

Technology Replacement Plan

Capital Expenditures for FY2025

<u>Department/Division</u>	<u>Description</u>	<u>Price</u>
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Information Technology	Wireless Network Link	\$ 30,000
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The City of Billings currently has a Licensed Point-to-Point Wireless link from City Hall to the 4-Dances Tower. This serves as the main backhaul link connecting PW-Belknap facilities and the Water Reclamation Facility to the city network along with backup connection services for the Billings Operations Center facilities. The existing link is 9 years old and in need of replacement. The new wireless link to 4-Dances will be installed on the roof of the new City Hall (formally know as the Stillwater Building) and will provide the same critical network backhaul services.

Information Technology	Network Switches (2 @ \$6K each)	\$ 12,000
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These switches are a replacement for (1) Airport and (1) MET Transit switch. The existing switches are over 6 years old and in need of replacement to meet the current performance, reliability, and cybersecurity needs of these areas.

Library	Security Cameras	\$ 12,500
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The library security system includes 25 video cameras which are components of a system that is nearly ten years old. These cameras, along with 3 Digital Video Recording (DVR) units are due for replacement. Over the years, library staff has noticed blind spots in the video camera coverage, and the clarity of the video is not optimal for assessing security issues. A new system with updated cameras and capabilities will help the library ensure the safety of staff and public at the library.

Library	Network Firewall (2 @ \$9,500)	\$ 19,000
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The library firewall ensures network security by monitoring network traffic. This is extremely important for the library as it ensures that traffic on the public computers are not a cybersecurity threat. The library also relies on a second redundant firewall to serve as a backup in the event that the first firewall fails. Both of the library's existing firewalls are twelve years old, and two years away from manufacturer End of Life (EOL).

Library	Creston A/V System	\$ 5,800
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The audiovisual system in the community room of the library is original to the building. This room is in high demand for public, community partners, and city departments. The majority of programming and events taking place in this room include some form of audiovisual component. Pieces of the system are starting to fail, and the library is currently using temporary fixes to keep the system running for public use. A new system would better serve all the community groups that use the room and audiovisual system.

Parks and Recreation	Cannon Printer/Copier	\$ 5,000
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This copier is the main networked copier/printer for the Parks and Recreation Department Community Center Administrative offices. The current copier is 5 years old and has over 126,000 prints on it as of 10/15/23.

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<u>Department/Division</u>	<u>Description</u>	<u>Price</u>
Fire/9-1-1	9-1-1 Telephone System	\$ 400,000
<p>The Sentinel server hosts the Emergency Communications Centers 911 call handling software. This software, and the requisite server identified here, are required to receive and process the varying degree of both emergency and non-emergency calls the Center receives from the public and responders 24/7/365 and in excess of 700,000 times per year. The replacement of this server represents a continuity of assurance that emergency and on-emergency calls can be properly routed through existing software and handling platforms to be met with a physical dispatchers attention.</p>		
PW Administration	Remit+ Server	\$ 20,000
<p>This server hosts remittance software which enables the utility billing office to process checks received as payments applied to customer accounts within the CIS system. It is critical to maintain service levels.</p>		
PW Distribution & Collection	(Neptune) Belt Clip Transceivers (6)	\$ 18,000
<p>Replacing obsolete units with system compatible models. This equipment allows field representatives to access real time water meter information during site visits with customers. Improves customer service.</p>		
PW Distribution & Collection	(Neptune) Data Collector	\$ 8,500
<p>Unit is aging and requires updating. This equipment allows field representatives to obtain water meter reads while driving a vehicle. Improves the AMR efficiency by obtaining 100% of our customers water meter reads.</p>		
PW Distribution & Collection	GPS Equipment	\$ 49,350
<p>The GPS Equipment plays a critical role in the design phase of any project. This unit is used to mark everything in the construction area, including utilities, sidewalks, curbs, and property lines. Once an asset is recorded, the measurements are stored on the server, and can then be used to reliably find assets or utility lines. This is used in response to our 811 protocols, and finding features like bends in a water main, or valves and manholes that accidently get buried.</p>		
PW Distribution & Collection	Line Locator/ Tracer	\$ 5,500
<p>The equipment is aged and outdated. The Line Locator allows location of underground utilities. The transmitter is connected to a line and emits an energy signal that transmits through the utility line up to the surface. The receiver traces the signal and guides the user to where that underground utility is located. The new model will also be able to trace the signal emitted by the CCTV camera, which will help locate problem areas as well as locate with more accuracy.</p>		

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PW Engineering	GPS Equipment	\$ 49,350
<p>The GPS Equipment plays a critical role in the design phase of any project. This unit is used to mark everything in the construction area, including utilities, sidewalks, curbs, and property lines. All the acquired data is then transferred to a drafting program to accurately create plans for construction and verify as-built information on projects.</p>		
PW Street-Traffic	Sign Printer	\$37, 000
<p>The sign printer is a large-scale printer that has the ability to print on high prismatic (reflective) paper and has given us the ability to print signs cheaper and instantly to limit repair times and avoid keeping a staggering inventory for the 32,000 signs we are responsible for. This printer has also given us the ability to print low-cost signs for other divisions and departments across the city.</p>		
PW Street-Traffic	Signal Server	\$ 15,000
<p>The server runs our interactive platform for monitoring and ability to enhance traffic flows or gather data from our 115 signalized intersections. This server is of significant importance to the flow of traffic and the security of the City.</p>		
PW Water Quality WTP Laboratory	Ion Chromatographer	\$ 46,000
<p>The Ion Chromatography instrument monitors for inorganic contaminants in water treatment for process control, in the distribution system to monitor changing water quality and for wastewater.</p>		
PW Water Quality WRF Laboratory	Drying Oven	\$ 7,960
<p>This equipment enables staff to remove moisture from sample materials or equipment, ensuring the integrity of the sampling performed at the laboratory.</p>		
PW Water Quality WRF Laboratory	Muffle Furnace	\$ 7,695
<p>This equipment enables staff to isolate materials in sampling, ensuring the integrity of the sampling performed at the laboratory.</p>		
PW Water Quality WRF Laboratory	Glassware Washer	\$ 11,257
<p>This equipment enables staff to reuse vessels by keeping them clean and sanitized, ensuring the integrity of the sampling performed at the laboratory.</p>		
PW Water Quality - Electrical	Laptops (2 @ \$ 5,600 ea)	\$ 11,200
<p>These high-end laptops are configured to handle higher graphics and processing power needed by electrical staff to run detailed schematics and image data. They are ruggedized, water-resistant field laptops with solid state drives for the electrical crew to connect to plant equipment for configuration, troubleshooting and documentation.</p>		

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PW Water Quality – WRF & WTP	Servers (5)	\$ 113,500
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There are four virtual machine host servers (\$26,500) planned for next year to support the process control system at both plants (2 servers each plant). They provide for the plant data acquisition and archiving, graphical process displays, plant alarm system, operator's client management, and domain control. The fifth server (\$7500) is the water plant time sync server which coordinates all the connected network equipment so that plant process data has the same time stamp. This facilitates accurate data storage, retrieval and reporting for regulatory compliance.

PW Water Quality - WRF	Switches (2)	\$ 11,000
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These switches enable the exchange of data between devices within the City Hall Domain that supports plant processes and operations. They enable a variety of functions, including network management tools and applications, primary computer backup, and file sharing.

FY2025 TRP Capital Items Total: \$ 895,612