Central 70 Quarterly Status Report

October through December 2018



PREPARED BY:



COLORADO

Department of Transportation

IN CONSULTATION WITH:







COLORADO Department of Transportation Statewide Bridge Enterprise

DATE: January 28, 2019

TO: Transportation Commission

FROM: Keith Stefanik, Project Director, Central 70 Project

SUBJECT: Quarterly Update

PROJECT PROGRESS

This memo summarizes the status of the Central 70 Project across the following areas:

- Status of Design and Construction
- Status of Pre-Development Budget
- Status of Community Commitments

ACTION

No actions are requested at this time. This memo is for information purposes only.

BACKGROUND

Per the Central 70 Project Intra-Agency Agreement, dated August 22, 2017, the Central 70 Project Director shall provide quarterly updates to the Transportation Commission, BE Board of Directors, and the HPTE Board of Directors through Final Acceptance.

MATTERS REQUIRING POLICY INPUT

None at this time.

COMPLETED MILESTONES THIS QUARTER

October 2018

- Closure and demo of York Street on ramp to westbound I-70
- Began Mechanically Stabilized Earth (MSE) wall construction and implement traffic phasing on the East Segment
- Closure of eastbound lanes of 46th Avenue from York Street to Colorado Boulevard
- Construction of temporary sound barriers along viaduct area

November 2018

- Completed east UPRR Shoofly and switched UPRR traffic on to temporary alignment to facilitate bridge reconstruction
- Began construction for I-270 over I-70 Bridge
- Began construction of I-70 over Peoria Bridge
- Began utility relocations around Swansea Elementary School and UPRR
- First snow and ice services response by KMP took place



🎎 Central 70

December 2018

- Completed Phase 3 at Swansea Elementary (reconstruction of playground and parking area) by DPS Contractor
- Began construction of cast-in-place walls
- Began permanent pavement and drainage on the East Segment
- Began UPRR Phase 3 construction
- Completed detour paving within the East Segment
- Began fabrication of I-270 steel girders

UPCOMING MILESTONES

January through March 2019

- Completion of waterline on Columbine adjacent to Swansea Elementary
- Load testing existing viaduct structure
- I-270 pier 3 post-tensioning
- Start fabrication of pre-stressed girders at Peoria
- Complete west shoofly for UPRR (allows demolition of the existing UPRR bridge to commence)
- Begin sanitary sewer line under 46th Avenue
- Relocate XCEL gas line at 48th and Colorado Boulevard
- Begin temporary signals at Colorado Boulevard in preparation for bridge reconstruction

LAWSUIT UPDATE

Lawsuit/Complaint	Status
Lawsuit filed against Environmental Protection Agency (EPA) regarding Air Quality standards	Ruling in EPA's favor
Title VI complaint filed against FHWA regarding Environmental Justice	Administrative decision in the Colorado Department of Transportation's (CDOT) favor
Drainage lawsuit against City of Denver	Ruling in City of Denver's favor
National Environmental Policy Act (NEPA) Lawsuit filed against FHWA regarding connected action	Lawsuit dismissed with prejudice
NEPA lawsuit filed against FHWA regarding environmental issues	Plaintiffs and State reached settlement agreement in December 2018. State to provide mitigations including funding health study, air quality monitoring, and additional landscaping.

ISSUES

As described below, the Developer and the Enterprises are working collaboratively towards resolution of all issues, with the shared goal of reaching Project completion in late 2022. None of the issues described below currently impact the ability to achieve that goal.



The Union Pacific Railroad (UPRR) Railroad Agreement (RRA) was executed on February 2, 2018 and sent as Enterprise Change Notice (ECN) 003 to the Developer to incorporate into the Project Agreement. The Developer submitted a Detailed Supervening Event Submission on June 22, 2018 due to the execution date of the UPRR RRA. The Developer and the Enterprises negotiated the terms of a settlement agreement, which resolved Supervening Event Notices (SEN) 1, 2, and 4. Final execution required Colorado Transportation Commission approval, which was received in November. The settlement agreement is awaiting final execution from all parties upon resolution of comments from FHWA and TIFIA. Upon execution, the Project will be extended approximately 6 months.

