

Memo

To: Docketing Division

From: George Martin, Grade Crossing Planner, Rail Division *GM*

Re: In the matter of the authorization of CSX Transportation to install an active grade crossing warning device in Union County

Date: August 28, 2012

The Ohio Rail Development Commission (ORDC) has authorized funding for CSX Transportation (CSX) to install mast-mounted flashing lights and roadway gates at the Paver Barnes Rd/CR 134 grade crossing, DOT# 513814M, located in Liberty Township, Union County. The crossing was surveyed on November 8, 2011, 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 projects 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- **2387** -RR-FED In the matter of the authorization of CSX Transportation to install an active grade crossing warning device in Union County

C: Legal Department

Please serve the following parties of record

RECEIVED-DOCKETING DIV
2012 AUG 28 AM 10:51
PUCO

Ms Susan Kirkland
Ohio Rail Development Commission
1980 West Broad St, 2nd Floor
Columbus, Oh 43223

Ms Amanda DeCesare
CSX Transportation
1717 Dixie Hwy, Ste 400
Ft Wright, Ky 41011

Mr Tom Messerly
Union County Engineer's Office
233 West Sixth Street
Marysville, Ohio 43040

Union Rural Electric

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

TO: Leah Thomas-Dalton, Rail Division Chief, PUCO
FROM: Susan Kirkland, Manager, Safety Section, ORDC
BY: Joe Reinhardt, Project Manager, ORDC
SUBJECT: Union County, Paver-Barnes Road
DOT 513814M, PID 92774
DATE: August 3, 2012

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

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

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

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

Thank you for your assistance with these matters.

Attachment: Diagnostic Review
Plan & Estimate

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



OHIO RAIL DEVELOPMENT COMMISSION

1980 West Broad Street, Columbus OH 43223

John R. Kasich, Governor • James G. Bradley, ORDC Chairman

August 3, 2012

Ms. Amanda DeCesare
Project Manager
1717 Dixie Highway, Suite 400
Fort Wright, KY 41011

RE: Union County, Paver Barnes Road, DOT 513814M
PID 92774, OH0882

Dear Ms. DeCesare:

The plan and estimate dated July 24, 2012, for the referenced project has been reviewed and is acceptable. CSX may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$178,359.00. Additional costs must be approved in writing by the 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 accepting the following instructions:

1. CSX will furnish prior written notification of their scheduled date to start construction to George Martin, PUCO, Railroad Division.
2. CSX's project foreman will furnish FAX or written notification five (5) working days prior to the date work will start at the project site to Joseph Reinhardt, Ohio Rail Development Commission (ORDC), 1980 West Broad Street, Columbus, Ohio 43223, email joe.reinhardt@dot.state.oh.us or FAX (614) 728-4520, (telephone number 614-580-7728), and to the Public Utilities Commission of Ohio at 180 East Broad Street, Columbus, Ohio 43215, email George.martin@puc.state.oh.us, (telephone number 614-752-9107). CSX'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.
3. 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.
4. CSX's project foremen will notify Joe Reinhardt 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.



www.rail.ohio.gov

phone: 614.644.0306

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5. CSX will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed Encumbrance Estimate to reference when billing.
6. 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,



Joseph Reinhardt
Project Manager

C: Leah Thomas-Dalton, Rail Division Chief, PUCO
George Martin, PUCO, Grade Crossing Planner
ORDC (file)



Diagnostic Review Team Survey

Date: 11.8.11

Location Data			
Street or Road Name: Paver-Barnes Rd.			
Route/Road Number (i.e. Twp., Co., SR or US) CR 134		AAR-DOT No.: 513814M	
County: Union	Township: LIBERTY	City: (In or Near) Peoria	
Railroad Name: CSX Transportation, Inc.	Railroad Division: Great Lakes	Branch/Line Name: Scottslawn SEC	
Nearest RR Timetable Station: Ada		RR Milepost: 98.26 QT	

On-Site Review Team

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

1. Tom Messerly - Union County Liberty Township - 937.645.3118
2. ~~Jeff Stauch - Union County Liberty Township - 937.645.3018~~
3. MIKE FORTE ORDC 614.374.9287 MIKE.FORTE@DOT.STATE.OH.US
4. GEORGE MARTIN PUCO 614-752-9107
5. JEFF PASTO PUCO 614.301.5412
6. Karen Murphy CSX 904-359-1650
7. TOM MESSERLY UNION CITY 937.645.3018
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
'Stop' Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes	<input type="checkbox"/> No NA	
Pavement Markings (condition?)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	GOOD
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2 STANDARD
Number of Tracks Signs	<input type="checkbox"/> Yes	<input type="checkbox"/> No NA	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	2
Interconnected Highway Traffic Signal	<input type="checkbox"/> Yes	<input type="checkbox"/> No NA	
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
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	0	
Hazard Ranking	541	Date Run: 10/27/11
Railroad Data		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	15	
< 1 per day		
Day thru trains	7	
Night thru trains	4	
Daytime switching movements	4	
Nighttime switching movements	0	
Total number of tracks		
Number of main tracks	1	
Number of other tracks	0	
Maximum train speed	50	
Typical train speed		45 to 50
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 NA		
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 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:		Union County
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	238 (2007)	(2010) ~ 268
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>20</u> ft.		
Number of highway lanes		2
Urban or Rural	Rural Local	
Vehicle Speed: <u>55</u> MPH		
School Bus Operation: <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes Amount <u>32</u>		
Hazardous Materials Trucks: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Amount		
Shoulders: <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <u>2' AGGREGATE</u>		
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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, deficient approach(es) <u>NORTH BOUND</u>		

