

NC

FILE

# Public Utilities Commission of Ohio

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2016 AUG 25 AM 10: 53

PUCO

# Memo

**To:** Docketing Division  
**From:** George Martin, Grade Crossing Planner, Rail Division  
**Re:** In the matter of the authorization of the Ohio Central Railroad and CSX Transportation to install active grade crossing warning devices Tuscarawas and Wood Counties  
**Date:** August 25, 2016

The Ohio Rail Development Commission (ORDC) has authorized funding for the Ohio Central Railroad (OHCR) and CSX Transportation (CSX) to install mast-mounted flashing lights and roadway gates as follows:

OHCR, Tuscarawas County, Buck Township, near Baltic, Schrock Rd/TR 656, DOT# 474241X, surveyed due to constituent complaint on March 2, 2015, approved cost \$177,189.00, electric utility provider AEP.

CSX, Wood County, Washington Township, near Tontogany, Green Rd/TR 96, DOT# 155802E, surveyed due to hazard rank on September 29, 2015, approved cost \$300,673.00, electric utility provider Toledo Edison.

CSX, Wood County, near Portage, CR 28, DOT# 513660E, surveyed due to hazard rank on September 29, 2015, approved cost \$254,015.00, electric utility provider AEP.

These projects will be paid for with federal funds, and are actual cost. As the plans and estimates in the above referenced amounts have been submitted and approved, staff requests a Finding & Order 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. 16- 1791 -RR-FED In the matter of the authorization of the Ohio Central Railroad and CSX Transportation to install active grade crossing warning devices in Tuscarawas and Wood Counties

C: Legal Department

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.  
 Technician AS Date Processed 8/25/16

Please serve the following parties of record.

Ms Cathy Stout

Ohio Rail Development Commission

1980 West Broad St, Mailstop 3140

Columbus, Oh 43223

Bucks Township Trustees

7026 Fiat Rd SW

Stone Creek, Oh 43840

AEP

Toledo Edison

Ms Amanda DeCesare

CSX Transportation

500 Meijer Dr, Ste 305

Florence, Ky 41042

Mr John Hilborn

Ohio Central Railroad

4349 Easton Way, Ste 110

Columbus, Oh 43219

Mr Ray Huber, PE, PS

Wood County Engineer

One Courthouse Square

Bowling Green, OH 43402

Washington Township Trustees

PO Box 232

Tontogany, Oh 43565

**OHIO RAIL DEVELOPMENT COMMISSION  
INTER-OFFICE COMMUNICATION**

**TO:** Randall Schumacher, Supervisor, Rail Division, PUCO  
**FROM:** Cathy Stout, Manager, Safety Section, ORDC  
**BY:** James Tucker, Safety Project Manager ORDC  
**SUBJECT:** Tuscarawas County, TR656/Schrock Rd.  
DOT# 474241X, PID# 100023.  
**DATE:** August 22, 2016

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The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on March 2, 2015. The Public Utilities Commission of Ohio (PUCO) 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 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.

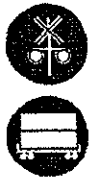
It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

- 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  
Susan Arduni, ORDC  
ORDC Project Manager (file)



# OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • Mark Policinski, ORDC Chairman

August 22, 2016

Mr. John Hilborn  
Vice President-Engineering, Ohio Valley Region Railroads  
Genesee & Wyoming/OHCR  
4349 Easton Way, ste.110  
Columbus, Oh 43219

RE: Tuscarawas County, TR 656/Schrock Rd, DOT#474241X  
PID# 100023

Dear Mr. Hilborn:

The plan and estimate dated 8/22/2016, for the referenced project has been reviewed and is acceptable. OHCR may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. Construction may include but is not limited to circuitry design, installation of service poles, procurement of materials and signal construction. Please note ODOT Railroad Audit Circular No.4 Subcontracted Costs for Railroads and accordingly provide ORDC with any relevant bid documents and bid tabs pertaining to this project. 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 \$177,189.00 and will be adjusted based on bid tabulations if applicable. 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 OHCR accepting the following instructions:

1. OHCR's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to James Tucker, ORDC, email [james.tucker@dot.ohio.gov](mailto:james.tucker@dot.ohio.gov), and to the Public Utilities Commission of Ohio at [George.martin@puc.state.oh.us](mailto:George.martin@puc.state.oh.us). OHCR'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. OHCR 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 OHCR.
3. OHCR's project foremen will notify James Tucker at 614-398-6897 (telephone) or [james.tucker@dot.ohio.gov](mailto:james.tucker@dot.ohio.gov) (email) of any changes in the scope of work, cost overruns,



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

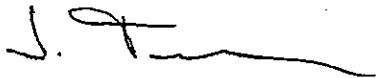
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material changes, etc. which are not included in the approved plan and estimate and secure approval of same before the work is performed.

4. Open cut of roadways is *not permitted* except in unusual circumstances and must be coordinated with the local highway authority and preapproved by ORDC.
5. OHCR will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. OHCR 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.
7. This installation will include any ancillary work to make the warning devices function as designed and meet MUTCD.

Thank you for your assistance with these matters.

Sincerely,



James Tucker  
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO  
George Martin, Grade Crossing Planner, PUCO  
Susan Arduini, ORDC  
ORDC (file)

## Diagnostic Review Team Survey

**Reason for Survey:**  
(e.g. formula, accident, constituent, etc.) AOT

**Date:** 3/2/2015

### Location Data

Street or Road Name: Shrock Road			
Route/Road Number (i.e. Twp., Co., SR or US) TR 656		US DOT No.: 474241X	
County: TUS	Township: Buck	City: (In or Near) Near Baltic	
Railroad Name: Ohio Central Railroad	Railroad Division: Western	Branch/Line Name: Zanesville Dist.	
Nearest RR Timetable Station: Baltic		RR Milepost: 97.04	

### On-Site Review Team

(Include: Name - Organization - Phone Number - Email)

