

Capital Improvements Program 2017-2023

City of Independence, Missouri



2017-2023

Capital Improvements Program



City of Independence, Missouri

March 2017

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Capital Improvements Program

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Capital Improvements Program 2017-2023

The Capital Improvements Program (CIP) is one of the primary programs that implements the long-range plan for city infrastructure development. Article 12, Section 2 of the City Charter lists one of the Planning Commission's duties as preparing and delivering to the City Manager a report of recommended public improvements by April 1st of each fiscal year. The Planning Commission's role in the CIP process is to provide a recommendation of public improvements to the City Manager that further implements the Vision, Values and Priorities of the community.

The intention of the report is to inform the public of plans for the future development or re-development of city infrastructure by identifying trends, recognizing issues, and providing an opportunity for discussion by the Planning Commission, the public and department staff regarding such projects.

The CIP sets forth proposed projects for constructing, maintaining, upgrading and replacing the City's physical infrastructure necessary for continued operations and providing City services during the next six fiscal years beginning in July 2017 through June 2023.

CIP infrastructure projects address one, or more of the three focus areas of infrastructure planning:

1. Future Needs—focus on new areas of development in Independence
2. Maintenance—focus on existing, stable areas of Independence
3. Revitalization— focus on existing, though less stable areas of Independence

The CIP is structured to include different topics including Energy, Parks, Recreation, Tourism, Sanitary Sewer, Streets & Sidewalks, Storm Water, and Water. The CIP program identifies 40 projects for fiscal year 2017-18 with descriptions and photos. The last segment lists 123 projects for the remaining five years.

Projects listed in the CIP report are not necessarily listed in priority order and are not be construed as a promise to any person or group that it will be completed within a specific time frame. The report is a planning document and not intended to be financially or operationally binding. Opportunities may emerge depending on constantly changing circumstances that will accelerate or delay the completion of any project.



Energy

- ***Vision:***

To provide reliable and affordable electric energy services in a customer-oriented and environmentally-responsible manner, while participating organizationally in the growth and enhancement of the community.
- ***Goals:***

To provide the necessary improvements to existing facilities and future additions to ensure efficient, environmentally safe and the most economical operation of the electric energy system.
- ***Priority Projects:***
 - ◇ Generation Master Plan Study (Budgeted)
 - ◇ AMI-Advanced Metering Infrastructure ('Blue Print' Approved)
 - ◇ Missouri City Decommissioning, Ownership Transfer (Pending)
 - ◇ 69 kV Transmission Line Rebuild from Substation E to Substation F
 - ◇ Substation I Transformers and Switchgear Replacement (Approved)
 - ◇ Substation K Transformers and Switchgear Replacement (Budgeted)
 - ◇ Primary System Operations Center Upgrade (Budgeted)
 - ◇ Blue Valley Units 1, 2, and 3 Generator Hydrogen Monitoring System Replacement/Upgrade (Budgeted, Insurance requirement)
 - ◇ Blue Valley Power Plant Ash Pond Closure (Approved, Environmental requirement)
 - ◇ Blue Valley Units 1, 2 and 3 Boiler Burner Management System Replacement/Upgrade



Generation Master Plan Study

Generation Master Plan Study

Non-Capital project, but a critical evaluation to determine the future of IPL's generating fleet. This Study responds to Goal number 2 by increasing operational efficiencies.



AMI-Advanced Metering Infrastructure

AMI-Advanced Metering Infrastructure

Installation of system-wide automated, digital smart meters including the associated telecommunication network and data management system. This is a joint effort with the Water and Water Pollution Control Divisions to replace electric and water meters. These meters will allow for staff reallocation by eliminating the need for field personnel to visually record usage, allow automated turn on/turn off, offer a wide array of billing and rate alternatives, automate collection of outage information, and provide for future technology changes in the industry.



Missouri City Decommissioning & Ownership Transfer

Missouri City Decommissioning & Ownership Transfer

Project provides removal of all IPL facilities on the site, remediation of known environmental concerns, transfers site ownership to a third party, and provides Liability insurance against future Environmental issues. Responds to Goal 2 (efficiencies). This site is not within City Limits.



69kV Transmission Line Rebuild

69kV Transmission Line Rebuild from Substation E to Substation F
(1014 S. McCoy Street to 3200 Weatherford Road)

69 kV Transmission Line Rebuild from Substation E to Substation F (Western Independence) – This project responds to CIP goal number 2 by maintaining equipment and includes design and construction rebuild of an existing 69 kV Transmission line. With the rebuild of the line, reliability of the transmission system will be improved.



Substation I and K Transformers and Switchgear Replacements

Substation I and K Transformers and Switchgear Replacements
(4380 South Kiger to Eastern Independence)

This project responds to CIP goal number 2 by maintaining equipment and includes the replacement of the existing 69 kV transformers and distribution switchgear including the associated relay equipment in order to improve reliability of the distribution system.

Primary Operations Center Upgrade
(21500 E. Truman Road)

This project responds to CIP goal number 3 by updating and modernizing the Primary System Operations Center within the Physical Security Perimeter. The System Operations Center monitors the Transmission, Substation, Generation assets and Distribution Systems on a real-time basis as well as monitoring Transmission ties with IPL's interconnected Utilities. The Operations Center was installed over 25 years ago, since then the NERC Standards have evolved, which place more emphasis on tracking real-time system parameters, situational awareness as well as physical security of key facilities. The update will require designing a layout that can accommodate additional personnel for the future, incorporate features that streamline the systems to make it more efficient and user friendly.



