

FILE

**Public Utilities
Commission of Ohio**

Memo

To: Docketing Division
From: George Martin, Grade Crossing Planner, Rail Division
Re: PUCO Case No. 12-2197-RR-RCP
Date: August 22, 2012

Please docket the attached diagnostic survey in the above referenced case.

RECEIVED-DOCKETING DIV
2012 AUG 22 PM 1:30
PUCO

C: Legal Department

Parties of record

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 > Date Processed AUG 22 2012



Diagnostic Review Team Survey

12-2197-RR-RCP

Date: 8/21/12

Location Data

Street or Road Name:

MILL ST - NOW MULLEN'S ST.

Route/Road Number (i.e.
Twp., Co., SR or US)

(Include SLM if State or US route)

AAR-DOT
No.:

502857A

County:

COLUMBIANA

Township:

City: (In
or Near)

SALEM

Railroad
Name:

NS

Railroad
Division:

PITTSBURGH

Branch/Line
Name:

FT WAYNE

Nearest RR
Timetable Station:

SALEM

RR Milepost:

69.85

On-Site Review Team

(Include: Name - Organization - Phone Number)

1. GEORGE MARTIN PUCO 614-752-9107

2. WAYNE D. McPAULY NS 330-204-9041

3. ROBERT KENSTLER POC 614-466-1150

4. MIKE FORTE CRDC 614-374-9287

5. KEN KENST CITY OF SALEM 330-323-4241

6. JIM PHILLIS CITY OF SALEM 330-853-8476

7. _____

8. _____

9. _____

10. _____

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
'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	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	JUST REPAVED - BE PUT DOWN MARKINGS WILL
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2 SOON
Number of Tracks Signs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Mast-Mounted Flashing Lights	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
Cantilever Flashing Lights	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Number: 2 Length: 16-18
Side Lights	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Automatic Gates	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Number: 2 Length:
Bells	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
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
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	318 Date Run: 8/15/12	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	70	60
< 1 per day		
Day thru trains	32	
Night thru trains	30	
Daytime switching movements	2	
Nighttime switching movements		
Total number of tracks	7	3
Number of main tracks	3	2
Number of other tracks	4	1
Maximum train speed	60	60
Typical train speed	50	50
Amtrak	YES	YES

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

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:
(Who maintains this roadway?)

