

BEFORE THE OFFICE OF THE COMMISSIONER OF RAILROADS

STATE OF WISCONSIN

In the Matter of the:

Petition of the City of Oak Creek for the Alteration of a Public Crossing of the Union Pacific Railroad Co. Tracks with CTH 'ZZ' (College Avenue) in the City of Oak Creek, Milwaukee County

9040-RX-1261

FINAL DECISION

By letter dated July 21, 2008, the City of Oak Creek petitioned the Office of the Commissioner of Railroads (OCR) for the alteration of a public crossing of the Union Pacific Railroad Co. (UP) tracks with CTH 'ZZ' (College Avenue) in the City of Oak Creek, Milwaukee County (crossing no. 176 794X).

Jurisdiction: Secs. 195.28 and 195.29, Stats.

Pursuant to due notice, a public hearing was held in this matter on October 28, 2008 in Oak Creek, Wisconsin with hearing examiner Douglas S. Wood presiding.

On December 30, 2008, the hearing examiner issued a proposed decision. By letter dated January 2, 2009, an area resident, Edward Mueller filed comments. Mr. Mueller's comments primarily concerned his opposition to the local decision to allow the USPS facility to be constructed near the crossing. That decision is a local land use decision that state law places in the hands of local government and not the OCR. Mr. Mueller attended the prior hearings related to this crossing (docket 9040-RX-1154) and expressed his wish that the OCR had ordered a grade-separated crossing. The OCR did order a bridge over the tracks, but later rescinded the order after rehearing.

By letter dated January 13, 2009, the City of Oak Creek filed comments supporting the proposed decision, but requesting that several items be adjusted. Specifically, the City requests that the deadlines in paragraphs 1, 2, 7, and 8 be changed from October 1, 2010 to May 1, 2011. The City states that the project is still scheduled for 2010. The City's request for an extension anticipates the possibility that construction delays may occur. The request is premature. The OCR sets deadlines that the parties propose and expects the parties will direct all reasonable and concerted efforts attempt to meet the deadline. Setting the deadline in 2011 would significantly increase the chance that the project would be completed in 2011 rather than 2010. The OCR will always consider requests for extensions when a specific need exists. Extensions for construction delays are typically considered when the specific need arises. The Commissioner declines to extend the deadlines at this time.

The City also requests that the duties assigned to the City of Oak Creek in paragraphs 4 and 5 be changed to Milwaukee County. Paragraph 4 provides that the UP shall submit its signal cost estimate to the City. Paragraph 5 requires that the signal installation work shall not begin until the City issues a 'start notice' to the UP. The Commissioner agrees that these duties more properly belong to the County because under the cost-sharing agreement as described at the hearing, the County and USPS will pay the signal costs. The Commissioner amends the findings (under the heading "Costs") and paragraphs 4 and 5 accordingly.

The Commissioner adopts the proposed decision as final without change.

Appearances:

**Parties**

City of Oak Creek, Petitioner  
by  
Lawrence Haskin, City Attorney  
7300 S. 13<sup>th</sup> Street  
Oak Creek, WI 53154

In Support:

Milwaukee County  
by  
Ben Eruchalu, Resident Contracting Manager  
Department of Transportation & Public Works  
2711 West Wells Street  
Milwaukee, WI 53208

United States Postal Service  
by  
Paul Purcell, Manager Real Estate Acquisitions  
Facilities Headquarters  
4301 Wilson Blvd. Suite 300  
Arlington, VA 22203-1861

Union Pacific Railroad Co.  
by  
John Venice, Manager - Special Projects  
301 West Lake Street, Room 103  
Northlake, IL 60164

## Findings of Fact

### THE COMMISSIONER FINDS:

The City proposes to alter the roadway in conjunction with the United States Postal Service (USPS). The roadway would be expanded from two lanes to four lanes with a median plus a right-turn lane for eastbound traffic. The USPS proposes to construct a new mail processing facility that would consolidate three separate locations into one location just east of the crossing.

CTH 'ZZ' (College Avenue) is a 2-lane road and consists of a 24' roadway with 10'-wide shoulders and intersects the tracks at an angle of 82°. The crossing is constructed with concrete crossing panels. The crossing consists of one mainline track.

The project will reconstruct the roadway to a 4-lane divided highway. Reconstructed CTH 'ZZ' (College Avenue) will consist of a 16'-wide outside lane and a 12'-wide inside lane in each direction plus a 12'-wide right-turn-only lane for eastbound traffic entering the USPS facility. The eastbound and westbound roadways will be separated by a 24'-wide median. The roadway will have curb and gutter. The roadway will be closed during construction.

A UP representative testified at the hearing that a track signal is located 130' from the crossing. If the back of the relocated curb is within 100' or less of track signal, then the track signal would have to be relocated at project cost.