Operations Center Upgrade



Blue Valley Generator Hydrogen System

Blue Valley Generator Hydrogen System (21500 E. Truman Road)

This project responds to CIP goal number 2 by maintaining equipment and includes engineering, purchase, installation and commissioning of new Generator Hydrogen Monitoring System to replace the current obsolete and unsupported Generator Systems that have been maintained since original installation. The new systems for each unit will be in compliance with National Fire Protection Association standards. The safety, reliability and availability of these generating units will be maintained and improved with this project.



Blue Valley Ash Pond Closure

Blue Valley Ash Pond Closure (21500 E. Truman Road)

This project responds to CIP goal number 3 by administering property maintenance compliance, infrastructure construction and repairs and includes engineering and construction necessary for closure of the three (3) Blue Valley Power Plant Ash Ponds in compliance with the Coal Combustion Residual rule that became effective in April, 2015. The ponds are no longer required since coal is no longer used as fuel at the Blue Valley Power Plant. Also included in this project is the installation of a post-closure groundwater monitoring network of wells surrounding the ponds. This rule requires closure of Inactive Status Coal Ash ponds by April, 2018.



Blue Valley Burner Management System Replacement

Blue Valley Burner Management System Replacement.

Blue Valley Units 1, 2 and 3 Boiler Burner Management System Replacement/ Upgrade (21500 E. Truman Road) - This project responds to CIP goal number 2 by maintaining equipment. The new systems are required for compliance with National Fire Protection Association standards and for State certification to operate the boilers.

Project Summary 2018-2023

Project Name: Substation E Switchgear Replacement
Location: Western Independence

Project Name: New 161/69/13 kV Substation "S"
Location: Eastern Independence

Project Name: New 161 kV Transmission Line from Substation A to new Substation S & associated Substation A Line Terminal Modifications
Location: Eastern Independence

Project Name: New 161 kV Transmission Line from new Substation S to Blue Mills Junction
Location: Eastern Independence

Project Name: New 161 kV Transmission Line from Substation N to Substation R and associated Substation Improvements
Location: Southern Independence

Project Name: New 161/13 kV Substation T
Location: Eastern Independence

Project Name: New 13 kV distribution feeder lines and ties associated with Substation S
Location: Eastern Independence

Project Name: Blue Valley Unit #3 Turbine Inspection/Repair
Location: Eastern Independence

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Parks/ Recreation/ Tourism

- *Vision:*

To provide quality leisure, recreational and educational opportunities that elevate the quality of life for residents and enhance visitor experience.

- *Goals*

To provide the necessary improvements to existing spaces and facilities and plan for future additions to ensure that the structures, grounds and amenities effectively and efficiently support the delivery of quality parks, recreation and tourism related programming and services.

- *Priority Projects*

- ◇ Repair the Basketball Courts at Benton Park
- ◇ Renovate the Backstop at Blackburn Park
- ◇ Repair the Basketball Courts at Bundschu Park
- ◇ Repair the Parking Lot at Bundschu Park
- ◇ Repair the Lake Overflow System at George Owens Nature Park
- ◇ Replace the Picnic Shelter at George Owens Nature Park
- ◇ Re-build the Filtration System at McCoy Spraygrounds
- ◇ Re-build the Filtration System at Rotary Spraygrounds



Benton Park Basketball Courts

Benton Park Basketball Courts

The current condition of the courts necessitates repairs to the surface, the application of a new color coat and repainting the lines on these courts.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



Blackburn Park Backstop

Blackburn Park Backstop

The current condition of the baseball/softball backstop necessitates the removal of the existing fence fabric and replacing it with new backstop fencing.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



Bundschu Park Basketball Courts

Bundschu Park Basketball Courts

The current condition of the courts necessitates repairs to the surface, the application of a new color coat and repainting the lines on all courts.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



Bundschu Park Parking Lot

Bundschu Park Parking Lot

The current condition of the parking lot necessitates surface crack repairs, filling a few pot-holes, applying a sealer coat and repainting the parking space lines.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



George Owens Lake Overflow System

George Owens Lake Overflow System

The current condition of the Overflow System located in Lake Loraine necessitates replacement of the stand pipe, a section of the outflow pipe and reinforcement of a section of the surface outflow area.

This project was identified as a need during recent park inspections.



George Owens Park Shelter

George Owens Park Shelter

The current condition of the Picnic Shelter located at George Owens Nature Park necessitates the removal of the existing shelter and replacing it with a new structure.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



McCoy Park Sprayground Filtration

McCoy Park Sprayground Filtration

Due to the age of the filtration system currently in use at the McCoy Sprayground, several components of the system are due for replacement to ensure proper and safe operation well into the future.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.



Rotary Park Sprayground Filtration

Rotary Park Sprayground Filtration

Due to the age of the filtration system currently in use at the Rotary Sprayground, several components of the system are due for replacement to ensure proper and safe operation well into the future.