CITY OF SALEM

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	2227 (2010)	SAME
Highway paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" 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: 30 ft.		
Number of highway lanes	2	2
Urban or Rural?	URBAN	URBAN
Vehicle Speed: 25 MPH		
School Bus Operation: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes _____ Amount		
Hazardous Materials Trucks: <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes _____ 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
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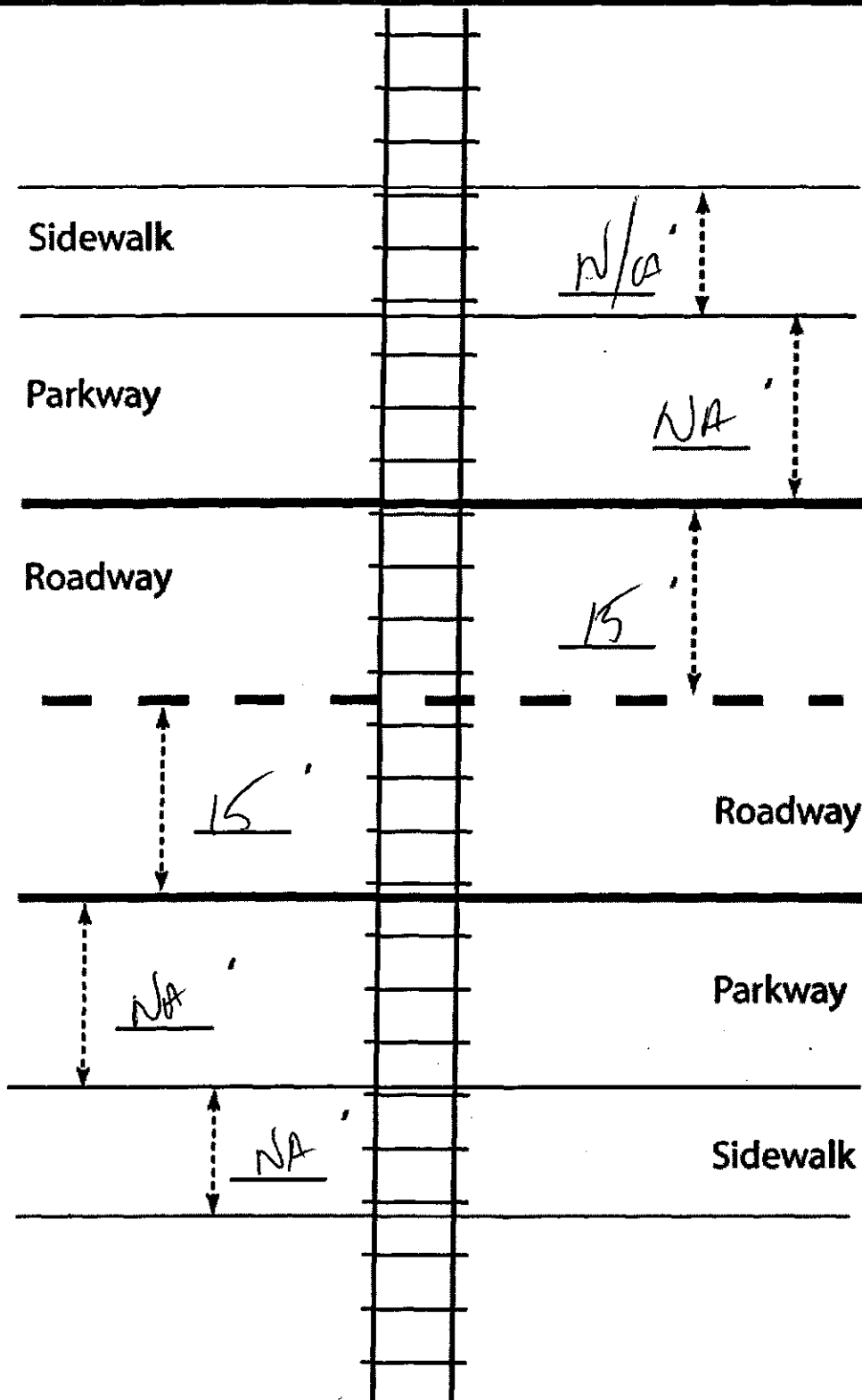
Pedestrians: ☐ No ☒ Yes
 Is sidewalk present? ☒ No ☐ Yes
 Is there a nearby intersection that could cause queuing over the crossing? ☐ No ☐ Yes
 If yes,
 Distance _____
 Is this intersection signalized? ☐ No ☐ Yes
 Are the signals currently interconnected with the existing crossing warning devices? ☐ 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		
<input type="checkbox"/> Open Space <input type="checkbox"/> Industrial <input type="checkbox"/> Residential	<input type="checkbox"/> Institutional <input type="checkbox"/> Commercial	Location of nearby schools: _____

Utility Information	
Is commercial power available? <input type="checkbox"/> No <input type="checkbox"/> Yes Utility Provider (Company Name) _____ Phone Number _____ Nearest Available Power Source _____ What other utilities are present? _____ Is there potential utility conflict(s) <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	

Diagnostic Team Recommendations		
	Quadrants Needed	
<input type="checkbox"/> Install/upgrade active devices	NEITHER CANTILEVER IS NEEDED / REQUIRED / RECOMMENDED UNDER MUTCD.	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)		
<input type="checkbox"/> AFLS / Cants		
<input type="checkbox"/> AFLS / Gates		
<input type="checkbox"/> AFLS / Gates / Cants		
<input type="checkbox"/> Upgrade circuitry		
<input type="checkbox"/> Sidelights		
<input type="checkbox"/> Guardrail Needed		
<input type="checkbox"/> Install/Replace curb		
<input type="checkbox"/> Other (define)	DEVICES IN SW QUAD NEED TO BE RELOCATED TO BE MUTCD COMPLIANT AND TO ELIMINATE TRUCKS TURNING BETWEEN THE DEVICES & THE TRACK (MAIN #1)	
Comments: _____		
DEVICES IN THE NE NEED TO BE RELOCATED - TOO CLOSE TO SPDE TRACK.		
<input type="checkbox"/> Install/upgrade traffic signal preemption		
<input type="checkbox"/> No improvements needed		
<input checked="" type="checkbox"/> Other (define)		