- |    |                   |                  |              |
|----|-------------------|------------------|--------------|
| 1. | MIKE FORTE        | ORDC             | 614-374-9287 |
| 2. | SHAWN ZARNEY      | PUCO             | 614-466-1150 |
| 3. | GEORGE MARTIN     | PUCO             | 614-752-9107 |
| 4. | Michael C. Manger | Township Trustee | 330-897-1090 |
| 5. | Patrick W. Hurl   | Township         | 330-897-8601 |
| 6. | John R. Cost      | Township Trustee | 330-897-1124 |
| 7. | DAN BIRRELL       | OHCR             | 740-295-4122 |
| 8. |                   |                  |              |
| 9. |                   |                  |              |

### Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	1
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2 w/YIELDS
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2 ENS
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Cantilever Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Automatic Gates	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Bells	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:
Sidewalk Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'No Turn' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Illumination	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Safety Data (Obtain crash reports, if possible, prior to review)		
	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	0	
Hazard Ranking	1430	Date Run: 12/30/2014
Railroad Data		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	6	
< 1 per day		
Day thru trains	4	
Night thru trains	2	
Daytime switching movements		YES
Nighttime switching movements		
Total number of tracks		
Number of main tracks	1	
Number of other tracks		
Maximum train speed	30	
Typical train speed	30	35
Amtrak		
If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table I) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No TREE ONLY ON NW QUAD		
If multiple tracks, can two trains occupy crossing at the same time? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Can one train block the motorists' view of another train at crossing? <input type="checkbox"/> Yes (Explain below) <input checked="" type="checkbox"/> No		
Can one or more tracks be eliminated through the crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are there other track(s) crossing this same roadway within 100 ft of this crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: Buck Township		
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	462	
Highway paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: <input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Roadway width: 16 ft. E. 20' W		
Number of highway lanes	2	
Urban or Rural	Urban	
Vehicle Speed: 55 MPH		
School Bus Operation: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes 4 Amount 4		
Hazardous Materials Trucks: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Amount		
Shoulders: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		
Is the shoulder surfaced? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes		
Is there existing guardrail along roadway in crossing vicinity? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is stopping site distance adequate? (See Table 2) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, deficient approach(es) _____		

Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
Pedestrians: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is sidewalk present? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is there a nearby intersection that could cause queuing over the crossing? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Distance _____	
Is this intersection signalized? <input type="checkbox"/> No <input type="checkbox"/> Yes	
Are the signals currently interconnected with the existing crossing warning devices? <input type="checkbox"/> No <input type="checkbox"/> Yes	
Is there a 'Do not Stop on Track' sign? <input type="checkbox"/> No <input type="checkbox"/> Yes	
Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Improvement type _____ Lead Agency _____ Timeline/completion _____	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons:	
<b>Type of Development</b>	
<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	Location of nearby schools: <div style="font-size: 1.2em; margin-top: 10px;">1 MILE NORTH</div>
<b>Utility Information</b>	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Utility Provider (Company Name) <u>AEP</u>	Phone Number _____
Nearest Available Power Source <u>@ KING</u>	
What other utilities are present? (add locations to sketch) <div style="display: flex; justify-content: space-between; margin-top: 5px;"> <div> <input type="checkbox"/> Gas  <input type="checkbox"/> Petroleum  <input type="checkbox"/> Other _____         </div> <div> <input checked="" type="checkbox"/> Cable  <input type="checkbox"/> Water         </div> <div> <input type="checkbox"/> Telephone  <input type="checkbox"/> Sanitary Sewer         </div> <div> <input checked="" type="checkbox"/> Fiber Optic Cable         </div> </div>	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Comments:	



## Potential Red Flags / Project Challenges

Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):

No

Crossing Consolidation or Closure:

No

Real Estate or ROW:

Culverts / Drainage / Ballast Conditions:

Big Pipe 36"?

Roadway and/or Sidewalks:

No

Circuitry (e.g. reaches out to other crossings, specific needs, etc.):

No

Environmental:

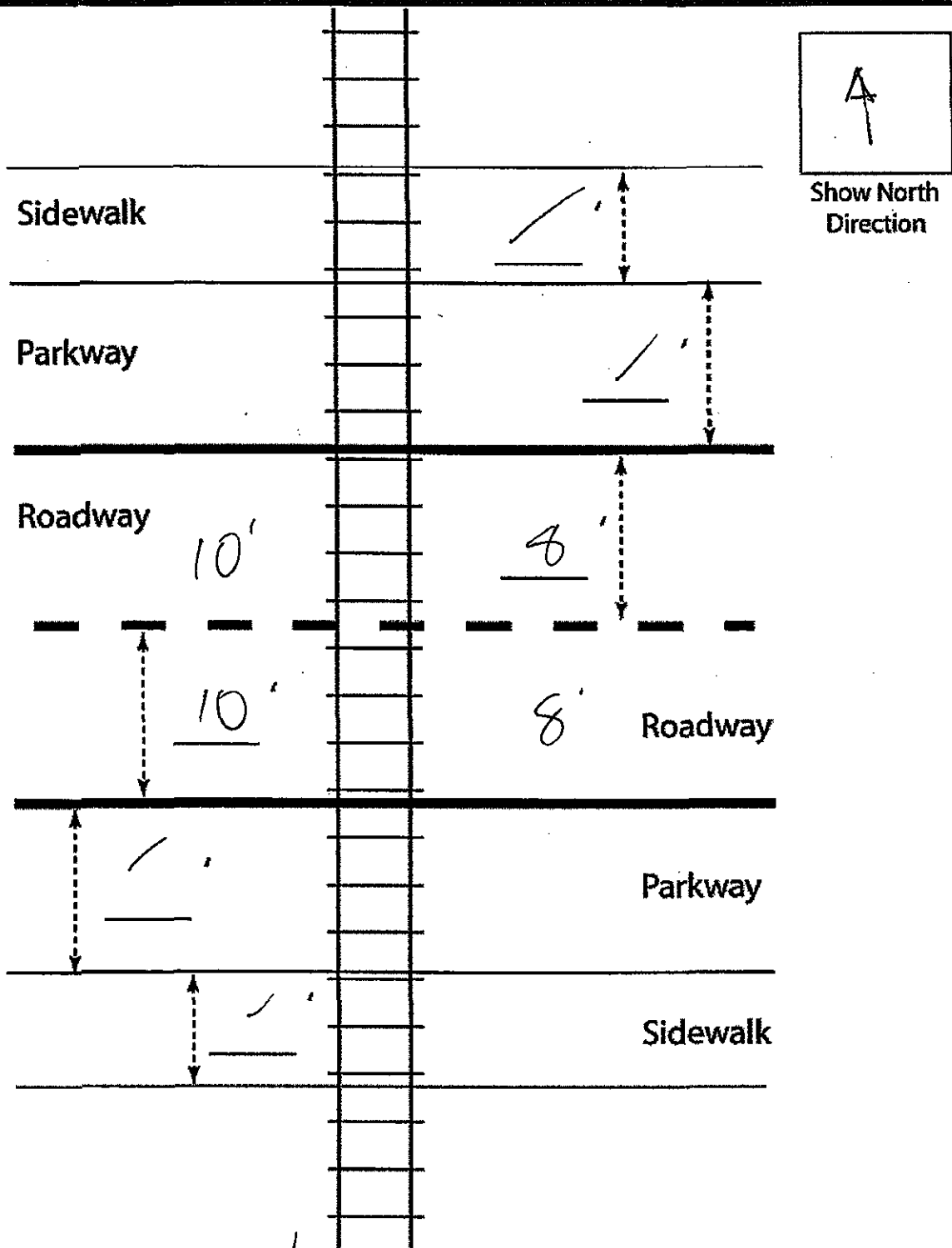
No

Other:

Diagnostic Team Recommendations	
	Quadrants Needed
<input type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	SW, NE
<input type="checkbox"/> AFLS / Gates / Cants	
<input type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	
<input checked="" type="checkbox"/> Other (define)	
Comments: IF NEW TRAIN COUNT / RE RANK IS QUALIFIES, AND TRAFFIC COUNT THEN LT+GTS	
<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input type="checkbox"/> Other (define)	
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement): MDF DLO mcm [Signature] PDA Cam DRB	

- No resources available to get new ADT. Due to hazard ranking and visibility at the crossing install L&A. cms 3/24/15

# Field Dimensions

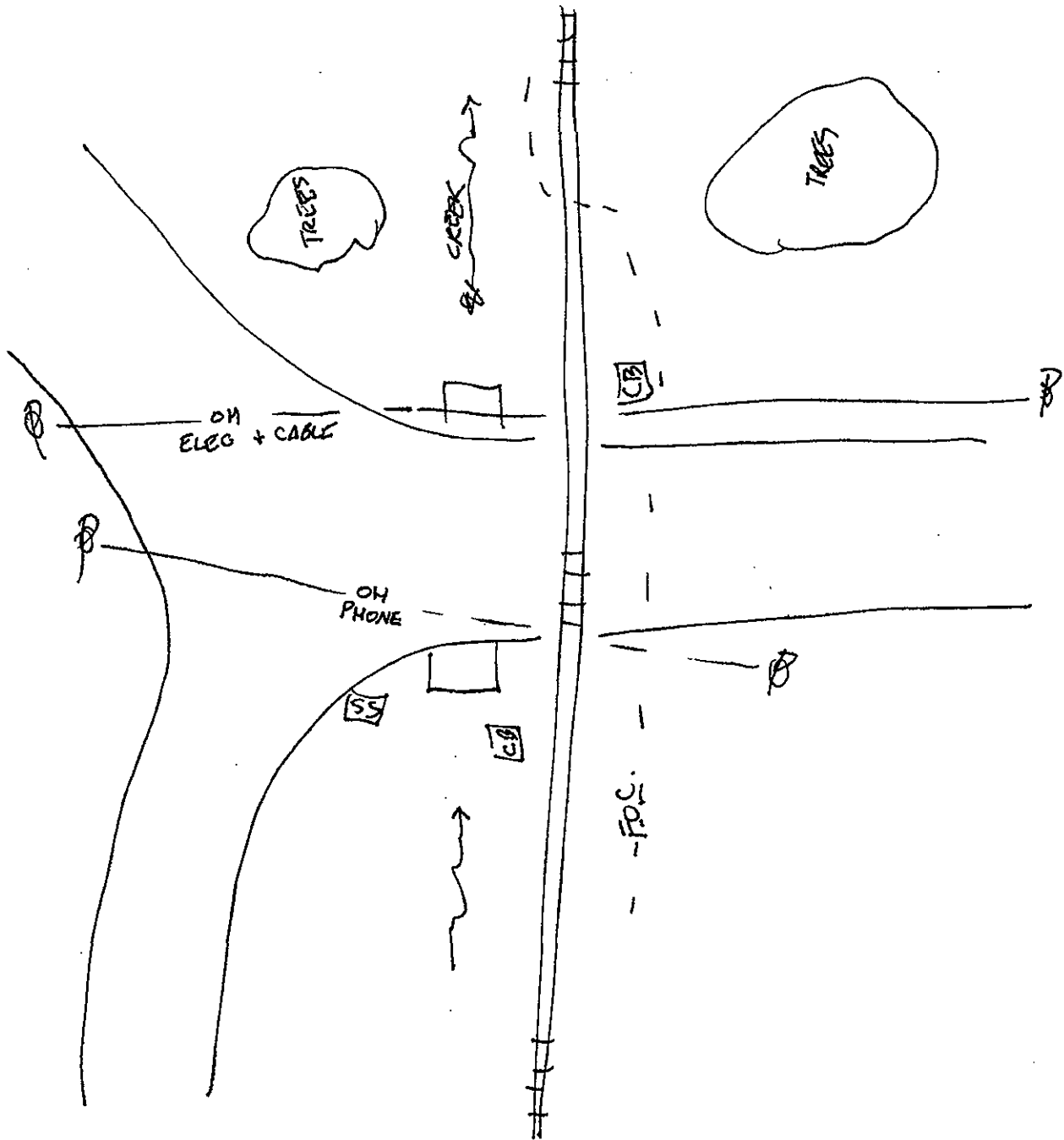


Crossing Angle ☐ 0-29° ☐ 30-59° ☒ 60-90° Measured in NE Quadrant?

