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Public Utilities Commission of Ohio

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2013 MAR 11 PM 12:58
PUCO

Memo

To: Docketing Division

From: George Martin, Grade Crossing Planner, Rail Division

Re: In the matter of the authorization of Norfolk Southern Railway to install an active grade crossing warning device in Crawford County

Date: March 11, 2013

The Ohio Rail Development Commission (ORDC) has authorized funding for Norfolk Southern Railway (NS) to install **mast-mounted flashing lights and roadway gates** in Crawford County, Liberty Township, near Bucyrus, Hieber Rd/TR 99, DOT# 481576E. The crossing was surveyed on July 17, 2012, due to a fatal crash, and was found to warrant the upgrade.

The project will be paid for with federal funds, and is actual cost. As the plan and estimate for the project has been submitted and approved, staff requests an Entry with completion due in nine months. Construction may commence at once. Staff requests that the following language be incorporated in the Entry:

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:
Any ancillary work to make the warning devices function as designed and visible to the roadway user, and
MUTCD compliance, including minor roadway work if necessary.

A suggested case coding and heading would be:

PUCO Case No. 13- 1035 -RR-FED In the matter of the authorization of the Norfolk Southern Railway to install an active grade warning device in Crawford County

C: Legal Department

Please serve the following parties of record.

Ms Cathy Stout

Ohio Rail Development Commission

1980 W Broad St, Mailstop # 3140

Columbus, Oh 43223

Ms Cayela Wimberly

Norfolk Southern Railway

1200 Peachtree St, Box 123

Atlanta, Ga 30309

Mr Cecil Newcome

Crawford County Engineer

815 Whetstone St

Bucyrus, Oh 44820

Liberty Township Trustees

3948 Ridgeton Rd

Bucyrus, Oh 44820

North Central Rural Electric Coopertaive

OHIO RAIL DEVELOPMENT COMMISSION
INTER-OFFICE COMMUNICATION

TO: **George Marion, Rail Division, PUCO**

FROM: **Cathy Stout, Manager, Safety Section, ORDC**

BY: **Joe Reinhardt, Project Manager, ORDC**

SUBJECT: **Crawford County, Hieber Road, TR 99**
DOT 481576E, PID 93936

DATE: **March 8, 2013**

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on Hieber Road. The Ohio Rail Development Commission (ORDC) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached.

PE has already been provided by the railroad. ORDC approves the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. This construction authorization is made with the stipulation and understanding that any field work needs prior approval before the work begins. This authorization is made with the stipulation and understanding that an approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance – including minor roadway work if necessary.

Thank you for your assistance with these matters.

Attachment: Diagnostic Review
Plan & Estimate

c: George Martin, PUCO
ORDC Project Manager (file)

OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223
John R. Kasich, Governor • James G. Bradley, ORDC Chairman

March 8, 2013

Ms. Cayela Wimberly
Public Projects Engineer
1200 Peach Street, Box 123
Atlanta, Ga. 30309

RE: Crawford County, Hieber Road, DOT 481576E
PID# 93936, NS Project 10.1392

Dear Ms. Wimberly:

The plan and estimate dated February 26, 2013, for the referenced project has been reviewed and is acceptable. NS may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to $210,386.00. Additional costs must be approved in writing by the Ohio Rail Development Commission (ORDC) prior to being incurred. Emergency verbal authorizations by ORDC may be permitted and will be confirmed by ORDC in writing within ten (10) business days of the verbal approval.

This authorization is contingent upon NS accepting the following instructions:

1. NS's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Joe Reinhardt, ORDC, joe.reinhardt@dot.state.oh.us email and to the Public Utilities Commission of Ohio at George.martin@puc.state.oh.us. NS's project foreman will also notify the same of any stops and re-starts of the work activity and of the date work was completed for the project.

2. NS will arrange for utilities to be located at the project site by the Ohio Utilities Protection Service (OUPS) prior to any construction activities at the site. Utilities that are not participating members of the service must be contacted directly by NS.

