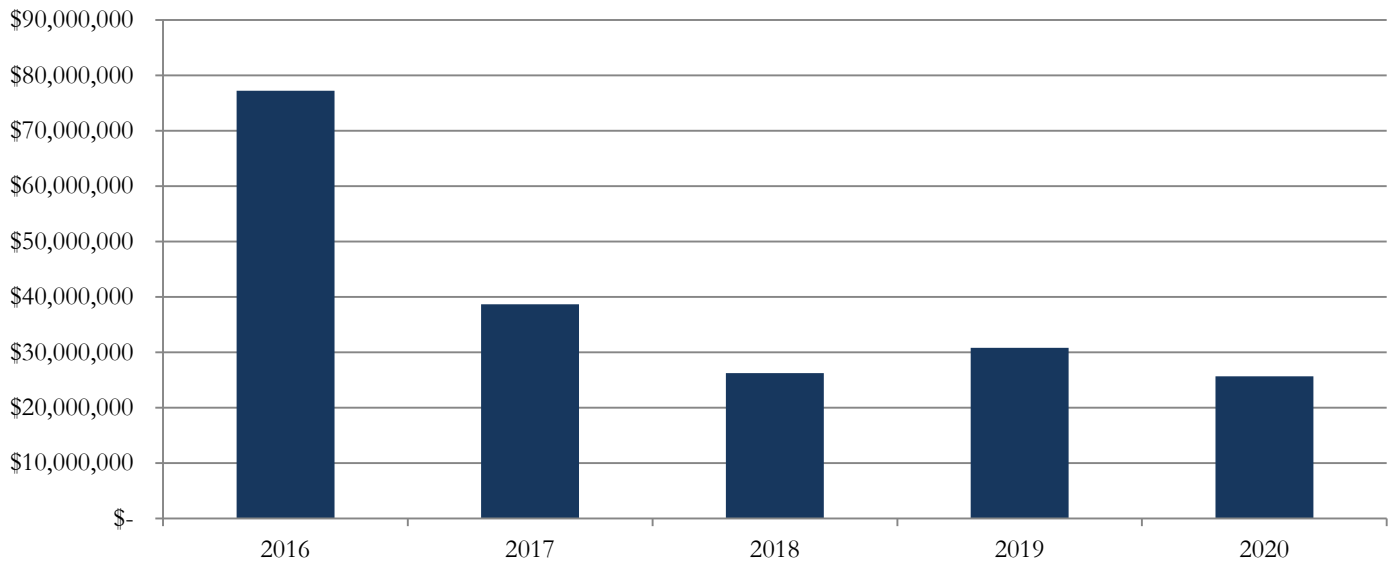


## 2016-2020 CAPITAL IMPROVEMENT PROGRAM SUMMARY - ALL FUNDS

### TOTAL CIP EXPENDITURES BY FUND AND YEAR

<i>Fund</i>	2016	2017	2018	2019	2020	Total
General Fund	\$ 730,799	\$ 1,116,368	\$ 843,880	\$ 733,880	\$ 843,880	\$ 4,268,807
General Long Term Planning	1,194,469	1,359,715	1,467,019	1,628,124	1,080,471	6,729,798
Transportation Fund	2,025,000	2,482,000	445,000	215,000	215,000	5,382,000
Transportation Capital Fund	14,033,775	505,000	4,637,000	4,882,000	3,100,000	27,157,775
Conservation Trust Fund	370,500	122,500	212,500	387,500	217,500	1,310,500
Parks and Rec Capital	4,425,000	300,000	2,000,000	-	-	6,725,000
Fire Capital	245,864	6,265,065	-	-	-	6,510,929
Water Fund	3,281,945	2,218,502	2,363,000	4,032,641	7,260,934	19,157,022
Water Resource Fund	36,528,303	14,883,990	6,005,830	9,489,862	4,276,033	71,184,018
Stormwater Fund	2,950,062	579,902	504,864	2,346,493	1,830,375	8,211,696
Wastewater Fund	4,328,521	3,705,360	3,682,636	4,630,951	4,635,790	20,983,258
Development Services Fund	2,500,000	-	-	-	-	2,500,000
Community Center Fund	812,000	190,000	65,000	370,000	-	1,437,000
Fleet Fund	2,849,288	4,668,065	3,805,602	2,012,368	2,071,032	15,406,355
Golf Fund	953,446	247,729	235,795	71,030	110,000	1,618,000
<b>Total by Year</b>	<b>\$ 77,228,972</b>	<b>\$ 38,644,196</b>	<b>\$ 26,268,126</b>	<b>\$ 30,799,849</b>	<b>\$ 25,641,015</b>	<b>\$ 198,582,158</b>

### Planned CIP Expenditures by Year 2016 - 2020



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM SUMMARY - ALL FUNDS

### FUNDING SOURCE SUMMARY

*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

<b>Source</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ 706,971	\$ 911,682	\$ 343,880	\$ 233,880	\$ 343,880	\$ 2,540,293
Transportation Fund Transfer	-	204,686	500,000	500,000	500,000	1,704,686
Police Forfeiture Fund	23,828	-	-	-	-	23,828
Building Use Tax	1,194,469	1,180,327	1,426,162	1,406,304	1,057,152	6,264,414
Utilities Funds	-	179,388	-	-	-	179,388
Transportation Fund	-	-	40,857	-	-	40,857
Community Center Fund	-	-	-	221,820	-	221,820
Golf Fund	-	-	-	-	23,319	23,319
Developer Contributions	2,198,333	-	2,300,000	-	-	4,498,333
Road and Bridge Tax	1,664,000	1,109,000	405,000	175,000	175,000	3,528,000
Sales and Use Tax	1,052,000	230,000	105,000	410,000	40,000	1,837,000
Federal Grant	-	1,617,000	269,000	1,447,000	-	3,333,000
State Contribution	1,924,132	-	400,000	1,480,000	-	3,804,132
CIP Reserves	51,269,280	21,409,104	12,710,335	17,822,216	15,926,741	119,137,676
Impact Fees	720,864	3,715,065	3,350,000	-	-	7,785,929
Use Taxes	3,050,000	71,000	318,000	1,705,000	3,100,000	8,244,000
County Contribution	-	-	-	250,000	-	250,000
Colorado Lottery Funds	370,500	122,500	212,500	387,500	217,500	1,310,500
Interfund Loan Proceeds	-	3,000,000	-	-	-	3,000,000
Metered Water Sales	2,210,000	1,910,000	1,560,000	1,550,000	1,187,382	8,417,382
System Development Fees	1,390,920	461,000	528,469	643,469	333,469	3,357,327
Stormwater Charges	540,750	244,038	209,864	1,292,769	1,266,375	3,553,796
Wastewater Service Charges	910,000	599,786	949,000	959,000	1,030,000	4,447,786
Development Services Capital R	2,500,000	-	-	-	-	2,500,000
Administration Fees	110,000	-	-	-	-	110,000
Vehicle Salvage	118,991	170,732	233,137	244,861	134,651	902,372
Transfers from Other Funds	370,488	1,261,159	171,127	-	195,546	1,998,320
Revenue Bond Proceeds	650,000	150,000	-	-	-	800,000
Charges for Service	303,446	97,729	235,795	71,030	110,000	818,000
DDA TIF Fund	2,500,000	-	-	-	-	2,500,000
Conservation Trust Fund	950,000	-	-	-	-	950,000
Gen. Long Term Plng Fund	500,000	-	-	-	-	500,000
<b>Total by Year</b>	<b>\$ 77,228,972</b>	<b>\$ 38,644,196</b>	<b>\$ 26,268,126</b>	<b>\$ 30,799,849</b>	<b>\$ 25,641,015</b>	<b>\$ 198,582,158</b>

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**GENERAL FUND**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
<b>Police Department</b>						
Body-Worn Cameras / Tasers	166,607	97,488	97,488	97,488	97,488	556,559
Mobile Data Terminals (Toughbooks)	46,392	46,392	46,392	46,392	46,392	231,960
Public Safety Radios	102,661	102,661	-	-	-	205,322
Property & Evidence Room Shelving	-	40,000	-	-	-	40,000
<b>Fire Department</b>						
Public Safety Radios	210,139	210,141	-	-	-	420,280
Automatic CPR Devices	-	80,000	-	-	-	80,000
Power Stretchers	-	200,000	-	-	-	200,000
<b>Community Relations</b>						
Mobile Application Upgrade	-	50,000	-	-	-	50,000
<b>Division of Innovation and Technology</b>						
IT Governance	175,000	85,000	200,000	90,000	200,000	750,000
<b>Parks Department</b>						
Gateway Mesa House Demolition	30,000	-	-	-	-	30,000
Annual Trail Improvements	-	204,686	500,000	500,000	500,000	1,704,686
<b>Total Expenditures by Year</b>	<b>\$ 730,799</b>	<b>\$ 1,116,368</b>	<b>\$ 843,880</b>	<b>\$ 733,880</b>	<b>\$ 843,880</b>	<b>\$ 4,268,807</b>
<b>Project Funding Sources*</b>						
Sales Tax	\$ 706,971	\$ 911,682	\$ 343,880	\$ 233,880	\$ 343,880	\$ 2,540,293
Transportation Fund Transfer	-	204,686	500,000	500,000	500,000	1,704,686
Police Forfeiture Fund	23,828	-	-	-	-	23,828
<b>Total Funding Sources by Year</b>	<b>\$ 730,799</b>	<b>\$ 1,116,368</b>	<b>\$ 843,880</b>	<b>\$ 733,880</b>	<b>\$ 843,880</b>	<b>\$ 4,268,807</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Body-Worn Cameras / Tasers**

Project Number:	70-30	5 Year Historical Total	\$	-
Contact:	Tim Gorman, Commander	2016-2020 Total		556,559
Department:	Police Department	<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>556,559</b>
Category:	Equipment			
Type:	New			
Useful Life:	2.5 Years			

**Description**

This project is intended to accommodate the purchase of body-worn cameras for Patrol Officers. The pricing below includes the following: 66 Officer Safety Plan Licenses (full warranty, unlimited data, and includes the replacement of body-worn cameras every 2.5 years and Tasers every 5 years), 18 basic licenses, 56 body-worn cameras, 10 flex cameras, 4 six-bay docking stations, 46 single-bay docking stations, 1 flex camera spare, 2 body-worn camera spares, 2 days of on-site training, computer aided dispatch and records management integration, two duty cartridges for each Taser, two training cartridges for Taser, yellow handles for Tasers, holsters for all Tasers, 2 additional network switches for the Taser body-worn camera docking stations, signal technology interfaces, internet service provider (ISP) to I-Cloud, data storage and integration licensing.

**Justification**

Video evidence is a silent witness with the ability to present unbiased facts. It is considered to be extremely persuasive, vivid, and unforgettable. Video images are compelling when presented as evidence in court. Juries presented with video evidence will remember far more information than those who simply hear the words without a corresponding visual depiction. In a study conducted by the International Association of Chiefs of Police, prosecutors were asked to rate the value or effectiveness of video evidence in court proceedings. They reported that the presence of video evidence enhances their ability to obtain convictions and increases the number of guilty pleas prior to going to trial. Ninety-three percent reported that video evidence is an effective tool for prosecutors and the majority reported a reduction in the time they actually spent in court.

Please note that the totals below include replacement Tasers that were previously included in the three year financial plan for \$33,020 in 2016 and \$15,240 in 2017 so these amounts are no longer be needed and have been removed. Funds for this project will come from Sales Taxes and the Police Forfeiture Fund. The Police Forfeiture Fund was established in 2013 and accounts for funds received and expended as a result of State or Federal cooperative efforts. Equipment is a permissible use and as a result the Police Department will use collected funds toward the funding of this project.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Body-Worn Cameras / Tasers	\$ 166,607	\$ 97,488	\$ 97,488	\$ 97,488	\$ 97,488	\$ 556,559
<b>Total Expenditures</b>	<b>\$ 166,607</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 556,559</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ 142,779	\$ 97,488	\$ 97,488	\$ 97,488	\$ 97,488	\$ 532,731
Police Forfeiture Fund	23,828	-	-	-	-	23,828
<b>Total Funding Sources</b>	<b>\$ 166,607</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 97,488</b>	<b>\$ 556,559</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	19,080	\$	19,080	\$	19,080	\$	19,080	\$	76,320
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Estimated operating expenditures anticipated as a result of this project are \$19,080 per year. These expenditures are included in the budgeted expenditure amount shown above.

<b>Estimated Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
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No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Mobile Data Terminals (Toughbooks)**

Project Number: 61-30	
Contact: Tim Gorman, Commander	5 Year Historical Total \$ 46,392
Department: Police Department	2016-2020 Total <u>231,960</u>
Category: Technology	<b>CIP Project Total (2011-2020): \$ 278,352</b>
Type: Replacement	
Useful Life: 3 years	

**Description**

This project allows for the replacement of mobile computers in Police vehicles to improve user productivity, while decreasing down time and support costs of older machines. The Police Department continues to add new software for enhanced technology efficiency and some software requirements have led to the need for new computing systems. The amounts shown below include the replacement of 12 mobile data terminals per year in 2016-2020 as this will be an ongoing expense based on the useful life of the mobile computers and the phased approach of replacement at 12 per year.

**Justification**

Currently the Police Department utilizes forty-seven (47) mobile computers that range in age from one (1) year to four (4) years old. As the Police Department grows, this number will increase – limiting the departments ability to replace them as frequently. Officers utilize the mobile computers as their office workstations and this requires the utmost efficiency from the technology.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Mobile Data Terminals (Toughbooks)	\$ 46,392	\$ 46,392	\$ 46,392	\$ 46,392	\$ 46,392	\$ 231,960
<b>Total Expenditures</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 231,960</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ 46,392	\$ 46,392	\$ 46,392	\$ 46,392	\$ 46,392	\$ 231,960
<b>Total Funding Sources</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 46,392</b>	<b>\$ 231,960</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -  
No additional operating expenditures are anticipated as a result of this project as all costs are included above.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -  
No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Public Safety Radios**

Project Number:	78-06				
Contact:	Tim Gorman, Commander and Norris Croom, Deputy Fire Chief	5 Year Historical Total	\$	312,800	
Department:	Police and Fire Departments	2016-2020 Total		625,602	
Category:	Equipment	<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>938,402</b>	
Type:	Replacement				
Useful Life:	10 Years				

**Description**

This project is for the replacement of all public safety radios. The purchase contract was approved by Town Council at the December 16, 2014 meeting and the radios have all been purchased and received by both departments. The amounts shown below include the 2nd (2016) and 3rd (2017) phases of the public safety radio replacement contract. Funding for the radios is provided by the accumulation of sales tax revenue in the unobligated fund balance in the General Fund.

**Justification**

Interoperable communications during emergencies is key to public health and safety. Communications is one area that typically experiences the most challenges during multi-agency responses due to incompatible or inoperable radio systems. In an attempt to solve this issue, Project 25 (or "P25") was initiated by the public safety agencies and manufacturers to establish standards that would allow public safety responders to communicate regardless of the radio system being utilized. Motorola has begun phasing out support for any radio system that does not meet the P25 standard. After 2017, support will not exist for the radios previously utilized by both departments so an upgrade to P25 compliant radios was essential. The Fire and Police Departments are on the State's Digital Trunked Radio System (DTRS) and by their direction, all upgrades had to be completed by 2020. The Fire and Police Departments will now be able to communicate with other public safety partners.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Police Department Portable Radios	\$ 102,661	\$ 102,661	\$ -	\$ -	\$ -	\$ 205,322
Fire Department Portable Radios	210,139	210,141	-	-	-	420,280
<b>Total Expenditures</b>	<b>\$ 312,800</b>	<b>\$ 312,802</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 625,602</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ 312,800	\$ 312,802	\$ -	\$ -	\$ -	\$ 625,602
<b>Total Funding Sources</b>	<b>\$ 312,800</b>	<b>\$ 312,802</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 625,602</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No future repair costs or software upgrade costs are anticipated as the E911 Authority Board funds these areas. The E911 Board is responsible for administering the installation, operation, maintenance, upgrade and enhancement of emergency communication services to all member agencies. They are responsible for only services within the confines of Douglas County unless the Board agrees to services beyond the boundaries. The board of directors consists of representatives from the Douglas County Sheriff's Office, Castle Rock Fire, Castle Rock Police, Franktown Fire, Larkspur Fire, Lone Tree Police, Parker Police, and South Metro Fire.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Automatic CPR Devices**

Project Number: 70-30

Contact: Norris Croom, Deputy Fire Chief

Department: Fire Department

Category: Equipment

Type: New

Useful Life: 5 Years

5 Year Historical Total \$ -

2016-2020 Total 80,000

**CIP Project Total (2011-2020): \$ 80,000**

**Description**

This project accommodates the purchase of five automatic cardiopulmonary resuscitation (CPR) devices, one for each medic unit at a cost of approximately \$16,000 each, for a total project cost of \$80,000. The Fire Department does not currently have any of these devices.

**Justification**

Current personnel are at risk of injury while performing CPR in the back of medic units while transporting a cardiac arrest patient to the hospital. In order to provide adequate and efficient CPR, Fire personnel have to be unbelted and standing over the patient in the back of a moving medic unit. There is a significant amount of risk in doing this because any severe driving action or accident can result in Fire personnel being thrown around in the back of a medic unit and being injured as a result. Additionally, continuous, consistent CPR (at a rate of at least 100 compressions per minute) must be performed to ensure a positive outcome which means that personnel performing CPR should be switched out every two to three minutes.

Automatic CPR devices have been developed that provide continuous CPR needed without an actual person performing the CPR. These devices are designed to improve outcomes of sudden cardiac arrest and allow for better provider safety at the same time. They allow all personnel to remain seated and belted in a moving vehicle while the patient receives quality CPR. The device also reduces the number of people needed in the back of the medic unit as the device does not have to be switched out every two to three minutes. The device can also be applied to the patient on the scene, again providing continuous, quality CPR at the recommended rate of at least 100 compressions per minute.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Automatic CPR Devices	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ 80,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 80,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 80,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ -	\$ 80,000	\$ -	\$ -	\$ -	\$ 80,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 80,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 80,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ 2,000	\$ 2,000	\$ 2,000	\$ 6,000
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Additional expenditures would include an annual maintenance and inspection at an estimated cost of \$2,000 per year and this amount is included in the General Fund.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional revenue is anticipated as a result of this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Power Stretchers

Project Number: 70-30

Contact: Norris Croom, Deputy Fire Chief

Department: Fire Department

Category: Equipment

Type: New

Useful Life: 5-7 Years

5 Year Historical Total \$ -

2016-2020 Total 200,000

**CIP Project Total (2011-2020): \$ 200,000**

### Description

This project is intended to accommodate the purchase of five Power Stretchers, one for each medic unit at a cost of approximately \$40,000 each, for a total project cost of \$200,000 in 2017.

### Justification

In each of the Fire Department's five medic units, there is a manually operated stretcher to move patients from the scene to the medic unit and from the medic unit to the hospital. Manually operated means that personnel have to physically lift the stretcher into and out of the medic units. As our population has continued to increase in weight, it is not uncommon for personnel to lift 300 pounds or more into and out of units. Patients of even greater weight are being seen which further increases the overall amount of weight personnel are required to move. This creates a significant risk to personnel in trying to safely load and unload patients from the medic units.

The Fire Department has mitigated this issue, to a degree, by ensuring there are a sufficient number of personnel on the scene of a call to assist in lifting and loading larger patients into the medic units. When the medic unit arrives at the hospital, the crew of two is then responsible for unloading a patient that may have required four people to load. Additionally, there are certain calls where the medic unit responds solo and does not have additional personnel to assist with loading patients. Lifting larger patients can pose a significant risk of back injuries to our personnel, and considering that 65% of calls are for EMS, personnel are exposed to this risk several times a day. Considering the average back injury costs an estimated \$16,000 (not including time off of work), two incidents equal the cost of one power stretcher. By implementing this project, the risk of lifting injuries to personnel will be reduced while making it safer for patients with lower risk of being dropped or personnel not being able to lift them in and out of medic units.

Expenditures	2016	2017	2018	2019	2020	Total
Power Stretchers	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 200,000</b>
Funding Sources	2016	2017	2018	2019	2020	Total
Sales Tax	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 200,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated as a result of this project as all costs are included above.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Mobile Application Upgrade**

Project Number: 70-43	5 Year Historical Total \$ -
Contact: Karen Carter, Creative Services Supervisor	2016-2020 Total <u>50,000</u>
Department: Deputy Town Manager	<b>CIP Project Total (2011-2020): \$ 50,000</b>
Category: Technology	
Type: Upgrade	
Useful Life: 5 Years	

**Description**

This project will upgrade the existing mobile application to connect to existing third party platforms that will allow residents to report many different items such as potholes, animal control needs, traffic signal problems, various water issues and public safety concerns. Included are the current platforms such as the Report A Concern, CODERED and ePolice Reporting functions that are available on CRgov.com.

**Justification**

Improvements to the mobile application will enhance communication channels and information sharing with the citizens in the Town of Castle Rock.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Upgrade	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### IT Governance

Project Number: 70-43

Contact: Jenn Jaeger, Chief Technology Officer

Department: Division of Innovation and Technology

Category: Technology

Type: New

Useful Life: 5 Years

5 Year Historical Total \$ 297,162

2016-2020 Total 750,000

**CIP Project Total (2011-2020): \$ 1,047,162**

### Description

IT Governance includes individual projects to support Town infrastructure and to benefit from new technologies. Only projects classified as capital are included on this list of the identified 2016 IT Governance projects. Specific projects are proposed annually and estimated amounts are identified for outgoing years. The projects planned for 2016 are as follows:

- Cartegraph Operations Management System - Asset Management for Public Works, Parks and Recreation and "Report a Concern" app for an estimated cost of \$70,400
- Aerohive Security - Security for wi-fi access points Townwide totaling \$16,680
- Trimble GPS - Survey grade GPS device to accurately locate Town assets and acquire spatial data costing \$32,037
- Conference Room Upgrades - To meet professional standards and to replace retired and failing devices for \$55,883

### Justification

These projects provide a backbone infrastructure for business continuity, new technology, increased performance at lower costs and takes advantage of new processes and efficiencies.

Expenditures	2016	2017	2018	2019	2020	Total
IT Governance	\$ 175,000	\$ 85,000	\$ 200,000	\$ 90,000	\$ 200,000	\$ 750,000

<b>Total Expenditures</b>	<b>\$ 175,000</b>	<b>\$ 85,000</b>	<b>\$ 200,000</b>	<b>\$ 90,000</b>	<b>\$ 200,000</b>	<b>\$ 750,000</b>
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Funding Sources	2016	2017	2018	2019	2020	Total
Sales Tax	\$ 175,000	\$ 85,000	\$ 200,000	\$ 90,000	\$ 200,000	\$ 750,000

<b>Total Funding Sources</b>	<b>\$ 175,000</b>	<b>\$ 85,000</b>	<b>\$ 200,000</b>	<b>\$ 90,000</b>	<b>\$ 200,000</b>	<b>\$ 750,000</b>
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<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional operating expenditures are anticipated as a result of this project.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Gateway Mesa House Demolition**

Project Number: 30-70		5 Year Historical Total	\$	-
Contact: Jeff Smullen, Park Planning and Construction Manager		2016-2020 Total		30,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>30,000</b>
Category: Parks/Trails/Open Space				
Type: Removal				
Useful Life: N/A				

**Description**

There is currently a vacant house on the Gateway Mesa Open Space property which will be demolished and removed with this project.

**Justification**

This structure has been repeatedly vandalized, is uninhabitable and needs to be removed for both safety (asbestos and deterioration) and restoration of the open space.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
House Demolition	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 30,000
<b>Total Expenditures</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 30,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales Tax	\$ 30,000	\$ -	\$ -	\$ -	\$ -	\$ 30,000
<b>Total Funding Sources</b>	<b>\$ 30,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 30,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Annual Trail Improvements**

Project Number: 75-14		
Contact: Jeff Smullen, Park Planning and Construction Manager	5 Year Historical Total	\$ 1,864,465
Department: Parks & Recreation Department	2016-2020 Total	1,704,686
Category: Parks/Trails	<b>CIP Project Total (2011-2020):</b>	<b>\$ 3,569,151</b>
Type: New		
Useful Life: 50 Year		

**Description**

Annual Trail Improvements are funded by sales tax, a portion of which was enacted by voters to fund trail improvements throughout Castle Rock. As a result, the trails account receives \$500,000 annually from a portion of sales tax through the Town's Transportation Fund in addition to outside contributions, such as grant support when available. Public Works and the Parks and Recreation Department have worked to evaluate all potential projects and create a capital plan that addresses priorities for both side paths and trails. All funds from 2016, and a portion of 2017 funds, are planned for use in 2015 for the construction of a pedestrian bridge over Wolfensberger Road that will connect trails at Philip S. Miller Park and Ridgeline Open Space. Therefore, no funds will be available for 2016 projects. Beginning in 2017, funds will be used for planning efforts for the East Plum Creek Trail. Construction of the East Plum Creek Trail heading south to Crystal Valley Parkway will occur in 2018, 2019 and 2020.

**Justification**

On an average monthly basis, both the Meadows Parkway and the Festival Park locations see approximately 9,000 visitors each. There are approximately 300 visitors per day on an average during the summer months. The Plum Creek Trail extension completes the missing Town connection from downtown to Crystal Valley Ranch and completes the Town's portion of the Front Range Trail along East Plum Creek Trail. The Lanterns Development will construct a trail section to Bell Mountain Ranch and Douglas County will complete a portion from Bell Mountain Ranch to Greenland Open Space. The Town's entire portion of the Front Range Trail along East Plum Creek Trail will be 8 miles long when complete.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction Contracts	\$ -	\$ 204,686	\$ 500,000	\$ 500,000	\$ 500,000	\$ 1,704,686
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 204,686</b>	<b>\$ 500,000</b>	<b>\$ 500,000</b>	<b>\$ 500,000</b>	<b>\$ 1,704,686</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Transportation Fund Transfer	\$ -	\$ 204,686	\$ 500,000	\$ 500,000	\$ 500,000	\$ 1,704,686
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 204,686</b>	<b>\$ 500,000</b>	<b>\$ 500,000</b>	<b>\$ 500,000</b>	<b>\$ 1,704,686</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Expenses are variable depending on scope of the project, type of trail surface and potential volunteer support. Maintenance of the existing trail system is budgeted at \$558,415 for 2016 and is budgeted in the General Fund - Open Space Division.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**GENERAL LONG TERM PLANNING FUND**

**DEPUTY TOWN MANAGER**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Fiber Line	\$ 237,000	\$ -	\$ -	\$ -	\$ -	\$ 237,000
Building Improvements	250,000	250,000	250,000	250,000	250,000	1,250,000
Parking Lot Improvements	179,417	382,989	372,184	472,039	138,911	1,545,540
Park Concrete Repair	79,000	15,000	10,000	24,500	-	128,500
Cisco Devices	153,200	169,400	206,000	231,000	269,500	1,029,100
Microsoft Licensing Agreement	81,900	90,000	90,000	90,000	100,000	451,900
Server Replacement	39,984	45,984	45,000	45,000	57,000	232,968
Computer Replacement Program	90,568	90,342	90,116	89,000	87,000	447,026
Storage Replacement Program	26,700	34,900	45,719	59,435	77,860	244,614
Commvault Licensing	16,200	21,600	27,000	32,400	43,200	140,400
UPS (Battery Backup) Replacement	27,000	27,000	27,000	27,000	27,000	135,000
Synthetic Turf Replacement	-	216,000	295,000	295,000	-	806,000
Wireless Device Replacement	13,500	16,500	9,000	12,750	30,000	81,750
<b>Total Expenditures by Year</b>	<b>\$ 1,194,469</b>	<b>\$ 1,359,715</b>	<b>\$ 1,467,019</b>	<b>\$ 1,628,124</b>	<b>\$ 1,080,471</b>	<b>\$ 6,729,798</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 1,194,469	\$ 1,180,327	\$ 1,426,162	\$ 1,406,304	\$ 1,057,152	\$ 6,264,414
Utilities Funds	-	179,388	-	-	-	179,388
Transportation Fund	-	-	40,857	-	-	40,857
Community Center Fund	-	-	-	221,820	-	221,820
Golf Fund	-	-	-	-	23,319	23,319
<b>Total Funding Sources by Year</b>	<b>\$ 1,194,469</b>	<b>\$ 1,359,715</b>	<b>\$ 1,467,019</b>	<b>\$ 1,628,124</b>	<b>\$ 1,080,471</b>	<b>\$ 6,729,798</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Fiber Line**

Project Number: 76-33  
 Contact: Jenn Jaeger, Chief Technology Officer  
 Department: Division of Innovation and Technology  
 Category: Technology  
 Type: Repair  
 Useful Life: 13 Years

5 Year Historical Total \$ 560,431  
 2016-2020 Total 237,000  
**CIP Project Total (2011-2020): \$ 797,431**

**Description**

This project will accomplish the repair and enhancement of current fiber infrastructure. The three year fiber project will cease at the end of 2016, concluding the scope of fiber infrastructure to create a self-healing ring between Town facilities that provides network connectivity in the case of an inadvertent fiber splice. If any segment of the ring shall be interrupted, the data traffic takes to the opposite direction in the ring, around the break allowing for continued business production. Phase 1 of the project provided fiber splicing to existing runs along Perry Street, continuing under I-25 to the MAC. Phase 2 of the project runs fiber north of the MAC, across Wolfensberger to Meadows Parkway. The last phase will be complete in 2016 and will tie the ring from Meadows Parkway to our existing fiber on the east side of I-25.

