

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 19A-0059R

IN THE MATTER OF THE APPLICATION OF THE REGIONAL TRANSPORTATION DISTRICT AND THE CITY AND COUNTY OF DENVER FOR AUTHORITY TO ALTER TEN AT-GRADE CROSSINGS ALONG WELTON STREET BETWEEN 21ST AND 30TH STREETS IN THE CITY AND COUNTY OF DENVER, STATE OF COLORADO.

**COMMISSION DECISION
GRANTING PHASE 2 DESIGN PLANS**

Mailed Date: January 31, 2020

Adopted Date: January 29, 2020

I. BY THE COMMISSION

A. Statement

1. This matter comes before the Commission for consideration of an application (Application) filed jointly by the Regional Transportation District (RTD) and the City and County of Denver (Denver) (collectively Applicants or Joint Applicants), on January 24, 2019, as amended on December 27, 2019 and January 16, 2020, seeking final approval for crossings of the RTD light rail with intersections adjacent to Welton Street at 21st Street, National Inventory No. 966734V; 22nd Street, National Inventory No. 966735C; Park Avenue West (23rd Street), National Inventory No. 966736J; 24th Street, National Inventory No. 966737R; 25th Street, National Inventory No. 966738X; 26th Street, National Inventory No. 966739E; 27th Street/Washington Street/26th Avenue at Five Points, National Inventory No. 966741F; 28th Street, National Inventory No. 966740Y; 29th Street and 20th Street, National Inventory No. 966742M; and 30th Street, National Inventory No. 966743U in the City and County of Denver for Phase 1 replacement of existing blank-out signs, second train warning signs, for final

approval of Phase 2 replacement of existing signs, addition of new LED blank-out signs, replacement of the existing equipment along the Welton corridor and at the crossings for installation of the new blank-out signs, conversion of 28th Street from one-way to two-way traffic, and payment of part of the project costs with Federal Section 130 funds in Denver, State of Colorado.

2. Notice of the Application was provided by the Commission to all interested parties, including adjacent property owners pursuant to § 40-6-108(2), C.R.S., on January 28, 2019.

3. The Commission reviewed the Application and deemed the Application complete within the meaning of § 40-6-109.5, C.R.S., by Decision No. C19-0248 mailed March 19, 2019.

4. There were no interventions filed in this matter.

5. The Commission approved the Phase 1 plans and required the filing of final Phase 2 plans by May 30, 2019 by Decision No. C19-0248.

6. On May 30, 2019, RTD filed a motion requesting an extension until August 30, 2019 to file the Phase 2 plans. The Commission granted this motion by Decision No. C19-0480 mailed June 11, 2019.

7. On August 30, 2019, RTD filed a motion requesting an additional extension of time until December 31, 2019 to file the Phase 2 plans. The Commission granted this motion by Decision No. C19-0752 mailed September 17, 2019.

8. On December 27, 2019, RTD filed the Phase 2 plans for Commission review and approval. RTD filed additional information on its final plans on January 16, 2020 to make some additions of signage along the Welton Corridor.

9. Now being fully advised in the matter, we grant the Application as amended for Phase 2 of this project.

B. Findings of Fact

10. The Commission gave notice to all interested parties, including the adjacent property owners. No intervention was received opposing the Application.

11. The Joint Applicants propose dividing the Application into two stages to coincide with immediate needs to replace existing blank-out signs that are difficult to repair and in many cases no longer serviceable and the design and construction needs to add additional blank-out signs, second train sign functionality, and additional detection functionality for the new proposed blank-out signs.

12. Phase 1 of the Application involves replacing the existing LRT “NO RIGHT TURN” blank-out signs currently installed along Welton Street for vehicles making a right-turn from Welton Street onto 21st Street, 22nd Street, Park Avenue West, 24th Street, 25th Street, 26th Street, 27th Street/Washington Street/26th Avenue at Five Points, 28th Street, 29th Street, and 30th Street with new blank-out signs that will alternate between the LRT train symbol and the No Right Turn symbol. These signs will also include the “2nd Train” supplemental blank-out messages at double track locations at 21st Street, 22nd Street, and Park Avenue West that will not be functional until Phase 2 of the project because of the needed additional detection circuitry. Although there is double track at 24th Street, at this location the track is just switching from single track to double track, so two trains would not be able to operate through this crossing at the same time. The new blank-out signs are also consistent with the blank-out signs that have been installed on new projects throughout the RTD light rail system to provide consistency throughout the system. The new blank-out signs are significantly brighter and more legible than

the old signs. Phase 1 of the Application can be implemented now with the existing detection circuitry and needs to be implemented now because RTD needs to replace the old signs that are now becoming difficult to repair and are in many cases no longer serviceable. Phase 1 was approved by the Commission by Decision No. C19-0248.

13. Phase 2 of the Application will include replacing existing passive signage, installing new W10-1 advance warning signs for the crossings on the westbound and eastbound approaches to the crossings, installing W10-2 and W10-3 advance warning signs for the northbound approaches to the crossings from Welton Street, removing the advance warning signs and associated warning beacons associated with the LRT crossing “When Flashing” warning signage and replacing with just LRV advance warning signs, and adding new LED blank-out signs that alternate between the LRT train symbol and the appropriate “No Right”, “No Through”, or “No Through/Right”. The new detection circuitry would be installed through the entire corridor and the “2nd Train” functionality would be added to the appropriate signs. Ancillary work to install the Phase 2 signs will require installation of new pedestal signal poles, horizontal drilling of signal and electrical conduit, removal and replacement of sidewalk to accommodate the horizontal drilling, installation and diagnostics of electrical equipment to activate the new Phase 2 signage, and replacement of the Phase 1 activation system.

