



Office of the City Manager

INFORMATION CALENDAR

April 14, 2020

To: Honorable Mayor and Members of the City Council

From: Dee Williams-Ridley, City Manager

Submitted by: Phillip L. Harrington, Director, Department of Public Works

Subject: Public Works Capital Improvement Projects: Planned Projects for Fiscal Year 2021

SUMMARY

This report provides an update on planned improvements to the City's public facilities and infrastructure for the Fiscal Year (FY) 2021 Proposed Capital Improvement Plan (CIP). No specific action is required of the Council other than to provide comments to staff on the information presented.

CURRENT SITUATION AND ITS EFFECTS

The delivery of high quality capital projects that improve and maintain the City's infrastructure is a central part of the Public Works Department's (Public Works) mission. Public Works matches available funding with needed capital improvement and infrastructure maintenance projects, and also leverages one-time and outside sources of funding, whenever possible. Currently, Public Works is operating at full capacity delivering a robust capital program that addresses road pavement conditions with an emphasis on complete streets; adds green infrastructure; provides sewer system upgrades; makes improvements to the City's transportation network; and improves City facilities and buildings. The Engineering and Transportation Divisions within Public Works are tasked with delivery of the capital projects. This report highlights the capital plan for FY 2021.

Engineering Division

The Engineering Division focuses on the preparation of plans and specifications, and construction delivery of capital assets and infrastructure. The process also involves preparation of feasibility studies, environmental reviews, and public outreach. Most projects and programs fall under one of the following categories: facilities, streets and roads, storm drains, sanitary sewer, and sidewalks.

Facilities:

Public Works maintains 56 facilities with the City of Berkeley. Facility capital projects involve construction of new facilities, or restoration or improvements to existing facilities. Not included in this report are routine maintenance projects which involve repairs to minor components of existing facilities.

The major facilities projects that will be completed in FY 2021 include:

North Berkeley Senior Center (T1) - The North Berkeley Senior Center (NBSC) has been in operation for over 40 years and is in need of comprehensive upgrades. The work includes roof replacement, photovoltaic panels, mechanical and plumbing improvements, electrical improvements, foundation upgrades, restroom improvements, painting, as well as new flooring, walls, doors, and finishes. The work also includes seismic upgrades to the building and the installation of a new fire sprinkler system. Construction started in June of 2019 and is estimated to be completed in August 2020 with full move in by September 2020.

Mental Health Services Building (T1) - The Berkeley Adult Mental Health Services Center will serve Berkeley and Albany community members and their families, living with serious and persistent mental illness. This facility is critical for the Housing & Community Services Department (HHCS) to provide their intended adult services in one location, accessible to community members needing care. The upgrades and renovation of this building comprise of seismic upgrades and tenant improvements to offices, exam and psychiatric rooms. The work also includes roof replacement, photovoltaic panels, mechanical and plumbing improvements, electrical improvements, foundation upgrades and a new fire sprinkler system. Construction of the project started in April 2019 and is estimated to be completed by July 2020 with full move in by August 2020.

Electrical Charging Station - This project will install charging stations at four locations in the City that include the Corporation Yard, North Berkeley Senior Center Building (NBSC), 2180 Milvia Street Building (CCB), and 2640 Martin Luther King Jr. Way Building (Mental Health). Currently, the design is being developed for accommodating four charging stations at the NBSC, two charging stations at the Mental Health building, four charging stations at the CCB, and ten charging stations at the Corp Yard. Construction will start in June 2020, and is expected to be completed in November 2020.

Other Facilities projects that will be completed in FY 2021 include:

- Marina Maintenance Building Electrical and Structural Upgrades (T1)
- Corp Yard Maintenance Building Electrical and Structural Upgrades (T1)
- Public Safety Building Leak Repair
- Telegraph Channing Elevator Replacement

- Fire Station 3 and 4 Roof Evaluation
- Library Interior Upgrades
- Library Stucco Construction
- 125/127 University Building Upgrade
- Police Evidence Storage Upgrade

Streets & Roads:

Engineering manages 216 miles of streets citywide. On average the city rehabilitates 3.2 miles of roadway a year. The street projects which will be underway in FY 2021 include:

FY 2020 Street Rehabilitation - This project includes the pavement rehabilitation, drainage, and concrete work (curbs, gutters, sidewalks, and ramps) of approximately 2.6 miles of various streets throughout the City as identified in the City's 5-Year Street Rehabilitation Plan. The project is currently in the contract award stage. The project is scheduled to start construction in June 2020 and to be completed in December 2020.