This project has been identified as a need in the Parks and Recreation Trails Master Plan.

Project Summary 2018-2023

Project Name: Beckett Park Trail Overlay
Location: 2701 S. Cherokee St.

Project Name: Beckett Park Playground Replacement
Location: 2701 S. Cherokee St.

Project Name: Benton Park Ballfield Renovation
Location: 707 S. Crane St.

Project Name: Benton Park Trail Overlay
Location: 707 S. Crane St.

Project Name: Benton Park Perimeter Fencing Replacement
Location: 707 S. Crane St.

Project Name: Benton Park Playground Replacement
Location: 707 S. Crane St.

Project Name: Blackburn Park Tennis Court Repair
Location: 17302 E. RD Mize Rd.

Project Name: Blackburn Park Sidewalk Replacement
Location: 17302 E. RD Mize Rd.

Project Name: Blackburn Park Playing Field Renovation
Location: 17302 E. RD Mize Rd.

Project Name: Bund-Jack Park Property Fence Line Replacement
Location: 1001 N. Jackson Dr.

Project Name: Bund-Jack Park Playground Replacement
Location: 1001 N. Jackson Dr.

Project Name: Bundschu Park Trail Overlay
Location: 11400 E. 9th St. S

Project Name: Carriage Hills Park Playground Replacement
Location: 16841 E. 41st St. S

Project Name: Choplin Hood Park Renovation and Expansion
Location: 15919 E. Cogan Ln.

Project Summary 2018-2023

Project Name: Clothier Park Trail Overlay
Location: 17201 E. Medical Center Parkway

Project Name: Country Club Park Playground Replacement
Location: 2930 S. Norton Ave.

Project Name: Country Club Park Trail Overlay
Location: 2930 S. Norton Ave.

Project Name: Dickinson Park Playground Replacement
Location: 1700 Dickinson Rd.

Project Name: Dickinson Park Parking Lot Repair
Location: 1700 Dickinson Rd.

Project Name: Fairmount Park Playground Replacement
Location: 300 N. Home Ave.

Project Name: Fairmount Park Trail Overlay
Location: 300 N. Home Ave.

Project Name: Fairmount Park Playground Parking Installation
Location: 300 N. Home Ave.

Project Name: Fairmount Park Shelter Replacement
Location: 300 N. Home Ave.

Project Name: George Owens Nature Park ADA Parking Installation
Location: 1601 S. Speck Rd.

Project Name: George Owens Nature Park Trail Overlay and Walking Bridges Replacement
Location: 1601 S. Speck Rd.

Project Name: Glendale Park Playground Replacement
Location: 16010 E. Crackerneck Rd.

Project Name: Glendale Park Trail Overlay
Location: 16010 E. Crackerneck Rd.

Project Name: Glendale Park Parking Lot Repair
Location: 1601 E. Crackerneck Rd.

Project Summary 2018-2023

Project Name: Hill Park Trail Overlay
Location: 2201 S. Maywood Ave.

Project Name: Hill Park Parking Lot Repair
Location: 2201 S. Maywood Ave.

Project Name: Hill Park Playground Replacement
Location: 2201 S. Maywood Ave.

Project Name: Historic Log Courthouse Window Replacement
Location: 107 W Kansas Ave

Project Name: Independence Athletic Complex Trail Overlay
Location: 17800 E. Salisbury Rd.

Project Name: Independence Athletic Complex Parking Lot Repair
Location: 17800 E. Salisbury Rd.

Project Name: McCoy Park Sprayground Re-theming
Location: 800 N. Bess Truman Pkwy.

Project Name: McCoy Park Parking Lot Repair
Location: 800 N. Bess Truman Pkwy.

Project Name: McCoy Park Trail Overlay
Location: 800 N. Bess Truman Pkwy.

Project Name: McCoy Park Tennis Court Repair
Location: 800 N. Bess Truman Pkwy.

Project Name: Mill Creek Park Dugout Renovation
Location: 1717 N. River Blvd.

Project Name: Mill Creek Park Playground Replacement
Location: 1717 N. River Blvd.

Project Name: Mill Creek Park Trail Overlay
Location: 1717 N. River Blvd.

Project Name: Mill Creek Park Tennis Court Repair
Location: 1717 N. River Blvd.

Project Name: National Frontier Trails Museum Library Stabilization (northeast corner)
Location: 318 W. Pacific Ave.

Project Summary 2018-2023

Project Name: Old Mill Office Renovation
Location: 318 W. Pacific Ave.

Project Name: Old Water Tower Stabilization or Removal
Location: 318 W. Pacific Ave.

Project Name: Phil Roberts Park Trail Overlay
Location: 3250 S. Blue Ridge Blvd.

Project Name: Phil Roberts Park Parking Lot Repair
Location: 3250 S. Blue Ridge Blvd.

Project Name: Rotary Park Playground Replacement
Location: 10615 E. 24th St. S

Project Name: Rotary Park Trail Overlay
Location: 10615 E. 24th St. S

Project Name: Santa Fe Park Tennis Court Repair
Location: 2731 S. Santa Fe Rd.

Project Name: Santa Fe Park Playground Replacement
Location: 2731 S. Santa Fe Rd.

Project Name: Santa Fe Park Ballfield Renovation Project
Location: 2731 S. Santa Fe Rd.

