



# Quarterly Status Report

October 2019 through December 2019



PREPARED BY:



**COLORADO**  
Department of Transportation

IN CONSULTATION WITH:



**COLORADO**  
Department of Transportation  
Statewide Bridge Enterprise

**DATE:** January 31, 2020  
**TO:** Colorado Transportation Commission (TC)  
Colorado High Performance Transportation (HPTE) Board of Directors  
Colorado Bridge Enterprise (BE) Board of Directors  
**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 (IAA) dated August 22, 2017, (as amended by the First Amendment to the IAA, dated November 15, 2017, and the Second Amendment to the IAA, dated April 3, 2019), the Central 70 Project Director shall provide quarterly updates to the Transportation Commission, Bridge Enterprise (BE) Board of Directors, and the High Performance Transportation Enterprise (HPTE) Board of Directors through Final Acceptance.

## MATTERS REQUIRING POLICY INPUT

None at this time.

## COMPLETED MILESTONES THIS QUARTER

### October 2019

- 100% Union Pacific Railroad (UPRR) Bridge plans Approved on October 4, 2019.
- UPRR license agreements for infrastructure in their right of way (ROW) submitted for approval.
- Continued reconstruction of various bridge structures along I-70 between Brighton Boulevard and Quebec Street.
- Set girders at Monroe Street Bridge.
- Received 40-day advance notice of Milestone 1 completion from the Developer.

### November 2019

- Continued Burlington Northern Santa Fe Railway (BNSF) bridge work at the BNSF Market Lead tracks in order to meet the 9-month shut down schedule.

- Submitted the 100% UPRR Drainage package to UPRR for review on November 15, 2019.
- Set girders for Steele/Vasquez Street bridges.
- Placed bridge deck for Monroe Street bridge.
- Continued construction of the lowered section north of 46th Avenue between Brighton and Colorado boulevards, including excavation and wall work.
- Continued reconstruction of various bridges structures.
- Finalized punch list for Milestone 1.

#### December 2019

- Continued BNSF Bridge work at the BNSF Market Lead tracks in order to meet the 9-month shut down schedule.
- Continued construction of Phase 2 of the I-70 over Peoria Street bridge (inside lanes), including placing the bridge deck.
- Continued reconstruction of various bridges structures.
- Milestone 1 Completion occurred on December 9, 2019 and punchlist work has commenced.
- Continued setting permanent sign structures in the east segment.
- Submitted Cover Top drainage variance to CCD for approval on December 31, 2019.
- Continued substructure work at the UPRR bridge.

### UPCOMING MILESTONES

#### January 2020 through March 2020

- Finalize I-70 traffic configuration between Quebec Street and Chambers Road.
- Finish construction of the Peoria Street and I-70 interchange. Put Peoria northbound and southbound lanes in the final configuration.
- Shift traffic and start demolition of I-70 over Brighton Boulevard bridge.
- Close westbound 46th Avenue between Clayton and Steele streets through mid-spring for waterline work on Fillmore Street; Fillmore Street to close between 45th and 46th avenues as part of this work. Local access will be maintained.
- Continue to progress Milestone 1 punch-list items, which are scheduled to be completed in February 2020 (excluding overhead sign bridges and SMA paving).
- Place deck at Colorado over I-70 bridge (Phase 1).
- Place deck at Steele/Vasquez bridge.
- Continue work on UPRR bridge, including substructure and girder fabrication.
- Enterprises plan to issue Milestone 1 Payment on January 28, 2020.

## 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 the Federal Highway Administration (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 in process of implementing settlement mitigations including funding health study, air quality monitoring, and additional landscaping.

All lawsuits associated with the Project to date have been resolved. The State (CDOT) reached a settlement agreement with the petitioners (Sierra Club, Elyria and Swansea Neighborhood Association, Chaffee Park Neighborhood Association, and Colorado Latino Forum) in the civil action lawsuit (D. Colo. No. 17-1679) in December 2018.

