



## 2013-2017 Capital Improvement Plan

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**Overview****Capital Improvement Plan Introduction**

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The City of Manistee 2013-2017 Capital Improvement Plan (CIP) is presented on the following pages. The CIP is a rolling five-year plan for capital improvements throughout the City of Manistee. It includes all departments and operating areas. The document presents capital needs of the City and is in alignment with the goals and priorities set forth in the Strategic Plan. The CIP ensures that staff continues to be forward-looking and proactive in identifying areas of needed capital investment.

Current year items identified in the CIP are incorporated in the operating budget. The outlying years serve as an important planning tool, identifying areas that will need resources in the future. Since the plan is forward-looking, it is subject to available funding, changing priorities and unanticipated events.

For the purpose of this plan, a capital expenditure is any project that costs in excess of \$5,000 and has an estimated useful life of greater than one year. This includes a wide array of items, ranging from vehicles to equipment to infrastructure items to physical structures. Each item identified in the CIP has a project justification statement. This project statement consists of the following parts:

**Project Title:** This indicates the name of the project.

**Department:** Which department or operating area is the capital improvement related to.

**Year:** Which fiscal year is the project expected to be started. When a project spans multiple years, this will be indicated in the text of the statement.

**Estimated Project Cost:** Total estimated project cost, even if it will be financed over time.

**Project Description:** A brief description of what the project or expenditure is.

**Project Justification\Case Statement:** An explanation of why the project or expenditure is important and why it should be funded.

**Impact on Operating Expenses:** An estimate of how this project or expenditure impacts City operating expenses.

**Funding Source & Financing Method:** An indication where funds will come from to pay for the project or expenditure and how it may be financed.

**Funding Notes:** This is an elaboration on the funding source or financing method.

Overview

Capital Projects Summary

The total estimated cost of all capital projects in the five year plan is **\$ 5,983,000** and is summarized in the following figures.

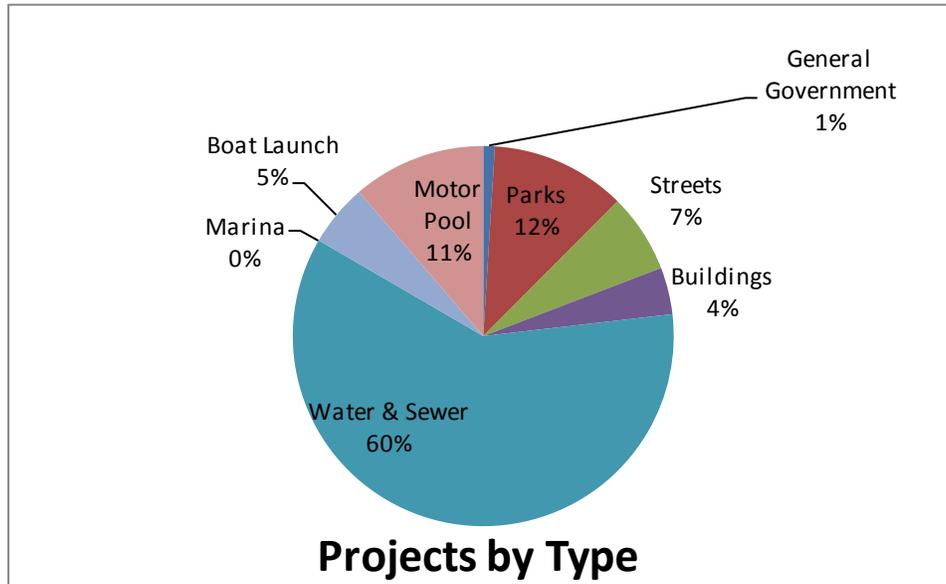
**Capital Projects by Type**

General Government	\$ 60,000
Parks	\$ 705,000
Streets	\$ 412,500
Buildings	\$ 245,000
Water & Sewer	\$ 3,700,500
Marina	\$ -
Boat Launch	\$ 325,000
Motor Pool	\$ 695,000

**Capital Projects by Year**

	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
	\$498,000	\$3,276,500	\$663,500	\$692,500	\$1,012,500

**Total \$ 6,143,000**



General Government Capital Projects Summary

General government capital projects are those that are general in nature and impact the whole City operations, or those that relate to General Fund activities. The total estimated cost of all general government capital projects in the five year plan is **\$60,000** and is summarized below.

General Government	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
File Server			\$ 15,000			\$ 15,000
Heart Monitor	\$ 18,000					\$ 18,000
City Hall Generator	\$ 15,000					\$ 15,000
City Garage Generator	\$ 12,000					\$ 12,000
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 45,000</b>	<b>\$ -</b>	<b>\$ 15,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 60,000</b>

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General Government Capital Projects

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**Project Title: File Server**

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**Department:** Finance

**Year:** 2014-2015

**Estimated Project Cost:** \$20,000

**Project Description:** The City intends to replace a five year-old file server that is at City Hall. This file server is the main domain, DNS, email and DHCP server for the City. The new server will be more powerful and have newer software and technology.

**Project Justification\Case Statement:** The current file server will be at the end of its expected useful life and will likely be underpowered for the tasks it is handling. It is a best practice to keep our file servers current with technology to enhance efficiency and productivity. This file server is critical to City operations, and if it were to fail, would effectively shut down City Hall. Once the new file server is in place, the old one will be rebuilt and used either as a spare server in the event of a failure or a workstation. This has been endorsed by the City's IT consultant Terrapin Networks.

**Impact on Operating Expenses:** The new server should reduce the amount of time spent maintaining the server.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

General Government Capital Projects

Project Title: Cardiac Monitor

Department: Fire\EMS

Year: 2012-2013

Estimated Project Cost: \$18,000

Project Description: Purchase a cardiac monitor for Rescue 5.

Project Justification\Case Statement:

This is a required piece of equipment for ALS and should be a onetime cost.



Impact on Operating Expenses: None. In fact this piece of equipment will be a revenue generator for an ALS call

Funding Source:

Financing Method:

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

Funding Notes: A LRSB grant will be explored for partial funding of the cardiac monitor, however purchase is not dependent upon receiving grant funds.