FY 2021 Street Rehabilitation – This project includes the pavement rehabilitation, drainage, and concrete work (curbs, gutters, sidewalks, and ramps) of approximately 3.8 miles of various streets throughout the City as identified in the City's 5-Year Street Rehabilitation Plan. The project is currently in the design stage. The project is scheduled to start construction in June 2021 and to be completed in December 2021.

Ward Street - Acton Street to San Pablo Avenue and Monterey Avenue – The Alameda to Hopkins Street T1 Street Improvements – This project includes the pavement rehabilitation, green infrastructure, drainage, and concrete work (curbs, gutters, sidewalks, and ramps) of approximately 0.9 miles of streets. The project is currently in the bidding stage. The project is scheduled to start construction in July 2020 and to be completed in December 2020.

Storm Drain:

The City's engineered storm drain infrastructure consists of approximately 78 miles of underground pipes, manholes, catch basins and cross-drains. This stormwater infrastructure is over 80 years old and in need of ongoing rehabilitation. The major projects that will be underway in FY 2021 include:

Measure M Low Impact Development (LID) Woolsey Street - This project will provide a cistern and bio-swale on Woolsey Street between Adeline Street and Tremont Street that will provide storm water treatment and flood control benefits as identified

in the Watershed Management Plan. The project started construction in January 2020 and is scheduled to be completed in July 2020.

Kains Trash Rack – This project will restore a section of lower Codornices Creek between Kains Avenue and San Pablo Avenue that includes replacement of a trash rack. The project is currently in the bidding stage. The project is scheduled to start construction in July 2020 and is scheduled to be completed in October 2020.

Green Infrastructure – Installation of Low Impact Development (LID) improvements; multi-benefit GI project at the Piedmont median and traffic circle at Channing, and at various other locations throughout West Berkeley. These improvements will provide storm water treatment as identified in the City's recently adopted Green Infrastructure (GI) Plan.

Storm Water Master Plan - This project will develop a comprehensive Storm Water Master Plan, incorporating the recent GI Plan, and Watershed Management Plan. The Master Plan will also include updates to the City's existing hydraulic model for the storm drainage infrastructure, condition and capacity assessments, and prioritization of future capital improvement rehabilitation needs for the City's storm drainage program

Sanitary Sewer:

In September 2014, the City entered into a Consent Decree with EPA along with EBMUD and its other satellite agencies. The Consent Decree requires the City to rehabilitate an average of 4.2 miles of sewer pipeline annually based upon a three-year rolling average, and rehabilitate maintenance holes, perform acute defect repairs within 12 months, perform 15 miles of CCTV inspection annually, and perform routine cleaning of hot spot areas.

The major sewer projects that will be completed in FY 2021, to assist in meeting the Consent Decree requirements include:

MLK, Cedar, et al. – This project will construct improvements to the sanitary sewer system that rehabilitate approximately 6,000 linear feet (LF) of sanitary sewer main and associated lower laterals and maintenance holes.

Walnut, Spruce, et al. – This project will construct improvements to the sanitary sewer system that rehabilitate approximately 6,500 LF of sanitary sewer main and associated lower laterals and maintenance holes.

Parker, MLK, et al – This project will construct improvements to the sanitary sewer system that rehabilitate approximately 8,600 LF of sanitary sewer main and associated lower laterals and maintenance holes.

Sanitary Sewer Master Plan – This project will develop a comprehensive Sanitary Sewer Master Plan. The Master Plan will include updates to the City’s existing hydraulic model, prioritization of future sewer capital improvement rehabilitation, development of 5-year and 15-year CIP programs, and a financial analysis to assess the health of the sewer fund. This work is in progress with completion anticipated by the end of summer 2021.