Project Name: Santa Fe Park Trail Overlay
Location: 2731 S. Santa Fe Rd.

Project Name: Santa Fe Park Parking Lot Repair
Location: 2731 S. Santa Fe Rd.

Project Name: Spring Cabin Relocation
Location: 201 N. Dodgion Ave.

Project Name: St. Clair Park Trail Overlay
Location: 8851 E. US 24 Hwy.

Project Name: Sycamore Hills Park Playground Replacement
Location: 15208 E. 39th St. S

Project Name: Sycamore Hills Park Trail Overlay
Location: 15208 E. 39th St. S

Project Summary 2018-2023

Project Name: Tourism Wayfinding Signage (new installation)
Location: Citywide

Project Name: Vaile Mansion Stone Windowsill Repair
Location: 1500 N. Liberty St.

Project Name: Waterfall Park Trail Overlay
Location: 4501 S. Bass Pro Dr.

Project Name: Waterfall Park Parking Lot Repair
Location: 4501 S. Bass Pro Dr.

Project Name: Waterfall Park Accessible Dock Installation
Location: 4501 S. Bass Pro Dr.

Project Name: Young Park Basketball Court Repair
Location: 405 N. Dodgion Ave.

Project Name: Young Park Playground Replacement
Location: 405 N. Dodgion Ave.

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Sanitary Sewer

- ***Vision:***

To deliver high-quality, reliable sanitary sewer and wastewater treatment services to the customers of the City of Independence.

- ***Goal:***

The Water Pollution Control Department's Sanitary Sewer Management goal is to promptly, professionally and properly address customer's sewer issues; to protect public health; environmental sustainability; and comply with state and federal regulatory requirements.

- ***Priority Projects:***

- ◇ Rock Creek Treatment Facilities SCADA Software Upgrade
- ◇ Rock Creek Treatment Facilities Water Utilities Improvement Project
- ◇ Saddle Ridge Villas Pump Station Improvement Project
- ◇ Arrowhead Project
- ◇ 28th & Norwood
- ◇ 16th & Scott



Rock Creek Treatment Facilities SCADA Software Upgrade

Rock Creek Treatment Facilities SCADA Software Upgrade

The Rock Creek Treatment Facilities Supervisory Control & Data Acquisition (SCADA) system is an outdated system of hardware and software. In addition to increasing difficulty of maintaining due to scarcity of replacement parts, the system is one of patches and updates over the course of 10 years and a new SCADA system is required to resolve these issues and provide additional features. A new SCADA system can be tailored to provide full control and access from various processes throughout the treatment plant, expand data storage capacity, improve data protection and backup, enhance alarms and security measures, improve functionality, provide redundancy and optimize treatment plant operations.



Rock Creek Treatment Facilities Water Utilities Improvement Project

Rock Creek Treatment Facilities Water Utilities Improvement Project

This project replaces approximately 7,000 linear feet of potable and non-potable water lines throughout the 45 year old Rock Creek Treatment facility. Treated wastewater is piped and used throughout the plant for seal water for pumps, solids handling processes and general cleaning of equipment and structures. Potable water is delivered throughout the plant buildings for certain pumping needs and personal hygiene.



Saddle Ridge Villas Pump Station Improvement Project

Saddle Ridge Villas Pump Station Improvement Project

This project provides upgrades to equipment and controls for the Saddle Ridge Villas Pump Station. It will also provide installation of a covered structure for protection from elements.



Arrowhead Project

Arrowhead Project

This project will be designed and constructed in fiscal year 2017-2018. An embankment on the east side of the Arrowhead Shopping Center is sloughing off causing a sanitary sewer main to be crushed. This project will relocate the main outside of the embankment.



28th & Norwood

28th & Norwood

Design of this project is to be completed in fiscal year 2017-2018. This project will alleviate capacity issues in the area of 2800 Norwood and will move a main from under a house to the City's right of way. It will also make sanitary sewer available to citizens that are currently on septic systems.



16th & Scott

16th & Scott

This project is to be designed in fiscal year 2017-2018 and constructed in 2018-2019. The project will relocate a sanitary sewer main from under existing houses and into the City's right of way.

2017-2018

Sanitary Sewer

Project Summary 2018-2023

Project Name: Rock Creek Treatment Facilities Building Heat Boiler Replacement Project
Location: 9600 Norledge Ave. in the Rock Creek Watershed

Project Name: Rock Creek Pump Station Raw Pumps & Motors Replacement
Location: 400 N Kentucky Road in the Rock Creek Watershed

Project Name: Rock Creek Treatment Facilities Wet Air Oxidation Grinder Replacement
Location: 9600 Norledge Ave. in the Rock Creek Watershed

Project Name: Sugar Creek Pump Station Elevator Replacement
Location: 10600 Hayward in the Rock Creek Watershed

Project Name: Sugar Creek Pump Station Automatic Bar Screen Replacement
Location: 10600 Hayward in the Rock Creek Watershed

Project Name: Rock Creek Treatment Facilities Dissolved Air Flotation Tank Replacement
Location: 9600 Norledge Ave. in the Rock Creek Watershed

