banners, it is recommended for both safety and aesthetics.

Linkage to Vision: We will work together toward being a community . . .

- ***Where shopping, dining and entertainment options thrive.***
- ***With a reliable and sustainable infrastructure.***

4. **Related Cost Details**
None

5. **Future Funds Needed**
None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Bike Shelters and Corrals

Department Downtown

Source of Funding Tax Increment Finance Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000

1. Description and Location

Bike shelters and bike corrals are desired downtown to provide a place for customers, visitors, merchants, and residents to lock and store their bikes for both short and long time periods. They are intended to encourage commuters to use a bicycle for transportation to and from downtown, helping to decrease single occupant vehicle travel and alleviate traffic congestion and parking demands.

Bike shelters and/or corrals will be installed in and around downtown parking lots as they are repaved over the next 10-15 years. The Bike Petal™ model below is the shelter of choice as it is both functional and aesthetically pleasing. Base is 8' 7" and can be surface mounted. Canopy is 10' diameter, and has a clearance of 7'. Materials are powder coated and available in a variety of colors. Bike corrals, like shown below are an alternative to areas that bike shelters don't fit into or in areas that may be suited to bike parking in warmer months. Bike corrals are installed in parking areas with high bicycle parking demand. Bicycle corrals accommodate 12 to 24 bicycles in one or two auto parking spaces.

In years that a parking lot is not being renovated, bike shelters and/or corrals will be installed in locations where they can be unbolted and moved for future parking lot renovations or where the sidewalk is large enough to accommodate both the shelter and pedestrian walkers. In those areas that are not large enough to accommodate a bike shelter, either a traditional "wave" bike rack or medallion will be used.



2. **History and Plans**

Although the downtown area has a number of bike racks in existence, these racks do not provide a place for storage during inclement weather, nor are they designed for long term visits to downtown. It is the intent for the bike shelters to be placed in parking lots and focused on cyclist's long-term parking needs.

2013

Two bike shelters were incorporated into the renovation of parking lot #2.

2014

Installation of bike shelter in parking lot #1 was planned, however, due to manufacturing facility issues in obtaining materials; the fabrication of this bike shelter was moved to 2015.

2016

Installation of a bike shelter in parking lot #1 and bike corral for Main or Broadway.

2017-2021

Installation of additional bike shelters and corrals will be installed in conjunction with parking lot renovations, where the sidewalk is large enough to accommodate both the shelter and pedestrian walkers or in parking areas that have demand. In those areas that are not large enough to accommodate a bike shelter or corral, either a traditional "wave" bike rack or medallion will be used.

3. **Need and Impact**

It is anticipated that as the City becomes more engaged with walkable and bikeable initiatives there will be an increased demand for short and long-term bicycle storage spaces. Bike shelter and corral benefits are:

- Promote health and welfare
- Community Development
- Community cultural and leisure programs
- Transportation and related services
- Environmental improvement

Linkage to Vision: We will work together toward being a community . . .

- Ø ***That is safe, clean and healthy.***

4. **Related Cost Details**

It is anticipated that repairs may be required. Maintenance for repairs to bike shelters and corrals in case of vandalism such as paint touch-up, graffiti removal, etc. are estimated at \$250 per year.

5. **Future Funds Needed**

Replacement of bike shelters and corrals is anticipated in 10 years.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Downtown Improvement Program				
Department	Downtown	Source of Funding	Tax Increment Finance Authority		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000

1. Description and Location

Downtown Improvement Program will ensure that the Central Business District is a safe and inviting environment for those who work, live, shop, and visit by maintaining the various amenities located downtown.

2. History and Plans

2013

Inventory and determine lifecycle and replacement plan for all amenities throughout downtown. Based on this inventory, create a repair/replace schedule based on either amenities or location. To be included in the inventory: landscaping hardscape and plant materials, trash cans, electric outlets, benches, signage, bike racks, irrigation, street lights, bricks, and banner brackets.

2014

Purchase of 30 new trash cans. \$23,340
 Purchase of six new benches as part of the reconstruction of parking lot #2.
 Remove diseased ash trees and replace electrical and irrigation in corresponding areas.

2015

Continuation of removal of diseased and dead trees and replace electrical and irrigation in corresponding areas.
 Removal and replacement of 25 trees. \$6,500

2016

Begin replacement of concrete planters that have cracked due to tree roots. This will be a multi-year project due to cost and complexity of planter replacement. Engineering firm will be contracted for assistance with planter design and phase-in. Based on planter replacement costs, the remainder of the funding will be used as outlined below:

Replacement of rusted bike racks throughout downtown.
 Purchase of benches in areas currently without seating.

2017-2018

Continue replacement of concrete planters, addition of benches and replacement of bike racks.

2019-2021

Implementation improvements based on sequence in plan completed in 2013.

3. **Need and Impact**

Downtown is highly visible to both residents and visitors alike, and due to the continued wear and tear of various amenities, it is necessary on an annual basis to repair, replace and sometimes add in new features to keep the area looking presentable and safe.

Downtown Improvement Program benefits are:

- Protection of people and property
- Promote community development
- General government efficiency

Linkage to Vision: We will work together toward being a community . . .

- ***Where shopping, dining and entertainment options thrive.***
- ***With a reliable and sustainable infrastructure.***

4. **Related Cost Details**

None

5. **Future Funds Needed**

Based on the MP2 inventory, repair/replace by specific amenities will be planned.

INDIVIDUAL PROJECT DESCRIPTION

Project Parking Lot Renovations

Department Downtown **Source of Funding** Tax Increment Finance Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$335,000	\$10,000	\$185,000	\$15,000	\$285,000

1. Description and Location

Milling, overlay, cracksealing, reconstruction and re-striping of various downtown parking lots over time. Lot selection is based on need and placement within downtown to best utilize funds and manpower while keeping strategic parking lots open for businesses and customers to use.

2. History and Plans

Reconstruction, implement milling, overlay and repainting over a multi-year cycle based on the lot need and allocation of parking spaces. No year should have more than two parking lots in design or construction so cars utilizing the spaces can be redirected to other lots within downtown. PASER system to determine priority of need. State grants will be used when possible for matching situations.

Projected costs include expectation for project management costs. Please see following page for details on what project specific items are included.

2011

Planning & Design of lot #2	\$10,000
Mill and overlay of lots 9 & 11	\$55,000

2013

Reconstruction of lot 2 (Jockey Alley), including dumpster enclosures, lighting, planters, benches, trash cans, irrigation, and sidewalks.	\$870,000
--	-----------

2013

Planning and design of Lot 8 (located at the SW corner of Lansing and Broadway)	\$13,000
PASER review of all lots	\$5,000

2015

PASER all lots and alleyways, crackseal parking lot #1, thin overlay of lots 10 and 12, markings in all lots. These PASER ratings resulted in rearranging the order of parking lot construction projects due to current conditions.

2015-16

Design of Lot 3 (Town Center). This design is for the lot and includes the greenspace at Town Center. Construction of lot #3 moved to 2017 to better coordinate with reconstruction of Broadway. Agreement between Housing Commission and City for use of 25 parking spaces adjacent to lot #10. \$25,000

2017

Reconstruction of Lot #3 (Town Center) \$300,000

Square yardage per lot = 2,924

Parking spaces in lot = 81

*Cost includes: surveying, engineering, site amenities (lighting, irrigation, landscaping, etc.)

PASER rating of all lots (2 year cycle) \$5,000

Restripe all lots \$20,000

Crackseal lots as necessary \$10,000

2018

Design of lot #7 (NE corner of University and Illinois) \$10,000

2019

Reconstruction of lot #7 (SW corner of Main and Michigan) \$150,000

Square yardage per lot = 1,722

Parking spaces in lot = 48

*Cost includes: surveying, engineering, site amenities (lighting, irrigation, landscaping, etc.)

PASER rating of all lots (2 year cycle) \$5,000

Restripe all lots \$20,000

Crackseal lots as necessary \$10,000

2020

Design work for lot #8 (SE corner of University and Illinois) \$15,000

2021

Reconstruction of lot #8 (SW corner of Broadway and Lansing) \$250,000

Square yardage per lot = 2,724

Parking spaces in lot = 76

Cost includes: surveying, engineering, site amenities (lighting, irrigation, dumpster enclosure, landscaping, etc.)

PASER rating of all lots (2 year cycle) \$5,000

Restripe all lots \$20,000

Crackseal lots as necessary \$10,000

3. Need and Impact

Those lots with the greatest need are completed first based upon PASER system. Impact is based on functionality and usage of the lots. Parking lots are used by hundreds of customers, employees, owners and residents within downtown on a daily basis.

PASER Ratings (as of 2015):

	<u>Driving Area</u>	<u>Parking Area</u>
Lot #1	7.0	7.0
Lot #2	10.0	10.0
Lot #3	5.0	5.0
Lot #4	5.0	5.0
Lot #5	5.0	5.0
Lot #6	5.0	5.0
Lot #7	4.0	4.0
Lot #8	4.0	4.0
Lot #9	9.0	9.0
Lot #10	6.0	6.0
Lot #11	9.0	9.0
Lot #12	6.0	6.0

Linkage to vision: We will work together toward being a community . . .

- ***Where shopping, dining and entertainment options thrive.***
- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

A systematic review utilizing the PASER system to determine priority of repair of downtown parking lots will take place just as we do for roads, parking lots and paths in our park system. Additional lots may need to be addressed.

Future costs will include restriping, patching and repaving and will be dependent on asphalt and labor at that time.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Pedestrian Street Lighting				
Department	Downtown	Source of Funding	Tax Increment Finance Authority/Grant		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$100,000	-0-	\$160,000	-0-	\$160,000

1. Description and Location

Continue energy efficient (LED) pedestrian and street lighting throughout downtown for safety and walkability.

2. History and Plans

High-pressure sodium lights were successfully replaced with LED in 2012 and new LED fixtures were included in the reconstruction of parking lot #2. However, there are many areas of downtown that do not have pedestrian lighting that would continue the streetscape appearance of downtown and would fit into being a more walkable community.

2010

Michigan Ave. between Oak and Washington was completed.

2012

Replacement of existing fixtures with LED was completed.

2013

Installation of LED fixtures in parking lot #2.

2016

Develop comprehensive lighting plan for remainder of downtown - Franklin, Mosher, Lansing, Pine, Oak, Illinois, Wisconsin, and Washington.

2017-2021

Implementation of lighting plan – locations, type, and number dependent on 2016 study. Due to limited CBD TIFA funds 2017 lighting installation will be grant dependent.

Additionally, purchase of bulbs for replacement will take place so we will have a supply on hand as they need to be replaced.

3. Need and Impact

To complete the existing streetscape look throughout downtown to present a more cohesive image for downtown and allow for pedestrian and street level lighting to encourage a more walkable downtown. Pedestrian street lighting benefits are:

- Protection of people and/or property
- Promote community development
- Transportation and related services
- Environmental improvement

Linkage to vision: We will work together toward being a community . . .

- Ø Where shopping, dining and entertainment options thrive.***
- Ø That is safe, clean and healthy.***
- Ø With well maintained, livable and desirable neighborhoods.***

4. Related Cost Details

Based on photometric standards, manufacturing and installation costs, the estimated cost of lighting is \$80,000 per block (assuming both sides need lighting). This CIP plan sequences the design and construction of pedestrian and street lighting over an extended period of time and calls for a comprehensive plan of remaining areas to be lighted to be developed in 2016 with implementation beginning in 2017.

Current technology necessitates the replacement of the LED light bulbs approx. every 7-10 years at a cost of \$900 each. LED bulb replacement costs will be added in the CIP starting in 2019.

Desire to replace existing lights on Michigan between Oak and Washington with lights and layout found in other parts of downtown.

5. Future Funds Needed

Based on plan developed in 2016 additional sections of pedestrian street lighting are likely to be added into future years.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Streetscape Improvements

Department	<u>Downtown</u>	Source of Funding		<u>Tax Increment Finance Authority/Grants</u>		
Year Program Proposed	2017	2018	2019	2020	2021	
Capital Cost	-0-	-0-	-0-	\$75,000	\$75,000	

1. Description and Location

Streetscape amenities in areas of CBD TIFA district downtown that have not been completed including:

- Illinois – between Washington and University
- Michigan – between Oak and Washington
- Michigan – between University and Lansing
- Mosher – between Broadway and Main
- Mosher – between Court and Fancher
- Lansing – between Mosher and Michigan
- Franklin – between Chippewa and Michigan
- Court – between Chippewa and Mosher
- University – between Michigan and Illinois
- Washington – between Broadway and Illinois
- Pine – between Broadway and Michigan
- Oak – between Broadway and Michigan

2. History and Plans

2014

Discussion held with property owners in a variety of areas of downtown that do not have the streetscape features found on Main and Broadway. Property owners requested installation of amenities to match those found in other areas such as:

- | | | |
|--------------------------|------------|--------------------------|
| Decorative brickwork | Trash cans | Benches |
| Planters/plant materials | Bike racks | Banner arms and brackets |
| Irrigation | Electrical | |

Costs are set at \$75,000 per year at this time assuming all amenities above will be needed. Costs can be lowered in areas that may have some of the items listed above or increased if additional infrastructure work is necessary. Work on these infrastructure improvements will be coordinated with DPW street projects.

2016

Develop streetscape installation plan using the lighting study and plan as a guide to sequence the lighting and streetscape improvements at the same time if possible.

2020

Begin preliminary plan for streetscape installation based on plan developed in 2016. Priority area is expected to be Michigan between Oak and Washington.

2021

Coordinate streetscape improvements for Michigan Ave. with DPW work occurring in 2021.

3. Need and Impact

Completing the missing streetscape amenities will give downtown a cohesive and unified look throughout.

Linkage to Vision: We will work together toward being a community . . .

- Ø Where shopping, dining and entertainment options thrive.***
- Ø With a reliable and sustainable infrastructure.***

4. Related Cost Details

Street light installation and streetscape improvements will be sequenced together when possible to reduce costs and disrupt planned areas as little as possible.

5. Future Funds Needed

Upkeep costs for plant materials, utility costs for irrigation and lighting.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Wayfinding System

Department Downtown **Source of Funding** Capital Improvement Fund/Grant/Tax Increment Finance Authority

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$50,000	\$235,000	\$205,000	-0-	-0-

1. Description and Location

To streamline the City's directional signage efforts, it is recommended to create a signage system for all modes of transportation (auto, pedestrian, bikes) within the city limits. Current signage in the City is ineffective and has no cohesive design, size, and method of placement. This lack of signage makes it difficult for visitors traveling in Mt. Pleasant to find locations of importance such as our park system, downtown, and Central Michigan University and has led to an increase in complexity for auto and pedestrian traffic. Additionally, many residents of Mt. Pleasant are unaware of the many cultural amenities found in our city due to a lack of signage. Increase in costs due to timing of project and increase in material and labor costs.

2. History and Plans

2008

The Planning Commission, with the assistance of Vision 20/20, gathered data on signage styles for both Mission/Pickard and downtown. At this time discussions began on a unified wayfinding system for the city.

2015

Updated pricing was obtained.

2017

These activities will begin as soon as community branding is completed.

RFP for wayfinding to encompass:

- 1.) Planning study with community outreach meetings - discuss potential number of signs, locations and cultural amenities based on stakeholder meetings with internal departments such as Parks and Public Works in addition to community organizations and institutions such as Central Michigan University, Union Township, Saginaw Chippewa Indian Tribe, McLaren Hospital, Chamber of Commerce, Convention and Visitors Bureau, Art Reach, CRDL, Non-Motorized Transportation organization, Chippewa River Watershed Conservancy, etc.
- 2.) Design and bid documents - based on findings from the planning study (number of signs, locations, what should be included, etc.) Prepare RFP for design of wayfinding signage.

2017

Wayfinding study \$50,000

2018

Install Phase I which includes:

Downtown – vehicular and amenities	\$80,000
Downtown – entrance signs (2 of four entrances)	\$80,000
Parks - entrance and vehicular signage	\$75,000

2019

Install Phase II

City-wide – vehicular and amenities	\$80,000
Downtown – entrance signs (2 of four entrances)	\$80,000
Parks – trail and amenities signage	\$45,000

3. Need and Impact

To assist economic development efforts, increase ease of mobility, and strengthen neighborhoods for the City of Mt. Pleasant it is recommended we incorporate a city-wide directional signage system. Wayfinding benefits are:

- Promote health and welfare
- Community Development and placemaking
- Community Cultural and leisure programs
- Transportation and related services
- Environmental improvement

Linkage to vision: We will work together toward being a community . . .

- Ø ***Where services and opportunities are optimized by communicating, coordinating and cooperating with other entities and our citizens.***
- Ø ***Where shopping, dining and entertainment options thrive.***

4. Related Cost Details

Installation costs are included in Phase I and II.

5. Future Funds Needed

Repair and replacement of signs over time will likely be required.

