

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 18A-0809R

IN THE MATTER OF THE APPLICATION OF THE CITY OF LOUISVILLE FOR
AUTHORITY TO INSTALL 4-QUADRANT RAILROAD GATES WITH FLASHING
LIGHTS, BELLS, CONSTANT WARNING TIME CIRCUITRY, AND NEW SIGNAL CABIN
AT TRACKS OWNED BY BNSF RAILWAY COMPANY CROSSING SOUTH BOULDER
ROAD, USDOT NO. 244804N, IN BOULDER COUNTY, STATE OF COLORADO.

**RECOMMENDED DECISION OF
ADMINISTRATIVE LAW JUDGE
MELODY MIRBABA
APPROVING STIPULATION AND
GRANTING AMENDED APPLICATION**

Mailed Date: October 19, 2020

TABLE OF CONTENTS

I. STATEMENT AND BACKGROUND.....	2
A. Summary.....	2
B. Procedural History.....	2
II. STIPULATION, PROPOSED AMENDMENT, AND EVIDENCE.	7
A. Stipulation, Proposed Amendment to Application, and Joint Filing.....	7
B. Evidence.	8
III. RELEVANT LAW	11
A. Jurisdiction, Burden of Proof, and Modified Procedure.....	11
B. Relevant Commission Rules and Requirements.....	13
C. Relevant FRA Rules and Recommendations.	14
IV. FINDINGS, DISCUSSIONS, AND CONCLUSIONS.	15
A. Radar Exit Gate System.....	15
B. Cost Estimate and Schematic Diagram.	17
C. Cost of Installation and Maintenance.	19
D. Schedule to Move Construction Forward.....	19

V. ORDER.....	20
A. The Commission Orders That:	20

I. STATEMENT AND BACKGROUND

A. Summary.

1. The question presented here is whether the four-quadrant gate system for the subject crossing should include a timed exit gate system as the Commission originally approved, or a radar exit gate system, as proposed by the parties in recent filings. This Decision approves the proposed radar exit gate system, and the Stipulation of the Parties Concerning Railroad Preemption and Exit Gate Technology (Stipulation) and the Unopposed Amendment to Application (Amendment). This Decision also provides deadlines for the next steps in the process.

2. The Administrative Law Judge (ALJ) transmits the record of this proceeding, this recommended decision containing findings of fact and conclusions thereon, and a recommended order to the Commission as provided under § 40-6-109, C.R.S.

B. Procedural History.

3. The procedural history is long; as such, only the procedural history necessary to understand this Decision is included. This matter concerns the City of Louisville's (City) above-captioned Application to which BNSF Railway Company (BNSF) objected. As discussed in Decision No. R19-0742, the City sought to modify the subject crossing to qualify it as a quiet zone under the Federal Railroad Authority's (FRA) final train horn rule.¹ After a two-day

¹ References throughout this Decision to the federal train horn rule or the train horn rule are to 49 *Code of Federal Regulations* Part 222. Hearing Exhibit 123 is a copy of 49 CFR Parts 222 and 229 and appendices.

evidentiary hearing, the ALJ granted the Application. Decision No. R19-0742 issued September 10, 2019. As relevant here, the ALJ approved the City's request to modify the subject crossing to add a four-quadrant gate system using a timed exit gate system, and to continue to use simultaneous preemption at the crossing.

4. On September 30, 2019, BNSF filed exceptions to the Recommended Decision, to which the City responded on October 15, 2019. During its weekly meeting on December 17, 2019, the Commission denied BNSF's exceptions. Decision No. C20-0238 issued April 13, 2020.

5. On May 4, 2020, BNSF filed an Application for Reconsideration of Commission Decision Denying BNSF Railway Company's Exceptions to Recommended Decision No. R19-0742 (Application for Reconsideration), to which the City responded on May 19, 2020. In its Application for Reconsideration, BNSF states that it received certain information after the Recommended Decision was issued that may indicate timed exit gates may not be feasible at the crossing. Application for Reconsideration, at 5.

