



August 10, 2017

To: Transit Committee

From: Darrell Johnson, Chief Executive Officer

Subject: Regional Rail and Facilities Engineering Quarterly Report

Overview

The Regional Rail and Facilities Engineering departments are responsible for the Orange County Transportation Authority's rail project development, rail capital programs, rail operations, and transit facilities engineering projects. This report provides an update on rail and facilities engineering programs through the fourth quarter (April, May, and June) of fiscal year 2016-17.

Recommendation

Receive and file as an information item.

Background

The Regional Rail and Facilities Engineering departments (Departments) are responsible for implementing the Orange County Transportation Authority's (OCTA) railroad capital projects, including station parking enhancements and expansions, new station developments, expanded rail services, OC Streetcar, and transit facilities engineering. Additionally, the Departments are responsible for improved and expanded operations of Orange County's rail system by providing rail service that supports and matches the growth and development patterns of Orange County and the region.

Discussion

The report provides an update on the Departments' programs and the projects including rail capital, transit extensions to Metrolink, Regional Rail, and transit facilities engineering.

Rail Capital

Rail Capital projects include a wide range of projects necessary to sustain existing passenger rail service and support future increases in service. This includes new station developments, station parking expansions and enhancements, grade separations and grade crossing enhancements, and various other track and infrastructure projects.

Station Improvements

The Laguna Niguel/Mission Viejo Metrolink Station Improvements project provides Americans with Disabilities Act-(ADA) compliant access ramps that will replace the existing elevators. The station elevators were previously routinely out of service, requiring buses to transport passengers from one side of the station to the other. The elevator rooms are being converted to a restroom, a vending machine room, and storage rooms. The project scope also includes additional benches, shade structures, and relocation of Moulton Niguel Water District's 33-inch sewer line which is in conflict with the project. The construction notice to proceed (NTP) was issued on February 23, 2016. The contractor has completed the relocation of the sewer main and completed major concrete work including ADA ramps, walls, and stairs on both sides of the pedestrian underpass. Work continues with wall finishing, handrails and railings, restroom and vending machine room. ADA ramps are anticipated to open to the public by mid-August 2017 and complete construction by end of August 2017, with a final closeout in October 2017.

The Orange Transportation Center (OTC) parking structure project represents a long-standing effort between the City of Orange and OCTA to increase the parking capacity to accommodate future growth in ridership of the Metrolink system. Per a cooperative agreement between OCTA and the City of Orange, the city is the lead on the design phase, and OCTA is the lead on the construction phase of the project. OCTA has awarded a contract to Hill International to provide construction management services for the OTC project. On June 12, 2017, the OCTA Board of Directors (Board) awarded a contract to Bomel Construction, in the amount of \$18.4 million, for the construction of the project. A ground breaking ceremony was held on July 26, 2017. Completion of the OTC parking structure is anticipated to be early 2019.

The proposed Placentia Metrolink Station will be located on the BNSF Railway (BNSF) and City of Placentia-owned right-of-way (ROW). The station will include platforms, parking, a new bus stop, and passenger amenities. OCTA is the lead for design and construction of the project. Previously completed design plans are being revised to include a parking structure in lieu of surface parking. The project will also include a third track which will assist with

the efficiency and on-time performance of train operations and provide operational flexibility for both freight and passenger trains. BNSF will be the lead on the rail construction, so a construction and maintenance agreement with BNSF for the work will need to be in place before the invitation for bids (IFB) for construction can be released. The plans are anticipated to be complete and will be advertised for bid in October 2017 with an anticipated completion date of September 2019, pending the BNSF agreement is in place.

The Anaheim Canyon Metrolink Station Improvement project includes the addition of a second station track, platform, the extension of the existing platform to accommodate longer train consist, and associated passenger amenities including ticket vending machines, benches, canopies, and signage. OCTA is the lead agency on all phases of project development including construction. Preliminary engineering (30 percent plans) and California Environmental Quality Act (CEQA) clearance was obtained in January 2017 and National Environmental Policy Act (NEPA) clearance was obtained in June 2017. A request for proposal was released for final plans, specification and estimates on April 10, 2017, and final selection of the consultant will be presented to the Board in August 2017. Construction is expected to begin in June 2019 and be completed in August 2020.