**SUMMARY OF PROJECTS
PARKS DEPARTMENT**

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
Chipp River Protection Program	CI/GR	\$50,000	\$200,000	\$48,000	\$400,000	\$200,000	\$898,000
Island Park Fitness Trail	CI/GR/DO/RF	0	153,000	0	0	0	153,000
Island Park S Restroom Imprvmt	CI	0	130,000	0	0	0	130,000
Medium Size Project	CI/GR/RF	35,000	0	65,000	0	20,000	120,000
Mid-Mich/GKB Path Connect N	CI/GR/DO	0	0	0	25,000	450,000	475,000
Mission Creek Improvements	CI/GR	319,000	25,000	TBD	TBD	TBD	344,000
Nelson Park Walkway	CI/DO	28,000	0	0	0	0	28,000
Park Partnership Program	CI	5,000	5,000	5,000	5,000	5,000	25,000
Playgrnd Eqpmnt/Univ Access	CI/GR	35,000	0	150,000	85,000	35,000	305,000
Renovtn Roads, Parking, Trails	CI/GR	50,000	150,000	25,000	80,000	0	305,000
Riverside Cemetery Columbarium	CI	0	0	0	0	80,000	80,000
Totals		\$522,000	\$663,000	\$293,000	\$595,000	\$790,000	\$2,863,000

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Chippewa River Bank Protection Program				
Department	Parks	Source of Funding	Capital Improvement Fund/Grant		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$50,000	\$200,000	\$48,000	\$400,000	\$200,000

1. Description and Location

The funds for this program focus on protecting the Chippewa River Corridor as it flows through the City. This may include various locations in City Parks or along roadways or other important resources impacted by the Chippewa River and its tributaries. This program helps protect city-wide resources including riverbanks, bridge abutments, trails, weirs, overlooks, roads, sewer outfalls, culverts, wetlands, trees, animal/fish/bird habitats and other important resources impacted by seasonal flooding and scouring effects of river flow as well as the health of the river itself. These goals may be achieved over a single year or phasing in multiple years to complete a project. Costs associated with the river corridor tend to be higher due to enhanced engineering, MDEQ permitting requirements and the ever changing river corridor due to damaging flood events. The 2017 GRLI Grant funded project (partnership with SCIT) focuses on improvements to the riverbank to help reduce sedimentation and erosion in critical areas and includes bank stabilization through tree revetments, removals, and replanting of riverbank areas.

2. History and Plans

2014

Riverbank Erosion Protection Chipp-A-Waters \$120,000

2015

Reconstruction Mill Pond Weir structure \$220,000

State flood relief funds + SCIT 2% Grant

Broadway St. River Repair Project \$235,000

State flood relief funds + SCIT 2% Grant

2016

GRLI River Protection Grant Program SCIT partnership Phase 1 \$51,000

Grant funded

City contribution for engineering \$10,000

All engineering for 2016 & 17 project spent in 2016

2017

GRLI River Protection Grant SCIT partnership Program Phase 2 \$50,000

Grant funded

2018

Mill Pond/Nelson Riverbank Erosion Protection \$200,000

These funds were increased due to actual cost comparison with the 2015 Broadway St. Riverbank Reconstruction Project.

2019

Design, Engineering, Grant application, DEQ permitting, and bidding services for 2020 Mill Pond Dam reconstruction project \$48,000

2020

Reconstruction of Mill Pond Dam Structure \$400,000

2021

Nelson/Island Riverbank Erosion Protection \$200,000

These funds were increased due to actual cost comparison with the 2015 Broadway St. Riverbank Reconstruction Project. The project was also moved from 2019 to 2021 to accommodate the higher priority Mill Pond Dam Reconstruction Project and associated costs.

3. Need and Impact

The Chippewa River is a tremendous resource as it flows through the City of Mt. Pleasant. As listed in item 1 above, many critical resources and infrastructure are found in the river corridor; taking a proactive approach to protecting the Chippewa River’s natural and man-made resources is paramount to preserving healthy infrastructure and leisure enjoyment well into the future. These projects will be designed to:

- Ø Protect and/or enhance the river resource itself keeping it vibrant and healthy.
- Ø Protect and/or enhance man-made structures and or natural resources directly impacted by the river.
- Ø Reduce maintenance on riverbanks and river related infrastructure.
- Ø Whenever possible seek out partners and available grant funds to protect the resource.

Much of the work in this program will be required to take place in the summer months when river flow rate is at its lowest. This may occasionally impact recreational use of the river corridor.

Linkage to Vision: We will work together toward being a community . . .

- Ø ***With varied recreational and cultural opportunities.***
- Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Most projects in this program will stand on their own with most creating savings in long term maintenance and operational costs due to the improved infrastructure and reduced riverbank damage and erosion. MDEQ permitting and engineering costs will always be considerable part of this program. Maintenance costs for these projects will be contained in various city operational budgets.

5. Future Funds Needed

Some projects in this program may be multi-year, but most will stand alone in one funding year. Funding may skip a year or multiple years based on other funding priorities in various areas.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Island Park Fitness Trail				
Department	Parks	Source of Funding		Capital Improvement Fund/Grant/ Donation/Recreation Fund	
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$153,000	-0-	-0-	-0-

1. Description and Location

The Island Park Fitness Trail includes the addition of trails connecting the Lincoln Street Bridge with the Oak Street Bridge to the south and Vietnam Vets Bridge to the North. This project effectively completes the much requested trail “loop” around Island Park and fulfills the need for off street trail connections to the Oak Street and Vets Bridges. In addition to the completed trail loop, the project includes outdoor fitness equipment stationed along the south leg of the trail in Island Park across the river from the tree street neighborhoods, high-rise housing development and City Hall.

2. History and Plans

The GKB Riverwalk Trail has become one of the most utilized resources in the city parks with many residents and visitors taking advantage of the trail system year round. State DNR funding for trails has increased dramatically over the past 5-8 years. Staff suggests coupling this project with the replacement of the aging Vietnam Vets Bridge and satellite play equipment in Island & Pickens Parks also proposed in the same year which increases the chance for matching grant funds for the project.

Need and Impact

The project establishes an outdoor fitness trail designed to help reduce obesity and provide additional healthy activities in the parks. The project increases safety in our most heavily used park by creating a complete off street trail system in Island Park. It establishes a comprehensive “looped” trail along the river connecting Lincoln, Oak, Pickens, and Nelson Bridges. The project coordinates other proposed projects in the same location and year to maximize DNR grant opportunities.

Linkage to Vision: We will work together toward being a community...

Ø With varied recreational and cultural opportunities.

4. Related Cost Details

Ongoing maintenance of this addition to the GKB Riverwalk would be housed in the Parks operational budget.

5. Future Funds Needed

LED Solar lighting could be added to this trail loop in the future for extended use and enjoyment.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Island Park South Restroom Improvements

Department Parks **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$130,000	-0-	-0-	-0-

1. Description and Location

Island Park South Restroom, located adjacent to the farmers’ market pavilion, is the heaviest used restroom facility in the Mt. Pleasant Park system. Staff is recommending that the existing facility be updated with additional stalls to handle the increased demand on the facility to include changing areas accommodating the increasing demand from the spray park, skate park, Playscape, farmers market, softball leagues, and tournaments held in the park.

2. History and Plans

The original restroom and supporting waste management infrastructure was not built to handle the volume of use the park restrooms see today. Upgrades to the waste lift stations that serve the Island Park restroom facilities were completed in 2015 making way for this project in 2018. Dewatering concerns at Island park may increase overall project costs.

3. Need and Impact

Being the heaviest used restroom facility in the Mt. Pleasant System, the Island Park South restroom supports diverse user needs from many park venues including the skate park, spray park, tennis courts, playscape, shuffleboard courts, horseshoe pits, ball diamonds, slide-land, trail users, farmers’ market, south shelter rentals and events such as family reunions and the like. This aging restroom with its existing number of stalls is overstressed and requires constant cleaning care from park personnel as well as increased repair and maintenance in an effort to maintain the standard of care and safety park users expect.

Originally constructed to handle much less traffic and wastewater flow, the Island Park south restroom facility has seen an increase in use over the past 15 years. Over the past few years much of the increased use has come from the addition of the spray park and softball tournaments in the park with patrons utilizing the facility for changing rooms and the synergy created with multiple popular venues in close proximity.

Linkage to Vision: We will work together toward being a community . . .
 Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Completed development plan will outline potential ongoing cost detail that will include increased electric and sewer/water costs for the rest room. The development plan will also outline additional staff time to maintain the facility at the current standard of care, maintenance, and safety.

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Medium Size Project

Department Parks **Source of Funding** Capital Improvement Fund/Recreation Fund/Grant

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$35,000	-0-	\$65,000	-0-	\$20,000

1. Description and Location

Generally between \$25,000 and \$75,000 of the funds for this program assists the City Parks in achieving medium size project goals over a single year or phasing in multiple years. The 2017 project improves the Island Park ball fields including all field lamp replacements, dug out repairs, and field irrigation. \$25,000 will come from the recreation fund to assist in the completion of these improvements.

2. History and Plans

2012

Interactive and hard copy mapping for Riverwalk Trail \$15,000

2014

Riverbank Repair Chipp-A-Waters (\$60,000+\$60,000 2%) \$120,000

Riverside Cemetery Wayfinding \$11,000

Horizon Park Ball Field Improvements *Total from Recreation Fund* \$20,000

2015

Island Park Infrastructure Improvements \$25,000 from Recreation Fund \$60,000

a) Farmers Market Patio

b) North Ball Fields Access Pathway

2016

Island Park Main Pavilion Roof Replacements \$75,000

2017

Island Park Ball Field Enhancements (\$25,000) *Recreation Fund* \$35,000

Additional \$10,000 was added to this project for sports lighting re-lamp as many of the bulbs have been failing, a re-lamp has not taken place for 14 years at the facility.

a) Field Irrigation & Dugout

b) Improvements

c) Sports Lighting Lamp replacements 3 fields

2019

Nelson Park Shop Improvements \$65,000

2021

Mill Pond Park Nature Center Redevelopment phase 1 \$20,000

3. Need and Impact

These projects will continue to offer the end user quality and up-to-date medium size projects and are designed to reduce maintenance, enhance and improve parks infrastructure, accessibility, aesthetics, and safety. 2017 Island Park is our heaviest utilized facility with Ball fields seeing extreme annual use from community leagues to state and National tournaments. Last ballfield lighting re-lamp was done over 16 years ago.

Linkage to Vision: We will work together toward being a community . . .

- ***With varied recreational and cultural opportunities.***

4. Related Cost Details

Most projects in this program will stand on their own with most creating savings in long term maintenance and operational costs due to the improved infrastructure. Maintenance costs for these projects will be contained in the parks operational budget.

5. Future Funds Needed

Some projects in this program may be multi-year, but most will stand alone in one funding year. Some projects follow a theme throughout a number of years or funding may skip a year based on other funding priorities in various areas.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Mid-Michigan/GKB Pathway Connection North				
Department	Parks	Source of Funding		Capital Improvement Fund/Grant	
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$25,000	\$450,000

1. Description and Location

The 2020 and 2021 project plan, in cooperation with the Mid-Michigan Regional Pathway group, proposes to conduct planning and grant application to establish a one-mile long paved trail (attached map) connecting the GKB Riverwalk at Island/Nelson Park north to Mission Creek Park.

2. History and Plans

The GKB Riverwalk Trail has become one of the most utilized resources in the Mt. Pleasant City Park system with many residents and visitors taking advantage of the trails year round. State DNR and other grant funding opportunities for trails and trail connections has increased dramatically in recent years.

2010 GKB Riverwalk South Connection

Chipp-A-Waters Access to Recreation Trail and Bridge Project \$418,000
 Included \$225,000 City funds and \$193,000 Access to Recreation grant funds.

The Access to Recreation Trail project served as the starting point for future southerly trail connection opportunities. With the addition of the Mary Ellen Brandell Bridge this existing trail now connects City park property on both sides of the Chippewa River and allows for access to the GKB Riverwalk Trail from the south side of the community.

2020 GKB Riverwalk North Connection

The 2020 and 2021 project plan in cooperation with the Mid-Michigan Regional Pathway group proposes to add a trail connecting the GKB Riverwalk Trail to Mission Creek Park and establishing a northerly connection point for the mid-Michigan regional pathway system.

Need and Impact

Pursuant of the goals and objectives in the 2016-2020 Parks and Recreation Master Plan coupled with the recent funding of a major portion of the Mid-Michigan Regional Pathway System, it is important for the City to look at projects/partnerships for funding and connections to a larger pathway system and connecting existing city park facilities. The addition of this pathway would:

- Add additional community-wide pedestrian access to the GKB Riverwalk Trail
- Connect Mission Creek Park to the GKB Riverwalk Trail system
- Connect the joint Union Township-City of Mt. Pleasant Dog Park to the pathway system
- Create a northerly connection point for the Mid-Michigan regional pathway

Connection points to regional pathway systems have been shown to:

- Increase the ability to obtain grant funding for pathway projects
- Increase the number of visitors to a community having positive economic benefits
- Provide additional opportunities to recreate contributing to a reduction in obesity and overall positive health benefit to the community

Linkage to Vision: We will work together toward being a community...

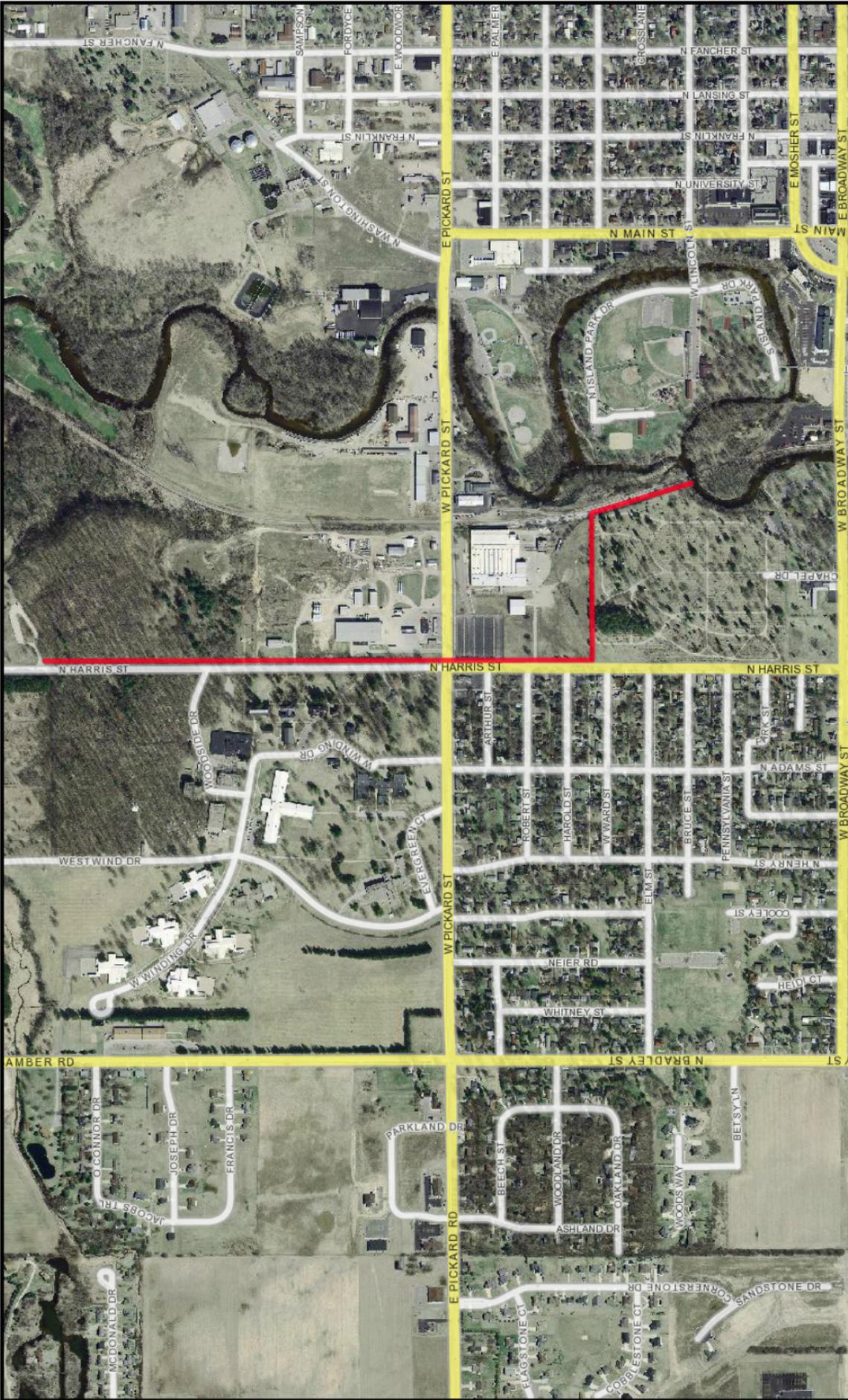
- Ø ***With a reliable and sustainable infrastructure***
- Ø ***With varied recreational and cultural opportunities***

4. Related Cost Details

Ongoing maintenance of this addition to the GKB Riverwalk Trail and linkage point to the Mid-Michigan Pathway system would be housed in the Parks operational budget.

5. Future Funds Needed

Plans are to continue to seek future linkages between the Mt. Pleasant GKB Riverwalk Trail and all Mid-Michigan regional and local trail opportunities. Partnerships with area agencies will be a focus with pursuit and leveraging of available grant resources. Funds for grant matches and future projects to fully integrate with area trail projects will be explored and likely part of future funding requests. A southerly trail loop to connect Crawford Road to our trail system is under consideration as the second phase of the Mid-Michigan GKB Pathway Connection.



