

**Public Utilities
Commission of Ohio**

Memo

To: Docketing Division
From: George Martin, Grade Crossing Planner, Rail Division
Re: PUCO Case No. 12-2436-RR-RCP
Date: October 12, 2012

By Attorney Examiner Entry dated September 13, 2012, staff was directed to conduct a diagnostic review of the Holland-Sylvania Rd grade crossing, DOT# 509457F, City of Toledo, Lucas County, and file a response to the request of Norfolk Southern Railway for the installation of a cantilever at the crossing by October 15, 2012.

On October 11, 2012, staff conducted the review of the grade crossing with staff from the City of Toledo, the Lucas County Engineer's office, Norfolk Southern Railway, and the Ohio Rail Development Commission. The review (attached) concluded that nothing in the Manual of Uniform Traffic Control Devices precludes the installation of a cantilever at this location.

RECEIVED-DOCKETING DIV
2012 OCT 12 AM 10:40

PUCO

C: Legal Department



Diagnostic Review Team Survey

Date: 10/11/2012

Location Data

Street or Road Name:

HOLLAND - SYLVANIA RD

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

(include SLM if State or US route)

AAR-DOT
No.:

509457F

County:

LUCAS

Township:

SYLVANIA

City: (In
or Near)

TOLEDO

Railroad
Name:

NS

Railroad
Division:

DEARBORN

Branch/Line
Name:

CHICAGO

Nearest RR

Timetable Station:

TOLEDO

RR Milepost:

CD 295.15

On-Site Review Team

(Include: Name - Organization - Phone Number)

1. GEORGE MARIN PUCO 614-752-9107

2. MIKE FORTE ORDC 614-374-9287

3. Doug Jones NS 317-850-6478

4. MIKE FREEBY NS 734-904-3699

5. TED Campbell NS 734-788-2142

6. GARY STOKER City of Toledo 419-245-1306

7. DOUG PARRISIT LUCAS CO. ENG (419) 213-4540

8. Joel Palermo " " " (419) 467-3080

9.

10.

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	2
Crossbucks	☒ Yes	☐ No	2
Number of Tracks Signs	☒ Yes	☐ No	2
Inventory Tags	☒ Yes	☐ No	2
Interconnected Highway Traffic Signal	☐ Yes	☒ No	
Mast-Mounted Flashing Lights	☒ Yes	☐ No	2
Cantilever Flashing Lights	☐ Yes	☒ No	Number: Length:
Side Lights	☐ Yes	☒ No	
Automatic Gates	☒ Yes	☐ No	Number: 2 Length:
Bells	☐ Yes	☒ No	
Sidewalk Gate Arms	☐ Yes	☒ No	
'No Turn' Signs	☐ Yes	☒ No	
Illumination	☐ Yes	☒ No	
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 5/16/2009 FATAL 7 PEDESTRIAN	
Hazard Ranking 965	Date Run: 10/9/12	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	100	PROBABLY HIGHER
< 1 per day		
Day thru trains	50	
Night thru trains	50	
Daytime switching movements		
Nighttime switching movements		
Total number of tracks	2	
Number of main tracks	2	
Number of other tracks		
Maximum train speed	79	
Typical train speed	60	
Amtrak	YES	

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

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 TOLEDO

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	16,000	16,000 2012
Highway paved	☒ Yes ☐ No	☒ Yes ☐ No
Roadway Surface: ☒ Blacktop ☐ Gravel ☐ Concrete ☐ Other _____		
Roadway width: 32 ft.	WIDENING TO 36' WITH 2 1/2' CURBS & GUTTER	
Number of highway lanes	2 + TURN LANES	
Urban or Rural?	URBAN	
Vehicle Speed: 45 MPH		

School Bus Operation: ☐ No ☒ Yes 19 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) _____