Traffic signals will be installed at the intersection of CTH 'ZZ' (College Avenue) and the new roadway into the USP facility. It will be 200' from the center of crossing to the center of the signalized intersection. Given the volume of traffic and proximity of the intersection to the crossing, the traffic signals and crossing signals will need to be interconnected with preemption circuitry. With preemption circuitry the traffic signals will typically cycle through to allow a brief green signal for the street with the crossing to allow vehicles to clear the track zone before the gates come down and a train arrives at the crossing.

CTH 'ZZ' (College Avenue) carried 17,900 ADT (average daily traffic) in 2003 according to the Wisconsin Department of Transportation. The County projects CTH 'ZZ' (College Avenue) will carry 26,700 ADT in the design year of 2028. The speed limit is 40 mph.

Based on a count by Key Railroad Associates on behalf of the City of Oak Creek, the railroad operated about 8 train movements per day over the crossing between June 16 and June 23, 2008. The Federal Railroad Administration (FRA) database indicates the railroad operates a total of 18 trains per day over the crossing. While train traffic fluctuates, it is likely that the lower number is more accurate. The timetable speed on this line is 50 mph, but is limited to 30 mph due to the proximity of a turnout.

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

Assuming a train speed of 30 mph, a driver traveling at 40 mph needs to see a train when it is 305' from the crossing from a point 335' down the highway. The sight distance available in each quadrant from the safe stopping distance is as follows: 270' in the northwest quadrant, 229' in the northeast quadrant, 228' in the southwest quadrant and 153' in the southeast quadrant. The corner sight distance is inadequate 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 CTH 'ZZ' (College Avenue) crossing is 895'. The available clearing sight distance exceeds 895' in all quadrants. The clearing sight distance is adequate.

The exposure factor at this crossing is about 160,000. The exposure factor at this crossing will be about 216,000 in the design year assuming 8 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.

Six train-vehicle accidents have occurred at this crossing since 1973, all before 1988. The crashes occurred in 1987, 1986, 1984, 1982, 1978, and 1975.

The crossing presently has mast-mounted 12" LED automatic flashing lights with gates and constant warning time circuitry that were installed in 2005. The existing warning devices will be adequate until such time as the new warning devices are installed. Due to the width of the roadway two sets of gates are needed on each approach (one behind the outside curb and one behind the inside curb) with mast-mounted 12" LED automatic flashing lights and constant warning time circuitry. The order directs the railroad to provide adequate advance time for the traffic signal preemption. The order requires the County to inform the railroad how much advance time is needed. The order allows the County to delegate the responsibility to the City of Oak Creek.

The order requires Milwaukee County to install standard pavement markings on both approaches and dynamic envelope markings on the eastbound approach. Section 8B.22 of the federal Manual on Uniform Traffic Control Devices (MUTCD) and 8B.22 of the Wisconsin Supplement (WMUTCD) provide guidance on the dynamic envelope markings. The WMUTCD adds a requirement for diagonal striping within the dynamic envelope. The County shall also install a DO NOT STOP ON TRACKS (R8-8) sign on the eastbound approach. The order allows the County to delegate the pavement marking responsibility to the City of Oak Creek.

*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.

In summary, the alteration of the crossing at-grade of the Union Pacific Railroad Co. tracks with CTH 'ZZ' (College Avenue) will promote public safety and convenience.

**Costs:** The City of Oak Creek, Milwaukee County, and the USPS reached an agreement with respect to all costs for the crossing construction and for the signal materials and installation (Exhibit 5, Testimony of Patrick DeGrave). Under the general terms of the agreement, Milwaukee County will pay the costs related to the expansion of the roadway, except for the right-turn lane. USPS will pay the costs associated with the right-turn lane. Milwaukee County and USPS will split the signals costs. USPS will pay for any costs related to traffic signal preemption costs.

The OCR lacks the legal authority to assign costs to the USPS, thus the order assigns the costs to Milwaukee County and the City of Oak Creek with the understanding that the costs will be paid as set forth in their agreement.

**Prior Docket.** Milwaukee County previously petitioned the OCR for the alteration of the CTH 'ZZ' (College Avenue) crossing in 2001 (9040-RX-1154). In that docket, the hearing examiner recommended approval of the alteration from a 2-lane to a 4-lane at-grade crossing. Then-Commissioner Rodney W. Kreunen issued a final decision that required a grade-separated crossing. The Commissioner granted a request for rehearing and subsequently, on June 6, 2003 then-Commissioner Kreunen approved the construction of the at-grade crossing, but ordered barrier gates to be installed rather than standard gates.

