

AURORA WATER CAPITAL PROJECTS UPDATE

JULY 2019

PROJECTS UNDER CONSTRUCTION

Listed by Ward(s) in which construction is occurring. "All" indicates the project benefits the entire system specified and work may be occurring outside the city limits.

	WARD	PROJECT NAME	DESCRIPTION	LOCATION	SYSTEM(S)	STATUS
1	I	Lower Westerly Creek Flood Control Improvements at Montview Boulevard	The Westerly Creek Flood Control Improvements project will replace two existing box culverts and construct a 60' clear-span bridge, while improving approximately 2,500 linear feet of channel upstream and downstream of Montview Boulevard.	The focus of the project is at Montview Boulevard, between Chester and Beeler Streets.	Stormwater	The draft LOMR has been submitted to the Urban Drainage and Flood Control District (UDFCD) for review on behalf of the Federal Emergency Management Agency (FEMA). FEMA has requested additional information that is being assembled.
2	I	Fitzsimons-Peoria Stormwater Outfall Project	This Fitzsimons-Peoria Outfall Project will provide a cost effective solution to manage and convey stormwater in this area.	North on Peoria Street, from Quari Court to an existing outfall at Sand Creek.	Stormwater	The pre-construction meeting was held for Work Packages 2 and 3 and mobilization is expected in mid-August. Tunneling under Colfax will begin the first week of August.
3	I	Sewer Improvements for Lima Street Alley and Paris Street Alley at Montview Boulevard	This project will address maintenance issues that have cause nuisance sanitary sewer backups.	This work is along Lima and Paris, from Colfax to Montview and down East 22nd Avenue to Dallas Street.	Waste Water	Construction on Lima and Oswego streets continues. The first tunnel crossing at Peoria and East 14th Avenue is complete and the contractor is working on the second tunnel crossing at Oswego Street and East Colfax Avenue.
4	II	Flow Control Vault at East 6th Avenue and Powhaton	This is an on-call project to construct control vaults that will supply reusable raw water.	The project is located at East 6th Avenue and Powhaton.	Water	Site Acceptance Testing (SAT) for the control panel was completed and water is now flowing through the vaults. Substantial completion of the project will be issued in August.
5	II	2018-2019 Waterline System Improvement Project	With the help of the Operations Team, Engineering Services has identified a priority site on Havana Street, between East 1st and East 6th avenues. Work at this location has been elevated due to planned improvements at the old Fan Fare site and the need to improve water pressures.	The priority location is on Havana Street, between East 1st and East 6th avenues. The balance of the work will be located between East 1st to East 3rd avenues and Dayton to Havana streets.	Water	Construction on Havana Street, between 3rd and 6th avenues has progressed to the testing phase. Water main installation on East 1st Avenue is in progress east of Havana Street. We have asked the contractor to complete water line installation that serves Concorde College and Aurora Academy to be completed prior to the start of school on August 12.
6	III	Westerly Creek Tunnels Rehabilitation Project	This project will design measures to repair the corroding steel reinforcement in the existing concrete box culverts where Westerly Creek crosses under East Exposition and East Kentucky avenues.	The work will be located at East Exposition and East Kentucky avenues.	Stormwater	A pre-bid meeting was held on July 18 and the bid opening is scheduled for August 1.
7	III	Easterly Creek Improvements - First Avenue and Kenton Street Detention Pond	This project will design and construct a regional detention pond in the Easterly Creek Basin. Once completed, the pond will substantially reduce flood flows downstream.	First Avenue and Kenton Street.	Stormwater	Phase 2 water line relocation is ongoing as is work on pond excavation. The footing for the forebay retaining wall as well as the outlet structure have been poured and Phase 2 of the stormwater infrastructure continues. Overall, the project is approximately 50 percent complete. The contractor is on track to complete the project in September.
8	III	Toll Gate Creek Confluence Channel Improvements Project	The Toll Gate Creek Stream Confluence Improvements Project is located at the intersection of East 1st Avenue and Chambers Road. The project includes stream restoration, grade control, flood control earthwork and the revegetation of 10,700 feet of open channel along East and West Toll Gate Creeks and immediately downstream of their confluence with Toll Gate Creek.	Toll Gate Creek is located near East 1st Avenue and Chambers Road.	Stormwater	July's activities included mobilization, initial erosion control installation, surveying and material delivery. Upcoming tasks include delivery and set-up of the construction trailer and early construction activities.
9	V	Griswold Water Purification Facility PLC Replacement and Network Improvements	This project will replace the Programmable Logic Controllers (PLC) that automate the process control at the treatment facility, as well as upgrade security and wireless coverage for Operations.	The work is located at the Griswold Water Purification Facility.	Water	Plans are under review by the Building Department. SOQ references are being checked because only two submittals have been received. Final project completion is expected in June 2020.
10	V	Griswold Air Scour Improvements	Griswold Water Purification Facility.	The work will increase the efficiency and safety of air scour piping in four of the gravity filters at Griswold.	Water	Construction activities began July 22.