General Government Capital Projects

**Project Title: City Hall Generator**

**Department:** Municipal Buildings

**Year:** 2013-2014

**Estimated Project Cost:** \$15,000-\$20,000

**Project Description:** Purchase of stand by generator for City Hall.



**Project Justification\Case Statement:** When City Hall was renovated, it was wired for future emergency generator power. The external plug in for the generator was also installed. An emergency stand-by generator would allow City Hall to function in the event of a power outage or other emergency that cut power. Since City Hall will be providing centralized phone and data services for other City locations, and vital links for well and pump station controls, it is critical that these remain up and running. Also, since City Hall houses the Police Department, it is important for Public Safety continuity.

**Impact on Operating Expenses:** Minimal increase due to annual generator maintenance. Large, but difficult to quantify, savings from the elimination of lost data and employee downtime during power events.

**Funding Source:**

**Financing Method:**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Capital Improvement Fund | <input checked="" type="checkbox"/> Cash           |
| <input checked="" type="checkbox"/> Water & Sewer Utility    | <input type="checkbox"/> Cash Installment          |
| <input type="checkbox"/> Marina                              | <input type="checkbox"/> Bank Installment Purchase |
| <input type="checkbox"/> Boat Ramp                           | <input type="checkbox"/> Bond Issue                |
| <input checked="" type="checkbox"/> Grant                    | <input type="checkbox"/> Internal Loan             |

**Funding Notes:** Grants opportunities will be explored for this investment, but purchase is not dependent on grant funding.

General Government Capital Projects

Project Title: City Garage Generator

Department: Municipal Buildings

Year: 2012-2013

Estimated Project Cost: \$12,000

Project Description: Purchase of stand by generator for City Garage.



Project Justification\Case Statement: City Garage has an inoperable 1950's civil defense generator. A functioning emergency stand-by generator would allow City Garage to function in the event of a power outage or other emergency that cut power. City Garage serves as a head end for the City network and as the nerve center for the well controls. It is critical that these remain up and running. Also, since City Garage often works in situations where power may be out, power becomes a critical safety and efficiency issue.

Impact on Operating Expenses: Minimal increase due to annual generator maintenance. Large, but difficult to quantify, savings from the elimination of lost data and employee downtime during power events.

Funding Source:

Financing Method:

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

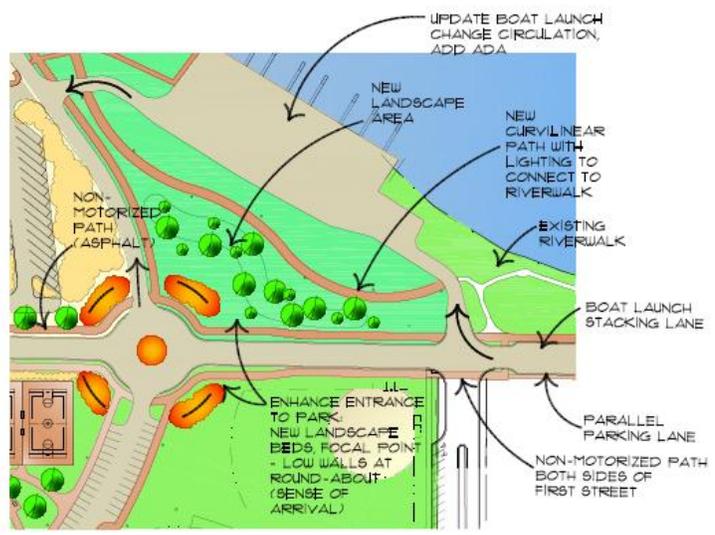
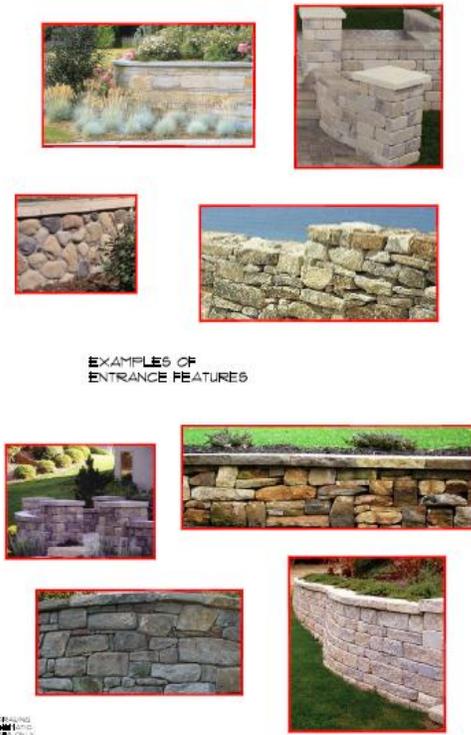
Funding Notes: Grants opportunities will be explored for this investment, but purchase is not dependent on grant funding.

Parks Capital Projects Summary

Parks capital projects are those that are directly related to improvements in the City’s extensive park system. The total estimated cost of all general government capital projects in the five year plan is **\$705,000** and is summarized below.

