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LETTER OF INTRODUCTION FOR THE FIVE YEAR CAPITAL IMPROVEMENT PROGRAM

August 20, 2019

Honorable Mayor and Members of the Town Council,

Hereby submitted is the Five Year Capital Improvement Program (CIP) for the Town of Castle Rock, Colorado for the years 2020 through 2024. The 2020 Budget allows for $69,358,788 associated with the Capital Improvement Program. The Funding Source information in the following pages 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 CIP summarizes all major capital expenditures to be made over the next five years. This budget contains a summary of revenue sources and CIP costs by fund and year in which the revenues and costs are anticipated. In order to be included in the CIP, the project must meet the following guidelines:

- Costs are expected to be over $25,000
- The resulting project has a useful life of more than one year
- The project results in the addition of a fixed asset, or extends the useful life of an existing asset or is a major software purchase
- The Town must have full ownership, or be a significant holder in a joint venture asset. For example, software that is licensed by the Town and owned by the vendor is not considered a capital asset of the Town.

During the preparation process, staff identified what would be necessary to meet existing levels of service to the community and which projects could reasonably be accomplished within each year, within the financial and staff limitations of the Town. Contractual obligations and/or needs were considered in setting the priorities.

Capital improvements are funded through a variety of sources including the use of reserves, impact fees, debt financing, grants, building use taxes and operating revenues. All available current and future resources were considered when identifying funding sources for the identified capital improvements. For example, the estimated available reserve balance was calculated and shown as a funding source, as well as estimated impact fees, building use taxes, and other revenue sources. The CIP costs projected meet, but do not exceed, the limitations of those funding sources.

Sincerely,



David L. Corliss
Town Manager

THIS PAGE IS A PLACE HOLDER FOR THE RESOLUTION

APPROVING THE 2020-2024 CIP

2020-2024 CAPITAL IMPROVEMENT PROGRAM SUMMARY - ALL FUNDS

TOTAL CIP EXPENDITURES BY FUND AND YEAR

Fund	2020	2021	2022	2023	2024	Total
General Fund	$ 285,000	$ 1,030,000	$ 750,000	$ 450,000	$ 900,000	$ 3,415,000
General Long Term Planning	1,898,500	716,975	1,417,359	954,284	2,761,689	7,748,807
Transportation Fund	4,351,000	942,000	978,000	585,000	650,000	7,506,000
Transportation Capital Fund*	10,060,000	6,650,000	21,873,000	9,559,000	15,775,000	63,917,000
Conservation Trust Fund	1,150,000	850,000	625,000	600,000	150,000	3,375,000
Parks and Rec Capital Fund	4,000,000	450,000	4,500,000	500,000	2,000,000	11,450,000
Police Capital	430,128	-	300,000	-	-	730,128
Water Fund	11,943,844	7,074,000	4,813,000	6,876,000	4,575,000	35,281,844
Water Resource Fund	21,407,510	20,466,807	9,596,447	10,820,691	14,376,027	76,667,482
Stormwater Fund	3,489,162	1,316,178	3,046,915	3,524,176	2,546,439	13,922,870
Wastewater Fund**	7,985,572	5,646,051	3,902,015	5,365,465	3,298,106	26,197,209
Fleet Fund	1,908,294	3,226,902	3,031,976	3,179,777	2,155,710	13,502,659
Golf Fund	224,778	427,722	87,973	550,681	46,491	1,337,645
Community Center Fund	225,000	300,000	350,000	-	160,000	1,035,000
Total by Year	**$ 69,358,788**	**$ 49,096,635**	**$ 55,271,685**	**$ 42,965,074**	**$ 49,394,462**	**$ 266,086,644**

* Transportation Capital Fund CIP differs from budgeted amounts due to the planned accumulation of reserves

** Wastewater Fund CIP differs due to the categorization of capital buy in for Plum Creek Water Reclamation Authority

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.

Source	2020	2021	2022	2023	2024	Total
Sales Tax	$ 510,000	$ 1,330,000	$ 1,100,000	$ 450,000	$ 1,060,000	$ 4,450,000
Residential Building Use Tax	8,035,500	5,193,975	1,181,223	994,284	1,006,198	16,411,180
Road and Bridge Tax	684,450	515,000	530,000	545,000	610,000	2,884,450
Colorado Lottery Funds	316,250	233,750	171,875	150,000	41,250	913,125
Impact Fees	9,883,532	3,050,000	22,072,000	10,059,000	17,775,000	62,839,532
Metered Water Sales	3,352,500	4,574,000	1,425,000	4,250,000	1,575,000	15,176,500
System Development Fees	28,537,179	18,104,087	11,362,351	11,310,634	12,459,337	81,773,587
Water Resources Fees	8,303,898	8,186,723	3,838,579	4,328,276	5,750,411	30,407,887
Stormwater Charges	2,580,973	389,226	1,517,448	1,405,422	1,835,825	7,728,893
Wastewater Service Charges	2,051,538	3,249,000	3,215,000	5,292,000	3,175,000	16,982,538
Vehicle Repl. Contributions	1,597,842	2,932,861	2,764,564	2,921,075	1,985,639	12,201,981
Vehicle Salvage	158,350	280,736	253,642	258,702	170,071	1,121,501
Transfers from Other Funds	474,698	13,305	13,770	-	-	501,773
Transfers In (Sales Tax)	1,034,000	-	684,136	-	1,795,491	3,513,627
Developer Contributions	155,550	-	-	-	-	155,550
Federal Grant	624,000	-	3,601,000	-	-	4,225,000
County Contribution	-	-	1,000,000	-	-	1,000,000
Douglas County Shareback	833,750	616,250	453,125	450,000	108,750	2,461,875
Charges for Service	224,778	427,722	87,973	550,681	46,491	1,337,645
Total by Year	**$ 69,358,788**	**$ 49,096,635**	**$ 55,271,685**	**$ 42,965,074**	**$ 49,394,462**	**$ 266,086,644**

2020-2024 CAPITAL IMPROVEMENT PROGRAM

TOWNWIDE

SUMMARY OF ESTIMATED ONGOING OPERATING COSTS

BY FUND [1]

Department / Division	Project Name	2020	2021	2022	2023	2024
General Fund						
	Unmanned Aerial Vehicle	$ -	$ 2,600	$ 2,600	$ 2,600	$ 2,600
Transportation Fund						
	Traffic Signal Program	5,200	2,600	2,600	2,600	2,600
Water Fund						
	Pump & Distribution System Upgrades	-	-	-	30,074	30,074
	Administration & Customer Service Building	12,119	12,119	12,119	12,119	12,119
Water Resources Fund						
	WISE Project	-	4,600,000	4,600,000	4,600,000	4,600,000
	Chatfield Reallocation Project	120,000	120,000	120,000	120,000	120,000
	Administration & Customer Service Building	5,689	5,689	5,689	5,689	5,689
	PCWPF Expansion	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000
	Castle Rock Reservoir	-	-	-	-	200,000
Stormwater Fund						
	Administration & Customer Service Building	5,510	5,510	5,510	5,510	5,510
Wastewater Fund						
	Administration & Customer Service Building	6,682	6,682	6,682	6,682	6,682
Community Center Fund						
Total Ongoing Operating Expenditures by Year		**$ 1,255,200**	**$ 5,855,200**	**$ 5,855,200**	**$ 5,885,274**	**$ 6,085,274**

NOTE: New vehicle additions to the fleet are incorporated and paid for in each individual department. Operating costs associated with a vehicle addition on average are $986 for repair and maintenance and $1,200 for fuel annually

(1) Existing Capital Improvement Programs included above reflect projects with known ongoing operating costs

2020-2024 CAPITAL IMPROVEMENT PROGRAM

GENERAL FUND

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Parks and Recreation						
Annual Trail Improvements	$ 285,000	$ 1,000,000	$ 700,000	$ 450,000	$ 900,000	$ 3,335,000
Fire Department						
Unmanned Aerial Vehicle	-	30,000	-	-	-	30,000
Community Relations						
Town of Castle Rock Website	-	-	50,000	-	-	50,000
Total Expenditures by Year	**$ 285,000**	**$ 1,030,000**	**$ 750,000**	**$ 450,000**	**$ 900,000**	**$ 3,415,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ 285,000	$ 1,030,000	$ 750,000	$ 450,000	$ 900,000	$ 3,415,000
Total Funding Sources by Year	**$ 285,000**	**$ 1,030,000**	**$ 750,000**	**$ 450,000**	**$ 900,000**	**$ 3,415,000**

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.



East Plum Creek Trail Extension

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Annual Trail Improvements**

Project Number: 75-14
Contact: Jeff Smullen, Assistant Director of Parks & Recreation
Department: Parks & Recreation Department
Category: Trails
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 4,168,158
2020-2024 Total	3,335,000
CIP Project Total (2015-2024):	**$ 7,503,158**

Description and Justification

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 an annual transfer 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 sidewalks and trails. Improvements in 2020 will include the continued extension of the Gateway Mesa Trail, a sidewalk connection at Covy Court in the Woodlands and design development for the Front Range Trail through Castle Rock. In 2021 and 2022 funds will be committed to completion of the Front Range Trail through Castle Rock with grant support. In 2023 and 2024 planning includes work to cross the Union Pacific Railroad at Prairie Hawk Drive and unpaved trail development in Cobblestone Ranch / McCanta Regional Park.

The completion of the East Plum Creek Trail / McMurdo Gulch Trail (Colorado Front Range Trail) through Castle Rock is dependent on securing a Connect Initiative Grant through Great Outdoors Colorado (GOCO). Information on grant award will be available at the end of 2019.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction Contracts	$ 285,000	$ 1,000,000	$ 700,000	$ 450,000	$ 900,000	$ 3,335,000
Total Expenditures	**$ 285,000**	**$ 1,000,000**	**$ 700,000**	**$ 450,000**	**$ 900,000**	**$ 3,335,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Sales Tax	$ 285,000	$ 1,000,000	$ 700,000	$ 450,000	$ 900,000	$ 3,335,000
Total Funding Sources	**$ 285,000**	**$ 1,000,000**	**$ 700,000**	**$ 450,000**	**$ 900,000**	**$ 3,335,000**

Operational Impact

Costs to maintain the addition to the trail will be minimal and can be accommodated within current budgeted resources.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Unmanned Aerial Vehicle**

Project Number: 70-30
Contact: Brian Dimock, Division Chief & Fire Marshall
Department: Fire Department
Category: Equipment
Type: New
Useful Life: 3-5 years

5 Year Historical Total	$ -
2020-2024 Total	30,000
CIP Project Total (2015-2024):	**$ 30,000**

Description and Justification

The Fire Department Unmanned Aerial Vehicle (UAV) program has been in place since 2016. UAVs are used almost daily for incident support, documentation, inspections, and training. Pilots are FAA licensed UAV pilots, operating within federal guidelines. The UAV Team also provides support to Castle Rock Police Department, Douglas County Sheriff's Office, Colorado State Patrol, and Douglas County Search and Rescue, as well as mutual aid to other departments, including our Town partners. Day to day UAV operations are typically accomplished utilizing the small platform Mavic Pro quadcopters equipped with HD color video and photo technology. For specialized UAV flight operations the Inspire 1 quadcopters are currently being used, but they are limited to a single camera, allowing for either a color HD or Thermal (FLIR) can be operated. This can become a limiting factor during complex missions, fire operations, search and rescue, SWAT operations, and other public safety uses. The Matrice 210 model solves many of these limitations due to the fact that it incorporates in its technology a gimbal mounted Thermal FLIR camera, as well as a second gimbal mounted HD Color camera that can be operated independently of one another. This UAV would significantly increase the capabilities of the UAV program to support our partners in public safety, as well as protecting the community through the use of innovative cost effective aerial technology at far less expense rate than manned aircraft. Through adding an optional tethering kit, the Matrice 210 can climb to 400 feet above the ground, providing a continuous power supply for unlimited flight time to monitor safety at large events, fires, or other public safety needs. When the time is of the essence and weather conditions turn foul, first responders require a versatile and reliable aerial platform. The Matrice 210 is able to carry visual and/or thermal sensors at the same time, the 210 provides situational awareness of potentially dangerous situations, such as fires and natural disasters. This technology allows the incident commanders to use data collected by the aircraft to make smarter and better decisions, protecting life and property while minimizing the safety risk to rescue personnel.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
UAV Purchase	$ -	$ 30,000	$ -	$ -	$ -	$ 30,000
Total Expenditures	**$ -**	**$ 30,000**	**$ -**	**$ -**	**$ -**	**$ 30,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Sales Tax	$ -	$ 30,000	$ -	$ -	$ -	$ 30,000
Total Funding Sources	**$ -**	**$ 30,000**	**$ -**	**$ -**	**$ -**	**$ 30,000**

Operational Impact

Operating expenditures are reflected within the Fire Department's budget, totalling approximately $2,600 per year.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Town of Castle Rock Website**

Project Number: 70-43
Contact: Kristin Zagurski, Assitant Town Manager
Department: Town Manager
Category: Technology
Type: Upgrade
Useful Life: 5+ Years

5 Year Historical Total	$ 120,645
2020-2024 Total	50,000
CIP Project Total (2015-2024):	**$ 170,645**

Description and Justification

Community Relations division is requesting funds to update and upgrade the current Town public facing website. The current webpage is outdated and has not been updated in a number of years. The estimated amount below will be revised as better information is obtained.

Expenditures	2020	2021	2022	2023	2024	Total
Town of Castle Rock Website	$ -	$ -	$ 50,000	$ -	$ -	$ 50,000
Total Expenditures	**$ -**	**$ -**	**$ 50,000**	**$ -**	**$ -**	**$ 50,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ -	$ -	$ 50,000	$ -	$ -	$ 50,000
Total Funding Sources	**$ -**	**$ -**	**$ 50,000**	**$ -**	**$ -**	**$ 50,000**

Operational Impact

Please describe the anticipated revenue and/or expenditure impact on annual operations, including estimated amounts.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

GENERAL LONG TERM PLANNING FUND

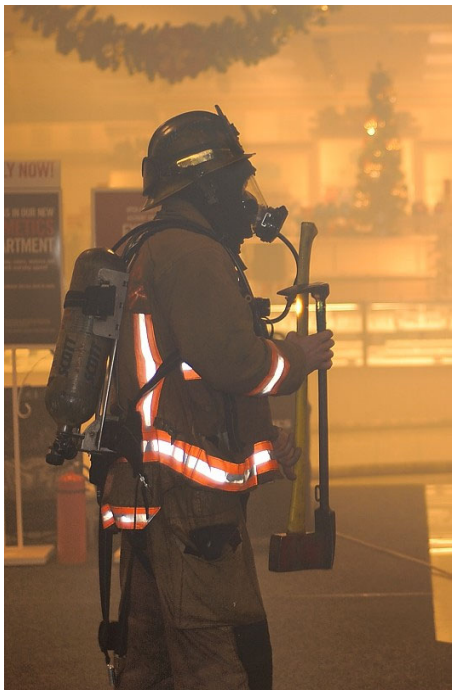
TOWN MANAGER

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Parks & Recreation Department						
Synthetic Turf Replacement	$ 216,000	$ 295,000	$ 295,000	$ 491,000	$ 485,000	$ 1,782,000
Fire & Rescue Department						
Self Contained Breathing Apparatus	1,034,000	-	-	-	-	1,034,000
Fire Department Radio Replacement	-	-	-	-	1,500,000	1,500,000
Station 154 & 155 Bay Remodels	250,000	-	-	-	-	250,000
EMS Equipment	-	-	684,136	-	295,491	979,627
DoIT						
Server Replacement	89,000	97,000	97,000	105,000	105,000	493,000
Cisco Devices	309,500	324,975	341,223	358,284	376,198	1,710,180
Total Expenditures by Year	**$ 1,898,500**	**$ 716,975**	**$ 1,417,359**	**$ 954,284**	**$ 2,761,689**	**$ 7,748,807**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Residential Building Use Tax	$ 864,500	$ 716,975	$ 733,223	$ 954,284	$ 966,198	$ 4,235,180
Transfers In (Sales Tax)	1,034,000	-	684,136	-	1,795,491	3,513,627
Total Funding Sources by Year	**$ 1,898,500**	**$ 716,975**	**$ 1,417,359**	**$ 954,284**	**$ 2,761,689**	**$ 7,748,807**

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.



Firefighter wearing Self Contained Breathing Apparatus (SCBA)

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Synthetic Turf Replacement**

Project Number: 78-47
Contact: Jeff Smullen, Assistant Director of Parks & Recreation
Department: Parks & Recreation Department
Category: Parks/Trails
Type: Replacement
Useful Life: 10 Years

5 Year Historical Total	$ 164,250
2020-2024 Total	1,782,000
CIP Project Total (2015-2024):	**$ 1,946,250**

Description and Justification

The Parks and Recreation Department requests funding for synthetic turf replacement at the following locations:

-2020 for Butterfield Park
-2021 for Gemstone Park
-2022 for Matney Park
-2023 for Rhyolite Regional Park
-2024 for Bison Park

Town staff is working with the Douglas County School District on possible funding for Bison Park in 2024. 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, and to maintain the functional and aesthetic quality of these parks. Synthetic turf surfaces are regularly evaluated for safety and actual project timing may change based on this ongoing evaluation.

Expenditures	2020	2021	2022	2023	2024	Total
Site Improvements	$ 216,000	$ 295,000	$ 295,000	$ 491,000	$ 485,000	$ 1,782,000
Total Expenditures	**$ 216,000**	**$ 295,000**	**$ 295,000**	**$ 491,000**	**$ 485,000**	**$ 1,782,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Residential Building Use Tax	$ 216,000	$ 295,000	$ 295,000	$ 491,000	$ 485,000	$ 1,782,000
Total Funding Sources	**$ 216,000**	**$ 295,000**	**$ 295,000**	**$ 491,000**	**$ 485,000**	**$ 1,782,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Self Contained Breathing Apparatus**

Project Number: 70-30
Contact: Norris Croom, Fire Chief
Department: Fire Department
Category: Equipment
Type: Replacement
Useful Life: 10 years

5 Year Historical Total	$ 623,840
2020-2024 Total	1,034,000
CIP Project Total (2015-2024):	**$ 1,657,840**

Description and Justification

The Fire and Rescue Department utilizes Self Contained Breathing Apparatus (SCBAs), which allow responders to breathe safely when entering hazardous environments as a result of fires, hazardous materials incidents, or any other type of incident that could create a hazardous breathing environment. Current equipment was purchased in 2010, and will reach end of life in 2020.

This request is to replace the old equipment with current and more technologically advanced equipment to ensure continued maintenance of existing level of service. Currently, there are 75 SCBAs, at a cost of $9,000 each for a total of $675,000. Additionally, there are 150 SCBA cylinders at a cost of $1,100 each, or $165,000, for a total cost of $840,000. Using these cost estimates plus inflation, this request is for $1,034,000.

Funds have been accumulated through an annual transfer in 2018-2020 from the General Fund to accommodate this purchase.

This aligns with the Council priority of providing outstanding public health and safety. Replacement of this equipment will maintain existing level of service, while not replacing them could reduce levels of service should the old SCBAs fail or become non-compliant.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
SCBA Purchase	$ 1,034,000	$ -	$ -	$ -	$ -	$ 1,034,000
Total Expenditures	**$ 1,034,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,034,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Transfers In (Sales Tax)	$ 1,034,000	$ -	$ -	$ -	$ -	$ 1,034,000
Total Funding Sources	**$ 1,034,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,034,000**

Operational Impact

There should be minimal to no operational costs associated with cost of this equipment other than the required annual inspection and maintenance as well as hydro testing of the SCBA bottles. Any ongoing expenses will be absorbed in the existing Fire Department budget in the General Fund.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Fire Department Radio Replacement**

Project Number: 70-30
Contact: Norris Croom, Fire Chief
Department: Fire Department
Category: Equipment
Type: Replacement
Useful Life: 10 Years

5 Year Historical Total	$ 623,840
2020-2024 Total	1,500,000
CIP Project Total (2015-2024):	**$ 2,123,840**

Description and Justification

This project is planned to accommodate replacement of mobile and portable radios. As technology continues to advance, the life span of the Fire Department's radios has decreased from 15 years to 10 years. In order to ensure operational stability and continuity of systems, these radios need to be replaced all at one time as opposed to a phased process. This plan ensures that items such as radio batteries, carrying cases, microphones, cabling systems, capabilities, etc. are maintained as opposed to having variations of each. These are a key component in being able to provide service as we have to be able to communicate with dispatch as well as other units to be able to respond to calls.