As part of this settlement agreement, CDOT agreed to a variety of mitigations including funding a community health study, air quality monitoring, and landscaping. CDOT received the petitioners’ proposal and identification of nonprofit organization (The Nature Conservancy) on March 29, 2019 related to the acquisition and planting of trees throughout Elyria, Swansea and Globeville. CDOT reviewed and accepted the proposal and then issued payment to The Nature Conservancy in the amount of \$25,000. The Nature Conservancy confirmed receipt on April 25, 2019.

Also per the settlement agreement, an Agreement related to a proposed health study was executed between the Petitioners, CDOT, CDPHE and Denver on July 16, 2019. With the execution of the Agreement, CDOT provided \$550,000 to CDPHE for ultimate completion of the Health Study. CDPHE confirmed receipt on September 12, 2019. The Enterprises executed a change with the Developer to add the vines to the sound walls between Brighton Boulevard and High Street and add additional trees within small remnant parcels between Brighton Boulevard and Fillmore Street. Both additions are to fulfill one of the commitments in the settlement agreement.

The overall status of all settlement agreement items will be tracked monthly by the Enterprises to conclusion.

## ISSUES

The Enterprises issued the Milestone 1 completion certificate to the Developer on December 9, 2019. The Developer has prepared a punch list for Milestone 1 and is working towards

resolution of all items. Some punch list items, such as the sign structure installation and the final lift of paving (Stone Matrix Asphalt or “SMA”) within the Milestone 1 limits, will not be completed until summer 2020.

The Developer and the Enterprises negotiated the terms of the Third Amendment to the Project Agreement, which modified the existing thresholds for the increased oversight and default clauses of the Project Agreement. The Developer reached the Increased Oversight Threshold due to non-compliance points associated with lane closures in October 2019 and was put on notice by the Enterprises. The Developer provided a remedial plan of action and has been implementing this plan since November 2019. The Third Amendment was executed on December 11, 2019 which increased the existing thresholds, but maintained the monetary deductions for unapproved lane closures on the Project.

The UPRR approved the 100% UPRR bridge plans October 4, 2019 and the associated Public Utilities Commission (PUC) permit amendment was issued October 9, 2019. This allowed the Developer to commence construction of the UPRR bridge and the bridge substructure is underway. The UPRR bridge continues to drive the overall completion date of the project. The Enterprises and the Developer are working with UPRR on prioritizing construction, submittals, resolving noncompliant construction work and identifying schedule mitigation strategies. The Enterprises continue to perform reviews of the Developer’s UPRR submittals prior to submission to UPRR (instead of concurrently with the UPRR review per the Project Agreement) to identify and correct any errors or missing documents in the submittals and minimize UPRR rejections. The Developer submitted the latest revision of the UPRR drainage package to UPRR on November 15, 2019 for review. The Enterprises anticipate UPRR comments on this submittal in January 2020.

The Enterprises have received numerous Supervening Events (SEs) (see SEs 8, 10-15, 17-18, 21-22, 24-26, 29-30, and 31 -34) related to the UPRR bridge based on design criteria interpretation differences between the Developer and UPRR. The Enterprises have rejected these SEs, but continue to work with the Developer and the UPRR to resolve these SEs. Regardless of the merits of each of the SEs, construction of the UPRR bridge is critical to the project schedule. With approval of the UPRR 100% bridge design by UPRR, the merit and impacts (cost and schedule) associated with each of these SEs can be determined. The Developer requested an extension on the submittal date for the Detailed SE submissions and the Enterprises granted an extension to February 14, 2020.

The Developer’s project schedule is indicating that completion of Milestones 2, 3, 4, 5 and 6 will occur after the associated milestone completion deadlines (approximately 230 days late). The Enterprises and the Developer are meeting regularly to identify and implement mitigation strategies to get the overall project back on schedule, including the interim completion milestones.

Supervening events are summarized in the table below (shading indicates the SE is closed).