The Burlington Northern Santa Fe Railway (BNSF) RRA is still in negotiations and has been delayed due to additional Right-of-Way (ROW) that the Developer has identified in the 30% design plans. As the BNSF RRA does not contain a mechanism to revise the ROW after execution, BNSF and the Enterprises incorporated this additional ROW into the agreement. From August 31, 2018 to January 30, 2019, the Construction and Maintenance Agreement will be finalized and circulated for final review and signature by the State Controller and the City and County of Denver. An executed BNSF RRA is anticipated by the end of January 2019.

The Project Agreement restricts the Developer from starting construction of the UPRR bridge until after the UPRR completes the 36th Yard Expansion construction (Phase 0). UPRR was originally expected to complete this work prior to NTP 2 (commencement of construction activities). The UPRR began work in April and is currently scheduled to complete in spring 2019. Working with the Developer and the Enterprises, the UPRR prioritized the elements of Phase 0 that would impact the critical path of the Project and finished those items in November 2018. The remaining non-critical work to complete Phase 0 will be completed in early 2019 and is not anticipated to impact the Project.

On December 20, 2018, the Developer sent Emergency Notice #1 to the Enterprises stating that the I-70 Viaduct (Structure E-17-FX) was in such condition that either vehicle restrictions above the U.S. Class 5 Weight limits be enacted immediately or the Viaduct be closed. The Developer justification for this notice was based on load rating calculations that the Developer conducted on the Viaduct pier caps. The Enterprises provided a response to the Developer on December 21, 2018, that certified bridge engineers were dispatched upon receipt of the Developer notice to inspect the Viaduct pier caps to ensure the safety of the public. During this inspection, the Enterprises' bridge engineers did not note any recent changes to the condition of the Viaduct pier caps and concluded that the Viaduct remained safe for legal loads based on previous analyses conducted by CDOT and supported by FHWA. To reassure the Developer, the Enterprises and the Developer agreed to conduct a load test on the Viaduct in early January 2019. The Enterprises continue to work with the Developer on the appropriate testing protocol that simulates actual loading conditions on the Viaduct.

Supervening events are summarized in the table below.



SEN #	Description	Date Received from Developer	Type of SEN	Status
1	UPRR Agreement Delay, Request for Extension to Detailed Supervening Event Submission	04/25/2018	Comp Event	Included in Settlement Agreement
2	UPRR Phase 0 Work Delay	03/23/2018	Comp Event	Included in Settlement Agreement
3	UPRR Work Performance Schedule	03/23/2018	Delay Relief Event	Withdrawn by KMP
4	Section 232 Steel and Aluminum Tariffs	08/13/2018	Relief Event	Included in Settlement Agreement
5	Swansea Asbestos Containing Material	07/07/2018	Comp Event	Department responded 07/19/2018 to proceed with PSES
6	AP-83 Asbestos Containing Material	10/10/2018	Comp Event	See PSES 6.1
7	Sand Creek Bridge	11/20/2018	Comp Event	PSES received 12/11/2018
8	UPRR Crossing Diaphragm Spacing	12/17/2018	Delay Relief Event	PSES due 01/09/2019
9	Structure E-17-FX Viaduct	12/17/2018	Comp Event	Load test scheduled for 01/04/2019.

SCHEDULE STATUS

The Developer reported that the Project is 16.1% complete through December 2018. Design is 90.3% complete and construction is 2.1%.

The Developer has provided a draft copy of the Revised Baseline Schedule that will reflect the updated construction sequencing that they are developing as design progresses. They anticipate submitting this schedule formally in January 2019, pending resolution of the settlement agreement negotiations for SENs 1, 2, and 4.

The Developer continues with design, with many packages progressing towards the 100% and Release For Construction (RFC) design levels.

The Developer's monthly schedule update continues to indicate that the design of the project is behind schedule. KMP is mitigating the design delays by re-sequencing the construction schedule. The Developer's current dates for each Project milestone are provided below. Milestones 1 and 2 remain on schedule, however Milestones 3 and 4 have slipped. The Developer has indicated that this delay to Milestones 3 and 4 will be mitigated upon execution of the settlement agreement for SENs 1, 2, and 4.



