

FILE

12

**Public Utilities  
Commission of Ohio**

# Memo

**To:** Docketing Division  
**From:** George Martin, Grade Crossing Planner, Rail Division  
**Re:** In the matter of the authorization of the Wheeling & Lake Erie Railway to install an active grade crossing warning device in Stark County  
**Date:** October 4, 2012

The Ohio Rail Development Commission (ORDC) has authorized funding for the Wheeling & Lake Erie Railway (WE) to install mast-mounted flashing lights and roadway gates at the Allen Ave. SE grade crossing, DOT# 142854J, located in the City Canton, Stark County. The crossing was surveyed on February 12, 2012 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 has already been submitted and approved, staff requests an Entry with completion of the project 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. 12- 2664 -RR-FED In the matter of the authorization of the Wheeling & Lake Erie Railway to install an active grade crossing warning device in Stark County

C: Legal Department

Please serve the following parties of record

• Page 1 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 [Signature] Date Processed OCT 04 2012

RECEIVED-DOCKETING DIV  
2012 OCT -4 AM 9:40  
PUCO

Ms Susan Kirkland

Ohio Rail Development Commission

1980 West Broad St, 2<sup>nd</sup> Floor

Columbus, Oh 43223

Mr Dan Reinsel

Wheeling & Lake Erie Railway

100 East First St

Brewster, Oh 44613

Mr Nick Loukas, Assistant Engineer

City Service Center, Bldg A

2436 30<sup>th</sup> St NE

Canton, Oh 44705

Ohio Power Company

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

**TO:** George Martin, Planner, Railroad Division, PUCO  
**FROM:** Susan Kirkland, Manager, Safety Section, ORDC  
**BY:** Mike Forte', Safety Section, ORDC *M. Forte*  
**SUBJECT:** Allen Ave. SE, Wheeling & Lake Erie Railway Company (WLE),  
142 854J, City of Canton, Stark County  
**DATE:** October 3, 2012

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The Public Utilities Commission of Ohio (PUCO) established a diagnostic review at the subject location on February 15, 2012. The Ohio Rail Development Commission (ORDC) attended the review. The Diagnostic Team recommended the installation of flashing lights signals with roadway gates and a grade crossing reconstruction. A copy of the diagnostic review form is 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. Because of the added complexity of the grade crossing surface needing reconstruction to support the new warning system, please issue a one (1) year Order for the project. 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

c: M. Fortè (file)



## Diagnostic Review Team Survey

Date: 2/15/2012

### Location Data

Street or Road Name: Allen Avenue SE			
Route/Road Number (i.e. Twp., Co., SR or US)		US DOT No.: 142854	
County: Stark (STA)	Township:	City: (In or Near)	Canton
Railroad Name: Wheeling & Lake Erie	Railroad Division: <del>AK</del> CLEVELAND SUB	Branch/Line Name: SANDY BR	
Nearest RR Timetable Station: <del>Canton</del> SANDY		RR Milepost: 15.5	

### On-Site Review Team

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

1. Mike Forte - ORDC - 614.374.9287 - mike.forte@dot.state.oh.us MDE
2. George Martin - PUCO - 614.752.9107 - George.Martin@puc.state.oh.us GM
3. DAN REINSEL WLE 330-767-7202 DREINSEL@WLE.RWY.COM
4. SLAIM ZORFIK PUCO
5. Nick Loukas - Canton - nick.loukas@canton.ohio.gov 330-438-6920
- 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	GOOD 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 (condition?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2 w/YIELD + ENS
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	N.A.
Inventory Tags	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	N.A.
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	+ 2
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Other	<input type="checkbox"/> Yes	<input checked="" 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	1 (3/7/2011)	
Hazard Ranking	82	Date Run: 2/2/2012
Railroad Data		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	4	
< 1 per day		
Day thru trains	1	
Night thru trains	1	
Daytime switching movements	1	
Nighttime switching movements	1	
Total number of tracks		
Number of main tracks	1	
Number of other tracks	0	
Maximum train speed	12	10
Typical train speed		10
Amtrak		N
If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
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 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: City of Canton		
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	2100 (2006)	900 <del>2100</del> (2009)
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: 32 ft.		
Number of highway lanes	2	
Urban or Rural	Urban	
Vehicle Speed: 35 MPH		
School Bus Operation: <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes _____ Amount		
Hazardous Materials Trucks: <input type="checkbox"/> No <input type="checkbox"/> Yes _____ Amount		
Shoulders: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		
Is the shoulder surfaced? <input 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 checked="" type="checkbox"/> Non-functional (Curb height = Less than 4") <input type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input checked="" type="checkbox"/> Non-functional (Curb height = Less than 4") <input 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:	
Type of Development	
<input type="checkbox"/> Open Space <input type="checkbox"/> Institutional <input checked="" type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential	Location of nearby schools: <div style="font-size: 1.2em; margin-top: 10px;">LEARNING CENTER ON 14TH</div>
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 XING</u>	
What other utilities are present? <u>ALL</u> (add locations to sketch)	
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:

CITY 50' WLE 80 ON NW, 60 ON SE

Culverts / Drainage / Ballast Conditions:

SURFACE + JOINTS  
(106')

Roadway and/or Sidewalks:

DRIVEWAY

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

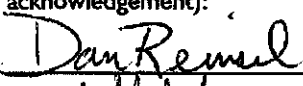


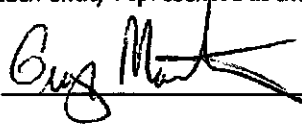
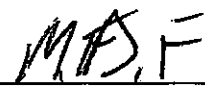
SURFACE

Environmental:

NO

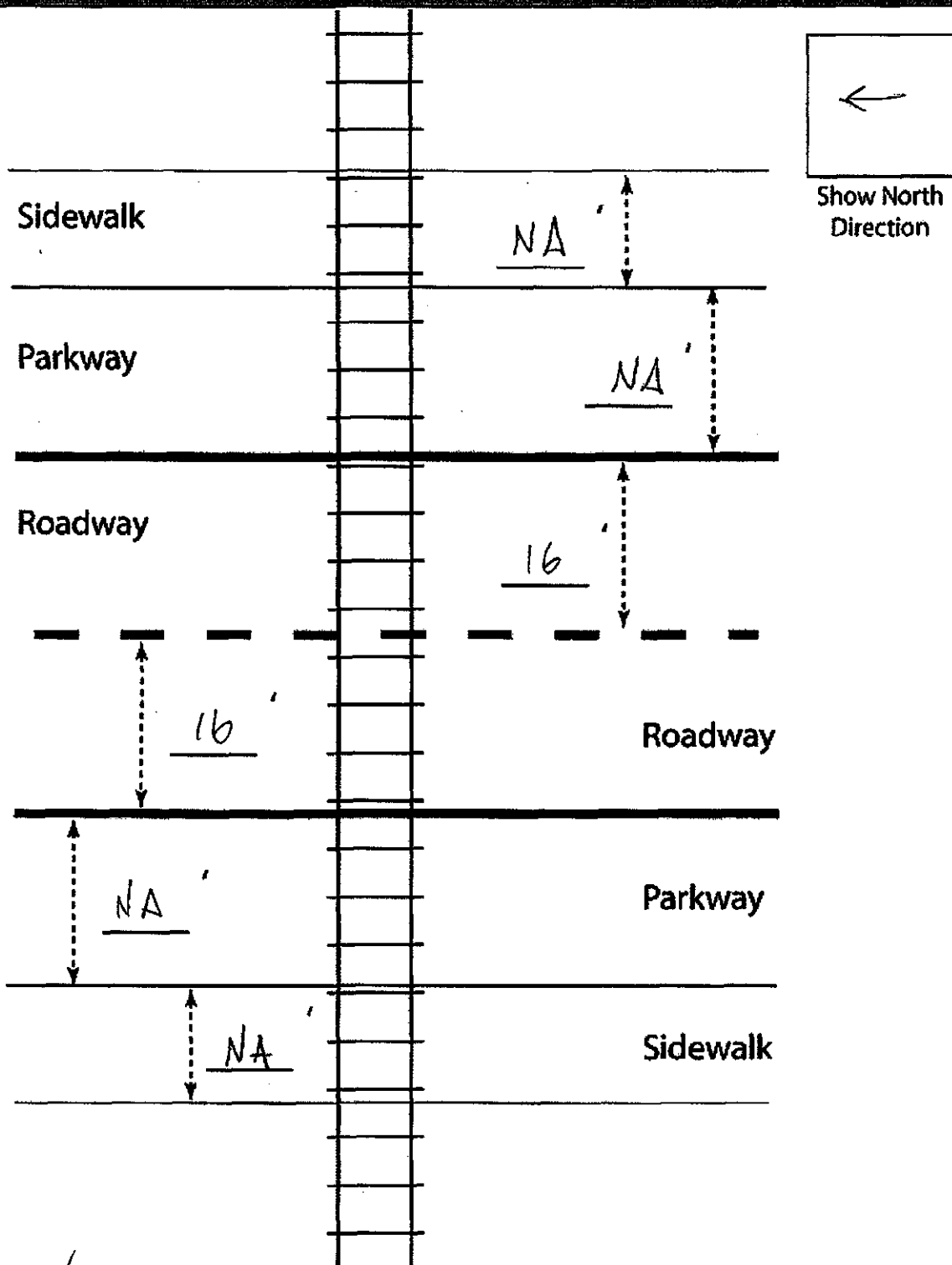
Other:

UTILITIES

Diagnostic Team Recommendations	
	Quadrants Needed
<input checked="" type="checkbox"/> Install/upgrade active devices	
<input checked="" type="checkbox"/> Automatic Flashing Lights (AFLS)	WEST - SDF TRACKS
<input checked="" type="checkbox"/> AFLS / Cants	<del>NW</del>
<input checked="" type="checkbox"/> AFLS / Gates	SE
<input checked="" type="checkbox"/> AFLS / Gates / Cants	NW
<input type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input checked="" type="checkbox"/> Install/Replace curb	NW
<input type="checkbox"/> Bungalow placement & offset from rail & highway	
<input checked="" type="checkbox"/> Other (define)	RECONSTRUCT SURFACE
Comments:	
<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): <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">             Dan Reinsel     </div> <div style="text-align: center;">             Greg Mark         </div> <div style="text-align: center;">             M.F.F.         </div> </div>	



# Field Dimensions

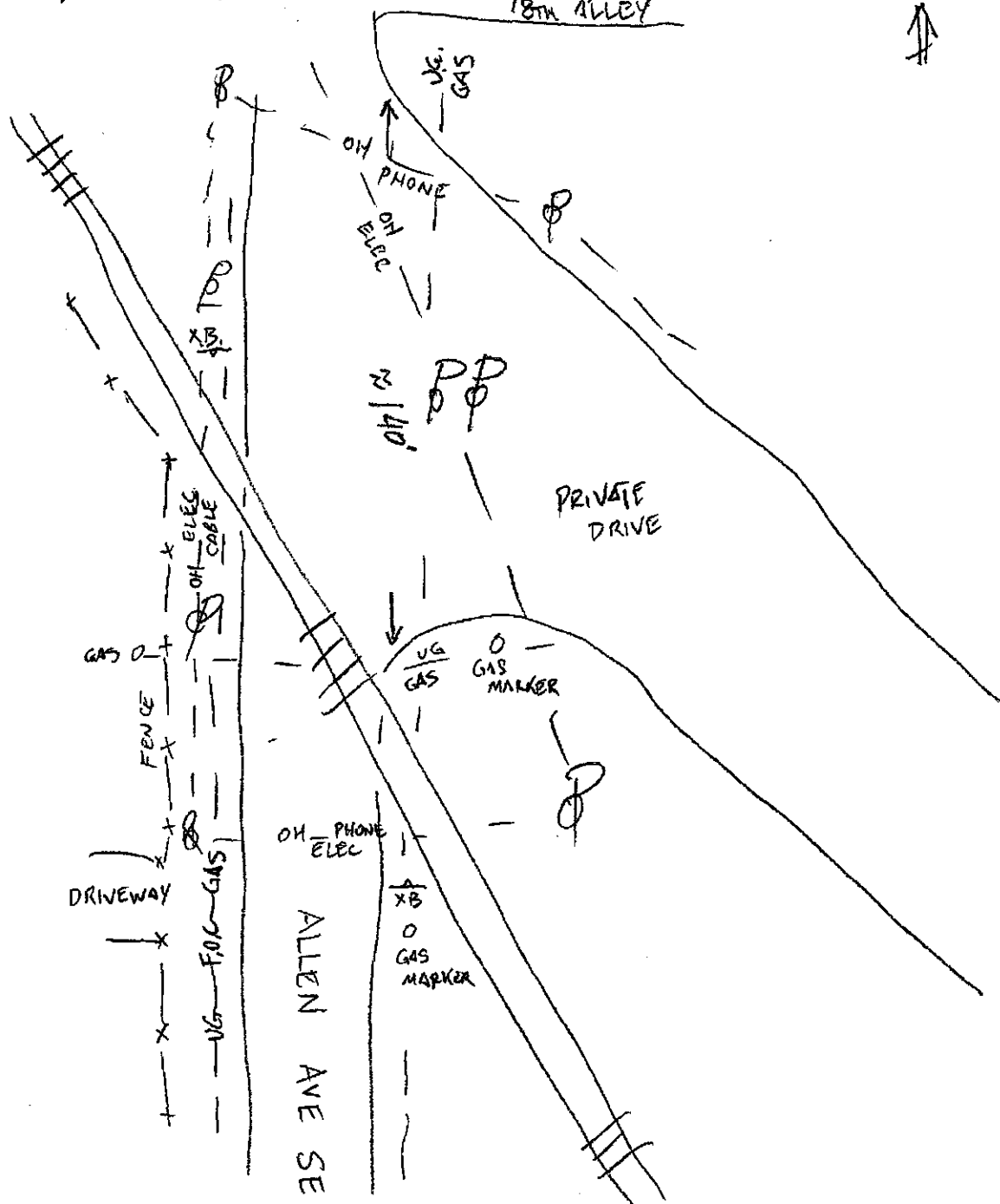


Crossing Angle ☒ 0-29° ☐ 30-59° ☐ 60-90° Measured in NW Quadrant?

Measurements by: MDP

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

N



Sketch by: MDF

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.