**Justification**

As Town facilities are added, and/or renovated, fiber is necessary to connect those buildings with the Town's data network so employees are able to continue to work. Additionally, areas of repair and/or enhancements occur occasionally and require funding from this program, including but not limited to, Intergovernmental Agreements with Douglas County and CDOT to share resources beneficial to all parties (such as intersection cameras, traffic control and emergency access to radio communications).

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Equipment & Installation	\$ 237,000	\$ -	\$ -	\$ -	\$ -	\$ 237,000
<b>Total Expenditures</b>	<b>\$ 237,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 237,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 237,000	\$ -	\$ -	\$ -	\$ -	\$ 237,000
<b>Total Funding Sources</b>	<b>\$ 237,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 237,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Building Improvements**

Project Number: 70-20	
Contact: Kristin Zagurski, Management Analyst	5 Year Historical Total \$ 448,903
Department: Facilities Department	2016-2020 Total <u>1,250,000</u>
Category: Building	<b>CIP Project Total (2011-2020): \$ 1,698,903</b>
Type: Repair	
Useful Life: 10-15 Years	

**Description**

Building improvements in 2016 will include upgrades to Fire Stations 154 and 155 including aesthetic improvements like paint and carpet, as well as functional repairs to the stations' kitchens. These improvements are estimated to be up to \$80,000 for each of the two stations. Other improvements in 2016 include HVAC repairs at Fire Station 151 for \$15,000 and renovations to the main floor of the Police Department totaling \$75,000. A placeholder amount of \$250,000 is budgeted in future years to accommodate necessary building improvements.

**Justification**

Ongoing facility maintenance and improvement projects are necessary as Town facilities grow older. The projects reflected above resolve end of life issues. Additionally, the improvements will address overall aesthetics while also ensuring facilities are properly maintained.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Facility Improvements	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,250,000
<b>Total Expenditures</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 1,250,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 250,000	\$ 1,250,000
<b>Total Funding Sources</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 250,000</b>	<b>\$ 1,250,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Parking Lot Improvements

Project Number: 70-10

Contact: Carl Armijo, CIP Engineering Manager

Department: Public Works Department

Category: Infrastructure

Type: Repair

Useful Life: 10-15 Years

5 Year Historical Total \$ 309,344

2016-2020 Total 1,545,540

**CIP Project Total (2011-2020): \$ 1,854,884**

### Description

Town owned public parking lots require regular repair and improvements. Portions of the improvements will be completed through the General Long-Term Planning Fund, while other components of the project will occur in the funds that will benefit based on Town facility. For example, the Utilities Funds, Golf Course Fund and Community Center Fund will incur expenditures related to those parking lot improvements in the years shown below.

### Justification

Parking lot inspections occurred in 2014 to determine what repairs needed to be performed at various parking lots. Revised cost estimates have been established in 2015 to reflect more accurate pricing and scope of work. This work is necessary in order to maintain functional and safe parking lots at Town facilities.

Expenditures	2016	2017	2018	2019	2020	Total
Parks & Trailhead Parking Lots	\$ 126,187	\$ 119,788	\$ 331,327	\$ 125,014	\$ 67,503	\$ 769,819
Facilities Building Parking Lot		52,364				52,364
Town Hall Parking Lot				125,205		125,205
Fire Station Parking Lots	53,230	31,449			17,892	102,571
Police Department Parking Lot					30,197	30,197
Utilities Parking Lots		179,388				179,388
Red Hawk Maintenance Shop					23,319	23,319
Service Center Parking Lots			40,857			40,857
Community Center Parking Lots				221,820		221,820
<b>Total Expenditures</b>	<b>\$ 179,417</b>	<b>\$ 382,989</b>	<b>\$ 372,184</b>	<b>\$ 472,039</b>	<b>\$ 138,911</b>	<b>\$ 1,545,540</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Building Use Tax	\$ 179,417	\$ 203,601	\$ 331,327	\$ 250,219	\$ 115,592	\$ 1,080,156
Transportation Fund			40,857			40,857
Utilities Funds		179,388				179,388
Golf Fund					23,319	23,319
Community Center Fund				221,820		221,820
<b>Total Funding Sources</b>	<b>\$ 179,417</b>	<b>\$ 382,989</b>	<b>\$ 372,184</b>	<b>\$ 472,039</b>	<b>\$ 138,911</b>	<b>\$ 1,545,540</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no additional operating expenses anticipated and maintenance costs in each area may decrease due to the site improvement.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Park Concrete Repair**

Project Number: 70-10

Contact: Jeff Smullen, Park Planning & Construction Manager

Department: Parks & Recreation Department

Category: Parks/Trails

Type: Replacement

Useful Life: 15 Years

5 Year Historical Total \$ 309,344

2016-2020 Total 128,500

**CIP Project Total (2011-2020): \$ 437,844**

**Description**

This project is for concrete replacement within the parks, open space and trails system that are potential safety hazards. Budgeted amounts include the following repairs in each year:

- 2016: Founders Park (\$44k), Butterfield Park (\$20k) and Memmen Ridge (\$15k)
- 2017: Centennial Park (\$15k)
- 2018: Gemstone Park (\$5k) and Mitchell Gulch (\$5k)
- 2019: Matney (\$2,500) and Metzler Ranch (\$22k)

**Justification**

Staff has visited the sites listed above and documented the identified safety hazards. It is imperative that the concrete be replaced for the safety of individuals utilizing these areas.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Site Improvements	\$ 79,000	\$ 15,000	\$ 10,000	\$ 24,500	\$ -	\$ 128,500
<b>Total Expenditures</b>	<b>\$ 79,000</b>	<b>\$ 15,000</b>	<b>\$ 10,000</b>	<b>\$ 24,500</b>	<b>\$ -</b>	<b>\$ 128,500</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 79,000	\$ 15,000	\$ 10,000	\$ 24,500	\$ -	\$ 128,500
<b>Total Funding Sources</b>	<b>\$ 79,000</b>	<b>\$ 15,000</b>	<b>\$ 10,000</b>	<b>\$ 24,500</b>	<b>\$ -</b>	<b>\$ 128,500</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Cisco Devices**

Project Number: 76-80

Contact: Jenn Jaeger, Chief Technology Officer

Department: Division of Innovation and Technology

Category: Technology

Type: Replacement

Useful Life: 5 Years

5 Year Historical Total \$ 317,727

2016-2020 Total 1,029,100

**CIP Project Total (2011-2020): \$ 1,346,827**

**Description**

This project will replace a portion of our Cisco networking devices including any that are five years or older. Network devices are an essential requirement to deliver data between computers and servers. If a Cisco network device fails, data cannot be delivered, and employee productivity is greatly reduced. Maintaining these devices is very important for daily work of almost every Town employee.

**Justification**

The Town is no longer able to buy support for some of these devices, and the likelihood of failure increases with age. Proactive replacement of the devices will avoid excessive downtime from an unscheduled failure while allowing staff to find and buy the best replacement option. Cisco devices grow at an annual rate of 17%. Replacement costs are estimated as follows, per year:

- 2016 based on 20% of 132 devices
- 2017 based on 20% of 154 devices
- 2018 based on 20% of 180 devices
- 2019 based on 20% of 210 devices
- 2020 based on 20% of 245 devices

The cost of devices vary, but average \$5,500 each. In addition to annual replacement costs, two Cisco VPN ASA devices must be replaced in 2016 (Town VPN), and two more in 2018 (Police VPN and SCADA VPN) at a cost of \$4,000 each. The Fortigate clusters must also be replaced in 2018 for a total of \$90,000.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Equipment	\$ 153,200	\$ 169,400	\$ 206,000	\$ 231,000	\$ 269,500	\$ 1,029,100
<b>Total Expenditures</b>	<b>\$ 153,200</b>	<b>\$ 169,400</b>	<b>\$ 206,000</b>	<b>\$ 231,000</b>	<b>\$ 269,500</b>	<b>\$ 1,029,100</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 153,200	\$ 169,400	\$ 206,000	\$ 231,000	\$ 269,500	\$ 1,029,100
<b>Total Funding Sources</b>	<b>\$ 153,200</b>	<b>\$ 169,400</b>	<b>\$ 206,000</b>	<b>\$ 231,000</b>	<b>\$ 269,500</b>	<b>\$ 1,029,100</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Microsoft Licensing Agreement**

Project Number: 76-81

Contact: Jenn Jaeger, Chief Technology Officer

Department: Division of Innovation and Technology

Category: Technology

Type: Upgrade

Useful Life: 3 Years

5 Year Historical Total \$ 196,942

2016-2020 Total 451,900

**CIP Project Total (2011-2020): \$ 648,842**

**Description**

This licensing agreement allows the Town to use the latest version of the Microsoft operating system, office productivity software and backend server licenses. Using this unique enterprise agreement allows the Town to spread the cost of new software over multiple years while guaranteeing the ability to upgrade if a newer version comes to market. The current contract is for three years (May 31, 2013-May 31, 2016). An annual true-up is required in this agreement to purchase new licenses added over the past 12 months. The current true-up cost per workstation is \$593.

**Justification**

Not upgrading to newer versions of the Microsoft software such as Office and Windows, the Town will not be able to purchase new applications since they only work on the latest versions. Microsoft discontinues support for older software versions and most importantly the old versions have significant security risks to hacking. Also, this contract provides enough licenses to be in compliance based on the number of computers in Town.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Software Licenses	\$ 81,900	\$ 90,000	\$ 90,000	\$ 90,000	\$ 100,000	\$ 451,900
<b>Total Expenditures</b>	<b>\$ 81,900</b>	<b>\$ 90,000</b>	<b>\$ 90,000</b>	<b>\$ 90,000</b>	<b>\$ 100,000</b>	<b>\$ 451,900</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 81,900	\$ 90,000	\$ 90,000	\$ 90,000	\$ 100,000	\$ 451,900
<b>Total Funding Sources</b>	<b>\$ 81,900</b>	<b>\$ 90,000</b>	<b>\$ 90,000</b>	<b>\$ 90,000</b>	<b>\$ 100,000</b>	<b>\$ 451,900</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Server Replacement**

Project Number: 76-83		5 Year Historical Total	\$	247,457
Contact: Jenn Jaeger, Chief Technology Officer				
Department: Division of Innovation and Technology				2016-2020 Total
Category: Technology				232,968
Type: Replacement		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>480,425</b>
Useful Life: 5 Years				

**Description**

With nine physical servers used by departments in Town, this project will replace a percentage of them each year to make sure critical business operations continue to run without interruption. These nine physical servers house 100 virtual servers that contain Town data for every application used by Town employees. Just like computers on desktops, the backend servers get old and must be replaced before a critical hardware failure causes excessive downtime. If just one of the physical servers should fail, multiple departments would be affected, resulting in loss of productivity.

**Justification**

Every five years, a server needs to be replaced or the Town risks failures, which could potentially result in major outages. A regular schedule will keep systems healthy and vendor support available.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Server Equipment	\$ 30,000	\$ 36,000	\$ 30,000	\$ 30,000	\$ 42,000	\$ 168,000
UPS Remote Server	9,984	9,984	15,000	15,000	15,000	64,968
<b>Total Expenditures</b>	<b>\$ 39,984</b>	<b>\$ 45,984</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 57,000</b>	<b>\$ 232,968</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 39,984	\$ 45,984	\$ 45,000	\$ 45,000	\$ 57,000	\$ 232,968
<b>Total Funding Sources</b>	<b>\$ 39,984</b>	<b>\$ 45,984</b>	<b>\$ 45,000</b>	<b>\$ 45,000</b>	<b>\$ 57,000</b>	<b>\$ 232,968</b>

**Estimated Operating Expenditures**    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue**                                \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Computer Replacement Program

Project Number:	75-12		
Contact:	Jenn Jaeger, Chief Technology Officer	5 Year Historical Total	\$ 345,462
Department:	Division of Innovation and Technology	2016-2020 Total	447,026
Category:	Technology	<b>CIP Project Total (2011-2020):</b>	<b>\$ 792,488</b>
Type:	Replacement		
Useful Life:	3 Years		

#### Description

Town computers are scheduled to be replaced every three years in order to maintain up-to-date systems for employees. A list of replacements, by year, will be supplied by the Division of Innovation and Technology to appropriately cost allocate replacement desktops by department.

#### Justification

Without replacing Town computers staff would be less productive because their computers will be slow and unstable. The new applications installed by the Town require more power and memory, so upgrading the computers allows staff to use newer applications.

Expenditures	2016	2017	2018	2019	2020	Total
Equipment	\$ 90,568	\$ 90,342	\$ 90,116	\$ 89,000	\$ 87,000	\$ 447,026
<b>Total Expenditures</b>	<b>\$ 90,568</b>	<b>\$ 90,342</b>	<b>\$ 90,116</b>	<b>\$ 89,000</b>	<b>\$ 87,000</b>	<b>\$ 447,026</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Building Use Tax	\$ 90,568	\$ 90,342	\$ 90,116	\$ 89,000	\$ 87,000	\$ 447,026
<b>Total Funding Sources</b>	<b>\$ 90,568</b>	<b>\$ 90,342</b>	<b>\$ 90,116</b>	<b>\$ 89,000</b>	<b>\$ 87,000</b>	<b>\$ 447,026</b>

**Estimated Operating Expenditures**    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue**                            \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional revenue is anticipated as a result of this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Commvault Licensing**

Project Number: 70-43

Contact: Jenn Jaeger, Chief Technology Officer

Department: Division of Innovation and Technology

Category: Technology

Type: Upgrade

Useful Life: 5 Years

5 Year Historical Total \$ 58,574

2016-2020 Total 140,400

**CIP Project Total (2011-2020): \$ 198,974**

**Description**

This project will add additional Commvault backup storage licensing each year to perform backups on Townwide data.

**Justification**

As Townwide storage increases at an average of 25% annually, Commvault licensing must be increased to meet the storage capacity for backups.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Software	\$ 16,200	\$ 21,600	\$ 27,000	\$ 32,400	\$ 43,200	\$ 140,400
<b>Total Expenditures</b>	<b>\$ 16,200</b>	<b>\$ 21,600</b>	<b>\$ 27,000</b>	<b>\$ 32,400</b>	<b>\$ 43,200</b>	<b>\$ 140,400</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 16,200	\$ 21,600	\$ 27,000	\$ 32,400	\$ 43,200	\$ 140,400
<b>Total Funding Sources</b>	<b>\$ 16,200</b>	<b>\$ 21,600</b>	<b>\$ 27,000</b>	<b>\$ 32,400</b>	<b>\$ 43,200</b>	<b>\$ 140,400</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.





**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Synthetic Turf Replacement**

Project Number: 78-47		5 Year Historical Total	\$	-
Contact: Jeff Smullen, Park Planning & Construction Manager		2016-2020 Total		806,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>806,000</b>
Category: Parks/Trails				
Type: Replacement				
Useful Life: 10 Years				

**Description**

The synthetic turf field at Butterfield, Gemstone and Matney parks will be reaching their use expectancy of 10 years and will need to be replaced. Replacement is projected to occur in 2017 for Butterfield Park, 2018 for Gemstone Park and 2019 for Matney Park.

**Justification**

Turf on field sites is nearing the end of the expected life and will need to be replaced in order to maintain proper safety levels.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Equipment	\$ -	\$ 216,000	\$ 295,000	\$ 295,000	\$ -	\$ 806,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 216,000</b>	<b>\$ 295,000</b>	<b>\$ 295,000</b>	<b>\$ -</b>	<b>\$ 806,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ -	\$ 216,000	\$ 295,000	\$ 295,000	\$ -	\$ 806,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 216,000</b>	<b>\$ 295,000</b>	<b>\$ 295,000</b>	<b>\$ -</b>	<b>\$ 806,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Wireless Device Replacement**

Project Number: 70-30		5 Year Historical Total	\$	-
Contact: Jenn Jaeger, Chief Technology Officer				
Department: Division of Innovation and Technology				2016-2020 Total
Category: Equipment				81,750
Type: Replacement				<b>CIP Project Total (2011-2020): \$</b>
Useful Life: 3 Years				<b>81,750</b>

**Description**

This project will replace wireless access points for mobility in the field, wi-fi access and connectivity for remote swimming pools every 3 years, prior to end of device and support life.

**Justification**

Wireless access points are necessary for providing wi-fi access in all facilities, video upload for the in-car cameras for the Police Department, connectivity to remote locations (swimming pools, Red Hawk, Facilities), and the Airtight devices which provide security to the wireless devices.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Equipment	\$ 13,500	\$ 16,500	\$ 9,000	\$ 12,750	\$ 30,000	\$ 81,750
<b>Total Expenditures</b>	<b>\$ 13,500</b>	<b>\$ 16,500</b>	<b>\$ 9,000</b>	<b>\$ 12,750</b>	<b>\$ 30,000</b>	<b>\$ 81,750</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Use Tax	\$ 13,500	\$ 16,500	\$ 9,000	\$ 12,750	\$ 30,000	\$ 81,750
<b>Total Funding Sources</b>	<b>\$ 13,500</b>	<b>\$ 16,500</b>	<b>\$ 9,000</b>	<b>\$ 12,750</b>	<b>\$ 30,000</b>	<b>\$ 81,750</b>

**Estimated Operating Expenditures**    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional operating expenses are anticipated as a result of this project.

**Estimated Revenue**                                \$       -    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**TRANSPORTATION FUND**

**PUBLIC WORKS DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Miscellaneous Projects & Studies	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Traffic Safety Improvements	50,000	50,000	50,000	50,000	50,000	250,000
Traffic Signal Program	860,000	600,000	230,000	-	-	1,690,000
Neighborhood Traffic Calming	25,000	25,000	25,000	25,000	25,000	125,000
Development Related Improvements Program	89,000	50,000	50,000	50,000	50,000	289,000
Transportation Master Plan Update	200,000	-	-	-	-	200,000
ADA Ramps	40,000	40,000	40,000	40,000	40,000	200,000
Meadows Parkway Reconstruction	-	1,667,000	-	-	-	1,667,000
Downtown Crosswalks	496,000	-	-	-	-	496,000
Sunset Drive Improvements	160,000	-	-	-	-	160,000
School Beacons Management	55,000	-	-	-	-	55,000
<b>Total Expenditures by Year</b>	<b>\$ 2,025,000</b>	<b>\$ 2,482,000</b>	<b>\$ 445,000</b>	<b>\$ 215,000</b>	<b>\$ 215,000</b>	<b>\$ 5,382,000</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Developer Contributions	\$ 121,000	\$ -	\$ -	\$ -	\$ -	\$ 121,000
Road and Bridge Tax	1,664,000	1,109,000	405,000	175,000	175,000	3,528,000
Sales and Use Tax	240,000	40,000	40,000	40,000	40,000	400,000
Federal Grant	-	1,333,000	-	-	-	1,333,000
<b>Total Funding Sources by Year</b>	<b>\$ 2,025,000</b>	<b>\$ 2,482,000</b>	<b>\$ 445,000</b>	<b>\$ 215,000</b>	<b>\$ 215,000</b>	<b>\$ 5,382,000</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Miscellaneous Projects & Studies**

Project Number: 75-24					
Contact: Bob Goebel, Director of Public Works			5 Year Historical Total	\$	135,719
Department: Public Works Department			2016-2020 Total		250,000
Category: Infrastructure			<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>385,719</b>
Type: Repair					
Useful Life: Variable					

**Description**

Small projects or studies are typically identified during the year that are currently unknown. Examples include miscellaneous concerns like broken sidewalks, or minor drainage issues not previously identified. This program is meant to pay for these items.

**Justification**

Being able to immediately implement small projects as they are identified provides for the best customer service for the public.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Design/Engineering/Construction	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Road and Bridge Tax	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Operational impacts are typically minimal as these small improvements to existing infrastructure fall under existing maintenance operations.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Traffic Safety Improvements

Project Number: 75-25  
 Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Manager      5 Year Historical Total      \$      285,444  
 Department: Public Works Department      2016-2020 Total      250,000  
 Category: Infrastructure      **CIP Project Total (2011-2020):**      \$      **535,444**  
 Type: Repair  
 Useful Life: Variable

#### Description

Small traffic safety studies or projects are typically identified during the year that are currently unknown. Examples include modifications to existing crosswalks, or adding new crosswalks to improve pedestrian safety. This program is meant to pay for these items.

#### Justification

Being able to immediately implement small projects as they are identified provides for the best customer service for the public and aids in improving safety.

Expenditures	2016	2017	2018	2019	2020	Total
Construction	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Road and Bridge Tax	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

**Estimated Operating Expenditures**      \$      -      \$      -      \$      -      \$      -      \$      -      \$      -

Operational impacts are typically minimal as these small improvements to existing infrastructure fall under existing maintenance operations.

**Estimated Revenue**      \$      -      \$      -      \$      -      \$      -      \$      -      \$      -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Traffic Signal Program

Project Number:	75-26		
Contact:	Ryan Germeroth, Transp. Planning & Traffic Engineering Manager	5 Year Historical Total	\$ 1,343,992
Department:	Public Works Department	2016-2020 Total	1,690,000
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 3,033,992</b>
Type:	Upgrade		
Useful Life:	15-20 years		

### Description

This program is utilized to construct new traffic signals that are identified through engineering evaluations, and to signal system changes recommended in the comprehensive townwide system analysis. For 2016, a new traffic signal is planned to be added at Highway 86 and Black Pine Drive at a budgeted cost of \$230,000. A second signal is planned to be installed south of 5th Street on Ridge Road. \$400,000 is also included in 2016 to accomplish phase II of III of the traffic signal system upgrades. This project improves overall communications infrastructure as well as signal controller upgrades. 2017 will be the final year for completing these upgrades and will improve responses to maintenance needs as well as provide for the ability to take over the operations and maintenance of CDOT owned signals.

For years 2017 through 2020, signal projects will be chosen based upon historical trends, judgment, and locations identified by engineering evaluations. Intersections that are close to needing a signal are evaluated annually.

### Justification

Installations improve traffic movement and safety of roadway users. For the signal planned for 2016, \$121,000 of the project cost is funded by a developer contribution for the Liberty Village neighborhood, with the remaining \$739,000 funded by Road and Bridge Taxes. The current software system uses computer technology that is over twenty years old and the main communication software has not been supported by the vendor for the past five years. The existing phone modem system will be replaced with a radio communications system that will speed up communications to and from signals and improve reliability.

Expenditures	2016	2017	2018	2019	2020	Total
Construction/Engineering	\$ 860,000	\$ 600,000	\$ 230,000	\$ -	\$ -	\$ 1,690,000
<b>Total Expenditures</b>	<b>\$ 860,000</b>	<b>\$ 600,000</b>	<b>\$ 230,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,690,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Developer Contributions	\$ 121,000	\$ -	\$ -	\$ -	\$ -	\$ 121,000
Road and Bridge Tax	739,000	600,000	230,000	-	-	1,569,000
<b>Total Funding Sources</b>	<b>\$ 860,000</b>	<b>\$ 600,000</b>	<b>\$ 230,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,690,000</b>

<b>Estimated Operating Expenditures</b>	\$ 2,600	\$ 5,200	\$ 5,200	\$ 5,200	\$ 5,200	\$ 23,400
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The department currently contracts out the maintenance of traffic signal equipment as in-house specialization does not exist. In addition, electricity cost increases also exist with new signal installation. The average electricity and maintenance cost per signal is \$2,600 per year.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Neighborhood Traffic Calming**

Project Number: 75-28  
 Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Manager      5 Year Historical Total      \$      35,397  
 Department: Public Works Department      2016-2020 Total      125,000  
 Category: Infrastructure      **CIP Project Total (2011-2020): \$      160,397**  
 Type: Upgrade  
 Useful Life: Variable

**Description**

These projects are identified through the Town's Neighborhood Traffic Calming Program. This program is utilized to complete projects geared toward encouraging cars to adhere to the posted speed limit, or to reduce the amount of cut-through traffic on residential streets.

**Justification**

Projects are identified through the current policy approved by Town Council and administered by staff. These projects are typically developed during the year as residents request them and certain criteria are met. Examples include the installation of speed cushions on residential streets.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
<b>Total Expenditures</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 125,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Road and Bridge Tax	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
<b>Total Funding Sources</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 25,000</b>	<b>\$ 125,000</b>

**Estimated Operating Expenditures**      \$      -      \$      -      \$      -      \$      -      \$      -      \$      -

The impact to operations is minor as these projects are small in scope and fairly infrequent. Speed cushions are constructed with asphalt material that is keyed in above existing asphalt, which can be maintained within existing operations just as the asphalt surface below was.

**Estimated Revenue**      \$      -      \$      -      \$      -      \$      -      \$      -      \$      -

No additional operating revenue is anticipated as a result of this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Development Related Improvements Program

Project Number:	75-32		
Contact:	Bob Goebel, Director of Public Works	5 Year Historical Total	\$ 92,019
Department:	Public Works Department	2016-2020 Total	289,000
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 381,019</b>
Type:	New		
Useful Life:	Variable		

### Description

Opportunities exist for transportation improvements to be made in conjunction with various developments. Constructing improvements in conjunction with development improvements can be done at a reduced cost with less impact on the public. Projects are identified through the development review process and constructed as needed. Increased costs in 2016 include curb and gutter work on Jerry Street and milling and overlay work on Appleton Way.

### Justification

The Town has recognized that opportunities exist for transportation improvements to be made in conjunction with developments. It is our intent to construct these improvements during development, at a reduced cost.

Expenditures	2016	2017	2018	2019	2020	Total
Engineering/Construction	\$ 89,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 289,000
<b>Total Expenditures</b>	<b>\$ 89,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 289,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Road and Bridge Tax	\$ 89,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 289,000
<b>Total Funding Sources</b>	<b>\$ 89,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 289,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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The operational impact of the program will depend on the projects constructed.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Transportation Master Plan Update

Project Number:	76-44		5 Year Historical Total	\$	21,316
Contact:	Bob Goebel, Director of Public Works				
Department:	Public Works Department				200,000
Category:	Intangible		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>221,316</b>
Type:	Planning/Design				
Useful Life:	5 years				

### Description

The Transportation Master Plan shows what the Town's transportation network will look like in the future. It includes bicycle / pedestrian links and road construction projects through 2030. The Town's Transportation Master Plan will be updated to reflect current conditions and establish a prioritized list of projects.

### Justification

The Town's Transportation Master Plan was last updated in 2011. Since that time, a significant number of projects have been completed and the Town has experienced significant growth, such as the new Promenade development. These factors result in the need to update the Plan to reflect all of the changes to the transportation system and prioritize future projects based upon the community needs.

