

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

In the Matter of the:

Petition of the Wisconsin Department of Transportation for the Establishment of a Public Crossing of the Union Pacific Railroad Co. Tracks with Gateway Boulevard in the City of Beloit, Rock County

Petition of the Wisconsin Department of Transportation for the Closure of a Public Crossing of the Iowa, Chicago & Eastern Railroad Corp. Tracks with St. Paul Avenue in the City of Beloit, Rock County

9005-RX-97

FINAL DECISION

By letter dated October 19, 2007, the Wisconsin Department of Transportation (DOT) petitioned the Office of the Commissioner of Railroads (OCR) under secs. 195.28, 195.285, and 195.29 Stats., for the establishment of a public crossing of Gateway Boulevard with the Union Pacific Railroad Co. (UP) tracks located in the City of Beloit, Rock County.

DOT also petitioned to exempt the Gateway Boulevard crossing from the stopping requirement of §346.45, Stats. That section requires certain specified vehicles, such as fuel trucks and school buses, to stop at highway/rail crossings unless posted with an exempt sign.

Last, DOT petitioned to formally close the public crossing of St. Paul Avenue with the Iowa, Chicago & Eastern Railroad Corp. (ICE) tracks located in the City of Beloit.

On February 29, 2008, the Office of the Commissioner of Railroads (OCR) conducted a hearing on the petition of the Wisconsin Department of Transportation (DOT) for the establishment of a public crossing of Gateway Boulevard with the Union Pacific Railroad Co. (UP) tracks located in the City of Beloit, Rock County.

By letter dated May 30, 2008, the DOT notified the OCR that the Wisconsin Department of Natural Resources (DNR) has requested that the proposed crossing be moved about 600' to 800' east of the location presented at the February hearing. DOT requested a continued hearing to present additional testimony with respect to this new location.

Pursuant to due notice, public hearing was held in this matter on February 29 and July 1, 2008 in Beloit, Wisconsin with hearing examiner Douglas S. Wood presiding.

On August 5, 2008, the hearing examiner issued a proposed decision. The OCR received no comments on the proposed decision. The Commissioner adopts the proposed decision.

Appearances:

Parties

Wisconsin Department of Transportation, Petitioner

by

Gregory A. Baer, PE

Railroad Project Coordination Engineer

PO Box 7914

Madison, WI 53707-7914

And by

Kathleen Chung

Assistant General Counsel

PO Box 7914

Madison, WI 53707-7914

And by (July 1 hearing)

Mark Morrison, PE

Grade Crossing Safety Engineer

PO Box 7914

Madison, WI 53707-7914

In Support:

City of Beloit

by

Larry N. Arft

City Manager

Beloit, WI 53511

As Interest May Appear:

Union Pacific Railroad Co.

by

Mack H. Shumate, Jr.

Senior General Attorney

101 N. Wacker Drive, Suite 1920

Chicago, IL 60606

No appearance by Iowa, Chicago & Eastern Railroad Corp.

Findings of Fact

THE COMMISSIONER FINDS:

This docket encompasses two entirely distinct matters. First, DOT petitioned to formally close the public crossing of St. Paul Avenue with the Iowa, Chicago & Eastern Railroad Corp. (ICE) tracks located in the City of Beloit. The St. Paul Avenue is already physically closed at the tracks, but the closure is not recognized in the Federal Railroad Administration (FRA) database because St. Paul Avenue has a joint crossing number with Park Avenue. The City of Beloit vacated the portion of St. Paul Avenue that included the Iowa, Chicago & Eastern Railroad Corp. crossing by resolution of the common council on July 17, 2006.

With no public roadway to cross the tracks, by definition the crossing no longer exists. The OCR formally orders the closure of the crossing.

Gateway Boulevard

The second matter in this docket concerns the proposal by the DOT and the City of Beloit to establish a public crossing of Gateway Boulevard with the Union Pacific Railroad Co. tracks. The DOT and the City of Beloit propose to extend Gateway Boulevard from Eagles Ridge Road to Hart Road in 2009. The extension would cross the UP's Harvard Subdivision.

The proposed construction of Gateway Boulevard will link the new Gateway Business Park to the central Beloit area and also provide a critical link from the business park to I-43 and I-39. The Gateway Business Park is a 450-acre site for multi-use development.

Gateway Boulevard will consist of 4-lanes (two lanes in each direction divided by a raised median within approximately 100' of the crossing). A 12'-wide multiuse path will be constructed within the roadway right-of-way about 12' behind the back of the east curb. Gateway Boulevard will intersect the UP tracks at an angle of 80°. The roadway approaches to the crossing will be about 0.50% on each approach. The crossing will consist of one mainline track.

Gateway Boulevard is projected to carry 6500 ADT (average daily traffic) in 2009. The DOT projects Gateway Boulevard will carry 9600 ADT in the design year of 2028. The speed limit will be 40 mph.