Proposed Pathway Connection 1 mile



Isabella County
Map Service

web mapping by
Amalgam LLC



1:15000

Map Publication:

Fri Feb 26 2016 12:26:51 PM

Disclaimer:

This map does not represent a survey or legal document and is provided on an "as is" basis. Isabella County expresses no warranty for the information displayed on this map document.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Mission Creek Improvements

Department Parks **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$319,000	\$25,000	TBD	TBD	TBD

1. Description and Location

Develop Mission Creek Woodland Park as an improved recreational facility using a phased approach. With the addition of a dog park and increased use of the sled hill and winter activities, a modern, year-round restroom is the next proposed phase in 2017. In 2018, plans include a development of site plan and pro-forma with potential grant preparation. 2019 proposes construction activities based on site plan and formulated pro-forma with paved parking included in this phase. Development may take place in a multi-year program which could include picnic pavilion, playground, gate house, outdoor ice rink, facility lighting, warming house, trail and sled hill enhancements. The park could potentially become a fee based entrance facility generating revenue from visitors to the park. Increase costs include design, engineering and bidding services added to overall project cost.

2. History and Plans

1990-1995

Park renovations, trail work, electric to South Shelter

2001-2003

Sledding hill renovations \$30,000

2004

Outdoor pit style restroom removed

2014-2015

Dog Park \$120,000

2017

All season restroom facility w/ engineered septic system \$319,000

2018

Development of park site plan, pro-forma and grant package \$25,000

2019

Parking Lot and phased facilities per site plan TBD by pro-forma

2020

TBD by site plan

3. Need and Impact

There is a community need for outdoor winter activities and enhanced safety and use of Mission Creek Park. With the addition of a Community Dog Park, pressure will increase for additional support facilities. Safe, controlled, and improved park facilities at Mission Creek Park could also contribute to revenue generated by charging a gate fee for activities in the park. Development of new park facility would have a significant impact on operational budget in the form of increased maintenance and utility costs.

Linkage to Vision: We will work together toward being a community . . .

Ø With varied recreational and cultural opportunities.

4. Related Cost Details

General Fund operational budget allotment would increase substantially to safely manage the property. Additional staffing would be needed to manage the developed facility including plowing, trash pickup, and restroom cleaning. Increased utilities cost for restroom, lighting, pavilion, and ice rink would be expected. Portion of staffing costs could be offset by entrance fees and pavilion rentals.

5. Future Funds Needed

Based on pro-forma, construction of site plan in a multi-year program could include an ADA restroom facility, pavilion, gate house, paved parking areas, outdoor ice rink, facility lighting, warming shelter, playground, and trail and sled hill improvements.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Nelson Park Walkway				
Department	Parks	Source of Funding	Capital Improvement Fund/Donation		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$28,000	-0-	-0-	-0-	-0-

1. Description and Location

In 2002, Isabella Bank donated funds to complete the Centennial Gardens Project at Nelson Park which includes a fountain and patio which has been well used by the community. The bank has been interested in partnering with the City again to include a universally accessible walkway to facilitate access to the lower fountain area, gazebo expected to be installed in 2016, and the many weddings that take place at Nelson Park.

2. History and Plans

2002

Installed pond and fountain at Nelson Park “Centennial Gardens” via donation from Isabella Bank

2008

Nelson Park Climbing Rockscape structure west of fountain \$10,000

2014

Rotary Club Covered Bridge Project \$40,000
 \$20,000 Rotary Club donation
 \$10,000 MPACF Grant
 \$10,000 Capital Improvement Fund

2016

Isabella Bank Gazebo Project \$72,000

2017

Proposed universally accessible walkway to gazebo and fountain \$28,000

3. Need and Impact

Nelson Park is a showcase in the downtown area and sits in the center of the Riverwalk Trail system. The Rotary Bridge, gazebo and walkway will assist in the number of weddings that take place at Nelson Park as well as give a location for small non-amplified music venues to take place and provide universal accessibility to the gazebo and lower fountain area. The shelter would serve as a centering place for Nelson Park.

Linkage to Vision: We will work together toward being a community...

➤ ***With varied recreational and cultural opportunities.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Park Partnership Program				
Department	Parks	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000

1. Description and Location

This program incentivizes partnerships for development of new and existing City park facilities. Project description and location are determined by cooperative planning with various community groups and individuals. Currently, the program matches dollar for dollar or in-kind labor leveraged towards a planned project. Pending annual participation, remaining funds will be used on smaller capital improvement projects and designs, or carried in a designated fund balance for future large projects and grant matches.

2. History and Plans

2009

GKB Trail Project	\$6,000
Island Park Cameras Vets Memorials	\$8,000
Pickens Field Partnership	\$9,000
Yost Field Partnership volunteer labor and funds	\$5,000

2010

Island Park Girls Youth Softball Field Fencing	\$5,000
--	---------

2011

Chipp-A-Waters Park revitalization Home Depot Volunteer Labor and Funds	\$1,000
---	---------

2012

Lower Pickens Bleacher fundraising/Installation w/local partners	\$2,000
--	---------

2013

Yost Field Improvements MPBA	\$15,000
Mission Creek Dog Park Design	\$3,000
Pickens BEA Moses Property Donation	\$2,000
Nelson Covered Bridge Design Rotary Club	\$500
Nelson Gazebo Design Isabella Bank	\$500

2015

Horizon Park Carolynn Cosan Pavilion	\$15,000
--------------------------------------	----------

2016

Nelson Park Gazebo/Walkway Isabella Bank	\$5,000
--	---------

3. Need and Impact

Increases involvement and commitment of community organizations, businesses, groups and individuals towards improvements of City park facilities. Projects develop a market of users as we develop and invest in our park recreation areas and facilities.

Linkage to Vision: We will work together toward being a community . . .

- ***Where services and opportunities are optimized by communicating, coordinating and cooperating with other entities and our citizens.***
- ***With varied recreational and cultural opportunities.***

4. Related Cost Details

Many of the improvements help stabilize our maintenance costs due to increase in the quality of the facilities. Those projects that may increase the costs of utilities and supplies are budgeted for within the appropriate operational budget.

5. Future Funds Needed

The program has proven successful at different levels over a number of years. As community partners continue to innovate and collaborate, parks staff believes the program will continue to improve. With continued marketing and planning designed to engage new and past project partners, ongoing capital fund requests are anticipated.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Playground Equipment & Universal Access <small>(New & Replacement)</small>				
Department	Parks	Source of Funding	Capital Improvement Fund/Grant		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$35,000	-0-	\$150,000	\$85,000	\$35,000

1. Description and Location

These funds are utilized to:

- Place new and replace old playground equipment, both composite and single activity structures, in various locations throughout the park system. (Spray Park is considered a water playground and is included in this program)
- Provide new and repair old universal access points to various park amenities including: linkage points to the Riverwalk Trail, playground equipment, spectator seating areas, sport courts, ball fields, pavilions, restrooms, and park buildings. Each project year will identify project location and overview.

2. History and Plans

2009

Island Park Spray Park Project \$216,000

2010

Universal Access Points to Park amenities including: \$10,000
Island Park Spray Park & Sunnyside play structure

2011

Island Park Riverwalk Trail Connector and walkway repair \$10,000

2016

Island Park Playscape redevelopment project \$242,000
Yost Park Playground Component Structure \$82,000
Potter Playground Component Structure \$64,000

2017

Universal Access Island Park – tennis, basketball, horseshoe, \$35,000
and satellite shelter facilities per ADA transition plan

2019

Island and Pickens replacement of satellite play components \$65,000
Purchase and installation of Mission Creek playground
component structure

2020

Replace Sunnyside Park playground component structure \$85,000

2021

Upgrade & universal access to Chipp-A-Waters playground \$35,000
structure per ADA plan

3. Need and Impact

- Public is very aware of needed playground replacement, new equipment, universal access to current play equipment, and other park venues such as spectator seating areas, sports fields, and play courts
- Playgrounds support and invite park use by families
- Accessible facilities provide opportunities for all users regardless of age or ability and enhance safety for all.
- Play areas, spectator seating, & other park venues need to be safe and accessible to all
- Facilitate accessible Riverwalk Trail linkages in key park areas
- Improvements follow the 2016-2020 Parks Master Plan ADA transition component

Linkage to Vision: We will work together toward being a community . . .

- Ø ***With varied recreational and cultural opportunities.***
- Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

- Labor cost to annually inspect and maintain quality standard of care and safety in all park facilities.
- Training and testing of staff to maintain National Playground Safety Inspector certification.
- Annual replenishment of safety surfacing for all park playgrounds.

5. Future Funds Needed

Funds will be requested annually to keep standards current with use and demand.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Renovation of Park Roads, Parking Lots, and Paved Trails				
Department	Parks	Source of Funding	Capital Improvement Fund/Grant		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$50,000	\$150,000	\$25,000	\$80,000	-0-

1. Description and Location

Numerous areas exist within the parks and cemetery where roads, bridges, parking areas, trails, overlook decks, and fencing are considered key infrastructure elements for use, access, and safety of facilities. Renovation of existing paved areas, paving of unpaved roads, parking lots, and trail sections as well as renovation and repair of wooden overlook decks and fencing are part of this program. Replacements, upgrades, and infrastructure repairs to trails, bridges, fishing decks, boardwalks, and safety railing are also included in this program.

2. History and Plans

2012

Mill and repave Riverwalk Trail in Millpond Park from Broadway to dam area - \$30,000 DNR grant received to assist with this project. \$120,000

2013

Develop Asset Management system for existing park roads, parking facilities and paved trail areas as well as park structures and buildings \$12,000

2014

Replace wooden footbridge at Nelson Park (moved forward due to deterioration and age) \$40,000

2015

Replace bridge decks at various park locations due to deterioration \$10,000

2016

Mill and repave Mill Pond Trail Adams to Leaton Streets \$75,000
 Replace bridge decks at various park locations due to deterioration \$50,000

2017

Replace fishing decks at Mill Pond Park due to deterioration and age \$50,000

2018

Replace Island Park Vets Memorial Bridge \$150,000

2019

Pavement Repair various parks \$25,000

2020

Replace Island and Nelson Fishing decks \$80,000

3. Need and Impact

Park facilities have been improving over the past ten years and we are beginning to see developed park infrastructure deteriorate at a rapid rate due to high community use. With these improvements and overall quality of facilities and programs, use is constantly increasing. It is a necessity to maximize available space and create a safe, attractive, and controlled atmosphere. Parking and drainage are needed while maintaining existing infrastructure to keep parks vital. These types of additions, repairs, and upgrades are planned to keep and maintain safe, attractive, and inviting parks.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure

4. Related Cost Details

Staff is continuing to evaluate short and long-term maintenance and replacement issues. As amenities in the parks age and deteriorate at an increasing rate, additional staff expertise and materials are needed for repair and maintenance.

5. Future Funds Needed

Future replacement and reconstruction will be needed as park roads, parking areas, paved trails, bridges, fishing decks, and boardwalks show their age at an increasing rate.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Riverside Cemetery Columbarium				
Department	Parks	Source of Funding		Capital Improvement Fund	
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	-0-	\$80,000

1. Description and Location

Once all traditional lots are sold in the cemetery, no space will exist for future burials. This proposal introduces the Columbarium to continue meeting the needs of increasing resident burials. In 2013, cremations overtook traditional ground burials as the preferred form of burials in the United States. A Columbarium is an above-ground disposition site for cremations with small niches in which to place urns and is becoming increasingly popular as cemetery burial space becomes limited. The word Columbarium comes from the Latin "columba," meaning "dovecote," a compartmented house for doves. Columbaria date back to early Greek and Roman times. (see attached photos for modern day examples installed in today's cemeteries)

2. History and Plans

The 2015 final plot layout reserves areas to construct future columbarium for efficient burials and improved maintenance while continuing to appropriately meet growing needs of the citizenry.

2015

Completion of section at Harris & Broadway with area reserved for future Columbarium

2021

Purchase & install Columbarium as designed & designated in 2015 plot layout plan
(*this project was moved from 2019 to 2021 to accommodate higher priority items*)

3. Need and Impact

As all areas of the cemetery continue to fill, choices become limited. When the final plots are laid out and spaces are sold, we expect that the public will pressure us to continue to provide spaces for burials. Appropriate and efficient uses of cemetery grounds require planning and installation of proper infrastructure. The addition of a Columbarium maximizes the space left at Riverside Cemetery and continues to provide burial options for citizens well into the future.

Linkage to Vision: We will work together toward being a community . . .

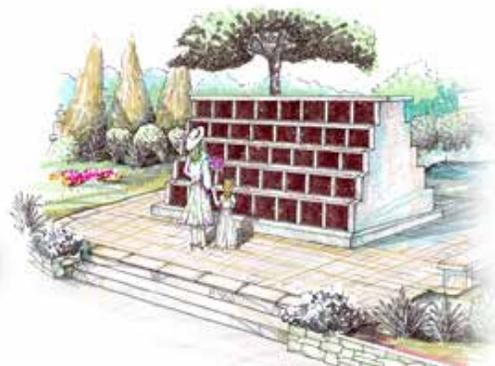
Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

Maintenance will increase then level off over time as lots and niches are sold and standard of care is maintained. As facilities and infrastructure are added and upgraded, additional staff will be needed to maintain growth but will level off when all areas are sold well into the future.

5. Future Funds Needed

Continued cemetery support services including paving of all cemetery roads for safety and universal access for all citizens. Additional CIP funds may be requested for additional columbaria construction as niches are sold.



This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Building Maintenance

Department Public Works **Source of Funding** Motor Pool

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$0	\$0	\$70,000	\$20,000	\$110,000

1. Description and Location

The entire Public Works building, to include the administrative office building, Motor Pool shop, cold storage areas, and salt barn – 1303 North Franklin Street.

2017

No maintenance planned. \$0

2018

No maintenance planned. \$0

2019

Drop ceiling, insulation replacement, office furniture \$70,000
Replacement, office improvements, HVAC

2020

Paint office area, parts room, shop, replace carpet \$20,000

2021

Paint outside of building, replace salt barn \$110,000

2. History and Plans

The DPW building was originally constructed in 1980. Routine maintenance and general upkeep of the building are necessary to keep the building functional and in good condition.

2011

Reconstruction of DPW drive east and west of cold storage area
Asphalt overlay of front parking lot and existing drive

2012

New pavement markings applied
Begin study regarding relocation of the DPW administration staff to City Hall
Facility Condition Index Study

2013

Cold storage area heated
Installed storage racks in the cold storage area

2014

Replaced door opener on sign room door
Replaced panel on wash bay door

2015

Remove fuel depot and underground tanks

2016

Roof repair, remodel front entrance to comply with ADA regulations, installation of a canopy over the front door

3. Need and Impact

Annual maintenance and/or repairs should be completed proactively rather than after a problem or emergency is realized. Currently, the building is not wheelchair accessible. The building requires modification in order to meet building code and ADA regulations.

A limited indoor air quality investigation of the DPW facility was completed in 2011 by AKT Peerless. Other concerns highlighted in that report are addressed and accounted for in the 2017-2021 Capital Improvement Plan.

The existing road salt storage barn will need to be replaced by 2021 due to the deterioration and corrosion of the wooden walls. Construction of a new road salt storage barn is estimated at \$100,000.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure

4. Related Cost Details

None

5. Future Funds Needed

Continuance of maintenance and upkeep.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Neighborhood Pedestrian Street Lighting

Department Public Works **Source of Funding** Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$120,000	\$120,000	\$120,000	\$120,000	\$120,000

1. Description and Location

This project would install decorative pedestrian lights in residential neighborhoods in the City to provide illumination of the public sidewalks. In 2016, lighting will be installed between High Street and Bellows Street along Douglas, University, and Franklin Streets. It will also be installed between Gaylord Street and Bellows Street along Lansing Street.

Costs included in this estimate are the lighting fixtures and poles, wiring, conduit, and new electrical service and meters. In addition, the projects would include costs for surveys and engineering to assure that lighting levels would be designed to meet industry standards and to appropriately design around driveways and street tree locations. Construction administration and inspection are also factored in.

The estimates do not include timer controls; daylight sensors would be used as is currently done with the Main Street project. It may be desirable to consider screening of the meter installations in the future.

These estimates relate only to costs associated with installation of the lighting and do not factor in any costs related to planning or prioritization of neighborhoods to be provided with lighting or stakeholder outreach and meetings.

2. History and Plans

At their goal setting retreat in 2013, the City Commission prioritized the installation of pedestrian lighting in additional areas of the City.

The cost estimates provided reflect the use of the same poles and fixtures that were selected for the Main Street Downtown to Campus Connection lighting. These poles and fixtures were selected due to their similar design to those in the downtown, but are distinguished in color and material.

The estimates provided assume an illumination level similar to the Main Street project and are generally based on providing illumination on two long or four short City blocks. Because block lengths vary, the assumed service area is 600 feet long with 18 poles and fixtures. Once service areas are recommended, annual estimates can be updated to reflect the true conditions of the planned service area.

In February of 2014, the Neighborhood Resource Unit recommended the installation of pedestrian lighting for future years:

1. Washington Street between Bellows Street and High Street, including additional lighting at the Washington/High intersection. (Completed in 2014).
2. Washington Street between High Street and Broadway Street (Completed in 2015).
3. Main and High Street Intersection. (Completed in 2014).
4. Broadway Street between Harris or Adams and Oak.(Recommended for completion in 2017)

The Neighborhood Resource Unit will review areas of consideration for lighting and to create a new 5 year location plan for lighting during 2016.