6. During its weekly meeting on May 27, 2020, the Commission denied in part and granted in part BNSF's Application for Reconsideration, and remanded this proceeding to the ALJ for a limited purpose (first remand). Decision No. C20-0401 issued June 1, 2020. While the Commission denied the substance of BNSF's Application for Reconsideration, the Commission was concerned with BNSF's statements that the crossing technology may not be able to meet the approved crossing design specifications. *Id.* at ¶¶ 11-12. For that reason, the Commission granted the Application for Reconsideration in part "for the limited purpose of considering the information BNSF references in its application for RRR and the additional information and

filings we order in this Decision.” (Footnote omitted.) *Id.* at ¶ 12. The Commission ordered BNSF to make a filing providing a detailed description, explanation, and technical specifications as to why it is technologically impossible to maintain simultaneous preemption with a timed exit gate system at the subject crossing, and to file a cost estimate and schematic diagram for changes to the crossing consistent with the City’s Application, as required by and consistent with Rule 7204(a)(X)(C) and (D) of the Commission’s Rules Regulating Railroads, Rail Fixed Guideways, Transportation by Rail, and Rail Crossings, 4 *Code of Colorado Regulations* (CCR) 723-7. *Id.* at ¶ 13. The Commission remanded the proceeding to the ALJ to consider whether the information contained in these filings warrants a hearing, to hold a hearing if necessary, and to determine ultimately whether that information renders the approved design infeasible as BNSF suggests. *Id.* at ¶ 15.

7. Based on Decision Nos. R19-0742 and C20-0401, the Commission has authorized the City to make changes to the crossing which will qualify the crossing to be designated as a quiet zone under federal law. None of the Decisions that follow (including this one) impact this.

8. On July 1, 2020, BNSF filed an Unopposed Motion for Extension of Time to File Required Submission, which the ALJ granted on July 8, 2020, extending the deadline to make the required filings to August 3, 2020. Decision No. R20-0496-I. BNSF did not make the Commission-ordered filings, instead filing the parties’ Stipulation with Exhibit A (an updated schematic diagram for the subject crossing) on August 3, 2020. The Stipulation proposes a change to the Commission-approved crossing design and seeks to resolve the parties’ disputes.

9. On August 13, 2020, BNSF filed a Notice of Filing of Revised Cost Estimate (Notice) and a Cost Estimate. The Notice states that BNSF’s cost estimate is updated to reflect changes based on the parties’ Stipulation.

10. On August 14, 2020, the ALJ issued a Recommended Decision finding that the Commission's first remand order does not authorize the ALJ to consider, decide, or make recommendations on the parties' Stipulation, or to excuse BNSF from making the filings required by Decision No. C20-0401. Decision No. R20-0596, ¶ 14. The Recommended Decision also finds that BNSF failed to make the filings required by Decision No. C20-0401, and as a result, the record lacks information establishing that the approved design is not feasible. *Id.* at ¶ 15. The Decision concludes that the record does not establish that it is necessary to hold an evidentiary hearing on the feasibility of the approved design, and recommends that no such hearing should be held. *Id.*

11. During its weekly meeting on September 2, 2020, the Commission stayed Recommended Decision No. R20-0596 on its own motion. Decision No. C20-0643-I issued September 2, 2020. The Commission found that the parties' Stipulation "materially changes the crossing design by replacing timed exit gates with a photo radar exit gate system." *Id.* at ¶ 6. The Commission ordered: (a) the City to file an amended application within 20 days; (b) BNSF to file an estimate and schematic diagram consistent with the amended application, as required by Rule 7204(a)(X)(C) and (D), 4 CCR 723-7, within 20 days; and (c) BNSF to make a signal engineer available to provide testimony about the modified design. *Id.* at ¶ 9. Finally, the Commission remanded the proceeding to the undersigned ALJ (second remand).

12. On this second remand, the ALJ determined that it is necessary to take evidence on whether the parties' proposed change to the approved design meets relevant legal standards. To this end, the ALJ scheduled a status conference for September 24, 2020. Decision No. R20-0660-I issued September 11, 2020. The ALJ also noted that BNSF's most recent updated schematic diagram still does not comply with Commission Rule 7204(a)(X)(D), 4 CCR

723-7 because it does not provide equipment response time, minimum warning time, clearance time, buffer time, and total warning time (as required by the referenced rule). *Id.* at ¶ 13. The ALJ told BNSF that its next schematic diagram must include the missing information. *Id.*