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 the Developer
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	Change Order was executed on 09/03/2019
6	AP-83 Asbestos Containing Material	10/10/2018	Comp Event	Withdrawn by the Developer
7	Sand Creek Bridge	11/20/2018	Comp Event	Waiting on detailed SE submission by Developer. Portions of this repair have been completed by the Developer
8	UPRR Crossing Diaphragm Spacing	12/17/2018	Delay Relief Event	Rejected by the Enterprises on 09/30/2019
9	Structure E-17-FX Viaduct	12/17/2018	Comp Event	Withdrawn by the Developer
10	UPRR Transverse Plate Welding	02/22/2019	Delay Relief Event	Rejected by Enterprises on 08/29/2019
11	UPRR Underside Plate Welding	02/22/2019	Delay Relief Event	Rejected by Enterprises on 08/31/2019
12	UPRR Drip Plates	02/22/2019	Comp and Relief Event	Withdrawn by the Developer
13	UPRR Bearings	02/22/2019	Comp and Relief Event	Withdrawn by the Developer
14	UPRR Impact Loading	02/22/2019	Delay Relief Event	Rejected by Enterprises on 09/23/2019
15	UPRR Rebar Detailing	02/22/2019	Delay Relief Event	Rejected by Enterprises on 09/23/2019
16	Severe Weather Event - Bomb Cyclone	03/27/2019	Relief Event	Withdrawn by the Developer
17	UPRR Shoring	03/28/2019	Comp Event	Rejected by Enterprises on 08/29/2019
18	UPRR Shoring unexcused RR delay	03/28/2019	Delay Relief Event	Rejected by Enterprises on 08/29/2019
19	AP-102 Hazardous Material	03/27/2019	Comp Event	Withdrawn by the Developer
20	Reserved			
21	UPRR Steel Notes	05/02/2019	Comp Event	Rejected by Enterprises on 07/10/2019.

SEN #	Description	Date Received from Developer	Type of SEN	Status
22	UPRR Steel Notes Relief	05/02/2019	Delay Relief Event	Rejected by Enterprises on 07/10/2019.
23	Recognized Hazardous Material (RHM) 46 <sup>th</sup> and Steele Southwest Gore Asbestos	05/29/2019	Comp Event	Waiting on detailed SE submission by Developer
24	UPRR Crossing Diaphragm Spacing	06/14/2019	Comp Event	Rejected by Enterprises on 09/30/2019. Related to SE Event 8.
25	UPRR Transverse Plate Welding	06/19/2019	Comp Event	Rejected by Enterprises on 08/31/2019. Related to SE Event 10.
26	UPRR Underside Plate Welding	06/28/2019	Comp Event	Rejected by Enterprises on 08/31/2019. Related to SE 11.
27	Reserved			
28	Reserved			
29	UPRR Impact Loading	06/28/2019	Comp Event	Rejected by Enterprises on 09/23/2019. Related to SE 14.
30	UPRR Rebar Detailing	06/28/2019	Comp Event	Rejected by Enterprises on 09/23/2019. Related to SE 15.
31	UPRR Drainage Review	08/22/2019	Comp Event	Rejected by Enterprises on 12/17/2019.
32	UPRR Drainage Review	08/22/2019	Delay Relief Event	Rejected by Enterprises on 12/17/2019.
33	UPRR Unreasonableness	08/22/2019	Comp Event	Rejected by Enterprises on 12/18/2019.
34	UPRR Unreasonableness	08/22/2019	Delay Relief Event	Rejected by Enterprises on 12/18/2019.
35	Fire Department Review	12/26/2019	Delay Relief Event	Under review by Enterprises
36	Fire Department Review	12/26/2019	Relief Event	Under review by Enterprises. Related to SE 35.

## SCHEDULE STATUS

The Developer reported that the Project is 37.9% complete through December 2019. Design is 98.9% complete and construction is 25.6%.