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11	VI	Lift/Pump Station Miscellaneous Improvements - Work Package No. 3 (Aurora Pump Station Improvements)	This project includes general electrical and mechanical improvements to the Aurora Reservoir Pump Station. Improvements will be delivered using the Construction Manager/General Contractor (CM/GC) delivery method.	The Aurora Reservoir Pump Station is located on the north side of the Aurora Reservoir.	Water	Construction of the building superstructure is complete and equipment installation will continue through 2019. Installation of new pumps is underway and commissioning of pumps is expected to begin in August. Construction will be finished later this year.
12	VI	Trickle Channel at Blow-off Valve 25VW001	A potable water blow-off valve has been rendered inoperable because of drainage discharge from a storm sewer outlet pipe. The trickle channel will route Stormwater around the blow-off so it will be accessible for operation.	The project is located in an easement near East Plymouth Drive and South Elk Court.	Stormwater	A single bid was received on May 22nd (the previous bid opening received no bids from contractors). The bid was higher than the engineer's estimate. Staff are exploring options for awarding this project, including the possibility that Aurora Water staff will do the work.
13	VI	Wemlinger Water Purification Facility CT Chamber	This project will design and construct a chlorine contact basin at the Wemlinger Water Purification Facility, which will better enable the facility to meet all regulatory requirements at full rated capacity.	The work is located at the Wemlinger Water Purification Facility on East Quincy Avenue.	Water	Concrete placements have started on the lower slabs and yard piping is beginning to be installed in the under slab. Substantial completion is scheduled for May 1, 2020.
14	VI	Gun Club Raw Water Line Expansion Project	This project stems from a request from Heritage Eagle Bend Metro District to help supply water to the community golf course. Aurora Water offered to develop a non-potable water feed already benefitting Saddle Rock Golf Course. The expansion project entails upgrading the Gun Club Pump Station raw water system. Heritage Eagle Bend has contracted to complete project design and Aurora Water will assume responsibility for the construction.	The Gun Club Pump Station is located just south of East Quincy Avenue and Gun Club Road. The pipeline that will fee Heritage Eagle Bend will tie into the existing 12" raw water line at Saddle Rock Golf Course, proceed to and follow the Piney Creek Drainage Way where it will cross under E-470 and then head south to an existing Heritage Eagle Bend pipeline, where the connection will be made.	Water	The pre-bid meeting was held July 17 and the bid opening was held on July 31.
15	VI	Binney Water Purification Facility UV/AOP Clean-in-Place Improvements Project	The purpose of this project is to develop an effective and economical method of cleaning the ultraviolet (UV) lamps.	The project is located at the Binney Water Purification Facility.	Water	A construction pre-bid meeting was held July 17 and the bid opening occurred on July 31.
16	All	Aurora Reservoir Outlet Tower Hydraulic System Repairs	This project will replace the existing hydraulic system on the outlet tower that has reached the end of its service life. Additionally, the project will rehabilitate other components on the tower that are in need of repair/replacement and address items from the annual SEO report.	Construction is at the Aurora Reservoir Outlet Tower.	Treatment	The System Acceptance Testing (SAT) was started on June 3. Several defective parts were found during the testing and these items have been ordered by the contractor for replacement. SAT testing will resume once the new parts have been installed, which is expected to occur in September.
17	All	System Wide Uninterruptible Power Supply (UPS) Project	There are approximately 60 water and waste water facilities that need UPS replacements. This project will design those replacements.	Work will occur at approximately 60 locations throughout the city.	Water, Waste Water, Stormwater, Reuse	Final installation and System Acceptance Testing (SAT) of the five remaining UPS units has begun and is expected to wrap up in early August.
18	All	Quincy Reservoir Improvements: Outlet Tower Trash Rack Replacement	Replacement of the four existing trash racks at the reservoir outlet tower.	Quincy Reservoir.	Water	The contractor has begun demolition of the existing trash racks and will begin installation of the new trash racks in early August. The new trash racks are undergoing weld testing at the fabrication shop and should ship to the project site in early August. An Owner Requested Change Order to replace the outlet tower's gate actuator's was taken to council and approved. This work will extend the contract until the end of the year.
19	All	Rampart Pipeline PCCP Repair	Replacement of specified pipe sections along the Rampart delivery system.	Three locations in the Denver Tech Center.	Water	Consultant and contractor are on board and the kick off meeting is being scheduled. Replacement should be complete by January 2020.