This request aligns with Council established Strategic Priorities by ensuring outstanding public safety and allows the Fire department to maintain the current level of service.

These radios (approx. 200 total) are scheduled for replacement in 2024 at an estimated cost of $1,500,000.

Expenditures	2020	2021	2022	2023	2024	Total
Radio Replacement	$ -	$ -	$ -	$ -	$ 1,500,000	$ 1,500,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**	**$ 1,500,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Transfers In (Sales Tax)	$ -	$ -	$ -	$ -	$ 1,500,000	$ 1,500,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,500,000**	**$ 1,500,000**

Operational Impact

There should be no additional annual costs as maintenance is already built into the annual Fire Department operating budget in the General Fund.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Station 154 & 155 Bay Remodels**

Project Number: 70-20
Contact: Norris Croom, Fire Chief
Department: Fire Department
Category: Building
Type: Upgrade
Useful Life: 30 years

5 Year Historical Total	$	181,749
2020-2024 Total		250,000
CIP Project Total (2015-2024):	**$**	**431,749**

Description and Justification

This request is for one-time funding to modify the bays at Stations 154 and 155. When these stations were built in 1998 and 2003 respectively, four of the six bay doors were built to a height of twelve feet with the two center doors built to fourteen feet. As apparatus, specifically aerial ladder trucks have increased in height, these shorter bay doors cannot accommodate the taller trucks unless they are fully loaded. Even if the trucks are fully loaded there is only approximately one inch of clearance, which leaves no room for error. These funds would be used to raise the headers for the shorter doors so that all doors would be fourteen feet high and allow any bay to be used for an aerial ladder truck. Estimates were obtained in the summer of 2018, and cost increases have been included in the requested amount.

This aligns with Council established Strategic Priorities by ensuring outstanding public safety, and this will allow us to maintain our level of service.

The only alternatives or potential solutions would be to leave the doors as they are, thus reducing the ability to use these bays and increasing the risk of expense related to the top of the truck striking the door header.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Building Improvements	$ 250,000	$ -	$ -	$ -	$ -	$ 250,000
Total Expenditures	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 250,000	$ -	$ -	$ -	$ -	$ 250,000
Total Funding Sources	**$ 250,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 250,000**

Operational Impact

There is no estimated annual cost as this is a one-time expense. No additional maintenance costs would be needed other than what is already appropriated.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **EMS Equipment**

Project Number: 70-30
Contact: Norris Croom, Fire Chief
Department: Fire Department
Category: Equipment
Type: Replacement
Useful Life: 7-10 years

5 Year Historical Total	$ 623,840
2020-2024 Total	979,627
CIP Project Total (2015-2024):	**$ 1,603,467**

Description and Justification

These requested items include EMS equipment required to provide emergency care. The cardiac monitors have a 10 year useful life, the prams have a 7 year useful life, as do the stair chairs. The prams and stair chairs are used on medic units, while the cardiac monitors are on both medic units and engines/aerials as part of our Advanced Life Support (ALS) system.

This aligns with Council established Strategic Priorities by ensuring outstanding public safety, it allows us to maintain our current level of service, and it addresses the community survey need of ensuring public safety.

Replacement of these items could potentially be delayed, but the risk is that the equipment typically is no longer supported by the manufacturer after it reaches its end of life.

Expenditures	2020	2021	2022	2023	2024	Total
LifePak Cardiac Monitors	$ -	$ -	$ 684,136	$ -	$ -	$ 684,136
Powered Ambulance Prams	-	-	-	-	211,065	211,065
Powered Stair Chairs	-	-	-	-	84,426	84,426
Total Expenditures	**$ -**	**$ -**	**$ 684,136**	**$ -**	**$ 295,491**	**$ 979,627**

Funding Sources	2020	2021	2022	2023	2024	Total
Transfers In (Sales Tax)	$ -	$ -	$ 684,136	$ -	$ 295,491	$ 979,627
Total Funding Sources	**$ -**	**$ -**	**$ 684,136**	**$ -**	**$ 295,491**	**$ 979,627**

Operational Impact

There should be no additional operational costs as annual maintenance is already built into the Fire Department operating budget in the General Fund.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Server Replacement**

Project Number: 76-83
Contact: Jennifer Jaeger, Chief Technology Officer
Department: Division of Innovation and Technology
Category: Technology
Type: Replacement
Useful Life: 5 Years

5 Year Historical Total	$	115,080
2020-2024 Total		493,000
CIP Project Total (2015-2024):	**$**	**608,080**

Description and Justification

With 18 physical servers used by departments in Town, this project will replace a percentage of them each year to ensure critical business operations continue to run without interruption. These 18 physical servers house 200 virtual servers that contain Town data for every application. Just like desktop computers, servers age 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. Five year old servers need to be replaced or the Town risks failures, which could potentially result in major outages. A regular replacement schedule will keep systems healthy and vendor support available.

Expenditures	2020	2021	2022	2023	2024	Total
Server Replacement	$ 89,000	$ 97,000	$ 97,000	$ 105,000	$ 105,000	$ 493,000
Total Expenditures	**$ 89,000**	**$ 97,000**	**$ 97,000**	**$ 105,000**	**$ 105,000**	**$ 493,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Residential Building Use Tax	$ 89,000	$ 97,000	$ 97,000	$ 105,000	$ 105,000	$ 493,000
Total Funding Sources	**$ 89,000**	**$ 97,000**	**$ 97,000**	**$ 105,000**	**$ 105,000**	**$ 493,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Cisco Devices**

Project Number: 76-80
Contact: Jennifer Jaeger, Chief Technology Officer
Department: Division of Innovation and Technology
Category: Technology
Type: Replacement
Useful Life: 5 Years

5 Year Historical Total	$ 291,949
2020-2024 Total	1,710,180
CIP Project Total (2015-2024):	**$ 2,002,129**

Description and Justification

This project will replace a portion of networking and wireless devices including any that are five years or older. Network devices are an essential requirement to deliver data between computers and servers. If a network device fails, data cannot be delivered, and employee productivity is greatly reduced. These devices also provide wi-fi in all facilities, video upload for the in-car and body cameras for the Police Department, and connectivity to remote locations (swimming pools, Red Hawk). Maintaining these devices is very important for daily work of almost every Town employee. The Town is no longer able to buy support for some 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. Network devices cost are expected to grow at an average annual rate of 27% and are budgeted below accordingly.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Cisco Devices	$ 309,500	$ 324,975	$ 341,223	$ 358,284	$ 376,198	$ 1,710,180
Total Expenditures	**$ 309,500**	**$ 324,975**	**$ 341,223**	**$ 358,284**	**$ 376,198**	**$ 1,710,180**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 309,500	$ 324,975	$ 341,223	$ 358,284	$ 376,198	$ 1,710,180
Total Funding Sources	**$ 309,500**	**$ 324,975**	**$ 341,223**	**$ 358,284**	**$ 376,198**	**$ 1,710,180**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

TRANSPORTATION FUND

PUBLIC WORKS DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Miscellaneous Projects & Studies	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
Traffic Safety Improvements	50,000	50,000	50,000	50,000	50,000	250,000
Traffic Signal Program	640,000	315,000	330,000	345,000	360,000	1,990,000
Neighborhood Traffic Calming	25,000	25,000	25,000	25,000	25,000	125,000
Development Related Projects	50,000	50,000	50,000	50,000	100,000	300,000
ADA Ramps	40,000	40,000	40,000	40,000	40,000	200,000
Craig & Gould N. Infrastructure	3,100,000	-	-	-	-	3,100,000
Downtown Alley Improvements	315,000	330,000	350,000	-	-	995,000
Illuminated Street Name Signs	56,000	57,000	58,000	-	-	171,000
Total Expenditures by Year	**$ 4,351,000**	**$ 942,000**	**$ 978,000**	**$ 585,000**	**$ 650,000**	**$ 7,506,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Road and Bridge Tax	$ 684,450	$ 515,000	$ 530,000	$ 545,000	$ 610,000	$ 2,884,450
Residential Building Use Tax	3,511,000	427,000	448,000	40,000	40,000	4,466,000
Developer Contributions	155,550	-	-	-	-	155,550
Total Funding Sources by Year	**$ 4,351,000**	**$ 942,000**	**$ 978,000**	**$ 585,000**	**$ 650,000**	**$ 7,506,000**

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



Curb and gutter work in progress

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Miscellaneous Projects & Studies**

Project Number: 75-24
Contact: Carl Armijo, Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: New
Useful Life: Variable

5 Year Historical Total	$ 124,969
2020-2024 Total	375,000
CIP Project Total (2015-2024):	**$ 499,969**

Description and Justification

Small projects and studies are typically identified during the year that are currently unknown. Projects typically arise that were not accounted for or specifically identified in the annual budget process. The purpose of this miscellaneous projects account is to have monies available when minor unexpected road projects need to be funded and constructed. Examples include projects such as repair of broken concrete sidewalks, minor drainage improvements, or subsurface investigations such as the Sixth Street alley wall failure and Castle Oaks east approach settlement. The ability to immediately implement small projects as they are identified provides for the best customer service for the public and maintains a level of service expected and provided by the Town. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Design/Engineering/Construction	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
Total Expenditures	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 375,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Road and Bridge Tax	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 75,000	$ 375,000
Total Funding Sources	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 75,000**	**$ 375,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Traffic Safety Improvements**

Project Number: 75-25
Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Mgr.
Department: Public Works Department
Category: Infrastructure
Type: Repair
Useful Life: Variable

5 Year Historical Total	$ 167,507
2020-2024 Total	250,000
CIP Project Total (2015-2024):	**$ 417,507**

Description and Justification

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 intended to pay for these items. The ability to immediately implement small projects as they are identified provides for the best customer service for the public and aids in improving safety. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Total Expenditures	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 250,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Road and Bridge Tax	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Total Funding Sources	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 250,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Traffic Signal Program**

Project Number: 75-26
Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Mgr.
Department: Public Works Department
Category: Infrastructure
Type: New
Useful Life: 15-20 years

5 Year Historical Total	$ 2,653,867
2020-2024 Total	1,990,000
CIP Project Total (2015-2024):	**$ 4,643,867**

Description and Justification

This program is utilized to construct new traffic signals that are identified through engineering evaluations, and to perform signal system changes recommended in the comprehensive town wide system analysis. For 2020, it is expected that two new traffic signals will be needed. The projected locations, which are yet to be verified through an engineering evaluation in 2019, are Meadows / Cherokee and Meadows / Morningview. The projected cost for construction per intersection in 2020 is $305,000. This is an average of the construction costs over the past four years plus a 10% contingency. In the recent two years, construction cost per intersection has increased about 16% due to the addition of illuminated street name signs, higher costs for steel signal poles, and an overall increase in construction costs. For years 2021 through 2024, signal projects will be chosen based upon historical trends, judgment, and locations identified by engineering evaluations. A 4% increase in cost from one year to the next has been applied to the projected construction in 2021 through 2024. This projected increase is based on the average growth seen in signal construction within the Town the past four years.

The remaining $30,000 is requested to finish the installation of advanced vehicle detection at the three remaining intersections that will not be completed with the approved Phase 3 signal upgrade projects in 2019. Late in 2018 and early in 2019, staff ran a proof of concept on automated traffic signal performance measures (ATSPMs) on the Plum Creek Parkway corridor. The proof of concept showed how the use of ATSPMs in Castle Rock would be beneficial in identifying deficiencies in current signal timing and operations that staff would not have been aware of otherwise. Utilizing ATSPMs include benefits to both signal efficiency and safety. The use of ATSPMs throughout the full signal system can quickly identify deficiencies and allow staff to quickly address the deficiency before it negatively affects the service level and travel time of the given corridor. This is a proactive approach that will be a benefit to the community. The intent of ATSPMs is to assure as much operational functionality out of a given corridor before additional time and cost is spent on signal retiming projects or more costly capital improvement projects that add physical capacity.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction/Engineering	$ 640,000	$ 315,000	$ 330,000	$ 345,000	$ 360,000	$ 1,990,000
Total Expenditures	**$ 640,000**	**$ 315,000**	**$ 330,000**	**$ 345,000**	**$ 360,000**	**$ 1,990,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Road and Bridge Tax	$ 484,450	$ 315,000	$ 330,000	$ 345,000	$ 360,000	$ 1,834,450
Developer Contributions	155,550	-	-	-	-	155,550
Total Funding Sources	**$ 640,000**	**$ 315,000**	**$ 330,000**	**$ 345,000**	**$ 360,000**	**$ 1,990,000**

Operational Impact

The department currently contracts out some of the maintenance of traffic signal equipment but only on an as needed basis to supplement the in-house capabilities. In addition, electricity cost increases also exist with new signal installation. The average electricity and maintenance cost per signal is $2,600 per year and is included in electricity costs within the Transportation Fund.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Neighborhood Traffic Calming**

Project Number: 75-28
Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Mgr.
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: Variable

5 Year Historical Total	$ 57,925
2020-2024 Total	125,000
CIP Project Total (2015-2024):	**$ 182,925**

Description and Justification

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. Projects are identified through the current policy approved by Town Council and administered by staff. These projects are typically developed during the year as requested by residents and certain criteria are met. Examples include the installation of speed cushions on residential streets. This project helps to address the community priority of a safe and reliable transportation system.

Expenditures	2020	2021	2022	2023	2024	Total
Construction/Engineering	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 125,000
Total Expenditures	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 125,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Road and Bridge Tax	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 125,000
Total Funding Sources	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 25,000**	**$ 125,000**

Operational Impact

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.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Development Related Projects**

Project Number: 75-32
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: New
Useful Life: Variable

5 Year Historical Total	$ 205,403
2020-2024 Total	300,000
CIP Project Total (2015-2024):	**$ 505,403**

Description and Justification

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 to the public. Projects are identified through the development review process and constructed as needed. The Town has recognized that opportunities exist for transportation improvements to be made in conjunction with other development activity in Town. It is the Town's intent to construct these improvements during development at a reduced cost and to continue to provide an adequate level of service. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Engineering/Construction	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 100,000	$ 300,000
Total Expenditures	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 100,000**	**$ 300,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Road and Bridge Tax	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 100,000	$ 300,000
Total Funding Sources	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 100,000**	**$ 300,000**

Operational Impact

The operational impact of the program will depend on the specific projects constructed and will be incorporated at such time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **ADA Ramps**

Project Number: 76-78
Contact: Aaron Monks, Project Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: Variable

5 Year Historical Total	$ 40,000
2020-2024 Total	200,000
CIP Project Total (2015-2024):	**$ 240,000**

Description and Justification

Town Council approved the Americans with Disabilities Act (ADA) Prioritization Plans which identified $40,000 per year to be allocated towards curb ramp upgrades based on priorities and funding. A contractor will be utilized to construct these upgrades. The goal of the 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. This project helps to address the community priority of a safe and reliable transportation system.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 200,000
Total Expenditures	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 200,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 200,000
Total Funding Sources	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 40,000**	**$ 200,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

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

Project Number: 77-62
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 30 years

5 Year Historical Total	$ 800,000
2020-2024 Total	3,100,000
CIP Project Total (2015-2024):	**$ 3,900,000**

Description and Justification

The scope of the project includes reconstruction and replacement of existing utility and street infrastructure. This includes reconstruction of existing pavement and the addition of curb, gutter, and sidewalk improvements. These modifications are expected to improve pedestrian safety and better define parking areas along the streets that currently do not have curbs or sidewalks. This project was included in the Public Works Five-Year Capital considerations presented to Town Council and Strategic Planning considerations presented and approved in 2015. This infrastructure is beyond its design life, and needs to be replaced. Increased maintenance is required to keep service active, which creates cost inefficiencies. This is a joint effort with Castle Rock Water and timing of these improvements for design and construction years was closely coordinated between both departments. This project helps to address the community priority of a safe and reliable transportation system.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 3,100,000	$ -	$ -	$ -	$ -	$ 3,100,000
Total Expenditures	**$ 3,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,100,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 3,100,000	$ -	$ -	$ -	$ -	$ 3,100,000
Total Funding Sources	**$ 3,100,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 3,100,000**

Operational Impact

Increased operational impacts are not anticipated as this project is an upgrade. 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.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Downtown Alley Improvements**

Project Number: 78-46
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 30 years

5 Year Historical Total	$ 122,500
2020-2024 Total	995,000
CIP Project Total (2015-2024):	**$ 1,117,500**

Description and Justification

The scope of the project includes reconstruction of alley pavement infrastructure and upgrades including the addition of gutter and storm drain infrastructure improvements at six locations in the downtown area. These modifications are expected to improve drainage, safety, and access to the alleys. This infrastructure is beyond its design life, and needs to be replaced and improved. Increased maintenance is required to keep current service active, which is creating cost inefficiencies. This project is intended to address the community priority of a safe and reliable transportation system. The six alleys requiring improvement are scheduled to be constructed over the course of three years, 2020-2022. This program fulfills current needs for alleyway work.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 315,000	$ 330,000	$ 350,000	$ -	$ -	$ 995,000
Total Expenditures	**$ 315,000**	**$ 330,000**	**$ 350,000**	**$ -**	**$ -**	**$ 995,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 315,000	$ 330,000	$ 350,000	$ -	$ -	$ 995,000
Total Funding Sources	**$ 315,000**	**$ 330,000**	**$ 350,000**	**$ -**	**$ -**	**$ 995,000**

Operational Impact

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.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Illuminated Street Name Signs**

Project Number: 79-02
Contact: Ryan Germeroth, Transp. Planning & Traffic Engineering Mgr.
Department: Public Works Department
Category: Infrastructure
Type: New
Useful Life: 10 years

5 Year Historical Total	$ 55,000
2020-2024 Total	171,000
CIP Project Total (2015-2024):	**$ 226,000**

Description and Justification

Installation of illuminated street name signs began in 2019 at two existing signalized intersections and continues to 2022. Six of the locations are at the I-25 ramp terminals at Meadows / Founders, Wolfensberger and Plum Creek Parkway. The other two locations are on Meadows Parkway at Factory Shops Boulevard and at Highway 85. Purchase and installation of signs costs approximately $28,000 for a typical four way intersection at about $7,000 per sign.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 56,000	$ 57,000	$ 58,000	$ -	$ -	$ 171,000
Total Expenditures	**$ 56,000**	**$ 57,000**	**$ 58,000**	**$ -**	**$ -**	**$ 171,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 56,000	$ 57,000	$ 58,000	$ -	$ -	$ 171,000
Total Funding Sources	**$ 56,000**	**$ 57,000**	**$ 58,000**	**$ -**	**$ -**	**$ 171,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

TRANSPORTATION CAPITAL FUND

PUBLIC WORKS DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Plum Creek Pkwy Widening & Roundabout	$ 3,660,000	$ 4,050,000	$ -	$ -	$ -	$ 7,710,000
Ridge Road Widening	-	-	75,000	4,553,000	-	4,628,000
Hwy 86 & 5th St. Improvements	1,200,000	-	5,300,000	-	-	6,500,000
5th Street Widening	-	-	1,298,000	374,000	1,198,000	2,870,000
Wolfensberger Widening & Roundabout	-	-	2,400,000	1,100,000	11,700,000	15,200,000
Wilcox and South Roundabout	600,000	-	-	-	-	600,000
Crowfoot and Timber Canyon Roundabout	-	-	-	2,222,000	-	2,222,000
Crowfoot Valley Road Widening	-	-	-	785,000	-	785,000
Prairie Hawk Widening	-	-	-	525,000	2,877,000	3,402,000
Crystal Valley Parkway Interchange	4,600,000	2,600,000	12,800,000	-	-	20,000,000
Total Expenditures by Year	**$10,060,000**	**$ 6,650,000**	**$21,873,000**	**$9,559,000**	**$15,775,000**	**$63,917,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ 5,776,000	$ 2,600,000	$17,272,000	$9,559,000	$15,775,000	$50,982,000
Residential Building Use Tax	3,660,000	4,050,000	-	-	-	7,710,000
Federal Grant	624,000	-	3,601,000	-	-	4,225,000
County Contribution	-	-	1,000,000	-	-	1,000,000
Total Funding Sources by Year	**$10,060,000**	**$ 6,650,000**	**$21,873,000**	**$9,559,000**	**$15,775,000**	**$63,917,000**

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.