Expenditures	2016	2017	2018	2019	2020	Total
Plans/Studies	\$ 200,000	\$ -	\$ -	\$ -	\$ -	200,000
<b>Total Expenditures</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>200,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Sales and Use Tax	\$ 200,000	\$ -	\$ -	\$ -	\$ -	200,000
<b>Total Funding Sources</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>200,000</b>

**Estimated Operating Expenditures**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

Operational expenditures may be impacted as a result of constructing planned projects.

**Estimated Revenue**     \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**ADA Ramps**

Project Number: 76-78

Contact: Bob Goebel, Director of Public Works

Department: Public Works Department

Category: Infrastructure

Type: Replacement

Useful Life: Variable

5 Year Historical Total \$ 271,722

2016-2020 Total 200,000

**CIP Project Total (2011-2020): \$ 471,722**

**Description**

Town Council approved the ADA Prioritization Plans which identified \$40,000 per year to be allocated towards curb ramp upgrades based on priorities, and funding level. A contractor will be utilized to construct upgrades. The goal of the Americans with Disabilities Act (ADA) Curb Ramps Prioritization Plan for the Town of Castle Rock is to ensure that the Town creates accessible paths of travel within the public right-of-way for people with disabilities. The ADA Prioritization Plan will be implemented with annual construction upgrades, and retrofits for curb ramps for the purpose of becoming ADA compliant.

**Justification**

The ADA Prioritization Plan was developed in response to requirements under Title II of American with Disabilities Act. Title II of the ADA requires that state and local entities develop and implement a transition plan specific to curb ramps.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 200,000
<b>Total Expenditures</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 200,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales and Use Tax	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000	\$ 200,000
<b>Total Funding Sources</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 40,000</b>	<b>\$ 200,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Operational impacts are typically minimal as these small improvements to existing infrastructure fall under existing maintenance operations.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Meadows Parkway Reconstruction**

Project Number: 78-40		
Contact: Carl Armijo, CIP Engineering Manager	5 Year Historical Total	\$ -
Department: Public Works Department	2016-2020 Total	1,667,000
Category: Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,667,000</b>
Type: Replacement		
Useful Life: 20 years		

**Description**

The concrete pavement within the stretch of Meadows Parkway between Prairie Hawk Drive and US-85 has reached the end of its lifespan and requires a reconstruction of the pavement surface. This work will involve the removal of the existing concrete pavement and replacement with new pavement. The project was included as a future planning consideration in an attachment to the Strategic Planning considerations packet that was presented and approved at the January 27, 2015 meeting.

**Justification**

Construction in 2017 has been identified for this work since the North Meadows Extension project will be completed in July 2016. Traffic volumes on Meadows Parkway will be less which will minimize disruption to the traveling public once this work is completed. The Denver Regional Council of Governments (DRCOG) has provided notification to the Town that our request for federal funding to complete this project has been approved. The Town's funding portion is for 20% of the project cost. The remaining 80% will be grant funding.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ -	\$ 1,667,000	\$ -	\$ -	\$ -	\$ 1,667,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 1,667,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,667,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Road and Bridge Tax	\$ -	\$ 334,000	\$ -	\$ -	\$ -	\$ 334,000
Federal Grant	-	1,333,000	-	-	-	1,333,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 1,667,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,667,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Increases to maintenance operations are projected to be minor. Slight increases to the Pavement Management Program may be necessary within 5-years from construction completion to fit in with the current preventative maintenance strategy.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Downtown Crosswalks**

Project Number: 78-42

Contact: Carl Armijo, CIP Engineering Manager

Department: Public Works Department

Category: Infrastructure

Type: Replacement

Useful Life:

5 Year Historical Total \$ -

2016-2020 Total 496,000

**CIP Project Total (2011-2020): \$ 496,000**

**Description**

The project is intended to accommodate the reconstruction of crosswalks within the downtown area. Sections of existing crosswalks along Perry and Wilcox Streets are failing and in need of reconstruction in order to decrease safety risks to pedestrians and vehicles. This work has been scheduled to correspond with adjacent street maintenance planned within the Pavement Maintenance Program in order to minimize disruptions to the traveling public and adjacent businesses across multiple years. This work will involve removing portions or all of damaged crosswalks and replace with new pavement and markings.

**Justification**

Existing pavement failures have resulted in the increased need to temporarily patch potholes that are not expected to be sustainable and will require continual patching until such time that permanent repairs can be made. The Town is receiving increased inquiries from pedestrian and adjacent businesses as to when permanent repairs will be completed.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Reconstruction	\$ 496,000	\$ -	\$ -	\$ -	\$ -	\$ 496,000
<b>Total Expenditures</b>	<b>\$ 496,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 496,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Road and Bridge Tax	\$ 496,000	\$ -	\$ -	\$ -	\$ -	\$ 496,000
<b>Total Funding Sources</b>	<b>\$ 496,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 496,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Operational impacts are typically minimal as these small improvements to existing infrastructure fall under existing maintenance operations.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Sunset Drive Improvements**

Project Number: 78-43

Contact: Carl Armijo, CIP Engineering Manager

Department: Public Works

Category: Infrastructure

Type: Repair

Useful Life: 20 years

5 Year Historical Total \$ -

2016-2020 Total 160,000

**CIP Project Total (2011-2020): \$ 160,000**

**Description**

Sunset Drive is an older street that did not have curb and gutter installed along portions of the street. As a result, erosion is occurring to adjacent landscaping from stormwater runoff that is encroaching onto the travel lanes after storms. This requires continual maintenance to clean up and repair the erosion. This project will improve the storm water conveyance and collection infrastructure, including the installation of curb and gutter, to eliminate adjacent erosion. In addition, portions of the existing pavement that have been damaged as a result of this erosion activity will be reconstructed to improve the subgrade material and install new pavement.

**Justification**

These improvements will decrease the need to clean up and repair landscaping erosion after storm events and extend the lifespan of the existing roadway.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 160,000	\$ -	\$ -	\$ -	\$ -	\$ 160,000
<b>Total Expenditures</b>	<b>\$ 160,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 160,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Road and Bridge Tax	\$ 160,000	\$ -	\$ -	\$ -	\$ -	\$ 160,000
<b>Total Funding Sources</b>	<b>\$ 160,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 160,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Operational impacts fall under existing maintenance operations.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name School Beacons Management

Project Number:	78-44		
Contact:	Ryan Germeroth, Transp. Planning & Traffic Engineering Manager	5 Year Historical Total	\$ -
Department:	Public Works Department	2016-2020 Total	55,000
Category:	Technology	<b>CIP Project Total (2011-2020):</b>	<b>\$ 55,000</b>
Type:	New		
Useful Life:	15-20 years		

#### Description

This project involves the installation of new computer hardware and software to allow for the operations of the Town's School Beacons from a central office location. The Town currently has over 50 school beacons located along streets nearby all elementary and the middle school within Town to temporarily reduce speed limits along the streets. This project will install a new system to allow for the management of these timeframes from a central office location.

#### Justification

Each year the schools make adjustments to the reporting and dismissal times throughout the year. When this occurs, Town staff adjusts the times at each beacon location to ensure that school zone speed limits are occurring when high volume pedestrian activity associated with the schools occur. This is very time consuming as the number of school beacons added as new schools are built continues to grow. This project is intended to significantly reduce the staff time associated with clock adjustments and allow for this time to be spent on the growing number of traffic sign and pavement marking inventory to be maintained.

<b>Expenditures</b>	2016	2017	2018	2019	2020	Total
Construction/Engineering	\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ 55,000
<b>Total Expenditures</b>	<b>\$ 55,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 55,000</b>

<b>Funding Sources</b>	2016	2017	2018	2019	2020	Total
Road and Bridge Tax	\$ 55,000	\$ -	\$ -	\$ -	\$ -	\$ 55,000
<b>Total Funding Sources</b>	<b>\$ 55,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 55,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

The new hardware will require maintenance as malfunctions occur. This will require minor increases to the Town's existing signal service contract should the Town's technology resources not have the in-house specialization to repair.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**TRANSPORTATION CAPITAL FUND**

**PUBLIC WORKS DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
North Meadows Extension to US 85 & I-25	\$ 9,483,775	\$ -	\$ -	\$ -	\$ -	\$ 9,483,775
Service Center Expansion	-	150,000	1,350,000	-	-	1,500,000
Craig & Gould N. Infrastructure Improvement:	-	-	-	800,000	3,100,000	3,900,000
Plum Creek Improvements at Perry & Wilcox	3,050,000	-	-	-	-	3,050,000
Improvements at Highway 86 & Allen Way	-	355,000	337,000	2,632,000	-	3,324,000
Improvements at Hwy 86 & Crowfoot Valley	-	-	650,000	1,450,000	-	2,100,000
Crystal Valley Parkway Interchange	1,500,000	-	2,300,000	-	-	3,800,000
<b>Total Expenditures by Year</b>	<b>\$14,033,775</b>	<b>\$ 505,000</b>	<b>\$ 4,637,000</b>	<b>\$ 4,882,000</b>	<b>\$ 3,100,000</b>	<b>\$ 27,157,775</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Developer Contribution	\$ 2,077,333	\$ -	\$ 2,300,000	\$ -	\$ -	\$ 4,377,333
State Contribution	1,924,132	-	400,000	1,480,000	-	3,804,132
CIP Reserves	6,982,310	-	-	-	-	6,982,310
Impact Fees	-	150,000	1,350,000	-	-	1,500,000
Use Taxes	3,050,000	71,000	318,000	1,705,000	3,100,000	8,244,000
Federal Grant	-	284,000	269,000	1,447,000	-	2,000,000
County Contribution	-	-	-	250,000	-	250,000
<b>Total Funding Sources by Year</b>	<b>\$14,033,775</b>	<b>\$ 505,000</b>	<b>\$ 4,637,000</b>	<b>\$ 4,882,000</b>	<b>\$ 3,100,000</b>	<b>\$ 27,157,775</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name **North Meadows Extension to US 85 & I-25**

Project Number:	75-31		
Contact:	Bob Goebel	5 Year Historical Total	\$ 62,569,285
Department:	Public Works Department	2016-2020 Total	<u>9,483,775</u>
Category:	Infrastructure	<b>CIP Project Total (2011-2020): \$ 72,053,060</b>	
Type:	New		
Useful Life:	30 years		

#### Description

This project is planned to accommodate the completion of two paved lanes from the Meadows development area to US 85 and four lanes from US 85 to I-25. Construction began in 2014 and is projected to be completed and open to traffic by the second quarter of 2016. Budgeted costs in 2016 include estimated unspent amounts from 2015. 5-year historical expenses include approximately \$27.3 million in 2014 and an estimated \$27 million in 2015.

#### Justification

The purpose of the project is to relieve traffic congestion and improve safety at the US 85/Meadows Parkway intersection and the I-25/Meadows Parkway interchange. As the Town continues to grow, improvements to transportation infrastructure will be required in order to handle additional traffic volume. Significant demands on transportation infrastructure are attributable to substantial residential growth and large multi-use developments such as the Promenade at Castle Rock. This project helps to accommodate these growing transportation needs.

Expenditures	2016	2017	2018	2019	2020	Total
Construction	\$ 9,483,775	\$ -	\$ -	\$ -	\$ -	9,483,775
<b>Total Expenditures</b>	<b>\$ 9,483,775</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>9,483,775</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Developer Contribution	\$ 577,333	\$ -	\$ -	\$ -	\$ -	577,333
State Contribution	1,924,132	-	-	-	-	1,924,132
CIP Reserves	6,982,310	-	-	-	-	6,982,310
<b>Total Funding Sources</b>	<b>\$ 9,483,775</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>9,483,775</b>

<b>Estimated Operating Expenditures</b>	\$ 5,650	\$ 11,300	\$ 11,300	\$ 11,300	\$ 11,300	\$ 50,850
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An additional FTE and equipment was added in 2015 to assist with increased snow removal and maintenance needs. The approximate additional maintenance cost is \$5,650 per lane-mile. With two additional lane-miles, the estimated increased annual cost is \$11,300.

<b>Estimated Revenue</b>	\$ -	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 60,000
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Highway User Tax is collected by the state through gas taxes and motor vehicle registration fees and are distributed based on a formula that includes miles of streets in the Town of Castle Rock. Based upon 2014 estimates, revenue may increase by about \$15,000 in 2017.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Service Center Expansion**

Project Number: 70-20

Contact: Bob Goebel, Public Works Director

Department: Public Works Department

Category: Building

Type: Upgrade

Useful Life: 40 years

5 Year Historical Total \$ -

2016-2020 Total 1,500,000

**CIP Project Total (2011-2020): \$ 1,500,000**

**Description**

This project involves the construction of new office space along with an additional vehicle service bay. In 2015 the Town completed a facilities master plan update to assess the next 10-15 year space needs for departments. This project implements those recommendations for facilities expansion for the Public Works Department. This project is anticipated to occur over a two-year period to accommodate both design and construction phases.

**Justification**

The Facilities Master Plan included an examination of the Public Works Department's employee growth projections in addition to current space allocations and evaluated several options to assess needs in order to maintain levels of service. Current available space will likely be insufficient to meet the needs of the department over the next 10 to 15 year period to sustain service levels as the Town grows.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Design	\$ -	\$ 150,000	\$ -	\$ -	\$ -	\$ 150,000
Construction	-	-	1,350,000	-	-	1,350,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 150,000</b>	<b>\$ 1,350,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,500,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ -	\$ 150,000	\$ 1,350,000	\$ -	\$ -	\$ 1,500,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 150,000</b>	<b>\$ 1,350,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,500,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Future operating expenditures will exist with utilities and facilities maintenance.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### **Project Name**                                      **Craig & Gould N. Infrastructure Improvements**

Project Number: 77-62

Contact: Carl Armijo, CIP Engineering Manager

Department: Public Works Department

Category: Infrastructure

Type: Replacement

Useful Life: 30 years

5 Year Historical Total    \$           -

2016-2020 Total                    3,900,000

**CIP Project Total (2011-2020): \$    3,900,000**

#### **Description**

The scope of the project includes reconstruction and replacement of existing utility and street infrastructure in a similar manner to what was completed in the Craig and Gould neighborhood south of Fifth Street. This includes reconstruction of existing pavement and the addition of curb, gutter, and sidewalk improvements. The improvements are expected to improve pedestrian safety and better define parking areas along the streets that currently do not have curbs or sidewalks. The project was included in the Public Works Five-Year Capital considerations presented to Council on October 7, 2014 and Strategic Planning considerations presented and approved at the January 27, 2015 meeting.

#### **Justification**

This infrastructure is beyond its design life, and needs to be replaced. Increased maintenance is required to keep service active, which is creating cost inefficiencies. This is a joint effort with the Utilities Department and timing of these improvements for design and construction years was closely coordinated between both departments.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Design	\$ -	\$ -	\$ -	\$ 800,000	\$ -	\$ 800,000
Construction	-	-	-	-	3,100,000	3,100,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 800,000</b>	<b>\$ 3,100,000</b>	<b>\$ 3,900,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Use Taxes	\$ -	\$ -	\$ -	\$ 800,000	\$ 3,100,000	\$ 3,900,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 800,000</b>	<b>\$ 3,100,000</b>	<b>\$ 3,900,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Increased operational impacts are not anticipated as this project is a replacement. A decrease in maintenance is expected as a result of the replacement infrastructure being "reset" to its original condition where normal preventative maintenance activities can resume.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Plum Creek Improvements at Perry & Wilcox**

Project Number: 78-17		
Contact: Carl Armijo, CIP Engineering Manager	5 Year Historical Total	\$ 345,000
Department: Public Works Department	2016-2020 Total	3,050,000
Category: Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 3,395,000</b>
Type: Upgrade		
Useful Life: 20 years		

**Description**

This project includes adding a dedicated right turn lane on Perry Street at the intersection with Plum Creek Parkway in the southbound direction. Improvements at the intersection of Plum Creek Parkway and Wilcox Street include the addition of another left turn lane on Wilcox Street in the northbound direction and removal of the drainage pan on Plum Creek Parkway that currently creates a dip in the road that forces vehicles to slow down. Striping improvements on Plum Creek Parkway at the intersection of the northbound on-ramp to I-25 will also occur. The project was included in the Public Works Five-Year Capital considerations presented to Council on October 7, 2014 and Strategic Planning considerations presented and approved at the January 27, 2015 meeting.

**Justification**

The project will reduce congestion and improve traffic flow along the Plum Creek Parkway corridor near the I-25 interchange. The current volume of traffic during certain peak hours of each day create the need to make these improvements in order to improve operations as well as decrease the safety risk. Removal of the dip at the Plum Creek Parkway and Wilcox intersection will allow for higher speeds, fewer stops, and improved traffic flow through the intersection.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 3,050,000	\$ -	\$ -	\$ -	\$ -	\$ 3,050,000
<b>Total Expenditures</b>	<b>\$ 3,050,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,050,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Use Taxes	\$ 3,050,000	\$ -	\$ -	\$ -	\$ -	\$ 3,050,000
<b>Total Funding Sources</b>	<b>\$ 3,050,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,050,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Increases to maintenance operations are projected to be minor. Slight increases to the Pavement Management Program may be necessary within 5-years from construction completion to fit in with the current preventative maintenance strategy.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Improvements at Highway 86 & Allen Way

Project Number:	78-38		5 Year Historical Total	\$	-
Contact:	Carl Armijo, CIP Engineering Manager				
Department:	Public Works Department		2016-2020 Total		3,324,000
Category:	Infrastructure		<b>CIP Project Total (2011-2020): \$ 3,324,000</b>		
Type:	Upgrade				
Useful Life:	20 years				

### Description

The project will allow for improvements to Founders Parkway to accommodate a second eastbound left turn lane and a dedicated westbound right turn lane. The project will also add a second southbound right turn lane at Founders and a second through lane at the Allen Way and Allen Street intersection. Improvements will also be made to the existing roadside trail. The project was included in the Public Works Five-Year Capital considerations presented to Council on October 7, 2014 and Strategic Planning considerations presented and approved at the January 27, 2015 meeting.

### Justification

The close proximity of this intersection to the northbound on and off-ramps to I-25 make this intersection a challenge to operate efficiently. It is not uncommon for left turning traffic on Founders Parkway in the eastbound direction to back up into the adjacent through lane. In addition, the amount of volume often times makes it difficult to process vehicles that are waiting to make a turn to make it through on one cycle of the signal.

Expenditures	2016	2017	2018	2019	2020	Total
Design	\$ -	\$ 355,000	\$ -	\$ -	\$ -	\$ 355,000
Right-of-way Acquisition	-	-	337,000	-	-	337,000
Construction	-	-	-	2,632,000	-	2,632,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 355,000</b>	<b>\$ 337,000</b>	<b>\$ 2,632,000</b>	<b>\$ -</b>	<b>\$ 3,324,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Use Taxes	\$ -	\$ 71,000	\$ 68,000	\$ 655,000	\$ -	\$ 794,000
Federal Grant	-	284,000	269,000	1,447,000	-	2,000,000
State Contribution	-	-	-	280,000	-	280,000
County Contribution	-	-	-	250,000	-	250,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 355,000</b>	<b>\$ 337,000</b>	<b>\$ 2,632,000</b>	<b>\$ -</b>	<b>\$ 3,324,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Increases to maintenance operations are projected to be minor. Slight increases to the Pavement Management Program may be necessary within 5-years from construction completion to fit in with the current preventative maintenance strategy.

<b>Estimated Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Improvements at Hwy 86 & Crowfoot Valley

Project Number:	78-39		5 Year Historical Total	\$	-
Contact:	Carl Armijo, CIP Engineering Manager		2016-2020 Total		2,100,000
Department:	Public Works Department		<b>CIP Project Total (2011-2020):</b>		
Category:	Infrastructure			\$	<b>2,100,000</b>
Type:	Upgrade				
Useful Life:	20 years				

### Description

This project will accommodate the construction of an additional left turn lane on Founders Parkway at the intersection with Crowfoot Valley Road to allow for two dedicated left turn lanes for the eastbound direction. Additional work will widen Crowfoot Valley Road at this intersection to allow for the additional left turn lane as well as right turn lane improvements on Crowfoot Valley Road at the intersection. The project was included in the Public Works Five-Year Capital considerations presented to Council on October 7, 2014 and Strategic Planning considerations presented and approved at the January 27, 2015 meeting. In early 2016 the Town was notified by CDOT that they will commit funding to this project. Updated costs are supplied based on this.

### Justification

There is a significant amount of left turning traffic during certain peak hours of each day that is difficult to accommodate with a single left turn lane. It is not uncommon for queues of left turning traffic to be stacked up to a point that it blocks the adjacent through lane and hinders efficient operations.

Expenditures	2016	2017	2018	2019	2020	Total
Design	\$ -	\$ -	\$ 650,000	\$ -	\$ -	\$ 650,000
Construction	-	-	-	1,450,000	-	1,450,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 650,000</b>	<b>\$ 1,450,000</b>	<b>\$ -</b>	<b>\$ 2,100,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Use Taxes	\$ -	\$ -	\$ 250,000	\$ 250,000	\$ -	\$ 500,000
State Contribution	-	-	400,000	1,200,000	-	1,600,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 650,000</b>	<b>\$ 1,450,000</b>	<b>\$ -</b>	<b>\$ 2,100,000</b>

**Estimated Operating Expenditures**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

Increases to maintenance operations are projected to be minor. Slight increases to the Pavement Management Program may be necessary within 5-years from construction completion to fit in with the current preventative maintenance strategy.

**Estimated Revenue**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

No additional operating revenue is anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Crystal Valley Parkway Interchange

Project Number:	78-41		5 Year Historical Total	\$	-
Contact:	Carl Armijo, CIP Engineering Manager		2016-2020 Total		3,800,000
Department:	Public Works Department		<b>CIP Project Total (2011-2020):</b>		
Category:	Infrastructure			\$	<b>3,800,000</b>
Type:	New				
Useful Life:	30 years				

### Description

A new interchange is proposed to be constructed on Interstate 25 in the southernmost part of Town. Located approximately 2.5 miles south of the Plum Creek Parkway interchange, the new interchange could connect Douglas Lane on the east side of I-25 and Territorial Road on the west side. The current five year effort is to achieve an update to the existing Federal Environmental Assessment to allow for construction phasing, complete design of any approved phase one option, along with remaining ROW acquisition for the full project. Construction costs for any approved phase will need to be assessed upon completion of the Environmental Assessment update. Construction cost estimates are not included at this time, only Design and Right of Way Acquisition are represented below. Current estimates indicate that construction will cost between \$45 to \$50 million. Phasing options are currently being explored which would spread the costs of construction out over multiple years.

### Justification

The interchange will provide access from Castle Rock to the metropolitan areas of Denver and Colorado Springs. It will serve the area's expanding population and is centrally located between several existing and planned developments in south Castle Rock. The interchange also will:

- Improve safety by eliminating one at-grade railroad crossing
- Improve the local roadway network by providing a continuous east-west through route across I-25
- Provide direct access to I-25 for the growing population
- Reduce existing and future congestion at the Plum Creek Parkway interchange by re-distributing traffic to this new interchange

Expenditures	2016	2017	2018	2019	2020	Total
Design	\$ 1,500,000	\$ -	\$ -	\$ -	\$ -	\$ 1,500,000
Right of Way Acquisition	-	-	2,300,000	-	-	2,300,000
<b>Total Expenditures</b>	<b>\$ 1,500,000</b>	<b>\$ -</b>	<b>\$ 2,300,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,800,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Developer Contribution	\$ 1,500,000	\$ -	\$ 2,300,000	\$ -	\$ -	\$ 3,800,000
<b>Total Funding Sources</b>	<b>\$ 1,500,000</b>	<b>\$ -</b>	<b>\$ 2,300,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,800,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Slight increases to the Pavement Management Program may be necessary within 5-years from construction completion to fit in with the current preventative maintenance strategy.

<b>Estimated Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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No additional operating revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**CONSERVATION TRUST FUND**

**PARKS & RECREATION DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Park Improvements	\$ 241,000	\$ 48,000	\$ 168,000	\$ 343,000	\$ 173,000	\$ 973,000
Park Safety Improvements	129,500	74,500	44,500	44,500	44,500	337,500
<b>Total Expenditures by Year</b>	<b>\$ 370,500</b>	<b>\$ 122,500</b>	<b>\$ 212,500</b>	<b>\$ 387,500</b>	<b>\$ 217,500</b>	<b>\$ 1,310,500</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Colorado Lottery Funds	\$ 370,500	\$ 122,500	\$ 212,500	\$ 387,500	\$ 217,500	\$ 1,310,500
<b>Total Funding Sources by Year</b>	<b>\$ 370,500</b>	<b>\$ 122,500</b>	<b>\$ 212,500</b>	<b>\$ 387,500</b>	<b>\$ 217,500</b>	<b>\$ 1,310,500</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



*Philip S. Miller Park Turf Field*



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Park Improvements

Project Number:	75-18		
Contact:	Jeff Smullen, Park Planning and Construction Manager	5 Year Historical Total	\$ 368,143
Department:	Parks & Recreation Department	2016-2020 Total	973,000
Category:	Parks/Trails	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,341,143</b>
Type:	Repair		
Useful Life:	Varies by Project		

### Description

This line item is reserved each year for irrigation updates, POST Partners, trees for Arbor Day, playground safety updates, signs as needed and one major project per year. Planning includes Metzler Ranch Park improvements including dugout covers & hockey board replacement in 2016 (\$38,000) and new playground and site furniture and inline resurfacing in 2019 (\$325k); Butterfield Park concrete replacement, playground and court repairs in 2016 (\$185k); Mitchell Gulch Park Playground in 2018 (\$150k); Paintbrush Park shed and utility cart in 2017 (\$30k), backstop extensions and pavilions in 2020 (\$155k). Additionally, this includes \$10k per year for POST Partners and \$8k per year for Arbor Day trees.

### Justification

The upkeep of parks and open space requires continual investment to maintain high levels of service into perpetuity. Castle Rock is part of the Colorado Tree Coalition that leads statewide efforts to preserve, renew and enhance community forests in Colorado. Additionally, the Town has two certified Arborists on staff that monitor the health of Castle Rock trees and support the annual Arbor Day Celebration where local fifth grade students are invited to plant trees and learn about the importance of trees. Also, playground equipment and other amenities ages with standard wear patterns and has an average life expectancy of 15-20 years. The projects listed above are part of our aging system and will need replaced based on the schedule provided. Lastly, POST Partners is a parks, open space, and trails related volunteer outreach program that helps fill a maintenance gap by providing trail maintenance, trash clean-up, site improvements through scout projects, environmental restoration through Earth Day activities, Colorado Bluebird Project and open space revegetation among other nature education programs and special events throughout the year.

Expenditures	2016	2017	2018	2019	2020	Total
Metzler Ranch Improvements	\$ 38,000	\$ -	\$ -	\$ 325,000	\$ -	\$ 363,000
Butterfield Park Improvements	185,000	-	-	-	-	185,000
Paintbrush Park Improvements	-	30,000	-	-	-	30,000
Mitchell Gulch Park Improvements	-	-	150,000	-	155,000	305,000
POST & Arbor Day Trees	18,000	18,000	18,000	18,000	18,000	90,000
<b>Total Expenditures</b>	<b>\$ 241,000</b>	<b>\$ 48,000</b>	<b>\$ 168,000</b>	<b>\$ 343,000</b>	<b>\$ 173,000</b>	<b>\$ 973,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Colorado Lottery Funds	\$ 241,000	\$ 48,000	\$ 168,000	\$ 343,000	\$ 173,000	\$ 973,000
<b>Total Funding Sources</b>	<b>\$ 241,000</b>	<b>\$ 48,000</b>	<b>\$ 168,000</b>	<b>\$ 343,000</b>	<b>\$ 173,000</b>	<b>\$ 973,000</b>

**Estimated Operating Expenditures**    \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional operating expenditures are anticipated at this time.