Measurements by: MDF

# Field Sketch

Include utilities as marked by OUPS and LHA; include ROW boundaries as indicated by railroad and LHA.



Crossing Angle ☐ 0-29° ☐ 30-59° ☒ 60-90° Measured in 40 NE Quadrant?

Sketch by: MDF

TABLE 1

## 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.

**OHIO RAIL DEVELOPMENT COMMISSION  
INTER-OFFICE COMMUNICATION**

**TO:** Randall Schumacher, Supervisor, Rail Division, PUCO  
**FROM:** Cathy Stout, Manager, Safety Section, ORDC  
**BY:** Don Damron, Project Manager, ORDC  
**SUBJECT:** Wood County, TR 96, Green Rd. / CSX Transportation  
DOT# 155802  
PID# 102020  
**DATE:** August 25, 2016

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The Public Utilities Commission of Ohio (PUCO) established a Diagnostic Review Team Survey at the subject highway/railroad crossing location on 9/29/2015. The Ohio Rail Development Commission (ORDC) attended the Diagnostic Survey. The Diagnostic Review Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the Diagnostic Review Team Survey form and the railroad plan and estimate are attached.

The PE has already been provided by the railroad. ORDC approved the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. 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:

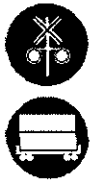
- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance – including minor roadway work if necessary.

Thank you for your assistance with these matters.

**Attachments:**

Diagnostic Review Team Survey dated 9/29/2015  
CSX Force Account Estimate dated 3/15/2016  
Proposed Crossing Layout – PE Approved Signal Layout

**cc:** 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, Chairman

August 25, 2016

Amanda DeCesare  
Project Manager – Public Projects  
CSX Transportation  
500 Meijer Drive, Suite 305  
Florence, KY 41042

RE: Grade Crossing Warning Device Improvement – Construction Authorization  
Wood County, TR 96, Green Rd.  
DOT# 155802E  
PID# 102020  
CSX ACCT. CODE: OH1088

Dear Ms. DeCesare:

The Force Account Estimate dated 3/15/2016 for the referenced project has been reviewed and is acceptable and the Proposed Crossing Layout has been approved as to signal layout only. CSX Transportation may proceed with the construction of the proposed grade crossing warning device upgrade in accordance with the abbreviated plan. Please also refer to the ORDC email which authorized construction on 7/29/16 (attached). The 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 \$300,673.00. 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 CSX Transportation accepting the following instructions:

1. CSX's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Don Damron, ORDC, 1980 West Broad Street, Columbus Ohio 43223, or email [don.damron@dot.ohio.gov](mailto:don.damron@dot.ohio.gov), (mobile: 614-917-8466; office: 614-466-2509), and to the Public Utilities Commission of Ohio at [George.martin@puc.state.oh.us](mailto:George.martin@puc.state.oh.us) (phone: 614-752-9107). The CSX 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. CSX 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 CSX.



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

3. CSX 's project foremen will notify Don Damron at 614-917-8466 (mobile phone) or [don.damron@dot.ohio.gov](mailto:don.damron@dot.ohio.gov) (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. CSX will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
5. CSX 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,

A handwritten signature in black ink, appearing to read "Donald J. Damron", written in a cursive style.

Donald J. Damron  
Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO  
George Martin, Grade Crossing Planner, PUCO  
ORDC (file)



## **Damron, Donald**

---

**From:** Stout, Catherine  
**Sent:** Friday, July 29, 2016 8:51 AM  
**To:** DeCesare, Amanda; Damron, Donald  
**Cc:** Henning, Nicole (External); Elliott, Scott (External); Reinhardt, Joseph  
**Subject:** RE: Status of PE for TR 96, Green Rd DOT# 155802E, and CR 28, Mermill Rd. DOT# 513660E

Yes, I have been in the field most of this week and was going to respond to Scott's email this morning...

We can issue formal construction authorization next week. I had been waiting on a couple of things on the traffic signal side but I have no problem issuing construction authorization. If you wish, you may consider this email authorization to proceed and we will follow up with the usual authorization letter next week.

Cathy Stout  
Manager, Safety Programs  
MS 3140, 1980 W. Broad Street  
Columbus, OH 43223  
614-466-0313

---

**From:** DeCesare, Amanda [mailto:Amanda\_DeCesare@csx.com]  
**Sent:** Friday, July 29, 2016 8:47 AM  
**To:** Damron, Donald <Don.Damron@dot.ohio.gov>; Stout, Catherine <Catherine.Stout@dot.ohio.gov>  
**Cc:** Henning, Nicole (External) <Nicole\_Henning@csx.com>; Elliott, Scott (External) <Scott\_Elliott@csx.com>  
**Subject:** RE: Status of PE for TR 96, Green Rd DOT# 155802E, and CR 28, Mermill Rd. DOT# 513660E

Cathy,  
Do you have an ETA on the construction authorization for this project?  
Our signal team would like to do this at the same time as Hannah Rd.  
Thank you,

**Amanda J. DeCesare**  
Project Manager  
CSX Transportation | Public Projects (MI, OH, IN, IL)  
(859) 372-6124 | 500 Meijer Drive, Suite 305, Florence, KY 41042  
[Click to view CSX's Public Projects Manual](#)

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**From:** DeCesare, Amanda  
**Sent:** Monday, July 18, 2016 9:03 AM  
**To:** [Don.Damron@dot.ohio.gov](mailto:Don.Damron@dot.ohio.gov)  
**Cc:** Henning, Nicole (External)  
**Subject:** FW: Status of PE for TR 96, Green Rd DOT# 155802E, and CR 28, Mermill Rd. DOT# 513660E

Don,  
See attached. PE was submitted in March.



## Diagnostic Review Team Survey

**Reason for Survey:**

(e.g. formula, accident, constituent, etc.)