Quadrant <u>NW</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>SE</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 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: <div style="text-align: center; font-size: 1.2em; font-family: cursive;">TRAFFIC IMPACT</div>	
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: <div style="font-size: 1.2em; font-family: cursive;">1 MILE RAYMOND ELEMENTARY</div>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) <u>UNION PACIFIC ELECTRIC</u> Phone Number <u>419-752-2441</u> Nearest Available Power Source <u>AT CROSSING</u> What other utilities are present? <u>NONE</u> (add locations to sketch)	
Is(are) there potential utility conflict(s) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown Comments: <u>NO OUPS MARKS</u>	

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:

NO

Real Estate or ROW:

NO

RR ROW 100'

Culverts / Drainage / Ballast Conditions:

NO

Roadway and/or Sidewalks:

NO

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

NO

Environmental:

NO

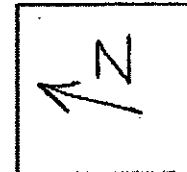
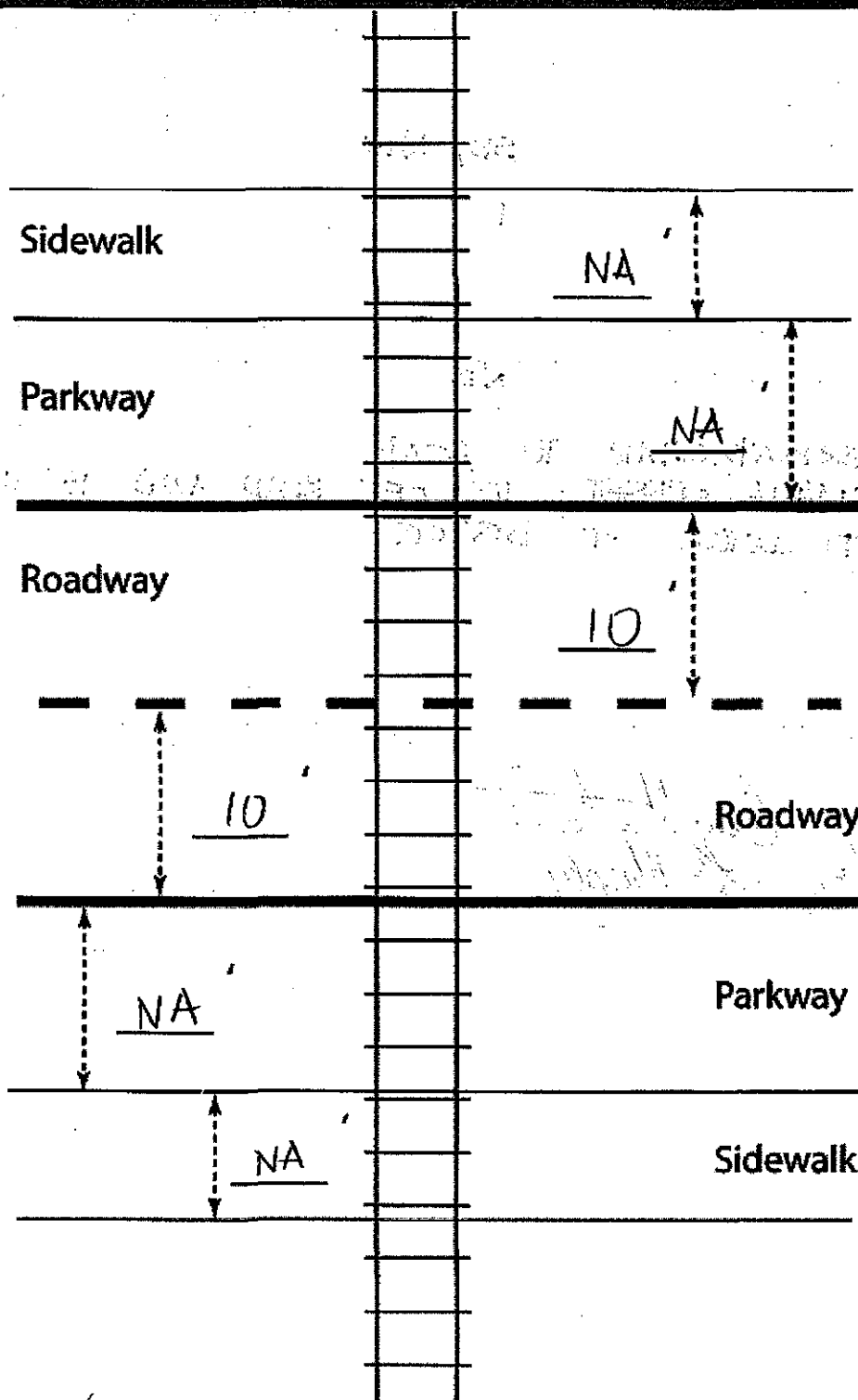
Other:

NO

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	1
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input checked="" type="checkbox"/> Bungalow placement & offset from rail & highway	NE
<input type="checkbox"/> Other (define)	
Comments: GATES PERPENDICULAR TO ROAD AT SE MINIMUM OFFSET 10' OFF ROAD AND 15' CENTER OF TRACK TO CENTER OF DEVICE.	
<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-between;"> <div> M. Forte Thomas Nunnally </div> <div> Guy Hart J. Murphy </div> </div>	

Field Dimensions



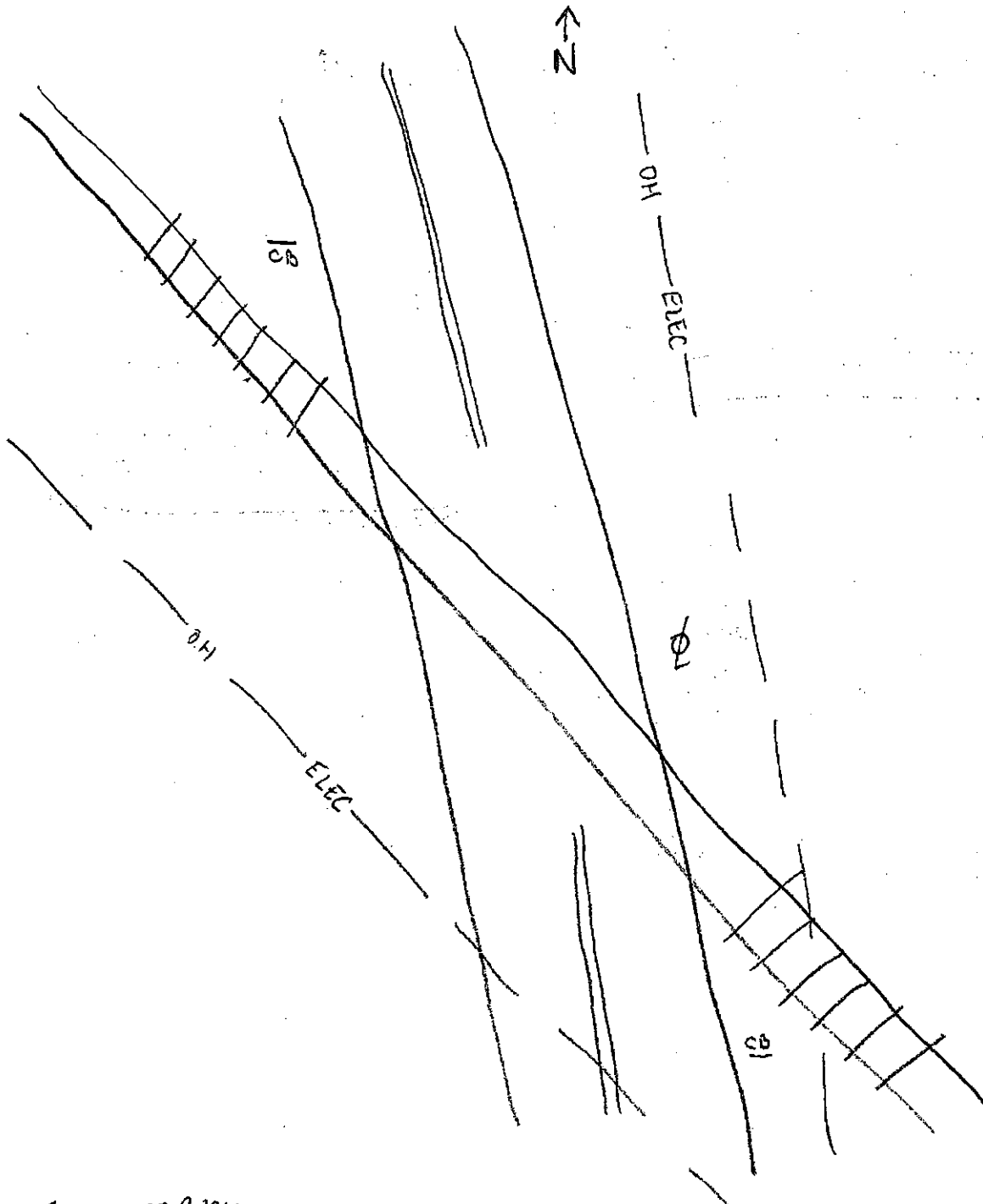
Show North Direction

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

Measurements by: MDF

Field Sketch

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



CB - CROSSBUCK

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