3. Need and Impact

The project will help to enhance walkability, safety, and nighttime activity in City neighborhoods.

Linkage to vision: We will work together toward being a community . . .

- ***With well maintained, livable and desirable neighborhoods.***
- ***That is safe, clean and healthy.***

4. Related Cost Details

While black concrete poles were selected for the lighting project for their durability and low maintenance, it is anticipated that there will be long term maintenance costs associated with the poles. Those costs are not known at this time.

LED lamps also have a finite life span. Industry estimates vary widely from about 8 to 15 years. The oldest LED lights in the City are still only a couple of years old, so there is no local track record on lamp life. It will be necessary to budget future funds for these replacements. With technology changes, the costs of lamps are also changing rapidly. Current costs for lamp replacement are around \$900 each.

It is necessary to budget for annual operating costs for electricity. These costs can be better estimated on a project by project basis, but a rough estimate of the annual cost of operating a long block is approximately \$1,100.

5. Future Funds Needed

There will be additional installation, maintenance and operational costs as lighting is added to more neighborhood blocks in future.

INDIVIDUAL PROJECT DESCRIPTION

Project Title New Sidewalk

Department Public Works **Source of Funding** Capital Improvement Fund/Special Assessment

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$0	\$200,000	\$117,000	\$100,000	\$100,000

1. Description and Location

New sidewalk construction is based on the 2015 sidewalk construction prioritization guidelines. Additional locations will be determined by the non-motorized transportation plan. Potential projects could be:

2017

No new sidewalk planned.

2018

Henry - Pickard to High	5280 ft.	\$115,950
Burch - Adams to Bradley	1900 ft.	47,000
ADA Ramps	30 ea.	37,050

2019

University - Andre to Pickard	941 ft.	\$23,700
Lansing - Pickard to Palmer	263 ft.	6,575
Palmer - Main to University	263 ft.	6,575
Bennett - Main to University	263 ft.	6,575
Oak - Locust to Maple	263 ft.	6,575
Palmer - Fancher to Mission	908 ft.	23,300
Southmoor - Crawford to Watson	600 ft.	15,400
ADA Ramps	25 ea.	28,300

2020

Bennett - Lansing to Mission	1044 ft.	\$27,700
Andre - Fancher to Mission	800 ft.	21,000
Crosslanes - Arnold to Mission	145 ft.	3,625
Cherry - Arnold to Kinney	305 ft.	7,700
ADA Ramps	32 ea.	39,975

2021

Lincoln - Kinney to Mission	530 ft.	\$14,250
Illinois - Kinney to Arnold	305 ft.	7,700
Maple - Fancher to Lansing	240 ft.	6,000
Cherry - Mission to Arnold	300 ft.	7,500
Stockman - Broomfield to Sunset	1350 ft.	33,750
Sunset - Stockman to CMU walkway	365 ft.	9125
Elizabeth - Illinois to Wisconsin	265 ft.	6,625
ADA Ramps	16 ea.	15,050

History and Plans

New sidewalk construction is identified in the City's Strategic Plan as a priority. From 1996-2005, approximately one mile of new sidewalk was constructed each year. The City currently has 89 miles of sidewalk. An additional 39 miles of sidewalk would have to be installed in order to have sidewalk on both sides of the street citywide. Property owners will be notified three years in advance of proposed sidewalk installation.

3. Need and Impact

Targeted locations are based on prioritization of walking routes, areas identified as pedestrian traffic areas without sidewalk, and street construction projects.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***
- ***That is safe, clean and healthy.***
- ***With well maintained, livable and desirable neighborhoods.***

4. Related Cost Details

None

5. Future Funds Needed

Continuation of program at \$100,000 every year after 2018. Half of the funding for this project will be from special assessments.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Sidewalk Replacement				
Department	Public Works	Source of Funding	Capital Improvement Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

1. Description and Location

The City focuses on identifiable hazards, such as large stumbling blocks and trees blocking sidewalk paths, small lips and cracks, pocketing water, and spalling. Replacement sidewalks are built to coincide with planned street and water main replacement projects and recommends the following:

2017

Complaint Locations	\$100,000
---------------------	-----------

2018

Complaint Locations	\$100,000
---------------------	-----------

2019

St Kinney: Pickard to Palmer	300	\$10,000
East side of street due to street reconstruction project	LFT	
Complaint Locations		\$90,000

2020

Complaint Locations	\$100,000
---------------------	-----------

2021

Complaint Locations	\$100,000
---------------------	-----------

2. History and Plans

Since 1996, approximately one mile of sidewalk has been replaced each year throughout the City. The Division of Public Works has created a sidewalk rating system so that the sidewalk replacement list can be prioritized. Starting in 2016 the City will be utilizing sidewalk mudjacking to reduce the cost and need to completely replace areas of sidewalk.

3. Need and Impact

Targeted locations based on construction projects are being prepared in correlation with street construction projects. Complaints and accident locations will be addressed as realized. The prioritization of walking routes and those areas referenced in the non-motorized transportation plan will be prepared.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***
- ***That is safe, clean and healthy.***
- ***With well maintained, livable and desirable neighborhoods.***

4. **Related Cost Details**

None

5. **Future Funds Needed**

Planned program of sidewalk replacement each year.

STCoordinated with Street Project

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Crack Sealing and Maintenance

Department Streets

Source of Funding Major Street Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000

1. Description and Location

The Major Street system will be crack sealed to inhibit the infiltration of water into the sub-grade and base. Approximately one tenth or 2.4 miles of major streets will be crack sealed in each year.

2. History and Plans

The estimated costs for this program continue to be adjusted due to better application yield estimates. The crack sealing program will be ongoing.

3. Need and Impact

The City uses crack sealing to protect the large investment it has in the 24 miles of major streets within its jurisdiction. Crack sealing will protect this investment by prolonging the pavement life and reducing replacement costs.

Linkage to Vision: We will work together toward being a community . . .

Ø With a reliable and sustainable infrastructure

4. Related Cost Details

Reduced patching maintenance and operational costs.

5. Future Funds Needed

Planned program of crack sealing each year.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Resurfacing and Reconstruction

Department	<u>Streets</u>	Source of Funding	<u>Major Street Fund/Capital Improvement Fund/Grant</u>		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$1,273,000	\$435,000	\$606,000	\$882,000	\$874,000

1. Description and Location

Project Area	Type	Cost	Cond.	Complete St Information					
				PASER (Resurf.)	Sidewalk	Lane Width	Width	On-str Prkg	Bike
<u>2017</u>									
Pickard Street Bridge Const.* Bridge Construction Engineering	Deck Replace.	\$712,000 \$71,000	5 (01')	B	12	50	N	N	N
^P Broadway: Bridge to Main Denison: Three Leaves to W. Campus	Mill & Overlay, Recon w/ Curb Crush and Shape	\$160,000 \$171,000	4 (88') 3 (88')	B O	11	40 29	E N	S D	C C
Three Leaves: Deerfield to Denison	Crush and Shape	\$67,000		V	11	29	N	D	C
US-127BR and Mission Roundabout Engineering ADA Compliance Ramp Repl.	Participate with MDOT	\$12,000 \$44,000 \$36,000							
<u>2018</u>									
Fancher: Pickard to Industrial Main: Pickard to Mosher Preston: Lynnwood to Isabella Engineering ADA Compliance Ramp Repl.	Thin Overlay Mill & Overlay Thin Overlay	\$114,000 \$121,000 \$114,000 \$24,000 \$62,000	5-6 (00') 6 (08') 5-6 (93')	G B O	11	42 36 40	R E E	D S S	M M S
<u>2019</u>									
^S Maple: Mission to Brown Sweeney: Broomfield to Preston Engineering ADA Compliance Ramp Repl.	Recon w/ Curb Thin Overlay	\$445,000 \$57,000 \$74,000 \$30,000	4-5 (76') 5-6 (91')	B O	11	42 37	E E	S S	C S
<u>2020</u>									
Brown: North Drive to Broadway** Crawford: Broomfield to Preston Engineering ADA Compliance Ramp Repl.	Recon w Curb Mill & Overlay	\$607,000 \$121,000 \$105,000 \$49,000	5 (01') 5-6 (04')	B O	11	38 34	R R	D D	C C

2021

Pickard: Bradley to Mission	Mill & Overlay	\$585,000	5-6 (02')	B	11	46	N	D	W
Preston: Washington to E Campus	Participate with CMU	\$200,000							
Engineering		\$33,000							
ADA Compliance Ramp Repl.		\$56,000							

2. History and Plans

Continuing program of resurfacing streets as surface deterioration becomes evident. Minor repairs/preparation prior to recapping will be necessary. Curb, gutter and drainage improvements may also be implemented as needed. As sidewalks are replaced during the reconstruction/resurfacing process, new handicap ramps will be installed to comply with ADA regulations. ADA regulations require all handicap ramps be replaced any time a street is altered.

Streets are selected for resurfacing based on their PASER value. PASER is a Pavement Surface Evaluation and Rating system developed by the University of Wisconsin. Each PASER value indicates the type of restoration or maintenance work that needs to be done on that section of street. The Street Department began using PASER in 2000 and evaluates the street surfaces on a biannual basis using the PASER system to aid in street maintenance planning and budget projections. The dates which follow the PASER ratings indicate the year in which the streets were last resurfaced.

Manhole adjustments and curb repairs are included in the individual costs per street.

Projects will be designed in accordance with the Complete Streets ordinance. Thin overlays, full overlays and mill and overlays are not assumed to include sidewalk upgrades.

3. Need and Impact

Normal surface wear, weather, and traffic over periods of time deteriorate the wearing course of pavement necessitating an overlay, which will extend the overall life of the road. In some instances, complete deterioration may necessitate replacement of the paved surfaces and surrounding structures.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***
- ***With well maintained, livable and desirable neighborhoods.***

4. Related Cost Details

Reduction of maintenance costs and postponement of reconstruction.

5. Future Funds Needed

Planned program of resurfacing and reconstruction each year.

^S Coordinated with Sewer Project
^P Coordinated with Parking Lot Project
^K Coordinated with Sidewalk Project
* Includes State Grant (\$676,400)
** Expected State Grant (\$375,000)

Complete Streets Information Table Key – Indicates conditions after resurfacing or reconstruction

Sidewalk	Street Width	On-street Parking	Bike Accommodations	Non-motorized Plan Compliance
E–Existing	Back of Curb to Back of Curb Widest Block in Project	E–Existing	S–Shared Lane	C–Compliant
N–None		N–None	D–Dedicated Ln	N–Non-compliant
O–One Side		R–Removed	N–None	M–Modified
B–Both Sides		A–Added		S–SW Missing*
V–Varies				
P–Planned Near-term				P–Planned Near-term Compliance
G–Gaps Exist				

*Projects with the designation “S” under non-motorized plan compliance are designated this way only because the non-motorized plan calls for sidewalk on both sides of any local street. These local streets will not have sidewalk on both sides upon project completion. This requirement is on page 232 and should be considered modified according the city commissions’ prioritization of new sidewalk. This prioritization indicates that sidewalk should be on one side of all streets first.

Project Notes:

Fancher: Pickard to Industrial

These projects are designated “Modified” because way finding signs are required according page 102 of the non-motorized plan. The format of these signs may not be defined at the time of project construction.

Main: Pickard to Mosher

The non-motorized plan calls for designated bike lanes north of Lincoln Street. Due to the loss of on-street parking as well as the awkward transition that would be required at Lincoln, travel lanes on Main Street will be marked for shared use as is the case on Broadway downtown to Bradley.

Pickard: Bradley to Mission

The portion of this project between Mission and Main will not have designated bike lanes as there is not currently enough road width to accommodate this. The non-motorized plan designates this section as needing bike lanes upon reconstruction.

Adjustment Notes:

Broadway: Bridge to Main

This project was brought up to 2017 to coincide with the parking lot 3 reconstruction.

Denison: Three Leaves to West Campus

Three Leaves: Deerfield to Denison

These projects were moved forward to 2017 because of the rate of deterioration and the anticipated increase in state funding.

Preston: Lynnwood to Isabella

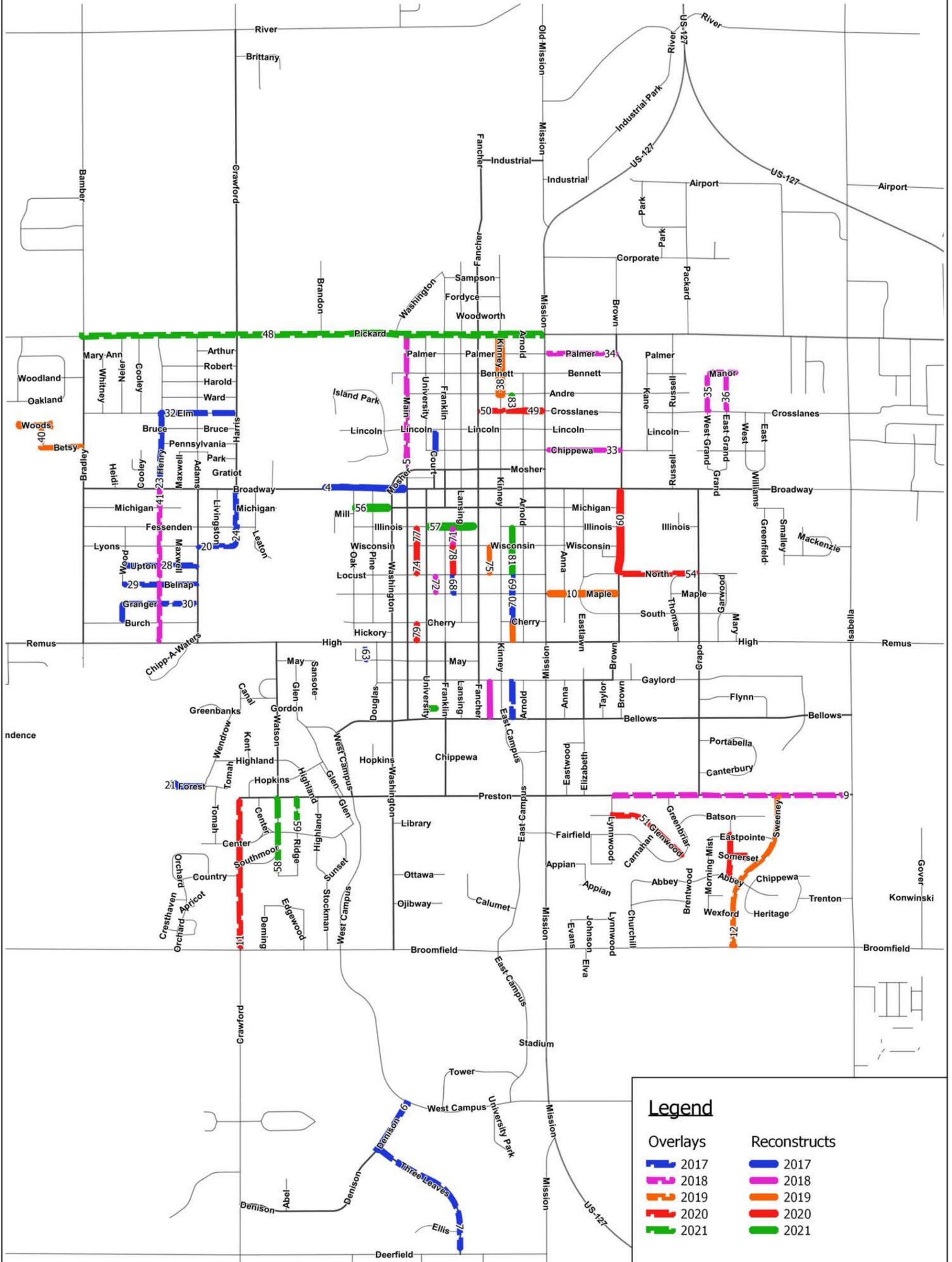
Maple: Mission to Brown

Sweeney: Broomfield to Preston

These projects were moved forward because of the anticipated increase in state funding.

Street Project Overview Map

City of Mt. Pleasant



Legend

Overlays

- █ 2017
- █ 2018
- █ 2019
- █ 2020
- █ 2021

Reconstructs

- █ 2017
- █ 2018
- █ 2019
- █ 2020
- █ 2021



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-



This Page Left Blank Intentionally.