Formula

RANK = 1522

Date:

SEPT. 29 2015

### Location Data

Street or Road Name: <u>Green Road</u>	
Route/Road Number (i.e. Twp., Co., SR or US) <u>TR 96</u>	US DOT No.: <u>155802E</u> ✓
County: <u>WOO</u>	Township: <u>Washington Twp.</u> City: (In or Near) <u>Near Tontogany</u>
Railroad Name: <u>CSX Transportation</u>	Railroad Division: <u>Louisville</u> Branch/Line Name:
Nearest RR Timetable Station: <u>Tontogany</u>	RR Milepost: <u>183.32</u> <u>BE 185.20</u>

### On-Site Review Team

(Include: Name - Organization - Phone Number - Email)

- DON DAMRON, ORDC, 614-917-8466 don.damron@dot.ohio.gov.
- Steve Powell, Washington Twp. 419-823-1718
- smppowell53@gmail.com
- GEORGE MARTIN PUCO 614-752-9107
- 
- 
- 
- 
- \*NO RAILROAD REPRESENTATIVE.

### Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Cantilever Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Automatic Gates	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Bells	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:
Sidewalk Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'No Turn' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Illumination	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<u>UNKNOWN</u>
Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

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

	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	0	
Hazard Ranking	1522	Date Run: 8/18/15

**Railroad Data**

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	10	NEED CONFIRMATION
< 1 per day		
Day thru trains	3	
Night thru trains	5	
Daytime switching movements	2	
Nighttime switching movements		
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks		
Maximum train speed	50	NEED CONFIRMATION
Typical train speed	50	
Amtrak		SIGNAL

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

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

Can one or more tracks be eliminated through the crossing? ☐ Yes ☒ 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:	Washington Twp.	
<b>Roadway Characteristics</b>	<b>Initial Information (from database)</b>	<b>Revised</b>
Average daily traffic	187 (2007)	NO NEW DATA AVAILABLE
Highway paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: <input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Roadway width: <u>12</u> ft.		
Number of highway lanes	<u>2</u>	
Urban or Rural	<u>Rural</u>	
Vehicle Speed: <u>56</u> MPH		
School Bus Operation: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <u>5</u> Amount <u>OK</u>		
Hazardous Materials Trucks: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <u>105</u> Amount		
Shoulders: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is the shoulder surfaced? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is there existing guardrail along roadway in crossing vicinity? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is stopping site distance adequate? (See Table 2) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, deficient approach(es) _____		

Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
Pedestrians: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is sidewalk present? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is there a nearby intersection that could cause queuing over the crossing? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Distance _____ Is this intersection signalized? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Are the signals currently interconnected with the existing crossing warning devices? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Is there a 'Do not Stop on Track' sign? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, Improvement type <u>NO PLANS</u> Lead Agency _____ Timeline/completion - _____	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons: _____	
Type of Development	
<input checked="" type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	Location of nearby schools: <u>HASKINS PK-12 IN TONTOGAWY</u> <u>↳ STUDENTS ATTEND TONTOGAWY SCHOOL</u>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>TOLEDO EDISON</u> Phone Number _____ Nearest Available Power Source <u>AT EXISTING SIGNAL HOUSE AT CROSSING</u>	
What other utilities are present? (add locations to sketch) <input type="checkbox"/> Gas <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input type="checkbox"/> Fiber Optic Cable <input type="checkbox"/> Petroleum <input type="checkbox"/> Water <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other _____	
Is(are) there potential utility conflict(s) <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Unknown	
Comments: <div style="text-align: center; font-size: 1.2em;">• OH ELECTRIC ALONG WEST SIDE OF ROAD</div>	

## Potential Red Flags / Project Challenges

Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):

NA

Crossing Consolidation or Closure:

NA

Real Estate or ROW:

NA

Culverts / Drainage / Ballast Conditions: WOOD RETAINING WALLS AND  
CULVERT IN NE QUAD IN ROUGH SHAPE.

Roadway and/or Sidewalks:

NA

Circuitry (e.g. reaches out to other crossings, specific needs, etc.):

EXISTING SIGNAL HOUSE IN SE QUAD TOO CLOSE TO ROAD.

Environmental:

NA

Other:

## Diagnostic Team Recommendations

	Quadrants Needed
<input checked="" type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	SE & NW
<input type="checkbox"/> AFLS / Gates / Cants	
<input checked="" type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	BUNGALOW PLACEMENT MAY BE DIFFICULT
<input type="checkbox"/> Other (define)	

Comments: **CONSENSUS (NO CSX REP.):**

**"UPGRADE WARNING DEVICES TO LIGHTS AND GATES"**

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

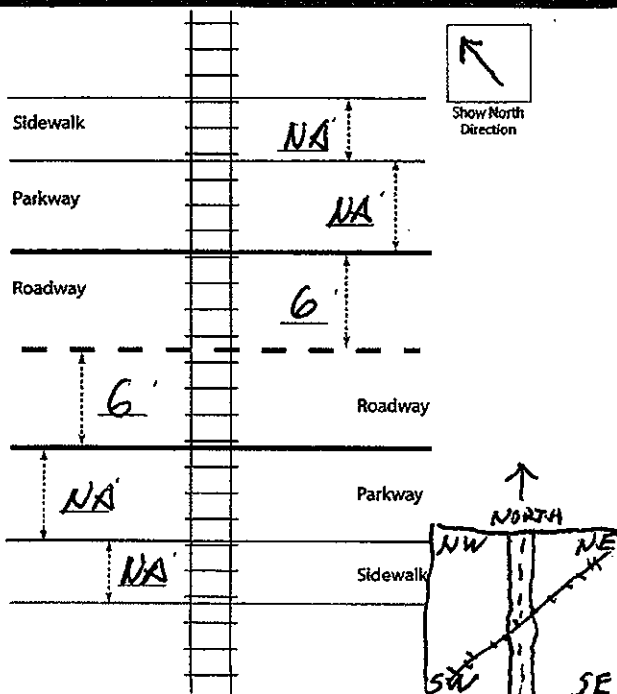
Acknowledgement of Recommendations (each entity represented at the diagnostic must have at least one signature acknowledgement):

