

Fiscal Years 2018-2022

Capital Improvements Program



BOZEMAN MT

City of Bozeman, Montana

Adopted

Capital Improvements Program

For Fiscal Years 2018-2022

Presented And Adopted during Public Meetings held

November 2016 – February 2017

City Commission

Carson Taylor, Mayor

Cynthia Andrus, Deputy Mayor

Jeff Krauss, Commissioner

Chris Mehl, Commissioner

I-Ho Pomeroy, Commissioner

Chris Kukulski, City Manager

Anna Rosenberry, Assistant City Manager

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CITY OF BOZEMAN - Vision, Mission, and Goals

Vision: **Bozeman, Montana:** The most livable place.

Mission: To enhance the quality of life through excellence in public service.

Goals:

1. Encourage and promote opportunities for citizenship.
2. Provide and communicate quality customer service.
3. Build a strong team of staff, elected officials and citizens.
4. Anticipate future service demands and resource deficiencies and be proactive in addressing them.
5. Develop a visually appealing and culturally rich community.
6. Commit to a strong financial position.
7. Provide excellent and equitable public services which are responsive to the community within available resources.

City of Bozeman 2016-2017 Priorities

On February 29, 2016, the City Commission adopted the following items as their top priorities for staff to focus on accomplishing in the coming year.

Adopted Priorities:

- 1. Joint Law & Justice Center**
- 2. Story Mill Landfill**
- 3. Unified Development Code Rewrite**
- 4. Vision & Strategic Plan**
- 5. 2017 Legislative Agenda**
- 6. Parks & Maintenance District**
- 7. Broadband Expansion**
- 8. Impact Fee Update**

What is a Capital Improvement Program (CIP) and Why Adopt One?

One of the primary responsibilities of local government is to properly preserve, maintain, and improve a community's stock of buildings, streets, parks, water and sewer lines, and equipment. Planning for these capital improvements is a matter of prudent financial management, as well as sound development practice.

At times of rapid growth, as we are experiencing once again, the need for expanded public facilities and services is at its peak. A carefully developed CIP plans for these expansions and communicates our intent to citizens and the development community. In times of economic contraction, like the past prolonged recession, capital improvements were often put off (deferred) as a way of trimming budgets. While this can be appropriate in cases, an annual analysis and focus on necessary capital improvements helps to ensure that capital deferrals, and their impact on the community, are fully vetted.

Definition of Capital Improvement:

The CIP includes any planned expenditure of \$10,000 or greater, that results in the acquisition of an asset with a useful life of 1 year or more.

There are a couple of "exceptions" or "extensions" of this definition that we have found helpful and necessary in past years:

- General Planning Documents (master plans, community surveys, etc.) are NOT included in our CIP;
- Specific plans that involve pre-engineering or preliminary design of facilities are often (but not always) included in the CIP.
- Software purchases that could potentially be "software as a service". Cloud based services are beginning to replace our purchase of outright software and hardware. In the CIP, we have treated the software projects as a capital outlay purchase, although a "service" type solution may actually be chosen during the bidding/proposal process.

The City's Charter Requirements

In Article 5.06 of the adopted City Charter, the City Manager is responsible for preparing and submitting a multi-year capital program to the City Commission no later than December 15 for the ensuing fiscal year. The plan must be revised and extended each year with regard to projects not yet completed. This plan is required to include:

1. A clear general summary of contents;
2. Identification of the long-term goals of the community;
3. A list of all capital improvements and other capital expenditures which are proposed to be undertaken during the fiscal years next ensuing, with appropriate supporting information as to the necessity for each;

4. Cost estimates and recommended time schedules for each improvement or other capital expenditure;
5. Method of financing upon which each capital expenditure is to be reliant;
6. The estimated annual cost of operating and maintaining the facilities to be constructed or acquired;
7. A commentary on how the plan addresses the sustainability of the community or region of which it is a part; and
8. Methods to measure outcomes and performance of the capital plan related to the long-term goals of the community.

Municipal Code Requirements

Because the City has engaged in a Capital Improvement Program process for more than two decades, it has come to be relied upon as an important part of our annual budgeting process. Customarily adopted before the budget development process begins, Capital Improvement items form the basis of department budget requests. In addition, the Municipal Code allows for the “re-appropriation” of prior year budget amounts for Capital Improvement Plan items that have been budgeted but not completed.

Bozeman Municipal Code §2.06.160(C) – BUDGET ADMINISTRATION AND OVERSIGHT

C. Through the annual appropriation resolution each year, the city commission will authorize and re-appropriate the unexpended balance of capital improvement program items and building repair and maintenance items previously budgeted which have not been completed.

State Law Requirements

In addition to our local requirements for an annual CIP, State Law requires the City to maintain a Capital Improvement Plan for our Development Impact Fee programs.

Under Montana Code Annotated (MCA), this Capital Improvement Plan provides the schedules and cost projections required under MCA §7-6-1602(2)(k)(i-iv):

7-6-1602. Calculation of impact fees -- documentation required -- ordinance or resolution -- requirements for impact fees. (1) For each public facility for which an impact fee is imposed, the governmental entity shall prepare and approve a service area report.

(2) The service area report is a written analysis that must: ...

(k) have a component of the budget of the governmental entity that:

(i) schedules construction of public facility capital improvements to serve projected growth;

(ii) projects costs of the capital improvements;

(iii) allocates collected impact fees for construction of the capital improvements;

and

(iv) covers at least a 5-year period and is reviewed and updated at least every 2 years

City's CIP Process—Calendar

Each year, we begin the process of updating our Capital Improvements Plan in September. The process is completed when the Commission adopts a final budget with capital items approved, usually in the following August.

September:

- Departments make requests for new CIP items.
- Staff reviews existing CIP projects and makes note of any changes.

October/November:

- City Manager and staff meet to review new and existing projects; modify any timing, cost or revenue estimates.
- Impact Fee Advisory Committee receives and reviews proposed Impact Fee CIP schedules and forwards comments to City Commission.

November/December:

- City Manager presents Draft CIP to City Commission prior to December 15th.
- City Commission holds public hearings, takes public comment and adopts CIP Plan for ensuing fiscal year.

January:

- Adopted CIP is integrated into City Manager's Recommended Budget for ensuing fiscal year.

June:

- Commission, via adopting a final budget, appropriates dollars for CIP projects for the fiscal year.

City's CIP Process – Ranking Criteria

Prior to 2008, the City had not formally adopted criteria upon which the Capital Improvement Plan projects would be ranked or rated for funding approval. It was often unclear to city staff and members of the public as to what the important elements or factors for funding were.

In the fall of 2008, for preparation of the Fiscal Year 2010-2014 CIP, we developed criteria used to score the capital projects and equipment in the General Fund. Because the General Fund contains, by far, the largest quantity and diversity of projects requested, we believed that specific expressed criteria could be helpful in making decisions for the plan. The Criteria were approved by the Commission, and have been used since that time.

General Fund Criteria

Criteria	Rating	Notes	Project Score
1. Level of Service	Up to 20 pts	20 - Corrects a health or safety hazard or prevents a critical breakdown of an existing city facility or equipment. 15 - Repairs, rehabilitates, or replaces physically deteriorated or functionally obsolete existing city facility or equipment. 10 - Brings an area up to the basic level of service as identified in an adopted city wide plan. 5 - Expands an approved City service. 0 - Other.	
2. Operating Budget Impact	Up to 10 pts	10 - Provides a significant decrease in city operating and/or maintenance expenses. 5 - Has a neutral or small impact on operating and/or maintenance expenses. 0 - Provides a significant increase in city operating requirements.	
3. Service Area	Up to 10 pts	10 - Direct Benefit to entire city. 5 - Direct benefit to roughly half city or indirect benefit to entire city. 2 - Direct benefit to small area of the city or indirect benefit to several areas.	
4. Departmental Priority	Up to 10 pts	10 - Critical to Department's Mission 7 - High 3 - Moderate 0 - Questionable/Very Difficult to Complete	
5. Commission Work Plan	Up to 10 pts	10 - Identified project in Adopted Commission Work Plan 5 - Contributes to an identified project in the Adopted Commission Work Plan. 0 - Not identified in Adopted Commission Work Plan.	
6. Municipal Climate Protection (Municipal Climate Action Plan - MCAP)	Up to 5 pts	5 - Is recommended by MCAP and will accomplish a stated MCAP goal. 3 - Will assist in meeting MCAP goal. 0 - No relation to MCAP.	
7. Seasonal Use	Up to 5 pts	5 - Year Round. 3 - Six to Eleven months per year. 1 - Five or fewer months per year.	
TOTAL	Up to 70 pts.		

Our Current Facilities and their Condition:

The City has a number of long-range (20-year) facility plans:

- Water Treatment & Distribution Facilities
- Wastewater Collection & Treatment Facilities
- Stormwater Collection & Treatment Facilities
- Fire Station, Equipment & Staffing
- Police Station & Staffing
- Parks, Recreation, Trails & Open Space
- Transportation System Plan

These studies examine the condition and placement of existing facilities, area growth projections and pattern, regulatory changes, and possible funding mechanisms. The plans analyze various alternatives and make recommendations for implementation.

Level of Service (LOS) Standards

Most of the City's long range plans establish level of service standards. These standards are critical to planning for the needs of future city residents. In some cases, such as water quality or wastewater discharge, these standards are often established or guided by outside regulating bodies. The CIP does not frequently reference specific LOS, but the underlying facility and staffing plans will contain detailed discussions of levels of service, and how the City should address increasing or decreasing levels of service through infrastructure and staffing recommendations.

Policies for the Physical Development of our Community

The City's Unified Development Code (UDC) is a combination of both Subdivision and Zoning regulations for development within the City. The Code is subject to amendment by the Commission, after public notices and hearings are held. The UDC applies to both private and city-owned projects. The City is currently underway with "The Bozeman Code Update," a public process to update the City's Unified Development Code (UDC). The UDC covers a diverse range of topics, including, zoning, design standards, subdivisions, wetland, and permit review procedures. The key feature of the update is to translate the community's expectations for development as expressed in the Community Plan into a concise and useable set of regulations.

Our Community's Ability to Pay for Planned Improvements

In a community with relatively high cost of living, the ability of citizens to afford the needed utility rate, fee, and assessment levels is of concern. At the same time, the City strives to keep existing facilities properly maintained — and not pass deferred maintenance costs and problems on to future generations.

The City has adopted a Utility Rate Studies for Water and Wastewater services. These studies give us an indication of how and when utility rates must be increased to pay for the

needed water and wastewater system improvements.

For General Fund (Administration, Parks, Recreation, Library, Police, and Fire) facilities and Street construction, the City does not have the ability to easily increase tax levels for funding. Any tax levy increase must be approved by the City's voters, and maximum debt levels are established by state law.

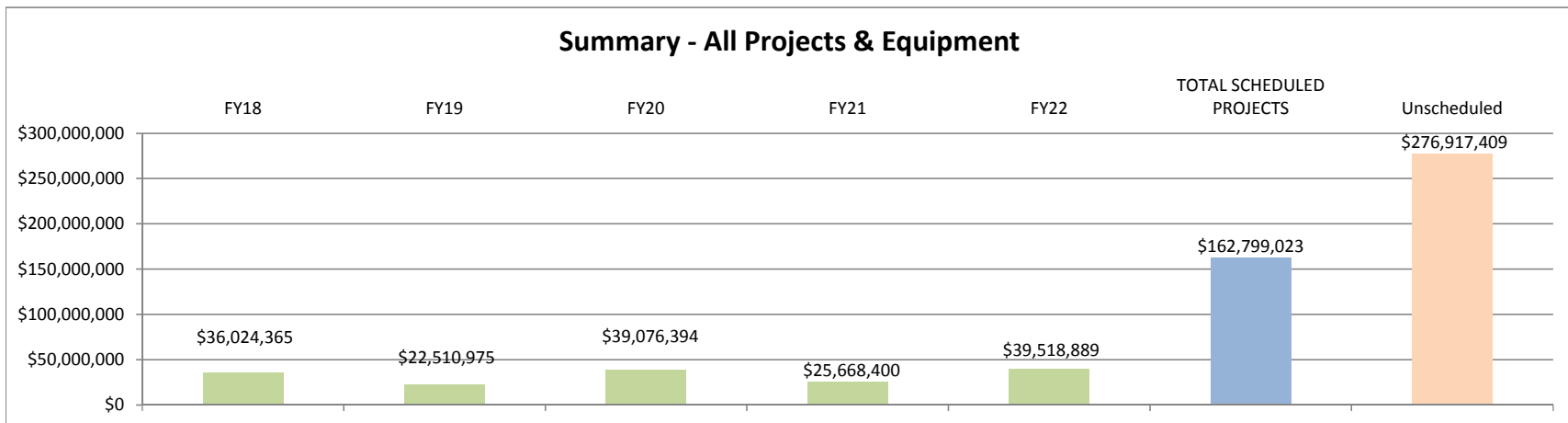
In November 2007, the City of Bozeman voters approved a 4 mill perpetual levy to establish a Fire Equipment and Capital Replacement fund. This fund was added to the CIP plan, and funds our needs to replace fire engines, our ladder truck, and other capital improvements to fire stations.

In the summer of 2015, the city successfully created a city-wide Arterial & Collector Street Special District, under the special district laws of the state. The District is meant to fund street maintenance and (re)construction on Arterial & Collector streets that is NOT eligible to be funded by impact fees. The CIP includes a 5-year plan for capital projects for this new district.

**SUMMARY - ALL FUNDS. Amended
Capital Improvement Plan**

	Scheduled Projects					TOTAL SCHEDULED PROJECTS	Unscheduled
	FY18	FY19	FY20	FY21	FY22		
Arterial and Collector District	\$ 3,934,345	\$ 1,090,421	\$ 2,900,000	\$ 825,000	\$ 750,000	\$ 9,499,766	\$ 13,464,146
Building Inspection Fund	\$ -	\$ 209,354	\$ -	\$ -	\$ -	\$ 209,354	\$ 325,000
Community Development	\$ 100,000	\$ 292,215	\$ 28,000	\$ 10,800	\$ -	\$ 431,015	\$ -
Fire Equipment & Capital Replacement	\$ 530,500	\$ 250,000	\$ 250,000	\$ -	\$ -	\$ 1,030,500	\$ 2,660,500
Fire Impact Fee	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000	\$ 4,600,000
Forestry	\$ 57,000	\$ 105,000	\$ 28,000	\$ -	\$ -	\$ 190,000	\$ 210,000
General Fund	\$ 1,965,496	\$ 2,016,860	\$ 1,302,085	\$ 870,000	\$ 18,923,700	\$ 25,078,141	\$ 10,320,183
Library Depreciation	\$ 90,000	\$ 250,000	\$ -	\$ -	\$ -	\$ 340,000	\$ -
Parking	\$ 290,000	\$ 400,779	\$ 310,000	\$ 280,000	\$ 45,000	\$ 1,325,779	\$ 2,310,000
Solid Waste Collection & Recycling	\$ 430,000	\$ 300,000	\$ 560,000	\$ 238,000	\$ 250,000	\$ 1,778,000	\$ -
Storm Water Utility	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 650,000	\$ 3,250,000	\$ 125,000
Street & Curb Reconstructions	\$ 2,178,375	\$ 1,574,625	\$ 595,500	\$ 543,000	\$ 742,500	\$ 5,634,000	\$ 13,157,375
Street Impact Fee	\$ 11,920,049	\$ 2,340,421	\$ 6,900,000	\$ 2,325,000	\$ 1,000,000	\$ 24,485,470	\$ 36,236,584
Street Maintenance District	\$ 2,378,900	\$ 1,748,500	\$ 1,977,100	\$ 2,402,500	\$ 2,146,789	\$ 10,653,789	\$ 3,401,210
Vehicle Maintenance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Wastewater Fund	\$ 2,702,500	\$ 1,669,870	\$ 1,277,500	\$ 1,182,500	\$ 1,602,500	\$ 8,434,870	\$ 16,034,333
Wastewater Impact Fee	\$ 1,440,000	\$ 2,985,000	\$ 6,090,000	\$ 800,000	\$ 800,000	\$ 12,115,000	\$ 6,018,035
Water Fund	\$ 3,517,200	\$ 4,641,920	\$ 2,062,480	\$ 8,836,600	\$ 10,363,400	\$ 29,421,600	\$ 3,464,439
Water Impact Fee	\$ 3,790,000	\$ 1,986,010	\$ 14,145,729	\$ 6,705,000	\$ 2,245,000	\$ 28,871,739	\$ 164,590,604
Total	\$ 36,024,365	\$ 22,510,975	\$ 39,076,394	\$ 25,668,400	\$ 39,518,889	\$ 162,799,023	\$ 276,917,409

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**Arterial & Collector District Fund
Capital Improvement Plan**

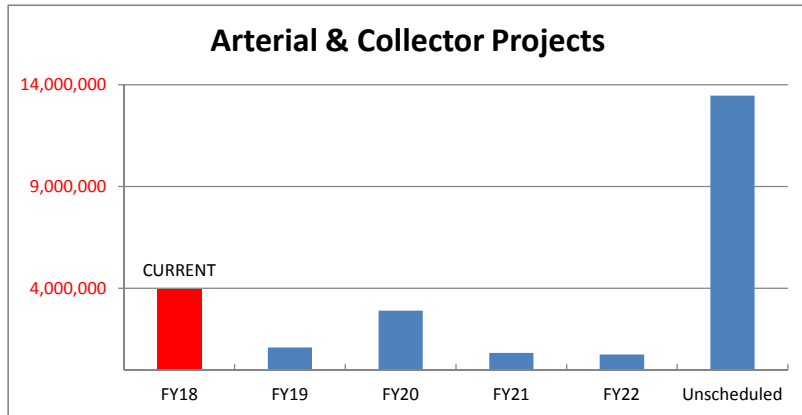
Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,005,600	\$ 1,070,600	\$ (783,245)	\$ 248,444	\$ (487,004)	\$ 895,839	
Plus: Assessment Revenues Dedicated to CIP	\$ 1,095,000	\$ 2,080,500	\$ 2,122,110	\$ 2,164,552	\$ 2,207,843	\$ 2,252,000	\$ -
Less: Scheduled CIP Project Costs	\$ (1,030,000)	\$ (3,934,345)	\$ (1,090,421)	\$ (2,900,000)	\$ (825,000)	\$ (750,000)	\$ (13,464,146)
Projected Year-End Cash Dedicated to CIP	\$ 1,070,600	\$ (783,245)	\$ 248,444	\$ (487,004)	\$ 895,839	\$ 2,397,840	\$ (13,464,146)

Beginning Balance of Payback Improvements:	\$ -	\$ -	\$ (2,544,666.00)	\$ (2,677,666)	\$ (2,677,666)	\$ (3,177,666)	\$ (3,177,666)
SIF036 - Payback District	\$ -	\$ (1,278,000)	\$ -				
SIF046 - Gallatin County SID		\$ (600,000)					
SIF073 - Payback District							\$ (404,000)
SIF076 - Payback District					\$ (500,000)		
SIF080 - Gallatin County SID		\$ (333,333)					
SIF080 - Payback District		\$ (333,333)					
SIF105 - Payback District							\$ (1,240,000)
SIF109 - Gallatin County Payback/SID			\$ (133,000)				
SIF113 - Payback District				\$ (2,000,000)			
SIF117 - Payback District					\$ (225,000)		
Ending Balance of Payback Improvements:	\$ -	\$ (2,544,666)	\$ (2,677,666)	\$ (2,677,666)	\$ (3,177,666)	\$ (3,177,666)	\$ (4,821,666)

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Assessment Revenues	\$ 565,000	\$ 1,095,000	\$ 2,080,500	\$ 2,122,110	\$ 2,164,552	\$ 2,207,843
Estimated Annual Increase	95.0%	90%	2%	2%	2%	2%
Total Estimated Revenues	\$ 1,095,000	\$ 2,080,500	\$ 2,122,110	\$ 2,164,552	\$ 2,207,843	\$ 2,252,000
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,095,000	\$ 2,080,500	\$ 2,122,110	\$ 2,164,552	\$ 2,207,843	\$ 2,252,000

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Arterial & Collector
Streets

SIF036	STREET IF	COTTONWOOD (BABCOCK TO DURSTON) - CONSTRUCTION*	\$1,278,000						
SIF039	STREET IF	FERGUSON & DURSTON (INTERSECTION) - CONSTRUCTION	\$451,244						
SIF046	STREET IF	OAK (NEW HOLLAND TO FERGUSON) - CONSTRUCTION*	\$600,000						
SIF057	STREET IF	OAK (FLANDERS MILL TO RYUNSON WAY) - CONSTRUCTION							\$500,000
SIF058	STREET IF	OAK & N 27TH (INTERSECTION) - CONSTRUCTION							\$122,146
SIF061	STREET IF	OAK & FERGUSON (INTERSECTION) - SIGNAL CONSTRUCTION	\$269,066						
SIF062	STREET IF	DURSTON (FOWLER TO FERGUSON) - CONSTRUCTION		\$757,421					
SIF063	STREET IF	FOWLER & BABCOCK (INTERSECTION) - CONSTRUCTION							\$400,000
SIF073	STREET IF	FOWLER & DURSTON (INTERSECTION) - SIGNAL CONSTRUCTION*							\$404,000
SIF074	STREET IF	OAK & DAVIS (INTERSECTION) - ROUNDABOUT CONSTRUCTION	\$352,302						
SIF076	STREET IF	FOWLER CONNECTION (HUFFINE TO OAK) - DESIGN (INCLUDES 3 INTERSECTIONS)*				\$500,000			
SIF080	STREET IF	FERGUSON (BAXTER TO OAK) - CONSTRUCTION*	\$666,666						
SIF086	STREET IF	BAXTER & COTTONWOOD (INTERSECTION) - CONSTRUCTION							\$500,000
SIF098	STREET IF	OAK & COTTONWOOD (INTERSECTION) - ROUNDABOUT CONSTRUCTION							\$548,000
SIF104	STREET IF	COTTONWOOD & BABCOCK (INTERSECTION) - SIGNAL CONSTRUCTION	\$287,067						
SIF105	STREET IF	COTTONWOOD (DURSTON TO OAK) - CONSTRUCTION*							\$1,240,000
SIF108	STREET IF	S 3RD AND GRAF - SIGNAL CONSTRUCTION		\$200,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	SIF109	STREET IF	OAK (ROUSE THROUGH CANNERY DISTRICT) - CONSTRUCTION*		\$133,000				
	SIF110	STREET IF	MANLEY & GRIFFIN (INTERSECTION) - CONSTRUCTION			\$400,000			
	SIF111	STREET IF	HIGHLAND (MAIN TO KAGY) - CONSTRUCTION & DESIGN*						\$5,000,000
	SIF112	STREET IF	HIGHLAND & MAIN INTERSECTION IMPROVEMENTS	\$30,000					
	SIF113	STREET IF	GRIFFIN (7TH TO ROUSE) - CONSTRUCTION*			\$2,000,000			
	SIF114	STREET IF	FOWLER CONNECTION (HUFFINE TO OAK) - CONSTRUCTION*						\$3,750,000
	SIF115	STREET IF	COLLEGE (11TH TO 19TH) - CONSTRUCTION						\$550,000
	SIF116	STREET IF	BRIDGER DR & STORY MILL RD (INTERSECTION) - CONSTRUCTION						\$200,000
	SIF117	STREET IF	STORY MILL (GRIFFIN TO BRIDGER) - CONSTRUCTION*				\$225,000		
	SIF118	STREET IF	BABCOCK (11TH AVE TO 19TH AVE) - CONSTRUCTION*					\$750,000	
	SIF121	STREET IF	BAXTER & DAVIS (INTERSECTION) - CONSTRUCTION			\$500,000			
	SIF125	STREET IF	COLLEGE (11TH TO 19TH) - DESIGN				\$100,000		
	SIF134	STREET IF	OAK (COTTONWOOD TO FLANDERS MILL) - CONSTRUCTION						\$250,000

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<i>Summary for Arterial & Collector Streets (30 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$3,934,345	\$1,090,421	\$2,900,000	\$825,000	\$750,000	\$13,464,146

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF036

PROJECT NAME

Cottonwood (Babcock to Durston) - Construction*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$1,278,000

DESCRIPTION OF PROJECT

The project consists of finishing Cottonwood Road from Babcock to Durston to a five lane urban arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Cottonwood is also failing in this section because of heavy traffic and subbase degradation. Failure to complete this section will likely result in large maintenance expenses.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Cottonwood serves as an important element in Bozeman's west side street system and serves as a primary north-south corridor on the west side of the City.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Cottonwood corridor street improvements, intersection improvements at Cottonwood and Babcock and Cottonwood and Durston.

ALTERNATIVES CONSIDERED

SID, payback district, incremental construction by adjacent development.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs. Added maintenance costs are expected if this project is not completed within the next 2-3 years.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,278,000) and the Arterial & Collector District (\$1,278,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$1,278,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF039

PROJECT NAME

Ferguson & Durston (Intersection) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$451,244

DESCRIPTION OF PROJECT

Installation of a roundabout at the intersection of Ferguson and Durston

Describe the criticality (i.e., importance) of this project to the operation: The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended.

How is capacity affected by this project: This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: The Ferguson Road Improvement project.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,804,976) and the Arterial & Collector District (\$451,244).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF046

PROJECT NAME
Oak (New Holland to Ferguson) - Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$600,000					

DESCRIPTION OF PROJECT

Complete To 5-Lane Arterial Standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

Are there other affected projects: Oak Street Cottonwood to Ferguson, Intersection improvements at Oak and Ferguson and Oak and Fowler.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project will be funded by Street Impact Fees (\$1,400,000) and Arterial & Collector District financing for local improvements attributed to Gallatin County - creation of Special Improvement District (\$600,000). The Special Improvement District will re-pay the Arterial & Collector District Fund.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF057

PROJECT NAME
Oak (Flanders Mill to Ryunson Way) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled \$500,000
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DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Flanders Mill to Ryunson Way, to a five-lane urban principal arterial standard. Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. How is connectivity affected by this project: Completes an important east-west link between Ferguson and Cottonwood. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained. How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders. Are there other affected projects: Intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street & New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,000,000) the Arterial & Collector District (\$500,000) and local participation. The Flander's Mill development is expected to be a partner in the construction of the segments adjacent to their development.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF058

PROJECT NAME
Oak & N 27th (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$122,146

DESCRIPTION OF PROJECT

Installation of a signal at the intersection of Oak and N 27th.

Describe the criticality (i.e., importance) of this project to the operation: The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended.

How is capacity affected by this project: This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: Oak Street corridor projects and North 27th Street improvements project.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$488,584) and the Arterial & Collector District (\$122,146).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF06 I

PROJECT NAME
Oak & Ferguson (Intersection) - Signal Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$269,066					

DESCRIPTION OF PROJECT

Installation of a signal at the intersection of Oak and Ferguson. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Development which is currently occurring as well as projects which already have approval make it clear that this intersection will no longer meet the city's LOS standard. Installation of a signal at this intersection will increase it's capacity and assist in improving the LOS at nearby intersections. How is connectivity affected by this project: Facilitates the extension of Oak Street to the west of Ferguson Road where it currently does not exist, and will eventually make the connection with Cottonwood Road. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Oak Street projects and Ferguson Road projects are affected.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,076,265) and Arterial & Collector District (\$269,066).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF062

PROJECT NAME

Durston (Fowler to Ferguson) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$757,421

DESCRIPTION OF PROJECT

Complete Durston Rd, from Cottonwood to Fowler, to a three-lane urban minor arterial standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Durston & Ferguson, Durston & Fowler, Durston & Flanders Mill.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$757,421) and the Arterial & Collector District (\$757,421). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF063

PROJECT NAME

Fowler & Babcock (Intersection) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Install a traffic signal, roundabout, or other adequate traffic control device at the intersection of Fowler and Babcock.

Describe the criticality (i.e., importance) of this project to the operation: Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network.

How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity.

How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,600,000) and the Arterial & Collector District (\$400,000).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF073

PROJECT NAME
Fowler & Durston (Intersection) - Signal Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$404,000

DESCRIPTION OF PROJECT

Install a signal at the intersection of Fowler and Durston Describe the criticality (i.e., importance) of this project to the operation: Current LOS is acceptable. How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Fowler corridor street improvements.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Improves an important connecting element in the network.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,616,000) and the Arterial & Collector District (\$404,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$404,000).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF074

PROJECT NAME
Oak & Davis (Intersection) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$352,302					

DESCRIPTION OF PROJECT

Install a roundabout at the intersection of Oak and Davis. Describe the criticality (i.e., importance) of this project to the operation: Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network. Geometric deficiencies will be addressed. How is capacity affected by this project: This intersection is currently I-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Oak Street corridor improvements and Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Accept the current geometry and level of service.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,409,206) and the Arterial & Collector District (\$352,302).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF076

PROJECT NAME

Fowler Connection (Huffine to Oak) - Design (Includes 3 Intersections)*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$500,000

DESCRIPTION OF PROJECT

Design Fowler from Huffine to Oak to an urban minor arterial standard, including three intersections.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections.

How is connectivity affected by this project: This project completes an important north-south connection on the west side of town.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Fowler and Durston and Fowler and Oak.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

This project will complete an important north-south connection, expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$500,000) and the Arterial & Collector District (\$500,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$500,000).

CIP Project Fund	DEPARTMENT						PROJECT NUMBER
Arterial & Collector Streets	STREET IF						SIF080
PROJECT NAME							<input checked="" type="checkbox"/> New
Ferguson (Baxter to Oak) - Construction*							<input type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled	<input type="checkbox"/> Equipment	
\$666,666						<input checked="" type="checkbox"/> Project	

DESCRIPTION OF PROJECT
<p>Complete Ferguson from Baxter to Oak to a two lane urban collector standard with bike lanes, curb and gutter, boulevards, parking and sidewalks.</p> <p>Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.</p> <p>How is capacity affected by this project: This project increases capacity directly by constructing a new roadway which includes dedicated bike lanes and sidewalks.</p> <p>How is connectivity affected by this project: Completes an important north-south link between Baxter and Oak.</p> <p>What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.</p> <p>How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.</p> <p>Are there other affected projects: Intersection of Ferguson and Oak.</p>

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$333,333), Gallatin County (\$333,333), and a developer contribution (\$333,333). This budget assumes that A&C funds will be used to cover the both the County portion and the developer contribution, both to be paid back with SID or payback agreement.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF086

PROJECT NAME
Baxter & Cottonwood (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$500,000

DESCRIPTION OF PROJECT

Improve the intersection at Baxter and Cottonwood. Describe the criticality (i.e., importance) of this project to the operation: Current LOS is acceptable. How is capacity affected by this project: This intersection is currently I-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood corridor improvements and Baxter corridor improvements.

ALTERNATIVES CONSIDERED

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF098

PROJECT NAME
Oak & Cottonwood (Intersection) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$548,000

DESCRIPTION OF PROJECT

Installation of a roundabout at the intersection of Oak and Cottonwood. Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Capacity will be greatly increased on the network as a whole as this intersection is currently 3-legged, rural and stop controlled on Cottonwood (Harper Puckett). How is connectivity affected by this project: This improvement will complete an important north-south connection on Cottonwood. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood Road Improvements, Oak Street Improvements.

ALTERNATIVES CONSIDERED

Not installing the intersection improvement at the same time as the construction of the intersecting streets. Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,192,000) and the Arterial & Collector District (\$548,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF104

PROJECT NAME

Cottonwood & Babcock (Intersection) - Signal Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$287,067

DESCRIPTION OF PROJECT

Installation of a traffic signal at the intersection of Cottonwood and Babcock. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase it's capacity. How is connectivity affected by this project: Connectivity exists at this location, it is capacity which is being increased. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood corridor improvement projects.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,148,269) and the Arterial & Collector District (\$287,067).

CIP Project Fund	DEPARTMENT						PROJECT NUMBER
Arterial & Collector Streets	STREET IF						SIF105
PROJECT NAME							<input checked="" type="checkbox"/> New
Cottonwood (Durston to Oak) - Construction*							<input type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled	<input type="checkbox"/> Equipment	
					\$1,240,000	<input checked="" type="checkbox"/> Project	

DESCRIPTION OF PROJECT

Complete the construction of Cottonwood Road from Durston Road to Oak Street to a five-lane urban arterial standard. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Cottonwood Rd serves as an important element in Bozeman's west side street system and serves as a primary north-south corridor on the west side of the city.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Cottonwood corridor street improvements, intersection improvements at Cottonwood and Durston and Cottonwood and Oak.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,240,000) and the Arterial & Collector District (\$1,240,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$1,240,000).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF108

PROJECT NAME
S 3rd and Graf - Signal Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$200,000				

DESCRIPTION OF PROJECT

Signal construction at S 3rd and Graf Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This is currently a stop controlled intersection. Installation of a roundabout will directly increase capacity. How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC). Are there other affected projects: Graf Street corridor improvements.

ALTERNATIVES CONSIDERED

Accept the existing level of service, create an SID for financing.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF109

PROJECT NAME

Oak (Rouse through Cannery District) - Construction*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$133,000

DESCRIPTION OF PROJECT

This project consists of improving Oak from Rouse through the Cannery District to include curb, gutter, sidewalks, and a turning lane to provide a complete arterial street standard. The Cannery District will be responsible for the cost of curb, gutter, and sidewalk along their property frontage as well as the turn lane to access two drive accesses that allow a left turn movement from Oak Street into the Cannery District.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What safety or risk measures are mitigated with this project: Left turn traffic safety will be improved upon installation of left turn lanes. Pedestrian safety will be improved.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders. Cash-in-lieu of infrastructure is anticipated to be contributed from the Cannery District developer to cover the cost of the left turn lanes needed for their drive accesses as well as the cost of curb, gutter, and sidewalk adjacent to their property.

Are there other affected projects: Oak Street Corridor improvements

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians. There will be substantial pedestrian traffic between the Fairgrounds and the Cannery District. Additionally, the traffic impact study for the Cannery District indicated the need for left turn lanes for their drive accesses. As the City's transportation master plan identifies the need to upgrade the Oak Street Corridor to an arterial standard, this is an opportunity to partner with the Cannery District developer to complete a portion of the Oak Street improvements.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$133,000), the Arterial & Collector District (\$133,000), and Cannery District Developer share (\$133,000). A development payback district or SID may be created to reimburse the Arterial & Collector District for the County's (project related) costs.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIFI 10

PROJECT NAME

Manley & Griffin (Intersection) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Intersection control at Manley & Griffin

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Griffin corridor improvements

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Street Impact Fees (\$1,600,000) and Arterial & Collector District (\$400,000).

CIP Project Fund	DEPARTMENT					PROJECT NUMBER
Arterial & Collector Streets	STREET IF					SIF I I I
PROJECT NAME						<input checked="" type="checkbox"/> New
Highland (Main to Kagy) - Construction & Design*						<input checked="" type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled	<input type="checkbox"/> Equipment
					\$5,000,000	<input checked="" type="checkbox"/> Project

DESCRIPTION OF PROJECT

Upgrade Highland, from Main to Kagy.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Highland and Kagy, Highland and Ellis and Highland and Main Street.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs

FUNDING SOURCES

This project is funded by Street Impact Fees (\$5,000,000) and the Arterial & Collector District (\$5,000,000). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 12

PROJECT NAME
Highland & Main Intersection Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$30,000					

DESCRIPTION OF PROJECT

Improve intersection control at Highland & Main

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Highland Boulevard corridor improvements.

ALTERNATIVES CONSIDERED

Accept the existing level of service, create an SID for financing.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Street Impact Fees (\$150,000), Arterial & Collector District (\$30,000)

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIFI 13

PROJECT NAME

Griffin (7th to Rouse) - Construction*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$2,000,000

DESCRIPTION OF PROJECT

Construct W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Griffin and 7th and Griffin and Rouse.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing).

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,000,000) and the Arterial & Collector District (\$2,000,000). A development payback district or SID may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$2,000,000).

CIP Project Fund	DEPARTMENT						PROJECT NUMBER
Arterial & Collector Streets	STREET IF						SIFI 14
PROJECT NAME							<input checked="" type="checkbox"/> New
Fowler Connection (Huffine to Oak) - Construction*							<input type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled	<input type="checkbox"/> Equipment	
					\$3,750,000	<input checked="" type="checkbox"/> Project	

DESCRIPTION OF PROJECT
<p>Complete the section of Fowler from Huffine to Oak</p> <p>Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.</p> <p>How is capacity affected by this project: Allows for extension of Fowler Avenue, which will directly increase capacity.</p> <p>How is connectivity affected by this project: Extends an important north-south corridor on the west side of the city.</p> <p>What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.</p> <p>How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.</p> <p>Are there other affected projects: Intersection improvements on Fowler at Huffine, Babcock, Durston and Oak.</p>

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Completes an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,750,000) and the Arterial & Collector District (\$3,750,000). A payback district may be created to reimburse the Arterial & Collector District for any local improvements.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIFI 15

PROJECT NAME

College (11th to 19th) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$550,000

DESCRIPTION OF PROJECT

Complete College, from 19th to 11th, to a principal arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: Urban funds could be used on this section of College.

Are there other affected projects: Intersections of College/11th and College/8th.

ALTERNATIVES CONSIDERED

Accept the current configuration

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

50% Street Impact Fees & 50% Arterial & Collector District.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 16

PROJECT NAME
Bridger Dr & Story Mill Rd (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$200,000

DESCRIPTION OF PROJECT

Intersection design at Bridger and Story Mill
Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.
How is capacity affected by this project: Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection.
How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.
What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.
Are there other affected projects: Story Mill, Griffin to Bridger Drive.

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 17

PROJECT NAME
Story Mill (Griffin to Bridger) - Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$225,000		

DESCRIPTION OF PROJECT

Improve Story Mill from Griffin to Bridger

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements to Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$225,000) and the Arterial & Collector District (\$225,000). An Sid or payback district may be created to recover the local share.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIFI 18

PROJECT NAME

Babcock (11th Ave to 19th Ave) - Construction*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$750,000

DESCRIPTION OF PROJECT

Improve Babcock from 11th to 19th)

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project:

Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$750,000) and the Arterial & Collector District (\$750,000). An SID or payback district may be created to pay for some local share improvements.

CIP Project Fund
Arterial & Collector Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF121

PROJECT NAME
Baxter & Davis (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$500,000			

DESCRIPTION OF PROJECT

Install a roundabout at Baxter & Davis

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan and Level of Service Standard is attained.

Are there other affected projects: Baxter Lane Corridor Improvements.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF125

PROJECT NAME

College (11th to 19th) - Design

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$100,000

DESCRIPTION OF PROJECT

Design College, from 19th to 11th, to a principal arterial standard. Evaluate upgrading 11th to an Arterial Collector (from a local street). Including adding bike lanes, pedestrian crossings and removing parking.

Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection

LOS.

How is connectivity affected by this

project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: Urban funds could be used on this section of College.

Are there other affected projects: Intersections of College/11th and College/8th.

ALTERNATIVES CONSIDERED

Accept the current configuration

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

50% Street Impact Fees & 50% Arterial & Collector District.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Arterial & Collector Streets

STREET IF

SIF134

PROJECT NAME

Oak (Cottonwood to Flanders Mill) - Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$250,000

DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Cottonwood to Flanders Mill, to a five-lane urban principal arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Completes an important east-west link between Ferguson and Cottonwood.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,300,000), Arterial & Collector District of \$250,000 for the local share adjacent to the City park, and an additional \$250,000 from School District #7.

**Building Inspection Fund
Capital Improvement Plan**

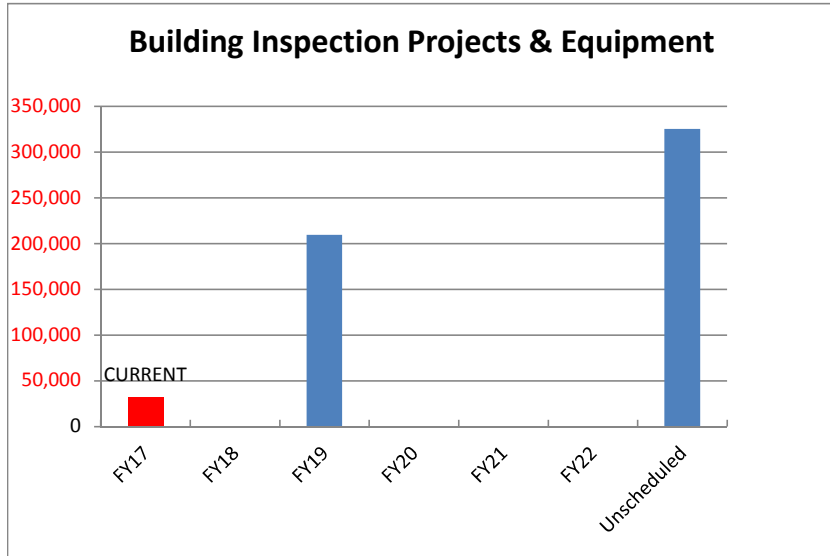
Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 200,000	\$ 179,500	\$ 192,100	\$ (4,024)	\$ 9,868	\$ 24,454	
Plus: Building Inspection Revenues Dedicated to CIP	\$ 12,000	\$ 12,600	\$ 13,230	\$ 13,892	\$ 14,586	\$ 15,315	\$ -
Less: Scheduled CIP Project Costs	\$ (32,500)		\$ (209,354)				\$ (325,000)
Projected Year-End Cash Dedicated to CIP	\$ 179,500	\$ 192,100	\$ (4,024)	\$ 9,868	\$ 24,454	\$ 39,769	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Building Inspection Revenues	\$ 2,000,000	\$ 2,000,000	\$ 2,100,000	\$ 2,205,000	\$ 2,315,250	\$ 2,431,013
Estimated Growth in Revenues	-	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 2,000,000	\$ 2,100,000	\$ 2,205,000	\$ 2,315,250	\$ 2,431,013	\$ 2,552,563
Current Revenues Dedicated to CIP %	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%
Plus: Increase Dedicated to Capital Improvements %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%

Total Estimated Revenues Dedicated to CIP \$ 12,000 \$ 12,600 \$ 13,230 \$ 13,892 \$ 14,586 \$ 15,315

51



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Building Inspection									
	BI01	BUILDING INSP	STAFF VEHICLE - REPLACEMENTS						\$325,000
	GF199	BUILDING INSPECTION	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2		\$209,354				
					\$209,354				\$325,000

<i>Summary for Building Inspection (2 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>					\$209,354				\$325,000

CIP Project Fund
Building Inspection

DEPARTMENT
BUILDING INSPECTION

PROJECT NUMBER
BI01

PROJECT NAME
STAFF VEHICLE - REPLACEMENTS

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$325,000

DESCRIPTION OF PROJECT

This item is for the scheduled replacement of Building Inspection vehicles based on age and use of the vehicle. Vehicles will be replaced according to the City's Vehicle Replacement policy; generally, 150,000 miles/20 years before replacement of non-emergency vehicles. This program will address the long term vehicle needs of the Building Division by allowing careful replacement of vehicles as vehicle conditions and department needs warrant. Right now, all vehicles are in use by Department staff, averaging approximately 5,000 miles per year. Vehicle Mileage updated October 2015. There are no maintenance issues or significant problems to report. We do regular maintenance and service all of our vehicles and always fix small stuff before it becomes a big problem.

ALTERNATIVES CONSIDERED

Utilize vehicles beyond the recommendations of the vehicle use policy; consider replacements of different model of vehicle.

ADVANTAGES OF APPROVAL

Based on the age and use of the vehicle a new vehicle will be purchased as replacement. In the past, vehicles were replaced after 5 years. We are stretching the useful life within the division to match the newly-revised vehicle purchase/replacement policy.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Generally, annual operating and maintenance costs are expected to decrease when older vehicles are replaced with newer ones. More fuel efficiency and lower repair costs are financial benefits.

FUNDING SOURCES

100% Building Inspection Fund

CIP Project Fund
Building Inspection

DEPARTMENT
BUILDING INSPECTION

PROJECT NUMBER
GF199

PROJECT NAME
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$209,354				

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

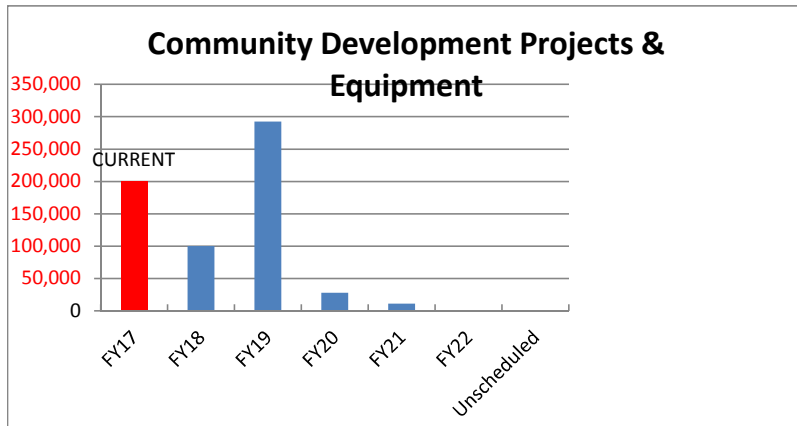
Building Inspection, Community Development, General Fund, Parking, Water

**Community Development Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 206,000	\$ 141,884	\$ 120,465	\$ (91,598)	\$ (37,842)	\$ 34,749	
Plus: Long Range Planning Restricted Cash	\$ 58,948						
Plus: Conservation Overlay Restricted Cash	\$ 53,702						
Plus: Entryway Corridor Restricted Cash	\$ 19,687						
Plus: Technology Restricted Cash	\$ 3,547						
Plus: Planning Revenues Dedicated to CIP	\$ -	\$ 78,581	\$ 80,153	\$ 81,756	\$ 83,391	\$ 85,059	
Plus: General Fund/Other Contribution							
Less: Scheduled CIP Project Costs	\$ (200,000)	\$ (100,000)	\$ (292,215)	\$ (28,000)	\$ (10,800)	\$ -	\$ -
Projected Year-End Cash Dedicated to CIP	\$ 141,884	\$ 120,465	\$ (91,598)	\$ (37,842)	\$ 34,749	\$ 119,807	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Community Development Revenues (Excludes interfund transfers)	\$ 1,055,344	\$ 1,055,344	\$ 1,076,451	\$ 1,097,980	\$ 1,119,939	\$ 1,142,338
Estimated Growth in Revenues	-	2%	2%	2%	2%	2%
Total Estimated Revenues	\$ 1,055,344	\$ 1,076,451	\$ 1,097,980	\$ 1,119,939	\$ 1,142,338	\$ 1,165,185
Current Revenues Dedicated to CIP %	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
Plus: Increase Dedicated to Capital Improvements %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	7.3%	7.3%	7.3%	7.3%	7.3%	7.3%
Total Estimated Revenues Dedicated to CIP	\$ 77,040	\$ 78,581	\$ 80,153	\$ 81,756	\$ 83,391	\$ 85,059



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Community Development

CD01	COMMUNITY D	VEHICLE REPLACEMENT			\$28,000				
CD02	COMMUNITY DEVELOPMENT	COMMUNITY PLAN/GROWTH POLICY UPDATE	\$100,000						
CD03	COMMUNITY D	COMPUTER HARDWARE				\$10,800			
CD05	COMMUNITY D	COPIER REPLACEMENT		\$35,000					
GF199	COMMUNITY DEVELOPMENT	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2		\$257,215					

<i>Summary for Community Development (5 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$100,000	\$292,215	\$28,000	\$10,800		

CIP Project Fund
Community Development

DEPARTMENT
COMMUNITY DEVELOPMENT

PROJECT NUMBER
CD01

PROJECT NAME
VEHICLE REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$28,000			

DESCRIPTION OF PROJECT

Replacement of the current vehicle, a 2003 Honda CRV purchased in 2005 (asset # 3283). The vehicle is used by Planning Staff for site visits to projects, posting notices on-site, in-town meetings, and driving to meetings or conferences within Montana and other department activities (WL01-WL32) . Replacement would be with a fuel efficient medium size vehicle, possibly a hybrid. Anticipated upcoming maintenance cost of approximately \$1,000 for repairs to make dash lights operational. *Previous Year Plans, this item was number: GF064

ALTERNATIVES CONSIDERED

Continue to operate the existing vehicles with increasing maintenance costs.

ADVANTAGES OF APPROVAL

Provide functional transportation with reduced maintenance costs. Because of the age of the existing vehicle, maintenance costs are likely to increase to keep it functional. Recent repairs include power windows and routine maintenance. The vehicle needs numerous minor repairs, including dashboard lights, that continue to be deferred.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: No new costs are expected as maintenance is already performed on the existing vehicle. However, maintenance and repair costs are anticipated to increase due to the age of the vehicle.

FUNDING SOURCES

Community Development Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Community Development

COMMUNITY DEVELOPMENT

CD02

PROJECT NAME

COMMUNITY PLAN/GROWTH POLICY UPDATE

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$100,000

DESCRIPTION OF PROJECT

This is the second-year of funding for the development of the Growth Policy (aka Community Plan). Previous plans have projected forward based on primarily local population and land use data. However, the economy is very different today and changes nationally and locally are happening quickly. We need a market analysis to look at what is under-served in Bozeman commercially/industrially, where trends are headed nationwide, and how Bozeman fits into the larger trade area. Outlying communities can now support their own services which used to be provided by Bozeman, e.g. medical care and shopping. Our industrial lands are positioned to old economy infrastructure, e.g. rail. What kind of industry do we want (coordinate with Econ Dev plan), what does it need for land and infrastructure, and where do we put it to support industry? Regardless of any other action, access to land is a limiting factor. We need to begin to identify substantial expansion areas for industrial and commercial spaces. There is a substantial change in demographics happening with rapid aging, deferred onset of household formation, and smaller households. This is not matching well with the housing stock in the area. The myth of the rural west continues to hold on even though most of the population of Gallatin County has been urbanized for over 20 years. The perception of Bozeman as a "rich" place is directly countered by the high level of poverty. In order to allow for constructive conversations and allow elected officials to make informed decisions, we need better insights on our population: is poverty based on students with low incomes, retirees on fixed incomes, and/or working households with low wages? New policies should be based on current data and projections for the future which will require extensive research and analysis. Another cost as part of the project will be continued public engagement. Our best practices of the past have resulted in a very small percentage of the population participating in decisions that will affect the future of the community. We plan to build on the public outreach for the Strategic Plan: and, we are seeking funding to use programs such as mySidewalk/Mindmixer, On line City Hall, and/or Metroquest to allow electronic participation in the process to reach out to a larger portion of the community and different segments of the community.

ALTERNATIVES CONSIDERED

None. This update was directed by the City Commission during consideration of status of plan during FY 2015. In addition, Montana requires that the plan be assessed every five years to determine the need for an update.

ADVANTAGES OF APPROVAL

This project, at this time, would be able to benefit from the upcoming Strategic Plan process the city is planning to undertake. By utilizing results of public outreach, the growth policy update will take less time and cost less. In addition, the growth policy update will include the gathering and analysis of data such as demographics, residential and commercial square footage absorption rates, job growth, and other economic and demographic data that will support the development of the new Economic Development Plan.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Plan will be updated/re-evaluated in 5 years. Potential future costs that may be associated with implementation of policies incorporated within the plan which in the past has included subarea plans or neighborhood plans.

FUNDING SOURCES

Community Development Restricted Cash Accounts, Community Development Fund, General Fund

CIP Project Fund
Community Development

DEPARTMENT
COMMUNITY DEVELOPMENT

PROJECT NUMBER
CD03

PROJECT NAME						
COMPUTER HARDWARE						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$10,800		

DESCRIPTION OF PROJECT

Replace computer hardware; replacements planned for years FY18 and FY20 did not meet the CIP capital threshold and will be included in budget requests for those years.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Keeping computer hardware current diminishes the need for service calls and also facilitates the production of planning review by ensuring computers are able to run effective updated software.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

IT support, software updates

FUNDING SOURCES

Community Development Fund

CIP Project Fund
Community Development

DEPARTMENT
COMMUNITY DEVELOPMENT

PROJECT NUMBER
CD05

PROJECT NAME
Copier Replacement

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$35,000				

DESCRIPTION OF PROJECT

Replace combination copier/scanner. This is an essential primary work tool for Community Development for production of staff reports, intake of applications, and many other daily duties. The copier is shared with Public Works. The anticipated service life for this type of equipment under the use conditions and loads is five years or less. Mechanical failure are becoming more common with the existing machine.

ALTERNATIVES CONSIDERED

A lease may be an alternative. Experience with leasing has not been particularly positive. Efforts to continue with increasing maintenance may extend service life some but there are associated costs financially and with lost productivity during breakdowns. Given the level of time sensitive deadlines for the department substantial and frequent down times are not acceptable.

ADVANTAGES OF APPROVAL

Enable departments to continue to produce and process applications and materials.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional expenses are anticipated. Standard operating expenses are included in the annual budgets and are not anticipated to change substantially.

FUNDING SOURCES

General fund, planning fund

CIP Project Fund
Community Development

DEPARTMENT
COMMUNITY DEVELOPMENT

PROJECT NUMBER
GF199

PROJECT NAME
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$257,215				

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, Parking, Water

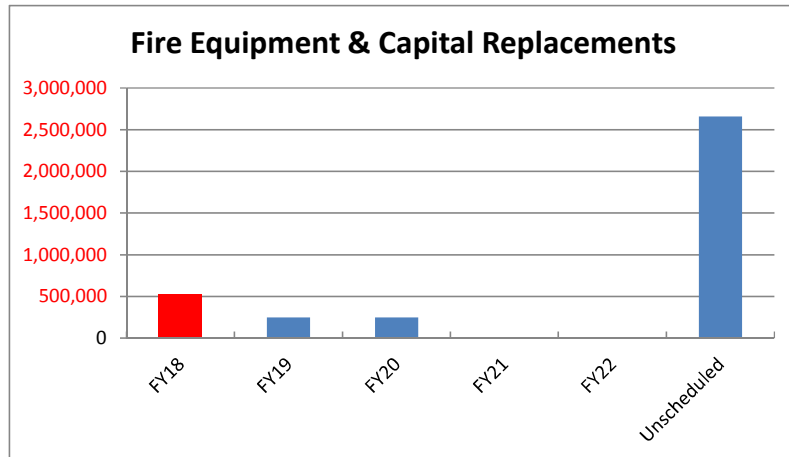
Fire Equipment & Capital Replacement Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 675,700	\$ 1,028,881	\$ 866,400	\$ 995,460	\$ 1,132,100	\$ 1,526,474	
Plus: Dedicated Tax Revenues 4 Mills	\$ 353,181	\$ 368,019	\$ 379,060	\$ 386,641	\$ 394,374	\$ 402,261	\$ -
Plus: Anticipated Grant Revenue				\$ -			
Less: Scheduled CIP Project Costs	\$ -	\$ (530,500)	\$ (250,000)	\$ (250,000)			\$ (2,660,500)
Projected Year-End Cash Dedicated to CIP	\$ 1,028,881	\$ 866,400	\$ 995,460	\$ 1,132,100	\$ 1,526,474	\$ 1,928,735	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Tax Revenues	\$ 357,300	\$ 357,300	\$ 368,019	\$ 379,060	\$ 386,641	\$ 394,374
Estimated Annual Increase		3%	3%	2%	2%	2%
Total Estimated Revenues	\$ 357,300	\$ 368,019	\$ 379,060	\$ 386,641	\$ 394,374	\$ 402,261
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 357,300	\$ 368,019	\$ 379,060	\$ 386,641	\$ 394,374	\$ 402,261

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Fire Equip & Capital Replacement

FE06	FIRE	RADIO REPLACEMENT PROGRAM		\$250,000	\$250,000				
FE07	FIRE	LIGHT DUTY VEHICLE REPLACEMENTS	\$130,000						
FE08	FIRE	FIRE STATION #1 REMODEL							\$2,400,000
FE10	FIRE	SELF-CONTAINED BREATHING APPARATUS (SCBA) REPLACEMENTS	\$400,500						
FE11	FIRE	BOILER REPLACEMENT AT FIRE STATION #1							\$260,500

<i>Summary for Fire Equip & Capital Replacement (5 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$530,500	\$250,000	\$250,000			\$2,660,500

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

FIRE

FE06

PROJECT NAME

Radio Replacement Program

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$250,000

\$250,000

DESCRIPTION OF PROJECT

This plan allows for aging fire portable radios to be replaced, including all of the software, programming and peripheral accessories. This is a planned replacement of radios at the end of their predicted usable life, estimated between eight and ten years. This will provide for seamless communication and response capabilities as the radios become less reliable and repair is no longer a financially prudent option. Radios are an essential item in the operation of the Bozeman Fire Department. Fire radios must be available for fire use 24 hours a day, 365 days a year. These radios are assigned to the three stations, all apparatus, and management staff and are used daily. The decision was made during FY-17 CIP discussions to postpone scheduled replacements of Fire Department radios due to uncertain plans of the Gallatin County 911 Center. Since this decision one year ago, a test was conducted with Bozeman Fire and Bozeman Police Department. The test utilized an 800 MHz radio system to evaluate its use as a potential upgrade from the current radio system. The results of the test were extremely positive, with noted improvements related to in-building coverage and city wide coverage. Since the test, the 911 advisory board has voted to move forward with a 4 phase plan to upgrade the radio system in Gallatin County. Phase I would call for the City of Bozeman to move to an 800 MHz digital trunked radio system.

ALTERNATIVES CONSIDERED

We still have the option of backing out of the 800 MHz system, however in doing so we would need to re-visit with 911 and the 911 Advisory Board about other potential solutions for Bozeman Fire. If Bozeman Fire were to back out and Bozeman Police still move forward, we would lose the ability to communicate effectively with each other, something that creates a major safety concern for both parties. In order to maintain consistency in public safety operations, both departments should remain on the same radio system.