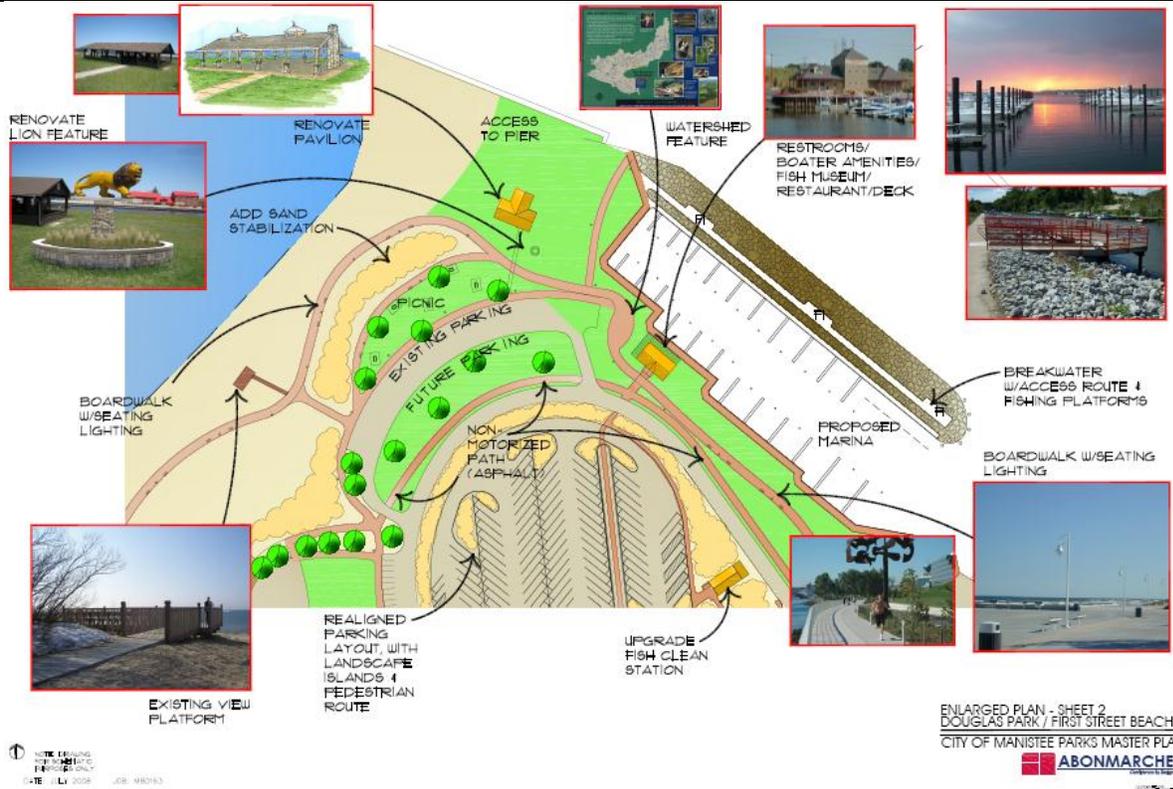
Parks	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Wayfinding Signage	\$ 15,000	\$ 10,000				\$ 25,000
First Street Beach Improvements		\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 100,000
Playground Equipment			\$ 15,000	\$ 15,000		\$ 30,000
Man-Made Lake Improvements					\$ 550,000	\$ 550,000
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 15,000</b>	<b>\$ 35,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 575,000</b>	<b>\$ 705,000</b>

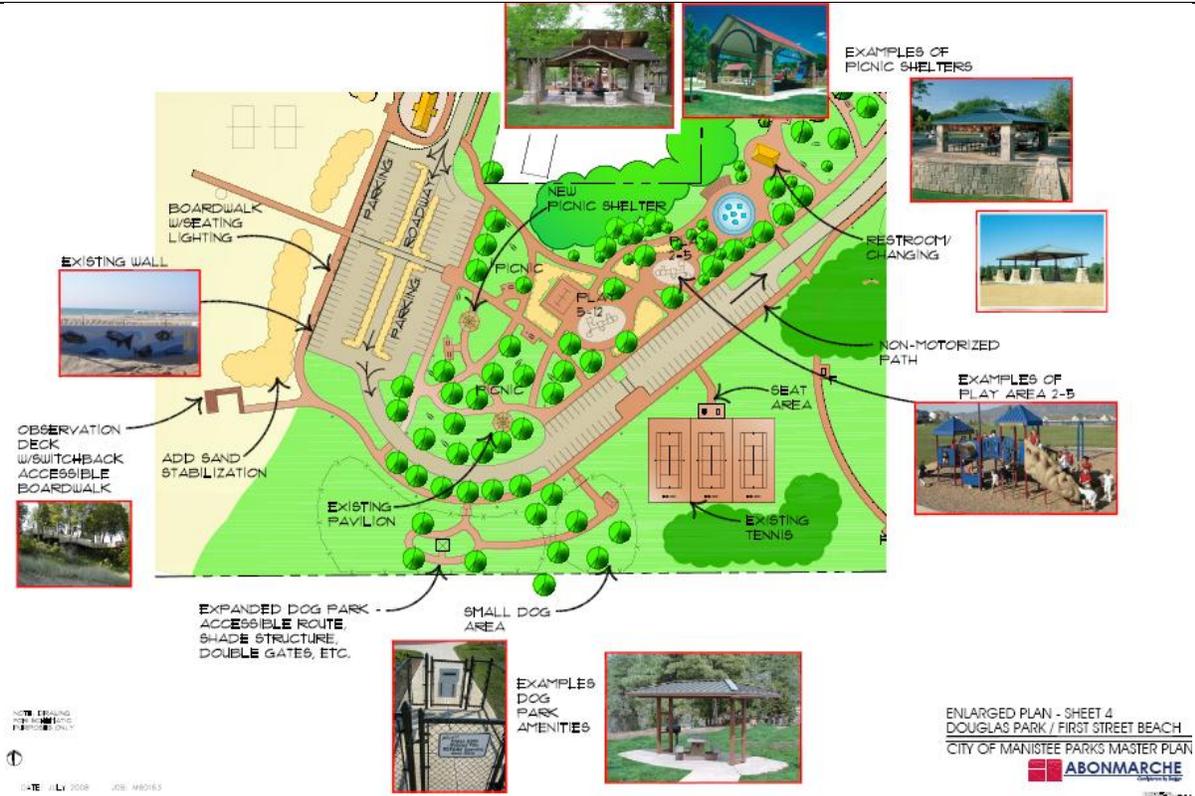
The community has undertaken an extensive process to develop Beach Conceptual plans for the City beach areas. This ambitious project was to design a plan to have world class beaches. Of course, world class beaches carry a world class price tag. The projects identified represent just a small fraction of the cost to implement the plan. Renderings of the plan for various areas are included.



ENLARGED PLAN - SHEET 1  
 DOUGLAS PARK / FIRST STREET BEACH  
 CITY OF MANISTEE PARKS MASTER PLAN

ABONMARCHÉ CONSULTANTS, INC.