The City of Fullerton is the lead agency on a project to add an elevator tower to each side of the existing railroad pedestrian bridge at the Fullerton Transportation Center and modify the restrooms to bring them into compliance with ADA. The City of Fullerton issued the construction NTP in January 2016, and renovations to the restrooms have been completed. The contractor has experienced significant delays on the elevator work due to subcontractor issues and dry utility conflicts. The City of Fullerton is now estimating the completion of the project to be September 2018.

Rail Corridor Improvements

Rail corridor improvements consist of capital and rehabilitation projects that improve the safety, operations, or reliability of the rail infrastructure. OCTA owns over 45 miles of operating railroad.

There are currently six grade separation projects along the Los Angeles – San Diego – San Luis Obispo (LOSSAN) rail corridor that have completed the project study reports or environmental clearance and are not currently advancing due to lack of funds.

The 17th Street Grade Separation project is progressing through the environmental clearance phase. The project report equivalent document was reviewed and approved by the stakeholders. The City of Santa Ana, upon review of the project documents, provided a CEQA statutory exemption determination for the project.

The Office of Historic Preservation (OHP) reviewed the Historical Property Survey Report submitted by the California Department of Transportation (Caltrans) and determined that one of the properties impacted by the project is eligible for listing in the National Register of Historical Places. Caltrans and OHP has reviewed the exhibits from the draft Finding of Effects (FOE) documentation and provided feedback that the project may have adverse effects on the eligible property. The project team is currently revising the FOE and supporting documents to address the comments and resubmit to Caltrans to clarify and support the draft conclusion of no adverse effects. If OHP agrees with the FOE's conclusion, Caltrans will complete the NEPA determination, currently projected to be eligible for Categorical Exclusion. The environmental phase is anticipated to be completed in October 2017, bringing any protracted reviews.

The Laguna Niguel to San Juan Capistrano passing siding project will add approximately 1.8 miles of new passing siding railroad track adjacent to the existing mainline track. The project will enhance operational efficiency of passenger services within the LOSSAN rail corridor. Proposed modifications to the existing Rancho Capistrano private grade crossing, associated with the addition of passing track, were discussed with all the stakeholders including the California Public Utilities Commission (CPUC). Alternatives to address concerns raised by CPUC have been developed in coordination with the stakeholders. Staff met with the CPUC to discuss concerns regarding the grade crossing and recently received concurrence to proceed with the proposed design. The project design schedule has been impacted by an additional six months extending to December 2017 and the anticipated advertisement for construction to February 2018. All advance San Diego Gas & Electric power pole relocation activities were completed in June 2017.

The San Juan Creek railroad bridge in the City of San Juan Capistrano was built in 1917. The existing 300-foot long bridge carries a single mainline track for passenger and freight rail traffic over San Juan Creek and is in need of replacement. The replacement bridge will be constructed adjacent to the existing bridge to minimize disruption of rail traffic. Additionally, the new railroad bridge will incorporate a future bikeway underpass on the south end of the track along the creek. OCTA and the Southern California Regional Rail Authority (SCRRA) are working with the County of Orange to develop a cooperative agreement to identify the roles, responsibilities, and funding to design and construct the additional bikeway underpass to enhance the county's network of trails and bikeways. SCRRA is the overall project lead, and OCTA is the leader for ROW. SCRRA has advanced the design to 60 percent completion where the cost of construction has increased by approximately \$2.5 million due to further development and refinement of the bridge structure. The associated project support costs and contingencies have also increased by \$1.6 million. The total increase is \$4.1 million making the new project budget \$38.3 million. A programming action was approved by the Board on July 10, 2017 to add the

necessary funds to the project. The draft Documented Categorical Exclusion was submitted to Federal Transit Administration (FTA) for review and concurrence in compliance with NEPA. The project received revised CEQA clearance in May 2017. The Board approved the authority to obtain the necessary ROW for the project in June 2017. The preliminary ROW acquisition schedule is anticipated to be 18 months and construction ready by the third quarter 2018.