ADVANTAGES OF APPROVAL

Clear and dependable communication allows for quick and efficient emergency deployment and the required level of firefighter safety. The portable radio project addresses a planned replacement program that existed in the CIP prior to the decision to move to 800 MHz radios. The purchase improves our ability to communicate within the city, particularly inside of larger buildings such as the high school, hospital, and big box retailers. We potentially may see some trade in value or resale value for some of the replaced units depending on their condition.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

As these are replacement radios we anticipate very little increases operating costs.

FUNDING SOURCES

100% Fire Equipment & Capital Replacement Fund - with possible reimbursement by Gallatin County 911 System.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

FIRE

FE07

PROJECT NAME

LIGHT DUTY VEHICLE REPLACEMENTS

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$130,000

DESCRIPTION OF PROJECT

As of October 1, 2016 the Bozeman Fire Department has a fleet of light duty vehicles that consist of 9 total vehicles, 7 SUVs and 2 Pickups. The department currently has 8-day staff members who are assigned to these vehicles with the extra vehicle being utilized as a fire investigation and plow vehicle used for plowing operations at Fire Station 3 / Gallatin County Dispatch. 4 vehicles are for primary responders. Having mechanical issues or failures with these vehicles is unacceptable and creates gaps and failures in the department's response and operational procedures. 4 vehicles fall into the non-essential category. These members are primarily day staff personnel. The Bozeman Fire Department is proposing to purchase two (2) new Ford Explorer Interceptors and one (1) new 3/4-ton pickup truck in FY-18 at a total cost of \$130,000. This purchase would allow us to ensure that all 4 of our essential chief officer positions are in dependable and reliable vehicles and allow us to re-organize our remaining fleet for the other 4 staff positions. In approximately 7 years (FY-2025) we believe it would be time to replace the 4 vehicles that are assigned to our non-essential positions. At the same time our new FY-18 purchases, coupled with the Ford Explorer purchased in FY-16, would be at the halfway point of their life span with an estimated 56,000 – 63,000 miles and we would look to push these vehicles down to our non-essential positions and place our essential positions in new vehicles. This strategy allows for us to plan for a 14-year service life for a fire department vehicle and keep our essential staff in reliable equipment. This is a plan that we have modeled after our water department.

ALTERNATIVES CONSIDERED

Could continue to utilize existing vehicles longer, however, many of these vehicles are emergency response vehicles for the Fire Department and are not reliable for 24/7/365 use.

ADVANTAGES OF APPROVAL

The Department will have adequate, properly sized vehicles for emergency response and other operational functions. Leaves nothing unscheduled and is a \$110,000 reduction from last years CIP plan.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Newer vehicles are expected to be more fuel efficient and reliable for 24/7 response.

FUNDING SOURCES

100% Fire Equipment & Capital Replacement Fund

Fire Department Light Vehicle Replacements

Asset #	Unit #	Model Yr	Current Make/Features	Currently Assigned to	Current Mileage	Replacement	FY18	FY19	FY20	FY21	FY22	Unscheduled
3076	F3	2002	Chevy Suburban	Fire Marshall	146,209	Replace with a 4x4, SUV style, mid-sized, code-capable (lights & sirens) vehicle.	\$40,000					
3247	F4	2004	Chevy Tahoe	Emergency Management Staff Captain	140,464	4x4, SUV style, mid-sized vehicle, with emergency lighting, radios, MDT.						
2764	F2	2000	Chevy Tahoe	Operations Chief	130,668	4x4, SUV style, mid-sized vehicle, with emergency lighting, radios, MDT.	\$40,000					
3153	BC1	2003	Chey Suburban	Batallion Chief	109,994	To be replaced with Ford Interceptor	\$50,000					
3332	F6	2007	Chevy Tahoe	Fire Inspector	71,530	4x4, SUV style, mid-sized vehicle, with emergency lighting, radios, MDT.						
3363	F7	2007	Dodge Durango	Fire Inspector	44,402							
3275	U4	2005	Ford F150	Plowing/Fire Investigations/Prevention Truck	41,950							
3158	F5	2003	Chevy Silverado - Crew Cab	Training Officer	32,979							
1535	B1	1993	Ford Truck	Hazmat	17,979							
3816	F1	2016	Ford Interceptor	Fire Chief	1,524							
3260	HMT	2004	Trailer	Hazmat								
Totals							\$130,000					

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

FIRE

FE08

PROJECT NAME

FIRE STATION #1 REMODEL

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$2,400,000

DESCRIPTION OF PROJECT

The purpose of this project is to address the structural deficiencies identified in a 2012 study completed by Nishkian Monks, and to expand and remodel the aging station. The remodel will increase the facility size and functionality and decrease maintenance costs and increase energy efficiency. We need additional office space for our fire inspectors and Battalion Chiefs, along with sleeping quarters for the Battalion Chief. We currently have common sleeping and restroom areas which does not allow for privacy or separation for members of opposite gender. The station remodel will include sleeping quarters, bathrooms, and living spaces for firefighters of either sex. All standard areas commonly found in modern stations will be included in this facility such as kitchen space, office space and physical training area. The remodel of this station should be completed in conjunction with the boiler replacement as multiple walls will have to be opened up during the boiler replacement and replacement of aging windows and doors would help the efficiency of the new boiler.

ALTERNATIVES CONSIDERED

Continue with utilizing the existing station in its current condition. Cost of construction could be reduced via the use of some alternative structural stabilization materials but these plans would need to be evaluated to ensure they meet the city design criteria. An assessment of retrofitting and remodel cost should be weighed against new construction cost.

ADVANTAGES OF APPROVAL

This project would significantly improve the living conditions and operational functionality of the Station: It remedies the hazards identified in Nishkian Monks study, decreases ongoing maintenance costs compared to the existing facility, new construction will be "green" and more energy efficient, creates sleeping and office space for Battalion Chiefs and Fire Inspectors, separate and equal bath and sleeping facilities for employees of both genders, on-site physical fitness area.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Operating cost should maintain similar to what is currently budgeted. Although the facility will be getting larger, a more energy efficient facility will balance with the increase in size.

FUNDING SOURCES

Would be constructed concurrently with FE11 - Boiler Replacement at Fire Station #1. Total Cost, including Boiler, is \$2.7 Million. Depending on features of the project, the Fire Equipment & Capital Replacement, and potentially Impact Fees, could be used to pay for this project. The department will seek grant money for this project again in FY-18 but this should not be considered a high probability as we did not qualify for grant funding in FY-17.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

FIRE

FE10

PROJECT NAME

Self-Contained Breathing Apparatus (SCBA) Replacements

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$400,500

DESCRIPTION OF PROJECT

The fire department currently owns 35 self-contained breathing apparatus (SCBA) manufactured by Dragger and purchased in 2008. SCBA can be broken down into two distinct pieces, the actual breathing apparatus itself and the air cylinder. The expected replacement cycle for SCBA apparatus is normally 10 to 12 years while the cylinders have a life span of 15 years. While the current SCBA are still 2 years away from their expected end of service life there are a number of reasons for requesting to replace these units ahead of schedule. We are seeing a reoccurring failure of what is known as the sentinel on the SCBA apparatus. The sentinel is the electronic brain that runs everything on the SCBA, thus any problem with it requires the SCBA be removed from service and sent out for repairs. Many of the sentinels are going bad for reasons that have not been determined by Dragger. They are not being damaged by crews due to use or exposure. The average cost to ship an SCBA to the factory for repair of a sentinel is \$1500. We are requesting funds to purchase two high pressure air compressors for Fire Station 1 & 2, giving us the ability to safely and efficiently fill high pressure SCBAs in the future.

ALTERNATIVES CONSIDERED

The current SCBAs could be used for another two years before reaching their expected end of service life. The downside to this is we will need to incur the cost of hydrostatically testing the air cylinders in the upcoming budget cycle and will lose all potential resale value on the existing units. If the decision is made to continue with the use of the current SCBA we would need to repair any units currently out of service.

ADVANTAGES OF APPROVAL

Firefighters use SCBA's to enter hazardous atmospheres in all aspects of their jobs; firefighting, confined space entry, and hazmat response. The health and safety of our personnel, as well as the ability of our fire department to perform its function, is greatly dependent on these units. The new SCBA units are safer than current units as they are certified for chemical, biological, and radiological emergencies.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The department spends about \$5,000 annually on SCBA maintenance. Yearly checks and certification is required regardless of SCBA age although maintenance costs would decline with new units as replacement parts would not be needed.

FUNDING SOURCES

100% Fire Equipment & Capital Replacement Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Fire Equip & Capital Replacement

FIRE

FEI I

PROJECT NAME

BOILER REPLACEMENT AT FIRE STATION #1

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$260,500

DESCRIPTION OF PROJECT

This project is most ideally timed with the Station #1 Remodel in the Fire Equipment Capital Replacement Fund. The old steam boiler at Fire Station #1 has reached the end of its useful cycle. The fact that the unit is no longer serving the old City Hall means that is working even less efficient because it is now oversized. The condition of the system's pipes were found to be severely corroded and in poor condition. An engineer was hired to size the boiler for servicing only Fire Station #1 and to assess other features of the 1964 vintage system. Three options were proposed to upgrade the system for both building comfort and energy efficiency, with two of those options being viable solutions. Option 3 proposed in the study, a variable refrigerant volume system, is the most efficient and has the best payback and would be the best option for the newly remodeled fire station. This project significantly effects building occupant comfort/quality (PM05) and potentially generates emergency and non-emergency repairs (PM01-3). Costs are from the 2011 study and could be outdated. Further discussion about this replacement and the fire station I remodel need to occur in the next 12 months to fine tune this project.

ALTERNATIVES CONSIDERED

Replacement of the current boiler with another steam boiler is an option but would require the opening of multiple walls throughout the building to replace the older steam lines. Three options were reviewed and a summary report for each option was included in the analysis done by the engineer, CTA Engineers. The project includes boiler replacement, distribution line replacement, and changing out the old pneumatic controls with a digital control system. This information allows for proper sizing of the boiler. It's best to replace the boiler as part of the planned improvements for the building if the renovation is going to be done in the near future.

ADVANTAGES OF APPROVAL

The proposed option will better address the variable heating needs of the building – work areas, living areas, and fire bays. The proposed system is designed for the current configuration of the building and could be supplemented to handle the additional square footage proposed when the dorm area of the station is increased. The proposed system is in line with the Municipal Climate Action Plan. Planning for the replacement of the current boiler prior to failure of the unit will be most cost effective.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The recommended system would result in an approximate \$9,000 per year in energy savings at current utility rates. The payback would be about 28 years.

FUNDING SOURCES

Fire Equipment and Capital Replacement

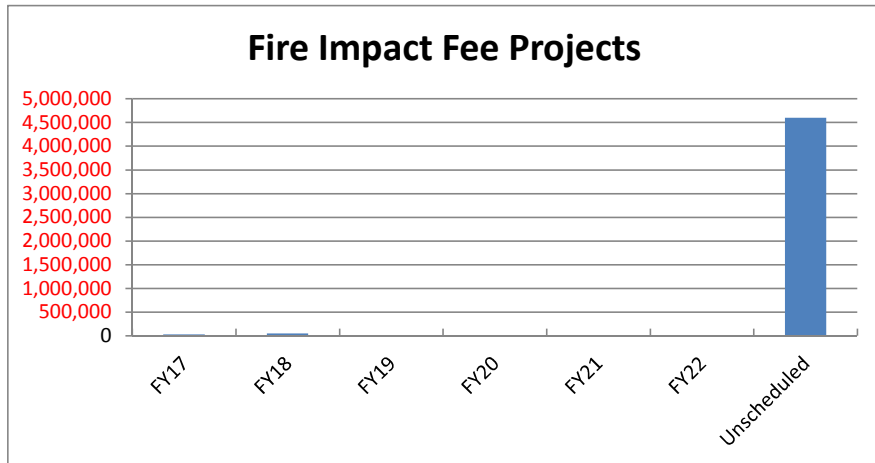
**Fire Impact Fee
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,259,601	\$ 1,546,501	\$ 1,858,751	\$ 2,239,114	\$ 2,638,494	\$ 3,057,844	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 311,900	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350	\$ 440,317	\$ -
Plus: FIF07 Engine #4 - Voter Approved Bond							
Plus: FIF06 Station #4 - Voter Approved Bond							
Less: Scheduled CIP Project Costs	\$ (25,000)	\$ (50,000)					\$ (4,600,000)
Projected Year-End Cash Dedicated to CIP	\$ 1,546,501	\$ 1,858,751	\$ 2,239,114	\$ 2,638,494	\$ 3,057,844	\$ 3,498,161	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Fire Impact Fee Revenues	\$ 311,973	\$ 345,000	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 311,973	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350	\$ 440,317
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Fire Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 311,973	\$ 362,250	\$ 380,363	\$ 399,381	\$ 419,350	\$ 440,317

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Impact Fees
Fire

FIF06	FIRE IF	FIRE STATION #4							\$3,900,000
FIF07	FIRE IF	FIRE ENGINE, STATION #4							\$700,000
FIF08	FIRE IF	IMPACT FEE STUDY - FIRE	\$50,000						
			\$50,000						\$4,600,000

<i>Summary for Impact Fees Fire (3 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$50,000					\$4,600,000

CIP Project Fund
Impact Fees Fire

DEPARTMENT
FIRE IF

PROJECT NUMBER
FIF06

PROJECT NAME
FIRE STATION #4

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$3,900,000

DESCRIPTION OF PROJECT

This project was identified as a priority in the adopted 2006 Fire Protection Master Plan but should be better defined in the 2017 update as the city has changed a lot since 2006. While we won't have the updates to the master plan for another 6-8 months we anticipate that it will recommend a fourth fire station in the next 5 years thus we are scheduling this in FY-22 for planning purposes. Once we have the Master Plan update back this section will need to be re-addressed before making additional plans. Portions of the City are located such that our response time exceeds four to six minutes for fire and medical emergencies. Land acquisition costs are not included in the proposed budget number. While the City currently owns the site on the southwest corner of 19th Avenue and Graf Street, which was identified as an ideal site for a station in 2006, that is subject to change with the 2016 Master Plan update.

ALTERNATIVES CONSIDERED

The budget number associated with this project is the same as the cost of Fire Station 3. A smaller station may be an option for this project and looking at building in areas where the city currently owns property could also reduce the cost of construction. Delaying the building of the station is an option but would require an understanding that some areas are going to be subject to longer than normal response times. Other options to be evaluated from 2017 Fire Protection Master Plan.

ADVANTAGES OF APPROVAL

The completion of this project would enhance our ability to respond to growing parts of the community within a time frame that has been historically acceptable to the citizens of Bozeman. The additional station also has the potential to have a positive impact on our ISO rating and encourage additional growth in areas of the city.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on operations and maintenance costs. The City's General Fund will bear the annual operating and maintenance expenses associated with this facility, estimated at \$1,600,000, including all crew personnel.

FUNDING SOURCES

75% Fire Impact Fees (\$2,925,000), 25% Voter Approved Bond (\$975,000.)

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Fire

FIRE IF

FIF07

PROJECT NAME

FIRE ENGINE, STATION #4

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$700,000

DESCRIPTION OF PROJECT

This project is the purchase of an engine and accompanying equipment for use out of new Fire Station 4. It will be necessary to have this engine at the Station when it opens. There is an estimated 12 month lead time in delivery of this type of equipment, thus this would need to be ordered a year before the opening of Fire Station 4. This estimated cost is for the apparatus and the majority of the equipment needed for service delivery.

ALTERNATIVES CONSIDERED

It may be valuable for ISO purposes to evaluate the purchase of a quint apparatus which is a Fire Engine with a ladder mounted on it that is smaller than Ladder 1. We also could use the 2006 Pierce reserve engine at Station 4. This would leave city with only one reserve fire engine to cover for 4 front line apparatus, a 1989 Pierce. The 2006 Pierce could require updates to make the apparatus serviceable as front line apparatus, but it is already 11 years into its current service life. There is also the option to purchase a used piece of apparatus.

ADVANTAGES OF APPROVAL

Purchase of this unit will adequately equip Station #4 for fire and other emergency responses.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be used for annual operating and maintenance costs. The City's General Fund will pay for the increased fuel, maintenance and insurance costs associated with this engine, estimated at \$30,000 per year.

FUNDING SOURCES

75% Fire Impact Fees (\$525,000), 25% Voter Approved Bond (\$175,000).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Fire

FIRE IF

FIF08

PROJECT NAME

IMPACT FEE STUDY - FIRE

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$50,000

DESCRIPTION OF PROJECT

An update of our current Fire Impact Fee calculation should be completed. It will be most helpful to have this done after we make an update to our Fire Service Master Plan, which is expected to take place in FY17.

ALTERNATIVES CONSIDERED

None. Statute requires an update to this calculation.

ADVANTAGES OF APPROVAL

Compliance with state law; accuracy in the amount of fee being charged.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Fire Impact Fees

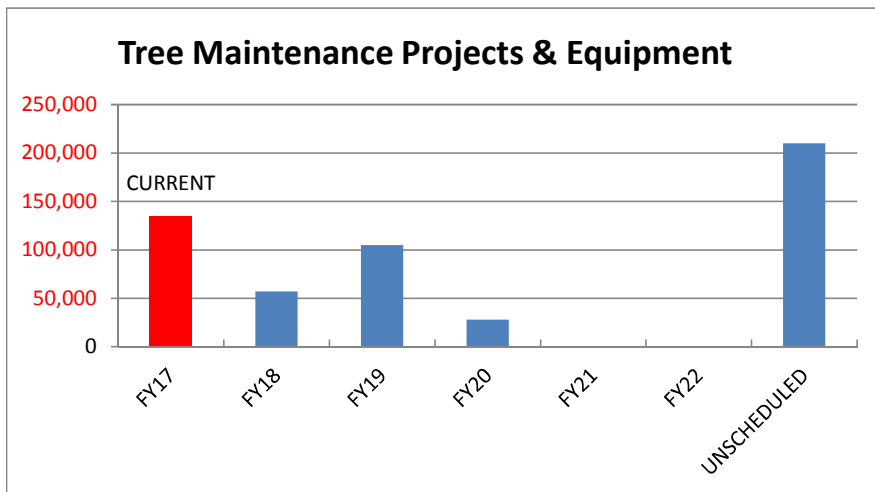
**Tree Maintenance Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					UNSCHEDULED
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 159,000	\$ 50,663	\$ 29,568	\$ (30,101)	\$ (3,161)	\$ 61,578	\$ -
Plus: Tree Mtc Revenues Dedicated to CIP	\$ 26,663	\$ 35,906	\$ 45,331	\$ 54,941	\$ 64,739	\$ 74,727	\$ -
Less: Scheduled CIP Project Costs	\$ (135,000)	\$ (57,000)	\$ (105,000)	\$ (28,000)		\$ -	\$ (210,000)
Projected Year-End Cash Dedicated to CIP	\$ 50,663	\$ 29,568	\$ (30,101)	\$ (3,161)	\$ 61,578	\$ 136,305	\$ (210,000)

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Tree Mtc Revenues	\$ 592,500	\$ 592,500	\$ 598,425	\$ 604,409	\$ 610,453	\$ 616,558
Estimated Annual Increase - Attributed to Annexations		1%	1%	1%	1%	1%
Total Estimated Revenues	\$ 592,500	\$ 598,425	\$ 604,409	\$ 610,453	\$ 616,558	\$ 622,723
Current Revenues Dedicated to CIP %	3.2%	4.5%	6.0%	7.5%	9.0%	10.5%
Plus: Increase Dedicated to CIP	1.3%	1.5%	1.5%	1.5%	1.5%	1.5%
Total % Dedicated to CIP	4.5%	6.0%	7.5%	9.0%	10.5%	12.0%
Total Estimated Revenues Dedicated to CIP	\$ 26,663	\$ 35,906	\$ 45,331	\$ 54,941	\$ 64,739	\$ 74,727

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Tree Maintenance District									
	FOR07	FORESTRY	FORESTRY VEHICLE REPLACEMENTS			\$28,000			
	FOR10	FORESTRY	STUMP GRINDER	\$24,000					
	FOR11	FORESTRY	LOG LOADER & TRUCK		\$105,000				
	FOR12	FORESTRY	VEHICLE FOR FORESTRY SUPERINTENDENT	\$33,000					
	FOR13	FORESTRY	AERIAL LIFT / BUCKLET TRUCK						\$210,000
				\$57,000	\$105,000	\$28,000			\$210,000

<i>Summary for Tree Maintenance District (5 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$57,000	\$105,000	\$28,000			\$210,000

CIP Project Fund
Tree Maintenance District

DEPARTMENT
FORESTRY

PROJECT NUMBER
FOR07

PROJECT NAME						
Forestry Vehicle Replacements						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$28,000			

DESCRIPTION OF PROJECT

This is a request to replace a 1999 Ford 1/2 ton pickup truck. #2728 has 95,000 miles and the clutch needs replacement.

ALTERNATIVES CONSIDERED

Continue to use and repair existing vehicle. As directed by Commission.

ADVANTAGES OF APPROVAL

Replacing this pickup will provide the Forestry division with more reliable truck, improve safety, lower exhaust emissions, tow trailers with its tow package, and work as needed.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Operating costs (maintenance and fuel/oil) of a newer vehicle are expected to be lower.

FUNDING SOURCES

100% Tree Maintenance District Fund

CIP Project Fund
Tree Maintenance District

DEPARTMENT
FORESTRY

PROJECT NUMBER
FOR10

PROJECT NAME
STUMP GRINDER

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$24,000					

DESCRIPTION OF PROJECT

This is a request to replace a 1996 Vermeer stump grinder. This would be a scheduled replacement of an department forestry equipment that is nearing 20 years of age. Forestry needs a larger, and more modern stump grinder. Additional info: #2671 – 1996 Vermeer 630B Stump Grinder
350 Hours Replace All Wiring Replace Cutter Belts

ALTERNATIVES CONSIDERED

Continue to use existing equipment. As directed by Commission.

ADVANTAGES OF APPROVAL

Replacing this equipment will provide the Forestry division with an larger and more reliable piece of equipment. Also it will improve productivity and will be safer for the operator. Trade in on new purchase or put in public auction.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal maintenance and upkeep.

FUNDING SOURCES

100% Tree Maintenance District Fund

CIP Project Fund
Tree Maintenance District

DEPARTMENT
FORESTRY

PROJECT NUMBER
FOR I I

PROJECT NAME
LOG LOADER & TRUCK

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$105,000				

DESCRIPTION OF PROJECT

This a request to replace a 2001 Ford F650. Forestry is moving up an unscheduled request to FY19. This piece of Forestry equipment is both unsafe and impractical. Additional info: #3125 – 2001 Ford F650, National Crane N50, Palift Hydraulic Dump, 10,000 miles/1100 hours. Hydroboost Brake System Repairs, Leaky Rear Seals, transmission slip, GVWR 26000 Max – 24500 lbs. empty. Not True Forestry style Equipment.

ALTERNATIVES CONSIDERED

Continue to use existing vehicle. As directed by Commission.

ADVANTAGES OF APPROVAL

Replacing this Forestry equipment will provide better production and improved safety to the operator. This truck and crane was pieced together and is over its safe gvw nearly empty. Replace for a true urban Forestry log and brush loader. Trade in or public auction the whole thing. No other City department can use it or any part of it.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Tree Maintenance District Fund

CIP Project Fund
Tree Maintenance District

DEPARTMENT
FORESTRY

PROJECT NUMBER
FOR12

PROJECT NAME						
Vehicle for Forestry Superintendent						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$33,000					

DESCRIPTION OF PROJECT

½ Ton pickup or suv for the Forestry superintendent. New position added in FY17 in support of the Urban Forestry Management Plan.

ALTERNATIVES CONSIDERED

Lease or purchase Toyota Prius hybrid

ADVANTAGES OF APPROVAL

As described in the Urban Forestry Plan.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal maintenance and upkeep.

FUNDING SOURCES

100% Tree Maintenance District

CIP Project Fund
Tree Maintenance District

DEPARTMENT
FORESTRY

PROJECT NUMBER
FOR13

PROJECT NAME
Aerial Lift / Bucket Truck

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$210,000

DESCRIPTION OF PROJECT

Replace 2001 #3069 C7500 HI-Ranger bucket truck. This Forestry equipment is nearing its 20 year anniversary. 11,000 miles/4,000 hours. This truck has been the main workhorse for the division and is showing its wear. Replacement would give us a modern truck with a higher working height and new safety items.

ALTERNATIVES CONSIDERED

Continue to use existing vehicle. As directed by the commission.

ADVANTAGES OF APPROVAL

Replacement of this equipment provides the division with a more reliable bucket truck. Improves operator safety, lowers exhaust emissions, and gives us the overall working height we need for the City's largest trees. Sell by public auction the existing bucket truck.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Tree Maintenance District Fund

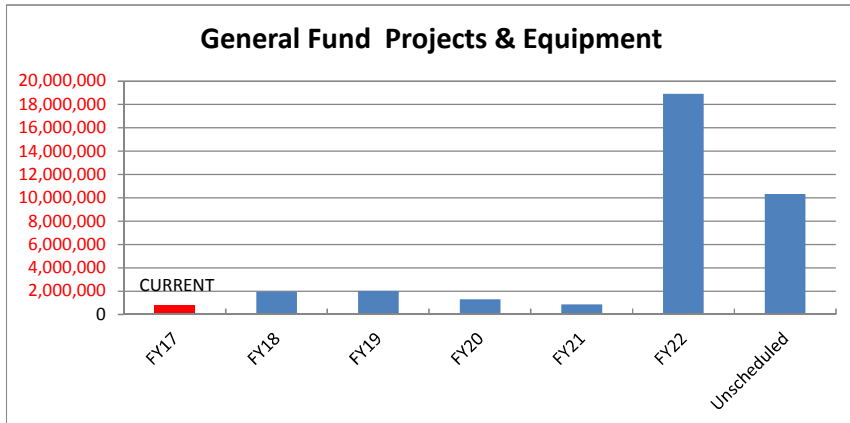
**General Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Balance Dedicated to CIP	\$ 750,760	\$ -	\$ 292,071	\$ 45,883	\$ (8,698)	\$ 385,631	
Plus: General Fund Revenues Dedicated to CIP		\$ 872,821	\$ 1,026,172	\$ 1,182,504	\$ 1,194,329	\$ 1,206,272	\$ -
Plus: Added Mills Dedicated to GF Capital: 2 Mills		\$ -	\$ -	\$ -	\$ -	\$ -	
Plus: 50% of General Fund Cash Carryover (estimated)		\$ -	\$ -	\$ -	\$ -	\$ -	
Plus: GF231 - Cem. Irrigation Project - Reserve Used for Grant Match		\$ 200,000	\$ 200,000				
Plus: GF282 - Purchase of Property Adjacent to City Hall, Reserve Used		\$ 560,000					
Plus: GF286 - Veterans Cemetery Project - Reserve Used			\$ 88,000	\$ 40,000	\$ 45,000		
Plus: GF275 - Fiber Optic Conduit, Mill Levy Increase (~0.3 mills)		\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	
Plus: GF280 - Story Mansion Sewer Repair, from Story Mansion Fund		\$ 18,000					
Plus: GF052 - Police Non-Patrol Vehicle, from Donation		\$ 18,000					
Plus: Bond Issue: Indoor/Outdoor Aquatics Facility						\$ 16,500,000	
Plus: Swim Center/Bogert Bond Issue (with Aquatics Facility question)						\$ 1,402,000	
Plus: Intercap Loan - GF266 Story Mill Park Center Imps.		\$ 188,500					
Plus: Intercap Loan - GF206, GF254 Bronken & Rose Park Imps.		\$ 375,246					
Plus: Intercap Loan - GF260, GF261 Sports Complex Imps.			\$ 431,500				
Plus: GF257 - Donation from Baracuda Swim Team	\$ 50,000						
Less: Scheduled CIP Project Costs	\$ (800,760)	\$ (1,965,496)	\$ (2,016,860)	\$ (1,302,085)	\$ (870,000)	\$ (18,923,700)	\$ (10,320,183)
Projected Year-End Cash Dedicated to CIP	\$ -	\$ 292,071	\$ 45,883	\$ (8,698)	\$ 385,631	\$ 595,203	

Assumptions Made for Revenue Estimates:

		Projected				
		FY18	FY19	FY20	FY21	FY22
Estimated Annual General Fund Revenues	\$ 28,354,746	\$ 28,354,746	\$ 28,638,293	\$ 28,924,676	\$ 29,213,923	\$ 29,506,062
Estimated Growth in General Fund Revenues		1%	1%	1%	1%	1%
Total Estimated General Fund Revenues	\$ 28,354,746	\$ 28,638,293	\$ 28,924,676	\$ 29,213,923	\$ 29,506,062	\$ 29,801,123
Current Revenues Dedicated to CIP %	2.6%	2.6%	3.0%	3.5%	4.0%	4.0%
Plus: Increase Dedicated to Capital Improvements %		0.4%	0.5%	0.5%	0.0%	0.0%
Total % Dedicated to CIP		3.0%	3.5%	4.0%	4.0%	4.0%
Total Estimated Revenues Dedicated to CIP		\$ 872,821	\$ 1,026,172	\$ 1,182,504	\$ 1,194,329	\$ 1,206,272

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PROJ.	DEPARTMENT	PROJECT NAME	RATING	FY18	FY19	FY20	FY21	FY22	Unscheduled
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CIP PROJECT FUND: General Fund

Sorted by Department and Rating

GF231	CEMETERY	CEMETERY IRRIGATION PROJECT	44	\$200,000	\$200,000				
GF083	CEMETERY	BACKHOE	42			\$110,000			
GF116	CEMETERY	CEMETERY VEHICLE REPLACEMENTS	34		\$45,000				
GF268	CEMETERY	SOUTHWEST MONTANA VETERAN'S CEMETERY	34		\$88,000	\$40,000	\$45,000		\$360,000
GF252	CEMETERY	CEMETERY COLUMBARIUM	32	\$50,000			\$55,000		
GF010	CEMETERY	CEMETERY MOWER REPLACEMENTS	25	\$16,000	\$16,000	\$16,000			
GF275	ECONOMIC DEVE	FIBER OPTIC CONDUIT AND VAULTS	29	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
GF245	FACILITY - CH	ENERGY PROJECTS – CITY HALL	43				\$75,000		
GF103	FACILITY - CH	AMERICAN'S WITH DISABILITIES ACT (ADA) COMPLIANCE IMPROVEMENTS	42	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
GF272	FACILITY - CH	SITE SECURITY UPGRADE - BUILDING LOCKS	37	\$15,000	\$15,000	\$15,000	\$15,000		
GF241	FACILITY - CH	REPLACEMENT OF CITY HALL AC CONDENSING UNIT – ROOF TOP	36		\$50,000				
GF274	FACILITY - CH	CITY HALL - BOZEMAN CREEK BRIDGE IMPROVEMENTS	35	\$25,000					
GF219	FACILITY - CH	ADDITION TO CITY HALL, CONSOLIDATION OF SERVICES	28						\$5,500,000
GF271	FACILITY - CH	CITY HALL NEW PARKING LOT	23						\$250,000
GF273	FACILITY - PROF	PROFESSIONAL BUILDING - ELECTRICAL UPGRADE	50	\$75,000					
GF001	FACILITY - PROF	PROFESSIONAL BUILDING ELEVATOR REPLACEMENT	33						\$66,600
GF199	FACILITY - PROF	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	27		\$35,779				
GF157	FACILITY - SC	SENIOR CENTER ELEVATOR	37					\$68,000	
GF203	FACILITY - SC	BOZEMAN SENIOR SOCIAL CENTER EXTERIOR ENVELOPE IMPROVEMENTS.	32	\$64,750					
PW01 - S	FACILITY - SH	SHOPS FACILITY EXPANSION PLAN	38		\$10,000				

PROJ.	DEPARTMENT	PROJECT NAME	RATING	FY18	FY19	FY20	FY21	FY22	Unscheduled
GF282	FACILITY-CH	PURCHASE OF PROPERTY ADJACENT TO CITY HALL	21	\$560,000					
GF227	FINANCE	ERP REPLACEMENT / UPGRADE "SUNGARD REPLACEMENT / UPGRADE"	50						\$333,333
GF224	FINANCE	SUNGARD ANALYTICS NOW COGNOS BI (BUSINESS INTELLIGENCE) WEB-BASED REPORTING SUITE	37			\$34,340			
GF080	I.T.	REMOTE CLOSET SWITCHES, ROUTER AND WIRELESS AP REPLACEMENT	50	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
GF265	I.T.	GENERAL FUND SERVER REPLACEMENT	50		\$40,000		\$36,000		
GF196	I.T.	ROOFTOP COOLING UNIT FOR THE PROFESSIONAL BUILDING DATA CENTER	47					\$20,000	
GF229	I.T.	ISCSI STORAGE REPLACEMENT	47			\$40,000			
GF062	I.T.	PERSONAL COMPUTER (PC) REPLACEMENT	45	\$43,000	\$48,000	\$55,000	\$57,000	\$50,000	
GF233	I.T.	VEHICLE REPLACEMENT	38						\$99,000
GF263	I.T.	POLICE VIDEO EVIDENCE STORAGE AND BACKUP	32	\$50,000				\$40,000	
GF199	I.T.	PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2	27		\$131,581				
GF115	PARKS	PARK VEHICLE REPLACEMENTS	63		\$45,000	\$30,000			\$105,000
GF260	PARKS	SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' COTTONWOOD ROAD AREA WATER & WASTEWATER IMPROVEMENTS	45		\$364,000				
GF261	PARKS	SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' OAK STREET AREA WATER IMPROVEMENTS	45		\$67,500				
GF034	PARKS	LARGE DECK MOWER	43		\$90,000		\$58,000		\$58,000
GF278	PARKS	GRIFFIN AT STORY MILL PARK ROAD IMPROVEMENT - .26 MILE	42						\$260,000
GF279	PARKS	STORY MILL ROAD IMPROVEMENT - .17 MILE	42						\$170,000
GF280	PARKS	STORY MANSION SEWER REPAIR	42	\$18,000					
GF281	PARKS	BOZEMAN POND PARK & AASHEIM BALLFIELDS ROAD EXPANSION - .17 MILE & .09 MILE	42						\$260,000
GF254	PARKS	25TH STREET FROM OAK TO TSCHACHE	40	\$287,000					

PROJ.	DEPARTMENT	PROJECT NAME	RATING	FY18	FY19	FY20	FY21	FY22	Unscheduled
PW03	PARKS	VEHICLE MAINTENANCE BUILDING DESIGN & STORAGE CONSTRUCTION	38		\$50,000				
GF031	PARKS	PARK IMPROVEMENT GRANTS	37			\$150,000		\$150,000	
GF084	PARKS	PARKS RESTROOM UPGRADES	37	\$32,000			\$80,000		\$470,000
GF092	PARKS	PLAYGROUND EQUIPMENT	37		\$70,000	\$80,000			
GF190	PARKS	4-WHEELER ATV REPLACEMENT	37						\$14,000
GF205	PARKS	PROST PLAN UPDATE	35		\$100,000				
GF250	PARKS	SPLASH PADS	35					\$195,700	\$180,250
GF253	PARKS	TURF SWEEPER	35	\$38,000					
GF270	PARKS	SNOW PLOWING VEHICLE	28		\$70,000				\$75,000
GF108	PARKS	PARK SIDEWALK REPLACEMENTS	27					\$208,000	
GF206	PARKS	BRONKEN PARK PATHWAY	27	\$88,246					
GF148	PARKS	BMX PARKING LOT	25						\$85,000
GF191	PARKS	UPGRADE SOFTBALL COMPLEX LIGHTING	22						\$825,000
GF195	PARKS	AERATOR	19		\$32,000				
GF165	POLICE	PATROL MOTORCYCLE REPLACEMENTS	66				\$30,000		\$30,000
GF053	POLICE	PATROL VEHICLE REPLACEMENT	63	\$122,000	\$124,000	\$189,000	\$192,000	\$195,000	\$661,000
GF166	POLICE	PORTABLE RADIO REPLACEMENTS	57		\$250,000	\$250,000			
GF262	POLICE	POLICE K9	47						\$17,000
GF235	POLICE	EVIDENCE BAR CODING SYSTEM	45						\$11,000
GF052	POLICE	POLICE - NON-PATROL VEHICLES	38	\$18,000				\$20,000	\$465,000
GF140	RECREATION	LINDLEY CENTER PARKING LOT RENOVATION	47				\$52,000		
GF137	RECREATION	SWIM CENTER - FACILITY REPAIRS AND REPLACEMENTS	45					\$947,000	
GF056	RECREATION	DESIGN & CONSTRUCT INDOOR/OUTDOOR FAMILY AQUATICS CENTER	44				\$100,000	\$16,500,000	
GF238	RECREATION	BOGERT POOL RENOVATION	40					\$455,000	
GF209	RECREATION	LINDLEY CENTER FULL UPGRADE: RESTROOMS, WINDOWS, SIDING, KITCHEN, ROOF, FLOORING	38			\$217,745			

PROJ.	DEPARTMENT	PROJECT NAME	RATING	FY18	FY19	FY20	FY21	FY22	Unscheduled
GF266	RECREATION	STORY MILL COMMUNITY CENTER UPGRADE: HVAC, ELECTRICAL, FIRE PROTECTION	37	\$188,500					

<i>Summary for General Fund (66 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$1,965,496	\$2,016,860	\$1,302,085	\$870,000	\$18,923,700	\$10,320,183

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - PROF

PROJECT NUMBER
GF001

PROJECT NAME						
PROFESSIONAL BUILDING ELEVATOR REPLACEMENT						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$66,600

DESCRIPTION OF PROJECT

The elevator in the Professional Building is a three stop Otis elevator. The elevator was installed when the second floor was added in 1972. Since the City purchased the building we have remodeled several areas on both the main floor and second floor – the elevator remains original and is approaching 44 years of continued use. The elevator is to the point where many technological improvements have been made in elevator technology and a change out would yield both improved service and some reductions in energy costs. The elevator is inspected annually and is still safe although there are some inherent problems with the operation of the elevator. Of the four elevators owned by the City, this system experiences the most downtime. One big problem is the leveling systems and the way the rails and tracks are mounted in the building. The elevator will malfunction and require resetting if it loaded heavy to one side. A new car and track system would solve the nuisance trips associated with this aging elevator.

ALTERNATIVES CONSIDERED

Continue to maintain and adjust the elevator operating systems throughout the year.

ADVANTAGES OF APPROVAL

Increase reliability and reduced maintenance costs. Some electrical savings associated with improved electric motors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs

FUNDING SOURCES

General Fund and Building Inspection Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 33

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
CEMETERY

PROJECT NUMBER
GF010

PROJECT NAME
CEMETERY MOWER REPLACEMENTS

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$16,000	\$16,000	\$16,000			

DESCRIPTION OF PROJECT

Ongoing cemetery mower replacement program. Scheduled on a five year replacement program, with the oldest cemetery mower now being 5 years old. These mowers are used to complete the mowing 53+ acres of turf inside and outside the cemetery which include mowing of the open space, trails, and the weekly mowing through the headstones.

ALTERNATIVES CONSIDERED

Keep older mowers for extended periods of time, which has been done as we moved to a 5 year replacement program instead of a 3 year program.

ADVANTAGES OF APPROVAL

Less down time; Decreased repair /maintenance costs; High trade –in value; Increased productivity; Less emissions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Routine maintenance, oil changes, fuel.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

25

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF031

PROJECT NAME					
PARK IMPROVEMENT GRANTS					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$150,000		\$150,000	

DESCRIPTION OF PROJECT

The General Fund contributes funds every other year towards improving park infrastructure through implementation of park master plans. This grant program is a matching funds program in which the City receives a minimum 1 to 1 match from the recipient. The Commission has established a formal grant policy by resolution. By switching to every other year, and also increasing the allocation, bigger projects can be accomplished, though these projects will take more time to complete. For FY20, parks department is interested in partnering with a local group for a Pickleball courts construction project.

ALTERNATIVES CONSIDERED

Handle park equipment and improvement requests on an adhoc basis, as various donors or service groups bring them forward. Allocate more or fewer dollars to the program.

ADVANTAGES OF APPROVAL

This matching funds program provides critical infrastructure to the park system by utilizing the talents of our community members through matching funds, donations, labor in lieu of and numerous specialized services. All of the above can be used as a match in this program

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: New infrastructure and facilities bring on increased maintenance and labor costs. The nature of each project funded will determine the continued costs. Some projects have very low ongoing costs, others have relatively higher costs.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 37

LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	7
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF034

PROJECT NAME
LARGE DECK MOWER

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$90,000		\$58,000		\$58,000

DESCRIPTION OF PROJECT

The mower request in FY18 would be an addition of a large-deck sports turf mower, anticipated to be needed for additional parkland used for athletics, such as: Enterprise Park (formerly Lerner Park), Oak Springs Park, Adam Bronken Sports Complex, and the eventual 80 acre Bozeman Sports Complex, slated to open in 2018. All of which are on the City's west side. The City currently maintains over 150 acres of Formal Turf in the parks system.

ALTERNATIVES CONSIDERED

Continue to repair as break downs occur, Replace mowers as they breakdown, Lease mowers on a 3 - year program.

ADVANTAGES OF APPROVAL

Proper mowing of sports fields and formal parks are imperative to safety. Regular replacement will reduce maintenance costs and decrease the number of breakdowns we have been experiencing. Well mowed parks are an important reflection on our City and how it is perceived by visitors and citizens. New mowers will be more reliable, safer, productive, and will reduce the workload on the vehicle maintenance shop personnel. Well maintained sports fields have proven to be a vital component to the economic growth of our community, by attracting regional and state tournaments to Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Improve scheduling of mowing and increase crew efficiency because of reliable equipment.

FUNDING SOURCES

100% General Fund.

General Fund Project and Equipment Scoring		TOTAL RATING:	43
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF052

PROJECT NAME						
POLICE - NON-PATROL VEHICLES						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$18,000				\$20,000	\$465,000

DESCRIPTION OF PROJECT

The police department has unmarked (non-patrol) vehicles used by command staff, detectives and some support positions. Some of these vehicles are used for support operations, such as animal control, community resource officer, code compliance, etc. Command and detective vehicles are assigned and used to respond to emergency calls for command/control or investigations. Generally vehicle replacement of these vehicles involves buying used, lower mileage vehicles with some trade-in with higher mileage vehicles nearing the end of their useful life. Decisions on when to rotate these vehicles is usually high miles and track history of maintenance concerns. The FY18 vehicle is for a new detective position that will currently be using a car with 121,000 miles on it that is beginning to have some maintenance concerns. This car will have an estimated 130,000 miles at the time of replacement. The FY22 vehicle is to replace a Blazer that is not ideal for police operation, has already shown maintenance concerns, and currently has 65,000 miles with an estimated 100,000 at time of replacement. The \$465,000 unscheduled amount represents non-patrol (unmarked) vehicles that will need replacing after FY23.

ALTERNATIVES CONSIDERED

Adopt the Water Fund Capital Improvement Plan (CIP) for Fiscal Years 2018-2022.

ADVANTAGES OF APPROVAL

This plan involves two replacements over 5 year period and will provide a means to respond and control major events and investigation of violent and complex crimes.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund; Use of Police Donation to replace a vehicle in FY18.

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	38
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF053

PROJECT NAME
PATROL VEHICLE REPLACEMENT

- New
 Replacement
 Equipment
 Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$122,000	\$124,000	\$189,000	\$192,000	\$195,000	\$661,000

DESCRIPTION OF PROJECT

This plan allows for a number of patrol cars to be replaced each year, including all of the necessary vehicle equipment (top lights, sirens, radio, mobile data terminals, video cameras, electronic reporting / ticketing systems, etc.) Costs are based on actual costs in FY17 of \$61,000 per vehicle and anticipated increases in FY18 and beyond. Patrol vehicles are an essential item in the operation of the Bozeman Police Department, being the primary tool used for over 50,000 Response to Calls each year. Police vehicles must be available for police patrol and emergency call response 24 hours a day, 365 days a year. These vehicles are used to respond to both emergency and non-emergency calls for service, investigate vehicle crashes, conduct traffic enforcement and for general patrol duties. These patrol vehicles average approximately 20,000 miles annually. Vehicles earmarked for replacement will have a minimum estimated 110,000 miles per vehicle, which with police emergency response tends to be the rough time when police vehicles are no longer safe for emergency response. An additional 11 patrol vehicles will need replacement after FY23.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

This helps us plan for safe and reliable emergency response vehicles for patrol use, as well as projected lower annual maintenance costs. This program would allow for the replacement of older, higher mileage patrol cars that become less reliable and more costly to repair. Equipment components mounted inside the car can sometimes be transferred from the old car to the new car, depending on the condition. These replacements continue to bring the department closer to 100% matching Ford SUV patrol vehicles.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

These are replacement vehicles. Recurring costs frequently decline as newer cars replace older ones. Maintenance costs have stabilized due to regularly scheduled service, even though calls for service have increased and additional officers have been hired.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

63

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

Police Vehicle Details

Project Number	Asset #	Make	Current Mileage	FY18	FY19	FY20	FY21	FY22	Unscheduled	Notes
99	GF052	3138	02 Chevy Impala	122,000	\$18,000					Mileage Oct16
	1617	89 Ford Truck	125,000						\$0	Mileage Oct16
	2979	01 Chevy Impala	119,000						\$0	Mileage Oct16
	3280	05 Chevy Impala	157,000						\$0	Mileage Oct16
	2696	99 Dodge Dakota	105,000						\$0	Mileage Oct16
	3274	01 Dodge Durang	112,000						\$0	Mileage Oct16
	3724	04 Chevy Suburba	35,000						\$0	Mileage Oct16
	3480	08 Chevy Uplande	106,000						\$0	Mileage Oct16
	3760	07 Toyota Sienna	37,000						\$0	Mileage Oct16
	3679	10 Chevy Impala	35,000						\$20,000	Mileage Oct16
	3739	13 Chevy Impala	37,000						\$20,000	Mileage Oct16
	3680	11 Chevy Impala	39,000						\$20,000	Mileage Oct16
	3381	08 Chevy Impala	41,000						\$20,000	Mileage Oct16
	3678	10 Chevy Malibu	49,000						\$20,000	Mileage Oct16
	3383	08 Chevy Impala	55,000						\$20,000	Mileage Oct16
	3384	08 Chevy Impala	52,000						\$20,000	Mileage Oct16
	3677	10 Chevy Malibu	44,000						\$20,000	Mileage Oct16
	3230	04 Dodge Dakota	130,000						\$20,000	Mileage Oct16
	3151	03 Chevy Impala	66,000						\$20,000	Mileage Oct16
	3438	08 Chevy Impala	63,000						\$20,000	Mileage Oct16
	3443	08 Chevy Impala	60,000						\$20,000	Mileage Oct16
	3445	08 Chevy Impala	55,000						\$20,000	Mileage Oct16
	3374	06 Ford Explorer	84,000						\$20,000	Mileage Oct16
	3681	10 Ford Escape	43,000						\$20,000	Mileage Oct16
	3382	08 Chevy Impala	83,000						\$20,000	Mileage Oct16
3140	09 Chevy Impala	75,000						\$20,000	Mileage Oct16	

Project Number	Asset #	Make	Current Mileage	FY18	FY19	FY20	FY21	FY22	Unscheduled	Notes
GF052	3790	15 GMC Sierra	6,000						\$30,000	Mileage Oct16
		17 Ford Intercept	0						\$55,000	Mileage Oct16
	3368	07 Chevy Trailblaz	64,000					\$20,000.00		Mileage Oct16
GF053	3590	11 Chevy Impala	88,000	\$61,000						Mileage Oct 16
	3589	11 Chevy Impala	90,000	\$61,000						Mileage Oct 16
	3499	09 Chevy Impala	69,000		\$62,000					Mileage Oct 16
	3627	12 Chevy Impala	68,000		\$62,000					Mileage Oct 16
	3628	12 Chevy Impala	54,000			\$63,000				Mileage Oct 16
	3595	11 Chevy Impala	57,000			\$63,000				Mileage Oct 16
	3630	12 Chevy Impala	59,000			\$63,000				Mileage Oct 16
	3370	07 Chevy Impala	88,806							Mileage Oct 16
	3742	15 Ford Intercept	27,000						\$66,000	Mileage Oct 16
	3661	13 Chevy Impala	32,000						\$66,000	Mileage Oct 16
	3740	15 Ford Intercept	22,000						\$66,000	Mileage Oct 16
	3741	15 Ford Intercept	22,000						\$66,000	Mileage Oct 16
	4037	16 For Interceptor	10,000						\$66,000	Mileage Oct 16
	4038	16 Ford Intercept	8,000						\$66,000	Mileage Oct16
	4039	16 Ford Intercept	4,000						\$66,000	Mileage Oct16
	3660	13 Chevy Tahoe	27,000						\$66,000	Mileage Oct 16 – K9
	3697	14 Ford Intercept	45,000					\$65,000.00		Mileage Oct 16
	3659	13 Chevy Impala	40,000					\$65,000.00		Mileage Oct 16
	3699	14 Ford Intercept	37,000					\$65,000.00		Mileage Oct 16
	3698	14 Ford Intercept	44,000				\$64,000			Mileage Oct 16
3631	12 Chevy Tahoe	45,000				\$64,000			Mileage Oct 16 – K9	
3696	14 Ford Intercept	40,000				\$64,000			Mileage Oct 16	
Totals				\$140,000	\$124,000	\$189,000	\$192,000	\$215,000	\$953,000	

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF056

PROJECT NAME						
DESIGN & CONSTRUCT INDOOR/OUTDOOR FAMILY AQUATICS CENTER						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$100,000	\$16,500,000	

DESCRIPTION OF PROJECT

Indoor/Outdoor Aquatics Center. This item was identified as a “Top Ten Capital Facility Recommendation” in the PROST plan, adopted October 2007. The design phase in FY18 includes the preliminary design of the Family Aquatics Center. This project will need to be approved by the voters. It is estimated that an election would be offered in the fall of 2021.

ALTERNATIVES CONSIDERED

Do not build a community aquatics center.

ADVANTAGES OF APPROVAL

Community Benefits of an Aquatics Center: safe and healthy place for families to play, connected families, strong vital involved community, and increased community programs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs to include additional aquatic staff: Cost undetermined at this time.

FUNDING SOURCES

Bond and General Fund.

General Fund Project and Equipment Scoring			TOTAL RATING:	44
LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):		8
OPERATING BUDGET IMPACT (Up to 10):	0	COMMISSION WORKPLAN (Up to 10):		8
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):		3
FREQUENCY OF USE (Up to 5):	5			

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF062

PROJECT NAME					
PERSONAL COMPUTER (PC) REPLACEMENT					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$43,000	\$48,000	\$55,000	\$57,000	\$50,000	

DESCRIPTION OF PROJECT

This is a general item for replacement of personal computers and Servers for General Fund related jobs and services. (Enterprise and Special Revenue fund services pay for their own pc's and servers.) As of FY17, Personal Computers moved to a 5 year rotation before rotation. PC Replacements are one of the primary drivers of Help Desk Calls (PM01 & WL01) - aging computers can have more software and technical conflicts, and replaced PC's often require user support for newer versions of software, etc.

ALTERNATIVES CONSIDERED

Not replace computer/server hardware as frequently.

ADVANTAGES OF APPROVAL

City technology needs will be better met and the IT department will be able to more efficiently support employees and citizens.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 45

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	7	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	8	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF080

PROJECT NAME
REMOTE CLOSET SWITCHES, ROUTER AND WIRELESS AP REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	

DESCRIPTION OF PROJECT

Wan Site end of life replacements for switches and router throughout City to include City Hall, Professional Building, City Shops, Landfill, L&J, Library, WWTP, WTP, Swim Center, Beall Park, Cemetery. Smaller sites will be consolidated in one year. FY 15 - Prof-Building, Vehicle Maint. This equipment is critical to the City's technology network, supporting all of the department's performance measures related to system "uptime" (PM02-PM06) and workload measures related to number of hours the network and various software is "in service" (WL02-W06).

ALTERNATIVES CONSIDERED

Maintain current switches without critical support or maintenance.

ADVANTAGES OF APPROVAL

Maintain uptime for all WAN locations throughout the City to include phone services as well as data.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund – with costs shared with Enterprise, as location warrants.

General Fund Project and Equipment Scoring		TOTAL RATING:	50
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
CEMETERY

PROJECT NUMBER
GF083

PROJECT NAME
BACKHOE

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$110,000			

DESCRIPTION OF PROJECT

This piece of equipment would replace the current cemetery backhoe (2001- 2969 hours) that is used for burials an average of 2 times per week. This is the main piece of equipment utilized for cemetery burials.

ALTERNATIVES CONSIDERED

Continue to utilize the older backhoe and repair and maintain as necessary. Potentially, borrow from another department.

ADVANTAGES OF APPROVAL

Increased reliability and safety for staff and the families relying on cemetery services. The old cemetery backhoe could potentially be transitioned to the Parks Division.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Operating and repair costs are expected to be lower than the existing vehicle.

FUNDING SOURCES

100% General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	42
LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF084

PROJECT NAME					
PARKS RESTROOM UPGRADES					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$32,000			\$80,000		\$470,000

DESCRIPTION OF PROJECT

This project is the general replacement and upgrading of the City Park’s public restroom facilities. Other restrooms that need to be replaced- and/or built are: ; Rose Park (\$80,000) in FY 21; Beall Park (\$40,000)and a new addition, the Softball Complex (\$300,000 - Large Facility plus Concession Stand), BMX- Westlake Park (\$130,000) are unscheduled.

ALTERNATIVES CONSIDERED

Continue to try to maintain existing facilities. The Rose and BMX Park projects will provide restroom facilities in areas where currently none exist. The BMX project potentially could be part of the Midtown Urban Renewal District.

ADVANTAGES OF APPROVAL

Ease and efficiency of maintaining new restrooms; increased cleanliness of public facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Operating and repair costs are expected to be lower than the existing facilities.

FUNDING SOURCES

100% General Fund, BMX Park funding possible from TIF

General Fund Project and Equipment Scoring		TOTAL RATING:	37
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF092

PROJECT NAME
PLAYGROUND EQUIPMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$70,000	\$80,000			

DESCRIPTION OF PROJECT

The following playground equipment will eventually need to be replaced due to its age and condition: Replacement will bring equipment up to today's standards and reduce safety and liability concerns. Jarrett Park (FY19) and Christie Park (FY20) are identified as the playgrounds that need replacement, in that priority. In general, safety recommendations for playgrounds address: playground site elements, sight lines, equipment features and materials, surfacing materials, hardware, paints and finishes, and any other hazards that might be present. Playground repairs require same-day response given their critical safety implication. Currently, the Parks Division inspects and maintains 21 playgrounds city-wide and assists with another 18 HOA- maintained playgrounds with monthly inspections and recommendations. Since last year, new playgrounds have been constructed at The Lakes at Valley West, Meadow Creek Park (formerly known as Ainsworth Park), Legends, and the Bozeman Pond expansion.

ALTERNATIVES CONSIDERED

Keep existing equipment in place, maintain as we go

ADVANTAGES OF APPROVAL

Increased safety for community members.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal.

FUNDING SOURCES

100% General Fund.

General Fund Project and Equipment Scoring

TOTAL RATING:

37

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF103

PROJECT NAME					
AMERICAN'S WITH DISABILITIES ACT (ADA) COMPLIANCE IMPROVEMENTS					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

Replace or install ADA upgrades in various city-owned buildings. Work examples include: door hardware, handrails, parking signage and stalls, building access, etc. The Facilities Superintendent has been working with the ADA advisory committee to provide recommendations to the City on priority order for any upgrades or improvements that may be identified to make our facilities and programs more accessible. This money has been used, and will continue to be used to improve accessibility as demonstrates a commitment from the City to address ADA issues. Based on the initial review of the work to be done the dollar amount should be increased in order to complete the improvements within the needed timeframe.

ALTERNATIVES CONSIDERED

When remodels are initiated on buildings they are brought up to current ADA requirements as per regulations. There are changes to the ADA that took effect in March 2011. We will continue to make upgrades as changes are made to buildings but this budget item would accelerate the compliance for city buildings.

ADVANTAGES OF APPROVAL

It has been the policy of the city to meet the full spirit of the law as outlined in the ADA regulations. By taking the initiative to bring all our buildings up to current standards we can provide a positive example to the community in meeting the needs of people with restricted or limited mobility.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No significant costs are anticipated with these improvements.

FUNDING SOURCES

100% General Fund.

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	42
LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF108

PROJECT NAME						
PARK SIDEWALK REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$208,000	

DESCRIPTION OF PROJECT

Sidewalks Identified for replacement due to deteriorating cement, missing sections and heaving from weather and tree roots. New sidewalks must meet or exceed city code. Replacing the old sidewalk will result in a safer sidewalk year round and enable the sidewalk plows to better meet the snow removal municipal code. Costs of approximately \$11.75 square foot for rip and replace. Project 1: \$120,000 - Southside Park - replace 730' of sidewalk along South 5th Avenue and along West Alderson Street with new 6' (six foot) wide concrete sidewalk, and the related retaining wall. Project 2: \$88,000 - Cooper Park - replace the sidewalk around the entire block approximately 1875' total. This sidewalk serves as a main route to and from the University.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased safety for community members and efficiency of operation (plowing)

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: no estimate at this time

FUNDING SOURCES

General Fund.