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	<u>Alley Reconstruction and Resurfacing</u>				
Department	<u>Streets</u>	Source of Funding	<u>Capital Improvement Fund/Special Assessment</u>		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$18,000	TBD	TBD	TBD	TBD

1. Description and Location

Project Area	Type	Cost
<u>2017</u>		
Alley: Pleasant to Douglas/May to High	Overlay	\$1,600
Alley: Gaylord to Bellows/ Arnold to Kinney	Overlay	4,450
Alley: Franklin to University/Lincoln to Chippewa	Overlay	2,400
Alley: Locust to Maple/Franklin to Lansing	Overlay	2,350
Alley: Locust to Maple/Kinney to Arnold	Overlay	2,350
Alley: Maple to Cherry/Kinney to Arnold	Overlay	3,250
Engineering		1,600
<u>2018 - 2021</u>		
Alley: Illinois to Wisconsin/Franklin to Lansing	Reconstruct	TBD
Alley: Locust to Maple/ University to Franklin	Reconstruct	TBD
Alley: Gaylord to Bellows/Fancher to Kinney	Reconstruct	TBD
Alley: Wisconsin to Locust/Main to University	Reconstruct	TBD
Alley: Wisconsin to Locust/Fancher to Kinney	Reconstruct	TBD
Alley: Cherry to High/Kinney to Arnold	Reconstruct	TBD
Alley: Illinois to Wisconsin/Main to University	Reconstruct	TBD
Alley: Wisconsin to Locust/University to Franklin	Reconstruct	TBD
Alley: Wisconsin to Locust/Franklin to Lansing	Reconstruct	TBD
Alley: Cherry to High/Main to University	Reconstruct	TBD
Alley: Gaylord to Bellows/University to Franklin	Reconstruct	TBD
Alley: Wisconsin to Locust/Kinney to Arnold	Reconstruct	TBD
Alley: Illinois to Wisconsin/Kinney to Arnold	Reconstruct	TBD
Alley: Andre to Crosslanes/Kinney to Arnold	Reconstruct	TBD

2. History and Plans

In 2015 the City completed PASER Ratings on 13.8 miles of Alleys within the City limits. Approximately 3.9 miles are paved alleys. At a PASER rating of 4-5 it is recommended that an alley be resurfaced with an overlay. At a PASER rating of 3 and below it is recommended that an alley have a full reconstruction or the existing pavement be pulverized and returned to a gravel alley. Costs for reconstruction will be based on surveys not yet conducted.

3. **Need and Impact**

Identifies and prioritizes alley rehabilitation. Normal surface wear, weather, and traffic over periods of time deteriorate the wearing course of pavement, necessitating an overlay or total reconstruction.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***
- ***That is safe, clean and healthy.***
- ***With well maintained, livable and desirable neighborhoods.***

4. **Related Cost Details**

Reduction of maintenance costs and postponement of reconstruction. Additional personnel may be needed to conduct inspections of the alley reconstructions depending on how many are petitioned for in a given year. The cost of resurfacing and reconstruction is expected to be paid 90% by residents who petition for improvements for their block if the residents choose to keep the paved alley. The City is expected to pay the remaining 10% for resurfacing or reconstruction. 100% of the cost will be paid by the city if the alley is converted to gravel.

5. **Future Funds Needed**

Future needs will be based on PASER ratings and assessments of alley conditions each year.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Crack Sealing

Department Streets **Source of Funding** Local Street Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$26,000	\$26,000	\$26,000	\$26,000	\$26,000

1. Description and Location

The Local Street system will receive crack sealing with an elastomeric-type crack sealer, which will inhibit water infiltration into the granular base. Approximately one tenth or 5.1 miles of local streets will be crack sealed in each year.

2. History and Plans

The estimated cost for this program continues to be adjusted due to better application yield estimates. The crack sealing program will be ongoing.

3. Need and Impact:

Crack sealing is used to protect the City's large investment it has in its 51 miles of local streets. Crack sealing is a less expensive method of maintaining streets in a smooth, safe condition. Local street patching and repair costs have been reduced since this program's inception.

Linkage to Vision: We will work together toward being a community . . .

- Ø With a reliable and sustainable infrastructure*
- Ø With well maintained, livable and desirable neighborhoods*

4. Related Cost Details

Reduced patching maintenance and operational costs.

5. Future Funds Needed

Planned program of crack sealing each year.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Industrial Area Street Improvements				
Department	Streets	Source of Funding		Local Street Fund/Special Assessment	
Year Program	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	-0-	\$250,000

1. Description and Location

Program for improvements of gravel streets located north of Pickard and west of Mission.

2. History and Plans

The streets in this area represent the last gravel streets within the city limits.

Projects plans will be affected by zoning and future land use.

3. Need and Impact:

Current drainage in the area is very limited due to gravel in and over existing catch basins. During the winter months these streets can be very icy and much of the warmer months there is a large amount of standing water at the edges giving rise to large pot holes.

Paving these streets would bring them up to the standards associated with the rest of the street system within the city limits.

Linkage to Vision: We will work together toward being a community . . .

With a reliable and sustainable infrastructure

With well maintained, livable and desirable neighborhoods

4. Related Cost Details

Reduced operational costs related to grading and dust control for gravel streets.

5. Future Funds Needed

Same maintenance that is required on other local streets.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Resurfacing and Reconstruction

Department Streets **Source of Funding** Local Street Fund/Capital Improvement Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$372,000	\$563,000	\$478,000	\$302,000	\$690,000

1. Description and Location

Project Area	Type	Cost	Condition PASER (Resurface)	Sidewalk	Width	On-Star Parking	NM Comp
<u>2017</u>							
^w Forest: Wendrow to Dead End	Recon. w/o Curb	\$94,000	4 (79')	N	31	E	S
Henry: Broadway to Elm	Thin Overlay	31,000	6 (85')	P	31	E	S
Harris: Lyon to Broadway	Thin Overlay	26,000	7-8 (87')	N	29	E	S
Lyons: Adams to Harris	Thin Overlay	17,000	5 (87')	N	29	E	S
Upton: Wood to Adams	Thin Overlay	32,000	6 (87')	N	33	E	S
Belnap: Wood to Adams	Thin Overlay	35,000	6-7 (87')	O	29	E	S
Granger: Wood to Adams	Thin Overlay	32,000	6-7 (87')	N	29	E	S
Wood: Burch to Granger	Thin Overlay	9,000	6 (87')	N	26	E	S
Elm: Henry to Harris	Thin Overlay	33,000	6-7 (86')	O	31	E	S
Engineering		36,000					
ADA Compliance Ramp Repl.		27,000					
<u>2018</u>							
Chippewa: Mission to Brown	Recon. w/ Curb	\$248,000	4 (89')	B	31	E	C
Palmer: Mission to Brown	Thin Overlay	31,000	6 (87')	B	29	E	C
W Grand: Crosslanes to Manor	Thin Overlay	18,000	7 (90')	B	31	E	C
E Grand: Crosslanes to Manor	Thin Overlay	16,000	7 (90')	B	31	E	C
Manor: Crosslanes to Manor	Thin Overlay	12,000	7 (90')	B	31	E	C
^k Henry: High to Broadway	Mill & Overlay	128,000	6-7 (90')	V	31	E	M
Engineering		57,000					
ADA Compliance Ramp Repl.		53,000					
<u>2019</u>							
Kinney: Pickard to Andre	Recon. w/ Curb	\$345,000	8 (83')	B	23	E	C
Woods Way: Dead End to Dead End	Thin Overlay	15,000	6 (93')	B	31	E	C
Betsy Lane and Kelly Drive	Thin Overlay	26,000	6 (93')	V	31	E	S
Engineering		60,000					
ADA Compliance Ramp Repl.		32,000					
<u>2020</u>							
^k Crosslanes: Arnold to Mission	Recon. w/ Curb	\$90,000	3 (86')	O	29	E	S
Crosslanes: Fancher to Arnold	Thin Overlay	38,000	6 (86')	N	26	E	S
Glenwood: Lynnwood to Greenbriar	Thin Overlay	43,000	7 (95')	N	31	E	S
Somerset Court: Somerset to Dead End	Thin Overlay	9,000	5 (95')	B	31	E	S

Somerset: Abbey to Eastpointe	Thin Overlay	21,000	5 (95')	B	31	E	C
North Drive: Brown to Crapo	Thin Overlay	36,000	5-6 (95')	B	31	E	M
Engineering		29,000					
ADA Compliance Ramp Repl.		36,000					

2021

^C Michigan: Oak to Washington	Recon. w/ Curb	\$212,000	5 (03')	B	42	E	M
Illinois: University to Fancher	Recon. w/ Curb	298,000	5 (02')	B	42	E	C
Watson: Ridge to Preston	Thin Overlay	33,000	5 (89')	O	31	E	M
Ridge: Crescent to Preston	Thin Overlay	16,000	5 (89')	N	29	E	C
Engineering		88,000					
ADA Compliance Ramp Repl.		43,000					

2. History and Plans

Continuing program of resurfacing streets as surface deterioration becomes evident. Minor repairs/preparation prior to recapping will be necessary.

Streets are selected for resurfacing based on their PASER value. PASER is a Pavement Surface Evaluation and Rating system developed by the University of Wisconsin. Each PASER value indicates the type of restoration or maintenance work that needs to be done on that section of street. The Street Department began using the PASER system in 2000 to aid in street maintenance planning and budget projections.

The dates which follow the PASER ratings indicate the year in which the streets were originally constructed or reconstructed. Manhole adjustments and curb repairs are included in the individual costs per street.

Projects will be designed in accordance with the Complete Streets ordinance. Thin overlays, full overlays and mill and overlays are not assumed to include sidewalk upgrades.

3. Need and Impact

Focuses on and correlates with strategic planning. Identifies and prioritizes street rehabilitation. Normal surface wear, weather, and traffic over periods of time deteriorate the wearing course of pavement, necessitating an overlay, which will extend the overall life of the road before construction becomes necessary.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***
- ***With well maintained, livable and desirable neighborhoods.***

4. Related Cost Details

Reduction of maintenance costs and postponement of reconstruction.

5. Future Funds Needed

Planned program of recapping and reconstruction each year.

^S Coordinated with Sewer Project

^W Coordinated with Water Project

^K Coordinated with Sidewalk Project

^C Coordinated with Landscaping and Streetscaping Improvements

Complete Streets Information Table Key – Indicates conditions after resurfacing or reconstruction

Sidewalk	Street Width	On-street Parking	Non-motorized Plan Compliance
E–Existing	Back of Curb to Back of Curb	E–Existing	C–Compliant
N–None		A–Added	N–Non-compliant
O–One Side		R–Removed	M–Modified
B–Both Sides	Widest Block in Project	N–None	S–SW Missing*
V–Varies			P–Planned Near-term Compliance
P–Planned Near-term			
G–Gaps exist			

Lane widths are not indicated as local streets are not marked with centerlines.

*Projects with the designation “S” under non-motorized plan compliance are designated this way only because the non-motorized plan calls for sidewalk on both sides of any local street. These local streets will not have sidewalk on both sides upon project completion. This requirement is on page 232 and should be considered modified according the city commissions’ prioritization of new sidewalk. This prioritization indicates that sidewalk should be on one side of all streets first.

Project Notes:

Forest: Wendrow to Dead End

This project will not include sidewalk as it is a cul-de-sac street. Because of the limited amount of traffic at this location there are many higher priority locations for sidewalk within the city limits.

Henry: High to Broadway

North Drive: Brown to Crapo

Michigan: Oak to Washington

Watson: Ridge to Preston

These projects are designated “Modified” because way finding signs are required according page 102 of the non-motorized plan. The format of these signs may not be defined at the time of project construction. Henry and Watson also will not have sidewalk on both sides. Watson will not include edge striping as it is a local street.

Adjustment Notes:

Lyons: Adams to Harris

Elm: Henry to Harris

These project extents were adjusted because portions of the projects will be done in 2016.

Henry: High to Broadway

Glenwood: Lynnwood to Greenbriar

Somerset Court: Somerset to Dead End

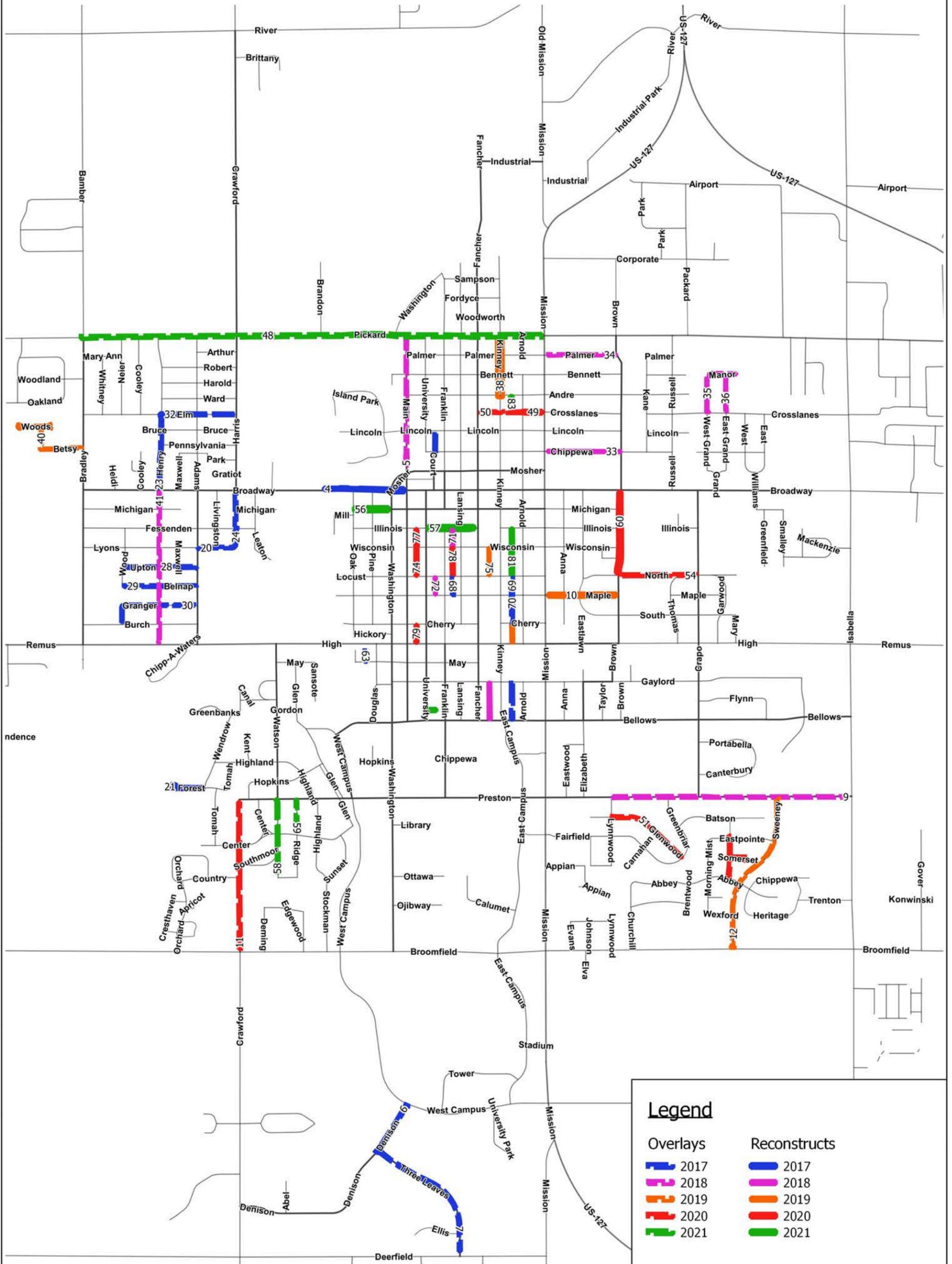
Somerset: Abbey to Eastpointe

North Drive: Brown to Crapo

These projects were moved forward in the plan due to the anticipated increase in state funding.

Street Project Overview Map

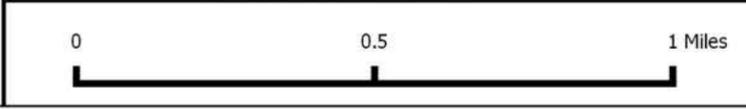
City of Mt. Pleasant



Legend	
Overlays	Reconstructs
2017	2017
2018	2018
2019	2019
2020	2020
2021	2021



City of Mt. Pleasant
 DIVISION OF PUBLIC WORKS
 -ENGINEERING DEPARTMENT-



Published: Mar-31-2016
 \\compfile\DPW\Budget\CIP\Engineering\

SUMMARY OF PROJECTS
AIRPORT FUND

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
Papi/Reil/Taxiway Lighting	FG/SG/AF	\$0	\$315,000	\$0	\$0	\$0	\$315,000
Runway 9 Tree Abatement	FG/SG/AF	415,000	105,000	0	0	0	520,000
Runway 9/27 Rehab	FG/SG/AF	0	0	0	0	173,000	173,000
Taxiway A Rehab	FG/SG/AF	0	0	109,000	1,371,000	0	1,480,000

Note: Federal funding regulations require the following matching:
90% Federal / 5% State / 5% Local

Totals		\$415,000	\$420,000	\$109,000	\$1,371,000	\$173,000	\$2,488,000
---------------	--	-----------	-----------	-----------	-------------	-----------	-------------

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Papi/Reil/"V" Taxiway Lighting				
Department	Airport	Source of Funding	Federal Grant/State Grant/Airport Funds		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$315,000	-0-	-0-	-0-

1. Description and Location

Install precision approach path indicator (PAPI) and runway end indicator light (REIL) lighting at the end of runway 9, and replace "V" taxiway lighting.

2. History and Plans

Precision approach lighting was installed on runway 27, but never on runway 9. Precision lighting is a safety feature that aides landings in low visibility conditions. The "V" taxiway lighting is more than 20 years old, and is in disrepair. Project was pushed back two years due to tree abatement and easement allocation.

3. Need and Impact

For several years, MDOT AERO has requested the precision approach runway lighting be installed on runway 9 for safety reasons, and the amount of jet traffic the Mt. Pleasant airport receives. The "V" taxiway lights are more than 20 years old, and in disrepair.