13. On September 22, 2020, the City filed an Amendment, reflecting the changes proposed in the parties' Stipulation. That same day, BNSF filed an estimate and schematic diagram, (Exhibits A and B), consistent with the Amendment and the parties' Stipulation. BNSF also filed a "Submission re: Decision R20-0660-I" (Submission). The Submission states that the updated schematic diagram (Exhibit B) includes the equipment response time, minimum warning time, and buffer time, but that it does not include the clearance time and total warning time because BNSF must first perform a survey and that BNSF does not perform surveys at this stage. BNSF offers to update the information once it becomes available. *Id.*

14. The ALJ called the status conference as noticed on September 24, 2020; all parties appeared. During the status conference, the parties agreed to submit written testimony in support of their Stipulation and the related amendment to the Application on or by October 6, 2020. Decision No. R20-0692-I issued September 28, 2020. The ALJ accepted this approach, but also scheduled an evidentiary hearing for October 12, 2020, so that the parties may supplement written testimony should the ALJ determine that it is necessary. *Id.* During the status conference, the ALJ noted that BNSF's schematic diagram filed on September 22, 2020 (Exhibit B), fails to provide all of the information required by Rule 7204(a)(X)(D), 4 CCR 723-7 and multiple Commission decisions. Noting BNSF's statement that it does not have the missing information because it does not perform a survey at this stage, the ALJ explained that there appears to be no reason why BNSF could not provide estimated figures (through testimony or other filing). The ALJ directed BNSF to either provide such estimated figures, or explain why it is unable to do so

through testimony or other filing. The ALJ also directed the parties to provide information relating to the anticipated or requested timing to file a construction and maintenance agreement, begin construction, and complete construction, through testimony or other filing.

15. On October 6, 2020, the parties timely submitted verified written testimony, and also made a joint filing addressing timelines for filing a signed construction and maintenance agreement, and beginning and finishing construction. See Joint Submission of the Parties Concerning Construction Deadlines (Joint Filing). After reviewing the parties' evidentiary submissions and Joint Filing, the ALJ found that sufficient evidence exists in the record to determine whether to approve the parties' Stipulation and the related amendment to the Application. As such, the ALJ vacated the evidentiary hearing as unnecessary. Decision No. R20-0716-I issued October 7, 2020.

II. STIPULATION, PROPOSED AMENDMENT, AND EVIDENCE.

A. Stipulation, Proposed Amendment to Application, and Joint Filing.

16. The parties seek to make a single change to the approved design, that is, changing the approved exit gate system from a timed system to a radar or presence detection system. Stipulation at 4; Amendment at 3. Per the Stipulation, the parties agree that: simultaneous preemption will be maintained at the subject crossing as already approved; BNSF withdraws its objection to using simultaneous preemption; the Commission-approved timed exit gate system should be replaced with a photo radar exit gate system; and that the City will seek to amend the Application to modify the crossing design to reflect a photo radar exit gate system. Stipulation, 4.

17. The City also agrees to fund the "installation of the photo radar exit gate monitoring system" and BNSF will maintain it once it is installed. *Id.* The Stipulation asks the ALJ to approve the Stipulation. *Id.* at 5.

18. The City's proposed Amendment is consistent with the parties' Stipulation, and seeks to install a photo radar exit system, rather than the Commission-approved timed exit gate system.

19. None of the proposed changes to the approved design impact whether the crossing may qualify for quiet zone designation under federal law.

20. The parties' Joint Filing proposes that if the Stipulation and proposed Amendment are approved, that the fully-executed construction and maintenance agreement be filed with the Commission within 60 days of the order approving the Amendment; that construction begin by March 1, 2021 and be completed by September 1, 2021. Joint Filing at 2.

B. Evidence.

21. Mr. Steven Phillips, BNSF's Assistant Director of Signal Design, provided written testimony in support of the Stipulation and proposed Amendment. Hearing Exhibit 300, at 1. Mr. Phillips has worked for BNSF since 1996. In his current role, he supervises a team responsible for all crossing designs for BNSF's system, including crossings with preemption circuits. *Id.*

22. BNSF's signal practices require the use of radar technology to operate exit gate systems when replacing existing installations or installing new ones. *Id.* at 2. BNSF believes that radar exit gate systems are "best practice" and industry standard because the systems are able to detect a vehicle present in the crossing (known as presence detection), and avoid closing the exit gate when a vehicle is detected. *Id.* BNSF prefers presence detection systems over timed exit gate systems because timed exit gates will close regardless of whether a vehicle is within the crossing. *Id.* at 2-3. Based on this, Mr. Phillips opines that timed exit gate systems increase the chance of trapping a vehicle in the crossing and falling onto and striking a vehicle. *Id.* at 3.