General Fund Project and Equipment Scoring		TOTAL RATING:	27
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	0
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF115

PROJECT NAME					
PARK VEHICLE REPLACEMENTS					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$45,000	\$30,000			\$105,000

DESCRIPTION OF PROJECT

Parks Department utilizes vehicles for mowing, fertilization, irrigation, inspections, snow plowing and repairs of the city parks, comprising over 150 acres of formal turf and 220 acres of natural parkland. All vehicles are utilized until service related down-time for equipment and staff become problematic or safety is compromised. FY19 represents a one ton replacement. Dodge has ceased making parts for 2001 1-ton that is currently in the Parks fleet. The two current 1-tons in the Park fleet are used for plowing parking lots, ice rinks, hauling garbage, stone, and trail fines among other duties. The addition in FY20 of \$30,000 is for a ½ ton fleet vehicle to replace the 1991 Dodge with 5 year repair costs of #3,018. The unscheduled is for continued replacement of aging fleet vehicles which include an additional 1-ton, a hybrid car and an additional ½ ton. A detailed listing of the replacement plan, with vehicle mileage, has been sent to Finance. Mileage updated October 2016.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

This insures safe and reliable vehicles for park use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: These are replacements; recurring costs frequently decline as newer cars replace older ones. 5 year average on repairs to the Parks fleet - \$3,276 per vehicle.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

63

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

Parks Vehicle Replacements - Details

Project Number	Asset #	Make	Model Yr	Current Mileage	FY18	FY19	FY20	FY21	FY22	Unscheduled	Notes
GF115	3251	DODGE	2001	199,382						\$30,000	10/2016MILEAGE
	2691	FORD	1990	199,165							10/2016MILEAGE
	2503	Yellow Jeep Plow CJ-5	1976	197,065				\$0			
		Water Truck with light		194,370				\$0			
	1608	FORD	1986	187,861						\$30,000	10/2016MILEAGE
	5561	FORD	1997	187,386							10/2016MILEAGE
	3252	CHEVY 1/2 TON	1999	167,727							10/2016MILEAGE
	1691	DODGE	1985	165,912						\$30,000	10/2016MILEAGE
	249	JEEP	1978	161,825							10/2016MILEAGE
	497	LOADSTER DUMP	1976	145,418							10/2016MILEAGE
	2665	FORD EXPLORER	1996	142,913							10/2016MILEAGE
	1373	DODGE	1991	141,419			\$30,000				10/2016MILEAGE
	3116	FORD RANGER	1998	129,216							10/2016MILEAGE
	3161	FORD 1 TON W/ PUP	2000	122,173							10/2016MILEAGE
	3160	FORD 3 TON	2000	119,985							10/2016MILEAGE
	1999	CHEVROLET	1996	116,408							10/2016MILEAGE
	3117	Blue Dodge 1500 Ram	1998	111,741				\$0			
	2530	Emily's Truck Chevy 3	1997	105,038				\$0			
	3503	GMC (WHITE)	2010	79,414							10/2016MILEAGE
	5392	Blue Jeep Plow		76,945				\$0			
	3022	DODGE 3/4 TON	2001	66,492						\$15,000	10/2016MILEAGE

Project Number	Asset #	Make	Model Yr	Current Mileage	FY18	FY19	FY20	FY21	FY22	Unscheduled	Notes
GF115	3502	GMC (WHITE)	2010	62,072							I0/2016MILEAGE
	3624	GMC PICKUP	2012	37,927							I0/2016MILEAGE
	3023	DODGE I TON W/ D	2001	37,697		\$45,000					I0/2016MILEAGE
	3327	GMC 3/4 TON (MOW)	2006	28,867							I0/2016MILEAGE
	3449	GMC I TON DUMP	2008	25,535							I0/2016MILEAGE
	3767	GMC PICKUP	2015	11,203							I0/2016MILEAGE

Totals						\$45,000	\$30,000	\$0		\$105,000	
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CIP Project Fund
General Fund

DEPARTMENT
CEMETERY

PROJECT NUMBER
GF116

PROJECT NAME						
CEMETERY VEHICLE REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$45,000				

DESCRIPTION OF PROJECT

Cemetery Vehicle Replacement Plan - the Cemetery Department utilizes 1-Ton trucks for operations and maintenance of the Sunset Hills Cemetery. Asset# 1213 - 1989 1Ton 4x4, *41,155 miles - is critical to providing prompt burial services roughly twice a week and sanding/plowing cemetery roads. While it has relatively low miles, it has extremely low fuel economy (460 engine) which drives our recommendation to replace this 28 year old vehicle. *Mileage as of 11/2016.

ALTERNATIVES CONSIDERED

Keep maintaining #1213 until a new replacement is funded or replacement parts are no longer available.

ADVANTAGES OF APPROVAL

This insures safe and reliable vehicles for cemetery use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: These are replacements; recurring costs frequently decline as newer cars replace older ones

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

34

LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	5
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF137

PROJECT NAME						
SWIM CENTER - FACILITY REPAIRS AND REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$947,000	

DESCRIPTION OF PROJECT

The Swim Center requires numerous repair and equipment replacements which would be added to the Bond initiative for the Indoor/Outdoor Aquatics Center. These items include - gutter replacement/\$150,000; deck tile replacement/\$142,000; removal of ceiling tiles and grid and basic cosmetic improvements \$120,000; HVAC unit replacement/\$360,000; resurface pool/\$140,000; and replacement of front furnace \$35,000.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

These projects will help to ensure that we are able to maintain a safe and functional facility. The pool is extremely well utilized and repairs and replacements are necessary over time in order to continue to serve the community. Our energy consumption is currently being analyzed to determine the cost savings associated with an HVAC system designed for any aquatic environment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional annual operating and maintenance costs

FUNDING SOURCES

Bond

General Fund Project and Equipment Scoring		TOTAL RATING:	45
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	7	COMMISSION WORKPLAN (Up to 10):	7
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF 140

PROJECT NAME					
LINDLEY CENTER PARKING LOT RENOVATION					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$52,000		

DESCRIPTION OF PROJECT

Curb and overlay the parking lot at the Lindley Center and include ADA parking stalls. Install parking lot lights and bases, a dumpster pad and dumpster enclosure fence. This project aligns with section 10.10.1 of the PROST plan (adopted October 2007) that recommends that City parks, recreation facilities and trails are accessible to the greatest extent possible. Includes permit fees.

ALTERNATIVES CONSIDERED

Sealing and striping lot and not installing lights

ADVANTAGES OF APPROVAL

Comply with city codes, allow for more cars to be parked in the lot at a time, more organized parking which will make the lot safer and reduced liability, lights will help with public safety and parking lot/facility security, ADA spots will be designated which will make the lot accessible, the dumpster would be enclosed.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs to include stripping and periodic overlays.

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	47
LEVEL OF SERVICE (Up to 20):	13	DEPARTMENT PRIORITY (Up to 10):	9
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF 148

PROJECT NAME

BMX PARKING LOT

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$85,000

DESCRIPTION OF PROJECT

Installation of parking lot at Westlake BMX park, for which a design plan was completed in 2008.

ALTERNATIVES CONSIDERED

Do not install a parking lot

ADVANTAGES OF APPROVAL

Also access for Children's Memorial Park and Christmas tree drop off area.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Minimal. Clean-up, possible snow plowing, painting lines every few years

FUNDING SOURCES

100% General Fund, possible funding from TIF

General Fund Project and Equipment Scoring

TOTAL RATING:

25

LEVEL OF SERVICE (Up to 20):

10

DEPARTMENT PRIORITY (Up to 10):

3

OPERATING BUDGET IMPACT (Up to 10):

5

COMMISSION WORKPLAN (Up to 10):

0

SERVICE AREA (Up to 10):

2

ADOPTED CLIMATE PLAN (Up to 5):

0

FREQUENCY OF USE (Up to 5):

5

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - SC

PROJECT NUMBER
GF157

PROJECT NAME
SENIOR CENTER ELEVATOR

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$68,000	

DESCRIPTION OF PROJECT

The elevator at the Bozeman Senior Social Center is a three stop Otis elevator. The elevator was installed in early 1980 and is at the point where many technological improvements have been made in elevator technology. A change out would yield both improved service and some reductions in energy costs. While the elevator is inspected annually and is safe, it is used heavily by the members of the Senior Center. Planning ahead for the replacement of the elevator will be more cost effective and avoid unnecessary down time during the replacement process. The elevator maintenance contractor has recommended this be the first elevator replaced by the City.

ALTERNATIVES CONSIDERED

Continue to maintain and adjust the elevator operating systems as needed. Wait to replace the elevator until it physically breaks down or continue to monitor the operation and hold off on the replacement until the routine repair and maintenance costs exceed acceptable limits

ADVANTAGES OF APPROVAL

Improved operations and reduced maintenance for the elevator most needed by a special population. Small reduction in annual energy costs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs.

FUNDING SOURCES

General Fund -

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	37
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	7	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF165

PROJECT NAME						
PATROL MOTORCYCLE REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$30,000		\$30,000

DESCRIPTION OF PROJECT

Originally in FY15, we identified the need to trade in 3 higher mileage motorcycles for 2 new motorcycles for our traffic division, at a total end-price of \$60,000. Authorization was given to purchase one of the two motorcycles, which resulted in trading in two 2003 Harley Motorcycles for one new Harley motorcycle. We are moving this replacement to FY21, as we currently are only fielding one trained motorcycle officer. If fully trained and operationally ready to deploy 2nd patrol motorcycle, we will trade in a 2002 Harley Davidson Motorcycle for a new motorcycle. With trade in value and re-use of the police radio, the total cost will be \$30,000. The end result of this purchase will leave the department with 2 new primary patrol motorcycles fully outfitted. Patrol motorcycles are an essential item in the traffic enforcement division, used for a portion of the over 13,000 traffic stops, crashes, and citations each year. These motorcycles are used from March to October each year and are responsible for a portion of the response to both emergency and non-emergency calls for service, investigate accidents, conduct traffic enforcement and general patrol duties.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

This ensures safe and reliable emergency response vehicles for patrol use, as well as lower annual maintenance costs. For the traffic division to be effective, this equipment must be kept in top operating condition. Police motorcycles are available for police patrol use during the day and when the city streets are clear enough to ride.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance costs are stable due to regularly scheduled service. Officers assigned to the motorcycle division are also assigned to their own motorcycle.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

66

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	10
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF166

PROJECT NAME						
PORTABLE RADIO REPLACEMENTS						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$250,000	\$250,000			

DESCRIPTION OF PROJECT

The department has been in conversations and planning with Gallatin County 9-1-1 to improve radio communication that has become an operational and safety concern. Regardless of the final improvements to infrastructure, one of the identified needs for replacement is subscriber units (portable radios used by officers and mobile radios used in emergency response vehicles). The replacement of these subscriber units (radios) are a major step to improving communications and responses capabilities. These radios are an essential item in the operation of the Bozeman Police Department, being a critical communication tool used for over to 50,000 Response to Calls each year. Police radios must be available for police use 24 hours a day, 365 days a year. These radios are individually assigned, allowing for greater longevity, and department-wide communication in the event of a need for major response. These costs are based on 78 portable radios at \$6,000 per radio and 39 mobile radios at \$5,500 per radio.

ALTERNATIVES CONSIDERED

Regardless of the infrastructure improvements, the existing radios are 10 years old and beginning to reach the end of their effectiveness. Additionally, the existing radios are not dual-band and will not operate with a planned move to VHF/encrypted operations as part of infrastructure improvement plans. Some phasing of purchases could be done with a focus on patrol officers / patrol cars / remaining emergency responders over a maximum 3 year period.

ADVANTAGES OF APPROVAL

This ensures safe and reliable emergency communication and response. Program allows for a planned and predictable need for equipment replacement. Clear and dependable communication allows for quick and efficient deployment and the required level of officer safety.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring		TOTAL RATING:		57
LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):		7
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):		5
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):		0
FREQUENCY OF USE (Up to 5):	5			

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF190

PROJECT NAME
4-WHEELER ATV REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$14,000

DESCRIPTION OF PROJECT

Replace the ATV (2000 Yamaha Grizzly) used for sidewalk snow removal and is the main piece of equipment that is used to spray approx 300 acres with herbicides and biostimulants for the Parks Division.

ALTERNATIVES CONSIDERED

Continue to use the 2000 Yamaha Grizzly and repair as needed.

ADVANTAGES OF APPROVAL

Maximize efficiency, minimize down time, proactive replacement of aging equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

37

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF191

PROJECT NAME
UPGRADE SOFTBALL COMPLEX LIGHTING

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$825,000

DESCRIPTION OF PROJECT

Replace the current lights at the Softball Complex with appropriate stadium lights. Estimate provided by MUSCO, would be bid at the time of construction. Existing lights have light spillage and this is the only way to make the lights Dark Skies Compliant.

ALTERNATIVES CONSIDERED

Keep existing lights

ADVANTAGES OF APPROVAL

The new lights can offer 50% less light spillage and glare and reduce energy costs by up to 50%. Additionally, upgraded lights could help to reduce or eliminate complaints regarding light pollution.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Reduction in electrical use.

FUNDING SOURCES

100% General Fund, or fundraising by user groups - Cost estimates range from \$750,000 to \$825,000 in August 2012.

General Fund Project and Equipment Scoring

TOTAL RATING:

22

LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	0
OPERATING BUDGET IMPACT (Up to 10):	6	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	1		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF195

PROJECT NAME						
AERATOR						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$32,000				

DESCRIPTION OF PROJECT

An additional aerator into Parks and Recreation inventory of turf equipment. This would be used to maintain the 150+ acres of turf in the park inventory. This piece of equipment would be used extensively at the new Sports Complex and other venues on the west side of town. (Adam Bronken Sports Complex and Oak Springs Park) The Toro Pro-Core aerator is efficient, productive and coincides with water conservation efforts and safe playing athletic fields.

ALTERNATIVES CONSIDERED

Continue to operate with one aerator.

ADVANTAGES OF APPROVAL

Proactively and aggressively aerate parks and sports fields within the City to create safer and healthier turf that uses less water.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

19

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	1		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF196

PROJECT NAME
ROOFTOP COOLING UNIT FOR THE PROFESSIONAL BUILDING DATA CENTER

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$20,000	

DESCRIPTION OF PROJECT

Replacement of the current APC cooling system in the professional building - dedicated to the Data Center. When the current unit fails, we will need to replace it ASAP. The current until is more than 10 years old and has been reliable in the recent past.

ALTERNATIVES CONSIDERED

Keep using the current 10 year old system and spend \$6,000 to replace bearings.

ADVANTAGES OF APPROVAL

We would have a system that is properly sized for the room and heat load. The new system would be more energy efficient. We will use the old system as a backup system in the event the new system is down for repairs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

1 Year warranty out of the gate with roughly \$100 per year for Freon replacement and maintenance. Repairs and issues beyond basic maintenance after the first year would have to be paid at that time.

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	47
LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	7	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF199

PROJECT NAME
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$131,581				

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this grow, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, Parking, Water

General Fund Project and Equipment Scoring

TOTAL RATING: 27

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	0	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - PROF

PROJECT NUMBER
GF199

PROJECT NAME						
PROFESSIONAL BUILDING RECONFIGURATION - Phase 2						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$35,779				

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this growth, we need to remodel the Stiff Building. In FY16 the City Commission approved Phase I of the remodel which will provide better use of existing space by relocating certain functions to the basement and repurposing unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, Parking, Water

General Fund Project and Equipment Scoring

TOTAL RATING: 27

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	0	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - SC

PROJECT NUMBER
GF203

PROJECT NAME						
BOZEMAN SENIOR SOCIAL CENTER EXTERIOR ENVELOPE IMPROVEMENTS.						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$64,750					

DESCRIPTION OF PROJECT

This project will replace portions of the building envelope of the Bozeman Senior Center that are in need of replacement due to the age and heavy use of the facility. Work will include the replacement of the rough board siding with cement-based clapboard siding. Additionally, new soffit and fascia will be installed where needed to keep birds from entering the attic. Gutter sections that are leaking and torn away will be replaced and rotting entrance columns on the northeast side will be replaced. There are also unprotected areas of the foundation where missing insulating foam is not providing moisture protection.

ALTERNATIVES CONSIDERED

It is most efficient and economical to do this work at the same time, but it could be phased.

ADVANTAGES OF APPROVAL

This is a highly utilized and important public resource. The building is over 30 years old and is showing its age. The roof and west side of the building envelope was replaced after the 2010 hail damage and this project will complete the restoration of the building envelope minus the windows. In addition to improving the overall appearance of the building, the new materials will have a longer life expectancy and protect the condition of the building. There has been some water leaking in through the windows in the basement and the new gutters will be set up so that the water from the roof does not drain into the window wells keeping the water from getting into the building.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The completion of this project will reduce current maintenance costs.

FUNDING SOURCES

100% General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 32

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF205

PROJECT NAME
PROST PLAN UPDATE

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$100,000				

DESCRIPTION OF PROJECT

Update the 2007 Parks Recreation Open Space Trail (PROST) Plan. The current plan is nearing 10 years old. Since adoption, the city has grown in size, new park properties have come into the system, and local demographics may have changed. This project anticipates hiring an outside party to update the Plan that will take into consideration the updated Community Plan.

ALTERNATIVES CONSIDERED

Do not update the plan.

ADVANTAGES OF APPROVAL

The update would record and reference new and accurate information that has been developing over the last 10 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	35
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	0	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF206

PROJECT NAME

BRONKEN PARK PATHWAY

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$88,246

DESCRIPTION OF PROJECT

Installation on new sidewalk for pedestrian traffic between Durston and Classical Way along Cottonwood Road. This project will align with the new sidewalk that is currently being constructed along Durston, spanning the entire length of Bronken Park.

ALTERNATIVES CONSIDERED

Do not construct the sidewalk.

ADVANTAGES OF APPROVAL

Safe pedestrian travel that for park and school users.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Plowing.

FUNDING SOURCES

General Fund.

General Fund Project and Equipment Scoring

TOTAL RATING:

27

LEVEL OF SERVICE (Up to 20):

10

DEPARTMENT PRIORITY (Up to 10):

5

OPERATING BUDGET IMPACT (Up to 10):

5

COMMISSION WORKPLAN (Up to 10):

0

SERVICE AREA (Up to 10):

2

ADOPTED CLIMATE PLAN (Up to 5):

0

FREQUENCY OF USE (Up to 5):

5

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF209

PROJECT NAME					
LINDLEY CENTER FULL UPGRADE: RESTROOMS, WINDOWS, SIDING, KITCHEN, ROOF, FLOOR					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$217,745			

DESCRIPTION OF PROJECT

This project is the combination of requests for upgrade of the Restrooms (\$55,000), Window Replacement (\$24,200), Siding Replacement (\$26,400), Kitchen Upgrade (\$55,000), East Roof Insulation (\$26,400), Floor support (\$13,970), Roof support (\$16,775) . This is a heavily used community center that could benefit from substantial improvements.

ALTERNATIVES CONSIDERED

As suggested by the Commission

ADVANTAGES OF APPROVAL

1. Brings restroom up to current ADA requirements; 2. Brings restroom up to current City of Bozeman building codes; 3. Improves sanitation in the restrooms and kitchen facilities; 4. Rehabs and secures the building envelope for years to come; 5. Reduced energy consumption from improved windows and insulation. 6. Addresses deficiencies that were identified in the 2014 structural analysis and 2012 facility condition inventory.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal.

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	38
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF219

PROJECT NAME
ADDITION TO CITY HALL, CONSOLIDATION OF SERVICES

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$5,500,000

DESCRIPTION OF PROJECT

This project would relocate the functions currently housed in the Stiff Building (Community Development/Engineering/IT/Building Inspection) into an expansion of City Hall on Lamme Street.

ALTERNATIVES CONSIDERED

Keep operations at the Stiff Building.

ADVANTAGES OF APPROVAL

Centralizing more services in one location at City Hall will improve efficiency of staff and make it easier for citizens to conduct business with the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The new facility should have lower operating costs than the Stiff Building.

FUNDING SOURCES

Potential Funding Sources include: General Fund, Enterprise Fund (for public works), Building Inspection Fund (Building Inspection Division), sale of the Stiff Building. This is a very rough estimate, based on building square footage and current construction costs.

General Fund Project and Equipment Scoring

TOTAL RATING: 28

LEVEL OF SERVICE (Up to 20):	12	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	3	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FINANCE

PROJECT NUMBER
GF224

PROJECT NAME
SUNGARD ANALYTICS NOW COGNOS BI (BUSINESS INTELLIGENCE) WEB-BASED REPORTIN

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$34,340			

DESCRIPTION OF PROJECT

Web-based report authoring tool used to build sophisticated, multi-page, multi-query reports using data from SunGard. Seamlessly integrates Microsoft Excel, enabling users to explore and analyze data in a familiar environment using skills they already have. Includes enhanced e-mailing and report publishing capabilities, in addition to access by mobile devices including iPads & iPhones.

ALTERNATIVES CONSIDERED

Continue to use SunGard QREP product, which requires a higher level of training and expertise for end-users. QREP is no longer being developed/enhanced and IBM software support is scheduled to end on April 30, 2018

ADVANTAGES OF APPROVAL

An increased ability to push more big data out to a bigger audience and to empower novice users to collect and analyze the tremendous amount of data in SunGard.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Ongoing annual maintenance cost = \$3,280

FUNDING SOURCES

General Fund, although enterprise funds would continue to be big users, especially GIS

General Fund Project and Equipment Scoring

TOTAL RATING: 37

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FINANCE

PROJECT NUMBER
GF227

PROJECT NAME						
ERP REPLACEMENT / UPGRADE "SUNGARD REPLACEMENT / UPGRADE"						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$333,333

DESCRIPTION OF PROJECT

Replacing/upgrading the current system installed in 1999. This is the system that runs all the financial, community development, land records, utility and business license applications.

ALTERNATIVES CONSIDERED

Continue running current SunGard package. Use SunGard.net (NaviLine EDGE) as an improvement to the current system, but not a full replacement.

ADVANTAGES OF APPROVAL

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown. Dependent on the option chosen.

FUNDING SOURCES

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

General Fund Project and Equipment Scoring

TOTAL RATING: 50

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF229

PROJECT NAME
ISCSI STORAGE REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$40,000			

DESCRIPTION OF PROJECT

All of the virtual servers that reside at these two buildings use these devices as their storage device. These are critical pieces of infrastructure.

ALTERNATIVES CONSIDERED

Don't replace and not have warranty.

ADVANTAGES OF APPROVAL

Allows us to keep our critical pieces of infrastructure running well and under warranty.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

47

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	7	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

CEMETERY

GF23I

PROJECT NAME

CEMETERY IRRIGATION PROJECT

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$200,000

\$200,000

DESCRIPTION OF PROJECT

Phased Project to move irrigation of cemetery and park lands off treated municipal supply onto raw surface supply previously decreed to irrigate cemetery lands from the Story Mill Ditch .The planned improvements dramatically reduces the amount of man hours required to monitor watering during season. Improved irrigation system reduces/eliminates water loss and water is applied in the most efficient manner maximizing the use of the resource. FY 16: Phase I Monitoring and Pre-Design Feasibility Analysis: • Historic Flows of Sourdough Creek to measure reliability • Ditch survey to understand overflow and flooding issues • Headgate assessment and repair/replace • Cost assessment for City to operate and maintain diversion works, pump and screen • Haggerty Fields Extension. FY 17: Phase II Design for Irrigation of Cemetery Lands • Inlet structure and piping • Pump house • Main and laterals • Electrical • Irrigation System Components. FY 18:* Phase III Installation of Diversion Works Project to Cemetery Lands. FY 19:* Phase IV Extension to Haggerty Fields •Design •Installation.

ALTERNATIVES CONSIDERED

Continue to use treated water for cemetery land irrigation.

ADVANTAGES OF APPROVAL

The Parks & Rec Department would no longer pay for large quantities of treated water for irrigation. It protects and preserves the City’s most valuable decreed surface water right and makes available for sale treated water that would otherwise have irrigated the cemetery. The treated water that is no longer applied to the cemetery and parks irrigation would be available for sale to new water customers enabling future growth and/or improving the reliability of the City’s water supplies for use in times of drought. Makes available approximately 258 AF of treated water, valued at \$1,548,000.00 available for retail sale for approximately 1,121 SF homes or 2,080 MF homes. Reduces numbers of seasonal workers required to be hired by Parks Department and increases the reliability of domestic water supplies in times of drought.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Pump replacement. It is yet to be determined what additional operations and maintenance costs would be associated with the project during FY 19-21 at this time. This is due to the fact that the feasibility study that will be completed in FY 17 and will identify various alternatives and costs of each alternative will inform future operations and maintenance costs during FY 19-21. Upon completion of the feasibility study, an alternative will be selected and projected operations and maintenance costs can be

FUNDING SOURCES

General Fund. *If awarded, grant funding through the Bureau of Reclamation’s WaterSMART Program would offset total project costs.

General Fund Project and Equipment Scoring

TOTAL RATING:

44

LEVEL OF SERVICE (Up to 20):

15

DEPARTMENT PRIORITY (Up to 10):

3

OPERATING BUDGET IMPACT (Up to 10):

10

COMMISSION WORKPLAN (Up to 10):

5

SERVICE AREA (Up to 10):

5

ADOPTED CLIMATE PLAN (Up to 5):

3

FREQUENCY OF USE (Up to 5):

3

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF233

PROJECT NAME
VEHICLE REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$99,000

DESCRIPTION OF PROJECT

Replacement of IT Vehicles. If our current vehicle is still running well and maintenance costs are not high, we would keep them beyond what is shown here. 2005

Chevy Colorado with 38K
 1999 Dodge Truck with 105K
 1999 Jeep Cherokee with 73K
 1995 Dodge Truck with 67K

ALTERNATIVES CONSIDERED

Buy new or Do nothing.

ADVANTAGES OF APPROVAL

Provide functional transportation with reduced maintenance costs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 38

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

IT Vehicle Details

Project Number	Asset #	Make	Current Mileage	FY18	FY19	FY20	FY21	FY22	Unscheduled	Notes
GF233	1784	'95 Dodge Dakota	67,000						\$23,000	If our current vehicle is still running well and maintenance costs are not high we would keep it beyond 2020
GF233	2697	'99 Jeep Cherokee	73,000						\$23,000	
GF233	2707	'99 Dodge Dakota	105,000						\$30,000	
GF233	3273	'05 Chevy Colorado	38,000						\$23,000	
Totals									\$99,000	

132

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF235

PROJECT NAME
EVIDENCE BAR CODING SYSTEM

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$11,000

DESCRIPTION OF PROJECT

This evidence barcode system is a mix of software and hardware that provides a secure and efficient method of entering, tracking and managing evidence. This system includes the bar code reader, label printer, labels, software and software licenses, initial training and 1st year of maintenance to handle the existing 10,000+ items of evidence and input and control of evidence gathered from this point forward. This barcode system is an essential addition to a new facility that integrates technology with design improvements and improve overall efficiency of the evidence process.

ALTERNATIVES CONSIDERED

Can continue with existing process which is not efficient and is difficult to use for conducting inventories and audit processes and involves increased staff time. This plan includes coordination with Gallatin County to pay for 50% of this need and only if this is not resolved by formal bond issue passing by City and Gallatin County citizens in November 2016.

ADVANTAGES OF APPROVAL

Improved integrity of evidence control for prosecution, to minimize existing staff time and to improve overall management of all property held as evidence. Extremely important with potential move to a new facility in FY18/FY19, if approved.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED
\$2,500 ANNUAL MAINTENANCE FEE

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	45
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF238

PROJECT NAME						
BOGERT POOL RENOVATION						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$455,000	

DESCRIPTION OF PROJECT

Bogert Pool is beginning to show its wear faster every year. This project would replace the coping around the pool that is cracked in several areas and the pool gutters that are cracking, crumbling, and/or lifting from the pool edge. All of the leaks that could be patched without digging up the bottom of the pool have been patched. There is minimal leaking in the return pipes to the pool but we recommend repairing the leaks in the returning piping that were identified in May of 2015, before the pool is blasted with sand or high pressure water, prepped, and resurfaced. The retaining wall is going to be replaced with a wrought iron fence to allow more visibility to the facility at night and provide more structure, as the current wall is weakening. The sections of the decking in front of the locker rooms have sunken over the years and will also be replaced. The Bogert Pool renovation or replacement with an alternate water feature would be added to the Bond Initiative for the Indoor/Outdoor Aquatic Center.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

A new gutter system would mitigate entrapment issues caused by the current gutter system. The current gutters are disintegrating between the gutter and the ledge of the pool where there gutter sits. Several gutter tiles need to be re-adhered to the pool ledge every spring and often during the pool season. If a tile is still attached but loose, it can easily be pulled from the wall. Several of the gutter tiles have been replaced through the years. In many places, a space was not left between the tiles. This doesn't allow the water to flow into the gutter system for optimal water circulation. The surface of the pool is currently being patched with hydraulic cement in areas where the plaster is coming up. A new surface would work to protect the structure of the pool. Making these repairs to Bogert would extend the life of the pool for many years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs would be associated with these repairs.

FUNDING SOURCES

Bond

General Fund Project and Equipment Scoring		TOTAL RATING:		40
LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):		7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):		0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):		0
FREQUENCY OF USE (Up to 5):	3			

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF24I

PROJECT NAME
Replacement of City Hall AC Condensing Unit – Roof Top

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

The roof-top air conditioning condensing unit at City Hall is original to the building (1980) and is reaching the end of its useful service life. This unit is critical to the temperature control for all office and public areas at City Hall.

ALTERNATIVES CONSIDERED

Continue to maintain the current unit until parts and refrigerant are no longer available.

ADVANTAGES OF APPROVAL

Reduced maintenance, increased efficiency and improved operation.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

36

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF245

PROJECT NAME
Energy Projects – City Hall

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$75,000		

DESCRIPTION OF PROJECT

City Hall is a LEED-Silver certified building and is currently underperforming. A recent Energy Star Portfolio Manager review found that City Hall scored a 30 on a scale of 1 to 100, indicating that the energy performance of the building has declined as equipment has aged or been replaced, and spaces modified. Retro-commissioning improves efficiency of a building’s equipment and systems; often resolving problems that occurred during design or construction, or those that develop over time. It is a system-wide evaluation of opportunities to improve energy performance and occupant comfort. City Hall was first commissioned in 2008 following the remodel. Many issues were addressed at that time, but certain problems related to the heating hot water system balance were not due to budget constraints. The commissioning report recommended replacement of 24 fin tube balancing valves and control valves on unit heaters. These components are negatively impacting the operation and efficiency of heating and cooling systems. Building Commissioning was again identified as a need in the 2014 McKinstry Investment Grade Audit. This project addresses the mechanical upgrades first identified in the commissioning report from 2008 allowing for a retro-commission for the building following the mechanical upgrades and AC Condensing Unit replacement.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Improved HVAC system operations and reduced utility costs, based on the known conditions, McKinstry estimates that commissioning would save at least \$2,400 per year. The occupants of the building should experience more even temperatures and improved building airflow and ventilation. Additional savings may be possible, but not fully understood until all the recommended improvements are identified.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	43
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	3
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF250

PROJECT NAME
Splash Pads

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$195,700	\$180,250

DESCRIPTION OF PROJECT

There are two proposed Splash Pad Projects: 1, The installation of a Splash Pad at the Sports Park (Baxter Road), estimated cost \$195,700 2. The installation of an Interactive Water Feature at Story Mill Community Park, estimated cost \$180,250. This plan will give the community two larger Splash Pads / Water Features located in large Community Parks at different ends of the City. Story Mill Community Park in the East and Sports Park in the West.

ALTERNATIVES CONSIDERED

Do not install splash pads.

ADVANTAGES OF APPROVAL

Can help reduce children’s fear of water. Adds community water features that have no admittance fee allowing people of all socio economic status to enjoy a public aquatics amenity. Geographically separates two installations to best serve the entire community.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Some additional water costs and maintenance will be required. Additional maintenance is estimated at 0.2 FTE

FUNDING SOURCES

Numerous funding options include TOP Bond money, General Fund cash reserves, Park Improvement Grant money, or combining into an Aquatics Bond vote.

General Fund Project and Equipment Scoring

TOTAL RATING: 35

LEVEL OF SERVICE (Up to 20):	8	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	7	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
CEMETERY

PROJECT NUMBER
GF252

PROJECT NAME					
CEMETERY COLUMBARIUM					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000			\$55,000		

DESCRIPTION OF PROJECT

Adding two (eighty niche each) columbariums to the Sunset Hills Cemetery with the first one scheduled FY18. These additional columbariums would be installed within the same area as the existing columbariums. Currently, the second columbarium is approximately 80% sold.

ALTERNATIVES CONSIDERED

Do not add any columbariums to the cemetery and cease or put on hold the program once the second columbarium is full.

ADVANTAGES OF APPROVAL

Continuation on a long standing cemetery service, along with ease and minimal maintenance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal if any.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 32

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	7	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF253

PROJECT NAME
Turf Sweeper

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$38,000					

DESCRIPTION OF PROJECT

Sweeper for turf that pulverizes aeration cores, sweeps excess grass and leaves, verticuts and flail mows as well. Also has hydraulic dumping capacity.

ALTERNATIVES CONSIDERED

Continue to use the Toro sweeper until it is done

ADVANTAGES OF APPROVAL

True 4-in 1 machine that keeps parks and fields free of debris and excess material that could smother the grass.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Fuel for the tractor

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

35

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF254

PROJECT NAME
25th street from Oak to Tschache

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$287,000					

DESCRIPTION OF PROJECT

Extend 25th street from Oak street to Tschache street along the western border of Rose Park.

ALTERNATIVES CONSIDERED

Do not build the street or instead build a 10 foot shared use asphalt path in its place.

ADVANTAGES OF APPROVAL

Coincides with the Transportation plan; increased vehicular flow;

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Increased costs for snow plowing and street sweeping

FUNDING SOURCES

General Fund, with any necessary paybacks from adjacent property developers.

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	40
LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF260

PROJECT NAME						
SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' COTTONWOOD ROAD AREA						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$364,000				

DESCRIPTION OF PROJECT

As owner of the Sports Park property, the City is required to construct a number of street, water, and sewer improvements. In approval of the Sports Park purchase, \$1,778,000 was approved in TOP Bond funding for these infrastructure improvements: Baxter Lane, Cottonwood Road, Durston/Cottonwood Intersection, Flanders Mill Road (including ditch), and Oak Street. We estimate that the Bond Funding will not be sufficient to cover the Cottonwood Road (or Oak Street) improvements. We anticipate needing to build the project-related portions of the Cottonwood Road street-related improvements with Arterial & Collector District dollars. The related water and sewer-line improvements will need to come from the General Fund. Our original cost estimates from the Spring of 2014 have been increased by 15% to estimate construction inflation costs.

ALTERNATIVES CONSIDERED

Delay the improvements.

ADVANTAGES OF APPROVAL

Proper construction of the adjacent street, water, and sewer improvements, in concert with our development regulations. Better access and amenities for the Sports Park.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The City's Street Maintenance Funds will maintain the street surface, once constructed. The utilities will maintain the pipes once installed.

FUNDING SOURCES

GENERAL FUND.

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	45
LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	10
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF261

PROJECT NAME						
SPORTS COMPLEX - CONSTRUCTION OF 'PROJECT RELATED' OAK STREET AREA WATER IM						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$67,500				

DESCRIPTION OF PROJECT

As owner of the Sports Park property, the City is required to construct a number of street, water, and sewer improvements. Approval of the Sports Park purchase, \$1,778,000 was approved in TOP Bond funding for these infrastructure improvements: Baxter Lane, Cottonwood Road, Durston/Cottonwood Intersection, Flanders Mill Road (including ditch), Oak Street. We estimate that the Bond Funding will not be sufficient to cover the Oak Street (or Cottonwood road) improvements. The project-related portions of the Oak Street area street improvements will be built with Arterial Collector District dollars. Associated water-line improvements will need to be paid for by the General Fund. Our original cost estimates from the Spring of 2014 have been increased by 15% to estimate construction inflation costs.

ALTERNATIVES CONSIDERED

Delay the improvements.

ADVANTAGES OF APPROVAL

Proper construction of the adjacent street, water, and sewer improvements, in concert with our development regulations. Better access and amenities for the Sports Park.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The City's Street Maintenance Funds will maintain the street surface, once constructed. The utilities will maintain the pipes once installed.

FUNDING SOURCES

GENERAL FUND.

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	45
LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	10
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
POLICE

PROJECT NUMBER
GF262

PROJECT NAME
POLICE K9

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$17,000

DESCRIPTION OF PROJECT

Police K9 (canine dogs) are an instrumental tool for police operations. The department has two trained K9 teams (handler and dog) for operations that provide assistance with drug interdiction, search ability for suspect s committing crimes in buildings or helping locate and identify suspects that have left or fled a crime scene. A trained K9 generally has a maximum of 7-8 years where the dog is healthy and capable of serving. In FY17, one of two dogs deployed has reached that useful operational timeline, while the remaining K9 has another 5 years of operational capability. This cost includes full purchase, training of the new K9 handler (officer) and shipping/transport of the K9 to Bozeman.

ALTERNATIVES CONSIDERED

Alternative funding is being pursued to limit or even eliminate this cost. Two K9 teams are the minimum needed to sustain public safety operations.

ADVANTAGES OF APPROVAL

Continued ability to have K9 on-duty or available to investigate and secure prosecution of criminal activity in Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

The operational costs of K9 each year are part of existing budget considerations. This item has not historically been place in CP, but as the costs of full purchase has risen, this in now being added.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 47

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	7	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF263

PROJECT NAME
Police Video Evidence Storage and Backup

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000				\$40,000	

DESCRIPTION OF PROJECT

We are currently generating around 1 Terabyte of data per month with the in car video systems and will be out of space for storage in the next 12-18 months. It is critical information that grows rapidly. We are trying to get ahead of the growth by purchasing a 5 year solution out of the gate that can be expanded as needed into the future for growth and the possibility of body cameras. The FY 22 amount relates to the increased storage needed related to body camera files.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Will allow us to continue to safely store, access and backup crucial evidentiary data without concern of running out of storage space.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund or Grant Money

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	32
LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
I.T.

PROJECT NUMBER
GF265

PROJECT NAME
GENERAL FUND SERVER REPLACEMENT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$40,000		\$36,000		

DESCRIPTION OF PROJECT

Replacement of physical servers.

ALTERNATIVES CONSIDERED

Virtualize if possible instead of buying physical servers

ADVANTAGES OF APPROVAL

Keep our server infrastructure under warranty and in good working condition for required performance.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 50

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
RECREATION

PROJECT NUMBER
GF266

PROJECT NAME
STORY MILL COMMUNITY CENTER UPGRADE: HVAC, ELECTRICAL, FIRE PROTECTION

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$188,500					

DESCRIPTION OF PROJECT

This project will make the necessary improvements to the following systems: HVAC, Electrical, and Fire Protection due to the renovation and change in use of the existing Story Mill Community Center interior space to accommodate five full time Parks and Recreation Department staff offices and a Recreation Leader work space to accommodate up to 11 part time Recreation Division staff members. Architectural fees included.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Bringing the new office space up to code, occupant safety, and occupant comfort.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 37

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
CEMETERY

PROJECT NUMBER
GF268

PROJECT NAME					
Southwest Montana Veteran's Cemetery					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$88,000	\$40,000	\$45,000		\$360,000

DESCRIPTION OF PROJECT

First phase of the Southwest Montana Veteran's Cemetery which includes design, earth work, sidewalks and retaining walls to form the 'backbone' for the Veteran group to start fundraising. Phase two potentially could be the 5500 square foot stamped concrete plaza and phase three could be the installation of the first columbarium. Phases 2 and 3 potentially be funded with a 50% match from the veteran's groups for the concrete and the first columbarium.

ALTERNATIVES CONSIDERED

Reduce the City's capital input and rely on the various Veteran groups for the funding.

ADVANTAGES OF APPROVAL

A true veteran's cemetery will help the veteran's realize their benefits upon their death. Currently, there are over 70,000 veterans in southwest Montana, who upon their death, would have to be interred in Helena or Laurel to realize the benefit.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Future phasing might be required, depending on the fundraising capabilities of the various veteran group in southwest Montana.

FUNDING SOURCES

50% General Fund and funds from various veteran's groups.

General Fund Project and Equipment Scoring

TOTAL RATING: 34

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	2	COMMISSION WORKPLAN (Up to 10):	10
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF270

PROJECT NAME						
Snow Plowing Vehicle						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$70,000				\$75,000

DESCRIPTION OF PROJECT

The eventual replacement of the 1992 MT articulating tractor, which does the bulk of the sidewalk snow removal for the Parks Division, encompassing over 17 miles of sidewalks and three routes to plow. The newest cost saving measure is to share the cost of a vehicle with Streets. The advantage of the co-op is that Parks needs the vehicle in the winter for plowing and Streets in the summer for right of way mowing. The Parks and Cemetery divisions are responsible for snow removal on the majority of sidewalks, paths, accesses and trails that the City is responsible for. The addition of Oak Spring Park, Adam Bronken sidewalk and the Bozeman Pond expansion has necessitated moving up the request for an additional snow removal vehicle into FY19 instead of FY20.

ALTERNATIVES CONSIDERED

Repair and maintain the 1992 MT as needed.

ADVANTAGES OF APPROVAL

Less down time and maintenance/repair costs. A new MT tractor will be able to support more implements, less emissions and better fuel economy, faster more efficient use of time which will be a factor with the expanding sidewalk and trail snow removal routes as more parks come on board such as Bozeman Pond expansion, sports Complex and Story Mill Community Park.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs: better fuel economy and less emissions = less maintenance and operating costs.

FUNDING SOURCES

100% General Fund for Parks but cost share with Street Maintenance District

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	28
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	1		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF271

PROJECT NAME
City Hall New Parking Lot

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled \$250,000
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DESCRIPTION OF PROJECT

Convert existing lot west of City Hall into a new parking lot.

ALTERNATIVES CONSIDERED

Continue to use the underutilized lot West of City Hall as a community garden.

ADVANTAGES OF APPROVAL

Parking at City Hall is very limited due to space constraints, this has an impact on City staff, the general public, and visiting guests. Additional parking spaces in the West lot should take pressure off of street parking around City Hall as well as allow staff to parking in the same lot. This will free up the East side parking lot for general public during normal business hours. A new lot will also provide a safer parking environment to the public during large meetings that take place at City Hall after hours.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

General annual cost for items such as: lamp replacement, line stripping, asphalt reseal, snow removal, and landscaping.

FUNDING SOURCES

General Fund or Downtown TIF District Funding

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	23
LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF272

PROJECT NAME					
Site Security upgrade - Building Locks					

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$15,000	\$15,000	\$15,000	\$15,000		

DESCRIPTION OF PROJECT

Currently the City has approximately 64 Trilogy keyless access locks. Of the 64 units, 18 are wireless units. The remaining 46 hardwired units require physical access with a cable & laptop to make updates for staffing access changes. This project will upgrade the hardwire units to wireless over a period of time.

ALTERNATIVES CONSIDERED

Continue as we currently operate.

ADVANTAGES OF APPROVAL

Moving to a wireless system means all updates can be performed using the City wide network. The advantages to this system is the better utilization of staff hours by reducing the required man hours per access update. Depending on the access level required for a staff member, it could mean accessing 50 individual locks for a single access change.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

General maintenance cost, battery change-outs.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING: 37

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - PROF

PROJECT NUMBER
GF273

PROJECT NAME

Professional Building - Electrical Upgrade

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$75,000					

DESCRIPTION OF PROJECT

The current main electrical distribution gear is original to the building, due to the age of the electrical equipment it has very limited upgradability as our electrical load increase with this building. An electrical system evaluation is currently underway that will provide the support details required to make any necessary upgrades to the electrical distribution system.

ALTERNATIVES CONSIDERED

Do nothing and run the risk in the event of a major failure. The electrical gear is at the age that replacement parts might not be available.

ADVANTAGES OF APPROVAL

The age of the electrical distribution gear means that it is difficult or impossible to get any required replacement parts in the event of a major failure. The IT servers in this building support public safety operations and need to be upgradable and dependable as City's operations continue to grow. One of the main distribution panels is a single phase panel that has been wired to be functioning as a 3 phase panel. By today's National Electrical Codes, this is not a recommended practice.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

50

LEVEL OF SERVICE (Up to 20):	20	DEPARTMENT PRIORITY (Up to 10):	10
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	10	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - CH

PROJECT NUMBER
GF274

PROJECT NAME						
City Hall - Bozeman Creek Bridge Improvements						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000					

DESCRIPTION OF PROJECT

Creek bank erosion around the City Hall pedestrian bridge needs to be fortified to reduce the risk of a catastrophic failure that could impact the operation of the bridge along with access to City Hall. In recent years the bank has eroded back a couple of feet which has impacted the irrigation system, bridge abutments, and sidewalk dirt compaction.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

If the erosion from Bozeman Creek is not stopped, it will impact the main East sidewalk to City Hall and could cause major structural bridge safety concerns.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED
N/A

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring		TOTAL RATING:	35
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	3	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
ECONOMIC DEVELOPMENT

PROJECT NUMBER
GF275

PROJECT NAME						
Fiber Optic Conduit and Vaults						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000

DESCRIPTION OF PROJECT

Future City conduit policy will drive the future investment in city owned conduit.

ALTERNATIVES CONSIDERED

Do nothing, reduce or increase CIP investment.

ADVANTAGES OF APPROVAL

Provides funding for the purchase of fiber conduit and vaults in furtherance of a future conduit policy

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Cost of design and installation

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

29

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	7
SERVICE AREA (Up to 10):	2	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF278

PROJECT NAME						
Griffin at Story Mill Park road improvement - .26 mile						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$260,000

DESCRIPTION OF PROJECT

This represents funding the City's 1/2 portion of the East Griffin Road construction as it abuts to Story Mill Community Park.

ALTERNATIVES CONSIDERED

Construction of a woonerf type road section (or alternative park type road). More accomodating to pedestrian traffic depending on future development by the property owners adjacent south side E Griffin.

ADVANTAGES OF APPROVAL

Safe vehicluar an dpedestrian access to municipal facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	42
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF279

PROJECT NAME						
Story Mill Road Improvement - .17 mile						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$170,000

DESCRIPTION OF PROJECT

This represents funding the City's 1/2 portion of the Story Mill Road construction as it abuts to Story Mill Community Park.

ALTERNATIVES CONSIDERED

No alternatives considered.

ADVANTAGES OF APPROVAL

Safe vehicular and pedestrian access to municipal facilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

<u>General Fund Project and Equipment Scoring</u>		TOTAL RATING:	42
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

General Fund

PARKS

GF280

PROJECT NAME

Story Mansion sewer repair

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$18,000

DESCRIPTION OF PROJECT

The service line from the sewer main to the mansion is in need of repairs. The sewer is frequently backing up into the facility.

ALTERNATIVES CONSIDERED

Do not repair. Continue to clean-up and maintain.

ADVANTAGES OF APPROVAL

Will fix a significant operational problem for this rented facility

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This repair will yield lower operational costs for maintenance.

FUNDING SOURCES

General Fund or Story Mansion Special Revenue Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

42

LEVEL OF SERVICE (Up to 20):

15

DEPARTMENT PRIORITY (Up to 10):

7

OPERATING BUDGET IMPACT (Up to 10):

5

COMMISSION WORKPLAN (Up to 10):

5

SERVICE AREA (Up to 10):

5

ADOPTED CLIMATE PLAN (Up to 5):

0

FREQUENCY OF USE (Up to 5):

5

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
GF281

PROJECT NAME						
Bozeman Pond Park & Aasheim ballfields road expansion - .17 mile & .09 mile						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$260,000

DESCRIPTION OF PROJECT

This represents funding the City's required portion of 1/2 necessary to build Fowler Road adjacent to Bozeman Pond Park Expansion and Aasheim ballfields.

ALTERNATIVES CONSIDERED

Waiting to acquire the ROW at the intersection of Fowler and Babcock before constructing these road sections.

ADVANTAGES OF APPROVAL

Safe vehicular and pedestrian access to municipal parks.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring		TOTAL RATING:	42
LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	5
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY-CH

PROJECT NUMBER
GF282

PROJECT NAME
Purchase of Property Adjacent to City Hall

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$560,000					

DESCRIPTION OF PROJECT

Purchase property adjacent to existing City Hall for future use.

ALTERNATIVES CONSIDERED

Do not purchase property.

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Dependant on the immediate and long term uses of the property.

FUNDING SOURCES

General Fund

General Fund Project and Equipment Scoring

TOTAL RATING:

21

LEVEL OF SERVICE (Up to 20):	5	DEPARTMENT PRIORITY (Up to 10):	3
OPERATING BUDGET IMPACT (Up to 10):	5	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	0
FREQUENCY OF USE (Up to 5):	3		

CIP Project Fund
General Fund

DEPARTMENT
FACILITY - SH

PROJECT NUMBER
PW01 - SH

PROJECT NAME						
SHOPS FACILITY EXPANSION PLAN						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$10,000				

DESCRIPTION OF PROJECT

The construction of the new Vehicle Maintenance Shop at the Lower Yards on Rouse Avenue in FY10/FY11 was Phase I in expanding and improving our ability to service equipment, store vehicles, and provide work space for Public Works, Parks, and Facility services. Questions remain about the long-term plan for construction, location, and expansion for: Streets, Sign & Signal, Forestry, Water/Sewer Operations, Solid Waste Collection & Recycling, Facilities, and Parks & Cemetery departments. This project would develop a master plan.

ALTERNATIVES CONSIDERED

Most of the reconfiguration for the existing buildings is now complete. Also the improvements for the Laurel Glen building are complete and that building is being used for Water/Sewer operations. This work would assess future needs for the departments at the current Shop location at 814 N. Bozeman. We could also determine whether there is space for additions at both the 814 N. Bozeman location and the new Vehicle Maintenance building site at 1812 N. Rouse.

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

From related divisions: General Fund 20% (\$10,000), Water Fund 20% (\$10,000), Wastewater Fund 20% (\$10,000), Street Maintenance Fund 20% (\$10,000), Solid Waste Fund 20% (\$10,000).

General Fund Project and Equipment Scoring

TOTAL RATING: 38

LEVEL OF SERVICE (Up to 20):	15	DEPARTMENT PRIORITY (Up to 10):	7
OPERATING BUDGET IMPACT (Up to 10):	3	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

CIP Project Fund
General Fund

DEPARTMENT
PARKS

PROJECT NUMBER
PW03

PROJECT NAME						
Vehicle Maintenance Building Design & Storage Construction						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

Design and construct vehicle storage

Describe the criticality (i.e., importance) of this project to the operation: Having equipment, especially winter equipment, inside and ready to go extends the life, produces less emissions by not having to warm up and shortens response time.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure.

How is this project leveraged with other stakeholders/projects/funds: By being located next to existing city property, we could

ALTERNATIVES CONSIDERED

Not build and only use for outdoor storage.

ADVANTAGES OF APPROVAL

Large inside storage for several departments. Equipment would be located next to current Vehicle Maintenance Shop. Good access onto Rouse and Griffin. Early morning shift equipment could be stored here so as not to disturb the neighbors in this mostly zoned Industrial area. With this building, Streets could switch to producing our own brine solution for pre wet of the sand. We wouldn't have to use mag chloride which is about 4-5 times more expensive than salt brine. Gallatin County has expressed interest in buying brine from us.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance. Possibly heat with waste oil from the Shops. Possibly heat with wood chips from Forestry.

FUNDING SOURCES

This project totals \$200,000. It will be split evenly 4 ways: Water Fund (\$50,000), Wastewater Fund (\$50,000), Street Maintenance (\$50,000), and Parks (\$50,000).

General Fund Project and Equipment Scoring		TOTAL RATING:	38
LEVEL OF SERVICE (Up to 20):	10	DEPARTMENT PRIORITY (Up to 10):	5
OPERATING BUDGET IMPACT (Up to 10):	10	COMMISSION WORKPLAN (Up to 10):	0
SERVICE AREA (Up to 10):	5	ADOPTED CLIMATE PLAN (Up to 5):	3
FREQUENCY OF USE (Up to 5):	5		

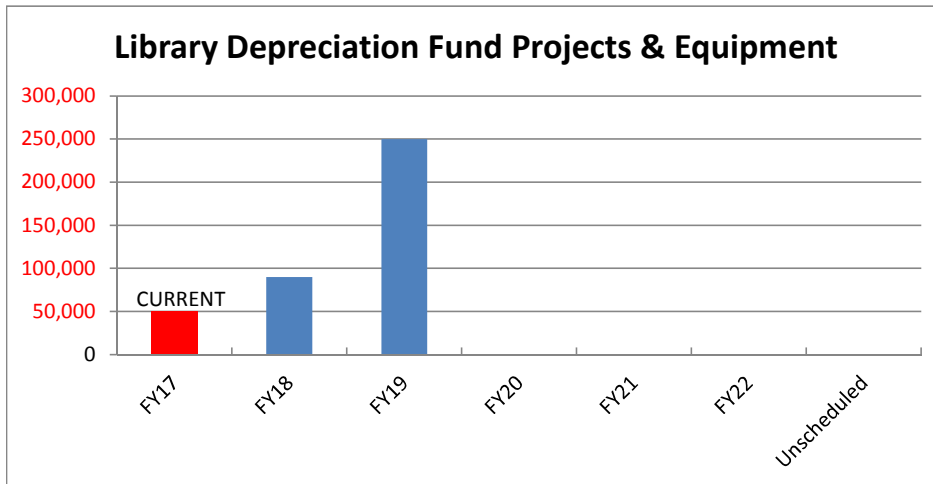
Library Depreciation Reserve Fund Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 259,000	\$ 209,000	\$ 157,357	\$ (53,518)	\$ (13,612)	\$ 27,093	
Plus: Estimated Annual Unspent Appropriations		\$ 38,357	\$ 39,124	\$ 39,907	\$ 40,705	\$ 41,519	\$ -
Plus: Library Foundation for Bookmobile							
Less: Scheduled CIP Project Costs	\$ (50,000)	\$ (90,000)	\$ (250,000)	\$ -	\$ -	\$ -	\$ -
Projected Year-End Cash Dedicated to CIP	\$ 209,000	\$ 157,357	\$ (53,518)	\$ (13,612)	\$ 27,093	\$ 68,612	

Assumptions Made for Revenue Estimates:

		Projected				
		FY18	FY19	FY20	FY21	FY22
Estimated Annual Library Budget	\$ 1,960,000	\$ 2,018,800	\$ 2,059,176	\$ 2,100,360	\$ 2,142,367	\$ 2,185,214
Estimated Amount of Budget left Unused	0.3%	1.9%	1.9%	1.9%	1.9%	1.9%
Estimated Annual Unspent Appropriations	\$ 5,880	\$ 38,357	\$ 39,124	\$ 39,907	\$ 40,705	\$ 41,519
Current Budget Amount Dedicated to CIP %		100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Capital Improvements %		0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP		100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP		\$ 38,357	\$ 39,124	\$ 39,907	\$ 40,705	\$ 41,519

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	LIB12	LIBRARY	PEDESTRIAN ACCESS - LIBRARY PARKING LOT	\$30,000					
	LIB13	LIBRARY	RECONFIGURATION OF EXISTING BUILDING SPACE						
	LIB14	LIBRARY	IMPLEMENTATION OF LANDSCAPE MASTER PLAN						
	LIB20	LIBRARY	SECURITY SYSTEM FOR THE LIBRARY - COST UNKNOWN, ANTICIPATED FOR FY18						
	LIB21	Library	TASK CHAIRS FOR PUBLIC AND STAFF	\$20,000					
	LIB22	LIBRARY	NEW CARPET FOR THE PUBLIC AREA OF THE LIBRARY.		\$230,000				
	LIB23	LIBRARY	2 COPIERS: CHILDREN'S DEPT AND STAFF WORKROOM		\$20,000				
	LIB24	LIBRARY	(2) SELF-CHECK KIOSK FOR MAIN AND SECOND FLOOR	\$40,000					

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<i>Summary for Library Depreciation Reserve (8 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$90,000	\$250,000				

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB12

PROJECT NAME
PEDESTRIAN ACCESS - LIBRARY PARKING LOT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$30,000					

DESCRIPTION OF PROJECT

Re-design and construction of pedestrian-friendly features in the Library Parking lot. Patrons parking on the west side of the parking lot have to cross through vehicle traffic and around curbing/medians to access the Library entrance. In addition, proposed renovations of the old Harrington Building adjacent to the Library have included adding a pedestrian pathway, crossing from Wallace to the Library parking lot. This improvement to pedestrian access to the parking lot is expected to have consequences for how many people will be crossing through this heavily used lot. Accessibility requirements for line-of-travel and the need to navigate the existing curbs are a concern. Some parking spaces may have to be eliminated. A revised site plan has been completed by WTI with estimated construction costs for Phase I of \$50,000 and Phase II at \$30,000 – Downtown TIF participating in an amount of TBD, with the balance coming from the Library Depreciation Reserve. The Library Foundation will also participate by providing the funds needed for changes to the landscaping.

ALTERNATIVES CONSIDERED

Leave parking lot configuration the way it is - without a pedestrian path from Wallace.

ADVANTAGES OF APPROVAL

Improved safety for pedestrians trying to access the Library or cross the library property.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

Library Depreciation Reserve - with possible contribution from the Downtown Tax Increment District.

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB13

PROJECT NAME
RECONFIGURATION OF EXISTING BUILDING SPACE

- New
- Replacement
- Equipment
- Project

FY18 FY19 FY20 FY21 FY22 Unscheduled

DESCRIPTION OF PROJECT

The Library's Strategic Plan for 2013-2017 includes reviewing current Library space usage and ensuring that we are using it as efficiently and effectively as possible. We are working with local architect, Rob Pertzborn, (funded by the Foundation) to see what options we have for possibly reconfiguring some of our existing space, i.e. the Computer Training Lab and the Foundation offices. The Strategic Plan also calls for more space that can be used by local businesspeople and patrons for planning and creative purposes. We have begun meeting with the architect but no decisions have been made and the project is still in initial phases, so no dollar amount has been determined yet.

ALTERNATIVES CONSIDERED

Leaving the interior space utilization as it currently exists.

ADVANTAGES OF APPROVAL

The Library's two public meeting rooms are booked months in advance, so people ask the Library staff for quiet space to have small meetings frequently. One of our goals is to have a public work space that would include a 3-D printer and other materials conducive to creativity. That could only be accomplished by making some changes to the current space configuration, and would answer the requests from the public.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Reserve

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB14

PROJECT NAME
IMPLEMENTATION OF LANDSCAPE MASTER PLAN

- New
- Replacement
- Equipment
- Project

FY18 FY19 FY20 FY21 FY22 Unscheduled

DESCRIPTION OF PROJECT

The Library currently has no completed Grounds Master Plan; although there are plans for the installation of memorial benches and trees. We want to work with a landscape architect to develop a plan that will replace high-maintenance plants with low-maintenance, drought-resistant plantings that will enhance the Library's grounds and maintain the Library's appearance as a community jewel. This would also complement the landscaping that has been done by the owners of the Harrington building on south Wallace, adjacent to the Library's west property line, and accommodate any upgrades to the parking lot that would be made this year (LIB12). Because the project is in the initial phases, there is no estimate of cost yet.