3. NS's project foremen will notify Joe Reinhardt at 614-580-7728 (telephone) or joe.reinhardt@dot.state.oh.us (email) of any changes in the scope of work, cost overruns, material changes, etc. which are not included in the approved plan and estimate and secure approval of same before the work is performed.

4. NS will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed Encumbrance Estimate to reference when billing.

5. NS will furnish two (2) copies of the final all-inclusive bill to ORDC stating the exact dates of starting and completing work, the initial and final dates of construction and location where the accounts may be audited.

Thank you for your assistance with these matters.

Sincerely,

Joseph Reinhardt
Project Manager

C: George Martin, PUCO, Grade Crossing Planner
ORDC (file)

Attachment: 1 (encumbrance estimate)

Ohio Rail Development Commission
1980 W. Broad Street, 2nd Floor
Columbus, OH 43223

Diagnostic Review Team Survey

Date: 7/17/12

Location Data

Street or Road Name:	Hieber Rd				
Route/Road Number (i.e. Twp., Co., SR or US)	TR 99 (include SLM if State or US route)			AAR-DOT No.:	481576E
County: Crawford	Township: Liberty	City: (In or Near)	Bucyrus		
Railroad Name: Norfolk Southern Corp.	Railroad Division: Lake			Branch/Line Name:	Sandusky
Nearest RR Timetable Station: Bucyrus				RR Milepost:	67.76

On-Site Review Team

(Include: Name – Organization – Phone Number)

1. AJ Pease – NS – 440-429-1960 NOT AT SURVEY
2. Joe Reinhardt ODOT 614-644-0291
3. Mark Lusa – Liberty Twp Trustee 419-834-0608
4. Donald Quall " " " 419-562-2783
5. DAVID BRAUSE TRUSTEE 419 362 3343
6. Cecil Newcome County Engr 419-563-1520
7. Mike Dentinger Sgt Rail Maintainer NS
8. GEORGE MARTIN PUCO 614-752-9107
9. _____

Existing Traffic Control Devices

Type of Warning Devices	Installed?	Quantity/Comments
Advance Warning Signs	☑ Yes ☐ No	2
'Stop' Signs	☐ Yes ☑ No	
'Stop Ahead' Signs	☐ Yes ☑ No	
Pavement Markings	☐ Yes ☑ No	
Crossbucks	☑ Yes ☐ No	2 w/ Yield Signs
Number of Tracks Signs	☐ Yes ☑ No	
Inventory Tags	☐ Yes ☑ No	
Interconnected Highway Traffic Signal	☐ Yes ☑ No	
Mast-Mounted Flashing Lights	☐ Yes ☑ No	
Cantilever Flashing Lights	☐ Yes ☑ No	Number: Length:
Side Lights	☐ Yes ☑ No	
Automatic Gates	☐ Yes ☑ No	Number: Length:
Bells	☐ Yes ☑ No	
Sidewalk Gate Arms	☐ Yes ☑ No	
'No Turn' Signs	☐ Yes ☑ No	
Illumination	☑ Yes ☐ No	1
Is crossing flagged by train crew?	☐ Yes ☑ No	
Other	☐ Yes ☑ No	

Safety Data (Obtain crash reports, if possible, prior to review)

	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	1 Fatal 4/14/12	
Hazard Ranking	2592 Date Run:7/5/12	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	30	
< 1 per day		
Day thru trains	14	
Night thru trains	14	
Daytime switching movements		
Nighttime switching movements	2	
Total number of tracks		
Number of main tracks	1	
Number of other tracks	0	
Maximum train speed	60	
Typical train speed		
Amtrak	No	

If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) ☑ Yes ☐ No

If multiple tracks, can two trains occupy crossing at the same time? ☐ Yes ☑ No

Can one train block the motorists' view of another train at crossing? ☐ Yes (Explain below) ☑ No

Are there other track(s) crossing this same roadway within 100 ft of this crossing? ☐ Yes ☑ No

If yes, Crossing DOT #(if different) _____

If yes, distance _____ (take measurement between track centerlines at closest point along roadway)

Roadway Data

Local Highway Authority: Liberty Township

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	52 (2006)	
Highway paved	☑ Yes ☒ No	☐ Yes ☐ No

Roadway Surface: ☑ Blacktop ☐ Gravel ☐ Concrete ☐ Other _____

Roadway width: 10 ft.