Linkage to Vision: We will work together toward being a community...
 ∅ ***With reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Runway 9 Approach Tree Abatement

Department Airport **Source of Funding** Federal Grant/State Grant/Airport Funds

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$415,000	\$105,000	-0-	-0-	-0-

1. Description and Location

Acquire easements for property containing trees that obstruct runway 9 approach slope. Perform tree abatement for runway 9 approach slope to comply with federal requirements for Federal Aviation Regulations Part 77 and precision approach path indicator (PAPI) obstacle clearance surface (OCS).

2. History and Plans

As part of the process to install PAPI lighting on runway 9, which was originally scheduled for 2016, an engineering firm took measurements of the runway approach slopes (Sept. 2014) and identified trees that had become obstructions or were close to becoming obstructions (April 2015). The airport was approved for federal grant money which may be used to remove tree obstructions, but can only be used once in a given area. The Airport Capital Improvement Program which included tree abatement funding was approved and finalized 01/12/2016 by MDOT. Starting in late 2016, the airport will acquire easements to properties containing obstructions, trees in the affected areas are to be cleared to ground, and properties are expected to be maintained to prevent future tree growth.

3. Need and Impact

To gain approval to use PAPI lighting on runway 9 the PAPI OCS must be free of obstructions. There are also two other approach slopes that affect the use of the runway. These must also be clear of obstructions to maintain current operational hours and runway length.

Linkage to Vision: We will work together toward being a community...

➤ ***With reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Runway 9/27 Rehabilitation

Department Airport **Source of Funding** Federal Grant/State Grant/Airport Funds

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	-0-	\$173,000

1. Description and Location

2021

Design Runway 9/27 \$173,000

2022

Rehabilitate Runway 9/27 \$2,157,000

2. History and Plans

It is anticipated that the pavement index will be in the range of 60, which puts it in a rehabilitation category. Pavement will be pulverized, and runway will be repaved. There has been a change in focus from adding length to the main runway, and paving the cross wind runway to a maintenance program on existing infrastructure.

3. Need and Impact

In order to keep a usable airport, there is a need to keep up on pavement maintenance, and replacement.

Linkage to Vision: We will work together toward being a community...

Ø ***With reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

The construction phase of the runway 9/27 rehabilitation is scheduled to take place in 2022 with a cost \$2,157,000 and a 5% local match. This project will be subject to the award of discretionary funds from a federal grant.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Taxiway “A” Rehabilitation

Department Airport **Source of Funding** Federal Grant/State Grant/Airport Funds

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$109,000	\$1,371,000	-0-

1. Description and Location

2019

Design East portion of taxiway “A” \$73,000

2019

Design light replacement for East portion of taxiway “A” \$36,000

2020

Rehabilitate the East portion of taxiway “A” \$917,000

2020

Light replacement for East portion of taxiway “A” \$454,000

2. History and Plans

It is anticipated that the pavement index will be between 61 and 62, which puts it in a rehabilitation category. Due to FAA guidance for airfield geometry, the lights will have to be replaced, or moved. Current lighting was installed in 1992, and is in poor condition. Pavement will be pulverized, and taxiway will be repaved. There has been a change in focus from adding length to the main runway, and paving the cross wind runway to a maintenance program on existing infrastructure. Cost of pavement rehab has increased due to changes in how the pavement is evaluated and prioritized through the pavement index, leading us to include a greater area of pavement. A change in the type of lighting being used is the reason for a decrease in light replacement costs.

3. Need and Impact

In order to keep a usable airport, there is a need to keep up on pavement maintenance, and replacement. In doing so, we must also come into compliance with new FAA requirements concerning the lighting.

Linkage to Vision: We will work together toward being a community...

Ø ***With reliable and sustainable infrastructure***

4. Related Cost Details

None

5. Future Funds Needed

This project will be subject to the award of discretionary funds from Federal Grant.

**SUMMARY OF PROJECTS
WASTEWATER FUND**

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
Lift Station Improvements	SCR	\$75,000	\$80,000	\$50,000	\$30,000	\$40,000	\$275,000
Manhole Rehab	SF	100,000	100,000	100,000	100,000	100,000	500,000
Meter Replacement	WF/SF	125,000	125,000	10,000	10,000	10,000	280,000
Mt Pleasant Ctr Sewer Sys Imprvmt	PD/EDF	0	0	0	80,000	0	80,000
Plant Improvements/Replacements	WWPR	232,000	160,000	110,000	559,000	200,000	1,261,000
Rear Yard Lead Rehab Program	SF	13,000	13,000	15,000	15,000	18,000	74,000
Reconstruction/Reline	SCR	230,000	150,000	150,000	150,000	150,000	830,000
Totals		\$775,000	\$628,000	\$435,000	\$944,000	\$518,000	\$3,300,000

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Lift Station Improvements and Replacements				
Department	Wastewater	Source of Funding		Sewer Collection Reserve	
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$75,000	\$80,000	\$50,000	\$30,000	\$40,000

1. Description and Location

2017

Upgrade Electrical Service at Pickard Lift Station \$75,000

2018

Rebuild Fisher Lift Station \$80,000

2019

Standby Generator for Oak Street Lift Station \$25,000

Lift Station Pump Replacements \$25,000

2020

Upgrade Remaining Multitrode Control Panels to Multismart \$30,000

2021

Standby Generator for Pickard Lift Station \$40,000

2. History and Plans

Existing electrical service at Pickard will not run overflow and duty pumps at the same time. Current 1980 diesel generator to be replaced with natural gas-fired generator with automatic transfer switch. This work was identified in the SAW Grant Asset Management Plan equipment assessment, and reprioritized as recommended.

Fisher Lift Station is the only remaining lift station not rebuilt.

3. Need and Impact

The core mission of the WWTP Department is to pump raw sewage from homeowners and businesses. Reliable equipment and backup power sources are essential to that function.

Linkage to Vision: We will work together toward being a community...

➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Installation of two more natural gas-fired generators will add some cost to utility bills. The estimated cost of rebuilding Fisher Lift Station has increased to more closely match recent similar work at Industrial Lift Station

5. Future Funds Needed

Lift station pumps will need to be replaced about every 5 years. Some lift stations updated during the most recent round of upgrades are approaching 20 years old. Concrete structures will need to be maintained due to corrosive gases in the wet wells. SAW Grant Asset Management Plan calls for blasting and resealing concrete wet wells at 7 lift stations in 2025 for approximately \$50,000.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Manhole Rehabilitation – Sanitary Sewer

Department Wastewater **Source of Funding** Sewer Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000

1. Description and Location

This project will add structural strength to sanitary sewer manholes that are in poor condition. It consists of a concrete layer being applied to the flow channels and benches of the manholes, followed by a ½-inch spray polymer liner. The oldest and most critical sanitary sewer manholes would be done first, with an annual assessment of structures to follow. Currently costs are about \$1,000 to \$1,200 per manhole, depending on depth and diameter.

2. History and Plans

The manholes need to be repaired on sanitary sewers that are not scheduled for replacement. This is a preventative maintenance project. There are approximately 1,400 sanitary sewer manholes of various ages. Engineering will coordinate a survey of manhole condition with the help of Street department employees to prioritize repairs, but a safe estimate would be that at least 1,000 need relining.

3. Need and Impact

Currently, the sanitary sewer system has manholes that were installed as long ago as 1920 and have been minimally maintained since that time. The structural life of a typical manhole is 50 years. The cost of unplanned repairs in response to a collapse would pay for preventive work on 10-15 manholes.

Linkage to Vision: We will work together toward being a community...

Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

Currently, there are approximately 1,000 sanitary manholes throughout the city in need of rehabilitation.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Meter Replacement				
Department	Wastewater	Source of Funding	Water Fund/Sewer Fund		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$125,000	\$125,000	\$10,000	\$10,000	\$10,000

1. Description and Location

Replace the 5/8" – 6" size water meters city-wide.

2. History and Plans

Under our meter replacement program, meters that have high usage or are 15 years old should be replaced to ensure accuracy under AWWA C700 standards. In 1998 the City started a replacement program, but at the current rate this work will not be completed for several decades. Beginning in 2015, we are investigating the possibility of using a contracted service to help coordinate and implement a more rapid replacement schedule. The project would also include an improved meter reading technology. We will develop a comprehensive plan in 2016, and if approved, implement the work beginning in 2017.

2006	351 meters replaced	2011	109 meters replaced
2007	170 meters replaced	2012	79 meters replaced
2008	155 meters replaced	2013	94 meters replaced
2009	60 meters replaced	2014	124 meters replaced
2010	96 meters replaced	2015	68 meters replaced

3. Need and Impact

Replacement will ensure the accuracy of the meters and of the revenue collected.

Linkage to Vision: We will work together toward being a community . . .

Ø With stable funding from a diverse tax base.

4. Related Cost Details

As water meters age they tend to under record usage, so replacement of aging meters may lead to additional revenue.

5. Future Funds Needed

There will be some meters or meter reading equipment that will need to be replaced before the next 15-year replacement cycle.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Mt. Pleasant Center Sewer System Improvement

Department Wastewater **Source of Funding** Private Developer/Economic Development Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$80,000	-0-

1. Description and Location

Construction of new sewer line to serve the Mt. Pleasant Public School property.

2. History and Plans

If the school system decides to use their buildings, new sewer lines will need to be installed on the south west line of the property.

3. Need and Impact

Existing utilities that served the school property are in unknown condition and in a location that could possibly interfere with future development.

Linkage to Vision: We will work together toward being a community . . .

➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

There is a related cost for water service which is detailed in the Water section of the CIP, and will likely occur at the same time.

5. Future Funds Needed

Development plans will determine the scope and timeline of future construction.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Plant Improvements and Replacements				
Department	Wastewater	Source of Funding	Wastewater Plant Reserve		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$232,000	\$160,000	\$110,000	\$559,000	\$200,000

1. Description and Location

2017

Replace Primary Sludge Pump	\$32,000
Replace Ferrous Storage Tanks	\$200,000

2018

Mill and Overlay Plant drives (PASER rating 4)	\$80,000
Repair Roof on Service Building	\$80,000

2019

Sludge Tank A Roof	\$110,000
--------------------	-----------

2020

Rebuild East Digester	\$559,000
-----------------------	-----------

2021

Replace Plant Generator	\$200,000
-------------------------	-----------

2. History and Plans

The original plant was built in 1954, and received major upgrades in 1982 and 2002. The SAW Grant Asset Management Plan identified potentially \$15 million in upgrades between now and 2030. The 5 Year CIP begins to address those issues within available and anticipated funding. Based on the Asset Management Plan we have rescheduled several projects. Replacing the Ferrous Tanks will now involve placing the tanks outdoors, and increases the cost of the project. This project was originally scheduled for 2016, now is planned for 2017.

Two projects appear within the 5 year window for the first time based on condition assessment. These are repairing the roof on the Service Building and replacing the roof on Sludge Storage Tank A.

In addition, replacing the plant generator with a generator that will run all necessary equipment is in the CIP for the first time. The Asset Management Plan recommends replacing all Plant Electrical equipment; this is the first step in that project.

3. Need and Impact

Equipment used to treat wastewater is subject to wear and corrosion. Regular maintenance and replacement is necessary to meet increasingly stringent State and Federal Discharge limits.

Linkage to Vision: We will work together toward being a community...

Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Equipment Replacement will be an on-going cost of doing business. Major components have a 25-30 expected useful lifespan, and the 2002 upgrade is already 15 years old as this CIP begins.

5. Future Funds Needed

The SAW Grant AMP recommends completely replacing all electrical equipment in the WWTP at an estimated cost of \$1.5 million. In addition, the West Digester will need to be rebuilt at an estimated cost of \$470,000 in today's dollars, and during this process we should look at additional equipment for energy recovery.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Rear Yard Lead Rehabilitation Program

Department Wastewater **Source of Funding** Sewer Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$13,000	\$13,000	\$15,000	\$15,000	\$18,000

1. Description and Location

The City has initiated an incentive based program that provides reimbursement of 50% of the cost of abandoning homeowner’s rear yard sewer leads and reconnecting their service to the sewer main on the street side of the property.

2. History and Plans

Rear yard sewer connections are old and prone to failure. The City’s goal is elimination of all rear yard connections.

3. Need and Impact

This program will prevent sewer backups from occurring and make any necessary repairs simpler and less expensive in the future.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***
- ***With well maintained, livable and desirable neighborhoods.***

4. Related Cost Details

None

5. Future Funds Needed

Expenditures are expected to increase over time as more contractors and residents become aware of this program.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	Reconstruction and Relining				
Department	Wastewater	Source of Funding	Wastewater Collection Reserve		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$230,000	\$150,000	\$150,000	\$150,000	\$150,000

1. Description and Location

2017

Lansing – Locust to Michigan – 1160’ of 15" \$58,000
 Engineering (Approximately 5% of relining costs) \$3,000
 Additional Relining locations to be determine through heavy cleaning and televising operations done using SAW Grant funds. \$169,000

2018

Reline

Relining locations to be determine through heavy cleaning and televising operations done using SAW Grant Funds. \$150,000

2019

Construction

ST Maple – Elizabeth to Brown – 500’ of 8” \$41,000
 Engineering (Approximately 15% of construction costs) \$17,000
 Maple St. project moved to align with Grant Funding cycle.

Reline

Additional relining to be determined after reviewing sewer video. \$92,000

2020

Additional relining to be determined after reviewing sewer video. \$150,000

2021

Reline

Clay tile Sewer relining as necessary. \$150,000

2. History and Plans

By 2018 we should have relined all of the known concrete sewer lines, and will be moving to clay tile lines. These are generally smaller in diameter, and less critical to reline. We have reduced the amount budgeted for relining beginning that year.
 Later in 2016 we will have received and analyzed the sewer video obtained through the SAW Grant. That information will be used to prioritize future relining projects.

3. Need and Impact

Relining is needed to protect the health and property of the citizens in the city of Mt. Pleasant. Relining and replacing the sewers will strengthen the lines and help prevent collapses in the sewers.

Linkage to Vision: We will work together toward being a community...

➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

This is an ongoing annual replacement program.

This Page Left Blank Intentionally.

SUMMARY OF PROJECTS
WATER FUND

Project Title	Source of Funding	Fiscal Year Program Proposed					Total Estimated Capital Costs
		2017	2018	2019	2020	2021	
1MG Reservoir Bypass	WPR	\$20,000	\$100,000	\$0	\$0	\$0	\$120,000
Boiler Replacement	WPR	0	0	75,000	75,000	0	150,000
Cast Iron Watermain Replac.	WDR	0	0	0	0	144,000	144,000
Chemical Tank Rehab	WPR	5,000	50,000	0	0	0	55,000
Clarifier Repair	WPR	150,000	0	0	100,000	0	250,000
Deerfield Wells Generator Bldg	WPR	8,000	0	0	0	0	8,000
Distribution System Replace	WDR	15,000	50,000	50,000	50,000	50,000	215,000
Elevated Tank Construction	WF/RB	15,000	0	0	2,000,000	0	2,015,000
Elevated Tank Painting	WF	0	0	100,000	0	0	100,000
HSP Rehabilitation	WF	19,000	0	19,000	0	20,000	58,000
Lime Residuals Removal	WLR	0	0	0	200,000	0	200,000
Meter Replacement	WF/SF	125,000	125,000	10,000	10,000	10,000	280,000
Mt. Pleasant Center Water	PD/EDF	0	0	0	106,000	0	106,000
Pavement Replacement	WPR	0	50,000	0	0	0	50,000
Reservoir Valve Replace	WPR	0	0	0	40,000	0	40,000
Roof Replacement	WPR	65,000	5,000	0	0	0	70,000
Valve Actuators	WPR	0	100,000	0	0	0	100,000
Well 8 Abandonment	WF	0	0	25,000	0	0	25,000
Well Rehabilitation	WF	110,000	47,000	47,000	40,000	47,000	291,000
Totals		\$532,000	\$527,000	\$326,000	\$2,621,000	\$271,000	\$4,277,000

This Page Left Blank Intentionally.

INDIVIDUAL PROJECT DESCRIPTION

Project Title	1MG Reservoir Bypass				
Department	Water	Source of Funding	Water Plant Reserve		
Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$20,000	\$100,000	-0-	-0-	-0-

1. Description and Location

This project will construct a robust solution to bypass the 1MG Reservoir. The slide gates and valves of the High Service Pump Station pump sump will be rehabilitated and new piping constructed, or a new pump and piping will be added.

2. History and Plans

The two reservoirs have been in service since the mid-1960s; one of the most critical parts of the water supply system is the 1 MG reservoir. The project will allow the 1MG reservoir to be bypassed for inspection or repair. There are three slide gates in the pump sump that need to be rehabilitated or replaced, and piping constructed from the adjacent valve vault reservoir piping into the sump or around the sump.

2017

Design

2018

Installation

3. Need and Impact

This project will help ensure that the water system remains reliable. The 1MG reservoir will need to be emptied for inspection within 5 years. Currently, there is no way to bypass water flow and empty the reservoir for inspection. Adding the bypass valve will allow us to maintain plant operations while also inspecting the reservoir as needed.

Linkage to Vision: We will work together toward being a community . . .

➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Boiler Replacement

Department Water **Source of Funding** Water Plant Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$75,000	\$75,000	-0-

1. Description and Location

Replace the two water treatment plant (WTP) boilers.

2. History and Plans

The WTP was constructed in 1994. Although the HVAC system has been upgraded with more efficient controls, the two boilers are the original units. In 2014 the boiler unit controls were repaired. This project will replace the boilers with more efficient units, a geothermal technology system, or a combination of the two.