ALTERNATIVES CONSIDERED

Maintain the current grounds appearance.

ADVANTAGES OF APPROVAL

The Library staff gets regular complaints and comments from our customers regarding the weeds in the 'dog bones' of the parking lot, and the sometimes unkempt flower beds and grounds. City Facilities staff do their best to keep the grounds mowed but weeding the current rocky spaces is almost impossible due to their design. The current plantings are high-maintenance and time-intensive, which makes keeping them healthy and attractive very difficult. We would like to keep the Library's appearance up and remain a place that community members are proud of; a landscaping master plan will help us do that.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Reserve

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB20

PROJECT NAME						
Security System for the Library - cost unknown, anticipated for FY18						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
------	------	------	------	------	-------------

DESCRIPTION OF PROJECT

Installation of a security system with cameras for the Library's interior, lobby, and exterior. This will be an agenda item for discussion during an upcoming Library Board meeting.

ALTERNATIVES CONSIDERED

Continue without security system

ADVANTAGES OF APPROVAL

Increased safety of Library customers and staff; increased security for the many thousands of dollars of materials, equipment and art in the Library.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Fund

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
Library

PROJECT NUMBER
LIB21

PROJECT NAME						
Task chairs for public and staff						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$20,000					

DESCRIPTION OF PROJECT

Purchase 75 task chairs to replace worn out public and staff chairs that were purchased ten years ago and have been in constant use since then.

ALTERNATIVES CONSIDERED

Continue to use chairs that are currently in use until they disintegrate.

ADVANTAGES OF APPROVAL

Ensure comfort and safety of the staff and patrons in need of appropriate seating.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Fund

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB22

PROJECT NAME
New carpet for the public area of the Library.

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$230,000				

DESCRIPTION OF PROJECT

Replace worn carpeting in Library on both floors, in public areas.

ALTERNATIVES CONSIDERED

Library patrons and staff will continue to walk on worn carpet.

ADVANTAGES OF APPROVAL

The 10-yr. old carpet is beginning to show a great deal of wear from the 1000-1500 people a day who come through the library. It will have to be replaced at some point for both aesthetic reasons and as a safety precaution.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Fund

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB23

PROJECT NAME
2 copiers: Children's Dept and staff workroom

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$20,000				

DESCRIPTION OF PROJECT

Place a small color copier in the Children's Department and replace the aging black & white printer in the staff workroom until it quits.

ALTERNATIVES CONSIDERED

Place a small color copier in the Children's Department and replace the aging black & white printer in the staff workroom until it quits. Continue to provide only black & white copies to public in Children's; use the existing black & white printer in the staff workroom until it quits. According to the service rep, we will not be able to get parts for the machine after the next year.

ADVANTAGES OF APPROVAL

Patrons of the Children's department have asked for color printing for some time and will be pleased to have this service. A new color printer in the staff workroom will help Library staff complete work efficiently.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Fund

CIP Project Fund
Library Depreciation Reserve

DEPARTMENT
LIBRARY

PROJECT NUMBER
LIB24

PROJECT NAME
(2) Self-check kiosk for Main and Second floor

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$40,000					

DESCRIPTION OF PROJECT

We need to put a self-check kiosk on the second floor to accommodate people who want to check their materials out themselves and leave, rather than waiting in line to use the self-check machines on the first floor. This is in response to numerous patron requests. It will lessen the burden on circulation staff and serve the patrons more efficiently.

ALTERNATIVES CONSIDERED

Continue to have no self-check machines upstairs and send everyone to the first floor Circulation desk or two kiosks.

ADVANTAGES OF APPROVAL

Less dependence on Library staff and greater efficiency for Library patrons.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Library Depreciation Fund

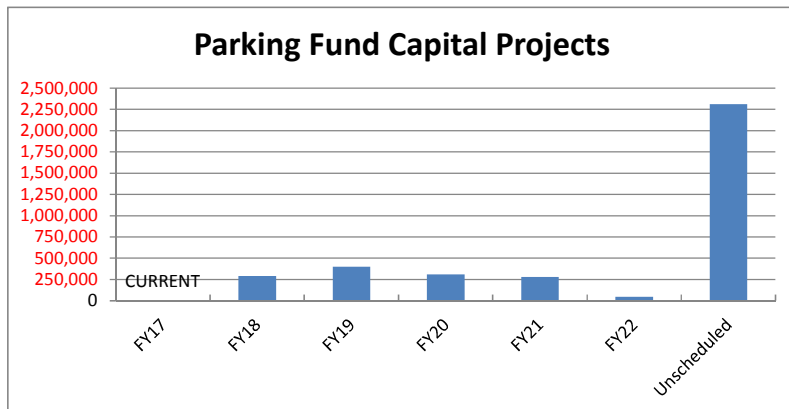
**Parking Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Balance Dedicated to CIP	\$ 166,616	\$ 176,616	\$ 190,716	\$ 146,242	\$ 174,862	\$ 125,914	
Cash In Lieu of Parking							
Plus: Parking Revenues Dedicated to Capital	\$ -	\$ 44,100	\$ 46,305	\$ 48,620	\$ 51,051	\$ 53,604	\$ -
Plus: Downtown TIF Interest Contribution	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	
Plus: TIF Contribution for parking lot redesign and improv.	\$ -	\$ 250,000	\$ 300,000	\$ 280,000	\$ 170,000		
Plus: Additional TIF Contribution Request					\$ -	\$ -	
Less: Scheduled CIP Costs (adjusted)	\$ -	\$ (290,000)	\$ (400,779)	\$ (310,000)	\$ (280,000)	\$ (45,000)	\$ (2,310,000)
Projected Year-End Cash Dedicated to CIP	\$ 176,616	\$ 190,716	\$ 146,242	\$ 174,862	\$ 125,914	\$ 144,517	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Parking Fund Revenues	\$ 700,000	\$ 700,000	\$ 735,000	\$ 771,750	\$ 810,338	\$ 850,854
Estimated Growth in Revenues	-	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 700,000	\$ 735,000	\$ 771,750	\$ 810,338	\$ 850,854	\$ 893,397
Current Revenues Dedicated to CIP %	0.0%	0.0%	6.0%	6.0%	6.0%	6.0%
Plus: Increase Dedicated to Capital Improvements %	0.0%	6.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	0.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Total Estimated Revenues Dedicated to Capital	\$ -	\$ 44,100	\$ 46,305	\$ 48,620	\$ 51,051	\$ 53,604

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
			Parking Fund						
GF199	PARKING		PROFESSIONAL BUILDING RECONFIGURATION - PHASE 2		\$35,779				
P001	PARKING		WILLSON LOT REDESIGN		\$300,000				
P004	PARKING		SURFACE PARKING LOT HARDWARE & SOFTWARE SYSTEMS		\$15,000	\$15,000	\$15,000	\$15,000	
P012	PARKING		ARMORY LOT REDESIGN AND IMPROVEMENTS				\$250,000		
P013	PARKING		BLACK (CARNEGIE) LOT REDESIGN & IMPROVEMENTS						\$410,000
P014	PARKING		PARKING GARAGE CRACK MAINTENANCE AND REPAIR	\$5,000	\$20,000	\$5,000	\$5,000	\$20,000	\$0
P015	PARKING		PARKING GARAGE ROOF PROJECT						\$400,000
P016	PARKING		PURCHASE OF PROPERTY FOR FUTURE PARKING FACILITIES IN THE DOWNTOWN PARKING DISTRICT.						\$1,500,000
P017	PARKING		ROUSE PARKING LOT RE-DESIGN AND IMPROVEMENTS			\$280,000			
P020	PARKING		PARKING VEHICLE LEASES	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
P021	PARKING		PORTABLE RADIO REPLACEMENT		\$20,000				
P022	PARKING		PARKING GARAGE AND CITATION EQUIPMENT	\$250,000					
P023	PARKING		PARKING GARAGE SECURITY CAMERAS	\$25,000					

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<i>Summary for Parking Fund (13 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$290,000	\$400,779	\$310,000	\$280,000	\$45,000	\$2,310,000

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

GF199

PROJECT NAME

PROFESSIONAL BUILDING RECONFIGURATION - Phase 2

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$35,779

DESCRIPTION OF PROJECT

The City is responding to growth by adding staff to meet the increased demand for services in our community. We have also reorganized divisions (Community Development) and created other divisions (Stormwater) to improve efficiency and better serve our community. In order to accommodate this growth, we need to remodel the Stiff Building. In FY16 the City Commission approved a Phase I of the remodel that will provide a better use of existing space by relocating certain functions to the basement and reclaiming unused square footage. Approval of Phase II would allow the consolidation of Community Development (Planning and Building) together on one floor and the consolidation of Public Works Services (Engineering, GIS and Stormwater) together on another floor. This will allow better coordination of staff and better service to our public. Phase I is anticipated to be completed late spring of 2016.

ALTERNATIVES CONSIDERED

Continue to operate as we are today

ADVANTAGES OF APPROVAL

Community Development would be able to consolidate its operations and services to allow for an integrated customer-focused service delivery model. It will also provide Public Works with the ability to collocate its services in the Stiff Building. Finally it will help the City to take a planned and efficient approach to building utilization and service optimization.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs anticipated for building reconfiguration.

FUNDING SOURCES

Building Inspection, Community Development, General Fund, Parking, Water

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P001

PROJECT NAME

Willson Lot Redesign

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

Improve the parking lot layout, set-backs, landscaping, signage, lighting, required storm water treatment infrastructure requirements and parking kiosk.

ALTERNATIVES CONSIDERED

Keep lot as is

ADVANTAGES OF APPROVAL

Improved functioning of parking lot

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal

FUNDING SOURCES

Parking Fund and TIF Contribution

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P004

PROJECT NAME

Surface Parking Lot Hardware & Software Systems

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$15,000

\$15,000

\$15,000

\$15,000

DESCRIPTION OF PROJECT

It is highly likely the Downtown Parking Lots will be transitioned to a fee lots. This will require the purchase and installation of pay-and-display kiosks for each parking lot estimated to cost \$60,000. The pads and vehicle protection will be installed as a part of each surface lot's redesign.

ALTERNATIVES CONSIDERED

Do not convert lots to pay lots; continue the current practice of permit holders and free 2-hour parking.

ADVANTAGES OF APPROVAL

Citizens using the surface lots will pay for the actual time they use the facilities. Revenue from parking charges can be used to support the parking operations and fund additional parking assets. This equipment will improve the efficiency of parking officers monitoring parking rules in the downtown.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minor operational costs.

FUNDING SOURCES

Parking Fund and TIF Contributions

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P012

PROJECT NAME

Armory Lot Redesign and Improvements

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$250,000

DESCRIPTION OF PROJECT

This project is scheduled after the completion of the Etha Hotel construction project. Layout, set-backs, landscaping, signage, lighting, sidewalks, and storm water treatment facilities are being planned.

ALTERNATIVES CONSIDERED

Keep the lot as is.

ADVANTAGES OF APPROVAL

Better functioning and safer parking lot layout. Will reduce a significant amount of untreated stormwater runoff. Increased revenue and parking asset coordination through the implementation of pay kiosks.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

New asphalt will require less maintenance, but plantings and landscaping will require additional maintenance.

FUNDING SOURCES

Parking Fund and TIF Contributions - the Etha Hotel may also help fund these improvements.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P013

PROJECT NAME

Black (Carnegie) Lot Redesign & Improvements

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$410,000

DESCRIPTION OF PROJECT

Improve the parking lot with layout, set-backs, landscaping, signage, lighting, sidewalks, and required storm water treatment infrastructure. This site may provide an important location for a regional underground storm water retention and treatment system under the parking surface.

ALTERNATIVES CONSIDERED

Keep the lot as is.

ADVANTAGES OF APPROVAL

Better functioning and safer parking lot layout. Will reduce a significant amount of untreated stormwater runoff. Increased revenue and parking asset coordination through the implementation of pay kiosks.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

New asphalt will require less maintenance, but plantings and landscaping will require additional maintenance.

FUNDING SOURCES

Parking Fund and TIF Contribution. Potential for Stormwater program funding.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P014

PROJECT NAME

Parking Garage Crack Maintenance and Repair

New

Replacement

Equipment

Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$5,000	\$20,000	\$5,000	\$5,000	\$20,000	\$0

DESCRIPTION OF PROJECT

Includes laser measuring of deck gaps and routine repairs and patching of concrete deck surfaces. Structural gap repair is anticipated every 3 years with routine caulking in between.

ALTERNATIVES CONSIDERED

Moving to an every other year gap maintenance or reducing the frequency of structural gap filling (not advised).

ADVANTAGES OF APPROVAL

Will extend the life of the parking garage deck surfaces.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Parking Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P015

PROJECT NAME

Parking Garage Roof Project

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Construction in the downtown core has increased demand for parking space in the Garage. The demand for additional space is anticipated with construction projects both planned and underway. The top floor of the garage has limited use during the winter months as snow removal is difficult due to limited clearances. Installing a roof on the top floor would allow for maximum utilization of the garage year around.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased utilization of the Parking Garage in all weather conditions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

Parking Fund and TIF Contributions

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P016

PROJECT NAME

Purchase of property for future parking facilities in the Downtown Parking District.

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$1,500,000

DESCRIPTION OF PROJECT

The Downtown Strategic Parking Management Plan was adopted by the Parking omission and City Commission in July 2016. The plan outlines 26 strategies to address current and future parking issue in the Downtown. Over the next year, the Parking Commission will be working with city staff, downtown stakeholders and the community at large on next steps based on the adopted plan. The acquisition and construction of future parking assets (surface and structured) is a fundamental component. Costs and locations of those needed assets are not know, but our current Black (Carnegie) Parking lot was appraised at \$1.5 M in 2011.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Adequate parking resources are critical for the economic health and vibrancy of the Downtown Bozeman.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Additional lot maintenance each year/season.

FUNDING SOURCES

Parking Fund, Bonds, TIF, Loans, SID

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P017

PROJECT NAME

Rouse Parking Lot Re-design and Improvements

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$280,000

DESCRIPTION OF PROJECT

Rouse Lot Improvements – Layout, set-backs, landscaping, signage, lighting, sidewalks, and stormwater treatment facilities. These improvements are separate from any creek restoration project and will only involve the surface lot.

ALTERNATIVES CONSIDERED

Maintain current configuration.

ADVANTAGES OF APPROVAL

Better functioning and safer parking lot layout. Increased revenue and parking asset coordination through the implementation of pay kiosks.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

New asphalt will require less maintenance, but plantings and landscaping will require additional maintenance.

FUNDING SOURCES

Parking Fund, TIF contribution for lot improvements.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P020

PROJECT NAME

Parking Vehicle Leases

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

In the fall of 2016, the Parking Division transitioned from utilizing old Police vehicles to leased Prius hybrids. Initial indications are that these vehicles will work exceptionally well for parking enforcement duties and will reduce the fuel consumption and maintenance costs when compared to the retired patrol vehicles.

ALTERNATIVES CONSIDERED

Continue to use retired patrol vehicles, lease hybrid vehicles at \$280/mp. 12,000 mile annual usage. Purchase new cars.

ADVANTAGES OF APPROVAL

Low cost vehicles that are suitable for the Parking Enforcement function; re-use of police vehicles once they are no longer suitable for first-responder use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Anticipating maintenance requirements for used police vehicles is difficult at best as their age and condition were the primary reasons they were replaced in the PD. Maintenance and operations for leased vehicles would be limited to oil changes and fuel costs and would be significantly lower than the current fleet.

FUNDING SOURCES

Parking Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P021

PROJECT NAME

Portable Radio Replacement

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

This replacement project is dependent on the technology determination for the City's police and fire departments. We recommend using the same platform (digital trunked) as police and fire, and the cost of the units will be similar to those specified for that system.

ALTERNATIVES CONSIDERED

Continue the use of the current portables to the point of failure. Purchase less expensive models.

ADVANTAGES OF APPROVAL

These portable radios are the primary means of emergency communications with 9-1-1 and police units. Providing the Parking Enforcement Officers with reliable push-to-talk communications improves safety and efficiency of staff by ensuring they are in immediate contact should they need help themselves or need to report an emergency during their patrols.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance and battery replacements.

FUNDING SOURCES

Parking Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P022

PROJECT NAME

Parking Garage and Citation Equipment

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$250,000

DESCRIPTION OF PROJECT

The parking garage equipment (barrier gates, card readers, ticket machines and pay stations) were purchased and installed in 2008. As the parking garage is not staffed, this equipment must be highly reliable and operate with limited staff intervention. Too often breakdowns strand parking customers in the garage until the gates are forced open, driven through, or are opened manually by staff. These malfunctions anger customers and diminish trust in the facility and of local government operations in general. Additionally, hotels using the garage for parking are requesting equipment to provide validation tickets for their customers. Our current system does not allow this capability in an affordable package. New technology and user interfaces will improve reliability and customer experience and allow for increased revenue through more reliable equipment operation and enforcement. The Parking Commission reordered the priorities previously listed in the CIP to accommodate tax increment funding and fund the replacement of the garage equipment and citation software (thought to be a software as service purchase).

ALTERNATIVES CONSIDERED

Continue to use the current equipment and interfaces.

ADVANTAGES OF APPROVAL

Parking customers will experience improved payment options and reliability in the operation of the garage. Garage revenue will increase as the gates will operate more regularly. Staff will spend less time repairing equipment and responding to calls for malfunctioning gates and payment machines. Public trust in the garage and parking operations will most likely improve while equipment damage and vandalism will likely decrease.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Standard maintenance agreements

FUNDING SOURCES

Parking Fund, TIF

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Parking Fund

PARKING

P023

PROJECT NAME

Parking Garage Security Cameras

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$25,000

DESCRIPTION OF PROJECT

Presently Bridger Park has two video cameras covering the exit gates on Mendenhall and Black Streets. The cameras, while high quality, do not provide adequate security of the garage. It has been the plan to install additional cameras in key locations, but we have been limited by the speed of our internet connection. The installation of fiber in the garage has provided the needed bandwidth to install additional cameras to provide security on all levels and the stairwells.

ALTERNATIVES CONSIDERED

Continue to monitor only the exit gates.

ADVANTAGES OF APPROVAL

Increased security. We anticipate the installation of additional cameras will provide an important deterrence and will help the police to identify vehicles and those who choose to commit acts of vandalism and other criminal behavior. We may also receive additional reimbursements from the courts for damaged equipment if the parties responsible can be identified.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance for vandalized cameras and equipment.

FUNDING SOURCES

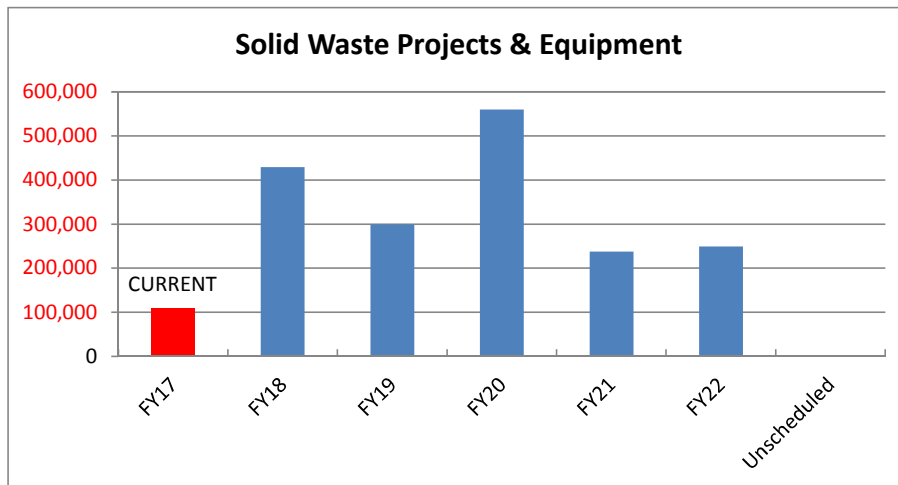
Parking Fund

Solid Waste Collection & Recycling Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 145,000	\$ 31,710	\$ 60,256	\$ 241,729	\$ 187,275	\$ 480,099	\$ -
Plus: Revenues Dedicated to CIP	\$ 436,710	\$ 458,546	\$ 481,473	\$ 505,547	\$ 530,824	\$ 557,365	\$ -
Less: Carryover Capital from FY16	\$ (440,000)						
Less: Scheduled CIP Project Costs	\$ (110,000)	\$ (430,000)	\$ (300,000)	\$ (560,000)	\$ (238,000)	\$ (250,000)	
Projected Year-End Cash Dedicated to CIP	\$ 31,710	\$ 60,256	\$ 241,729	\$ 187,275	\$ 480,099	\$ 787,465	\$ -

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Revenues	\$ 3,359,309	\$ 3,359,309	\$ 3,527,274	\$ 3,703,638	\$ 3,888,820	\$ 4,083,261
Estimated Annual Increase in Revenues	-	5.0%	5.0%	5.0%	5.0%	5.0%
Total Estimated Revenues	\$ 3,359,309	\$ 3,527,274	\$ 3,703,638	\$ 3,888,820	\$ 4,083,261	\$ 4,287,424
Current Revenues Dedicated to CIP %	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Total Estimated Revenues Dedicated to CIP	\$ 436,710	\$ 458,546	\$ 481,473	\$ 505,547	\$ 530,824	\$ 557,365



Note: 2012 Rate Study identifies \$367,000 in total annual depreciation expense.

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Solid Waste									
	SW32	COLLECTION	FRONT LOAD TRUCK REPLACEMENT			\$270,000			
	SW36	COLLECTION	SIDE LOAD TRUCK - NEW (ADDITIONAL ROUTE)			\$290,000			
	SW38	COLLECTION	SIDE LOAD TRUCK REPLACEMENT OF ASSET #3367		\$300,000				
	SW42	COLLECTION	STORAGE BUILDING	\$130,000					
	SW45	COLLECTION	TOTE DELIVERY TRUCK				\$38,000		
	SW46	COLLECTION	GRAPPLE TRUCK				\$200,000		
	SW49	COLLECTION	SIDE LOAD TRUCK - REPLACEMENT OF ASSET #3452	\$300,000					
				\$430,000	\$300,000	\$560,000	\$238,000		

Solid Waste									
	SW47	SOLID WASTE	SOLID WASTE RATE STUDY					\$50,000	
	SW48	SOLID WASTE	TROMMEL SCREEN					\$200,000	
								\$250,000	

<i>Summary for Solid Waste (9 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$430,000	\$300,000	\$560,000	\$238,000	\$250,000	

CIP Project Fund
Solid Waste

DEPARTMENT
COLLECTION

PROJECT NUMBER
SW32

PROJECT NAME
Front Load Truck Replacement

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$270,000			

DESCRIPTION OF PROJECT

This truck is a replacement for an existing front-load truck currently collecting residential and commercial refuse.

Describe the criticality (i.e., importance) of this project to the operation: This equipment is critical to the operation of the Solid Waste Division. Customer depend on refuse removal on their collection day

How is efficiency improved with this equipment: Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions

What is the impact (i.e., scope-of-use) for this equipment: This equipment will be used in the collection of refuse for Bozeman customers.

ALTERNATIVES CONSIDERED

Leasing a front-load truck.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We will be forced to use existing equipment longer leading to higher repair costs and longer downtime of trucks not on route. Can lead to declining customer confidence resulting in loosing customer accounts. Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Average maintenance costs: \$10,000/year

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

COLLECTION

SW36

PROJECT NAME

Side Load Truck - New (Additional Route)

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$290,000

DESCRIPTION OF PROJECT

Side Load Truck - New (Additional Route)

Describe the criticality (i.e., importance) of this project to the operation: This equipment is critical to the operation of the Solid Waste Division. Customers depend on refuse removal on their collection day

How is efficiency improved with this equipment: Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions. The packer mounted on the chassis also see improvements thru better operator agronomics with joystick controls and better packer function options.

What is the impact (i.e., scope-of-use) for this equipment: This equipment will be used in the collection of refuse for Bozeman customers

ALTERNATIVES CONSIDERED

Leasing a side-load truck

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We will be forced to use existing equipment longer leading to higher repair costs and longer downtime of trucks not on route. Can lead to declining customer confidence resulting in loosing customer accounts. Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs = \$30,000

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

COLLECTION

SW38

PROJECT NAME

Side Load Truck Replacement of Asset #3367

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

This truck is a replacement for an existing side-load truck currently collecting residential refuse.

Describe the criticality (i.e., importance) of this project to the operation: This equipment is critical to the operation of the Solid Waste Division. Customer depend on refuse removal on their collection day.

How is efficiency improved with this equipment: Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions. The packer mounted on the chassis also see improvements thru better operator ergonomics with joystick controls and better packer function options.

What is the impact (i.e., scope-of-use) for this equipment: This equipment will be used in the collection of refuse for Bozeman customers

ALTERNATIVES CONSIDERED

Leasing a side-load truck

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We will be forced to use existing equipment longer leading to higher repair costs and longer downtime of trucks not on route. Can lead to declining customer confidence resulting in loosing customer accounts. Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs = \$30,000

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

COLLECTION

SW42

PROJECT NAME

Storage Building

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$130,000

DESCRIPTION OF PROJECT

Solid Waste Storage Building

Describe the criticality (i.e., importance) of this project to the operation: Allows us to store containers indoors out of Sunlight, container can be left in stack form and be assembled as needed. We have about 2,000 containers in stock. Also house all the repair items such as lids, wheels for each size for totes and dumpsters.

ALTERNATIVES CONSIDERED

Continue to store items outside

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We continue to work outdoors in poor weather conditions to assemble 600 totes as they are off loaded. If totes are not assembled quickly, it becomes impossible to pull them apart, as the totes are stacked together. Protect equipment from the elements of weather; All of our containers can be stored inside, not collecting water, exposure to sun and be less visible to adjacent properties.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Operating costs, electricity for lights = < \$1,000/ year

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

COLLECTION

SW45

PROJECT NAME

Tote Delivery Truck

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$38,000

DESCRIPTION OF PROJECT

This truck is a replacement for an existing tote delivery truck

Describe the criticality (i.e., importance) of this project to the operation: This truck is critical in the execution of container management. Totes need to be delivered to new customers, exchange of totes for customers and removal of totes.

What is the impact (i.e., scope-of-use) for this equipment: Used for the tote management of Solid Waste customers

ALTERNATIVES CONSIDERED

Leasing a truck

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Will have a significant impact on the daily operation of the Solid Waste Division. The Solid Waste Division can continue to deliver, exchange and remove customer tote requests.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance costs \$1,000/year

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund
Solid Waste

DEPARTMENT
COLLECTION

PROJECT NUMBER
SW46

PROJECT NAME
Grapple Truck

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$200,000		

DESCRIPTION OF PROJECT

Truck with articulating arm with clam shells that will pick up large items and place into dump box

Describe the criticality (i.e., importance) of this project to the operation: Work can still be done by hand, increasing risk of back injury .

How is efficiency improved with this equipment: Efficiency is accomplished thru our work comp rates.

What is the impact (i.e., scope-of-use) for this equipment: This equipment will be used in the collection of bulky item and brush removal.

ALTERNATIVES CONSIDERED

Leasing a grapple truck

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We continue to collect these large items by hand. Equipment would be used to pick up large bulky items and brush. Currently we manually load these items by hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance cost: \$6,000 per year

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

SOLID WASTE

SW47

PROJECT NAME

Solid Waste Rate Study

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$50,000

DESCRIPTION OF PROJECT

Solid Waste Rate Study - including an analysis of revenue requirements, funding depreciation, and cost recovery by customer class. The most recent rate study was completed in 2013 and should be updated.

ALTERNATIVES CONSIDERED

Continue with current rates.

ADVANTAGES OF APPROVAL

Customers will be appropriately charged for their garbage and recycling services. Full cost accounting, rates based on cost of services.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund
Solid Waste

DEPARTMENT
SOLID WASTE

PROJECT NUMBER
SW48

PROJECT NAME
Trommel Screen

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$200,000	

DESCRIPTION OF PROJECT

A screen that can separate out garbage from finished compost and separate the size of compost.

Describe the criticality (i.e., importance) of this project to the operation: This is the final stage of the composting process.
How is efficiency improved with this equipment: Currently we do not have the ability to accomplish this task.

ALTERNATIVES CONSIDERED

Rental of this equipment is not available

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We continue to stockpile. The Solid Waste Division can market the finished compost product.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

100% Solid Waste Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Solid Waste

COLLECTION

SW49

PROJECT NAME

Side Load Truck - Replacement of Asset #3452

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$300,000

DESCRIPTION OF PROJECT

Side Load Truck - Replacement of Asset #3452

Describe the criticality (i.e., importance) of this project to the operation: This equipment is critical to the operation of the Solid Waste Division. Customers depend on refuse removal on their collection day.

How is efficiency improved with this equipment: Efficiency is improved with this equipment on the chassis side with increased fuel efficiency and emission reductions. The packer mounted on the chassis also see improvements thru better operator ergonomics with joystick controls and better packer function options.

What is the impact (i.e., scope-of-use) for this equipment: This equipment will be used in the collection of refuse for Bozeman customers

ALTERNATIVES CONSIDERED

Leasing a side-load truck

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We will be forced to use existing equipment longer leading to higher repair costs and longer downtime of trucks not on route. Can lead to declining customer confidence resulting in loosing customer accounts. Reliable equipment to ensure routes completed in an efficient manner. Maintenance costs of new equipment will be lower.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual operating and maintenance costs = \$30,000

FUNDING SOURCES

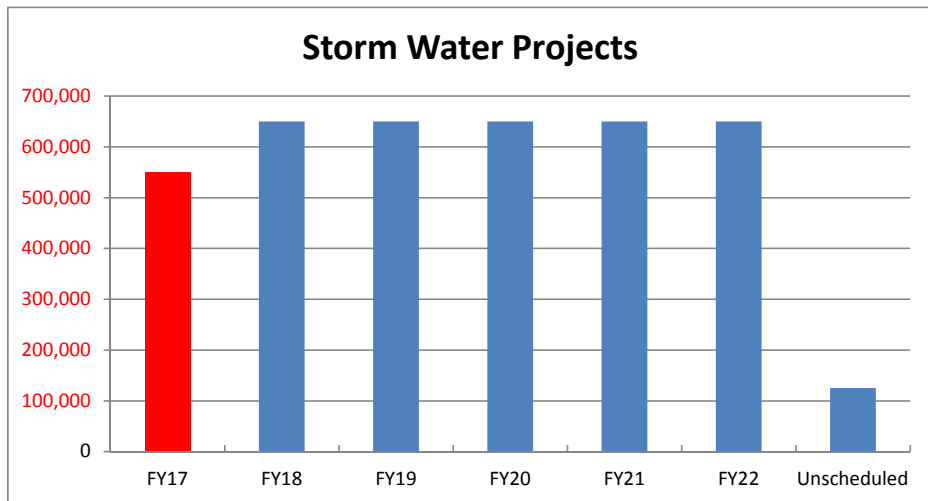
100% Solid Waste Fund

**Storm Water Utility
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 489,000	\$ 375,901	\$ 332,057	\$ 306,398	\$ 299,469	\$ 311,832	
Plus: Storm Water Utility Fees Dedicated to Capital	\$ 588,501	\$ 606,156	\$ 624,341	\$ 643,071	\$ 662,363	\$ 682,234	
Less: FY16 Carryover Capital	\$ (151,600)						
Less: Scheduled CIP Project Costs	\$ (550,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (650,000)	\$ (125,000)
Projected Year-End Cash Dedicated to CIP	\$ 375,901	\$ 332,057	\$ 306,398	\$ 299,469	\$ 311,832	\$ 344,066	\$ (125,000)

Assumptions Made for Revenue Estimates:	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Storm Water Utility Revenue	\$ 1,307,780	\$ 1,307,780	\$ 1,347,013	\$ 1,387,424	\$ 1,429,047	\$ 1,471,918
Estimated Annual Increase - Attributed to Growth		3%	3%	3%	3%	3%
Estimated Annual Increase - Rate Increase		0%	0%	0%	0%	0%
Total Estimated Revenues	\$ 1,307,780	\$ 1,347,013	\$ 1,387,424	\$ 1,429,047	\$ 1,471,918	\$ 1,516,075
Current Revenues Dedicated to CIP %	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Plus: Increase Dedicated to Capital	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Total Estimated Revenues Dedicated to CIP	\$ 588,501	\$ 606,156	\$ 624,341	\$ 643,071	\$ 662,363	\$ 682,234

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Storm Water Fund									
	STRM04	STORMWATER	ANNUAL STORMWATER PIPE REHABILITATION AND DRAINAGE PROJECT DESIGN	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
	STRM10	STORMWATER	ANNUAL STORMWATER SYSTEM ENHANCEMENT PROJECT DESIGN	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
	STRM13	STORMWATER	ANNUAL PIPE REHABILITATIONS AND DRAINAGE PROJECTS	\$105,000	\$175,000	\$175,000	\$325,000	\$325,000	
	STRM20	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - S BLACK AND E CLEVELAND		\$100,000				
	STRM21	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - S BOZEMAN AND E CLEVELAND			\$75,000			
	STRM26	STORMWATER	STORMWATER TV VAN REFURBISHMENT						\$125,000
	STRM31	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - N 9TH AND W VILLARD			\$100,000			
	STRM32	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - LANGHOR AND WESTRIDGE			\$75,000			
	STRM33	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - N 11TH AND W KOCH					\$75,000	
	STRM34	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - N ROUSE AND E PEACH			\$75,000			
	STRM36	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - 11TH AND DICKERSON					\$50,000	
	STRM37	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - WEST RIDGE				\$75,000		
	STRM38	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - PEACH AND 4TH				\$100,000		
	STRM39	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND BOZEMAN		\$75,000				
	STRM40	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND BLACK		\$75,000				
	STRM41	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND ROUSE		\$75,000				
	STRM42	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MASON AND TRACY	\$25,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	STRM43	STORMWATER	STORMWATER DIGITAL UNIVERSAL CAMERA - DUC	\$70,000					
	STRM44	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND WILLSON	\$75,000					
	STRM45	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND 3RD	\$75,000					
	STRM46	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND GRAND	\$75,000					
	STRM47	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - MAIN AND TRACY	\$75,000					
	STRM48	STORMWATER	ANNUAL PEDESTRIAN RAMP REPLACEMENT PROGRAM	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
	STRM49	STORMWATER	STORMWATER SYSTEM ENHANCEMENT PROGRAM - 11TH AND ALDERSON					\$50,000	
				\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$125,000

Summary for Storm Water Fund (24 items)

Totals by year:

<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
\$650,000	\$650,000	\$650,000	\$650,000	\$650,000	\$125,000

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM04

PROJECT NAME
Annual Stormwater Pipe Rehabilitation and Drainage Project Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	

DESCRIPTION OF PROJECT

The hiring of a qualified firm to complete engineering design for scheduled pipe rehabilitation and drainage projects.

Describe the criticality (i.e., importance) of this project to the operation: Allows staff to complete projects on time by having the discretion to assign design work to external consultants when internal engineering services are not available.

How is this project leveraged with other stakeholders/projects/funds: Design work is combined with other Public Work projects when possible, such as road reconstructions and utility replacements.

ALTERNATIVES CONSIDERED

Internal engineering staff complete design work when available.

ADVANTAGES OF APPROVAL

Professional design and timely completion of scheduled pipe and drainage projects.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM10

PROJECT NAME
Annual Stormwater System Enhancement Project Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	

DESCRIPTION OF PROJECT

The hiring of a qualified firm to complete engineering design for scheduled system enhancement projects.

Describe the criticality (i.e., importance) of this project to the operation: Allows staff to complete projects on time by having the discretion to assign design work to external consultants when internal engineering services are not available.

How is this project leveraged with other stakeholders/projects/funds: Design work is combined with other Public Work projects when possible, such as road reconstructions and utility replacements.

ALTERNATIVES CONSIDERED

Internal engineering staff complete design work.

ADVANTAGES OF APPROVAL

Professional design and timely completion of scheduled system enhancement projects.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM13

PROJECT NAME
Annual Pipe Rehabilitations and Drainage Projects

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$105,000	\$175,000	\$175,000	\$325,000	\$325,000	

DESCRIPTION OF PROJECT

The hiring of a contractor to complete infrastructure repairs and improvement projects, increasing the stormwater system's structural integrity and conveyance capacity.

Describe the criticality (i.e., importance) of this project to the operation: Allows staff to focus on the operation and maintenance of the stormwater system.

How is capacity affected by this project: The capacity of the stormwater system will be increased through the upsizing of pipes.

What safety or risk measures are mitigated with this project: Decreased likelihood of road failure, flooding, environmental degradation, and a drop in level-of-service to rate payers.

How is this project leveraged with other stakeholders/projects/funds: Funds may be saved and accumulated over a multi-year period or joined with other water/sewer pipe rehabilitation projects. A determination on how to allocate funds will occur annually during the CIP process.

ALTERNATIVES CONSIDERED

City staff complete pipe rehabilitation and drainage projects, reducing the resources applied towards system maintenance.

ADVANTAGES OF APPROVAL

Proactive approach to the repair and replacement of stormwater infrastructure that has or is likely to fail, increasing system efficiency and customer service.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM20

PROJECT NAME
Stormwater System Enhancement Program - S Black And E Cleveland

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$100,000				

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM21

PROJECT NAME
Stormwater System Enhancement Program - S Bozeman And E Cleveland

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$75,000			

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM26

PROJECT NAME
Stormwater TV Van Refurbishment

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$125,000

DESCRIPTION OF PROJECT

Refurbishment of existing Stormwater TV van routinely completed every 5 years to replace worn parts and remain consistent with new technology.

Describe the criticality (i.e., importance) of this project to the operation: This equipment is critical in assessing structural failures in the City's underground stormwater system.

Which infrastructure assets are maintained by this equipment: Stormwater Infrastructure
How is efficiency improved with this equipment: Allows the City to identify troubled areas and allocate resources to fix.

What is the impact (i.e., scope-of-use) for this equipment: Significantly improves operation efficiency, budget allocation, and project planning.

What are the implications of deferring the purchase of this equipment: Existing equipment breaks down and is not functional.

ALTERNATIVES CONSIDERED

Purchase a new TV Van at an estimated cost of \$250,000.

ADVANTAGES OF APPROVAL

Provides for the timely replacement of critical maintenance equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Decrease in maintenance costs

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM3I

PROJECT NAME
Stormwater System Enhancement Program - N 9th And W Villard

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$100,000			

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM32

PROJECT NAME
Stormwater System Enhancement Program - Langhor And Westridge

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$75,000			

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM33

PROJECT NAME
Stormwater System Enhancement Program - N 11th And W Koch

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$75,000	

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM34

PROJECT NAME
Stormwater System Enhancement Program - N Rouse And E Peach

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$75,000			

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM36

PROJECT NAME
Stormwater System Enhancement Program - I Ith and Dickerson

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$50,000	

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM37

PROJECT NAME
Stormwater System Enhancement Program - West ridge

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$75,000		

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM38

PROJECT NAME
Stormwater System Enhancement Program - Peach and 4th

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$100,000		

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM39

PROJECT NAME
Stormwater System Enhancement Program - Main and Bozeman

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$75,000				

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM40

PROJECT NAME
Stormwater System Enhancement Program - Main and Black

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$75,000				

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM4I

PROJECT NAME
Stormwater System Enhancement Program - Main and Rouse

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$75,000				

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM42

PROJECT NAME
Stormwater System Enhancement Program - Mason and Tracy

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000					

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM43

PROJECT NAME
Stormwater Digital Universal Camera - DUC

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$70,000					

DESCRIPTION OF PROJECT

Stormwater Digital Universal Camera

Describe the criticality (i.e., importance) of this project to the operation: This camera is critical to accessing the condition of the sewer main along with the Pipeline Assessment program we use. Our goal is to inspect the entire collection system once every 5 years.

Which infrastructure assets are maintained by this equipment: The Digital Universal Camera (DUC) is a semi-autonomous, high resolution digital CCTV side scanning camera designed for rapid and detailed condition assessment of our wastewater system.

How is efficiency improved with this equipment: This camera allows us to TV the main non-stop will allows us to increase the amount of pipe we TV in a day up to 5 to 10 times more than the traditional stop and go method that we now use.

What are the implications of deferring the purchase of this equipment: As we gain more miles of main every year we will have to adjust our goal of every main being televised once every five years to six or seven with the current stop and go technology we use.

How is this project leveraged with other stakeholders/projects/funds: The condition assessment of our mains is critical in determining the priority of sewer main replacement.

ALTERNATIVES CONSIDERED

Continue to use the stop and go method (SAG) and take longer to TV the mains. We have a goal to TV the entire system every 5 years, this is getting harder to do with the increasing growth of our collection system.

ADVANTAGES OF APPROVAL

This camera allows us to TV the main non-stop will allows us to increase the amount of pipe we TV in a day up to 5 to 10 times more than the traditional stop and go method that we now use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Placing electronic equipment in raw sewage is hard to predict costs I believe there will be little or no more costs than our present camera.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM44

PROJECT NAME
Stormwater System Enhancement Program - Main and Willson

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$75,000					

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM45

PROJECT NAME
Stormwater System Enhancement Program - Main and 3rd

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$75,000					

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM46

PROJECT NAME
Stormwater System Enhancement Program - Main and Grand

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$75,000					

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM47

PROJECT NAME
Stormwater System Enhancement Program - Main and Tracy

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$75,000					

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Semi-annual maintenance completed by crews using existing equipment. The workflow includes the vacuuming and disposal of settled debris, pollutants, and trash, which takes approx. 1-hour to complete per unit.

FUNDING SOURCES

Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM48

PROJECT NAME
Annual Pedestrian Ramp Replacement Program

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	

DESCRIPTION OF PROJECT

This annual program provides funding to continue upgrading pedestrian ramps to ADA compliance

How is connectivity affected by this project: A curb/pedestrian ramp provides an accessible route that people with disabilities can use to safely transition from a roadway to a curbed sidewalk and vice versa.

What safety or risk measures are mitigated with this project: Without access to properly developed ramps onto sidewalks, people with disabilities are forced to risk their personal safety by traveling in the street.

What regulations or standards are attained with this project: Upgrading CoB pedestrian ramps will allow the City to be in compliance with Title II of the ADA and Section 504 of the Rehabilitation Act of 1973 (Section 504).

How is this project leveraged with other stakeholders/projects/funds: The cost of this project will be 1/2 street maintenance fund and 1/2 stormwater fund. Cost split is appropriate because typically pedestrian ramp improvements also require replacement of stormwater inlets and catch basins.

ALTERNATIVES CONSIDERED

Continue with existing infrastructure, and not meet current ADA regulatory standards

ADVANTAGES OF APPROVAL

Upgrading the curb ramps will increase safety for community members and visitors with disabilities.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs.

FUNDING SOURCES

50% Street Maintenance Fund & 50% Stormwater Fund

CIP Project Fund
Storm Water Fund

DEPARTMENT
STORMWATER

PROJECT NUMBER
STRM49

PROJECT NAME
Stormwater System Enhancement Program - I Ith and Alderson

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$50,000	

DESCRIPTION OF PROJECT

Installation of an in-line stormwater sediment, trash, and oil separation unit

Describe the criticality (i.e., importance) of this project to the operation: Treatment unit is an industry standard practice and the best suited treatment option given the drainage area's size, land use, and pollutants of concern.

What safety or risk measures are mitigated with this project: Decreased pollutant loading into Bozeman Creek, reducing liabilities associated with environmental non-compliance, community health, and aquatic ecosystem degradation.

What regulations or standards are attained with this project: Measurable step toward the City's goal of delisting Bozeman Creek from the Montana DEQ's list of impaired waterbodies. Also, the project will be credited under the City's MS4 Discharge Permit, which requires the implementation of practices, programs, and technologies that reduce local waterway degradation caused by stormwater.

ALTERNATIVES CONSIDERED

Continued discharge of untreated stormwater into Bozeman Creek.

ADVANTAGES OF APPROVAL

Provides stormwater treatment and permit compliance

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Provides stormwater treatment and permit compliance

FUNDING SOURCES

Stormwater Fund

**Street and Curb Reconstructions
Capital Improvement Plan**

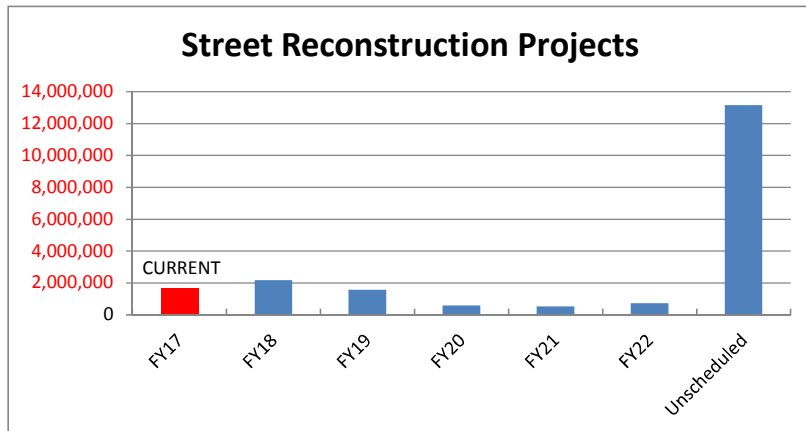
Fund 504

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 74,209	\$ (653,637)	\$ (416,238)	\$ (602,538)	\$ (67,099)	\$ 375,300	
Plus: Street Maintenance Assessments Dedicated	\$ 673,773	\$ 700,993	\$ 715,013	\$ 729,313	\$ 743,899	\$ 758,777	
Plus: SID for West Olive - SCR03 - 15%	\$ 236,756						
Plus: SID for South Grand - SCR04 - 75%		\$ 1,588,781					
Plus: SID for West Lincoln - SCR20 - 75%		\$ 126,000					
Plus: SID for South Tracy - SCR09 - 50%			\$ 673,313				
Plus: SID for South Black - SCR08 - 75%				\$ 401,625			
Plus: SID for North Tracy - SCR10 - 50%					\$ 241,500		
Plus: SID for North 17th - SCR16 - 75%						\$ 511,875	
Less: Scheduled CIP Project Costs	\$ (1,638,375)	\$ (2,178,375)	\$ (1,574,625)	\$ (595,500)	\$ (543,000)	\$ (742,500)	\$ (13,157,375)
Projected Year-End Cash Dedicated to CIP	\$ (653,637)	\$ (416,238)	\$ (602,538)	\$ (67,099)	\$ 375,300	\$ 903,452	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Total Estimated Annual Street Assessment Revenue	\$ 4,346,920	\$ 4,433,858	\$ 4,522,536	\$ 4,612,986	\$ 4,705,246	\$ 4,799,351
Estimated Annual Increase - Attributed to Annexations		2%	2%	2%	2%	2%
Total Estimated Revenues	\$ 4,346,920	\$ 4,522,536	\$ 4,612,986	\$ 4,705,246	\$ 4,799,351	\$ 4,895,338
Current Revenues Dedicated to Street & Curb CIP %	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%
Plus: Increase Dedicated to Reconstruction & Curbs	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	15.5%	15.5%	15.5%	15.5%	15.5%	15.5%
Total Estimated Revenues Dedicated to CIP	\$ 673,773	\$ 700,993	\$ 715,013	\$ 729,313	\$ 743,899	\$ 758,777

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Street & Curb
Replacement Fund

SCR01	ENGINEERING	ANNUAL CURB REPLACEMENT & CONCRETE REPAIR PROGRAM	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
SCR03	ENGINEERING	W OLIVE (8TH TO TRACY) - DESIGN AND CONSTRUCTION						\$1,441,125
SCR04	ENGINEERING	S GRAND (OLIVE TO HAYES) - DESIGN AND CONSTRUCTION	\$2,118,375					
SCR05	ENGINEERING	N GRAND (MENDENHAL TO PEACH) - DESIGN AND CONSTRUCTION						\$989,625
SCR07	ENGINEERING	S 3RD (OLIVE TO CLEVELAND) - DESIGN AND CONSTRUCTION						\$1,548,750
SCR08	ENGINEERING	S BLACK (COLLEGE TO S CUL-DE-SAC) - DESIGN AND CONSTRUCTION			\$535,500			
SCR09	ENGINEERING	S TRACY (BABCOCK TO COLLEGE) - DESIGN AND CONSTRUCTION		\$1,346,625				
SCR10	ENGINEERING	N TRACY (VILLARD TO PEACH) - DESIGN AND CONSTRUCTION				\$483,000		
SCR11	ENGINEERING	S 4TH AVE (COLLEGE TO BABCOCK) - DESIGN AND CONSTRUCTION						\$1,295,000
SCR12	ENGINEERING	W KOCH (8TH TO TRACY) - DESIGN AND CONSTRUCTION						\$1,438,500
SCR13	ENGINEERING	S 6TH (BABCOCK TO CLEVELAND) - DESIGN AND CONSTRUCTION						\$1,758,750
SCR14	ENGINEERING	S 5TH (OLIVE TO HAYES) - DESIGN AND CONSTRUCTION						\$2,121,000
SCR15	ENGINEERING	W HARRISON (TRACY TO 6TH) - DESIGN AND CONSTRUCTION						\$1,084,125
SCR16	ENGINEERING	N 17TH (DURSTON TO END) - DESIGN AND CONSTRUCTION					\$682,500	
SCR17	ENGINEERING	W COLLEGE (8TH TO 11TH) - DESIGN AND CONSTRUCTION						\$530,250
SCR18	ENGINEERING	LINDLEY (KOCH TO OLIVE) - DESIGN AND CONSTRUCTION						\$420,000
SCR19	ENGINEERING	DAVIS (CHURCH TO PLUM) - DESIGN AND CONSTRUCTION						\$530,250

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	SCR20	ENGINEERING	W LINCOLN (GRAND TO WILSON) - DESIGN AND CONSTRUCTION		\$168,000				

<i>Summary for Street & Curb Replacement Fund (18 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$2,178,375	\$1,574,625	\$595,500	\$543,000	\$742,500	\$13,157,375

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR01

PROJECT NAME
Annual Curb Replacement & Concrete Repair Program

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

DESCRIPTION OF PROJECT

When a pedestrian ramp is installed, many times the adjacent curbs need to be replaced in order to get drainage to not stop at the new ramp. Smaller curb repairs can be necessary rather than replacing a whole block.

Describe the criticality (i.e., importance) of this project to the operation: Medium

How is capacity affected by this project: Control of stormwater is improved, facilitates better street sweeping

What safety or risk measures are mitigated with this project: Broken curbs can be hazardous to vehicle tires

What regulations or standards are attained with this project: Replacing dilapidated curbs to meet current standards

How is this project leveraged with other stakeholders/projects/funds: Can be combined with ADA ramp replacement work and inlet replacement work

ALTERNATIVES CONSIDERED

Continue current operations

ADVANTAGES OF APPROVAL

This will allow completion of smaller projects instead of waiting for an entire block to be repaired

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Cost of Materials

FUNDING SOURCES

Street & Curb Replacement Fund

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR03

PROJECT NAME
W Olive (8th to Tracy) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,441,125

DESCRIPTION OF PROJECT

Reconstruction of West Olive St from 8th to Tracy, including repairs to failed curbs and gutters

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates West Olive to function as a Major Collector, which would require a 15% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 85%. Local SID - 15%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR04

PROJECT NAME
S Grand (Olive to Hayes) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$2,118,375					

DESCRIPTION OF PROJECT

Reconstruction of South Grand Street from Olive to Hayes, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and other pavement irregularities.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South Grand to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Street & Curb Replacement Fund

ENGINEERING

SCR05

PROJECT NAME

N Grand (Mendenhal to Peach) - Design and Construction

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$989,625

DESCRIPTION OF PROJECT

Reconstruction of North Grand from Mendenhal to Peach, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates North Grand will function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR07

PROJECT NAME
S 3rd (Olive to Cleveland) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,548,750

DESCRIPTION OF PROJECT

Reconstruction of South 3rd Ave from Olive to Cleveland, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates S 3rd to function as a Minor Collector, which would require a 50% contribution from property owners via a Special District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR08

PROJECT NAME
S Black (College to S Cul-De-Sac) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$535,500			

DESCRIPTION OF PROJECT

Reconstruction of South Black from College to the Cul-de-Sac, including repairs to failed curb and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and other pavement irregularities.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South Black to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR09

PROJECT NAME
S Tracy (Babcock to College) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$1,346,625				

DESCRIPTION OF PROJECT

Reconstruction of South Tracy Street from Babcock to College, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South Tracy to function as a Minor Collector, which would require a 50% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR10

PROJECT NAME
N Tracy (Villard to Peach) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$483,000		

DESCRIPTION OF PROJECT

Reconstruction of North Tracy Street from Villard to Peach, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: This project will decrease street maintenance costs, increase public safety and improve the condition of our public streets.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and other pavement irregularities.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates North Tracy to function as a Minor Collector, which would require a 50% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCRII

PROJECT NAME
S 4th Ave (College to Babcock) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,295,000

DESCRIPTION OF PROJECT

Reconstruction of South 4th Ave from College to Babcock, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South 4th to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR12

PROJECT NAME
W Koch (8th to Tracy) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,438,500

DESCRIPTION OF PROJECT

Reconstruction of West Koch Street from 8th to Tracy, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates West Koch to function as a Minor Collector, which would require a 50% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR13

PROJECT NAME
S 6th (Babcock to Cleveland) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,758,750

DESCRIPTION OF PROJECT

Reconstruction of South 6th Ave from Babcock to Cleveland, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South 6th to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCRI4

PROJECT NAME
S 5th (Olive to Hayes) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,121,000

DESCRIPTION OF PROJECT

Reconstruction of South 5th Ave from Olive to Hayes, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates South 5th to function as a Minor Collector, which would require a 50% contribution from property owners via a Special District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 50%. Local SID - 50%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR15

PROJECT NAME
W Harrison (Tracy to 6th) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,084,125

DESCRIPTION OF PROJECT

Reconstruction of West Harrison from Tracy to 6th, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates West Harrison to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCRI6

PROJECT NAME
N 17th (Durston to End) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$682,500	

DESCRIPTION OF PROJECT

Reconstruction of North 17th Ave from Durston to Waggon Wheel Trailer Park, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates North 17th to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR17

PROJECT NAME
W College (8th to 11th) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$530,250

DESCRIPTION OF PROJECT

Reconstruction of West College from 8th to 11th, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates College to function as a Major Collector, which would require a 15% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 85%. Local SID - 15%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR18

PROJECT NAME
Lindley (Koch to Olive) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$420,000

DESCRIPTION OF PROJECT

Reconstruction of Lindley from Koch to Olive, including repairs to failed curbs and gutters

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates Lindley to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCRI9

PROJECT NAME
Davis (Church to Plum) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$530,250

DESCRIPTION OF PROJECT

Reconstruction of Davis from Church to Plum, including repairs to failed curbs and gutters

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates Davis to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvement projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

CIP Project Fund
Street & Curb Replacement Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
SCR20

PROJECT NAME
W Lincoln (Grand to Wilson) - Design and Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$168,000				

DESCRIPTION OF PROJECT

Reconstruction of West Lincoln, from Grand to Wilson, including repairs to failed curbs and gutters.

Describe the criticality (i.e., importance) of this project to the operation: The street is already in a failing condition and continues to function; however, eventually the street will become deteriorated to a point where it is unfeasible to maintain and keep open to public use.

What safety or risk measures are mitigated with this project: This project will provide a city standard street section, with ADA compliant pedestrian ramps, pavement markings, and signage which will improve pedestrian safety. Also, new asphalt and drainage improvements will eliminate potholes and minimize ice build up.

What regulations or standards are attained with this project: ADA compliance and MS4 permit compliance.

How is this project leveraged with other stakeholders/projects/funds: For planning purposes, project estimates Lincoln to function as a Local Street, which would require a 75% contribution from property owners via a Special Improvement District Assessment.

Are there other affected projects: This project will trigger water, sewer, and storm drain improvements projects within the reconstruction area.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Enhances safety and drainage, preserves pavement

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Street and Curb Replacement Fund - 25%. Local SID - 75%.

