

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan .

+ - Indicates projects with multiple funding

Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds		
Bridges													
714-19-CIP		200 Block Alley Enhanced Improvements	V	\$0	\$0	\$0	\$817,000	\$0	\$0	\$0	\$817,000	\$817,000	\$0
+ 58-19-CIP		Eighth Street Bridge Repair	V	\$155,000	\$1,144,500	\$0	\$0	\$0	\$0	\$0	\$1,299,500	\$587,000	\$712,500
+ 885-19-CIP		North Cass Street Bridge Rehabilitation	V	\$183,000	\$45,000	\$1,115,000	\$0	\$0	\$0	\$0	\$1,343,000	\$246,500	\$1,096,500
+ 586-19-CIP		Park Street Bridge Repair	V	\$0	\$957,500	\$0	\$0	\$0	\$0	\$0	\$957,500	\$150,000	\$807,500
+ 187-19-CIP		South Cass Street Bridge Repair	V	\$0	\$939,502	\$0	\$0	\$0	\$0	\$0	\$939,502	\$132,002	\$807,500
+ 186-19-CIP		South Union Street Bridge Repair	V	\$0	\$74,500	\$1,243,500	\$0	\$0	\$0	\$0	\$1,318,000	\$260,500	\$1,057,500
+ 535-19-CIP		West Front Street Bridge Replacement	V	\$0	\$1,562,430	\$0	\$0	\$0	\$0	\$0	\$1,562,430	\$380,870	\$1,181,560
Total Bridges				\$338,000	\$4,723,432	\$2,358,500	\$817,000	\$0	\$0	\$0	\$8,236,932	\$2,573,872	\$5,663,060



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

714-19-CIP 200 Block Alley Enhanced Improvements

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Project Description:	Pedestrian bridge, riverwalk and pedestrian improvements to north East Front alley between Cass and Park.
Category:	Visionary	Department Head:	Jean Derenzy		
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)		
Fund Detail:	TIF 97	Council Priority:			

200 Block Alley Enhanced Improvements - Cost

714-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$0	\$817,000	\$0	\$0	\$0	\$817,000
Project Total:									\$817,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$817,000	Cost Total: \$817,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Landscaping and streetscape elements will result in additional services. Trash receptacle pick up

Project Justification:

TIF 97

Location Description:

Alley north of the 200 block of E. Front Street



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

58-19-CIP Eighth Street Bridge Repair

Project Information

Submitted By: Jean Derenzy
Category: Visionary
Fund Group: Tax Increment Financing
Fund Detail: TIF 2

Department: Downtown Development
Department Head: Tim Lodge
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

The work will include concrete box beam deck removal and replacement, railing replacement, sidewalk widening, riverbank slope protection, approach work and related work including aesthetic treatments. Twenty percent of the composite deck area is delaminated/defective. The City received \$750,000 in funding thru the MDOT Local Bridge Program which requires a 5% local match and the City to perform engineering for the project. This project needs to be coordinated with the Midtown Water Transmission Line #115 project included in the Water Fund.

Eighth Street Bridge Repair (+Grant) - Cost

58-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
ACPF	Available Capital Projects Fund	\$155,000	\$0	\$0	\$0	\$0	\$0	\$0	\$155,000
FSG	Federal / State Grant	\$0	\$712,500	\$0	\$0	\$0	\$0	\$0	\$712,500
TIFOT	TIF Old Town	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
WAT	Water Fund	\$0	\$282,000	\$0	\$0	\$0	\$0	\$0	\$282,000
Project Total:									\$1,299,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$30,506	
Construction:	\$1,396,245	Cost Total: \$1,426,751
Annual Maint. Cost:	\$5,500	Project Difference: \$-127,251
Maint. Year Start:		

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

885-19-CIP North Cass Street Bridge Rehabilitation

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description: The work anticipated includes the removal and replacement of the existing concrete box beam supported deck, widening and replacement of the sidewalks, railings, approach pavement and related work.
Category: Visionary	Department Head: Tim Lodge	
Fund Group: Tax Increment Financing	Staff Priority: Imperitive (Must Do)	
Fund Detail: TIF 97	Council Priority:	

North Cass Street Bridge Rehabilitation (+ - Cost) 885-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$913,500	\$0	\$0	\$0	\$0	\$913,500
IN	Inkind	\$183,000	\$0	\$0	\$0	\$0	\$0	\$0	\$183,000
TIF97	TIF 97	\$0	\$45,000	\$201,500	\$0	\$0	\$0	\$0	\$246,500
Project Total:									\$1,343,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$183,000	
Construction:	\$1,160,000	Cost Total: \$1,343,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Improvement should lessen service burden.

Project Justification:

Bridge rehabilitation due the deck condition and known foundation type information.

Location Description:

North Cass Street bridge located between Grandview Parkway and E. Front Street.



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

586-19-CIP Park Street Bridge Repair

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description: Rehabilitate bridge superstructure.
Category: Visionary	Department Head: Jean Derenzy	
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

Park Street Bridge Repair - Cost 586-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$807,500	\$0	\$0	\$0	\$0	\$0	\$807,500
TIF97	TIF 97	\$0	\$150,000	\$0	\$0	\$0	\$0	\$0	\$150,000
Project Total:									\$957,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$29,705	
Construction:	\$654,219	Cost Total: \$683,924
Annual Maint. Cost:		Project Difference: \$273,576
Maint. Year Start:	1905	

Service Impact:

N/A

Project Justification:

Based on bridge assessment

Location Description:

Park St



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

187-19-CIP South Cass Street Bridge Repair

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description: Concrete arch rehabilitation. This project may move to FY 17/18.
Category: Visionary	Department Head: Tim Lodge	
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

South Cass Street Bridge Repair(+TIF2) - Cost

187-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$807,500	\$0	\$0	\$0	\$0	\$0	\$807,500
TIF97	TIF 97	\$0	\$66,001	\$0	\$0	\$0	\$0	\$0	\$66,001
TIFOT	TIF Old Town	\$0	\$66,001	\$0	\$0	\$0	\$0	\$0	\$66,001
Project Total:									\$939,502

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$92,578	
Construction:	\$931,310	Cost Total: \$1,023,888
Annual Maint. Cost:		Project Difference: -\$84,386
Maint. Year Start:		

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

186-19-CIP South Union Street Bridge Repair

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description: Rehabilitate bridge superstructure.
Category: Visionary	Department Head: Tim Lodge	
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

South Union Street Bridge Repair (+TIF2) - Cost 186-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$1,057,500	\$0	\$0	\$0	\$0	\$1,057,500
GEN	General Fund	\$0	\$74,500	\$0	\$0	\$0	\$0	\$0	\$74,500
TIF97	TIF 97	\$0	\$0	\$93,000	\$0	\$0	\$0	\$0	\$93,000
TIFOT	TIF Old Town	\$0	\$0	\$93,000	\$0	\$0	\$0	\$0	\$93,000

Project Total: \$1,318,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$189,000	
Construction:	\$1,134,000	Cost Total: \$1,323,000
Annual Maint. Cost:		Project Difference: \$-5,000
Maint. Year Start:	1905	

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.



Six Year Capital Improvement Program

BRIDGES-19-CIP

Bridges

535-19-CIP West Front Street Bridge Replacement

Project Information

Submitted By: Jean Derenzy
Category: Visionary
Fund Group: Tax Increment Financing
Fund Detail: TIF 97

Department: Downtown Development
Department Head: Tim Lodge
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

This project includes the complete removal and replacement of the existing concrete arch bridge with a new concrete bridge including aesthetic treatments. The current condition of the Front Street bridge is poor and very poor and it cannot be properly evaluated and renovated to meet current service and load carrying requirements. The City received \$1,100,000 in funding thru the MDOT Local Bridge Program which requires a 5% local match and the City to perform engineering for the project.

West Front Street Bridge Replacement - Cost

535-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$1,181,560	\$0	\$0	\$0	\$0	\$0	\$1,181,560
TIF97	TIF 97	\$0	\$220,001	\$0	\$0	\$0	\$0	\$0	\$220,001
WAT	Water Fund	\$0	\$160,869	\$0	\$0	\$0	\$0	\$0	\$160,869
Project Total:									\$1,562,430

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$58,405	
Construction:	\$1,603,055	Cost Total: \$1,661,461
Annual Maint. Cost:	\$5,500	Project Difference: \$-99,031
Maint. Year Start:		

Service Impact:

See Project Description.

Project Justification:

See Project Description.

Location Description:

See Project Description.

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

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Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	
Brown Bridge												
+ 1106-19-CIP	ADA Accessible Watercraft Landing	V	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000	\$50,000	\$50,000	
+ 850-19-CIP	ADA Trail Improvements	C	\$0	\$46,000	\$0	\$0	\$0	\$0	\$46,000	\$23,000	\$23,000	
+ 1105-19-CIP	Boardman River Recreation Plan	V	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$5,000	\$25,000	
849-19-CIP	Bucks Landing Renovation	M	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$0	
+ 1107-19-CIP	Caretaker House Maintenance	M	\$0	\$15,000	\$0	\$0	\$1,000	\$0	\$16,000	\$16,000	\$0	
+ 975-19-CIP	Fish & Wildlife Habitat Improvements	M	\$0	\$85,000	\$10,000	\$0	\$0	\$0	\$95,000	\$55,000	\$40,000	
+ 851-19-CIP	Interpretive and Navigational Signage	C	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$10,000	\$5,000	
853-19-CIP	Invasive Species Treatment	M	\$0	\$5,000	\$0	\$5,000	\$0	\$0	\$10,000	\$10,000	\$0	
863-19-CIP	North Parking Lot Improvements	M	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$0	
+ 856-19-CIP	Overlook (2) and Access Steps (3 sets)	V	\$0	\$0	\$45,000	\$0	\$0	\$0	\$45,000	\$22,500	\$22,500	
+ 855-19-CIP	Overlook and Historical Display at Former Powerho	V	\$0	\$0	\$0	\$0	\$20,000	\$0	\$20,000	\$10,000	\$10,000	
Total Brown Bridge			\$0	\$226,000	\$55,000	\$5,000	\$21,000	\$100,000	\$0	\$407,000	\$231,500	\$175,500



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

1106-19-CIP **ADA Accessible Watercraft Landing**

Project Information

Submitted By:	Grand Traverse Conservation C	Department:	Department of Public Services	Project Description:	
Category:	Visionary	Department Head:	Frank Dituri	Replace existing landing with ADA accessible watercraft landing.	
Fund Group:	Brown Bridge Trust Parks Imprc	Staff Priority:	Essential (Should Do)		
Fund Detail:	Brown Bridge Trust Parks Imprc	Council Priority:			

ADA Accessible Watercraft Landing

1106-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000
								Project Total:	\$100,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$25,000		
Construction:	\$75,000	Cost Total:	\$100,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Resource Management Contract w/GTCD

Project Justification:

River access for those with physical disabilities

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

850-19-CIP **ADA Trail Improvements**

Project Information

Submitted By: Dave Green	Department: Department of Public Services	Project Description:
Category: Capital	Department Head: Frank Dituri	Install crushed and compacted limestone from Buck's Landing to new Bridge to improve handicap accessibility.
Fund Group: Brown Bridge Trust Parks Impr	Staff Priority: Important (Could Do)	
Fund Detail: Brown Bridge Trust Parks Impr	Council Priority:	

Crushed Limestone for New Bottomland Trail - Cost 850-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$23,000
LFG	Local / Foundation Grant	\$0	\$23,000	\$0	\$0	\$0	\$0	\$0	\$23,000
Project Total:									\$46,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$45,000	Cost Total: \$45,000
Annual Maint. Cost:	\$1,000	Project Difference: \$1,000
Maint. Year Start:	1905	

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

ADA Accessibility

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP

Brown Bridge

1105-19-CIP

Boardman River Recreation Plan

Project Information

Submitted By:	Grand Traverse Conservation C	Department:	Department of Public Services	Project Description: Development of a recreation plan for the Boardman River post dam removal to protect the river at Brown Bridge and the quiet area its self.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Boardman River Recreation Plan - Cost

1105-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000
FSG	Federal / State Grant	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
P	Private	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$30,000	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	
Annual Maint. Cost:		Cost Total: \$30,000
Maint. Year Start:		Project Difference: \$0

Service Impact:

Resource Management Contract w/GTCD

Project Justification:

Resource Protection

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

849-19-CIP **Bucks Landing Renovation**

Project Information

Submitted By: Dave Green	Department: Department of Public Services	Project Description:
Category: Maintenance	Department Head: Frank Dituri	Gravel and re-grade existing parking lot at Bucks Landing off Brown Bridge Road; Replace fencing
Fund Group: Brown Bridge Maintenance Fur	Staff Priority: Important (Could Do)	
Fund Detail: Brown Bridge Maintenance Fur	Council Priority:	

Bucks Landing Renovation - Cost 849-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBM	Brown Bridge Maintenance Fund	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000

Project Total: \$15,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$15,000	Cost Total: \$15,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Public Access maintenace

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**
1107-19-CIP **Caretaker House Maintenance**

Project Information

Submitted By:	Grand Traverse Conservation C	Department:	Department of Public Services	Project Description:	
Category:	Maintenance	Department Head:	Frank Dituri	Repair and stain siding.	
Fund Group:	General	Staff Priority:	Imperitive (Must Do)		
Fund Detail:	General Government	Council Priority:			

Caretaker House Maintenance - Cost 1107-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBM	Brown Bridge Maintenance Fund	\$0	\$0	\$0	\$0	\$1,000	\$0	\$0	\$1,000
GEN	General Fund	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000
Project Total:									\$16,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$15,000	Cost Total: \$15,000
Annual Maint. Cost:	\$1,000	Project Difference: \$1,000
Maint. Year Start:	1905	

Service Impact:

Resource Management Contract w/GTCD

Project Justification:

Protect valve of house

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

975-19-CIP **Fish & Wildlife Habitat Improvements**

Project Information

Submitted By:	Grand Traverse Conservation C	Department:	Department of Public Services	Project Description: In stream habitat and native species planting to provide forage, nesting and breeding sites for fish & wildlife. Riparian Planting will provide bank stabilization as well as habitat benefits. \$15,000 Grant funded 2018/2019
Category:	Maintenance	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Maintenance Fur	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Maintenance Fur	Council Priority:		

Fish & Wildlife Habitat Improvements

975-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBM	Brown Bridge Maintenance Fund	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$5,000
BBTP	Brown Bridge Trust Parks	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
FSG	Federal / State Grant	\$0	\$35,000	\$5,000	\$0	\$0	\$0	\$0	\$40,000
Project Total:									\$95,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$-5,000
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Dam Removal

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

851-19-CIP **Interpretive and Navigational Signage**

Project Information

Submitted By: Dave Green	Department: Department of Public Services	Project Description:
Category: Capital	Department Head: Frank Dituri	Design and install interpretive and navigational signage to improve way-finding and education opportunities on the trails.
Fund Group: Brown Bridge Trust Parks Impr	Staff Priority: Important (Could Do)	
Fund Detail: Brown Bridge Trust Parks Impr	Council Priority:	

Interpretive and Navigational Signage - Cost 851-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
FSG	Federal / State Grant	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$2,500
P	Private	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0	\$2,500
Project Total:									\$15,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$15,000	Cost Total: \$15,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improve Recreation experience

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

853-19-CIP **Invasive Species Treatment**

Project Information

Submitted By:	Grand Traverse Conservation C	Department:	Department of Public Services	Project Description:	
Category:	Maintenance	Department Head:	Frank Dituri		Treat/remove invasive species that threaten ecologic integrity of
Fund Group:	Brown Bridge Maintenance Fur	Staff Priority:	Essential (Should Do)		Brown Bridge.
Fund Detail:	Brown Bridge Maintenance Fur	Council Priority:			

Invasive Species Treatment - Cost 853-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBM	Brown Bridge Maintenance Fund	\$0	\$5,000	\$0	\$5,000	\$0	\$0	\$0	\$10,000

Project Total: \$10,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$0		
Construction:	\$10,000	Cost Total:	\$10,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Bottom lands management

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

863-19-CIP **North Parking Lot Improvements**

Project Information

Submitted By:	Grand Traverse Conservation E	Department:	Department of Public Services	Project Description:	Gravel and re-grade parking lots on Ranch Rudolf Road; Replace fencing.
Category:	Maintenance	Department Head:	Frank Dituri		
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Important (Could Do)		
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:			

North Parking Lot Improvements - Cost 863-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000
Project Total:									\$15,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$15,000	Cost Total: \$15,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improved parking

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP **Brown Bridge**

856-19-CIP **Overlook (2) and Access Steps (3 sets)**

Project Information

Submitted By:	Grand Traverse Conservation L	Department:	Department of Public Services	Project Description: Provide viewing opportunities and river access points to the "new" section of river to limit stream bank erosion caused by recreational foot traffic.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Important (Could Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Overlook (2) and Access Steps (3 sets) - Cost 856-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$22,500	\$0	\$0	\$0	\$0	\$22,500
FSG	Federal / State Grant	\$0	\$0	\$11,250	\$0	\$0	\$0	\$0	\$11,250
P	Private	\$0	\$0	\$11,250	\$0	\$0	\$0	\$0	\$11,250
Project Total:									\$45,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$45,000	Cost Total: \$45,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improve Recreation Access

Location Description:

3405 Brown Bridge Rd



Six Year Capital Improvement Program

BB-19-CIP

Brown Bridge

855-19-CIP Overlook and Historical Display at Former Powerho

Project Information

Submitted By:	Grand Traverse Conservation E	Department:	Department of Public Services	Project Description: Design and install an overlook and historic display featuring one of the turbines removed from the powerhouse during decommissioning of the dam.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	Brown Bridge Trust Parks Impr	Staff Priority:	Essential (Should Do)	
Fund Detail:	Brown Bridge Trust Parks Impr	Council Priority:		

Overlook and Historical Display at Former - Cost 855-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$10,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$5,000
P	Private	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$5,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$20,000	Cost Total: \$20,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Brown Bridge Resource Management Contract w/GTCD

Project Justification:

Improved Recreation experience

Location Description:

3405 Brown Bridge Rd

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Cemetery

47-19-CIP	Install Cremation Niches in Mausoleum	V	\$0	\$0	\$0	\$0	\$22,000	\$0	\$0	\$22,000	\$22,000	\$0
48-19-CIP	Paving of Main Loop in First Addition	V	\$0	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000	\$110,000	\$0
Total Cemetery			\$0	\$0	\$0	\$110,000	\$22,000	\$0	\$0	\$132,000	\$132,000	\$0



Six Year Capital Improvement Program

CEMETERY-19-CIP

Cemetery

47-19-CIP Install Cremation Niches in Mausoleum

Project Information

Submitted By:	Lauren Vaughn	Department:	Department of Public Services	Project Description: This project would allow additional burial options for families and utilize an area of the mausoleum that is currently not being used. It would also make the lobby area more attractive and provide more revenue potential.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Cemetery	Council Priority:		

Install Cremation Niches in Mausoleum - Cost 47-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$0	\$0	\$22,000	\$0	\$0	\$22,000
								Project Total:	\$22,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$22,000	Cost Total: \$22,000
Annual Maint. Cost:	\$300	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Little to no maintenance outside of that related to the sale and subsequent use of a niche.

Project Justification:

As more families use cremation as an option, having a Niche inside the mausoleum would fill a service need and also provide a revenue potential for the cemetery.

Location Description:

1400 East 8th



Six Year Capital Improvement Program

CEMETERY-19-CIP

Cemetery

48-19-CIP Paving of Main Loop in First Addition

Project Information

Submitted By: Lauren Vaughn	Department: Department of Public Services	Project Description: The roads in this area are dusty gravel and often have rough areas. This project would provide paved connections to all main parts of the cemetery. This would tie together the main cemetery road through Plat 1 to First Addition and Fourth Addition.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: General	Staff Priority: Imperitive (Must Do)	
Fund Detail: Cemetery	Council Priority:	

Paving of Main Loop in First Addition - Cost 48-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$0	\$110,000	\$0	\$0	\$0	\$110,000
Project Total:									\$110,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$110,000	Cost Total: \$110,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Future patching and longterm replacement will be required.

Project Justification:

Increasing the paved pathways through the cemetery would help with dust control, winter maintenance (plowing) and aesthetics.

Location Description:

1400 East 8th Street

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	
Civic												
+ 870-19-CIP	Civic Square	V	\$0	\$0	\$0	\$0	\$6,000,000	\$0	\$6,000,000	\$1,000,000	\$5,000,000	
+ 781-19-CIP	Farmers Market	V	\$0	\$0	\$3,300,000	\$0	\$0	\$0	\$3,300,000	\$600,000	\$2,700,000	
82-19-CIP	Lower Boardman River Universal Access	V	\$0	\$0	\$0	\$700,000	\$0	\$0	\$700,000	\$700,000	\$0	
646-19-CIP	Redevelopment of Lot O	V	\$0	\$0	\$0	\$316,000	\$0	\$0	\$316,000	\$316,000	\$0	
Total Civic			\$0	\$0	\$0	\$3,300,000	\$1,016,000	\$6,000,000	\$0	\$10,316,000	\$2,616,000	\$7,700,000



Six Year Capital Improvement Program

CIVIC-19-CIP

Civic

870-19-CIP Civic Square

Project Information

Submitted By:	Rob Baciagalupi	Department:	Downtown Development	Project Description:	
Category:	Visionary	Department Head:	Jean Derenzy		Public gathering space for Traverse Cityans and visitors
Fund Group:	Tax Increment Financing	Staff Priority:	Important (Could Do)		
Fund Detail:	TIF 97	Council Priority:			

Civic Square (+Private) - Cost 870-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$5,000,000	\$0	\$5,000,000
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$1,000,000
								Project Total:	\$6,000,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$1,000,000		
Engineering / Design:	\$0		
Construction:	\$5,000,000	Cost Total:	\$6,000,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:	1905		

Service Impact:

Additional landscaping and streetscape elements will result in additional services. Addition of restrooms will result in contracting services for maintenance if open year round. Renovation of the space will may result in rental i.e. issuing permits for use

Project Justification:

TIF 97

Location Description:

NE corner of State and Cass is where it is designate in the TIF plan



Six Year Capital Improvement Program

CIVIC-19-CIP

Civic

781-19-CIP

Farmers Market

Project Information

Submitted By: Rob Baciagalupi
Category: Visionary
Fund Group: Tax Increment Financing
Fund Detail: TIF 97

Department: Downtown Development
Department Head: Jean Derenzy
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Reconstruction of the Farmers Market Lot B with permanent structure, wider sidewalks, river enhancements, lighting, and reconstruction of parking lot. \$400,000 from Parking Fund.

Farmers Market - Cost

781-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$2,700,000	\$0	\$0	\$0	\$2,700,000
TIF97	TIF 97	\$0	\$0	\$0	\$600,000	\$0	\$0	\$0	\$600,000
Project Total:									\$3,300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$300,000	
Construction:	\$3,000,000	Cost Total: \$3,300,000
Annual Maint. Cost:	\$10,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Additional landscaping and placement of shed will require additional snowplowing services. Addition of restrooms will result in contracting services for maintenance if open year round. Renovation of the space and "birdhouse" will may result in rental i.e. issuing permits for use

Project Justification:

Boardman River Enhancement

Location Description:

See Lot B Rehab.