Project Name: Rock Creek Treatment Facilities Primary Clarifier Bull Gears Replacement
Location: 9600 Norledge Ave. in the Rock Creek Watershed

Project Name: Rock Creek Effluent Flowmeter/Sampling Structure Improvement
Location: 9600 Norledge Ave. in the Rock Creek Watershed

Project Name: Trenchless Technology
Location: City-wide locations throughout Independence

Project Name: Sanitary Sewer Evaluation Surveys
Location: City-wide locations throughout Independence

Project Name: Arlington Neighborhood Sanitary Sewer Improvement Project
Location: Brookside Avenue from East 14th Street to East 17th Street

Project Name: 25th Street Improvements
Location: Near the intersection of 25th and Scott Street

Project Name: Fairmount Highlands Neighborhood Improvement Project
Location: 9th to 11th Street and Vermont to Scott Street



Streets & Sidewalks

- ***Vision:***
 - To provide the citizens of Independence with a safe and efficient transportation system.

 - ***Goals:***
 - ◇ Build smooth, long lasting streets
 - ◇ Projects that reduce travel delays
 - ◇ Improve traffic safety
 - ◇ Integrate a complete streets system for multiple modes of travel

 - ***Priority Projects:***
 - ◇ Street Overlay Program
 - ◇ Sidewalks To Schools and Parks
 - ◇ Chrysler Avenue Complete Streets
 - ◇ 39th Street and Noland Road Intersection Improvements
 - ◇ 2017 Intersection Improvements
 - ◇ 2017 Alley Rehabilitation
-



Street Overlay Program—City Wide

Street Overlay Program

The annual asphalt overlay program consists of milling and resurfacing approximately 40 miles of streets throughout the City. The actual number of miles depends on the estimated cost and projected revenue available for each budget year. Street sections are inspected throughout the entire City each year and are placed on the list of locations to be resurfaced according to the condition of the pavement at the time of inspection. The goal of this program is to provide smoother streets for travel and to reduce the required maintenance costs. The contract is funded through the Street Sales Tax Program. The Street Overlay Program supports CIP goal number 2 by maintaining existing infrastruc-



Sidewalks to Schools and Parks

Sidewalks to Schools and Parks

This project is an ongoing program to construct new sidewalks near schools and parks and is funded through the Street Sales Tax Program. The next Sidewalks to Parks location is near Glendale Park, Rotary Park, Fairmount Park and the Falls Park. The next Sidewalks to Schools project is at Korte Elementary School, Three Trails School and a second Phase for Nativity School. The Sidewalks program addresses CIP goal numbers 2 and 3 by maintaining infrastructure and contributing to neighborhood revitalization efforts.



Crysler Avenue Complete Streets Project

Crysler Avenue Complete Streets

This project will add pedestrian push buttons, countdown signal heads and ADA sidewalk/ramps at several intersections along the Crysler Avenue corridor. Specific cross streets include 40 Highway, 43rd Street, 42nd Street, 41st Terrace, Interstate 70, 41st Street, 39th Street, 35th Street, 23rd Street, Turner Avenue, Lexington Avenue, Walnut Street and River Boulevard. The Crysler Ave. Complete Streets project addresses CIP goal numbers 2 and 3 by maintaining infrastructure and contributing to neighborhood revitalization efforts.



39th Street and Noland Road Intersection

39th Street and Noland Road Intersection Improvements

This project will add a northbound right-turn lane from Noland Road onto 39th Street, improve turning radii at all quadrants of the intersection, add ADA sidewalks and curb ramps, and upgrade traffic signal equipment including addition of pedestrian countdown signals. These intersection improvements address CIP goal numbers 2 and 3 by maintaining infrastructure and contributing to neighborhood revitalization efforts.



Intersection Improvements

2017 Intersection Improvements

Intersections with an existing concrete surface will be reconstructed and repaved with high strength asphalt at seven locations throughout the City. The intersections include Sterling and Winner, Sterling and Truman, 39th and Blue Ridge, Lee's Summit Road and 23rd Street, Lee's Summit Road and 24 Highway, Truman and Liberty and Noland Road and Walnut. The Intersection Improvement project supports CIP goal number 2 and 3 by maintaining infrastructure and contributing to neighborhood revitalization efforts.



Alley Rehabilitation

2017 Alley Rehabilitation

Approximately 0.8 miles of alleys at multiple locations throughout the City will be rehabilitated to address deteriorated conditions of the alley surface as well as other necessary improvements to the alley. The actual locations will be depends on the estimate of cost and projected revenue available. Alleys will be inspected throughout the City and included on the list to be rehabilitated depending on the condition at the time of inspection. The contract is funded through the Street Sales Tax Program. The Alley Rehabilitation project supports CIP goal number 2 by maintaining existing infrastructure.

Project Summary 2018-2023

Project Name: Noland Road and Fair Street Improvements
Location: S. Noland Road and E. Fair Street

Project Name: Bundschu Road
Location: E. Susquehanna Drive to N. Jackson Drive

Project Name: 35th Street and Phelps Road Intersection Improvements
Location: E. 35th Street S. and S. Phelps Road

Project Name: 32nd Street
Location: S. M-291 Hwy to Van Hook Park

Project Name: Englewood Sidewalk Improvements, Phase 3
Location: Winner Road between Sterling Avenue and Northern Avenue

Project Name: US 24 Highway Complete Streets & Trail Bridge
Location: MO 291 Highway to Lee's Summit Road

Project Name: US 40 Highway Complete Streets
Location: Blue Ridge Cutoff to Sterling



Stormwater

- ***Vision:***

To provide the residents of the City of Independence with a safe and reliable storm drainage system that is effective, manageable, environmentally responsible, and considerate of the surroundings.