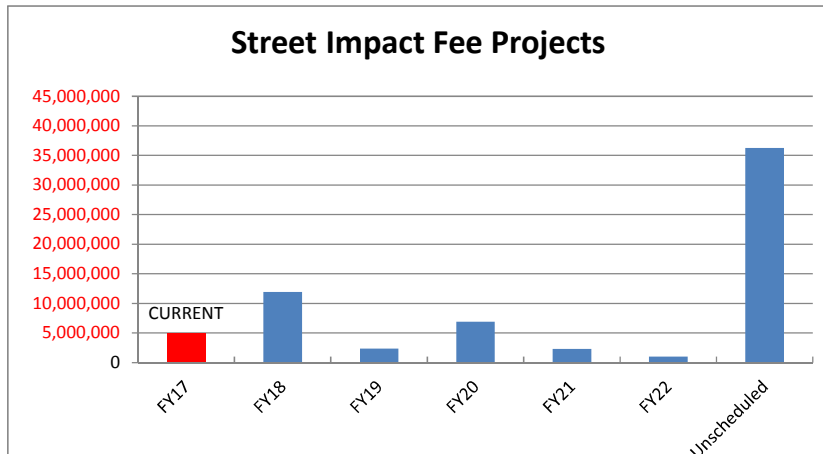
Street Impact Fee Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 13,172,000	\$ 8,548,426	\$ (247,873)	\$ 691,644	\$ (2,764,422)	\$ (1,473,291)	
Plus: Impact Fee Revenues Dedicated to CIP	\$ 2,388,901	\$ 3,123,750	\$ 3,279,938	\$ 3,443,934	\$ 3,616,131	\$ 3,796,938	\$ -
Plus: Urban Funds:							
Less: Carryover FY16 Capital Projects	\$ (2,067,000)						
Less: Scheduled CIP Project Costs	\$ (4,945,475)	\$ (11,920,049)	\$ (2,340,421)	\$ (6,900,000)	\$ (2,325,000)	\$ (1,000,000)	\$ (36,236,584)
Projected Year-End Cash Dedicated to CIP	\$ 8,548,426	\$ (247,873)	\$ 691,644	\$ (2,764,422)	\$ (1,473,291)	\$ 1,323,647	\$ (36,236,584)
Beginning Balance of Payback Improvements:	\$ -	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	
Graf Street Project	\$ (1,436,000)						
SIF102 - Payback District							
SIF111 - Payback District							
SIF118 - Payback District							
SIF129 - Payback District							
Ending Balance of Payback Improvements:	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	\$ (1,436,000)	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Street Impact Fee Revenues	\$ 2,388,901	\$ 2,975,000	\$ 3,123,750	\$ 3,279,938	\$ 3,443,934	\$ 3,616,131
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 2,388,901	\$ 3,123,750	\$ 3,279,938	\$ 3,443,934	\$ 3,616,131	\$ 3,796,938
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Street Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 2,388,901	\$ 3,123,750	\$ 3,279,938	\$ 3,443,934	\$ 3,616,131	\$ 3,796,938

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*Note: This schedule no longer contains the portions of project costs that will be paid by other sources, with the exception of Federal Urban Funds. See the "Funding Sources" discussion at the bottom of each project item sheet.

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Impact Fees Streets

SIF001	STREET IF	ANNUAL RIGHT OF WAY ACQUISITION	\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	
SIF009	STREET IF	KAGY (WILLSON TO 19TH) - CONSTRUCTION						\$8,000,000
SIF036	STREET IF	COTTONWOOD (BABCOCK TO DURSTON) - CONSTRUCTION	\$1,278,000					
SIF039	STREET IF	FERGUSON & DURSTON (INTERSECTION) - CONSTRUCTION	\$1,804,976					
SIF046	STREET IF	OAK (NEW HOLLAND TO FERGUSON) - CONSTRUCTION	\$1,400,000					
SIF057	STREET IF	OAK (FLANDERS MILL TO RYUNSON WAY) - CONSTRUCTION						\$1,000,000
SIF058	STREET IF	OAK & N 27TH (INTERSECTION) - CONSTRUCTION						\$488,584
SIF061	STREET IF	OAK & FERGUSON (INTERSECTION) - SIGNAL CONSTRUCTION	\$1,076,265					
SIF062	STREET IF	DURSTON (FOWLER TO FERGUSON) - CONSTRUCTION		\$757,421				
SIF063	STREET IF	FOWLER & BABCOCK (INTERSECTION) - CONSTRUCTION						\$1,600,000
SIF073	STREET IF	FOWLER & DURSTON (INTERSECTION) - SIGNAL CONSTRUCTION						\$1,616,000
SIF074	STREET IF	OAK & DAVIS (INTERSECTION) - ROUNDABOUT CONSTRUCTION	\$1,409,206					
SIF076	STREET IF	FOWLER CONNECTION (HUFFINE TO OAK) - DESIGN (INCLUDES 3 INTERSECTIONS)				\$500,000		
SIF080	STREET IF	FERGUSON (BAXTER TO OAK) - CONSTRUCTION	\$333,333					
SIF086	STREET IF	BAXTER & COTTONWOOD (INTERSECTION) - CONSTRUCTION						\$2,000,000
SIF098	STREET IF	OAK & COTTONWOOD (INTERSECTION) - ROUNDABOUT CONSTRUCTION						\$2,192,000
SIF102	STREET IF	S 11TH AVE (KAGY BLVD TO GRAF ST EXTENSION) - CONSTRUCTION*	\$1,600,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	SIF104	STREET IF	COTTONWOOD & BABCOCK (INTERSECTION) - SIGNAL CONSTRUCTION	\$1,148,269					
	SIF105	STREET IF	COTTONWOOD (DURSTON TO OAK) - CONSTRUCTION						\$1,240,000
	SIF106	STREET IF	TRANSPORTATION DEMAND MANAGEMENT CONTRACT	\$50,000	\$50,000				
	SIF108	STREET IF	S 3RD AND GRAF - SIGNAL CONSTRUCTION		\$800,000				
	SIF109	STREET IF	OAK (ROUSE THROUGH CANNERY DISTRICT) - CONSTRUCTION		\$133,000				
	SIF110	STREET IF	MANLEY & GRIFFIN (INTERSECTION) - CONSTRUCTION			\$1,600,000			
	SIF111	STREET IF	HIGHLAND (MAIN TO KAGY) - CONSTRUCTION & DESIGN*						\$5,000,000
	SIF112	STREET IF	HIGHLAND & MAIN INTERSECTION IMPROVEMENTS	\$120,000					
	SIF113	STREET IF	GRIFFIN (7TH TO ROUSE) - CONSTRUCTION			\$3,000,000			
	SIF114	STREET IF	FOWLER CONNECTION (HUFFINE TO OAK) - CONSTRUCTION						\$3,750,000
	SIF115	STREET IF	COLLEGE (11TH TO 19TH) - CONSTRUCTION						\$550,000
	SIF116	STREET IF	BRIDGER DR & STORY MILL RD (INTERSECTION) - CONSTRUCTION						\$800,000
	SIF117	STREET IF	STORY MILL (GRIFFIN TO BRIDGER) - CONSTRUCTION				\$225,000		
	SIF118	STREET IF	BABCOCK (11TH AVE TO 19TH AVE) - CONSTRUCTION*					\$750,000	
	SIF118	STREET IF	BABCOCK (11TH AVE TO 19TH AVE) - DESIGN*				\$250,000		
	SIF121	STREET IF	BAXTER & DAVIS (INTERSECTION) - CONSTRUCTION			\$2,000,000			
	SIF122	STREET IF	BABCOCK & FERGUSON (INTERSECTION) - CONSTRUCTION	\$800,000					
	SIF123	STREET IF	BRIDGER DR & STORY MILL RD (INTERSECTION) - DESIGN*						\$200,000
	SIF125	STREET IF	COLLEGE (11TH TO 19TH) - DESIGN				\$100,000		
	SIF127	STREET IF	FOWLER RIGHT OF WAY PURCHASE				\$1,000,000		

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	SIF128	STREET IF	KAGY (WILLSON TO HIGHLAND) - DESIGN						\$500,000
	SIF129	STREET IF	KAGY (WILLSON TO HIGHLAND) - CONSTRUCTION*						\$6,000,000
	SIF130	STREET IF	KAGY (19TH TO WILLSON) INTERIM IMPROVEMENTS	\$500,000					
	SIF131	STREET IF	S 3RD AND GRAF - SIGNAL DESIGN	\$150,000					
	SIF132	STREET IF	STORY MILL (GRIFFIN TO BRIDGER) - DESIGN			\$50,000			
	SIF133	STREET IF	GRIFFIN CORRIDOR DESIGN		\$250,000				
	SIF134	STREET IF	OAK (COTTONWOOD TO FLANDERS MILL) - CONSTRUCTION						\$1,300,000
	SIF135	STREET IF	OAK (FERGUSON TO RYUNSON WAY) - CONSTRUCTION		\$100,000				

Summary for Impact Fees Streets (45 items)

Totals by year:

<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
\$11,920,049	\$2,340,421	\$6,900,000	\$2,325,000	\$1,000,000	\$36,236,584

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF001

PROJECT NAME
Annual Right Of Way Acquisition

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$250,000	\$250,000	\$250,000	\$250,000	\$250,000	

DESCRIPTION OF PROJECT

Annual allocation available for right-of-way purchases as they become available.

Describe the criticality (i.e., importance) of this project to the operation: Purchasing additional right-of-way can be critical to expanding the capacity of streets in the city.

How is capacity affected by this project: Additional right-of-way is directly related to capacity expansion. In all cases the only reason additional R/W is required is that the existing roadway is being expanded.

How is connectivity affected by this project: Purchasing additional right-of-way may be critical to connecting elements of the transportation network.

What regulations or standards are attained with this project: Conformance with the City Transportation Master Plan is obtained.

How is this project leveraged with other stakeholders/projects/funds: Purchase of R/W is often a prerequisite for construction of the critical elements of the transportation network.

Are there other affected projects: All of the other street impact fee projects could potentially be affected by R/W acquisition.

ALTERNATIVES CONSIDERED

Condemn property for right-of-way; pay court costs as well as appraised value of property. Time consuming for city staff and a relatively expensive process. Wait for adjacent property owners to dedicate R/W as part of the annexation/development process.

ADVANTAGES OF APPROVAL

Provides dollars for the purchase of necessary right-of-way as it becomes available on the market. Avoids the expensive condemnation process where possible or having to wait for voluntary dedications.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Street Impact Fees can not be spent on operating and maintaining facilities. There is expected to be a very minimal, incremental cost to the Street Maintenance District from this expenditure.

FUNDING SOURCES

100% Street Impact Fees

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF009

PROJECT NAME
Kagy (Willson to 19th) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$8,000,000

DESCRIPTION OF PROJECT

This project consists of reconstructing Kagy Boulevard from the intersection of S 19th Ave to Willson Ave to a 4 lane urban arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections.

How is connectivity affected by this project: Kagy serves as an important element of Bozeman's perimeter street system connecting Highland Blvd., Willson Ave, and S. 19th. It also serves as the primary access to Montana State University and the University's major athletic facilities.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: Intersection Improvements at Kagy & 19th, Kagy & 7th, Kagy & 11th, Kagy & Willson.

ALTERNATIVES CONSIDERED

SID, Urban funds, incremental construction by adjacent development.

ADVANTAGES OF APPROVAL

Kagy is a State Urban Route and is eligible for expenditure of State urban funds designated annually for the City of Bozeman; however, the availability of urban funds cannot match the pace of the City's transportation improvement needs. The need for this project comes from increased traffic due to growth in the Bozeman area and the project is eligible for Impact Fee Funds. Use of Street Impact Funds enables the community to leverage the available State Urban transportation funds to complete projects and address more of its pressing transportation needs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$8,000,000) and Urban Funds (\$8,000,000). A Payback District or SID may be able to created to leverage other stakeholders.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF036

PROJECT NAME
Cottonwood (Babcock to Durston) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,278,000					

DESCRIPTION OF PROJECT

The project consists of finishing Cottonwood Road from Babcock to Durston to a five lane urban arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. Cottonwood is also failing in this section because of heavy traffic and subbase degradation. Failure to complete this section will likely result in large maintenance expenses.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Cottonwood serves as an important element in Bozeman's west side street system and serves as a primary north-south corridor on the west side of the City.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Cottonwood corridor street improvements, intersection improvements at Cottonwood and Babcock and Cottonwood and Durston.

ALTERNATIVES CONSIDERED

SID, payback district, incremental construction by adjacent development.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs. Added maintenance costs are expected if this project is not completed within the next 2-3 years.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,278,000) and the Arterial & Collector District (\$1,278,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$1,278,000).

CIP Project Fund	DEPARTMENT						PROJECT NUMBER
Impact Fees Streets	STREET IF						SIF039
PROJECT NAME							<input checked="" type="checkbox"/> New
Ferguson & Durston (Intersection) - Construction							<input type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled		<input type="checkbox"/> Equipment
\$1,804,976							<input checked="" type="checkbox"/> Project

DESCRIPTION OF PROJECT

Installation of a roundabout at the intersection of Ferguson and Durston

Describe the criticality (i.e., importance) of this project to the operation: The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended.

How is capacity affected by this project: This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: The Ferguson Road Improvement project.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,804,976) and the Arterial & Collector District (\$451,244).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF046

PROJECT NAME
Oak (New Holland to Ferguson) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,400,000					

DESCRIPTION OF PROJECT

Complete To 5-Lane Arterial Standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

Are there other affected projects: Oak Street Cottonwood to Ferguson, Intersection improvements at Oak and Ferguson and Oak and Fowler.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project will be funded by Street Impact Fees (\$1,400,000) and Arterial & Collector District financing for local improvements attributed to Gallatin County - creation of Special Improvement District (\$600,000). The Special Improvement District will re-pay the Arterial & Collector District Fund.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF057

PROJECT NAME
Oak (Flanders Mill to Ryunson Way) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,000,000

DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Flanders Mill to Ryunson Way, to a five-lane urban principal arterial standard. Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. How is connectivity affected by this project: Completes an important east-west link between Ferguson and Cottonwood. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained. How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders. Are there other affected projects: Intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street - New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,000,000) the Arterial & Collector District (\$500,000) and local participation. The Flander's Mill development is expected to be a partner in the construction of the segments adjacent to their development.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF058

PROJECT NAME
Oak & N 27th (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$488,584

DESCRIPTION OF PROJECT

Installation of a signal at the intersection of Oak and N 27th.

Describe the criticality (i.e., importance) of this project to the operation: The level of service at this intersection has degraded to unacceptable levels. Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended.

How is capacity affected by this project: This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: Oak Street corridor projects and North 27th Street improvements project.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$488,584) and the Arterial & Collector District (\$122,146).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF06 I

PROJECT NAME
Oak & Ferguson (Intersection) - Signal Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,076,265					

DESCRIPTION OF PROJECT

Installation of a signal at the intersection of Oak and Ferguson. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Development which is currently occurring as well as projects which already have approval make it clear that this intersection will no longer meet the city's LOS standard. Installation of a signal at this intersection will increase it's capacity and assist in improving the LOS at nearby intersections. How is connectivity affected by this project: Facilitates the extension of Oak Street to the west of Ferguson Road where it currently does not exist, and will eventually make the connection with Cottonwood Road. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Oak Street projects and Ferguson Road projects are affected.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,076,265) and Arterial & Collector District (\$269,066).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF062

PROJECT NAME
Durston (Fowler to Ferguson) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$757,421				

DESCRIPTION OF PROJECT

Complete Durston Rd, from Cottonwood to Fowler, to a three-lane urban minor arterial standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Durston & Ferguson, Durston & Fowler, Durston & Flanders Mill.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$757,421) and the Arterial & Collector District (\$757,421). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF063

PROJECT NAME
Fowler & Babcock (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,600,000

DESCRIPTION OF PROJECT

Install a traffic signal, roundabout, or other adequate traffic control device at the intersection of Fowler and Babcock.

Describe the criticality (i.e., importance) of this project to the operation: Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network.

How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity.

How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,600,000) and the Arterial & Collector District (\$400,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF073

PROJECT NAME
Fowler & Durston (Intersection) - Signal Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,616,000

DESCRIPTION OF PROJECT

Install a signal at the intersection of Fowler and Durston Describe the criticality (i.e., importance) of this project to the operation: Current LOS is acceptable. How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Fowler corridor street improvements.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Improves an important connecting element in the network.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,616,000) and the Arterial & Collector District (\$404,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$404,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF074

PROJECT NAME
Oak & Davis (Intersection) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,409,206					

DESCRIPTION OF PROJECT

Install a roundabout at the intersection of Oak and Davis. Describe the criticality (i.e., importance) of this project to the operation: Peak hour level of service for northbound traffic is degrading due to lack of north-south connectivity in the network. Geometric deficiencies will be addressed. How is capacity affected by this project: This intersection is currently I-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Oak Street corridor improvements and Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Accept the current geometry and level of service.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,409,206) and the Arterial & Collector District (\$352,302).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF076

PROJECT NAME
Fowler Connection (Huffine to Oak) - Design (Includes 3 Intersections)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$500,000		

DESCRIPTION OF PROJECT

Design Fowler from Huffine to Oak to an urban minor arterial standard, including three intersections.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional travel lanes, dedicated bike lanes and sidewalks and making improvements to the intersections.

How is connectivity affected by this project: This project completes an important north-south connection on the west side of town.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Fowler and Durston and Fowler and Oak.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

This project will complete an important north-south connection, expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$500,000) and the Arterial & Collector District (\$500,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$500,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF080

PROJECT NAME
Ferguson (Baxter to Oak) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$333,333					

DESCRIPTION OF PROJECT

Complete Ferguson from Baxter to Oak to a two lane urban collector standard with bike lanes, curb and gutter, boulevards, parking and sidewalks.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by constructing a new roadway which includes dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Completes an important north-south link between Baxter and Oak.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection of Ferguson and Oak.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$333,333), Gallatin County (\$333,333), and a developer contribution (\$333,333). This budget assumes that A&C funds will be used to cover the both the County portion and the developer contribution, both to be paid back with SID or payback agreement.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF086

PROJECT NAME
Baxter & Cottonwood (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,000,000

DESCRIPTION OF PROJECT

Improve the intersection at Baxter and Cottonwood. Describe the criticality (i.e., importance) of this project to the operation: Current LOS is acceptable. How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal or roundabout will greatly increase it's capacity. How is connectivity affected by this project: East-west connectivity already exists at this location. North-south connectivity is still lacking. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood corridor improvements and Baxter corridor improvements.

ALTERNATIVES CONSIDERED

Identified in the 2007 Transportation Plan Update. Includes installation of a traffic signal, roundabout or other adequate traffic control device when warrants are met.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF098

PROJECT NAME
Oak & Cottonwood (Intersection) - Roundabout Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,192,000

DESCRIPTION OF PROJECT

Installation of a roundabout at the intersection of Oak and Cottonwood. Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Capacity will be greatly increased on the network as a whole as this intersection is currently 3-legged, rural and stop controlled on Cottonwood (Harper Puckett). How is connectivity affected by this project: This improvement will complete an important north-south connection on Cottonwood. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood Road Improvements, Oak Street Improvements.

ALTERNATIVES CONSIDERED

Not installing the intersection improvement at the same time as the construction of the intersecting streets. Secure additional financing by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,192,000) and the Arterial & Collector District (\$548,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF102

PROJECT NAME

S 11th Ave (Kagy Blvd to Graf St Extension) - Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,600,000					

DESCRIPTION OF PROJECT

Complete S 11th, from Kagy to Graf, to an urban collector standard, including sidewalks, curb and gutter, and bike lanes.

Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by constructing a new roadway which includes dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Completes an important north-south connection south of Kagy.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders

Are there other affected projects: Intersections of 11th and Kagy and 11th and Graf.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,600,000), with a portion reimbursed by a payback district for improvements that are related to adjacent properties.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF104

PROJECT NAME
Cottonwood & Babcock (Intersection) - Signal Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,148,269					

DESCRIPTION OF PROJECT

Installation of a traffic signal at the intersection of Cottonwood and Babcock. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This intersection is currently 2-way stop controlled. Replacing it with a signal will greatly increase it's capacity. How is connectivity affected by this project: Connectivity exists at this location, it is capacity which is being increased. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained. Are there other affected projects: Cottonwood corridor improvement projects.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,148,269) and the Arterial & Collector District (\$287,067).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF105

PROJECT NAME
Cottonwood (Durston to Oak) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,240,000

DESCRIPTION OF PROJECT

Complete the construction of Cottonwood Road from Durston Road to Oak Street to a five-lane urban arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Cottonwood Rd serves as an important element in Bozeman's west side street system and serves as a primary north-south corridor on the west side of the city.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Cottonwood corridor street improvements, intersection improvements at Cottonwood and Durston and Cottonwood and Oak.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,240,000) and the Arterial & Collector District (\$1,240,000). A development payback district may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$1,240,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF106

PROJECT NAME
Transportation Demand Management Contract

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000	\$50,000				

DESCRIPTION OF PROJECT

Explore the potential for reducing vehicle demand on the network at peak hours by flexible start times, work from home incentives etc. Describe the criticality (i.e., importance) of this project to the operation: This project is important because the funding available to increase capacity by building physical improvements to the network is unlikely to ever be sufficient. This project supplements that effort. How is capacity affected by this project: By reducing overall demand on the network How is this project leveraged with other stakeholders/projects/funds: 33% Impact Fee, 33% Montana State University, 33% Western Transportation Institute Are there other affected projects: This project has the potential to impact the network at large.

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

May improve peak hour LOS in many locations by directly reducing demand

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Three-year commitment with Western Transportation Institute and MSU. FY17 was the first year of funding. FY18 & FY19 are the remaining years. 33% Impact Fee, 33% Montana State University, 33% Western Transportation Institute

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF108

PROJECT NAME
S 3rd and Graf - Signal Construction

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$800,000				

- New
- Replacement
- Equipment
- Project

DESCRIPTION OF PROJECT

Signal construction at S 3rd and Graf Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This is currently a stop controlled intersection. Installation of a roundabout will directly increase capacity. How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded. What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC). Are there other affected projects: Graf Street corridor improvements.

ALTERNATIVES CONSIDERED

Accept the existing level of service, create an SID for financing.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF109

PROJECT NAME
Oak (Rouse through Cannery District) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$133,000				

DESCRIPTION OF PROJECT

This project consists of improving Oak from Rouse through the Cannery District to include curb, gutter, sidewalks, and a turning lane to provide a complete arterial street standard. The Cannery District will be responsible for the cost of curb, gutter, and sidewalk along their property frontage as well as the turn lane to access two drive accesses that allow a left turn movement from Oak Street into the Cannery District.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What safety or risk measures are mitigated with this project: Left turn traffic safety will be improved upon installation of left turn lanes. Pedestrian safety will be improved.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders. Cash-in-lieu of infrastructure is anticipated to be contributed from the Cannery District developer to cover the cost of the left turn lanes needed for their drive accesses as well as the cost of curb, gutter, and sidewalk adjacent to their property.

Are there other affected projects: Oak Street Corridor improvements

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians. There will be substantial pedestrian traffic between the Fairgrounds and the Cannery District. Additionally, the traffic impact study for the Cannery District indicated the need for left turn lanes for their drive accesses. As the City's transportation master plan identifies the need to upgrade the Oak Street Corridor to an arterial standard, this is an opportunity to partner with the Cannery District developer to complete a portion of the Oak Street improvements.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$133,000), the Arterial & Collector District (\$133,000), and Cannery District Developer share (\$133,000). A development payback district or SID may be created to reimburse the Arterial & Collector District for the County's (project related) costs.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 10

PROJECT NAME
Manley & Griffin (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$1,600,000			

DESCRIPTION OF PROJECT

Intersection control at Manley & Griffin

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This intersection is currently 1-way stop controlled. Replacing it with a signal will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Griffin corridor improvements.

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Street Impact Fees (\$1,600,000) and Arterial & Collector District (\$400,000).

CIP Project Fund	DEPARTMENT					PROJECT NUMBER
Impact Fees Streets	STREET IF					SIFI I I
PROJECT NAME						<input checked="" type="checkbox"/> New
Highland (Main to Kagy) - Construction & Design*						<input checked="" type="checkbox"/> Replacement
FY18	FY19	FY20	FY21	FY22	Unscheduled	<input type="checkbox"/> Equipment
					\$5,000,000	<input checked="" type="checkbox"/> Project

DESCRIPTION OF PROJECT

Upgrade Highland, from Main to Kagy.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increase capacity by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Highland and Kagy, Highland and Ellis and Highland and Main Street.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Increased capacity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs

FUNDING SOURCES

This project is funded by Street Impact Fees (\$5,000,000) and the Arterial & Collector District (\$5,000,000). A payback district may be created to reimburse both funds for any local share (project related) costs that may be allocated to future developments.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 12

PROJECT NAME
Highland & Main Intersection Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$120,000					

DESCRIPTION OF PROJECT

Improve intersection control at Highland & Main

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place

How is capacity affected by this project: Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Highland Boulevard corridor improvements

ALTERNATIVES CONSIDERED

Accept the existing level of service, create an SID for financing.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

100% Street Impact Fees

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 13

PROJECT NAME
Griffin (7th to Rouse) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$3,000,000			

DESCRIPTION OF PROJECT

Construct W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Griffin and 7th and Griffin and Rouse.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing).

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,000,000) and the Arterial & Collector District (\$2,000,000). A development payback district or SID may be created to reimburse Arterial & Collector District for any local share (project related) costs that may be allocated to future developments (estimated at \$2,000,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 14

PROJECT NAME
Fowler Connection (Huffine to Oak) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$3,750,000

DESCRIPTION OF PROJECT

Complete the section of Fowler from Huffine to Oak Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Allows for extension of Fowler Avenue, which will directly increase capacity. How is connectivity affected by this project: Extends an important north-south corridor on the west side of the city. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained. Are there other affected projects: Intersection improvements on Fowler at Huffine, Babcock, Durston and Oak.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Completes an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$3,750,000) and the Arterial & Collector District (\$3,750,000). A Payback District or SID may be created to reimburse the Arterial & Collector District for any local improvements.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 15

PROJECT NAME
College (11th to 19th) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$550,000

DESCRIPTION OF PROJECT

Complete College, from 19th to 11th, to a principal arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: Urban funds could be used on this section of College.

Are there other affected projects: Intersections of College/11th and College/8th.

ALTERNATIVES CONSIDERED

Accept the current configuration

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

50% Street Impact Fees & 50% Arterial & Collector District.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 16

PROJECT NAME
Bridger Dr & Story Mill Rd (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$800,000

DESCRIPTION OF PROJECT

Intersection control at Bridger and Story Mill. Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection. How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained. Are there other affected projects: Story Mill, Griffin to Bridger Drive

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 17

PROJECT NAME
Story Mill (Griffin to Bridger) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$225,000		

DESCRIPTION OF PROJECT

Improve Story Mill from Griffin to Bridger

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements to Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$225,000) and the Arterial & Collector District (\$225,000). An SID or payback district may be created to recover the local share.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 18

PROJECT NAME
Babcock (11th Ave to 19th Ave) - Design*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$250,000		

DESCRIPTION OF PROJECT

Design the Babcock (11th to 19th) street upgrade

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

100% Street Impact Fees. A payback district may be able to reimburse for design costs.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIFI 18

PROJECT NAME
Babcock (11th Ave to 19th Ave) - Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$750,000	

DESCRIPTION OF PROJECT

Improve Babcock from 11th to 19th)

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$750,000) and the Arterial & Collector District (\$750,000). An SID or payback district may be created to pay for some local share improvements.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF121

PROJECT NAME
Baxter & Davis (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$2,000,000			

DESCRIPTION OF PROJECT

Install a roundabout at Baxter & Davis

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This intersection is currently 4-way stop controlled. Replacing it with a roundabout will greatly increase it's capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity that is affected.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan and Level of Service Standard is attained.

Are there other affected projects: Baxter Lane Corridor Improvements.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$2,000,000) and the Arterial & Collector District (\$500,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF122

PROJECT NAME
Babcock & Ferguson (Intersection) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$800,000					

DESCRIPTION OF PROJECT

Install intersection improvements at Babcock & Ferguson

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This is currently a four-legged intersection with stop control on the Babcock Street approaches (east and west legs). Installation of a signal at this intersection will directly increase capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

Are there other affected projects: Corridor improvements to Babcock and Ferguson.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network, improve safety for drivers and pedestrians and increase capacity at this intersection. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

The total cost of this project is \$1,000,000. This project is funded by Street Impact Fees (\$800,000) and a developer contribution (\$200,000).

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF123

PROJECT NAME
Bridger Dr & Story Mill Rd (Intersection) - Design*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$200,000

DESCRIPTION OF PROJECT

Intersection design at Bridger and Story Mill

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Adding additional phases and improving geometry will increase capacity for deficient movements at this intersection.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

Are there other affected projects: Story Mill, Griffin to Bridger Drive.

ALTERNATIVES CONSIDERED

Accept the current LOS

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

This project is funded by Street Impact Fees (\$800,000) and the Arterial & Collector District (\$200,000). An SID or payback district may be created to recover the local share.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF125

PROJECT NAME
College (11th to 19th) - Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$100,000		

DESCRIPTION OF PROJECT

Design College, from 19th to 11th, to a principal arterial standard. Evaluate upgrading 11th to an Arterial Collector (from a local street). Including adding bike lanes, pedestrian crossings and removing parking.

Describe the criticality (i.e., importance) of this project to the operation: Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: Urban funds could be used on this section of College

Are there other affected projects: Intersections of College/11th and College/8th.

ALTERNATIVES CONSIDERED

Accept the current configuration

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

50% Street Impact Fees & 50% Arterial & Collector District.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF127

PROJECT NAME
Fowler Right of Way Purchase

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$1,000,000		

DESCRIPTION OF PROJECT

Purchase the right of way on Fowler (Durstun to Annie)

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Allows for extension of Fowler Avenue, which will directly increase capacity.

How is connectivity affected by this project: Extends an important north-south corridor on the west side of the city.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

Are there other affected projects: Fowler corridor improvements.

ALTERNATIVES CONSIDERED

Do nothing, wait for adjacent development to dedicate the R/W

ADVANTAGES OF APPROVAL

Allows for improvements to be made to the corridor at a time more favorable to the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED
NA

FUNDING SOURCES

100% Street Impact Fees

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF128

PROJECT NAME
Kagy (Willson to Highland) - Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$500,000

DESCRIPTION OF PROJECT

Design Kagy, from Willson to Highland, including the intersections at Sourdough & Kagy and Highland & Kagy.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersections at Sourdough/Church and Highland.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

Design is 100% impact fee eligible.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF129

PROJECT NAME
Kagy (Willson to Highland) - Construction*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$6,000,000

DESCRIPTION OF PROJECT

Complete Kagy, from Willson to Highland, including the intersections at Sourdough & Kagy and Highland & Kagy.

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by adding additional lanes, dedicated bike lanes and sidewalks and by improving intersection LOS.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersections at Sourdough/Church and Highland.

ALTERNATIVES CONSIDERED

Wait for adjacent development to install the improvements section by section.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is eligible for Urban funds. A payback district or SID could be created to recover a portion of the local share.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF130

PROJECT NAME
Kagy (I 9th to Willson) Interim Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$500,000					

DESCRIPTION OF PROJECT

Intersection improvements at Kagy and 7th, Kagy and I Ith and Kagy and I9th, minor geometric improvements such as Two Way Left Turn Lane (TWLTL).

Describe the criticality (i.e., importance) of this project to the operation: The LOS on Kagy has degraded far beyond what is acceptable. Peak hour backups are now stretching across the entire corridor between I9th and Willson, affecting adjacent roadways and the overall performance of the network.

How is capacity affected by this project: Improvements will improve LOS at the key intersections which will increase capacity.

How is connectivity affected by this project: Connectivity already exists in this area, it is capacity that is being increased.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC).

How is this project leveraged with other stakeholders/projects/funds: At the present time there is no viable way to leverage these funds with other stakeholders.

Are there other affected projects: Kagy corridor improvements.

ALTERNATIVES CONSIDERED

Do nothing, wait until the full project can be funded.

ADVANTAGES OF APPROVAL

Will provide some improvement to capacity and LOS on Kagy until the full project can be built.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

100% Street Impact Fees

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF131

PROJECT NAME
S 3rd and Graf - Signal Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$150,000					

DESCRIPTION OF PROJECT

Signal design at S 3rd and Graf

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This is currently a stop controlled intersection. Installation of a roundabout will directly increase capacity.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC).

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Graf Street corridor improvements.

ALTERNATIVES CONSIDERED

Accept the existing level of service, create an SID for financing.

ADVANTAGES OF APPROVAL

Increased capacity and safety at this intersection.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Design is 100% Impact fee eligible.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF132

PROJECT NAME
Story Mill (Griffin to Bridger) - Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$50,000			

DESCRIPTION OF PROJECT

Story Mill design from Griffin to Bridger

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project directly increases capacity by adding additional travel lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements to Story Mill and Bridger Drive.

ALTERNATIVES CONSIDERED

Wait for adjacent development to occur and construct the road incrementally.

ADVANTAGES OF APPROVAL

Improves an important north-south link in the transportation network which reduces demand on other adjacent corridors.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED
NA

FUNDING SOURCES

Design is 100% impact fee eligible.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF133

PROJECT NAME
Griffin Corridor Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$250,000				

DESCRIPTION OF PROJECT

Design W Griffin corridor improvements from N. 7th to Rouse to an urban minor arterial standard

Describe the criticality (i.e., importance) of this project to the operation: Future developments which impact this intersection area may not be allowed to proceed until improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: Designed improvements will improve LOS at the key intersections and will increase capacity in the corridor as a whole.

How is connectivity affected by this project: Connectivity already exists at this location, it is capacity which is being expanded.

What regulations or standards are attained with this project: The Level of Service (LOS) Standard (BMC) and conformance with the Transportation Master Plan are attained.

How is this project leveraged with other stakeholders/projects/funds: A Payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Griffin and 7th and Griffin and Rouse.

ALTERNATIVES CONSIDERED

Accept the current level of service (do nothing). Alternative financing could be provided by creating an SID or Payback District.

ADVANTAGES OF APPROVAL

This project will expand the capacity of our street network and improve safety for drivers and pedestrians. Facilitates development currently occurring in this part of the city and network performance overall.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

Design is 100% impact fee eligible.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF134

PROJECT NAME
Oak (Cottonwood to Flanders Mill) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,300,000

DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Cottonwood to Flanders Mill, to a five-lane urban principal arterial standard.

Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place.

How is capacity affected by this project: This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks.

How is connectivity affected by this project: Completes an important east-west link between Ferguson and Cottonwood.

What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained.

How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders.

Are there other affected projects: Intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$1,300,000), Arterial & Collector District of \$250,000 for the local share adjacent to the City park, and an additional \$250,000 from School District #7.

CIP Project Fund
Impact Fees Streets

DEPARTMENT
STREET IF

PROJECT NUMBER
SIF135

PROJECT NAME
Oak (Ferguson to Ryunson Way) - Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$100,000				

DESCRIPTION OF PROJECT

This project is the completion of the street segment of Oak St, from Ferguson to Ryunson Way, to a five-lane urban principal arterial standard. Describe the criticality (i.e., importance) of this project to the operation: Future developments in this area may not be allowed to proceed until these improvements are in place. Functionality of the network at large is dependent on this element functioning as intended. The incomplete transportation network in this vicinity is putting unnecessary demand on those elements of the street network that are in place. How is capacity affected by this project: This project increases capacity directly by constructing new segments of arterial roadway and by adding additional lanes, dedicated bike lanes and sidewalks. How is connectivity affected by this project: Completes an important east-west link between Ferguson and Cottonwood. What regulations or standards are attained with this project: Conformance with the Transportation Master Plan is attained. How is this project leveraged with other stakeholders/projects/funds: A payback District or SID may be created to leverage other stakeholders. Are there other affected projects: Intersection improvements at Oak and Cottonwood, Oak and Flanders Mill, Oak and Ferguson, Oak Street -New Holland to Ferguson.

ALTERNATIVES CONSIDERED

Construct segment by segment as adjacent parcels develop.

ADVANTAGES OF APPROVAL

Increased capacity, connectivity and safety in this corridor, both for motorized vehicles as well as bicycles and pedestrians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Incremental increases in sweeping, plowing and general maintenance costs.

FUNDING SOURCES

This project is funded by Street Impact Fees (\$100,000) and developer contribution.

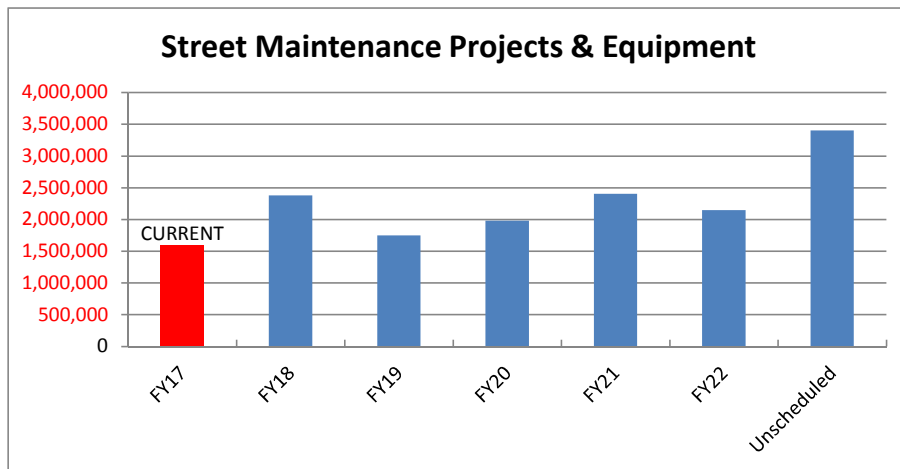
**Street Maintenance District
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ (481,014)	\$ (282,634)	\$ (377,529)	\$ 189,779	\$ 560,924	\$ 539,757	
Plus: Street Mtc Revenues Dedicated to CIP	\$ 1,101,944	\$ 1,590,105	\$ 1,621,907	\$ 1,654,346	\$ 1,687,433	\$ 1,721,181	\$ -
Plus: Gas Tax	\$ 693,936	\$ 693,900	\$ 693,900	\$ 693,900	\$ 693,900	\$ 693,900	
Less: Scheduled CIP Project Costs	\$ (1,597,500)	\$ (2,378,900)	\$ (1,748,500)	\$ (1,977,100)	\$ (2,402,500)	\$ (2,146,789)	\$ (3,401,210)
Projected Year-End Cash Dedicated to CIP	\$ (282,634)	\$ (377,529)	\$ 189,779	\$ 560,924	\$ 539,757	\$ 808,049	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Undesignated Annual Street Mtc Revenues	\$ 3,673,147	\$ 3,673,147	\$ 4,077,193	\$ 4,158,737	\$ 4,241,912	\$ 4,326,750
Estimated Annual Increase - Attributed to Annexations	-	2%	2%	2%	2%	2%
Annual Increase in Pavement Maintenance	-	9%	0%	0%	0%	0%
Total Estimated Revenues	\$ 3,673,147	\$ 4,077,193	\$ 4,158,737	\$ 4,241,912	\$ 4,326,750	\$ 4,413,285
Current Revenues Dedicated to CIP %	20.0%	30.0%	39.0%	39.0%	39.0%	39.0%
Plus: Increase Dedicated to CIP	10.0%	9.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	30.0%	39.0%	39.0%	39.0%	39.0%	39.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,101,944	\$ 1,590,105	\$ 1,621,907	\$ 1,654,346	\$ 1,687,433	\$ 1,721,181

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Street Maintenance
District

PW04	ENGINEERING	PROPERTY ON CORNER OF ASPEN & ROUSE	\$100,000						
STR71-18	ENGINEERING	STREET MAINTENANCE MILL & OVERLAY FY18	\$967,600						
STR71-19	ENGINEERING	STREET MAINTENANCE MILL & OVERLAY FY19		\$554,500					
STR71-20	ENGINEERING	STREET MAINTENANCE MILL & OVERLAY FY20			\$808,100				
STR71-21	ENGINEERING	STREET MAINTENANCE MILL & OVERLAY FY21				\$964,000			
STR71-22	ENGINEERING	STREET MAINTENANCE MILL & OVERLAY FY22					\$913,329		
STR72-18	ENGINEERING	STREET MAINTENANCE CHIP SEAL FY18	\$185,300						
STR72-19	ENGINEERING	STREET MAINTENANCE CHIP SEAL FY19		\$827,000					
STR72-20	ENGINEERING	STREET MAINTENANCE CHIP SEAL FY20			\$913,000				
STR72-21	ENGINEERING	STREET MAINTENANCE CHIP SEAL FY21				\$902,500			
STR72-22	ENGINEERING	STREET MAINTENANCE CHIP SEAL FY22					\$727,460		
PW03	PUBWORKS ADMIN	VEHICLE MAINTENANCE DESIGN & STORAGE CONSTRUCTION		\$50,000					
STR53	PUBWORKS AD	MENDENHALL & BABCOCK STREETSCAPE							\$2,076,210
STR01	STREETS OP	REPLACE #1539 - 2WD 1990 FORD RANGER		\$16,000					
STR01	STREETS OP	REPLACE #2749 - 1997 FORD 1 TON MANUAL TRANSMISSION F350		\$45,000					
STR20	STREETS OP	ANNUAL BIKE PATH IMPROVEMENTS	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	
STR22	STREETS OP	GRADER LEASE	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
STR30	STREETS OP	ANNUAL MEDIAN & BOULEVARD MAINTENANCE	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	
STR34	STREETS OP	SWEEPERS	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	
STR35	STREETS OP	REGENERATIVE AIR SWEEPER							\$250,000
STR38	STREETS OP	MINI LOADER	\$90,000						

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	STR40	STREETS OP	DUMP TRUCK WITH PLOW & SANDER - 2				\$200,000		
	STR40	STREETS OP	DUMP TRUCK WITH PLOW & SANDER - 1	\$180,000					
	STR49	STREETS OP	SANDERS	\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	
	STR50	STREETS OP	PLOWS	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
	STR56	STREETS OP	TACK OIL DISTRIBUTION UNIT	\$90,000					
	STR58	STREETS OP	TANDEM AXLE DUMP TRUCK WITH PLOW & SANDER	\$230,000				\$250,000	
	STR62	STREETS OP	REPLACE #2751 - WATER TRUCK	\$160,000					
	STR63	STREETS OP	REPLACE SIGNAL AT BABCOCK & WILSON						\$750,000
	STR64	STREETS OP	STEEL DRUM ROLLER & TRAILER	\$120,000					
	STR67	STREETS OP	COVERED STORAGE AT SHOPS COMPLEX						\$100,000
	STR73	STREETS OP	REPLACE SKID STEER				\$80,000		
	STR74	STREETS OP	PAINT TRUCK						\$225,000
	STR68	STREETS SIGN	RECTANGULAR RAPID FLASHING BEACON	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

Summary for Street Maintenance District (34 items)

Totals by year:

<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
\$2,378,900	\$1,748,500	\$1,977,100	\$2,402,500	\$2,146,789	\$3,401,210

CIP Project Fund
Street Maintenance District

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
PW03

PROJECT NAME
Vehicle Maintenance Design & Storage Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

Design and construct vehicle storage

Describe the criticality (i.e., importance) of this project to the operation: Having equipment, especially winter equipment, inside and ready to go extends the life, produces less emissions by not having to warm up and shortens response time.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

How is this project leveraged with other stakeholders/projects/funds: By being located next to existing city property, we could aggregate the lots giving even more useful space.

ALTERNATIVES CONSIDERED

Not build and only use for outdoor storage.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure. Large inside storage for several departments. Equipment would be located next to current Vehicle Maintenance Shop. Good access onto Rouse and Griffin. Early morning shift equipment could be stored here so as not to disturb the neighbors in this mostly zoned Industrial area. With this building, Streets could switch to producing our own brine solution for pre wet of the sand. We wouldn't have to use mag chloride which is about 4-5 times more expensive than salt brine. Gallatin County has expressed interest in buying brine from us.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance. Possibly heat with waste oil from the Shops. Possibly heat with wood chips from Forestry.

FUNDING SOURCES

This project totals \$200,000. It will be split evenly 4 ways: Water Fund (\$50,000), Wastewater Fund (\$50,000), Street Maintenance (\$50,000), and Parks (\$50,000).

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
PW04

PROJECT NAME
Property on Corner of Aspen & Rouse

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000					

DESCRIPTION OF PROJECT

Property Purchase to expand shops area and potentially offices. This is an opportunity to make more land available for project PW01-SH - Shops Expansion.

ALTERNATIVES CONSIDERED

Do not purchase the property. Wait to purchase at a later date.

ADVANTAGES OF APPROVAL

Larger contiguous land area for City Shops. The Shops Expansion project has been a scheduled CIP for a number of years. This item could bring an important piece of land into that project area, making a better-functioning property at Rouse and Tamarack.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Building Maintenance would be needed to keep the existing structure useful.

FUNDING SOURCES

Split 33/33/33 between Water, Wastewater and Street Maintenance Funds.

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR01

PROJECT NAME
Replace #1539 - 2WD 1990 Ford Ranger

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$16,000				

DESCRIPTION OF PROJECT

Replace #1539 -2WD 1990 Ford Ranger With Hybrid Sedan. We would buy one of the Public Works lease hybrids. Their lease ends August

Describe the criticality (i.e., importance) of this project to the operation: Currently when we need to do inspections, inventories, GIS, training trips or take several people on route training, we use several vehicles or make several trips. A hybrid sedan to replace the truck would be much more useful.

Which infrastructure assets are maintained by this equipment: Streets, luminaires, sidewalks, curbs, signs.

How is efficiency improved with this equipment: Able to carry up to 4 people at a time in a hybrid sedan.

What is the impact (i.e., scope-of-use) for this equipment: For inventories, GIS, training trips and route training. Would be available to other departments as needed.

ALTERNATIVES CONSIDERED

Drive it until it dies.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Poor use of time. Excessive emissions. Continued use of two vehicles when a 4 passenger car would work. A much more useable year round vehicle. Better fuel mileage and lower emissions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal routine maintenance.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR01

PROJECT NAME
Replace #2749 - 1997 Ford 1 Ton Manual Transmission F350

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$45,000				

DESCRIPTION OF PROJECT

Replace #2749 - 1997 Ford 1 Ton Manual Transmission F350

Describe the criticality (i.e., importance) of this project to the operation: Setting up and mobilizing to the job site is done with this truck and a trailer. Being able to leave the truck hooked up to the trailer during the project helps with transporting and also utilizing the smallest work area in neighborhoods. Single pieces of equipment scattered over blocks in the core not only inconveniences the residents where we are working but affects the surrounding blocks as well.

Which infrastructure assets are maintained by this equipment: Streets and alleys.

How is efficiency improved with this equipment: Mainly used to haul large equipment to the job site. Without this truck operating reliably, we have to drive equipment to the site which can take a paver or skid steer more than an hour to travel through town.

What is the impact (i.e., scope-of-use) for this equipment: Pulling large trailers and normal one ton uses.

Are there other affected projects: This truck is used to haul equipment to paving projects.

ALTERNATIVES CONSIDERED

Drive it until it dies.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: More people and more equipment used to complete projects. A much more useable year round truck. Better fuel mileage and lower emissions. We are spending about \$.90 per mile on maintenance and repairs. A new vehicle spends about \$.05 per mile on M&R. Anytime M&R exceed \$.50 per mile, it is time to consider removing the truck from the fleet.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal routine maintenance.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR20

PROJECT NAME
Annual Bike Path Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	

DESCRIPTION OF PROJECT

This item would provide for bike-related infrastructure including (but, not limited to) racks, signs, striping, curb-cuts, and separated pathways.

Describe the criticality (i.e., importance) of this project to the operation: Medium.

How is capacity affected by this project: The Greater Bozeman Area Transportation Plan (2007 Update) Section 5.4 Recommended Bicycle Facility Improvements outlines many facilities. The Bozeman Area Bicycle Advisory Board (BABAB) gave the City their top 2 priorities: They are listed with City Engineering cost estimates: North 11th Ave - Mendenhall to Durston, \$14,500; Willson Ave - Main Street to Kagy Blvd, \$54,300.

How is connectivity affected by this project: Enhanced.

What safety or risk measures are mitigated with this project: Allows for safer bike usage.

What regulations or standards are attained with this project: Conformance with Transportation Plan recommendations.

How is this project leveraged with other stakeholders/projects/funds: Can be combined with street re-surfacing projects.

Are there other affected projects: Can be coordinated with street re-surfacing projects.

ALTERNATIVES CONSIDERED

Continue with existing infrastructure.

ADVANTAGES OF APPROVAL

Safety will likely be improved.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs.

FUNDING SOURCES

100% Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR22

PROJECT NAME
Grader Lease

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	

DESCRIPTION OF PROJECT

This is a request to establish at a minimum a 20 year replacement schedule for our graders. Currently our fleet is comprised of a 1994, 1998, 2003, 2007, and 2014.

Describe the criticality (i.e., importance) of this project to the operation: Grading the residential streets is critical to safe travel of our citizens. Pulling the snow out from the curb so it can be blown into trucks and hauled away is important to parking in the downtown and other business areas.

Which infrastructure assets are maintained by this equipment: Streets.

How is efficiency improved with this equipment: With all wheel drive our productivity increases. Newer equipment has less breakdowns and better fuel economy which means less time in the shop and fueling during a shift.

What is the impact (i.e., scope-of-use) for this equipment: Grading local streets.

How is this project leveraged with other stakeholders/projects/funds: The old grader would be traded in or auctioned.

ALTERNATIVES CONSIDERED

Budget 250k every 5 years to purchase. Cut back on our use of graders in the residential areas. Continue to use what we have and replace when we have complete failure.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Although the industry standard schedules a 15 year replacement, we believe our extensive preventative maintenance schedule will allow us to get 20 years out of a grader. Much more reliable and fuel efficient equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Decrease in costs due to newer equipment.

FUNDING SOURCES

100% Street Maintenance Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR30

PROJECT NAME
Annual Median & Boulevard Maintenance

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$55,000	\$55,000	\$55,000	\$55,000	\$55,000	

DESCRIPTION OF PROJECT

This is a request for money to be used for maintaining and upgrading our medians.

ALTERNATIVES CONSIDERED

None.

ADVANTAGES OF APPROVAL

Making our currently unmaintained medians into weed free low maintenance show pieces. We are partnering internally with the Water Conservation Manager and externally with MSU to design and install low water easily maintained medians. Also contract out the maintenance on our established medians.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None. Lower water use means lower utility costs.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR34

PROJECT NAME
Sweepers

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	

DESCRIPTION OF PROJECT

This is for leasing or purchasing through the MACI (Montana Air and Congestion Initiative) equipment purchase program. These are mechanical sweepers that if necessary can be operated without using water. The next sweeper we would replace is our 2005 model with 59,000 miles and 9372 hours. It is scheduled for an elevator replacement next year and we would like to replace rather than repair at a cost of \$15,000. Industry standards show it is best to replace municipal sweepers at 5 years. We are able to get about 10 years due to our excellent maintenance program.

Describe the criticality of this project to the operation: The City's MS4 Stormwater Permitting requires sweeping up sand and dirt before it can enter waterways. Clean streets/ bike lanes are a quality of life issue. We are required to meet the goal of sweeping all local streets twice per year, monthly sweeping of all arterial and collector roadways and weekly sweeping of Main Street, most bike lanes weekly during the summer. Heavy development activity requires additional sweeping in construction areas.

Which infrastructure assets are maintained by this equipment: Streets, parking lots, Stormwater intakes and Bozeman's air quality.

How is efficiency improved with this equipment: Sweepers are very high maintenance as they age. Leases terms for sweepers are a maximum of 5 years due to life expectancy. We are currently in the 3rd year of one lease. This additional sweeper lease would replace our oldest sweeper a 2006.

How is this project leveraged with other stakeholders/projects/funds: We submit every year to the Montana Department of Transportation's (MDT) Montana Air and Congestion Initiative (MACI) equipment purchase program for sweepers. With this program, MACI pays for 87% and we pay 13% for a sweeper. If we are chosen, we would use our lease payment to fund our share of the cost which would be ~\$34,000.

Other affected projects: Stormwater contractor compliance, spring and fall street cleaning, pre sweep for pavement painting.

ALTERNATIVES CONSIDERED

Budget 250k every year until all sweepers are replaced. Cut back on our sweeping There are no local contractors at this time. Continue to use what we have.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Major repairs. Downtime and not being able to complete sweeping routes. Increased discharge to waterways and increase in particulate mater, reducing air quality. Much improved operations. Better air quality. Improved storm water discharge.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR35

PROJECT NAME
Regenerative Air Sweeper

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$250,000

DESCRIPTION OF PROJECT

Regenerative Air Sweeper

Describe the criticality (i.e., importance) of this project to the operation: We have had demonstrations of these sweepers and their ability to get the fine particles off of the pavement is noticeable. As air quality and Stormwater discharge regulations tighten, we may be forced to use regenerative type sweepers or at the very least have one in our fleet to do the final sweeping pass to get the <1 micron particles that can become airborne.

Which infrastructure assets are maintained by this equipment: Streets.

How is efficiency improved with this equipment: Rather than make several passes with our mechanical sweepers, an RA sweeper could get it done in one pass. The one drawback is that RA sweepers can not be used below freezing. They need water at all times.

How is this project leveraged with other stakeholders/projects/funds: Possible MDT MACI funds.

Are there other affected projects: Compliance with Stormwater permitting.

ALTERNATIVES CONSIDERED

Only use mechanical sweepers which discharge dust when sweeping.

ADVANTAGES OF APPROVAL

What is the impact (i.e., scope-of-use) for this equipment: All sweeping operations.

What are the implications of deferring the purchase of this equipment: Continue to make several passes and never getting the fine particles. We could improve our discharge into the storm water system. Spring sweeping of the winter sand would generate less dust therefore eliminating complaints from citizens and DEQ.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal sweeper maintenance costs.

FUNDING SOURCES

100% Street Maintenance District

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR38

PROJECT NAME
Mini Loader

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$90,000					

DESCRIPTION OF PROJECT

This request is for a mini loader that would be used for sidewalk maintenance, removal, and repair. Will also be used in curb repairs and alley maintenance. Using a smaller loader allows us to only close the parking lane and keep traffic flowing. Loader will accept attachments such as bucket, bucket with thumb, brooms and plows that we already have.

Describe the criticality (i.e., importance) of this project to the operation: It would be useful in tight situations where a full size loader wouldn't fit, such as when the mini excavator is being used and material needs to be moved off site.

Which infrastructure assets are maintained by this equipment: This loader will accept many attachments that we already have, such as brooms, sweepers, and plows.

How is efficiency improved with this equipment: Currently we are using full size loaders for repairs. It will be safer and more efficient to use equipment sized for the smaller jobs.

What is the impact (i.e., scope-of-use) for this equipment: Anywhere a loader is needed this can be used. It is safer in the tight situations to use smaller equipment.

How is this project leveraged with other stakeholders/projects/funds: This loader would be available for use in other departments.

ALTERNATIVES CONSIDERED

No comparable equipment is available for rent.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Wear and tear on our large loaders. Tying up the large loaders on smaller jobs when the loader can be used on asphalt and gravel road projects.

This loader will give us another piece of equipment that will utilize our attachments. The compact size will allow us to get in spaces that we wouldn't normally be able to access.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR40

PROJECT NAME
Dump Truck With Plow & Sander - I

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$180,000					

DESCRIPTION OF PROJECT

The 1990 Dump truck will be 28 years old with 82,000 in town miles and over 10,000 hours. Parts have been discontinued. We have had to patch the leaking gas tank because a replacement is not available. When the other rusted spots start leaking we will be forced to park the truck. The motor is so tired that we are removing the plow this winter because it doesn't have the power to plow and sand uphill. We average about \$1,200 per year in repairs and maintenance. The running and floor boards are rusted through but we are able to cover them with old mud flaps to make it drivable. Parts availability will be what stops this truck. Describe the criticality (i.e., importance) of this project to the operation: Single axle dump trucks are used on smaller projects in the summer including alley maintenance, asphalt patching and debris pickup. In the winter these trucks are the only equipment we can safely and efficiently plow the narrow streets. We are able to haul snow in tight quarters also. Which infrastructure assets are maintained by this equipment: This will replace a 1990 underpowered gasoline engine dump truck that averages about 3 MPG when used for plowing operations. The FY21 request will replace a 1993 underpowered gasoline engine dump truck. How is efficiency improved with this equipment: The new truck could be fueled with alternative fuels such as Biodiesel. Estimates show that the 1990 spews over 30 tons of CO2 into the air per year and by removing this from our fleet will help us reach our goal of reducing municipal greenhouse emissions 15% below 2000 levels by 2020. What is the impact (i.e., scope-of-use) for this equipment: Much more reliable, safer and environmentally friendly than our current model. This truck will be used in all aspects of our operations. How is this project leveraged with other stakeholders/projects/funds: Could be used by other departments.

ALTERNATIVES CONSIDERED

Continue with 1990 model.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Chance of catastrophic failure of the underpowered gasoline trucks. Efficiency, less emissions, safety, fuel savings and more reliable equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Less than current model.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR40

PROJECT NAME
Dump Truck With Plow & Sander - 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$200,000		

DESCRIPTION OF PROJECT

The 1993 Dump truck will be 25 years old with 51,025 in town miles and over 5400 hours. Parts have been discontinued. We had to replace the fuel tank with a used diesel tank (new tanks no longer available) and since have spent over \$4,000 on fuel related repairs. Over the past 5 years we have spent almost \$16,000 in repairs. Fuel issues and parts availability will be what stops this truck.

Describe the criticality (i.e., importance) of this project to the operation: The new truck could be fueled with alternative fuels such as Biodiesel. Estimates show that the 1993 spews over 30 tons of CO2 into the air per year and by removing this from our fleet will help us in our goal of reducing municipal greenhouse emissions 15% below 2000 levels by 2020.

Which infrastructure assets are maintained by this equipment: This will replace a 1993 underpowered gasoline engine dump truck that averages about 3 MPG when used for plowing operations.

How is efficiency improved with this equipment: The new truck could be fueled with alternative fuels such as Biodiesel which is more fuel efficient with less emissions.

What is the impact (i.e., scope-of-use) for this equipment: Much more reliable, safer and environmentally friendly than our current model. This truck will be used in all aspects of our operations.

ALTERNATIVES CONSIDERED

Continue with 1993 model.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Chance of catastrophic failure of the underpowered gasoline trucks. Efficiency, less emissions, safety, fuel savings and more reliable equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Less than current model.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR49

PROJECT NAME
Sanders

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$16,000	\$16,000	\$16,000	\$16,000	\$16,000	

DESCRIPTION OF PROJECT

Sanders are used in a very corrosive and abrasive environments. We rebuild the conveyor and hydraulic system in the first 4 years. If we don't have a catastrophic failure in the next 2-3 years, the V box and structural components start to fail in the 7th year. By replacing the sander every 8 years (we now have 8 sanders), we can avoid having a season ending failure. Sanders are about 6 months out when ordering so we would never get a new one in the same season that we needed a replacement. We have two different sizes so we could run them until they fail during a major storm and then have one of each size sitting here. The problem with that is the new sanders would be aging without being used. Using this method we could have two failures in one year and be short one sander.