The Revised Baseline Schedule reflects the current construction sequencing that reflects the work plan towards the revised Milestones Completion dates associated with the settlement agreement. The Revised Baseline Schedule was conditionally accepted on May 14, 2019.

Milestones 2 is currently behind schedule. The Developer is working to recover schedule time associated with this milestone by optimized construction sequencing and the addition of resources. However, seasonal construction work associated with SMA pavement, which is pushing this work out of the 2020 construction season. Pushing of all Milestone 2 work has been caused by several factors including longer than anticipated design duration, construction productivity issues, field design changes, and vertical/horizontal control. The Developer is not attributing any of the causes of these delays to the Enterprises.

Milestones 3, 4, 5, 6, and Substantial Completion are all linked. Delay associated with this work is tied to approval of the UPRR 100% bridge design by UPRR. The UPRR bridge design was approved October 4, 2019, which is much later than what was anticipated at the time of the Settlement Agreement in November 2018 and as planned in the Revised Baseline 2. The Developer believes this delay is compensable and the basis of this position is detailed in the outstanding Supervening Events associated with UPRR. As mentioned earlier, the validity of many of the Developer's claims will be analyzed and any associated impacts determined.

The Developer and the Enterprises are meeting regularly to discuss potential mitigation measures that can provide some schedule recovery. For example, the Developer procured the UPRR bridge girders at risk and the UPRR allowed the UPRR bridge to be demolished prior to approval of the 100% bridge design. Additional mitigation measures continue to be evaluated by the Enterprises and the Developer.

Event	Baseline Date	Forecast Date	Status*
Commercial Close	11/21/2017	NA	Completed - 11/21/2017
Financial Close	12/21/2017	NA	Completed - 12/21/2017
NTP1	02/09/2018	NA	Completed - 02/09/2018
NTP2	06/01/2018	NA	Completed - 07/10/2018
NTP3 (Snow and Ice Control Services)	07/01/2018	NA	Completed - 07/18/2018
Payment Milestone 1 (Sand Creek Bridge to Chambers Road)	12/09/2019	NA	Completed 12/09/2019
Payment Milestone 2 (Dahlia Street to Sand Creek Bridge)	11/10/2020	08/04/2021	-257 days
Payment Milestone 3 (Phases 1-5 of the UPRR Crossing)	10/17/2020	03/22/2021	-156 days
Payment Milestone 4 (Westbound I-70 between Brighton Boulevard to Dahlia Street & Removal of Viaduct)	09/26/2021	12/22/2021	-87 days
Payment Milestone 5 (Eastbound I-70 between Brighton Boulevard to Dahlia Street, UPRR Phase 6)	03/25/2022	09/02/2022	-161 days

Payment Milestone 6 (SMA paving & Cover top)	08/20/2022	11/03/2022	-84 days
Commence Intelligent Transportation System(s) (ITS)/Tolling Testing/Integration	09/22/2022	12/09/2000	-92 days
Substantial Completion	09/21/2022	12/21/2022	-92 days
Final Acceptance	12/20/2022	03/22/2023	-92 days
Design/Build Phase Close-out	06/2023	09/2023	-90 days

*\*see Schedule Status narrative for additional information regarding the status*

The forecast dates for Milestones 3, 4, 5, 6, Substantial Completion, and Final Acceptance will be delayed by construction elements that are now in the 100% UPRR Bridge plans. This will increase the overall construction duration for Phase 4 and 5 of the UPRR work compared to what was anticipated in Revised Baseline 2. The Developer is in the process of quantifying these impacts and will provide a copy of the schedule to the Enterprises for review. After acceptance by the Enterprises, this schedule will become Revised Baseline 3 and will reflect the plan for the remaining work.