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20	All	North Campus Well Field Maintenance and Rehabilitation Project	This project entails the mechanical cleaning of 17 groundwater production wells located at the Prairie Waters north campus well field. The project also includes the rehabilitation and/or replacement of excessively corroded and worn groundwater production equipment in the wells. Well cleaning and rehabilitation is being phased over three years. Five wells were addressed in 2017, six in 2018 and the remainder in 2019.	The Prairie Waters north campus well field is located on the west bank of the South Platte River, between Brighton and Ft. Lupton.	Water	A well maintenance contractor has been identified through a competitive bid process and a recommendation to award has advance to City Council for approval. Project kick off and the procurement of long lead equipment is expected to begin in mid-August. Substantial and Final Completion is anticipated in March and April 2020, respectively.
21	All	Gilcrest Site Demolition Project	This project addresses the demolition and off-site disposal of six structures at the city's Gilcrest Reservoir. The structures are being demolished because they serve no current or future use, they are in the footprint of future mining operations and they are an unattractive nuisance.	Gilcrest Reservoir is a future augmentation surface storage complex located on the east bank of the South Platte River, approximately five miles west/southwest of Gilcrest, Colorado.	Water	A demolition contractor has been selected and a demolition permit application is being prepared. Field activities are expected to begin in late August. Substantial and Final Completion is anticipated in October and November respectively.
22	All	Spinney Mountain Caretaker Facilities	The existing caretaker facilities are modular and are 40+ years old. They must be replaced.	The project is located at Spinney Mountain Reservoir near Hartsel, Colorado.	Water	Park County is requesting new sanitary leach fields for each home. We applied for the permit and it has been issued. The foundation for the first home is nearly complete. The rough framing is underway.

PROJECTS UNDER DESIGN

Listed by Ward(s) in which construction is occurring. "All" indicates the project benefits the entire system specified and work may be occurring outside the city limits.

	WARD	PROJECT NAME	DESCRIPTION	LOCATION	SYSTEM(S)	STATUS
23	I	Stanley Marketplace Water Quality Pond	This project will realize the construction of a water quality pond west of the newly redeveloped Stanley Marketplace. The pond will be located west of the new parking lot.	Northwest of East 23rd Avenue and Dallas Street.	Stormwater	The project's scope of work has been reviewed to look at improving a longer reach of the creek. The revised scope was sent to Purchasing for processing on July 17.
24	II	First Creek Interceptor	This is an interceptor connecting the ProLogis lift station and the First Creek Lift Station, to eliminate the ProLogis lift station.	Approximate location of the First Creek Lift Station is off Piccadilly Road and East Copperleaf Boulevard. The ProLogis Lift Station is located on Smith Road.	Waste Water	The contractor was given Notice of Award on July 2 and it is expected that the contractor will have Notice to Proceed by August 1.
25	II	Buckley East Tollgate Creek	This project will develop stream improvements identified in Major Drainage Plan (MDP) to 30 % design. This effort will support an Intergovernmental Agreement (IGA) for the land swap between the City of Aurora and Buckley Air Force Base.	This project is located in the vicinity of Buckley Air Force Base for East Tollgate Creek.	Stormwater	Design plans remain under Amanda review.
26	II	First Creek Lift Station	The First Creek Lift Station services the First, Second and Third Creek Drainage Basins. The station is under sized for the area and the project will increase the station's firm capacity. Site work will include upsizing the pumps, generator and power.	The approximate location of the First Creek Lift Station is near Piccadilly Road and Green Valley Ranch Boulevard, just east of Piccadilly Road.	Waste Water	Design continues. The engineer has submitted their 60 percent plans and has conducted a design workshop. The site application is under review at the Metro Wastewater Reclamation Facility.
27	II, V, VI	HVAC Facility Evaluations	This study will assess the need for HVAC upgrades at the Griswold, Binney and Sand Creek Water Purification Facilities.	Work will occur at the Griswold, Binney and Sand Creek Water Purification Facilities. However, the first phase of the study will be conducted at Griswold.	Water, Waste Water	A contractor has been selected and an agreement to conduct a study only at the Griswold facility is expected to be executed before August 1.
28	II, VI	Stormwater Corrugated Metal Pipe (CMP) Rehabilitation - Task 5	The project involves the rehabilitation of nearly 1,700 feet of storm sewer pipelines ranging in diameter from 84" to 132", utilizing the Centrifugally Cast Concrete (CCCP) method.	Rehabilitation will occur at four locations in Ward II and one location in Ward VI.	Stormwater	A low bid contractor has been identified and a notice to proceed with construction will be issued after City Council approvals have been completed.
29	III, V	Havana Street 30" Water Line Renewal Project	This project follows the condition assessment that was completed in 2017 and will determine the best rehabilitation method and design for the water line renewal within Havana Street.	The project is located on Havana Street between 1st Avenue and 6th Avenue.	Water	The final design review is in process. This project will go to bid in January 2020.