Event	Baseline Date	Actual / Forecast Date	Status
Commercial Close	11/21/2017	11/21/2017	Complete
Financial Close	12/21/2017	12/21/2018	Complete
NTP1	02/09/2018	02/09/2018	Complete
NTP2	06/01/2018	07/10/2018	Complete
NTP3 (Snow and Ice Control Services)	07/01/2018	07/18/2018	Complete
Payment Milestone 1 (Sand Creek Bridge to Chambers Road)	12/09/2019	12/09/2019	
Payment Milestone 2 (Dahlia Street to Sand Creek Bridge)	11/10/2020	11/10/2020	
Payment Milestone 3 (Westbound I-70 Brighton Boulevard to Dahlia Street)	10/17/2020	01/22/2021	
Payment Milestone 4 (Eastbound I-70 Brighton Boulevard to Dahlia Street)	09/26/2021	12/21/2021	
Commence Intelligent Transportation System (ITS)/ Tolling Testing/Integration	09/06/2021	12/22/2021	
Substantial Completion	03/25/2022	06/19/2022	
Final Acceptance	07/16/2022	10/22/2022	
Design/Build Phase Close-out	11/2022	01/2023	

BUDGET STATUS

No changes to the project budget have occurred in the reporting period.

Enterprises Costs Estir	Amount	
Environmental Phase		\$40.3M
Procurement Phase		\$80.8M
Delivery Phase		\$56.8M
Miscellaneous Enterprise Reserve		\$10.2M
ROW Phase		\$131.3M
Utility Phase		\$41.7M
	Enterprises Construction Total	\$350.9M

In addition to the funds listed in the table above, the Enterprises have established a contingency (funded by the Department and Colorado Bridge Enterprise) to cover additional costs due to Supervening Events and Change Orders during the construction phase of the Project. Per the Project Agreement, the Enterprises have the option of paying KMP for changes via a lump sum payment or by adjusting the annual availability payment. The current balance of this contingency fund is provided in the table below.



Contingency	Amount (in millions)
Enterprises Change Order/Supervening Event Initial Contingency	\$43.3
Executed Change Orders – Previous	(\$0.3)
Executed Change Orders – Current Period	\$0.6
Remaining Enterprises Change Order/Supervening Event Contingency Balance	\$43.0

CONTRACT CHANGE NOTICES

As of December 31, 2018, the Enterprises have issued (29) Enterprise Change Notices, received (17) Developer Change Notices, issued (3) Directive Letters, received (9) Supervening Event Notices, received (6) Preliminary Supervening Event Submission, received (2) Detailed Supervening Event Submissions, and executed (26) Change Orders. The change orders executed to date have had a net cost of \$0.3 million to the Project.

No claims have been filed by KMP against the Project and the Dispute Resolution Panel (DRP) has not been utilized.

QUALITY ISSUES

A summary of the Enterprises' quality oversight program of KMP is provided in the table below. The Enterprises conduct assessments of KMP's performance of project activities based on risk, with higher risk activities being evaluated on a more frequent basis. Conformances indicate that KMP is fully compliant with the Project Agreement requirements, while nonconformances indicated that KMP's performance is not fully compliant with the Project Agreement and requires correction. KMP has diligently corrected or is working toward correcting all Nonconforming work to meet the requirements of the Project Agreement.

Month	Conformances	Nonconformances	Conformance Percentage
October 2018	237	70	77%
November 2018	308	18	94%
December 2018	287	40	88%

During the fourth quarter of 2018, KMP continues to remedy or rework nonconforming work to bring it into full compliance with the Project Agreement. KMP has used the Enterprises' assessments to improve their quality processes and procedures. KMP has displayed commitment to continually improving both design and construction quality. The Developer is continuing to work through Corrective Action Plan (CAP) 005 to develop and implement a plan to improve Maintenance of Traffic issues on the project.

The Enterprises' audits have identified numerous nonconformances with the Developer's implementation of the Civil Rights programs. The Enterprises requested that the Developer provide IQC resources and update the Quality Management Plan (QMP) to address



noncompliances. The Enterprises granted Conditional Approval for the Developer's process and quality procedures for civil rights.