- ***Goals:***

The Water Pollution Control Department's Stormwater Management goal is to properly address and mitigate drainage issues and concerns.

- ***Priority Projects:***

- ◇ Blue Lawn Stormwater Project
- ◇ Sugar Creek Neighborhood Drainage Projects
- ◇ Crescent Meadows Stormwater Project



Blue Lawn Stormwater Project

Blue Lawn Stormwater Project

This project will address neighborhood-wide drainage issues in the vicinity of East 31st Street to East 32nd Street of Arlington Avenue in the Rock Creek Watershed. Design was completed in fiscal year 2016-2017 and construction will be completed in 2017-2018. The Blue Lawn project addresses goal number 2 by maintaining existing infrastructure.



Sugar Creek Neighborhood Drainage Projects

Sugar Creek Neighborhood Drainage Projects

This project consists of four small drainage projects located in neighborhoods throughout the Sugar Creek Watershed. This project is currently being designed and will be constructed in fiscal year 2017-2018. This project addresses goal number 2 by maintaining existing infrastructure. Project locations include the following areas:

- 1206 Harris
- 15th & Sterling
- Waldo Street from Delaware to Union
- 11225 15th Street S



Crescent Meadows Stormwater Project

Crescent Meadows Stormwater Project

This project will address surface drainage issues in Crescent Meadows along S Crescent Avenue and S Arlington Avenue in the vicinity of E 25th St. This project addresses goal number 2 by maintaining existing infrastructure.

Project Summary 2018-2023

- Project Name: Detention Basin Re-vegetation
Location: City-owned facilities located throughout the City
- Project Name: Trenchless Technology
Location: City-wide locations
- Project Name: Bundschu Regional Stormwater Detention Basin
Location: Bundschu Road west of Ponca in the Bundschu Watershed
- Project Name: Rockwood Storm Drainage Improvements
Location: Between 25th Terrace and 28th Terrace and between Hardy Ave. and Northern Ave.
- Project Name: Ellison Way Stormwater Project
Location: S Ellison Way north of E 23rd Street S in the Springbranch Watershed
- Project Name: Pearl to Crane Street at Hereford Avenue Drainage Improvements Phases 1 & 2
Location: S Pearl Street to S Crane Street at E Hereford Avenue in the Crackerneck Watershed
- Project Name: Ralston Storm Drainage Improvements
Location: S Ralston Ave to S Northern Blvd and E 15th St south to E Winner Rd in the Rock Creek Watershed
- Project Name: Wedgewood Neighborhood Drainage Improvements
Location: Chrysler Ave and 46th Street to Willis Avenue in the Chapel Road Watershed
- Project Name: 8th Street Neighborhood Storm Drainage Improvements
Location: 8th Street west of Sterling

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Water

- ***Vision:***

To provide to the citizens of Independence and wholesale customers a plentiful supply of safe drinking water that meets or exceeds all federal and state regulations at a reasonable cost.

- ***Goals:***

- ◇ Ensure that our facilities and infrastructure are well maintained and operating efficiently at all times.
- ◇ Plan, construct and operate our water system in a way that will accommodate and provide for future development.

- ***Priority Projects:***

- ◇ 23rd St. Main Replacement
- ◇ Plant Discharge Outfall Improvements
- ◇ Lime Slaker No. 3
- ◇ Van Horn Reservoir Improvements
- ◇ Hardy Ave. Main Replacement (Westport Rd to 28th St.)
- ◇ Production Maintenance Building
- ◇ Lighting Improvements



23rd St. Main Replacement

23rd St. Main Replacement

This project will replace approximately 1,900 feet of 12" water transmission main along 23rd St. between Hub Dr. and Trail Ridge. This section of main was installed in 1952 and has experienced several large breaks causing costly repairs and traffic interruptions along 23rd St. The new main will provide a more reliable source of water for the customers in the area. This project addresses the improvement of existing infrastructure.



Plant Discharge Outfall Improvements

Plant Discharge Outfall Improvements

The Courtney Bend Plant currently has three outfalls which receive residuals from the treatment processes at the plant. This project will address current issues with these outfalls and provide a more reliable system to manage the residuals from the plant. This project addresses the maintenance and improvement of existing infrastructure.



Lime Slaker No. 3

Lime Slaker No. 3

The Courtney Bend Water Plant utilizes lime to soften the ground water in its purification process. Currently the plant utilizes seven different lime slakers to provide an uninterrupted flow of slaked lime to the treatment basins. This project will provide a new Slaker No. 3 to help ensure that this process will remain uninterrupted. This project addresses the improvement of existing infrastructure.



Van Horn Reservoir Improvements

Van Horn Reservoir Improvements

This project provides for improvements to the Van Horn Reservoir. This Reservoir provides 2,000,000 gallons of storage capacity for the distribution system and was constructed in 1925. The reservoir is in need of several upgrades including a new roof and piping modifications which this project will provide. This project addresses the maintenance and improvement of existing infrastructure.