Six Year Capital Improvement Program

CIVIC-19-CIP

Civic

82-19-CIP Lower Boardman River Universal Access

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description: To beautify and enhance the river environment for recreationalist and fisheries.
Category: Visionary	Department Head: Jean Derenzy	
Fund Group: Tax Increment Financing	Staff Priority:	
Fund Detail: TIF 97	Council Priority:	

Lower Boardman River Universal Access- Cost

82-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$700,000	\$0	\$0	\$700,000
Project Total:									\$700,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$700,000	Cost Total: \$700,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The project may be in conjunction with other items, but would most likely result in maintenance to a boardwalk and landscaping and require additional services for snow removal

Project Justification:

Boardman River Enhancement

Location Description:

Lower Boardman River



Six Year Capital Improvement Program

CIVIC-19-CIP

Civic

646-19-CIP Redevelopment of Lot O

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description:
Category: Visionary	Department Head: Jean Derenzy	Private/public partnership for developing a mixed use development
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

Redevelopment of Lot O - Cost

646-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$316,000	\$0	\$0	\$316,000
Project Total:									\$316,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$316,000	Cost Total: \$316,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Remove 25 space parking lot to build a mixed use development

Project Justification:

Better land use

Location Description:

NW Corner of State and Cass

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Facilities

1074-19-CIP	Harbor Master Building Foundation Repair	M	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000	\$300,000	\$0
+ 1114-19-CIP	NOAA Culvert Replacement	M	\$39,100	\$1,263,200	\$866,300	\$0	\$0	\$0	\$0	\$2,168,600	\$358,000	\$1,810,600
+ 871-19-CIP	Senior Center building renovation	V	\$0	\$4,000,000	\$0	\$0	\$0	\$0	\$0	\$4,000,000	\$3,750,000	\$250,000
+ 168-19-CIP	Union Street Dam Improvements	V	\$0	\$1,000,000	\$9,000,000	\$9,000,000	\$0	\$0	\$0	\$19,000,000	\$0	\$19,000,000
172-19-CIP	Union Street Dam: Outlet relining	M	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000	\$400,000	\$0
Total Facilities			\$39,100	\$6,263,200	\$10,266,300	\$9,300,000	\$0	\$0	\$0	\$25,868,600	\$4,808,000	\$21,060,600



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

1074-19-CIP Harbor Master Building Foundation Repair

Project Information

Submitted By: Barry Smith	Department: Department of Public Services	Project Description: Repairs to the Harbor Master Building foundation and the interior and exterior of the building per the recommendations from the crack monitoring done in the summer of 2018. Repairs to the exterior includes concrete removal and replacement, helical piles, backfilling and mobilization and demobilization. Interior repairs include masonry remove and replace, joint repair, drywall repair, painting and caulking. Per cost estimate provided by Machin Engineering in 2018.
Category: Maintenance	Department Head: Frank Dituri	
Fund Group: Marina	Staff Priority: Imperitive (Must Do)	
Fund Detail: Marina	Council Priority:	

Harbor Master Building Foundation Repair 1074-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
MAR	Marina Fund	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Once the repairs are complete, there should be no additional future repairs for this issue as this project should resolve the cracking and foundation issues.

Project Justification:

The foundation at the marina is cracking and causing damage to the harbor master building. Delaying the repairs could mean additional damage to the building which could result in increased repair costs as the scope changes.

Location Description:

1011 E Grandview Pkwy, Traverse City, MI 49684



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

1114-19-CIP NOAA Culvert Replacement

Project Information

Submitted By: Tim Lodge
Category: Maintenance
Fund Group: General
Fund Detail: Facilities

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Ongoing restoration work in Kids Creek by improving in-stream habitat on a 3,000-foot section of the creek on City property south of Silver Lake Road. Restoration includes riparian buffer plantings along the creek, large wood placement at key locations, and the placement of toe wood on outside of stream meanders for habitat purposes. The project will improve a total of 4 priority road crossings in the City of Traverse City along Kids Creek that are having a negative hydrological effect on the stream by removing undersized culverts and replacing them with open bottom bridge structures.

City Engineering will lead design and construction efforts for the road crossing improvements and will provide engineering services and construction oversight as project match at an estimated amount to be \$166,500 over a period of 4 years. Construction is slated for the first two crossings in 2021.

NOAA Culvert Replacement-C

1114-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$822,000	\$822,000	\$0	\$0	\$0	\$0	\$1,644,000
IN	Inkind	\$39,100	\$83,200	\$44,300	\$0	\$0	\$0	\$0	\$166,600
S	Sewer Fund	\$0	\$162,000	\$0	\$0	\$0	\$0	\$0	\$162,000
WAT	Water Fund	\$0	\$196,000	\$0	\$0	\$0	\$0	\$0	\$196,000

Project Total: \$2,168,600

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$166,600
Construction: \$2,002,000
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$2,168,600
Project Difference: \$0

Service Impact:

Replacement of four street and stream crossings for which the City would otherwise be responsible.

Project Justification:



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

Will allow us to leverage receipt of nearly \$2.3 million in grant funds for improvements to Kids Creek.

Location Description:

Kids Creek south of Silver Lake Rd.

2 locations on Cedar Street. One location on Sixth Street and one location of Tributary A on Elmwood Avenue near Seventh Street.



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

871-19-CIP Senior Center building renovation

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Tim Lodge
Fund Group:	Senior Center Fund	Staff Priority:	Important (Could Do)
Fund Detail:	Senior Center	Council Priority:	

Project Description:

Building Renovation- The Grand Traverse County Senior Center Network is presently housed at the city owned building at 801 E. Front Street in Traverse City. For some years it has been apparent that the facility is inadequate to meet the numerous uses and needs of our local seniors. This program is presently managed by the Grand Traverse County Commission on Aging.

The Senior Center Fund has \$423,000 in savings originally collected by donations to the center toward a new building and which the City Commission has agreed to release the funds for a building remodel. The existing building footprint is 5,760 square feet. It is anticipated that the building would be demolished and replaced with a new building with a similar footprint. The building shall be designed with operational efficiency in mind. However, because this project will serve the community for many years, considerations for a larger building will be entertained during the design phase. The schematic design for the larger footprint will be no larger than 12,000 square feet.

Senior Center building renovation (+Privat - Cost

871-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LFG	Local / Foundation Grant	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000
P	Private	\$0	\$3,327,000	\$0	\$0	\$0	\$0	\$0	\$3,327,000
SCB	Senior Center Building Fund	\$0	\$423,000	\$0	\$0	\$0	\$0	\$0	\$423,000
Project Total:									\$4,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$320,000	
Construction:	\$3,680,000	Cost Total: \$4,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:



FACILITIES-19-CIP

Facilities

None.

Project Justification:

Building upgrade.

Location Description:

801 E. Front Street



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

168-19-CIP Union Street Dam Improvements

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Frank Dituri
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Facilities	Council Priority:	

Project Description:

The goal of FishPass is to provide bi-directional movement of native and desirable fishes while removing or blocking invasive fishes on the Boardman River, Michigan. As part of the ongoing Boardman River Restoration Project, the Union Street Dam will be removed and replaced with a new and improved barrier. Below the barrier, a facility with multiple sorting channels and nature-like channel will be constructed as a place to demonstrate an integrated suite of technologies and techniques for selective fish passage and invasive species control. The project consists of a 1,481 square foot building with an office, fabrication room and public bathrooms is planned in the vicinity where a small cement block building currently exists. There are plans for connecting walks to adjacent parks and properties along with other features shown in the attached report. Approved by the Planning Commission for consistency with Master Plan on 1/3/17.

Union Street Dam Improvements- Cost

168-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$9,000,000	\$9,000,000	\$0	\$0	\$0	\$18,000,000
P	Private	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$1,000,000
								Project Total:	\$19,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$19,000,000	Cost Total: \$19,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The building and public restroom will require ongoing maintenance. The improvements to the grounds may also require additional maintenance.

Project Justification:

Boardman River Enhancement

Location Description:



City of
TRAVERSE CITY

Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

235 S. Union Street. The project is located in and around the existing earthen Union Street Dam which is located on Boardman River between Cass and Union Streets south of State Street.



Six Year Capital Improvement Program

FACILITIES-19-CIP

Facilities

172-19-CIP Union Street Dam: Outlet relining

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Maintenance	Department Head:	Frank Dituri
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Facilities	Council Priority:	

Project Description:

The 10 corrugated metal pipes that create the principal spillway need to be relined. Sliplining will be the preferred method. When and if this project is completed depends on the efforts of the Boardman Dams Implementation Team. This project will be obsolete if fish passage project is successful. The DEQ to inspect this facility this year (2018).

Union Street Dam: Outlet relining - Cost

172-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000
								Project Total:	\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:	\$2,500	Project Difference: \$0
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Maintenance

Location Description:

235 S. Union Street

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan .

+ - Indicates projects with multiple funding

Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	
977-19-CIP	Fire detection and suppression system installatio	M	\$0	\$0	\$131,250	\$89,250	\$0	\$0	\$0	\$220,500	\$220,500	\$0
976-19-CIP	Storage building at Fire Station 02	M	\$0	\$157,000	\$0	\$0	\$0	\$0	\$0	\$157,000	\$157,000	\$0
Total Fire			\$0	\$157,000	\$131,250	\$89,250	\$0	\$0	\$0	\$377,500	\$377,500	\$0



Six Year Capital Improvement Program

TCFD-19-CIP

Fire

977-19-CIP Fire detection and suppression system installatio

Project Information

Submitted By:	Jim Tuller	Department:	Fire
Category:	Maintenance	Department Head:	Jim Tuller
Fund Group:	General	Staff Priority:	Imperative (Must Do)
Fund Detail:	Fire	Council Priority:	

Project Description:

Both City fire stations currently have no fire detection or fire suppression systems in place to warn occupants of a fire, or to suppress a fire that breaks out. Both Stations house City Fire personnel 24/7 and hundreds of thousands of dollars of emergency equipment.

Fire detection and suppression system inst - Cost

977-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$131,250	\$89,250	\$0	\$0	\$0	\$220,500
Project Total:									\$220,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$220,500	Cost Total: \$220,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Protection of personnel and equipment

Location Description:

Traverse City Fire Department Station 1, 500 West Front Street and Station 2, 1313 E. 8th Street



Six Year Capital Improvement Program

TCFD-19-CIP

Fire

976-19-CIP Storage building at Fire Station 02

Project Information

Submitted By: Jim Tuller
Category: Maintenance
Fund Group: General
Fund Detail: Fire

Department: Fire
Department Head: Jim Tuller
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

An estimated cost for a cold storage building to be constructed on property currently occupied by the abandoned cemetery equipment storage shet. 30'x40' building with 12' sidewalls.

Storage building at Fire Station 02 - Cost

976-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$157,000	\$0	\$0	\$0	\$0	\$0	\$157,000
Project Total:									\$157,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$151,200	Cost Total: \$151,200
Annual Maint. Cost:		Project Difference: \$5,800
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Proper storage and security of specialized response resources.

Location Description:

Traverse City Fire Department Station 2, 1313 E. 8th Street

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan .

+ - Indicates projects with multiple funding

Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	
126-19-CIP	Annual Vehicle and Equipment Replacement	C	\$0	\$2,044,300	\$1,307,000	\$1,359,800	\$1,294,976	\$2,637,300	\$2,210,926	\$10,854,302	\$10,854,302	\$0
Total Garage			\$0	\$2,044,300	\$1,307,000	\$1,359,800	\$1,294,976	\$2,637,300	\$2,210,926	\$10,854,302	\$10,854,302	\$0



Six Year Capital Improvement Program

GARAGE-19-CIP

Garage

126-19-CIP Annual Vehicle and Equipment Replacement

Project Information

Submitted By: Dave Courtad
Category: Capital
Fund Group: Garage
Fund Detail: Garage

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 The garage annually purchases new equipment, vehicles, and machinery to replace existing assets. These items to be replaced on an annual basis are based on cost effectiveness of ownership. This allocation will not replace all vehicles and equipment

Annual Vehicle and Equipment Replacement - Cost

126-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GAR	Garage Fund	\$0	\$2,044,300	\$1,307,000	\$1,359,800	\$1,294,976	\$2,637,300	\$2,210,926	\$10,854,302
								Project Total:	\$10,854,302

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0
Project Difference: \$10,854,302

Service Impact:

continued ability to carryout current level of service

Project Justification:

work force equipment needs

Location Description:

City-wide

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

<p>Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding</p>											
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds

General Government

784-19-CIP	Annual City Computers	M	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$0	\$180,000	\$180,000	\$0
4-19-CIP	City Document Management System	V	\$0	\$0	\$25,000	\$25,000	\$25,000	\$0	\$0	\$75,000	\$75,000	\$0
1100-19-CIP	Install CHP Engine - Carnegie Building	C	\$0	\$0	\$12,000	\$12,000	\$12,000	\$12,000	\$0	\$48,000	\$48,000	\$0
1095-19-CIP	Install CHP Engine - Opera House	C	\$0	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000	\$50,000	\$0
1098-19-CIP	Lighting Retrofit - Incandescents - Opera House	M	\$0	\$18,000	\$0	\$0	\$0	\$0	\$0	\$18,000	\$18,000	\$0
1102-19-CIP	Lighting Retrofit - T-8 fixtures - Carnegie Bldg	M	\$0	\$16,500	\$0	\$0	\$0	\$0	\$0	\$16,500	\$16,500	\$0
1099-19-CIP	Lighting Retrofit - T-8 fixtures - Opera House	M	\$0	\$17,500	\$0	\$0	\$0	\$0	\$0	\$17,500	\$17,500	\$0
1029-19-CIP	Master Plan Vision and Re-Write Planning Commission	V	\$0	\$20,000	\$0	\$80,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
1111-19-CIP	Network Upgrade & Redesign - City Portion	M	\$0	\$27,600	\$27,600	\$27,600	\$27,600	\$27,600	\$0	\$138,000	\$138,000	\$0
+ 1104-19-CIP	New Utility Billing Software	M	\$0	\$0	\$116,000	\$0	\$0	\$0	\$0	\$116,000	\$116,000	\$0
1112-19-CIP	Purchase & Install Backup Generator - Opera House	C	\$0	\$0	\$30,000	\$25,000	\$0	\$0	\$0	\$55,000	\$55,000	\$0
1103-19-CIP	Replace Boiler - Carnegie Building	M	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$12,000	\$12,000	\$0
1097-19-CIP	Replace Boiler - Opera House	M	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000	\$12,000	\$0
1101-19-CIP	Replace Chiller Unit - Carnegie Building	M	\$0	\$0	\$36,500	\$0	\$0	\$0	\$0	\$36,500	\$36,500	\$0
1096-19-CIP	Replace Packaged A/C Rooftop Units - Opera House	M	\$0	\$0	\$15,000	\$20,000	\$0	\$0	\$0	\$35,000	\$35,000	\$0
Total General Government			\$30,000	\$141,600	\$314,100	\$229,600	\$104,600	\$79,600	\$10,000	\$909,500	\$909,500	\$0



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

784-19-CIP Annual City Computers

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description:
Category: Maintenance	Department Head: Marty Colburn	Replacement of general computer hardware and software
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: General Government	Council Priority:	

Annual City Computers - Cost		784-19-CIP-C							
Funding Sources:									
		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$30,000	\$0	\$180,000
								Project Total:	\$180,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	Cost Total: \$0
Annual Maint. Cost:	\$30,000	Project Difference: \$180,000
Maint. Year Start:		

Service Impact:

Provides efficiencies in operations City-wide

Project Justification:

Cycles out obsolete or non-functioning equipment

Location Description:

City Wide



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

4-19-CIP City Document Management System

Project Information

Submitted By:		Department:	Department of Public Services	Project Description:	
Category:	Visionary	Department Head:	Frank Dituri		Document Imaging various City records. Starting with the
Fund Group:	General	Staff Priority:	Essential (Should Do)		Treasurer's office: Image all invoices, journal entries, financial
Fund Detail:	General Government	Council Priority:			reports, and receipts that support financial transactions. These
					documents would then be searchable by anyone with inquiry ac

City Document Management System - Cost

4-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$25,000	\$25,000	\$25,000	\$0	\$0	\$75,000
Project Total:									\$75,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	Cost Total: \$0
Annual Maint. Cost:	\$9,400	Project Difference: \$75,000
Maint. Year Start:		

Service Impact:

Project Justification:

Location Description:



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1100-19-CIP Install CHP Engine - Carnegie Building

Project Information

Submitted By: Penny Hill
Category: Capital
Fund Group: General
Fund Detail: General Government
Department: Manager
Department Head: Marty Colburn
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that a Combined Heat and Power (CHP) or cogeneration system be installed, which utilizes gas engines to generate electricity. The engines will also produce high temperature exhaust gas that can be used to help heat the building.

Install CHP Engine - Carnegie Bldg

1100-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$12,000	\$12,000	\$12,000	\$12,000	\$0	\$48,000
Project Total:									\$48,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$48,000	Cost Total: \$48,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduce Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of -4,138ccf and an annual electricity savings of 50,996kWh. The recommended measure will provide a total annual cost savings of \$3,917. Using the estimated initial investment of \$48,000, the project will have a simple payback of 12.25 years, and a Savings to Investment ratio (SIR) of 1.214.

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1095-19-CIP Install CHP Engine - Opera House

Project Information

Submitted By: Penny Hill
Category: Capital
Fund Group: Opera House
Fund Detail: Opera House
Department: Manager
Department Head: Marty Colburn
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that a Combined Heat and Power (CHP) or cogeneration system be installed, which utilizes gas engines to generate electricity. The engines will also produce high temperature exhaust gas that can be used to help heat the building.

Install CHP Engine - Opera House

1095-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
OPH	Opera House	\$0	\$0	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of -4,138ccf and an annual electricity savings of 50,996kWh. The recommended measure will provide a total annual cost savings of \$2,650.91 Using the estimated initial investment of \$48,000, the project will have a simple payback of 18.107 years, and a Savings to Investment ratio (SIR) of .822

Location Description:

106 E. Front Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1098-19-CIP Lighting Retrofit - Incandescents - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Project Description: Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the incandescent lights be replaced with LED and TLED lights. 80% of energy consumed by incandescent lights is lost in the form of heat.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Opera House	Council Priority:	Imperitive (Must Do)	

Lighting Retrofit - Incandescent - Opera House

1098-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$18,000	\$0	\$0	\$0	\$0	\$0	\$18,000
Project Total:									\$18,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$18,000	Cost Total: \$18,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduces energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 56,759 kWh. The recommended measure will provide a total annual cost savings of \$6,972.66. Using the estimated initial investment of \$17,276, the project will have a simple payback of 2.48 years, and a Savings to Investment ratio (SIR) of 6.004

Location Description:

106 E Front Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1102-19-CIP Lighting Retrofit - T-8 fixtures - Carnegie Bldg

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description: Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the current T-8 lights be retrofitted with TLED Fixtures.
Category: Maintenance	Department Head: Marty Colburn	
Fund Group: General	Staff Priority: Imperitive (Must Do)	
Fund Detail: General Government	Council Priority: Essential (Should Do)	

Lighting Retrofit - T-8 fixtures - Carnegie Bldg

1102-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$16,500	\$0	\$0	\$0	\$0	\$0	\$16,500
Project Total:									\$16,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$19,500	Cost Total: \$19,500
Annual Maint. Cost:		Project Difference: \$-3,000
Maint. Year Start:	1905	

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 17,652 kWh. The recommended measure will provide a total annual cost savings of \$2,215. Using the estimated initial investment of \$19,484, the project will have a simple payback of 8.80 years, and a Savings to Investment ratio (SIR) of 1.692

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1099-19-CIP Lighting Retrofit - T-8 fixtures - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Project Description: Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that all T-8 fluorescent lights lamps be replaced with LED Lamps and TLED lamps.
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Opera House	Council Priority:	Imperitive (Must Do)	

Lighting Retrofit - T-8 fixtures - Opera House

1099-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$17,500	\$0	\$0	\$0	\$0	\$0	\$17,500
Project Total:									\$17,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$17,500	Cost Total: \$17,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduce Energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 5,354 kWh. The recommended measure will provide a total annual cost savings of \$657.77. Using the estimated initial investment of \$5,657, the project will have a simple payback of 8.60 years, and a Savings to Investment ratio (SIR) of 1.73.

Location Description:

106 E Front St



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1029-19-CIP Master Plan Vision and Re-Write_PlanningCommission

Project Information

Submitted By: Missy Luick
Category: Visionary
Fund Group: General
Fund Detail: General Government

Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Master Plan Review Committee recommended that the Planning Commission add a project to the CIP for an eventual Master Plan re-write. The process they envisioned included a community engagement/vision process that could be followed by a Master Plan re-write should the vision process result in that outcome.

Master Plan Vision and Re-Write_PlanningCommission

1029-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$20,000	\$0	\$80,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$100,000	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$100,000
	Project Difference:	\$0

Service Impact:

None.

Project Justification:

To make sure the Master Plan reflects the communities values

Location Description:

City-wide



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1111-19-CIP Network Upgrade & Redesign - City Portion

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description: City portion of City/County Network upgrade & redesign including Core/firewall, Distribution, Network Access Controls, and cabling upgrades
Category: Maintenance	Department Head: Marty Colburn	
Fund Group: General	Staff Priority: Imperitive (Must Do)	
Fund Detail: General Government	Council Priority:	

Network Upgrade & Redesign - City Portion

1111-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$27,600	\$27,600	\$27,600	\$27,600	\$27,600	\$0	\$138,000
Project Total:									\$138,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$138,000	Cost Total: \$138,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve efficiency in operations due to increased internet speed and capacity. Improve security and reliability.

Project Justification:

Included in Grand Traverse County IT Strategic Plan

Location Description:

400 Boardman Avenue



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1104-19-CIP New Utility Billing Software

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description: Replace existing HTE-Sungard-Superion software with BS&A Software. HTE-Sungard-Superion utilizes the IBM iSeries (AS-400) platform. It is the mutual goal of the City and Grand Traverse County to phase out software applications based on the AS-400 platform.
Category: Maintenance	Department Head: Marty Colburn	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: General Government	Council Priority:	

New Utility Billing Software

1104-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$58,000	\$0	\$0	\$0	\$0	\$58,000
WAT	Water Fund	\$0	\$0	\$58,000	\$0	\$0	\$0	\$0	\$58,000
Project Total:									\$116,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$116,000	Cost Total: \$116,000
Annual Maint. Cost:	\$6,600	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Improve Efficiency and reliability by using an integrated software system

Project Justification:

It is the mutual goal of the City and Grand Traverse County to phase out software applications based on the AS-400 platform.

Location Description:

400 Boardman Avenue



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1112-19-CIP Purchase & Install Backup Generator - Opera House

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description:
Category: Capital	Department Head: Marty Colburn	Purchase and install backup generator on rooftop for emergency electricity.
Fund Group: Opera House	Staff Priority: Essential (Should Do)	
Fund Detail: Opera House	Council Priority:	

Purchase & Install Backup Generator - Opera House 1112-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
OPH	Opera House	\$0	\$0	\$30,000	\$25,000	\$0	\$0	\$0	\$55,000
Project Total:									\$55,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$55,000	Cost Total: \$55,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Improve reliability of systems in the event of power failure.

Project Justification:

Equipment is needed in the event of power failure, will prevent people from getting stuck in the elevator during a power outage.

Location Description:

106 E. Front Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1103-19-CIP Replace Boiler - Carnegie Building

Project Information

Submitted By:	Penny Hill	Department:	Manager
Category:	Maintenance	Department Head:	Marty Colburn
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	General Government	Council Priority:	

Project Description:

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the existing two hydronic boilers be replaced with new, high efficiency condensing boilers, which will improve the overall heating efficiency from 80% to approximately 95%. By recovering energy from condensed water in the exhaust stream, the boiler requires less fuel input for the same output of heating.

Replace Boiler - Carnegie Bldg

1103-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$12,000	\$0	\$0	\$0	\$0	\$12,000
Project Total:									\$12,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$12,000	Cost Total: \$12,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of 1,339 ccf and will provide a total annual cost savings of \$803. Using the estimated initial investment of \$11,625, the project will have a simple payback of 14.47 years, and a Savings to Investment ratio (SIR) of 1.028.

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1097-19-CIP Replace Boiler - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager
Category:	Maintenance	Department Head:	Marty Colburn
Fund Group:	Opera House	Staff Priority:	Essential (Should Do)
Fund Detail:	Opera House	Council Priority:	

Project Description:

Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the existing boiler be replaced with a new high efficiency condensing boiler. Condensing boilers are an efficient way to heat a building. By recovering energy from condensed water in the exhaust stream, the boiler requires less fuel input for the same output of heat.