SAFETY ISSUES

The Developer had one recordables for the quarter. Field activities primarily consisted of temporary detour paving and embankments, permanent embankments, utility relocations, installation of the fence/sound barrier along the Elyria/Swansea neighborhoods, York Street Ramp demolitions, and I-70 at Peoria partial bridge demolition.

The Developer completed the following safety critical work for this quarter: Overhead Sign Structure Removal, Drill Shaft Installation, Pile Installation, trench excavation for drainage related items, and for the excavation of the permanent retaining walls between Havana Street and eastbound Central Park Boulevard, demolition of I-70 over Peoria Bridge, Support of Excavation for Peoria, UPRR temporary Shoring, Brighton Sanitary Sewer, and general excavation and trenching (project wide), the Brighton CBC construction, demolition of the York Street On Ramp, and the UPRR temporary shoring (East Shoofly).

Safety Patrol have responded to 1,414 events during the fourth quarter. Events include abandoned vehicles, crash/incidents, debris, heavy traffic, pedestrians, police activity, and stalled vehicles.

MAINTENANCE/TRAFFIC ISSUES

The Developer took over operation and maintenance of I-70 at NTP2. They continue to perform routine maintenance throughout the project limit. The focus of routine maintenance work for this reporting period was litter/debris removal, vegetation control, drainage cleaning, and resolution of any safety critical or hazardous defects, repairing potholes and guardrail, energy attenuator maintenance, multi-post sign maintenance and installation, and safety patrol services. Additionally, Baseline Asset Condition Inspection (BACI) backlog work including signs, delineators, and drainage work activities occurred.

The Enterprises have found issues with the Method of Handling Traffic setups and takedowns. The frequency of those assessments has increased to provide additional oversight until the Developer can improve their processes. The Developer has issued, and is implementing, a Corrective Action (CAR-005). The Corrective Action included adding additional experienced staff, additional Independent Quality Control oversight, and coordination meetings with all parties. CAR-005 is also trying to improve on the Lane Closure Report process and make the LCR a useable tool for construction and traveling public.

CIVIL RIGHTS STATUS

Small Business DBE/ESB Goals

Design: the Developer's Disadvantaged Business Enterprise (DBE) goal for the design is 11.6%. To date, the Developer has commitments to DBE design firms of 9.29% (\$4.46 million in work); this meets 80% of the Developer's DBE goal for the design period. The Enterprises have



requested additional information from the Developer on how they intend to bridge this gap to meet the goal. The Developer's Emerging Small Business (ESB) goal for the design period is 3.0%. To date, the Developer has commitments to ESB design firms of 8.23% (\$3.95 million in work); this exceeds the ESB goal for design for the Project.

Construction: the Developer's DBE goal for the construction is 12.5%. To date, the Developer has commitments to DBE construction firms of 4.97% (\$37.38 million in work); this meets 40% of the Developer's DBE goal for the construction period. The Developer's ESB goal for the construction period is 3.0%. To date, the Developer has commitments to ESB construction firms of 4.56% (\$34.35 million in work); this exceeds the Developer's ESB goal for construction for the Project.

Workforce Development Program and Goals

The WORKNOW program combines construction workforce training and supportive service programs into one coordinated program. The Central 70 Project is a founding partner of WORKNOW. The Neighborhood Training Center will continue to serve as a hub for construction training and support programs, including navigators who can work with participants on a one-one basis. WORKNOW enrollment has reached 705.

During the quarter, the Project and its WORKNOW partners hosted the first Central 70 Hiring Fair. There were 145 job seekers, as well as 25 family members and children, in attendance. KMP supported transit connections to the 40th and Colorado transit station, free food vouchers for each attendee, and activities for children so job seekers would have fewer barriers to attend. Ten subcontractors attended, as well as four unions. Nine job seekers reported back to WORKNOW that they received a job from the Hiring Fair, not including individuals who enrolled with one of Kiewit's signatory unions. WORKNOW also hosted a celebration at Gary Community Investments, WORKNOW's key funding partner. The Project partners attended the event to celebrate the progress that the collective impact group achieved in 2018, roughly one year of operation.