The UP appealed that decision to circuit court. The court remanded the case to the OCR by consent of the parties due to a lack of evidence in the record to support the order for the installation of barrier gates. The hearing examiner scheduled a second rehearing, but on January 24, 2005, the Commissioner granted the UP's request for a continuance to study the barrier gate issue. The matter was never rescheduled.

The order in this matter rescinds the order from 9040-RX-1154.

#### Ultimate Conclusions on the Issues

#### THE COMMISSIONER CONCLUDES:

1. That the alteration of the crossing at-grade of CTH 'ZZ' (College Avenue) with the Union Pacific Railroad Co. tracks in accordance with the design plans of the City of Oak Creek in the City of Oak Creek, Milwaukee County will promote public safety and convenience.

2. That in order to adequately protect and promote public safety, it is necessary to install and maintain 12" LED automatic flashing lights with gates and constant warning time circuitry, and a preempt interconnection and advance preemption between the crossing signals and the traffic signals at the CTH 'ZZ' (College Avenue)/USPS Roadway intersection.

3. That it is reasonable that the Union Pacific Railroad Co. bear none of the cost for the crossing construction or signal materials or installation.

#### Conclusion of Law

THE COMMISSIONER CONCLUDES:

That the jurisdiction of the Office of the Commissioner of Railroads under §§195.28 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 **Union Pacific Railroad Co.** shall install and maintain a crossing at-grade of **CTH 'ZZ' (College Avenue)** with its tracks in accordance with the design plans of the City of Oak Creek in the City of Oak Creek, Milwaukee County by **October 1, 2010** (Crossing No. 176 794X).

2. That the **Union Pacific Railroad Co.** shall install and maintain two sets of gates on each approach (one behind the outside curb and one behind the inside curb) with mast-mounted 12" LED automatic flashing lights with gates, constant warning time circuitry, and an interconnection that provides for the advance preemption of the traffic signals at the CTH 'ZZ' (College Avenue)/USPS Roadway intersection 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 CTH 'ZZ' (College Avenue) at-grade in the City of Oak Creek, Milwaukee County by **October 1, 2010** (Crossing No. 176 794X).

3. That **Milwaukee County** shall determine the amount of time needed for the advance preemption and provide a track clearance interval. **Milwaukee County** shall inform the railroad of the amount of advance time needed for the pre-emption. The railroad shall operate its signal system to provide adequate advance notice to the signal controller based on the amount of time as determined by **Milwaukee County**. The county may delegate this responsibility to the **City of Oak Creek** with the city's concurrence.

4. That the **Union Pacific Railroad Co.** shall submit the cost estimate of its

proposed signal installation to **Milwaukee County** and the signal and circuit plans with the cost estimate of its proposed signal installation to the Office of the Commissioner of Railroads and upon completion of the signal project, a detailed statement of the actual cost to the Office and to the City of Oak Creek.

5. That the signal installation work herein ordered shall not begin until the **Milwaukee County** 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 **Milwaukee County** shall not open CTH 'ZZ' (College Avenue) at the railroad crossing to unrestricted public use until the installation and activation of the automatic warning devices ordered above.

7. That **Milwaukee County** shall install and maintain dynamic envelope markings and diagonal markings within the dynamic envelope for the **eastbound roadway** at the crossing of the Union Pacific Railroad Co. tracks with **CTH 'ZZ' (College Avenue)** in the City of Oak Creek, Milwaukee County by **October 1, 2010** (Crossing No. 176 794X). The county may delegate the pavement marking responsibility to the **City of Oak Creek** with the city's concurrence.

8. That **Milwaukee County** shall install and maintain a DO NOT STOP ON TRACKS sign on the eastbound approach to the crossing of the Union Pacific Railroad Co. tracks with **CTH 'ZZ' (College Avenue)** in the City of Oak Creek, Milwaukee County by **October 1, 2010** (Crossing No. 176 794X). The county may delegate this signage responsibility to the **City of Oak Creek** with the city's concurrence.

9. That in addition to the pavement markings ordered in Paragraph 7, **Milwaukee County** shall install and maintain standard pavement markings on each approach to the crossing.

10. That the costs for the crossing construction and for the signal materials and installation shall be paid by the **City of Oak Creek, Milwaukee County, and the United States Postal Service** and shall be divided in accordance with the terms of an agreement among those three parties.

11. That the **Union Pacific Railroad Co.** shall bear no part of the cost of the crossing construction, signal materials, or installation, 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 the order dated June 6, 2003 from OCR Docket 9040-RX-1154 is hereby **rescinded**.

13. That jurisdiction is retained.

Dated at Madison, Wisconsin, (January 22, 2009).

By the Office of the Commissioner of Railroads.

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Roger Breske  
Commissioner of Railroads

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