14. The old Phase 1 system will be converted during Phase 2 to a new microprocessor based system, and the existing relay cases and associated control equipment at the intersection of 22nd Street, 25th Street, and 29th Street will be replaced. New duct bank systems, power requirements for new relay cases, and upgraded TWC loops and systems are being designed to support desired functionality of the signaling system. Blank-out signs will illuminate at the start of traffic signal yellow clearances at the two traffic signal locations to provide approximately

five to six seconds of blank-out operation prior to the LRT receiving a vertical bar from the traffic signal to proceed. This same operation is being designed at the non-traffic signal locations along the corridor to provide five to six seconds of advance blank-out sign warning prior to LRT arrival at the crossing to give drivers advance warning of the train arriving and give drivers time to react. The “2nd Train” supplemental blank-out signs will be operated such that if a second train is within approximately five to six seconds of arriving at the same crossing, the second train message will illuminate to warn drivers that a second train is approaching the crossing. The exception is at the traffic signal controlled crossing of Park Avenue West where the second train message will illuminate only when both trains would be able to pass through the intersection during the same LRT phase within the traffic signal phasing of the traffic signal cycle.

15. Finally, as part of Phase 2, 28th Street would be converted from one-way to two-way traffic. Although the current plans still show 28th Street as a one-way street eastbound and do not show blank-out signage associated with the new westbound movements at 28th Street, presumably the revised Phase 2 plans will include new blank-out signage consistent with the signage at the other locations along the corridor associated with the new westbound through and right-turning movements across the tracks at this location.

16. The proposed changes are being made to quickly address the failing sign issues that RTD is experiencing while also addressing the identified safety issues along the Welton Corridor that have been seen through the years through the accident history and patterns identified.

17. The Applicants state there are currently approximately 122 LRT movements through the crossings every day at speeds ranging from 10 to 20 miles per hour with the number of trains predicted to be the same in future years.

18. RTD estimates the costs for the entire project at approximately \$3.772M dollars with \$1.5M coming from Federal Section 130 funding and the remaining \$2.272M dollars coming from RTD funding. RTD proposed to start replacement of the existing signs in Phase 1 upon approval by the Commission and be complete by December 2019, and RTD proposes to begin Phase 2 of the project by 2019. The Applicants have waived the applicable statutory period found at § 40-6-109.5, C.R.S., regarding the time limit for decisions.

19. With the filing of the final Phase 2 plans, RTD requests approval of the project for Phase 2 of construction.

20. RTD shall inform the Commission in writing when the crossing changes are complete and operational. The Commission will expect this letter by October 31, 2020.

21. RTD and Denver shall be required to update the crossing inventory form and file a copy of the updated form at the end of the project by October 31, 2020.

C. Conclusions

22. The Commission has jurisdiction in this matter under §§ 40-4-106(2)(a) and (3)(a), C.R.S.

23. No intervenor that filed a petition to intervene or other pleading contests or opposes the Application.

24. Because the Application is unopposed, the Commission finds that it will determine this matter upon the record, without a formal hearing under § 40-6-109(5), C.R.S., and Rule 1403, 4 *Code of Colorado Regulations* 723-1 of the Commission's Rules of Practice and Procedure.

25. Based on the Findings of Fact, we find that good cause exists and that the requirements of public safety and necessity are met by granting the Application for the Joint Applicants' Phase 2 final plans.

II. ORDER

A. The Commission Orders That:

1. The application filed jointly by the Regional Transportation District (RTD) and the City and County of Denver (Denver) (collectively Joint Applicants) on January 24, 2019, as amended on December 27, 2019 and January 16, 2020, seeking final approval for crossings of the RTD light rail with intersections adjacent to Welton Street at 21st Street, National Inventory No. 966734V; 22nd Street, National Inventory No. 966735C; Park Avenue West (23rd Street), National Inventory No. 966736J; 24th Street, National Inventory No. 966737R; 25th Street, National Inventory No. 966738X; 26th Street, National Inventory No. 966739E; 27th Street/Washington Street/26th Avenue at Five Points, National Inventory No. 966741F; 28th Street, National Inventory No. 966740Y; 29th Street and 20th Street, National Inventory No. 966742M; and 30th Street, National Inventory No. 966743U in the City and County of Denver for Phase 1 replacement of existing blank-out signs, second train warning signs, Phase 2 replacement of existing signs; addition of new LED blank-out signs, replacement of the existing equipment along the Welton corridor and at the crossings for installation of the new blank-out signs; conversion of 28th Street from one-way to two-way traffic; and payment of part of the project costs with Federal Section 130 funds in Denver, State of Colorado is granted.

2. The Joint Applicants are authorized and ordered to proceed with replacement of the existing blank-out signs with the new blank-out signs at the existing locations along the Welton Corridor, replacement of the existing control equipment, addition of new relay cases,

upgraded TWC loops, addition of new LED blank out signs, and replacement and addition of new advance warning signs.

3. RTD will be required to inform the Commission in writing that the crossing changes are complete and operational within ten days after completion. We shall expect this letter by October 31, 2020. However, we understand this letter may be provided earlier or later than this date depending on changes or delays to the construction schedule.

4. RTD and Denver will be required to update the crossing inventory form showing the changed crossing conditions and file a copy of the updated inventory forms in this proceeding at the end of the project by October 31, 2020.

5. The 20-day period provided for in § 40-6-114, C.R.S., within which to file applications for rehearing, reargument, or reconsideration, begins on the first day following the effective date of this Decision.

6. The Commission retains jurisdiction to enter further decisions as necessary.

7. This Decision is effective on its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING
January 29, 2020.**

(S E A L)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

JEFFREY P. ACKERMANN

FRANCES A. KONCILJA

JOHN GAVAN

Commissioners