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30	IV	Westerly Creek/Canterbury Improvements Project (Canterbury Pond)	A Major Drainage way Plan (MDP) was completed for Westerly Creek in 2015. Recommendations in the MDP included a detention pond in Canterbury Park and additional channel improvements to help alleviate potential flooding along Westerly Creek. The project will include a hydrologic and hydraulic model and a Conditional Letter of Map Revision (CLOMR) to verify improvements are functioning as needed.	Westerly Creek, between Florida and Mississippi avenues.	Stormwater	The hydraulic model showed less than anticipated flood reduction for the proposed pond improvements so staff are reconsidering alternatives to maximize benefit. A decision on a new direction is expected in August.
31	V	Smoky Hill Pump Station Improvements	This project will evaluate the existing pump station conditions and propose cost effective improvements to address maintenance issues of the aging infrastructure.	The Smoky Hill Pump Station is located at 16801 E. Smoky Hill Road.	Water	Design continues. The engineer is preparing for the 90 percent plans review in August, at which time a review workshop will be held.
32	V	2020 Water System Improvement Project	With the help of Operations, areas where frequent water breaks have occurred and replacement needs are required have been identified.	One project area will be located within Chambers Ridge, a multi-family complex near Chambers Road and Evans Avenue. Another project site will be within the Seven Hills sub-division near East Villanova Place and South Flanders Street.	Water	The design kick off meeting was held July 17. Initial locates and survey base work will began the week of July 22.
33	V	Hutchinson Pond Sediment Removal Project - Phase II	Improvements to the intake structure and aeration system will be made.	Hutchinson Pond.	Stormwater	Construction of the intake structure has been postponed to fall, at the end of the irrigation season, when pond dewatering will not have any impact on the maintenance of the adjacent open space.
34	VI	Gun Club Pump Station Preliminary Design	This project will determine the overall performance of the existing pump station. Those items in need of rehabilitation and/or replacement will be identified to help improve or increase the service life of the station to meet the future needs of the service area. A preliminary design will be provided with prioritized recommendations and cost estimates.	The Gun Club Pump Station is located just south of East Quincy Avenue and Gun Club Road.	Water	Design is at the 90 percent and a design review meeting was held July 31.
35	All	Wild Horse Reservoir	This project involves the development of new storage reservoir for the Homestake pipeline.	Wild Horse Reservoir will be located just south of Hartsel, Colorado, off Highway 9. County Road 53 borders the south property line.	Water	The project is moving forward with reservoir sizing analysis. Staff is working with the BLM to obtain access to federal lands for geotech work. As part of the National Environmental Policy Act (NEPA) process, staff is beginning to assess potential alternative sites.
36	All	North Campus Horizontal Wells Pilot Project	This project will serve to obtain the required hydrogeological data on the Ocker property, to hire a consulting firm to assist with the development of a side-by-side comparison of two types of horizontal wells and to install a portion of the permanent infrastructure that will provide access to the east side of the South Platte River using the Davis easement. The permanent infrastructure will include a South Platte River crossing and piping to connect to the existing raw water supply system. Once the required site data is obtained, the project will advance to designing a plan for a pilot project that will compare two types of horizontal wells, a Ranney collector well and a channel well. The goal of the pilot project will be to develop a cost-per-gallon-produced water rate that includes: 1) impacts to treatment costs based on the quality of water obtained, 2) required permitting, 3) infrastructure design/installation, 4) operation and maintenance and 5) to keep in service the most productive technology.	North Campus and Ocker property located near Highways 8 and 85.	Water	A draft of the final report was submitted for staff review on July 19.
37	All	Sand Creek Water Reuse Facility and UPS Conversion Project	This work will replace the Programming Logic Controllers (PLCs) and Supervisory Control and Data Acquisition (SCADA) network that automates the facility's process controls.	The Sand Creek Water Reuse Facility is located at 11405 East 30th Avenue.	Water	Formal negotiation of project scope and fee with short-listed respondents have concluded and a recommendation to award has advanced to City Council for approval. Project kick off is expected to occur in late August and project completion is expected in June 2021.
38	All	Rampart Appurtenance Rehabilitation Project - Phase VI	This project includes the rehabilitation of critical appurtenances of the Rampart raw water pipeline during the 2019-2020 shut-down.	Work will occur on various appurtenances such as butterfly valves and vaults; manways; air relief valves and vaults; and blow-off vaults on the 54" conduit.	Water	A 90 percent design review meeting was held on July 17 and construction is expected to begin in early December.