Describe the criticality (i.e., importance) of this project to the operation: If we can't put down sand or deicer during the winter, we fail to service our citizens. Not being able to control the quantity, means we are either putting down too much or too little product. Too much sand and we increase our spring sweeping and too little sand and the crashes increase.

How is efficiency improved with this equipment: Less down time during a storm for repairs. Less preseason maintenance needed with newer more reliable equipment. Able to more accurately control quantities.

What is the impact (i.e., scope-of-use) for this equipment: Sanding in the winter.

Are there other affected projects: Everyone that has to stop or get up a hill in the winter are affected by whether our sanders are operating.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Sanders wear out every 5 years, depending on the winter. We have seven sanders, so we will make them last 7 years. Major breakdowns in the middle of winter can put a sander out of service for weeks if not months. More reliable sanders. Less failures in the middle of a storm.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Decrease in maintenance costs.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR50

PROJECT NAME
Plows

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

This is to replace the worn plow blades.

Describe the criticality (i.e., importance) of this project to the operation: Critical to have fully operational plows. With as much as a 90 day delivery time to replace a plow, it is important to replace them before they fail.

Which infrastructure assets are maintained by this equipment: We have 7 large plows so they will be on a 7 year replacement schedule.

How is efficiency improved with this equipment: When the moldboard of the plow gets bent after several years of use, it is very difficult to bolt on a replacement cutting edge. If they are not tight to the cutting edge surface they face early failure and require replacement at inopportune times.

What is the impact (i.e., scope-of-use) for this equipment: Plowing snow.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Failure during a snowstorm and possibility of not getting a replacement during the winter season. A much more efficient plow operation. Less time spent replacing cutting edges that prematurely break.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
STR53

PROJECT NAME						
Mendenhall & Babcock Streetscape						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,076,210

DESCRIPTION OF PROJECT

Conduct Streetscape Improvements Along Mendenhall & Babcock (On Hold For SID Development)

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR56

PROJECT NAME
Tack Oil Distribution Unit

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$90,000					

DESCRIPTION OF PROJECT

The 1971 Distributor will be 47 years old, mileage and hours are unknown as the meters quit working accurately long ago, and parts for the truck and oil distributor unit have been discontinued. Due to lack of available parts, we recently had to convert the rear axle to a wet system. Parts are no longer available for the pre heat system. Therefore, someone has to come in early to heat the oil so we can spray tack oil after 8. The distributor is a two man system. One drives and the other rides on the back to engage the clutch for the tack oil. Not a safe way to spray oil. Application rates on the unit are controlled by the speed of the truck. The guy riding on back has to yell to the driver to speed up or slow down as needed. We have only spent ~\$2,500 on this truck in the last 5 years because parts are not available. We have been jury-rigging burners and drive trains to get it to work one more time. We think there is some interest in donating this to a museum if we do get a replacement.

Describe the criticality (i.e., importance) of this project to the operation: Critical to our paving operation. If our 1971 unit failed in the middle of a job, we couldn't continue to pave.

Which infrastructure assets are maintained by this equipment: This is used to spray tack oil on asphalt patches and paving. Currently we are using the 1971 unit or doing it by hand with our patch truck.

How is efficiency improved with this equipment: Less chance for an oil spill. Able to calibrate to dispense the exact amount needed for the job. Not having to have workers ride on the back of the unit to engage the spray bar. Currently in order to control the amount of tack oil being put down, the operator on the back of the truck hand signals to the driver to go faster or slower as needed. This means the driver is constantly watching his mirrors instead of the road.

What is the impact (i.e., scope-of-use) for this equipment: Used for tack oil for paving, mill and overlays and large patches.

How is this project leveraged with other stakeholders/projects/funds: Patching and paving for other departments.

ALTERNATIVES CONSIDERED

Continue to use what we have when it runs.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Chance of equipment failure during operations. More reliable and safer unit. Less chance of major spill.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Costs will be less with the newer unit.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR58

PROJECT NAME
Tandem Axle Dump Truck With Plow & Sander

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$230,000				\$250,000	

DESCRIPTION OF PROJECT

This is a request to replace a 1994 tandem axle truck with 128,000 miles and over 11,000 hours.

Describe the criticality (i.e., importance) of this project to the operation: It is very important that we get the arterials and collectors done before 8 AM. When a tandem axle 10 yard truck is down for any period of time, the backup is a 1990 gas engine single axle 4 yard truck which takes twice as long to finish a route if it stays in operation for the entire shift. Not acceptable to our customers.

Which infrastructure assets are maintained by this equipment: All streets and alleys. With the widening of multiple collectors and arterials, the continued need for a larger capacity truck to finish plow and sanding routines is critical to maintaining our service to the traveling public.

How is efficiency improved with this equipment: During paving operations, being able to haul twice as much asphalt cuts down on the number of trips to the asphalt plant. This make she paving crew more efficient and uses less fuel.

What is the impact (i.e., scope-of-use) for this equipment: Plowing, sanding, hauling and paving.

How is this project leveraged with other stakeholders/projects/funds: The 1994 truck would be used as a backup in the winter and still be used for paving instead of a single-axle truck.

Are there other affected projects: Snow plowing, snow hauling and paving.

ALTERNATIVES CONSIDERED

Continue with no tandem back up in the winter. Run single axle 4 yard dump trucks with asphalt operations

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Hope that none of our tandem axle trucks break down during a storm or paving operations.
Reliability, efficiency, less emissions and safety.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Less than the current model.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Street Maintenance District

STREETS OP

STR62

PROJECT NAME

Replace #2751 - Water Truck

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$160,000

DESCRIPTION OF PROJECT

This request is to replace a 1995 water truck (#2751) with 500,000 miles. This truck is used in the summer to water and also apply dust control to gravel streets. Also used to wash concrete medians. In the winter it can be used for de-icer or to apply anti-icing before a storm.

Describe the criticality (i.e., importance) of this project to the operation: Very important in the maintenance of our gravel roads. Without a water truck, the roads would become washboard and all the gravel fines would end up in the ditch. If we couldn't apply dust control, air quality would suffer in the neighborhoods.

Which infrastructure assets are maintained by this equipment: All streets, gravel and paved.

How is efficiency improved with this equipment: The new water truck will be an automatic transmission so that all CDL license holders can drive. Title 49 of the Code of Federal Regulations (CFR) 383.95c now requires that if you test for your CDL in an automatic truck then you can not drive a manual transmission truck. Because we need our new recruits to pull a trailer while testing, we can not test with our current water truck because it can't tow a trailer.

What is the impact (i.e., scope-of-use) for this equipment: Watering gravel roads, washing streets and concrete medians, and applying de-icer.

How is this project leveraged with other stakeholders/projects/funds: Occasionally, water trucks become available in the MACI program. We will pursue if they become available in the MACI equipment program.

ALTERNATIVES CONSIDERED

Let employees hired before 2015 drive it until it dies. Lease or rent.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: It has a manual transmission and with CDL laws making you test in the type of transmission that you will drive, new employees can't test in it and therefore, can't operate it.

Everyone can drive it, less down time due to failures, more fuel efficient and less emissions.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR63

PROJECT NAME
Replace Signal At Babcock & Wilson

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$750,000

DESCRIPTION OF PROJECT

Upgrade Signal At Babcock & Wilson

How is capacity affected by this project: Underground conduit is full and failing. Pedestrian functions should be upgraded to new type such as count down and vibratory tactile.

What safety or risk measures are mitigated with this project: This signal can't have Opticom for fire trucks

What regulations or standards are attained with this project: Also should conform with ADA.

ALTERNATIVES CONSIDERED

Leave as is until failure.

ADVANTAGES OF APPROVAL

Fire department can use Opticom to pass through the light. ADA requirements would be met. Room for future expansion in the conduit.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Routine maintenance.

FUNDING SOURCES

Arterial and Collector Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR64

PROJECT NAME
Steel Drum Roller & Trailer

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$120,000					

DESCRIPTION OF PROJECT

This is a request for a larger roller for our paving operations.

Describe the criticality (i.e., importance) of this project to the operation: This roller will allow us to get better compaction therefore, giving a better finished product. Milling and paving salvageable portions of our local roadways is a key strategy for extending the life of existing local streets until they can be reconstructed.

Which infrastructure assets are maintained by this equipment: Paved streets.

How is efficiency improved with this equipment: The roller we currently have is for smaller projects and tighter areas.

What is the impact (i.e., scope-of-use) for this equipment: Compacting asphalt paving projects.

Are there other affected projects: In house paving projects.

ALTERNATIVES CONSIDERED

Rent if/when available. Lease. Rental rates are \$1000.00 per week without a trailer.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: If a rental roller is not available, we can't pave local streets. Best paving possible for longer pavement life. Improve PCI.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal maintenance.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR67

PROJECT NAME
Covered Storage At Shops Complex

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$100,000

DESCRIPTION OF PROJECT

Covered Storage At Shops Complex

Describe the criticality (i.e., importance) of this project to the operation: Getting equipment parked inside greatly extends the life of the equipment.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

What is the impact (i.e., scope-of-use) for this equipment: Equipment and vehicle storage.

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure.

How is this project leveraged with other stakeholders/projects/funds: At the proper site we could build one big enough to house other departments equipment. Project is split 50% Street Maintenance Fund, 20% Water Fund, & 25% Wastewater Fund.

Are there other affected projects: Depends where this building is located.

ALTERNATIVES CONSIDERED

Keep parking millions of dollars' worth of equipment outside.

ADVANTAGES OF APPROVAL

Better equipment management.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance.

FUNDING SOURCES

50% Street Maintenance Fund, 25% Water Fund, 25% Wastewater Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS SIGN

PROJECT NUMBER
STR68

PROJECT NAME
Rectangular Rapid Flashing Beacon

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

This request is for a rectangular rapid flashing beacon.

Describe the criticality (i.e., importance) of this project to the operation: We get several requests a year for these and would like to have one ready to install. These would be similar to the unit installed on Kagy at 7th avenue.

Which infrastructure assets are maintained by this equipment: Crosswalks.

How is efficiency improved with this equipment: RRFB's have shown to increase visibility of pedestrians in crosswalks which in turn increases safety of the pedestrian.

What is the impact (i.e., scope-of-use) for this equipment: High pedestrian use intersections.

How is this project leveraged with other stakeholders/projects/funds: In the past we have had the Bozeman School District and the Bozeman Police Foundation contribute to the cost of these.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Not having a unit in stock may increase the time to respond to requests. By having one on hand, we are able to install it in the same construction season it is requested without waiting for a budget cycle.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR71-18

PROJECT NAME
Street Maintenance Mill & Overlay FY18

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$967,600					

DESCRIPTION OF PROJECT

Mill & Overlay Story Mill Rd (Bridger Dr to Caddie Ct), Lincoln St (19th to S 11th), Grant (S 6th to Willson), Willson (Kagy to Babcock), Church (Story to Olive), Church (Babcock to Davis), College (8th to 11th), and Lamme (Church to Broadway).

Describe the criticality (i.e., importance) of this project to the operation: High

How is capacity affected by this project: We plan to mill and overlay 3.8 miles in FY18, 2.4 miles in FY19, 2.4 miles in FY20, 2.7 miles in FY21, and 2.8 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation, mitigation of failed pavement sections.

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects

Are there other affected projects: Coordination needed with any utility replacement projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR71-19

PROJECT NAME
Street Maintenance Mill & Overlay FY19

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$554,500				

DESCRIPTION OF PROJECT

Mill & Overlay S 23rd Ave (College to Main), Babcock (Main to 11th), Koch (23rd to 11th), and S 20th Ave (Koch to Babcock)

Describe the criticality (i.e., importance) of this project to the operation: High.

How is capacity affected by this project: We plan to mill and overlay 3.8 miles in FY18, 2.4 miles in FY19, 2.4 miles in FY20, 2.7 miles in FY21, and 2.8 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation, mitigation of failed pavement sections.

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

Are there other affected projects: Coordination needed with any utility replacement projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR71-20

PROJECT NAME
Street Maintenance Mill & Overlay FY20

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$808,100			

DESCRIPTION OF PROJECT

Mill & Overlay Tamarack (7th to Rouse), Aspen (7th to 5th), Peach (7th to Rouse), N 5th Ave (Peach to Tamarack), N 3rd (Peach to Tamarack), and Willson (Main to Cottonwood).

Describe the criticality (i.e., importance) of this project to the operation: High.

How is capacity affected by this project: We plan to mill and overlay 3.8 miles in FY18, 2.4 miles in FY19, 2.4 miles in FY20, 2.7 miles in FY21, and 2.8 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation, mitigation of failed pavement sections.

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects

Are there other affected projects: Coordination needed with any utility replacement projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR71-21

PROJECT NAME
Street Maintenance Mill & Overlay FY21

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$964,000		

DESCRIPTION OF PROJECT

Mill & Overlay Durston (Hanson St to 7th) and Simmental Way.

Describe the criticality (i.e., importance) of this project to the operation: High.

How is capacity affected by this project: We plan to mill and overlay 3.8 miles in FY18, 2.4 miles in FY19, 2.4 miles in FY20, 2.7 miles in FY21, and 2.8 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation, mitigation of failed pavement sections

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects

Are there other affected projects: Coordination needed with any utility replacement projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR71-22

PROJECT NAME
Street Maintenance Mill & Overlay FY22

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$913,329	

DESCRIPTION OF PROJECT

Mill & Overlay S 3rd from Goldenstein to Kagy) and Griffin (7th to Rouse)

Describe the criticality (i.e., importance) of this project to the operation: High.

How is capacity affected by this project: We plan to mill and overlay 3.8 miles in FY18, 2.4 miles in FY19, 2.4 miles in FY20, 2.7 miles in FY21, and 2.8 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation, mitigation of failed pavement sections

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects

Are there other affected projects: Coordination needed with any utility replacement projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR72-18

PROJECT NAME
Street Maintenance Chip Seal FY18

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$185,300					

DESCRIPTION OF PROJECT

Chip Seal Highland Blvd, Ellis St, Old Highland Blvd, Kenyon Dr (Josephine to the end), O'Connell Dr, Berthot Dr, Chambers Dr, Baxter Dr, Knaab Dr, Lomas Dr.

Describe the criticality (i.e., importance) of this project to the operation: Medium-high.

How is capacity affected by this project: We plan to chip seal 4.4 miles in FY18, 18.7 miles in FY19, 15.6 miles in FY20, 19.3 miles in FY21, and 13.7 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation.

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR72-19

PROJECT NAME
Street Maintenance Chip Seal FY19

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$827,000				

DESCRIPTION OF PROJECT

Chip Seal W Oak (Ferguson to 19th), Ferguson (Fallon to Oak), Babcock (Meagher to Main), Fowler (Garfield to Babcock), Resort Dr (Huffine to Babcock), Fallon (Ferguson to Fowler), Laramie Dr, Granite Ave, Laredo Dr, Prairie Ave, Laredo Dr, Golden Valley Dr, Pondera Ave, E Granite Ave, Powder River Ave, Treasure Ave, Stillwater Ave, Ginella Way, Sheridan Pl, S Sweetgrass Ave, Broadwater St, Choteau Ave, Teton Ave, Sheridan Ave (Broadwater to Durston), N Sweetgrass Ave, Meagher (Babcock to Oak), Flathead Ave, N Sanders Ave, Mineral Ave, Toole St (Ferguson to the end), Cascade St (Ferguson to the end), Carbon St, Diamond St, Sunstone St (Ferguson to Sanders), Moonstone Dr (Ferguson to Sanders), Annie St (Ferguson to Hanson St), Renova Ln (Ferguson to the end), Tanzanite Dr, Opal St, Agate Ave, Bur Ave, Laduke St, Pin Ave, Yellowstone Ave (Durston to Oak), Palm St, Potosi St, Jardine Ave, Pipestone St, Corwin St, Beaverhead St.

Describe the criticality (i.e., importance) of this project to the operation: Medium-high.
How is capacity affected by this project: We plan to chip seal 4.4 miles in FY18, 18.7 miles in FY19, 15.6 miles in FY20, 19.3 miles in FY21, and 13.7 miles in FY22.
What safety or risk measures are mitigated with this project: Pavement preservation
How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR72-20

PROJECT NAME
Street Maintenance Chip Seal FY20

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$913,000			

DESCRIPTION OF PROJECT

Chip Seal W Beall St (25th to 15th), N 23rd Ave, N 22nd Ave (Beall to Durston), N 21st Ave (Beall to Durston), N 20th Ave (Main to Durston), N 18th Ave, N 17th Ave (Beall to Durston), N 16th Ave, N 15th Ave (Main to Patrick), Kagy (19th west), Stockman Way, S 22nd Ave, Remington Way, S 11th (Kagy to Opportunity Way), Opportunity Way, Graf (19th to 27th), Golden Sun Dr, S 27th Ave (Blackwood to Graf), Parkway Ave, Kurk Dr, S 31st Ave, S 30th Ave, S 29th Ave, S 28th Ave, S 26th Ave, Meah Ln, Parkway Ave, S Tracy Ave, Hill St, Highland Ct, Spring Creek Dr (3rd to Tracy), Circle Dr, S 15th Ave, Summer View Ln, Spring Ridge Dr, Madrona Ln, S 11th Ave, Hidden Springs Ln, Summerset Dr, Hillcrest Dr, Gardenbrook Ln, Alder Creek Dr, Cambridge Dr, Fieldstone Dr, Fieldstone Dr W, Concord Dr, Lexington Dr, Park Pl, Oxford Dr, Cornell Dr, Stanford Dr, Princeton Pl, Dartmoth Dr, Silverwood Dr, Heritage Dr.

Describe the criticality (i.e., importance) of this project to the operation: Medium-high.
How is capacity affected by this project: We plan to chip seal 4.4 miles in FY18, 18.7 miles in FY19, 15.6 miles in FY20, 19.3 miles in FY21, and 13.7 miles in FY22.
What safety or risk measures are mitigated with this project: Pavement preservation
How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR72-21

PROJECT NAME
Street Maintenance Chip Seal FY21

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$902,500		

DESCRIPTION OF PROJECT

Chip Seal Laurel Glen Streets, Trout Meadows Rd, Fen Way, Catamount St (Davis Ln to N 27th), Sora Way, Sundew Ln, Blackbird Dr (Lori Ln to Catamount), Warbler Way, Catalyst St, Floxtail St, Downy Ln, Savannah St, Catkin Ln, Hamilton Ct, Marlyn Ct, N 27th Ave (Cattail to Catamount), Cattail St (Davis Ln to Ferguson), Kimberwicke St, Thoroughbred Ln, Farrier Ln, Andalusian Ave, Arabian Ave, McCafferty St, Equestrian Ln (Harper Puckett to Arabian), Danube St, Draft Horse Dr, Lasso Ave, N Ferguson Ave (Baxter to Cattail), Equestrian Ln (Lasso to Vaquero Pkwy), Galloway St, Bosal St, Milkhouse Ave (Equestrian to Kimberwicke), Gallatin Green Blvd, Vaquero Pkwy (Equestrian to Kimberwicke), Lolo Way (Caspian to Marias), Lemhi Trail Dr (Caspian to Marias), Marias Ln, Caspian Ave (Lemhi Trail Dr to Monida), Monida, Tschache Ln (Caspian to N 27th), Spring View Ct, Autumn Grove St, Westwind Way, Winter Park St, Windward Ave, Breeze Ln, Hunters Way (Oak to Tschache), Santana Ct, Buckrake Ave (Oak to Sartain St), Sartain St, Gale Ct, Tempest Ct, Brisk Ct, Leeward Ct, Breeze Ln, Turbulence Ln, Hedgerow Ct, Trade Wind Ln (Santana Ct), N 27th (Oak to Baxter), Thomas Dr.

Describe the criticality (i.e., importance) of this project to the operation: Medium-high.
How is capacity affected by this project: We plan to chip seal 4.4 miles in FY18, 18.7 miles in FY19, 15.6 miles in FY20, 19.3 miles in FY21, and 13.7 miles in FY22.
What safety or risk measures are mitigated with this project: Pavement preservation
How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
ENGINEERING

PROJECT NUMBER
STR72-22

PROJECT NAME
Street Maintenance Chip Seal FY22

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$727,460	

DESCRIPTION OF PROJECT

Chip Seal the streets in the Legends at Bridger Creek subdivision, Valley West subdivision, Flanders Creek subdivision, and the Traditions subdivision – phase I.

Describe the criticality (i.e., importance) of this project to the operation: Medium-high.

How is capacity affected by this project: We plan to chip seal 4.4 miles in FY18, 18.7 miles in FY19, 15.6 miles in FY20, 19.3 miles in FY21, and 13.7 miles in FY22.

What safety or risk measures are mitigated with this project: Pavement preservation

How is this project leveraged with other stakeholders/projects/funds: Potential for bike lane striping enhancements with some projects.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Increases the lifespan of streets within the City of Bozeman

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pavements.

FUNDING SOURCES

Street Maintenance Fund

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR73

PROJECT NAME
Replace Skid Steer

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$80,000		

DESCRIPTION OF PROJECT

This to replace our 2003 Skid Steer with 1750 hours. Used mainly in paving operations with the cold planer attached. This is very important in our operation but is also very hard on the equipment. In the last 5 years we have spent over \$26,000 in repairs. Down time during these repairs has been weeks and that interferes with our ability to finish asphalt repairs in a timely manner.

Describe the criticality (i.e., importance) of this project to the operation: This is used on every paving project.

Which infrastructure assets are maintained by this equipment: Streets and Alleys.

How is efficiency improved with this equipment: Streets uses the skid steer in all aspects of milling, paving and gravel work.

When we don't have the skid steer up and running we are using larger equipment using more fuel. Working in tight spaces is more difficult with a full size loader.

What is the impact (i.e., scope-of-use) for this equipment: All aspects of the Streets operation.

Are there other affected projects: Mill and overlays.

ALTERNATIVES CONSIDERED

Keep running the one we have.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: More down time and less use when it is needed. Less downtime

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None.

FUNDING SOURCES

100% Street Maintenance District Revenue

CIP Project Fund
Street Maintenance District

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR74

PROJECT NAME
Paint Truck

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$225,000

DESCRIPTION OF PROJECT

Pavement marking renewal is a yearly operation because we use environmentally friendly water borne paint. The disadvantage to latex paint is that it has to be renewed at least annually. Currently we have MDT paint for us and due to their busy schedule it is not always done as early in the season as we would like. We are now waiting until mid to late summer to get the double yellow center lines, bike lane lines, skip lines and fog lines painted. MDT's crew is not as dialed in to the needs and wants of our citizens so we are not getting the quality that we and our city is used to.

Describe the criticality (i.e., importance) of this project to the operation: Very important to not have to depend on another agency to get our painting done. Fresh pavement markings are critical to the traveling public.

Which infrastructure assets are maintained by this equipment: Streets.

How is efficiency improved with this equipment: Our crews would get it done in a more timely manner with less mistakes.

What is the impact (i.e., scope-of-use) for this equipment: Painting pavement markings.

ALTERNATIVES CONSIDERED

Continue to have MDT paint for us when it is convenient for their schedule and weather permitting. Contract out the painting.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Continue to rely on others to get our painting done. Public outcry when markings are not visible at night or in inclement weather. Producing a quality product that we don't always get with our current MOU with MDT. Being able to paint when we want and as often as we want.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This will need to be stored inside and we will have to make room for that in our current buildings.

FUNDING SOURCES

100% Street Maintenance District Revenue

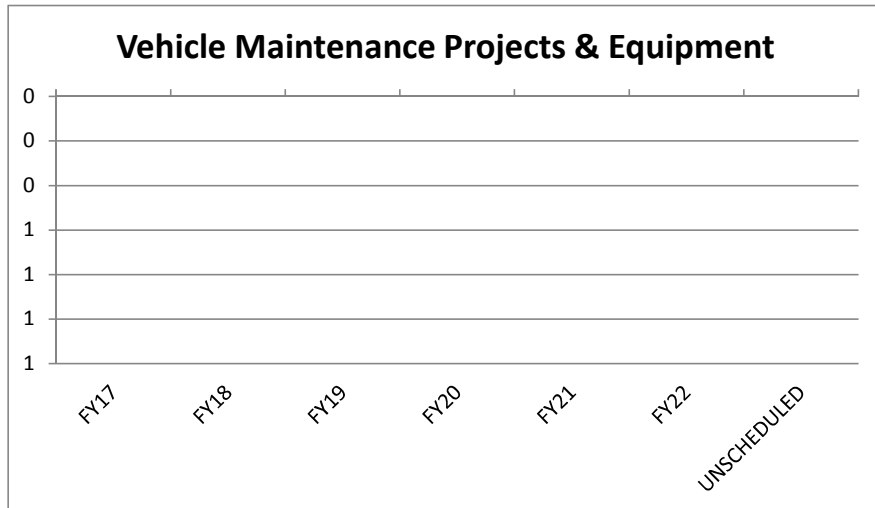
**Vehicle Maintenance Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					UNSCHEDULED
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ -	\$ -	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	
Plus: Internal Allocation/Billing Dedicated to CIP	\$ -	\$ 63,000	\$ -	\$ -	\$ -	\$ -	\$ -
Less: Scheduled CIP Costs							
Projected Year-End Cash Dedicated to CIP	\$ -	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
<i>Estimated Annual Vehicle Mtc Billings</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Estimated Annual Vehicle Mtc Allocation</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Total Estimated Revenues</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Current Revenues Dedicated to CIP %</i>	5.5%	3.5%	7.1%	0.0%	0.0%	0.0%
<i>Plus: Increase (Decrease) Dedicated to CIP</i>	-2.0%	3.6%	-7.1%	0.0%	0.0%	0.0%
<i>Total % Dedicated to CIP</i>	3.5%	7.1%	0.0%	0.0%	0.0%	0.0%
<i>Total Estimated Revenues Dedicated to CIP</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

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Note: The Vehicle Maintenance Fund is an internal service fund that operates entirely from cost recovery paid by City Departments. Capital items are funded as needed, without the accumulation of any reserve for capital.

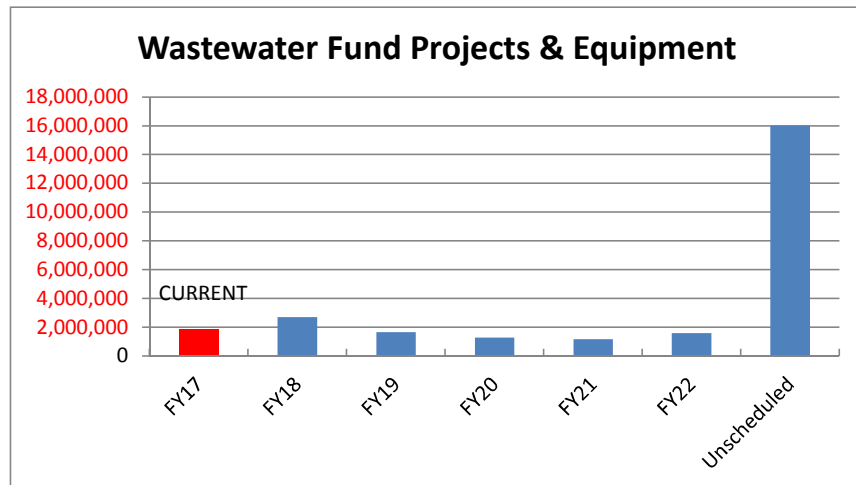
**Wastewater Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,354,455	\$ 1,625,992	\$ 1,099,406	\$ 1,670,727	\$ 2,701,654	\$ 3,896,834	\$ -
Plus: Wastewater Revenues Dedicated to CIP	\$ 2,112,538	\$ 2,175,914	\$ 2,241,191	\$ 2,308,427	\$ 2,377,680	\$ 2,449,010	\$ -
Less: Scheduled CIP Project Costs	\$ (1,841,001)	\$ (2,702,500)	\$ (1,669,870)	\$ (1,277,500)	\$ (1,182,500)	\$ (1,602,500)	\$ (16,034,333)
Projected Year-End Cash Dedicated to CIP	\$ 1,625,992	\$ 1,099,406	\$ 1,670,727	\$ 2,701,654	\$ 3,896,834	\$ 4,743,344	\$ (16,034,333)

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Wastewater Revenues	\$ 8,450,151	\$ 8,450,151	\$ 8,703,656	\$ 8,964,765	\$ 9,233,708	\$ 9,510,719
Estimated Annual Increase	0.0%	3%	3%	3%	3%	3%
Total Estimated Revenues	\$ 8,450,151	\$ 8,703,656	\$ 8,964,765	\$ 9,233,708	\$ 9,510,719	\$ 9,796,041
Current Revenues Dedicated to CIP %	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Plus: Increase Dedicated to CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
Total Estimated Revenues Dedicated to CIP	\$ 2,112,538	\$ 2,175,914	\$ 2,241,191	\$ 2,308,427	\$ 2,377,680	\$ 2,449,010

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Wastewater Fund

PW04	ENGINEERING	PROPERTY ON CORNER OF ASPEN & ROUSE	\$100,000				\$0	\$0	
WW07	ENGINEERING	ANNUAL WASTEWATER PIPE REPLACEMENT PROGRAM - DESIGN	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	
WW08-18	ENGINEERING	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2018	\$1,000,000						
WW08-19	ENGINEERING	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2019		\$1,000,000					
WW08-20	ENGINEERING	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2020			\$1,000,000				
WW08-21	ENGINEERING	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2021				\$1,000,000			
WW08-22	ENGINEERING	WASTEWATER PIPE REPLACEMENT PROGRAM - CONSTRUCTION IN 2022						\$1,000,000	
WW27	ENGINEERING	ANNUAL WATERSHED STUDY & STREAM MODELING	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	
GF227	FINANCE	ERP REPLACEMENT "SUNGARD REPLACEMENT/UPGRADE"							\$333,333
PW03	PUBWORKS ADMIN	VEHICLE MAINTENANCE DESIGN & STORAGE CONSTRUCTION		\$50,000					
STR67	STREETS OP	COVERED STORAGE AT SHOPS COMPLEX							\$50,000
WW54	Wastewater Op	REPLACE #1783 - 1995 FORD DUMP TRUCK			\$95,000				
WW65	Wastewater Op	DIGITAL UNIVERSAL CAMERA - DUC	\$70,000						
WW86	Wastewater Op	WHEELED EXCAVATOR							\$151,000
WW39	WRF	SANDBLAST & PAINT CLARIFIER DRIVES AND BEACHES	\$90,000	\$90,000					
WW42	WRF	PRIMARY CLARIFIER COVER							\$1,500,000
WW45	WRF	FINAL & SECONDARY CLARIFIER LAUNDER COVERS	\$200,000						
WW49	WRF	ROLL-OFF STORAGE BUILDING CONSTRUCTION & POSSIBLE 2ND SCREW PRESS ENCLOSURE	\$600,000						
WW50	WRF	REFRIGERATED AUTOMATIC SAMPLER	\$10,000						

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	WW53	WRF	POSITIVE DISPLACEMENT LOBE PUMPS	\$50,000					
	WW58	WRF	CHIP SEAL AND TOPCOAT WRF ASPHALT		\$47,370				
	WW66	WRF	ODOR CONTROL FOR OLD PRETREATMENT BUILDING	\$40,000					
	WW69	WRF	WRF FACILITY R&R	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
	WW70	WRF	WRF FACILITY ENGINEERING & OPTIMIZATION	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
	WW71	WRF	WRF FACILITY MASTER PLAN UPDATE	\$250,000					
	WW76	WRF	THIRD PRETREATMENT SCREEN		\$300,000				
	WW78	WRF	SERVER REPLACEMENT AT WRF (WRFCTRLBAK)					\$10,000	
	WW79	WRF	WRF IMPROVEMENTS FOR ENERGY SUSTAINABILITY						\$4,000,000
	WW80	WRF	LAGOON VALVE REPLACEMENT IN LIFT #3, CLEAN OUT REPLACEMENT ON SLUDGE LINE TO LAGOON; PUMP, VALVES AND PIPING TO PUMP SLUDGE BACK FROM THE SMALL LAGOON	\$50,000					
	WW81	WRF	MEMBRANE ROOF REPLACEMENT ON OLD DIGESTER BUILDING (DIG 1 & 2)	\$60,000					
	WW83	WRF	UFAT GRAVITY THICKENER DRIVE AND ARMS REPLACEMENT					\$400,000	
	WW84	WRF	SERVER REPLACEMENT AT WRF (WRFCTRLPRI)					\$10,000	
	WW85	WRF	WRF PROCESS UPGRADES TO IMPROVE NUTRIENT RECOVERY						\$10,000,000

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<i>Summary for Wastewater Fund (33 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$2,702,500	\$1,669,870	\$1,277,500	\$1,182,500	\$1,602,500	\$16,034,333

CIP Project Fund
Wastewater Fund

DEPARTMENT
FINANCE

PROJECT NUMBER
GF227

PROJECT NAME						
ERP Replacement "SunGard Replacement/Upgrade"						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$333,333

DESCRIPTION OF PROJECT

ERP Replacement "SunGard Replacement/Upgrade"

ALTERNATIVES CONSIDERED

Continue running current SunGard package. Use SunGard.net (Naviline EDGE) as an improvement to the current system, but not a full replacement.

ADVANTAGES OF APPROVAL

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown. Dependent on the option chosen.

FUNDING SOURCES

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

CIP Project Fund
Wastewater Fund

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
PW03

PROJECT NAME
Vehicle Maintenance Design & Storage Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

Design and construct vehicle storage

Describe the criticality (i.e., importance) of this project to the operation: Having equipment, especially winter equipment, inside and ready to go extends the life, produces less emissions by not having to warm up and shortens response time.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

How is this project leveraged with other stakeholders/projects/funds: By being located next to existing city property, we could aggregate the lots giving even more useful space.

ALTERNATIVES CONSIDERED

Not build and only use for outdoor storage.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure. Large inside storage for several departments. Equipment would be located next to current Vehicle Maintenance Shop. Good access onto Rouse and Griffin. Early morning shift equipment could be stored here so as not to disturb the neighbors in this mostly zoned Industrial area. With this building, Streets could switch to producing our own brine solution for pre wet of the sand. We wouldn't have to use mag chloride which is about 4-5 times more expensive than salt brine. Gallatin County has expressed interest in buying brine from us.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance. Possibly heat with waste oil from the Shops. Possibly heat with wood chips from Forestry.

FUNDING SOURCES

This project totals \$200,000. It will be split evenly 4 ways: Water Fund (\$50,000), Wastewater Fund (\$50,000), Street Maintenance (\$50,000), and Parks (\$50,000).

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
PW04

PROJECT NAME
Property on Corner of Aspen & Rouse

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000			\$0	\$0	

DESCRIPTION OF PROJECT

Property Purchase to expand shops area and potentially offices. This is an opportunity to make more land available for project PW01-SH - Shops Expansion.

ALTERNATIVES CONSIDERED

Do not purchase the property. Wait to purchase at a later date.

ADVANTAGES OF APPROVAL

Larger contiguous land area for City Shops. The Shops Expansion project has been a scheduled CIP for a number of years. This item could bring an important piece of land into that project area, making a better-functioning property at Rouse and Tamarack.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Building Maintenance would be needed to keep the existing structure useful.

FUNDING SOURCES

Split 33/33/33 between Water, Wastewater and Street Maintenance Funds.

CIP Project Fund
Wastewater Fund

DEPARTMENT
STREETS OP

PROJECT NUMBER
STR67

PROJECT NAME
Covered Storage At Shops Complex

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$50,000

DESCRIPTION OF PROJECT

Covered Storage at Shops Complex

Describe the criticality (i.e., importance) of this project to the operation: Getting equipment parked inside greatly extends the life of the equipment.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

What is the impact (i.e., scope-of-use) for this equipment: Equipment and vehicle storage.

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure.

How is this project leveraged with other stakeholders/projects/funds: At the proper site we could build one big enough to house other department's equipment. Project is split 50% Street Maintenance Fund, 20% Water Fund, & 25% Wastewater Fund.

Are there other affected projects: Depends where this building is located.

ALTERNATIVES CONSIDERED

Keep parking millions of dollars' worth of equipment outside.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure. Better equipment management.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance.

FUNDING SOURCES

50% Street Maintenance Fund, 25% Water Fund, 25% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW07

PROJECT NAME						
Annual Wastewater Pipe Replacement Program - Design						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	

DESCRIPTION OF PROJECT

This item provides for design work to be completed every-other year, in anticipation of the Annual System Upgrades.

Describe the criticality (i.e., importance) of this project to the operation: Annual wastewater pipe replacement projects minimize service interruptions or main breaks attributable to aging infrastructure.

Are there other affected projects: Annual Wastewater Pipe Replacement Program project would be delayed if not done.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Provides survey work needed for design of necessary sewer system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED
NA

FUNDING SOURCES

100% Wastewater Utility Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW08-18

PROJECT NAME
Wastewater Pipe Replacement Program - Construction in 2018

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,000,000					

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2018. Priority will be places on the sewer segment on S Grand from Olive to Hayes to coincide with the S Grand street reconstructions scheduled for FY18. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW08-19

PROJECT NAME						
Wastewater Pipe Replacement Program - Construction in 2019						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$1,000,000				

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2019. Priority will be places on the sewer segment on S Tracy from College to Babcock to coincide with the S Tracy street reconstructions scheduled for FY19. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW08-20

PROJECT NAME						
Wastewater Pipe Replacement Program - Construction in 2020						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$1,000,000			

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2020. Priority will be places on the sewer segment on S Black from College to the Cul-De-Sac to coincide with the S Black street reconstructions scheduled for FY20. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW08-21

PROJECT NAME
Wastewater Pipe Replacement Program - Construction in 2021

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$1,000,000		

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2021. Priority will be places on the sewer segment on N Tracy from Villard to Peach to coincide with the N Tracy street reconstructions scheduled for FY21. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW08-22

PROJECT NAME						
Wastewater Pipe Replacement Program - Construction in 2022						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$1,000,000	

DESCRIPTION OF PROJECT

This project would complete design, bid and begin construction in the Spring/Summer of 2022. Priority will be places on the sewer segment on N 17th from Durston to the end to coincide with the N 17th street reconstructions scheduled for FY22. The remaining balance will be used to continue sewer replacements on segments identified as needing repairs. The condition of the sewer system is analyzed nightly to account for daily updates from the Wastewater Operations Department.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary wastewater system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
WW27

PROJECT NAME
Annual Watershed Study & Stream Modeling

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$60,000	\$60,000	\$60,000	\$60,000	\$60,000	

DESCRIPTION OF PROJECT

Develop a comprehensive, multi-year watershed study and computer model for the East Gallatin River, which would enable the City and DEQ to better determine stream load allocations and develop a more scientifically valid TMDL for the river segment we discharge to. This will require annual field sample collection, laboratory analytical work, and detailed computer modeling using calibrated and validated datasets.

Describe the criticality (i.e., importance) of this project to the operation: Crucial tool to inform MPDES discharge permit negotiations and compliance with MT numeric nutrient regulations

What regulations or standards are attained with this project: Future MPDES discharge permit compliance.

How is this project leveraged with other stakeholders/projects/funds: Leverages cooperative relationship with Gallatin Local Water Quality District in the performance of field sampling activities.

Are there other affected projects: Project has significant potential to affect scope of future upgrades to WRF to meet numeric nutrient limitations imposed by DEQ Circular 12A and implemented through future MPDES discharge permits. Stream modeling may reduce or eliminate the need for future upgrades dependent upon the results of ongoing data collection and model calibrations. Modeling could identify that assimilative capacity is available in the East Gallatin River or that the EGR is nutrient limited. Model also essential to identify nutrient trade opportunities which could be a significant MPDES compliance tool.

ALTERNATIVES CONSIDERED

Not undertake this work and risk having to accept the TMDL and waste load allocations the DEQ has proposed in their original draft documents. This decision could greatly limit our ability to appeal future nutrient limitations and could result in non-compliance.

ADVANTAGES OF APPROVAL

This watershed study will greatly enhance the City's understand of our impact on the East Gallatin River and enable us to more successfully negotiate future permit limits with the DEQ.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None, unless additional stream sampling is desired in subsequent years.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW39

PROJECT NAME
Sandblast & Paint Clarifier Drives and Beaches

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$90,000	\$90,000				

DESCRIPTION OF PROJECT

Sandblast and paint old clarifier drives, beaches, baffles and weirs.

Describe the criticality (i.e., importance) of this project to the operation: The old final clarifiers were installed in the late 1980's and need to be painted to extend their useful life.

Which infrastructure assets are maintained by this equipment: Final Clarifiers.

What is the impact (i.e., scope-of-use) for this equipment: Painting the clarifier drives will preserve the infrastructure and delay the purchase of new stainless drives.

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Not painting the clarifier drives will speed their deterioration which may result in failure of the drives before plans can be made to replace them. Replace lost & chipping paint on old clarifiers to prevent further deterioration of existing infrastructure. These clarifiers have not been painted since they were installed in 1985.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No new operating costs.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW42

PROJECT NAME
Primary Clarifier Cover

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,500,000

DESCRIPTION OF PROJECT

Install a geodesic dome cover with 8 foot side walls on the 3 primary clarifiers. The installation would include a door, two skylights and a vent tube. The clarifier drive motor and controls would have to be explosion proof.

Describe the criticality (i.e., importance) of this project to the operation: Not having to use all the primary clarifiers during the winter would allow larger particulate carbon to be flushed into the Bio-Trains postponing the purchase of supplemental carbon to reduce the total nitrogen in the facility effluent. Covering the primary clarifiers would allow the capturing of odors from the raw sewage they contain and direct these odors to treatment equipment. These odors are now reaching the residences near the facility and Springhill Road.

Which infrastructure assets are maintained by this equipment: The three Primary Clarifiers.

How is efficiency improved with this equipment: Not having to use all the primary clarifiers during the winter would allow larger particulate carbon to be flushed into the Bio-Trains postponing the purchase of supplemental carbon to reduce the total nitrogen in the facility effluent.

What is the impact (i.e., scope-of-use) for this equipment: This equipment is used to reduce odors and improve the efficiency of the BNR process reducing nutrient discharges to the river.

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Odors from raw sewage are not contained within the facilities boundaries and drift to near by neighbors and traffic on Springhill Road. Enclosing the primary clarifiers will trap these odors so they can be eliminated on the property. The Bozeman WRF is limited in the amount of carbon needed to remove nitrates with the BNR process. Covering the primary clarifiers will allow more carbon to be utilized by the process improving nutrient removal year round. Covering the primary clarifiers will allow odor control & eliminate cleaning & painting. Cleaning & painting of all railings and catwalks is an on-going maintenance issue to remove grease & droppings deposited by birds. Covers on primary clarifiers would allow some clarifiers not to be used during the winter

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Only maintenance of odor control would be additional.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW45

PROJECT NAME

Final & Secondary Clarifier Launder Covers

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$200,000					

DESCRIPTION OF PROJECT

Cover effluent launder of one final clarifier to eliminate algal growth in the launder.

Describe the criticality (i.e., importance) of this project to the operation: Secondary Launder Covers will reduce the algae in the clarifier launders to a level that they will need only to be cleaned only once or twice a year. Currently there is a brush system installed on the skimmer arm that needs to be maintained constantly to insure proper operation. Some brushes can fall into the clarifier and could damage the clarifier drive or get stuck in the waste sludge piping.

Which infrastructure assets are maintained by this equipment: Final Clarifiers.

How is efficiency improved with this equipment: It will eliminate the man hours needed to maintain the brush system now in place and prevent clarifier damage.

What is the impact (i.e., scope-of-use) for this equipment: It will eliminate the man hours needed to maintain the brush system now in place and prevent clarifier damage.

ALTERNATIVES CONSIDERED

Continue using a brush system to reduce the amount of algal growth. This method requires continual maintenance and there is a risk of brushes breaking off and falling into the clarifier. This could block the wasting hopper in the clarifier.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: The man hours used to maintain the brush system can be put to better use and possible infrastructure damage could be eliminated. Elimination of the brush system with its maintenance and dangers. Maintenance on the launder would be cut to twice a year for a quick manual cleaning allowing operators to spend time on other duties.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None. Would actually cut operating costs (time and materials)

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW49

PROJECT NAME
Roll-Off Storage Building Construction & Possible 2nd Screw Press Enclosure

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$600,000					

DESCRIPTION OF PROJECT

Construction of a roll-off building and possible 2nd screw press enclosure.

Describe the criticality (i.e., importance) of this project to the operation: Currently, an enclosed area consisting of concrete blankets suspend by cables and heated with torpedo heaters keeps the roll-offs from freezing in the truck storage building, where they are stored over night during the winter. The addition would return the needed space in the truck storage building and would reduce heating costs by using the exhaust air from the solids handling building.

How is efficiency improved with this equipment: Less energy would be used if an extension to the roll-off loading area was built that could use exhaust air from the solids dewatering building to heat it.

What is the impact (i.e., scope-of-use) for this equipment: Storing roll-offs, polymer totes and possibly housing a screw press.

ALTERNATIVES CONSIDERED

Construction of a roll-off loading bay extension for roll-off storage and possibly a screw press enclosure.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Higher energy costs associated with heating a make shift storage area in the truck storage building. Increased safety risks associated with using and fueling torpedo heaters inside a building. This addition to the existing roll-off loading area would serve as storage for the sludge roll-offs to keep them from freezing and reduce odors. This addition will also be available to house a second screw press and polymer tote storage.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This addition could be heated with exhaust air from the Solids Handling Building, reducing costs. If a screw press was also housed in this addition, electrical costs for pumping and press operation would be additional.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW50

PROJECT NAME

Refrigerated Automatic Sampler

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000					

DESCRIPTION OF PROJECT

Purchase a new refrigerated sampler for the influent, primary, and effluent.

Describe the criticality (i.e., importance) of this project to the operation: If the refrigerated sampler fails, samples have to be taken manually every two hours and flow proportioned. This sample is not representative of the time period from 12:30 am until 7:00 am because the plant is unmanned during that time and no samples are taken. The manual samples are taken during the highest loading on the facility and could result in an effluent limit violation.

How is efficiency improved with this equipment: Manual sampling could induce errors that would make the composite sample more or less concentrated that could result in a violation. An operator's time that would be spent doing other testing or inspecting the facility is now collecting and measuring samples manually.

What is the impact (i.e., scope-of-use) for this equipment: Two of the three refrigerated samplers at the facility sample the in and out going flows that are required to be tested for the facilities Discharge Monitoring Report.

ALTERNATIVES CONSIDERED

Keep repairing old samplers until they fail.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: The refrigerated samplers have been repaired several times by replacing worn out parts but if the computer control components fail the repair costs will be much higher. The samplers we are using have been in service since 2000 and we have been replacing worn out parts. We need to start replacing them before the circuit boards fail.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW53

PROJECT NAME
Positive Displacement Lobe Pumps

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000					

DESCRIPTION OF PROJECT

The positive displacement lobe pumps will replace the older wasting pumps that cannot provide the necessary wasting rates.

Describe the criticality (i.e., importance) of this project to the operation: Being able to remove the required amount of microorganisms (WAS) from the Bio-Trains is a key factor in maintaining the facility's effluent quality. If the sludge in the wasting hoppers in final clarifiers one thru three cannot be remove at a rate fast enough to keep the sludge from going anaerobic then secondary phosphorus release will occur.

Which infrastructure assets are maintained by this equipment: The wasting system from Final Clarifiers numbers one, two, and three would be serviced by these pumps.

How is efficiency improved with this equipment: Positive displacement lobe pumps have a wider range of pumping speeds then the current pumps in service on this system. Maintenance costs less and they are also easier to maintain then the older pumps.

What is the impact (i.e., scope-of-use) for this equipment: Pump WAS to the RST's at a rate that would maintain the proper F/M ratio and prevent secondary phosphorus.

ALTERNATIVES CONSIDERED

Do nothing.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: A decrease in facility effluent quality and an increase in pump maintenance and cost. Controlling mixed liquor inventory is critical to producing high quality effluent. If solids in the mixed liquor cannot be removed fast enough, total suspended solids will increase in the effluent which will also increase the total phosphorus to the river.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No new operating costs. Replacement of the lobe pump may actually increase efficiency.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
Wastewater Operations

PROJECT NUMBER
WW54

PROJECT NAME						
Replace #1783 - 1995 Ford Dump Truck						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$95,000			

DESCRIPTION OF PROJECT

This project will replace a 1995 Ford Dump Truck that has 25,396 miles on it.

Which infrastructure assets are maintained by this equipment: This dump truck would be used to haul material for the water, storm and sanitary sewer departments. And can be loaned to the street department for their operations.

How is efficiency improved with this equipment: Efficiency is improved due to a more reliable dump truck that can cut down on the amount of trips we make by having multiple truck on site.

ALTERNATIVES CONSIDERED

Continue to use older vehicle which is becoming unreliable and costly to maintain.

ADVANTAGES OF APPROVAL

Will be a more fuel efficient and lower emissions vehicle. The new vehicle will improve safety of the crews, there would be lower repair costs and it would help maintain current operations levels.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Using an older piece of equipment that becomes more unreliable.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW58

PROJECT NAME
Chip Seal and Topcoat WRF Asphalt

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$47,370				

DESCRIPTION OF PROJECT

Chip Seal and topcoat WRF Asphalt to keep it from deteriorating.

Describe the criticality (i.e., importance) of this project to the operation: Without chip sealing and topcoat the asphalt will deteriorate sooner requiring replacement.

Which infrastructure assets are maintained by this equipment: The 4.894 acres of asphalt at the WRF facility needs to be protected to extend its useful life. Chip seal 0.402 acres and topcoat 4.492 acres.

What is the impact (i.e., scope-of-use) for this equipment: Protect the existing asphalt to extend its useful life.

ALTERNATIVES CONSIDERED

Do nothing.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Deferring the chip seal and topcoat will allow the asphalt to deteriorate sooner requiring its replacement sooner at a much higher cost to the City. Chip seal and topcoat will protect the existing City infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
Wastewater Operations

PROJECT NUMBER
WW65

PROJECT NAME
Digital Universal Camera - DUC

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$70,000					

DESCRIPTION OF PROJECT

Digital Universal Camera

Describe the criticality (i.e., importance) of this project to the operation: This camera is critical to accessing the condition of the sewer main along with the Pipeline Assessment program we use. Our goal is to inspect the entire collection system once every 5 years.

Which infrastructure assets are maintained by this equipment: The Digital Universal Camera (DUC) is a semi-autonomous, high resolution digital CCTV side scanning camera designed for rapid and detailed condition assessment of our wastewater system.

How is efficiency improved with this equipment: This camera allows us to TV the main non-stop will allows us to increase the amount of pipe we TV in a day up to 5 to 10 times more than the traditional stop and go method that we now use.

ALTERNATIVES CONSIDERED

Continue to use the stop and go method (SAG) and take longer to TV the mains. We have a goal to TV the entire system every 5 years, this is getting harder to do with the increasing growth of our collection system.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: As we gain more miles of main every year we will have to adjust our goal of every main being televised once every five years to six or seven with the current stop and go technology we use.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Placing electronic equipment in raw sewage is hard to predict costs I believe there will be little or no more costs than our present camera.

FUNDING SOURCES

100% Wastewater Fund

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW66

PROJECT NAME

Odor Control For Old Pretreatment Building

FY18
\$40,000

FY19

FY20

FY21

FY22

Unscheduled

- New
- Replacement
- Equipment
- Project

DESCRIPTION OF PROJECT

Odor Control For Old Pretreatment Building

Describe the criticality (i.e., importance) of this project to the operation: Old Pretreatment Building odor (raw sewage) is vented out the roof of the building next to Springhill Road which generates odor complaints. The open channel containing the raw sewage emits corrosive gases into the building.

What is the impact (i.e., scope-of-use) for this equipment: Protect equipment in the building and reduced odor complaints.

ALTERNATIVES CONSIDERED

Do nothing and run the risk of more odor complaints. Lack of enclosed and heated storage in the facility requires equipment to be parked in the old pretreatment building. Equipment stored there is exposed to the corrosive atmosphere.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Continuation of odor complaints and the corrosion of unprotected metal in the Old Pretreatment Building. Foul air from the sewer system coming into the old pretreatment building needs to be collected and treated. This treatment will eliminate the odor complaints and corrosive atmosphere.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional operating costs if another inline fan is not needed.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW69

PROJECT NAME
WRF Facility R&R

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

DESCRIPTION OF PROJECT

WRF Facility R&R

Describe the criticality (i.e., importance) of this project to the operation: Repair and replacement of equipment is an ongoing job at the Bozeman WRF. These funds would be used to repair or replace equipment that fails unexpectedly in an emergency situation.

Which infrastructure assets are maintained by this equipment: Any unscheduled repair or replacement of equipment within the facility that would keep the facility running properly.

How is efficiency improved with this equipment: An unforeseen mechanical failure needs to be remedied quickly to protect the quality of facility effluent discharged into the East Gallatin.

What is the impact (i.e., scope-of-use) for this equipment: To repair or replace any equipment that fails and could compromise facility performance.

ALTERNATIVES CONSIDERED

Not having this fund would defer other needed maintenance.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Without these funds available repair or replacement of failed equipment would depend on budgeted funds that may be allocated already. Most processes run 24/7 and have backup systems but when the first system fails there is no backup system and repairs need to be made immediately. Not all repairs or equipment failures can be predicted and budgeted as a capital improvement project.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW70

PROJECT NAME
WRF Facility Engineering & Optimization

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

DESCRIPTION OF PROJECT

WRF Facility Engineering & Optimization

Describe the criticality (i.e., importance) of this project to the operation: This will allow engineering to be completed on needed projects and to study plant optimization options before spending money on equipment that might not be needed or the proper type.

Which infrastructure assets are maintained by this equipment: The entire facility

How is efficiency improved with this equipment: Additionally, this will allow studies to be conducted to make sure the proposed plant optimizations will actually improve the effluent quality at a reasonable expense.

What is the impact (i.e., scope-of-use) for this equipment: This will allow engineering to be completed on needed projects and to study plant optimization options before spending money on equipment that might not be needed or the proper type.

ALTERNATIVES CONSIDERED

Order replacement or upgrades to equipment that may not be sized correctly or made of the proper materials. Proceed with optimization projects without knowing if the project will actually improve plant performance.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Not having this will impede engineering needed for emergency projects that will come up unexpectedly. It will allow for engineering studies of operational problems to find the most efficient way to correct the problem. The advantage of having funds available to do engineering studies before any project is started will make sure that the right equipment is purchased and that it will perform properly. Optimization studies will predict actual cost/benefit over time to make sure the city is spending its money efficiently.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Currently unknown

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW71

PROJECT NAME
WRF Facility Master Plan Update

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$250,000					

DESCRIPTION OF PROJECT

Facility Master Plan Update

Describe the criticality (i.e., importance) of this project to the operation: The Master Plan Update will compare past predictions of the loadings on the City's Water Reclamation Facility with current loadings.

How is efficiency improved with this equipment: New projections will be made using these data trends to determine the best course of action and sequencing of projects to meet the needs of the facility.

What is the impact (i.e., scope-of-use) for this equipment: The entire facility will be effected by this plan because it will plan for facility expansion, side stream treatment and odor control among other things.

ALTERNATIVES CONSIDERED

Not being proactive in predicting the best way to accommodate future loading at the Bozeman WRF will not fulfill the city's needs to meet future discharge limits.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: If the update plan is not conducted future needs of the facility may not be scheduled in an logical manner or even recognized. Financial expenditures and bond obligations could be incurred without sound justification. Bozeman's rapid population growth dictates a review of the WRF's treatment processes to make sure they will meet requirements now and in the future. Establishing a clear incremental improvement process will prevent mistakes and eliminate inefficient spending of funds. New permit and water quality regulations require an update of the master plan to ensure compliance over the next 15 years.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW76

PROJECT NAME
Third Pretreatment Screen

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$300,000				

DESCRIPTION OF PROJECT

Purchase a third pretreatment screen and the engineering to properly install it.

Describe the criticality (i.e., importance) of this project to the operation: The two installed pretreatment screens are running 24/7 so there is no redundancy to the system.

How is capacity affected by this project: Adding a third screen will increase the capacity of pretreatment to handle increased flows without bypassing the screens.

What regulations or standards are attained with this project: Preventing the clogging of pipes and pumps will preserve the effluent quality of the facility.

Which infrastructure assets are maintained by this equipment: All equipment downstream of the screens will be better protected.

How is efficiency improved with this equipment: Pipes and pumps that are not plugged run more efficiently and require less energy to run.

What is the impact (i.e., scope-of-use) for this equipment: To protect the facility infrastructure.

ALTERNATIVES CONSIDERED

Do nothing and run the risk of having to bypass the existing screens because they cannot handle the load coming into the plant.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Do nothing and run the risk of having to bypass the existing screens because they cannot handle the load coming into the plant. Protecting downstream infrastructure by not having to bypass the screens.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Additional cost of electricity for the motors on the screen.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW78

PROJECT NAME						
Server Replacement at WRF (WRFCTRLBAK)						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$10,000	

DESCRIPTION OF PROJECT

Replace the WRF server WRFCTRLBAK

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW79

PROJECT NAME

WRF Improvements for Energy Sustainability

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled
\$4,000,000

DESCRIPTION OF PROJECT

Energy Recovery (Methane Cogeneration) Project Design and Construction

Describe the criticality (i.e., importance) of this project to the operation: To generate electricity for excess methane gas, reduce the carbon footprint of the facility and to add captured exhaust heat to the facility's heat loop.

How is connectivity affected by this project: This project supports the sustainability and green goals of the city.

What regulations or standards are attained with this project: The carbon footprint of the Water Reclamation Facility will be reduced.

How is efficiency improved with this equipment: To generate electricity for excess methane gas and reduce the carbon footprint of the facility.

What is the impact (i.e., scope-of-use) for this equipment: To generate electricity for excess methane gas, reduce the carbon footprint of the facility and to add captured exhaust heat to the facility's heat loop. How is this project leveraged with other stakeholders/projects/funds: The initial study for the project could identify other stakeholders such as Northwestern Energy.