Hardy Ave. 12" Main

***Hardy Ave. 12" Main
(Westport Rd. to 28th St.)***

This project will replace approximately 2,600 feet of 12" water transmission main along Hardy Ave. between Westport to 28th St. This section of main installed in 1955 has experienced several large breaks causing costly repairs and operational issues in areas of the system during these breaks. The new main will reduce the number of breaks and provide a more reliable source of water for the customers in the surrounding area. This project addresses the improvement of existing infrastructure.



Production Maintenance Building

Production Maintenance Building

The original maintenance building at the Courtney Bend Plant, constructed in 1955, requires replacement. Plant expansion has placed treatment basins and plant utilities in close proximity to the building, elevation changes of the surrounding roadways is causing drainage problems, and the building's age and use over the years has resulted in considerable wear & tear. In addition, present day maintenance operations have expanded and changed considerably from the time the building was originally constructed. This project will improve the condition of infrastructure.



Lighting Improvements

Lighting Improvements

This project would allow for a complete renovation of the lighting at the Courtney Bend plant to modern high efficiency LED lighting, including 24,000 Watts of High Mast Lighting fixtures. LED lighting will decrease energy consumption and cost for the Water Department. In addition, Kansas City Power & Light company rebate programs are currently available that will decrease the cost of the project considerably.

Project Summary 2018-2023

Project Name: Main Replacement
Location: Throughout the Distribution System

Project Name: Security Upgrades
Location: Throughout the Water Department Facilities

Project Name: Treatment Plant Discharge Engineering
Location: Courtney Bend Water Plant

Program Name: Future Production Wells
Location: Courtney Bend Water Plant

Program Name: Lagoon Cleanout
Location: Courtney Bend Water Plant

Project Name: Distribution System Improvements
Location: Throughout Water Department Facilities

Project Name: Filter Backwash
Location: Courtney Bend Water Plant

Project Name: SB Drive Improvements
Location: Courtney Bend Water Plant

Project Name: Courtney Bend Basin Catwalk Improvements
Location: Courtney Bend Water Plant

Project Name: Lime Silo
Location: Courtney Bend Water Plant

Project Name: New Financial Management System
Location: Throughout Water Department Facilities

Project Name: Geographical Information System
Location: Throughout Water Department Facilities

Project Name: Filter Backwash Basin
Location: Courtney Bend Water Plant

Program Name: HSPS HVAC Improvements
Location: Throughout City Facilities

Program Name: Ellison Way Main Replacement
Location: Ellison Way from 23rd St to Queens Ridge Dr.

Program Name: 39th St. Reservoir
Location: 39th St. Reservoir

2018-2023

Water

Project Summary 2018-2023

Program Name: High Service Pump No. 6
Location: Courtney Bend Water Plant

Program Name: Treatment Plant Discharge Handling
Location: Courtney Bend Water Plant