23. According to Mr. Phillips, a vehicle detection system is a supplemental safety measure in quiet zones. *Id.* Radar systems are mounted above the crossing; Mr. Phillips testified that this makes maintenance and repair easy, particularly as compared to older loop technology, which is installed in the pavement. *Id.* at 4.

24. In addition, Mr. Phillips explained that when no vehicle is present, a radar exit gate descends quicker than a timed exit gate. Mr. Phillips sees this as another advantage of a radar system because it is better to have the exit gates down as quickly as possible. *Id.* at 6.

25. Here, the photo radar detection equipment will be installed at four locations, above and outside the crossing, on opposite sides of the crossing. The equipment will face directions to allow it to monitor the entire crossing island and provide redundant coverage with two radars positioned on opposite sides of the crossing. *Id.* at 4-5. Mr. Phillips states that the radar exit gates will be triggered after the entrance gates descend. *Id.* at 6. Mr. Phillips believes that the crossing design with the proposed changes, as shown in the schematic diagram (also referred to as a state sketch), is a reasonable and necessary design to the end, intent, and purpose that accidents be prevented, and the safety of the public promoted at the crossing. *Id.* at 8.

26. At this crossing, Mr. Phillips believes that a radar exit gate system is preferable because the crossing uses simultaneous preemption. He explained that because simultaneous preemption provides less advance warning time for vehicles than advanced preemption, using radar or active presence detection will keep an exit pathway open for vehicles that may be queued at the crossing. *Id.* at 7. Timed exit gates will not. *Id.* Mr. Phillips also believes that even setting aside the type of preemption, the crossing is located in a relatively busy and growing area. Mr. Phillips believes that with increased traffic, the odds of a vehicle getting trapped in a crossing increases. *Id.*

27. As to the information required by Commission decisions and Rule 7204(a)(X)(D), 4 CCR 723-7, Mr. Phillips states that the equipment response time is 4 seconds, the minimum warning time is 20 seconds, and the buffer time is 10 seconds. *Id.* at 7-8. All of these figures are typically constant across all projects. BSNF does not provide the clearance time and total warning time because those calculations cannot be determined with certainty until BNSF completes its full survey. *Id.* at 8. BNSF does not perform a survey until after a construction and maintenance agreement is executed and the City has issued a “Notice to Proceed.” *Id.* at 8. But, Mr. Phillips provides estimated clearance time and total warning time only “for the purpose of fulfilling the requirement of PUC Rule 7204(a)(X)(D),” which are 1 second and 35 seconds, respectively. *Id.* Mr. Phillips clarifies that these estimates were compiled by the City’s engineers and consultants, and that BSNF will determine final figures after a survey is performed. *Id.*

28. Mr. Kurt Kowar, the City’s Public Works Director, provided written testimony in support of the Stipulation and proposed Amendment. Hearing Exhibit 200 at 1. He has worked for the City since 2012, and has experience working on highway-rail projects, including multiple underpass projects. *Id.* The City defers to BNSF on the installation of the photo radar exit gate system at the crossing, and does not express an opinion on safety of such systems. *Id.* at 3. Mr. Kowar explains that the City does not have expertise in railway design, and does not design or operate railroad equipment; for that reason, the City relies on BNSF’s expertise as to using a photo radar exit gate system at the crossing. *Id.*

29. Mr. Kowar believes that once the proposed Amendment and Stipulation are approved, that negotiations with BNSF for a construction and maintenance agreement will begin immediately, but that he does not know how long that will take. *Id.* at 2. After negotiations are

complete, the Louisville City Council (City Council) must approve it. The City Council meets on the first and third Tuesdays of the month. The agreement will also have to go through BNSF's internal reviewing process. *Id.* The parties will sign the agreement as soon as they receive all the necessary approvals from their organizations.