Replace Boiler - Opera House

1097-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$12,000	\$0	\$0	\$0	\$0	\$0	\$12,000
Project Total:									\$12,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$12,000	Cost Total: \$12,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure should provide an annual natural gas savings of -2,015 ccf and an annual cost savings of \$1,758.49. Using the estimated initial investment of \$11,325.00, the project will have a simple payback of 6.44 years, and a Savings to Investment ratio (SIR) of 2.31

Location Description:

106 E Front Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1101-19-CIP Replace Chiller Unit - Carnegie Building

Project Information

Submitted By: Penny Hill	Department: Manager	Project Description: Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the current Chiller rooftop unit is approaching the end of its useful life, and should be replaced with a new, higher efficiency unit.
Category: Maintenance	Department Head: Marty Colburn	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: General Government	Council Priority:	

Replace Chiller Unit - Carnegie Bldg 1101-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$36,500	\$0	\$0	\$0	\$0	\$36,500
Project Total:									\$36,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$36,200	Cost Total: \$36,200
Annual Maint. Cost:		Project Difference: \$300
Maint. Year Start:	1905	

Service Impact:

Reduces energy consumption

Project Justification:

The recommended measure should provide an annual electricity savings of 8,293 kWh. The recommended measure will provide a total annual cost savings of \$1,041. Using the estimated initial investment of \$36,200, the project will have a simple payback of 34.78 years, and a Savings to Investment ratio (SIR) of .501.

Location Description:

322 Sixth Street



Six Year Capital Improvement Program

GEN GOVT-19-CIP

General Government

1096-19-CIP Replace Packaged A/C Rooftop Units - Opera House

Project Information

Submitted By:	Penny Hill	Department:	Manager	Project Description: Per the 2018 Energy Assessment through Michigan Energy Options and SEEDS, it is recommended that the five rooftop A/C units are approaching the end of their useful lives, and should be replaced with new, high efficiency units
Category:	Maintenance	Department Head:	Marty Colburn	
Fund Group:	Opera House	Staff Priority:	Essential (Should Do)	
Fund Detail:	Opera House	Council Priority:		

Replace Packaged A/C Rooftop Units - Opera House 1096-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
OPH	Opera House	\$0	\$0	\$15,000	\$20,000	\$0	\$0	\$0	\$35,000
Project Total:									\$35,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$35,000	Cost Total: \$35,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Reduces Energy Consumption

Project Justification:

The recommended measure will provide an annual electricity savings of 6,552 kWh, and provide a an annual cost savings of \$804.59. Using the estimated initial investment of \$34,675, the project will have a simple payback of 43.096 years and a Savings to Investment ratio (SIR) of 0.345.

Location Description:

106 E Front Street

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Light and Power

1041-19-CIP	ALLEY BETWEEN STATE AND FRONT STREET	C	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000	\$1,500,000	\$0
1039-19-CIP	BUILDING D REHABILITATION	C	\$0	\$50,000	\$250,000	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$0
1108-19-CIP	CRITICAL AND LARGE CUSTOMERS	C	\$0	\$925,000	\$925,000	\$0	\$0	\$0	\$0	\$1,850,000	\$1,850,000	\$0
1009-19-CIP	DIVISION STREET STREETSCAPES LIGHTING	C	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$1	\$1	\$0
1043-19-CIP	EAST FRONT STREET STREETSCAPE LIGHTING	C	\$0	\$0	\$0	\$0	\$0	\$56,000	\$0	\$56,000	\$56,000	\$0
1008-19-CIP	EIGHTH STREET STREETSCAPES LIGHTING	C	\$0	\$85,000	\$85,000	\$0	\$0	\$0	\$0	\$170,000	\$170,000	\$0
808-19-CIP	EXTENSIONS AND NEW SERVICES	C	\$0	\$600,000	\$650,000	\$700,000	\$750,000	\$800,000	\$850,000	\$4,350,000	\$4,350,000	\$0
1030-19-CIP	FIBER TO THE PREMISE	C	\$0	\$4,050,000	\$4,050,000	\$4,050,000	\$4,050,000	\$0	\$0	\$16,200,000	\$16,200,000	\$0
1038-19-CIP	GRAND TRAVERSE SUBSTATION UPGRADES	C	\$0	\$500,000	\$575,000	\$0	\$0	\$0	\$0	\$1,075,000	\$1,075,000	\$0
1005-19-CIP	HARTMAN ROAD OVERHEAD TIE	C	\$0	\$725,000	\$725,000	\$0	\$0	\$0	\$0	\$1,450,000	\$1,450,000	\$0
824-19-CIP	HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS	C	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000	\$300,000	\$0
811-19-CIP	OVERHEAD LINE IMPROVEMENTS	C	\$0	\$350,000	\$400,000	\$450,000	\$500,000	\$550,000	\$600,000	\$2,850,000	\$2,850,000	\$0
1120-19-CIP	REBUILD CIRCUIT - BW-23 - EIGHTH/HASTINGS ST	C	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$400,000	\$400,000	\$0
1125-19-CIP	REBUILD CIRCUIT - CD-31/SS-30 - SMART GRID (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000	\$200,000	\$0
1116-19-CIP	REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY	C	\$0	\$0	\$0	\$650,000	\$650,000	\$0	\$0	\$1,300,000	\$1,300,000	\$0
1126-19-CIP	REBUILD CIRCUIT - GRANDVIEW PKWY - STREET LIGHTING	C	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000	\$300,000	\$0
1124-19-CIP	REBUILD CIRCUIT - HL-33 - LOCUST STREET (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$400,000	\$400,000	\$0
1117-19-CIP	REBUILD CIRCUIT - HL-33 - WADSWORTH ST	C	\$0	\$0	\$0	\$85,000	\$0	\$0	\$0	\$85,000	\$85,000	\$0
1127-19-CIP	REBUILD CIRCUIT - PC-22 - PARSONS RD/MUNSON AVE	C	\$0	\$0	\$0	\$82,000	\$0	\$0	\$0	\$82,000	\$82,000	\$0
1121-19-CIP	REBUILD CIRCUIT - PC-22 - MUNSON AVE (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$300,000	\$300,000	\$0

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Light and Power

1122-19-CIP	REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$150,000	\$0
809-19-CIP	REBUILD CIRCUIT - PC-23 - MITCHELL CREEK (NEW)	C	\$0	\$0	\$0	\$125,000	\$0	\$0	\$0	\$125,000	\$125,000	\$0
1119-19-CIP	REBUILD CIRCUIT - PC-23 - MUNSON AVENUE	C	\$0	\$0	\$0	\$0	\$0	\$320,000	\$0	\$320,000	\$320,000	\$0
1123-19-CIP	REBUILD CIRCUIT - SS-31 - CRESTWOOD (NEW)	C	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$250,000	\$0
1118-19-CIP	REBUILD CIRCUIT PC-22 - MUNSON AVE	C	\$0	\$0	\$0	\$0	\$370,000	\$0	\$0	\$370,000	\$370,000	\$0
1040-19-CIP	SCADA SYSTEM UPGRADE	C	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000	\$0
815-19-CIP	SUBSTATION SWITCHING STATIONS	C	\$0	\$998,000	\$1,200,000	\$0	\$0	\$0	\$0	\$2,198,000	\$2,198,000	\$0
819-19-CIP	SUBSTATION TRANSFORMER UPGRADES	C	\$0	\$0	\$0	\$0	\$775,000	\$750,000	\$0	\$1,525,000	\$1,525,000	\$0
820-19-CIP	TRANSMISSION LINE RECONSTRUCTION	C	\$0	\$0	\$0	\$1,500,000	\$1,500,000	\$1,045,000	\$0	\$4,045,000	\$4,045,000	\$0
1109-19-CIP	UNDERGROUND LINE IMPROVEMENTS	C	\$0	\$275,000	\$325,000	\$375,000	\$425,000	\$475,000	\$525,000	\$2,400,000	\$2,400,000	\$0
829-19-CIP	UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES	C	\$0	\$0	\$0	\$0	\$0	\$0	\$1,340,000	\$1,340,000	\$1,340,000	\$0
1110-19-CIP	UTILITY BILLING SOFTWARE (NEW)	C	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$350,000	\$350,000	\$0
Total Light and Power			\$0	\$8,858,000	\$9,585,000	\$8,767,000	\$9,070,001	\$4,746,000	\$5,465,000	\$46,491,001	\$46,491,001	\$0



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1041-19-CIP

ALLEY BETWEEN STATE AND FRONT STREET

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Remove all overhead lines and transformers and install new underground lines and transformers. The utility may need to purchase easements/real estate to set equipment or purchase vaults to set in alley right of way.

ALLEY BETWEEN STATE AND FRONT STREET

1041-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000
								Project Total:	\$1,500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,500,000	Cost Total: \$1,500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and aesthetics of the system

Project Justification:

Joint Project

Location Description:

Alley between State and Front Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1039-19-CIP

BUILDING D REHABILITATION

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Eliminate driveway, demolish the front office portion of the building, brick the new front of the building to match the existing service center building.

BUILDING D REHABILITATION

1039-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$50,000	\$250,000	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve the inventory cycle process

Project Justification:

Internal analysis

Location Description:

1125 Hastings Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1108-19-CIP

CRITICAL AND LARGE CUSTOMERS

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power Service	Project Description:
Category: Capital	Department Head: Tim Arends	Replacement of underground distribution facilities involving the use
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	of wire, meters, cabinets and transformers.
Fund Detail: Light and Power	Council Priority:	

CRITICAL AND LARGE CUSTOMER

1108-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$925,000	\$925,000	\$0	\$0	\$0	\$0	\$1,850,000
Project Total:									\$1,850,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,850,000	Cost Total: \$1,850,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Upgrading lines will improve system reliability and minimize future maintenance costs.

Project Justification:

System study

Location Description:

Aero Park Industrial Park



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1009-19-CIP

DIVISION STREET STREETSAPES LIGHTING

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Joint Projects

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

New street lighting installations in conjunction with planned streetscape with funding in accordance with TCL&P Street Lighting Operations and Maintenance Policy and Decorative Lighting Policy.

DIVISION STREET STREETSAPES LIGHTING

1009-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$1	\$0	\$0	\$1
Project Total:									\$1

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1	Cost Total: \$1
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Joint Project

Project Justification:

Joint Project

Location Description:

Fourteenth Street to Grandview Parkway



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1043-19-CIP

EAST FRONT STREET STREETScape LIGHTING

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

New street lighting installations in conjunction with planned streetscapes on East Front Street from Boardman Avenue to Holiday Inn with funding in accordance with TCL&P Street Lighting Operations and Maintenance Planning and Decorative Lighting Policy.

EAST FRONT STREET STREETScape LIGHTING

1043-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$56,000	\$0	\$56,000
								Project Total:	\$56,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$56,000
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$56,000
Project Difference: \$0

Service Impact:

Joint Project

Project Justification:

Joint Project

Location Description:

East Front Street between Boardman Avenue and Holiday Inn.



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1008-19-CIP

EIGHTH STREET STREETSCAPES LIGHTING

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Joint Projects

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 New street lighting installation in conjunction with planned corridor improvements with funding in accordance with the Street Lighting Operations and Maintenance Policy and the Decorative Lighting Policy.

EIGHTH STREET STREETSCAPES LIGHTING

1008-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$85,000	\$85,000	\$0	\$0	\$0	\$0	\$170,000
Project Total:									\$170,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$170,000	Cost Total: \$170,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Joint Project

Project Justification:

Joint Project

Location Description:

Eighth Street between Boardman to Woodmere Avenue



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

808-19-CIP

EXTENSIONS AND NEW SERVICES

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Distribution

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Construction/replacements of services involving the use of wire, poles, meters, cabinets and transformers.

EXTENSIONS AND NEW SERVICES

808-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$600,000	\$650,000	\$700,000	\$750,000	\$800,000	\$850,000	\$4,350,000
Project Total:									\$4,350,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$4,350,000	Cost Total: \$4,350,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Upgrading lines and extension and installing new services improving reliability and minimizing maintenance costs.

Project Justification:

New extensions and some upgrades are request of new customers and other improvements are to increase reliability of the system.

Location Description:

Entire service area



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1030-19-CIP

FIBER TO THE PREMISE

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Deployment of a fiber optic network.

FIBER TO THE PREMISE

1030-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FBR	FIBER	\$0	\$4,050,000	\$4,050,000	\$4,050,000	\$4,050,000	\$0	\$0	\$16,200,000
								Project Total:	\$16,200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$16,200,000	Cost Total: \$16,200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

A new business within the utility

Project Justification:

Economic development

Location Description:

Entire service area.



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1038-19-CIP

GRAND TRAVERSE SUBSTATION UPGRADES

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Installation of new control system, breakers, and switches along with land improvements of removing an unused foundation and expanding the fence perimeter.

GRAND TRAVERSE SUBSTATION UPGRADES

1038-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$500,000	\$575,000	\$0	\$0	\$0	\$0	\$1,075,000
Project Total:									\$1,075,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,075,000	Cost Total: \$1,075,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability

Project Justification:

Internal analysis and analysis completed by Wolverine Power Cooperative

Location Description:

Grand Traverse Substation - Keystone Road



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1005-19-CIP

HARTMAN ROAD OVERHEAD TIE

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power Service	Project Description: Allow a second feed into a circuit to enhance reliability in the southwest service area.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Essential (Should Do)	
Fund Detail: Distribution	Council Priority:	

HARTMAN ROAD OVERHEAD TIE

1005-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$725,000	\$725,000	\$0	\$0	\$0	\$0	\$1,450,000
Project Total:									\$1,450,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,450,000	Cost Total: \$1,450,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Reduce the potential of future maintenance costs and increase reliability of the system.

Project Justification:

System study

Location Description:

Southeast part of the distribution system.



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

824-19-CIP HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power Service	Project Description:
Category: Capital	Department Head: Tim Arends	Site improvements to existing facility.
Fund Group: Light and Power	Staff Priority: Essential (Should Do)	
Fund Detail: Facilities	Council Priority:	

HASTINGS SERVICE CENTER FACILITY IMPROVEMENTS

824-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Efficiency of operations

Project Justification:

Internal analysis

Location Description:

1131 Hastings Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

811-19-CIP

OVERHEAD LINE IMPROVEMENTS

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Distribution

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Accumulation of small construction/replacement projects of overhead distribution facilities involving the use of wire, poles, meters, cabinets and transformers.

OVERHEAD LINE IMPROVEMENTS

811-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$350,000	\$400,000	\$450,000	\$500,000	\$550,000	\$600,000	\$2,850,000
Project Total:									\$2,850,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,850,000	Cost Total: \$2,850,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Reduce the potential of future maintenance costs.

Project Justification:

Reliability of the system.

Location Description:

Entire Service Area



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1120-19-CIP REBUILD CIRCUIT - BW-23 - EIGHTH/HASTINGS ST

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - BW-23 - EIGHTH/HASTINGS ST

1120-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Eighth/Hastings Street area East to Munson Avenue



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1125-19-CIP REBUILD CIRCUIT - CD-31/SS-30 - SMART GRID (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT- CD 31/SS-30 - SMART GRID (NEW)

1125-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000
								Project Total:	\$200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$200,000	Cost Total: \$200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Smart Grid Automatic Restoration



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1116-19-CIP REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Distribution	Council Priority:	

REBUILD CIRCUIT - GRANDVIEW PKWY - PRIMARY

1116-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$650,000	\$650,000	\$0	\$0	\$1,300,000
Project Total:									\$1,300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,300,000	Cost Total: \$1,300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Grandview Parkway and behind buildings north of Front Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1126-19-CIP REBUILD CIRCUIT - GRANDVIEW PKWY - STREET LIGHTING

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - GRANDVIEW PKWY - STREET LIGHTING 1126-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

M-72 to Front Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1124-19-CIP REBUILD CIRCUIT - HL-33 - LOCUST STREET (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - HL-33 - LOCUST STREET (NEW)

1124-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$400,000
								Project Total:	\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Locust Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1117-19-CIP

REBUILD CIRCUIT - HL-33 - WADSWORTH ST

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

REBUILD CIRCUIT - HL-33 - WADSWORTH ST

1117-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$85,000	\$0	\$0	\$0	\$85,000
Project Total:									\$85,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$85,000	Cost Total: \$85,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Wadsworth St from Fifth to Thirteenth Street



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1127-19-CIP REBUILD CIRCUIT - PC-22 - PARSONS RD/MUNSON AVE

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - PC-22 - MUNSON AVENUE 1127-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$82,000	\$0	\$0	\$0	\$82,000
Project Total:									\$82,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$82,000	Cost Total: \$82,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Back lot area from Parsons Rd to Munson Ave



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1121-19-CIP REBUILD CIRCUIT - PC-22 - MUNSON AVE (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - PC-22 - MUNSON AVE (NEW) 1121-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Munson Avenue from Avenue B to Avenue E



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1122-19-CIP REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - PC-22 - TOM'S MARKET EAST (NEW)

1122-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000
								Project Total:	\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$150,000	Cost Total: \$150,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Behind Tom's Market East Bay



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

809-19-CIP REBUILD CIRCUIT - PC-23 - MITCHELL CREEK (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power Service	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Distribution	Council Priority:	

REBUILD CIRCUIT PC-23- MITCHELL CREEK (NEW)

809-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$125,000	\$0	\$0	\$0	\$125,000
Project Total:									\$125,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$125,000	Cost Total: \$125,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Mitchell Creek



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1119-19-CIP REBUILD CIRCUIT - PC-23 - MUNSON AVENUE

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - PC-23 - MUNSON AVENUE 1119-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$320,000	\$0	\$320,000
								Project Total:	\$320,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$320,000	Cost Total: \$320,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Munson Avenue from Three Mile to Four Mile Road



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1123-19-CIP REBUILD CIRCUIT - SS-31 - CRESTWOOD (NEW)

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Light and Power	Council Priority:	

REBUILD CIRCUIT - SS-31 - CRESTWOOD (NEW) 1123-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
								Project Total:	\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$250,000	Cost Total: \$250,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Crestwood



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1118-19-CIP REBUILD CIRCUIT PC-22 - MUNSON AVE

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Replace deteriorated overhead/underground facilities with new wire, conduit, poles, etc to include conversion of overhead facilities to underground as appropriate.

REBUILD CIRCUIT - PC-22 - MUNSON AVENUE

1118-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$370,000	\$0	\$0	\$370,000
Project Total:									\$370,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$370,000	Cost Total: \$370,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Rebuilding circuits to increase reliability of the system and minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

OH Munson Avenue from Davis Street to Three Mile Rd



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1040-19-CIP

SCADA SYSTEM UPGRADE

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Upgrade the system to allow it to interconnect with other related systems such as AMI, billing, GIS, OMS and other technologies.

SCADA SYSTEM UPGRADE

1040-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$250,000	Cost Total: \$250,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability of the system

Project Justification:

Internal analysis

Location Description:

1131 Hastings Street and Substations



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

815-19-CIP

SUBSTATION SWITCHING STATIONS

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 Installation of substation infrastructure and equipment. The addition of switching equipment will allow for switching load on the looped transmission system for increased reliability.

SUBSTATION SWITCHING STATION

815-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$998,000	\$1,200,000	\$0	\$0	\$0	\$0	\$2,198,000
Project Total:									\$2,198,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,198,000	Cost Total: \$2,198,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase system reliability

Project Justification:

System study

Location Description:

Barlow Street Substation



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

819-19-CIP SUBSTATION TRANSFORMER UPGRADES

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power Service	Project Description: Installation of higher rated transformers as recommended by Engineers for system reliability due to load growth and age of transformers.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Imperitive (Must Do)	
Fund Detail: Substation	Council Priority:	

SUBSTATION TRANSFORMER UPGRADES

819-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$775,000	\$750,000	\$0	\$1,525,000
Project Total:									\$1,525,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,525,000	Cost Total: \$1,525,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minimize the potential of future maintenance costs.

Project Justification:

System study

Location Description:

Cass and Parsons Road Substations



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

820-19-CIP TRANSMISSION LINE RECONSTRUCTION

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Transmission

Department: Light and Power
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

Reconductor/rebuilding of existing 69kv transmission lines with new lines, higher poles and undergrounding portion of the line to bring circuits to current day standards and in compliance with FAA regulations.

TRANSMISSION LINE RECONSTRUCTION

820-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$1,500,000	\$1,500,000	\$1,045,000	\$0	\$4,045,000
Project Total:									\$4,045,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$4,045,000	Cost Total: \$4,045,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minimize the potential of future maintenance costs and increase reliability of the system.

Project Justification:

System study

Location Description:

1) Cass Road Substation to Cass Road Junction 2) Cass Road Junction to Hall Street Substation 3) Barlow Street Substation to Parsons Road Substation



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1109-19-CIP

UNDERGROUND LINE IMPROVEMENTS

Project Information

Submitted By: Karla Myers-Beman
Category: Capital
Fund Group: Light and Power
Fund Detail: Light and Power

Department: Light and Power Service
Department Head: Tim Arends
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 Accumulation of small construction/replacement projects of underground distribution facilities involving the use of wire, poles, meters, cabinets and transformers.

UNDERGROUND LINE IMPROVEMENTS

1109-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$275,000	\$325,000	\$375,000	\$425,000	\$475,000	\$525,000	\$2,400,000
Project Total:									\$2,400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,400,000	Cost Total: \$2,400,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve reliability of the system.

Project Justification:

Internal analysis

Location Description:

Entire service area.



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

829-19-CIP UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES

Project Information

Submitted By: Karla Myers-Beman	Department: Light and Power	Project Description: Upgrade circuit to accommodate increased load and will consist of new conduit, wire and addition of event outlets.
Category: Capital	Department Head: Tim Arends	
Fund Group: Light and Power	Staff Priority: Essential (Should Do)	
Fund Detail: Joint Projects	Council Priority:	

UPGRADE FRONT ST LIGHTING CIRCUITS & RECEPTACLES

829-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$0	\$0	\$0	\$0	\$1,340,000	\$1,340,000
								Project Total:	\$1,340,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,340,000	Cost Total: \$1,340,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and service to event holders for that circuit.

Project Justification:

Internal analysis

Location Description:

Downtown north and south along Front Street.



Six Year Capital Improvement Program

TCLP-19-CIP

Light and Power

1110-19-CIP

UTILITY BILLING SOFTWARE (NEW)

Project Information

Submitted By:	Karla Myers-Beman	Department:	Light and Power Service
Category:	Capital	Department Head:	Tim Arends
Fund Group:	Light and Power	Staff Priority:	Imperitive (Must Do)
Fund Detail:	Light and Power	Council Priority:	

Project Description:

The current utility billing software does not have multi-speak capability needed to integrate with the other software programs used at Light and Power to manage system outages, the GIS System and engineering analysis. Nor does it have a suitable customer service platform that provides the customer instantaneous information or requested variety of payment options. Additionally, the current software company has been sold several times with continuing diminish customer service with upgrades and customer cases.