Other Sanitary Sewer projects that will be worked on in FY 2021 include:

- Urgent Sewer Repair Project FY 2021
- FY 2021 Maintenance Hole Rehabilitation Project
- Animal Shelter Lift Station

Sidewalks:

The major sidewalk projects that will be completed in FY 2021 include:

FY 20 Sidewalk Project – This project will use concrete sidewalk shaving as an alternative to concrete sidewalk replacement. The locations for sidewalk shaving will be established based on the existing 50%-50% sidewalk program wait list. Concrete shaving utilizes a technique that removes a sidewalk uplift (from approximately one-half to three inches in height) to mitigate potential tripping hazards without replacing the entire concrete section. This results in significant cost savings for areas that are applicable for this type of mitigation. The locations for sidewalk shaving will be established based on the existing 50%-50% sidewalk program wait list. Bids for these services opened in fall 2019. Construction is expected to start in April 2020.

FY 21 Sidewalk Project – This project will replace concrete sidewalk in locations that were not suitable for shaving. The locations for sidewalk replacement will be established based on the existing 50%-50% sidewalk program wait list and the FY20 Sidewalk Shaving project. The project is currently in the preliminary design stage. The project is scheduled to start construction in January 2021 and to be completed by end of year 2021.

Other:

Underground Utility District (UUD) No. 48 Project – This project will underground the overhead utilities in the Grizzly Peak area of Berkeley within UUD No. 48. UUD 48 includes 175 parcels along Grizzly Peak Boulevard. between Hill Road and the southeastern City limit, Summit Road between Atlas Place and the southeastern City limit; Summit Lane, Senior Avenue, Harvard Circle, Fairlawn between Avenida Drive and Senior Avenue, and Avenida Drive between Queens Road and Grizzly Peak Boulevard. Currently, the City is in the process of acquiring easements, and PG&E is finalizing design. Construction of the project is expected to bid in July 2020 and start construction in November 2020.

American Disabilities Act (ADA) Transition Plan - This plan provides for a path forward to achieve a uniform level of physical access to the City's buildings, streets, parks, and facilities, and consistent program access for the public and people with disabilities. The City of Berkeley developed its existing ADA Transition Plan in 2001 in accordance with statutory requirements in place at that time. Now, that original plan will be expanded and updated to become more comprehensive and conform to current federal/state legislative standards and requirements. Accordingly, the City released an Request for Proposals (RFP) to produce a new ADA Transition Plan, and awarded a contract for this work to Disability Access Consultants (DAC), at the December 11, 2018 City Council meeting. Disability Access Consultants (DAC) will lead surveys and reviews of City ADA policies and procedures; conduct surveys of City buildings and public right-of-ways and parks to determine ADA compliance. The results of this surveying along with public input, will be used to develop a final ADA Transition Plan Document. DAC is currently scheduled to accomplish this scope of work by end of summer, 2020.

Transportation Division

The mission of the Transportation Division is to make effective use of available resources to provide services, projects, and policies that support safe and effective movement of people and goods throughout the City of Berkeley. The values are focused on safety, equitable mobility, and sustainability. As such, the goals are to improve transportation safety; encourage transit use, bicycling, and walking; and address a variety of transportation issues. Capital projects in support of these goals include; street improvements; traffic calming measures such as signs, markings, striping, and traffic circles; and bicycle and pedestrian infrastructure improvements such as pathways, on-street facilities, and bicycle parking. The work of the division generally falls into the following categories: Traffic Engineering, Parking Services, Transportation Planning, and Transportation Capital Project Design.

In FY 2019, after delivering baseline services, including operations and maintenance, approximately 10% of staff time in the division, roughly 3.3 full-time employees (FTE), remained for management of consultants and contractors used to design and deliver capital projects. As part of the FY 2020 budget Council approved four new engineering and administrative positions in Transportation and a fifth in engineering to support planning, funding, design, and delivery of the existing capital program. Three of those positions have been filled, and the remaining two are in the recruitment process.

Traffic Engineering:

Traffic Engineering oversees installation and maintenance of traffic control devices, signs, roadway markings, traffic calming and overall operation of existing transportation facilities. Projects that will be completed, continuing, or beginning in FY 2021 include the following:

Gilman Street/I-80 Interchange and Pedestrian Overcrossing - Traffic Engineering serves as a key stakeholder and design partner to the Alameda County Transportation Commission in preparation of the Environmental Impact Report (EIR) for the interchange improvement project. The EIR was completed in spring 2019. Currently efforts are on the way to complete construction plans and right of way acquisitions. Construction is projected to start in winter 2021 and is expected to last 24 months.