## BUDGET STATUS

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

Enterprises Costs Estimate	Amount
Environmental Phase	\$40.9M
Procurement Phase	\$82.1M
Delivery Phase	\$52.2M
Miscellaneous Enterprise Reserve	\$5.3M
ROW Phase	\$122.2M
Utility Phase	\$37.9M
<b>Enterprises Construction Total</b>	<b>\$335.3M</b>

In addition to the funds listed in the above table, the Enterprises have established a construction 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 the Developer 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	\$45.9
Executed Change Orders – Previous	\$3.2
Executed Change Orders – Current Period	\$1.1
Settlement Agreement	\$7.6
<b>Remaining Enterprises Change Order/Supervening Event Contingency Balance</b>	<b>\$34.0</b>

## CONTRACT CHANGE NOTICES

As of September 30, 2019, the Enterprises have executed (56) Change Orders, issued (46) Enterprise Change Notices, received (29) Developer Change Notices, issued (15) Directive Letters, received (33) Supervening Event Notices, received (29) Preliminary Supervening Event Submission, and received (3) Detailed Supervening Event Submissions. The change orders executed to date have had a net cost of \$4.3 million to the Project.

No claims have been filed by the Developer against the Project and neither party has referred a dispute to the Dispute Resolution Panel (DRP) at this time.

## QUALITY

The Developer is responsible for implementation and maintenance of an effective quality program to manage, control, document and ensure Developer compliance with all obligations and requirements in the Central 70 Project Agreement. The Enterprises implement the quality oversight program to monitor the Developer's quality program, but are not responsible for implementation of the Developer's quality program. However, the Enterprises retain the responsibility for acceptance of the work based on the assessment and test results of the quality oversight program summarized below.

**Owner Verification Testing:** Other than as detailed in the Enterprises' Quarterly Quality Report to the Federal Highway Administration (FHWA), the Enterprises' Owner Verification Testing (OVT) program has statistically verified and validated that all materials placed by the Developer are in full conformance with Project Agreement requirements. It is important to note that this report to FHWA will discuss that the Developer's Independent Quality Control (IQC) testing program and the OVT program identified concrete that did not meet the required 28-day compressive strength. There are about 30 tests out of approximately 1,200 concrete tests performed throughout the Project that have not met specifications. On average, the concrete in these 30 tests was about 100 to 400 pounds per square inch lower than the 4,000 to 4,500 PSI specification. The material represented by these tests has either been removed and replaced or has been accepted into the project based on Design Engineer of Record evaluation, KMP concurrence, and Enterprise concurrence based on the allowance prescribed in CDOT specification 601.17. The issue of low concrete breaks is currently being mitigated and tracked by the Developer through Corrective Action Plan 017.

**Independent Assurance Testing (IAT):** The Enterprises' IAT program tests each OVT and Independent Quality Control (IQC) tester for each test procedure at least once per year. The Enterprises have determined that all Owner Verification and Developer IQC testers are qualified to test on the Project through December 2019.

**Construction Verification Inspections (CVI):** The Enterprises' CVIs evaluate Developer compliance with Project Agreement (PA) requirements by assessing a risk-based percentage of their Construction Work. All non-conforming work identified by the Enterprises is resolved through KMPs nonconformance report closure process. From October 2019 through December

2019, the Enterprises conducted 222 CVIs, yielding a 90 percent overall conformance percentage. For the entire project through December 2019, the Enterprises have conducted 755 CVIs, yielding a 90 percent overall conformance percentage. The Developer continues to perform well for permanent construction work such as Electrical/ITS, Structures, Walls, Roadway, Earthwork, and Utilities. Last quarter, the Enterprises identified concerns with temporary work, especially related to Maintenance of Traffic (MOT). The notable MOT issues are summarized below. This quarter, KMP has shown substantial improvement by implementing effective corrective action related to these issues.