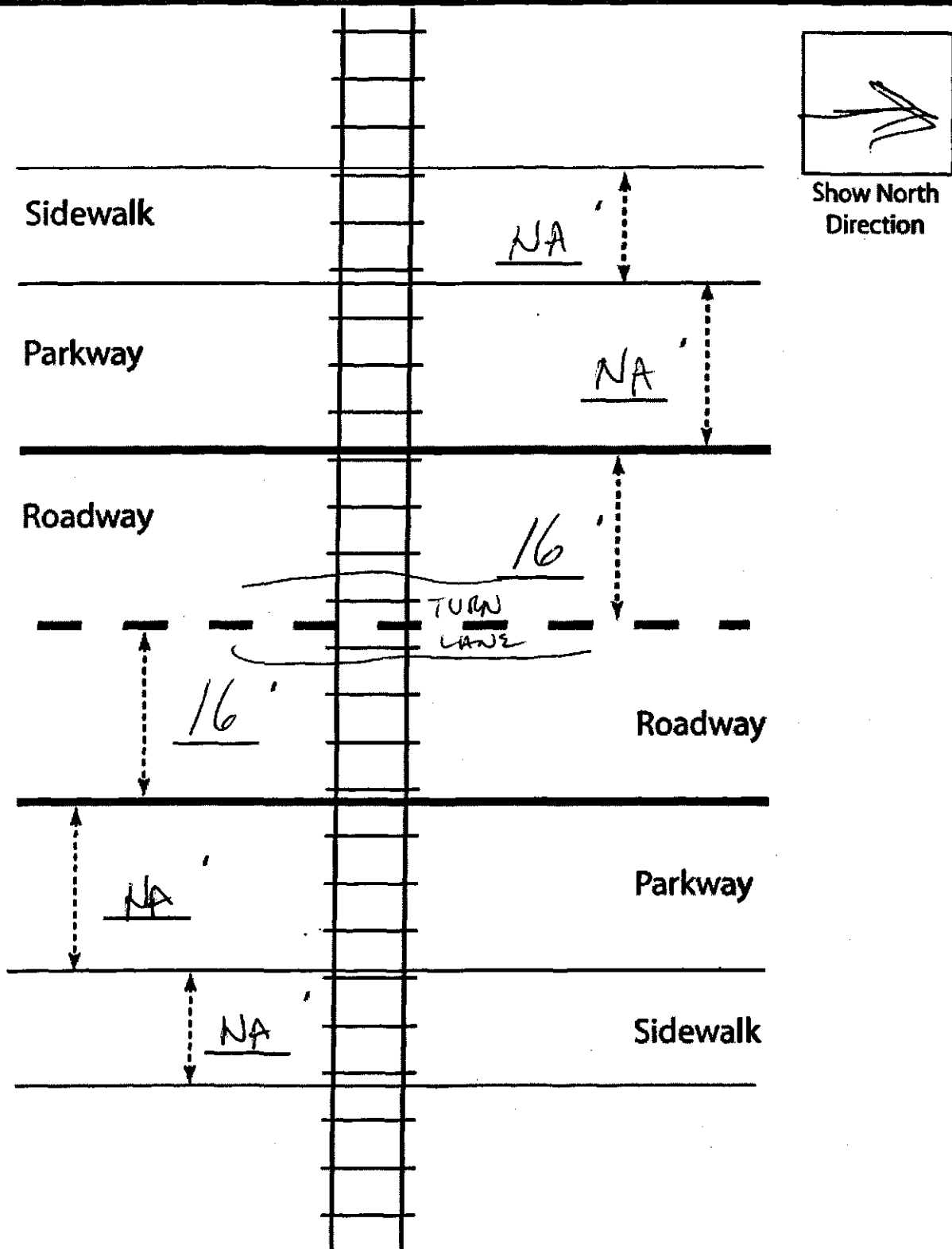
Quadrant <u>NW</u> Curb and Gutter: ☒ Functional (Curb height = 4" or more) ☐ Non-functional (Curb height = Less than 4") ☐ None	Quadrant <u>SE</u> Curb and Gutter: ☒ Functional (Curb height = 4" or more) ☐ Non-functional (Curb height = Less than 4") ☐ None
Pedestrians: ☐ No ☒ Yes	
Is sidewalk present? ☒ No ☐ Yes	
Is there a nearby intersection that could cause queuing over the crossing? ☐ No ☐ Yes <u>ANGOLA ROAD</u> If yes, Distance _____ Is this intersection signalized? ☐ No ☒ Yes <u>NO INTERCONNECTION PLANNED</u> 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: <u>MAJOR ARTERY.</u>	

Type of Development	
☐ Open Space ☐ Institutional ☐ Industrial ☒ Commercial ☒ Residential	Location of nearby schools: <u>1/2 MILE</u>

Utility Information	
Is commercial power available? ☐ No ☒ Yes	
Utility Provider (Company Name) <u>TOLEDO EDISON</u>	Phone Number _____
Nearest Available Power Source <u>AT CROSSING</u>	
What other utilities are present? <u>UG GAS, STORM SEWER, TELEPHONE & WATER</u>	
Is there potential utility conflict(s) ☐ Yes ☒ No ☐ Unknown	