The Developer and its subcontractors have enrolled local hires for both professional services and construction. They have enrolled 168 local hires and 47 On-the-Job Training (OJT) participants; 24 of the OJT participants have worked on the project to date. The Developer has recorded 63,806 local hire hours and 4,622 OJT hours.

MITIGATION/COMMUNITY COMMITMENTS STATUS

As of the date of this report, 107 of the 148 identified Record of Decision (ROD) mitigation measures are either in progress or completed.

The Enterprises and Developer have completed five ROD re-evaluations to date. Re-evaluation 5 was approved on November 15, 2018. This Re-evaluation cleared expansions of the construction limits in areas and around I-270, Peoria Street, Quebec Street, and Sand Creek. It also included installation of a sanitary sewer line north of the Denver Coliseum. Two additional ROD re-evaluations are in progress. The Developer is preparing Re-evaluations 6 and 7 to



permit temporary easements and to allow for construction limit adjustments to accommodate the movement of construction equipment and project improvements such as fencing, grading, access to noise walls, Intelligent Transportation Systems infrastructure, drainage, and tie-ins for roadways, sidewalks, driveways, and alleys. SHPO consultation will be required for these Reevaluations.

This Project is unique in that the core feature of the project—lowering the highway and constructing a cover/park that will link the two sides of the community back together—was developed to address Environmental Justice (EJ) concerns that arose from original highway construction back in the 1960s. In addition to the cover and park, the C70 Project includes other unique EJ mitigations such as the recognition of the importance of the Swansea Elementary School as a community center. These mitigations include two new early childhood education classrooms, a new heating and air conditioning (HVAC) system, new exterior windows and doors, a relocated and renovated main entrance and administration offices, and a new playground. The table below provides the status of these mitigations.

Mitigation	Status	Notes
Targeted assistance to crucial businesses to remain in the neighborhood.	In Process	KMP looking at options through the Community Development fund
Provide funding to assist displacees with financial counseling and procurement of financing.	Complete	Funding has been provided through Community Resources and Housing Development Corporation (CRHDC)
Provide before, during, and after environmental sampling to assure the project has not caused re-contamination of residential properties.	Complete	Soil sampling on seven residential properties was completed on 06/28/2018
Mitigate noise and dust impacts by providing residents living adjacent to the project new storm windows, furnace filters, and air conditioning units.	In Process	Assessments and installations of improvements continue. Home improvements were 98.7% complete in December 2018 with the final window order will be complete in January. The contract to disperse energy credits and perform ongoing warranty work was routed for signatures in December with an anticipated execution date of January 2019.
Fresh Food Access – Provide \$100,000 to Denver Office of Economic Developments Globeville Elyria-Swansea (GES) Healthy Food Challenge.	Complete	The Enterprises transferred funds to the City and County of Denver in early November 2018; an initial report is due to the Enterprises in mid-2019.
Provide \$2M in funding to support affordable housing in Elyria and Swansea neighborhoods.	Complete	The Enterprises transferred funds to Brothers Redevelopment in late November 2018; monthly reports will begin in 2019.
Monetary Incentive for Managed Lanes	Deferred	Deferred until the new managed lanes are operational.



Mitigation	Status	Notes
Swansea Elementary Phase 1	Complete	Retrofit school building with new classrooms, windows, doors, and HVAC system
Swansea Elementary Phase 2	Complete	Modify outdoor areas around school to provide playground, parking, and access roads during construction period.
Swansea Elementary Phase 3	Complete	Construct temporary outdoor features including playground, parking, and access roads.

COMMUNITY ENGAGEMENT

The Enterprises have continued to make neighborhood outreach a priority. This includes monthly "chips and chats" at a local restaurant, monthly "coffee and chats" at the local library, newsletters and e-blasts, briefings to nonprofit organizations and community leaders, and presence at community events. The team is also increasing outreach to the broader commuter audience through various media platforms, including social media platforms such as Facebook, Twitter, and NextDoor. The Project is featured regularly on tv news and print media and the team is working in partnership with the Developer to develop messaging around construction coping and awareness.

