



Office of the City Manager

WORKSESSION
November 7, 2017

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: Update on Department of Public Works Capital Improvement Projects

SUMMARY

This report provides an update on current and planned improvements to the City's public facilities and infrastructure Capital Improvement Plan (CIP) projects and programs from spring 2017 through the FY 2018. 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 to improve and maintain the City's infrastructure is part of the Department of Public Works' (DPW) core mission. Currently, DPW is operating at full capacity to deliver a robust capital program that accelerates road pavement condition and improves complete streets; adds green infrastructure; repairs the sewer system; makes improvements to the City's transportation network; and improves City facilities and buildings. This report and presentation will highlight recently completed projects, and those projects currently in the planning, design, and construction phases.

Engineering Division

The Engineering Division focuses on the preparation of plans and specifications, and construction delivery of the aforementioned capital assets and infrastructure. The process also commonly 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, sewers, storm drains, and sidewalks.

Facilities:

Facility capital projects involve construction of new facilities, or restoration or improvements to existing facilities that costs \$50,000 or more. Routine maintenance projects are those involving repairs to minor components of existing facilities, and are not included in this report.¹

¹ Including plumbing, electrical, HVAC, painting, etc.

Within the first three months of FY 2018, DPW has already delivered many facilities projects. The 1947 Center Street building has been renovated and upgraded; the Cesar Chavez landfill gas flare has been replaced; Fire Station No. 1 has been upgraded and remodeled; and the South Berkeley Senior Center has completed many upgrades. The City performs upgrades to its public facilities sewer laterals on an ongoing basis. Staff have already rehabilitated four laterals this fiscal year, and will complete three more by June 2018. Additionally, DPW assists the Parks, Recreation, and Waterfront Department with their required capital improvements. This fiscal year, staff assisted with seismic and building upgrades of James Kenney and Bahia Community Centers.

Construction of the new Center Street Garage Building is well underway, and is scheduled for completion in May 2018. The new garage will be an eight-story, 248,000 square foot (SF) building that provides 720 parking spaces, replacing a five-story garage with 420 spaces. Features will include nineteen disabled parking spaces (up from nine in the previous building), nineteen electric vehicle charging stations, and solar panels on the roof. Following the garage opening, staff intend to apply for Parksmart Green Garage certification, which recognizes high-performing, sustainable garage management programs, and technology structure design.

The carpet replacement project at the Civic Center and Public Safety Buildings (PSB) that began in October 2017 will be completed by February 2018. Staff also plans to undertake repairs of a water leak at the PSB, and repair the roof, windows, and door of Fire Station No. 6's Drill Tower by the end of the fiscal year.

Streets & Roads:

Commencing May 2017, the City has resurfaced 10.2 street miles. In addition, 146 existing curb ramps were upgraded, and 120 new curb ramps were added in conjunction with the street rehabilitation and the Hearst Complete Streets projects. By the end of FY 2018, staff intends to resurface an additional 4.2 street miles and make needed repairs to associated streetscape infrastructure, including storm drains, curbs, gutters, and sidewalks. Major street rehabilitation projects planned for FY 2018 include the entire portion of Panoramic Hill that lies within the city limits.

Baseline funding for the streets program is derived from Measures M, F, B, and BB, the General Fund Capital Improvement Fund, and the State Gas Tax.

Storm Drains – Clean Stormwater Program:

The City's engineered storm drain system 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.

Construction of the FY 2016 - FY 2017 Drainage and Valley Gutter Project has been completed. It provided improvements at six street intersections to include approximately 125 feet of new storm drains, 250 feet of new valley gutters, nine new drainage inlets, and four new storm manholes. In addition, 2,200 feet of existing cross drain piping was

replaced, and fourteen existing drainage inlets were reconstructed through the Valley Gutter Project and the street rehabilitation projects combined. The FY 2017 Trash Capture Device Installation project installed 210 devices in drainage inlets. Emergency retaining wall and drainage repairs were completed on Wildcat Canyon Road, and a trash rack was installed on Hilgard Avenue. FY 2018 storm drain repairs in the Park Hills area are planned to replace sections of failed pipe. Green Infrastructure projects staff expect to complete in FY2018 include a bio-swale at the intersection of Rose and Hopkins Streets, and a permeable paver bus pad at the intersection of Shattuck and University Avenues. The Woolsey Street Cistern, and the Kains Trash Rack are planned for design and construction in FY 2018.