The Control Point (CP) Fourth project is located in the City of Santa Ana between Fourth Street and Chestnut Avenue, between mile posts 175.45 and 175.80. Metrolink operations utilize Centralize Traffic Control (a train traffic control system) in which a dispatcher controls the railroad traffic through the use of signal blocks. A CP is a set of railroad signals and switches controlled by the dispatcher and authorizes a train to proceed or stop within the block of track it controls. The project includes installation of a turnout to a Union Pacific Railroad spur track along with related civil, signal, and communication modifications and improvements. The project will provide rail operational efficiencies and improve on-time performance. On June 13, 2016, the Board approved a cooperative agreement with SCRRA to define the roles and responsibilities and the funding requirements of the project. SCRRA began removal of existing spur track and installation of new track up to the new CP. Signal materials are being received at the warehouse and new signal house is expected next quarter. SCRRA is working with Union Pacific Railroad to agree on future maintenance responsibilities. A new turnout will be installed during the weekend of August 4-6, 2017. The project is expected to be complete by the second quarter of 2018.

The railroad ROW Slope Stabilization project includes eight locations within the OCTA-owned LOSSAN rail corridor that have been identified for improvements to prevent future erosion and slope instability. OCTA's consultant has provided a 90 percent design submittal. Design exceptions for areas 4B, 5B, and 6B were given preliminary approval from SCRRA, waiting for final documentation. Consultant is scheduled to provide 100 percent PS&E first week of August 2017.

Metrolink continues the implementation of positive train control (PTC) throughout the system. In September 2016, Metrolink achieved a significant milestone, becoming the first commuter railroad in the nation to receive approval of conditional PTC system certification from the Federal Railroad Administration (FRA). In December 2016, Metrolink staff submitted a response to the conditions in FRA's letter of conditional certification in hopes of achieving full PTC system certification in 2017.

Transit Extensions to Metrolink: OC Streetcar

The Transit Extensions to Metrolink Program is intended to broaden the reach of Orange County's backbone rail system to key employment, population, and activity centers. The OC Streetcar project will serve the Santa Ana Regional

Transportation Center (SARTC) through downtown Santa Ana, and the Civic Center to Harbor Boulevard in the City of Garden Grove.

90 percent design plans for the streetcar infrastructure and facilities were submitted by the designer in April and June 2017, and are under review by OCTA and the cities of Garden Grove and Santa Ana. Work is proceeding on preparation of the procurement documents for the construction IFB which is scheduled to be released in the fall 2017.

Based upon a risk assessment workshop that was held in March 2017 to finalize the project scope, schedule and budget, FTA recommended minor changes to the project cost estimate, increasing the cost by less than one half of one percent from the 30 percent design cost estimate prepared in July 2016. The updated cost estimate and funding plan were approved by the OCTA Board at the May 22, 2017 Board meeting. The Board also authorized submission of the Full Funding Grant Agreement Application to FTA at the meeting.

The funding request as well as extensive project readiness documents required for the application were submitted to FTA in late May 2017. Staff are coordinating with FTA and its consultants on the federal reviews of the documents.

Staff continued meetings with utility owners to identify conflicts and assist with the response to relocation claim letters. Additionally, negotiations continued regarding acquisition of properties required for the maintenance and storage facility and relocation assistance for the residential and commercial tenants. Staff continued to coordinate with representatives of the Orange County Flood Control District and the Army Corp of Engineers to obtain the permits required for the Santa Ana River Bridge.

In late April 2017, the CPUC approved the Project's Safety and Security Certification Plan, which outlines the detailed procedures that will be followed to obtain the critical safety and security approvals of the project. Staff continued to coordinate with CPUC to discuss the grade crossing applications.

The vehicle manufacturing and delivery procurement was extended to early July 2017 in response to a proposer request. Proposals will be reviewed and the contract award recommendations are scheduled to be presented to the Transit Committee in December 2017 and the OCTA Board in January 2018. Work commenced on development of the scope of services for the operation and maintenance service procurement which is scheduled to be released in fall 2017.

Construction agreements with the cities of Garden Grove and Santa Ana were approved by the OCTA Board and the city councils in April 2017, in addition to

the agreement with the City of Santa Ana for incorporation of streetcar elements at the SARTC.