San Pablo Avenue at Ashby Avenue Intersection Signal Improvements - Design for this project (funded largely by mitigation funds from Bayer) to widen the westbound approach to the intersection in order to accommodate a left-turn lane should be complete in spring 2020. Permitting from Caltrans is expected in autumn 2020 with construction anticipated to begin in early 2021

Projects completed in or expected to be completed in FY 2020 include John Muir Safe Routes to School project to improve pedestrian crossing of Claremont Avenue and *Ashby Avenue/Tunnel Road Corridor Bike and Pedestrian Safety Improvements* funded by approximately \$2,000,000 in one-time funding from Caltrans, augmented by approximately \$300,000 in mitigation funds from Safeway.

Parking Services:

Parking Services manages all on-street meters and City owned off-street public parking lots and garages, as well as the Residential Shared Parking and goBerkeley programs. The parking projects include:

Center Street Garage Reconstruction – Working with Facilities Engineering, Parking Services is pursuing a Parksmart Gold sustainable garage certification (similar to LEED Platinum). Parking Services has completed installation of charging capacity for up to fifty-seven (57) electric vehicles and secured approvals from PG&E to begin using the photovoltaic panels on the roof of the garage.

Transportation Planning:

Transportation Planning is responsible for developing and updating the Bike and Pedestrian Master Plans every five years to maintain City eligibility for both grants and pass through funding for Local Streets and Roads and Bike and Pedestrian Capital Projects. Transportation Planning also produces various policies and programs and updates the Berkeley Strategic Transportation Plan every two years to track and prioritize the hundreds of Council supported projects valued at close to \$500,000,000 in order to seek grant funding and plan for their delivery over the course of 30 years. Major Transportation Planning projects include:

Southside Complete Streets - This is the first of a series of complete streets projects to be incrementally developed and implemented on Bancroft Way, Telegraph

Avenue, Dana Street, and other streets in the area south of UC-Berkeley Campus. The City will be working in partnership with AC Transit and local stakeholders and has been awarded approximately \$7.1 million in grant funding for design and construction of these improvements which will be ongoing in FY 2021.

Vision Zero Action Plan - Expected to be adopted by Council in FY 2020 this will join the Bike Plan and Pedestrian Master Plan in identifying and prioritizing capital projects, which along with education and enforcement efforts are intended to reduce fatal and sever traffic related collisions in Berkeley to zero by 2028.

Shared Mobility – This is primarily a program related to private operators providing shared transportation devices for the public to use for short trips. The Bike Share system which includes Berkeley, Emeryville, Oakland, San Francisco, and San Jose launched at the beginning of FY 2018 is planned for expansion in FY 2021. The current fleet of 400 bikes in Berkeley is planned to expand by adding 850 dockless ebikes in quarterly increments over FY 2021. As part of this expansion the City will receive \$63,750 to spend on installation of new public bike racks. An Electric Scooter share program is planned to launch in FY 2020 with up to three operators, pending resolution of legal concerns related to similar programs in other cities. By FY 2020 electric moped providers will be able to provide services through the existing one-way car share program which will be revised to be a one-way vehicle share program open to vehicles that have a license plate and require a driver license to operate. Revel Scooters is proposing to provide electric moped service under this program and City staff will evaluate the need to adding metered motorcycle parking zones around the City to help manage this new service.

Transportation Capital Project Design:

The Capital Project Design group is tasked with turning concepts from Transportation Planning, Traffic Engineering, Master Plans, and other sources into construction ready Plans, Specifications, and Estimates and putting the projects out to bid. Capital Project Design staff then continue to support the project through construction so that the design objectives and funding requirements are achieved. Significant Transportation capital projects being developed include:

Shattuck Avenue Reconfiguration – This project addresses pedestrian safety needs by changing traffic flow on Shattuck Avenue between University Avenue and Allston Way is funded by a combination of federal grants, SOSIP and other fees paid by private developments, UC LRDP mitigation funds from UC Berkeley, and State gas tax funds. The project solicited construction bids in the autumn 2018 and began construction in early 2019, with completion scheduled in summer 2020.