*[Signature]*

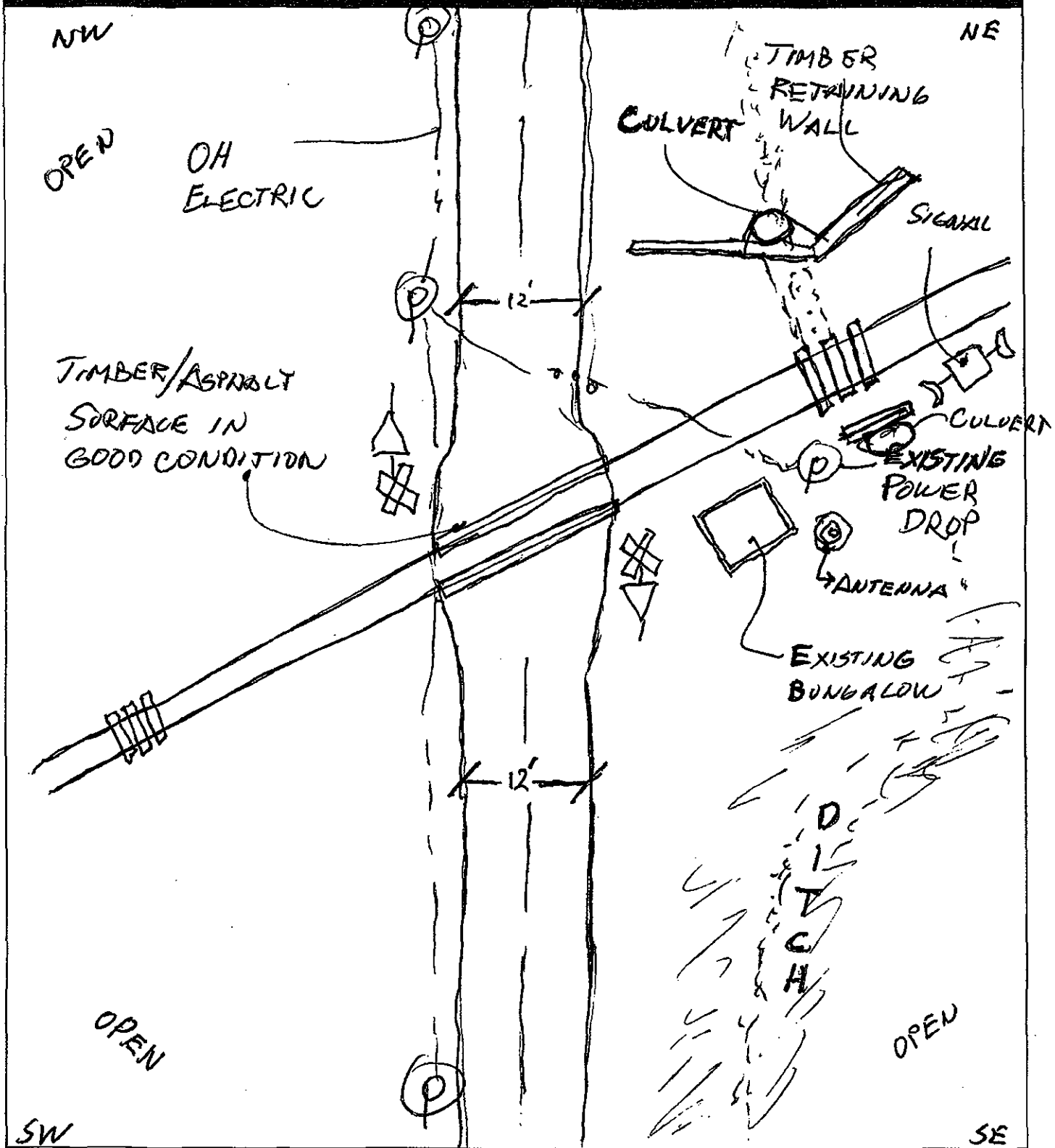
*[Signature]*

*Steve Pouchel*

## Field Dimensions



Field Sketch



Crossing Angle ☐ 0-29° ☒ 30-59° ☐ 60-90° Measured in \_\_\_\_\_ Quadrant?

Sketch by: DJD

**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
<del>55</del>	<del>570</del>
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.



**OHIO RAIL DEVELOPMENT COMMISSION  
INTER-OFFICE COMMUNICATION**

**TO:** Randall Schumacher, Supervisor, Rail Division, PUCO  
**FROM:** Cathy Stout, Manager, Safety Section, ORDC  
**BY:** Don Damron, Project Manager, ORDC  
**SUBJECT:** Wood County, CR 28, Mermill Rd. / CSX Transportation  
DOT# 513660E  
PID# 101889  
**DATE:** August 25, 2016

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The Public Utilities Commission of Ohio (PUCO) established a Diagnostic Review Team Survey at the subject highway/railroad crossing location on 9/29/2015. The Ohio Rail Development Commission (ORDC) attended the Diagnostic Survey. The Diagnostic Review Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the Diagnostic Review Team Survey form and the railroad plan and estimate are attached.

The PE has already been provided by the railroad. ORDC approved the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. 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:

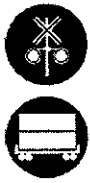
- any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance – including minor roadway work if necessary.

Thank you for your assistance with these matters.

**Attachments:**

Diagnostic Review Team Survey dated 9/29/2015  
CSX Force Account Estimate dated 3/4/2016  
Proposed Crossing Layout – PE Approved Signal Layout

**cc:** 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, Chairman

August 25, 2016

Amanda DeCesare  
Project Manager – Public Projects  
CSX Transportation  
500 Meijer Drive, Suite 305  
Florence, KY 41042

RE: Grade Crossing Warning Device Improvement – Construction Authorization  
Wood County, CR 28, Mermill Rd.  
DOT# 513660E  
PID# 101889  
CSX ACCT. CODE: OH1087

Dear Ms. DeCesare:

The Force Account Estimate dated 3/4/2016 for the referenced project has been reviewed and is acceptable and the Proposed Crossing Layout has been approved as to signal layout only. CSX Transportation may proceed with the construction of the proposed grade crossing warning device upgrade in accordance with the abbreviated plan. Please also refer to the ORDC email which authorized construction on 7/29/16. The construction 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 \$254,015.00. 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 CSX Transportation accepting the following instructions:

1. CSX's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Don Damron, ORDC, 1980 West Broad Street, Columbus Ohio 43223, or email [don.damron@dot.ohio.gov](mailto:don.damron@dot.ohio.gov), (mobile: 614-917-8466; office: 614-466-2509), and to the Public Utilities Commission of Ohio at [George.martin@puc.state.oh.us](mailto:George.martin@puc.state.oh.us) (phone: 614-752-9107). The CSX 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. CSX 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 CSX.