The railroad currently operates 2 train movements per day on three days per week at a speed of 10 mph. The trains are typically 2 to 20 cars in length and primarily carry dry goods and fertilizer.

A driver traveling at 40 mph needs a distance of about 335' to stop safely. The crossing warning devices will be visible from much more than 335' in each direction. The approach sight distance will be adequate.

Assuming a train speed of 10 mph, a driver traveling at 40 mph needs to see a train when it is 100' from the crossing from a point 335' down the highway. The DOT and the City will acquire right-of-

way or easements to provide the necessary sight distance (except that no right-of-way within the sight triangle will be acquired from the UP). The corner sight distance will be adequate in all quadrants.

At all crossings, except those with gates, a driver stopped 15' short of the near rail must be able to see far enough down the track, in both directions, to determine if sufficient time exists for moving their vehicle safely across the tracks to a point 15' past the far rail, prior to the arrival of a train. Required clearing sight distance along both directions of the track, from the stopped position of the vehicle, is dependent upon the maximum train speed and the acceleration characteristics of the "design" vehicle. The necessary clearing sight distance at the Gateway Boulevard crossing is 225'. The available clearing sight distance will be in excess of 225'. The clearing sight distance will be adequate.

The order requires that the City acquire permanent sight easements or right-of-way to create and maintain a clear view within the required sight triangles in each quadrant.

The exposure factor at this crossing is 13,000. The exposure factor at this crossing will exceed 19,200 in the design year assuming 2 train movements per day. The exposure factor equals the product of the number of trains per day and the number of highway vehicles per day, which yields a numerical value for the potential conflicts each day at the crossing.

The DOT proposes that the OCR the UP to install cantilevered 12" automatic flashing lights with gates and constant warning time circuitry. These warning devices will adequately protect public safety.

Constant warning time circuitry adjusts for train speed and causes the crossing signals to always operate for the same amount of time before the train reaches the crossing, regardless of train speed. A motion detector simply detects the train operation, but does not adjust for train speed so that the amount of warning time varies based on train speed.

Light emitting diodes (LED) lamps replace incandescent bulbs. LEDs have higher conspicuity, a wider cone of vision, and longer life than incandescent lights. LEDs are especially useful on east-west roadways where the rising and setting sun may make the signals difficult to see.

The DOT evaluated a number of alternative locations, including the use of Townhall Road rather than constructing new crossing. DOT also evaluated the construction of grade-separated crossing. DOT also evaluated the closure of Townhall Road as part of its proposal.

The selected alternative is reasonable. Using Townhall Road is impractical because the roadway would need to be considerably widened and squeezed into an already developed strip. (Closing Townhall Road at the tracks would require a separate proceeding.) Construction of a bridge for Gateway Boulevard is not warranted based on the number and speed of trains.

In summary, the establishment of the crossing at-grade of the UP tracks with Gateway Boulevard will promote public safety and convenience by providing a safe crossing on a roadway needed for critical transportation needs.

Exempting the Crossing

The DOT and the City propose to exempt the Gateway Boulevard crossing from the stopping requirement of s. 346.45 Stats. That section requires certain specified vehicles, such as fuel trucks and school buses, to stop at highway/rail crossings unless posted with an exempt sign.

Gateway Boulevard is projected to carry about 650 trucks per day and typically, about 10% of trucks are required to stop, which would be about 65 per day.

Exempting these vehicles from the stopping requirement of §346.45, Stats., will promote the public interest, particularly in light of public safety. Train traffic is light and low speed. Gateway Boulevard will carry a substantial volume of vehicular traffic, which means there would be frequent conflicts between vehicles required to stop and all other highway traffic. The crossing will have automatic flashing lights and gates for warning devices.

The order requires the City to install exempt signs [Sign R15-3 in the Manual on Uniform Traffic Control Devices (MUTCD)] on the vertical signal posts on each approach. The order also requires the City to install yellow-background advance warning exempt signs on the advance warning signs on the approaches to the crossing.

Source of funding: The highway project will pay 100% of the signal materials and installation and the crossing construction.

Timing and temporary construction crossing. DOT proposes the construction of a temporary crossing for use during construction only be construction vehicles. This temporary crossing will greatly facilitate the movement of fill needed for the project. DOT requested that the temporary crossing be constructed by June 15, 2009.

The railroad raised concerns about the safety of the temporary crossing and proposed that the project pay the UP to have a flagger at the construction site for most of the project. A UP flagger costs \$750/day or \$1000/day with overtime. Having a flagger at the work site every day could add \$50,000 to \$100,000 to the project cost. This broad request is unreasonable. Trains are relatively infrequent and slow-moving. There will be many construction days with no trains at all. A reasonable approach is to install stop signs at the temporary crossing and to require flagging when the contractor is working within 25' of the tracks, but when just hauling materials or equipment over the tracks.