Number of highway lanes	1	
Urban or Rural	Rural	
Vehicle Speed: ____ MPH	55	

School Bus Operation: ☐ No ☑ Yes 1 Amount

Hazardous Materials Trucks: ☐ No ☑ Yes ____ Amount

Shoulders: ☑ No ☐ Yes

Is the shoulder surfaced? ☑ No ☐ Yes

Is there existing guardrail along roadway in crossing vicinity? ☑ No ☐ Yes

Is stopping site distance adequate? (See Table 2) ☑ Yes ☐ No If no, deficient approach(es) _____

Quadrant NE Curb and Gutter:	Quadrant SW Curb and Gutter:
☐ Functional (Curb height = 4" or more)	☐ Functional (Curb height = 4" or more)
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")
☑ None	☑ None

Pedestrians: ☑ No ☐ Yes

Is sidewalk present? ☑ No ☐ Yes

Is there a nearby intersection that could cause queuing over the crossing? ☑ No ☐ Yes

If yes,

Distance _____

Is this intersection signalized? ☑ No ☐ Yes

Are the signals currently interconnected with the existing crossing warning devices? ☑ No ☐ Yes

Is it the consensus of the Diagnostic Review Team that this is a potential closure project: ☑ No ☐ Yes

Explain reasons:

Type of Development

☑ Open Space ☐ Institutional

☐ Industrial ☐ Commercial

☐ Residential

Location of nearby schools:

Wimpler 5 miles

Utility Information

Is commercial power available? ☐ No ☑ Yes

Utility Provider (Company Name) N. Central Phone Number _____

Nearest Available Power Source _____

What other utilities are present? _____

Is there potential utility conflict(s) ☐ Yes ☐ No ☑ Unknown

Diagnostic Team Recommendations

	Quadrants Needed
☑ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
☑ AFLS / Gates	
☐ AFLS / Gates / Cants	
☐ Upgrade circuitry	
☐ Sidelights	
☐ Guardrail Needed	
☐ Install/Replace curb	
☐ Other (define)	

Comments:

☐ Install/upgrade traffic signal preemption	
☐ No improvements needed	
☐ Other (define)	