Wolfensberger Road and Plum Creek Parkway Roundabout

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Plum Creek Pkwy Widening & Roundabout**

Project Number: 77-05
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 3,174,036
2020-2024 Total	7,710,000
CIP Project Total (2015-2024):	**$ 10,884,036**

Description and Justification

This project will accommodate the addition of the remaining two lanes of the master planned four-lane roadway on Plum Creek Parkway which was identified in the Transportation Master Plan, revised in 2018. Construction of this project will support the continued development in the south and east areas of the Town. This project will also improve access to the I-25/Plum Creek Parkway interchange from the eastern areas of Town. In addition, this project will include bicycle and pedestrian multi use lanes. Construction is phased into two areas. Construction of the widening in 2020 is planned to be from Gilbert Street to Eaton Street, and 2021 construction would be from Eaton Street to Ridge Road. In addition, construction of a roundabout at Gilbert Street and Plum Creek Parkway is planned for 2020. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the 2019 Community Survey.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Widening Construction	$ 3,660,000	$ 4,050,000	$ -	$ -	$ -	$ 7,710,000
Total Expenditures	**$ 3,660,000**	**$ 4,050,000**	**$ -**	**$ -**	**$ -**	**$ 7,710,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Residential Building Use Tax	$ 3,660,000	$ 4,050,000	$ -	$ -	$ -	$ 7,710,000
Total Funding Sources	**$ 3,660,000**	**$ 4,050,000**	**$ -**	**$ -**	**$ -**	**$ 7,710,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane-miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Ridge Road Widening**

Project Number: 78-84
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 205,984
2020-2024 Total	4,628,000
CIP Project Total (2015-2024):	**$ 4,833,984**

Description and Justification

This requested project involves the widening of Ridge Road from the intersection of Highway 86 and Ridge Road to the intersection of Ridge Road and Plum Creek Parkway. The objective of this project is to improve congestion relief due to current and forecasted traffic volumes. Additionally, this project is located on the eastern portion of the Town which assists with the geographic distribution of projects proposed over the five year period to minimize the density and associated impacts of multiple projects in a certain geographic area. Design for this project is planned to be complete in 2019. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the 2019 Community Survey.

Expenditures	2020	2021	2022	2023	2024	Total
Right of Way Acquisition	$ -	$ -	$ 75,000	$ -	$ -	$ 75,000
Construction	-	-	-	4,553,000	-	4,553,000
Total Expenditures	**$ -**	**$ -**	**$ 75,000**	**$ 4,553,000**	**$ -**	**$ 4,628,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ -	$ -	$ 75,000	$ 4,553,000	$ -	$ 4,628,000
Total Funding Sources	**$ -**	**$ -**	**$ 75,000**	**$ 4,553,000**	**$ -**	**$ 4,628,000**

Operational Impact

This project will add to increased operational and maintenance costs within the Transportation Fund associated with additional lanes. Based on the pavement lifecycle, pavement maintenance needs will occur at approximately five years after installation and will be incorporated at that time. Pavement marking maintenance will occur annually. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Hwy 86 & 5th St. Improvements**

Project Number: 78-69
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 223,760
2020-2024 Total	6,500,000
CIP Project Total (2015-2024):	**$ 6,723,760**

Description and Justification

This project is requested to accommodate capacity improvements at the intersection of Highway 86 and 5th Street in order to minimize congestion due to current and forecasted traffic volumes. The timing of this project is proposed to occur with the planned widening of Ridge Road in order to assist with minimizing disruption to the community. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

The Town is seeking a federal grant of $4.225 million for the project. In addition, Douglas County has agreed to contribute $1 million toward the construction of the project in 2022. The remaining portion of the project costs will be the responsibility of the Town.

Expenditures	2020	2021	2022	2023	2024	Total
Design	$ 1,200,000	$ -	$ -	$ -	$ -	$ 1,200,000
Construction	-	-	5,300,000	-	-	5,300,000
Total Expenditures	**$ 1,200,000**	**$ -**	**$ 5,300,000**	**$ -**	**$ -**	**$ 6,500,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ 576,000	$ -	$ 699,000	$ -	$ -	$ 1,275,000
Federal Grant	624,000	-	3,601,000	-	-	4,225,000
County Contribution	-	-	1,000,000	-	-	1,000,000
Total Funding Sources	**$ 1,200,000**	**$ -**	**$ 5,300,000**	**$ -**	**$ -**	**$ 6,500,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **5th Street Widening**

Project Number: 78-85
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ -
2020-2024 Total	2,870,000
CIP Project Total (2015-2024):	**$ 2,870,000**

Description and Justification

This project involves the widening of the eastbound lanes from the intersection of Woodlands Boulevard at Fifth Street to the intersection of Fifth Street and Ridge Road. The objective of this project is to reduce congestion from forecasted traffic volumes which has been identified as an area of concern in the Community Survey.

Additional pedestrian improvements will also be incorporated to improve safety between Woodlands Boulevard and Ridge Road. The timing of this project is proposed to occur with the intersection improvements at Fifth Street and Ridge Road in order to minimize disruption to transportation stakeholders.

Expenditures	2020	2021	2022	2023	2024	Total
Design	$ -	$ -	$ 1,298,000	$ -	$ -	$ 1,298,000
Right of Way Acquisition	-	-	-	374,000	-	374,000
Construction	-	-	-	-	1,198,000	1,198,000
Total Expenditures	**$ -**	**$ -**	**$ 1,298,000**	**$ 374,000**	**$ 1,198,000**	**$ 2,870,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ -	$ -	$ 1,298,000	$ 374,000	$ 1,198,000	$ 2,870,000
Total Funding Sources	**$ -**	**$ -**	**$ 1,298,000**	**$ 374,000**	**$ 1,198,000**	**$ 2,870,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Wolfensberger Widening & Roundabout**

Project Number: 77-08
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ -
2020-2024 Total	15,200,000
CIP Project Total (2015-2024):	**$ 15,200,000**

Description and Justification

This project accommodates the design of the remaining two lanes of the master planned four lane roadway on Wolfensberger Road from the intersection of Red Hawk Drive to the future Philip S. Miller Regional Park entrance. This widening of the roadway will support the continued development of the north/south and west areas of the Town by improving access to I-25 at Wolfensberger Road from the western areas of Town. This project will also include bicycle and pedestrian multi use lanes. This project will also reduce congestion along Wolfensberger Road, provide needed pedestrian and bicycle connections between the downtown area and Coachline Road, and support proposed development along Wolfensberger.

This project also accommodates the construction of a roundabout at the intersection of Wolfensberger Road with Red Hawk Drive. This project will improve the capacity of the intersection in order to assist with congestion relief as well as improve safety. A roundabout is also the most efficient traffic control throughout all hours of the day, as opposed to traffic signals, which are limited in efficiency to the peak hours of a day. The improved efficiency of a roundabout leads to increased societal benefits such as decreased delay, improved safety, and decreased environmental impacts.This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Design	$ -	$ -	$ 2,400,000	$ -	$ -	$ 2,400,000
Right of Way Acquisition	-	-	-	1,100,000	-	1,100,000
Construction	-	-	-	-	11,700,000	11,700,000
Total Expenditures	**$ -**	**$ -**	**$ 2,400,000**	**$ 1,100,000**	**$ 11,700,000**	**$ 15,200,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ -	$ -	$ 2,400,000	$ 1,100,000	$ 11,700,000	$ 15,200,000
Total Funding Sources	**$ -**	**$ -**	**$ 2,400,000**	**$ 1,100,000**	**$ 11,700,000**	**$ 15,200,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Crowfoot and Timber Canyon Roundabout**

Project Number: 78-99
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 444,580
2020-2024 Total	2,222,000
CIP Project Total (2015-2024):	**$ 2,666,580**

Description and Justification

This project accommodates the construction of a roundabout at the intersection of North Crowfoot Valley Road and Timber Canyon Drive. This project will improve safety and mobility. A roundabout is also the most efficient traffic control throughout all hours of the day, as opposed to traffic signals, which are limited in efficiency to the peak hours of a day. The improved efficiency of a roundabout leads to increased societal benefits such as decreased delay, improved safety, and decreased environmental impacts. Design for this roundabout is planned to be complete in 2019.

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ -	$ -	$ -	$ 2,222,000	$ -	$ 2,222,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 2,222,000**	**$ -**	**$ 2,222,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ -	$ -	$ -	$ 2,222,000	$ -	$ 2,222,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 2,222,000**	**$ -**	**$ 2,222,000**

Operational Impact

Minor increases to pavement maintenance are anticipated, dependent on the overall net change to the roadway impervious area. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Wilcox and South Roundabout**

Project Number: 79-10
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ -
2020-2024 Total	600,000
CIP Project Total (2015-2024):	**$ 600,000**

Description and Justification

This project is anticipated to be constructed at the same time that the development project on the northeast corner of this intersection is planned to occur. With the anticipated increase in new traffic that will result with the development project, a roundabout is projected to enhance operations and safety at this intersection. A roundabout also fits in well with the current planning that is occurring with the Downtown Mobility Study. This improvement assists with slowing down vehicular traffic, enhancing the pedestrian environment, and still processing vehicle movement efficiently. Constructing these projects at the same time will also assist with minimizing travel disruptions to the public.

Please note: This project will be constructed by the developer.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 600,000	$ -	$ -	$ -	$ -	$ 600,000
Total Expenditures	**$ 600,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 600,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ 600,000	$ -	$ -	$ -	$ -	$ 600,000
Total Funding Sources	**$ 600,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 600,000**

Operational Impact

Operational impacts are anticipated to be minor with this project. The will be some additional pavement infrastructure that will require future maintenance needs, but this should be minor in nature.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Crowfoot Valley Road Widening**

Project Number: 78-83
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ -
2020-2024 Total	785,000
CIP Project Total (2015-2024):	**$ 785,000**

Description and Justification

This requested project involves the widening of Crowfoot Valley Road from the intersection of Knobcone Drive to the Town boundary. The objective of this project is to improve congestion relief due to current and forecasted traffic volumes. The timing of the project will account for the Canyons South development project in Douglas County and will coordinate any required widening work with the development. The project will also include analyzing the intersection of Timber Canyon and Diamond Ridge to assess improvements for resident egress from the existing developments. Construction is currently anticipated to occur outside the five year planning period. This project helps to address increases in traffic and congestion, which has been identified as an area of concern in the Community Survey.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Design	$ -	$ -	$ -	$ 785,000	$ -	$ 785,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 785,000**	**$ -**	**$ 785,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ -	$ -	$ -	$ 785,000	$ -	$ 785,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 785,000**	**$ -**	**$ 785,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane-miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Prairie Hawk Widening**

Project Number: 76-29
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ -
2020-2024 Total	3,402,000
CIP Project Total (2015-2024):	**$ 3,402,000**

Description and Justification

The Town's Transportation Master Plan has identified the need to widen the existing two-lane roadway to four lanes, between Wolfensberger Road on the south end to Melting Snow Drive to the north. This widening is included in the Master Plan as a project to be completed by 2030 in order to accommodate continued growth within the Town. This project objective is in line with one of the community's top priorities to address traffic congestion as identified in the past two Community Surveys in 2017 and 2019. Funding for design is included in 2023 with construction currently planned for 2024.

Expenditures	2020	2021	2022	2023	2024	Total
Design	$ -	$ -	$ -	$ 525,000	$ -	$ 525,000
Construction	-	-	-	-	2,877,000	2,877,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 525,000**	**$ 2,877,000**	**$ 3,402,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ -	$ -	$ -	$ 525,000	$ 2,877,000	$ 3,402,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 525,000**	**$ 2,877,000**	**$ 3,402,000**

Operational Impact

Minor increases to pavement maintenance are anticipated, dependent on the overall net change to the roadway impervious area. This impact will not be known until design details are finalized or after project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Crystal Valley Parkway Interchange**

Project Number: 78-41
Contact: Carl Armijo, CIP Engineering Manager
Department: Public Works Department
Category: Infrastructure
Type: New
Useful Life: 30 years

5 Year Historical Total	$ 22,740
2020-2024 Total	20,000,000
CIP Project Total (2015-2024):	**$ 20,022,740**

Description and Justification

A new interchange is planned to be constructed at I-25 in the southernmost part of Town. Located approximately 2.5 miles south of the Plum Creek Parkway interchange, the new interchange will connect Crystal Valley Parkway on the east side of I-25 and Territorial Road on the west side. The current five year effort is intended to achieve acquisition of remaining right of way and set aside future project funding to allow for potential funding partnerships to assist with advancing construction. Current estimates indicate that interchange construction will cost approximately $70-80 million in today's dollars. The future interchange will provide access from south 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 will also:

-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	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction/Design/Right of Way	$ 4,600,000	$ 2,600,000	$12,800,000	$ -	$ -	$ 20,000,000
Total Expenditures	**$ 4,600,000**	**$ 2,600,000**	**$12,800,000**	**$ -**	**$ -**	**$ 20,000,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ 4,600,000	$ 2,600,000	$12,800,000	$ -	$ -	$ 20,000,000
Total Funding Sources	**$ 4,600,000**	**$ 2,600,000**	**$12,800,000**	**$ -**	**$ -**	**$ 20,000,000**

Operational Impact

Increases to future pavement maintenance will occur with the additional lane-miles of impervious surface added to the roadway network and will be evaluated and incorporated in the Transportation Fund operating budget. This impact will not be known until project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

CONSERVATION TRUST FUND

PARKS & RECREATION DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Park Improvements	$ 1,150,000	$ 850,000	$ 625,000	$ 600,000	$ 150,000	$ 3,375,000
Total Expenditures by Year	**$ 1,150,000**	**$ 850,000**	**$ 625,000**	**$ 600,000**	**$ 150,000**	**$ 3,375,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Douglas County Shareback	$ 833,750	$ 616,250	$ 453,125	$ 450,000	$ 108,750	$ 2,461,875
Lottery Funds	316,250	233,750	171,875	150,000	41,250	913,125
Total Funding Sources by Year	**$ 1,150,000**	**$ 850,000**	**$ 625,000**	**$ 600,000**	**$ 150,000**	**$ 3,375,000**

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.



Butterfield Park

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Park Improvements**

Project Number: 75-18
Contact: Jeff Smullen, Assistant Director of Parks & Recreation
Department: Parks & Recreation Department
Category: Parks/Trails
Type: New
Useful Life: 15-20 Years

5 Year Historical Total	$ 649,700
2020-2024 Total	3,375,000
CIP Project Total (2015-2024):	**$ 4,024,700**

Description and Justification

The upkeep of parks and open space requires continual investment to maintain existing levels of service. Playground equipment and other park amenities deteriorate with standard wear patterns and have an average life expectancy of 15-20 years.

This line item is reserved each year for life cycle repair and replacement projects throughout Castle Rock, which include items such as playground replacements, game court, athletic field, and pavilion improvements. This line item meets the Council supported strategic plan goal of providing safe, high quality facilities for residents through the implementation of an annual replacement program.

Staff will request Douglas County Shareback funds annually through 2023 and receive annual funds from the Colorado Lottery Distribution to complete design work, assessment, and capital improvements as necessary for each property as learned through the annual assessment process. Planned improvements by year include:

2020 - Replacing tennis and basketball courts and relocating the playground at Butterfield Park, utility extension for planned restroom at Bison Park, and miscellaneous improvements (irrigation upgrades, park equipment, signs, etc.)
2021 - Funds are being held in reserve for potential open space purchase, design development for 2022 project, and miscellaneous improvements
2022 - Replace developer built playground and court surface at Castle Highlands, replace sun damaged plastic components at the Recreation Center playground, pavilion and restroom improvements at Founders Park, and miscellaneous improvements
2023 - Renovate tennis and basketball courts at Centennial Park, replace playground at Baldwin Park, construct permanent restrooms at the amphitheater, and miscellaneous improvements
2024 - Miscellaneous improvements

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Park Improvements	$ 1,150,000	$ 850,000	$ 625,000	$ 600,000	$ 150,000	$ 3,375,000
Total Expenditures	**$ 1,150,000**	**$ 850,000**	**$ 625,000**	**$ 600,000**	**$ 150,000**	**$ 3,375,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Douglas County Shareback	$ 833,750	$ 616,250	$ 453,125	$ 450,000	$ 108,750	$ 2,461,875
Lottery Funds	316,250	233,750	171,875	150,000	41,250	913,125
Total Funding Sources	**$ 1,150,000**	**$ 850,000**	**$ 625,000**	**$ 600,000**	**$ 150,000**	**$ 3,375,000**

Operational Impact

No additional revenues or expenditures are anticipated as a result of these projects.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

PARKS AND RECREATION CAPITAL FUND

PARKS & RECREATION DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Future Park Planning	$ 4,000,000	$ 450,000	$ 4,500,000	$ -	$ -	$ 8,950,000
Recreation Center	-	-	-	500,000	2,000,000	2,500,000
Total Expenditures by Year	**$ 4,000,000**	**$ 450,000**	**$ 4,500,000**	**$ 500,000**	**$ 2,000,000**	**$ 11,450,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ 4,000,000	$ 450,000	$ 4,500,000	$ 500,000	$ 2,000,000	$ 11,450,000
Total Funding Sources by Year	**$ 4,000,000**	**$ 450,000**	**$ 4,500,000**	**$ 500,000**	**$ 2,000,000**	**$ 11,450,000**

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



Playground construction at Deputy Zach S. Parrish III Memorial Park

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Future Park Planning**

Project Number: 75-21
Contact: Jeff Smullen, Assistant Director of Parks & Recreation
Department: Parks & Recreation Department
Category: Parks/Trails
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 620,400
2020-2024 Total	8,950,000
CIP Project Total (2015-2024):	**$ 9,570,400**

Description and Justification

Parks and Recreation requests funding for future park planning that includes new community and neighborhood parks to maintain current levels of service with population growth. Staff completed a parks prioritization study in 2018 to determine the location of the next neighborhood park. Cobblestone Ranch was identified as the next highest priority because of population growth and lack of facilities in the northeast quadrant of Town. The cost of the project is unknown as the design is planned to occur in 2019; however $4.5 million is estimated to develop approximately 8 acres of park land, which is the average neighborhood park size.

Recent Parks:

Deputy Zack S. Parrish III Memorial Park, constructed in 2018-2019, is the last neighborhood park brought on line and previous to that location was Wrangler Park in 2012 while the urban downtown Festival Park project was completed in 2017. In addition to these parks, the regional Philip S. Miller Park was opened in 2014 and expanded in 2016. As the Town of Castle Rock continues to grow, so will the need for additional neighborhood parks.

Planning for the Cobblestone Ranch Park will begin in 2019 with construction taking place in 2020. Current planning includes constructing a new neighborhood park every other year with the next park scheduled for 2022. An indoor recreation facility is currently being planned following the 2022 project and may have an outdoor park component depending on site selection.

Expenditures	2020	2021	2022	2023	2024	Total
Park Design	$ -	$ 450,000	$ -	$ -	$ -	$ 450,000
Park Construction	4,000,000	-	4,500,000	-	-	8,500,000
Total Expenditures	**$ 4,000,000**	**$ 450,000**	**$ 4,500,000**	**$ -**	**$ -**	**$ 8,950,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ 4,000,000	$ 450,000	$ 4,500,000	$ -	$ -	$ 8,950,000
Total Funding Sources	**$ 4,000,000**	**$ 450,000**	**$ 4,500,000**	**$ -**	**$ -**	**$ 8,950,000**

Operational Impact

Operational costs will increase after the completion of construction of each neighborhood park. These costs will be determined and incorporated into future planning in the General Fund once design of the park site is complete. Factors affecting operating costs include size of the park site, natural v. artificial turf, water features, and other elements related to the specific park site.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Recreation Center**

Project Number: 79-14
Contact: Jeff Smullen, Assistant Director of Parks & Recreation
Department: Parks & Recreation Department
Category: Building
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	2,500,000
CIP Project Total (2015-2024):	**$ 2,500,000**

Description and Justification

The Parks and Recreation Capital Fund includes planning for both parks and indoor recreation facilities as a core level of service for the Town. A new indoor recreation center is planned for a 2026 opening and is needed to meet the demand created by growth. A new recreation facility is included in the Parks and Recreation approved strategic plan and master plan. It aligns with Council strategic priorities of maintaining excellent parks and recreation services and Council's direction that growth shall pay for the impacts created by growth.