UTILITY BILLING SOFTWARE (NEW)

1110-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
LAP	Light and Power	\$0	\$0	\$350,000	\$0	\$0	\$0	\$0	\$350,000
Project Total:									\$350,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$350,000	Cost Total: \$350,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve customer service

Project Justification:

Internal analysis

Location Description:

Utility billing and Hastings Service Center

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Parking

1071-19-CIP	Hardy Boiler Replacement	M	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000	\$60,000	\$0
1081-19-CIP	Hardy PTAC Units	M	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
1080-19-CIP	Hardy Tower Roof Replacement (EPDM)	M	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
545-19-CIP	Lot B Rehab	V	\$0	\$0	\$0	\$400,000	\$0	\$0	\$400,000	\$400,000	\$0
979-19-CIP	Lot C Resurfacing	M	\$0	\$0	\$80,000	\$0	\$0	\$0	\$80,000	\$80,000	\$0
980-19-CIP	Lot J Resurfacing	M	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000	\$50,000	\$0
981-19-CIP	Lot K Resurfacing	M	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000	\$30,000	\$0
708-19-CIP	Lot O Remediation	M	\$0	\$0	\$430,000	\$0	\$0	\$0	\$430,000	\$430,000	\$0
982-19-CIP	Lot T Resurfacing	M	\$0	\$0	\$200,000	\$0	\$0	\$0	\$200,000	\$200,000	\$0
1082-19-CIP	Old Town Battery Backup Convert to Generator	M	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000	\$50,000	\$0
1072-19-CIP	Old Town Boiler Replacement	M	\$0	\$0	\$0	\$0	\$80,000	\$0	\$80,000	\$80,000	\$0
1059-19-CIP	Old Town Garage LED Light Conversion	M	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000	\$100,000	\$0
1083-19-CIP	Old Town PTAC Units	M	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000	\$50,000	\$0
645-19-CIP	West Front St Redevelopment (BOND)	V	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000	\$4,000,000	\$0
Total Parking			\$0	\$120,000	\$180,000	\$2,030,000	\$1,100,000	\$1,160,000	\$5,590,000	\$5,590,000	\$0



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1071-19-CIP Hardy Boiler Replacement

Project Information

Submitted By: Nicole VanNess
Category: Maintenance
Fund Group: Traverse City Parking System
Fund Detail: Parking System

Department: Parking Services
Department Head: Jean Derenzy
Staff Priority:
Council Priority:

Project Description:

Boilers are original to 2003 install. Boiler life is 10 years. 3 boilers onsite. 1 boiler replaced in 2018. 2 boilers need to be scheduled for replacement.

Hardy Boiler Replacement-C

1071-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$60,000	Cost Total: \$60,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

None.

Project Justification:

Ensure operational snow melt

Location Description:

Hardy Parking Garage 303 East State Street.



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1081-19-CIP

Hardy PTAC Units

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Project Description:

Category: Maintenance

Department Head: Jean Derenzy

Replace all PTAC units at the Hardy Parking Garage

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Fund Detail: Parking System

Council Priority:

Hardy PTAC Units - Cost

1081-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$30,000

Cost Total: \$30,000

Annual Maint. Cost:

Project Difference: \$0

Maint. Year Start: 1905

Service Impact:

No service impact

Project Justification:

Routine replacement, equipment at end of life

Location Description:

Hardy Parking Garage, 303 E State Street



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1080-19-CIP Hardy Tower Roof Replacement (EPDM)

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description: Replace all three tower roofs (NE corner, SE corner, and SW corner). All replacement expenses to come from Hardy Fund 585-586
Category: Maintenance	Department Head: Jean Derenzy	
Fund Group: Traverse City Parking System	Staff Priority: Imperitive (Must Do)	
Fund Detail: Parking System	Council Priority:	

Hardy Tower Roof Replacement (EPDM) - Cost

1080-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$30,000	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

This is a maintenance item for the structure of the stair towers to prevent any leaking or runoff into the stair ways and elevator areas.

Project Justification:

Routine building maintenance.

Location Description:

Hardy Parking Garage, 303 E State Street



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

545-19-CIP **Lot B Rehab**

Project Information

Submitted By:	Nicole VanNess	Department:	Parking Services	Project Description:	Reconstruct Lot B per Farmers Market Plan. Could include the replacement of meters with pay stations.
Category:	Visionary	Department Head:	Jean Derenzy		
Fund Group:	Traverse City Parking System	Staff Priority:	Important (Could Do)		
Fund Detail:	Parking System	Council Priority:			

Lot B Rehab - Cost 545-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:	\$2,500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot is at max life. We need to replace top coat and reconstruct.

Location Description:

100 E. Grandview Pkwy; corner of Cass/Grandview Pkwy



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

979-19-CIP Lot C Resurfacing

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Resurface Lot C, which serves Clinch Park and downtown businesses
Fund Group: Traverse City Parking System	Staff Priority: Essential (Should Do)	
Fund Detail: Parking System	Council Priority:	

Lot C Resurfacing - Cost

979-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$80,000
Project Total:									\$80,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$80,000	Cost Total: \$80,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

200 E. Grandview Pkwy



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

980-19-CIP Lot J Resurfacing

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Resurface Lot J, which serves the Union Street Dam area.
Fund Group: Traverse City Parking System	Staff Priority: Essential (Should Do)	
Fund Detail: Parking System	Council Priority:	

Lot J Resurfacing - Cost 980-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

300 S. Union/Union Street Dam



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

981-19-CIP Lot K Resurfacing

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description: Add approximately 8 parking spaces east of existing Lot K if City is able to acquire/lease the Consumers Energy Property just north of the Union Street Dam
Category: Maintenance	Department Head: Jean Derenzy	
Fund Group: Traverse City Parking System	Staff Priority: Essential (Should Do)	
Fund Detail: Parking System	Council Priority:	

Lot K resurfacing- Cost 981-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0	\$30,000
								Project Total:	\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$30,000	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

None.

Project Justification:

Maintenance

Location Description:

North of Union Street Dam



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

708-19-CIP **Lot O Remediation**

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description: Mitigation of contamination that likely is affecting adjacent properties and the water table in close proximity to the Boardman River. Five underground storage tanks exist at Lot O and likely are contributing to soil contamination.
Category: Maintenance	Department Head: Jean Derenzy	
Fund Group: Traverse City Parking System	Staff Priority: Important (Could Do)	
Fund Detail: Parking System	Council Priority:	

Lot O Remediation - Cost 708-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$430,000	\$0	\$0	\$0	\$430,000
Project Total:									\$430,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$430,000	Cost Total: \$430,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot.

Project Justification:

Lot will near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

100 E. State Street. Corner of State/Cass.



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

982-19-CIP Lot T Resurfacing

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Resurface Lot T
Fund Group: Traverse City Parking System	Staff Priority: Essential (Should Do)	
Fund Detail: Parking System	Council Priority:	

Lot T Resurfacing - Cost 982-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$200,000
Project Total:									\$200,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$200,000	Cost Total: \$200,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Stop patches and replace lot

Project Justification:

Lot near end of life. Should be included in Pavement Preservation for replacement.

Location Description:

100 E. Grandview Pkwy, Corner of Grandview Parkway/Union.



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1082-19-CIP Old Town Battery Backup Convert to Generator

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Replace battery backup system with a natural gas powered generator
Fund Group: Traverse City Parking System	Staff Priority: Important (Could Do)	
Fund Detail: Parking System	Council Priority:	

Old Town Battery Backup Convert to Generator - Cos

1082-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Failure of battery backup system could result in failure of emergency lighting, inoperable equipment, and inoperable elevators

Project Justification:

A natural gas powered generator is cheaper than purchasing a replacement battery back up system, and the generator life is longer than the battery.

Location Description:

Old Town Parking Garage, 125 E Eighth Street



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1072-19-CIP Old Town Boiler Replacement

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description: Boilers are original to 2009 install. Boiler life is 10 years. 3 boilers onsite.
Category: Maintenance	Department Head: Jean Derenzy	
Fund Group: Traverse City Parking System	Staff Priority:	
Fund Detail: Parking System	Council Priority:	

Old Town Boiler Replacement-C

1072-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$0	\$80,000	\$0	\$80,000
								Project Total:	\$80,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$80,000	Cost Total: \$80,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

None.

Project Justification:

Ensure operational snow melt

Location Description:

Old Town Parking Garage, 125 E. Eighth St.



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1059-19-CIP **Old Town Garage LED Light Conversion**

Project Information

Submitted By: Nicole VanNess	Department: Parking Services	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Concert lighting to LED in order to reduce lighting costs and repairs.
Fund Group: Traverse City Parking System	Staff Priority:	
Fund Detail: Parking System	Council Priority:	

Old Town Garage LED Light Conversion-Cost

1059-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Lighting swap out may reduce lighting on some levels as conversion is taking place over replacement period.

Project Justification:

Replace all existing lighting and convert to a more energy efficient lighting system.

Location Description:

125 E. Eighth Street. Old Town Garage



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

1083-19-CIP

Old Town PTAC Units

Project Information

Submitted By: Nicole VanNess

Department: Parking Services

Project Description:

Category: Maintenance

Department Head: Jean Derenzy

Replace all PTAC units at the Old Town Parking Garage.

Fund Group: Traverse City Parking System

Staff Priority: Essential (Should Do)

Replacement will be from the Old Town Fund 585-587

Fund Detail: Parking System

Council Priority:

Old Town PTAC Units - Cost

1083-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
APS	Parking System	\$0	\$0	\$0	\$0	\$0	\$50,000	\$0	\$50,000
								Project Total:	\$50,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$50,000

Cost Total: \$50,000

Annual Maint. Cost:

Project Difference: \$0

Maint. Year Start: 1905

Service Impact:

No impact, equipment replacement

Project Justification:

Routine equipment replacement for end of life equipment.

Location Description:

Old Town Parking Garage, 125 E Eighth Street



Six Year Capital Improvement Program

PARKING-19-CIP

Parking

645-19-CIP West Front St Redevelopment (BOND)

Project Information

Submitted By: Jean Derenzy	Department: Parking Services	Project Description:
Category: Visionary	Department Head: Jean Derenzy	Build an approximately 410 space parking deck to serve the west side of downtown. This project is a bond.
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

West Front St Redevelopment (BOND) - Cost

645-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000
Project Total:									\$4,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$1,050,000	
Construction:	\$10,300,000	Cost Total: \$11,350,000
Annual Maint. Cost:	\$220,000	Project Difference: \$-7,350,000
Maint. Year Start:	1905	

Service Impact:

Estimated annual maintenance of \$220,000

Project Justification:

Provide parking on west end. Free up existing surface lots for development.

Location Description:

145 W. Front Street. Corner W. Front/Pine.

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Parks

+ 928-19-CIP	American Legion Park Improvements	V	\$0	\$0	\$0	\$150,000	\$0	\$0	\$0	\$150,000	\$35,000	\$115,000
+ 306-19-CIP	Ashton Park Playground	V	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$30,000	\$15,000	\$15,000
+ 539-19-CIP	Boon Street Park Playground Improvements	V	\$0	\$0	\$58,000	\$0	\$0	\$0	\$58,000	\$50,000	\$50,000	\$8,000
+ 26-19-CIP	Bryant Park Improvements	V	\$0	\$15,000	\$50,000	\$145,000	\$0	\$0	\$210,000	\$95,000	\$95,000	\$115,000
1090-19-CIP	Franklin Street Promenade	C	\$0	\$0	\$0	\$0	\$79,500	\$0	\$79,500	\$79,500	\$79,500	\$0
3-19-CIP	Hannah Park improvements	V	\$80,000	\$65,000	\$0	\$0	\$0	\$0	\$145,000	\$65,000	\$65,000	\$80,000
+ 309-19-CIP	Indian Woods Playground	V	\$0	\$120,000	\$0	\$0	\$0	\$0	\$120,000	\$50,000	\$50,000	\$70,000
+ 972-19-CIP	Mini Park Upgrade and East Downtown Entrance	V	\$0	\$0	\$0	\$0	\$0	\$55,000	\$55,000	\$30,000	\$30,000	\$25,000
785-19-CIP	Natural Features Inventory (Planning Commission)	V	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000	\$20,000	\$20,000	\$0
684-19-CIP	Park Sign Replacement	M	\$0	\$30,000	\$30,000	\$0	\$0	\$0	\$60,000	\$60,000	\$60,000	\$0
+ 543-19-CIP	Rose and Boyd Triangle Park (Jupiter Gardens)	V	\$0	\$10,000	\$50,000	\$0	\$0	\$0	\$60,000	\$30,000	\$30,000	\$30,000
+ 602-19-CIP	Senior Center -Bayfront Plan	V	\$0	\$0	\$0	\$0	\$0	\$161,888	\$161,888	\$0	\$0	\$161,888
+ 926-19-CIP	Senior Citizen Park Improvements	V	\$0	\$0	\$0	\$0	\$0	\$75,000	\$75,000	\$35,000	\$35,000	\$40,000
+ 927-19-CIP	Sunset Park Improvements	V	\$0	\$0	\$0	\$0	\$250,000	\$0	\$250,000	\$100,000	\$100,000	\$150,000
+ 1020-19-CIP	West End Beach Bathhouse Project	V	\$0	\$0	\$100,000	\$283,000	\$0	\$0	\$383,000	\$163,000	\$163,000	\$220,000
Total Parks			\$80,000	\$240,000	\$308,000	\$578,000	\$280,000	\$134,500	\$236,888	\$1,857,388	\$827,500	\$1,029,888



Six Year Capital Improvement Program

PARK-19-CIP

Parks

928-19-CIP American Legion Park Improvements

Project Information

Submitted By:	Derek Melville	Department:	Department of Public Services	Project Description: The improvements to American Legion Park could include terracing to create different levels of the park to make it more usable for sitting areas, small events and river access opportunities. Landscaping around the Veteran's monument would also be important.
Category:	Visionary	Department Head:	Frank Dituri	
Fund Group:	General	Staff Priority:	Important (Could Do)	
Fund Detail:	Parks & Rec	Council Priority:		

American Legion Park Improvements (+Grant - Cost) 928-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0	\$35,000
LFG	Local / Foundation Grant	\$0	\$0	\$0	\$65,000	\$0	\$0	\$0	\$65,000
P	Private	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000
Project Total:									\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$140,000	Cost Total: \$150,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minimal increased costs for maintenance as compared to current operations.

Project Justification:

Currently the landscape of the park makes it difficult for the space to be used for gathering or small events so improvements would help activate the park. This project is listed in the Parks & Recreation 5 year master plan.

Location Description:

200 Washington Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

306-19-CIP Ashton Park Playground

Project Information

Submitted By: Derek Melville
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Replace existing play equipment with small structure designed for younger children. Larger play structure for older children is available at Willow Hill Elementary School. The new equipment would meet current safety and ADA accessibility standards.

Ashton Park Playground - Cost

306-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$15,000
P	Private	\$0	\$0	\$0	\$0	\$15,000	\$0	\$0	\$15,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$30,000	Cost Total: \$30,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minor impacts for City Parks operations. Annually wood chips will need to be spread.

Project Justification:

The existing playground equipment is outdated and non-ADA accessible. All new equipment will be selected to increase safety and ADA accessibility.

Location Description:

1200 Wayne Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

539-19-CIP Boon Street Park Playground Improvements

Project Information

Submitted By: Derek Melville	Department: Department of Public Services	Project Description: This neighborhood park has a mixture of thirty year old and older pieces of play equipment. All equipment should be replaced, a new picnic area should be established and the trail should have defined ada pathways (sidewalk or limestone fines) to improve access.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: Parks & Rec	Council Priority:	

Boon Street Park Playground Improvements - Cost 539-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
P	Private	\$0	\$0	\$8,000	\$0	\$0	\$0	\$0	\$8,000
Project Total:									\$58,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$3,000	
Construction:	\$55,000	Cost Total: \$58,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Annually the parks department would have to spread woodchips and minor increased maintenance activities when the picnic area is heavily used.

Project Justification:

All playground equipment is in need of replacement along with the addition of ADA accessible play pieces and general park accessibility. Creating an improved picnic area will increase park use over time.

Location Description:

925 Boon Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

26-19-CIP Bryant Park Improvements

Project Information

Submitted By: Lauren Vaughn
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Bryant Park is one of the most utilized parks in the City, so it has been identified that expanding and updating the bathhouse, adding an outside foot wash station and creating small picnic areas with mini pavilions and grills are desired. Additionally, a retaining wall will greatly reduce the amount of sand that blows up into the turf area during the late fall to early spring period. It will also help to stop the encroachment of the sand and shrinking of the turf areas.

Bryant Park Improvements

26-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$95,000	\$0	\$0	\$0	\$95,000
FSG	Federal / State Grant	\$0	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$100,000
LFG	Local / Foundation Grant	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$15,000
Project Total:									\$210,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$15,000	
Construction:	\$195,000	Cost Total: \$210,000
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Increased cleaning costs will come from a larger facility, as well as increased maintenance costs of additional pavilions and the retaining wall.

Project Justification:

The installation of a retaining wall at Bryant Park is identified in the Parks & Recreation 5 year master plan, and the other amenities have been identified as needed due to the high use the park sees throughout the summer, specifically on weekends and during special events.

Location Description:

1101 Peninsula Dr



Six Year Capital Improvement Program

PARK-19-CIP

Parks

1090-19-CIP

Franklin Street Promenade

Project Information

Submitted By: Russ Soyring
Category: Capital
Fund Group: General
Fund Detail: Parks & Rec

Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

Phase 1: An extension of Franklin Street as a promenade to connect the North Boardman Lake District to Boardman Lake. To do this, the project includes moving security gates for the wastewater treatment plant and relocating security fencing.

Phase 2: At a future time when Franklin Street is reconstructed, the street ending should be re-built as a shared street with pedestrian amenities.

Franklin Street Promenade-Cost

1090-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$0	\$0	\$0	\$79,500	\$0	\$79,500
								Project Total:	\$79,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$79,500	Cost Total: \$79,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase service impact due to landscaping, lighting.

Project Justification:

Envision 8th Master Plan

Location Description:

Extension of the 500 block of Franklin to Boardman Lake



Six Year Capital Improvement Program

PARK-19-CIP

Parks

3-19-CIP Hannah Park improvements

Project Information

Submitted By: Derek Melville	Department: Department of Public Services	Project Description: Pave or use limestone fines to build 6' path where an informal dirt trail from Union to Wadsworth Streets. Decorative lights will replace existing yard lights. Also includes irrigation system improvements and a paver path for maintenance vehicles/pedestrians coming into the park from Union Street.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: Brown Bridge Trust Parks Impr	Staff Priority: Essential (Should Do)	
Fund Detail: Parks & Rec	Council Priority:	

Hannah Park improvements (+Private +BBTF) - Cost 3-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$65,000	\$0	\$0	\$0	\$0	\$0	\$65,000
P	Private	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000
Project Total:									\$145,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$2,000	
Construction:	\$63,000	Cost Total: \$65,000
Annual Maint. Cost:	\$1,000	Project Difference: \$80,000
Maint. Year Start:	1905	

Service Impact:

Annually the Parks Department will have to provide maintenance to the trail and will have to maintain the irrigation system.

Project Justification:

The project will provide a minor face lift for Hannah Park and will increase bike user and pedestrian user access through the park and also increase user safety. The drive into the park will help prevent future erosion and maintenance issues.

Location Description:

200 6th Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

309-19-CIP **Indian Woods Playground**

Project Information

Submitted By: Lauren Vaughn
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

This would replace most of the existing play equipment with a small new structure that would meet current safety and ADA accessibility standards. Some of the existing play pieces could remain as they were replaced and/or added in the past 15 years. Additionally, the neighborhood has identified they'd like to have a connection between the upper and lower tiers of the park, possibly through a sidewalk or trail. Also, hill slides and an improved picnic area has been identified to be added.

Indian Woods Playground - Cost

309-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$60,000	\$0	\$0	\$0	\$0	\$0	\$60,000
GEN	General Fund	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
P	Private	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$120,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$110,000	Cost Total: \$120,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Ongoing repairs and maintenance to the improved facilities will be similar to existing levels.

Project Justification:

Improving Indian Woods Park and playground is identified in the Parks & Recreation 5 year master plan. Due to the age and condition of the existing playground equipment it should be replaced with ADA compliant pieces. Additionally, connecting the two tiers, if possible, would be a positive improvement for users of all abilities.

Location Description:

1765 Indian Woods Drive



Six Year Capital Improvement Program

PARK-19-CIP

Parks

972-19-CIP Mini Park Upgrade and East Downtown Entrance

Project Information

Submitted By: Lauren Vaughn	Department: Department of Public Services	Project Description: Improvements to Mini Park at the corner of East Front Street and Grandview Parkway will become a focal point for the entrance to downtown. Improvements should include lighting, reworked trails around the "guardian" plaza and landscaping updates.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: General	Staff Priority: Important (Could Do)	
Fund Detail: Parks & Rec	Council Priority:	

Mini Park Upgrade and East Downtown Entran - Cost 972-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000
GEN	General Fund	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$5,000
P	Private	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0	\$25,000
Project Total:									\$55,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$45,000	Cost Total: \$55,000
Annual Maint. Cost:	\$1,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

With increased use of the area the Parks department will have to increase general maintenance and trash removal.

Project Justification:

With the new Coast Guard plaza, reworking the bike traffic and trails is crucial to help with traffic flow and safety. Lighting and other amenities in collaboration with a streetscape improvement will tie the parcel together.

Location Description:

539 East Front Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

785-19-CIP Natural Features Inventory (Planning Commission)

Project Information

Submitted By: Russ Soyring
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

Conduct an extensive Natural Features Inventory (NFI), including flora, fauna, soil types, air quality and water quality to establish baseline criteria on city properties. After the completion of the NFI, specific priorities, goals and standards can be developed. Currently, some natural features data is being collected as part of the SAW grant.

Natural Features Inventory (Planning) - Cost

785-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$20,000	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$20,000
	Project Difference:	\$0

Service Impact:

None.

Project Justification:

Natural Resources Element in the Master Plan calls for this plan to provide a baseline for policy making.

Location Description:

City-wide.



Six Year Capital Improvement Program

PARK-19-CIP

Parks

684-19-CIP Park Sign Replacement

Project Information

Submitted By: Lauren Vaughn
Category: Maintenance
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 This project would replace all main park entrance signs with a different style and color to bring the parks up to date. This would also include a new branding design (logo) on the signs and some additional signs for marking trails and for wayfinding.

Park Sign Replacement - Cost 684-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$30,000	\$30,000	\$0	\$0	\$0	\$0	\$60,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$4,000	
Construction:	\$56,000	Cost Total: \$60,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

A full sign replacement will result in an immediate decrease of park sign maintenance costs, but ongoing replacement for damaged/vandalized signs should be built into the budget.

Project Justification:

The Parks & Recreation 5 year master plan identifies a sign replacement project as a priority, as the P&R Commission has identified a desire to re-brand the Parks as a whole, with all new signs being part of that plan. Additionally, many of the Parks signs are past their useful life and need to be replaced so they reflect positively on the City.

Location Description:

n/a



Six Year Capital Improvement Program

PARK-19-CIP

Parks

543-19-CIP Rose and Boyd Triangle Park (Jupiter Gardens)

Project Information

Submitted By: Derek Melville	Department: Department of Public Services	Project Description: The North Traverse Heights neighborhood group and other individuals have expressed an interest in seeing improvements to this park to include: a small trailside shelter, sidewalks, native/edible gardens, water and bike repair stations, natural playscapes and trails within the park. The use of this park could greatly increase if these amenities are added.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: Parks & Rec	Council Priority:	

Rose and Boyd Triangle Park (Jupiter Garde - Cost

543-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
FSG	Federal / State Grant	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$10,000
LFG	Local / Foundation Grant	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$10,000
P	Private	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$1,000	
Construction:	\$59,000	Cost Total: \$60,000
Annual Maint. Cost:	\$1,500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

The gardens would require seasonal attention and the natural areas would require annual woodchips/mulch.

Project Justification:

Users of the TART trail and neighborhood residents would benefit most from this improvement that would create a stopping point for trail traffic and a community garden that residents could help support. Additionally, the natural playscapes would allow for opportunities for play for young children without the need for a large playground.