Element	Work Component	Issue	Status
MOT (Maintenance of Traffic)	Temporary Drainage	KMP is not installing temporary drainage per the signed and sealed MOT plans	This was identified as a systemic issue in late July 2019. KMP started making progress on rectifying the issue in September 2019. Due to complexity of tying temporary drainage to the MOT phasing, KMP has started using the Traffic Control Revision (TCR) process to make field decisions on temporary drainage in collaboration with the Design Engineer of Record. In October through December, KMP implemented a performance based approach to temporary drainage which yielded positive results. This issue is considered closed. <b>CLOSED</b>
MOT (Maintenance of Traffic)	Methods of Handling Traffic (MHT)	KMP is not consistently performing traffic control per approved MHTs on low volume roads.	This was identified as a systemic issue in late September 2019. KMP plans to hold a project-wide stand-down meeting in early October to address this issue. Since the stand-down meeting, KMP crews have shown a better understanding of traffic control requirements of the Project. The number of reported noncompliant closures reduced. Due to reduction of noncompliant closures, this issues is considered closed. <b>CLOSED</b>

**Project Management Process Audits:** The Enterprises’ Project Management Process Audits evaluate Developer compliance with the PA and processes prescribed in the Developer’s approved Management Plans. From October 2019 through December 2019, the Enterprises conducted 66 process audits, yielding a 91 percent overall conformance percentage. For the entire Project, the Enterprises conducted 448 process audits, yielding an 86 percent overall conformance percentage. Notable process quality Issues identified by the Enterprises and/or the Developer for this reporting period are presented below.

Element	Process	Issue	Status
Construction Quality Management	PA Schedule 8 and Quality Management Plan (QMP)	Issues continue related to KMP building work without released for construction (RFC) design changes and/or shop drawings.	This issue is carried over from the second quarter quality report of 2019. Corrective Action plan 008 was submitted in April 2019. Due to ineffectiveness of the April 2019 plan, KMP submitted a revised plan in June 2019. In September, KMP showed improvement by implementing a more efficient and organized restricted activity process. This improvement continued through October 2019. CAR-008 was closed in November 2019. <b>CLOSED</b>
Traffic (MOT) Process	PA Schedule 10, Section 2 and Transportation Management Plan (TMP)	KMP is not performing traffic switches per the signed and sealed MOT plans and is late picking up lane closures.	This issue is carried over from the third quarter quality report of 2019. This issue is a result of KMP process with opening traffic switches to the traveling public. Corrective Action Plan 015 was initiated in August, but KMP continued to struggle with noncompliant traffic shifts through September. In October, KMP submitted an Increased Oversight and Remedial Plan of Action which is supplemental to CAR 015. In December 2019, the Enterprises’ audited KMPs implementation of the corrective action plan in conjunction with KMP Increased Oversight and Remedial Plan of Action. The Enterprises’ found that KMP is generally complying with their mitigation plan, but has not fully followed through with some of the commitments in the plan. KMP has acknowledged that there is room for improvement with the implementation of the plan and has shown improvement since the Enterprises’ Audit was issued. This issue is expected to be closed in February or March 2020. <b>OPEN</b>

Element	Process	Issue	Status
Construction Quality Management	Horizontal and Vertical Grade Control	KMP self-identified the issue. The issues include drainage lines installed off alignment, aprons poured too wide and not to design elevation, a concrete box culvert installed off alignment, RCP not laid aligned to inlet opening, and the Peoria WB on-ramp reverse curve is too short.	This issue is carried over from the third quarter quality report of 2019. CAR-016 was opened in September for KMPs persistent issue with vertical and horizontal grade control. The Enterprises sent the plan back to KMP as revise and resubmit due to lack of defined monitoring and measurement requirements for the proposed action. The Enterprises approved the revised plan in October 2019. It will take KMP many months to evaluate the effectiveness of the corrective action. CAR-016 is still open and is not expected to close until January 2020 or later. The corrective action is discussed at the weekly Quality Task Force meeting. It is important to note that since CAR 016 was opened in September, the Enterprises and KMP have noticed a steady decrease in the frequency and magnitude of vertical and horizontal grade control issues. <b>OPEN</b>
Construction Quality Management	Concrete Process Control (low breaks)	KMP self-identified the issue. Intermittent low 28-day strength results from Aggregate Industries Class D concrete	This issue is carried over from the third quarter quality report of 2019. The Corrective Action Plan was submitted to and approved by the Enterprises in October 2019. To close this Corrective Action, a 2-month period must pass with no low Class D concrete breaks. We have noted low concrete breaks from October 2019 through December 2019 so it is not expected to close this CAR until at least spring of 2020. The corrective action is discussed at the weekly Quality Task Force meeting. In December 2019, the Enterprises requested a revised corrective action plan to determine the root cause of the continued low breaks and to develop a new mitigation plan. <b>OPEN</b>