Sewers:

Within the City limits, there are approximately 254 miles of sanitary sewer mains, 7,200 sanitary sewer manholes, and 130 miles of public sewer laterals. Two projects to rehabilitate 9,500 linear feet of sewer main are currently under construction, and those projects are scheduled for completion in the second quarter of FY 2018. Two additional sewer projects to rehabilitate an additional 17,600 linear feet of sewer main will start construction later this month, with expected completion by end of the FY 2018. Staff also undertakes an Urgent Sewer Repair Project and Manhole Rehabilitation Project each fiscal year to address those repairs identified through an annual condition assessment of the City's sewer infrastructure.

On September 22, 2014, the City and East Bay Municipal Utility District (EBMUD) along with other area municipalities concluded negotiations with the Environmental Protection Agency (EPA) and agreed to a Consent Decree (CD) primarily intended to reduce the amount of wastewater the City conveys to EBMUD during wet weather. Under the CD, Berkeley agreed to submit an annual report to the EPA; replace an average of 4.2 miles of sewer pipeline annually over the next twelve years; replace noncompliant manholes; perform a regular condition assessment of sewer infrastructure, perform spot repairs, and increase required maintenance activities.

On September 30, 2017, the City submitted the FY 2017 Annual Report to the EPA enumerating its compliance with the CD. From FY 2015 through FY 2017, the City rehabilitated over 13 sewer miles, exceeding the 12.6 miles required over a three-year period. Finally, the City also met its sewer system condition assessment and maintenance goals as established by the CD.

Sidewalks:

The City has a Responsive Sidewalk Repair Program, which splits responsibility for repair costs 50%-50% with property owners. This program is meant to improve overall pedestrian safety, and increase the annual volume of sidewalks repaired/replaced. The program also includes repairs to damaged curbs, and driveway aprons located in the public right of way.

In FY 2017, as part of several other planned capital improvement projects, the City installed approximately 7,000 SF of new sidewalk to infill an existing sidewalk gap on the north side of UC Berkeley campus; replaced approximately 11,000 SF of existing sidewalk; 5,100 SF of existing driveway aprons; 3,780 linear feet (LF) of existing curbs; and is currently assessing the feasibility of developing a pathway on Devon Lane.

Currently, FY 2018 Proactive and Responsive Program projects have 95% complete designs, with anticipated project construction completion expected summer 2018. In addition, design of a West Berkeley Sidewalk Gap Project is at 100% design phase completion, with project construction completion expected spring 2018. This project will install more than 1,900 LF of new sidewalk in six locations in west Berkeley.

Landslide Repairs:

The City is working with property owners to expedite repairs to the landslides on Cragmont Avenue and Middlefield Road. Staff are examining the situations to minimize hazards and inconveniences to the public for the winter season.

Transportation Division

The City of Berkeley is committed to improving transportation safety; encouraging transit use, bicycling, and walking; and addressing a variety of transportation issues. Capital projects include parking facilities; 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 four functional groups in Transportation are Traffic Engineering, Parking Services, Transportation Capital Projects, and Transportation Planning.

Traffic Engineering:

DPW currently maintains 139 traffic signals. One-time funding from Caltrans for Ashby Avenue/Tunnel Road Corridor improvements is being used for construction of a bike and pedestrian safety project along the corridor starting fall 2017 and planned completion by spring 2018. Design for the San Pablo Avenue at Ashby Avenue intersection signal improvements was completed in summer 2017 and is funded for construction pending issuance of permits by Caltrans.

Traffic Engineering also supports the Alameda County Transportation Commission in preparation of the Environmental Impact Report (EIR) for the Gilman Street/I-80 interchange and pedestrian overcrossing. That Draft EIR is anticipated to be available in January 2018 for public comment. The final EIR is expected in summer 2018, and will be followed by final design, with a planned construction start in 2020.