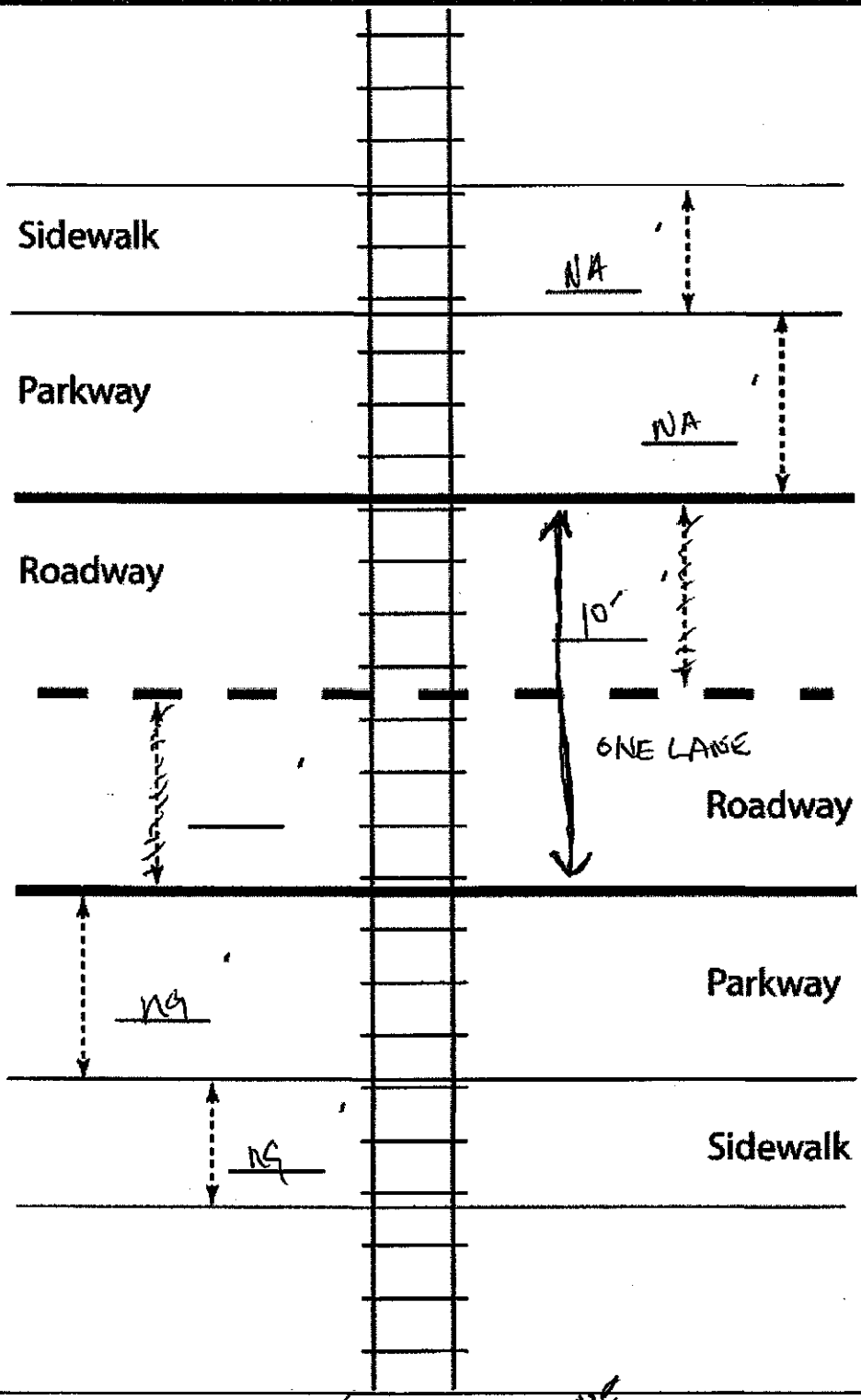
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):

Joe Reinhardt Greg Martin

Cecil Newcome

David Brown TRUSTEE

Field Dimensions



Crossing Angle ☐ 0-29° ☐ 30-59° ☑ 60-90° Measured in NE Quadrant?

Measurements by: [signature]