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

3. CSX 's project foremen will notify Don Damron at 614-917-8466 (mobile phone) or [don.damron@dot.ohio.gov](mailto:don.damron@dot.ohio.gov) (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. CSX will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
5. CSX 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,

A handwritten signature in black ink, appearing to read "Donald J. Damron", written in a cursive style.

Donald J. Damron  
Project Manager

C: Randall Schumacher, Supervisor, Rail Division, PUCO  
George Martin, Grade Crossing Planner, PUCO  
ORDC (file)



## Diagnostic Review Team Survey

**Reason for Survey:**

(e.g. formula, accident, constituent, etc.)

Formula

RANK = 1291

Date:

SEPT. 29, 2015

### Location Data

Street or Road Name: Mermill Road		US DOT No.: 513660E	
Route/Road Number (i.e. Twp., Co., SR or US): CR 28	County: WOO Township: Near Portage		
Railroad Name: CSX Transportation	Railroad Division: Chicago	Branch/Line Name: TOLEDO BRANCH	
Nearest RR Timetable Station:		RR Milepost: 26.04	

### On-Site Review Team

(Include: Name - Organization - Phone Number - Email)

1. DON DAMRON, ORDC, 614 917-8466, don.damron@dot.ohio.gov
2. JONAS MUSTERIE, WOOD CO. ENGR. 419-354-9060 j.musterie@co.wood.oh.us
3. PAUL HUBER, WOOD CO. ENGR. 419-354-9060 p.huber@co.wood.oh.us
4. GEORGE MARTIN, PULCO 614-752-9107
5. JUSTIN RHORER, CSX, 248-872,9887, Justin.Rhorer@CSX.com
- 6.
- 7.
- 8.
- 9.

### Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	NEED RE-PAINTING
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Cantilever Flashing Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Automatic Gates	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
Bells	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number:
Sidewalk Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'No Turn' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Illumination	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	1/2 100' FROM XING - BOTH SIDES
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Safety Data (Obtain crash reports, if possible, prior to review)		
	Initial Information (from database)	Revised
Number & dates of crashes in previous 5 years	0 (6/21/2004)	
Hazard Ranking	1291 Date Run: 8/18/15	828 10/7/15
Railroad Data		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	9	OK
< 1 per day		
Day thru trains	2	OK
Night thru trains	4	OK
Daytime switching movements	3	5.00 281-FERTILIZER PLANTS
Nighttime switching movements		PAYS HOPPERS IN BG
Total number of tracks	1	MANY SHIPPERS ON NEWTON RD
Number of main tracks	1	
Number of other tracks		
Maximum train speed	50	
Typical train speed	50	
Amtrak		
If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 50MPH=1200'		
If multiple tracks, can two trains occupy crossing at the same time? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Can one train block the motorists' view of another train at crossing? <input type="checkbox"/> Yes (Explain below) <input type="checkbox"/> No		
Can one or more tracks be eliminated through the crossing? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Are there other track(s) crossing this same roadway within 100 ft of this crossing? <input type="checkbox"/> Yes <input type="checkbox"/> 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: Wood County		
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	340 (2012)	750 REVISED
Highway paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: <input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete <input type="checkbox"/> Other _____		
Roadway width: 20 ft.		
Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: 35 MPH (55 EAST)		
School Bus Operation: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes 6 Amount		
Hazardous Materials Trucks: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes 105 Amount FERTILIZER		
Shoulders: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is the shoulder surfaced? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is there existing guardrail along roadway in crossing vicinity? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is stopping site distance adequate? (See Table 2) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, deficient approach(es) _____		

35 MPH = 280'

Quadrant <u>NE</u> Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant <u>SW</u> Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
Pedestrians: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes	
Is sidewalk present? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is there a nearby intersection that could cause queuing over the crossing? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If yes, Distance _____ Is this intersection signalized? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Are the signals currently interconnected with the existing crossing warning devices? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Is there a 'Do not Stop on Track' sign? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <span style="margin-left: 20px;"><b>REPAVED RECENTLY</b></span> If yes, Improvement type _____ Lead Agency _____ Timeline/completion - _____	
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Explain reasons: _____	
Type of Development	
<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential	Location of nearby schools: <b>* BOWLING GREEN</b>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>AEP</u> Phone Number _____ Nearest Available Power Source <u>AT CROSSING</u>	
What other utilities are present? <input checked="" type="checkbox"/> Gas <u>UG</u> <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input type="checkbox"/> Fiber Optic Cable (add locations to sketch) <input type="checkbox"/> Petroleum <input type="checkbox"/> Water <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other _____	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Comments: <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <ul style="list-style-type: none"> <li>• UG COLUMBIA GAS LINE ALONG SOUTH SIDE OF MERMILL RD.</li> <li>• UG FIBER ALONG EAST SIDE OF RR TRACKS APPROX 12' FROM TRACK CENTER</li> <li>• UG GAS IS APPROX 20' FROM EDGE OF ROADWAY IN SW QUAD.</li> <li>• OH CABLE + POWER MAY NEED TO BE RELOCATED</li> <li>• POWER POLE IN NE QUAD MAY OBSTRUCT PRE-VIEW.</li> </ul> </div>	

## Potential Red Flags / Project Challenges

Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):

NA

Crossing Consolidation or Closure:

NA

Real Estate or ROW:

ROADWAY = 80' (CENTER LINE OF ROW @ SOUTH EOR)  
RAILROAD = ~~100'~~ 80' CONFIRMED BY CO. ENG.