Are there other affected projects: The facility could reduce its carbon footprint by using methane as an onsite fuel to generate electricity. This would support the sustainability goals of the city.

ALTERNATIVES CONSIDERED

Continue to flare our excess digester methane.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: To continue to flare excess methane and not benefit from the generated electricity, reduced carbon footprint or additional captured heat.

Current plant excess methane gas will be captured and utilized to reduce plant operating costs. It supports the City's Municipal Climate Action Plan goals.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Once construction is funded, this project will reduce energy costs of the facility.

FUNDING SOURCES

Wastewater Fund, other grants or community partners.

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW80

PROJECT NAME
Lagoon Valve Replacement in Lift #3, Clean Out Replacement on Sludge Line to Lagoon; Pump, valves

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000					

DESCRIPTION OF PROJECT

Replace valves that cannot be opened or closed because of struvite deposits (replace 4 valves, blind flange 6 others). Replace cleanouts in the sludge lagoon line so their orientation allows a complete cleaning of the sludge line. Put in pump valves and piping so that sludge from the little lagoon can be pumped back through the pipe going out to the small lagoon.

Describe the criticality (i.e., importance) of this project to the operation: If the screw press fails or if a digester needs to be emptied quickly Digester #3 has only a limited amount of storage so the sludge will need to be stored in the small lagoon. The system serving the small lagoon needs to be fully functional.

Which infrastructure assets are maintained by this equipment: The small lagoon, the sludge line to the lagoon, Digester #3 and the screw press.

How is efficiency improved with this equipment: The small lagoon can be filled and mixed properly. The sludge line to the lagoon can be cleaned in less time. Sludge in the small lagoon can be pumped back to Digester #3 and the screw press for dewatering without having to be trucked back.

What is the impact (i.e., scope-of-use) for this equipment: This CIP supports the small lagoon sludge storage and the piping that gets the sludge to and from the lagoon.

ALTERNATIVES CONSIDERED

Do nothing and not be able to control flow to the small lagoon or even mix it. Sludge line to the small lagoon will not be cleaned properly. Sludge pumped to the small lagoon will have to be trucked back to Digester #3.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Not being able to control flow to the small lagoon or even mix it. Sludge line to the small lagoon will not be cleaned properly. Sludge pumped to the small lagoon will have to be trucked back to Digester #3. The small lagoon can be used to store sludge when needed. The sludge line to the lagoon can be cleaned in less time. Sludge in the small lagoon can be pumped back to Digester #3 and the screw press for dewatering without having to be trucked back.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs unless positive displacement is used to pump sludge back to Digester #3.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW81

PROJECT NAME
Membrane Roof Replacement on Old Digester Building (Dig 1 & 2)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$60,000					

DESCRIPTION OF PROJECT

Repair or replacement of membrane roof covering on old digester building.

Describe the criticality (i.e., importance) of this project to the operation: The extent of damage to the roof is not known. Just outside the door to the roof you step on the roof membrane and it is like walking on a thin water bed. An inspection and a repair or replacement to the roof membrane needs to be conducted in the near future prevent damage to the buildings roof.

Which infrastructure assets are maintained by this equipment: The old digester building roof and infrastructure below.

What is the impact (i.e., scope-of-use) for this equipment: Protect the old digester building roof and equipment in the room below.

ALTERNATIVES CONSIDERED

Do nothing and see if more ceiling leaks occur.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Possible more damage to the old digester building roof. There has been water under the roof membrane for several years (since 2004) and the extent of damage to the roof is unknown. Repair or replacement of the roof membrane would stop the leaks that pour water into the room below during rain events.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW83

PROJECT NAME

UFAT Gravity Thickener Drive and Arms Replacement

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$400,000

DESCRIPTION OF PROJECT

Replacement of the gravity thickener deteriorating mechanism.

Describe the criticality (i.e., importance) of this project to the operation: The gravity Thickener thickens elutriated fermented sludge before it is sent to the digester thus increasing detention time in the digesters.

Which infrastructure assets are maintained by this equipment: The Gravity Thickener is second stage of the UFAT system that generates Volatile Fatty Acids that are an energy source for the Phosphorus Accumulating Organisms. These POA's are what remove the phosphorus from the wastewater.

How is efficiency improved with this equipment: The gravity Thickener thickens elutriated fermented sludge before it is sent to the digester thus increasing detention time in the digesters.

What is the impact (i.e., scope-of-use) for this equipment: To thicken sludge before is pumped to the digester which increases the digester efficiency.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: The failure of the gravity thickener and UFAT system. Installation planning and purchase of the drive and arms will allow a scheduled shutdown rather than a quick fix when the drive fails.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No additional costs.

FUNDING SOURCES

Not known at this time.

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW84

PROJECT NAME						
Server Replacement at WRF (WRFCTRLPRI)						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$10,000	

DESCRIPTION OF PROJECT

Replace the WRF server WRFCTRLPRI

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
WRF

PROJECT NUMBER
WW85

PROJECT NAME

WRF Process Upgrades to Improve Nutrient Recovery

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled
\$10,000,000

DESCRIPTION OF PROJECT

The study and construction of nutrient recovery processes to capture nitrogen and phosphorus from anaerobically digested sludge.

Describe the criticality (i.e., importance) of this project to the operation: Recovery of the limiting element phosphorus, in the form of struvite, is critical to the production of food. The present market value of recovered phosphorus (struvite) is approximately \$200 to \$300 dollars a ton but its value will increase as the easily minable phosphorus rock deposits are depleted. How is capacity affected by this project: Nutrient recovery will reduce the nutrient load on the facility from the screw press supernatant that has to be returned to the head of the facility for treatment therefore increasing its capacity.

How is connectivity affected by this project: This project supports the sustainability and green goals of the city.

What regulations or standards are attained with this project: Nutrient recovery will reduce the nutrient load on the facility from the screw press supernatant that has to be returned to the head of the facility for treatment. Reducing the load will increase the facility efficiency so that the effluent quality will be maintained.

How is efficiency improved with this equipment: Nutrient recovery will reduce the nutrient load on the facility from the screw press supernatant that has to be returned to the head of the facility for treatment therefore increasing its capacity.

What is the impact (i.e., scope-of-use) for this equipment: The recovery and reuse of nutrients from the waste stream would complete the phosphorus nutrient cycle and support the sustainability goals of the city. The use of this nutrient recovered fertilizer would reduce the possibility of groundwater contamination.

How is this project leveraged with other stakeholders/projects/funds: The initial study for the project could identify other stakeholders.

ALTERNATIVES CONSIDERED

Do nothing and lose a commodity that is a bi-product of anaerobic digestion

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Not proceeding with nutrient recovery falls short of the sustainability goals of the City. The production of magnesium ammonium phosphate to be sold as a slow release fertilizer will recycle limited nutrients back into the ecosystem. This process will reduce the nitrogen and phosphorus in our side stream returning to the head of the plant which will in turn reduce the loading on the process.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Maintenance and operating costs that will be off set by income from the sale of the slow release fertilizer.

FUNDING SOURCES

100% Wastewater Funds

CIP Project Fund
Wastewater Fund

DEPARTMENT
Wastewater Operations

PROJECT NUMBER
WW86

PROJECT NAME
Wheeled Excavator

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$151,000

DESCRIPTION OF PROJECT

This would be a trac hoe excavator with wheels instead tracks.
Describe the criticality (i.e., importance) of this project to the operation: It is a critical piece of machinery in our department.
Which infrastructure assets are maintained by this equipment: Water, sewer, and stormwater
How is efficiency improved with this equipment: Because it can move more dirt quicker.
How is this project leveraged with other stakeholders/projects/funds: Can be split with water.

ALTERNATIVES CONSIDERED

Continue to use smaller equipment.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Continue using smaller equipment that task longer to do the work due to it's size. Increased productivity with larger excavator.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

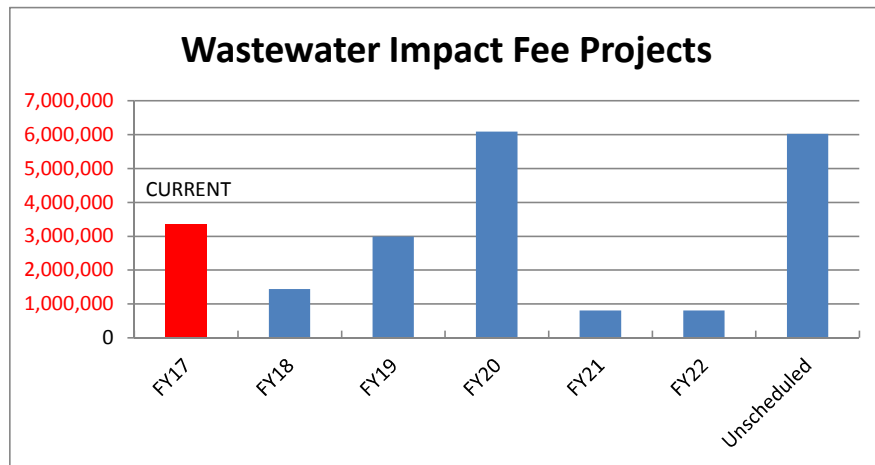
50% Water Fund, 50% Wastewater Fund

Wastewater Impact Fee Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,479,000	\$ (135,912)	\$ (354,762)	\$ 127,446	\$ 673,763	\$ 1,287,397	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 1,103,500	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315	\$ -
Plus: Loans for WWIF11, WWIF20			\$ 2,185,000	\$ 5,290,000			
Plus: Developer Contribution From WWIF26	\$ 631,837						
Less: Scheduled CIP Project Costs	\$ (3,350,249)	\$ (1,440,000)	\$ (2,985,000)	\$ (6,090,000)	\$ (800,000)	\$ (800,000)	\$ (6,018,035)
Projected Year-End Cash Dedicated to CIP	\$ (135,912)	\$ (354,762)	\$ 127,446	\$ 673,763	\$ 1,287,397	\$ 1,971,713	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Wastewater Impact Fee Revenues	\$ 1,103,500	\$ 1,163,000	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 1,103,500	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Wastewater Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,103,500	\$ 1,221,150	\$ 1,282,208	\$ 1,346,318	\$ 1,413,634	\$ 1,484,315



CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Impact Fees									
Wastewater									
WWIF11	WW IMPACT FE		FRONT STREET INTERCEPTOR *		\$2,185,000				
WWIF20	WW IMPACT FE		N FRONTAGE RD INTERCEPTOR *			\$5,290,000			
WWIF22	WW IMPACT FEES		DAVIS-FOWLER INTERCEPTOR (DURSTON RD TO W OAK ST)						\$778,035
WWIF24	WW IMPACT FE		DAVIS LANE (LIFT STATION)						\$1,200,000
WWIF27	WW IMPACT FEES		SOUTH UNIVERSITY DISTRICT/CATTAIL CREEK BASIN - S 15TH AVE TO WILLOW WAY TO W LINCOLN ST *	\$795,000					
WWIF31	WW IMPACT FEES		DAVIS LN LIFT STATION, INTERCEPTOR, AND FORCE MAIN	\$645,000					
WWIF32	WW IMPACT FE		HIDDEN VALLEY (LIFT STATION)						\$3,240,000
WWIF33	WW IMPACT FE		DAVIS LN LIFT STATION DEBT SERVICE		\$800,000	\$800,000	\$800,000	\$800,000	\$800,000

<i>Summary for Impact Fees Wastewater (8 items)</i>				<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>				\$1,440,000	\$2,985,000	\$6,090,000	\$800,000	\$800,000	\$6,018,035

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIFI I

PROJECT NAME
Front Street Interceptor*

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$2,185,000				

DESCRIPTION OF PROJECT

This project consists of construction of ~8,500 LF 18", 21", 24" sewer pipe from manhole E0304 to C0524.

Describe the criticality (i.e., importance) of this project to the operation: Without this wastewater interceptor development in the vicinity of Bozeman Deaconess Health Services as well as the remainder of The Village Downtown property will not be able to occur.

How is capacity affected by this project: The downstream portion of the existing sewer is already at capacity. Additional capacity is needed to serve future development in the vicinity of Bozeman Deaconess Hospital and lands to the south.

How is connectivity affected by this project: This interceptor provides sewer for Upper Bozeman Creek Basin.

What safety or risk measures are mitigated with this project: There are no risk or safety issues mitigated by this project.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Master Plan.

How is this project leveraged with other stakeholders/projects/funds: It is estimated that 70% of this project costs will be due to capacity expansion and will be eligible for Wastewater Impact Fees. The remaining 30% of the project costs will need to be provided by a "local share" contribution or other source.

Are there other affected projects: This project will provide sewer capacity in the area of Bozeman Deaconess Health Services.

ALTERNATIVES CONSIDERED

Limit development to only that capacity of the existing sewer.

ADVANTAGES OF APPROVAL

This project will significantly increase the service area and capacity of the trunk sewer.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

70% Wastewater Impact Fees = \$1,529,864 30% Wastewater Impact Fees for Local Share = \$655,656, recovered via payback district(s).

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

WW IMPACT FEES

WWIF20

PROJECT NAME

N Frontage Rd Interceptor *

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$5,290,000

DESCRIPTION OF PROJECT

This project will replace or parallel 11,500' of the North Frontage Road interceptor between Springhill Rd and Bridger Dr.

Describe the criticality (i.e., importance) of this project to the operation: Portions of the interceptor are at or very near capacity and unless improvements are made it will be at or over capacity when the tributary obligated areas are developed.

How is capacity affected by this project: Directly increases collection capacity in the southeast and east parts of the city.

Development in the southeast part of town within the Community Plan Boundary as well as the east part of town will be tributary to this North Frontage Road Interceptor.

How is connectivity affected by this project: This project will provide capacity to new development within the existing city limits.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Master Plan.

How is this project leveraged with other stakeholders/projects/funds: It is estimated that 70% of this project costs will be due to capacity expansion and will be eligible for Wastewater Impact Fees. The remaining 30% of the project costs will need to be provided by a "local share" contribution or other source.

Are there other affected projects: There are potentially a great number of private development projects which will not be able to proceed due to the lack of wastewater collection capacity.

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for future growth tributary to this main.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district(s)

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIF22

PROJECT NAME
Davis-Fowler Interceptor (Durston Rd to W Oak St)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$778,035

DESCRIPTION OF PROJECT

This project will replace or parallel 2700' of the Davis-Fowler Interceptor between Durston and Oak.

Describe the criticality (i.e., importance) of this project to the operation: The interceptor between Durston Rd and W Oak will eventually exceed capacity as the Baxter Creek drainage basin develops.

How is capacity affected by this project: In order to convey the ultimate build-out flow, the interceptor will need to be increased from an 18-inch diameter to a 24-inch diameter pipe.

How is connectivity affected by this project: This interceptor provides sewer for Baxter Creek and Cattail Creek Basins.

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for anticipating the long-term future growth in this area

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIF24

PROJECT NAME
Davis Lane (Lift Station)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$1,200,000

DESCRIPTION OF PROJECT

Complete the buildout of Davis Ln Lift Station

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for anticipating the long-term future growth in this area

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Impact Fees Wastewater

WW IMPACT FEES

WWIF27

PROJECT NAME

South University District/Cattail Creek Basin - S 15th Ave to Willow Way to W Lincoln St*

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$795,000

DESCRIPTION OF PROJECT

This project consists of extending the sewer main to service the South University District area with a 10-inch sewer pipe.

Describe the criticality (i.e., importance) of this project to the operation: As described in the 2015 Wastewater Facility Plan, there is little potential to accommodate additional flow from this area through existing pipe network, therefore, if capacity is not added no further development in this area can be supported. Since this area is especially suited to housing for University students and since the University continues to grow in population the community needs are best accommodated if collection capacity is increased.

How is capacity affected by this project: This interceptor will support an average day flow value of 1,456 gallons per acre.

How is connectivity affected by this project: This sewer pipe will serve the area generally between Lincoln and University Way, and South 19th and the vacant land to the west of Spectators.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Master Plan.

How is this project leveraged with other stakeholders/projects/funds: It is estimated that 50% of this project costs will be due to capacity expansion and will be eligible for Wastewater Impact Fees. The remaining 50% of the project costs will need to be provided by a "local share" contribution or other source.

Are there other affected projects: There are potentially a great number of private development projects which will not be able to proceed due to the lack of wastewater collection capacity.

ALTERNATIVES CONSIDERED

Limit future development in the area.

ADVANTAGES OF APPROVAL

If constructed to the line sizes master planned in the City's Wastewater Facilities plan, capacity will be provided for anticipating the long-term future growth in this area

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Wastewater Impact Fees, with local share recovered via payback district

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIF31

PROJECT NAME
Davis Ln Lift Station, Interceptor, and Force Main

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$645,000					

DESCRIPTION OF PROJECT

This project will provide initial funding for oversizing the Davis Ln Lift Station not included in the funding package for the Billings Clinic. This will include oversizing the wet well capacity and sanitary sewer freeway crossing to accommodate peak hour flows up to 6.2 MGD.

Describe the criticality (i.e., importance) of this project to the operation: This will be the City's portion of the initial Davis Ln Lift Station upsizing construction that is not included in the Billings Clinic funding.

How is capacity affected by this project: Sanitary sewer capacity will be increased for development in the western portion of the community.

How is connectivity affected by this project: This lift station serves development north of the Cattail Lake Lift Station.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Master Plan.

How is this project leveraged with other stakeholders/projects/funds: The Billings Clinic will finance the lift station, and the City will reimburse the Billings Clinic for the City's portion over 5 years. The Billings Clinic will not be reimbursed for their portion of the lift station capacity, which is estimates as 8% of the capacity of the initial lift station construction.

Are there other affected projects: Yes, we may want to consider building the Norton East Ranch Outfall Diversion with this project. Construction of the Diversion will take pressure off the existing Baxter Meadows Lift Station and limit the need to upgrade that lift station farther into the future. Additionally, the Norton East Ranch Diversion would reduce early operational challenges in the Davis Lane Lift Station due to odors associated with minimal flows.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

This will pay off the City's portion of the Davis Ln Lift Station

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Billings Clinic is constructing the Lift Station and will provide a payback district for the City's portion of the financing.

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIF32

PROJECT NAME
Hidden Valley (Lift Station)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$3,240,000

DESCRIPTION OF PROJECT

Design and Construct Hidden Valley Lift Station and Force Main

Describe the criticality (i.e., importance) of this project to the operation: Service area expansion of the City's sanitary sewer collection system.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Collection Facilities Plan

Are there other affected projects: The Davis Lane Lift Station must be upgraded to accommodate flows from the Hidden Valley Lift Station when the Hidden Valley Lift Station is constructed.

ALTERNATIVES CONSIDERED

Limit development on the northwestern edge of the City due to no sanitary sewer availability.

ADVANTAGES OF APPROVAL

Increased service area of the City's sanitary sewer system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Operating costs will be paid from the City's sewer enterprise fund.

FUNDING SOURCES

Payback district or other local share contribution from development at the time of construction.

CIP Project Fund
Impact Fees Wastewater

DEPARTMENT
WW IMPACT FEES

PROJECT NUMBER
WWIF33

PROJECT NAME
Davis Ln Lift Station Debt Service

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$800,000	\$800,000	\$800,000	\$800,000	\$800,000

DESCRIPTION OF PROJECT

This project will provide a debt service payment for the City's portion of the Davis Ln Lift Station.

Describe the criticality (i.e., importance) of this project to the operation: If we do not fund this debit service, the City will be in default of our loan.

How is capacity affected by this project: Sanitary sewer capacity will be increased for development in the western portion of the community.

How is connectivity affected by this project: This lift station serves development north of the Cattail Lake Lift Station.

What regulations or standards are attained with this project: Conformance with the City's Wastewater Master Plan.

How is this project leveraged with other stakeholders/projects/funds: The Billings Clinic will finance the lift station, and the City will reimburse the Billings Clinic for the City's portion over 5 years. The Billings Clinic will not be reimbursed for their portion of the lift station capacity, which is estimates as 8% of the capacity of the initial lift station construction.

Are there other affected projects: Yes, we may want to consider building the Norton East Ranch Outfall Diversion with this project. Construction of the Diversion will take pressure off the existing Baxter Meadows Lift Station and limit the need to upgrade that lift station farther into the future. Additionally, the Norton East Ranch Diversion would reduce early operational challenges in the Davis Lane Lift Station due to odors associated with minimal flows.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

This will pay off the City's portion of the Davis Ln Lift Station

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating and Maintenance Costs: Impact fees can not fund operating and maintenance costs. The city's wastewater utility will pay for these costs, which are estimated to be a small increment of the city's system as a whole.

FUNDING SOURCES

Billings Clinic is constructing the Lift Station and will provide a payback agreement for the City's portion of the financing, to be paid back with interest over a 5-year period. Repayments are expected to being in the year following construction.

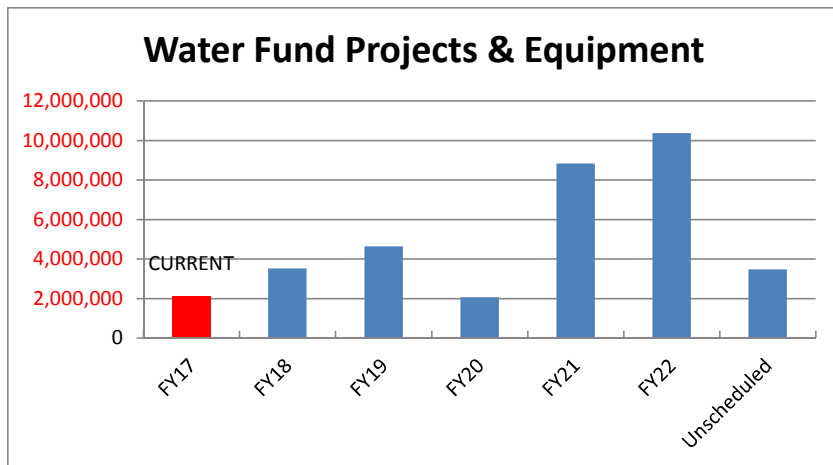
**Water Fund
Capital Improvement Plan**

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 553,791	\$ 155,404	\$ 600,823	\$ (1,271,069)	\$ (480,420)	\$ 1,769,678	\$ -
Plus: Water Revenues Dedicated to CIP	\$ 1,702,014	\$ 2,212,619	\$ 2,770,028	\$ 2,853,129	\$ 3,886,698	\$ 4,003,299	\$ -
Plus: Loan for Hyalite Dam Improvements W79					\$ 4,000,000		
Plus: Loan for Automation Upgrades W71						\$ 6,710,000	
Plus: Loan for Mechanical Upgrades W72		\$ 1,750,000					
Plus: Loan for Lyman Tank Construction WIF35					\$ 3,200,000		
Less: Scheduled CIP Project Costs	\$ (2,100,401)	\$ (3,517,200)	\$ (4,641,920)	\$ (2,062,480)	\$ (8,836,600)	\$ (10,363,400)	\$ (3,464,439)
Projected Year-End Cash Dedicated to CIP	\$ 155,404	\$ 600,823	\$ (1,271,069)	\$ (480,420)	\$ 1,769,678	\$ 2,119,578	\$ (3,464,439)

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Water Revenues	\$ 8,104,830	\$ 8,104,830	\$ 8,510,072	\$ 8,935,575	\$ 9,203,642	\$ 9,479,752
Estimated Annual Increase	0.0%	5.0%	5.0%	3.0%	3.0%	3.0%
Total Estimated Revenues	\$ 8,104,830	\$ 8,510,072	\$ 8,935,575	\$ 9,203,642	\$ 9,479,752	\$ 9,764,144
Current Revenues Dedicated to CIP %	21.0%	21.0%	26.0%	31.0%	31.0%	41.0%
Plus: Increase Dedicated to CIP	0.0%	5.0%	5.0%	0.0%	10.0%	0.0%
Total % Dedicated to CIP	21.0%	26.0%	31.0%	31.0%	41.0%	41.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,702,014	\$ 2,212,619	\$ 2,770,028	\$ 2,853,129	\$ 3,886,698	\$ 4,003,299

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
Water Fund									
PW04	ENGINEERING		PROPERTY ON CORNER OF ASPEN & ROUSE	\$100,000			\$0	\$0	
W03	ENGINEERING		ANNUAL WATER PIPE REPLACEMENT PROGRAM - DESIGN	\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	
W04-18	ENGINEERING		WATER PIPE REPLACEMENT 2018	\$1,200,000					
W04-19	ENGINEERING		WATER PIPE REPLACEMENT 2019		\$1,200,000				
W04-20	ENGINEERING		WATER PIPE REPLACEMENT 2020			\$1,200,000			
W04-21	ENGINEERING		WATER PIPE REPLACEMENT 2021				\$1,200,000		
W04-22	ENGINEERING		WATER PIPE REPLACEMENT 2022					\$1,200,000	
GF227	Finance		ERP REPLACEMENT "SUNGARD REPLACEMENT/UPGRADE"						\$333,333
GIS03	GIS		ASSET MANAGEMENT SOFTWARE		\$50,000				
GIS04	GIS		AERIAL PHOTOGRAPHY	\$85,000			\$85,000		
GIS05	GIS		LIDAR	\$75,000					
GIS06	GIS		GPS SYSTEM REPLACEMENT	\$17,500	\$17,500				
GIS08	GIS		LARGE FORMAT PLOTTER - REPLACEMENT		\$20,000				
GIS12	GIS		FME SERVER			\$15,000			
GIS11	PUBWORKS AD		COMPUTER REPLACEMENTS	\$15,200	\$14,800	\$22,100	\$16,100	\$17,900	
GIS13	PUBWORKS AD		LONG TERM SHOPS MASTER PLAN				\$100,000		
PW03	PUBWORKS ADMIN		VEHICLE MAINTENANCE DESIGN & STORAGE CONSTRUCTION		\$50,000				
GIS14	SCADA		SCADA UPGRADES & IMPROVEMENTS					\$2,100,000	
GIS15	SCADA		SCADA MASTER PLAN	\$150,000					
W66	SCADA		METERS, TRANSDUCERS & COMMUNICATIONS (REPLACEMENT SCADA RADIO & STRAP ON FLOW METER)	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	
WC01	Water Conservation		LANDSCAPE ARCHITECT MEDIANS AND BOULEVARDS	\$45,000					
WC02	Water Conserv		METER SOFTWARE SUBSCRIPTION	\$60,000	\$36,000	\$36,000	\$36,000	\$36,000	

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	WC04	Water Conservation	DROUGHT TOLERANT DEMONSTRATION GARDEN	\$45,000					
	WIF35	WATER IMPACT FEES	LYMAN TANK AND TRANSMISSION MAIN CONSTRUCTION				\$3,200,000		
	WIF39	WATER IMPACT FEES	SOURDOUGH TRANSMISSION MAIN – PHASE 1	\$310,000					
	WIF40	WATER IMPACT FEES	SOURDOUGH TRANSMISSION MAIN – PHASE 2			\$480,000			
	WIF45	WATER IMPACT FEES	DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN				\$30,000	\$30,000	\$420,000
	STR67	WATER OPS	COVERED STORAGE AT SHOPS COMPLEX						\$50,000
	W47	WATER OPS	REPLACE #2647 - 1998 1/2 TON CHEVY PICKUP				\$27,000		
	W49	WATER OPS	REPLACE #3078 - 2002 1/2 TON CHEVY PICKUP					\$27,000	
	W51	WATER OPS	REPLACE #2529 - 1997 1 TON CHEVY TRUCK/VALVE TRUCK	\$45,000					
	W68	WATER OPS	WHEELED EXCAVATOR						\$151,000
	W69	WATER OPS	WATER SYSTEM CONDITION ASSESSMENT	\$100,000		\$100,000		\$100,000	
	W70	WATER OPS	REDUNDANT NORTH 5038 ZONE FEED			\$66,880			
	W71	WATER OPS	PRV PHASE 2 - AUTOMATION AND INSTRUMENTATION UPGRADES					\$6,710,000	
	W72	WATER OPS	PRV PHASE 1 - MECHANICAL AND STRUCTURAL UPGRADES		\$1,750,000				
	W73	WATER OPS	PRV ABANDONMENTS (APPROXIMATELY 6 SITES)						\$510,106
	W74	WATER OPS	PEAR ST. BOOSTER STATION UPGRADE	\$547,000					
	W75	WATER OPS	LEAD SERVICE LINE REPLACEMENT	\$200,000	\$200,000				
	W56	WTP	WTP FACILITY R&R	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	
	W57	WTP	WTP FACILITY ENGINEERING & OPTIMIZATION	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	
	W58	WTP	MODULE REPLACE FUND	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	
	W59	WTP	REPLACE #1422 - 1992 TOYOTA PICKUP	\$30,000					

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	W63	WTP	SOURDOUGH WATERSHED FUEL REDUCTION		\$400,000				
	W77	WTP	CONTROL SERVER REPLACEMENT	\$25,000					
	W78	WTP	HILLTOP TANK INSPECTION AND MIXING SYSTEM		\$261,120				
	W79	WTP	HYALITE DAM AND RESERVOIR OPTIMIZATION IMPROVEMENTS				\$4,000,000		
	W80	WTP	WATERSHED & RESERVOIR OPTIMIZATION STUDY	\$150,000					
	W81	WTP	COMMUNICATIONS TOWER AT THE SOURDOUGH RESERVOIR.	\$25,000					
	W82	WTP	LYMAN TRANSMISSION MAIN CONDITION ASSESSMENT	\$150,000					
	W83	WTP	SOURDOUGH INTAKE IMPROVEMENTS						\$2,000,000
	W84	WTP	SOURDOUGH TANK INSPECTION AND IMPROVEMENTS		\$500,000				

Summary for Water Fund (52 items)

Totals by year:

<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
\$3,517,200	\$4,641,920	\$2,062,480	\$8,836,600	\$10,363,400	\$3,464,439

CIP Project Fund
Water Fund

DEPARTMENT
Finance

PROJECT NUMBER
GF227

PROJECT NAME						
ERP Replacement "SunGard Replacement/Upgrade"						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$333,333

DESCRIPTION OF PROJECT

ERP Replacement "SunGard Replacement/Upgrade"

ALTERNATIVES CONSIDERED

Continue running current SunGard package. Use SunGard.net (Naviline EDGE) as an improvement to the current system, but not a full replacement.

ADVANTAGES OF APPROVAL

Simplified package. Easier to integrate the various applications/programs. Easier to pull out information for end users. Easier compilation of Commission reports and packets for Community Development.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown. Dependent on the option chosen.

FUNDING SOURCES

General Fund 33%; Water Fund 33%; Wastewater Fund 33%

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS03

PROJECT NAME

Asset Management Software

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$50,000

DESCRIPTION OF PROJECT

Purchase Asset Management Software.

Describe the criticality (i.e., importance) of this project to the operation: Managing infrastructure efficiently continues to be one of the top priorities and goals of the Bozeman City Commission.

Which infrastructure assets are maintained by this equipment: Assets maintained by this equipment include the water distribution system, wastewater collection system, and the stormwater system.

How is efficiency improved with this equipment: Asset management software (Innovyze InfoMASTER) will build upon existing datasets and systems to assist in delivering the desired level of service for the lowest life cycle cost. Advanced applications are necessary to analyze condition information and criticality to identify and coordinate overlaps and gaps among various assets.

What is the impact (i.e., scope-of-use) for this equipment: Asset management software will be used to better understand opportunities for system repair and improvement across all asset categories.

How is this project leveraged with other stakeholders/projects/funds: Asset management software will leverage the strengths of coordinating and scheduling overlapping needs across all infrastructures.

Are there other affected projects: Current and future facility planning efforts will benefit from a comprehensive application of asset management as it relates to coordinated infrastructure improvements throughout the city.

ALTERNATIVES CONSIDERED

Continue managing data and workflow using manual processes with limited potential for effective analysis.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Deferring the purchase of asset management software will not provide the foundation necessary to proactively manage a wide range of infrastructure needs including deferred maintenance, routine operations, and modeling for new development.

Using technology to support long term capital planning will aid in rehabilitation/repair/replacement decisions and ultimately result in a prolonged asset lifespan. A fully developed asset management program will assist the organization in continuing to deliver a high level of service in the most sustainable way possible.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Maintenance (first year included) = \$8,000

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS04

PROJECT NAME

Aerial Photography

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$85,000

\$85,000

DESCRIPTION OF PROJECT

Acquire aerial photography for the Bozeman planning area.

Describe the criticality (i.e., importance) of this project to the operation: This information is used on a daily basis in all levels of our operations to support a wide variety of decisions.

Which infrastructure assets are maintained by this equipment: Aerial photography benefits both the organization and the community by supplying a clear and accurate representation of current conditions in addition to serving as an important historical record during times of high growth.

How is efficiency improved with this equipment: Current aerial photography supports timely decisions based on accurate information.

What is the impact (i.e., scope-of-use) for this equipment: This information is used on a daily basis in all levels of our operations to support a wide variety of decisions.

How is this project leveraged with other stakeholders/projects/funds: We continue to experience unprecedented demand for digital imagery (i.e., staff reports, Commission presentations, water/sewer/stormwater utilities, public requests, etc.).

Are there other affected projects: This project is proposed in conjunction with LiDAR data collection for FY18 (GIS05) to take advantage of cost savings related to mobilization of using the same flight.

ALTERNATIVES CONSIDERED

Use of lower resolution satellite imagery. Partnerships with other agencies.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Postponing the cycle for recurring aerial photography would negatively impact our ability to visualize and manage growth, including awareness of important historical context during times of rapid development.

Contributes to on-going acquisition of photos at regular intervals for historical archives. Since 1987 we have not gone more than five years without an update. Measurements and land use determinations are made on a local or regional basis without requiring extensive field time.

Aerial photographs are used extensively in several on-line and in-house mapping applications. Background information for existing and future GIS & CAD datasets and Facility Plans. Meets public demand for current and accurate aerial photography.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

There are no annual operating or maintenance costs associated with this project.

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS05

PROJECT NAME

LIDAR

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$75,000

DESCRIPTION OF PROJECT

LiDAR Data Collection

Describe the criticality (i.e., importance) of this project to the operation: This information is used on a daily basis in all levels of our operations to support a wide variety of decisions.

Which infrastructure assets are maintained by this equipment: LiDAR benefits both the organization and the community by supplying a clear and accurate representation of current conditions in addition to serving as an important historical record during times of high growth.

How is efficiency improved with this equipment: LiDAR supports timely decisions based on accurate information.

What is the impact (i.e., scope-of-use) for this equipment: Accurate and current topographical representation of the landscape (including building footprints) can provide an efficient means of better understanding the scale of proposed developments, in addition to stormwater and water conservation needs.

How is this project leveraged with other stakeholders/projects/funds: This information will be leveraged in a number of programs including (but not limited to) stormwater, water conservation, community development, etc.

Are there other affected projects: This project is proposed in conjunction with the acquisition of aerial photography for FY18 (GIS04) to take advantage of cost savings related to mobilization of using the same flight.

ALTERNATIVES CONSIDERED

Manual extraction of three dimensional information from national/coarse datasets resulting in marginalized outcomes.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Postponing LiDAR data collection would limit our ability to proactively visualize and manage the scale of proposed developments, including impacts related to stormwater management and water conservation.

Meets increasing demand for three dimensional analysis within several departments. Community Development has a strong desire to work with 3-D data to effectively communicate future growth scenarios. Both the water conservation & storm water divisions would like to incorporate accurate elevational information into their projects resulting in increased modeling & analysis capabilities. Additional datasets derived from this project include updated building footprints, contours, and water features.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

There are no annual operating or maintenance costs associated with this project.

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS06

PROJECT NAME

GPS System Replacement

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$17,500

\$17,500

DESCRIPTION OF PROJECT

GPS System Replacement

Describe the criticality (i.e., importance) of this project to the operation: GPS data provides current and accurate information to support critical decisions.

Which infrastructure assets are maintained by this equipment: GPS is used to collect a wide variety of location data, including all water, sewer, stormwater, parks, and transportation related assets.

How is efficiency improved with this equipment: This is the first of two planned upgrades to replace equipment originally purchased in 2012. Advancements in technology allow for greater efficiency along with improved accuracy.

What is the impact (i.e., scope-of-use) for this equipment: GPS is used to collect a wide variety of location data, including all water, sewer, stormwater, parks, and transportation related assets.

How is this project leveraged with other stakeholders/projects/funds: Major departments that share in the use of this equipment include water/sewer, stormwater, engineering, community development, streets, etc.

ALTERNATIVES CONSIDERED

Contracted data collection services. Rental equipment.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Postponing the replacement of existing GPS equipment will likely result in unnecessary downtime due to performance and support issues related to outdated technology.

Meets the demands of recent expansions in the scope of data collection efforts within Public Works. Maintains our most critical equipment in the GIS Department with current technology.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

There are no annual operating or maintenance costs associated with this project.

FUNDING SOURCES

None

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS08

PROJECT NAME

Large Format Plotter - Replacement

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$20,000

DESCRIPTION OF PROJECT

Replace Large Format Plotter (Include Scanning Capabilities)

Describe the criticality (i.e., importance) of this project to the operation: Printing large scale maps is critical for the delivery of hard-copy exhibits for both the organization as well as the public.

How is efficiency improved with this equipment: Large format displays facilitate efficient and effective decision making by providing visual context for surrounding infrastructure and development.

What is the impact (i.e., scope-of-use) for this equipment: Large format prints are produced on a daily basis in support of all city departments, including public map sales.

How is this project leveraged with other stakeholders/projects/funds: Major departments that share in the use of this equipment include water/sewer, stormwater, engineering, community development, streets, etc.

ALTERNATIVES CONSIDERED

Maintain current equipment beyond recommended lifespan (replacement parts become difficult to locate over time). Contracted printing services.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Postponing the replacement of the existing large format plotter will likely result in unnecessary downtime due to performance and support issues related to outdated technology. Maintains critical equipment in the GIS Department with current technology. Supports on-going printing needs for several departments (including the public).

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

On-going expenses include printing supplies and routine maintenance (approx. \$2,500.00/yr.).

FUNDING SOURCES

None

CIP Project Fund
Water Fund

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
GIS I I

PROJECT NAME
Computer Replacements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$15,200	\$14,800	\$22,100	\$16,100	\$17,900	

DESCRIPTION OF PROJECT

Anticipated Public Works computer replacements.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

GIS

GIS12

PROJECT NAME

FME Server

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$15,000

DESCRIPTION OF PROJECT

Purchase upgrade to an existing database technology which effectively automates the transfer of information between a variety of systems.

Describe the criticality (i.e., importance) of this project to the operation: Database information is used on a daily basis in all levels of our operations to support a wide variety of decisions.

How is efficiency improved with this equipment: Updated technology will result in a more efficient process for managing large volumes of data.

What is the impact (i.e., scope-of-use) for this equipment: Database information is used by almost every department to support many technology systems.

What are the implications of deferring the purchase of this equipment: Deferring the purchase of this upgrade will not allow for the full realization of potential efficiencies of moving large amounts of data between systems.

How is this project leveraged with other stakeholders/projects/funds: Upgraded FME server technology will leverage the strengths of a wide variety of database systems throughout the organization.

Are there other affected projects: Several current and future projects will benefit from automated data transformation including solid waste, stormwater, and water conservation.

ALTERNATIVES CONSIDERED

Continue transferring database information using manual processes with limited potential for increased efficiency.

ADVANTAGES OF APPROVAL

Employees and citizens will have real-time access to a wide variety of information that is typically out of date and hard to attain.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Maintenance (first year included) = \$3,470

FUNDING SOURCES

None

CIP Project Fund
Water Fund

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
GIS13

PROJECT NAME						
Long Term Shops Master Plan						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$100,000		

DESCRIPTION OF PROJECT

Develop a long term master plan for the shops facility complex.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
SCADA

PROJECT NUMBER
GIS14

PROJECT NAME
SCADA Upgrades & Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$2,100,000	

DESCRIPTION OF PROJECT

Install Wide Area Network infrastructure, connect PRV vaults, verify/ install Pressure relief per each Pressure Zone, central site improvements, update historian, and implement pressure management regimes to improve system pressure protection

Describe the criticality (i.e., importance) of this project to the operation: Improved surveillance of system operation, increased control and understanding of real-time system conditions, ability to implement tighter pressure management controls.

How is connectivity affected by this project: Improves connectivity of remote sites to one another, enhancing overall system operation

What safety or risk measures are mitigated with this project: Improved understanding of cause/effect allows improved overall system operation including more precise pressure control, real-time status during abnormal events

What regulations or standards are attained with this project: Compliance with applicable SCADA and security standards.

Are there other affected projects: PRV vault upgrades, Reservoir mixing upgrades, new storage reservoir, Pear St. Booster Station upgrade, remote water quality surveillance system

ALTERNATIVES CONSIDERED

Status Quo

ADVANTAGES OF APPROVAL

Improved surveillance of system operation, increased control and understanding of real-time system conditions, ability to implement tighter pressure management controls.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

SCADA WAN maintenance expenses, server and hardware maintenance, software maintenance and programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
SCADA

PROJECT NUMBER
GIS15

PROJECT NAME
SCADA Master Plan

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$150,000					

DESCRIPTION OF PROJECT

Evaluate options and develop recommendations for wide-area network implementation for planned remote water infrastructure. Develop SCADA design, equipment and SCADA tagging and programming standards. Formulate data accessibility and SCADA integration with other City applications (e.g., CMMS)

Describe the criticality (i.e., importance) of this project to the operation: Should be implemented in current fiscal year to adopt for planning processes for FY 18.

How is efficiency improved with this equipment: Data-driven decision making.

What are the implications of deferring the purchase of this equipment: This project is precursor to construction projects at critical facilities.

How is this project leveraged with other stakeholders/projects/funds: Older/projects precursor to construction projects with critical facilities.

Are there other affected projects: SCADA Phase 1, SCADA Phase 2, PRV Vault upgrades, Well field development, reservoir mixers, new booster stations, new reservoir sites.

ALTERNATIVES CONSIDERED

Status quo operation of limited SCADA within distribution system and plant

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: This project is precursor to construction projects at critical facilities. Leverage technology to improve understanding and real time remote control of infrastructure. Improved pressure management of high-pressure operation. Inform maintenance decisions with performance data.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
PUBWORKS ADMIN

PROJECT NUMBER
PW03

PROJECT NAME
Vehicle Maintenance Design & Storage Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$50,000				

DESCRIPTION OF PROJECT

Design and construct vehicle storage

Describe the criticality (i.e., importance) of this project to the operation: Having equipment, especially winter equipment, inside and ready to go extends the life, produces less emissions by not having to warm up and shortens response time.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

How is this project leveraged with other stakeholders/projects/funds: By being located next to existing city property, we could aggregate the lots giving even more useful space.

ALTERNATIVES CONSIDERED

Not build and only use for outdoor storage.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure. Large inside storage for several departments. Equipment would be located next to current Vehicle Maintenance Shop. Good access onto Rouse and Griffin. Early morning shift equipment could be stored here so as not to disturb the neighbors in this mostly zoned Industrial area. With this building, Streets could switch to producing our own brine solution for pre wet of the sand. We wouldn't have to use mag chloride which is about 4-5 times more expensive than salt brine. Gallatin County has expressed interest in buying brine from us.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance. Possibly heat with waste oil from the Shops. Possibly heat with wood chips from Forestry.

FUNDING SOURCES

This project totals \$200,000. It will be split evenly 4 ways: Water Fund (\$50,000), Wastewater Fund (\$50,000), Street Maintenance (\$50,000), and Parks (\$50,000).

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
PW04

PROJECT NAME
Property on Corner of Aspen & Rouse

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000			\$0	\$0	

DESCRIPTION OF PROJECT

Property Purchase to expand shops area and potentially offices. This is an opportunity to make more land available for project PW01-SH - Shops Expansion.

ALTERNATIVES CONSIDERED

Do not purchase the property. Wait to purchase at a later date.

ADVANTAGES OF APPROVAL

Larger contiguous land area for City Shops. The Shops Expansion project has been a scheduled CIP for a number of years. This item could bring an important piece of land into that project area, making a better-functioning property at Rouse and Tamarack.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Building Maintenance would be needed to keep the existing structure useful.

FUNDING SOURCES

Split 33/33/33 between Water, Wastewater and Street Maintenance Funds.

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
STR67

PROJECT NAME
Covered Storage At Shops Complex

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$50,000

DESCRIPTION OF PROJECT

Covered Storage At Shops Complex

Describe the criticality (i.e., importance) of this project to the operation: Getting equipment parked inside greatly extends the life of the equipment.

Which infrastructure assets are maintained by this equipment: All of our rolling stock and equipment.

How is efficiency improved with this equipment: The difference in getting in a motor grader that is parked inside vs. one that is parked outside in -20 degree weather is enormous. Equipment stays in better shape. Much less wear and tear on drivetrain and hydraulics. Easily adds an hour of productivity to every shift.

What is the impact (i.e., scope-of-use) for this equipment: Equipment and vehicle storage.

How is this project leveraged with other stakeholders/projects/funds: At the proper site we could build one big enough to house other departments equipment. Project is split 50% Street Maintenance Fund, 25% Water Fund, & 25% Wastewater Fund.

Are there other affected projects: Depends where this building is located.

ALTERNATIVES CONSIDERED

Keep parking millions of dollars' worth of equipment outside.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Equipment continues to degrade from the sun and exposure. Better equipment management.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Normal building maintenance.

FUNDING SOURCES

50% Street Maintenance Fund, 25% Water Fund, 25% Wastewater Fund

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W03

PROJECT NAME						
Annual Water Pipe Replacement Program - Design						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$22,500	\$22,500	\$22,500	\$22,500	\$22,500	

DESCRIPTION OF PROJECT

This item provides for design work to be completed every year, in anticipation of the Annual Water System Upgrades.

ALTERNATIVES CONSIDERED

ADVANTAGES OF APPROVAL

Provides for the design of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Utility Fund

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W04-18

PROJECT NAME						
Water Pipe Replacement 2018						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$1,200,000					

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (S Grand from Olive to Hayes). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W04-19

PROJECT NAME
Water Pipe Replacement 2019

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$1,200,000				

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (S Tracy from Babcock to College). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W04-20

PROJECT NAME
Water Pipe Replacement 2020

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$1,200,000			

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (S Black from College to the Cul-De-Sac). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W04-21

PROJECT NAME						
Water Pipe Replacement 2021						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$1,200,000		

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (N Tracy from Villard to Peach). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
ENGINEERING

PROJECT NUMBER
W04-22

PROJECT NAME
Water Pipe Replacement 2022

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$1,200,000	

DESCRIPTION OF PROJECT

The water replacement program sets aside funds to assess and replace failing water pipes. Priority will go to replace the water pipe associated with the annual street construction (N 17th from Durston to the End). The remaining funds will be used to conduct water pipe condition assessments and repair identified pipes.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Provides for the construction of necessary water system maintenance work.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

This project results in a net decrease in overall maintenance costs over the lifecycle of all pipes.

FUNDING SOURCES

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W47

PROJECT NAME						
Replace #2647 - 1998 1/2 Ton Chevy Pickup						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$27,000		

DESCRIPTION OF PROJECT

This project is to replace a 1998 Chevy with 70,779 miles.

Describe the criticality (i.e., importance) of this project to the operation: As our crew grows this type of vehicle is used daily in support of the department's mission.

Which infrastructure assets are maintained by this equipment: This truck responds to all types of calls from locating to witnessing bores to a support vehicle for excavation jobs.

How is efficiency improved with this equipment: Crews are able to quickly access a vehicle to use.

What are the implications of deferring the purchase of this equipment: Using an older vehicle which becomes more unreliable.

How is this project leveraged with other stakeholders/projects/funds: If we had to we could hold off a year.

ALTERNATIVES CONSIDERED

Continue to use older vehicle which is becoming unreliable and costly to maintain.

ADVANTAGES OF APPROVAL

Increased reliability and safety for staff.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

As the truck ages there will be unforeseen costs to maintain this vehicle.

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W49

PROJECT NAME						
Replace #3078 - 2002 1/2 Ton Chevy Pickup						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$27,000	

DESCRIPTION OF PROJECT

This project replaces a 2002 Chevy pickup with 85,816 miles.

Describe the criticality (i.e., importance) of this project to the operation: Leak detection, locating and fire hydrant flush are 3 critical programs for our department.

Which infrastructure assets are maintained by this equipment: This truck is used for leak detection, locating and fire hydrant snow removal and flushing.

How is efficiency improved with this equipment: Would have more fuel efficient vehicle.

What are the implications of deferring the purchase of this equipment: Using an older vehicle which becomes more unreliable.

ALTERNATIVES CONSIDERED

Continue to use older piece of equipment which is becoming unreliable and costly to maintain.

ADVANTAGES OF APPROVAL

Increased reliability and safety for staff.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

As the truck ages there will be unforeseen costs to maintain this vehicle.

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W51

PROJECT NAME
Replace #2529 - 1997 1 Ton Chevy Truck/Valve Truck

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$45,000					

DESCRIPTION OF PROJECT

This project will replace a 1997 Chevy with 73,716 miles.

Which infrastructure assets are maintained by this equipment: This truck is one of 2 trucks that "exercises" the 5,392 water valves. This exercising is important to ensure the valves work.

How is efficiency improved with this equipment: This is a faster and safer way to exercise valves.

ALTERNATIVES CONSIDERED

Continue to use older vehicle which is becoming unreliable and costly to maintain.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: We could defer this piece of equipment 1 year. Increased reliability and safety for staff.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

As the truck ages there will be unforeseen costs to maintain this vehicle.

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W56

PROJECT NAME

WTP Facility R&R

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$40,000	\$40,000	\$40,000	\$40,000	\$40,000	

DESCRIPTION OF PROJECT

Repair and replacement fund for the WTP

Describe the criticality (i.e., importance) of this project to the operation: Having this item in the budget will allow for unexpected and rapid repair of equipment, in the event of failure. This will result in shorter down time and not defer other planned projects.

Which infrastructure assets are maintained by this equipment: This fund will be used to repair unexpected failures in the treatment processes.

How is efficiency improved with this equipment: The city will be able to rapidly repair equipment and have less down time for maintenance.

What is the impact (i.e., scope-of-use) for this equipment: Without this fund, maintenance could be deferred for up to a year.

ALTERNATIVES CONSIDERED

Not having this fund would defer other needed maintenance.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Significant down time for the Water Treatment Plants and possible backlog of deferred maintenance as projects are set back to deal with "spot fires". If systems fail, they need to be repaired immediately. If the failure is unexpected, other items that have been budgeted for will need to be postponed. Not all repairs or equipment failures can be predicted and budgeted as capital improvement projects

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W57

PROJECT NAME

WTP Facility Engineering & Optimization

New

Replacement

Equipment

Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	

DESCRIPTION OF PROJECT

WTP Facility Engineering & Optimization

Describe the criticality (i.e., importance) of this project to the operation: The longer the water treatment plant is in operation, operators become familiar with the processes and come up with ideas to optimize the process. This line item will allow for engineering studies on the operators ideas before the expense of changing the process.

Which infrastructure assets are maintained by this equipment: The plan for this budget items is to improve the process from the raw water intakes to the treated water reservoirs.

How is efficiency improved with this equipment: This will allow engineering to be completed on needed projects and to study optimization options before spending money on equipment that might not be needed or the proper type. It will allow studies to be conducted to make sure that proposed optimizations will actually improve the process at a reasonable expense.

What is the impact (i.e., scope-of-use) for this equipment: Through the optimization of the plant with engineering studies the process will be streamlined and will save money in the future.

ALTERNATIVES CONSIDERED

Proceed with optimization projects without knowing if the project will actually improve plant performance.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Time and material may be wasted in failed optimization experiments. The advantage of having funds available to do engineering studies before any project is started will make sure that the right equipment is purchased and that it will perform properly. Optimization studies will predict actual cost/benefit over time to make sure the city is spending its money efficiently.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W58

PROJECT NAME
Module Replace Fund

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	

DESCRIPTION OF PROJECT

Annual Repair Fund

Describe the criticality (i.e., importance) of this project to the operation: Without the timely replacement of the membranes at the end of their useful lifespan, the whole treatment process will need to be shut down. Because this treatment process is relatively new, we do not have a firm estimate on the lifespan of the membranes. I expect them to last at least ten years but they could last twenty.

Which infrastructure assets are maintained by this equipment: The whole water treatment process and Sourdough water plant.

How is efficiency improved with this equipment: This "savings account" will provide for rapid acquisition and replacement of the membrane modules when the time comes, instead of waiting for the next budget cycle.

What is the impact (i.e., scope-of-use) for this equipment: This would serve as a sort of "savings account" in the event that any of the Plant's membrane modules needs to be replaced in the future. The costs for these replacements would be significant and typically need to be planned for after 10 years. This will be an on-going item for the next 20 years.

ALTERNATIVES CONSIDERED

Determine funding source at the time these replacements are needed.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Having the treatment process shut down until the financing can be arranged. If a membrane module at the plant needs to be replaced, the cost will be significant. This will allow the city to save money over time.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W59

PROJECT NAME
Replace #1422 - 1992 Toyota Pickup

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$30,000					

DESCRIPTION OF PROJECT

Replace #1422 - 1992 Toyota Pickup with 86,000 miles

Describe the criticality (i.e., importance) of this project to the operation: This piece of equipment will be for transporting operators to training.

Which infrastructure assets are maintained by this equipment: Water Treatment Superintendents management

How is efficiency improved with this equipment: A new vehicle will have less repair costs better fuel efficiency.

What is the impact (i.e., scope-of-use) for this equipment: The newer vehicle can have more seating for training trips

ALTERNATIVES CONSIDERED

Continue using pickup and paying increased repair and maintenance costs.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: As this vehicle gets older the cost of repair and maintenance will continue to be more expensive. New vehicle would provide more reliability and have fewer repair and maintenance costs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Minimal maintenance costs.

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W63

PROJECT NAME
Sourdough Watershed Fuel Reduction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$400,000				

DESCRIPTION OF PROJECT

Sourdough Fuel Reduction

Describe the criticality (i.e., importance) of this project to the operation: Protects investment in WTP pre-membrane sedimentation process and membrane filters by reducing wildfire impacts on raw water quality in sourdough. Should lessen wear and tear on processes and components in event of wildfire impacted source water

What safety or risk measures are mitigated with this project: Reduces wildfire risk in sourdough drainage and increases resiliency against catastrophic wildfire. Provides a safer environment for fire suppression to occur in the event of.

How is this project leveraged with other stakeholders/projects/funds: Project works in dovetail with USFS BMW project. Does not happen unless BMW project goes.

ALTERNATIVES CONSIDERED

Do nothing

ADVANTAGES OF APPROVAL

Provides landscape level fuel reduction that dovetails with the USFS BMW project. reduces susceptibility of catastrophic wildfire in Sourdough municipal watershed. Reduces impacts to public and watershed closures during work activities

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

State RRGL grants

CIP Project Fund
Water Fund

DEPARTMENT
SCADA

PROJECT NUMBER
W66

PROJECT NAME
Meters, Transducers & Communications (Replacement Scada Radio & Strap On Flow Meter)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	

DESCRIPTION OF PROJECT

Meters, Transducers & Communications (Replacement Scada Radio & Strap On Flow Meter) for the SCADA Technician.

Describe the criticality (i.e., importance) of this project to the operation: The City's SCADA Technician needs funds to perform their necessary job functions. Failure of electronic devices needed to perform the job cannot be foreseen or scheduled. This fund would allow funds for that equipment.

Which infrastructure assets are maintained by this equipment: Water Distribution, WRF, WTP

How is efficiency improved with this equipment: It improves accuracy of measurement and improvement of efficiency

What is the impact (i.e., scope-of-use) for this equipment: Cost savings through conservation.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Diminished leak detection and higher costs through water loss. This fund will allow the Technician to repair or replace important equipment in a more timely manner.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W68

PROJECT NAME
Wheeled Excavator

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$151,000

DESCRIPTION OF PROJECT

This would be a trac hoe excavator with wheels instead of tracks.

Describe the criticality (i.e., importance) of this project to the operation: It is a critical piece of machinery in our department.
How is this project leveraged with other stakeholders/projects/funds: Can be split with wastewater.

ALTERNATIVES CONSIDERED

Continue to use smaller equipment .

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Continue using smaller equipment that takes longer to do the work due to it's size. Increased productivity with larger excavator.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

50% Water Fund, 50% Wastewater Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W69

PROJECT NAME
Water System Condition Assessment

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$100,000		\$100,000		\$100,000	

DESCRIPTION OF PROJECT

Prepare and evaluate condition assessment plan and execute water main condition assessments in high risk portions of the city.

Describe the criticality (i.e., importance) of this project to the operation: Major assets whose failure could affect a large population of end-users. Work-around may be possible with heavy burden on Utility resources.

What is the impact (i.e., scope-of-use) for this equipment: Has subsystem application or affects major asset(s) and produces substantial & quantifiable benefits that improves product quality, processes, or adoption of best industry practices.

Are there other affected projects: Follow-on R&R.

ALTERNATIVES CONSIDERED

No inspection

ADVANTAGES OF APPROVAL

Doing planned condition assessment can provide a cost effective mechanism of identifying likely asset failures and thereby offering the opportunity of repairing the deficiency or the whole asset if needed prior to failure. Additionally, CA often can identify assets in good working condition, so only required repairs are completed thereby saving significant money in replacing assets in good working order.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W70

PROJECT NAME
Redundant North 5038 Zone Feed

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$66,880			

DESCRIPTION OF PROJECT

Evaluate, and upgrade as required, 2nd location of redundant feed of 5130 Zone water into North (5038) Zone. This will ensure alternative source of water exists and is sufficient to feed North Zone in time when Lyman Creek source is unavailable.

Describe the criticality (i.e., importance) of this project to the operation: This provides a second path for water to move from South Zone to North Zone in event that Lyman source is unavailable.

What safety or risk measures are mitigated with this project: Second source from outside the Pressure Zone. Adds amount of redundancy to system needed in event Lyman source is unavailable.

What regulations or standards are attained with this project: Meets City Hydraulic criteria.