The plan for the new center has not been fully studied or publicly processed; however, the new facility may include aquatics, gymnasiums, and/or other facilities yet to be determined. In 2023, $500,000 is identified for design development. This cost would include initial program development, site selection, preliminary studies, and public process. In 2024, preconstruction services of $2 million are budgeted to finalize design in order to complete a full bid ready package for development.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Design	$ -	$ -	$ -	$ 500,000	$ 2,000,000	$ 2,500,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 500,000**	**$ 2,000,000**	**$ 2,500,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ -	$ -	$ -	$ 500,000	$ 2,000,000	$ 2,500,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 500,000**	**$ 2,000,000**	**$ 2,500,000**

Operational Impact

The feasibility study planned for 2019 will identify the potential revenue and operational cost of a new indoor recreation facility. The program mix for this facility must consider balancing elements with higher operational costs with revenue producing amenities to meet future cost recovery goals. It is anticipated that the facility will have to operate through user fees generated and the use of the sale tax allocation for parks and recreation.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

POLICE CAPITAL FUND

POLICE DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Police Basement Remodel	$ -	$ -	$ 300,000	$ -	$ -	$ 300,000
Parking Lot Expansion	430,128	-	-	-	-	430,128
Total Expenditures by Year	**$ 430,128**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 730,128**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Impact Fees	$ 107,532	$ -	$ 300,000	$ -	$ -	$ 407,532
Transfers In	322,596	-	-	-	-	322,596
Total Funding Sources by Year	**$ 430,128**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 730,128**

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.



Castle Rock Police Department

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Police Basement Remodel**

Project Number: 70-20
Contact: Jack Cauley, Chief of Police
Department: Police Department
Category: Building
Type: Upgrade
Useful Life: 30 years

5 Year Historical Total	$ -
2020-2024 Total	300,000
CIP Project Total (2015-2024):	**$ 300,000**

Description and Justification

In an effort to consolidate resources, manpower, and long-term storage of our evidence, the police department entered into an MOU agreement with the Douglas County Sheriff's Office in January 2018. This agreement stipulated that all items of evidentiary value would be transferred from our property evidence room to the Douglas County Sheriff's Office, Property and Evidence Facility, 2965 Hwy 85, Castle Rock, Colorado. The police department's evidence room is located in the northwest corner in the lower level of the building.

The police department's previous property evidence area is approximately 1,700 square feet of usable office space. In an effort to re-purpose the existing room, it would be required to finish this area with drywall, carpeting, and ceiling tiles. This would also require additional electrical outlets and network connections for future office space.

Various personnel would be relocated to this new office space.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ -	$ -	$ 300,000	$ -	$ -	$ 300,000
Total Expenditures	**$ -**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 300,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Impact Fees	$ -	$ -	$ 300,000	$ -	$ -	$ 300,000
Total Funding Sources	**$ -**	**$ -**	**$ 300,000**	**$ -**	**$ -**	**$ 300,000**

Operational Impact

The operational impact of this project will not be known until project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Parking Lot Expansion**

Project Number: 70-10
Contact: Kristin Zagurski, Assistant Town Manager
Department: Police Department
Category: Infrastructure
Type: Upgrade
Useful Life: 30 years

5 Year Historical Total	$ -
2020-2024 Total	430,128
CIP Project Total (2015-2024):	**$ 430,128**

Description and Justification

The Police Department needs additional parking space to accommodate growth in staff, which has been 44% between 2009 and 2019. A concept-level design has been developed that would add roughly 30 spaces to the south of the current parking area, on land the Town owns. Development of construction documents is occurring in the latter portion of 2019, and construction is anticipated starting in spring/summer 2020. This budget figure is based off of the engineer's construction estimate for the conceptual design. The actual amount to construct the needed improvements will be determined in 2020, when the project is placed out to bid.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 430,128	$ -	$ -	$ -	$ -	$ 430,128
Total Expenditures	**$ 430,128**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 430,128**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Transfers In	$ 322,596	$ -	$ -	$ -	$ -	$ 322,596
Impact Fees	107,532	-	-	-	-	107,532
Total Funding Sources	**$ 430,128**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 430,128**

Operational Impact

This project is not anticipated to result in significant increases in operating expenditures.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

WATER FUND

CASTLE ROCK WATER

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Water Supply Wells	$ 3,300,000	$ 5,225,000	$ 3,225,000	$ 5,225,000	$ 3,225,000	$ 20,200,000
Water Treatment Plant Upgrades & Equip.	255,000	150,000	150,000	150,000	150,000	855,000
Water Storage (Tank) Projects	4,025,000	50,000	438,000	50,000	50,000	4,613,000
Pump & Distribution System Upgrades	400,000	375,000	300,000	300,000	300,000	1,675,000
Waterline Rehab/Replacement	1,098,000	994,000	400,000	876,000	600,000	3,968,000
Craig & Gould North Improvements	670,000	-	-	-	-	670,000
Security & SCADA System Improvements	75,000	50,000	50,000	50,000	50,000	275,000
General Facility Upgrades & Replacements	292,000	230,000	250,000	225,000	200,000	1,197,000
Administration & Customer Service Building	1,741,344	-	-	-	-	1,741,344
Customer Billing Software	87,500	-	-	-	-	87,500
Total Expenditures by Year	**$11,943,844**	**$ 7,074,000**	**$ 4,813,000**	**$ 6,876,000**	**$ 4,575,000**	**$ 35,281,844**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Metered Water Sales	$ 3,352,500	$ 4,574,000	$ 1,425,000	$ 4,250,000	$ 1,575,000	$ 15,176,500
System Development Fees	8,591,344	2,500,000	3,388,000	2,626,000	3,000,000	20,105,344
Total Funding Sources by Year	**$11,943,844**	**$ 7,074,000**	**$ 4,813,000**	**$ 6,876,000**	**$ 4,575,000**	**$ 35,281,844**

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



Water storage tank on Ridge Road

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Water Supply Wells**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Replacement
Useful Life: 25 Years

5 Year Historical Total	$ 1,698,059
2020-2024 Total	20,200,000
CIP Project Total (2015-2024):	**$ 21,898,059**

Description and Justification

This project is intended to rehabilitate or replace existing Town of Castle Rock wells as they reach the end of their useful lives.

Variable Frequency Drive (VFD) replacement - This project is intended to replace VFD's which are obsolete and, placing new VFD and other electrical components and controls outside of the building, away from the water pipe.

Well Redrills - 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.

New Wells and Waterlines - New deep groundwater wells and waterlines are budgeted for in 2020, 2022, and 2024 in order to keep up with water demand for the Town. The funding for this project is coming from System Development Fees due to growth in the community.

Well 9 - is no longer an active well facility. Plans are to demolish the building, disconnect services (power, telephone, etc.) and restore the site original condition.

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 requires that unused wells be formally abandoned. As existing wells deteriorate, they need to be rehabilitated or replaced.

These projects help Castle Rock Water meet the priority of providing high quality and reliable water service to Town residents and businesses.

Expenditures	2020	2021	2022	2023	2024	Total
Well Equipment and Replacement	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 500,000
VFD Replacement	125,000	125,000	125,000	125,000	125,000	625,000
Well Redrill	-	2,500,000	-	2,500,000	-	$ 5,000,000
New Wells and Waterlines	3,000,000	2,500,000	3,000,000	2,500,000	3,000,000	14,000,000
Well 9 Demolition Kinner Street	75,000	-	-	-	-	75,000
Total Expenditures	**$ 3,300,000**	**$ 5,225,000**	**$ 3,225,000**	**$ 5,225,000**	**$ 3,225,000**	**$ 20,200,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Metered Water Sales	$ 300,000	$ 2,725,000	$ 225,000	$ 2,725,000	$ 225,000	$ 6,200,000
System Development Fees	3,000,000	2,500,000	3,000,000	2,500,000	3,000,000	14,000,000
Total Funding Sources	**$ 3,300,000**	**$ 5,225,000**	**$ 3,225,000**	**$ 5,225,000**	**$ 3,225,000**	**$ 20,200,000**

Operational Impact

Costs will vary for each well depending on the amount and type of rehabilitation, and the depth of the well and will be determined upon project completion and incorporated into operational budgets at that time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

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

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Upgrade
Useful Life: 50 Years

5 Year Historical Total	$ 231,904
2020-2024 Total	855,000
CIP Project Total (2015-2024):	**$ 1,086,904**

Description and Justification

This facility upgrade project provide for miscellaneous improvements at existing Water Treatment Plants (WTP). There are five active water treatment plants and one dedicated for peak demand in Castle Rock. Examples of specific upgrades include pipe gallery painting, HVAC and cooling unit replacements, door repair and replacement, basin repairs, instrumentation, alarm upgrades, and safety improvements.

The equipment replacement project includes replacing existing electrical and/or mechanical equipment associated with water treatment facilities. These plants are necessary to filter deep aquifer groundwater and 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. These projects help Castle Rock Water meet the priority of providing high quality and reliable water service to Town residents and businesses.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
WTP Facility Upgrades	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
WTP Equipment Replacement	100,000	100,000	100,000	100,000	100,000	500,000
WTP Media Replacement	105,000	-	-	-	-	105,000
Total Expenditures	**$ 255,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 855,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Metered Water Sales	$ 255,000	$ 150,000	$ 150,000	$ 150,000	$ 150,000	$ 855,000
Total Funding Sources	**$ 255,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 150,000**	**$ 855,000**

Operational Impact

There is no operational impact anticipated for these projects.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Water Storage (Tank) Projects**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Repair
Useful Life: 50 Years

5 Year Historical Total	$ 50,000
2020-2024 Total	4,613,000
CIP Project Total (2015-2024):	**$ 4,663,000**

Description and Justification

The tank rehabilitation project includes structural and/or site modifications to existing tanks to ensure reliability and tank security as needed.

The Tank 15 project is to repair and update the wall, slope, and fence at Tank 15. This project is needed due to an eroding slope on the tank site.

The Tank 11 to Pine Canyon project constructs a water line from the tank to the development, and timing is somewhat dependent on development. These projects help Castle Rock Water meet the priority of providing high quality and reliable water service to Town residents and businesses.

Expenditures	2020	2021	2022	2023	2024	Total
Tank Rehabilitation	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Liberty Village Yellow Zone Tank	3,850,000	-	-	-	-	3,850,000
Tank 15 Wall/Slope/Fence Repair	125,000	-	-	-	-	125,000
Tank 11 to Pine Canyon	-	-	388,000	-	-	388,000
Total Expenditures	**$ 4,025,000**	**$ 50,000**	**$ 438,000**	**$ 50,000**	**$ 50,000**	**$ 4,613,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Metered Water Sales	$ 175,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 375,000
System Development Fees	3,850,000	-	388,000	-	-	4,238,000
Total Funding Sources	**$ 4,025,000**	**$ 50,000**	**$ 438,000**	**$ 50,000**	**$ 50,000**	**$ 4,613,000**

Operational Impact

Future repair and maintenance of tanks is ongoing and is included within currently budgeted maintenance and personnel costs.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Pump & Distribution System Upgrades**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Equipment
Type: Replacement
Useful Life: 25 Years

5 Year Historical Total	$ 97,929
2020-2024 Total	1,675,000
CIP Project Total (2015-2024):	**$ 1,772,929**

Description and Justification

The Town has nine active pump stations that are over ten 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. Water Infrastructure and Supply Efficiency (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 and Green Zones will have to be increased in 2023 to move the water to distribution and storage.

The Milestone Pump Station pressure reducing valve (PRV) project will upgrade a PRV at the Milestone Pump Station. A PRV 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 accessories often require repair and/or replacement before water main pipes do. Such items must be maintained in good operable condition to ensure reliable water transmission and distribution. The Diamond Ridge Pump Station Control Valve upgrade is required to control WISE deliveries in 2021.

These projects help Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Pump Station Equipment Replacement	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Milestone Pump Station PRV Valve	100,000	-	-	-	-	100,000
Distribution System Upgrades	250,000	250,000	250,000	250,000	250,000	1,250,000
Diamond Ridge Pump Station Control Valve	-	75,000	-	-	-	75,000
Total Expenditures	**$ 400,000**	**$ 375,000**	**$ 300,000**	**$ 300,000**	**$ 300,000**	**$ 1,675,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Metered Water Sales	$ 400,000	$ 375,000	$ 300,000	$ 300,000	$ 300,000	$ 1,675,000
Total Funding Sources	**$ 400,000**	**$ 375,000**	**$ 300,000**	**$ 300,000**	**$ 300,000**	**$ 1,675,000**

Operational Impact

Red Zone Pumping Upsize estimated operating costs are $30,074 annually and is incorporated into the Water Fund Operations Budget and paid for with System Development Fees as part of the Town's growth.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Waterline Rehab/Replacement**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Repair
Useful Life: 50 Years

5 Year Historical Total	$ 310,281
2020-2024 Total	3,968,000
CIP Project Total (2015-2024):	**$ 4,278,281**

Description and Justification

This project is intended to rehabilitate or replace existing Town of Castle Rock waterlines as they reach the end of their useful lives. 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 eight inch water mains.

In 2023, the Liggett Road upsize project will increase the waterline size on Liggett road and the Oakwood waterline replacement project is to replace the old waterlines in the Oakwood neighborhood in order to update older infrastructure and include stormwater in that area. Also in 2023, the 5th St. Red Zone connection is to update the connection for the Red Zone on 5th Street and is timed with road improvements.

Expenditures	2020	2021	2022	2023	2024	Total
Waterline Rehab/Replacement	$ -	$ 400,000	$ 400,000	$ 600,000	$ 600,000	$ 2,000,000
Glovers Waterline Replacement	788,000	594,000	-	-	-	1,382,000
Oakwood Waterline Replacement	310,000	-	-	-	-	310,000
Liggett Road Upsize	-	-	-	126,000	-	126,000
5th St. Red Zone Connection	-	-	-	150,000	-	150,000
Total Expenditures	**$ 1,098,000**	**$ 994,000**	**$ 400,000**	**$ 876,000**	**$ 600,000**	**$ 3,968,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Metered Water Sales	$ 1,098,000	$ 994,000	$ 400,000	$ 750,000	$ 600,000	$ 3,842,000
System Development Fees	-	-	-	126,000	-	126,000
Total Funding Sources	**$ 1,098,000**	**$ 994,000**	**$ 400,000**	**$ 876,000**	**$ 600,000**	**$ 3,968,000**

Operational Impact

There are no additional future operating expenditures associated with rehabilitation/replacement.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Craig & Gould North Improvements**

Project Number: 76-51
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 60,000
2020-2024 Total	670,000
CIP Project Total (2015-2024):	**$ 730,000**

Description and Justification

This project accomplishes infrastructure improvements in Craig and Gould North neighborhood. 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 including street improvements and storm sewer improvements. In-house resources will be used as much as possible to reduce the cost of this project and are reflected in the price below. This project helps Castle Rock Water meet the priority of providing high quality water, sewer, and stormwater service to Town residents and businesses.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 670,000	$ -	$ -	$ -	$ -	$ 670,000
Total Expenditures	**$ 670,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 670,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Metered Water Sales	$ 670,000	$ -	$ -	$ -	$ -	$ 670,000
Total Funding Sources	**$ 670,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 670,000**

Operational Impact

There are no additional future operating expenditures associated with Craig and Gould North Improvements.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Security & SCADA System Improvements**

Project Number: Multiple
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 134,353
2020-2024 Total	275,000
CIP Project Total (2015-2024):	**$ 409,353**

Description and Justification

This project is intended to accomplish miscellaneous small projects to increase facility security in accordance with the Facilities Vulnerability Assessment and Supervisory Control And Data Acquisition (SCADA) Master Plan and accomplish future year water transmission and distribution facility upgrades. 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.

Projects that were identified in the 2017 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 automation of several pressure reducing valve stations identified in the 2017 Water Master Plan. Most of this work will be performed by Castle Rock Water staff. These projects help Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Security Improvements	$ 50,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 150,000
SCADA Improvements	25,000	25,000	25,000	25,000	25,000	125,000
Total Expenditures	**$ 75,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 275,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Metered Water Sales	$ 75,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 275,000
Total Funding Sources	**$ 75,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 275,000**

Operational Impact

There are no additional future operating expenditures associated with Security and SCADA System Improvements.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **General Facility Upgrades & Replacements**

Project Number: Multiple
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Equipment
Type: Upgrade
Useful Life: 20 years

5 Year Historical Total	$ 158,811
2020-2024 Total	1,197,000
CIP Project Total (2015-2024):	**$ 1,355,811**

Description and Justification

The general facility project is intended to upgrade an existing booster pump station, pressure reducing valves, and other water facility improvements. The facilities capital replacements project will facilitate maintaining building functionality by making needed updates and replacing portions of various facilities.

The Town operates six water treatment plants, many pump stations, PRVs, buildings, and office space. All of these facilities require maintenance and replacements of various items and equipment. Small projects to improve the functionality and/or appearance of Town facilities are necessary. These projects include drainage, landscaping, siding and roofing, and site improvements at existing pump stations. As buildings age, components will require replacement. As a formal asset management program develops, capital replacements will become well defined. This project is created to accommodate those needs. The existing access to many sites is unimproved or gravel access that requires ongoing maintenance, particularly during the winter. Snowplowing and access, in general, will be improved by paving and otherwise improving site access. These projects help Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**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
Facilities Paving	142,000	80,000	100,000	75,000	50,000	447,000
Total Expenditures	**$ 292,000**	**$ 230,000**	**$ 250,000**	**$ 225,000**	**$ 200,000**	**$ 1,197,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Metered Water Sales	$ 292,000	$ 230,000	$ 250,000	$ 225,000	$ 200,000	$ 1,197,000
Total Funding Sources	**$ 292,000**	**$ 230,000**	**$ 250,000**	**$ 225,000**	**$ 200,000**	**$ 1,197,000**

Operational Impact

There are no additional future operating expenditures associated with rehabilitation/replacement.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Administration & Customer Service Building**

Project Number: 77-57
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: New
Useful Life: 50 years

5 Year Historical Total	$ 141,411
2020-2024 Total	1,741,344
CIP Project Total (2015-2024):	**$ 1,882,755**

Description and Justification

This project accommodates construction of a new Administration and Customer Service Building for Castle Rock Water. The existing Kellogg Facility will be repurposed for staff currently housed in trailers. The new building will accommodate existing and future Administration and Customer Service staff within Castle Rock Water. The Administration and Customer Service Team currently is short of space by approximately 3,000 square feet. The new facility will be designed and constructed to meet the needs of the department through buildout of the Town. A site assessment was conducted in 2013 that details existing and future conditions and identifies space needs for Castle Rock Water. Construction is targeted for 2020 with funding split across the four Castle Rock Water enterprise funds based upon staffing proportions. The Water Fund's portion of the project will utilize reserves accumulated in prior years through system development fees and rates revenues. This project helps Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Estimated Construction Cost
Water Fund: $1,741,344
Water Resources Fund: $779,014
Stormwater Fund: $798,594
Wastewater Fund: $729,853

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ 1,741,344	$ -	$ -	$ -	$ -	$ 1,741,344
Total Expenditures	**$ 1,741,344**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,741,344**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 1,741,344	$ -	$ -	$ -	$ -	$ 1,741,344
Total Funding Sources	**$ 1,741,344**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,741,344**

Operational Impact

There are general operations expenditures of approximately $30,000 per year. The Water Fund's portion is $12,119 per year, the Water Resources Fund's portion is $5,689 per year, the Stormwater Fund's portion is $5,510 per year, and the Wastewater Fund's portion is $6,682 per year.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Customer Billing Software**

Project Number: 70-43
Contact: Anne Glassman, Business Solutions Manager
Department: Castle Rock Water
Category: Technology
Type: New
Useful Life: 5+ years

5 Year Historical Total	$ -
2020-2024 Total	87,500
CIP Project Total (2015-2024):	**$ 87,500**

Description and Justification

These software costs are included for the customer billing department. Castle Rock Water needs to evaluate the possibility of upgrading to a new billing software from the current BillMaster software. New capabilities are needed for the department and the old software is becoming more outdated and obsolete. The billing department has estimated the cost to be $350,000. This cost will be evenly split across the four Castle Rock Water funds for $87,500 each.