Culverts / Drainage / Ballast Conditions:

NA

Roadway and/or Sidewalks:

NA

Circuitry (e.g. reaches out to other crossings, specific needs, etc.):

INTERMEDIATE SIGNALS (SIGNAL HOUSE)

Environmental:

NA

Other:

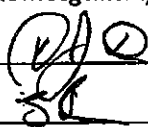


## Diagnostic Team Recommendations

	Quadrants Needed
<input checked="" type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input checked="" type="checkbox"/> AFLS / Gates	NE + SW QUADRANTS
<input type="checkbox"/> AFLS / Gates / Cants	
<input checked="" type="checkbox"/> Bells / number	(TWO BELLS)
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	
<input type="checkbox"/> Other (define)	

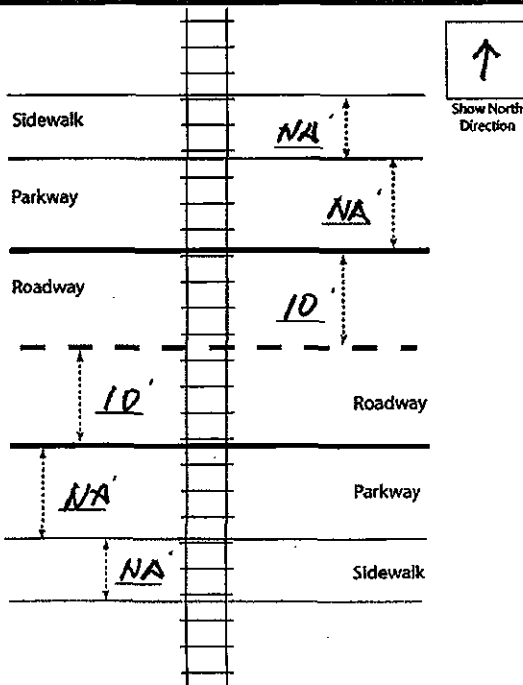
Comments: **CONSENSUS: "UPGRADE WARNING DEVICES TO LIGHTS AND GATES"**

<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input type="checkbox"/> Other (define)	

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

## Field Dimensions

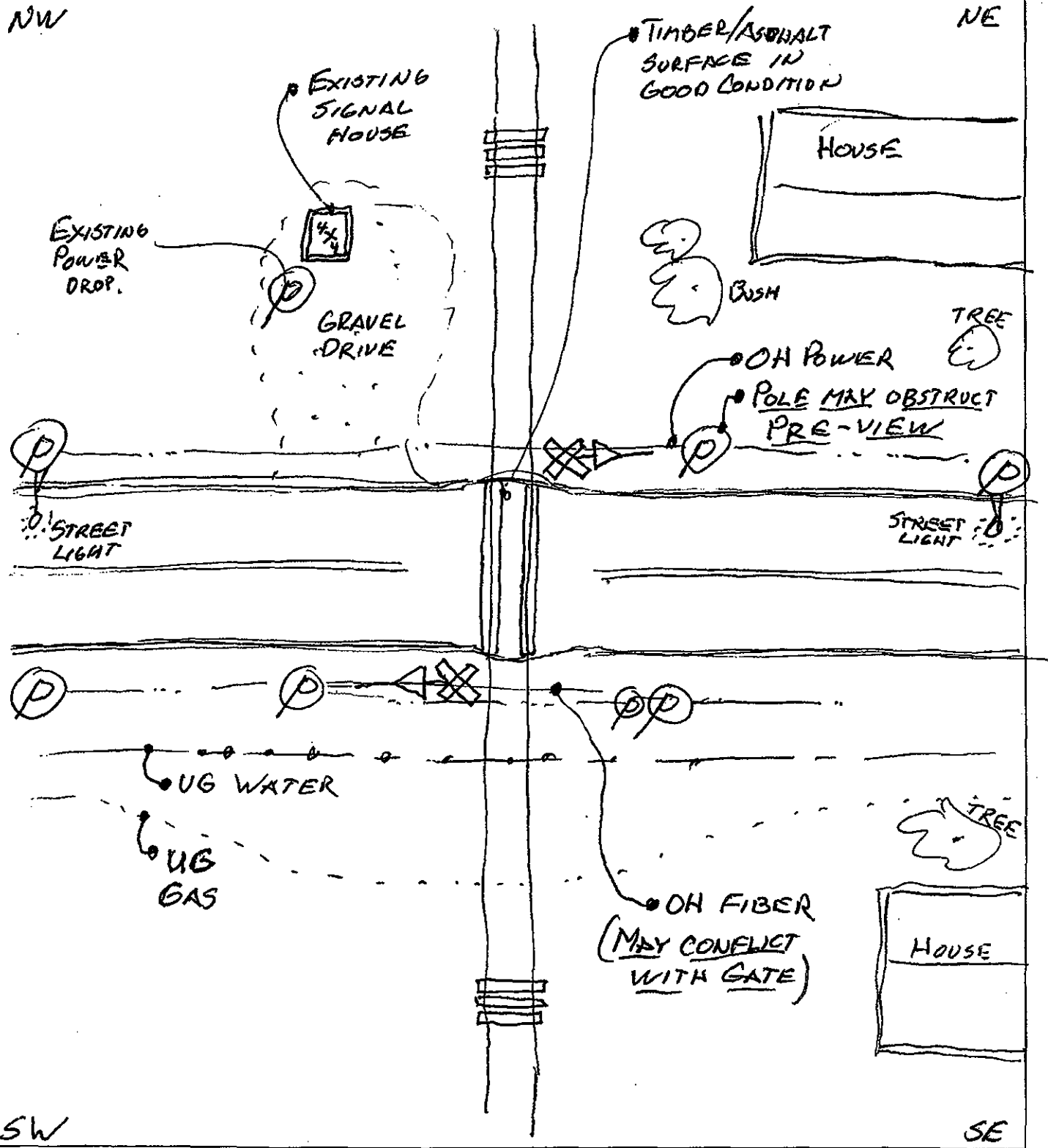




Field Sketch

NW

NE



SW

SE

Crossing Angle ☐ 0-29° ☐ 30-59° ☒ 60-90° Measured in \_\_\_\_\_ Quadrant?

Sketch by: DJD

SEPT. 29, 2016

TABLE 1

## 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.