Location Description:

912 Boyd Ave



Six Year Capital Improvement Program

PARK-19-CIP

Parks

602-19-CIP Senior Center -Bayfront Plan

Project Information

Submitted By: Russ Soyring	Department: Planning and Zoning	Project Description: Sidewalks, new parking lot improvement and Stormwater Treatment Structure are key elements of the project.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: Bayfront Plan NON-TIF Implem	Staff Priority: Important (Could Do)	
Fund Detail: Parks & Rec	Council Priority:	

Senior Center Bayfront Phase (+Grant) - Cost

602-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000	\$50,000
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$111,888	\$111,888
								Project Total:	\$161,888

COST DETAIL:

Study:	\$4,000	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$11,410	
Construction:	\$146,478	Cost Total: \$161,888
Annual Maint. Cost:	\$8,000	Project Difference: \$0
Maint. Year Start:		

Service Impact:

Service requirements would increase- Sidewalk and stormwater maintenance

Project Justification:

2010 Bayfront Plan

Location Description:

801 E. Front Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

926-19-CIP Senior Citizen Park Improvements

Project Information

Submitted By: Lauren Vaughn	Department: Department of Public Services	Project Description: These improvements would include an adult "playground" with components designed to help the Senior population with strength, balance, and mobility and a path connecting these features. Additionally, irrigation for the grounds and improved parking should be part of this project or it could aligned with the new Senior Center building discussions to create a comprehensive plan for the space.
Category: Visionary	Department Head: Frank Dituri	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: Parks & Rec	Council Priority:	

Senior Citizen Park Improvements (Grant +P - Cost) 926-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000	\$35,000
LFG	Local / Foundation Grant	\$0	\$0	\$0	\$0	\$0	\$0	\$35,000	\$35,000
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$5,000
								Project Total:	\$75,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$2,000	
Construction:	\$73,000	Cost Total: \$75,000
Annual Maint. Cost:	\$500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

The installation of an irrigation system and fitness amenities will require seasonal and periodic preventative maintenance, repair and servicing of the equipment.

Project Justification:

This project is listed as part of the Parks and Recreation 5 year master plan. Providing a fitness loop for senior center users onsite would

Location Description:

801 E Front Street



Six Year Capital Improvement Program

PARK-19-CIP

Parks

927-19-CIP Sunset Park Improvements

Project Information

Submitted By: Lauren Vaughn
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 The improvements to Sunset Parks would include: a small picnic pavilion with restrooms, a new playground, fitness stations, a walking path, landscaping, irrigation and retaining wall at the sand/grass interface and a drinking fountain/water bottle filling station. It was also recently supported by the Parks & Recreation Commission that a potential raquetball/handball court be placed as part of this project.

Sunset Park Improvements (+Grant +Private - Cost

927-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000
LFG	Local / Foundation Grant	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000
P	Private	\$0	\$0	\$0	\$0	\$25,000	\$0	\$0	\$25,000
Project Total:									\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$20,000	
Construction:	\$230,000	Cost Total: \$250,000
Annual Maint. Cost:	\$2,500	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

The cleaning and maintenance of the restrooms will be the source of the largest maintenance cost increase, with a need for repair and part replacement for the fitness and playground equipment.

Project Justification:

The 5 year Parks and Rec Master Plan highlights the need to update Sunset Park with the proposed amenities. A conceptual plan has been approved by the Parks and Rec Commission, with further refining needed as the project nears.

Location Description:

635 E Front



Six Year Capital Improvement Program

PARK-19-CIP

Parks

1020-19-CIP

West End Beach Bathhouse Project

Project Information

Submitted By: Derek Melville
Category: Visionary
Fund Group: General
Fund Detail: Parks & Rec

Department: Department of Public Services
Department Head: Frank Dituri
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 The existing bathroom facility is old, non-ADA compliant and in disrepair. This project proposes to build a new bathhouse/changing room that will be a modern, energy efficient ADA compliant facility. Additionally, the addition of an ADA access to the beach along with picnic & seating areas around the rebuilt bathhouse will be important.

West End Beach Bathhouse Project

1020-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BBTP	Brown Bridge Trust Parks	\$0	\$0	\$0	\$120,000	\$0	\$0	\$0	\$120,000
GEN	General Fund	\$0	\$0	\$0	\$43,000	\$0	\$0	\$0	\$43,000
LFG	Local / Foundation Grant	\$0	\$0	\$100,000	\$120,000	\$0	\$0	\$0	\$220,000
Project Total:									\$383,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$43,000	
Construction:	\$340,000	Cost Total: \$383,000
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minimal impact to city operations with regard to maintenance or cost increases as there is an existing bathhouse we currently maintain.

Project Justification:

Existing bathhouse is in disrepair and not ADA compliant. This project is referenced in the Parks & Recreation 5 year master plan as a necessity due to the lack of ADA usability. The addition of an ADA access to the beach will provide access to the beach on the West End to all users in proximity to parking.

Location Description:

706 West Grandview Parkway- West End

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Streets

+ 14-19-CIP	Annual Street Reconstruction Program	M	\$1,140,000	\$1,333,638	\$1,331,181	\$519,046	\$510,000	\$515,738	\$0	\$5,349,602	\$5,349,602	\$0
320-19-CIP	Division Street	V	\$100,000	\$0	\$100,000	\$100,000	\$100,000	\$0	\$0	\$400,000	\$400,000	\$0
+ 717-19-CIP	East Front St Reconstruction (400-500 blocks)	V	\$0	\$0	\$0	\$0	\$0	\$915,000	\$0	\$915,000	\$915,000	\$0
+ 882-19-CIP	Eighth Street- Boardman to Railroad Ave.	V	\$235,000	\$3,405,000	\$0	\$0	\$0	\$0	\$0	\$3,640,000	\$765,000	\$2,875,000
1087-19-CIP	Front Street Streetscapes	M	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
+ 1115-19-CIP	Garfield Ave Reconstruction (Hannah to Front St)	C	\$0	\$0	\$0	\$412,500	\$0	\$0	\$0	\$412,500	\$82,500	\$330,000
616-19-CIP	Grand Traverse Commons Infrastructure	V	\$0	\$0	\$223,095	\$690,000	\$310,000	\$0	\$0	\$1,223,095	\$0	\$1,223,095
713-19-CIP	Grandview Parkway Pedestrian Crossing Enhancement	V	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$500,000	\$500,000	\$0
+ 1130-19-CIP	Highway Safety Improvement Program (HSIP)	C	\$0	\$20,000	\$600,000	\$0	\$0	\$0	\$0	\$620,000	\$80,000	\$540,000
1088-19-CIP	State Street Streetscapes	M	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
889-19-CIP	Traffic Calming	V	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$500,000	\$500,000	\$0
1070-19-CIP	Traffic Signal Mast Arm	C	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0
15-19-CIP	Traffic Signal Power Backup	V	\$0	\$22,500	\$22,500	\$22,500	\$22,500	\$0	\$0	\$90,000	\$90,000	\$0
16-19-CIP	Traffic Signal Upgrades	V	\$0	\$120,000	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$360,000	\$360,000	\$0
1089-19-CIP	Tree Replacement	M	\$0	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0
+ 1026-19-CIP	Union Street and Streetscape	C	\$0	\$0	\$669,060	\$0	\$0	\$0	\$0	\$669,060	\$669,060	\$0
Total Streets			\$1,475,000	\$5,101,138	\$4,155,836	\$2,954,046	\$1,102,500	\$2,090,738	\$0	\$16,879,257	\$11,911,162	\$4,968,095



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

14-19-CIP Annual Street Reconstruction Program

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Maintenance	Department Head:	Tim Lodge
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Streets	Council Priority:	

Project Description:

This is an annual program that provides funds to resurface major and minor streets within the city limits. Funding eligible for bridge and street repair, resurfacing, reconstruction including sidewalks, storm water system. Millage fund cannot be used for sidewalks or underground utilities. In the coming fiscal years the following streets: 8th, E. 11th, E. 10th, Jefferson, Monroe, Madison, Randolph, Fitzhugh and existing gravel streets (Griffin, Fulton) are on the list for street reconstruction and are coordinated with utility fund projects. For the next 2 years, pavement preservation projects are planned utilizing the millage funds.

Annual Street Reconstruction Program (+GTC - Cost

14-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
ACPF	Available Capital Projects Fund	\$330,000	\$0	\$0	\$0	\$0	\$0	\$0	\$330,000
GEN	General Fund	\$0	\$523,638	\$521,181	\$519,046	\$510,000	\$515,738	\$0	\$2,589,602
RCMF	Road Commission Millage Fund	\$810,000	\$810,000	\$810,000	\$0	\$0	\$0	\$0	\$2,430,000
Project Total:									\$5,349,602

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$0	Cost Total: \$0
Annual Maint. Cost:		Project Difference: \$5,349,602
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Maintenance

Location Description:

City-wide



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

320-19-CIP **Division Street**

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

Funding for improvements to Division Street in conjunction with 2020 MDOT Safety project. In 2015/16, MDOT completed a PEL Study for the corridor. The City's participation in the project will likely include items such as sidewalks, lighting, and project enhancements.

Division Street - Cost

320-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
ACPF	Available Capital Projects Fund	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$100,000
GEN	General Fund	\$0	\$0	\$100,000	\$100,000	\$100,000	\$0	\$0	\$300,000
Project Total:									\$400,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0
Project Difference: \$400,000

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement.

Project Justification:

Partnering with MDOT for value added features of their improvement project.

Location Description:

Division Street from 13th to 7th Street.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

717-19-CIP East Front St Reconstruction (400-500 blocks)

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Tim Lodge
Fund Group:	Tax Increment Financing	Staff Priority:	Essential (Should Do)
Fund Detail:	TIF 97	Council Priority:	

Project Description:

Street reconstruction with utility rehabilitation and replacement. New curbs, street trees, benches, bike racks, and sidewalk along East Front between Park Street and Grandview Parkway. Project pending SID.

The City will request participation from TCLP for lighting associated with the streetscape. Utility funds will be utilized and coordinated with the street project. The utility projects associated with this project are in the CIP: 1052-19-CIP and 1053-19-CIP.

East Front Reconstructio (Park to Grand - Cost

717-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$400,000
SAF	Special Assessment Fund	\$0	\$0	\$0	\$0	\$0	\$257,500	\$0	\$257,500
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$0	\$257,500	\$0	\$257,500

Project Total: \$915,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$915,000	Cost Total: \$915,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increased service likely due to addition of street trees and site amenities.

Project Justification:

TIF 97

Location Description:

East Front Street 400-500 blocks.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

882-19-CIP **Eighth Street- Boardman to Railroad Ave.**

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Tim Lodge
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Streets	Council Priority:	

Project Description:

Implementation of Eighth Street Plan based on outcome of 8th Street Charrette. This project will reconstruct 8th Street from Boardman Avenue to Railroad Avenue including sidewalks, cycletracks, curb and gutter, storm sewers, sanitary sewers, watermain, lighting and street reconstruction. *This project needs to be coordinated with the East-West Transmission Line #935 project included in the Water Fund.

Eighth Street- Lake Ave. to Woodmere - Cost

882-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
ACPF	Available Capital Projects Fund	\$185,000	\$0	\$0	\$0	\$0	\$0	\$0	\$185,000
GEN	General Fund	\$50,000	\$2,875,000	\$0	\$0	\$0	\$0	\$0	\$2,925,000
S	Sewer Fund	\$0	\$530,000	\$0	\$0	\$0	\$0	\$0	\$530,000
Project Total:									\$3,640,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$5,200,000
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$5,200,000
Project Difference: **-\$1,560,000**

Service Impact:

Maintenance may increase due to streetscape, amenities and cycle-track.

Project Justification:

Envision 8th Charrette public process

Location Description:

8th Street from Boardman Ave to Railroad Ave.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1087-19-CIP Front Street Streetscapes

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Upgrade streetscapes in the 100 and 200 blocks of East Front
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

Front Street Streetscapes Cost 1087-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$1,000,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Minor sidewalk and street closures

Project Justification:

Original streetscapes at end of life and need to be upgraded

Location Description:

100/200 blocks of East Front Street



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1115-19-CIP **Garfield Ave Reconstruction (Hannah to Front St)**

Project Information

Submitted By: Tim Lodge	Department: Engineering	Project Description:
Category: Capital	Department Head: Tim Lodge	Garfield Ave. Reconstruction project to utilize small urban funds.
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: Streets	Council Priority:	

TBD Street Reconstruction-C

1115-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$0	\$330,000	\$0	\$0	\$0	\$330,000
GEN	General Fund	\$0	\$0	\$0	\$82,500	\$0	\$0	\$0	\$82,500
Project Total:									\$412,500

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$412,500	Cost Total: \$412,500
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Street Reconstruction

Location Description:

Garfield Ave. between Hannah and Front Street



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

616-19-CIP Grand Traverse Commons Infrastructure

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 For Streets, Sidewalks, Water, Sewer, and Storm Sewer infrastructure supporting Grand Traverse Commons Development. Reimbursement anticipated from Brownfield TIF.

Grand Traverse Commons Infrastructure - Cost

616-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BR	Brownfield	\$0	\$0	\$223,095	\$690,000	\$310,000	\$0	\$0	\$1,223,095
Project Total:									\$1,223,095

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,223,095	Cost Total: \$1,223,095
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Converting private utilities to public utilities.

Project Justification:

Replacing aged infrastructure as part of Brownfield Place.

Location Description:

Grand Traverse Commons Development.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

713-19-CIP Grandview Parkway Pedestrian Crossing Enhancement

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description: Pedestrian enhancements to cross Grandview Parkway between Hall Street to Cass Street. Possible gateway treatment at Union Street. Project to be coordinated with MDOT enhancements in 2022.
Category: Visionary	Department Head: Jean Derenzy	
Fund Group: Tax Increment Financing	Staff Priority:	
Fund Detail: TIF 97	Council Priority:	

Grandview Parkway Pedestrian Crossing Enha - Cost

713-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$0	\$0	\$0	\$500,000	\$0	\$500,000
								Project Total:	\$500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$500,000	Cost Total: \$500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None foreseen

Project Justification:

Crossing enhancement/Connectivity

Location Description:

Grandview Parkway



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1130-19-CIP Highway Safety Improvement Program (HSIP)

Project Information

Submitted By: Tim Lodge
Category: Capital
Fund Group: General
Fund Detail: Available Capital Projects Fund

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Replacement of the traffic signal at the Parsons and Airport Access Intersection with a roundabout for MDOT's 2020 fiscal year. The project is valued at \$600,000 for which the City is responsible for 10% or \$60,000 with the program paying the other 90%. The City will be responsible for other costs such as engineering, surveying and construction testing. Pedestrian improvements will accommodate pedestrians wish to cross at the intersection and provide easier access to the existing shared path that runs parallel to Parsons (south side) to help reduce the number of pedestrians and cyclists in the roadway.

Highway Safety Improvement Program (HSIP)

1130-19-CIP

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$0	\$540,000	\$0	\$0	\$0	\$0	\$540,000
GEN	General Fund	\$0	\$20,000	\$60,000	\$0	\$0	\$0	\$0	\$80,000
								Project Total:	\$620,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$20,000	
Construction:	\$600,000	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$620,000
	Project Difference:	\$0

Service Impact:

We would optimize the footprint to reduce maintenance costs. The roundabout will eliminate replacement costs of the traffic signal, as well as cost of operating the traffic signal.

Project Justification:

Converting intersection to a roundabout to reduce speed, therefore reducing the number and severity of accidents.

Location Description:

Intersection of Parsons Rd and Airport Access Rd.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1088-19-CIP State Street Streetscapes

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Upgrade streetscapes in the 100 and 200 blocks of East State Street
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

State Street Streetscapes Cost

1088-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$500,000	\$500,000	\$0	\$0	\$0	\$1,000,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Temporary sidewalk and street closures

Project Justification:

Current streetscapes are near end of life and need to be upgraded

Location Description:

100/200 East State Street



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

889-19-CIP Traffic Calming

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Important (Could Do)
Council Priority:

Project Description:
 Funding for Traffic Calming infrastructure improvements per City Commission.

Traffic Calming - Cost

889-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$0	\$500,000
Project Total:									\$500,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0
Project Difference: \$500,000

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement.

Project Justification:

Improving safety and traffic concerns.

Location Description:

City-wide.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1070-19-CIP

Traffic Signal Mast Arm

Project Information

Submitted By: Jean Derenzy
Category: Capital
Fund Group: Tax Increment Financing
Fund Detail: TIF 97

Department: Downtown Development
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 For installing mast arm signal posts in conjunction with MDOT Traffic Signal Upgrade project at the Grandview Parkway/E. Front intersection and Grandview Parkway/Union Street intersection.

Traffic Signal Mast Arm

1070-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:
None.

Project Justification:

Signal Upgrade

Location Description:

Grandview pkwy/E. Front and Grandview pkwy/Union St



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

15-19-CIP Traffic Signal Power Backup

Project Information

Submitted By: Tim Lodge	Department: Engineering	Project Description: Provide funding to install battery backup power systems in all signal equipment by 2022.
Category: Visionary	Department Head: Tim Lodge	
Fund Group: General	Staff Priority: Essential (Should Do)	
Fund Detail: Streets	Council Priority:	

Traffic Signal Power Backup - Cost

15-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$22,500	\$22,500	\$22,500	\$22,500	\$0	\$0	\$90,000
Project Total:									\$90,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0
Project Difference: \$90,000

Service Impact:

Reducing the need for response in brief power outages.

Project Justification:

Replacing aged traffic signal equipment and providing back up emergency power.

Location Description:

Various locations city-wide.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

16-19-CIP Traffic Signal Upgrades

Project Information

Submitted By: Tim Lodge
Category: Visionary
Fund Group: General
Fund Detail: Streets

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

This is an annual program that will fund traffic signal consulting and design for upgrade to the Garfield/Hannah, Parsons traffic signal and the Parsons/Hastings intersection signal.

Traffic Signal Upgrades - Cost

16-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$120,000	\$60,000	\$60,000	\$60,000	\$60,000	\$0	\$360,000
Project Total:									\$360,000

COST DETAIL:

Study: \$0
Land Acquisition / ROW: \$0
Engineering / Design: \$0
Construction: \$0
Annual Maint. Cost:
Maint. Year Start:

Cost Total: \$0
Project Difference: \$360,000

Service Impact:

Reduce operational and maintenance costs.

Project Justification:

Replacing aged traffic signal equipment.

Location Description:

Various locations city-wide.



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1089-19-CIP **Tree Replacement**

Project Information

Submitted By: Jean Derenzy	Department: Downtown Development	Project Description:
Category: Maintenance	Department Head: Jean Derenzy	Replace Trees throughout the DDA District
Fund Group: Tax Increment Financing	Staff Priority: Essential (Should Do)	
Fund Detail: TIF 97	Council Priority:	

Tree Replacement Cost 1089-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIF97	TIF 97	\$0	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:	1905	

Service Impact:

Temporary Sidewalk Closures

Project Justification:

Trees are overgrown/dying and need to be replaced.

Location Description:

DDA District



Six Year Capital Improvement Program

STREETS-19-CIP

Streets

1026-19-CIP Union Street and Streetscape

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description:
Category: Capital	Department Head: Jean Derenzy	Streetscape improvements on Union Street from Ninth Street to
Fund Group: Tax Increment Financing	Staff Priority: Important (Could Do)	South Union Street Bridge
Fund Detail: Streets	Council Priority:	

Union Street and Streetscape - Cost

1026-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
SAF	Special Assessment Fund	\$0	\$0	\$334,530	\$0	\$0	\$0	\$0	\$334,530
TIFOT	TIF Old Town	\$0	\$0	\$334,530	\$0	\$0	\$0	\$0	\$334,530
Project Total:									\$669,060

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$669,059	Cost Total: \$669,059
Annual Maint. Cost:		Project Difference: \$1
Maint. Year Start:		

Service Impact:

No new services foreseen

Project Justification:

Replacement of old streetscapes

Location Description:

Old Town

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan .
+ - Indicates projects with multiple funding

Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	
Walkways												
+ 570-19-CIP	Boardman Lake Trail-West (14th to S. Airport)	V	\$0	\$5,248,000	\$0	\$0	\$0	\$0	\$5,248,000	\$0	\$5,248,000	
316-19-CIP	Boardman River Walk south of 8th Street Bridge	V	\$0	\$0	\$0	\$0	\$0	\$690,700	\$690,700	\$690,700	\$0	
946-19-CIP	Expand Sidewalk System/Infill Gaps	V	\$60,589	\$370,759	\$373,215	\$375,351	\$377,165	\$378,659	\$374,911	\$2,310,648	\$2,310,648	\$0
+ 1023-19-CIP	Expand Sidewalk System/Infill Gaps (SR2S)	C	\$100,000	\$1,150,000	\$1,150,000	\$0	\$0	\$0	\$2,400,000	\$400,000	\$2,000,000	
1025-19-CIP	Rivers Edge Riverwalk Decking Replacement	M	\$0	\$0	\$106,869	\$0	\$0	\$0	\$106,869	\$106,869	\$0	
+ 942-19-CIP	TART Trail Reconstruct from Woodmere to Avenue B	M	\$0	\$80,000	\$0	\$0	\$0	\$345,000	\$425,000	\$370,000	\$55,000	
Total Walkways			\$160,589	\$6,848,759	\$1,630,084	\$375,351	\$377,165	\$723,659	\$1,065,611	\$11,181,217	\$3,878,217	\$7,303,000



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

570-19-CIP Boardman Lake Trail-West (14th to S. Airport)

Project Information

Submitted By: Russ Soyring
Category: Visionary
Fund Group: General
Fund Detail: Walkways/Bike Paths
Department: Planning and Zoning
Department Head: Russ Soyring
Staff Priority: Important (Could Do)
Council Priority:

Project Description:

The City of Traverse City is working TART Trails, Garfield Township and Grand Traverse County to complete the final segment of the Boardman Lake Trail. The proposed two and a half mile segment along the west side of the lake is needed to complete the five mile trail encircling Boardman Lake which was first conceptualized more than 25 years ago with a trail master plan funded by the Coastal Zone Management Program.

Boardman Lake Trail-West (14th to S. Airpo - Cost

570-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
BR	Brownfield	\$0	\$3,600,000	\$0	\$0	\$0	\$0	\$0	\$3,600,000
FSG	Federal / State Grant	\$0	\$1,248,000	\$0	\$0	\$0	\$0	\$0	\$1,248,000
P	Private	\$0	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000
Project Total:									\$5,248,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$510,774	
Construction:	\$4,360,571	Cost Total: \$4,871,345
Annual Maint. Cost:	\$12,000	Project Difference: \$376,655
Maint. Year Start:	1905	

Service Impact:

Operations and Maintenance Agreement is necessary among project partners

Project Justification:

Parks and Recreation Element of Master Plan

Location Description:

West side of Boardman Lake



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

316-19-CIP Boardman River Walk south of 8th Street Bridge

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description: River Boardwalk from the 8th Street bridge to the Boardman Lake Trail. The project includes a 840 linear feet of elevated boardwalk, low-level lighting, fishing and resting platforms and landscaping.
Category: Visionary	Department Head: Russ Soyring	
Fund Group: General	Staff Priority: Important (Could Do)	
Fund Detail: Walkways/Bike Paths	Council Priority:	

Boardman River Walk south of 8th Street Br - Cost 316-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIFOT	TIF Old Town	\$0	\$0	\$0	\$0	\$0	\$0	\$690,700	\$690,700
								Project Total:	\$690,700

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$81,800	
Construction:	\$608,900	Cost Total: \$690,700
Annual Maint. Cost:	\$2,000	Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increased service and maintenance.

Project Justification:

Boardman River Enhancement

Location Description:

Boardman River bank between 8th Street bridge and Boardman Lake Trail



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

946-19-CIP Expand Sidewalk System/Infill Gaps

Project Information

Submitted By:	Tim Lodge	Department:	Engineering
Category:	Visionary	Department Head:	Tim Lodge
Fund Group:	General	Staff Priority:	Essential (Should Do)
Fund Detail:	Walkways/Bike Paths	Council Priority:	Imperitive (Must Do)

Project Description:

Enhance public service and access through improved walkability throughout the City. Ongoing expansion of City's sidewalk infrastructures. Infill existing gaps in sidewalk system according to map on file in Engineering. Maintenance of existing sidewalks. Targeted areas are major street corridors and locations in proximity to public facilities. Current estimates call for \$3.4 million for infill/gaps and \$600,000 in sidewalk repair. \$500,000 is allotted for design/engineering and bond costs.