2017

Evaluate using the raw water as a heat source or heat sink (geothermal technology).

2019

Boiler #1

2020

Boiler #2

3. Need and Impact

The two WTP boilers provide heat via the HVAC system, and were installed in 1994.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Cast Iron (CI) Water Main Replacement

Department Water **Source of Funding** Water Distribution Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	-0-	\$144,000

1. Description and Location

2021

Lansing: Pickard to Sampson	\$122,000
Engineering (Approx.15% of construction costs)	\$22,000

Project delayed until Industrial Property needs are identified

2. History and Plans

These water mains have been in service since the Mt. Pleasant water system commenced in the early 1900s. The replacement program began in 1985 and was intended to replace all of the 4” cast iron water mains in the system. The 4” mains replacement will be completed in 2021.

3. Need and Impact

This project improves flow and quality of water to the customers by enlarging the water mains and improves fire protection.

Linkage to Vision: We will work together toward being a community . . .

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

It is possible that some 4” CI water main may still exist in the system; these mains will be replaced if they are discovered. Additionally, there are 2.2 miles of 6” CI water main; if it is determined that these should be replaced the cost for this work is estimated to be \$1.5 million.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Chemical Storage Tank Rehabilitation

Department Water **Source of Funding** Water Plant Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$5,000	\$50,000	-0-	-0-	-0-

1. Description and Location

Inspect and rehabilitate the five water treatment plant (WTP) chemical storage tanks.

2. History and Plans

The WTP was constructed in 1994 and placed on-line in 1995. The fiberglass chemical storage tanks are the original equipment, and should be-lined or treated as needed.

2017

Inspect tanks to determine condition of the tanks.

2018

Repair any problems identified during the inspection.

3. Need and Impact

This project is required to ensure safe storage of treatment chemicals.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Clarifier Repair

Department Water **Source of Funding** Water Plant Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$150,000	-0-	-0-	\$100,000	-0-

1. Description and Location

The Water Treatment Plant softens water in two steel clarifiers, and has had many small rust spots touched up each year by Water Department staff. This project is to repair and repaint the interior surfaces where the paint has failed.

2. History and Plans

The water plant was constructed in 1994 and placed in service in 1995. This project will help preserve the integrity of the clarifier structures. During the 2016 Clarifier #1 paint repair we learned that this work was insufficient; the entire interior paint was failing and could not be spot repaired. The project in 2017 will completely replace the interior paint coating of Clarifier #2. Cathodic protection (CP) equipment will be installed in both clarifiers to prevent future deterioration of the submerged metal. Clarifier #1 will have the interior paint completely replaced in 2020.

2016

Clarifier #1 touchup at \$19,500.

2017

Clarifier #2 rehab including steel grit blasting and repainting. Installation of CP on both clarifiers in 2017.

2020

Complete rehab of clarifier #1; includes steel grit blasting.

3. Need and Impact

This program is required to maintain critical equipment.

Linkage to Vision: We will work together toward being a community...

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Deerfield Wellfield Generator Storage Building

Department Water **Source of Funding** Water Plant Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$8,000	-0-	-0-	-0-	-0-

1. Description and Location

2017

Building construction and wiring connection.

2. History and Plans

The Deerfield Rd well field contains wells 16 and 17, and the original chemical feed (Chem Feed) building. In an event of a power outage, an electrical generator is transported to the site, connected to the Chem Feed building, and engaged to run the two wells. This process requires two people and can take several hours to complete. The wells are an important source of water for the City. This project would construct a small pole barn structure to house a generator on-site. This would allow a single person to quickly bring the generator on-line.

3. Need and Impact

This is part of our water system maintenance program to ensure an adequate water supply to the community.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

Cable and connections in the Chem Feed building.

5. Future Funds Needed

None.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Distribution System Replacement

Department Water **Source of Funding** Water Distribution Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$15,000	\$50,000	\$50,000	\$50,000	\$50,000

1. Description and Location

This project will replace the oldest large valves in the water distribution system, and it will also include adding large valves in critical areas. In addition, various other components of the system will be replaced as required during street reconstruction.

2017

ST Replace the section of water main on Forest Lane during the street reconstruction.

2018 – 2021

Replace valves at locations to be determined in coordination with street projects.

2. History and Plans

The water system has been in service since the early 1900s. One of the key parts of the system is the valves; the ability to isolate segments of the system for construction or in the event of an emergency repair is critical. Valves deteriorate with age and become inoperable so their replacement is needed. Also, street and sewer construction may cause breaks in any nearby AC water main so replacement of that section of main during this work will greatly reduce the chance of failure later.

3. Need and Impact

This project will help ensure that the water system remains reliable.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

Need to replace valves and water mains throughout the system.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Elevated Tank Construction

Department Water **Source of Funding** Water Fund/Revenue Bond

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$15,000	-0-	-0-	\$2Million	-0-

1. Description and Location

The existing 1 million gallon (1MG) and the existing .5 million gallon (.5MG) elevated tanks maintain stable water pressure and provide firefighting storage capacity. The 1MG tank is located east of Isabella Road, and the .5MG tank is located on North Kinney Street. This project will construct a new .5MG elevated tank to provide more water pressure and storage in the south end of Mt. Pleasant.

2. History and Plans

The south end of the City has historically had lower water pressure due to the 70 foot higher elevation. In 2015 a water system reliability study was performed to evaluate and update the City’s water capital plan. The study recommended an additional tank be constructed to address the lower pressure. A detailed design study for the tank will be performed in 2017.

3. Need and Impact

The elevated tanks are a critical component of the City water system, helping to maintain water pressure and water storage. The lower water pressure evident in the south section of the City impacts future development. This new tank will support development and growth in that area of Mt. Pleasant.

Linkage to Vision: We will work together toward being a community . . .
 ➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

15-year (approximate) cycle for tank maintenance.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Elevated Tank Painting

Department Water **Source of Funding** Water Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$100,000	-0-	-0-

1. Description and Location

The 1 million gallon (1MG) and the .5 million gallon (.5MG) elevated tanks maintain stable water pressure and provide firefighting storage capacity. The 1MG tank is located east of Isabella Road, and the .5MG tank is located on North Kinney Street. The 0.5MG is being rehabilitated and painted in 2016. The 1MG elevated tank was rehabilitated and painted in 2007; recoating the tank exterior will enable us to delay a complete rehab for 10 years.

2. History and Plans

Periodic cleaning and painting is required to prevent deterioration of the tanks and to maintain system reliability and water quality. Based on conversations with a tank painting contractor the cost for the exterior recoating is not the \$40,000 cost estimated in 2015 but may be close to \$100,000.

2016

Repaired and painted the interior and exterior of the 0.5 million gallon elevated tank.

2019

The 1MG elevated tank will receive exterior paint recoating.

3. Need and Impact

The elevated tanks are a critical component of the City water system. Correct operation of them is essential.

Linkage to Vision: We will work together toward being a community . . .

- ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

15-year (approximate) cycle for each tank.

INDIVIDUAL PROJECT DESCRIPTION

Project Title High Service Pump (HSP) Rehabilitation

Department Water **Source of Funding** Water Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$19,000	-0-	\$19,000	-0-	\$20,000

1. Description and Location

2017

High Service Pump #3

2019

High Service Pump #4

2021

High Service Pump #2

2. History and Plans

The High Service Pumps supply water to the City from the reservoirs. A planned rehabilitation program will ensure that these pumps operate efficiently.

3. Need and Impact

This is a continuous maintenance and repair program, to protect a critical part of the water system and ensure an adequate water supply to the community.

Linkage to Vision: We will work together toward being a community . . .

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

Continuous maintenance program; each pump is rehabilitated every 7 to 10 years

INDIVIDUAL PROJECT DESCRIPTION

Project Title Lime Residuals Removal

Department Water **Source of Funding** Water Lagoon Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$200,000	-0-

1. Description and Location

The water treatment plant (WTP) produces lime sludge as a by-product of the treatment process. This sludge is stored in two ponds located at the WTP. This project is to remove the sludge from one pond every three to five years.

2. History and Plans

The WTP softens water using a lime process. Lime sludge is produced and stored in ponds. These residuals will be removed and used as an agricultural soil conditioner.

2010

The Ranney Well upgrade helped decrease the volume of sludge produced.

2013

A Pilot study using a geotube to dry the sludge was conducted however the cost of the geotubes proved to be prohibitive.

2013-2015

A contractor removed the sludge from the east pond using traditional equipment and applied the residuals to area farm fields.

2016

The staff will be experimenting with a sludge drying bed.

3. Need and Impact

This program is required as part of the WTP's operation.

Linkage to Vision: We will work together toward being a community . . .

Ø ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

Approximately every three (3) to five (5) years.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Meter Replacement

Department Water **Source of Funding** Water Fund/Sewer Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$125,000	\$125,000	\$10,000	\$10,000	\$10,000

1. Description and Location

Replace the 5/8” – 6” size water meters city-wide.

2. History and Plans

Under our meter replacement program, meters that have high usage or are 15 years old should be replaced to ensure accuracy under AWWA C700 standards. In 1998 the City started a replacement program, but at the current rate this work will not be completed for several decades. Beginning in 2015, we are investigating the possibility of using a contracted service to help coordinate and implement a more rapid replacement schedule. The project would also include an improved meter reading technology. We will develop a comprehensive plan in 2016, and if approved, implement the work beginning in 2017.

2006	351 meters replaced	2011	109 meters replaced
2007	170 meters replaced	2012	79 meters replaced
2008	155 meters replaced	2013	94 meters replaced
2009	60 meters replaced	2014	124 meters replaced
2010	96 meters replaced	2015	68 meters replaced

3. Need and Impact

Replacement will ensure the accuracy of the meters and of the revenue collected.

Linkage to Vision: We will work together toward being a community . . .

Ø With stable funding from a diverse tax base.

4. Related Cost Details

As water meters age they tend to under record usage, so replacement of aging meters may lead to additional revenue.

5. Future Funds Needed

The will be some meters or meter reading equipment that will need to be replaced before the next 15-year replacement cycle.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Mt. Pleasant Center Water System Improvement

Department Water **Source of Funding** Private Developer/Economic Development Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$106,000	-0-

1. Description and Location

Construction of new water main in the Mt. Pleasant Center property.

2. History and Plans

When the state owned Mt. Pleasant Center closed, the on-site water system was evaluated by City staff and found to be deficient. A new water main will need to be designed and installed to serve the existing Mt. Pleasant School System buildings and any future construction.

3. Need and Impact

This project provides water service to new customers when development occurs.

Linkage to Vision: We will work together toward being a community . . .

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

The project is reliant on private developer contributions.

5. Future Funds Needed

Need to expand and improve the system to help support economic growth.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Pavement Replacement

Department Water **Source of Funding** Water Plant Replacement Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$50,000	-0-	-0-	-0-

1. Description and Location

Replace the paved driveways and parking lot at the Water Treatment Plant (WTP).

2. History and Plans

The WTP was constructed in 1994. The original pavement has been crack sealed in several places, but the overall condition is deteriorating with a PASER rating of 5. The WTP receives regular chemical deliveries in large tank trucks which contribute to the wear. This work will consist of milling and repaving the parking lot and drives.

3. Need and Impact

Replacement is needed because pavement is at the end of useful life.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Reservoir Valve Replacement

Department Water **Source of Funding** Water Plant Replacement Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	-0-	\$40,000	-0-

1. Description and Location

This project will replace or rehabilitate the actuated valves or actuators located in the reservoir valve vault.

2016

Valve #118

2020

Valves #110 & #113

2. History and Plans

The reservoirs have been in service since the mid-1960s. One of the most critical parts of the reservoir piping system is the #118 valve. This valve was installed in 1994. The valve controls the transfer of water from the 2MG reservoir to the 1MG reservoir, from which it is pumped to the City. Valves #110 & #113 control the flow of water from the WTP into the reservoirs.

3. Need and Impact

This project will help ensure that the water system remains reliable.

Linkage to Vision: We will work together toward being a community . . .

➤ ***With a reliable and sustainable infrastructure.***

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Roof Replacement

Department Water **Source of Funding** Water Plant Replacement Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$65,000	\$5,000	-0-	-0-	-0-

1. Description and Location

Replace roofs at the Water Treatment Plant (WTP) and the Ranney Well building.

2. History and Plans

2016

High Service Pump Station

2017

WTP (originally installed in the 1994)

2018

Ranney Well (This roof was installed in the 1960's, and was partly replaced in 2004.)

3. Need and Impact

The life span of this type of roof is 15 to 20 years. This project will replace the current roof with a new vinyl roof.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Valve Actuators Replacement

Department Water **Source of Funding** Water Plant Replacement Reserve

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	\$100,000	-0-	-0-	-0-

1. Description and Location

Replace the filter actuators at the Water Treatment Plant (WTP).

2. History and Plans

The WTP was constructed in 1994. The filters are a critical part of the treatment process, and have a number of valves and valve actuators that must operate correctly. This project will replace the aging valve actuators that will be approaching the end of their life cycle.

3. Need and Impact

The filter valve actuators must operate correctly to meet MDEQ & EPA regulations. These air operated actuators will be replaced with electric powered units that will reduce energy costs.

Linkage to Vision: We will work together toward being a community...

Ø With a reliable and sustainable infrastructure.

4. Related Cost Details

None

5. Future Funds Needed

None

INDIVIDUAL PROJECT DESCRIPTION

Project Title Well 8 Abandonment

Department Water **Source of Funding** Water Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	-0-	-0-	\$25,000	-0-	-0-

1. Description and Location

2019

Well 8 abandonment

2. History and Plans

Well 8 went on-line in 1960, and was never connected to the raw water piping that leads to the Water Treatment Plant. This well has been retained for use as an emergency well only, but is in need of significant rehabilitation. In addition, the well house and related equipment needs to be repaired or replaced. This plan calls for the well to be plugged, the building and fencing to be removed, and the property to become an attractive gateway to Mill Pond Park. In addition, the water main from the well would be configured to become a lead for a new hydrant that would serve the area of Leaton and Fessenden streets.

3. Need and Impact

This well has never been used in an emergency situation. A complete rehabilitation of the well, pump, motor, electrical components, and building is projected to cost \$40,000 - \$50,000.

4. Related Cost Details

None

5. Future Funds Needed

None.

INDIVIDUAL PROJECT DESCRIPTION

Project Title Well Rehabilitation

Department Water **Source of Funding** Water Fund

Year Program Proposed	2017	2018	2019	2020	2021
Capital Cost	\$110,000	\$47,000	\$47,000	\$40,000	\$47,000

1. Description and Location

2017

Ranney Well

2018

Well #16

2019

Well #20

2020

Well #6

2021

Well #17

2. History and Plans

Wells are scheduled for rehabilitation maintenance every 5 – 7 years, and the schedule is modified as the condition of each well changes. The Ranney Well has been scheduled for maintenance in 2017. This well has the largest capacity of any of our wells, and has the lowest chemical and electrical costs to operate.

3. Need and Impact

This is a continuous maintenance and repair program, to protect a critical part of the water system and ensure an adequate water supply to the community.

Linkage to Vision: We will work together toward being a community . . .

Ø With a reliable and sustainable infrastructure.

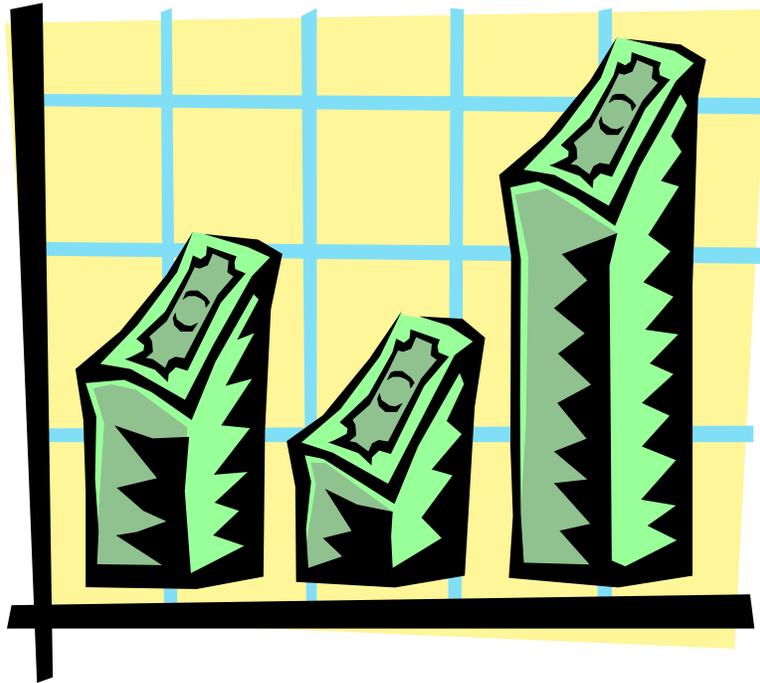
4. Related Cost Details

Included in this project are equipment upgrades to improve equipment condition monitoring using the WTP control system.

5. Future Funds Needed

Continuous maintenance program.

This Page Left Blank Intentionally.



Status Report on Specific 2016 Projects from 2016-2020 Plan
Changes in 2017-2020 Projects from 2016-2020 Plan
Taxable Value 2006-2021
Schedule of Capital Outlay 2012-2016
Summary of Debt Payments
Summary of Tax and Bonding Funds
Tax Levy to Retire General Obligation Debts
Projects Considered But Not Planned in Next 5 Years

This Page Left Blank Intentionally.