An environmental analysis for minor design modifications was completed, and staff is coordinating with FTA to obtain approval on the Section 130(c) determination, completing the federal environmental review process. In June 2017, the State Historic Preservation Office concurred that the project could not have an adverse impact on historic properties.

The OCTA Board approved the award of a public awareness campaign contract to Katz Associates. The firm will be assisting with the development and implementation of a public awareness campaign during the pre-construction and construction phases of the project.

Rail Operations

As one of five member agencies that comprise Metrolink, OCTA participates in the design and operation of Metrolink service in Orange County. Rail Operations staff serve as the liaison with Metrolink and are involved in route and service planning, funding, and implementation. In addition to coordination of daily Metrolink operations, the team coordinates the StationLink service, special trains, promotional activities, and outreach.

- The Metrolink Angels Express service continues for the 2017 season, serving 54 weekday home games on the OC Line, including 15 Friday night games on the Inland Empire – Orange County (IEOC) Line, with an extension from Perris Valley. In July and August 2017, kids 18 and under ride free on Angels Express trains. To date, ridership is down by 24 percent, compared to the same period last year.
- Metrolink has received the first of 40 new Tier 4 clean emissions locomotives, with 11 units on site. On June 1, 2017, the FRA gave Metrolink approval to begin non-revenue testing of the new locomotives. Testing is expected to take approximately three months and is currently taking place in Orange County (Irvine).
- Mobile ticketing is completely functional and is available via the Metrolink app, with over 20 percent of Metrolink passenger's systemwide as users. Almost half of the passengers on the IEOC Line use the app exclusively, mainly because there is no transfer in Los Angeles. Metrolink plans to fully integrate transfers through Los Angeles County Metropolitan Transportation Authority (Metro) transit access pass system with the installation of optical readers by October 2017. The installation of optical readers should significantly increase the use of mobile ticketing since 44 percent of riders going to the Los Angeles Union Station transfer to Metro.

Metrolink performance data (ridership and revenue) for the fourth quarter of fiscal year (FY) 2016-17 will be made available in the annual report to the Board this fall 2017.

Rail Operations staff also represent OCTA's interests in the LOSSAN Joint Powers Authority, including the ongoing coordination and service integration efforts on the LOSSAN rail corridor.

Transit Facilities Engineering

Transit Facilities Engineering is responsible for the development and implementation of capital rehabilitation, facility modifications, and new capital projects for all OCTA transit facilities, including the five bus bases and seven park-and-ride lots. Design is underway on six projects, including minor rehabilitation of the bus dock platform at the Fullerton Park-and-Ride, facility modifications for hydrogen buses at the Santa Ana Bus Base, video surveillance system replacement at the Garden Grove and Santa Ana bus bases, bus wash building metal framing and siding repairs at the Irvine Construction Circle Bus Base, liquid hydrogen fueling station at the Santa Ana Bus Base, and preliminary engineering and environmental clearance for the proposed Transit Security Operations Center started this period.

There are three projects in the bid phase for construction, including removal of liquefied natural gas underground storage tanks at the Anaheim and Garden Grove bus bases, bus yard pavement striping and markings at the Garden Grove Bus Base, and hydrogen gas detection upgrades at the Santa Ana Bus Base for the single hydrogen bus demonstration project.

Five projects were under construction this period, including the vehicle inspection station equipment canopy at the Garden Grove Bus Base, bus wash water run-off mitigation modifications at all bus bases, construction started on two new projects including replacement of heating and ventilation units at the Garden Grove Bus Base maintenance shop, and fence repair and bus parking stall wheel stops at the Anaheim Bus Base. The bridge repair at the Laguna Beach Transportation Center was completed on May 19, 2017.

Summary

The Departments are responsible for OCTA's rail project development, rail capital improvement programs, rail operations, and transit facilities engineering projects. For the period covering the third quarter of FY 2016-17, projects generally progressed consistent with scope and schedule.

Attachment

None.

Prepared by:

A handwritten signature in black ink, appearing to read 'Jennifer Bergener', with a stylized flourish at the end.

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