Milvia Bikeway Project – Using \$350,000 in Measure B grant funds awarded for FY 2018, the City will prepare the preliminary design for improvements to the Milvia Bike Boulevard through downtown as designated in the 2017 Bicycle Plan. Conceptual

design was completed in late 2019, and detailed design is scheduled to begin in early spring 2020.

9th Street Pathway and Crossing of Ashby - This \$1,600,000 project funded by a State Active Transportation Program grant and a County Vehicle Registration Fee grant is currently under design and is planned to commence construction in the second quarter of 2020. This project will complete the last remaining gap in the Ninth Street mixed-use path connecting Berkeley and Emeryville.

Railroad Crossing Safety Improvements and Quiet Zone - The City has been awarded \$1.5 million in Measure BB grant funding for environmental planning and design of this project in FY 2019 and 2020. The City will then seek approximately \$10 million in grant funds to construct safety improvements at the seven at-grade railroad crossings in Berkeley. This is intended to also establish a railroad-quiet zone where trains in West Berkeley will not continuously sound horns. The project is currently in the conceptual design stage.

Sacramento Street and North Berkeley BART Pedestrian Crossing Improvements – Using an Active Transportation Program Cycle 3 Augmentation grant for design and construction, the City is commencing design in FY 2009 and will complete construction in FY 2021 to improve pedestrian crossings of Sacramento Street between Virginia and Addison.

Recently completed projects include the grant funded *LeConte Elementary Safe Routes to School* project to build pedestrian crossing improvements on Shattuck near Sylvia Mendez School, and the grant funded *Gilman Street Railroad Crossing and Sidewalk Safety Improvements* to add sidewalks on Gilman Street across the railroad crossing. This project has received an American Public Works Association award.

BACKGROUND

Public Works manages the construction and maintenance of public buildings, streets, sewers, sidewalks, the storm drain system, and other structures in the public-right-of-way. The City is responsible for maintenance of ninety-five facilities, not including Library facilities and facilities leased to other entities. These ninety-five facilities include thirty-nine facilities in the Parks Recreation and Waterfront inventory and fifty-six facilities in the Public Works inventory. There are 216 miles of streets, 3,200 City-owned streetlight poles, 78 miles of storm drain system, 254 miles of sewer, and 325 retaining walls, bridges, tunnels, and miscellaneous non-building structures.

Every spring, staff presents to City Council the capital plan for the coming fiscal year. This report highlights the capital plan for FY 2021.

ENVIRONMENTAL SUSTAINABILITY

The City aims to provide safe, green, accessible, and efficient facilities and infrastructure to its residents and business owners. Staff considers the environmental

performance of all capital and major maintenance projects, and seeks to integrate energy and water efficiency improvements into those endeavors.

FISCAL IMPACT

In June 2019, Council adopted the FY 2020-2024 Capital Improvement Program (CIP). The five year CIP sets appropriation and project priorities for the first two fiscal years (FY 2020 and FY 2021) while communicating planned capital projects for the final three years of the plan. The amounts in the table below show the new appropriations planned in FY 2021 to Public Works Capital Projects by capital program from the budget adoption. Some of these amounts may change a bit due to project cost estimates and schedule changes to FY 2020 projects, new funding availability, changing project priorities, and staff capacity. Such changes to the Adopted FY 2021 CIP will be reflected in updates to the Mid-biennial budget for FY 2021, and Amendments to the Annual Appropriation Ordinance throughout FY 2021.

FY 2021 Public Works Adopted CIP	
CIP Program	FY 2021 Adopted
Facilities	\$5,400,000
Sanitary Sewer	\$19,525,412
Storm Drains	\$1,785,000
Sidewalk Repair	\$2,535,000
Street Repair	\$6,975,303
Transportation	\$8,183,116
Other Infrastructure	\$1,032,964
Total	\$45,436,795

CONTACT PERSONS

Phillip L. Harrington, Director, Department of Public Works (510) 981-6303
 Andrew Brozyna, Deputy Director, Public Works (510) 981-6396
 Farid Javandel, Transportation Manager (510) 981-7061
 Nisha Patel, Manager of Engineering (510) 981-6406