2018-2023

Water

Capital Improvements Projects 2017-2023

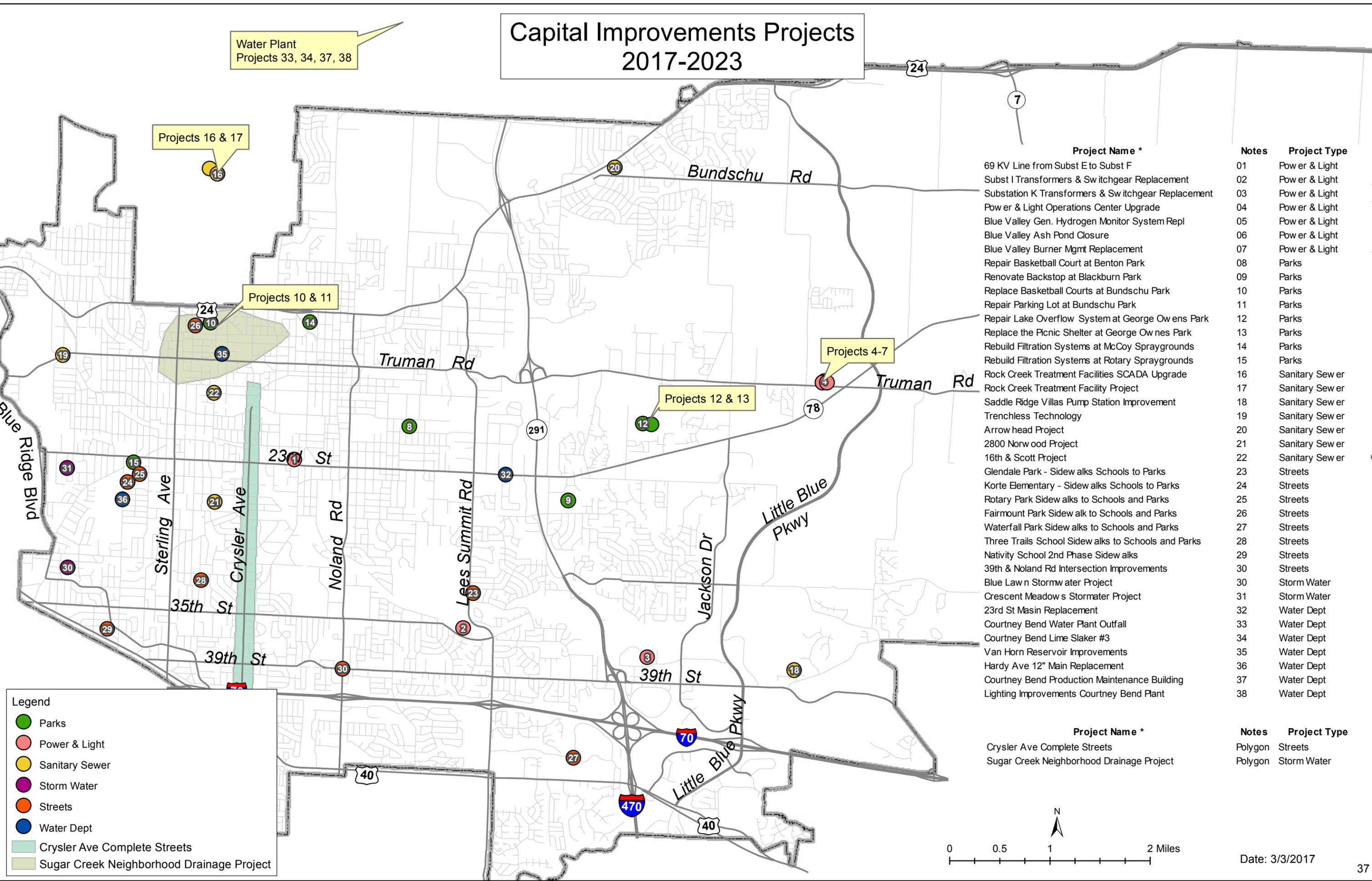
Water Plant
Projects 33, 34, 37, 38

Projects 16 & 17

Projects 10 & 11

Projects 4-7

Projects 12 & 13

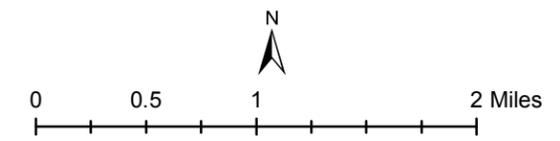


Legend

- Parks
- Power & Light
- Sanitary Sewer
- Storm Water
- Streets
- Water Dept
- Chrysler Ave Complete Streets
- Sugar Creek Neighborhood Drainage Project

Project Name *	Notes	Project Type
69 KV Line from Subst E to Subst F	01	Power & Light
Subst I Transformers & Switchgear Replacement	02	Power & Light
Substation K Transformers & Switchgear Replacement	03	Power & Light
Power & Light Operations Center Upgrade	04	Power & Light
Blue Valley Gen. Hydrogen Monitor System Repl	05	Power & Light
Blue Valley Ash Pond Closure	06	Power & Light
Blue Valley Burner Mgmt Replacement	07	Power & Light
Repair Basketball Court at Benton Park	08	Parks
Renovate Backstop at Blackburn Park	09	Parks
Replace Basketball Courts at Bundschu Park	10	Parks
Repair Parking Lot at Bundschu Park	11	Parks
Repair Lake Overflow System at George Owens Park	12	Parks
Replace the Picnic Shelter at George Owens Park	13	Parks
Rebuild Filtration Systems at McCoy Spraygrounds	14	Parks
Rebuild Filtration Systems at Rotary Spraygrounds	15	Parks
Rock Creek Treatment Facilities SCADA Upgrade	16	Sanitary Sewer
Rock Creek Treatment Facility Project	17	Sanitary Sewer
Saddle Ridge Villas Pump Station Improvement	18	Sanitary Sewer
Trenchless Technology	19	Sanitary Sewer
Arrow head Project	20	Sanitary Sewer
2800 Norwood Project	21	Sanitary Sewer
16th & Scott Project	22	Sanitary Sewer
Glendale Park - Sidewalks Schools to Parks	23	Streets
Korte Elementary - Sidewalks Schools to Parks	24	Streets
Rotary Park Sidewalks to Schools and Parks	25	Streets
Fairmount Park Sidewalk to Schools and Parks	26	Streets
Waterfall Park Sidewalks to Schools and Parks	27	Streets
Three Trails School Sidewalks to Schools and Parks	28	Streets
Nativity School 2nd Phase Sidewalks	29	Streets
39th & Noland Rd Intersection Improvements	30	Streets
Blue Lawn Stormwater Project	30	Storm Water
Crescent Meadows Stormwater Project	31	Storm Water
23rd St Masin Replacement	32	Water Dept
Courtney Bend Water Plant Outfall	33	Water Dept
Courtney Bend Lime Slaker #3	34	Water Dept
Van Horn Reservoir Improvements	35	Water Dept
Hardy Ave 12" Main Replacement	36	Water Dept
Courtney Bend Production Maintenance Building	37	Water Dept
Lighting Improvements Courtney Bend Plant	38	Water Dept

Project Name *	Notes	Project Type
Chrysler Ave Complete Streets	Polygon	Streets
Sugar Creek Neighborhood Drainage Project	Polygon	Storm Water



Date: 3/3/2017

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