Expenditures	2020	2021	2022	2023	2024	Total
Software	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Expenditures	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Funding Sources	2020	2021	2022	2023	2024	Total
Metered Water Sales	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Funding Sources	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Operational Impact

The operation impact of this project will be determined at project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

WATER RESOURCES FUND

CASTLE ROCK WATER

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
WISE Project	$ 4,833,000	$ 4,623,151	$2,373,151	$ 9,527,551	$ 9,527,551	$ 30,884,404
Chatfield Reallocation Project	1,132,996	35,400	1,140,736	43,140	1,148,476	3,500,748
Alternative Source of Supply Project	5,800,000	150,000	-	-	-	5,950,000
Administration & Customer Service Building	779,014	-	-	-	-	779,014
PCWPF Expansion	-	-	-	400,000	-	400,000
Newlin Gulch	3,000,000	500,000	-	-	-	3,500,000
Castle Rock Reservoir	325,000	12,050,000	-	-	3,700,000	16,075,000
Miscellaneous Projects	200,000	-	-	850,000	-	1,050,000
Cherry Creek Water Rights	5,000,000	608,256	6,082,560	-	-	11,690,816
Parker Water & Sanitation District Capacity	250,000	2,500,000	-	-	-	2,750,000
Customer Billing Software	87,500	-	-	-	-	87,500
Total Expenditures by Year	**$21,407,510**	**$20,466,807**	**$9,596,447**	**$10,820,691**	**$14,376,027**	**$ 76,667,482**

Project Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$13,103,612	$12,280,084	$5,757,868	$ 6,492,415	$ 8,625,616	$ 46,259,595
Water Resources Fees	8,303,898	8,186,723	3,838,579	4,328,276	5,750,411	30,407,887
Total Funding Sources by Year	**$21,407,510**	**$20,466,807**	**$9,596,447**	**$10,820,691**	**$14,376,027**	**$ 76,667,482**

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



Plum Creek Diversion

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **WISE Project**

Project Number: 77-72
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Water Rights
Type: New
Useful Life: Perpetual/50 years

5 Year Historical Total	$ 19,865,964
2020-2024 Total	30,884,404
CIP Project Total (2015-2024):	**$ 50,750,368**

Description and Justification

The WISE (Water Infrastructure and Supply Efficiency) project is a part of the Town's Strategic goal to transition to a 75% renewable water supply for the future. As part of this strategy, sustainable water supplies must be imported to the Town with a focus on proximity and feasibility in order to help meet this goal. This project includes securing 2,000 acre-feet (AF) (Castle Rock's original subscription plus 1,000 AF of the Douglas County Option water) of water on average from Denver and Aurora and will build infrastructure necessary to move water from the Peter Binney Water Purification Facility located near Aurora Reservoir to the Town of Castle Rock. This part of the project includes additional pipeline connections, and infrastructure expansion through Parker Water & Sanitation District's (PWSD) system. Funds are also included for the purchase from PWSD of additional treatment capacity in Rueter Hess Reservoir (RHR).

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
WISE Project Subscription Fees	$ 150,000	$ -	$ -	$ -	$ -	$ 150,000
WISE Local Infrastructure (PWSD Expsn)	350,000	3,500,000	1,250,000	4,404,400	4,404,400	13,908,800
WISE Option Agreement	-	1,123,151	1,123,151	1,123,151	1,123,151	4,492,604
Binney Connection	4,333,000	-	-	-	-	4,333,000
Purchase Capacity in PWSD RHR	-	-	-	4,000,000	4,000,000	8,000,000
Total Expenditures	**$ 4,833,000**	**$ 4,623,151**	**$ 2,373,151**	**$ 9,527,551**	**$ 9,527,551**	**$ 30,884,404**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
System Development Fees	$ 2,899,800	$ 2,773,891	$ 1,423,891	$ 5,716,531	$ 5,716,531	$ 18,530,642
Water Resources Fees	1,933,200	1,849,260	949,260	3,811,020	3,811,020	12,353,762
Total Funding Sources	**$ 4,833,000**	**$ 4,623,151**	**$ 2,373,151**	**$ 9,527,551**	**$ 9,527,551**	**$ 30,884,404**

Operational Impact

Operating costs for the WISE project will be variable based on actual annual water purchased and paid by rates and fees. Operational cost estimates are approximately $4.6 million each year once the full WISE delivery schedule begins in 2021 and beyond and are incorporated in the Water Resources Fund's operations budget.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Chatfield Reallocation Project**

Project Number: 77-29
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Water Rights
Type: New
Useful Life: Perpetual

5 Year Historical Total	$ 8,350,828
2020-2024 Total	3,500,748
CIP Project Total (2015-2024):	**$ 11,851,576**

Description and Justification

This project will fund the participation and maintenance costs of the Town's reserved storage space (461 acre-feet) in the expanded Chatfield Reservoir. The Town plans to increase its participation rate to 2,000 acre-feet over the next 16 years. This project has been identified as a critical component of the Town's Water Resources Strategic Master Plan, 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 the Town's Plum Creek water rights, including treated return flows in the Plum Creek basin, and native rights along Plum Creek and the South Platte River. This project is funded in partnership with multiple entities and managed by the Chatfield Reservoir Mitigation Company (CRMC), Castle Rock Water's portion is reflected in the numbers below. The future goal of the Town is to provide 75% renewable water supply annually to its customers, this project will be a key component to achieve that goal.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Additional Storage	$ 1,097,596	$ -	$ 1,097,596	$ -	$ 1,097,596	$ 3,292,788
CRMC Annual Assessment	35,400	35,400	43,140	43,140	50,880	207,960
Total Expenditures	**$ 1,132,996**	**$ 35,400**	**$ 1,140,736**	**$ 43,140**	**$ 1,148,476**	**$ 3,500,748**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
System Development Fees	$ 679,798	$ 21,240	$ 684,442	$ 25,884	$ 689,086	$ 2,100,449
Water Resources Fees	453,198	14,160	456,294	17,256	459,390	1,400,299
Total Funding Sources	**$ 1,132,996**	**$ 35,400**	**$ 1,140,736**	**$ 43,140**	**$ 1,148,476**	**$ 3,500,748**

Operational Impact

Future operating and maintenance expenses of the reservoir are anticipated to be approximately $120,000 a year beginning in 2020 and beyond and are incorporates in the Water Resources Fund's operations budget.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Alternative Source of Supply Project**

Project Number: 77-30
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Water Rights
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 15,468,358
2020-2024 Total	5,950,000
CIP Project Total (2015-2024):	**$ 21,418,358**

Description and Justification

This project entails importing an additional 2,500 acre-feet of renewable and fully consumable water from the South Platte River basin, northeast of the Denver metro area. It includes the purchase of approximately 2,500 acre-feet of renewable surface water rights and all legal costs associated with enabling the water to be used in Castle Rock. It includes legal and engineering due diligence, construction of a well field on the Box Elder (BE) property (located in Weld County), demolishing current structures on BE property, abandoning existing wells, pumping systems, and raw water transmission pipelines. This project also includes obtaining capacity in East Cherry Creek Valley (ECCV) Water & Sanitation District's Northern Pipeline plus pump stations and treatment capacity in ECCV's water treatment plant. 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 in order to meet the goal of 75% renewable water.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Water Rights Acquisition	$ 5,800,000	$ 150,000	$ -	$ -	$ -	$ 5,950,000
Total Expenditures	**$ 5,800,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 5,950,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
System Development Fees	$ 3,480,000	$ 90,000	$ -	$ -	$ -	$ 3,570,000
Water Resources Fees	2,320,000	60,000	-	-	-	2,380,000
Total Funding Sources	**$ 5,800,000**	**$ 150,000**	**$ -**	**$ -**	**$ -**	**$ 5,950,000**

Operational Impact

Operating costs are not currently estimated as construction of infrastructure to move the water is not planned to begin until year 2030. The operational costs will be funded by rates.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Administration & Customer Service Building**

Project Number: 77-57
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 63,841
2020-2024 Total	779,014
CIP Project Total (2015-2024):	**$ 842,855**

Description and Justification

This project accommodates construction of a new Administration and Customer Service Building for Castle Rock Water. The existing Kellogg Facility will be repurposed for staff currently housed in trailers. This building will accommodate existing and future Administration and Customer Service staff within Castle Rock Water. The Administration Customer Service Team currently is short of space by approximately 3,000 square feet. The new facility will be designed and constructed to meet the needs of the department through buildout of the Town. A site assessment was conducted in 2013 that details existing and future conditions and identifies space needs for Castle Rock Water. Construction is targeted for 2020 with funding split across the four Castle Rock Water enterprise funds based upon staffing proportions. The Water Resources Fund's portion of the project will utilize of reserves accumulated in prior years and departmentally designated plus system development fees and rates revenues. This project helps Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Estimated Construction Cost
Water Fund: $1,741,344
Water Resources Fund: $779,014
Stormwater Fund: $798,594
Wastewater Fund: $729,853

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ 779,014	$ -	$ -	$ -	$ -	$ 779,014
Total Expenditures	**$ 779,014**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 779,014**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 779,014	$ -	$ -	$ -	$ -	$ 779,014
Total Funding Sources	**$ 779,014**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 779,014**

Operational Impact

There are general operations expenditures of approximately $30,000 per year. The Water Fund's portion is $12,119 per year, the Water Resources Fund's portion is $5,689 per year, the Stormwater Fund's portion is $5,510 per year, and the Wastewater Fund's portion is $6,682 per year.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **PCWPF Expansion**

Project Number: 77-75
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 16,327,253
2020-2024 Total	400,000
CIP Project Total (2015-2024):	**$ 16,727,253**

Description and Justification

Advanced treatment processes are necessary for the effective treatment of the Town's 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. This project will add advanced treatment processes (ozonation, biologically activated filtration, and granular activated carbon) to the Plum Creek Water Purification Facility (PCWPF), giving the Town the ability to adequately treat additional Plum Creek surface water supplies.

Expenditures	2020	2021	2022	2023	2024	Total
PCWPF Expansion	$ -	$ -	$ -	$ 400,000	$ -	$ 400,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 400,000**	**$ -**	**$ 400,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ -	$ -	$ -	$ 240,000	$ -	$ 240,000
Water Resources Fees	-	-	-	160,000	-	160,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 400,000**	**$ -**	**$ 400,000**

Operational Impact

Estimated operation and maintenance costs for advanced treatment processes are estimated $1.1 million in 2020 and beyond and are incorporated in the Water Resources Fund's operations budget.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Newlin Gulch**

Project Number: 78-04
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 5,494,397
2020-2024 Total	3,500,000
CIP Project Total (2015-2024):	**$ 8,994,397**

Description and Justification

This project addresses permitting and construction of a new outlet structure into Rueter-Hess Reservoir so that a portion of the Town's water rights can be pumped and transmitted for storage and, subsequently for treatment at Parker's Rueter Hess Reservoir Water Purification Facility (RHRWPF). New infrastructure will involve a pipeline extension, an outlet structure within Rueter-Hess and potentially, treatment system upgrades at Plum Creek Water Reclamation Facility (PCWRF).

Expenditures	2020	2021	2022	2023	2024	Total
Upgrades for Newlin Gulch Pipeline	$ 3,000,000	$ 500,000	$ -	$ -	$ -	$ 3,500,000
Total Expenditures	**$ 3,000,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 3,500,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 1,800,000	$ 300,000	$ -	$ -	$ -	$ 2,100,000
Water Resources Fees	1,200,000	200,000	-	-	-	1,400,000
Total Funding Sources	**$ 3,000,000**	**$ 500,000**	**$ -**	**$ -**	**$ -**	**$ 3,500,000**

Operational Impact

The operational impact of this project will be known following project completion. These costs will primarily be related to electricity for pumping. Costs will be budgeted in the future when better understood.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Castle Rock Reservoir**

Project Number: Multiple
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	16,075,000
CIP Project Total (2015-2024):	**$ 16,075,000**

Description and Justification

This project includes the construction of a new 1,130 acre-foot raw water storage reservoir on the Plum Creek Trust property in Sedalia, Colorado, followed by a 370 acre-foot expansion of the existing Castle Rock Reservoir No. 1 reservoir on the same property in 2024. This additional storage space will allow Castle Rock Water to store fully-reusable effluent and junior water that is diverted from Plum Creek via the Plum Creek diversion, so that the Town may use that water during the high demand season. Additionally, monies are included to perform repair and maintenance activities on Castle Rock Reservoir No. 1 in 2020 and to improve CR-1 Diversion adjacent to the Plum Creek Water Purification Facility.

Expenditures	2020	2021	2022	2023	2024	Total
Castle Rock Reservoir No. 1 Expansion	-	-	-	-	3,700,000	3,700,000
Castle Rock Reservoir No. 2	250,000	11,300,000	-	-	-	11,550,000
CR-1 Diversion Improvements	75,000	750,000	-	-	-	825,000
Total Expenditures	**$ 325,000**	**$ 12,050,000**	**$ -**	**$ -**	**$ 3,700,000**	**$ 16,075,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 195,000	$ 7,230,000	$ -	$ -	$ 2,220,000	$ 9,645,000
Water Resources Fees	130,000	4,820,000	-	-	1,480,000	6,430,000
Total Funding Sources	**$ 325,000**	**$ 12,050,000**	**$ -**	**$ -**	**$ 3,700,000**	**$ 16,075,000**

Operational Impact

The Castle Rock Reservoir system will need to be maintained on a regular basis for proper functionality. Operation and maintenance expenditures will increase to $200,000 in 2024 and will be incorporated in the Water Resources Fund's operations budget.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Miscellaneous Projects**

Project Number: Multiple
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	1,050,000
CIP Project Total (2015-2024):	**$ 1,050,000**

Description and Justification

This capital improvement project addresses several needs including the construction of a new stream gage along Cook Creek (tributary to East Plum Creek) to measure the Town's Douglas Park water rights and the construction of two additional Aquifer Storage and Recovery (ASR) wells.

Expenditures	2020	2021	2022	2023	2024	Total
Stream Gages	$ 200,000	$ -	$ -	$ -	$ -	$ 200,000
ASR Program	-	-	-	850,000	-	850,000
Total Expenditures	**$ 200,000**	**$ -**	**$ -**	**$ 850,000**	**$ -**	**$ 1,050,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 120,000	$ -	$ -	$ 510,000	$ -	$ 630,000
Water Resources Fees	80,000	-	-	340,000	-	420,000
Total Funding Sources	**$ 200,000**	**$ -**	**$ -**	**$ 850,000**	**$ -**	**$ 1,050,000**

Operational Impact

The new stream gage and ASR wells will have operational impact and will be budgeted in the future following completion of projects.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Cherry Creek Water Rights**

Project Number: Multiple
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	11,690,816
CIP Project Total (2015-2024):	**$ 11,690,816**

Description and Justification

As part of Castle Rock's goal towards 75% renewable water, the Town is pursuing the purchase of water rights from Arapahoe County Water and Wastewater Authority (ACWWA) as part of their participation in the Cherry Creek Project Water Authority. This purchase would give Castle Rock access to approximately 247 acre-feet of renewable surface water annually (on average) within the Cherry Creek Basin as well as additional groundwater resources and junior water rights. Once acquired, the Town could put the water to immediate use thought a partnership with the Pinery. New infrastructure would need to be built as well to pump, transmit and store the Cherry Creek water rights to realize the maximum yield.

Expenditures	2020	2021	2022	2023	2024	Total
Purchase Cherry Creek Water Rights	5,000,000	-	-	-	-	5,000,000
CC Pipeline	-	608,256	6,082,560	-	-	6,690,816
Total Expenditures	**$ 5,000,000**	**$ 608,256**	**$ 6,082,560**	**$ -**	**$ -**	**$ 11,690,816**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 3,000,000	$ 364,954	$ 3,649,536	$ -	$ -	$ 7,014,490
Water Resources Fees	2,000,000	243,302	2,433,024	-	-	4,676,326
Total Funding Sources	**$ 5,000,000**	**$ 608,256**	**$ 6,082,560**	**$ -**	**$ -**	**$ 11,690,816**

Operational Impact

The operational impact of this project will be known following project completion. Costs will be budgeted in the future when better understood.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Parker Water & Sanitation District Capacity**

Project Number: Multiple
Contact: Matt Benak, Water Resources Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	2,750,000
CIP Project Total (2015-2024):	**$ 2,750,000**

Description and Justification

This capital improvement project is necessary so that Castle Rock will have adequate pumping capacity in Parker Water and Sanitation District's Rueter-Hess Pump Station (PWSDRHPS). The costs represent design and construction of an addition to that pump station so that the Town is able to access supplies from the WISE project and water treated by Parker out of Rueter-Hess Reservoir.

Expenditures	2020	2021	2022	2023	2024	Total
Capacity in PWSD RHR Diversion PS	250,000	2,500,000	-	-	-	2,750,000
Total Expenditures	**$ 250,000**	**$ 2,500,000**	**$ -**	**$ -**	**$ -**	**$ 2,750,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 150,000	$ 1,500,000	$ -	$ -	$ -	$ 1,650,000
Water Resources Fees	100,000	1,000,000	-	-	-	1,100,000
Total Funding Sources	**$ 250,000**	**$ 2,500,000**	**$ -**	**$ -**	**$ -**	**$ 2,750,000**

Operational Impact

The operational impact of this project will be known following project completion. Costs will be budgeted in the future when better understood.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Customer Billing Software**

Project Number: 70-43
Contact: Anne Glassman, Business Solutions Manager
Department: Castle Rock Water
Category: Technology
Type: New
Useful Life: 5+ years

5 Year Historical Total	$ -
2020-2024 Total	87,500
CIP Project Total (2015-2024):	**$ 87,500**

Description and Justification

These software costs are included for the customer billing department. Castle Rock Water needs to evaluate the possibility of upgrading to a new billing software from the current BillMaster software. New capabilities are needed for the department and the old software is becoming more outdated and obsolete. The billing department has estimated the cost to be $350,000. This cost will be evenly split across the four Castle Rock Water funds for $87,500 each.

Expenditures	2020	2021	2022	2023	2024	Total
Software	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Expenditures	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Funding Sources	2020	2021	2022	2023	2024	Total
Water Resources Fees	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Funding Sources	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Operational Impact

The operation impact of this project will be determined at project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

STORMWATER FUND

CASTLE ROCK WATER

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Minor Drainageway Stabilization	$ 178,233	$ 184,470	$ 190,927	$ 197,610	$ 204,525	$ 955,765
Stream Stabilization	1,005,534	1,042,324	2,162,191	2,588,331	1,666,679	8,465,059
Craig & Gould North Improvements	1,331,925	-	-	-	-	1,331,925
Detention Pond Retrofits	57,376	59,384	61,463	63,614	65,840	307,677
Corrugated Metal Pipe Rehabilitation	-	-	295,021	305,347	316,034	916,402
Watershed Master Plan Updates	30,000	30,000	337,313	369,274	293,361	1,059,948
Administration & Customer Service Building	798,594	-	-	-	-	798,594
Customer Billing Software	87,500	-	-	-	-	87,500
Total Expenditures by Year	**$ 3,489,162**	**$ 1,316,178**	**$3,046,915**	**$ 3,524,176**	**$ 2,546,439**	**$ 13,922,870**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Stormwater Charges	$ 2,580,973	$ 389,226	$1,517,448	$ 1,405,422	$ 1,835,825	$ 7,728,893
System Development Fees	908,189	926,952	1,529,468	2,118,754	710,615	6,193,977
Total Funding Sources by Year	**$ 3,489,162**	**$ 1,316,178**	**$3,046,915**	**$ 3,524,176**	**$ 2,546,439**	**$ 13,922,870**

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



Retainage pond near The Grange

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Minor Drainageway Stabilization**

Project Number: Multiple
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 219,794
2020-2024 Total	955,765
CIP Project Total (2015-2024):	**$ 1,175,559**

Description and Justification

This project includes new infrastructure on small channel systems downstream of development to correct erosion where the existing minor drainageway system is incomplete. 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 based on growth and stabilization. Projects are divided between the Plum Creek Basin (PC) and the Cherry Creek Basin (CC). This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for these improvements is split between stormwater charges and system development fees to account for existing infrastructure needs and impacts due to growth.