Diagnostic Team Recommendations	
	Quadrants Needed
☒ Install/upgrade active devices	<u>ONE CANTILEVER ON NORTH</u>
☐ Automatic Flashing Lights (AFLS)	<u>SIDE OF CROSSING DUE TO</u>
☐ AFLS / Cants	<u>ROADWAY WIDENING PROJECT.</u>
☐ 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)	

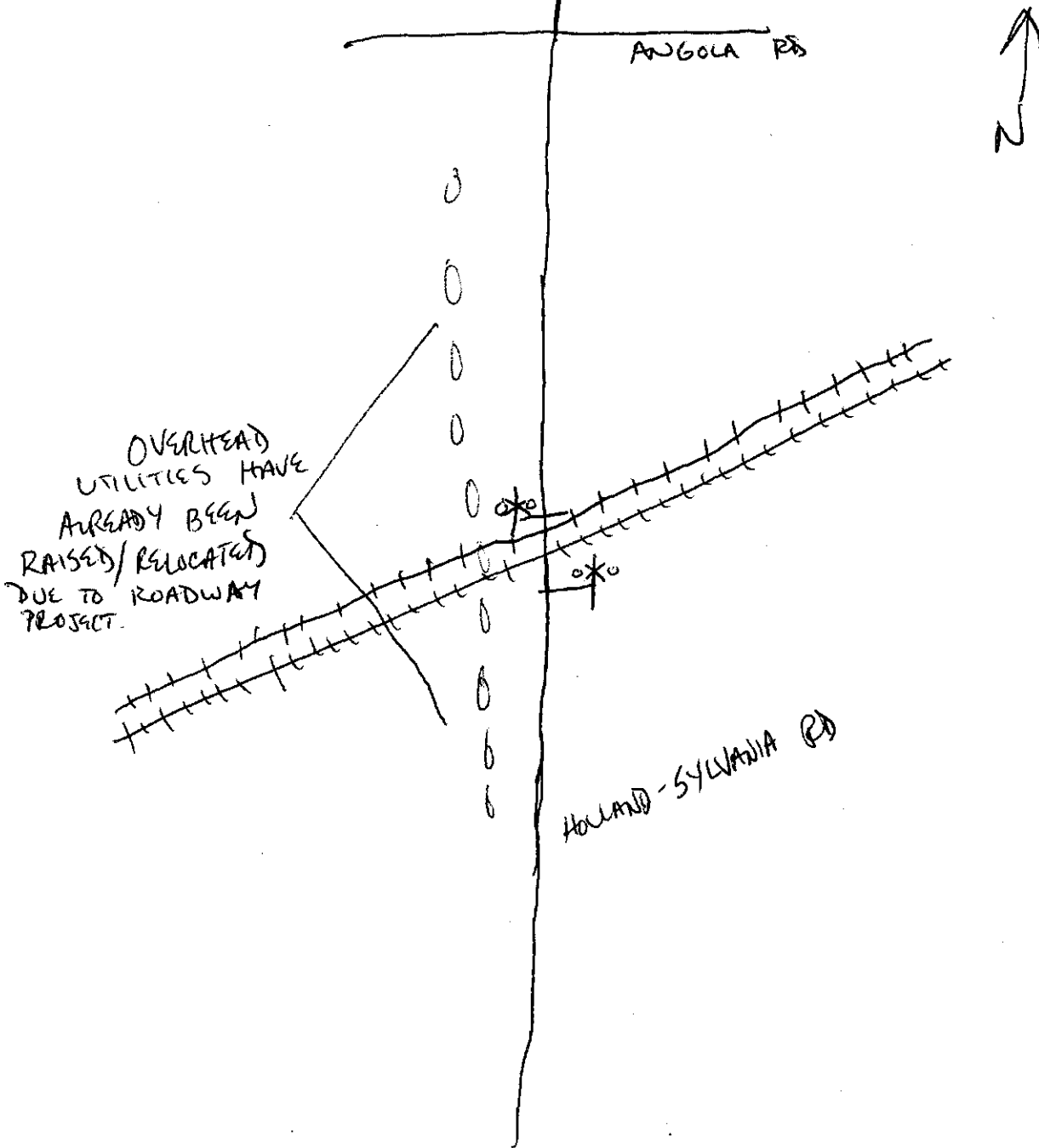
Field Dimensions



Crossing Angle ☐ 0-29° ☐ 30-59° ☒ 60-90° Measured in 5th Quadrant?

Measurements by: GM

Field Sketch



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

Sketch by: am

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.