30. After the construction and maintenance agreement is signed, the City will need to "re-bid" the portion of the project that it must construct (such as the roadway improvements). *Id.* Given that the City anticipates receiving funding from the Colorado Department of Transportation (CDOT) for the project, Mr. Kowar believes that CDOT may require additional updates to the plans and specifications before the City may seek bids. *Id.* The City anticipates that the bid process may take 30 to 60 days. After this, the chosen contractor must obtain permits, provide safety qualifications or undergo safety training, and be bonded and insured under BNSF's requirements. *Id.* at 2-3. Mr. Kowar testified that the City will need BNSF's approval for work scheduling, track shutdown scheduling, and flaggers within the right-of-way, and that the timing of this will depend on BNSF's availability and priorities. *Id.* at 3. For all these reasons, Mr. Kowar states that the precise start date cannot be determined. *Id.*

31. Mr. Kowar estimates that construction which it is responsible for handling will take approximately 30 to 45 days from start to finish. *Id.*

III. RELEVANT LAW

A. Jurisdiction, Burden of Proof, and Modified Procedure.

32. The Commission has authority to determine, order, and prescribe the terms and conditions for the construction, installation, operation, maintenance, and warning for the tracks or other facilities of any railroad corporation across any public highway, at, below, or above grade in Colorado. § 40-4-106(2)(a), C.R.S. (2020). The Commission is specifically empowered

to regulate, determine, and prescribe the terms and conditions for the installation of signaling systems, “safety appliance devices, or such other means or instrumentalities” as may appear to the Commission to be “reasonable and necessary to the end, intent, and purpose that accidents may be prevented and the safety of the public promoted” at crossings subject to the Commission’s jurisdiction. *Id.* Thus, public safety is integral to the Commission’s decisions when considering changes to a highway-rail crossing.

33. Both the City and BNSF seek the Commission to approve their Stipulation and the proposed Amendment. As such, they bear the burden of proof by a preponderance of the evidence. §§ 13-25-127(1) and 24-4-205(7), C.R.S.; Rule 1500 of the Commission’s Rules of Practice and Procedure, 4 CCR 723-1. The preponderance standard requires the fact finder to determine whether the existence of a contested fact is more probable than its non-existence. *Swain v. Colorado Department of Revenue*, 717 P.2d 507, 508 (Colo. App. 1985). A party has met this burden of proof when the evidence, on the whole and however slightly, tips in favor of that party. *Schocke v. State, Dep’t of Revenue*, 719 P.2d 361, 363 (Colo. App. 1986).

34. The Commission may decide a matter under a modified procedure, without a hearing, if the relief sought is unopposed. *See* Rule 1403(a), 4 CCR 723-1. Because the Stipulation and proposed Amendment are unanimous, unopposed, supported by sworn testimony verifying sufficient facts that adequately support the requested relief, and no hearing is requested or required, the ALJ will decide whether to approve the Stipulation and proposed Amendment based on the record, without a hearing. *Id.*

B. Relevant Commission Rules and Requirements.

35. The railroad and the road authority may seek authority from the Commission to install or modify active or passive warning devices at a public highway-rail crossing.² Rule 7203(d), 4 CCR 723-7; *see also* Rule 7001(d); Rule 7201(u), (v) and (hh), 4 CCR 723-7.

36. Among other requirements, applications to modify or install active or passive warning devices must include a detailed railroad cost estimate, and schematic diagram of the crossing warning devices, which must “specifically identify the equipment response time, advanced preemption time, minimum warning time, clearance time, buffer time, and total warning time.” Rule 7204(a)(X)(C) and (D), 4 CCR 723-7.

37. The road authority is responsible for maintaining the public highway while the railroad is responsible for maintaining the highway-rail crossing’s signals and devices for the life of the crossing. § 40-4-106(2)(b), C.R.S.; Rules 7211(h) and (i), 4 CCR 723-7.