Expenditures	2020	2021	2022	2023	2024	Total
Minor Drainage Way Stab PC	$ 97,172	$ 100,572	$ 104,093	$ 107,737	$ 111,507	$ 521,081
Minor Drainage Way Stab CC	81,061	83,898	86,834	89,873	93,018	434,684
Total Expenditures	**$ 178,233**	**$ 184,470**	**$ 190,927**	**$ 197,610**	**$ 204,525**	**$ 955,765**

Funding Sources	2020	2021	2022	2023	2024	Total
Stormwater Charges	$ 111,471	$ 115,372	$ 119,410	$ 180,389	$ 127,915	$ 654,557
System Development Fees	66,762	69,098	71,517	17,221	76,610	301,208
Total Funding Sources	**$ 178,233**	**$ 184,470**	**$ 190,927**	**$ 197,610**	**$ 204,525**	**$ 955,765**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Stream Stabilization**

Project Number: Multiple
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 219,794
2020-2024 Total	8,465,059
CIP Project Total (2015-2024):	**$ 8,684,853**

Description and Justification

This project includes stream channel stabilization throughout Castle Rock. Tributaries are part of the major drainageway networks that include watersheds with an upstream area greater than 130 acres, also known as the 100-year floodplain. These projects were identified in the 2017 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. Improvements to the natural drainageway are required to mitigate 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. Projects are divided between the Plum Creek Basin (PC) and the Cherry Creek Basin (CC). This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for these improvements is split between stormwater charges and system development fees to account for existing infrastructure needs and impacts due to growth. Stream Stabilization projects are listed below by year:

2020 - McMurdo Gulch, Parkview Tributary, and Hangman's Gulch
2021 - McMurdo Gulch
2022 - Industrial Tributary, East Plum Creek, Hangman's Gulch, and 6400 South Tributary Phase II
2023 - McMurdo Gulch, Industrial Tributary, East Plum Creek, Hangman's Gulch, and 6400 South Tributary Phase II
2024 - McMurdo Gulch, Sellars Gulch, Parkview Tributary, 6400 West Tributary, East Plum Creek, and South Dawson Tributary

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Total Drainage Way Stabilization PC	$ 703,407	$ -	$ 2,075,357	$ 2,410,453	$ 1,042,727	$ 6,231,944
Total Drainage Way Stabilization CC	302,127	1,042,324	86,834	177,878	623,952	2,233,115
Total Expenditures	**$ 1,005,534**	**$ 1,042,324**	**$ 2,162,191**	**$ 2,588,331**	**$ 1,666,679**	**$ 8,465,059**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Stormwater Charges	$ 962,701	$ 184,470	$ 857,897	$ 656,435	$ 1,164,355	$ 3,825,858
System Development Fees	42,833	857,854	1,304,294	1,931,896	502,324	4,639,201
Total Funding Sources	**$ 1,005,534**	**$ 1,042,324**	**$ 2,162,191**	**$ 2,588,331**	**$ 1,666,679**	**$ 8,465,059**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Craig & Gould North Improvements**

Project Number: 76-51
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Upgrade
Useful Life: 50 Years

5 Year Historical Total	$ 213,108
2020-2024 Total	1,331,925
CIP Project Total (2015-2024):	**$ 1,545,033**

Description and Justification

The Craig and Gould North subdivision improvements are being done in coordination with Water, Wastewater, Stormwater, and Public Works departments 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. 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. This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for this project is from monthly service charges to address existing infrastructure needs.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 1,331,925	$ -	$ -	$ -	$ -	$ 1,331,925
Total Expenditures	**$ 1,331,925**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,331,925**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Stormwater Charges	$ 1,331,925	$ -	$ -	$ -	$ -	$ 1,331,925
Total Funding Sources	**$ 1,331,925**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 1,331,925**

Operational Impact

There is a possible reduction in repair and maintenance costs, which won't be known until the project is complete and will be incorporated at that time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Detention Pond Retrofits**

Project Number: 77-18
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Upgrade
Useful Life: 50 Years

5 Year Historical Total	$ 50,000
2020-2024 Total	307,677
CIP Project Total (2015-2024):	**$ 357,677**

Description and Justification

This project includes regional detention pond retrofits to facilities that demonstrate an excessive operation and maintenance burden on the program. Generally, older water quality and detention facilities require upgrades to the outflow structure and other pond features to improve runoff circulation through the facility and reduce clogging potential. Ponds are evaluated on an ongoing basis and projects are identified as needed. This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for this project is from monthly service charges to address existing infrastructure needs.

Expenditures	2020	2021	2022	2023	2024	Total
Detention Ponds	$ 57,376	$ 59,384	$ 61,463	$ 63,614	$ 65,840	$ 307,677
Total Expenditures	**$ 57,376**	**$ 59,384**	**$ 61,463**	**$ 63,614**	**$ 65,840**	**$ 307,677**

Funding Sources	2020	2021	2022	2023	2024	Total
Stormwater Charges	$ 57,376	$ 59,384	$ 61,463	$ 63,614	$ 65,840	$ 307,677
Total Funding Sources	**$ 57,376**	**$ 59,384**	**$ 61,463**	**$ 63,614**	**$ 65,840**	**$ 307,677**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Corrugated Metal Pipe Rehabilitation**

Project Number: 78-73
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Repair
Useful Life: 20-50 Years

5 Year Historical Total	$ -
2020-2024 Total	916,402
CIP Project Total (2015-2024):	**$ 916,402**

Description and Justification

This program is required to address aging stormwater infrastructure. Existing corrugated metal pipe (CMP) has an average life expectancy of 30 years. If a pipe fails it causes corrosion and deterioration which would result in subgrade failure in pavement above the pipe. This program will help ensure rehabilitation to existing CMP systems prior to infrastructure failure and prolong the life of the system by 20 to 50 years. This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for this project is from monthly service charges to address existing infrastructure needs.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
CMP Rehabilitation	$ -	$ -	$ 295,021	$ 305,347	$ 316,034	$ 916,402
Total Expenditures	**$ -**	**$ -**	**$ 295,021**	**$ 305,347**	**$ 316,034**	**$ 916,402**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Stormwater Charges	$ -	$ -	$ 295,021	$ 305,347	$ 316,034	$ 916,402
Total Funding Sources	**$ -**	**$ -**	**$ 295,021**	**$ 305,347**	**$ 316,034**	**$ 916,402**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Watershed Master Plan Updates**

Project Number: 78-74
Contact: David Van Dellen, Stormwater Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Planning/Design
Useful Life: Perpetual

5 Year Historical Total	$ -
2020-2024 Total	1,059,948
CIP Project Total (2015-2024):	**$ 1,059,948**

Description and Justification

The Stormwater Capital Program includes updating 19 Major Drainageway Master Plans (MP) covering over 71 miles of floodplain system. Periodic updates to these plans are required to account for changes in watershed hydrology, stream stability assessment, and capital plan prioritization. It is estimated that approximately four plans will be updated annually over a five year period beginning in 2022. A master plan GIS database tool is needed to support modeling efforts, track capital completion status, and facilitate coordination with other stakeholder projects. This project helps Castle Rock Water provide high quality water service to Town residents and businesses by managing stormwater runoff and flood risks. Funding for chase drain installations is allocated to assist with excessive dry weather water over sidewalks in residential subdivisions. Chase drain installations are on a request bases and authorized following a monitoring period per the chase drain policy. Funds are allocated between rates and fees based on impacts estimated from existing development and growth.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Master Plan GIS Database Tool	$ -	$ -	$ 61,462	$ -	$ -	$ 61,462
Watershed MP Updates	-	-	245,851	339,274	263,361	848,486
Chase Drains Installations	30,000	30,000	30,000	30,000	30,000	150,000
Total Expenditures	**$ 30,000**	**$ 30,000**	**$ 337,313**	**$ 369,274**	**$ 293,361**	**$ 1,059,948**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Stormwater Charges	$ 30,000	$ 30,000	$ 183,657	$ 199,637	$ 161,681	$ 604,974
System Development Fees	-	-	153,657	169,637	131,681	454,974
Total Funding Sources	**$ 30,000**	**$ 30,000**	**$ 337,313**	**$ 369,274**	**$ 293,361**	**$ 1,059,948**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Administration & Customer Service Building**

Project Number: 77-57
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 64,372
2020-2024 Total	798,594
CIP Project Total (2015-2024):	**$ 862,966**

Description and Justification

This project accommodates construction of a new Administration and Customer Service Building for Castle Rock Water. The existing Kellogg Facility will be repurposed for staff currently housed in trailers. This building will accommodate the existing and future Administration and Customer Service staff within Castle Rock Water. The Administration and Customer Service Team currently is short of space by approximately 3,000 square feet. The new facility will be designed and constructed to meet the needs of the department through buildout of the Town. A site assessment was conducted in 2013 that details existing and future conditions and identifies space needs for the Castle Rock Water. Construction is targeted for 2020 with funding split across the four Castle Rock Water enterprise funds based upon staffing proportions. The Stormwater Fund's portion of the project will utilize reserves accumulated in prior years through system development fees and rates revenues. This project helps Castle Rock Water meet the priority of providing high quality water service to Town residents and businesses.

Estimated Construction Cost
Water Fund: $1,741,344
Water Resources Fund: $779,014
Stormwater Fund: $798,594
Wastewater Fund: $729,853

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ 798,594	$ -	$ -	$ -	$ -	$ 798,594
Total Expenditures	**$ 798,594**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 798,594**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 798,594	$ -	$ -	$ -	$ -	$ 798,594
Total Funding Sources	**$ 798,594**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 798,594**

Operational Impact

There are general operations expenditures of approximately $30,000 per year. The Water fund's portion is $12,119 per year, the Water Resources fund's portion is $5,689 per year, the Stormwater fund's portion is $5,510 per year, and the Wastewater fund's portion is $6,682 per year.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Customer Billing Software**

Project Number: 70-43
Contact: Anne Glassman, Business Solutions Manager
Department: Castle Rock Water
Category: Technology
Type: New
Useful Life: 5+ years

5 Year Historical Total	$ -
2020-2024 Total	87,500
CIP Project Total (2015-2024):	**$ 87,500**

Description and Justification

These software costs are included for the customer billing department. Castle Rock Water needs to evaluate the possibility of upgrading to a new billing software from the current BillMaster software. New capabilities are needed for the department and the old software is becoming more outdated and obsolete. The billing department has estimated the cost to be $350,000. This cost will be evenly split across the four Castle Rock Water funds for $87,500 each.

Expenditures	2020	2021	2022	2023	2024	Total
Software	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Expenditures	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Funding Sources	2020	2021	2022	2023	2024	Total
Stormwater Charges	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Funding Sources	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Operational Impact

The operation impact of this project will be determined at project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

WASTEWATER FUND

CASTLE ROCK WATER

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Lift Station Upgrades	$ 422,000	$ 444,000	$ 410,000	$ 370,000	$ 370,000	$ 2,016,000
Sewer Line Rehabilitation	500,000	2,400,000	2,400,000	2,400,000	2,400,000	10,100,000
Security System Improvements	50,000	50,000	50,000	50,000	50,000	250,000
PCWRA Projects	3,271,219	2,357,051	625,015	428,465	428,106	7,109,856
Craig & Gould North Improvements	425,000	-	-	-	-	425,000
Administration & Customer Service Building	729,853	-	-	-	-	729,853
Prairie Hawk Interceptor	-	50,000	417,000	-	-	467,000
Kinner Street Bottleneck	-	-	-	2,117,000	-	2,117,000
Malibu Street Upsize	-	345,000	-	-	50,000	395,000
Plum Creek Interceptor Upsize	2,500,000	-	-	-	-	2,500,000
Customer Billing Software	87,500	-	-	-	-	87,500
Total Expenditures by Year	**$ 7,985,572**	**$ 5,646,051**	**$ 3,902,015**	**$ 5,365,465**	**$ 3,298,106**	**$ 26,197,209**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Wastewater Service Charges	$ 2,051,538	$ 3,249,000	$ 3,215,000	$ 5,292,000	$ 3,175,000	$ 16,982,538
System Development Fees	5,934,034	2,397,051	687,015	73,465	123,106	9,214,671
Total Funding Sources by Year	**$ 7,985,572**	**$ 5,646,051**	**$ 3,902,015**	**$ 5,365,465**	**$ 3,298,106**	**$ 26,197,209**

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.



Castle Rock Water Administration and Customer Service Bulding

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Lift Station Upgrades**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Equipment
Type: Replacement
Useful Life: 20 Years

5 Year Historical Total	$ 185,406
2020-2024 Total	2,016,000
CIP Project Total (2015-2024):	**$ 2,201,406**

Description and Justification

The Lift Station Upgrades project is intended to accommodate multiple improvements to the Town's lift stations. 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 Wastewater Reclamation Authority for treatment. Pump and motor replacements are identified annually or on an emergency basis.

Pumps and motors at wastewater lift stations have a finite service life and replacement must be planned on an ongoing basis. Employee safety and year round access to the lift station are accommodated through paving projects, since lift stations are typically checked multiple times per week. These projects address the community need of providing a safe and reliable wastewater collection system.

Variable Frequency Drive (VFD) replacement is needed at Wastewater facilities to replace VFD's which are obsolete.

Lift station improvements are needed at the Castle Oaks Lift Station in 2020 and Mitchell Creek Lift Station in 2021.

Lift Station paving is needed to replace pavement at the Sellars Gulch Lift Station in 2021 and the Maher Lift Station access road in 2022.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Lift Station Rehab/Replacement	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Lift Station Pump & Motor Replacement	100,000	100,000	100,000	100,000	100,000	500,000
Lift Station Mixing Improvements	32,000	32,000	-	-	-	64,000
WW Facility VFD Replacements	220,000	220,000	220,000	220,000	220,000	1,100,000
Lift Station Improvements	20,000	20,000	-	-	-	40,000
Lift Station Paving	-	22,000	40,000	-	-	62,000
Total Expenditures	**$ 422,000**	**$ 444,000**	**$ 410,000**	**$ 370,000**	**$ 370,000**	**$ 2,016,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Wastewater Service Charges	$ 422,000	$ 444,000	$ 410,000	$ 370,000	$ 370,000	$ 2,016,000
Total Funding Sources	**$ 422,000**	**$ 444,000**	**$ 410,000**	**$ 370,000**	**$ 370,000**	**$ 2,016,000**

Operational Impact

Improvements and replacements to equipment typically result in reduced maintenance costs, which are unknown until project implementation and will be incorporated at that time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Sewer Line Rehabilitation**

Project Number: 75-62
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Repair
Useful Life: 50 Years

5 Year Historical Total	$ 878,455
2020-2024 Total	10,100,000
CIP Project Total (2015-2024):	**$ 10,978,455**

Description and Justification

This project is intended to rehabilitate or replace existing sewer lines due to age or failing infrastructure. This is an ongoing program and areas of focus 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. The sewer rehabilitation program will address the requirements of Environmental Protection Agency's (EPA) Capacity, Management, Operation, and Maintenance (CMOM) programs.

The Woodlands sewer line replacement accommodates the installation of stormwater infrastructure and install approximately 1,450 linear feet of new sewer line to eliminate the Woodlands Sewer along the Woodlands trail. This project will eliminate manholes that are severely corroded, reduce sewer odors along a popular trail, and improve access.

The Oakwood sewer replacement is to replace sewer main to accommodate the installation of stormwater infrastructure on Oakwood Drive and Court.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Repair	$ 500,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 10,100,000
Total Expenditures	**$ 500,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 10,100,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Wastewater Service Charges	$ 500,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 2,400,000	$ 10,100,000
Total Funding Sources	**$ 500,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 2,400,000**	**$ 10,100,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Security System Improvements**

Project Number: 75-36
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: Upgrade
Useful Life: 20 Years

5 Year Historical Total	$ 34,269
2020-2024 Total	250,000
CIP Project Total (2015-2024):	**$ 284,269**

Description and Justification

These miscellaneous 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. 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 investments in infrastructure and ensuring employee safety. Supervisory Control and Data Acquisition (SCADA) upgrades ensure that facilities can be monitored and controlled remotely.

Expenditures	2020	2021	2022	2023	2024	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
Total Expenditures	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 250,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Wastewater Service Charges	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Total Funding Sources	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 50,000**	**$ 250,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **PCWRA Projects**

Project Number: Multiple
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 2,518,328
2020-2024 Total	7,109,856
CIP Project Total (2015-2024):	**$ 9,628,184**

Description and Justification

The Town of Castle Rock does not perform wastewater treatment. 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's significant share of PCWRA debt which includes 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, blowers, and general facilities maintenance. The Ditch Three project will equip Oxidation Ditch Three at the wastewater reclamation facility, which was not originally equipped to accommodate future wastewater flow capacity 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.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Capital Buy-In	$ 2,704,181	$ 2,002,051	$ 270,015	$ 73,465	$ 73,106	$ 5,122,818
Ditch Three at PCWRA	212,038	-	-	-	-	212,038
PCWRA Rehab/Replacement	355,000	355,000	355,000	355,000	355,000	1,775,000
Total Expenditures	**$ 3,271,219**	**$ 2,357,051**	**$ 625,015**	**$ 428,465**	**$ 428,106**	**$ 7,109,856**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
System Development Fees	$ 2,704,181	$ 2,002,051	$ 270,015	$ 73,465	$ 73,106	$ 5,122,818
Wastewater Service Charges	567,038	355,000	355,000	355,000	355,000	1,987,038
Total Funding Sources	**$ 3,271,219**	**$ 2,357,051**	**$ 625,015**	**$ 428,465**	**$ 428,106**	**$ 7,109,856**

Operational Impact

Operating expenditures for PCWRA are included in the capital buy-in payments displayed above.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Craig & Gould North Improvements**

Project Number: 76-51
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Replacement
Useful Life: 50 Years

5 Year Historical Total	$ 45,000
2020-2024 Total	425,000
CIP Project Total (2015-2024):	**$ 470,000**

Description and Justification

This project will accomplish infrastructure improvements in the Craig and Gould neighborhood. Aging (greater than 70 years old) and undersized sewers will be replaced and deteriorated manholes will be replaced or rehabilitated. This project will be coordinated with the Public Works department to coincide with the annual Pavement Maintenance Program in order to minimize the construction impact on the community. This project addresses the community need of providing a safe and reliable wastewater collection system.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Construction	$ 425,000	$ -	$ -	$ -	$ -	$ 425,000
Total Expenditures	**$ 425,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 425,000**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Wastewater Service Charges	$ 425,000	$ -	$ -	$ -	$ -	$ 425,000
Total Funding Sources	**$ 425,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 425,000**

Operational Impact

The rehabilitation of aging equipment will likely result in reduced maintenance expenditures, which will not be known until project completion and will be incorporated at that time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Administration & Customer Service Building**

Project Number: 77-57
Contact: Tim Friday, Assistant Director of Castle Rock Water
Department: Castle Rock Water
Category: Building
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ 59,878
2020-2024 Total	729,853
CIP Project Total (2015-2024):	**$ 789,731**

Description and Justification

This project accommodates construction of a new Administration and Customer Service Building for Castle Rock Water. The existing Kellogg Facility will be repurposed for staff currently housed in trailers. This building will accommodate existing and future Administration and Customer Service staff within Castle Rock Water. The Administration and Customer Service Team currently is short of space by approximately 3,000 square feet. The new facility will be designed and constructed to meet the needs of the department through buildout of the Town. A site assessment was conducted in 2013 that details existing and future conditions and identifies space needs for Castle Rock Water. Construction is targeted for 2020 with funding split across the four Castle Rock Water enterprise funds based upon staffing proportions. The Wastewater Fund's portion of the project will utilize reserves accumulated in prior years and departmentally designated plus system development fees and rates revenues. This project helps Castle Rock Water meet the priority of providing high quality services to Town residents and businesses.

Estimated Construction Cost
Water Fund: $1,741,344
Water Resources Fund: $779,014
Stormwater Fund: $798,594
Wastewater Fund: $729,853

Expenditures	2020	2021	2022	2023	2024	Total
Construction	$ 729,853	$ -	$ -	$ -	$ -	$ 729,853
Total Expenditures	**$ 729,853**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 729,853**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 729,853	$ -	$ -	$ -	$ -	$ 729,853
Total Funding Sources	**$ 729,853**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 729,853**

Operational Impact

General costs of approximately $30,000 per year are anticipated and planned for in the respective operating budgets for future years. The Water Fund's portion is $12,119 per year, the Water Resources fund's portion is $5,689 per year, the Stormwater fund's portion is $5,510 per year, and the Wastewater fund's portion is $6,682 per year.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Prairie Hawk Interceptor**

Project Number: 75-92
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Equipment
Type: New
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	467,000
CIP Project Total (2015-2024):	**$ 467,000**

Description and Justification

This project will provide for the need to upsize the sewer system along Prairie Hawk Drive. The original sewer line (interceptor) must be upsized to 18 or 21 inches along Prairie Hawk Drive south of Wolfensberger to meet future wastewater flows generated by growth in the Town. This interceptor would serve the proposed development at Miller's Landing and could potentially be delayed based on the pace of development in the area.