It is likely that this project will be financed via bond. Expecting 15-year bond payment at \$366,500 a year.

Expand Sidewalk System/Infill Gaps (+SID + - Cost

946-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$60,589	\$370,759	\$373,215	\$375,351	\$377,165	\$378,659	\$374,911	\$2,310,648
Project Total:									\$2,310,648

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$500,000	
Construction:	\$4,000,000	Cost Total: \$4,500,000
Annual Maint. Cost:		Project Difference: \$-2,189,353
Maint. Year Start:		

Service Impact:

Additional infrastructure requiring operation, maintenance, and replacement. Enhance public service and access through improved walkability through the City.

Project Justification:

Enhance public service and access through improved walkability through the City.

Location Description:

City-wide with an initial focus on Traverse Heights Neighborhood.



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

1023-19-CIP

Expand Sidewalk System/Infill Gaps (SR2S)

Project Information

Submitted By: Missy Luick
Category: Capital
Fund Group: General
Fund Detail: Walkways/Bike Paths

Department: Engineering
Department Head: Tim Lodge
Staff Priority: Essential (Should Do)
Council Priority: Imperitive (Must Do)

Project Description:

In July 2018, the City of Traverse City received notification from the Michigan Department of Transportation that our multi-school \$2M Safe Routes to School (SRTS) infrastructure grant received conditional commitment for 4.9 miles of linear trail/sidewalk expansion, bike lanes, traffic calming, crosswalk improvements and signage upgrades. The project will enhance public service and access through improved infrastructure near schools. The project will be designed by the Engineering Department (In-kind contribution). It is anticipated that professional services will need to be allocated for project implementation. Additionally, there are several non-participating improvements and in-eligible costs that the city will need to provide match for.

Expand Sidewalk System/Infill Gaps (SR2S) - C

1023-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
FSG	Federal / State Grant	\$0	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$0	\$2,000,000
GEN	General Fund	\$0	\$50,000	\$50,000	\$0	\$0	\$0	\$0	\$100,000
IN	Inkind	\$100,000	\$100,000	\$100,000	\$0	\$0	\$0	\$0	\$300,000
Project Total:									\$2,400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$400,000	
Construction:	\$2,000,000	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$2,400,000
	Project Difference:	\$0

Service Impact:

Additional infrastructure will increase operations and maintenance.

Project Justification:

Transportation Element and Parks and Recreation Element call for non-motorized connections.

Location Description:

City-wide



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

1025-19-CIP Rivers Edge Riverwalk Decking Replacement

Project Information

Submitted By: Rob Baciagalupi	Department: Downtown Development	Project Description: Replacement of decking on River's Edge Riverwalk
Category: Maintenance	Department Head: Jean Derenzy	
Fund Group: Tax Increment Financing	Staff Priority:	
Fund Detail: Walkways/Bike Paths	Council Priority:	

Rivers Edge Riverwalk Decking Replacement - Cost 1025-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
TIFOT	TIF Old Town	\$0	\$0	\$106,869	\$0	\$0	\$0	\$0	\$106,869
Project Total:									\$106,869

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$106,869	Cost Total: \$106,869
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

None foreseen

Project Justification:

Replacement of old decking

Location Description:

River's Edge



Six Year Capital Improvement Program

WALK-19-CIP

Walkways

942-19-CIP TART Trail Reconstruct from Woodmere to Avenue B

Project Information

Submitted By:	Russ Soyring	Department:	Planning and Zoning
Category:	Maintenance	Department Head:	Frank Dituri
Fund Group:	General	Staff Priority:	Important (Could Do)
Fund Detail:	Walkways/Bike Paths	Council Priority:	

Project Description:

This section of TART trail was constructed in 1986 and is in need of reconstruction and widening from Woodmere to Avenue B. Root damage is cracking and heaving surface which will accelerate in future years without root control. Phase 1 includes the portion between Hastings and Avenue B with a connector to Avenue B and has a cost of \$80,000. Phase 2 timeline is yet to be determined from Woodmere to Hastings.

TART Trail Reconstruct from Woodmere to Av B- Cost

942-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
GEN	General Fund	\$0	\$25,000	\$0	\$0	\$0	\$345,000	\$0	\$370,000
P	Private	\$0	\$55,000	\$0	\$0	\$0	\$0	\$0	\$55,000
								Project Total:	\$425,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$500,000	Cost Total: \$500,000
Annual Maint. Cost:		Project Difference: -\$75,000
Maint. Year Start:		

Service Impact:

None.

Project Justification:

Trail surface is deteriorating and width does not meet current standards.

Location Description:

TART Trail from Woodmere to Avenue B.

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding											
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds

Wastewater

1091-19-CIP	12" Storm Sewer Repair-Ramsdell & Watch Hill Apts	C	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000	\$20,000	\$0
1052-19-CIP	16" San. Forcemain East Front L.S. To Wellington	M	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000	\$100,000	\$0
+ 1044-19-CIP	2nd Membrane Replacement	M	\$0	\$0	\$0	\$0	\$0	\$940,000	\$940,000	\$470,000	\$470,000
366-19-CIP	Annual Sewer Rehab/Replace	V	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,700,000	\$2,700,000	\$0
13-19-CIP	Annual Storm Water Mngt Program	M	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000	\$300,000	\$0
+ 948-19-CIP	Digester 3 and 4 Reconditioning	M	\$608,188	\$349,313	\$638,334	\$319,167	\$0	\$0	\$1,915,002	\$1,132,158	\$782,845
+ 1036-19-CIP	Digester 5 Cleaning and Reconditioning Equipment	M	\$0	\$0	\$0	\$277,240	\$0	\$0	\$277,240	\$138,620	\$138,620
+ 1037-19-CIP	Digester Gas Metering	C	\$0	\$0	\$0	\$70,000	\$0	\$0	\$70,000	\$35,000	\$35,000
+ 971-19-CIP	Enclose Membrane Trains	C	\$0	\$0	\$0	\$0	\$0	\$500,000	\$500,000	\$250,000	\$250,000
1000-19-CIP	Engineering Eval/Cond Assess Birchwood-Bay St LS	V	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000	\$30,000	\$0
1031-19-CIP	Engineering Eval/Cond Assess Woodmere LS	V	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000	\$30,000	\$0
967-19-CIP	Engineering Evaluation of Clinch -Coast Guard LS	V	\$0	\$0	\$30,000	\$0	\$0	\$0	\$30,000	\$30,000	\$0
+ 1019-19-CIP	Engineering study pertaining to the Facility Plan	M	\$200,000	\$300,000	\$0	\$0	\$0	\$0	\$500,000	\$250,000	\$250,000
1002-19-CIP	Front St LS- Engineering Evaluation/Capacity Study	V	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000	\$50,000	\$0
1001-19-CIP	Front ST. LS- Upgrade	M	\$0	\$0	\$0	\$598,000	\$0	\$0	\$598,000	\$598,000	\$0
913-19-CIP	Lift Station Telemetry System	V	\$0	\$0	\$0	\$0	\$131,312	\$0	\$131,312	\$131,312	\$0
+ 900-19-CIP	Membrane Distribution & RAS Channel Aeration Line	M	\$0	\$0	\$0	\$0	\$0	\$95,400	\$95,400	\$47,700	\$47,700
1032-19-CIP	New Portable Generator for Lift Stations	C	\$0	\$0	\$0	\$0	\$0	\$150,000	\$150,000	\$150,000	\$0
+ 890-19-CIP	Plant-Membrane Replacement	M	\$860,000	\$860,000	\$0	\$0	\$0	\$0	\$1,720,000	\$860,000	\$860,000
+ 905-19-CIP	Primary Clarifier Chain/Flight Replacement	M	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$1,000,000	\$500,000	\$500,000
+ 904-19-CIP	Primary Clarifier Supports and Structure	M	\$0	\$0	\$0	\$502,451	\$0	\$0	\$502,451	\$251,226	\$251,226
+ 902-19-CIP	Primary Header Replacement	M	\$0	\$0	\$1,500,000	\$0	\$0	\$0	\$1,500,000	\$750,000	\$750,000
+ 912-19-CIP	Reconditioning Digesters 1 and 2	M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

<p>Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding</p>												
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds	

Wastewater

898-19-CIP	Riverine Lift Station Engineering Eval Etc.	M	\$0	\$0	\$0	\$0	\$112,865	\$0	\$0	\$112,865	\$112,865	\$0
+ 1075-19-CIP	RWWTP-ADMINISTRATION BLDG HVAC UPGRADE	M	\$0	\$0	\$34,344	\$0	\$0	\$0	\$34,344	\$17,172	\$17,172	\$0
+ 1079-19-CIP	RWWTP-AERATION BASIN AERATING EQUIPMENT UPGRADE	C	\$0	\$0	\$0	\$1,500,000	\$0	\$0	\$1,500,000	\$750,000	\$750,000	\$0
+ 1077-19-CIP	RWWTP-BOILER CONTROLS UPGRADE	M	\$0	\$0	\$56,000	\$0	\$0	\$0	\$56,000	\$28,000	\$28,000	\$0
+ 1076-19-CIP	RWWTP-CRANE AND HOIST PAINTING	M	\$0	\$0	\$50,000	\$0	\$0	\$0	\$50,000	\$25,000	\$25,000	\$0
+ 1078-19-CIP	RWWTP-UPGRADE DIGESTED SOLIDS THICKENING EQUIPMENT	C	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$1,500,000	\$750,000	\$750,000	\$0
+ 795-19-CIP	SCADA Upgrade	V	\$0	\$0	\$120,000	\$0	\$0	\$0	\$120,000	\$60,000	\$60,000	\$0
+ 1073-19-CIP	Scour Air Blower Overhaul-5 blowers at TCRWWTP	M	\$45,000	\$47,250	\$47,250	\$48,250	\$48,250	\$0	\$236,000	\$118,000	\$118,000	\$0
+ 893-19-CIP	Screw Pump 2 and 3 Replacement	M	\$0	\$0	\$0	\$1,160,000	\$0	\$0	\$1,160,000	\$580,000	\$580,000	\$0
+ 970-19-CIP	TCRWWTP- PLC Upgrade	M	\$0	\$0	\$300,000	\$0	\$0	\$0	\$300,000	\$150,000	\$150,000	\$0
968-19-CIP	Upgrade Controls at 6 Lift Stations	M	\$0	\$0	\$0	\$0	\$184,440	\$0	\$184,440	\$184,440	\$0	\$0
+ 1033-19-CIP	UV System and Related Structures Upgrade	C	\$0	\$0	\$0	\$0	\$0	\$3,000,000	\$3,000,000	\$1,500,000	\$1,500,000	\$0
+ 764-19-CIP	Window Replacement 503 Hannah Ave.	V	\$0	\$0	\$60,000	\$0	\$0	\$0	\$60,000	\$60,000	\$0	\$0
1058-19-CIP	WW Gravity Main Rehab\Repair and PACP Inspections	M	\$0	\$0	\$0	\$0	\$385,000	\$385,000	\$1,155,000	\$1,155,000	\$0	\$0
1057-19-CIP	WW Manholes Rehab\Repair and MACP Inspections	M	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$150,000	\$150,000	\$0	\$0
Total Wastewater			\$1,713,188	\$2,106,563	\$3,415,928	\$4,127,868	\$3,259,107	\$4,185,000	\$3,970,400	\$22,778,054	\$14,464,492	\$8,313,562



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1091-19-CIP 12" Storm Sewer Repair-Ramsdell & Watch Hill Apts

Project Information

Submitted By:	Art Krueger	Department:	Department of Municipal Utilitie	Project Description: Replace approx. 180 LF of a problematic segment of existing 8" clay storm pipe with new 12" PVC. Historic root problems have led to flooding events where property damage occurred and the City was held responsible. The pipe alignment is all in a green area so restoration costs will be minimal. A new manhole is also needed at the upstream end.
Category:	Capital	Department Head:	Art Krueger	
Fund Group:	Waste Water	Staff Priority:	Imperitive (Must Do)	
Fund Detail:	Stormwater Fund	Council Priority:		

12" Storm Sewer Repair-Ramsdell & Watch Hill Apts 1091-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$20,000	Cost Total: \$20,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improvement will decrease City's liability with flooding issues and decrease long term maintenance costs.

Project Justification:

Needs to be completed to eliminate flooding problems and re-occurring maintenance costs.

Location Description:

Off west end of Ramsdell, south near 720 Watch Hill to east toward Willow St.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1052-19-CIP 16" San. Forcemain East Front L.S. To Wellington

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description: Replace approx. 300 lineal feet of aging 16" forcemain from the Front Street Lift Station along E. Front Street to Wellington Street. This project would be part of the East Front St. Reconstruction Project.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

16" San. Forcemain East Front L.S. To Wellington

1052-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000
								Project Total:	\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The pipe condition could not be assessed during the 2015 SAW Grant project since it is always under pressure and full flow. This project provides an opportunity to assess the pipe condition and make informed decisions regarding this and other forcemains in the City.

Project Justification:

2015 SAW Grant recommended replacing this forcemain due to it's age.

Location Description:

Front St. Lift Station along E. Front Street to Wellington Street.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**
1044-19-CIP **2nd Membrane Replacement**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Replace 1 train of membranes each year until all 8 trains of membranes are replaced. This project was moved out to start 2024/2025 and inactive for now.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

2nd Membrane Replacement 1044-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$470,000	\$470,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$470,000	\$470,000
								Project Total:	\$940,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$940,000	Cost Total: \$940,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands. Outside the initial purchase of the replacement membrane, there is very little future anticipated maintenance costs. It is recommended that the City budget to replace this train of membranes 8 years after its installation, however, they membranes are expected to last 10 years. This approach will ensure funds are available if something unforeseen occurs that effects the membrane life.

Project Justification:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands and meet the requirement of the facility's NPDES permit.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

366-19-CIP Annual Sewer Rehab/Replace

Project Information

Submitted By: Justin Roy	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Provide \$450,000 annually in both the water and wastewater funds
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	to continue systematic improvements (repair and replacement) of
Fund Detail: Sewer Collection System	Council Priority:	our underground infrastructure.

Annual Sewer Rehab/Replace - Cost 366-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$450,000	\$2,700,000
Project Total:									\$2,700,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,700,000	Cost Total: \$2,700,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Replacing sewer mains with historical maintenance issues that cause sewer backups will increase collection system reliability and minimize risk to property damage.

Project Justification:

This money gets programmed into larger street replacement projects to pay for the sewer portion of the street project.

Location Description:

City wide.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

13-19-CIP

Annual Storm Water Mngt Program

Project Information

Submitted By: Tim Lodge	Department: Department of Municipal Utilitie	Project Description: This line item will guarantee funds to construct and repair city storm sewer lines. Funds may be used to disconnect sanitary sewers as well as construct water quality related infrastructure.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Annual Storm Water Management Program - Cost 13-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$300,000
								Project Total:	\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Will require operation, maintenance, and replacement as additional infrastructure is installed.

Project Justification:

To maintain and improve water quality.

Location Description:

Various locations city-wide. Refer to the Stormwater Management Plan prepared in 2017.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

948-19-CIP Digester 3 and 4 Reconditioning

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	Perform actions outlined by third party condition assessment of
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	digesters. Cost is TBD by condition assessment.
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Digester 3 and 4 Reconditioning per 2017/2 - Cost 948-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$304,094	\$174,657	\$319,167	\$159,584	\$0	\$0	\$0	\$957,501
S	Sewer Fund	\$304,094	\$174,657	\$319,167	\$159,584	\$0	\$0	\$0	\$957,501
Project Total:									\$1,915,002

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,915,002	Cost Total: \$1,915,002
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Digester 3 is currently out of service, this limits the facility's capacity to treat biosolids. Digester 4 is the same age and is in need of a condition assessment and related upgrade to ensure full capacity of the solids treatment process is restore and maintained.

Project Justification:

Maintains suitable solids treatment capabilities to meet regulations for biosolids land application per federal code of regulations 503.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1036-19-CIP Digester 5 Cleaning and Reconditioning Equipment

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilitie	Project Description:	Clean digester 5, re-coat concrete if needed, refurbishing of existing centrifugal pumps used for mixing, and purchase of 1 new pump to add redundancy.
Category:	Maintenance	Department Head:	Art Krueger		
Fund Group:	Waste Water	Staff Priority:	Essential (Should Do)		
Fund Detail:	Sewer Plant and Buildings	Council Priority:			

Digester 5 Cleaning and Reconditioning Equipment 1036-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$138,620	\$0	\$0	\$138,620
S	Sewer Fund	\$0	\$0	\$0	\$0	\$138,620	\$0	\$0	\$138,620
Project Total:									\$277,240

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$277,240	Cost Total: \$277,240
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project ensures the treatment facility is able to properly treat solids created in the process of treating waste water. If we don't treat to a certain quality of solids the biosolids would be unable to be land applied and disposal costs then more than double. This project would add a spare pump its anticipated that quarterly the shaft will have to be rotated and other minor tasks perform to maintain its operability. The cost related to this activity is estimated to be less than \$300/yr.

Project Justification:

Digester 5 has been in service for 15 years and has not been cleaned or inspected since commissioned. Digesters accumulate grit and other debris in them that reduces their capacity, and causes pumping and mixing issues. We need to clean this debris out of the digester to maintain adequate treatment conditions for the solids byproduct created when treating waste water. We need to ensure the pumps are in conditions that will allow them to mix the digester properly to avoid foaming issues and treatment short falls. Recoating the digester and inner piping prevents degradation of the digester concrete and the increased cost to of related restoration.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1037-19-CIP **Digester Gas Metering**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Capital	Department Head: Art Krueger	Add metering and monitoring capabilities to the digester gas
Fund Group: Waste Water	Staff Priority: Important (Could Do)	system.
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Digester Gas Metering 1037-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0	\$35,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0	\$35,000
Project Total:									\$70,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$70,000	Cost Total: \$70,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project could help us expand the use of digester gas, and reduce the use of natural gas at the Waste Water Treatment Plant. The monitor will require sensor replacement at a minimum every year, and the device measuring the volume of gas produced will require annual verification/calibration to maintain accuracy of measurements. We have not yet ID the particular devices to be used so the cost involved in this ongoing maintenance is an estimate, and is estimated to be \$5,000/yr

Project Justification:

Having the ability to monitor the makeup of the digester gas will better help us identify the current "health" of the digester in real time. Having the ability to measure the volume of digester gas produced will help to understand the limitations to our expansion of its use in an effort to meet green team objectives of reducing the City's Carbon foot print.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

971-19-CIP **Enclose Membrane Trains**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Construct a building around membrane trains to keep them out of the elements preventing possible freezing, etc., and making it possible to do recovery cleaning in the winter months. Project was moved out to 2024/2025 and is inactive for now.
Category: Capital	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Important (Could Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Enclose Membrane Trains - Cost 971-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$250,000	\$250,000
								Project Total:	\$500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$500,000	Cost Total: \$500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The membranes can not be exposed to ambient temperature below 45 degrees. Currently, there is not a structure around the membrane tanks. Having a structure in place would shelter the membranes from the outside elements, greatly reducing the risk of the membranes freezing, and allowing for maintenance activities year round.

Project Justification:

Improves the ability of the facility to maintain needed equipment vital to meeting the requirements of the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1000-19-CIP Engineering Eval/Cond Assess Birchwood-Bay St LS

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: An engineering evaluation at Birchwood and Bay St Lift Stations (LS) to assess the lift stations' capacity, its structural condition, and to identify needed equipment upgrades.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Engineering Eval/Cond Assess Birchwood & Bay St LS 1000-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$30,000	\$0	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$30,000	
Construction:	\$0	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project would evaluate if the lift stations' structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

These lift stations are 2 of 8 major lift stations in Traverse City, it is imperative that they are in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the areas they serve.

Location Description:

Birchwood- 2060 E. Front St., Bay St-580 Bay St.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1031-19-CIP **Engineering Eval/Cond Assess Woodmere LS**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: Evaluate current capacity and condition of the lift stations devise engineering plan for addressing any needs.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Engineering Eval/Cond Assessment Woodmere LS 1031-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$30,000	
Construction:	\$0	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project would evaluate if the lift station structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

Woodmere lift station is one of 8 major lift stations in Traverse City, it is imperative that it is in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the area it serves.

Location Description:

645 Woodmere Ave.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

967-19-CIP Engineering Evaluation of Clinch -Coast Guard LS

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Evaluate current capacity and condition of the lift stations devise
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	engineering plan for addressing any needs.
Fund Detail: Sewer Collection System	Council Priority:	

Engineering Evaluation-Clinch -Coast Guard- Cost 967-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$30,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$30,000	
Construction:	\$0	Cost Total: \$30,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project would evaluate if the lift stations' structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

These lift stations are 2 of 8 major lift stations in Traverse City, it is imperative that they are in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the areas they serve.

Location Description:

Clinch Park Lift Station-111 E. Grandview Parkway
Coast Guard-911 Airport Access Rd.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1019-19-CIP **Engineering study pertaining to the Facility Plan**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: There are portions of the facility that range from 44-58 years of age. They are showing signs of degradation, and in some cases failure. CH2M developed a facility plan that outlines these areas, and their needs. An engineering study needs to be performed to detail possible solutions.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Engineering study pertaining to the Facility Plan 1019-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$100,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$250,000
S	Sewer Fund	\$100,000	\$150,000	\$0	\$0	\$0	\$0	\$0	\$250,000
Project Total:									\$500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$500,000	
Construction:	\$0	Cost Total: \$500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Systematically identifies and prioritizes issues at the facility, and estimates the cost/benefits of addressing these issues.

Project Justification:

This project will ensure that the facility will be able to treat waste and produce an effluent that meets its NPDES permit requirements.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1002-19-CIP Front St LS- Engineering Evaluation/Capacity Study

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: Engineering study to evaluate the capacity of the lift station, structural condition of the lift station (including the wet well), and options for equipment upgrades.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Front St LS- Engineering Evaluation							1002-19-CIP-C		
Funding Sources:									
		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000
								Project Total:	\$50,000

COST DETAIL:

Study:	\$0		
Land Acquisition / ROW:	\$0		
Engineering / Design:	\$50,000		
Construction:	\$0	Cost Total:	\$50,000
Annual Maint. Cost:		Project Difference:	\$0
Maint. Year Start:			

Service Impact:

This project would evaluate if the lift station structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

This lift station is the biggest of 8 major lift stations in Traverse City and most crucial to the downtown area, it is imperative that it is in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the area it serves.

Location Description:

Front St.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1001-19-CIP **Front ST. LS- Upgrade**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	The Front Street Lift Station has VFDs in place that have an estimate in service life of 6 years these VFDs will be in service 9 years by 2021-2022. The lift stations wet well, bypass capability, piping, metering, and pumps should be upgraded to add dependability and functionality. This cost is an estimate and will be subject to change once the 2020-2021 engineering study has been performed.
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Front ST. LS-VFD Pipe&Pump Wet Well Upgrade 1001-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$598,000	\$0	\$0	\$0	\$598,000
								Project Total:	\$598,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$598,000	Cost Total: \$598,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Lift station's wet well, piping, metering, and pumps should be upgraded to add dependability and functionality. This cost is an estimate and will be subject to change once the 2020-2021 engineering study has been performed.

Project Justification:

Ensures waste water can be properly conducted to the treatment plant for treatment. Helps to plan and budgeted any needed upgrades.