38. Preemption is the transfer of normal traffic operation to a special control mode of operation to coordinate vehicular and rail traffic. Rule 7008(a), 4 CCR 723-7, (incorporating the Manual on *Uniform Traffic Control Devices for Streets and Highways* (MUTCD) Sections 1A.13, 4L.03, and 8 (2009 Edition)); and MUTCD, § 1A.13, ¶ 152.³ Simultaneous preemption occurs when notice of approaching rail traffic is given to the highway traffic signal controller unit and the railroad warning devices at the same time. Rule 7201(nn), 4 CCR 723-7 and MUTCD, § 1A.13, ¶ 212. Advance preemption occurs when notice of approaching rail traffic is given to the highway traffic signal controller unit before the railroad warning devices are activated. Rule 7201(c), 4 CCR 723-7 and MUTCD, § 1A.13, ¶ 6.

² Given that the parties seek to make a single change to the approved crossing design, this Decision discusses only the rules relevant to that change.

³ All citations to the MUTCD in this Decision are to the 2009 Edition.

C. Relevant FRA Rules and Recommendations.

39. A more robust discussion of the FRA's train horn rule is outlined in Decision No. R19-0742. The FRA has jurisdiction over quiet zone determinations. 49 U.S.C. 20106; 49 *Code of Federal Regulations* (CFR) §§ 222.35 and 222.7(a). Quiet zone crossings are an exception to the FRA's general requirement that trains routinely sound their horns at a public highway-rail crossing. 49 CFR § 222.1. *Id.* The train horn rule sets minimum requirements for quiet zone designation to ensure public safety in light of the quiet zone mandate that trains no longer routinely sound their horns. 49 CFR § 222.39 (a) and (b). Where, as here, a road authority implements one or more FRA pre-approved supplementary safety measures at a crossing, the crossing does not require formal FRA review and approval in order to be designated as a quiet zone crossing. 49 CFR § 222.39(a)(1).

40. The FRA does not dictate whether a timed exit gate system or presence detection exit gate system (such as radar) must be used in order to qualify a four-quadrant gate system as a supplementary safety measure. See 49 CFR Part 222 Appendix A, ¶ (A)(2). But, the FRA does assign a lower effectiveness rate for a four-quadrant gate system using a presence detection exit gate system because drivers “may learn to delay the lowering of the exit gates by driving onto the opposing lane of traffic” and “other motorists at the crossing . . . may also be tempted to take advantage of the raised exit gate by driving around the lowered entrance gates, thus increasing the potential for a crossing collision.” *Id.* at ¶ (A)(2). The FRA notes that its assigned effectiveness rates do not mean that systems without presence detection are inherently safer than those with presence detection. Instead, the FRA recommends that the specific location should be reviewed to determine whether site-specific circumstances make using presence detection advisable. 49 CFR Part 222 Appendix A, ¶ (A)(2).

41. After reviewing the site-specific circumstances, if it is determined that a presence detection exit gate system is advisable, the presence detectors should be installed on one or both sides of the crossing, “and/or” in the surface between the rails closest to the field. *Id.*

IV. **FINDINGS, DISCUSSIONS, AND CONCLUSIONS.**

A. Radar Exit Gate System.

42. As the FRA recommends, the ALJ considers evidence as to the specific site conditions to determine whether a presence detection system is appropriate at the subject crossing.⁴ In doing so, the ALJ determines whether the preponderance of the evidence establishes that the proposed photo radar exit gate system is a reasonable and necessary measure to serve the intent and purpose of preventing accidents and promoting public safety at the crossing. *See* § 40-4-104(2)(a), C.R.S.

43. While the parties now stipulate to the use of a photo radar exit gate system at the crossing rather than the approved timed exit gate, they provide no studies of the subject crossing to support the change. The testimony revealed that the parties considered limited information in support of the change. Indeed, the City did not submit testimony or other information from any of its rail consultants, including those who testified at the 2019 hearing about the proposed change. Instead, the City now defers to BNSF.

44. During the 2019 hearing, the City’s consultant, Mr. Lawrence Lang testified that he observed the crossing on multiple occasions, and never witnessed vehicles queuing over the crossing.⁵ Decision No. R19-0742 at ¶ 74. If no vehicles queue on or over the crossing, vehicles

⁴ Contrary to BNSF’s assertion, presence detection exit gates are not supplementary safety measures under the train horn rule. 49 CFR Part 222 Appendix A, ¶ (A)(2)(g); *see* Hearing Exhibit 300 at 3.