Expenditures	2020	2021	2022	2023	2024	Total
Prairie Hawk Interceptor	$ -	$ 50,000	$ 417,000	$ -	$ -	$ 467,000
Total Expenditures	**$ -**	**$ 50,000**	**$ 417,000**	**$ -**	**$ -**	**$ 467,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ -	$ 50,000	$ 417,000	$ -	$ -	$ 467,000
Total Funding Sources	**$ -**	**$ 50,000**	**$ 417,000**	**$ -**	**$ -**	**$ 467,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Kinner Street Bottleneck**

Project Number: 75-81
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Replacement
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	2,117,000
CIP Project Total (2015-2024):	**$ 2,117,000**

Description and Justification

This project is to upsize nearly 3,000 linear feet of existing 18 and 21-inch sanitary sewer mains to 21 and 24-inch on Kinner Street. This project involves a broad crossing of I-25, East Plum Creek, and Wolfensberger Road. Hydraulic modeling does not indicate capacity issues at this time. However, increasing density downtown and in Lanterns, Crystal Valley Ranch could have an impact. The sewer main may need rehabilitation instead of full replacement.

Expenditures	2020	2021	2022	2023	2024	Total
Kinner Street Bottleneck	$ -	$ -	$ -	$ 2,117,000	$ -	$ 2,117,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 2,117,000**	**$ -**	**$ 2,117,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Wastewater Service Charges	$ -	$ -	$ -	$ 2,117,000	$ -	$ 2,117,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 2,117,000**	**$ -**	**$ 2,117,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Malibu Street Upsize**

Project Number: 75-20
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Replacement
Useful Life: 50 Years

5 Year Historical Total	$ -
2020-2024 Total	395,000
CIP Project Total (2015-2024):	**$ 395,000**

Description and Justification

This project replaces 1,130 linear feet of existing 15-inch clay pipe to 18 or 21-inch PVC (size to be determined) on Malibu Street in the Village North neighborhood. Timing is coordinated with a stormwater project that may require realignment of the sewer, at which time it would be upsized. Upstream development is contributing to the cost of the project through system development fees.

Expenditures	2020	2021	2022	2023	2024	Total
Malibu Street Upsize	$ -	$ 345,000	$ -	$ -	$ 50,000	$ 395,000
Total Expenditures	**$ -**	**$ 345,000**	**$ -**	**$ -**	**$ 50,000**	**$ 395,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ -	$ 345,000	$ -	$ -	$ 50,000	$ 395,000
Total Funding Sources	**$ -**	**$ 345,000**	**$ -**	**$ -**	**$ 50,000**	**$ 395,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Plum Creek Interceptor Upsize**

Project Number: 77-64
Contact: Jeanne Stevens, Engineering Manager
Department: Castle Rock Water
Category: Infrastructure
Type: Replacement
Useful Life: 50 Years

5 Year Historical Total	$ 113,940
2020-2024 Total	2,500,000
CIP Project Total (2015-2024):	**$ 2,613,940**

Description and Justification

This project is to replace and/or parallel approximately 2,400 linear feet of sanitary sewer pipe in order to increase capacity. A section of the existing sewer main is a minimal slope and has potential capacity issues. The alignment is a difficult corridor and requires a crossing of both State Highway 85 and Meadows Boulevard. The project will eliminate a known bottleneck in the collection system.

Expenditures	2020	2021	2022	2023	2024	Total
Plum Creek Interceptor Upsize	$ 2,500,000	$ -	$ -	$ -	$ -	$ 2,500,000
Total Expenditures	**$ 2,500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,500,000**

Funding Sources	2020	2021	2022	2023	2024	Total
System Development Fees	$ 2,500,000	$ -	$ -	$ -	$ -	$ 2,500,000
Total Funding Sources	**$ 2,500,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 2,500,000**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Customer Billing Software**

Project Number: 70-43
Contact: Anne Glassman, Business Solutions Manager
Department: Castle Rock Water
Category: Technology
Type: New
Useful Life: 5+ years

5 Year Historical Total	$ -
2020-2024 Total	87,500
CIP Project Total (2015-2024):	**$ 87,500**

Description and Justification

These software costs are included for the customer billing department. Castle Rock Water needs to evaluate the possibility of upgrading to a new billing software from the current BillMaster software. New capabilities are needed for the department and the old software is becoming more outdated and obsolete. The billing department has estimated the cost to be $350,000. This cost will be evenly split across the four Castle Rock Water funds for $87,500 each.

Expenditures	2020	2021	2022	2023	2024	Total
Software	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Expenditures	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Funding Sources	2020	2021	2022	2023	2024	Total
Wastewater Service Charges	$ 87,500	$ -	$ -	$ -	$ -	$ 87,500
Total Funding Sources	**$ 87,500**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 87,500**

Operational Impact

The operation impact of this project will be determined at project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

FLEET SERVICES FUND

PUBLIC WORKS DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Vehicles and Equipment	$ 1,908,294	$ 3,226,902	$ 3,031,976	$ 3,179,777	$ 2,155,710	$ 13,502,659
Total Expenditures by Year	**$ 1,908,294**	**$ 3,226,902**	**$ 3,031,976**	**$ 3,179,777**	**$ 2,155,710**	**$ 13,502,659**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Vehicle Replacement Contributions	$ 1,597,842	$ 2,932,861	$ 2,764,564	$ 2,921,075	$ 1,985,639	$ 12,201,981
Vehicle Salvage	158,350	280,736	253,642	258,702	170,071	1,121,501
Transfers from Other Funds	152,102	13,305	13,770	-	-	179,177
Total Funding Sources by Year	**$ 1,908,294**	**$ 3,226,902**	**$ 3,031,976**	**$ 3,179,777**	**$ 2,155,710**	**$ 13,502,659**

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.

Summary of 2020 Vehicle Additions

Department	*Make & Model*	*Estimated Cost*	*Justification*
Police	Ford Utility AWD	$ 61,997	One additional vehicle is needed to accommodate the addition of two Patrol Officer positions
Parks and Recreation	Mower	12,855	One additional mower is needed to accommodate the replacement of a mower that was not previously in the replacement program
Castle Rock Water	Ford F-250 SD	44,250	One additional vehicle is needed to accommodate the addition of a Utility Locator position
Castle Rock Water	Ford F-150	33,000	One additional vehicle is needed to accommodate the addition of a Field Services position
	Total	**$ 152,102**	

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Vehicles and Equipment**

Project Number: 70-40
Contact: Paul Colell, Fleet Manager
Department: Public Works Department
Category: Vehicles
Type: Replacement
Useful Life: 4-15 years

5 Year Historical Total	$ 14,291,599
2020-2024 Total	13,502,659
CIP Project Total (2015-2024):	**$ 27,794,258**

Description and Justification

The vehicle replacement program is funded through departmental contributions made to 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%. 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 to extend the vehicles life cycle. Because vehicles may be equipped with different equipment based upon their usage, the cost for similar vehicles will vary. Additionally, 3% of the total anticipated vehicle purchase amount is budgeted in order to accommodate unforseen variances in vehicle purchase amounts.

The following pages detail the requested replacements and additions to the Town's fleet by department.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Vehicles & Equipment	$ 1,908,294	$ 3,226,902	$ 3,031,976	$ 3,179,777	$ 2,155,710	$ 13,502,659
Total Expenditures	**$ 1,908,294**	**$ 3,226,902**	**$ 3,031,976**	**$ 3,179,777**	**$ 2,155,710**	**$ 13,502,659**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Vehicle Replacement Contributions	$ 1,597,842	$ 2,932,861	$ 2,764,564	$ 2,921,075	$ 1,985,639	$ 12,201,981
Vehicle Salvage	158,350	280,736	253,642	258,702	170,071	1,121,501
Transfers from Other Funds	152,102	13,305	13,770	-	-	179,177
Total Funding Sources	**$ 1,908,294**	**$ 3,226,902**	**$ 3,031,976**	**$ 3,179,777**	**$ 2,155,710**	**$ 13,502,659**

Operational Impact

Increases in operational expenditures, including gasoline and maintenance for 2020 are primarily related to vehicle additions, and are estimated to be approximately $12,000. Additional amounts are included for operational needs in the department budgets in which contributions occur from.

2020 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
DoIT Department				
SUV, General Purpose, Light Duty	Ford Escape Hybrid		$ 3,000	$ 32,131
Total DoIT Department		**1**	**$ 3,000**	**$ 32,131**
Police Department				
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
Sedan General Purpose	Ford Utility AWD		4,678	50,117
SUV, Police Patrol	Ford Interceptor AWD		5,750	61,595
SUV, Police Patrol	Ford Interceptor AWD		5,750	61,595
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
Trucks, Light Duty	Ford Utility AWD		4,679	50,117
SUV, Police Patrol	Ford Utility AWD		5,750	61,595
Vehicle Additions; SUV, Police Patrol	***Ford Utility AWD***		-	***61,997***
Total Police Department		**11**	**$ 55,357**	**$ 654,991**
Fire Department				
Fire Response, Brush Trucks, Hazmat	Dodge Ram 5500		18,508	198,274
Fire, Response, Ambulance	Dodge Ram 4500		18,800	205,301
SUV, Public Safety, Police, Fire	Ford Expedition		5,184	55,529
Total Fire Department		**3**	**$ 42,492**	**$ 459,104**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2020 Schedule of Vehicle & Equipment Purchase (Continued)

Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Transportation Fund				
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Volvo L90D		$ 23,894	$ 255,969
Trucks, Light Duty	Ford F-150		2,930	31,386
Trailers Medium, Light	Wanco WVTM		2,424	25,961
Trailers Medium, Light	Wanco WTMMB		2,701	28,933
Total Transportation Fund		**4**	**$ 31,949**	**$ 342,249**
Parks & Recreation Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Kromer Field Commander		2,417	25,895
Heavy Equipment Off-Road, Loaders, Tractors, Graders	John Deere 4300		3,425	37,045
Trailers Medium, Light	Big Tex 70CH-18		450	4,867
Trailers Medium, Light	Big Tex 70CH-18		450	4,867
Vehicle Additions; Equipment, Off-Road, Light duty, Mowers	***Mower***		-	***12,855***
Total Parks & Recreation Department		**5**	**$ 6,742**	**$ 85,529**
Community Center Fund				
Vans < 10K GVWR Passenger/Cargo	Ford E-350 SD		3,375	36,151
Vans < 10K GVWR Passenger/Cargo	Ford E-350 SD		3,375	36,151
Total Community Center Fund		**2**	**$ 6,750**	**$ 72,302**
Castle Rock Water Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Octane FY25		2,661	28,501
Trucks, Light Duty	Ford F-150 SSV		3,700	39,630
Trucks, Med Duty	Dodge Ram 3500		5,445	58,328
Trailers Heavy	J.W. Tandem Axle		254	2,698
Vehicle Additions; Trucks, Med Duty	***Ford F-250 SD***		-	***44,250***
Vehicle Additions; Trucks, Med Duty	***Ford F-150***		-	***33,000***
Total Castle Rock Water Department		**6**	**$ 12,060**	**$ 206,407**
Total - All Departments			**$ 158,350**	**$ 1,852,713**
3% Contingency				**55,581**
2020 Vehicle & Equipment Replacement Total		**32**	**$ 158,350**	**$ 1,908,294**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2021 Schedule of Vehicle & Equipment Purchase				
Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Facilities Department				
Trucks, Med Duty	Ford F-350 SD		$ 4,250	$ 47,121
Vans < 10K GVWR Passanger/Cargo	Ford E250		3,613	40,052
Vans < 10K GVWR Passanger/Cargo	Ford E250		3,613	40,052
Total Facilities Department		**3**	**$ 11,476**	**$ 127,225**
Police Department				
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
Sedan General Purpose	Ford Utility AWD		4,679	51,871
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	51,871
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	51,871
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	51,871
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	51,871
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Public Safety, Police, Fire	Ford Utility AWD		5,750	63,751
SUV, Police Patrol	Ford Utility AWD		5,750	63,751
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	51,871
Total Police Department		**14**	**$ 74,074**	**$ 821,234**
Fire Department				
Fire Response, Brush Trucks, Hazmat	Dodge Ram 5500		18,509	205,214
Fire, Response, Ambulance	Dodge Ram 4500		18,800	214,539
SUV, Public Safety, Police, Fire	Ford Expedition		5,184	57,473
SUV, Public Safety, Police, Fire, Batt Chief	Ford Expedition EL		7,140	79,161
SUV, Public Safety, Police, Fire	Ford Expedition		5,184	57,473
Trucks, Light Duty	Ford F-150 SSV		5,184	57,473
Total Fire Department		**6**	**$ 60,001**	**$ 671,333**
Development Services Department				
SUV, General Purpose, Light Duty	Ford Escape XLS		2,725	$ 30,213
Total Development Services Department		**1**	**$ 2,725**	**$ 30,213**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2021 Schedule of Vehicle & Equipment Purchase (Continued)				
Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Transportation Fund				
Heavy Equipment Off-Road, Loaders, Tractors, Graders	John Deere 4720		$ 5,987	$ 66,383
Sweepers	Elgin NP Pelican		20,500	227,287
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400		19,346	214,537
Trucks, Light Duty	Ford F-150		3,011	33,383
Trucks, Med Duty	Ford F-350 SD		5,212	57,786
Trucks, Med Duty	Ford F-350 SD		5,845	64,805
Trucks, Med Duty	Ford F-350 SD		5,845	64,805
Trailers Medium, Light	Dun-Rite 2LT7M		844	9,352
Trailers Medium, Light	Ray-Tech Mini Combo		3,995	44,293
Total Transportation Fund		**9**	**$ 70,585**	**$ 782,631**
Parks & Recreation Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat 5600		5,835	$ 65,636
Trucks, Light Duty	Ford F-150		2,950	32,707
Trucks, Med Duty	Ford F-350 SD		3,700	41,023
Vehicle Additions; Equipment, Off-Road, Light duty, Mowers	***Mower***		-	***13,305***
Total Parks & Recreation Department		**4**	**$ 12,485**	**$ 152,671**
Community Center Fund				
Vans < 10K GVWR Passenger/Cargo	Ford E-350 SD		3,375	37,424
Total Community Center Fund		**1**	**$ 3,375**	**$ 37,424**
Castle Rock Water Department				
SUV, General Purpose, Light Duty	Jeep Liberty		3,097	34,335
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400		10,825	120,022
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 5600I		24,075	266,924
Trucks, Light Duty	Ford F-150 SSV		3,759	41,680
Trucks, Med Duty	Ford F-350 SD		4,259	47,223
Total Castle Rock Water Department		**5**	**$ 46,015**	**$ 510,184**
Total - All Departments			**$ 280,736**	**$ 3,132,915**
3% Contingency				**93,987**
2021 Vehicle & Equipment Replacement Total		**43**	**$ 280,736**	**$ 3,226,902**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2022 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Facilities Department				
Trucks, Med Duty	Ford F-350 SD		$ 4,375	$ 50,204
Total Facilities Department		**1**	**$ 4,375**	**$ 50,204**
Police Department				
Sedan, Patrol	Ford Utility AWD		5,750	65,983
Sedan, Patrol	Ford Utility AWD		5,750	65,983
SUV, Police Patrol	Ford Utility AWD		5,750	65,983
SUV, Police Patrol	Ford Utility AWD		5,750	65,983
SUV, Police Patrol	Ford Utility AWD		5,750	65,983
SUV, Police Patrol	Ford Utility AWD		5,750	65,983
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	53,687
Total Police Department		**7**	**$ 39,179**	**$ 449,585**
Fire Department				
Fire, Response, Ambulance	Ford F450		18,800	224,193
Fire, Response, Ambulance	Ford F450		18,800	224,193
SUV, Public Safety, Police, Fire, Batt Chief	Ford Expedition EL		6,538	75,019
Trailers Medium, Light	Bauer TCOM-25		12,402	142,310
Trucks, Light Duty	Ford F-150 SSV		5,184	59,484
Total Fire Department		**5**	**$ 61,724**	**$ 725,199**
Development Services Department				
SUV, General Purpose, Light Duty	Jeep Liberty		2,725	31,270
Total Development Services Department		**1**	**$ 2,725**	**$ 31,270**
Transportation Fund				
Equipment, Off-Road, Loaders, Tractors, Graders	Caterpillar CB334D		8,175	93,810
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400		19,350	222,046
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7500		21,853	250,791
Trucks, Med Duty	Ford F-250 SD		4,200	48,196
Sweepers	Schwarze A7000		22,674	260,194
Trailers Heavy	Trail-Eze PDLX20TC30		5,267	60,442
Trailers Medium, Light	Big Tex 30SA		186	2,178
Trailers Medium, Light	Safe-Stop TMA9000CLC		3,151	36,162
Total Transportation Fund		**8**	**$ 84,856**	**$ 973,819**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2022 Schedule of Vehicle & Equipment Purchase (Continued)				
Department and Vehicle Use	**Vehicle Make/Model**		**Estimated Salvage Value**	**Estimated Cost ***
Parks & Recreation Department				
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	Scag Tiger Cat STC61V		$ 980	$ 11,246
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	John Deere HPX 4x4		1,075	12,336
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat 5600		5,835	68,261
Trailers Medium, Light	Vermeer BC1400XL		4,855	56,797
Vehicle Additions; Equipment, Off-Road, Light duty, Mowers	***Mower***		-	***13,770***
Total Parks & Recreation Department		**5**	**$ 12,745**	**$ 162,410**
Castle Rock Water Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Wachs 77-000-36		7,513	86,208
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Caterpillar 930H		20,250	232,373
SUV, General Purpose, Light Duty	Chevrolet Equinox		2,452	28,137
Trailers Medium, Light	Cornell 3HC-RP-EM16		8,375	96,105
Trucks, Light Duty	Ford F-150 SSV		3,319	38,083
Trucks, Light Duty	Ford F-150		2,956	33,917
Trucks, Light Duty	Ford F-150		2,932	33,640
Trailers Medium, Light	Big Tex 14X83		241	2,716
Total Castle Rock Water Department		**8**	**$ 48,038**	**$ 551,179**
Total - All Departments			**$ 253,642**	**$ 2,943,666**
3% Contingency				**88,310**
2017 Vehicle & Equipment Replacement Total		**35**	**$ 253,642**	**$ 3,031,976**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2023 Schedule of Vehicle & Equipment Purchase				
Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Facilities Department				
Trucks, Light Duty	Ford F-150		$ 3,125	$ 37,115
Trucks, Med Duty	Ford F-350SD		4,250	50,477
Total Facilities Department		**2**	**$ 7,375**	**$ 87,592**
Police Department				
SUV, Police Patrol	Ford Utility AWD		5,750	$ 68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	55,566
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	55,566
SUV, Police Patrol	Ford Utility AWD		5,750	68,292
Equipment, Off-Road, Loaders, Tractors, Graders	Polaris Ranger 800		2,030	24,114
Total Police Department		**11**	**$ 57,387**	**$ 681,582**
Fire Department				
Fire, Response, Ambulance	Ford F450		19,500	243,005
SUV, Public Safety, Police, Fire	Ford Expedition		5,184	61,566
Trucks, Med Duty	Chevrolet Silverado 3500		5,184	61,566
Total Fire Department		**3**	**$ 29,867**	**$ 366,137**
Development Services				
SUV, General Purpose, Light Duty	Ford Escape SE		2,635	31,296
SUV, General Purpose, Light Duty	Chevrolet Equinox		2,635	31,296
SUV, General Purpose, Light Duty	Ford Escape SE		2,635	31,296
SUV, General Purpose, Light Duty	Ford Escape SE		2,635	31,296
SUV, General Purpose, Light Duty	Ford Escape SE		2,635	31,296
SUV, General Purpose, Light Duty	Ford Escape SE		2,635	31,296
Total Development Services Fund		**6**	**$ 15,810**	**$ 187,776**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2023 Schedule of Vehicle & Equipment Purchase (Continued)

Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Transportation Fund				
Equipment, Off-Road, Loaders, Tractors, Graders	Miller Bobcat 250NT		$ 548	$ 6,507
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Caterpillar 143H		30,756	365,290
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Bobcat S570		4,125	48,992
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400		19,350	229,817
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7400		19,350	229,817
Trucks, Light Duty	Ford F-150		2,750	32,661
Trucks, Light Duty	Ford F-150 SSV		2,885	34,265
Trucks, Med Duty	Ford F-350 SD		5,845	69,420
Trucks, Med Duty	Ford F-350 SD		5,845	69,420
Trucks, Med Duty	Ford F-350 SD		5,445	64,670
Total Transportation Fund		**10**	**$ 96,899**	**$ 1,150,859**
Parks & Recreation Department				
Equipment, Off-Road, Light duty, Mowers, Carts, Skid Steers, Plows	Toro 4300-D		6,292	74,734
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat S570		4,275	52,012
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat 5600		5,835	70,992
Equipment, Off-Road, Loaders, Tractors, Graders	Kubota RTV400CI-H		925	10,986
Equipment, Off-Road, Loaders, Tractors, Graders	Kubota RTV400CI-H		925	10,986
Trucks, Light Duty	Ford F150		3,300	39,194
Trucks, Light Duty	Ford F-150		2,950	35,037
Trailers Medium, Light	Haulmark DLX Transport		866	10,535
Total Parks & Recreation Department		**8**	**$ 25,368**	**$ 304,476**
Castle Rock Water Department				
SUV, General Purpose, Light Duty	Ford Explorer		3,479	41,320
Trailers Medium, Light	Wacker LTC 4L		1,133	13,451
Trucks, Light Duty	Ford F-150		2,600	30,881
Trucks, Light Duty	Ford F-150		2,875	34,146
Trucks, Med Duty	Chevrolet C-5500		9,550	113,424
Trucks, Med Duty	Ford F-350 SD		6,175	73,340
Trailers Medium, Light	DW S1A		183	2,178
Total Castle Rock Water Department		**7**	**$ 25,995**	**$ 308,740**
Total - All Departments			**$ 258,702**	**$ 3,087,162**
3% Contingency				**92,615**
2018 Vehicle & Equipment Replacement Total		**47**	**$ 258,702**	**$ 3,179,777**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2024 Schedule of Vehicle & Equipment Purchase

Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Facilities Department				
Trucks, Med Duty	Ford F-250 SD		$ 3,600	$ 44,247
Total Facilities Department		**1**	**$ 3,600**	**$ 44,247**
Police Department				
SUV, Public Safety, Police, Fire	Ford Expedition XLT		5,750	70,682
SUV, Police Patrol	Ford Utility AWD		5,750	70,682
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	57,511
SUV, Public Safety, Police, Fire	Ford Utility AWD		4,679	57,511
SUV, Public Safety, Police, Fire	Ford Escape		2,650	32,575
Total Police Department		**5**	**$ 23,508**	**$ 288,961**
Fire Department				
SUV, Public Safety, Police, Fire	Ford Utility Interceptor		4,500	55,316
SUV, Public Safety, Police, Fire	Ford Utility Interceptor		3,200	39,336
SUV, Public Safety, Police, Fire	Ford Utility Interceptor		3,200	39,336
Trailers Medium, Light	Atlas Inclosed Van		573	7,046
Total Fire Department		**4**	**$ 11,473**	**$ 141,034**
Development Services				
Trucks, Light Duty	Ford F-150		2,725	33,497
Trucks, Light Duty	Ford F-150		2,725	33,497
Trucks, Light Duty	Ford F-150		2,725	33,497
Trucks, Light Duty	Ford F-150		2,725	33,497
Total Development Services Fund		**4**	**$ 10,900**	**$ 133,988**
Transportation Fund				
Equipment, Off-Road, Loaders, Tractors, Graders	Reliable HPU-2000		750	9,219
Equipment, Off-Road, Loaders, Tractors, Graders	Sullair 260DPQ		2,423	29,780
Heavy Equipment Off-Road, Loaders, Tractors, Graders	Volvo BL70B		9,311	114,474
Trucks, Light Duty	Ford F-150 SSV		2,885	35,464
Trailers Medium, Light	Haulmark TS7X16D2		771	9,481
Total Transportation Fund		**5**	**$ 16,140**	**$ 198,418**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2024 Schedule of Vehicle & Equipment Purchase (Continued)				
Department and Vehicle Use	Vehicle Make/Model		Estimated Salvage Value	Estimated Cost *
Parks & Recreation Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat A770		$ 6,438	$ 81,455
Trucks, Light Duty	Ford F-150		3,750	46,097
Trucks, Light Duty	Chevrolet Colorado		2,950	36,263
Trucks, Light Duty	Ford F-150		2,950	36,263
Trucks, Med Duty	Ford F-350 SD		5,300	65,151
Trucks, Med Duty	Ford F-250 SD		3,875	47,634
Equipment, Off-Road, Mower	Z-Master 5000		1,200	14,751
Total Parks & Recreation Department		**7**	**$ 26,463**	**$ 327,614**
Golf Department				
Trucks, Light Duty	Chevrolet Colorado		2,600	31,962
Total Golf Department		**1**	**$ 2,600**	**$ 31,962**
Castle Rock Water Department				
Equipment, Off-Road, Loaders, Tractors, Graders	Bobcat S570		3,617	44,465
Equipment, Off-Road, Loaders, Tractors, Graders	Vermeer S800TX		2,775	34,108
Sedan General Purpose	Chevrolet Impala LS		2,553	31,377
Trucks Heavy Duty, Snow Removal, Construction Dumps	International 7500		41,500	510,141
Trucks, Light Duty	Ford F-150		2,415	29,687
Trucks, Light Duty	Ford F-150		2,415	29,687
Trucks, Light Duty	Ford F-150		2,600	31,962
Trucks, Light Duty	Ford F-150		2,600	31,962
Trucks, Light Duty	Ford F-150 SSV		3,097	38,071
Trucks, Light Duty	Ford F-150		3,275	40,258
Trucks, Light Duty	Ford F-150 SSV		3,165	38,906
Trucks, Light Duty	Ford F-150		2,600	31,962
Trucks, Light Duty	Ford F-150		2,775	34,112
Total Castle Rock Water Department		**13**	**$ 75,387**	**$ 926,698**
Total - All Departments			**170,071**	**2,092,922**
3% Contingency				**62,788**
2019 Vehicle & Equipment Replacement Total		**40**	**$ 170,071**	**$ 2,155,710**

* Estimated cost is for a planned vehicle, actual cost may be adjusted according to requirements determined by the department

2020-2024 CAPITAL IMPROVEMENT PROGRAM

GOLF FUND

PARKS & RECREATION DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Red Hawk Ridge Maintenance Equipment	$ 50,000	$ 427,722	$ 87,973	$ 112,496	$ -	$ 678,191
Parking Lot Improvement	120,000	-	-	-	-	120,000
Clubhouse Upgrades	54,778	-	-	-	46,491	101,269
Red Hawk Ridge Golf Carts	-	-	-	438,185	-	438,185
Total Expenditures by Year	**$ 224,778**	**$ 427,722**	**$ 87,973**	**$ 550,681**	**$ 46,491**	**$ 1,337,645**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Charges for Service	$ 224,778	$ 427,722	$ 87,973	$ 550,681	$ 46,491	$ 1,337,645
Total Funding Sources by Year	**$ 224,778**	**$ 427,722**	**$ 87,973**	**$ 550,681**	**$ 46,491**	**$ 1,337,645**

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.



Hole #10 at Red Hawk Ridge Golf Course

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Red Hawk Ridge Maintenance Equipment**

Project Number: 70-30
Contact: Bob Persichetti, Head Golf Professional
Department: Golf
Category: Equipment
Type: New
Useful Life: 5-10 Years

5 Year Historical Total	$ 103,483
2020-2024 Total	678,191
CIP Project Total (2015-2024):	**$ 781,674**

Description and Justification

The typical lifespan for golf course maintenance equipment that is used on a regular basis is approximately five years. Some less frequently used equipment can last more than 10 years. Since golf course conditions are the most important factor for most golfers, having reliable equipment that produces a quality product is critical for the long term health of the golf course fund. Having reliable maintenance equipment also allows staff to provide a consistent product with minimal risk of failure and/or catastrophic turf damage. Staff will continue to perform the necessary preventative maintenance to extend the life of the equipment as long as possible/feasible and will adjust replacement schedules accordingly.

2020 - The two existing Sandpro units are beyond the normal lifecycle and are in need of replacement in 2020. These units are utilized on a daily basis and must be reliable to provide a great golfing experience year around. A wheelgrinder will be purchased and replaced and plays an important role in maintaining clean and accurate cuts for all of the mowers used to maintain the golf course.

2021 - Mowers that are planned for replacement in 2021 are budgeted as a lease/purchase. Payments are planned to occur over a five year period and will result in the golf course owning the equipment upon completion of the payment period.

2022 - Irrigation system updates are planned to be purchased in 2022. Amounts and potential financing needs will be evaluated in the future as maintenance equipment nears the end of its useful life.

2023 - Carryall utility tractors are planned to be purchased in 2023.

Expenditures	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Equipment	$ 50,000	$ 427,722	$ 87,973	$ 112,496	$ -	$ 678,191
Total Expenditures	**$ 50,000**	**$ 427,722**	**$ 87,973**	**$ 112,496**	**$ -**	**$ 678,191**

Funding Sources	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Charges for Service	$ 50,000	$ 427,722	$ 87,973	$ 112,496	$ -	$ 678,191
Total Funding Sources	**$ 50,000**	**$ 427,722**	**$ 87,973**	**$ 112,496**	**$ -**	**$ 678,191**

Operational Impact

Savings are not anticipated as a result of replacing maintenance equipment at Red Hawk Ridge golf course. Failure to replace the current equipment will result in increase maintenance costs and possible reduction in revenue due to a lower level of service.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Parking Lot Improvement**

Project Number: 70-10
Contact: Bob Persichetti, Head Golf Professional
Department: Golf
Category: Building
Type: Repair
Useful Life: 5 - 10 Years

5 Year Historical Total	$ 575,751
2020-2024 Total	120,000
CIP Project Total (2015-2024):	**$ 695,751**

Description and Justification

The parking lot located at the clubhouse and maintenance facilities at Red Hawk Ridge golf course require regular upkeep. Continual repair of parking lot surfaces ensures a better experience for users and reduces the possibility of significant failures in the parking lot in the future. Planned expenditures accommodate an overlay process and replacement as needed. The actual scope, timing, and process for the parking lot repair will be determined in 2020 to ensure the most appropriate action is taken.

Expenditures	2020	2021	2022	2023	2024	Total
Club House Parking	$ 96,000	$ -	$ -	$ -	$ -	$ 96,000
Maintenance Shop Parking	24,000	-	-	-	-	24,000
Total Expenditures	**$ 120,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 120,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Charges for Service	$ 120,000	$ -	$ -	$ -	$ -	$ 120,000
Total Funding Sources	**$ 120,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 120,000**

Operational Impact

No additional revenues or expenditures are anticipated as a result of this project. Long term savings may be realized by undergoing this proactive repair to parking lots, but amounts are not quantifiable at this time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Clubhouse Upgrades**

Project Number: 70-20
Contact: Bob Persichetti, Head Golf Professional
Department: Golf
Category: Equipment
Type: Replacement
Useful Life: 10+ Years

5 Year Historical Total	$ 95,997
2020-2024 Total	101,269
CIP Project Total (2015-2024):	**$ 197,266**

Description and Justification

The golf pro shop has not been updated since its construction in 2001 and is dated and lacks functionality. In order to capitalize on sales opportunities and to provide a better experience to the golfers the following capital projects have been determined.

2020 - A remodel of the golf pro shop. This will include a new counter (with accessory displays) and new fixtures throughout the proshop.

2024 - The dining room furniture is scheduled to be replaced in addition to the chargrill in the kitchen.

Expenditures	2020	2021	2022	2023	2024	Total
Golf Proshop Fixtures/Clubhouse	$ 54,778	$ -	$ -	$ -	$ -	$ 54,778
Restaurant Furniture/Equipment	-	-	-	-	46,491	$ 46,491
Total Expenditures	**$ 54,778**	**$ -**	**$ -**	**$ -**	**$ 46,491**	**$ 101,269**

Funding Sources	2020	2021	2022	2023	2024	Total
Charges for Service	$ 54,778	$ -	$ -	$ -	$ 46,491	$ 101,269
Total Funding Sources	**$ 54,778**	**$ -**	**$ -**	**$ -**	**$ 46,491**	**$ 101,269**

Operational Impact

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

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Red Hawk Ridge Golf Carts**

Project Number: 70-30
Contact: Bob Persichetti, Head Golf Professional
Department: Golf
Category: Equipment
Type: New
Useful Life: 4 Years

5 Year Historical Total	$ 1,123,952
2020-2024 Total	438,185
CIP Project Total (2015-2024):	**$ 1,562,137**

Description and Justification

The existing cart fleet at Red Hawk Ridge is in its first year of service of the four year lease. In time the fleet will show signs of wear and tear due ongoing demands. In order to maintain high product quality and service levels, it is imperative that the golf cart fleet also maintains the same high standard that golfers have come to expect from Red Hawk Ridge. Golf carts are leased for four years, a new leased fleet was delivered in the spring of 2019 and will need to be replaced in the spring of 2023. More accurate cost projections and replacement specifics will be established in 2022.

Expenditures	2020	2021	2022	2023	2024	Total
Equipment	$ -	$ -	$ -	$ 438,185	$ -	$ 438,185
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ 438,185**	**$ -**	**$ 438,185**

Funding Sources	2020	2021	2022	2023	2024	Total
Charges for Service	$ -	$ -	$ -	$ 438,185	$ -	$ 438,185
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ 438,185**	**$ -**	**$ 438,185**

Operational Impact

Failure to replace the current fleet will result in increased maintenance costs and possible reduction in revenue due to a lower level of service.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

COMMUNITY CENTER FUND

PARKS & RECREATION DEPARTMENT

PROJECTS & FUNDING SOURCES BY DEPARTMENT

Project Expenditures	2020	2021	2022	2023	2024	Total
Fitness Equipment Replacement	$ -	$ 175,000	$ 350,000	$ -	$ -	$ 525,000
Parking Lot Improvement	225,000	-	-	-	-	225,000
Pool Upgrades	-	125,000	-	-	-	125,000
Recreation Center HVAC	-	-	-	-	160,000	160,000
Total Expenditures by Year	**$ 225,000**	**$ 300,000**	**$ 350,000**	**$ -**	**$ 160,000**	**$ 1,035,000**

Project Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ 225,000	$ 300,000	$ 350,000	$ -	$ 160,000	$ 1,035,000
Total Funding Sources by Year	**$ 225,000**	**$ 300,000**	**$ 350,000**	**$ -**	**$ 160,000**	**$ 1,035,000**

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.



Weight Room at the Recreation Center

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Fitness Equipment Replacement**

Project Number: Multiple
Contact: Mike Kilman, Recreation Manager
Department: Parks & Recreation Department
Category: Equipment
Type: Replacement
Useful Life: 3 Years

5 Year Historical Total	$ 950,482
2020-2024 Total	525,000
CIP Project Total (2015-2024):	**$ 1,475,482**

Description and Justification

The weight training machines were last purchased in 2013 and are scheduled to be replaced in 2021, which is when they reach their end of functional lifespan resulting in increased down time for repair and maintenance. In order to provide a safe and functional work out experience, it is important to move to an eight year purchasing cycle to avoid increased costs for labor to maintain aging equipment and prevent increased time equipment is out of order. An eight year cycle will also allow the Town to increase its purchasing power by trading in aging equipment before it has completely depreciated. Free weights are scheduled to be replaced in 2021 as they are reaching their end of functional lifespan as well.

In 2022, the cardio equipment will be three years old and industry standards recommend replacement every three years. Equipment replacement is necessary in order to maintain safety and functionality for Recreation Center users.

Expenditures	2020	2021	2022	2023	2024	Total
Free Weight/Circuit	$ -	$ 100,000	$ -	$ -	$ -	$ 100,000
Circuit Weight Equipment	-	75,000	-	-	-	75,000
Cardio and Spin Equipment Replacement	-	-	350,000	-	-	350,000
Total Expenditures	**$ -**	**$ 175,000**	**$ 350,000**	**$ -**	**$ -**	**$ 525,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ -	$ 175,000	$ 350,000	$ -	$ -	$ 525,000
Total Funding Sources	**$ -**	**$ 175,000**	**$ 350,000**	**$ -**	**$ -**	**$ 525,000**

Operational Impact

No future expenditures are anticipated as a result of this project. By keeping the amenities in good working condition and updating when necessary, these general improvements contribute to the overall facility and may attract additional patronage.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Parking Lot Improvement**

Project Number: 70-10
Contact: Mike Kilman, Recreation Manager
Department: Parks & Recreation Department
Category: Building
Type: Repair
Useful Life: 5 - 10 Years

5 Year Historical Total	$ 34,319
2020-2024 Total	225,000
CIP Project Total (2015-2024):	**$ 259,319**

Description and Justification

The parking lot located at the Castle Rock Recreation Center requires regular upkeep. Continual repair of parking lot surfaces ensures a better experience for users and reduces the possibility of significant failures in the parking lot in the future. Planned expenditures accommodate an overlay process and replacement as needed.

Expenditures	2020	2021	2022	2023	2024	Total
Recreation Center Parking Lot	$ 225,000	$ -	$ -	$ -	$ -	$ 225,000
Total Expenditures	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ 225,000	$ -	$ -	$ -	$ -	$ 225,000
Total Funding Sources	**$ 225,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 225,000**

Operational Impact

No additional revenues or expenditures are anticipated as a result of this project. Long term savings may be realized by undergoing this proactive repair to parking lots, but amounts are not quantifiable at this time.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Pool Upgrades**

Project Number: 40-30
Contact: Mike Kilman, Recreation Manager
Department: Parks & Recreation Department
Category: Equipment
Type: Replacement
Useful Life: 10+ Years

5 Year Historical Total	$	192,554
2020-2024 Total		125,000
CIP Project Total (2015-2024):	**$**	**317,554**

Description and Justification

The Town currently maintains multiple pools throughout the community. Staying up to date with the maintenance on these pools will improve safety and maintain the quality of each facility. The play structure will reach the end of its useful lifespan and will be replaced.

Expenditures	2020	2021	2022	2023	2024	Total
Play Structure in Rec Leisure Pool	$ -	$ 125,000	$ -	$ -	$ -	$ 125,000
Total Expenditures	**$ -**	**$ 125,000**	**$ -**	**$ -**	**$ -**	**$ 125,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ -	$ 125,000	$ -	$ -	$ -	$ 125,000
Total Funding Sources	**$ -**	**$ 125,000**	**$ -**	**$ -**	**$ -**	**$ 125,000**

Operational Impact

Replacing the play structure and other pool upgrades will result in reduced maintenance costs and operational impact that will not be known until project completion.

2020-2024 CAPITAL IMPROVEMENT PROGRAM

Project Name **Recreation Center HVAC**

Project Number: 70-30
Contact: Mike Kilman, Recreation Manager
Department: Parks & Recreation Department
Category: Equipment
Type: Replacement
Useful Life: 20 Years

5 Year Historical Total	$ 950,482
2020-2024 Total	160,000
CIP Project Total (2015-2024):	**$ 1,110,482**

Description and Justification

The roof top unit (RTU) HVAC units on the Recreation Center will be nearing the end of their functional lives by 2024, which can result in increased down time and emergency maintenance. In order to maintain quality for facility users, the Recreation Center's weight room and Panorama Hall HVAC are scheduled to be replaced in 2024.

Expenditures	2020	2021	2022	2023	2024	Total
Recreation Center RTU HVAC units	$ -	$ -	$ -	$ -	$ 160,000	$ 160,000
Total Expenditures	**$ -**	**$ -**	**$ -**	**$ -**	**$ 160,000**	**$ 160,000**

Funding Sources	2020	2021	2022	2023	2024	Total
Sales Tax	$ -	$ -	$ -	$ -	$ 160,000	$ 160,000
Total Funding Sources	**$ -**	**$ -**	**$ -**	**$ -**	**$ 160,000**	**$ 160,000**

Operational Impact

Replacing this unit with a newer, more energy efficient unit is expected to reduce costs for both maintenance and operations. Any savings will be determined after the new unit is in service and will be reflected in future budget information.