DOT also proposed that the permanent crossing be installed by August 15, 2009 and the warning devices installed by November 23, 2009.

Ultimate Conclusions on the Issues

THE COMMISSIONER CONCLUDES:

1. That the closure of the crossing at-grade of St. Paul Avenue with the Iowa, Chicago & Eastern Railroad Corp. tracks in the City of Beloit, Rock County will promote public safety and convenience.
2. That the establishment of the crossing at-grade of Gateway Boulevard with the Union Pacific Railroad Co. tracks in accordance with the design plans of the Wisconsin Department of Transportation and the City of Beloit in the City of Beloit, Rock County will promote public safety and convenience.
3. That establishment of the Gateway Boulevard crossing is advisable under all the circumstances.
4. That in order to adequately protect and promote public safety, it is necessary to install and maintain cantilevered 12" LED automatic flashing lights with gates.
5. That it would promote the public interest to exempt the crossing of Gateway Boulevard with the Union Pacific Railroad Co. tracks from the stopping requirement of §346.45, Wis. Stats.
6. That it is reasonable that the Union Pacific Railroad Co. bear no part of the cost for the crossing construction.

Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §§195.28, 195.285, and 195.29, Stats., extends to this matter. Accordingly, the Office enters an order consistent with the findings of fact.

Order

THE COMMISSIONER ORDERS:

1. That the public crossing of the **Iowa, Chicago & Eastern Railroad Corp.** tracks with **St. Paul Avenue** in the City of Beloit, Rock County is hereby **declared closed effective immediately** (crossing no. 388 200H).

2. That the **Union Pacific Railroad Co.** shall install and maintain a **temporary** crossing at-grade of **Gateway Boulevard** with its tracks in accordance with the design plans of the Wisconsin Department of Transportation and the City of Beloit in the City of Beloit, Rock County by **June 15, 2009**.

3. That the **Union Pacific Railroad Co.** shall install and maintain a concrete-paneled crossing at-grade of **Gateway Boulevard** with its tracks in accordance with the design plans of the Wisconsin Department of Transportation and the City of Beloit in the City of Beloit, Rock County by **August 15, 2009**.

4. That the **Union Pacific Railroad Co.** shall install and maintain cantilevered 12" LED automatic flashing lights with gates, constant warning time circuitry, and other appropriate appurtenances in accordance with such plans as are filed with and approved by the Office of the Commissioner of Railroads at the crossing of its tracks with **Gateway Boulevard** at-grade in the City of Beloit, Rock County by **November 23, 2009**.

5. That the **Union Pacific Railroad Co.** shall submit to the Office of the Commissioner of Railroads signal and circuit plans with the cost estimate of its proposed installation and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the Wisconsin Department of Transportation.

6. That the signal installation work herein ordered shall not begin until the regional office of the Wisconsin Department of Transportation informs the railroad that they may start such work and such start notice will not be issued until appropriate federal aid or other funding arrangements have been assured. The cost of the new project initiated before the start notice will not be reimbursed with public funds and shall be the responsibility of the railroad.

6. That the **City of Beloit** shall install and maintain exempt signs on the signal masts on each approach to the crossing of **Gateway Boulevard** at-grade in the City of Beloit, Rock County by **November 23, 2009**.

7. The **City of Beloit** shall also install yellow-background advance warning exempt signs (Sign W10-1a in the MUTCD) on the advance warning signs by **November 23, 2009**.

8. That the **City of Beloit** shall obtain permanent property interests sufficient to allow for provision of a clear view within the required sight triangles (except that part within the railroad right-of-way). That the **City of Beloit** shall remove any obstructions within those sight triangles (except that part within the railroad right-of-way), including earth embankments, as part of the project. The triangles are formed by connecting the following points: a) the intersection of the centerline of the roadway and the near rail of the tracks; b) a point 100' down the tracks and; c) a point 335' along the roadway from the near rail of the tracks. The railroad signals bungalow may be installed and maintained within the sight triangle.

9. That the **City of Beloit** shall install and maintain stop signs on separate posts on each approach to the **temporary construction crossing** by **June 15, 2009**. The City of Beloit shall require the use of railroad flaggers when construction equipment is working within 25' of the tracks. Flagger are not required for construction vehicles moving directly across the tracks.

10. That the **City of Beloit** shall not open Gateway Boulevard at the railroad crossing to unrestricted public use until the installation and activation of the automatic warning devices ordered in paragraph 4, above.

11. That the **Union Pacific Railroad Co.** shall bear no part of the cost of the crossing construction, except for any cost assessed to the railroad pursuant to §195.60, Stats., for the investigation of this matter by the Office. The railroad shall not pass on those assessment costs either directly or indirectly.

12. That jurisdiction is retained.

Dated at Madison, Wisconsin, (September 3, 2008).

By the Office of the Commissioner of Railroads.

Roger Breske
Commissioner of Railroads

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