**Estimated Revenue**                                \$       -    \$       -    \$       -    \$       -    \$       -    \$       -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Park Safety Improvements**

Project Number: 70-10

Contact: Jeff Smullen, Park Planning and Construction Manager

Department: Parks & Recreation Department

Category: Parks/Trails

Type: Replacement

Useful Life: Varies

5 Year Historical Total \$ 151,082

2016-2020 Total 337,500

**CIP Project Total (2011-2020): \$ 488,582**

**Description**

With the 20 parks that we currently maintain, there is a safety need to fill the playgrounds with Fibar to protect users from falls while utilizing our equipment. The material needs to be placed at depths determined by the National Playground Safety Standards. The cost is \$40k in 2016 and 2017 and \$10k annually thereafter. The Department also has needs for a weather station to be placed at Philip S. Miller Park for efficient operations of the Maxicom irrigation system (\$10K), repairs to the existing baseline on the infield synthetic turf at Metzler Ranch Park (\$25k), an increase to the hazardous tree removal and replacement (\$15k), annual disposable parks equipment replacement (\$5k) and replacement of a stand on aerator and a high power trail blower (\$20k), annual site furniture replacements for those items that have been vandalized such as benches, picnic tables, bike racks, reservation signs (\$7,500) and annual irrigation updates for parks and streetscapes (\$7k).

**Justification**

All items outlined above are safety concerns for both the public and the staff utilizing the equipment or making repairs to the existing system. 2015 Community Survey ranks Castle Rock Parks and Trails as a high priority among residents and in order to meet the safety standards and the high expectations of the community, staff is continuing to keep pace with the current level of service.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Site Improvements	\$ 129,500	\$ 74,500	\$ 44,500	\$ 44,500	\$ 44,500	\$ 337,500
<b>Total Expenditures</b>	<b>\$ 129,500</b>	<b>\$ 74,500</b>	<b>\$ 44,500</b>	<b>\$ 44,500</b>	<b>\$ 44,500</b>	<b>\$ 337,500</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Colorado Lottery Funds	\$ 129,500	\$ 74,500	\$ 44,500	\$ 44,500	\$ 44,500	\$ 337,500
<b>Total Funding Sources</b>	<b>\$ 129,500</b>	<b>\$ 74,500</b>	<b>\$ 44,500</b>	<b>\$ 44,500</b>	<b>\$ 44,500</b>	<b>\$ 337,500</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated at this time.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**PARKS AND RECREATION CAPITAL FUND**

**PARKS & RECREATION DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Festival Park Improvement	\$ 4,250,000	\$ -	\$ -	\$ -	\$ -	\$ 4,250,000
Philip S. Miller Park LED Signage	100,000	-	-	-	-	100,000
Philip S. Miller Park Equipment	45,000	-	-	-	-	45,000
Philip S. Miller Park Improvements	30,000	100,000	-	-	-	130,000
Future Park Planning	-	200,000	2,000,000	-	-	2,200,000
<b>Total Expenditures by Year</b>	<b>\$ 4,425,000</b>	<b>\$ 300,000</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,725,000</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ 475,000	\$ 300,000	\$ 2,000,000	\$ -	\$ -	\$ 2,775,000
DDA TIF Fund	2,500,000	-	-	-	-	2,500,000
Conservation Trust Fund	950,000	-	-	-	-	950,000
General Long Term Planning Fund	500,000	-	-	-	-	500,000
<b>Total Funding Sources by Year</b>	<b>\$ 4,425,000</b>	<b>\$ 300,000</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,725,000</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



*Adventure Playground Giant Saucer Swing at Philip S. Miller Park*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Festival Park Improvement**

Project Number: 75-19		5 Year Historical Total	\$ 658,909
Contact: Jeff Smullen, Park Planning and Construction Manager		2016-2020 Total	4,250,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$ 4,908,909</b>
Category: Parks/Trails			
Type: Upgrade			
Useful Life: 30 Years			

**Description**

The Festival Park Improvement project will expand the size of the park through the incorporation of Second Street and Sellars Gulch into the project. Improvements will include a turf lawn, nature based playground, water play splash pad, street plaza areas, access to the creek with new bridge crossings and connections to Town Hall, a treehouse overlook of the creek, fire pits, restrooms, pavilion, site furniture and landscaping. Additionally, the Stormwater Fund will contribute toward the completion of this project through Sellars Gulch stabilization and improvements.

**Justification**

The purpose of the project is to expand the capacity of Festival Park to improve the carrying capacity for special events and general public use. In addition, the project will add new recreational amenities that will draw residents and visitors to Downtown, which will provide greater service to residents and will support economic development of downtown Castle Rock. This project received support from Town Council on October 20, 2015 with direction to complete construction drawings for the project on November 17, 2015. Additionally, Town Council supported the inclusion of this project to the 2016 Budget during the first reading of the proposed 2016 Budget on November 3, 2015.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Park Construction	\$ 4,250,000	\$ -	\$ -	\$ -	\$ -	\$ 4,250,000
<b>Total Expenditures</b>	<b>\$ 4,250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,250,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ 300,000	\$ -	\$ -	\$ -	\$ -	\$ 300,000
DDA TIF Fund	2,500,000	-	-	-	-	2,500,000
Conservation Trust Fund	950,000	-	-	-	-	950,000
General Long Term Planning Fund	500,000	-	-	-	-	500,000
<b>Total Funding Sources</b>	<b>\$ 4,250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 4,250,000</b>

**Estimated Operating Expenditures** \$ - \$ 18,535 \$ 55,778 \$ 58,009 \$ 60,329 \$ 192,651

Operating and maintenance expenditures are included for part of 2017 and full annual costs beginning in 2018. Full annual costs, included in the General Fund- Parks Division, are estimated to be \$29,000 for personnel, \$11,000 for utility costs, \$9,000 for other services/supplies, \$1,778 for insurance and \$5,000 for equipment (litter sweeper) in 2018.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Philip S. Miller Park LED Signage**

Project Number: 70-30		5 Year Historical Total	\$	-
Contact: Jeff Smullen, Park Planning and Construction Manager		2016-2020 Total		100,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>100,000</b>
Category: Equipment				
Type: New				
Useful Life: 10 Years				

**Description**

This project will fund an LED sign and wayfinding signs to identify trails and events at the Philip S. Miller Park and Miller Activity Complex (MAC). The estimated total for this project is \$100k.

**Justification**

Philip S. Miller Park is a regional park that draws more than 161,000 vehicles per month and more than 25,000 trips up and down the Challenge Hill. This high profile park is an economic driver to the Town and staff would like to provide additional levels of service to continue the regional draw to the community. Due to the addition of the amphitheater and mill house facilities, the number of events will increase at Philip S. Miller Park. Increased and improved signage will create a better overall experience by communicating information about park activities to all visitors.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Machinery and Equipment	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
<b>Total Expenditures</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 100,000
<b>Total Funding Sources</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Philip S. Miller Park Equipment**

Project Number: 70-30		
Contact: Jeff Smullen, Park Planning and Construction Manager	5 Year Historical Total	\$ 68,500
Department: Parks & Recreation Department	2016-2020 Total	45,000
Category: Equipment	<b>CIP Project Total (2011-2020):</b>	<b>\$ 113,500</b>
Type: New		
Useful Life: 5 - 10 Years		

**Description**

This expenditure accounts for equipment needed for general operations and maintenance of Philip S. Miller Park. The proposed item includes a sweeper in 2016. This sweeper will allow staff to maintain the concrete pathways in the Core Plaza, Millhouse, main entrance and throughout Philip S. Miller Park.

**Justification**

The upkeep of parks and open space require the purchase of capital equipment to maintain an appropriate level of service. Philip S. Miller Park is a regional park that draws more than 161,000 vehicles per month and more than 25,000 trips up and down the Challenge Hill. This high profile park is an economic driver to the Town and staff would like to provide additional levels of service to continue the regional draw to the community.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Machinery and Equipment	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ 45,000
<b>Total Expenditures</b>	<b>\$ 45,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ 45,000
<b>Total Funding Sources</b>	<b>\$ 45,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 45,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Increased fuel costs will be offset by recent savings in this line item, resulting in no overall increase to operating expenditures. Ongoing maintenance costs and future replacement of equipment will occur within the General Fund in future years.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Philip S. Miller Park Improvements**

Project Number: 76-87		5 Year Historical Total	\$	-
Contact: Jeff Smullen, Park Planning and Construction Manager		2016-2020 Total		130,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>130,000</b>
Category: Parks/Trails				
Type: New				
Useful Life: 10 Years				

**Description**

This project funds a connection to a parking lot for the aerial trekking course anticipated to open in the spring of 2016; and, for a pathway to future parking from the park through the concrete box culvert under Plum Creek Parkway for large community/regional events.

**Justification**

Philip S. Miller Park is a regional park that draws more than 161,000 vehicles per month and more than 25,000 trips up and down the Challenge Hill. This high profile park is an economic driver to the Town and staff would like to provide additional levels of service to continue the regional draw to the community. This project will expand access to parking for park visitors for regular use and during special events.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Parking Access	\$ 30,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 130,000
<b>Total Expenditures</b>	<b>\$ 30,000</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 130,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ 30,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 130,000
<b>Total Funding Sources</b>	<b>\$ 30,000</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 130,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenue is anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Future Park Planning**

Project Number: 75-21

Contact: Jeff Smullen, Park Planning and Construction Manager

Department: Parks & Recreation Department

Category: Parks/Trails

Type: New

Useful Life: Unknown

5 Year Historical Total \$ -

2016-2020 Total 2,200,000

**CIP Project Total (2011-2020): \$ 2,200,000**

**Description**

This project is for a future park that could be built in Meadows Filing #18, Liberty Village, Terrain or Castlewood Ranch Filing #2. The cost of the project is speculative and will be constructed based on approved funding when the project arises. At this time, the 2018 estimate is based on a five to six acre site.

**Justification**

Wrangler Park was the last neighborhood park brought on line in 2012. As the Town of Castle Rock continues to grow, so will the need for additional neighborhood parks. Planning for a new neighborhood park is expected to begin in 2017 with construction taking place in 2018. The priority for the project site will be based on community needs and will be determined at a future date.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Park Design	\$ -	\$ 200,000	\$ -	\$ -	\$ -	\$ 200,000
Construction Contract	-	-	2,000,000	-	-	2,000,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,200,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Impact Fees	\$ -	\$ 200,000	\$ 2,000,000	\$ -	\$ -	\$ 2,200,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 2,000,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,200,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ 30,000 \$ 30,000 \$ 60,000

Approximately \$30,000 per year is anticipated for ongoing park maintenance and will be incurred in the General Fund - Parks Division.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

Park rentals may increase with the addition of a new neighborhood park. Revenue from park rentals is received into the Conservation Trust Fund.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**FIRE CAPITAL FUND**

**FIRE DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Crystal Valley Ranch (CVR) Fire Station	\$ 245,864	\$ 6,265,065	\$ -	\$ -	\$ -	\$ 6,510,929
<b>Total Expenditures by Year</b>	<b>\$ 245,864</b>	<b>\$ 6,265,065</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,510,929</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Fire Impact Fees	\$ 245,864	\$ 3,265,065	\$ -	\$ -	\$ -	\$ 3,510,929
Interfund Loan Proceeds	-	3,000,000	-	-	-	3,000,000
<b>Total Funding Sources by Year</b>	<b>\$ 245,864</b>	<b>\$ 6,265,065</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,510,929</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Crystal Valley Ranch (CVR) Fire Station

Project Number: 78-18

Contact: Art Morales, Fire Chief

Department: Fire Department

Category: Building

Type: New

Useful Life: 50 Years

5 Year Historical Total \$ -

2016-2020 Total 6,510,929

**CIP Project Total (2011-2020): \$ 6,510,929**

### Description

The Crystal Valley Ranch (CVR) Fire Station will provide service to Crystal Valley Ranch, the Lanterns, Heckendorf Ranch, Stone Canyon Ranch, Sellars Creek Ranch, Bell Mountain Ranch, a portion of Plum Creek, and the South Lake Gulch Road corridor areas. The Town owns a site for this station at Plum Creek Boulevard and Crystal Valley Parkway. There will be a staff of 12 personnel at this station in order to maintain the current relief factor.

### Justification

At the current rate of growth, an additional fire station in the Crystal Valley area of Town will need to be fully operational in 2018 with construction and staffing projected to commence in 2017. This projection is based on the key influencer of: growth rate, percentage of build-out, calls generated, suppression apparatus annual responses to the area, and annual responses to the area. Planning began relative to the financial impacts of the station as presented and approved by Council at the October 21, 2014 Town Council meeting in the draft Fire Master Plan update as well as on January 27, 2015 within the approved Additional Financial and Strategic Priorities. It is planned for the station to be financed by accrued Fire Capital Fund residential development impact fees and an internal loan from the General Fund. Repayment would occur from residential development impact fees collected in the Fire Capital Fund. Capital totals include station construction and vehicle acquisition.

Estimated ongoing operational costs including staffing of 12 personnel (\$1.5M), services including an academy for 12 new recruits (\$75,210), Paramedic school for 4 people (\$32,000), facility maintenance and all utilities (\$212k), supplies (\$114k), and vehicle replacement (\$123k) are currently projected at approximately \$2M per year. Ongoing operational costs are planned to be funded by the General Fund within the Fire and Rescue Department.

Expenditures	2016	2017	2018	2019	2020	Total
Architectural Design	\$ 245,864			\$ -	\$ -	\$ 245,864
Construction		\$ 5,124,065				5,124,065
Apparatus		1,141,000				1,141,000
<b>Total Expenditures</b>	<b>\$ 245,864</b>	<b>\$ 6,265,065</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,510,929</b>
Funding Sources	2016	2017	2018	2019	2020	Total
Fire Impact Fees	\$ 245,864	\$ 3,265,065	\$ -	\$ -	\$ -	\$ 3,510,929
Interfund Loan Proceeds		3,000,000				3,000,000
<b>Total Funding Sources</b>	<b>\$ 245,864</b>	<b>\$ 6,265,065</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 6,510,929</b>

**Estimated Operating Expenditures** \$ - \$ - \$ 2,000,000 \$ 2,000,000 \$ 2,000,000 \$ 6,000,000

Estimated ongoing operational costs including staffing of 12 personnel (\$1.5M), services including facility maintenance and all utilities (\$212k), supplies (\$114k), and vehicle replacement (\$123k) are currently projected at approximately \$2M per year. This will be added to the General Fund within the Fire and Rescue Department.

**Estimated Revenue** \$ - \$ - \$ 110,000 \$ 110,000 \$ 110,000 \$ 330,000

There would be additional revenue in the General Fund from the Castle Rock Fire Protection District as the district pays 5.5% of the total annual operations budget, exclusive of capital expenditures, of the Castle Rock Fire Department annually.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**UTILITIES - COMBINED PROJECTS**

**UTILITIES DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Operations and Maintenance Center Building	\$ 549,500	\$ -	\$ -	\$ 5,559	\$ -	\$ 555,059
Administration and Customer Service Building	-	-	-	3,258,054	-	3,258,054
Site Improvements at 175 Kellogg Court	-	158,330	-	-	2,505,372	2,663,702
<b>Total Expenditures by Year</b>	<b>\$ 549,500</b>	<b>\$ 158,330</b>	<b>\$ -</b>	<b>\$ 3,263,613</b>	<b>\$ 2,505,372</b>	<b>\$ 6,476,815</b>

<b>Project Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Water Fund CIP Reserves	\$ 223,945	\$ 57,502	\$ -	\$ 1,403,641	\$ 1,021,325	\$ 2,706,413
Water Resources Fund CIP Reserves	100,236	43,480	-	627,940	456,907	1,228,563
Stormwater Fund CIP Reserves	101,812	25,864	-	643,724	464,000	1,235,400
Wastewater Fund CIP Reserves	123,507	31,484	-	588,308	563,140	1,306,439
<b>Total Funding Sources by Year</b>	<b>\$ 549,500</b>	<b>\$ 158,330</b>	<b>\$ -</b>	<b>\$ 3,263,613</b>	<b>\$ 2,505,372</b>	<b>\$ 6,476,815</b>

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Operations and Maintenance Center Building

Project Number:	Multiple		
Contact:	Tim Friday, Assitant Utilities Director	5 Year Historical Total	\$ 4,876,688
Department:	Utilities Department	2016-2020 Total	555,059
Category:	Building	<b>CIP Project Total (2011-2020):</b>	<b>\$ 5,431,747</b>
Type:	New		
Useful Life:	50 Years		

### Description

This project will complete a new Operations & Maintenance (O&M) Building for the Operations Division of Utilities. The Operations division is responsible for daily operation and maintenance of the Town's wastewater collection and water distribution systems. Construction began in April 2015 and will be completed in 2015. Amounts budgeted for 2016 will be used to purchase furniture and ancilliary equipment. Staff are currently housed in four differencet water treatment plants and a temporary trailer. This building is anticipated to be 40,000 sqare feet and accommodate approximately 70 employees.

### Justification

The existing utilities headquarters currently serves as the O&M Center and houses all employees. A new O&M Center will be constructed to provide a facility that will serve the department through municipal buildout. The project will be cash-funded from accumulated capital for construction and sale of the existing facility. The timeline for additional expenditures after design will be dependent upon market timing for sale of the existing facility and the readiness of the already purchased site for the new facility.

Expenditures	2016	2017	2018	2019	2020	Total
Water Fund	\$ 223,945	\$ -	\$ -	\$ -	\$ -	\$ 223,945
Water Resources Fund	100,236	-	-	-	-	100,236
Stormwater Fund	101,812	-	-	5,559	-	107,371
Wastewater Fund	123,507	-	-	-	-	123,507
<b>Total Expenditures</b>	<b>\$ 549,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,559</b>	<b>\$ -</b>	<b>\$ 555,059</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Water Fund CIP Reserves	\$ 223,945	\$ -	\$ -	\$ -	\$ -	\$ 223,945
Water Resources Fund CIP Reserves	100,236	-	-	-	-	100,236
Stormwater Fund CIP Reserves	101,812	-	-	5,559	-	107,371
Wastewater Fund CIP Reserves	123,507	-	-	-	-	123,507
<b>Total Funding Sources</b>	<b>\$ 549,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 5,559</b>	<b>\$ -</b>	<b>\$ 555,059</b>

<b>Estimated Operating Expenditures</b>	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
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The estimated annual O&M expense for this facility is \$50,000 per year, of which the Water fund portion is \$21,712 per year, Water Resources fund portion is \$8,580 per year, the Stormwater Fund portion is \$4,186 per year, and the Wastewater fund portion is \$15,522.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	-
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There are no operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Administration and Customer Service Building

Project Number:	Multiple	5 Year Historical Total	\$ -
Contact:	Tim Friday, Assistant Utilities Director	2016-2020 Total	3,258,054
Department:	Utilities Department	<b>CIP Project Total (2011-2020): \$ 3,258,054</b>	
Category:	Building		
Type:	New		
Useful Life:	50 years		

### Description

This project accommodates construction of a new Administration/Customer Service Building for the Utilities Department. The existing Kellogg Facility will be repurposed for staff currently housed in trailers.

### Justification

This building will accommodate the existing and future Administration and Customer Service staff within Utilities. The Admin/CS Team currently is short of space by approximately 3,000 SF. This shortage will increase as the department grows. The new facility will be designed and constructed to meet the needs of the department through buildout. A site assessment was conducted in 1st quarter 2013 that details existing and future conditions, and identifies space needs for the Utilities Department. Construction is targeted for 2019 with funding split across the 4-enterprises based upon staffing. The Wastewater Fund's portion of 2019 funding will be a drawdown of CIP Reserves accumulated in prior years and departmentally designated plus system development fees and rates revenues accumulated over a 5-year period (2015-2019).

Expenditures	2016	2017	2018	2019	2020	Total
Water Fund	\$ -	\$ -	\$ -	\$ 1,403,641	\$ -	\$ 1,403,641
Water Resources Fund	-	-	-	627,940	-	627,940
Stormwater Fund	-	-	-	638,165	-	638,165
Wastewater Fund	-	-	-	588,308	-	588,308
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,258,054</b>	<b>\$ -</b>	<b>\$ 3,258,054</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Water Fund CIP Reserves	\$ -	\$ -	\$ -	\$ 1,403,641	\$ -	\$ 1,403,641
Water Resources Fund CIP Reserves	-	-	-	627,940	-	627,940
Stormwater Fund CIP Reserves	-	-	-	638,165	-	638,165
Wastewater Fund CIP Reserves	-	-	-	588,308	-	588,308
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 3,258,054</b>	<b>\$ -</b>	<b>\$ 3,258,054</b>

<b>Estimated Operating Expenditures</b>	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 150,000
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There are general operations expenditures of approximately \$30,000 per year. The Water fund's portion is \$12,228 per year, the Water Resources fund portion is \$5,740 per year, the Stormwater fund's portion is \$5,559 per year, and the Wastewater fund portion is \$6,742 per year.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Site Improvements at 175 Kellogg Court

Project Number: Multiple	
Contact: Tim Friday, Assistant Utilities Director	5 Year Historical Total \$ -
Department: Utilities Department	2016-2020 Total <u>2,663,702</u>
Category: Building	<b>CIP Project Total (2011-2020): \$ 2,663,702</b>
Type: New	
Useful Life: 30 years	

#### Description

This project is part of overall facilities planning for the Utilities Department. Projects include paving, landscaping, a truck washing facility, and equipment storage upon completion of the Operations and Maintenance center and Administration and Customer Service buildings.

#### Justification

Money is needed for parking lot paving in 2017 and money is needed to help maintain, repair, and make improvements to the facilities at 175 Kellogg Court in 2020.

Expenditures	2016	2017	2018	2019	2020	Total
Water Fund	\$ -	\$ 57,502	\$ -	\$ -	\$ 1,021,325	\$ 1,078,827
Water Resources Fund	-	43,480	-	-	456,907	500,387
Stormwater Fund	-	25,864	-	-	464,000	489,864
Wastewater Fund	-	31,484	-	-	563,140	594,624
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 158,330</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,505,372</b>	<b>\$ 2,663,702</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Water Fund CIP Reserves	\$ -	\$ 57,502	\$ -	\$ -	\$ 1,021,325	\$ 1,078,827
Water Resources Fund CIP Reserves	-	43,480	-	-	456,907	500,387
Stormwater Fund CIP Reserves	-	25,864	-	-	464,000	489,864
Wastewater Fund CIP Reserves	-	31,484	-	-	563,140	594,624
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 158,330</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,505,372</b>	<b>\$ 2,663,702</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Future operating expenditures for this project are unknown at this time.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**WATER FUND**

**UTILITIES DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
<b>Water Supply Wells</b>						
Water Supply Wells	\$ 675,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 600,000	\$ 3,075,000
<b>Water Treatment</b>						
Water Treatment Plant Upgrades and Equip.	150,000	150,000	150,000	150,000	150,000	750,000
Meadows Skylight Removal	50,000	-	-	-	-	50,000
RWTP Filter Media Upgrade	500,000	-	-	-	-	500,000
<b>Water Storage</b>						
Water Storage (Tank) Projects	435,000	335,000	185,000	125,000	3,475,609	4,555,609
<b>Pumping &amp; Distribution System Upgrades</b>						
Pumping and Distribution System Upgrades	300,000	500,000	300,000	850,000	375,000	2,325,000
<b>Transmission &amp; Distribution</b>						
Waterline Rehab/Replacement	548,000	301,000	853,000	574,000	884,000	3,160,000
Craig & Gould N. Improvements	-	-	-	55,000	480,000	535,000
<b>Other Projects</b>						
Security and SCADA System Improvements	75,000	75,000	75,000	75,000	75,000	375,000
General Facility Upgrades & Replacements	325,000	200,000	200,000	200,000	200,000	1,125,000
<b>Combined Projects<sup>^</sup></b>						
Operations and Maintenance Center Building	223,945	-	-	-	-	223,945
Administration & Customer Service Building	-	-	-	1,403,641	-	1,403,641
Site Improvements at 175 Kellogg Court	-	57,502	-	-	1,021,325	1,078,827
<b>Total Expenditures by Year</b>	<b>\$ 3,281,945</b>	<b>\$ 2,218,502</b>	<b>\$ 2,363,000</b>	<b>\$ 4,032,641</b>	<b>\$ 7,260,934</b>	<b>\$ 19,157,022</b>
<b>Project Funding Sources*</b>						
Metered Water Sales	2,210,000	\$ 1,910,000	\$ 1,560,000	\$ 1,550,000	\$ 1,187,382	\$ 8,417,382
System Development Fees	-	151,000	-	-	-	151,000
CIP Reserves	1,071,945	157,502	803,000	2,482,641	6,073,552	10,588,640
<b>Total Funding Sources by Year</b>	<b>\$ 3,281,945</b>	<b>\$ 2,218,502</b>	<b>\$ 2,363,000</b>	<b>\$ 4,032,641</b>	<b>\$ 7,260,934</b>	<b>\$ 19,157,022</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

*<sup>^</sup>Combined projects meet the needs of the entire department and are funded by all four funds. These projects are reflected on the [Utilities - Combined Projects Capital Improvement](#) section.*

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Water Supply Wells

Project Number:	Multiple		
Contact:	Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 791,709
Department:	Utilities Department	2016-2020 Total	3,075,000
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 3,866,709</b>
Type:	Replacement		
Useful Life:	25 Years		

### Description

This project would rehabilitate or replace existing Town of Castle Rock wells as they reach the end of their useful lives. Well 9 is no longer an active well facility. Plans are to demolish the building, disconnect services (power, telephone, etc.) and restore the site. The well equipment and replacement project will rehabilitate or replace existing Town of Castle Rock well equipment as they reach the end of their useful lives. Building 204 Improvements include replacing the VFD (Variable Frequency Drive), which is too old to get parts for, placing new VFD and other electrical components and controls outside of the building away from the wet water pipe, and rehab and/or replacement of the well building due to age, wear, and the fact that removing the old VFD will almost demolish the old shed-like building.

### Justification

As existing wells deteriorate, they need to be rehabilitated or replaced. Replacement wells generally provide the same yield as a new well, but at a fraction of the cost. The replacement schedule is based on an assumed 25-year life from each well and a replacement will be drilled at the end of the 25-year period. Unused facilities are a liability from an insurance standpoint. The Colorado Department of Public Health is also requiring that our unused wells be formally abandoned. As existing wells deteriorate they need to be rehabilitated or replaced. Replacement wells generally provide the same yield as a new well, but at a fraction of the cost. The replacement schedule is based on an assumed 25-year life from each well and a replacement will be drilled at the end of the 25-year period. Well 204 is a critical water supply well and must remain in good working order.

Expenditures	2016	2017	2018	2019	2020	Total
Well Rehab/Replacement	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 2,500,000
Well 9 Demolition	75,000	-	-	-	-	75,000
Well Equipment and Replacement	100,000	100,000	100,000	100,000	100,000	500,000
<b>Total Expenditures</b>	<b>\$ 675,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 3,075,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 575,000	\$ 500,000	\$ 500,000	\$ 500,000	\$ 137,382	\$ 2,212,382
CIP Reserves	100,000	100,000	100,000	100,000	462,618	862,618
<b>Total Funding Sources</b>	<b>\$ 675,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 600,000</b>	<b>\$ 3,075,000</b>

<b>Future Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Future repair and maintenance of wells is ongoing and is included within the Well Rehab/Replacement project based on assumed 25-year life from each well. Costs will vary for each well depending on the amount and type of rehab, and the depth of the well.

<b>Future Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There is no future operating revenue anticipated as a result of this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Water Treatment Plant Upgrades and Equip.**

Project Number:	Multiple	5 Year Historical Total	\$	100,000
Contact:	Jeanne Stevens, Engineering Manager	2016-2020 Total		750,000
Department:	Utilities Department	<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>850,000</b>
Category:	Infrastructure			
Type:	Upgrade			
Useful Life:	50 years			

**Description**

This project will provide for miscellaneous improvements at existing Water Treatment Plants. There are four active water treatment plants. Examples of specific upgrades include pipe gallery painting, HVAC and cooling unit replacements, door repair and replacement, basins repairs, instrumentation and alarm upgrades and safety improvements. The equipment replacement project will replace existing electrical and/or mechanical equipment associated with water treatment facilities.