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Parks Capital Projects

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**Project Title: Park Wayfinding Signage**

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**Department:** Parks

**Year:** 2012-2013

**Estimated Project Cost:** \$15,000

**Project Description:** Continue installing wayfinding signage at City parks.

**Project Justification\Case Statement:** This signage would continue the theme established with our wayfinding signage program and better identify our park assets.



**Impact on Operating Expenses:** No impact immediately, but long term may increase maintenance slightly.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Parks Capital Projects

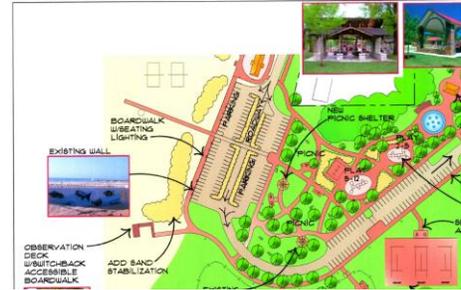
**Project Title: First Street Beach Picnic Shelter Area Improvements**

**Department:** Parks

**Year:** 2013-2014

**Estimated Project Cost:** \$25,000 per year, as funds allow

**Project Description:** With the planting of dune grass to stabilize drifting sand, the City can improve the picnic shelter area by addressing parking, removing excess sand, remove dead trees, strategic pouring of sidewalks, renovating structures, planting of grass, installation of new picnic grills, and installation of sprinkling systems. This funding will only start the process.



**Project Justification\Case Statement:** The City of Manistee has completed the Beach Conceptual Plan in accordance with the Three Year Council Strategic Goals. The primary goal is to improve both the aesthetics and use of the picnic shelter area by placement of strategic sidewalks and planting of grass. Due to the sandy conditions, it will be imperative for the area to have a sprinkling system.

**Impact on Operating Expenses:** This grassy area will require more mowing and annual edging of the sidewalks, but should reduce the number of staff hours used to remove sand. The increased use and aesthetic improvement will be worth the potential increase in staff maintenance.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Staff will research funding opportunities over the next few years. However, at this point, it appears that there is no readily available source of grant funds for this project. We will also look at partnering with other local units of government and\or the County.

Parks Capital Projects

Project Title: Playground Equipment

Department: Parks

Year: 2014-2015

Estimated Project Cost: \$15,000

Project Description: Replace\upgrade playground equipment in our Parks.



Project Justification\Case Statement: Current City parks playground equipment could stand to be upgraded.

Impact on Operating Expenses: Operating expenses should be similar to the cost of maintaining existing equipment. Although \$15,000 will not buy much playground equipment, it will help address some needs.

Funding Source:

Financing Method:

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

Funding Notes:

Parks Capital Projects

**Project Title: Man Made Lake Improvements**

**Department:** Parks

**Year:** 2016-2017

**Estimated Project Cost:** \$550,000

**Project Description:** Incorporate Phase I barrier free amenities throughout Man Made Lake park, construct restrooms and reconstruct parking.



**Project Justification\Case Statement:** The City has completed its acquisition of Man Made Lake. The Beach Conceptual Plan for this park has been completed and endorsed by Council. The plan has a three phase implementation schedule. Phase 1 improvements will address parking, restrooms\pavilion and accessible amenities. The MNRTF board has encouraged the City to apply for development funds for this park.

**Impact on Operating Expenses:** Impact on operating expenses would be associated with the requirement of maintaining and cleaning the new amenities by DPW and Parks personnel, as well as weekly (or as needed) sand removal. Sand removal hopefully should be less than at the exposed Fifth Avenue and First Street Beaches.

**Funding Source:**

**Financing Method:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** This project has been listed as an “Explore the Shore” candidate. Grant funding will be sought from the Michigan Natural Resources Trust Fund and Easter Seals. If grant funding is not received, this project will have to be pushed back.

Streets Capital Projects Summary

Streets capital projects are those that are directly related to improvements in the City’s street network. The total estimated cost of all street capital projects in the five year plan is **\$412,500** and is summarized below.

Streets	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Crack Seal	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 12,500	\$ 62,500
Small Urban Project		\$ 350,000				\$ 350,000
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 12,500</b>	<b>\$ 362,500</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 12,500</b>	<b>\$ 412,500</b>

The City has adopted a state approved Street Asset Management Plan. It will update this plan regularly and use the findings to assist in budgeting for street capital projects. This plan represents a “best practice” and has been recognized by the State of Michigan as a model plan. Implementation will stretch the City’s street dollars.

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Streets Capital Projects

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**Project Title: Streets Crack Sealing**

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**Department:** DPW

**Year:** 2012-2013

**Estimated Project Cost:** \$12,500

**Project Description:** Crack sealing various streets as indicated by the Street Asset Management Plan. The goal is to do 1/4 to 1/3 of the town each year.

**Project Justification\Case Statement:** Crack sealing is a cost effective way of preserving and extending the life of our streets. It seals water out and prevents heaving and additional cracking.

**Impact on Operating Expenses:** Crack sealing will delay the need to reconstruct streets, making our street resources go farther.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** This is typically contracted out with the Manistee County Road Commission.

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Streets Capital Projects

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**Project Title: Small Urban Project**

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**Department:** DPW

**Year:** 2012-2013 or when small urban funds become available

**Estimated Project Cost:** \$350,000

**Project Description:** A street resurfacing funded by an MDOT small urban grant, likely Kosciusko Street.

**Project Justification\Case Statement:** The City is in a rotation to receive small urban funds. This is an economical way to leverage scarce street dollars.

**Impact on Operating Expenses:** No significant impact.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** It will have to be determined if the street funds have sufficient resources to fund the local match.

Municipal Buildings Capital Projects Summary

Municipal buildings capital projects are those that are directly related to improvements in the City’s publically owned buildings. The total estimated cost of all building capital projects in the five year plan is **\$245,000** and is summarized below.