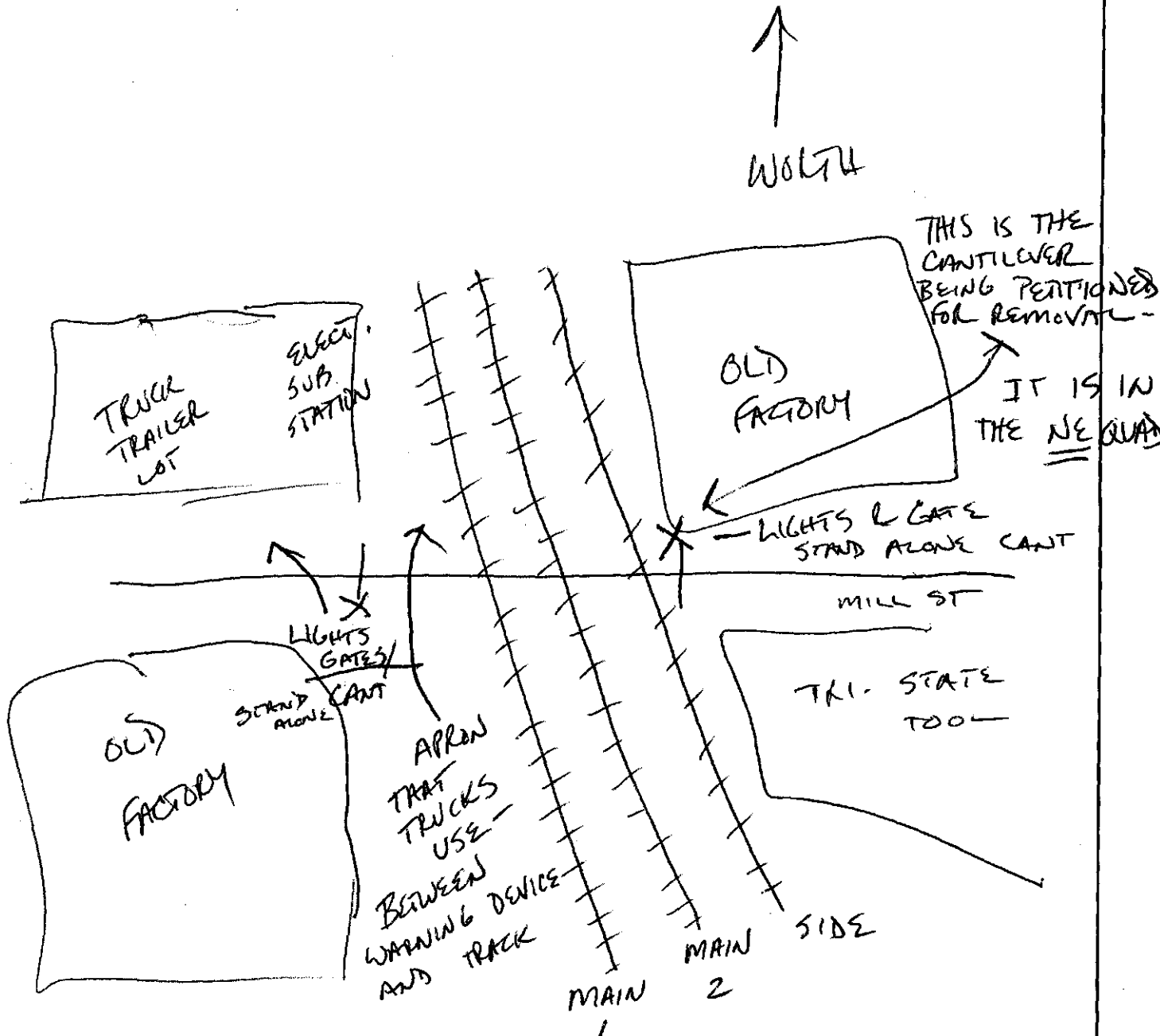
Field Dimensions



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

Measurements by GM

Field Sketch



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

Sketch by: GM

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.