Parking Services:

In addition to overseeing the operation of parking garages, and parking meters located on-street and in off-street lots, Parking Services staff has undertaken Level One review of contested parking citations, which duties were previously contracted out. DPW has completed conversion of all parking meters from cash only to cash or credit card

operated meters and consolidated all meters into a single parking meter management system. Reconstruction of the Center Street Garage and installation of the necessary parking and revenue control systems is now the primary capital project in which Parking Services is involved. Transportation staff provides support for this project by addressing construction issues related to operations and equipment.

Transportation Capital Projects (Complete Streets):

Projects currently under construction include the Hearst Complete Streets project with a planned fall 2017 completion, and the Downtown BART Intermodal Transit Plaza anticipated to be completed spring 2018. The Safe Routes to School project to improve pedestrian crossing of Shattuck Avenue for LeConte Elementary School has an early 2018 planned construction start. The Shattuck Avenue Reconfiguration project is awaiting federal funding authorization before it will be put out to bid for an estimated summer 2018 construction start. The Gilman Street Railroad Crossing and Sidewalk Safety improvements project currently under design is anticipated to be constructed in summer 2018. The 9th Street Pathway and crossing of Ashby is in the design phase, and is funded to commence construction in spring 2019.

Transportation Planning:

In FY 2017 the Emerson Elementary Safe Routes to School project was completed by installation of a sidewalk bulbout at the northwest corner of Forest Avenue and Claremont Boulevard; a speed table on Forest Avenue between Claremont Boulevard and Piedmont Avenue; and a rectangular rapid flashing beacon at the crossing on College Avenue at Garber Street.

The King Middle School Safe Routes to School project at the intersection of The Alameda/Hopkins Street has been completed. The grant funded first phase completed in December 2016 installed raised concrete islands to shorten the crossing distance for pedestrians and reduce the speed of turning motor vehicles. After repaving of The Alameda in October 2017, the project's second phase was installed that provided yellow school-zone crosswalks, green bike lanes, and rose colored treatments to reflect the historic rose-colored sidewalks in the area.

The Bancroft Bikeway and Pilot Transit Lane includes a two-way protected bikeway and pilot transit-only lane on Bancroft Way between Dana and Fulton Streets. The installation planned for completion in October 2017 follows the recently completed repaving of the street.

The citywide Bike Share System was launched in summer 2017. Eleven of 38 planned Ford GoBike Bike Share stations have been installed. Permits have been issued for three stations, and the remaining 24 stations are under review.

The citywide Bicycle Parking Project is currently installing 132 sidewalk bike racks and four in-street "bicycle corrals" to accommodate an estimated 380 bikes at locations requested by members of the public and local business and property owners.

The regional one-way car share program is a two-and-a-half-year pilot project and allows car share users to pick up a vehicle in one location and drop it off in another. The program has provided 250 cars that are available on the streets of Berkeley and Oakland. This pilot was approved by Council on September 27, 2016, and GIG Car Share, the first vendor, launched its program on April 30, 2017 after purchasing parking permits from the City. The Car Share program will be evaluated in spring 2018 and spring 2019, and if not extended, will automatically sunset June 30, 2019.

In summer 2017, as part of its 2018-2022 Comprehensive Investment Plan, the Alameda County Transportation Commission (ACTC) awarded the City funding for several projects based upon the City's October 2016 applications. This funding is project based, and includes Alameda County revenues from Measures F, B, BB, as well as Federal transportation program pass-through funding. City-managed projects that were awarded funding include Southside Complete Streets and Transit Improvements in FY 2018 and 2019, and Railroad quiet zone preliminary engineering in FY 2019. Additionally, funding is allocated for regional projects to be administered by transportation partners, including Gilman Street Interchange, San Pablo Avenue Multimodal Corridor, and Rapid Bus Corridor Upgrades along San Pablo and Telegraph Avenues.

The updated Bicycle Master Plan was adopted by Council FY 2018, and the Transportation Division will update the Pedestrian Master Plan in FY 2018 and FY 2019.

BACKGROUND

Public Works manages the construction and maintenance of public buildings, streets, sewers, vehicles, 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, 3200 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.

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.

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