Location Description:

Front St.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

913-19-CIP Lift Station Telemetry System

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Add and or upgrade telemetry at the following lift
Fund Group: Waste Water	Staff Priority: Important (Could Do)	stations-Birchwood, Bay St., Woodmere, Coast Guard, Clinch Park,
Fund Detail: Sewer Collection System	Council Priority:	and Riverine

Lift Station Telemetry System for 6 Lift Station 913-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$131,312	\$0	\$0	\$131,312
Project Total:									\$131,312

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$131,312	Cost Total: \$131,312
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This would allow for real time monitoring of the lift stations reducing operational vulnerabilities, and add trending capabilities.

Project Justification:

Would improve the capability of monitoring lift station operations, reduce vulnerabilities related to lift station failures, and adds trending capabilities.

Location Description:

606 Hannah



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

900-19-CIP Membrane Distribution & RAS Channel Aeration Line

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Remove and replace aging aeration line in the membrane distribution and RAS channel with SCH 80 PVC. This project was moved out to 2024/2025 and is inactive for now.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Membrane Distribution and RAS Channel Aera - Cost 900-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$47,700	\$47,700
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$47,700	\$47,700
								Project Total:	\$95,400

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$95,400	Cost Total: \$95,400
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The aeration in the distribution channel to the membranes and the return activated sludge channel is need to keep the solids from settling in the channels causing decreased capacity and short circuiting.

Project Justification:

Some portions of the current aeration grid in these channels has failed and been patched, and other areas are in poor conditions. Replacing the line with schedule 80 PVC will provide a robust aeration grid for the 2 channels far into the feature and ensure plant effluent is of a quality that meets the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1032-19-CIP

New Portable Generator for Lift Stations

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Current generator is obsolete as of 2017. Parts are difficult to obtain and repairs are difficult to complete. This generator would be used to prevent sewer overflows at lift stations in the event of power outages.
Category: Capital	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Collection System	Council Priority:	

New Portable Generator for Lift Stations

1032-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$150,000	\$0	\$150,000
								Project Total:	\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$150,000	Cost Total: \$150,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Allows critical lift stations to stay in operation when line power is unavailable preventing sewer backups, and overflows.

Project Justification:

Prevents sewer backups and overflows that could occur at lift stations when line power in unavailable. When overflows occur waste water spills onto the ground around the lift station and this is a violation of regulatory requirements. When sewer backups occur at businesses or residents the public health is at risk.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

890-19-CIP Plant-Membrane Replacement

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	Replace 1 Train of Membranes each year until remaining 4 trains of
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	500C membrane cassettes are replaced.
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Plant-Membrane Replacement - Cost

890-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$430,000	\$430,000	\$0	\$0	\$0	\$0	\$0	\$860,000
S	Sewer Fund	\$430,000	\$430,000	\$0	\$0	\$0	\$0	\$0	\$860,000
Project Total:									\$1,720,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,720,000	Cost Total: \$1,720,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands. Outside the initial purchase of the replacement membrane, there is very little future anticipated maintenance costs. It is recommended that the City budget to replace this train of membranes 8 years after its installation, however, the membranes are expected to last 10 years. This approach will ensure funds are available if something unforeseen occurs that effects the membrane life.

Project Justification:

This project will allow the waste water treatment facility to maintain plant capacity, ensuring we can permeate at a rate that meets influent flow demands and meet the requirement of the facility's NPDES permit.

Location Description:

606 Hannah



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

905-19-CIP Primary Clarifier Chain/Flight Replacement

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	Replace the chains and flights in all 8 Primary Clarifiers.
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Replace the Chains and Flights in Primary - Cost 905-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$500,000
S	Sewer Fund	\$0	\$0	\$0	\$500,000	\$0	\$0	\$0	\$500,000
Project Total:									\$1,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,000,000	Cost Total: \$1,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The primary clarifiers are rectangular tanks that allow for the solids in the waste water ,that are large enough, to settle, to do so this, reduces the load on the downstream processes saving money and helping to protect the longevity of the membranes. The chain and flight mechanism in these tanks collects the settled and floating solids so they can be pumped to the digesters for stabilization. These mechanisms have met the end of their useful life, and if they fail a tank has to be taken out of service reducing the effectiveness of the process itself.

Project Justification:

Properly maintain the equipment and processes at the treatment facility to meet the requirements of the NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

904-19-CIP

Primary Clarifier Supports and Structure

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	Replace support beams and brackets in all 8 Primary Clarifiers.
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	Repair and recoat the concrete in all 8 Primary Clarifiers.
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Primary Clarifier Supports and Structure - Cost

904-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$251,226	\$0	\$0	\$0	\$251,226
S	Sewer Fund	\$0	\$0	\$0	\$251,226	\$0	\$0	\$0	\$251,226
Project Total:									\$502,451

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$502,451	Cost Total: \$502,451
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project would replace the brackets and beams that the covers on the primary clarifier tanks rest. Without the covers in place odors associated with raw sewage will escape into the neighboring locations.

Project Justification:

Public interest-Without the covers in place odors will escape into the neighboring locations.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

902-19-CIP Primary Header Replacement

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	The top of the Header has some exposed areas. Header has never been full so doesn't leak, but should be repaired.
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Primary Header Replacement - Cost

902-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$750,000	\$0	\$0	\$0	\$0	\$750,000
S	Sewer Fund	\$0	\$0	\$750,000	\$0	\$0	\$0	\$0	\$750,000
Project Total:									\$1,500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,500,000	Cost Total: \$1,500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

If the primary header fails the waste coming into the facility will have to be pumped to upstream processes with a temporary distribution grid and multiple portable pumps this will be costly. The failure of this line could lead to permit noncompliance, and the flooding and damaging of many plant assets.

Project Justification:

The facility is required to be maintained adequately in order to meet standards of the facility's NPDES permit. The use of auxillary equipment to meet influent flow demands and properly treat the waste stream would only be allowed on a temporary basis.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

912-19-CIP Reconditioning Digesters 1 and 2

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: Install flame arrestors, and PRVs. Identify and seal all leaks. Test vessels for proper functioning. Cost Subject to engineering study that will result from facility plan completion in 2018-2019. Project was moved out to 2024/2025 and is inactive for now.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Important (Could Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Reconditioning Digesters 1 and 2 - Cost

912-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Total:									\$0

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$80,000	Cost Total: \$80,000
Annual Maint. Cost:		Project Difference: \$-80,000
Maint. Year Start:		

Service Impact:

Digesters 1 and 2 are out of service because they aren't in proper condition to be used for sludge stabilization. Refurbishing the digesters to full operability will increase the capacity of the sludge stabilization process, improve the quality of the digester gas, possibly increase digester gas production and thus allow us to extend our use of the gas reducing the amount of natural gas used at the facility.

Project Justification:

Improves biosolids quality and methane gas quality-This project would increase the capacity of the sludge stabilization process, reduce the amount of solids needing to be land applied, improve the quality of the digester gas, and possibly the quantity.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

898-19-CIP Riverine Lift Station Engineering Eval Etc.

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Engineering study to evaluate the capacity of the lift station, structural condition of the lift station, and options for equipment upgrades. Upgrades as defined by engineering study maybe-replace pumps, check valves, add a wet well mixer,rel ine pump housing, and replace cathodic protection
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Riverine Lift Station Engineering Eval etc. 898-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$112,865	\$0	\$0	\$112,865
								Project Total:	\$112,865

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$112,865	Cost Total: \$112,865
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

This project would evaluate if the lift station structures and equipment are sized appropriately to meet the demands of future growth, and would identify station maintenance needs and related costs.

Project Justification:

Riverine lift station is one of 8 major lift stations in Traverse City, it is imperative that it is in good operable condition and properly sized in order to ensure waste water is successfully pumped to the treatment plant at all times from the area it serves.

Location Description:

318 East Eighth Street



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1075-19-CIP

RWWTP-ADMINISTRATION BLDG HVAC UPGRADE

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: The HVAC system in the administration building at the facility does not work properly. This project would upgrade the system so that temperature, particularly in the laboratory, can be controlled adequately.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

RWWTP-ADMINISTRATION BLDG HVAC SYSTEM UPGRADE

1075-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$17,172	\$0	\$0	\$0	\$0	\$17,172
S	Sewer Fund	\$0	\$0	\$17,172	\$0	\$0	\$0	\$0	\$17,172
Project Total:									\$34,344

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$34,344	Cost Total: \$34,344
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

We believe that an upgrade will reduces current maintenance expenses.

Project Justification:

Upgrading the HVAC system in the administration bldg will allow us to control the temperature in the building, particularly in the laboratory where temperature variation effects the equipment we use to analyze samples for the purpose of obtaining data we report to the regulators to prove plant compliance.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1079-19-CIP **RWWTP-AERATION BASIN AERATING EQUIPMENT UPGRADE**

Project Information

Submitted By: Elizabeth Hart
Category: Capital
Fund Group: Waste Water
Fund Detail: Sewer Plant and Buildings

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

This project will upgrade the facility's aeration basin aerating equipment and controls per the facility engineering plan to be completed in 2020. The plan will included a cost benefit analysis of proposed upgrades, and will look at how to more efficiently aerate the basins. The plan will estimate the cost of the upgrade per the design. The current cost included in the CIP is a rough estimate meant to be a place holder, and will be updated once the Facility plan engineering study is complete.

RWWTP-AERATION BASIN AERATING EQUIPMENT UPGRADE

1079-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$750,000	\$0	\$0	\$750,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$750,000	\$0	\$0	\$750,000
Project Total:									\$1,500,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,500,000	Cost Total: \$1,500,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

We anticipate that the equipment upgrade will decrease annual maintenance expenses.

Project Justification:

The blowers currently in service will need to be overhauled in the near future. These blowers are not as efficient in their energy use as newer blowers. We believe we could save a great deal of energy by upgrading the blowers, the aeration grid or distribution system, and the way we control aeration output.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1077-19-CIP

RWWTP-BOILER CONTROLS UPGRADE

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: The boiler controls at the Regional Waste Water Treatment Plant are obsolete and unsupported. Currently, the controls are bypassed to allow for boiler operation. This project would update the controls with a supported technology.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

RWWTP-BOILER CONTROLS UPGRADE

1077-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$28,000	\$0	\$0	\$0	\$0	\$28,000
S	Sewer Fund	\$0	\$0	\$28,000	\$0	\$0	\$0	\$0	\$28,000
Project Total:									\$56,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$56,000	Cost Total: \$56,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Maintenance costs are not anticipated to be substantial.

Project Justification:

Proper control of the dual fuel boilers at the facility will ensure that the boilers operate as efficiently as possible, using digester gas whenever it is available which will reduce the use of natural gas.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1076-19-CIP

RWWTP-CRANE AND HOIST PAINTING

Project Information

Submitted By: Elizabeth Hart
Category: Maintenance
Fund Group: Waste Water
Fund Detail: Sewer Plant and Buildings

Department: Department of Municipal Utilitie
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 The crane and hoist painting projects includes all the cranes and hoists at the RWWTP. Painting the cranes and hoists will prevent premature deterioration of these assets. They will be painted with commercial grade paint.

RWWTP-CRANE AND HOIST PAINTING

1076-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
S	Sewer Fund	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$50,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$50,000	Cost Total: \$50,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The cranes and hoist should be painted every 10 years at a minimum. This is the only ongoing expense we anticipate until they are replaced. They also have to be rated and inspected annually, this requirement will not change when they are painted.

Project Justification:

Painting the hoists and cranes at the facility will help prevent the untimely deterioration of these assets.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1078-19-CIP

RWWTP-UPGRADE DIGESTED SOLIDS THICKENING EQUIPMENT

Project Information

Submitted By: Elizabeth Hart

Department: Department of Municipal Utilities

Project Description:

Category: Capital

Department Head: Art Krueger

This project will be engineered as part of the Facility Plan Engineering Study that should be completed in 2020. The engineering will include a cost benefit analysis, and cost estimate. The current cost of the upgrade included in the CIP is a rough estimate meant as a place holder.

Fund Group: Waste Water

Staff Priority: Essential (Should Do)

Fund Detail: Sewer Plant and Buildings

Council Priority:

RWWTP-Upgrade Digested Solids Thickening Equipment

1078-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$0	\$750,000	\$750,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$750,000	\$750,000
								Project Total:	\$1,500,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$1,500,000

Cost Total: \$1,500,000

Annual Maint. Cost:

Project Difference: \$0

Maint. Year Start:

Service Impact:

This upgrade is not well defined at this point, but we do not anticipate maintenance expenses outside that of the prescribed preventive maintenance.

Project Justification:

The upgrade of the digested solids thickening equipment will result in the ability to better thicken solids sent to the biosolids storage tanks, reducing the volume sent to the storage tanks, and the volume needing to be hauled. With will save in biosolids hauling expenses.

Location Description:

606 Hannah Avenue



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

795-19-CIP **SCADA Upgrade**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Upgrade SCADA system that controls the plant.
Fund Group: Waste Water	Staff Priority: Important (Could Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

SCADA Upgrade - Cost 795-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
S	Sewer Fund	\$0	\$0	\$60,000	\$0	\$0	\$0	\$0	\$60,000
Project Total:									\$120,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$120,000	Cost Total: \$120,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

There is very little if any on going maintenance cost related to the upgrade of the SCADA system.

Project Justification:

The SCADA system is the brains of the automated operations components at the facility if it fails or has issues it creates many vulnerabilities related to compliance, safety, and could result in costly ramifications. The SCADA was last upgraded in 2014.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1073-19-CIP

Scour Air Blower Overhaul-5 blowers at TCRWWTP

Project Information

Submitted By:	Elizabeth Hart	Department:	Department of Municipal Utilities
Category:	Maintenance	Department Head:	Art Krueger
Fund Group:	Waste Water	Staff Priority:	Imperitive (Must Do)
Fund Detail:	Sewer Plant and Buildings	Council Priority:	

Project Description:

The Scour Air Blowers at the TCRWWTP are used in the membrane process to periodically clear solids from the membrane surface in order to maintain permeability. The blowers have been in service since 2004 and based on the run times, and recent inspection by Aerzen, they are in need of an overhaul. Aerzen, the blower manufacturer, has an exchange program that will allow us to keep 5 scour air blowers in services while the inspect and overhaul the blower that was in service at the facility. The service Aerzen provides removal and install of the blowers which are very heavy. We will only be charge for the actual items needing overhauled once the blower has been inspected in the shop. We will need to front the cost of the exchange unit and also bay for install and removal. Once the system is assessed, we will be reimbursed for the actual cost of the overhaul. The exchange cost is the maximum cost of the Overhaul.

Scour Air Blower Overhaul

1073-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$22,500	\$23,625	\$23,625	\$24,125	\$24,125	\$0	\$0	\$118,000
S	Sewer Fund	\$22,500	\$23,625	\$23,625	\$24,125	\$24,125	\$0	\$0	\$118,000
Project Total:									\$236,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$236,000	Cost Total: \$236,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

These blowers provide scour air to the blowers. The air scouring is necessary to remove solids buildup from the membrane fibers that occurs during the process of permeating through the fibers, allowing the permeating process to continue and preventing plant backups.

Project Justification:

Scour Air is needed for the proper operation of the membranes which are vital to the facility's treatment process, and to meeting NPDES permit requirements.

Location Description:



City of
TRAVERSE CITY

Six Year Capital Improvement Program

WW-19-CIP

Wastewater

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

893-19-CIP Screw Pump 2 and 3 Replacement

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: Replacement of screw body, upper and lower bearings, drive assembly replacement, wet well and trough reconditioning. Possible replacement of screw pumps 2 and 3 with submersible pumps if feasible and more cost effective. (To be determined by facility plan to be completed in 2018-2019)
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Screw Pump Replacement - Cost 893-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$580,000	\$0	\$0	\$0	\$580,000
S	Sewer Fund	\$0	\$0	\$0	\$580,000	\$0	\$0	\$0	\$580,000
Project Total:									\$1,160,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,160,000	Cost Total: \$1,160,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

These pumps lift the waste water from the primary treatment process to the secondary treatment process for additional treatment necessary to meet the facility's NPDES permit.

Project Justification:

Pumps are needed to keep the waste stream moving through the facility for proper treatment and compliance with the facility's NPDES permit.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**
970-19-CIP **TCRWWTP- PLC Upgrade**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description: Upgrade PLC (Programmable Logic Controls) to maintain current plant functionality. Contains 12 PLCs and includes adding additional processors to allow membrane trains to operate on their own processor.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Plant PLC Upgrade - Cost 970-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
S	Sewer Fund	\$0	\$0	\$150,000	\$0	\$0	\$0	\$0	\$150,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Many of the PLCs at the treatment facility were commissioned in 2005, they are or are becoming obsolete, which means they aren't going to be supported in the near future. The PLCs are the nerves of the treatment plant, they take in data from different monitoring devices (nerve endings) and communicate it to the SCADA (the brain of the plant) so that automated functions are modified to meet the current plant conditions, and initiates alarms to be triggered notifying staff there is an abnormal condition present. This project would ensure that the PLCs in the plant are well supported and thus able to be maintained.

Project Justification:

Maintain treatment capabilities to meet the requirements of the facility's NPDES permit.

Location Description:

606 Hannah



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

968-19-CIP Upgrade Controls at 6 Lift Stations

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilitie	Project Description:
Category: Maintenance	Department Head: Art Krueger	Upgrade control panels to replace obsolete equipment and add remote connection capability at the Birchwood, Bay St., Woodmere, Coast Guard, Clinch Park, and Riverine Lift Stations
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

Control Upgrade at 6 Lift Stations- Cost 968-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$184,440	\$0	\$0	\$184,440
Project Total:									\$184,440

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$184,440	Cost Total: \$184,440
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Ensure that automated controls are fully operational, well supported if there are issues, and improves monitoring capabilities which reduces vunerbilities related to sewer backups and overflows.

Project Justification:

Reduces the risk of sewer overflows and backups.

Location Description:

Birchwood-2060 E. Front St., Bay Street-580 Bay Street, Clinch Park- 111 E. Grandview Parkway, Coast Guard-911 Airport Access Rd.
Woodmere-645 Woodmere Ave, Riverine-318 E Eighth St.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1033-19-CIP **UV System and Related Structures Upgrade**

Project Information

Submitted By: Elizabeth Hart	Department: Department of Municipal Utilities	Project Description: Upgrade UV System and Related Structures as outlined in the approved final version of the Traverse City Regional Waste Water Treatment Plant Ultraviolet Disinfection Evaluation dated September 2017.
Category: Capital	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

UV System and Related Structures Upgrade 1033-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
P	Private	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
S	Sewer Fund	\$0	\$0	\$0	\$0	\$0	\$1,500,000	\$0	\$1,500,000
Project Total:									\$3,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$3,000,000	Cost Total: \$3,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

It has been found that the UV system was not designed to handle current design peak flow for the plant. This project would upgrade the system to meet peak flow demands, and to meet the MDEQ's current requirement of meeting 10 state standards as it relates to waste water treatment plant design criteria, it also allows the facility to meet the permit requirement of disinfecting 100% of the facility effluent at peak flows.

Project Justification:

This project is necessary for the facility to remain in compliance with its discharge permit issued by the MDEQ.

Location Description:

606 Hannah Ave



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

764-19-CIP Window Replacement 503 Hannah Ave.

Project Information

Submitted By: Justin Roy	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Replace original single pane windows and doors with new energy efficient windows and doors.
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Plant and Buildings	Council Priority:	

Window Replacement 503 Hannah Ave. - Cost

764-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
WAT	Water Fund	\$0	\$0	\$30,000	\$0	\$0	\$0	\$0	\$30,000
Project Total:									\$60,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$60,000	Cost Total: \$60,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase energy efficiency and reduce heating costs.

Project Justification:

Windows need to be replaced - good stewardship.

Location Description:

Water / Sewer Maintenance Building at 507 Hannah.



Six Year Capital Improvement Program

WW-19-CIP

Wastewater

1058-19-CIP WW Gravity Main Rehab\Repair and PACP Inspections

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: Rehabilitate and Repair Wastewater Gravity Mains that were recommended in the 2015 SAW Grant Asset Management Plan. Also, continue to clean and perform PACP inspections for the entire system within a seven year cycle.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

PACP Sanitary Sewer Video Inspections 1058-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$385,000	\$385,000	\$385,000	\$1,155,000
Project Total:									\$1,155,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,155,000	Cost Total: \$1,155,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Repairs to gravity sewer mains will increase reliability and reduce sewer back ups and City's liability to customers property damage claims.

Project Justification:

Repair portions of gravity sewer mains already noted as needing repair in the 2015 SAW Grant and continue to clean, televise and inspect remaining portion (+/-50%) of the City's collection system that was not evaluated during the SAW Grant.

Location Description:

City wide.



Six Year Capital Improvement Program

WW-19-CIP **Wastewater**

1057-19-CIP **WW Manholes Rehab\Repair and MACP Inspections**

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description: Rehabilitate and Repair Wastewater Manholes that were recommended in the 2015 SAW Grant Asset Management Plan. Also, continue to MACP inspect on all remaining Wastewater Manholes that were not inspected during the 2015 SAW Grant Project.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Waste Water	Staff Priority: Essential (Should Do)	
Fund Detail: Sewer Collection System	Council Priority:	

MACP Manhole Inspections 1057-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$0	\$0	\$50,000	\$50,000	\$50,000	\$150,000
								Project Total:	\$150,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$150,000	Cost Total: \$150,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Repair manhole structure covers before they fail (sink down) which negatively impacts our streets and increases maintenance cost.

Project Justification:

Recommended in the 2015 SAW Grant Project.

Location Description:

City-wide.