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39 	All	Rampart Pipeline Cherry Creek Crossing Repair	Reinforcement of the utility's easement through Cherry Creek State Park to protect critical infrastructure.	Cherry Creek State Park.	Water	Consultant is on board and a pre-design kick off meeting will occur in early August.
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STUDIES AND ASSESSMENTS

Listed by Ward(s) in which construction is occurring. "All" indicates the project benefits the entire system specified and work may be occurring outside the city limits.

	WARD	PROJECT NAME	DESCRIPTION	LOCATION	SYSTEM(S)	STATUS
40	V	Griswold Chemical Feed	This study will examine the overall treatment process and the ways in which the chemical addition can be modified to improve safety and reliability, and potentially reduce chemical costs.	Griswold Water Purification Facility on Hampden Avenue.	Water	The study's final report was submitted in July and the project is completed. This item will be removed from the spreadsheet next month.
41	VI	Quincy Reservoir Intertie and Aeration System Improvements Project	An assessment of existing development, evaluation of alternatives, conceptual and preliminary activities for three Aurora Water systems at Quincy Reservoir, including reservoir water quality, the intertie and tower trash racks.	Quincy Reservoir marks the location of this project.	Water	The Building Department will be reviewing and approving the new electrical and HVAC. Public Works completed their first review and their comments were addressed and resubmitted for approval. The second round of reviews by Public Works is underway.
42	All	North Campus Electrical and Communication System Improvements	Ongoing expansion of the North Campus necessitates modification to and expansion of existing electrical and communication systems. Under this project, alternatives for modifying and expanding these systems will be identified and evaluated. The project will also evaluate options for addressing obsolescence and improving the reliability of electrical systems at select North Campus facilities.	The North Campus is located in both Adams and Weld counties, along the South Platte River, in general proximity to Fort Lupton and Brighton.	Water	An invitation to bid for the implementation of the first phase of recommended improvements was advertised and bids are expected in early August.
43	All	Sand Creek Parallel Interceptor	This is a study to determine the feasibility of paralleling the Sand Creek Interceptor from the Sand Creek Waste Water Reclamation Facility to a location near the intersection of 13th Avenue and Tower Road. Three projects from the 2017 Waste Water Master Plan - SC7, SC8 and SC12 - will be covered. The study will optimize the recommendations with respect to developing a capital improvement plan to deliver the projects.	Sand Creek Waste Water Reclamation Facility at 13th Avenue and Tower Road and the North Sand Creek Interceptor near North Peoria Street.	Waste Water	The final alignment for the interceptor has been identified. The contractor is continuing to develop a capital improvement plan for the recommended route.
44	All	Rampart Tunnel #2 Inspection	The tunnel is periodically drained to inspect conditions and sediment transport.	The work is located at Rampart Reservoir.	Water	The consultant is mobilizing and identifying teams for tunnel entry and inspection. Inspection to occur in October.
45	All	Wemlinger Water Purification Facility (WPF) Chemical Feed Study	This study will examine the raw water characteristics, the site layout and the ways in which the chemical addition can be modified to maximize safety and reliability, and potentially reduce chemical costs.	The study will be conducted at the WPF on East Quincy Av	Water	Contractor proposals are under review. The consultant selection process will occur in August and the project will be awarded in September.