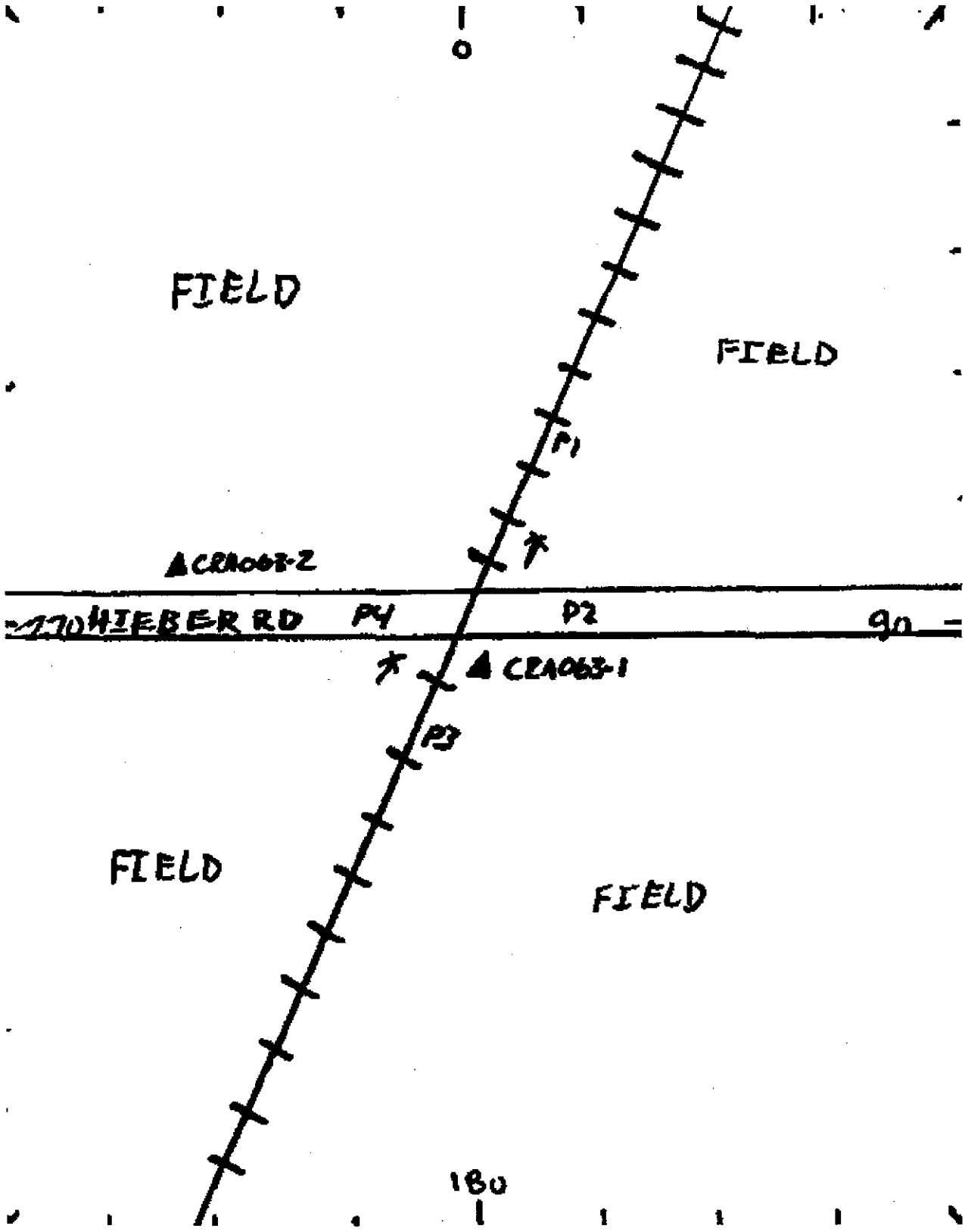

0
FIELD
FIELD
P1
CRA063-2
770 HIEBER RD
P4
P2
90
CRA063-1
P3
FIELD
FIELD
180

TABLE I

Clearing Sight Distances

Maximum Authorized Train Speed	Distance (dT) Along Railroad from Crossing (ft)
1 - 10	240
15	360
20	480
25	600
30	720
35	840
40	960
45	1080
50	1200
55	1320
60	1440
65	1560
70	1680
75	1800
80	1920
85	2040
90	2160

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers and level single track 90 degree crossings; and may need to be adjusted for multiple tracks, skewed crossings or approaches on grades.

Clearing Sight Distance is to be measured in each vehicle travel direction at non-gated crossings as viewed from a point 25 feet from centerline of nearest track in the center of whichever travel lane is nearest the direction along track being measured.

Table 2

Stopping Sight Distances

Highway Vehicle Speed	Distance (dH) Along Roadway from Crossing (ft)
0	n/a
5	50
10	70
15	105
20	135
25	180
30	225
35	280
40	340
45	410
50	490
55	570
60	660
65	760
70	865

Source: R-H Grade Crossing Handbook Table 36 (pp. 132-133)

Notes:

All calculated distances are rounded up to the next higher 5-foot increment.

Distances indicated are for 65-ft double bottom semi-tractor trailers on dry level pavements.

Stopping Sight Distance is to be measured on each roadway approach to crossing from stop bar.