**Justification**

The Town relies on four water treatment facilities to filter deep aquifer groundwater and one facility for purifying alluvial well water. These facilities require periodic upgrades to instrumentation, controls and other small upgrades. Electrical and mechanical equipment needs to be replaced as equipment reaches the end of its useful life. A preventive maintenance program associated with asset management will be used to determine replacement schedules based on the type of equipment, service duty and operating conditions.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Water Treatment Plant Facility Upgrades	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Water Treatment Plant Equipment Replacer	100,000	100,000	100,000	100,000	100,000	500,000
<b>Total Expenditures</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 750,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Metered Water Sales	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 150,000	\$ 750,000
<b>Total Funding Sources</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 150,000</b>	<b>\$ 750,000</b>

<b>Future Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Future operating expenditures for this project are unknown at this time.

<b>Future Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There is no future operating revenue anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Meadows Skylight Removal**

Project Number: 77-92			
Contact: Jeanne Stevens, Engineering Manager		5 Year Historical Total	\$ 45,000
Department: Utilities Department		2016-2020 Total	50,000
Category: Building		<b>CIP Project Total (2011-2020):</b>	<b>\$ 95,000</b>
Type: Repair			
Useful Life: 20 Years			

**Description**

This project is planned to remove the existing leaking skylights and restore the roof at the Meadows Water Treatment Plant. The skylights leak over the filter process area and are a source of potential cross contamination and a threat to electrical equipment.

**Justification**

The existing skylights leak during snow or rain events. The skylights will be removed and the roof repaired to stop leaks over the filter beds and instrumentation control areas.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Repair	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Metered Water Sales	\$ 50,000	\$ -	\$ -	\$ -	\$ -	\$ 50,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 50,000</b>

**Future Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Future Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There is no future operating revenue anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name RWTP Filter Media Upgrade**

Project Number: 77-95

Contact: Jeanne Stevens, Engineering Manager

Department: Utilities Department

Category: Building

Type: Repair

Useful Life: 50 Years

5 Year Historical Total \$ 609,330

2016-2020 Total 500,000

**CIP Project Total (2011-2020): \$ 1,109,330**

**Description**

The plastic filter underdrains of 8 filter cells at the Ray Waterman Water Treatment Plant will be replaced with new, stainless steel filter underdrains. The old underdrains are allowing filter media to escape, creating maintenance issues and with the potential to hamper adequate water treatment. The filter media in all 8 cells will have to be replaced. The old, removed media has to be properly disposed of in a landfill.

**Justification**

The upgrade is needed in order to improve plant performance and eliminate operations and maintenance issues. The escaping filter media collects in the underdrains, in the filter effluent pipe and in the 500,000 gallon clearwell. The media must be removed from those places. The lost media from the filters must be replaced. A loss of media in the filter beds could cause ineffective water treatment and the risk of a water quality violation.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000
<b>Total Expenditures</b>	<b>\$ 500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
CIP Reserves	\$ 500,000	\$ -	\$ -	\$ -	\$ -	\$ 500,000
<b>Total Funding Sources</b>	<b>\$ 500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>

**Future Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Future Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There is no future operating revenue anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Water Storage (Tank) Projects

Project Number:	Multiple		
Contact:	Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 172,430
Department:	Utilities Department	2016-2020 Total	4,555,609
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 4,728,039</b>
Type:	Repair		
Useful Life:	50 Years		

### Description

The tank rehabilitation project will facilitate structural and/or site modifications to existing tanks to ensure reliability and tank security. Known projects include adding stairs to tanks 3, 4, and 16A. The Liberty Village Yellow Zone Tank project includes the construction of a two million gallon tank to serve Liberty Village/Cobblestone Ranch Yellow Zone. As growth in the service area increases, demand will exceed the available storage in the Red Zone tanks that currently serve the area. This tank will be dedicated storage for max day demands and fire flow in the service area. The Tank 6B and 5 demolition project will include the demolition of two water tanks. Tank 6B has structural concrete issues and has been taken out of service. Plans are to demolish the tank so that it is not a safety liability. Tank 5 is no longer used and has reached the end of its useful life. Many of our water storage tanks are greater than 20 feet tall and are only accessible by ladders. Employees frequent the tanks for water quality sampling and inspections. Stairs improve access to the tanks and reduce the chances of serious injury from a fall. The EA Valves project is to add electric actuated valves to water storage tanks. Electric actuated valves can be remotely operated from a central SCADA location. Given the remote location of many of the tanks, this allows for quicker response to system upsets or vulnerabilities.

### Justification

The Town's water storage facilities consist of sixteen tanks requiring various maintenance and rehabilitation work on a periodic basis. Tanks are inspected annually and any deficiencies identified during this process are addressed through the Tank Rehabilitation program. There is no water storage in the Liberty Village development and this part of the water service area lies in a long finger in the northeast quadrant of Town. The Development Agreement with Liberty Village requires the Town to construct a water storage tank near the Liberty Village development. A storage tank in this development also would help reinforce operational reliability in the northeast quadrant. The stairs are needed to help alleviate the risk of falling while accessing the storage tanks for routine inspections and water quality testing. Water quality sampling and data analysis indicate that tanks may not be adequately circulating stored water, particularly during winter demand months. Inadequate circulation leads to aged water. Mixers can be added to tanks to improve circulation, decrease stratification and promote mixing.

Expenditures	2016	2017	2018	2019	2020	Total
Tank Rehabilitation	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Liberty Village Yellow Zone Tank	-	-	-	-	3,425,609	3,425,609
Tank Demolition	250,000	150,000	-	-	-	400,000
Add Stairs to Tanks	60,000	60,000	60,000	-	-	180,000
Electric Actuated Valves at Tanks	75,000	75,000	75,000	75,000	-	300,000
					\$	-
<b>Total Expenditures</b>	<b>\$ 435,000</b>	<b>\$ 335,000</b>	<b>\$ 185,000</b>	<b>\$ 125,000</b>	<b>\$ 3,475,609</b>	<b>\$ 4,555,609</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 435,000	\$ 335,000	\$ 185,000	\$ 125,000	\$ 50,000	\$ 1,130,000
CIP Reserves	-	-	-	-	3,425,609	3,425,609
<b>Total Funding Sources</b>	<b>\$ 435,000</b>	<b>\$ 335,000</b>	<b>\$ 185,000</b>	<b>\$ 125,000</b>	<b>\$ 3,475,609</b>	<b>\$ 4,555,609</b>

**Future Operating Expenditures**      \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

Future repair and maintenance of tanks is ongoing and is included within the Tank Rehabilitation project.

**Future Revenue**      \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

There is no future operating revenue anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Pumping and Distribution System Upgrades

Project Number:	Multiple		
Contact:	Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 480,710
Department:	Utilities Department	2016-2020 Total	2,325,000
Category:	Equipment	<b>CIP Project Total (2011-2020):</b>	<b>\$ 2,805,710</b>
Type:	Replacement		
Useful Life:	25 Years		

### Description

The Town has nine active pump stations that are all over 10 years old. Pump Stations are critical to providing water to customers and for moving water around Town. Although a pump station facility has an overall 50 year service life, the individual components (pumps, motors, flow meters, valves, etc.) need replacement at shorter intervals. WISE deliveries are expected to increase over time as more renewable water sources are added. Modeling indicates that to accommodate and deliver WISE water around Town, future pumping capacity in the Red Zone will have to be increased to move the water to distribution and storage. The Milestone Pump Station PRV Valve project will upgrade a pressure reducing valve at the Milestone Pump Station. The Tacker Court project will accomplish a new pressure reducing valve (PRV) in downtown area. Blue and Purple pressure zones exist at Tacker Court to distribute water to upper and lower parts of the Young American area. A Pressure reducing valve vault would provide some redundancy to the distribution system and also improve water quality in this older part of Town. The distribution system upgrades project will accomplish future year water transmission and distribution facility upgrades. Valves, Pressure reducing valves and vaults, and other appurtenances often require repair and/or replacement before water main pipes do. Such appurtenances must be maintained in good operable condition to ensure reliable water transmission and distribution.

### Justification

Pump station equipment and individual components need to be replaced as equipment reaches the end of its useful life. A preventive maintenance program associated with asset management will be used to determine replacement schedules based on the type of equipment, service duty and operating conditions. The existing Red Zone pumps will be undersized for future demands and supplies. A new PRV located at the end of Tacker Court will connect the blue and purple zones. This will provide a separate outlet for Tank 3 and aid in water quality by minimizing water age. Future year projects that are identified in the Water Master Plan will need to be implemented in order to ensure distribution system reliability and capacity to deliver water in growing areas. Planned improvements include the automation of several pressure reducing valve stations identified.

Expenditures	2016	2017	2018	2019	2020	Total
Pump Station Equipment Replacement	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
Red Zone Pumping Upsize	-	-	-	550,000	-	550,000
Milestone Pump Station PRV Valve	-	-	-	-	75,000	75,000
Tacker Court Pressure Reducing Valve (PRV)	-	200,000	-	-	-	200,000
Distribution System Upgrades	250,000	250,000	250,000	250,000	250,000	1,250,000
<b>Total Expenditures</b>	<b>\$ 300,000</b>	<b>\$ 500,000</b>	<b>\$ 300,000</b>	<b>\$ 850,000</b>	<b>\$ 375,000</b>	<b>\$ 2,325,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 300,000	\$ 500,000	\$ 300,000	\$ 300,000	\$ 375,000	\$ 1,775,000
CIP Reserves	-	-	-	550,000	-	550,000
<b>Total Funding Sources</b>	<b>\$ 300,000</b>	<b>\$ 500,000</b>	<b>\$ 300,000</b>	<b>\$ 850,000</b>	<b>\$ 375,000</b>	<b>\$ 2,325,000</b>

<b>Future Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ 30,074	\$ 30,074
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Future repair and maintenance of pump station equipment is ongoing and is included within the Pump Station Equipment Replacement project. A single pump or motor could exceed \$25,000. Red Zone Pumping Upsize Estimated operating costs are \$30,074 annually.

<b>Future Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There is no future operating revenue anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Waterline Rehab/Replacement

Project Number:	Multiple		
Contact:	Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 277,762
Department:	Utilities Department	2016-2020 Total	3,160,000
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 3,437,762</b>
Type:	Repair		
Useful Life:	50 years		

### Description

This project will rehabilitate or replace existing Town of Castle Rock waterlines as they reach the end of their useful lives. The Prairie Hawk project includes the installation of 500 linear feet of 12 inch waterline and the extension of blue zone waterline to eliminate zone break and improve water quality. The Glovers project is a phased approach to replace aging waterline in the Glovers neighborhood. Plans include the replacement of approximately 10,500 linear feet of 8 inch water mains. The Crowfoot project will replace approximately 725 linear feet of Purple Zone transmission line in Crowfoot Valley Road from Tower Rd to the Diamond Ridge Pump Station. The transmission line is undersized and must be upsized from 16 inch to 20 inch to to move future WISE water supplies. The Highway 85 projects includes the construction of a transmission line at HWY 85 that is needed to move WISE/Dominion flows. The Topeka Way project includes the construction of a waterline loop at Topeka Way. The Tank 11 to Pine Canyon project constructs a water line from Tank 11 to the Pine Canyon development

### Justification

This program is intended to systematically identify and replace old (at risk) water lines prior to their failure. This work is also coordinated with Public Works and their Pavement Maintenance Program. Currently part of the waterline in Prairie Hawk is a dead end line; extension of the water line to remove a zone break will enhance water circulation in the area and improve water quality. Low disinfectant residuals have been the water quality issue of concern in the area. Operators are routinely wasting water in the area to improve water quality. The Glovers neighborhood is experiencing water line breaks at a higher rate than other parts of Town. Also, most of the existing waterlines are undersized 6-inch water mains that don't support an adequate fire flow. Future water supplies from WISE must be delivered around Town and water transmission lines must be adequately sized to convey future flows required to meet future demands. This infrastructure is needed to move future water supplies and will require additional pipeline to handle the additional acre feet of water being transported.

Expenditures	2016	2017	2018	2019	2020	Total
Waterline Rehab/Replacement	\$ 150,000	\$ 150,000	\$ 150,000	\$ 200,000	\$ 200,000	\$ 850,000
Prairie Hawk Waterline Extension	150,000	-	-	-	-	150,000
Glovers Waterline Replacement	-	-	-	374,000	363,000	737,000
Crowfoot Purple Line Upsize	-	151,000	-	-	-	151,000
Highway 85 Transmission	-	-	703,000	-	-	703,000
Topeka Way Waterline Loop	248,000	-	-	-	-	248,000
Tank 11 to Pine Canyon Water Line	-	-	-	-	321,000	321,000
<b>Total Expenditures</b>	<b>\$ 548,000</b>	<b>\$ 301,000</b>	<b>\$ 853,000</b>	<b>\$ 574,000</b>	<b>\$ 884,000</b>	<b>\$ 3,160,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 300,000	\$ 150,000	\$ 150,000	\$ 200,000	\$ 200,000	\$ 1,000,000
CIP Reserves	248,000	-	703,000	374,000	684,000	2,009,000
System Development Fees	-	151,000	-	-	-	151,000
<b>Total Funding Sources</b>	<b>\$ 548,000</b>	<b>\$ 301,000</b>	<b>\$ 853,000</b>	<b>\$ 574,000</b>	<b>\$ 884,000</b>	<b>\$ 3,160,000</b>

<b>Future Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no additional future operating expenditures associated with rehab/replacement.

<b>Future Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There is no future operating revenue anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Craig & Gould N. Improvements**

Project Number: 76-51		5 Year Historical Total	\$	126,157
Contact: Jeanne Stevens, Engineering Manager		2016-2020 Total		535,000
Department: Utilities Department		<b>CIP Project Total (2011-2020):</b>		
Category: Infrastructure			<b>\$</b>	<b>661,157</b>
Type: Upgrade				
Useful Life: 20 years				

**Description**

This project would accomplish infrastructure improvements in Craig & Gould North neighborhood.

**Justification**

Existing water lines are undersized and greater than 70 years old. This project will be coordinated with Public Works and Stormwater for a comprehensive infrastructure improvement. In-house resources will be used as much as possible to reduce the cost of this project.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Design	\$ -	\$ -	\$ -	\$ 55,000	\$ -	\$ 55,000
Construction	-	-	-	-	480,000	480,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 55,000</b>	<b>\$ 480,000</b>	<b>\$ 535,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
CIP Reserves	\$ -	\$ -	\$ -	\$ 55,000	\$ 480,000	\$ 535,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 55,000</b>	<b>\$ 480,000</b>	<b>\$ 535,000</b>

**Future Operating Expenditures**      \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

Future operating expenditures for this project are unknown at this time.

**Future Revenue**                              \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

There is no future operating revenue anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Security and SCADA System Improvements

Project Number: Multiple

Contact: Tim Friday, Assistant Utilities Director

Department: Utilities Department

Category: Building

Type: Upgrade

Useful Life: 20 years

5 Year Historical Total \$ 434,417

2016-2020 Total 375,000

**CIP Project Total (2011-2020): \$ 809,417**

### Description

This project is intended to accomplish miscellaneous small projects to increase facilities security in accordance with the Facilities Vulnerability Assessment. This project will accomplish future year water transmission and distribution facility upgrades.

### Justification

Projects include electronic access control at all water facilities through installation of card readers or replacement of mechanical locks with electronic locks operated by programmable keys. Other projects include repair and replacement of fencing and installation of secure gates. Future year projects that are identified in the Water Master Plan will need to be implemented in order to ensure distribution system reliability and capacity to deliver water in growing areas. Planned improvements include the automation of several pressure reducing valve stations identified in the Water Master Plan. Most of this work will be performed by Utilities staff.

### Expenditures

	2016	2017	2018	2019	2020	Total
Security Improvements	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
SCADA System Improvements	25,000	25,000	25,000	25,000	25,000	125,000
<b>Total Expenditures</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 375,000</b>

### Funding Sources

	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 375,000
<b>Total Funding Sources</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 375,000</b>

<b>Future Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Future operating expenditures for this project are unknown at this time.

<b>Future Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There is no future operating revenue anticipated as a result of this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name General Facility Upgrades & Replacements

Project Number:	Multiple		
Contact:	Tim Friday, Assistant Utilities Director	5 Year Historical Total	\$ 375,976
Department:	Utilities Department	2016-2020 Total	1,125,000
Category:	Equipment	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,500,976</b>
Type:	Upgrade		
Useful Life:	20 years		

### Description

The general facilities upgrade project upgrades an existing booster pump station, pressure reducing valves and related water facilities. Facilities capital replacements project will facilitate maintaining building functionality by making needed updates and replacing portions for the facilities capital. The paving project will pave the access drives to pump stations/tanks/well sites and other facilities. We have 5 water treatment plants, many pump stations, PRVs, buildings and office space. All of these facilities require maintenance and replacements, i.e.. tables, chairs, blinds, HVAC systems, hot water heaters, roofs, doors, windows, painting, etc. This project also includes improvements to Well building 204 which include replacing outdated equipment and electrical components.

### Justification

Small projects to improve the functionality and/or appearance of Town facilities are necessary. These projects include drainage, landscaping, and site improvements at existing pump stations. As buildings age, components will require replacements. As a formal asset management program develops, capital replacements will become well defined. This project is created to accommodate that eventuality. The existing access to many of our sites is unimproved or gravel access that requires extension maintenance, particularly during the winter. Snowplowing and access in general will be improved by paving and otherwise improving site access.

Expenditures	2016	2017	2018	2019	2020	Total
General Facility Upgrades	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 75,000	\$ 375,000
Facilities Capital Replacements	75,000	75,000	75,000	75,000	75,000	375,000
Building 204 Improvements	125,000	-	-	-	-	125,000
Facilities Paving	50,000	50,000	50,000	50,000	50,000	250,000
<b>Total Expenditures</b>	<b>\$ 325,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 1,125,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Metered Water Sales	\$ 325,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 200,000	\$ 1,125,000
<b>Total Funding Sources</b>	<b>\$ 325,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ 1,125,000</b>

<b>Future Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Future operating expenditures for this project are unknown at this time.

<b>Future Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There is no future operating revenue anticipated as a result of this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**WATER RESOURCES FUND**

**UTILITIES DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Plum Creek Diversion Structure and Equipmen	\$ 9,217,388	\$ -	\$ -	\$ -	\$ -	\$ 9,217,388
WISE Project	13,532,865	739,323	1,030,643	4,041,735	2,448,939	21,793,505
Chatfield Reallocation Project	620,187	620,187	620,187	620,187	620,187	3,100,935
Rehabilitation of Alluvial Well Fields	120,000	150,000	-	200,000	250,000	720,000
Aquifer Storage and Recovery Pilot Program	-	500,000	-	-	500,000	1,000,000
Advanced Treatment Facility	7,171,627	-	-	-	-	7,171,627
PCWPF Generator	1,100,000	-	-	-	-	1,100,000
Future Pipelines & Pump Stations	200,000	200,000	-	-	-	400,000
Alternative Source of Supply Project	4,466,000	12,631,000	4,355,000	4,000,000	-	25,452,000
<b>Combined Projects^</b>						
Operations and Maintenance Center Building	100,236	-	-	-	-	100,236
Administration & Customer Service Building	-	-	-	627,940	-	627,940
Site Improvements at 175 Kellogg Court	-	43,480	-	-	456,907	500,387
<b>Total Expenditures by Year</b>	<b>\$ 36,528,303</b>	<b>\$ 14,883,990</b>	<b>\$ 6,005,830</b>	<b>\$ 9,489,862</b>	<b>\$ 4,276,033</b>	<b>\$ 71,184,018</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
CIP Reserves	36,528,303	14,883,990	6,005,830	9,489,862	4,276,033	71,184,018
<b>Total Funding Sources by Year</b>	<b>\$ 36,528,303</b>	<b>\$ 14,883,990</b>	<b>\$ 6,005,830</b>	<b>\$ 9,489,862</b>	<b>\$ 4,276,033</b>	<b>\$ 71,184,018</b>

\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.

^Combined projects meet the needs of the entire department and are funded by all four funds. These projects are reflected on the [Utilities - Combined Projects Capital Improvement](#) section.



*Rueter Hess Reservoir*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Plum Creek Diversion Structure and Equipment**

Project Number: 77-54		
Contact: Matt Benak, Water Resources Manager	5 Year Historical Total	\$ 824,522
Department: Utilities Department	2016-2020 Total	9,217,388
Category: Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 10,041,910</b>
Type: New		
Useful Life: 50 years		

**Description**

This project will install a surface diversion structure along Plum Creek downstream of the Plum Creek Water Reclamation Authority facility. This raw water pipeline will move the water collected from Plum Creek at the surface diversion structure south into Town to be treated at the Plum Creek Water Purification Facility (PCWPF). The length of the pipeline is dependent upon the exact location of the diversion structure.

**Justification**

The Town has more water rights along Plum Creek than it can currently capture through the existing alluvial well infrastructure. The Town has a goal of providing 75% renewable water to its customers at build-out. This project would allow the Town to continue towards the renewable water goal by capturing existing water rights on Plum Creek and taking full advantage of its junior water rights during times of high stream flow.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Diversion Structure & Pump Station	\$ 3,065,007	\$ -	\$ -	\$ -	\$ -	3,065,007
Raw Water pipeline to PCWPF	4,890,384	-	-	-	-	4,890,384
Pre-Sedimentation Basin	1,261,997	-	-	-	-	1,261,997
<b>Total Expenditures</b>	<b>\$ 9,217,388</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>9,217,388</b>

**Funding Sources**

CIP Reserves	\$ 9,217,388	\$ -	\$ -	\$ -	\$ -	9,217,388
<b>Total Funding Sources</b>	<b>\$ 9,217,388</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>9,217,388</b>

**Estimated Operating Expenditures** \$ - \$ 172,260 \$ 172,260 \$ 172,260 \$ 172,260 \$ 689,040

Future operating costs are estimated at \$172,260 per year beginning in 2017 and are incorporated into the Water Resources Fund 2016-2018 Balanced financial plan.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

**WISE Project**

Project Number: 77-72

Contact: Matt Benak, Water Resources Manager

Department: Utilities Department

Category: Intangible

Type: New

Useful Life: Perpetual / 50 years

5 Year Historical Total \$ 11,916,179

2016-2020 Total 21,793,505

**CIP Project Total (2011-2020): \$ 33,709,684**

### Description

This project secures 1,000 acre-feet (AF) of water on average from Denver and Aurora and builds infrastructure necessary to move water from the Peter Binney Water Purification Facility located at Aurora Reservoir to the Town of Castle Rock. It includes purchase and modifications to existing infrastructure as well as several miles of new pipelines, pump stations, operating facilities, an operational reserve and the capital portion of the water delivery rate each year. This project also includes the purchase of up to 175 acre-feet of WISE Water supplies from other WISE members if the Plum Creek Diversion Structure is not complete by high water demand season in 2017.

### Justification

The Town owns substantial Denver Basin groundwater supplies and a limited amount of surface water on Plum Creek. However as the demand for water increases along with the Town population, other supplies will need to be secured to meet that demand. Sustainable water supplies must be imported to the Town with a focus on proximity and feasibility.

Expenditures	2016	2017	2018	2019	2020	Total
ECCV Title Cleanup	\$ -	\$ -	\$ -	\$ 143,024	\$ -	\$ 143,024
Binney Connection	-	200,000	400,000	3,400,000	-	4,000,000
WISE Project Subscription Fees	120,000	150,000	150,000	150,000	150,000	720,000
Castle Rock Delivery Infrastructure	5,796,000	-	-	-	-	5,796,000
WISE Local Infrastructure	7,210,000	-	-	-	1,866,950	9,076,950
WISE Operating Expenses	103,560	103,560	103,560	103,560	103,560	517,800
Operational Reserve	180,000	180,000	180,000	-	-	540,000
WISE Supply Purchases	113,676	-	-	-	-	113,676
WISE Water Delivery Facilities Capital	9,629	105,763	197,083	245,151	328,429	886,055
<b>Total Expenditures</b>	<b>\$13,532,865</b>	<b>\$ 739,323</b>	<b>\$ 1,030,643</b>	<b>\$ 4,041,735</b>	<b>\$ 2,448,939</b>	<b>\$ 21,793,505</b>

### Funding Sources

CIP Reserves	\$13,532,865	\$ 739,323	\$ 1,030,643	\$ 4,041,735	\$ 2,448,939	\$ 21,793,505
<b>Total Funding Sources</b>	<b>\$13,532,865</b>	<b>\$ 739,323</b>	<b>\$ 1,030,643</b>	<b>\$ 4,041,735</b>	<b>\$ 2,448,939</b>	<b>\$ 21,793,505</b>

**Estimated Operating Expenditures** \$ 61,610 \$ 549,259 \$ 901,268 \$ 1,146,472 \$ 1,481,477 \$ 4,140,086

Operating costs for the WISE project will be variable based on actual annual water purchased. Preliminary estimates suggest that O&M costs will be approximately \$1.5 million each year once the permanent delivery schedule begins in 2021. Water is set to be delivered to the Town in 2017 and operating costs will begin that year at an estimated \$500k and are incorporated into the Water Resources Fund 2016-2018 Balanced Financial Plan.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Chatfield Reallocation Project**

Project Number:	77-29		
Contact:	Matt Benak, Water Resources Manager	5 Year Historical Total	\$ 2,065,813
Department:	Utilities Department	2016-2020 Total	<u>3,100,935</u>
Category:	Intangible	<b>CIP Project Total (2011-2020):</b>	<b>\$ 5,166,748</b>
Type:	New		
Useful Life:	Perpetual		

**Description**

This project funds the participation and maintenance costs of the Town's reserved storage space (200 acre-feet) in the expanded Chatfield Reservoir. The Town plans to increase its participation rate to 1,500 acre-feet over a 15 to 20 year period.

**Justification**

This project has been identified as a critical component of the Town's Renewable Water Implementation Program, which includes maximizing the Town's existing supplies and finding the most efficient solutions to meet the Town's long term renewable water supply goals. Specifically, this storage space will allow enhanced management capabilities for our Plum Creek Water rights, including treated return flows in the Plum Creek basin.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Additional Storage	\$ 620,187	\$ 620,187	\$ 620,187	\$ 620,187	\$ 620,187	\$ 3,100,935
<b>Total Expenditures</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 3,100,935</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
CIP Reserves	\$ 620,187	\$ 620,187	\$ 620,187	\$ 620,187	\$ 620,187	\$ 3,100,935
<b>Total Funding Sources</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 620,187</b>	<b>\$ 3,100,935</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ 75,000	\$ 75,000	\$ 75,000	\$ 225,000
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There future operating and maintenance expenses of the reservoir are anticipated to be approximately \$75,000 a year beginning in 2018 and are incorporated into the Water Resources Fund 2016-2018 Balanced Financial Plan.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no anticipated operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Rehabilitation of Alluvial Well Fields

Project Number: 78-30

Contact: Matt Benak, Water Resources Manager

Department: Utilities Department

Category: Infrastructure

Type: Repair

Useful Life: 3 Years

5 Year Historical Total \$ -

2016-2020 Total 720,000

**CIP Project Total (2011-2020): \$ 720,000**

### Description

The purpose of this project is to rehabilitate each alluvial well field over the course of 3 years. Alluvial wells are shallow and connected to surface streams. In 2015, significant biofouling of the alluvial wells was observed after being in operation for two years. The work would entail pump removal, cleaning, video recording, pump re-installation, and permitting.

### Justification

The Town owns substantial Denver Basin groundwater supplies and a limited amount of surface water on Plum Creek. The future goal of the Town is to provide 75% renewable water supply annually to its customers. The alluvial wells capture the Town's renewable water rights in Plum Creek for treatment at Plum Creek Water Purification Facility.