Municipal Buildings	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Ramsdell Classroom\Concession	\$ 40,000					\$ 40,000
Energy Efficiency Improvements	\$ 5,000					\$ 5,000
Ramsdell Theatre Substage		\$ 50,000				\$ 50,000
Ramsdell Theatre Other			\$ 50,000	\$ 50,000	\$ 50,000	\$ 150,000
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 45,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 245,000</b>

The City is developing a Building Asset Management Plan that will assist in identifying capital projects and preventative maintenance for City buildings which will then be used to prepare the capital improvement plan. This plan will represent a “best practice” and will stretch the City’s limited maintenance dollars.

Municipal Buildings Capital Projects

**Project Title: Finish Ramsdell Theatre Classrooms \ Start Concession Area**

**Department:** Municipal Buildings

**Year:** 2012-2013

**Estimated Project Cost:** \$40,000

**Project Description:** This project completes the classroom renovations on the lower level and starts to implement other portions of the Ramsdell master building plan. This will likely be the concession area.



**Project Justification\Case Statement:** The Ramsdell has several areas which are not complete and which limit the usefulness and revenue potential of the building. Examples of this include the classrooms in the basement level on the North side and lack of a concession area.

**Impact on Operating Expenses:** Operating expenses will go up slightly as renovated areas will be maintained at a higher level. This should be more than offset by the increased revenue brought in by the improvements.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** The City will likely have to pay for this out of its own resources; however, grant opportunities are being actively looked for; as is partnering with another organization to help defray costs.

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Municipal Buildings Capital Projects

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**Project Title: Energy Efficiency Improvements**

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**Department:** Municipal Buildings

**Year:** 2012-2013

**Estimated Project Cost:** \$6,000



**Project Description:** Implementing energy efficiency projects on City buildings.

**Project Justification\Case Statement:** The City recently had several of its buildings evaluated by the State of Michigan energy office. They issued a report detailing different areas that the City could save energy in a cost-effective manner. Examples include installing programmable thermostats, replacing incandescent lights, etc.

## Introductory Energy Evaluation

**Impact on Operating Expenses:** Operating costs should be reduced because of energy savings.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** The City previously received a \$40,000 energy efficiency grant. Part of this grant establishes an energy savings account. This energy savings account will be used to supplement \$3,000 from the Capital Improvement to pick up where the grant left off.

Municipal Buildings Capital Projects

**Project Title: Ramsdell Theatre Ancillary Spaces**

**Department: Municipal Buildings**

**Year:** 2013-2014 and beyond

**Estimated Project Cost:** \$50,000 / year (several years)

**Project Description:** Completing all unfinished areas in the Ramsdell Theatre



**Project Justification\Case Statement:** Once the Roof and HVAC projects are complete, the Ramsdell Theatre will still not be finished. In order to truly complete the building, the following spaces need to be addressed: concession area, green room, substage, sub theatre, dressing rooms, storage, loading dock, elevator and gallery area. By completing the building, the Ramsdell will become the premiere Cultural Arts center in the area and will help to draw people to Manistee.

**Impact on Operating Expenses:** Operating costs will likely increase as there are more areas to maintain and possibly staff. Revenue should also increase entirely offsetting this cost.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** The Ramsdell Governance is exploring all available options to help fund this important project, including grants, partnerships and looking at the long-term possibility of a county-wide millage or county cultural arts authority.

Water & Sewer Capital Projects Summary

The Water and Sewer Utility is by far the most capital intensive operation of the City as it has the most physical assets. The total estimated cost of all Water & Sewer capital projects in the five year plan is **\$3,700,500** and is summarized below.

Water & Sewer	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Well 8 Rehab	\$ 15,000					\$ 15,000
Fencing	\$ 22,500					\$ 22,500
8th & Vine Control Panel	\$ 30,000					\$ 30,000
WWTP Gas Monitors	\$ 8,000					\$ 8,000
						\$ -
Final Clarifier (FCT)		\$ 1,400,000				\$ 1,400,000
WWTP Basement Leaks		\$ 40,000				\$ 40,000
River Bank Sewer Line		\$ 825,000				\$ 825,000
Sixth Ave Pump Station		\$ 430,000				\$ 430,000
Ren Park Pump St Generator		\$ 50,000				\$ 50,000
						\$ -
River & Oak Valve Replacement			\$ 40,000			\$ 40,000
Arthur St. Pump Station Generator			\$ 50,000			\$ 50,000
I & I Suppression			\$ 150,000	\$ 150,000		\$ 300,000
						\$ -
Well 9 Chemical Feed Addition				\$ 40,000		\$ 40,000
Arthur St. Pump Station Rebuild				\$ 50,000		\$ 50,000
CSO #18 @ Ramsdell Closure				\$ 25,000		\$ 25,000
Replace Watermain under River @ 6th Ave					TBD	\$ -
Replace Sewermain under River @ 6th Ave					TBD	\$ -
Well 7 Rehab & Generator					TBD	\$ -
Maywood Tank Paint					\$ 375,000	\$ 375,000
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 75,500</b>	<b>\$ 2,745,000</b>	<b>\$ 240,000</b>	<b>\$ 265,000</b>	<b>\$ 375,000</b>	<b>\$ 3,700,500</b>

The Water & Sewer Utility is in the fortunate position of being able to fund its needed projects through user rates. This has allowed it to keep up with many maintenance items and be proactive in addressing an aging system's needs. Recent mandatory sewer separation projects have required additional rate increases and taking on more debt. However, recently rate increases have raised less revenue than projected requiring larger increases and scaled back investments.

Water & Sewer Capital Projects

**Project Title: Well 8 Rehab**

**Department: Water**

**Year: 2012-2013**

**Estimated Project Cost: \$15,000**

**Project Description:** Well 8 is scheduled to be cleaned as part of the clean water initiative program.



**Project Justification\Case Statement:** The cleaning and repairs of the city water wells is a department infrastructure goal. It is also a key activity to the clean water initiative program which will lead to improved water quality and reduced maintenance and operational expenses.

**Impact on Operating Expenses:** The cleaning of the city water wells should reduce operating electrical cost by increasing the pump efficiency.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Water & Sewer Capital Projects

**Project Title: Fencing at Pump Stations, Water Tower and Well Field**

**Department:** WWTP & Water

**Year:** 2012-2013

**Estimated Project Cost:** \$22,500

**Project Description:** Install fencing around generators at First St PS and Jerumbo St. PS, water towers, well houses and generators.