⁵ The ALJ does not repeat the robust discussion and findings concerning timed exit gate versus radar exit gate systems in Decision No. R19-0742. Decision No. R19-0742, at 46-48.

do not get trapped in the crossing by a timed exit gate system. While Mr. Phillips attempts to rebut this, his testimony falls short. Specifically, he opines that the crossing is located in a relatively busy and growing area, and that with increased traffic, the odds of a vehicle getting trapped in a crossing increases. He does not provide a factual basis for these conclusions. As such, the ALJ concludes that the preponderance of the evidence does not show that a photo radar exit gate system will enhance safety based on queuing at the crossing.⁶

45. However, Mr. Phillips does provide helpful testimony concerning how quickly exit gates descend under a radar system. Specifically, he explains that when no vehicle is present, a radar exit gate descends quicker than a timed exit gate. He believes that safety is enhanced when exit gates descend as quickly as possible. The ALJ generally agrees with this conclusion because exit gates which descend as quickly as possible may help decrease the potential that traffic in the opposing direction may enter the crossing through the exit gates on the opposite side of the road after their entrance gates have descended. The ALJ also finds that when no vehicles are present in the crossing at this location, radar exit gates descending earlier than timed exit gates do not create added safety hazards as compared to the approved timed exit gates.

46. The photo radar detection equipment will be triggered after the entrance gates descend and will be installed at four locations, above and outside the crossing, and on opposite sides of the crossing. The equipment will face directions to allow it to monitor the entire crossing island and provide redundant coverage with two radars positioned on opposite sides of the crossing. Hearing Exhibit 300, at 4-5. The ALJ concludes that this is consistent with the FRA's

⁶ For several reasons, the ALJ also finds Mr. Phillips's other testimony unhelpful. First, his testimony appears based on assumptions that BNSF's practices should be accepted and approved by the Commission without question, simply because they are BNSF's. Next, many of his conclusions assume queuing at the crossing with the use of simultaneous preemption, but there has been no reliable evidence that there is queuing at the crossing.

recommendations as to radar equipment installation, per 49 CFR Part 222 Appendix A, ¶ (A)(2)(g).

47. Based on the foregoing, the ALJ concludes that the preponderance of the evidence supports using the proposed photo radar exit gate system at the subject crossing as a reasonable measure to serve the intent and purpose of preventing accidents and promoting public safety at the crossing. See § 40-4-104(2)(a), C.R.S. In reaching this conclusion, the ALJ makes no determination that radar exit gate systems are industry standard, best practices, or preferred when simultaneous preemption is used. Nor does the ALJ decide that a radar exit gate system is *safer* at this crossing than the previously approved timed exit gate system.

B. Cost Estimate and Schematic Diagram.

48. Given that the parties seek to change the approved crossing design, an updated cost estimate and schematic diagram is necessary under Rule 7204(X)(C) and (D), 4 CCR 723-7. BNSF filed an updated cost estimate and schematic diagram (Exhibits A and B) on September 22, 2020 to reflect the proposed changes. The ALJ concludes that BNSF's updated cost estimate complies with Rule 7204(X)(C), 4 CCR 723-7. But, its updated schematic diagram does not comply with Rule 7204(X)(D), 4 CCR 723-7.

49. While BNSF's updated schematic diagram (Exhibit B) includes the equipment response time, minimum warning time, and buffer time, it does not include the clearance time and total warning time. BNSF excuses its failure to provide this information based on its internal practices. Specifically, BNSF states that this information only becomes available after it has completed a survey at the crossing; it will only do that after the parties have executed a construction and maintenance agreement, and it has received notice from the City to proceed.

BNSF provides estimates of the clearance time and total warning time, which it obtained from the City's Application. Thus, these estimates are the City's, not BNSF's.

50. The ALJ finds that BNSF has again failed to comply with the Commission's order that it provide the information required under Rule 7204(X)(D), 4 CCR 723-7.⁷ BNSF voluntarily chose to follow its policy that it does not perform a survey at this stage, knowing this choice *again* results in violating the Commission's order to provide the clearance time and total warning time. BNSF provided no information to justify this choice, nor did it file a motion seeking to be excused from complying with the Commission's order. BNSF's actions are especially concerning because it was ordered to provide the missing information no less than three times. Decision Nos. C20-0401 issued June 1, 2020; C20-0643-I issued September 2, 2020; and Decision No. R19-0352-I issued April 22, 2019. The ALJ remains concerned by BNSF's pattern of ignoring Commission orders, which demonstrates a disregard for the Commission's authority.