Element	Process	Issue	Status
Construction Safety Management	UPRR Safety Management Plan and the UPRR Controlled Access Plan	In late October 2019, the Enterprises' requested KMP to develop a corrective action plan for systemic issues regarding enforcement of the UPRR Safety Management Plan and the UPRR Controlled Access Plan	The development of this corrective action plan has been discussed in UPRR task force meetings between KMP, CDOT, and UPRR. The Corrective Action Plan has gone through a few iterations since the Enterprises' request in October 2019. The Enterprises' expects the revised plan to be approved in January 2020 and potentially many months for KMP to demonstrate that the plan has effectively mitigated the issue for closure. <b>OPEN</b>

**Design Verification Reviews (DVR):** The Enterprises' DVRs evaluate Developer compliance with PA requirements by assessing the Developer's design plans and other deliverables. From October 2019 through December 2019, the Enterprises conducted 86 DVRs, yielding an 87 percent overall conformance percentage. For the entire Project, the Enterprises conducted 751 reviews, yielding an 84 percent overall conformance percentage. All noncompliant design identified by the Enterprises is resolved prior to the Developer releasing the plans for construction. Additionally, the Developer and the Enterprises issue Nonconformance Reports (NCRs) for design issues that are identified during performance of construction work. The nonconforming design is then resolved prior to construction. Since there has not been any known noncompliant design incorporated into the permanent work there are not any notable design issues identified by the Enterprises and/or the Developer for this reporting period.

## MAINTENANCE/TRAFFIC ISSUES

The focus of routine maintenance work for this reporting period included vegetation control, flexible pavement repair, graffiti removal, litter cleanup, pothole patching, sweeping, flexible pavement repair, snow removal and resolution of any safety critical or hazardous defects which occurred throughout the course of the reporting period.

The construction assessment team has been performing weekly assessments of the MOT/MHT setups. These issues are being communicated with and addressed by the Developer. The Enterprises began finding reoccurring issues with the implementation and field modification of traffic switches shown in the plans. As a result, the Developer has implemented a Corrective Action to prevent future occurrences.

## SAFETY ISSUES

The Developer had one recordable event for the quarter, bringing the total to 5 for the project. The Developer has commenced all major construction activities, identifying traffic related incidents, metal to metal, and utility strikes as safety concerns. As part of the safety program,

anyone involved in a traffic related incident will be required to take a defensive driving course. Additionally, On-Site Safety is on the project to quickly tend to injuries as they occur.

The Developer completed the following safety critical work for this quarter: drill shaft installation, pile installation, trench excavation for drainage, sanitary and waterline related items, bridge demolition, girder erection, and for the excavation of the permanent walls between York and I-225. For the west segment of the Project, a large safety focus is being made on the excavations near and around the existing viaduct and UPRR shooflies.

Safety Patrol has responded to 1533 events during this reporting period. This total includes 176 crash/incidents. 47 percent of these events were self-identified by Safety Patrol.

## CIVIL RIGHTS STATUS

### Small Business DBE/ESB Goals

**Design Status:** 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 11.6% (\$5.6 million in work); this meets 99.98% of the Developer's DBE goal for the design period. 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 9.38% (\$4.51 million in work); this exceeds the ESB goal for design for the Project.