Expenditures	2016	2017	2018	2019	2020	Total
Well Rehabilitation	\$ 120,000	\$ 150,000	\$ -	\$ 200,000	\$ 250,000	\$ 720,000
<b>Total Expenditures</b>	<b>\$ 120,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 250,000</b>	<b>\$ 720,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
CIP Reserves	\$ 120,000	\$ 150,000	\$ -	\$ 200,000	\$ 250,000	\$ 720,000
<b>Total Funding Sources</b>	<b>\$ 120,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ 200,000</b>	<b>\$ 250,000</b>	<b>\$ 720,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Aquifer Storage and Recovery Pilot Program

Project Number: 75-84		5 Year Historical Total	\$	558,056
Contact: Matt Benak, Water Resources Manager		2016-2020 Total		1,000,000
Department: Utilities Department		<b>CIP Project Total (2011-2020): \$ 1,558,056</b>		
Category: Infrastructure				
Type: New				
Useful Life: Perpetual				

#### Description

This project will incrementally expand the Town's Aquifer Storage and Recovery (ASR) program. Project plans include water quality and reactivity sampling and testing of the wells that were retrofitted in 2015. This project also includes the retrofit of an existing well to be operated as an injection well and begin injecting potable renewable water for storage and recovery.

#### Justification

An ASR program could benefit the Town's Renewable Water Implementation Program. It has been successful in neighboring communities and, if feasible, would strengthen the Town's ability to manage its water resources.

Expenditures	2016	2017	2018	2019	2020	Total
Construction	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ 1,000,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ 1,000,000</b>

#### Funding Sources

CIP Reserves	\$ -	\$ 500,000	\$ -	\$ -	\$ 500,000	\$ 1,000,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 500,000</b>	<b>\$ 1,000,000</b>

<b>Estimated Operating Expenditures</b>	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 20,000
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The estimated operating and maintenance expenses are estimated to be approximately \$4,000 a year for annual sampling costs.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	-
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There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Advanced Treatment Facility**

Project Number: 77-75		5 Year Historical Total	\$	3,284,750
Contact: Matt Benak, Water Resources Manager				
Department: Utilities Department				2016-2020 Total
Category: Infrastructure				<u>7,171,627</u>
Type: Upgrade				<b>CIP Project Total (2011-2020): \$ 10,456,377</b>
Useful Life: 50 years				

**Description**

This project will add advanced treatment processes to the Plum Creek Water Purification Facility (PCWPF), giving the Town the ability to adequately treat additional Plum Creek surface water supplies.

**Justification**

Advanced treatment processes are necessary for the effective treatment of our Plum Creek surface water supplies. The future goal of the Town is to provide 75% renewable water supply annually to its customers and this project will be a key component to achieve that goal.

Expenditures	2016	2017	2018	2019	2020	Total
Advance Treatment Processes	\$ 5,154,127	\$ -	\$ -	\$ -	\$ -	\$ 5,154,127
Membrane Expansion	2,017,500	-	-	-	-	2,017,500
<b>Total Expenditures</b>	<b>\$ 7,171,627</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,171,627</b>

**Funding Sources**

CIP Reserves	7,171,627	\$ -	\$ -	\$ -	\$ -	\$ 7,171,627
<b>Total Funding Sources</b>	<b>\$ 7,171,627</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 7,171,627</b>

<b>Estimated Operating Expenditures</b>	\$ 1,604,175	\$ 1,604,175	\$ 1,604,175	\$ 1,604,175	\$ 6,416,700
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Estimated O&M costs for advanced treatment processes are estimated at \$1.6 million each year beginning in 2017.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no anticipated operating revenues for this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**PCWPF Generator**

Project Number: 77-56

Contact: Tim Friday, Assistant Utilities Director

Department: Utilities Department

Category: Equipment

Type: New

Useful Life: 50 years

5 Year Historical Total \$ -

2016-2020 Total 1,100,000

**CIP Project Total (2011-2020): \$ 1,100,000**

**Description**

This project adds a 2500 kilowatt (kW) generator to the Plum Creek Water Purification facility to support the facility in times of power outages. This size generator will run the current plant treatment processes and the advanced treatment process at a water treatment capacity of 6 million gallons per day.

**Justification**

This treatment plant is a key component of the Town's water system infrastructure. This backup power system will provide the ability to ensure adequate treatment capacity for our customers in the event of a power outage.

**Expenditures**

	2016	2017	2018	2019	2020	Total
Construction	\$ 1,100,000	\$ -	\$ -	\$ -	\$ -	\$ 1,100,000
<b>Total Expenditures</b>	<b>\$ 1,100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,100,000</b>

**Funding Sources**

CIP Reserves	1,100,000	\$ -	\$ -	\$ -	\$ -	\$ 1,100,000
<b>Total Funding Sources</b>	<b>\$ 1,100,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,100,000</b>

**Estimated Operating Expenditures** \$ - \$ 8,250 \$ 8,250 \$ 8,250 \$ 8,250 \$ 33,000

Fuel cost will be incurred when the generator is in service and during regular maintenance testing.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Future Pipelines & Pump Stations**

Project Number: 78-03		5 Year Historical Total	\$	100,000
Contact: Matt Benak, Water Resources Manager		2016-2020 Total		400,000
Department: Utilities Department		<b>CIP Project Total (2011-2020): \$ 500,000</b>		
Category: Infrastructure				
Type: Planning/Design				
Useful Life: 50 years				

**Description**

This project studies the concept of moving South Platte water supplies from the foothills to Rueter-Hess Reservoir through the Plum Creek Diversion Structure. Likely, partnerships with area water providers will be necessary to make the construction of this project feasible. Once feasibility of the project is determined, money will be budgeted in the future for design and construction of the project.

**Justification**

The Town owns substantial Denver Basin groundwater supplies and a limited amount of surface water on Plum Creek. However as the demand for water increases along with the town population, other supplies will need to be secured to meet that demand. Sustainable water supplies must be imported to the Town with a focus on proximity and feasibility.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Foothills Pipeline and Pump Station	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ 200,000
Newlin Gulch Pipeline and Pump Station	100,000	100,000	-	-	-	200,000
<b>Total Expenditures</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 400,000</b>

**Funding Sources**

CIP Reserves	200,000	200,000	\$ -	\$ -	\$ -	\$ 400,000
<b>Total Funding Sources</b>	<b>\$ 200,000</b>	<b>\$ 200,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 400,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There is no operational impact associated with the study.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Alternative Source of Supply Project

Project Number:	77-30		
Contact:	Matt Benak, Water Resources Manager	5 Year Historical Total	\$ 9,987,320
Department:	Utilities Department	2016-2020 Total	25,452,000
Category:	Intangible	<b>CIP Project Total (2011-2020):</b>	<b>\$ 35,439,320</b>
Type:	New		
Useful Life:	50 years		

#### Description

This project entails importing an additional 2,500 acre-feet of renewable and fully consumable water from the South Platte River. This project includes the purchase of 2,500 acre-feet of renewable surface water on the South Platte River and all legal costs associated with enabling the water to be used in Castle Rock. It includes Box Elder property well fields, pipelines, pump stations, and treatment necessary to move the water from Box Elder Creek to Castle Rock. It includes obtaining firm capacity in East Cherry Creek Valley (ECCV) Water & Sanitation District's Northern Pipeline and pump stations.

#### Justification

The Town owns substantial Denver Basin groundwater supplies and a limited amount of surface water on Plum Creek. However, as the demand for water increases along with the town population, other supplies will need to be secured to meet that demand. Sustainable water supplies must be imported to the Town with a focus on proximity and feasibility.

Expenditures	2016	2017	2018	2019	2020	Total
Box Elder Creek Properties Option Pmts	\$ 300,000	\$ 300,000	\$ 300,000	\$ -	\$ -	\$ 900,000
Box Elder Creek Properties Purchase	-	8,157,000	-	-	-	8,157,000
Box Elder Creek Properties Due Diligence	166,000	74,000	55,000	-	-	295,000
Box Elder Alluvial Water Treatment	-	100,000	-	-	-	100,000
Water Rights	4,000,000	4,000,000	4,000,000	4,000,000	-	16,000,000
<b>Total Expenditures</b>	<b>\$ 4,466,000</b>	<b>\$ 12,631,000</b>	<b>\$ 4,355,000</b>	<b>\$ 4,000,000</b>	<b>\$ -</b>	<b>\$ 25,452,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
CIP Reserves	\$ 4,466,000	\$ 12,631,000	\$ 4,355,000	\$ 4,000,000	\$ -	\$ 25,452,000
<b>Total Funding Sources</b>	<b>\$ 4,466,000</b>	<b>\$ 12,631,000</b>	<b>\$ 4,355,000</b>	<b>\$ 4,000,000</b>	<b>\$ -</b>	<b>\$ 25,452,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Operating costs are not currently estimated as infrastructure to move the water is not set to begin until year 2030.

<b>Estimated Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**STORMWATER FUND**

**UTILITIES DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
<b>Stabilization</b>						
Tributary B Stabilization	\$ 337,500	\$ 337,500	\$ 337,500	\$ -	\$ -	\$ 1,012,500
Minor Drainageway Stabilization	50,000	50,000	50,000	50,000	50,000	250,000
Tributary D Stabilization	250,000	-	-	-	-	250,000
Stream Stabilization	2,150,000	150,000	-	850,000	250,000	3,400,000
Diamond Ridge Tributary Stabilization	-	-	-	250,000	-	250,000
<b>System Improvements</b>						
Front St. Flyover Drainage Improvements	45,000	-	-	-	-	45,000
Craig & Gould N. Infrastructure Improvemen	-	-	-	133,625	1,066,375	1,200,000
Young American Storm Sewer	-	-	100,000	400,000	-	500,000
Chase Drain Installations	15,750	16,538	17,364	19,144	-	68,796
<b>Combined Projects<sup>^</sup></b>						
Operations and Maintenance Center Building	101,812	-	-	5,559	-	107,371
Administration & Customer Service Building	-	-	-	638,165	-	638,165
Site Improvements at 175 Kellogg Court	-	25,864	-	-	464,000	489,864
<b>Total Expenditures by Year</b>	<b>\$ 2,950,062</b>	<b>\$ 579,902</b>	<b>\$ 504,864</b>	<b>\$ 2,346,493</b>	<b>\$ 1,830,375</b>	<b>\$ 8,211,696</b>
<b>Project Funding Sources*</b>						
Stormwater Charges	\$ 540,750	\$ 244,038	\$ 209,864	\$ 1,292,769	\$ 1,266,375	\$ 3,553,796
System Development Fees	657,500	310,000	295,000	410,000	100,000	1,772,500
CIP Reserves	1,751,812	25,864	-	643,724	464,000	2,885,400
<b>Total Funding Sources by Year</b>	<b>\$ 2,950,062</b>	<b>\$ 579,902</b>	<b>\$ 504,864</b>	<b>\$ 2,346,493</b>	<b>\$ 1,830,375</b>	<b>\$ 8,211,696</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

*<sup>^</sup>Combined projects meet the needs of the entire department and are funded by all four funds. These projects are reflected on the [Utilities - Combined Projects Capital Improvement](#) section.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Tributary B Stabilization**

Project Number:	77-25		
Contact:	David Van Dellen, Stormwater Manager	5 Year Historical Total	\$ 337,500
Department:	Utilities Department	2016-2020 Total	<u>1,012,500</u>
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,350,000</b>
Type:	Repair		
Useful Life:	50 years		

**Description**

This project includes flood control improvements at the Highway 85 roadway crossing and Union Pacific Railroad (UPRR) crossing with Tributary B to eliminate flood hazard from undersized infrastructure. This project is being completed in conjunction with the North Meadows Extension project.

**Justification**

The improvements will reduce safety hazards and protect public transportation from loss during flooding.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 337,500	\$ 337,500	\$ 337,500	\$ -	\$ -	\$ 1,012,500
<b>Total Expenditures</b>	<b>\$ 337,500</b>	<b>\$ 337,500</b>	<b>\$ 337,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,012,500</b>

**Funding Sources**

Stormwater Charges	\$ 67,500	\$ 67,500	\$ 67,500	\$ -	\$ -	\$ 202,500
System Development Fees	270,000	270,000	270,000	-	-	810,000
<b>Total Funding Sources</b>	<b>\$ 337,500</b>	<b>\$ 337,500</b>	<b>\$ 337,500</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,012,500</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Estimated Operating Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Minor Drainageway Stabilization**

Project Number: 78-02		5 Year Historical Total	\$	50,000
Contact: David Van Dellen, Stormwater Manager		2016-2020 Total		250,000
Department: Utilities Department		<b>CIP Project Total (2011-2020):</b>		<b>\$ 300,000</b>
Category: Infrastructure				
Type: Repair				
Useful Life: 50 years				

**Description**

This project includes new infrastructure on small channel systems downstream of development to correct erosion where the minor drainageway system is incomplete.

**Justification**

Improvements are required for the minor drainageway system downstream of development and connecting to the major drainageway system. Minor drainageways are natural or engineered conveyance systems with an upstream drainage area less than 130 acres. If improvements are not made, these systems pose a potential public safety hazard and flood risk. These projects will provide improvements for adequate capacity and stabilization.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Stormwater Charges	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
System Development Fees	25,000	25,000	25,000	25,000	25,000	125,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Estimated Operating Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Tributary D Stabilization**

Project Number: 76-47		5 Year Historical Total	\$	-
Contact: David Van Dellen, Stormwater Manager				
Department: Utilities Department				250,000
Category: Infrastructure		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>250,000</b>
Type: Repair				
Useful Life: 20 years				

**Description**

This project includes regional detention pond improvements adjacent to Metzler Park to restore original design volume for water quality and detention. Sediment has accumulated in the detention facility over time and is scheduled for removal.

**Justification**

This project will ensure adequate volume to provide water quality and flood detention for portions of the upper Tributary D watershed. This project will protect downstream water quality and ensure adequate capacity in the system.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 250,000	\$ -	\$ -	\$ -	\$ -	250,000
<b>Total Expenditures</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>250,000</b>

**Funding Sources**

System Development Fees	\$ 62,500	\$ -	\$ -	\$ -	\$ -	62,500
Stormwater charges	187,500	-	-	-	-	187,500
<b>Total Funding Sources</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>250,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Estimated Operating Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Stream Stabilization

Project Number:	Multiple		
Contact:	David Van Dellen, Stormwater Manager	5 Year Historical Total	\$ 1,488,840
Department:	Utilities Department	2016-2020 Total	3,400,000
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 4,888,840</b>
Type:	Repair		
Useful Life:	50 years		

### Description

This project includes stream channel stabilization throughout Castle Rock. The Tributaries are part of the major drainageway networks that includes watersheds with an upstream area greater than 130 acres, also known as the 100-year floodplain. These projects have been identified in the Stormwater Master Plan as a scheduled activity. Stream improvements generally include natural or engineered segments of vegetated stream between engineered hard points that reduce channel slope and erosive velocities. Improvements also ensure adequate flood capacity in the channel to reduce flood potential for adjacent properties.

### Justification

Improvements to the natural drainageway are required to mitigate for development impacts that accelerate erosion and pose a potential public safety hazard if left unattended over time. This project will restore a sustainable channel system for water quality and flood control. The improvements will reduce channel erosion and protect adjacent property from loss during flooding.

Expenditures	2016	2017	2018	2019	2020	Total
Douglas Lane Tributary Stabilization	\$ 1,250,000	\$ -	\$ -	\$ -	\$ -	\$ 1,250,000
Omni Tributary Stabilization	-	150,000	-	100,000	-	250,000
Industrial Tributary Stabilization	300,000	-	-	750,000	-	1,050,000
6400 West Tributary Stabilization	-	-	-	-	250,000	250,000
Hangman's Gulch Stabilization	600,000	-	-	-	-	600,000
<b>Total Expenditures</b>	<b>\$ 2,150,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ 850,000</b>	<b>\$ 250,000</b>	<b>\$ 3,400,000</b>

### Funding Sources

System Development Fees	\$ 300,000	\$ 15,000	\$ -	\$ 385,000	\$ 75,000	\$ 775,000
Stormwater Charges	200,000	135,000	-	465,000	175,000	975,000
CIP Reserves	1,650,000	-	-	-	-	1,650,000
<b>Total Funding Sources</b>	<b>\$ 2,150,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ 850,000</b>	<b>\$ 250,000</b>	<b>\$ 3,400,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There is a possible reduction in repair and maintenance costs.

<b>Estimated Operating Revenues</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There are no operating revenues for this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Diamond Ridge Tributary Stabilization**

Project Number: 77-61		5 Year Historical Total	\$	-
Contact: David Van Dellen, Stormwater Manager				
Department: Utilities Department				250,000
Category: Infrastructure		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>250,000</b>
Type: Upgrade				
Useful Life: 50 years				

**Description**

This project includes regional detention pond improvements to improve water quality and reduce impacts to the drainageway in the Diamond Ridge Subdivision. Additional pond volume is required to protect downstream infrastructure and new modifications to the outlet structure are needed to reduce release rates for enhanced water quality treatment.

**Justification**

This project will retrofit two existing regional detention ponds along Diamond Ridge Tributary to meet current standards for water quality and detention. These improvements will reduce impacts on the downstream channel by reducing flow rates to meet pre-development conditions.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ 250,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Stormwater Charges	\$ -	\$ -	\$ -	\$ 250,000	\$ -	\$ 250,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>	<b>\$ -</b>	<b>\$ 250,000</b>

**Estimated Operating Expenditures**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

There is a possible reduction in repair and maintenance costs.

**Estimated Operating Revenues**        \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

There are no operating revenues for this project.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**                                **Craig & Gould N. Infrastructure Improvements**

Project Number:	76-51	5 Year Historical Total	\$ -
Contact:	David Van Dellen, Stormwater Manager	2016-2020 Total	1,200,000
Department:	Utilities Department	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,200,000</b>
Category:	Infrastructure		
Type:	New		
Useful Life:	50 years		

**Description**

This project includes storm sewer improvements in the Craig and Gould North subdivision in partnership with the Public Works department for the revitalization of this downtown area. Currently, there is no storm drain system in the area. This project will add storm drains to capture flow and reduce flood risk for this historic neighborhood.

**Justification**

This project will provide storm drainage infrastructure to reduce street flooding and meet current criteria for residential land use. These improvements will reduce flooding hazards on the streets and for the existing private property in the neighborhood.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Design	\$ -	\$ -	\$ -	\$ 133,625	\$ -	\$ 133,625
Construction	-	-	-	-	1,066,375	1,066,375
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 133,625</b>	<b>\$ 1,066,375</b>	<b>\$ 1,200,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Stormwater Charges	\$ -	\$ -	\$ -	\$ 133,625	\$ 1,066,375	\$ 1,200,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 133,625</b>	<b>\$ 1,066,375</b>	<b>\$ 1,200,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are minor maintenance costs for cleaning.

<b>Estimated Operating Revenues</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Young American Storm Sewer**

Project Number: 78-31		5 Year Historical Total	\$	-
Contact: David Van Dellen, Stormwater Manager				
Department: Utilities Department				2016-2020 Total
Category: Infrastructure				500,000
Type: New		<b>CIP Project Total (2011-2020):</b>		<b>\$ 500,000</b>
Useful Life: 50 Years				

**Description**

This project includes storm sewer improvements in the Young American Subdivision in partnership with Public Works for street reconstruction. Currently, there is no storm drain system in the area. This project will add storm drains to capture flow and reduce flood risk for this historic neighborhood.

**Justification**

This project will provide storm drainage infrastructure to reduce flood hazards in the right-of-way. This project will also increase emergency accessibility to residents in the event of a flood.

Expenditures	2016	2017	2018	2019	2020	Total
Design	\$ -	\$ -	\$ 100,000	\$ -	\$ -	\$ 100,000
Construction	-	-	-	400,000	-	400,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 500,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Stormwater Charges	\$ -	\$ -	\$ 100,000	\$ 400,000	\$ -	\$ 500,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ 500,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are minor maintenance costs for cleaning.

**Estimated Operating Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Chase Drain Installations**

Project Number:	75-67		
Contact:	David Van Dellen, Stormwater Manager	5 Year Historical Total	\$ 37,000
Department:	Utilities Department	2016-2020 Total	68,796
Category:	Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 105,796</b>
Type:	Upgrade		
Useful Life:	50 Years		

**Description**

The purpose of this program is to reduce safety concerns on residential sidewalks where excessive water is present year-round. Chase drains are installed at these locations to convey water through the sidewalk to the gutter.

**Justification**

The program addresses resident concerns where drainage issues cause icing/algae and nuisance standing water on sidewalks and walkways. Locations are monitored for a year before being approved for a chase drain installation.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 15,750	\$ 16,538	\$ 17,364	\$ 19,144	\$ -	\$ 68,796
<b>Total Expenditures</b>	<b>\$ 15,750</b>	<b>\$ 16,538</b>	<b>\$ 17,364</b>	<b>\$ 19,144</b>	<b>\$ -</b>	<b>\$ 68,796</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Stormwater Charges	\$ 15,750	\$ 16,538	\$ 17,364	\$ 19,144	\$ -	\$ 68,796
<b>Total Funding Sources</b>	<b>\$ 15,750</b>	<b>\$ 16,538</b>	<b>\$ 17,364</b>	<b>\$ 19,144</b>	<b>\$ -</b>	<b>\$ 68,796</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Estimated Operating Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**WASTEWATER FUND**

**UTILITIES DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Lift Station Upgrades	\$ 97,000	\$ 152,400	\$ 65,000	\$ 75,000	\$ 75,000	\$ 464,400
Sewer Line Rehabilitation	350,000	350,000	350,000	350,000	350,000	1,750,000
Security and SCADA System Improvements	50,000	50,000	50,000	50,000	50,000	250,000
PCWRA Projects	2,958,014	3,121,476	3,217,636	3,317,643	3,492,650	16,107,419
Plum Creek Interceptor Upsize	750,000	-	-	-	-	750,000
Craig & Gould N. Improvements	-	-	-	250,000	105,000	355,000
<b>Combined Projects<sup>^</sup></b>						
Operations & Maintenance Center Building	123,507	-	-	-	-	123,507
Administration & Customer Service Building	-	-	-	588,308	-	588,308
Site Improvements at 175 Kellogg Court	-	31,484	-	-	563,140	594,624
<b>Total Expenditures by Year</b>	<b>\$ 4,328,521</b>	<b>\$ 3,705,360</b>	<b>\$ 3,682,636</b>	<b>\$ 4,630,951</b>	<b>\$ 4,635,790</b>	<b>\$ 20,983,258</b>
<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Wastewater Service Charges	\$ 910,000	\$ 599,786	\$ 949,000	\$ 959,000	\$ 1,030,000	\$ 4,447,786
System Development Fees	733,420	-	233,469	233,469	233,469	1,433,827
CIP Reserves	2,685,101	3,105,574	2,500,167	3,438,482	3,372,321	15,101,645
<b>Total Funding Sources by Year</b>	<b>\$ 4,328,521</b>	<b>\$ 3,705,360</b>	<b>\$ 3,682,636</b>	<b>\$ 4,630,951</b>	<b>\$ 4,635,790</b>	<b>\$ 20,983,258</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

*<sup>^</sup>Combined projects meet the needs of the entire department and are funded by all four funds. These projects are reflected on the [Utilities - Combined Projects Capital Improvement](#) section.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Lift Station Upgrades**

Project Number: Multiple

Contact: Jeanne Stevens, Engineering Manager

Department: Utilities Department

Category: Equipment

Type: Replacement

Useful Life: 20 years

5 Year Historical Total \$ 73,322

2016-2020 Total 464,400

**CIP Project Total (2011-2020): \$ 537,722**

**Description**

The purpose of the pump and motor replacement project is to plan for the capital replacement of pumps and/or motors at wastewater lift stations. The lift stations transport wastewater to the Plum Creek Wastwater Reclamation Authority for treatment. Pump and motor replacements are identified annually or on an emergency basis. The paving program improves access to Wastewater lift stations that may currently only be accessible along an unimproved, unpaved access drives. The facilities must be accessible at all times. Paving the access roads will improve accessibility. Current planned improvements include paving access roads at the Meadows 17, Castlewood No. 1 & 2, and Maher Lift Stations.

**Justification**

Pumps and motors at wastewater lift stations have a finite service life and replacement must be planned for on an ongoing basis. Employee safety and year round access to the lift station are accomodated through this project. Lift stations are typically checked multiple times per week.

**Expenditures**

	2016	2017	2018	2019	2020	Total
LS Rehab/Replacement	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
Lift Station Pump & Motor Replacement	30,000	35,000	40,000	50,000	50,000	205,000
Lift Station Paving	42,000	92,400	-	-	-	134,400
<b>Total Expenditures</b>	<b>\$ 97,000</b>	<b>\$ 152,400</b>	<b>\$ 65,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 464,400</b>

**Funding Sources**

Wastewater Service Charges	\$ 97,000	\$ 152,400	\$ 65,000	\$ 75,000	\$ 75,000	\$ 464,400
<b>Total Funding Sources</b>	<b>\$ 97,000</b>	<b>\$ 152,400</b>	<b>\$ 65,000</b>	<b>\$ 75,000</b>	<b>\$ 75,000</b>	<b>\$ 464,400</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating expenditures for this project.

**Estimated Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Sewer Line Rehabilitation**

Project Number: 75-62

Contact: Jeanne Stevens, Engineering Manager

Department: Utilities Department

Category: Infrastructure

Type: Repair

Useful Life: 50 years

5 Year Historical Total \$ 1,366,192

2016-2020 Total 1,750,000

**CIP Project Total (2011-2020): \$ 3,116,192**

**Description**

This project will rehabilitate or replace existing sewer lines due to age or failing infrastructure. This is an ongoing program and focus areas are identified annually. The Engineering division will work with the Operations division to identify areas that need sewer improvements and coordinate with the Public Works department to complete projects ahead of the Pavement Maintenance Program to minimize the impact of Townwide roadwork.

**Justification**

This project funds the replacement and rehabilitation of old, undersized and/or deteriorated sewer lines. The Sewer Rehabilitation Program will address the requirements of Environmental Protection Agency's (EPA) Capacity, Management, Operation and Maintenance (CMOM) programs.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Repair	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 1,750,000
<b>Total Expenditures</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 1,750,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Wastewater Service Charges	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 350,000	\$ 1,750,000
<b>Total Funding Sources</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 350,000</b>	<b>\$ 1,750,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Future operating expenditures for this project are unknown at this time.

**Estimated Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Security and SCADA System Improvements

Project Number:	Multiple		
Contact:	Tim Friday, Assistant Utilities Director	5 Year Historical Total	\$ 96,962
Department:	Utilities Department	2016-2020 Total	250,000
Category:	Building	<b>CIP Project Total (2011-2020):</b>	<b>\$ 346,962</b>
Type:	Upgrade		
Useful Life:	20 years		

### Description

These miscellaneous small projects are needed to increase security at wastewater facilities in accordance with the vulnerability assessment. The vulnerability assessment identifies security and system integrity needs that may present a risk to public health and safety. Examples of improvements are fences, gates, cameras and alarms. The System Control and Data Acquisition (SCADA) system components are in need of system improvements, which are provided in this project. SCADA system components are required to transmit data such as alarms, flow, temperature, and other information to the Utilities Department's control facilities. Planned improvements include the automation of several pressure reducing valve stations identified in the Water Master Plan. Most of this work will be performed by Utilities staff.

### Justification

These various projects include installing or replacing electronic access control, locks, and surveillance as needed at all wastewater facilities. Security at all Town of Castle Rock facilities is important for safeguarding our investment in infrastructure and ensuring employee safety. Future year projects that are identified in the Water Master Plan will need to be implemented in order to ensure distribution system reliability and capacity to deliver water in growing areas. SCADA components also need to be replaced regularly due to changing technology and obsolescence of parts.

Expenditures	2016	2017	2018	2019	2020	Total
Security Improvements	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 125,000
SCADA System Improvements	25,000	25,000	25,000	25,000	25,000	125,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Wastewater Service Charges	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 250,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 50,000</b>	<b>\$ 250,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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Future operating expenditures for this project are unknown at this time.