**Project Justification\Case Statement:** With the addition of generators to pump stations and well facilities, the installation of fencing around the stations will be essential to security and protecting the equipment from vandalism and accidental destruction.

**Impact on Operating Expenses:** Operating costs will likely not change.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

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Water & Sewer Capital Projects

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**Project Title: Eighth & Vine Pump Station Controls**

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**Department:** WWTP

**Year:** 2012-2013

**Estimated Project Cost:** \$30,000

**Project Description:** Replace pump controls and control panel and Eighth & Vine Pump Station.

**Project Justification\Case Statement:** The current control system and panel at the Eighth and Vine Pump Station is in disrepair. A new panel and control system will be installed which will enable the pump station to be networked with the new SCADA system at the WWTP, enabling operators to have more monitoring capabilities as well as fewer maintenance issues.



**Impact on Operating Expenses:** Operating costs will likely decrease because there will be fewer maintenance issues.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

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Water & Sewer Capital Projects

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**Project Title: WWTP Gas Monitors**

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**Department:** WWTP

**Year:** 2012-2013

**Estimated Project Cost:** \$8,000

**Project Description:** Replace fixed gas monitors at the WWTP.

**Project Justification\Case Statement:** The gas monitoring equipment at the WWTP is at the end of its useful life. The monitors are essential to the safety of the operators. The monitors are used to detect Hydrogen Sulfide gas and Low Level Explosives such as Methane Gas.



**Impact on Operating Expenses:** Operating costs will not change.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

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Water & Sewer Capital Projects

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**Project Title: Final Clarifier (Filer Charter Twp)**

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**Department:** WWTP

**Year:** 2012-2013

**Estimated Project Cost:** \$1,400,000

**Project Description:** Construct a third final clarifier at the WWTP.



**Project Justification\Case Statement:** The sewer agreement with Filer Charter Township contemplates FCT paying for the design and installation of a third final clarifier at the WWTP.

**Impact on Operating Expenses:** Unknown, but FCT users will be paying user charges to support the system like City residents.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Financed by FCT thru a USDA grant.

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Water & Sewer Capital Projects

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**Project Title: WWTP Basement Leaks**

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**Department: WWTP**

**Year: 2013-2014**

**Estimated Project Cost: \$40,000**

**Project Description:** Repair cracks/leaks in basement wall at WWTP.

**Project Justification\Case Statement:** The basement wall at the WWTP has two areas where ground water is leaking in through a large crack and a pipe seal. If not repaired this could cause structural issues. There is a constant flow of water that is pumped out with a sump pump.

**Impact on Operating Expenses:** Operating costs will likely decrease due to decreased use of the sump pump.



**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** This will likely be done at the same time the final clarifier is being built.

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Water & Sewer Capital Projects

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**Project Title: River Bank Sewer Line**

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**Department:** Sewer

**Year:** 2013-2014

**Estimated Project Cost:** \$825,000

**Project Description:** Reconstruction of the 12 inch sewer main from Maple Street Bridge to the 6th Ave Pumping Station. Plans include 500ft. of sheet piling to stabilize the bank and install 600ft. of new 12 inch sewer. Note: Easements and permits have not been obtained yet and could result in the project being pushed back one year.



**Project Justification\Case Statement:** The sewer support pilings along the northside river bank have deteriorated to a condition just short of failing. This sewer line serves all customers east and north of Washington St, including the hospital and the prison. If this sewer line should happen to fail the potential health, safety, enviromental, and financial repercussions could be enormous.

**Impact on Operating Expenses:** None

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** It is unclear at this point how the project will be financed. If undertaken, rates will have to be increased to pay for the project.

Water & Sewer Capital Projects

**Project Title: Sixth Ave. Pump Station Replacement**

**Department:** WWTP

**Year:** 2013-2014

**Estimated Project Cost:** \$430,000

**Project Description:** Complete the replacement of the Sixth Ave. pump station.

**Project Justification\Case Statement:** The Sixth Ave. pump station is under capacity. The station is required to be upgraded by the MDEQ. There is an abundance of maintenance and design issues associated with the current station that will be addressed with the completion of the new pump station.



**Impact on Operating Expenses:** Operating costs will likely decrease, the new station will require much less maintenance. Also, there will be fewer issues associated with clogged pumps, therefore reducing the number of after-hours call-ins.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** It is unclear at this point how the project will be financed. If undertaken, rates will have to be increased to pay for the project.

Water & Sewer Capital Projects

**Project Title: Pump Station Generators**

**Department:** WWTP

**Year:** 2013-2014 and 2014-2015

**Estimated Project Cost:** \$100,000

**Project Description:** To provide onsite generators to the most critical pumping stations in the city sewer system. The remaining ones are Arthur St. PS, and Renaissance Park PS. The project plan is to address one pump station each year.



**Project Justification\Case Statement:** The waste stream from the hospital and prison is conveyed through these pumping stations. Both the hospital and the prison have onsite generators to power their pumping station to stay in operation. Thus, they produce a constant waste stream. Onsite generators at each of the pumping stations is a more efficient way of handling a power outage than having one pump and two generators. During a power outage, the question is, "Which pump station do you go to first, and with what?" Several times in the past ten years we have had 12 pumping stations down without power at the same time.

**Impact on Operating Expenses:** About \$3,000 per year per generator.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Water & Sewer Capital Projects

Project Title: River & Oak Valve Replacement

Department: Water

Year: 2015-2016

Estimated Project Cost: \$40,000

Project Description: Replace four water main valves and the fire hydrant at the intersection of River St. and Oak St.



Project Justification\Case Statement: There are four water main valves located under the intersection. The two valves running east and west which feed River St. are broken, causing issues with water quality and fire protection. The intersection needs to be opened up to do the replacement. While the intersection is open it is a convenient time to replace the aging north and south valves which feed the water line crossing the river and the old fire hydrant located at the intersection. This work was not done when the River Street Streetscape was completed.