**Construction Status:** The Developer's DBE goal for the construction is 12.5%. To date, the Developer has commitments to DBE construction firms of 10.64% (\$80.1 million in work); this meets 85% 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 6.2% (\$46.7 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. Total enrollment reached 1,439 members, with 157 enrolled this quarter. The Central 70 Project is a founding partner of WORKNOW. For further information on the WORKNOW Program please go to: <https://work-now.org/accomplishments-to-date/>

November was the final month that the Neighborhood Training Center (NTC) served as a hub for construction training and support programs. The final training course at the NTC was completed on November 8, 2019. The WORKNOW training and resource partners that used the NTC will continue training at a new temporary shared space location in the GES neighborhood.

Several key events occurred this quarter:

- WORKNOW hosted a community-based Meet and Greet at the Ross-Barnum Library in west Denver on October 8, 2019.

- The C70 team, both Kiewit and CDOT reps, participated in WORKNOW sub-committee meetings to develop robust skills assessments for WORKNOW members entering and advancing in the construction industry.
- The Kiewit C70 team was asked to present at a Workforce Coordinator Happy Hour event hosted by the City of Denver on October 30, 2019. Nine other major Prime Contractors in the Denver metro area attended to discuss ways to incorporate partnerships with WORKNOW and improve workforce development opportunities in construction. Resulting from this event, this group of Primes decided to meet quarterly to help solve workforce difficulties impacting the industry.
- WORKNOW hosted a community-based Meet and Greet at CrossPurpose in Five Points (C70 zip 80205) on November 14, 2019.
- The Kiewit and CDOT Central 70 team participated in the Denver-Metro Construction Sector Partnership on November 4, 2019 and will be supporting planning for a city-wide youth hiring fair in Spring 2020.
- Development of 2020 Milestones to improve WORKNOW internal efficacy, resulting in increased placement, retention, and wage gains of employees on WORKNOW's Partner Projects, including C70.

The Developer and its subcontractors have enrolled local hires for both professional services and construction. They have enrolled 471 local hires and 144 On-the-Job Training (OJT) participants. The Developer has recorded 318,528 local hire hours and 84,664 OJT hours.

### MITIGATION/COMMUNITY COMMITMENTS STATUS

As of the date of this report, 146 of the 148 identified Record of Decision (ROD) mitigation measures are either in progress or completed.

The Enterprises and Developer have completed nine ROD re-evaluations to date. Re-evaluation 9 was approved on October 4, 2019. ROD Re-evaluation 10 is in progress. It will expand the construction limits to allow temporary access to replace the existing sign bridges just west of the Coliseum.

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 Central 70 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.	Complete	Assistance was provided to all businesses that were displaced by the project per the Uniform Act. All impacted businesses have been completed and reestablished in their new location per the Uniform Act. The Developer will continue the Community Outreach for businesses within the project area.
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 in June 2018
Mitigate noise and dust impacts by providing residents living adjacent to the project new storm windows, furnace filters, and air conditioning units.	Complete	Assessments and installations of improvements were completed on 03/14/2019. Ongoing warranty work and energy credits will continue through the Construction Period.
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 was received by the Enterprises in July 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; quarterly reports began in 2019.
Monetary Incentive for Managed Lanes	Deferred	Deferred until the new managed lanes are operational.
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.
Swansea Elementary Phase 4	In Design	To be constructed by Developer along with the Cover.

## COMMUNITY ENGAGEMENT

The Enterprises, supported by the Developer, is responsible for communicating with citizens, the media, public officials, and other stakeholders regarding the Project. Public information efforts continue to take a two-pronged approach with focused outreach to commuters through service club presentations throughout the metro area providing Project overview and benefits. The Public Information team has also continued using various outreach tools in the community to alert residents. This includes small group and individual meetings, door-to-door flyers and weekly traffic updates sent through email. In addition, the communications team developed collateral to inform commuters and residents of the Project progress in year one. The communications team has been working with Swansea Elementary to tie Central 70 information into the school's website. They also continue to update the community using social media; such as Facebook (in English and Spanish), Twitter and the NextDoor online outreach tool.