<b>Estimated Revenues</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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There are no anticipated operating revenues for this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### PCWRA Projects

Project Number:	Multiple		
Contact:	Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 11,161,743
Department:	Utilities Department	2016-2020 Total	16,107,419
Category:	Intangible	<b>CIP Project Total (2011-2020):</b>	<b>\$ 27,269,162</b>
Type:	New		
Useful Life:	50 years		

### Description

The Plum Creek Water Reclamation Authority (PCWRA) is a regional reclamation facility that serves the Town of Castle Rock, Castle Pines, and Castle Pines North. The Capital Buy-In project accommodates the Town of Castle Rock share of PCWRA debt which include two Colorado Water Resources and Power Development Authority (2001 and 2002) loans and Clean Water Revenue Bonds Series 2005 for capacity expansion and treatment. This project also provides funding for capital repair and replacement including replacement of pumps, motors, and blowers, and general facilities maintenance. The Town of Castle Rock does not perform wastewater treatment. The Ditch Three project will equip Oxidation Ditch Three at the wastewater reclamation facility, which was not originally equipped, to accommodate future wastewater flows associated with planned development and future growth. An oxidation ditch is a concrete channel that funnels wastewater into the treatment plant. The ditch is the first phase of wastewater treatment using biological agents. Pumps, blowers, and motors are required to equip the ditch for operation. The Manganese Control project accomplishes facility improvements to control dissolved manganese in order to meet future EPA regulatory requirements.

### Justification

Debt service for the increased capacity at the PCWRA facility is required to meet Townwide growth projections and the associated increase in wastewater generation. The 2005 expansion should meet the Town's wastewater needs through 2020. The future oxidation ditch is required to provide treatment for wastewater flows from future water and wastewater customers. This project is driven by growth in the service area. PCWRA is under a permit compliance schedule to meet a dissolved manganese (Mn) limit of 80 micrograms per liter in 2016, which will maintain or improve overall water quality. Equipment and infrastructure require maintenance, replacement and/or upkeep to remain in good working order. The facility is subject to permit and monitoring requirements, reporting to the Colorado Department of Public Health and Environment (CDPHE), and must be in good operating condition at all times.

Expenditures	2016	2017	2018	2019	2020	Total
Capital Buy-In	\$ 2,311,545	\$ 2,404,007	\$ 2,500,167	\$ 2,600,174	\$ 2,704,181	\$ 12,520,074
Ditch Three at PCWRA	233,469	233,469	233,469	233,469	233,469	1,167,345
Manganese Control at PCWRA	200,000	200,000	200,000	200,000	200,000	1,000,000
PCWRA Rehab/Replacement	213,000	284,000	284,000	284,000	355,000	1,420,000
<b>Total Expenditures</b>	<b>\$ 2,958,014</b>	<b>\$ 3,121,476</b>	<b>\$ 3,217,636</b>	<b>\$ 3,317,643</b>	<b>\$ 3,492,650</b>	<b>\$ 16,107,419</b>

### Funding Sources

CIP Reserves	\$ 2,311,545	\$ 3,074,090	\$ 2,500,167	\$ 2,600,174	\$ 2,704,181	\$ 13,190,157
System Development Fees	233,469	-	233,469	233,469	233,469	933,876
Wastewater Service Charges	413,000	47,386	484,000	484,000	555,000	1,983,386
<b>Total Funding Sources</b>	<b>\$ 2,958,014</b>	<b>\$ 3,121,476</b>	<b>\$ 3,217,636</b>	<b>\$ 3,317,643</b>	<b>\$ 3,492,650</b>	<b>\$ 16,107,419</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Future operating expenditures for this project are unknown at this time.

<b>Estimated Revenues</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name Plum Creek Interceptor Upsize**

Project Number: 77-64		
Contact: Jeanne Stevens, Engineering Manager	5 Year Historical Total	\$ 375,000
Department: Utilities Department	2016-2020 Total	750,000
Category: Infrastructure	<b>CIP Project Total (2011-2020):</b>	<b>\$ 1,125,000</b>
Type: Upgrade		
Useful Life: 50 years		

**Description**

This project will provide for the need to upsize the Sewer system. The original sewer interceptor must be enlarged (upsized) to meet future wastewater flows generated by growth in the Town. The interceptor runs parallel to Plum Creek.

**Justification**

It is estimated that 1,000 linear feet of 36" sewer is necessary to accommodate an increase in wastewater flows associated with future growth and development.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Construction	\$ 750,000	\$ -	\$ -	\$ -	\$ -	\$ 750,000
<b>Total Expenditures</b>	<b>\$ 750,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 750,000</b>

**Funding Sources**

System Development Fees	\$ 499,951	\$ -	\$ -	\$ -	\$ -	\$ 499,951
CIP Reserves	250,049	-	-	-	-	250,049
<b>Total Funding Sources</b>	<b>\$ 750,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 750,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

Future operating expenditures for this project are unknown at this time.

**Estimated Revenues** \$ - \$ - \$ - \$ - \$ - \$ -

There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Craig & Gould N. Improvements**

Project Number: 76-51		5 Year Historical Total	\$	158,555
Contact: Jeanne Stevens, Engineering Manager		2016-2020 Total		355,000
Department: Utilities Department		<b>CIP Project Total (2011-2020):</b>		
Category: Infrastructure			<b>\$</b>	<b>513,555</b>
Type: Replacement				
Useful Life: 50 years				

**Description**

This project will accomplish infrastructure improvements in the Craig & Gould neighborhood. Aging and undersized sewers will be replaced and deteriorated manholes will be replaced or rehabilitated.

**Justification**

Existing sewer lines are greater than 70 years old and need to be replaced. This project will be coordinated with the Public Works department and Stormwater department for a comprehensive infrastructure improvement.

Expenditures	2016	2017	2018	2019	2020	Total
Construction	\$ -	\$ -	\$ -	\$ 250,000	\$ 105,000	\$ 355,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>	<b>\$ 105,000</b>	<b>\$ 355,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
CIP Reserves	\$ -	\$ -	\$ -	\$ 250,000	\$ 105,000	\$ 355,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 250,000</b>	<b>\$ 105,000</b>	<b>\$ 355,000</b>

**Estimated Operating Expenditures**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

Future operating expenditures for this project are unknown at this time.

**Estimated Revenues**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

There are no anticipated operating revenues for this project.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM  
DEVELOPMENT SERVICES FUND**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Development Services Space Opportunity	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	2,500,000
<b>Total Expenditures by Year</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>2,500,000</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Development Services Capital Reserve	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	2,500,000
<b>Total Funding Sources by Year</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>2,500,000</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



*The Development Services Department currently resides in Town Hall at 100 N Wilcox St in Castle Rock, CO*

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Development Services Space Opportunity

Project Number:	78-57		
Contact:	Bill Detweiler	5 Year Historical Total	\$ -
Department:	Development Services Department	2016-2020 Total	2,500,000
Category:	Building	<b>CIP Project Total (2011-2020):</b>	<b>\$ 2,500,000</b>
Type:	New		
Useful Life:	To be determined		

### Description

In July of 2015, Town Council directed staff to proceed with formalizing options for the expansion of Town Hall, which would accomplish the goal of relocating Development Services within Downtown. Some challenges have arisen while in pursuit of that plan, and other Downtown locations remain in consideration. Approval of this item will allow staff to remain nimble in pursuit of opportunities to relocate Development Services within Downtown during 2016. As options are being evaluated, \$2.5M has been included; however, any agreement in excess of \$250,000 would be brought to Town Council for approval per Town policy.

### Justification

In 2014, the Town embarked upon a comprehensive, Townwide site and facility planning process that resulted in a plan that was presented and formally accepted by Town Council. The goal of this planning effort was to solve the Town's growing space needs and maintain current service levels over the next ten years. The next step on the path of implementation calls for the relocation of the Development Services Department from its current position in Town Hall to make room for the return of the Division of Innovation and Technology group, which is currently in a leased facility with rent being paid out of the Municipal Facilities Capital Fund. As Development Services is adding capacity to maintain core levels of service for the growing community, pressure points have arisen surrounding space needs to address in 2016. There will be an associated decrease in General Fund revenue by \$136,500 annually as Development Services will no longer be paying facility rent to the General Fund.

Expenditures	2016	2017	2018	2019	2020	Total
Development Services Space Opportunity	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000
<b>Total Expenditures</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,500,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Development Services Capital Reserve	\$ 2,500,000	\$ -	\$ -	\$ -	\$ -	\$ 2,500,000
<b>Total Funding Sources</b>	<b>\$ 2,500,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 2,500,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 240,000
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Future operating expenditures could potentially include additional utilities, custodial and maintenance expense at an estimated cost of \$60k, which will be included in future budgets as amounts are determined. There would also be expenditure savings in the Municipal Facilities Capital Fund realized as a result of space changes as the Division of Innovation and Technology would no longer be leasing space for a total of \$343,762 from 2017-2020. Development Services will no longer be paying rent to the General Fund so expenditures will decrease by \$136,500 annually.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional revenue is anticipated as a result of this project at this time.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**COMMUNITY CENTER FUND**

**PARKS & RECREATION DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Butterfield Pool Improvement	\$ 400,000	\$ -	\$ -	\$ -	\$ -	\$ 400,000
Fitness Equipment Replacement	250,000	75,000	-	270,000	-	595,000
Diamond Brite Pool Surface	65,000	-	65,000	-	-	130,000
Recreation Center Balcony Roof Extension	50,000	-	-	-	-	50,000
Recreation Center Elevator Repair	47,000	-	-	-	-	47,000
Gym Ceiling Replacement & Floor Resurfacing	-	115,000	-	-	-	115,000
Racquetball Court Floor Resurfacing	-	-	-	100,000	-	100,000
<b>Total Expenditures by Year</b>	<b>\$ 812,000</b>	<b>\$ 190,000</b>	<b>\$ 65,000</b>	<b>\$ 370,000</b>	<b>\$ -</b>	<b>\$ 1,437,000</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales and Use Tax	\$ 812,000	\$ 190,000	\$ 65,000	\$ 370,000	\$ -	\$ 1,437,000
<b>Total Funding Sources by Year</b>	<b>\$ 812,000</b>	<b>\$ 190,000</b>	<b>\$ 65,000</b>	<b>\$ 370,000</b>	<b>\$ -</b>	<b>\$ 1,437,000</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



*Slide and trampolines at the MAC*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Butterfield Pool Improvement**

Project Number: 77-69		5 Year Historical Total	\$	200,000
Contact: Zach Morris, Aquatics Supervisor				
Department: Parks & Recreation Department				2016-2020 Total
Category: Building				400,000
Type: Upgrade		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>600,000</b>
Useful Life: 15 Years				

**Description**

The wader pool at Butterfield is in need of replacement. The existing wader pool will be removed and replaced with a small play structure or splash pad dependent on final design.

**Justification**

Butterfield pool was built in 1988 so is 27 years old. During that time no improvements to the pool have been made. Currently, there are cracks in the pipes under the wader pool. As a result, major leaks have presented themselves and have forced staff to isolate the main drain. There have been two instances in the past few years in which facility maintenance has had to dig up the deck in order to repair the leaks. The problem will continue to worsen unless action is taken. As requested by community input, and based on utilization, staff believe that a better alternative to only repairing the wader pool would be to replace it with a small water feature that will improve the level of service at that facility.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Butterfield Wader Pool Replacement	\$ 400,000	\$ -	\$ -	\$ -	\$ -	400,000
<b>Total Expenditures</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>400,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales and Use Tax	\$ 400,000	\$ -	\$ -	\$ -	\$ -	400,000
<b>Total Funding Sources</b>	<b>\$ 400,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>400,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No future expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

Additional revenue may be received in 2017, after completion of the project, since the improvement may attract additional patronage.



**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Fitness Equipment Replacement**

Project Number:	70-30		
Contact:	Mike Kilman, Recreation Facility Supervisor	5 Year Historical Total	\$ 315,948
Department:	Parks & Recreation Department	2016-2020 Total	<u>595,000</u>
Category:	Equipment	<b>CIP Project Total (2011-2020):</b>	<b>\$ 910,948</b>
Type:	Replacement		
Useful Life:	Varies by Equipment Type		

**Description**

This project will replace the existing cardio equipment in 2016 and 2019 with new models and free weight equipment in 2017. Although the fitness equipment replacement is budgeted as a purchase for each year, the decision to lease or purchase will be made in each year to determine the best option for the Community Center Fund at that time.

**Justification**

In 2016, the cardio equipment will be over 3 years old and industry standards recommend replacement every three years. The free weight equipment has a life expectancy of 10 years and will need to be replaced in 2017 with updated models. Equipment replacement is necessary in order to maintain safety and functionality for Recreation Center users.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Cardio Equipment	\$ 250,000	\$ -	\$ -	\$ 270,000	\$ -	\$ 520,000
Free Weight Replacement	-	75,000	-	-	-	75,000
<b>Total Expenditures</b>	<b>\$ 250,000</b>	<b>\$ 75,000</b>	<b>\$ -</b>	<b>\$ 270,000</b>	<b>\$ -</b>	<b>\$ 595,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales and Use Tax	\$ 250,000	\$ 75,000	\$ -	\$ 270,000	\$ -	\$ 595,000
<b>Total Funding Sources</b>	<b>\$ 250,000</b>	<b>\$ 75,000</b>	<b>\$ -</b>	<b>\$ 270,000</b>	<b>\$ -</b>	<b>\$ 595,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No future expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

General improvements to the facility may attract additional patronage.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Diamond Brite Pool Surface**

Project Number: 70-20

Contact: Zach Morris, Aquatics Supervisor

Department: Parks & Recreation Department

Category: Building

Type: Repair

Useful Life: 15 Years

5 Year Historical Total \$ -

2016-2020 Total 130,000

**CIP Project Total (2011-2020): \$ 130,000**

**Description**

This project will apply Diamond Brite gel coating to Butterfield pool surface in order to protect it and improve the overall appearance. The pool at Butterfield Park will be updated in 2016 and the lap pool at the Recreation Center is planned to be updated in 2018.

**Justification**

Harsh conditions and continuous usage of pool chemicals tend to abrade the pool surface, making it look dull and aesthetically unpleasing and more difficult to maintain. The Diamond Brite finishing was completed 15 years ago and a new surface will be required at the sites identified.

**Expenditures**

	2016	2017	2018	2019	2020	Total
Butterfied Pool Diamond Brite	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000
Comm. Center Lap Pool Diamond Brite	-	-	65,000	-	-	65,000
<b>Total Expenditures</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 130,000</b>

**Funding Sources**

	2016	2017	2018	2019	2020	Total
Sales and Use Tax	\$ 65,000	\$ -	\$ 65,000	\$ -	\$ -	\$ 130,000
<b>Total Funding Sources</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 130,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No future expenditures are anticipated as result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

General improvements to the facility may attract additional patronage.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Recreation Center Balcony Roof Extension

Project Number:	70-20	5 Year Historical Total	\$ -
Contact:	Mike Kilman, Recreation Facility Supervisor	2016-2020 Total	50,000
Department:	Parks & Recreation Department	<b>CIP Project Total (2011-2020):</b>	<b>\$ 50,000</b>
Category:	Building		
Type:	Upgrade		
Useful Life:	20 Years		

#### Description

This project will extend the roof to cover the entire balcony between the freight elevator and the Panorama Hall entrance at the Recreation Center.

#### Justification

The existing roof only extends a few feet over the balcony between the freight elevator and Panorama Hall entrance. When it snows, the balcony is covered with ice. During extremely cold winters the ice does not melt and the balcony is unavailable for use until the ice melts in the spring.

Expenditures	2016	2017	2018	2019	2020	Total
Renovation	\$ 50,000	\$ -	\$ -	\$ -	\$ -	50,000
<b>Total Expenditures</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>50,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Sales and Use Tax	\$ 50,000	\$ -	\$ -	\$ -	\$ -	50,000
<b>Total Funding Sources</b>	<b>\$ 50,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>50,000</b>

<b>Estimated Operating Expenditures</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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No future expenditures are anticipated as a result of this project.

<b>Estimated Revenue</b>	\$	-	\$	-	\$	-	\$	-	\$	-
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General improvements to the facility may attract additional patronage.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Recreation Center Elevator Repair**

Project Number: 70-20		5 Year Historical Total \$	-
Contact: Mike Kilman, Recreation Facility Supervisor		2016-2020 Total	47,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020): \$</b>	<b>47,000</b>
Category: Building			
Type: Repair			
Useful Life: 20 Years			

**Description**

Repair and upgrade to the elevator located at the Recreation Center. This project will furnish and install new elevator components to the existing elevator at the Recreation Center to meet code requirements.

**Justification**

The main elevator in the Recreation Center is out dated and in need of some modernization. The elevator is original equipment and is relying on antiquated controls. Because of the age we are finding that repairs are becoming more difficult since parts are harder to get and some controls parts are no longer available. This elevator was installed in 1988 making the age 27 years old. The average lifespan for lifts in generally is 15 to 20 years before significant upgrades need to be done. We are well over the lifespan and for safety reasons the system needs to be upgraded. These upgrades will also bring the lift into compliance with the current code regulations.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Elevator Repair	\$ 47,000	\$ -	\$ -	\$ -	\$ -	\$ 47,000
<b>Total Expenditures</b>	<b>\$ 47,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 47,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Sales and Use Tax	\$ 47,000	\$ -	\$ -	\$ -	\$ -	\$ 47,000
<b>Total Funding Sources</b>	<b>\$ 47,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 47,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No future expenditures are anticipated as a result of this project.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

No additional revenues are anticipated as a result of this project.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Gym Ceiling Replacement & Floor Resurfacing

Project Number: 70-20		5 Year Historical Total	\$	-
Contact: Mike Kilman, Recreation Facility Supervisor		2016-2020 Total		115,000
Department: Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>	<b>\$</b>	<b>115,000</b>
Category: Building				
Type: Repair				
Useful Life: 20 Years				

#### Description

This project will refurbish the floor and replace the ceiling in the Recreation Center gymnasium.

#### Justification

The gymnasium floor has not been resurfaced since the Recreation Center was built over 25 years ago. Additionally, the ceiling is in poor condition and requires replacement.

Expenditures	2016	2017	2018	2019	2020	Total
Building Improvements	\$ -	\$ 115,000	\$ -	\$ -	\$ -	\$ 115,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ 115,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 115,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Sales and Use Tax	\$ -	\$ 115,000	\$ -	\$ -	\$ -	\$ 115,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ 115,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 115,000</b>

**Estimated Operating Expenditures**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

No future expenditures are anticipated as a result of this project.

**Estimated Revenue**    \$ -    \$ -    \$ -    \$ -    \$ -    \$ -

General improvements to the facility may attract additional patronage.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Racquetball Court Floor Resurfacing

Project Number:	70-20		5 Year Historical Total	\$	-
Contact:	Mike Kilman, Recreation Facility Supervisor		2016-2020 Total		100,000
Department:	Parks & Recreation Department		<b>CIP Project Total (2011-2020):</b>		
Category:	Building		<b>\$</b>		<b>100,000</b>
Type:	Repair				
Useful Life:	20 Years				

### Description

This project is to resurface the the floor in two racquetball courts at the Recreation Center in 2019.

### Justification

The racquetball court floors have not been resurfaced since the Recreation Center was built over 25 years ago. The floors are damaged and stained from continuous use by our customers and will need to be resurfaced in order to maintain expected levels of service.

Expenditures	2016	2017	2018	2019	2020	Total
Building Improvements	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
<b>Total Expenditures</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ 100,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Sales and Use Tax	\$ -	\$ -	\$ -	\$ 100,000	\$ -	\$ 100,000
<b>Total Funding Sources</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 100,000</b>	<b>\$ -</b>	<b>\$ 100,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No future expenditures are anticipated as a result of this project.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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General improvements to the facility may attract additional patronage.

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**FLEET SERVICES FUND**

**PUBLIC WORKS DEPARTMENT**

**PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Fleet Management Software Upgrade	\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ 110,000
Vehicles	2,739,288	4,668,065	3,805,602	2,012,368	2,071,032	15,296,355
<b>Total Expenditures by Year</b>	<b>\$ 2,849,288</b>	<b>\$ 4,668,065</b>	<b>\$ 3,805,602</b>	<b>\$ 2,012,368</b>	<b>\$ 2,071,032</b>	<b>\$ 15,406,355</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Administration Fees	\$ 110,000	\$ -	\$ -	\$ -	\$ -	\$ 110,000
CIP Reserves ^	2,249,809	3,236,174	3,401,338	1,767,507	1,740,835	12,395,663
Vehicle Salvage	118,991	170,732	233,137	244,861	134,651	902,372
Transfers from Other Funds **	370,488	1,261,159	171,127	-	195,546	1,998,320
<b>Total Funding Sources by Year</b>	<b>\$ 2,849,288</b>	<b>\$ 4,668,065</b>	<b>\$ 3,805,602</b>	<b>\$ 2,012,368</b>	<b>\$ 2,071,032</b>	<b>\$ 15,406,355</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*

*^ CIP Reserves are comprised of prior year vehicle replacement contributions and interest earned.*

*\*\* Transfers from other funds are used to purchase new vehicles which are new additions to the Town fleet.*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name** **Fleet Management Software Upgrade**

Project Number: 70-43	5 Year Historical Total \$ -
Contact: Paul Colell, Fleet Manager	2016-2020 Total <u>110,000</u>
Department: Public Works Department	<b>CIP Project Total (2011-2020): \$ 110,000</b>
Category: Information Technology	
Type: Software Licensing	
Useful Life: > 5 years	

**Description**

The FASTER fleet management software was purchased in 2006. An upgrade to the software would improve efficiency of operations. The project includes costs identified to upgrade the existing FASTER software to a web-based fleet management software.

**Justification**

Upgrading to the web-based version of the fleet management software will increase efficiency of operations in several different areas. Some of the improvements include parts management and technician availability to web-based repair software at the point of operation. Other advantages include reduced need for services from the DoIT Division resulting from less hardware and software maintenance. This project will be funded with administration fees which are paid by Town departments to the Fleet Fund in support of ongoing administrative needs.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Software	\$ 110,000	\$ -	\$ -	\$ -	\$ -	110,000
<b>Total Expenditures</b>	<b>\$ 110,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>110,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Administration Fees	\$ 110,000	\$ -	\$ -	\$ -	\$ -	110,000
<b>Total Funding Sources</b>	<b>\$ 110,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>110,000</b>

<b>Future Operating Expenditures</b>	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 7,500	\$ 37,500
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Annual operating expenditures are estimated to be \$7,500 for software maintenance and upgrades. Increased efficiency in parts management and technician availability may reduce operating expenditures.

<b>Future Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	-
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There is no additional operating revenue anticipated as a result of this project.



## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Vehicles

Project Number: 70-40		
Contact: Paul Colell, Fleet Manager	5 Year Historical Total	\$ 8,515,215
Department: Public Works Department	2015 - 2019 Total	15,296,355
Type: Vehicles	<b>Total Project Cost (2011-2020):</b>	<b>\$ 23,811,570</b>
Useful Life: 4-15 years		
Category: Vehicles		

### Description

The vehicle replacement program is funded through the Fleet Fund which is an internal service fund intended for replacement of Town vehicles and equipment. Departments that operate vehicles and equipment enrolled in the Vehicle Replacement Program budget Vehicle Replacement Contributions annually for the purpose of replacing existing units. The units in the following pages include vehicles scheduled for replacement. However, vehicles and equipment lives may be extended or replaced earlier if necessary. The inflation rate assumed for future vehicle purchases varies by vehicle type, with an average of about 3%.

### Justification

In accordance with the Town's Vehicle Replacement Policy, unit age, usage, and historical maintenance costs are used to determine the replacement timing of vehicles and equipment in the program. The Town uses the Best Practice method recommended by the American Public Works Association. Other factors include type of use, operating weather conditions, and operating terrain. Once a vehicle has met the replacement criteria, there is a thorough review process by Fleet management, the operating department, and the Fleet Advisory Committee to determine if the vehicle should be replaced, retained for limited use, or extend the vehicles life cycle. Because vehicles may be equipped with different equipment based upon their usage, the cost for similar vehicles will vary.

### Expenditures

	2016	2017	2018	2019	2020	Total
Vehicles & Equipment	\$ 2,739,288	\$ 4,668,065	\$ 3,805,602	\$ 2,012,368	\$ 2,071,032	\$ 15,296,355
<b>Total Expenditures</b>	<b>\$ 2,739,288</b>	<b>\$ 4,668,065</b>	<b>\$ 3,805,602</b>	<b>\$ 2,012,368</b>	<b>\$ 2,071,032</b>	<b>\$ 15,296,355</b>

### Funding Sources

	2016	2017	2018	2019	2020	Total
CIP Reserves ^	\$ 2,249,809	\$ 3,236,174	\$ 3,401,338	\$ 1,767,507	\$ 1,740,835	\$ 12,395,663
Vehicle Salvage	118,991	170,732	233,137	244,861	134,651	902,372
Transfers from Other Funds *	370,488	1,261,159	171,127	-	195,546	1,998,320
<b>Total Funding Sources</b>	<b>\$ 2,739,288</b>	<b>\$ 4,668,065</b>	<b>\$ 3,805,602</b>	<b>\$ 2,012,368</b>	<b>\$ 2,071,032</b>	<b>\$ 15,296,355</b>

^ CIP Reserves are comprised of prior year vehicle replacement contributions and interest earned.

\* Transfers from other funds are used to purchase new vehicles that were not previously in the vehicle replacement program

### Future Operating Expenditures

2016 maintenance costs of vehicles and equipment is budgeted at \$970,977. Of this amount, \$224,460 is budgeted for outsourced vehicle repair. Outsourced vehicle repairs are typical for heavy equipment such as Fire Trucks and specialty services for transmissions and engines.

### Future Revenue

Replacement contributions are received by the Fleet Fund in the year following the initial purchase. The replacement contribution for each vehicle or piece of equipment is based upon the actual purchase price, useful life expectancy, estimated future salvage value, and anticipated rate of inflation. In addition, the Fleet Fund receives an Administrative Fee of \$430 for each unit. The Fleet Fund also receives maintenance and repair amounts for services performed by the Fleet Department.