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

<p>Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding</p>											
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds

Water

1084-19-CIP	Abandon 12" Water Main Under River at Pine & Front	M	\$0	\$10,000	\$0	\$0	\$0	\$0	\$10,000	\$10,000	\$0	
367-19-CIP	Annual Water Rehab/Replace	V	\$0	\$0	\$0	\$450,000	\$450,000	\$450,000	\$1,800,000	\$1,800,000	\$0	
+ 986-19-CIP	Automated Metering Infrastructure (+Wastewater)	C	\$1,500,000	\$1,450,000	\$0	\$0	\$0	\$0	\$2,950,000	\$2,950,000	\$0	
933-19-CIP	Chemical System Upgrades-Ferric, Chlorine&Fluoride	V	\$0	\$0	\$250,000	\$0	\$0	\$0	\$250,000	\$250,000	\$0	
935-19-CIP	East - West Transmission Main Upgrade	C	\$793,000	\$1,480,000	\$1,004,000	\$1,345,000	\$1,024,000	\$1,470,000	\$1,250,000	\$8,366,000	\$8,366,000	\$0
1053-19-CIP	East Front Street 16" Watermain	C	\$0	\$0	\$0	\$0	\$0	\$420,000	\$420,000	\$420,000	\$0	
930-19-CIP	Electrical Gear Upgrades at WTP & Low Service	V	\$0	\$0	\$0	\$850,000	\$0	\$0	\$850,000	\$850,000	\$0	
934-19-CIP	Filters 1, 2 & 3 Valve Replacement	V	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000	\$400,000	\$0	
1093-19-CIP	Flocculation Tanks Structural Wall Repairs at WTP	M	\$0	\$400,000	\$0	\$0	\$0	\$0	\$400,000	\$400,000	\$0	
932-19-CIP	Hannah Ave Water Main Upgrade	V	\$0	\$0	\$0	\$0	\$0	\$360,000	\$360,000	\$360,000	\$0	
770-19-CIP	High & Low Service Pump Repairs	C	\$240,000	\$80,000	\$80,000	\$80,000	\$0	\$0	\$480,000	\$480,000	\$0	
1028-19-CIP	Lagoon Maintenance	M	\$0	\$60,000	\$0	\$60,000	\$0	\$60,000	\$180,000	\$180,000	\$0	
1015-19-CIP	Low Service Check Valve Replacement Project	M	\$0	\$40,000	\$0	\$0	\$0	\$0	\$40,000	\$40,000	\$0	
+ 1027-19-CIP	Park Place Area Infrastructure Improvements	C	\$0	\$0	\$1,225,000	\$0	\$0	\$0	\$1,225,000	\$1,225,000	\$0	
1086-19-CIP	Phase 2 Security Barrier @ Water Treatment Plant	C	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0	
121-19-CIP	Plant - Freight Elevator Compliance	V	\$0	\$0	\$0	\$0	\$100,000	\$0	\$100,000	\$100,000	\$0	
1092-19-CIP	Remove and Replace Galvanized Water Services	M	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000	\$4,000,000	\$0	
1054-19-CIP	Union St. 12" Watermain	C	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000	\$100,000	\$0	
1016-19-CIP	Veterans Drive Water Main Replacement Project.	C	\$0	\$0	\$0	\$0	\$0	\$450,000	\$450,000	\$450,000	\$0	
1049-19-CIP	Wayne Hill Fire Pump	C	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$100,000	\$0	
1017-19-CIP	WTP Standby Generator Replacement Project	M	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000	\$300,000	\$0	
1065-19-CIP	WTP Sump Pump Discharge Flow Meter	C	\$0	\$0	\$20,000	\$0	\$0	\$0	\$20,000	\$20,000	\$0	
1047-19-CIP	WTP Turbidimeters Replacement	M	\$0	\$0	\$0	\$0	\$15,000	\$10,000	\$25,000	\$25,000	\$0	

Six Year Capital Improvement Plan

All Projects Submitted for 2019-2020

Budget Year 2019-2020 by Program Name

<p>Bold - Indicates projects occurring in the first FY of the plan . + - Indicates projects with multiple funding</p>											
Project ID	Cat	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds

Water

1045-19-CIP	WTP Water Quality In-Line Instrumentation	C	\$0	\$0	\$25,000	\$0	\$0	\$0	\$25,000	\$25,000	\$0	
Total Water			\$2,533,000	\$4,020,000	\$2,804,000	\$3,785,000	\$2,589,000	\$3,410,000	\$3,810,000	\$22,951,000	\$22,951,000	\$0



Six Year Capital Improvement Program

WATER-19-CIP

Water

1084-19-CIP Abandon 12" Water Main Under River at Pine & Front

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: This project will be completed after Project 535-19-CIP West Front St Bridge Replacement is complete. The bridge project includes a new 12" water main along Front St between Pine and Hall St. This will improve hydraulics to the service areas west and south of Hall St.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Imperative (Must Do)	
Fund Detail: Water Distribution System	Council Priority:	

Abandon 12" Water Main Under River at Pine & Front 1084-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$10,000
Project Total:									\$10,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$10,000	Cost Total: \$10,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Improve water system hydraulics to west side and decrease water loss.

Project Justification:

Abandoning this segment of water main after constructing a new water main with the West Front St Bridge project is more cost effective and beneficial than repairing it.

Location Description:

North of Pine and Front St under Boardman River



Six Year Capital Improvement Program

WATER-19-CIP

Water

367-19-CIP Annual Water Rehab/Replace

Project Information

Submitted By: Justin Roy	Department: Department of Municipal Utilities	Project Description: Provide \$450,000 annually in the water fund to continue systematic improvements (repair and replacement) of the underground infrastructure. The Public Improvement Plan will also contain more detailed descriptions of proposed near-term projects.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Distribution System	Council Priority:	

Annual Water Rehab/Replace - Cost 367-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$450,000	\$450,000	\$450,000	\$450,000	\$1,800,000
Project Total:									\$1,800,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,800,000	Cost Total: \$1,800,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Replacing old water mains will reduce emergency repairs and long-term maintenance costs.

Project Justification:

2014 Water System Reliability Study recommends replacing aging water mains where more frequent breaks are known to occur. This cost will be applied to the water main portion of an annual full street reconstruction project.

Location Description:

City wide.



Six Year Capital Improvement Program

WATER-19-CIP

Water

986-19-CIP Automated Metering Infrastructure (+Wastewater)

Project Information

Submitted By: Dave Green	Department: Department of Municipal Utilities	Project Description: Install water meters and software to accommodate smart metering capabilities that will provide for the migration to electronic advanced meters that will assist utility customers on energy use, reliability and provide reads to utility billing. Will also drive future system engineering and planning as well as provide metrics on completed items to show project results. 1.5 Million projected to be spent in 2017/2018. This project is coordinated with Light and Power project # 825.
Category: Capital	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Distribution System	Council Priority:	

Automated Metering Infrastructure (+Wastew - Cost 986-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$750,000	\$725,000	\$0	\$0	\$0	\$0	\$0	\$1,475,000
WAT	Water Fund	\$750,000	\$725,000	\$0	\$0	\$0	\$0	\$0	\$1,475,000
								Project Total:	\$2,950,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$2,950,000	Cost Total: \$2,950,000
Annual Maint. Cost:	\$39,600	Project Difference: \$0
Maint. Year Start:		

Service Impact:

Project will reduce operating costs by obtaining automatic meter reads for billing and increase water revenue by installing all new accurate meters thereby reducing water loss (unaccounted for water).

Project Justification:

Opportune time to install SMART water meters with TCLP's project implementation of SMART electric meters.

Location Description:

City wide.



Six Year Capital Improvement Program

WATER-19-CIP

Water

933-19-CIP Chemical System Upgrades-Ferric, Chlorine&Fluoride

Project Information

Submitted By: Art Krueger
Category: Visionary
Fund Group: Water
Fund Detail: Water Treatment

Department: Department of Municipal Utilitie
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Of these three (3) chemical systems, the Fluoride and Ferric chemical systems have already been completely upgraded as of 2017. The Chlorine system's chemical feed portion was also upgraded in 2012, so the two (2) 8,000 gal. chlorine bulk storage tanks (installed 1994) are the only remaining items needing to be upgraded since they are reaching the end of their useful life.

Chemical System Upgrades (Alum, Chlorine & - Cost

933-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
Project Total:									\$250,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$10,000	
Construction:	\$240,000	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$250,000
	Project Difference:	\$0

Service Impact:

Restore reliability of Chlorine bulk storage. One tank currently is leaking, leaving only one aging tank available for storage. Chlorine is critical for disinfection in the water treatment process.

Project Justification:

Project recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

935-19-CIP East - West Transmission Main Upgrade

Project Information

Submitted By: Art Krueger
Category: Capital
Fund Group: Water
Fund Detail: Water System Reliability Projec

Department: Department of Municipal Utilitie
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:

Projects recommended in the 2014 Water System Reliability Study Table 23, Projects P-3 and P-9. Costs/phases updated in 2017 by Wade Trim & DMU 2019. Replace aged smaller diameter mains with new 12,135 lineal feet (LF) of 24-inch main and 3,125 LF of new 16-inch main. Water main cost for Phase 1 is included in the 8th St. Bridge Project FY19-20.
 FY18-19: Phase 3A: 24" main - Lake Ave from 8th to Cass (Completed)
 FY19-20: Phase 1: 20" & 24" main - 8th St Bridge Project & Phase 2: 24" main - 8th from Boardman Ave to Railroad Ave.
 FY20-21: Phase 5A: 24" main - Garfield from Washington to Webster & Webster to Rose St.
 FY21-22: Phase 5B: 24" main - Railroad Ave from 8th to Webster & Webster from Railroad Ave to Rose St.
 FY22-23: Phase 3B: 24" main - Lake Ave from Cass to Union & Phase 4: 24" main; 7th from Union to Wadsworth
 FY23-24: Phase 6: 24" main - 7th from Wadsworth to Spruce
 FY24-25: Phase 7: 16" main - Spruce from 7th to Wayne St.

East - West Transmission Main Upgrade - Cost

935-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$793,000	\$1,480,000	\$1,004,000	\$1,345,000	\$1,024,000	\$1,470,000	\$1,250,000	\$8,366,000
Project Total:									\$8,366,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$1,515,000	
Construction:	\$6,851,000	
Annual Maint. Cost:		
Maint. Year Start:		
	Cost Total:	\$8,366,000
	Project Difference:	\$0

Service Impact:

Increase transmission capacity to west side of City and provide redundancy to the aging 16" water main along Front St. and Wayne St. to the Wayne Hill reservoir.

Project Justification:



WATER-19-CIP

Water

Projects recommended in the 2014 Water System Reliability Study based upon water model.

Location Description:

Various locations as noted in project description.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1053-19-CIP East Front Street 16" Watermain

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description:
Category: Capital	Department Head: Art Krueger	Replace approx. 1230 lineal feet of existing 16" pit cast main from the early 1900's in E. Front Street between Railroad and Boardman Avenues.
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Distribution System	Council Priority:	

East Front Street 16" Watermain 1053-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$420,000	\$0	\$420,000
Project Total:									\$420,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$420,000	Cost Total: \$420,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability of a significant portion of aging 16" water main and will decrease overall maintenance costs by reducing emergency repairs on E Front St.

Project Justification:

2014 Water System Reliability Study references concerns for this segment of water main due to it's age.

Location Description:

E. Front Street between Railroad and Boardman Avenues.



Six Year Capital Improvement Program

WATER-19-CIP

Water

930-19-CIP Electrical Gear Upgrades at WTP & Low Service

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description: Project recommended in the 2014 Water System Reliability Study Table 23, Project P-5. Update original (1965 and 1972) electrical equipment for both High Service and Low Service pumps. Project will also increase electric efficiency and reliability.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water System Reliability Projec	Council Priority:	

Electrical Gear Upgrades at WTP & Low Serv - Cost 930-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$850,000	\$0	\$0	\$0	\$850,000
								Project Total:	\$850,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$850,000	Cost Total: \$850,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Project Justification:

Location Description:



Six Year Capital Improvement Program

WATER-19-CIP

Water

934-19-CIP Filters 1, 2 & 3 Valve Replacement

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: Replace 8 of 9 valves per filter; 24 valves total in the three oldest filters that were originally built in 1965 (Filters 1 & 2) and 1972 (Filter 3). These valves are at the end of their useful life. The main effluent control valve in these three filters was replaced with the SCADA Project ID#103 in 2015-2016.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Treatment	Council Priority:	

Filters 1, 2 & 3 Valve Replacement - Cost 934-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$25,000	
Construction:	\$375,000	Cost Total: \$400,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Restore reliability in 3 of the 5 filters at the WTP. Valves are critical to filter operations and must be in operable condition at all times. Will decrease long term maintenance costs.

Project Justification:

Project recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1093-19-CIP Flocculation Tanks Structural Wall Repairs at WTP

Project Information

Submitted By: Art Krueger
Category: Maintenance
Fund Group: Water
Fund Detail: Water Treatment

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:

The concrete walls of the two (2) flocculation tanks at the water treatment plant have been leaking slowly over many years. The severity of concrete damage was not discovered until recently when an exterior decorative stone panel was removed, exposing the deteriorating concrete wall. The leaks have caused structural issues with the concrete walls that need to be evaluated and repaired. The interior walls of these tanks also need to be re-coated, but this will be completed under a different project at a later date.

Flocculation Tanks Structural Wall Repairs at WTP

1093-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$400,000	\$0	\$0	\$0	\$0	\$0	\$400,000
Project Total:									\$400,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$400,000	Cost Total: \$400,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Continued operation of Water Treatment Plant.

Project Justification:

Repairs are required to continue to treat water.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

932-19-CIP Hannah Ave Water Main Upgrade

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: Replace 1,900 lineal feet of aging 6-inch main on Hannah Ave. with 12-inch main from Bates Street to S. Garfield Ave. Project needs to be coordinated with the bonded sidewalk project.
Category: Visionary	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Distribution System	Council Priority:	

Hannah Ave Water Main Upgrade - Cost

932-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$360,000	\$360,000
Project Total:									\$360,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$360,000	Cost Total: \$360,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase system reliability and flows to immediate service area.

Project Justification:

Project recommended in the 2014 Water System Reliability Study

Location Description:

Hannah Ave. from Bates Street to S. Garfield Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

770-19-CIP High & Low Service Pump Repairs

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: 4 High Service and 3 Low Service pumps and motors need to be pulled and rebuilt by a pump service company. The motor windings need to be replaced so that a variable frequency drive (VFD) can be installed on the pumps. VFD's allow significant energy savings and assist in overall WTP operations.
Category: Capital	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Water System Reliability Project	Council Priority:	

High & Low Service Pump Repairs - Cost 770-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$240,000	\$80,000	\$80,000	\$80,000	\$0	\$0	\$0	\$480,000
								Project Total:	\$480,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$480,000	Cost Total: \$480,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase pump reliability, reduce energy consumption and reduce overall maintenance / emergency costs.

Project Justification:

Pumps are critical to WTP operations and need to be service regularly.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1028-19-CIP

Lagoon Maintenance

Project Information

Submitted By: Art Krueger
Category: Maintenance
Fund Group: Water
Fund Detail: Water Treatment

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 There are 2 washwater lagoons behind the water treatment plant facility and the sludge from the filter backwashing process must be removed and hauled to the landfill.

Lagoon Maintenance- Cost

1028-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$60,000	\$0	\$60,000	\$0	\$60,000	\$0	\$180,000
Project Total:									\$180,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$180,000	Cost Total: \$180,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Backwashing filters is critical to water treatment. Solids must be settled out of filter backwash water before releasing the clean water back to East Bay as allowed in the NPDES permit.

Project Justification:

Required by suspended solids limits set in NPDES permit.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1015-19-CIP Low Service Check Valve Replacement Project

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description:
Category: Maintenance	Department Head: Art Krueger	Replace 3 old, existing check valves in the Low Service Building
Fund Group: Water	Staff Priority: Essential (Should Do)	piping system.
Fund Detail: Water Treatment	Council Priority:	

Low Service Check Valve Replacement Project

1015-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$40,000	\$0	\$0	\$0	\$0	\$0	\$40,000
Project Total:									\$40,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$40,000	Cost Total: \$40,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Restore reliability to check valves which currently leak water from WTP back into pumps wet well. This causes inefficiencies in plant start-up operations due to a significant volume of water getting treated twice.

Project Justification:

Need to complete project to increase operational efficiency.

Location Description:

Low Service Pump Station - East end of Eastern Ave



Six Year Capital Improvement Program

WATER-19-CIP

Water

1027-19-CIP Park Place Area Infrastructure Improvements

Project Information

Submitted By: Missy Luick
Category: Capital
Fund Group: Water
Fund Detail: Water System Reliability Projec

Department: Engineering
Department Head: Tim Lodge
Staff Priority:
Council Priority:

Project Description:

The Park Place Brownfield Plan identifies water main and storm sewer water quality improvements. Watermain- An upgraded 12" watermain will be installed from Boardman to Cass and will go down a portion of State Street and Washington Streets. Storm Sewer Water Quality- This improvement will include a combination of infiltration and filtration to improve water quality for a significant portion of the downtown area. Both projects will be reimbursed using Brownfield funds.

Park Place Area Infrastructure Improvements- Cost

1027-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
S	Sewer Fund	\$0	\$0	\$250,000	\$0	\$0	\$0	\$0	\$250,000
WAT	Water Fund	\$0	\$0	\$975,000	\$0	\$0	\$0	\$0	\$975,000
Project Total:									\$1,225,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$1,225,000	Cost Total: \$1,225,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

The improvement will upgrade the city's water distribution system to current standards for fire protection and will implement best practices for storm water management. there could be an increase in maintenance costs

Project Justification:

Park Place Brownfield Plan, Water Reliability Study, Improve Water Quality.

Location Description:

Park Place vicinity



Six Year Capital Improvement Program

WATER-19-CIP

Water

1086-19-CIP Phase 2 Security Barrier @ Water Treatment Plant

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description: This project adds Phase 2 to the completed security gate project to increase the level of security by installing a physical vehicular barrier along Eastern Ave.
Category: Capital	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Water Treatment	Council Priority:	

Phase 2 Security Barrier @ Water Treatment Plant 1086-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase security level at Water Treatment Plant

Project Justification:

Homeland Security Recommendations

Location Description:

2010 Eastern Ave



Six Year Capital Improvement Program

WATER-19-CIP

Water

121-19-CIP Plant - Freight Elevator Compliance

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description:
Category: Visionary	Department Head: Art Krueger	Replacement of elevator's original steel single wall casing hydraulic cylinder (1965) with double wall casing cylinder.
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Treatment	Council Priority:	

Plant - Freight Elevator Compliance - Cost

121-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Project would protect ground water from contamination if the single wall cylinder were to fail and leak hydraulic fluid which would be an environmental liability for the City.

Project Justification:

Elevator inspections have not revealed any issues but due to the age of the elevator, the single wall hydraulic cylinder should be replaced to provide secondary containment.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1092-19-CIP Remove and Replace Galvanized Water Services

Project Information

Submitted By: Art Krueger
Category: Maintenance
Fund Group: Water
Fund Detail: Water Distribution System

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Essential (Should Do)
Council Priority:

Project Description:
 Michigan's new Lead and Copper Rule (LCR passed June 2018) requires that water utilities must pay for replacement of up to 5% per year of privately owned galvanized water services from the curb stop to inside the building if the service "is" or "was" connected to a lead pipe (gooseneck). It is estimated that 50% of all private City water services are galvanized, which is approximately 3,700 services. 5% per year is 185 to 200 services at cost of \$5,000 each or \$1M per year for 20 years with the first year planned to begin in FY2021.

Remove and Replace Galvanized Water Services

1092-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$4,000,000
Project Total:									\$4,000,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$4,000,000	Cost Total: \$4,000,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Minimal service impact since private water services are maintained by owner. Overall, could reduce long term water loss (leaks) due to old galvanized services being replaced with new copper over a 20 year period.

Project Justification:

Required by State law.

Location Description:

City-wide



Six Year Capital Improvement Program

WATER-19-CIP

Water

1054-19-CIP

Union St. 12" Watermain

Project Information

Submitted By: Art Krueger
Category: Capital
Fund Group: Water
Fund Detail: Water Distribution System

Department: Department of Municipal Utilities
Department Head: Art Krueger
Staff Priority: Imperitive (Must Do)
Council Priority:

Project Description:
 Install approx. 300 lineal feet of 12" main under Boardman River near Union Street bridge from south side of river to alley north of river to replace existing 12" main across the Union Street Dam. This project will be included in the 2020 Fish Pass (Union St. Dam) Project.

Union St. 12" Watermain

1054-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$100,000	Cost Total: \$100,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Replacement will reduce overall maintenance costs and increase reliability since it will be directionally drilled under the river vs. currently laying across the dam exposed to the elements, i.e. no bury on pipe.

Project Justification:

Needs to be replaced due to removal of existing 12" water main over Union St. dam with the 2020 Fish Pass project.

Location Description:

Between existing Union St. dam and Union Street bridge.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1016-19-CIP **Veterans Drive Water Main Replacement Project.**

Project Information

Submitted By: Justin Roy	Department: Department of Municipal Utilitie	Project Description:
Category: Capital	Department Head: Art Krueger	Replace 6" and 8" diameter water main with 12" between 14th Street and Georgetown Place.
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Distribution System	Council Priority:	

Veterans Drive Water Main Replacement Project.

1016-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$450,000	\$450,000
								Project Total:	\$450,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$450,000	Cost Total: \$450,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Decrease overall maintenance costs and improve water supply / fire flows in this area.

Project Justification:

Project recommended in 2014 Water System Reliability Study.

Location Description:

Veterans Drive between 14th St. and Georgetown Place.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1049-19-CIP

Wayne Hill Fire Pump

Project Information

Submitted By: Art Krueger

Department: Department of Municipal Utilities

Project Description:

Category: Capital

Department Head: Art Krueger

Need to improve fire protection in the Wayne Hill, Incochee and Morgan Farms area pressure districts which are fed from the Wayne Hill Booster Station.

Fund Group: Water

Staff Priority: Imperitive (Must Do)

Fund Detail: Water Distribution System

Council Priority:

Wayne Hill Fire Pump

1049-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000
Project Total:									\$100,000

COST DETAIL:

Study: \$0

Land Acquisition / ROW: \$0

Engineering / Design: \$0

Construction: \$100,000

Cost Total: \$100,000

Annual Maint. Cost:

Project Difference: \$0

Maint. Year Start:

Service Impact:

Improved fire flow and increased high pressure loop system reliability

Project Justification:

Need to improve fire protection in this service area.

Location Description:

Wayne Hill Booster Station - Wayne St. and Incochee Rd.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1017-19-CIP WTP Standby Generator Replacement Project

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: Existing generator is over 20 years old and is nearing the end of its useful life. This project will replace it with a new, more efficient model.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water System Reliability Project	Council Priority:	

WTP Standby Generator Replacement Project

1017-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$300,000
Project Total:									\$300,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$300,000	Cost Total: \$300,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Increase reliability and efficiency by replacing the plant generator when it is at the end of its useful life.

Project Justification:

Recommended in the 2014 Water System Reliability Study.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1065-19-CIP WTP Sump Pump Discharge Flow Meter

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description:
Category: Capital	Department Head: Art Krueger	Install flow meter to accurately measure lagoon discharge (from filter backwash) to East Bay as required per the NPDES permit.
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Treatment	Council Priority:	

WTP Sump Pump Discharge Flow Meter

1065-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$20,000
Project Total:									\$20,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$20,000	Cost Total: \$20,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Currently, flows are estimated and inaccurate due to the variables of incoming flow to the Sump Pump station and one or two pumps in operation. Over estimating flow requires notices to the MDEQ which could be eliminated if an accurate flow meter was installed.

Project Justification:

Increased compliance with NPDES permit requirements to report accurate flows discharged to East Bay.

Location Description:

Water Treatment Plant, 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1047-19-CIP WTP Turbidimeters Replacement

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilities	Project Description: Turbidity meters at the WTP will need to be replaced as they reach the end of their useful life. Reliable equipment and accurate readings are required by the MDEQ for water quality monitoring / compliance.
Category: Maintenance	Department Head: Art Krueger	
Fund Group: Water	Staff Priority: Imperitive (Must Do)	
Fund Detail: Water Treatment	Council Priority:	

WTP Turbidimeters Replacement

1047-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$0	\$0	\$15,000	\$10,000	\$0	\$25,000
Project Total:									\$25,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$25,000	Cost Total: \$25,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Restore reliability of instruments required for water quality as mandated by MDEQ.

Project Justification:

Replace critical instruments when they reach end of useful life.

Location Description:

Water Treatment Plant - 2010 Eastern Ave.



Six Year Capital Improvement Program

WATER-19-CIP

Water

1045-19-CIP WTP Water Quality In-Line Instrumentation

Project Information

Submitted By: Art Krueger	Department: Department of Municipal Utilitie	Project Description:
Category: Capital	Department Head: Art Krueger	Install a streaming current monitor instrument to monitor water chemistry in order to optimize daily coagulant dosing.
Fund Group: Water	Staff Priority: Essential (Should Do)	
Fund Detail: Water Treatment	Council Priority:	

WTP Water Quality In-Line Instrumentation

1045-19-CIP-C

Funding Sources:

		Previous	2019/2020	2020/2021	2021/2022	2022/2023	2023/2024	2024/2025	Total
WAT	Water Fund	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$25,000
Project Total:									\$25,000

COST DETAIL:

Study:	\$0	
Land Acquisition / ROW:	\$0	
Engineering / Design:	\$0	
Construction:	\$25,000	Cost Total: \$25,000
Annual Maint. Cost:		Project Difference: \$0
Maint. Year Start:		

Service Impact:

Installing this instrument will help optimize chemical dosing (reduce costs) and ensure proper water treatment.

Project Justification:

MDEQ District Engineer has recommended installing this equipment at the WTP.

Location Description:

WTP - 2010 Eastern Ave.



Six Year Capital Improvement Program

	Previous	Fiscal Year 2019-2020	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Project Cost	City Funds	Non-City Funds
GRAND TOTAL:	\$6,368,877	\$40,849,991	\$36,510,998	\$37,827,914	\$20,236,349	\$25,266,796	\$17,768,825	\$184,829,750	\$128,616,045	\$56,213,705

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