Impact on Operating Expenses: Operating costs will likely not change.

Funding Source:

Financing Method:

- Capital Improvement
General
Water & Sewer Utility
Major\Local Street Fund
Marina
Boat Ramp
Grant

- Cash
Cash Installment
Bank Installment Purchase
Bond Issue
Internal Loan

Funding Notes:

Water & Sewer Capital Projects

**Project Title: Sewer Infiltration & Inflow Suppression**

**Department:** Sewer

**Year:** 2013-2014

**Estimated Project Cost:** \$300,000 over several years (rough estimate depending on findings of S2 Study)

**Project Description:** To address inflow and infiltration to the sewers, particularly in the 1982 sewer project and Eighth & Vine pump station drainage area. THIS IS A MUST DO PROJECT.



It will be done after an infiltration/inflow study of the area, funded by the recently received S2 grant.

**Project Justification\Case Statement:** The flow from the Eighth & Vine pump station increases dramatically during wet weather events and spring thaw. This increase in flow will become a major problem when all the sewer overflows are eliminated as required by the Final Combined Sewer Overflow Control Program (December 31, 2016). Failure to identify and eliminate the INI problem will lead to flooded basements during wet weather events. Smoke testing has also revealed areas that will be addressed.

**Impact on Operating Expenses:** Should reduce operating cost during wet weather events as less flow is coming to the WWTP.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** The ultimate cost and corresponding financing of the project will be determined by the results of the INI study.

Water & Sewer Capital Projects

**Project Title: Well # 9 Chemical Feed Addition**

**Department: Water**

**Year: 2013-2014**

**Estimated Project Cost: \$40,000**

**Project Description:** Add building space to the well house to contain chemicals and chemical feed equipment.



**Project Justification\Case Statement:** At this time corrosive chemicals and chemical feed equipment are housed in the same building space as process controls and electrical equipment. Corrosive chemicals damage this equipment, shortening the life span of the components. Adding a new space will eliminate this problem and save money in the long term.

**Impact on Operating Expenses:** Operating costs will likely decrease due to less maintenance issues on electrical equipment and controls.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Water & Sewer Capital Projects

**Project Title: Arthur St Pump Station Rebuild**

**Department:** Sewer

**Year:** 2015-2016

**Estimated Project Cost:** \$50,000

**Project Description:** Rebuild Arthur Street pump station.

**Project Justification\Case Statement:** Prior to any sewer extension into Manistee Twp., this lift station will be evaluated and will likely need to be rebuilt.



**Impact on Operating Expenses:** Slight increase if larger pumps are required.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Water & Sewer Capital Projects

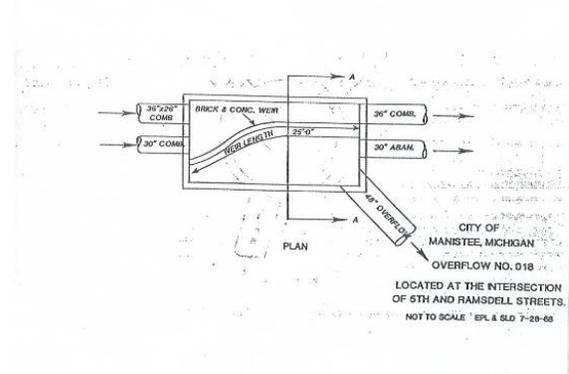
**Project Title: Closure of CSO#18 at 6<sup>th</sup> & Ramsdell St.**

**Department:** Sewer

**Year:** 2015-2016

**Estimated Project Cost:** \$25,000

**Project Description:** Close off last remaining combined sewer outfall per state mandated schedule.



**Project Justification\Case Statement:** This closure is required by the State and is the last piece of the CSO elimination program.

**Impact on Operating Expenses:** None.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Eligible for DWRF financing.

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Water & Sewer Capital Projects

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**Project Title:** Evaluate\Replace Water & Sewer Mains under Manistee River

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**Department:** Water & Sewer

**Year:** 2016-2017

**Estimated Project Cost:** Unknown

**Project Description:** The water and sewer mains that cross the Manistee River at Sixth Ave. have not been inspected, but are feared to be in disrepair. An evaluation needs to be undertaken to determine their condition and what, if anything needs to be done about them.

**Project Justification\Case Statement:** Huge disruption of service that could not be easily restored would happen if one of these lines failed. They need to be evaluated and a plan put in place.

**Impact on Operating Expenses:** The cost of the study.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

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Water & Sewer Capital Projects

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**Project Title: Well 7 Rehab & Generator**

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**Department:** Water

**Year:** 2016-2017

**Estimated Project Cost:** \$175,000

**Project Description:** Well 7 - Complete rework of well including new motor and pump, generator and right angle drive.

**Project Justification\Case Statement:** The cleaning and repairs to Well 7 is part of the water department clean water initiative program. Well 7 has high iron content and is known as the "rust bucket" and will be the most challenging to place back into production. It will be turned into a lower volume production well in an attempt to reduce chlorides. Prior to a decision being made to renovate this well, it needs to be determined if we have enough firm capacity without this well and\or if a new well in a different aquifer would make more sense.

**Impact on Operating Expenses:** The cleaning and repairs of water wells should increase the pump efficiency, thus reducing operating cost.

**Funding Source:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Potentially eligible for DWRP financing.

Water & Sewer Capital Projects

**Project Title: Paint Maywood Tank**

**Department:** Water

**Year:** 2016-2017

**Estimated Project Cost:** \$375,000

**Project Description:** Paint Maywood Tank inside and out.



**Project Justification\Case Statement:** The Maywood Tank was last painted in 1996. The paint on the tank is likely deteriorating and will need to be redone. This will be verified through inspection prior to the project.

**Impact on Operating Expenses:** None

**Funding Source:**

**Financing Method:**

- Capital Improvement Fund
- Water & Sewer Utility
- Marina
- Boat Ramp
- Grant

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:**

Municipal Marina Capital Projects Summary

Municipal Marina capital projects are those that are related to the City’s marina operations. The total estimated cost of all marina capital projects in the five year plan is **\$0** and is summarized below.