How is this project leveraged with other stakeholders/projects/funds: Could be performed in conjunction with Pear St. Booster Upgrade to facilitate testing and commissioning.

Are there other affected projects: Pear St. Booster Station Upgrade.

ALTERNATIVES CONSIDERED

Continue with single connection between pressure zones

ADVANTAGES OF APPROVAL

Use existing facilities and connectivity to provide redundant back up source of water

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W71

PROJECT NAME
PRV Phase 2 - Automation and Instrumentation Upgrades

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$6,710,000	

DESCRIPTION OF PROJECT

Upgrade pressure instrumentation, automate valve actuation, provide a LAN connection and SCADA programming for real-time monitoring and remote control of PRV settings.

Describe the criticality (i.e., importance) of this project to the operation: Without project, system operators are without vital data on system operating conditions. Limited real time data allows operators to anticipate, diagnose, or correct abnormal operating conditions.

How is connectivity affected by this project: Maintains existing connectivity

What safety or risk measures are mitigated with this project: Standardized pressure controls offers improved protections from surge conditions which are likely cause of pipe failure. Improves service levels to existing customers where pressure transients cause leaks in sprinkler systems or within customer premises.

Are there other affected projects: Pressure Management, PRV Abandonments

ALTERNATIVES CONSIDERED

Status quo operation

ADVANTAGES OF APPROVAL

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W72

PROJECT NAME
PRV Phase I - Mechanical and Structural Upgrades

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$1,750,000				

DESCRIPTION OF PROJECT

Upgrade hatch/entry, valving, piping, pressure settings, sump pumps and provide power

Describe the criticality (i.e., importance) of this project to the operation: Provides operators with a safe working environment and sets PRVs at operating pressures at pressure zone interfaces consistent with the WFPU recommendations. Provides necessary upgrades to equipment, piping and valving in PRV vaults to reduce likelihood of failure.

How is connectivity affected by this project: Maintains existing connectivity

What safety or risk measures are mitigated with this project: Standardized pressure controls offers improved protections from surge conditions which are likely cause of pipe failure. Improves service levels to existing customers where pressure transients cause leaks in sprinkler systems or within customer premises

Are there other affected projects: Pressure Management, PRV Abandonments.

ALTERNATIVES CONSIDERED

Status quo operation

ADVANTAGES OF APPROVAL

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W73

PROJECT NAME
PRV Abandonments (approximately 6 sites)

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$510,106

DESCRIPTION OF PROJECT

Abandon (in place) existing PRV's serving Northwest 4940 Pressure Zone, at sites to be determined through detailed hydraulic modeling. Install looped mains to maintain connectivity. Project done in conjunction with other transmission main improvements serving Northwest zones

Describe the criticality (i.e., importance) of this project to the operation: Reduces system complexity, and simplifies control strategy, which is critical with additional improvements planned within service area.

How is connectivity affected by this project: Reduces system complexity, yet maintains sufficient connectivity between zones per Hydraulic criteria

What safety or risk measures are mitigated with this project: Reduces system complexity, and opportunity for PRV's feeding zone to create undesired chattering of PRV's fighting each other via control strategy. Chattering of valves can lead to undesired hydraulic transients in system.

What regulations or standards are attained with this project: Maintenance of City Hydraulic criteria

How is this project leveraged with other stakeholders/projects/funds: Connected to West Water Transmission Main, Phase 2 and PRV upgrades projects

ALTERNATIVES CONSIDERED

Status quo

ADVANTAGES OF APPROVAL

Avoid costs of equipping sites with SCADA and related infrastructure. Reduce future operating expenses associated with PRV vault operation and control. Simplify zone operation by reducing number of required PRV's to feed zone.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Avoid costs of equipping sites with SCADA and related infrastructure. Reduce future operating expenses associated with PRV vault operation and control

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W74

PROJECT NAME
Pear St. Booster Station Upgrade

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$547,000					

DESCRIPTION OF PROJECT

Rehabilitate station by adding 2 - 1000 gpm high service pumps, 1 - 400 gpm normal service pump, electrical and control (either VFD and discharge check valve or Soft Starts with discharge control valves); verify condition or install new 5038 Zone PRVs (1 low range, 1 high range) to backfeed Zone. Allows interim operation as booster station into South 5130 Zone for South Zone reservoirs, as well as backfeed when Lyman Reservoir to be taken out of service. Provide SCADA control logic modifications as required.

Describe the criticality (i.e., importance) of this project to the operation: In absence of pumping capacity, Lyman source can not be fully exploited to fill reservoirs in South Zone. With limited storage, can affect capability to maintain storage for equalization, fire protection and emergency storage.

How is capacity affected by this project: Enables Lyman supply at approximately 2-3MGD to be fully utilized.

ALTERNATIVES CONSIDERED

Abandonment of Site as booster station. Status quo for backfeed from 5130 South Zone to 5038 North Zone

ADVANTAGES OF APPROVAL

Maintain capability during high demand period to fill/maintain reservoir levels in Sourdough and Hilltop Reservoirs. Augment Sourdough supply during peak demand period. Provide capability to backfeed North Zone in event Lyman Creek supply is insufficient or Lyman Reservoir is out of service.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

No

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WATER OPS

PROJECT NUMBER
W75

PROJECT NAME
Lead Service Line Replacement

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$200,000	\$200,000				

DESCRIPTION OF PROJECT

This two year project will be used to hire a contractor to assist water crews in replacing lead service lines.

Describe the criticality (i.e., importance) of this project to the operation: Removing lead service lines is critical to maintaining a high level of health and safety for our customers.

What safety or risk measures are mitigated with this project: Removing all lead service lines is the safest standard that we can meet.

What regulations or standards are attained with this project: This line removal meets recommendations of the National Drinking Water Advisory Council for total removal of all lead service lines.

How is this project leveraged with other stakeholders/projects/funds: City of Bozeman water crews are assisting with the lead service line replacements.

ALTERNATIVES CONSIDERED

Continue using just COB water crews to replace the lead service lines, extending the program by several years. We have a commitment to the community that they will all be replaced by FY19.

ADVANTAGES OF APPROVAL

The City of Bozeman will no longer have any lead service lines

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W77

PROJECT NAME

Control Server Replacement

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$25,000

DESCRIPTION OF PROJECT

Servers are on five year replacement warranty administered by IT.

Describe the criticality (i.e., importance) of this project to the operation: Server failure will result in plant shutdown.

Which infrastructure assets are maintained by this equipment: The Water Treatment SCADA system and security system.

How is efficiency improved with this equipment: Improved communication speed and redundancy.

What is the impact (i.e., scope-of-use) for this equipment: Control of all aspects of the Water Treatment Plant.

Are there other affected projects: Water Distribution.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Server failure will result in plant shutdown. Reliability and robustness of equipment.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W78

PROJECT NAME
Hilltop Tank Inspection and Mixing System

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$261,120				

DESCRIPTION OF PROJECT

Inspect reservoir. Furnish and Install Mixer(s), Power and Control and update Reservoir SCADA to include remote monitoring capability of mixer(s).

Describe the criticality (i.e., importance) of this project to the operation: Without mixing of tank contents, Water Quality can be impacted, cold weather operation can create damage to reservoir contents

What safety or risk measures are mitigated with this project: Freeze protection reduces risk of ice damage to cathodic protection system, tank interior.

ALTERNATIVES CONSIDERED

Installation of separate inlet and outlet configurations per each Reservoir

ADVANTAGES OF APPROVAL

Least expensive way to effect reservoir mixing and added freeze protection

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Energy costs for mixing; SCADA maintenance, scheduled mixer maintenance,

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W79

PROJECT NAME
Hyalite Dam and Reservoir Optimization Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$4,000,000		

DESCRIPTION OF PROJECT

Armoring of the control tower (to enable some year-over-year storage capacity) and control upgrades to improve winter operation

Describe the criticality (i.e., importance) of this project to the operation: Current vulnerability of Bozeman to drought is very high, due to the lack of sources that are robust in drought (large raw water reservoirs with year-over-year storage capacity, large rivers, or groundwater). Hyalite Reservoir is capable of providing year-over-year storage, but is not operated in that manner due to concerns of ice damage to the control tower.

How is capacity affected by this project: Capacity could be improved in a major drought condition.

What safety or risk measures are mitigated with this project: The risk of an extremely dry year resulting in the inability to fill the Hyalite reservoir with enough water for the City and irrigation uses.

What regulations or standards are attained with this project: Drought resiliency.

How is this project leveraged with other stakeholders/projects/funds: Project could potentially remove the 20% surcharge the City pays for Hyalite releases.

Are there other affected projects: The ability to utilize some year-over-year storage in Hyalite to mitigate against a dry year reduces the criticality of obtaining groundwater, or adding major storage to Lyman.

ALTERNATIVES CONSIDERED

Continue to deal with current Hyalite dam operation

ADVANTAGES OF APPROVAL

Drought mitigation, improved water use and cost efficiencies

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WTP

W80

PROJECT NAME

Watershed & Reservoir Optimization Study

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$150,000

DESCRIPTION OF PROJECT

Hydrologic and operations study of Sourdough, Hyalite and Lyman Creek municipal watersheds to determine water yields of each respective watershed supply source, demonstrate the physical availability of needed water supplies for the City of Bozeman pursuant to the Montana Water Use Act, Optimize operations of hyalite reservoir source and identify improvements needed for year round withdrawals of stored water. Study will also provide for additional data collection needs.

Describe the criticality (i.e., importance) of this project to the operation: Understanding municipal watersheds' long-term supply yields affects the sizing of the West Transmission Main and eventual WTP expansion, as well as the criticality of securing Sourdough rights and groundwater supply. In addition, this project will assess the feasibility of armoring the control tower, decreasing the City's drought vulnerability by enabling retention of water from wet years until the following year's water supply is assured.

What is the impact (i.e., scope-of-use) for this equipment: Has system wide application or affects major asset(s) and produces substantial & quantifiable benefits that improves product quality, processes, or adoption of best industry practices

How is this project leveraged with other stakeholders/projects/funds: Recommended by IWRP, DMP

Are there other affected projects: Long-term design of the West Transmission Main, Sourdough WTP expansion, quantification of groundwater needs

ALTERNATIVES CONSIDERED

Continue to utilize outdated hydrologic evaluations completed in mid 1980's and earlier by HKM and others.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Uncertainty in planning and designing Sourdough WTP supply, West Transmission Main and Groundwater systems. Continued high vulnerability to drought. Updates critical data supporting long-range water supply management, future water supply planning, and drought contingency decision making.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

May lead to annual costs for additional data collection for stream gaging and/or SNOTEL snowpack data

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W81

PROJECT NAME

Communications tower at the Sourdough Reservoir.

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$25,000					

DESCRIPTION OF PROJECT

Installing a communications tower at Sourdough reservoir to enhance network reliability for city network control system.

Describe the criticality (i.e., importance) of this project to the operation: Communication Signal failure would result in Loss of Water production from the WTP.

Which infrastructure assets are maintained by this equipment: Sourdough Reservoir and Water Treatment Plant.

How is efficiency improved with this equipment: Better Communications with the Water Treatment Plant and the City. Enhanced Sourdough Bypass redundancy in valve control.

What is the impact (i.e., scope-of-use) for this equipment: Security of water production.

How is this project leveraged with other stakeholders/projects/funds: The IT Departments Network would be enhanced.

Are there other affected projects: IT network

ALTERNATIVES CONSIDERED

Phone line through a third party carrier.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Communication Signal failure would result in Loss of Water production from the WTP. Better Communications with the Water Treatment Plant and the City. Enhanced Sourdough Bypass redundancy in valve control.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Funds

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W82

PROJECT NAME

Lyman Transmission Main Condition Assessment

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$150,000					

DESCRIPTION OF PROJECT

Prepare and evaluate condition assessment plan and execute condition assessment for the high consequence transmission main through the northeast Bozeman corridor to confirm likelihood of failure.

Describe the criticality (i.e., importance) of this project to the operation: Major asset whose failure would possibly affect a large population of end-users. Work-around possible with heavy burden on Utility resources. Asset is at or exceeds service capacity and does not allow for growth

What is the impact (i.e., scope-of-use) for this equipment: Has subsystem application or affects major asset(s) and produces substantial & quantifiable benefits that improves product quality, processes, or adoption of best industry practices

ALTERNATIVES CONSIDERED

No inspection

ADVANTAGES OF APPROVAL

Doing planned condition assessment can provide a cost effective mechanism of identifying likely asset failures and thereby offering the opportunity of repairing the deficiency or the whole asset if needed prior to failure. Additionally, CA often can identify assets in good working condition, so only required repairs are completed thereby saving significant money in replacing assets in good working order.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Assuming project is capitalized, operating costs to be less than \$35,000 for in-house labor

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W83

PROJECT NAME
Sourdough Intake Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,000,000

DESCRIPTION OF PROJECT

Sourdough intake improvements to increase efficiency of existing diversion infrastructure. Project calls for replacement of existing surface diversion, installation of sub-surface collection system within stream bed gravels to capture water during surface freeze-off events, new instrumentation and controls.

Describe the criticality (i.e., importance) of this project to the operation: increases resiliency of Sourdough water supply by reducing, or potentially eliminating, periods and frequency of surface water freeze-off.

How is capacity affected by this project: Increases efficiency of diversion operations.

ALTERNATIVES CONSIDERED

Keep existing diversion configuration and continue to deal with intermittent freeze-off problems of the source

ADVANTAGES OF APPROVAL

Increases efficiency of diversion operations

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

100% Water Fund

CIP Project Fund
Water Fund

DEPARTMENT
WTP

PROJECT NUMBER
W84

PROJECT NAME
Sourdough Tank Inspection and Improvements

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$500,000				

DESCRIPTION OF PROJECT

This project would entail taking the Sourdough Tank offline (once the West Transmission Main is online), inspecting it and repairing it as necessary. This project may or may not include reconfiguration of the inlet/outlet configuration to provide flow-through hydraulics.

Describe the criticality (i.e., importance) of this project to the operation: The condition of the Sourdough Tank is unknown. The hydraulics to and from the tank are suspected to be suboptimal. This project is critical to ensure that the Sourdough tank is reliable and operating well.

What is the impact (i.e., scope-of-use) for this equipment: Risk of critical failure of Sourdough Tank due to corrosion. Risk of long water age and reduced water quality due to poor hydraulics.

ALTERNATIVES CONSIDERED

Wait for critical failure

ADVANTAGES OF APPROVAL

Rehabilitation of critical storage infrastructure for several decades to come.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

None

FUNDING SOURCES

100% Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Conservation

WC01

PROJECT NAME

Landscape Architect Medians and Boulevards

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$45,000

DESCRIPTION OF PROJECT

Quantify water consumption in City of Bozeman medians and boulevards to spur change in how we think about these landscapes and to have an LSA take the inventory and create a few landscape and irrigation designs that developers and/or the City could utilize to install low water use vegetation and drip systems, with the objective to move the City away from sod and overhead sprays in those areas.

Describe the criticality (i.e., importance) of this project to the operation: This will allow the City to contract with a Landscape Architect with knowledge and expertise as to low water use and native plants, irrigation, soil and sun requirements of such plants, the development of designs and maintenance plans to ensure proper care throughout the irrigation season and the contacts and sub-contractors to make sure the work is of high quality and competence.

How is connectivity affected by this project: This connects Streets Department and Water Conservation Division.

What safety or risk measures are mitigated with this project: It also provides a means in which to demonstrate water wise plantings to developers, builders, and residents.

ALTERNATIVES CONSIDERED

(1) No action. Most of the City's medians and boulevards remain un-landscaped and unsightly. (2) Traditional turf grass is used and unlike native or low water use shrubs and perennials, requires weekly mowing, fertilizer, chemical weed mitigation and requires, on average, three to four times the amount of water when compared to low water use shrubs and perennials.

ADVANTAGES OF APPROVAL

The landscape architect provides expertise with regard to the water, soil and sun requirements for native and low water use plants, can draft designs, oversee projects and sub-contractors, draft and manage maintenance plans to ensure the success of attractive, low water use and native landscapes on City medians and boulevards.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

Enterprise Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Conservation

WC02

PROJECT NAME

Meter Software Subscription

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$60,000	\$36,000	\$36,000	\$36,000	\$36,000	

DESCRIPTION OF PROJECT

Software upgrades to provide for flow management alerts to customers and individualized water use assessments.

Describe the criticality (i.e., importance) of this project to the operation: This project is vital to both water conservation and water and sewer operations. A mechanism must be established to alert customers of leaks and inefficient water usage in real time. Delays in relaying this information are costly for customers and harm relations between utility and customers.

How is connectivity affected by this project: There is a potential to shift bill pay to FATHOM, and the additional cost in FY18 represents this one-time implementation fee for doing so (in addition to other services).

What regulations or standards are attained with this project: Best practice standards for empowering customers with real time information about their water usage.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Catches leaks very early and educates customers about individual water usage to reduce water consumption.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

NA

FUNDING SOURCES

Water Fund

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

Water Conservation

WC04

PROJECT NAME

Drought Tolerant Demonstration Garden

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$45,000

DESCRIPTION OF PROJECT

Demonstration garden to show best practices for drought tolerant and water smart native landscapes and irrigation systems to encourage turf replacement with these types of plantings and associated hydrozones and drip systems to reduce outdoor water use.

Describe the criticality (i.e., importance) of this project to the operation: The drought tolerant demonstration garden will provide a living exhibit to the community and beyond as to how to reduce outdoor water consumption. As 50% of total water supplies go to outdoor watering, it is essential to Bozeman's water resiliency to reduce outdoor water usage. Additionally, due to the drought prone nature of our climate, these plants are best suited to withstand drought events and not result in significant socio-economic impacts resulting from the loss of outdoor landscapes.

How is connectivity affected by this project: This project has the potential to bring together the City, MSU and MOR in partnership for Bozeman and Gallatin County residents and beyond.

What regulations or standards are attained with this project: Best management practice standards for landscape and irrigation design, installation and maintenance.

How is this project leveraged with other stakeholders/projects/funds: Partnerships with MSU and MOR

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Outdoor irrigation accounts for 50% of total water use in Bozeman. If customers can see and learn about beautiful water wise gardens as an alternative to sod, they will be more likely to participate in turf replacement programs.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

\$5,000.00 annually for maintenance

FUNDING SOURCES

Water Fund

PROJECT NAME						
Lyman Tank and Transmission Main Construction						

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$3,200,000		

DESCRIPTION OF PROJECT

Construct a new 5MG storage tank at Lyman, decommission existing Lyman storage tank, Condition Assessment-based repairs of the existing Lyman transmission main, new supply main tie in to new storage tank, new transmission main tie in from new storage tank to existing transmission main, new chlorination/fluoridation feed facility. Decommission Pear Street Booster Station if Hydraulic Grade Line of tank raised to meet Sourdough Tank.

Describe the criticality (i.e., importance) of this project to the operation: The Lyman water supply is a critical element of the city's overall water supply portfolio accounting for roughly 20% of annual supply volume to the city currently. The source provides supply redundancy and resiliency as it is geographically removed from the Sourdough/Hyalite source and provides an independent connection to the distribution system.

How is capacity affected by this project: The effective available water supply is increased since the new storage system will not leak and will expand the number of customers able to be supplied by Lyman water.

How is connectivity affected by this project: Maintains existing connectivity.

What safety or risk measures are mitigated with this project: Likelihood of failure of Lyman supply system dramatically reduced by replaced storage, new transmission and Condition Assessment -based rehab to existing transmission.

How is this project leveraged with other stakeholders/projects/funds: Constructs project design.

ALTERNATIVES CONSIDERED

Status quo operation of existing Lyman system

ADVANTAGES OF APPROVAL

Replaces Lyman storage tank which is at the end of its useful life. Increases effective available supply as existing tank leaks at a rate exceeding 100 gpm. If new storage sited at an elevation to match HGL of Sourdough Tank then Pear Street Booster Station can be decommissioned which reduces annual operating costs for power. CA-based rehab reduces likelihood of failure of critical transmission infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Anticipated operating cost reduction related to pear street booster decommissioning. Operating costs for new tank and transmission comparable to

FUNDING SOURCES

60% Water Impact Fees (\$4,800,000); 40% Water Utility (\$3,200,000)

CIP Project Fund

DEPARTMENT

PROJECT NUMBER

Water Fund

WATER IMPACT FEES

WIF39

PROJECT NAME

Sourdough Transmission Main – Phase I

New

Replacement

Equipment

Project

FY18

FY19

FY20

FY21

FY22

Unscheduled

\$310,000

DESCRIPTION OF PROJECT

The project consists of constructing approximately 3,000 feet of 48-inch DIP transmission main, starting at the WTP, cutting the corner at Nash and Sourdough, to tie into the existing transmission main.

Describe the criticality (i.e., importance) of this project to the operation: This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank. How is capacity affected by this project: This transmission main will provide additional capacity from the WTP to the Sourdough reservoir.

How is connectivity affected by this project: This project improves connectivity between the WTP and the City.

What safety or risk measures are mitigated with this project: The risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main. Provides redundant transmission from WTP to tie in point with existing 30" bar-wrapped concrete transmission main.

What regulations or standards are attained with this project: Water supply security.

How is this project leveraged with other stakeholders/projects/funds: This project's provides full hydraulic capacity of new Sourdough WTP storage tank.

Are there other affected projects: Sourdough WTP Storage Tank and Phase 2 of Sourdough Transmission Main.

ALTERNATIVES CONSIDERED

Conduct a condition assessment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary. Lose hydraulic capacity of new sourdough WTP storage tank due to HGL of existing sourdough transmission main.

ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure. 48" DIP provides hydraulics necessary to overcome friction losses and realize full capacity of new Sourdough WTP storage tank.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

90% Impact Fees (\$2,790,000); 10% (\$310,000) Water Utility

CIP Project Fund
Water Fund

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF40

PROJECT NAME
Sourdough Transmission Main – Phase 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$480,000			

DESCRIPTION OF PROJECT

The project consists of constructing approximately 8,000 feet of 30-inch DIP transmission main, which will start at the end of the Phase I connection point and go to the Sourdough Plant.

Describe the criticality (i.e., importance) of this project to the operation: This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank.
How is capacity affected by this project: This transmission main will provide additional capacity from the WTP to the Sourdough reservoir.

How is connectivity affected by this project: This project improves connectivity between the WTP and the City.

What safety or risk measures are mitigated with this project: The risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main.

What regulations or standards are attained with this project: Water supply security.

How is this project leveraged with other stakeholders/projects/funds: This project's cost and administration could be improved if combined with the new 3,000 feet of 48" bypass pipe.

ALTERNATIVES CONSIDERED

Conduct a condition assessment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary.

ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

90% Impact Fees (\$4,320,000); 10% (\$480,000)

CIP Project Fund
Water Fund

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF45

PROJECT NAME
DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$30,000	\$30,000	\$420,000

DESCRIPTION OF PROJECT

These are the estimated annual amounts owned for borrowing for WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The project can be constructed before cash is on hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Water Utility Revenue Bonds will be issued, with repayments made by the Utility (10%) and Impact Fee Fund (90%).

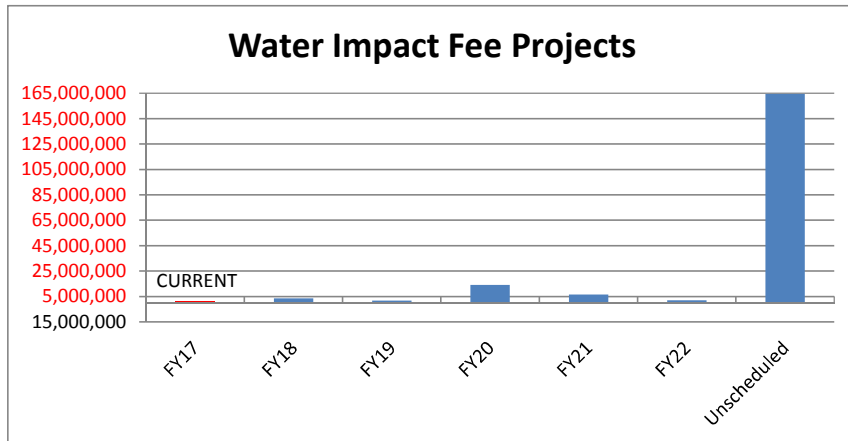
Water Impact Fee Capital Improvement Plan

Financial Summary	Current Year	Projected					Unscheduled
	FY17	FY18	FY19	FY20	FY21	FY22	
Projected Beginning Reserve Balance Dedicated to CIP	\$ 1,577,000	\$ 1,856,250	\$ (140,350)	\$ (243,290)	\$ (91,796)	\$ 79,289	\$ -
Plus: Impact Fee Revenues Dedicated to CIP	\$ 1,475,000	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085	\$ 2,179,889	\$ -
Plus: Loan for Well Field WIF32				\$ 8,000,000			
Plus: Loan for Lyman Tank WIF35					\$ 4,800,000		
Plus: Loan for Sourdough Transmission Main, PH 2 WIF40				\$ 4,320,000			
Less: Scheduled CIP Project Costs	\$ (1,195,750)	\$ (3,790,000)	\$ (1,986,010)	\$ (14,145,729)	\$ (6,705,000)	\$ (2,245,000)	\$ (164,590,604)
Projected Year-End Cash Dedicated to CIP	\$ 1,856,250	\$ (140,350)	\$ (243,290)	\$ (91,796)	\$ 79,289	\$ 14,178	

Assumptions Made for Revenue Estimates:

	Current Year	Projected				
	FY17	FY18	FY19	FY20	FY21	FY22
Estimated Annual Water Impact Fee Revenues	\$ 1,475,000	\$ 1,708,000	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085
Estimated Annual Increase	0.0%	5%	5%	5%	5%	5%
Total Estimated Revenues	\$ 1,475,000	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085	\$ 2,179,889
Current Revenues Dedicated to CIP %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Plus: Increase Dedicated to Water Capacity Expansion CIP	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total % Dedicated to CIP	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Estimated Revenues Dedicated to CIP	\$ 1,475,000	\$ 1,793,400	\$ 1,883,070	\$ 1,977,224	\$ 2,076,085	\$ 2,179,889

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CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
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Impact Fees Water

WIF05	WATER IMPACT FEES	WEST TRANSMISSION MAIN - PHASE 1 CONSTRUCTION							\$28,006,293
WIF14	WATER IMPACT FEES	LOAN DEBT SERVICE - WTP 5.3MG CONCRETE WATER STORAGE RESERVOIR	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$6,800,000
WIF21	WATER IMPACT	S 11TH 12" WATER MAIN EXTENSION		\$136,010					
WIF25	WATER IMPACT FEES	DAVIS 12" WATER MAIN & VALLEY CENTER 16" WATER MAIN EXTENSION			\$725,729				
WIF26	WATER IMPACT FEES	LYMAN TANK AND TRANSMISSION MAIN DESIGN		\$750,000					
WIF27	WATER IMPACT	5126 WEST SOURDOUGH RESERVOIR 1							\$9,757,500
WIF28	WATER IMPACT FEES	5126 WEST SOURDOUGH RESERVOIR 1 - SITING							\$350,000
WIF29	WATER IMPACT FEES	5560 SOUTHEAST RESERVOIR AND PUMP STATION							\$21,232,807
WIF30	WATER IMPACT	EAST TRANSMISSION MAIN							\$7,167,372
WIF31	WATER IMPACT	GROUNDWATER TEST WELL	\$400,000						
WIF32	WATER IMPACT FEES	GROUNDWATER WELL FIELD AND TRANSMISSION CONSTRUCTION			\$8,000,000				
WIF33	WATER IMPACT FEES	GROUNDWATER WELL FIELD AND TRANSMISSION MAIN DESIGN		\$500,000					
WIF35	WATER IMPACT FEES	LYMAN TANK AND TRANSMISSION MAIN CONSTRUCTION				\$4,800,000			
WIF36	WATER IMPACT FEES	WEST TRANSMISSION MAIN PLANNING STUDY							\$400,000
WIF37	WATER IMPACT FEES	SOURDOUGH CANYON NATURAL STORAGE - PLANNING AND DESIGN			\$500,000				
WIF38	WATER IMPACT FEES	SOURDOUGH CANYON NATURAL STORAGE CONSTRUCTION							\$8,000,000
WIF39	WATER IMPACT FEES	SOURDOUGH TRANSMISSION MAIN – PHASE 1	\$2,790,000						
WIF40	WATER IMPACT FEES	SOURDOUGH TRANSMISSION MAIN – PHASE 2			\$4,320,000				
WIF41	WATER IMPACT FEES	WEST TRANSMISSION MAIN - PHASE 1 DESIGN							\$2,907,235

CIP PROJECT FU	PROJ.	DEPARTMENT	PROJECT NAME	FY18	FY19	FY20	FY21	FY22	Unscheduled
	WIF42	WATER IMPACT FEES	WEST TRANSMISSION MAIN - PHASES 2-5 DESIGN & CONSTRUCTION						\$61,669,396
	WIF43	WATER IMPACT FEES	DEBT SERVICE FOR BORROWING - WELL FIELD				\$1,000,000	\$1,000,000	\$10,800,000
	WIF44	WATER IMPACT FEES	DEBT SERVICE FOR BORROWING - LYMAN TANK PROJECT					\$340,000	\$446,000
	WIF45	WATER IMPACT FEES	DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN				\$305,000	\$305,000	\$3,750,000

<i>Summary for Impact Fees Water (23 items)</i>	<u>FY18</u>	<u>FY19</u>	<u>FY20</u>	<u>FY21</u>	<u>FY22</u>	<u>Unscheduled</u>
<i>Totals by year:</i>	\$3,790,000	\$1,986,010	\$14,145,729	\$6,705,000	\$2,245,000	\$161,286,604

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF05

PROJECT NAME
West Transmission Main - Phase I Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$28,006,293

DESCRIPTION OF PROJECT

The project consists of a constructing a new transmission main from the Sourdough water treatment plant to the southwestern edge of the existing distribution network (S. 19th and Graf St.) to serve future anticipated growth and provide water delivery redundancy.

Describe the criticality (i.e., importance) of this project to the operation: This second transmission line from the WTP to the City's distribution system is critical to provide a second path to get potable water from the WTP into the City, as well as to adequately serve the rapidly growing western portions of the City with potable water and fire flows.

How is capacity affected by this project: Potable water delivery and fire flows will be improved in the southwest, west and northwest portions of the City.

How is connectivity affected by this project: This transmission line connects to the existing distribution system at a location that enables the existing Sourdough and Hilltop tanks to be filled even if the Sourdough pipeline is out of service.

What safety or risk measures are mitigated with this project: This project mitigates the risk of not having enough potable water to serve the City's residents or provide fire suppression.

What regulations or standards are attained with this project: Redundant water delivery infrastructure and sufficient fire flow for the western portion of the City.

How is this project leveraged with other stakeholders/projects/funds: This project will provide the ability for the City to connect additional storage reservoirs on the City's southwest to satisfy maximum day demand and fire flows on the western side of the City.

Are there other affected projects: Subsequent phases of the West Transmission Main.

ALTERNATIVES CONSIDERED

Construct a parallel transmission line between the Sourdough Water Treatment Plant to Kagy Boulevard.

ADVANTAGES OF APPROVAL

Provides transmission capacity to current and growing peak day and fire flow demands on Bozeman's western flanks, generally west of 19th Ave. All existing transmission capacity is on the eastern edge of the city's distribution system which presents hydraulic issues as the water demand centroid moves westward. The transmission also provides redundant transmission in the event of failure of sourdough transmission mains.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Developer contributions

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF14

PROJECT NAME
Loan Debt Service - WTP 5.3MG Concrete Water Storage Reservoir

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$600,000	\$600,000	\$600,000	\$600,000	\$600,000	\$6,800,000

DESCRIPTION OF PROJECT

Repayment of debt used to finance construction of WIF03, a 5.3 million gallon concrete water storage reservoir.

ALTERNATIVES CONSIDERED

Payoff loan principal

ADVANTAGES OF APPROVAL

Increased water storage to meet the needs of our growth community, and the requirement of MDEQ. Increased system water pressure in the southern part of the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Requires minimal operation and maintenance. Checking of valves, level sensors and vents on an annual basis and diver inspection and vacuuming every five years. Estimated at \$4,000 annually.

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF21

PROJECT NAME
S 11th 12" water main extension

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$136,010				

DESCRIPTION OF PROJECT

Extension of 12" diameter main per AE2S WFPU in S 11th avenue from current terminus to Graf Street.

Describe the criticality (i.e., importance) of this project to the operation: Provides for future looped water system per AE2S WFPU.

How is capacity affected by this project: Increases hydraulic capacity of system beyond minimum 8" main.

How is connectivity affected by this project: Provides for a future looped water system

What safety or risk measures are mitigated with this project: Reduces severity and consequences of water system outages due to future looping and provides for minimum fire flows.

What regulations or standards are attained with this project: ISO fire flow requirements and local water main looping standards.

How is this project leveraged with other stakeholders/projects/funds: Impact Fees fund capacity above 8" main which is minimum local share. Local share could be reimbursed to City through a "payback district" established by City Commission.

Are there other affected projects: S 11th Ave road improvements.

ALTERNATIVES CONSIDERED

Forego project and don't loop water system in this area

ADVANTAGES OF APPROVAL

Provides for water main construction at time of road construction and implements WFPU update for G&D water infrastructure

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

n/a

FUNDING SOURCES

Developer contribution (Graf's) for their "local share" of main would need to be reimbursed through a "payback district" established by the City Commission

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF25

PROJECT NAME
Davis 12" Water Main & Valley Center 16" Water Main Extension

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$725,729			

DESCRIPTION OF PROJECT

Extension of 12" water main in Davis Ln from Catamount to Valley Center & Extension of 16" diameter water main in Valley Center from Davis to 27th. 16" main is per AE2S WFPU. 12" main extends existing 12" main in Davis. These mains needed to support development south of East Valley Center between Davis and 27th.

Describe the criticality (i.e., importance) of this project to the operation: Provides for future looped water system per AE2S WFPU.

How is capacity affected by this project: Increases hydraulic capacity of system beyond minimum 8" main.

How is connectivity affected by this project: Provides for a future looped water system

What safety or risk measures are mitigated with this project: Reduces severity and consequences of water system outages due to future looping and provides for minimum fire flows.

What regulations or standards are attained with this project: ISO fire flow requirements and local water main looping standards.

How is this project leveraged with other stakeholders/projects/funds: Mains completed in connection with development of Billings Clinic.

Are there other affected projects: 12" main in Davis along the proposed alignment of Phase 5 of West Transmission Main in the AE2S WFPU. WTM diameter contemplated at 36" in Davis from Catamount to Valley Center.

ALTERNATIVES CONSIDERED

Billings Clinic may occupy this land. Fire flow demands may require large diameter mains above the minimum 8" diameter typical local share in order to meet the Clinic's fire flow requirement, thus reducing the overall impact fee contribution

ADVANTAGES OF APPROVAL

Implements WFPU update for G&D infrastructure

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

n/a

FUNDING SOURCES

Developer contribution (Billings Clinic) for their "local share" of main

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF26

PROJECT NAME
Lyman Tank and Transmission Main Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$750,000				

DESCRIPTION OF PROJECT

Design of new Lyman Storage (5MG), new transmission design, chlorination/fluoridation design and CA based repairs design to existing transmission main.

Describe the criticality (i.e., importance) of this project to the operation: Necessary for construction of Lyman tank and transmission project.

What regulations or standards are attained with this project: DEQ construction approval.

How is this project leveraged with other stakeholders/projects/funds: CA-based repairs determined from Lyman Transmission main CA.

Are there other affected projects: Lyman Tank and Transmission Main Construction.

ALTERNATIVES CONSIDERED

Status quo operation of existing Lyman system

ADVANTAGES OF APPROVAL

Provides bid plans and cost estimates for construction and obtains DEQ approvals needed for construction

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF27

PROJECT NAME

5126 West Sourdough Reservoir I

- New
- Replacement
- Equipment
- Project

FY18

FY19

FY20

FY21

FY22

Unscheduled
\$9,757,500

DESCRIPTION OF PROJECT

The project consists of a constructing a new gravity fed ground storage reservoir to the south/southwest of the City, which would tie into the West Water Transmission Main – Phase I and serve the existing City water distribution system.

Describe the criticality (i.e., importance) of this project to the operation: This reservoir provides storage for the areas served by the West Water Transmission Main, for maximum day demand and potable water supply and fire flows in the City's southwest area.

How is capacity affected by this project: This reservoir supplies water to the City's existing distribution network, to provide necessary storage capacity for the entire system, as well as contributes to adequate water supply capacity for future development along the City's western half.

How is connectivity affected by this project: In the near term the storage provided by this reservoir will augment storage provided by the City's existing Sourdough and Hilltop Tanks. In the long-term it provides storage for the west and northwest areas of the City.

What safety or risk measures are mitigated with this project: This project mitigates the risk of not having enough potable water and fire flow in the southwest area of the City.

What regulations or standards are attained with this project: Adequate storage for maximum day demand and fire flows, as well as redundant water storage capacity for existing storage tanks.

How is this project leveraged with other stakeholders/projects/funds: This project is directly tied to construction of the West Water Transmission Main - Phase I.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

Two of the City's three existing reservoirs are located along the Sourdough Transmission main (Sourdough and Hilltop Tanks). If the Sourdough transmission main or either of these tanks are off-line for any reason (i.e. maintenance, natural disaster, break, etc.), the City would have inadequate storage and supply. An additional reservoir located on the West Transmission Main – Phase I provides storage redundancy, allowing for routine inspection and maintenance of both water storage facilities/transmission mains, mitigates the risk of and reduces the consequence of a failure on the existing Sourdough transmission main or Sourdough or Hilltop tanks. It also contributes to satisfying required storage capacity for the system, as well as ensuring adequate potable water and fire flows to the City's southwest areas.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see an incremental increase in general maintenance cost. Current cost estimate of \$XX.XX annually.

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF28

PROJECT NAME
5126 West Sourdough Reservoir I - Siting

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$350,000

DESCRIPTION OF PROJECT

Siting study and land acquisition for 5MG ground storage reservoir to serve 5126 Pressure Zone from West Transmission Main.

Describe the criticality (i.e., importance) of this project to the operation: The West Sourdough Reservoir will be the next necessary reservoir for the City to continue to provide adequate potable water and fire flow. Proper siting of this reservoir will provide redundant supply to Sourdough and Hilltop Reservoirs.

How is capacity affected by this project: Increases water storage capacity by 5MG.

How is efficiency improved with this equipment: Greater efficiency in providing potable water and fire flows to the City's western areas. Better ability to take Sourdough or Hilltop reservoirs offline and still provide sufficient storage.

What is the impact (i.e., scope-of-use) for this equipment: System wide improvement in water storage capacity.

Are there other affected projects: Groundwater planning, engineering and construction West Transmission Main study, design, construction; reservoir design, construction projects.

ALTERNATIVES CONSIDERED

Wait until the need for the reservoir is more imminent

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Potential acquisition of the land by others, less optimal siting of the reservoir. Procurement of land while it is available, and less expensive

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF29

PROJECT NAME
5560 Southeast Reservoir and Pump Station

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$21,232,807

DESCRIPTION OF PROJECT

The project consists of a constructing a new ground storage tank, pump station, and transmission main that would serve two new future pressure zones located southeast of the existing City limits.

Describe the criticality (i.e., importance) of this project to the operation: This reservoir will become critical for potable water and fire flows in the southeast pressure zone.

How is capacity affected by this project: This project provides necessary storage to ensure potable water supply and fire flow to the City's southeast area.

How is connectivity affected by this project: The southeast reservoir and pipe feeds down into the future east transmission line and provides additional supply if needed. This reservoir will provide this area with water storage inside the zone.

What safety or risk measures are mitigated with this project: Inadequate potable water and fire flow for future development in the City's southeast

What regulations or standards are attained with this project: Water Storage for Maximum Day Demand and Fire Flows.

How is this project leveraged with other stakeholders/projects/funds: Correlates with the transmission main from the tank into the Southeast developments.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The hydraulic grade line associated in these pressure zones are greater than what can be provided by the City's existing infrastructure. A new ground storage reservoir and pump station will ensure that these pressure zones satisfy the City's hydraulic operating criteria (i.e. operating pressures, fire flows, and storage requirements). Furthermore, additional storage within the system promotes redundancy, provides flexibility for maintenance activities, and allows for future growth.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in costs associated with both general maintenance and energy. Current cost estimate of \$XX.XX annually.

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF30

PROJECT NAME
East Transmission Main

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$7,167,372

DESCRIPTION OF PROJECT

The project consists of a constructing a new transmission main that would ensure adequate water supply capacity for future developments located both east and northeast of the existing distribution system (extending approximately from East Kagy Blvd to Kelly Canyon Rd and Story Hill Rd).

Describe the criticality (i.e., importance) of this project to the operation: Without this transmission main, potable water and fire flows will eventually become insufficient in the east and northeast portions of the City. This main also supplies the future East Mountain Zone, which has a substantial demand.

How is capacity affected by this project: Potable water and fire flows will be provided in the east and northeast portions of the City as this area develops.

How is connectivity affected by this project: This project better connects the east and northeast portions of the City with the supply from the City's WTP. In conjunction with the west transmission mains, it will provide a more looped supply for the majority of the City.

What safety or risk measures are mitigated with this project: This project mitigates the risk of having inadequate potable water and fire flows to the City's east and northeast areas.

What regulations or standards are attained with this project: Potable water and fire flow standards.

How is this project leveraged with other stakeholders/projects/funds: This project leverages improvements in delivery of water due to the Sourdough Main replacement or paralleling. It will also enable siting of storage in the City's east and northeast areas.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The creation of an East Water Transmission Main is necessary to supply adequate water and fire flows to future developments in the eastern portion of the City's distribution system. This transmission line will also provides additional looping and redundancy to the City.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Developer contributions

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF31

PROJECT NAME
Groundwater Test Well

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$400,000					

DESCRIPTION OF PROJECT

Test well drilling, pumping and monitoring and water quality testing at one or more strategic well field sites identified in the 2016 Groundwater Investigation. Input data into transient hydrogeologic model developed with Groundwater Investigation project.

Describe the criticality (i.e., importance) of this project to the operation: Necessary for water right permitting and groundwater well field design.

What regulations or standards are attained with this project: Provides data to move forward with GW development.

How is this project leveraged with other stakeholders/projects/funds: Utilizes hydrogeologic model developed for the Groundwater Investigation and constructs design.

Are there other affected projects: Groundwater well field and transmission design; Groundwater construction.

ALTERNATIVES CONSIDERED

Don't develop a GW supply

ADVANTAGES OF APPROVAL

Test well pumping and monitoring provides aquifer property data to determine sustainable aquifer yield and drawdown characteristics at particular pumping sites. Data informs transient groundwater modeling which is necessary to identify potential adverse effects to existing water rights and to assemble mitigation strategies for water rights permitting.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF32

PROJECT NAME
Groundwater Well Field and Transmission Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$8,000,000			

DESCRIPTION OF PROJECT

Water right permitting and mitigation plan; purchase of mitigation water rights; construction of aquifer recharge or other mitigation infrastructure; acquisition of land for well field site; construction of wells, power, power backup, instrumentation and controls, SCADA, control building and site improvements; and transmission main construction to tie GW supply into the existing system.

Describe the criticality (i.e., importance) of this project to the operation: Absolutely critical for meeting long-range water supply needs and enhancing overall water supply resiliency and redundancy.

How is capacity affected by this project: Increases water supply capacity to meet projected water demands in the future.

How is connectivity affected by this project: Enhances connectivity by providing a redundant water supply source in the event of Sourdough WTP outage.

What safety or risk measures are mitigated with this project: Enhances overall water supply resiliency.

What regulations or standards are attained with this project: Implements IWRP.

How is this project leveraged with other stakeholders/projects/funds: Implements IWRP. Engages agricultural stakeholders.

ALTERNATIVES CONSIDERED

Status quo operation

ADVANTAGES OF APPROVAL

Improve water distribution operations through increased understanding of system operating characteristics. Improve responsiveness to dynamic operating conditions. Facilitate improved access to existing sites now requiring confined space entry procedures. Standardize and improve surge control features throughout system.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Debt service (if any) to construct, power costs, SCADA maintenance, vault maintenance, instrument maintenance, programming libraries

FUNDING SOURCES

Capital funding for water right permitting and water could be augmented with cash in lieu of water rights fund, water fund

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF33

PROJECT NAME
Groundwater Well Field and Transmission Main Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
	\$500,000				

DESCRIPTION OF PROJECT

Design of groundwater well field and transmission main including necessary appurtenances, instrumentation and controls, and DEQ approvals.

Describe the criticality (i.e., importance) of this project to the operation: Necessary for construction of groundwater supply source.

What regulations or standards are attained with this project: DEQ construction approval for groundwater supply source; amendments if needed to other DEQ documents such as Source Water Delineation and Assessment Report and Source Water Protection Plan.

How is this project leveraged with other stakeholders/projects/funds: Utilizes hydrogeologic model developed for the Groundwater Investigation and test well data.

Are there other affected projects: Groundwater Well Field and Transmission Main Construction.

ALTERNATIVES CONSIDERED

Don't develop a GW supply

ADVANTAGES OF APPROVAL

Provides bid plans and cost estimates for construction and obtains DEQ approvals needed for construction.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

N/A

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF35

PROJECT NAME
Lyman Tank and Transmission Main Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$4,800,000		

DESCRIPTION OF PROJECT

Construct a new 5MG storage tank at Lyman, decommission existing Lyman storage tank, Condition Assessment-based repairs of the existing Lyman transmission main, new supply main tie in to new storage tank, new transmission main tie in from new storage tank to existing transmission main, new chlorination/fluoridation feed facility. Decommission Pear Street Booster Station if Hydraulic Grade Line of tank raised to meet Sourdough Tank.

Describe the criticality (i.e., importance) of this project to the operation: The Lyman water supply is a critical element of the city's overall water supply portfolio accounting for roughly 20% of annual supply volume to the city currently. The source provides supply redundancy and resiliency as it is geographically removed from the Sourdough/Hyalite source and provides an independent connection to the distribution system.

How is capacity affected by this project: The effective available water supply is increased since the new storage system will not leak and will expand the number of customers able to be supplied by Lyman water.

How is connectivity affected by this project: Maintains existing connectivity.

What safety or risk measures are mitigated with this project: Likelihood of failure of Lyman supply system dramatically reduced by replaced storage, new transmission and Condition Assessment -based rehab to existing transmission.

How is this project leveraged with other stakeholders/projects/funds: Constructs project design.

ALTERNATIVES CONSIDERED

Status quo operation of existing Lyman system

ADVANTAGES OF APPROVAL

Replaces Lyman storage tank which is at the end of its useful life. Increases effective available supply as existing tank leaks at a rate exceeding 100 gpm. If new storage sited at an elevation to match HGL of Sourdough Tank then Pear Street Booster Station can be decommissioned which reduces annual operating costs for power. CA-based rehab reduces likelihood of failure of critical transmission infrastructure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Anticipated operating cost reduction related to pear street booster decommissioning. Operating costs for new tank and transmission comparable to

FUNDING SOURCES

60% Water Impact Fees (\$4,800,000); 40% Water Utility (\$3,200,000)

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF36

PROJECT NAME
West Transmission Main Planning Study

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$400,000

DESCRIPTION OF PROJECT

Planning study to identify key design parameters for WTM, right of way, route alignment, and timing for bringing WTM online.

Describe the criticality (i.e., importance) of this project to the operation: Eventual construction of the West Transmission Main is necessary to provide redundancy for the Sourdough Transmission Main as well as adequate potable water and fire flow for the City's west, northwest and north areas.

How is capacity affected by this project: Provides capacity sufficient for UBO and delivery of 34 MGD from future WTP expansion.

How is efficiency improved with this equipment: Conveyance of water to the City's western, northwestern and northern areas will be more efficient than moving water through downtown and existing PRVs.

Are there other affected projects: All subsequent phases of West Transmission Main design and construction.

ALTERNATIVES CONSIDERED

Defer the study further out, deferring eventual construction of the West Transmission Main.

ADVANTAGES OF APPROVAL

What are the implications of deferring the purchase of this equipment: Delay of eventual design and construction of the West Transmission Main, continued reliance on the single-point-of-failure Sourdough Transmission Main to convey water to the City from the WTP. Identify key design parameters, right-of-way, route and permitting for the West Transmission Main, so that design and construction can proceed once funds are available.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF37

PROJECT NAME
Sourdough Canyon Natural Storage - Planning and Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$500,000			

DESCRIPTION OF PROJECT

Alternatives planning and design for sourdough natural storage enhancement project.

Describe the criticality (i.e., importance) of this project to the operation: Increases resiliency of Sourdough watershed to drought impacts and provides augmented water supply, protects existing municipal water rights.

How is capacity affected by this project: Augments water supply capacity of sourdough watershed.

What is the impact (i.e., scope-of-use) for this equipment: Impacts the City's long-term water rights and helps close the approaching water supply gap.

How is this project leveraged with other stakeholders/projects/funds: Potential FEMA involvement for flood control.

Are there other affected projects: Final sizing of West Transmission Main, also informs long-term groundwater needs.

ALTERNATIVES CONSIDERED

Postpone

ADVANTAGES OF APPROVAL

Implements IWRP, augments Sourdough water supply capacity, and increases resiliency of Sourdough water supply by providing 'storage' to reduce the susceptibility of drought impacts

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

Potential opportunity for federal drought and flood hazard mitigation grants, state RRGL funds. Cash in lieu of water rights fund.

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF38

PROJECT NAME
Sourdough Canyon Natural Storage Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$8,000,000

DESCRIPTION OF PROJECT

Construction of natural water storage infrastructure alternatives planned and designed in project WFP_53 that augment water supply availability, reduce susceptibility to drought impacts, and maximize existing water rights.

Describe the criticality (i.e., importance) of this project to the operation: Provides enhanced water supply availability to support future growth and development.

How is capacity affected by this project: Increases water supply availability
What safety or risk measures are mitigated with this project: Reduces drought susceptibility and peak runoff impacts.

What regulations or standards are attained with this project: Implements IWRP.

How is this project leveraged with other stakeholders/projects/funds: To be determined. Leveraging potential exists with federal/state grants, federal/state cooperative agreements (consistent with fed initiatives to increase drought resiliency in western states and consistent with recommendations in state water plan to increase storage in closed basins). Project implements recommendations of the IWRP to develop storage in Sourdough.

ALTERNATIVES CONSIDERED

Project specific alternatives evaluated with project WFP_53. Water supply alternatives evaluated in IWRP.

ADVANTAGES OF APPROVAL

Augments Sourdough Creek water supply, reduces susceptibility to drought impacts and maximizes existing water rights

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Unknown

FUNDING SOURCES

Federal hazard mitigation grants (drought hazard and flood hazard). State renewable resource grant and loan program.

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF39

PROJECT NAME
Sourdough Transmission Main – Phase I

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
\$2,790,000					

DESCRIPTION OF PROJECT

The project consists of constructing approximately 3,000 feet of 48-inch DIP transmission main, starting at the WTP, cutting the corner at Nash and Sourdough, to tie into the existing transmission main.

Describe the criticality (i.e., importance) of this project to the operation: This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank.
How is capacity affected by this project: This transmission main will provide additional capacity from the WTP to the Sourdough reservoir.

How is connectivity affected by this project: This project improves connectivity between the WTP and the City.

What safety or risk measures are mitigated with this project: The risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main. Provides redundant transmission from WTP to tie in point with existing 30" bar-wrapped concrete transmission main.

What regulations or standards are attained with this project: Water supply security.

How is this project leveraged with other stakeholders/projects/funds: This project's provides full hydraulic capacity of new Sourdough WTP storage tank.

Are there other affected projects: Sourdough WTP Storage Tank and Phase 2 of Sourdough Transmission Main.

ALTERNATIVES CONSIDERED

Conduct a condition assessment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary. Lose hydraulic capacity of new sourdough WTP storage tank due to HGL of existing sourdough transmission main.

ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure. 48" DIP provides hydraulics necessary to overcome friction losses and realize full capacity of new Sourdough WTP storage tank.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

90% Impact Fees (\$2,790,000); 10% (\$310,000) Water Utility

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF40

PROJECT NAME
Sourdough Transmission Main – Phase 2

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
		\$4,320,000			

DESCRIPTION OF PROJECT

The project consists of constructing approximately 8,000 feet of 30-inch DIP transmission main, which will start at the end of the Phase I connection point and go to the Sourdough Plant.

Describe the criticality (i.e., importance) of this project to the operation: This project is critical to overcome vulnerabilities presented by the aging and unknown condition of the existing transmission main between the City's WTP and Sourdough Tank.
How is capacity affected by this project: This transmission main will provide additional capacity from the WTP to the Sourdough reservoir.

How is connectivity affected by this project: This project improves connectivity between the WTP and the City.

What safety or risk measures are mitigated with this project: The risk of not having adequate potable water and fire flow supplies to the City in the event of a failure to the existing bar-wrapped 30" main.

What regulations or standards are attained with this project: Water supply security.

How is this project leveraged with other stakeholders/projects/funds: This project's cost and administration could be improved if combined with the new 3,000 feet of 48" bypass pipe.

ALTERNATIVES CONSIDERED

Conduct a condition assessment of the existing 30-inch concrete pipe and repair/rehabilitate as necessary.

ADVANTAGES OF APPROVAL

The condition of the existing transmission main from the WTP to the Sourdough reservoir is currently unknown. Approval of this project will provide redundancy for this main, and mitigate the risk and consequence of its failure.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

90% Impact Fees (\$4,320,000); 10% (\$480,000)

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF41

PROJECT NAME
West Transmission Main - Phase I Design

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$2,907,235

DESCRIPTION OF PROJECT

Design of the first phase of the West Transmission Main, the criteria for which would be developed in the West Transmission Main Planning Study (WFP_01b).

Describe the criticality (i.e., importance) of this project to the operation: Reduces the consequence of a failure on the Sourdough Transmission Main, by providing a second pipeline to convey water to the City from the WTP.

How is efficiency improved with this equipment: Water delivery to the City's western side will become more efficient.

What are the implications of deferring the purchase of this equipment: Continued reliance on Sourdough Transmission Main, a single point of failure for conveyance of water from the Sourdough WTP.

Are there other affected projects: Subsequent phases of West Transmission Main design and construction, construction of storage reservoirs on the City's west side.

ALTERNATIVES CONSIDERED

Defer design and construction of West Transmission Main

ADVANTAGES OF APPROVAL

Potential to install the transmission main before significant growth and development occur along the route, reduced consequence of failure to Sourdough Transmission Main

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

FUNDING SOURCES

100% Water Impact Fees

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF42

PROJECT NAME
West Transmission Main - Phases 2-5 Design & Construction

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
					\$61,669,396

DESCRIPTION OF PROJECT

The project consists of remaining phases (2 thru 5) of the west Transmission Main, completing the transmission loop around the city's western flank.

Describe the criticality (i.e., importance) of this project to the operation: Extending the West Transmission Line further north into the City's future western and northwestern developments to ensure adequate potable water and fire flow for west and northwest Bozeman residents.

How is capacity affected by this project: This project will substantially improve water delivery and fire flow capacity in the west and northwest portions of the City.

How is connectivity affected by this project: The northwest portion of the City remains the least well connected area to the distribution system. Flow to the northwest must come through the existing PRVs from the Sourdough and Hilltop Tanks, or from the northeast Lyman source. This main will bring water from the WTP well into the northwest portion of the City.

What safety or risk measures are mitigated with this project: This project mitigates the risk of not having enough potable water or fire flow to serve the City's west residents.

What regulations or standards are attained with this project: Redundant water delivery infrastructure and sufficient fire flow for the central-western and northwestern portions of the City.

How is this project leveraged with other stakeholders/projects/funds: This project will provide the ability for the City to connect additional storage reservoirs on the City's southwest and west to satisfy maximum day demand and fire flows.

Are there other affected projects: Subsequent phases of the West Transmission Main.

ALTERNATIVES CONSIDERED

Do not complete west transmission main loop.

ADVANTAGES OF APPROVAL

Further extending the West Water Transmission Main would provide the following: distribution redundancy, and adequate water supply and fire flows for future development on the City's west and northwest sides.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Developer contributions

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF43

PROJECT NAME
DEBT SERVICE FOR BORROWING - WELL FIELD

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$1,000,000	\$1,000,000	\$10,800,000

DESCRIPTION OF PROJECT

These are the estimated annual amounts owned for borrowing for WIF32 - Well Field and WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The project can be constructed before cash is on hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Water Utility Revenue Bonds will be issued, with repayments made by the Impact Fee Fund.

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF44

PROJECT NAME
DEBT SERVICE FOR BORROWING - LYMAN TANK PROJECT

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
				\$340,000	\$446,000

DESCRIPTION OF PROJECT

These are the estimated annual amounts owned for borrowing for WIF35 - Lyman Tank project.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The project can be constructed before cash is on hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Water Utility Revenue Bonds will be issued, with repayments made by the Impact Fee Fund.

CIP Project Fund
Impact Fees Water

DEPARTMENT
WATER IMPACT FEES

PROJECT NUMBER
WIF45

PROJECT NAME
DEBT SERVICE FOR BORROWING - TRANSMISSION MAIN

- New
- Replacement
- Equipment
- Project

FY18	FY19	FY20	FY21	FY22	Unscheduled
			\$305,000	\$305,000	\$3,750,000

DESCRIPTION OF PROJECT

These are the estimated annual amounts owned for borrowing for WIF40 - Sourdough Transmission Main project. Payments will begin in the fiscal year following borrowing.

ALTERNATIVES CONSIDERED

None

ADVANTAGES OF APPROVAL

The project can be constructed before cash is on hand.

ADDITIONAL OPERATING COSTS IN THE FUTURE, IF FUNDED

Annual Operating & Maintenance Costs: Impact Fees can not be spent on annual operations and maintenance costs. The Water Utility will see incremental increases in general maintenance costs.

FUNDING SOURCES

Water Utility Revenue Bonds will be issued, with repayments made by the Utility (10%) and Impact Fee Fund (90%).