51. While BNSF has flouted the Commission's orders, the City has not. The City should not be punished for BNSF's actions. As such, the ALJ relies upon the City's estimated clearance and total warning time to satisfy the requirement in Rule 7204(X)(D), 4 CCR 723-7.

52. BNSF will be ordered to submit its calculation of the clearance time and total warning time. If it fails to do so, the City's figures will stand, meaning, that it is expected that the crossing will use the City's figures for clearance and total warning time.

⁷ BNSF did not provide its own estimate of the missing information (clearance time and total warning time).

C. Cost of Installation and Maintenance.

53. As discussed, the parties agree that the City will pay for the cost of installing the photo radar exit gate system, and BNSF is responsible for maintaining it. This is consistent, at least in part, with statute and Commission rules. § 40-4-106(2)(b), C.R.S.; Rules 7211(h) and (i), 4 CCR 723-7. As such, the ALJ will approve the parties' agreement as to the cost of installing and maintenance of the photo radar exit gate system. In addition, the ALJ clarifies that this is consistent with, and does not impact or otherwise modify Decision No. R19-0742, as to other equipment installation cost and maintenance.

D. Schedule to Move Construction Forward.

54. As explained in more detail above, the parties submitted a proposed schedule for filing a signed construction and maintenance agreement, beginning construction, and completing construction. Mr. Kowar's testimony indicates that most of these timeframes cannot be determined with certainty. While the ALJ understands that there may be events outside the parties' control impacting the schedule, deadlines for each step in the process are necessary to help the parties prioritize their work in order to move the construction forward.⁸ Given that the City's Application was approved over a year ago, the construction should begin as soon as practicable without any unjustifiable delays in the approved schedule. The ALJ concludes that the preponderance of the evidence supports approving the parties' proposed deadlines, and will do so.

⁸ The ALJ notes that Mr. Kowar's testimony indicates that the timelines depend (at least in part), on BNSF's priorities. This is consistent with BNSF's testimony in the 2019 hearing. Deadlines should require BNSF to prioritize its part of the work for the crossing.

V. ORDER**A. The Commission Orders That:**

1. Consistent with the above discussion, the Stipulation of the Parties Concerning Railroad Preemption and Exit Gate Technology filed August 3, 2020, and the Unopposed Amendment to Application filed September 22, 2020, are approved. The above-captioned Application, as amended, is granted.

2. The parties must file a signed construction and maintenance agreement for the subject crossing within 60 days of the date this Decision becomes a final Commission Decision.

3. Within 90 days of the date this Decision becomes a final Commission Decision, BNSF Railway Company must make a filing indicating its calculation of the clearance and total warning time for the subject crossing. If it fails to do so, the City of Louisville's calculation of clearance and total warning times must be used at the crossing.

4. Construction on the crossing must begin by March 1, 2021 and be completed by September 1, 2021.

5. Proceeding No. 18A-0809R is closed.

6. This Recommended Decision will be effective on the day it becomes the Decision of the Commission, if that is the case, and is entered as of the date above.

7. As provided by § 40-6-106, C.R.S., copies of this Recommended Decision will be served upon the parties, who may file exceptions to it.

8. If no exceptions are filed within 20 days after service or within any extended period of time authorized, or unless the recommended decision is stayed by the Commission upon its own motion, the recommended decision will become the decision of the Commission and subject to the provisions of § 40-6-114, C.R.S.

9. If a party seeks to amend, modify, annul, or reverse a basic finding of fact in its exceptions, that party must request and pay for a transcript to be filed, or the parties may stipulate to portions of the transcript according to the procedure stated in § 40-6-113, C.R.S. If no transcript or stipulation is filed, the Commission is bound by the facts set out by the administrative law judge; and the parties cannot challenge these facts. This will limit what the Commission can review if exceptions are filed.

10. If exceptions to this Recommended Decision are filed, they may not exceed 30 pages in length, unless the Commission for good cause shown permits this limit to be exceeded.

(S E A L)



ATTEST: A TRUE COPY

Doug Dean,
Director

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

MELODY MIRBABA

Administrative Law Judge