Municipal Marina	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
to be determined						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ -	\$ -	<b>\$0</b>

Having completed several capital projects over the past few years, including the replacement of the Marina building, has put the Marina in good shape. No planned projects are on the planning horizon at this time.

Boat Launch Capital Projects Summary

Boat Launch capital projects are those that are related to the City’s three boat launches. The total estimated cost of all Boat Launch capital projects in the five year plan is **\$325,000** and is summarized below.

Boat Launch	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
						\$ -
						\$ -
9th St Launch				\$ 325,000		\$ 325,000
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	\$ -	\$ -	\$ -	\$ 325,000	\$ -	\$ 325,000

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Boat Ramps Capital Projects

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**Project Title: Ninth Street Boat Launch Renovations**

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**Department:** Boat Ramps

**Year:** 2016-2017

**Estimated Project Cost:** \$325,000

**Project Description:** Renovation of the Ninth St. Boat launch including paving parking lot, replacing dock and skid pier(s), landscaping and adding a simple restroom. The timing is dependent on securing easements and availability of grant funding.

**Project Justification\Case Statement:** The Ninth St. launch is an important, but under utilized launch. This project would make it much more user friendly and would give the City three excellent boat launches. The City will need to clean up the ownership of the property on which the launch is located in order for the project to move forward.

**Impact on Operating Expenses:** Operating costs will increase as there is more to maintain.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** The site has been included on the "Explore the Shores" list of candidate sites. The project will likely be funded with a mix of grants, including the GLFT and Waterways. Likely local match will be \$80,000. If grants are not received, the project will have to be postponed.

Motor Pool Capital Projects Summary

Motor Pool capital projects are those that are related to the City’s extensive fleet of vehicles and equipment. The total estimated cost of all Motor Pool capital projects in the five year plan is **\$535,000** and is summarized below.

Motor Pool	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	Total
Sander\Blace Truck	\$ 100,000					\$ 100,000
Pickup	\$ 25,000					\$ 25,000
Mower	\$ 10,000					\$ 10,000
Vactor	\$ 170,000					\$ 170,000
						\$ -
						\$ -
Pickups (2)		\$ 27,000				\$ 27,000
City Manager		\$ 27,000				\$ 27,000
Police 4 x 4		\$ 30,000				\$ 30,000
						\$ -
Plow Truck			\$ 105,000			\$ 105,000
Fire Pickup			\$ 32,000			\$ 32,000
Parks Gator			\$ 9,000			\$ 9,000
Street Sweeper			\$ 160,000			\$ 160,000
						\$ -
Year 4 2015-2016				TBD		\$ -
						\$ -
Year 5 2016-2017					TBD	\$ -
						\$ -
						\$ -
						\$ -
						\$ -
<b>Total</b>	<b>\$ 305,000</b>	<b>\$ 84,000</b>	<b>\$ 306,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 695,000</b>

Motor Pool purchases and resulting cash flows fluctuate considerably based on an ongoing evaluation of the vehicles and equipment and the current cash reserves and interest rate environment. Although Administration maintains a rolling 10 year projection, it is working to better project future needs

Motor Pool Projects

**Project Title: 2012-2013 Motor Pool Purchases**

**Department:** Motor Pool

**Year:** 2012-2013

**Estimated Project Cost:** \$305,000

**Project Description:** Scheduled motor pool purchases of one plow truck, one pickup, one Vactor and one mower.



**Project Justification\Case Statement:** The Motor Pool maintains a multi-year plan for replacement of its vehicles and equipment. This plan is based on estimates of useful life of equipment. However, each piece of equipment is constantly evaluated to determine when it actually needs replacement. The vehicles slated for replacement are one 1992 plow truck, one 2003 pickup truck, one 2006 Vactor and one mower.

**Impact on Operating Expenses:** Operating costs will likely decrease as maintenance costs should decline.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Motor Pool
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Depending on a variety of factors, including interest rates, these will either be paid in cash or financed through an installment purchase contract.

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## Motor Pool Projects

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### Project Title: 2013-2014 Motor Pool Purchases

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**Department:** Motor Pool

**Year:** 2013-2014

**Estimated Project Cost:** \$84,000

**Project Description:** Scheduled motor pool purchases of one pickup, one City Manager vehicle and one Police four wheel drive vehicle.

**Project Justification\Case Statement:** The Motor Pool maintains a multi-year plan for replacement of its vehicles and equipment. This plan is based on estimates of useful life of equipment. However, each piece of equipment is constantly evaluated to determine when it actually needs replacement. The vehicles slated for replacement are one 2004 DPW pickup, one 2003 City Manager vehicle and one 2004 Police four wheel drive vehicle.

**Impact on Operating Expenses:** Operating costs will likely decrease as maintenance costs should decline.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Motor Pool
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Depending on a variety of factors, including interest rates, these will either be paid in cash or financed through an installment purchase contract.

Motor Pool Projects

**Project Title: 2014-2015 Motor Pool Purchases**

**Department:** Motor Pool

**Year:** 2014-2015

**Estimated Project Cost:** \$306,000

**Project Description:** Scheduled motor pool purchases of one plow truck, one pickup, one gator and one street sweeper (if needed).



**Project Justification\Case Statement:** The Motor Pool maintains a multi-year plan for replacement of its vehicles and equipment. This plan is based on estimates of useful life of equipment. However, each piece of equipment is constantly evaluated to determine when it actually needs replacement. The vehicles slated for replacement are one 1995 DPW plow truck, one 2004 Fire department pickup, one 2003 Parks gator and one 2006 Street sweeper.

**Impact on Operating Expenses:** Operating costs will likely decrease as maintenance costs should decline.

**Funding Source:**

- Capital Improvement
- General
- Water & Sewer Utility
- Major\Local Street Fund
- Marina
- Boat Ramp
- Motor Pool
- Grant

**Financing Method:**

- Cash
- Cash Installment
- Bank Installment Purchase
- Bond Issue
- Internal Loan

**Funding Notes:** Depending on a variety of factors, including interest rates, these will either be paid in cash or financed through an installment purchase contract.