## 2016 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Facilities Department</b>			
Trucks, Med Duty	Ford Super Duty	6,860	90,975
<b>Total Facilities Department</b>		<b>1 \$ 6,860</b>	<b>\$ 90,975</b>
<b>Police Department</b>			
Sedan, General Purpose	Ford Fusion	1,814	24,069
Sedan, General Purpose	Ford Fusion	3,277	43,460
Sedan, Patrol	Ford Crown Victoria	3,665	48,615
Sedan, Patrol	Ford Crown Victoria	3,665	48,615
Sedan, Patrol	Ford Crown Victoria	3,665	48,615
SUV, Public Safety, Police, Fire	Ford Explorer	3,277	43,460
SUV, Police Patrol	Ford Expedition	3,889	51,576
Vehicle Additions; SUV, Police Patrol	Ford Interceptor SUV	-	57,559
Vehicle Additions; SUV, Police Patrol	Ford Interceptor SUV	-	57,559
Vehicle Additions; SUV, Police Patrol	Ford Interceptor SUV	-	57,559
Vehicle Additions; SUV, Police Patrol	Ford Interceptor SUV	-	44,000
<b>Total Police Department</b>		<b>11 \$ 23,252</b>	<b>\$ 525,087</b>
<b>Fire Department</b>			
Fire, Response, Ambulance	Dodge Ram 4500	13,421	185,451
SUV, Public Safety, Police, Fire	Ford Expedition	3,723	49,376
Trucks, Light Duty	Dodge Dakota	3,013	39,962
Trucks, Light Duty	Dodge Dakota	3,013	39,962
Fire Response, Pumps, Quints, Rescue	HME	47,208	639,483
Vehicle Additions; SUV, Public Safety, Police, Fire	Ford F-350	-	55,059
Vehicle Additions; SUV, Public Safety, Police, Fire	Ford F-150	-	49,376
Vehicle Additions; SUV, Public Safety, Police, Fire	Ford F-150	-	49,376
<b>Total Fire Department</b>		<b>8 \$ 70,378</b>	<b>\$ 1,108,045</b>
<b>Development Services Department</b>			
Trucks, Light Duty	Chevrolet Colorado	1,845	24,470
<b>Total Development Services Department</b>		<b>1 \$ 1,845</b>	<b>\$ 24,470</b>
<b>Transportation Fund</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Graco LL3900	459	6,030
Equipment, Off-Road, Loaders, Tractors, Graders	Coleman Ultra 2500	32	422
Sweepers	Sterling SC8000	21,226	281,483
Sweepers	Elgin Pelican	16,781	222,534
Trucks, Light Duty	Ford F-150	1,859	25,130
Trailers Medium, Light	Dun-Rite 2LT7M	552	7,322
<b>Total Transportation Fund</b>		<b>6 \$ 40,909</b>	<b>\$ 542,921</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

**2016 Schedule of Vehicle & Equipment Purchase (Continued)**

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Parks &amp; Recreation Department</b>			
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	John Deere Z850A	858	11,381
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	John Deere 1600 Turbo W:	4,024	53,365
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat S185H	2,463	32,657
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Kubota M6800HDC3	4,674	64,589
Trucks, Light Duty	GMC Sierra	1,846	24,486
Trucks, Light Duty	Chevrolet Colorado	1,733	22,977
Trailers Medium, Light	Big Tex Trailer	245	3,385
<b>Total Parks &amp; Recreation Department</b>		<b>7 \$ 15,843</b>	<b>\$ 212,840</b>
<b>Utilities Department</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat S185H	2,261	31,246
Trucks, Light Duty	Chevrolet Colorado	1,720	22,809
Trucks, Light Duty	Chevrolet Colorado	1,720	22,809
Trucks, Light Duty	Ford F-150	1,858	24,639
Trucks, Medium Duty	GMC K-2500 HD	2,043	26,831
Trucks, Medium Duty	GMC K-2500 HD	2,043	26,831
<b>Total Utilities Department</b>		<b>6 \$ 11,645</b>	<b>\$ 155,165</b>
<b>Total - All Departments</b>		<b>170,732</b>	<b>2,659,503</b>
<b>3% Contingency</b>			<b>79,785</b>
<b>2016 Vehicle &amp; Equipment Replacement Total</b>		<b>40 \$ 170,732</b>	<b>\$ 2,739,288</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

## 2017 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Facilities Department</b>			
Trucks, Light Duty	Ford F-150	1,742	23,796
<b>Total Facilities Department</b>		<b>1 \$ 1,742</b>	<b>\$ 23,796</b>
<b>Police Department</b>			
Sedan, Patrol	Ford Interceptor AWD	4,313	58,918
Sedan, Patrol	Ford Interceptor AWD	4,313	58,918
SUV, Police Patrol	Ford Expedition	3,889	53,123
SUV, Police Patrol	Ford Expedition	4,412	60,264
Vehicle Additions; SUV, Police Patrol	Ford Explorer	-	60,100
Vehicle Additions; SUV, Police Patrol	Ford Explorer	-	60,100
<b>Total Police Department</b>		<b>6 \$ 16,927</b>	<b>\$ 351,423</b>
<b>Fire Department</b>			
Fire Response, Brush Trucks, Hazmat	Ford F-550	14,423	197,009
Fire, Response, Ambulance	Ford F-450	13,520	196,415
Fire, Response, Ambulance	Ford F-450	13,600	197,586
Fire Response, Pumps, Quints, Rescue	HME	68,000	986,795
Vehicle Additions; Fire Response, Brush Trucks, Hazmat	Ford F-550	-	225,000
Vehicle Additions; Fire Response, Pumps, Quints, Rescue	HME	-	915,959
<b>Total Fire Department</b>		<b>6 \$ 109,543</b>	<b>\$ 2,718,764</b>
<b>Development Services Department</b>			
Trucks, Light Duty	Chevrolet Colorado	1,845	25,204
<b>Total Development Services Department</b>		<b>1 \$ 1,845</b>	<b>\$ 25,204</b>
<b>Transportation Fund</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Crafco SS125	3,153	43,061
Equipment, Off-Road, Loaders, Tractors, Graders	Fairmount F20	649	8,735
Equipment, Off-Road, Loaders, Tractors, Graders	Hyster H60XL	2,493	36,224
Heavy Equipment Off-Road, Loaders, Tractors, Graders	John Deere 544G	12,912	173,817
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Volvo L90D	16,655	227,497
Trucks, Light Duty	Ford F-150	1,678	22,923
Trucks, Medium Duty	Ford F-250 SD	2,508	34,758
Trailers Heavy	Big Tex 30SA	113	1,548
<b>Total Transportation Fund</b>		<b>8 \$ 40,161</b>	<b>\$ 548,563</b>
<b>Fleet Department</b>			
Trucks, Light Duty	Ford F-150	1,890	25,822
<b>Total Fleet Department</b>		<b>1 \$ 1,890</b>	<b>\$ 25,822</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

**2017 Schedule of Vehicle & Equipment Purchase (Continued)**

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Parks &amp; Recreation Department</b>			
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	Bobcat S160N	2,463	33,636
SUV, General Purpose, Light Duty	Ford Explorer	2,054	27,652
Trailers Medium, Light	Vermeer BC1400XL	3,011	41,134
Trucks, Medium Duty	Dodge 2500 ST	2,746	39,899
Trucks, Medium Duty	Ford F-350 SD	2,759	40,079
Trucks, Medium Duty	Dodge Ram 3500	4,006	58,138
Trucks, Medium Duty	Ford F-250 SD	2,792	38,695
Trucks, Medium Duty	Ford F-250 SD	2,797	38,770
Trailers Medium, Light	Superior 2PT6M	472	6,358
<b>Total Parks &amp; Recreation Department</b>		<b>9 \$ 23,100</b>	<b>\$ 324,361</b>
<b>Utilities Department</b>			
SUV, General Purpose, Light Duty	Ford Escape Hybrid	2,378	32,016
Trucks, Light Duty	Chevrolet Colorado	1,942	26,139
Trucks, Light Duty	Chevrolet Colorado	1,862	25,440
Trucks, Light Duty	Chevrolet Colorado	1,862	25,440
Trucks, Light Duty	Chevrolet Colorado	1,862	25,440
Trucks, Light Duty	Ford F-150	2,210	29,746
Trucks, Light Duty	Ford F-150	1,697	23,178
Trucks, Light Duty	Ford F-150	2,368	31,870
Trucks, Light Duty	Ford F-150	1,818	24,474
Trucks, Light Duty	Ford F-150	1,841	24,788
Trucks, Light Duty	Ford F-150	1,676	22,899
Trucks, Light Duty	Ford F-150	2,342	31,531
Trucks, Medium Duty	Dodge 2500 ST	2,375	32,444
Trucks, Medium Duty	Dodge Ram 3500	3,683	49,577
Trucks, Medium Duty	Ford F-250	2,605	35,587
Trucks, Medium Duty	Ford F-250 SD	2,247	30,252
Trucks, Medium Duty	Ford F-250	2,263	30,460
Trailers Medium, Light	Butler LT1016	726	10,545
Trailers Medium, Light	Big Tex 14X83	172	2,343
<b>Total Utilities Department</b>		<b>19 \$ 37,929</b>	<b>\$ 514,169</b>
<b>Total - All Departments</b>		<b>233,137</b>	<b>4,532,102</b>
<b>3% Contingency</b>			<b>135,963</b>
<b>2017 Vehicle &amp; Equipment Replacement Total</b>		<b>51 \$ 233,137</b>	<b>\$ 4,668,065</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

## 2018 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Police Department</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Polaris Ranger 800	1,409	19,817
Sedan, Patrol	Ford Interceptor AWD	3,809	53,593
Sedan, Patrol	Ford Interceptor AWD	3,809	53,583
SUV, Police Patrol	Ford Utility AWD	3,666	51,575
SUV, Police Patrol	Ford Utility AWD	3,665	51,562
SUV, Police Patrol	Ford Utility AWD	3,664	51,554
SUV, Police Patrol	Ford Expedition XLT	4,412	62,072
SUV, Police Patrol	Ford Expedition XLT	4,085	57,474
SUV, Police Patrol	Ford Expedition XLT	4,085	57,474
Vehicle Additions; SUV, Police Patrol	Ford Expedition XLT	-	61,903
Vehicle Additions; SUV, Police Patrol	Ford Expedition XLT	-	47,321
Vehicle Additions; SUV, Police Patrol	Ford Expedition XLT	-	61,903
<b>Total Police Department</b>		<b>12 \$ 32,604</b>	<b>\$ 629,831</b>
<b>Fire Department</b>			
Fire, Response, Ambulance	Dodge Ram 4500	13,401	204,707
Fire Response, Brush Trucks, Hazmat	International	27,685	389,491
Fire Response, Pumps, Quints, Rescue	HME	47,200	677,039
Fire Response, Pumps, Quints, Rescue	HME	44,800	683,280
<b>Total Fire Department</b>		<b>4 \$ 133,086</b>	<b>\$ 1,954,517</b>
<b>Transportation Fund</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Miller Bobcat 250NT	362	5,095
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Caterpillar 143H	21,622	304,195
Sweepers	Elgin NP Pelican	14,111	198,531
Trucks, Medium Duty	Dodge Ram 3500	3,448	47,578
Equipment, Off-Road, Loaders, Tractors, Graders	Leeboy L250	807	11,352
Trailers Heavy	Trail-Eze PDLX20TC30	3,144	43,375
<b>Total Transportation Fund</b>		<b>6 \$ 43,494</b>	<b>\$ 610,126</b>
<b>Fleet Department</b>			
Trucks, Light Duty	Chevrolet Colorado	1,761	24,778
<b>Total Fleet Department</b>		<b>1 \$ 1,761</b>	<b>\$ 24,778</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

**2018 Schedule of Vehicle & Equipment Purchase (Continued)**

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Parks &amp; Recreation Department</b>			
Trucks, Light Duty	Chevrolet Colorado	1,766	24,851
Trucks, Light Duty	Chevrolet Colorado	1,695	23,850
Trucks, Medium Duty	Ford F-250 SD	2,360	32,566
<b>Total Parks &amp; Recreation Department</b>	<b>3</b>	<b>\$ 5,821</b>	<b>\$ 81,267</b>
<b>Utilities Department</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Miller Bobcat 250NT	343	4,736
Equipment, Off-Road, Loaders, Tractors, Graders	Fairmount F20	466	6,558
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Bobcat T300	4,920	69,222
SUV, General Purpose, Light Duty	Jeep Liberty	2,097	29,504
Trailers Medium, Light	Wacker LTC 4L	749	10,341
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400	7,708	108,436
Trucks, Medium Duty	Chevrolet C-5500	6,828	96,068
Trucks, Medium Duty	Chevrolet 3500 HD	2,797	39,350
Trucks, Medium Duty	Ford F-250 SD	2,055	28,197
Equipment, Off-Road, Loaders, Tractors, Graders	Briggs & Stratton Vanguard	132	1,828
<b>Total Utilities Department</b>	<b>10</b>	<b>\$ 28,095</b>	<b>\$ 394,240</b>
<b>Total - All Departments</b>		<b>244,861</b>	<b>3,694,759</b>
<b>3% Contingency</b>			<b>110,843</b>
<b>2018 Vehicle &amp; Equipment Replacement Total</b>	<b>36</b>	<b>\$ 244,861</b>	<b>\$ 3,805,602</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

## 2019 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Police Department</b>			
SUV, Police Patrol	Ford Utility AWD	3,889	56,358
SUV, Police Patrol	Ford Utility AWD	3,889	56,358
SUV, Police Patrol	Ford Utility AWD	3,889	56,358
SUV, Police Patrol	Ford Utility AWD	3,666	53,127
SUV, Police Patrol	Ford Expedition XLT	4,412	63,934
SUV, Police Patrol	Ford Expedition XLT	3,886	56,309
SUV, Police Patrol	Ford Utility AWD	3,889	56,358
SUV, Public Safety, Police, Fire	Ford Expedition XLT	3,401	49,280
<b>Total Police Department</b>		<b>8 \$ 30,921</b>	<b>\$ 448,082</b>
<b>Fire Department</b>			
Fire, Response, Ambulance	Dodge Ram 4500	14,055	214,691
SUV, Public Safety, Police, Fire	Ford Expedition	3,140	45,504
SUV, Public Safety, Police, Fire	Ford Expedition	3,140	45,504
Trucks, Light Duty	Ford F-150	3,235	46,874
<b>Total Fire Department</b>		<b>4 \$ 23,570</b>	<b>\$ 352,573</b>
<b>Development Services Department</b>			
SUV, General Purpose, Light Duty	Ford Escape XLS	1,661	24,065
<b>Total Development Services Department</b>		<b>1 \$ 1,661</b>	<b>\$ 24,065</b>
<b>Transportation Fund</b>			
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400	13,397	194,140
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400	13,397	194,140
Trailers Medium, Light	Wanco WVTM	1,633	23,668
Trailers Medium, Light	Wanco WTMMB	1,820	26,377
<b>Total Transportation Fund</b>		<b>4 \$ 30,247</b>	<b>\$ 438,325</b>
<b>Parks &amp; Recreation Department</b>			
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	Toro 4100-D	4,453	62,976
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat 2120	622	8,793
Heavy Equipment Off-Road, Loaders, Tractors, Graders	John Deere 4300	2,263	32,009
Trucks, Light Duty	Ford F-150	1,758	25,476
Trucks, Light Duty	Ford F-150	1,766	25,596
Trucks, Light Duty	Ford F-150	1,737	25,164
Trucks, Medium Duty	Dodge Ram 3500	2,906	42,104
Trucks, Medium Duty	Ford F-350 SD	2,759	44,305
Trucks, Medium Duty	Ford F-250 SD	2,062	29,884
Trucks, Medium Duty	Ford F-350 SD	2,390	33,797
Trailers Medium, Light	Superior Tandem Axle	393	5,556
<b>Total Parks &amp; Recreation Department</b>		<b>11 \$ 23,109</b>	<b>\$ 335,660</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department



**2019 Schedule of Vehicle & Equipment Purchase (Continued)**

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Utilities Department</b>			
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Bobcat 337	5,174	70,563
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Caterpillar 930H	14,031	198,433
Trucks, Medium Duty	Ford F-350 SD	3,606	52,259
Vans < 10K GVWR Passenger/Cargo	Ford E250	2,151	31,176
Trailers Heavy	J.W. Tandem Axle	181	2,619
<b>Total Utilities Department</b>		<b>5 \$ 25,143</b>	<b>\$ 355,050</b>
<b>Total - All Departments</b>		<b>134,651</b>	<b>1,953,755</b>
<b>3% Contingency</b>			<b>58,613</b>
<b>2019 Vehicle &amp; Equipment Replacement Total</b>		<b>33 \$ 134,651</b>	<b>\$ 2,012,368</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

## 2020 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>DoIT Department</b>			
SUV, General Purpose, Light Duty	Ford Escape Hybrid	2,326	34,723
<b>Total DoIT Department</b>	<b>1</b>	<b>\$ 2,326</b>	<b>\$ 34,723</b>
<b>Facilities Department</b>			
Trucks, Medium Duty	Ford F-350 Super Duty	3,118	46,535
Trailers, Medium Light	Bil-Jax ET5000	747	11,144
<b>Total Facilities Department</b>	<b>2</b>	<b>\$ 3,865</b>	<b>\$ 57,679</b>
<b>Police Department</b>			
Sedan, General Purpose	Ford Fusion	2,772	41,374
Sedan, Patrol	Ford Crown Victoria	3,776	54,716
Sedan, Patrol	Ford Crown Victoria	3,399	43,774
SUV, Police Patrol	Ford Interceptor SUV	3,836	57,255
SUV, Police Patrol	Ford Interceptor SUV	3,889	58,049
SUV, Police Patrol	Ford Interceptor SUV	3,646	54,421
SUV, Police Patrol	Ford Interceptor SUV	3,889	58,049
SUV, Police Patrol	Ford Interceptor SUV	3,666	54,716
SUV, Police Patrol	Ford Interceptor SUV	4,278	63,847
SUV, Public Safety, Police, Fire	Ford Expedition XLT	3,602	53,765
SUV, Public Safety, Police, Fire	Utility AWD	3,277	48,914
Trucks, Light Duty	Ford F-150	2,701	40,312
Trailers, Medium Light	Wells Cargo RF6101	280	4,180
Vehicle Additions; SUV, Police Patrol	Ford Explorer	-	63,416
Vehicle Additions; SUV, Police Patrol	Ford Explorer	-	66,065
Vehicle Additions; SUV, Police Patrol	Ford Explorer	-	66,065
<b>Total Police Department</b>	<b>16</b>	<b>\$ 43,011</b>	<b>\$ 828,918</b>
<b>Fire Department</b>			
Fire Response, Brush Trucks, Hazmat	Dodge Ram 5500	11,344	191,554
Fire Response, Brush Trucks, Hazmat	Dodge Ram 5500	11,344	191,554
Fire, Response, Ambulance	Dodge Ram 4500	14,836	226,622
SUV, Public Safety, Police, Fire	Ford Expedition XLT	3,140	46,869
SUV, Public Safety, Police, Fire, Batt Chief	Ford Expedition EL	4,930	73,579
<b>Total Fire Department</b>	<b>5</b>	<b>\$ 45,594</b>	<b>\$ 730,178</b>
<b>Development Services Department</b>			
SUV, General Purpose, Light Duty	Jeep Liberty	1,536	22,920
<b>Total Development Services Department</b>	<b>1</b>	<b>\$ 1,536</b>	<b>\$ 22,920</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

**2020 Schedule of Vehicle & Equipment Purchase (Continued)**

Department and Vehicle Use	Existing Vehicle Make/Model	Estimated Salvage Value	Estimated Cost *
<b>Transportation Fund</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Caterpillar CB334D	5,639	84,165
Equipment, Off-Road, Loaders, Tractors, Graders	Graco LL 3900	872	12,642
Trailers Medium, Light	Ray-Tech Mini Combo	3,544	52,898
<b>Total Transportation Fund</b>	<b>3</b>	<b>\$ 10,055</b>	<b>\$ 149,705</b>
<b>Parks &amp; Recreation Department</b>			
Equipment, Off-Road, Loaders, Tractors, Graders	Kromer Field Commander	1,637	23,728
<b>Total Parks &amp; Recreation Department</b>	<b>1</b>	<b>\$ 1,637</b>	<b>\$ 23,728</b>
<b>Community Center Fund</b>			
Vans < 10K GVWR Passenger/Cargo	Ford E-350 SD	2,670	40,296
Vans < 10K GVWR Passenger/Cargo	Ford E-350 SD	2,670	40,296
<b>Total Community Center Fund</b>	<b>2</b>	<b>\$ 5,340</b>	<b>\$ 80,592</b>
<b>Utilities Department</b>			
Sedan General Purpose	Chevrolet Impala	1,602	23,916
Trucks, Light Duty	Ford F-150	2,021	29,296
Trucks, Light Duty	Ford F-150	2,004	29,056
<b>Total Utilities Department</b>	<b>3</b>	<b>\$ 5,627</b>	<b>\$ 82,268</b>
<b>Total - All Departments</b>		<b>118,991</b>	<b>2,010,711</b>
<b>3% Contingency</b>			<b>60,321</b>
<b>2015 Vehicle &amp; Equipment Replacement Total</b>	<b>33</b>	<b>\$ 118,991</b>	<b>\$ 2,071,032</b>

\* Estimated cost is for a planned vehicle, which may be adjusted according to requirements determined by the department

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**GOLF FUND**

**PARKS & RECREATION DEPARTMENT  
PROJECTS & FUNDING SOURCES BY DEPARTMENT**

<b>Project Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Clubhouse Updates	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000
Golf Course Improvements	585,000	150,000	-	-	-	735,000
Golf Course Maintenance Equipment Repl	303,446	97,729	235,795	71,030	110,000	818,000
<b>Total Expenditures by Year</b>	<b>\$ 953,446</b>	<b>\$ 247,729</b>	<b>\$ 235,795</b>	<b>\$ 71,030</b>	<b>\$ 110,000</b>	<b>\$ 1,618,000</b>

<b>Project Funding Sources*</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Revenue Bond Proceeds	\$ 650,000	\$ 150,000	\$ -	\$ -	\$ -	\$ 800,000
Charges for Service	303,446	97,729	235,795	71,030	110,000	818,000
<b>Total Funding Sources by Year</b>	<b>\$ 953,446</b>	<b>\$ 247,729</b>	<b>\$ 235,795</b>	<b>\$ 71,030</b>	<b>\$ 110,000</b>	<b>\$ 1,618,000</b>

*\*Funding Source information is intended to identify the revenue that is planned to pay for the capital projects included. While additional revenue is anticipated to be received each year, this information identifies only what is necessary to fund the Capital Improvement Program.*



*Red Hawk Ridge Golf Course - Hole #2*

**2016-2020 CAPITAL IMPROVEMENT PROGRAM**

**Project Name**

**Clubhouse Updates**

Project Number: 70-20

Contact: Bob Persichetti, Head Golf Professional

Department: Golf

Category: Building

Type: Upgrade

Useful Life: 15 Years

5 Year Historical Total \$ -

2016-2020 Total 65,000

**CIP Project Total (2011-2020): \$ 65,000**

**Description**

This project would allow for improvements to the Clubhouse at the Red Hawk Ridge Golf Course. Planned improvements scheduled for 2016 include new entry and exit doors, restroom renovation including new countertops, a patio enclosure and installation of a walk-in refrigerator.

**Justification**

Red Hawk's clubhouse was built in 2000 and has not had any significant capital improvements. These improvements are necessary for safety and security as well as maintaining the current level of service to our customers. Enclosing the patio will make it possible for the golf course to better serve our tournament customers by providing a more controlled environment for their after golf banquets. It is possible that the enclosure will also enable the Food and Beverage operation to utilize the patio for banquets and parties during the winter months.

<b>Expenditures</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Building Improvements	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000
<b>Total Expenditures</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 65,000</b>

<b>Funding Sources</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total</b>
Revenue Bond Proceeds	\$ 65,000	\$ -	\$ -	\$ -	\$ -	\$ 65,000
<b>Total Funding Sources</b>	<b>\$ 65,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 65,000</b>

**Estimated Operating Expenditures** \$ - \$ - \$ - \$ - \$ - \$ -

No additional operating expenditures will result from this project and renovations may actually decrease ongoing maintenance costs.

**Estimated Revenue** \$ - \$ - \$ - \$ - \$ - \$ -

Improvements and renovations to the golf course and clubhouse will update the facility in order to attract new visitors and increase revenue. There is also a potential for growing Food and Beverage revenue in the off season by utilizing the enclosed patio for parties and banquets (unknown at this time until usability/function in the winter months is confirmed)

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name

### Golf Course Improvements

Project Number: 70-10

Contact: Bob Persichetti, Head Golf Professional

Department: Golf

Category: Land

Type: Upgrade

Useful Life: 12 - 15 Years

5 Year Historical Total \$ -

2016-2020 Total 735,000

**CIP Project Total (2011-2020): \$ 735,000**

### Description

Improvements to the golf course include cart paths, permanent restrooms on the course, practice facility updates and bunker renovations. Improvements planned for 2016 include the addition of permanent restrooms, adding concrete cart paths, renovating bunkers and improving the practice facility. Continued work will be done in 2017 related to the cart paths and bunker renovation.

### Justification

Red Hawk Ridge is in need of capital improvements which will reduce some operating expenses, increase revenues and allow staff to maintain the property appropriately. Paving cart paths will help with overall tournament and round sales along with reducing repair costs on golf carts and maintenance equipment; permanent restrooms will eliminate the need for port-a-potty rentals and be an added value element to the course while eliminating unsightly port-a-potties. Bunker sand has an estimated lifespan of 12 years. The sand in the bunkers at Red Hawk Ridge is 16 years old and this improvement will allow for proper drainage during heavy rains. The practice facility improvements will include the addition of a range ball dispensing machine, updated landscaping and the addition of a shed for storing necessary equipment.

Expenditures	2016	2017	2018	2019	2020	Total
Permanent Restrooms	\$ 110,000	\$ -	\$ -	\$ -	\$ -	110,000
Practice Facility Improvements	35,000	-	-	-	-	35,000
Bunker Renovation	190,000	40,000	-	-	-	230,000
Cart Path Project	250,000	110,000	-	-	-	360,000
<b>Total Expenditures</b>	<b>\$ 585,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 735,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Revenue Bond Proceeds	\$ 585,000	\$ 150,000	\$ -	\$ -	\$ -	735,000
<b>Total Funding Sources</b>	<b>\$ 585,000</b>	<b>\$ 150,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 735,000</b>

**Estimated Operating Expenditures** \$ - \$ (6,630) \$ (6,630) \$ (6,630) \$ (6,630) \$ (26,520)

Future operating expenses at Red Hawk Golf Course will be reduced through decreased maintenance needs and a reduction of \$6,630 in port-a-potty rental costs. While it is difficult to pinpoint the exact labor savings, the bunker renovation will save labor hours currently being utilized to pump out bunkers after each rain event and the cart path installation will save labor hours currently being utilized to repair temporary paths after each rain event.

**Estimated Revenue** \$ - \$ 20,000 \$ 20,000 \$ 20,000 \$ 20,000 \$ 80,000

Improvements such as the addition of a range ball dispensing machine could potentially increase driving range revenues by approximately 15-23% or \$20,000-\$30,000 in the first year.

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

### Project Name Golf Course Maintenance Equipment Repl

Project Number: 70-30		5 Year Historical Total	\$ -
Contact: Jon Holland, Golf Maintenance Supt.		2016-2020 Total	818,000
Department: Golf		<b>CIP Project Total (2011-2020):</b>	<b>\$ 818,000</b>
Category: Equipment			
Type: Replacement			
Useful Life: 5 - 10 Years			

#### Description

This project accommodates the replacement of golf maintenance equipment including mowers, sprayers and other equipment. Replacements in 2016 include some of our oldest equipment (beyond useable life) including a fairway unit, a utility vehicle, a sprayer, a rough unit, a greens aerator, tee mowers and the addition of a roller to improve green speeds and quality. Expenditures in 2017 include replacement of a sand-pro, the addition of a second roller and equipment implements (blower, box blade attachment) to improve the efficiency of our aeration process. The planned replacements for 2018 will include two fairway units, a sand-pro, a utility vehicle, a small rough unit and a green surround mower. Two greens mowers and a top dresser are planned to be replaced in 2019 and 2020 will include the replacement of a greens surround mower and the fairway aerator.

The equipment replacement in 2016 will be a lease-to-own purchase taking place over a 5 year period. The amount reflected below represents the full value of the equipment that will be replaced. Replacements in outgoing years is budgeted as a full purchase in 2017, 2019 and 2020 with a lease option budgeted in 2018. This will be reviewed on an annual basis to determine the best option for the Golf Course Fund.

#### Justification

Golf course maintenance equipment is aging and in need of replacement in order to maintain high levels of service at the course and to reduce repair costs for equipment. Most golf course equipment is manufactured to last approximately 3,000 to 4,000 hours. Everyday use equipment needs to be replaced before maintenance expenses and down time begin to impact the product and the operating budget (typically about every 5 years). Less frequently used equipment can last up to 10 years before it reaches the critical hour usage threshold.

Expenditures	2016	2017	2018	2019	2020	Total
Equipment Replacement	\$ 303,446	\$ 97,729	\$ 235,795	\$ 71,030	\$ 110,000	\$ 818,000
<b>Total Expenditures</b>	<b>\$ 303,446</b>	<b>\$ 97,729</b>	<b>\$ 235,795</b>	<b>\$ 71,030</b>	<b>\$ 110,000</b>	<b>\$ 818,000</b>

Funding Sources	2016	2017	2018	2019	2020	Total
Charges for Service	\$ 303,446	\$ 97,729	\$ 235,795	\$ 71,030	\$ 110,000	\$ 818,000
<b>Total Funding Sources</b>	<b>\$ 303,446</b>	<b>\$ 97,729</b>	<b>\$ 235,795</b>	<b>\$ 71,030</b>	<b>\$ 110,000</b>	<b>\$ 818,000</b>

<b>Estimated Operating Expenditures</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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Replacing equipment may reduce expenditures related to maintaining aging equipment. However, no savings are included in the budget in order to allow for unforeseen equipment repair needs.

<b>Estimated Revenue</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
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No additional revenue is anticipated as a result of this project.