TABLE 1
CITY OF MT. PLEASANT
STATUS OF SPECIFIC 2016 PROJECTS FROM
2016-2020 CAPITAL IMPROVEMENT PLAN

PROJECT TITLE	AMOUNT	STATUS
Planned in 2016-2020 Capital Improvement Plan for 2016 plus projects carried forward from 2015		
GENERAL FUND/TIFA/DDA/DOWNTOWN		
Phone System	\$125,000	Bid in March, project completion in May 2016
Park Partnership Program	5,000	Will be used towards Nelson Park gazebo
Neighborhood Lighting	120,000	Bid in March, project completion summer 2016
Downtown Improvement Program	40,000	Will occur summer 2016
Renov Dtown Park Lots/Alleys- Reconstruct #3	300,000	Delayed to coordinate with other project in Downtown
Banner Poles	20,000	Delayed to prioritize other projects
Downtown Parking Study	25,000	Bid opening in late March with project completion in August
Downtown Pedestrian Lighting - Design	10,000	Project should be completed by DPW in April
Mission St Reinv Capital Support	100,000	In process
Bike Shelters	5,000	Will be installed in Parking Lot #1 Changed to Campus Commons location to coordinate with proposed development
Mission Street Safety	315,000	
Brush Truck Replacement	65,000	Bid has been awarded
Utility Truck Replacement	45,000	Bid has been awarded
Public Safety Locker Room	33,000	Project will be bid in April
Island Park Playscape	242,000	Will be completed summer of 2016
Nelson Park Gazebo & Walkway	72,000	Project delayed for outside funding
Park Med Size Project-Pavilion Roof	75,000	Will occur summer 2016
Renov Park Roads/Prkg/Trails- Bridge Deck	60,000	Partially completed in 2015, remainder to occur summer 2016
Renov Park Roads/Prkg/Trails- Millpond Trail	75,000	Will occur summer 2016
Wayfinding	50,000	Delayed to coordinate with branding
Cemetery Mausoleum Roof	25,000	Will occur summer 2016
Sidewalk Replacement	150,000	Reallocation of \$60,500 from mudjacking will be used for some alley maint in 2016; remainder occurring summer 2016
DPW Building Maintenance	20,000	Will occur summer 2016
Potter Playground	120,000	Play equipment purchased in 2015 to take advantage of time sensitive grant. Construction occurring summer 2016
Chipp-A-Waters Park Drain Field Repair	8,000	Will occur summer 2016

TABLE 1
CITY OF MT. PLEASANT
STATUS OF 2016 PROJECTS FROM
2016-2020 CAPITAL IMPROVEMENT PLAN

PROJECT TITLE	AMOUNT	2016 STATUS
<u>MAJOR STREETS</u>		
Crack Sealing	\$12,000	Going out for bid in April or May. Work will occur in summer
Resurf/Reconst-Broadway & Pickard Bridge design	473,000	Bid awarded. Will be completed in April - August 2016
Bellow Street Corridor	230,000	Project delayed to 2017
<u>LOCAL STREETS</u>		
Crack Sealing	26,000	Out for bid in April/May. Work will occur in summer 2016
Resurfacing/Reconstruction-Southmoor and overlays	457,000	Reconstruction bid awarded. Overlays currently out for bid. Occuring summer 2016
<u>AIRPORT FUND</u>		
Glideslope Approach Tree Abatement	475,000	Airport consultant selection in March. Will then obtain easments and begin clearing phase 1 properties fall 2016
Parking Lot and Drive	61,000	Completed in 2015 to take advantage of grant
Papi/Reil/Taxiway Lighting	315,000	Delayed to prioritize other projects
<u>WASTEWATER FUND</u>		
Sewer Construction/Reline	270,000	Some coordinated with Broadway St reconstruction. Routine relining determ by results of SAW Grant
WWTP Improvements	119,000	Ferrous storage tank refurbishment changed to tank replacement in 2017
Lift Station Improvements	40,000	Generator has been postponed to prioritize other electrical system needs
Manhole Rehab-Sanitary Sewer	100,000	Work will occur September 2016
Water Meter Replacement	20,000	In progress
Sewer Lead Rehabilitation	12,500	In progress as requests received
<u>WATER</u>		
Well Rehabilitation	33,000	Bid in March. Work to occur in spring 2016
Water Meter Replacement	20,000	In progress
Generator Replacement	70,000	Completed in spring 2016
Reservoir Valve Replacement	20,000	Will be installed in late fall 2016
Elevated tank painting	450,000	Bid has been awarded. Work to occur in summer 2016
Cast Iron Main Replacements	164,500	Bid awarded in March; will be coordinated with street project
Roof Replacement	5,000	Will occur summer 2016
Distribution Valve Replacement	15,000	Project delayed to 2017 to prioritize other projects
Clarifier Painting	50,000	Due to conditions encountered during 2015 project, project will become refurbishment in 2017
2016 Total	\$5,543,000	

TABLE 2
CITY OF MT. PLEASANT
CHANGES IN 2017-2020 PROJECTS
FROM THE 2016-2020 CIP

CHANGED PROJECTS WITHIN THE 5 YEARS

<u>Page #</u>	<u>Project</u>	<u>Description of change</u>
42	Banner Poles (Downtown)	Project delayed to prioritize other projects
48	Parking Lot Renovations (Downtown)	Reconst. of lot #3 delayed to 2017 to coord. w/street project. Delayed #7 to 2019 and #8 to 2021
51	Pedestrian Lighting (Downtown)	Project reduced to prioritize other projects
55	Wayfinding (Downtown)	Delayed from 2016 until after branding is complete.
59	Chippewa River Protection Program	Project timelines and dollar amts adj. to reflect GRLI Grant and updated costs based on 2015 project
63	Medium Size Project (Parks)	Add'l funding in 2017 for field lighting. Mill Pond Nature Ctr redevelop. delayed 1 year to prioritize other
77	Riverside Cemetery Columbarium	Delayed until 2021 to prioritize other projects
81	Building Maintenance (DPW)	Delayed to coordinate projects for efficiency
87	Sidewalk Replacement	Reduced amount of replacement due to use of mudjacking repair system
92, 103	Resurfacing and Reconstruction (Major and Local Streets)	Some streets moved years based on updated assesments, state road funding, and grant availability
	Intersection Improvement	Moved to Table 8 - Projects considered but not planned in the next 5 years.
	Street Extension	Moved to Table 8 - Projects considered but not planned in the next 5 years.
109	Papi/Reil/Taxiway Lighting	Delayed to prioritize other projects
	Design/Construct Hanger Taxi Lanes	Delayed to prioritize other projects
112	Taxiway A Rehab	Delayed to prioritize other projects
	Drainage Improvements, Water & Sewer for Broadway	Moved to Table 8 - Projects considered but not planned in the next 5 years.
118,139	MP Center Water & Sewer	Moved to future years due to no current plan

TABLE 2
CITY OF MT. PLEASANT
CHANGES IN 2017-2020 PROJECTS
FROM THE 2016-2020 CIP

NEW PROJECTS THAT WERE NOT IN THE PRIOR CIP

<u>Page #</u>	<u>Project</u>	<u>Description of change</u>
17	Apparatus Bay Floors	Strip and epoxy floors in areas that house fire equipment
23	Roofing Project (DPS)	Replace sections of aged roofing based on asset management plan
27	Alley Maintenance/Mission St	Repair and reconstruct aging alleys
30	Corridor Imprv Study/Mission St	Examine how to make Mission Street more friendly to economic development
65	Mid-Mich/GKB Path Connect N	New trail to connect to existing parks trail system and Mid-Michigan path
99	Alley Recon and Resurface	Repair and reconstruct aging alleys
110	Runway 9 Tree Abatement	Phase II of tree abatement project
115	Lift Station Improvements	Updated based on SAW Grant findings
117,138	Meter Replacement	Prioritize replacing meters with radio read meters to gain efficiencies and more accurate readings
119	Improvements/ Replacements (WWTP)	Updated based on SAW Grant findings
122	Reconstruction/Reline (Sewer)	Updated based on SAW Grant findings
127	1MG Reservoir Bypass	Project accelerated because bypass is needed for other projects. Cost increased for updated estimates
129	Cast Iron Watermain Replacement	Delayed to 2021 to coordinate with other projects in industrial area
131	Clarifier Repair	Updated projections based on 2015 refinishing project
132	Deerfield Wells Generator Bldg	Protect electrical equipment from flooding
133	Distribution System Replace	Replace section of water main to coordinate with street project in 2017
134	Elevated Tank Construction	Will do in depth study and design in 2017
135	Elevated Tank Painting	Increased cost to reflect current projections
143	Valve Actuators	Delayed to prioritize other projects
144	Well 8 Abandonment	Discontinue Well 8 operations

TABLE 3

**TAXABLE VALUE
2006-2021**

YEAR	TAXABLE VALUE
2006	\$386,619,566
2007	409,176,955
2008	420,133,694
2009	434,801,883
2010	425,366,905
2011	428,273,541
2012	429,893,192
2013	437,763,957
2014	438,087,673
2015	443,492,718
ESTIMATES	
2016	\$447,928,000
2017	452,407,000
2018	456,931,000
2019	461,500,000
2020	466,115,000
2021	470,776,000

NOTE:

All numbers are as of March Board of Review certification.

TABLE 4**SCHEDULE OF CAPITAL OUTLAY 2012-2016**

FUND	2012 SPENT	2013 SPENT	2014 SPENT	2015 SPENT	2016 APPROVED
FUND					
Funding Source					
GENERAL FUND					
General Operating	\$73,471	\$124,457	\$310,861	\$303,204	\$336,760
Capital Impr Fund	183,200	345,140	544,200	562,960	573,500
Grant/Donation	30,000	571,959	0	214,105	60,000
Special Assessment	0	0	58,825	0	147,240
CBD TIFA	0	287,500	0	0	0
TOTAL GENERAL FUND	\$286,671	\$1,329,056	\$913,886	\$1,080,269	\$1,117,500
MAJOR STREET FUND					
Major Street	\$377,122	\$86,077	\$381,416	\$369,935	\$418,000
General Fund	173,000	0	0	0	0
Capital Improvement Fund	25,000	0	0	17,750	230,000
Federal/State Grant	375,000	0	352,893	36,368	0
TOTAL MAJOR STREETS	\$950,122	\$86,077	\$734,309	\$424,053	\$648,000
LOCAL STREET FUND					
Local Street	\$450,057	\$20,868	\$568,903	\$126,736	\$484,600
Capital Improvement Fund	225,000	0	200,000	150,000	160,500
Federal/State Grant	0	0	0	10,546	0
TOTAL LOCAL STREETS	\$675,057	\$20,868	\$768,903	\$287,282	\$645,100
PARKS & RECREATION FUND					
Recreation Funds	\$17,986	\$0	\$0	\$0	\$0
DOWNTOWN PARKING & IMPROVEMENTS					
Capital Improvement Fund	\$43,172	\$0	\$0	\$0	\$0
Federal Grant	142,493	0	0	0	0
TOTAL DOWNTOWN PARKING & IMPROVEMENTS	\$185,665	\$0	\$0	\$0	\$0

TABLE 4
SCHEDULE OF CAPITAL OUTLAY 2012-2016

FUND	2012 SPENT	2013 SPENT	2014 SPENT	2015 SPENT	2016 APPROVED
Funding Source					
TIFA FUND					
CBD TIFA	\$292,500	\$0	\$0	\$16,055	\$100,000
MISSION STREET DDA FUND					
Mission Street DDA	\$0	\$334,845	\$450,702	\$56,400	\$390,000
LAND DEVELOPMENT					
Grant/Loan	\$0	\$783,806	\$316,194	\$0	\$499,640
Land Development	0	0	575,163	0	152,610
TOTAL LAND DEVEL FUND	\$0	\$783,806	\$891,357	\$0	\$652,250
BORDEN BUILDING					
Capital Fund	\$21,600	\$0	\$0	\$0	\$0
AIRPORT FUND					
Federal/State Grant	\$464,074	\$0	\$0	\$0	\$0
2% Tribal Allocation	0	30,547	6,650	60,775	0
Airport	11,236	0	0	5,750	0
TOTAL AIRPORT FUND	\$475,310	\$30,547	\$6,650	\$66,525	\$0
WASTEWATER FUND					
Collection Repl Reserve	\$379,196	\$311,222	\$218,219	\$189,347	\$234,000
Plant Replacement Reserve	156,600	56,888	711,944	157,448	187,000
Sewer Fund	0	0	0	79,032	100,000
TOTAL WASTEWATER FUND	\$535,796	\$368,110	\$930,163	\$425,827	\$521,000
WATER FUND					
Water Dist. Repl Reserve	\$338,082	\$0	\$203,682	\$142,883	\$455,970
Plant Replacement Reserve	0	147,082	128,289	48,171	50,000
Water Fund	65,789	69,232	29,467	86,227	523,000
TOTAL WATER FUND	\$403,871	\$216,314	\$361,438	\$277,281	\$1,028,970
MOTOR POOL FUND					
Motor Pool	\$638,267	\$175,358	\$652,740	\$71,863	\$67,200
TOTAL CAPITAL OUTLAY	\$4,482,845	\$3,344,981	\$5,710,148	\$2,705,555	\$5,170,020

TABLE 5

**SUMMARY OF DEBT PAYMENTS
(INCLUDES PRINCIPAL AND INTEREST)**

	2007 BORDEN BLDG BONDS	1994 WATER TREATMENT PLANT BONDS	2007 REFUNDING WATER BONDS	2010 WASTEWATER BONDS
Principal Owed As of 12/31/16	\$1,870,000	\$1,135,000	\$2,600,000	\$1,115,000
Interest	290,281	318,500	351,010	53,588
Total	<u>\$2,160,281</u>	<u>\$1,453,500</u>	<u>\$2,951,010</u>	<u>\$1,168,588</u>
PAYMENTS				
2017	\$346,950	\$45,400	\$480,341	\$468,444
2018	353,700	45,400	481,091	473,544
2019	364,450	45,400	487,553	226,600
2020	356,662	45,400	489,815	
2021	363,669	45,400	481,291	
2022	374,850	45,400	530,919	
2023		584,400		
2024		596,700		
TOTAL	<u>\$2,160,281</u>	<u>\$1,453,500</u>	<u>\$2,951,010</u>	<u>\$1,168,588</u>

TABLE 6

**SUMMARY OF ESTIMATED TAX AND BONDING FUNDS
AVAILABLE FOR CAPITAL IMPROVEMENTS
2017-2021**

TAX REVENUES

YEAR	ESTIMATED TAXABLE VALUE (A)	2% MAX (B)	LESS	ESTIMATED AMOUNT FROM CURRENT LEVY (C)	ESTIMATED ADDITIONAL LEVY AVAILABLE
2017	\$452,407,000	\$9,048,140	-	\$814,300	\$8,233,840
2018	456,931,000	9,138,620	-	822,500	8,316,120
2019	461,500,000	9,230,000	-	830,700	8,399,300
2020	466,115,000	9,322,300	-	839,000	8,483,300
2021	470,776,000	9,415,520	-	847,400	8,568,120

BONDING CAPACITY

YEAR	BONDING MAXIMUM (D)	LESS	PRIOR YR BOND PRINCIPAL OS	ADDITIONAL BONDING AVAILABLE
2017	\$45,240,700	-	\$1,080,000	\$44,160,700
2018	45,693,100	-	1,135,000	44,558,100
2019	46,150,000	-	950,000	45,200,000
2020	46,611,500	-	755,000	45,856,500
2021	47,077,600	-	785,000	46,292,600

- (A) Estimates at 1% Increase Per Year
- (B) Article VIII, Section 1 of Charter Limits Annual Tax Levy to 2% of SEV
- (C) Average Last Five (5) Years = 1.80 Mills
- (D) Section 117.4(A), Michigan Compiled Laws Limits Bonding to 10% of SEV

TABLE 7

**TAX LEVY TO RETIRE GENERAL OBLIGATION DEBTS
(INCLUDES PRINCIPAL AND INTEREST)
2017-2021**

YEAR	ESTIMATED TAXABLE VALUE	TOTAL OBLIGATION	TAX RATE (MILLS)
2017	\$452,407,000	\$346,950	0.767
2018	456,931,000	353,700	0.774
2019	461,500,000	364,450	0.790
2020	466,155,000	356,662	0.765
2021	470,776,000	363,669	0.772

GENERAL OBLIGATION DEBT PRINCIPAL AND INTEREST OBLIGATION

YEAR	2007 BORDEN BLDG BONDS
2017	\$346,950
2018	353,700
2019	364,450
2020	356,662
2021	363,669

TABLE 8

**PROJECTS CONSIDERED BUT NOT PLANNED
IN NEXT 5 YEARS**

Community Pool

Paving of Cemetery Road

Festival of Lights in Island Park

Downtown Ice Rink

Airport Runway Extension

Mt. Pleasant Center Infrastructure

Intersection Improvement - Pickard & Bradley

Street Extension - Broadway to the West

Drainage Improvements, Water & Sewer for Broadway Extension

800 Mhz Fire Radios

Mission Street Decorative Lighting

This Page Left Blank Intentionally.