Public Utilities
Commission of Ohio

Memo

To: Docketing Division

From: Jill Henry, Rail Specialist, Rail Division

Cc: PUCO Legal Department

Date: 9/12/17

Re: PUCO Case No. 17-1975-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at Ashland Railway Crossings, DOT#264-982E, TR 1455 & DOT#264-989C, SR 96 in Ashland County & DOT#265-027S, SR 301, in Wayne County, Ohio.

On August 30, 2016, the Ohio Rail Development Commission (ORDC) authorized funding for Ashland Railway to install lights and gates at DOT#264-982E, TR 1455 & DOT#264-989C, SR 96 in Ashland County & DOT#265-027S, SR 301, in Wayne County, Ohio. The crossings were surveyed on March 29, 2016 and were found to warrant the upgrades. The electric utility provider for TR 1455 and SR 96 is First Energy-Ohio Edison. The electric utility provider for SR 301 is Holmes Wayne Rural Electric.

The projects will be paid for with federal funds and are actual cost. The plans and estimates for the projects in the amount of $164,780.00 for TR 1455, $164,780.00 for SR 96, and $170,280.00 for SR 301 have been approved. Construction may commence at once. **Staff requests a Finding & Order with completion of the project in nine months.** Staff requests that the following language be incorporated in the Finding & Order:

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.**

Please serve the following parties of record:

Ashland Railway
Mr. Scott Patsolic
803 North Main Street
Mansfield, Ohio 44902

Ohio Rail Development Commission
Cathy Stout
1980 West Broad Street
Mail Stop #3140
Columbus, Ohio 43223

Milton Township, Ashland County
Trustees
1196 County Road 1356
Ashland, Ohio 44805

ODOT District #3
Jason Schraibman
906 Clark Avenue
Ashland, Ohio 44805

Village of West Salem
Mayor
27 S. Main Street
West Salem, Ohio 44287

Holmes Wayne Electric Cooperative Inc.
P. O. Box 112
Millersburg, Ohio 44654

First Energy- Ohio Edison

INTER-OFFICE COMMUNICATION

TO: **Randall Schumacher, Supervisor, Rail Division, PUCO**

FROM: **Cathy Stout, Manager, Safety Section, ORDC**

BY: **Eric Neff, Safety Manager, Safety Section, ORDC**

SUBJECT: **ASD-TR1455 (Ashland County) - PID 103087 – DOT # 264982E**
WAY – SR301 (Wayne County) - PID 103086 – DOT # 265027S
ASD-SR96 (Ashland County) - PID 103088 – DOT # 264989C

DATE: **July 26, 2017**

The Ohio Rail Development Commission (ORDC) established diagnostic surveys at the subject locations on March 29, 2016. 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 forms and the plans and estimates are attached.

PE has already been provided by the railroad. ORDC accepts 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: Jill Henry, Rail Division Specialist, PUCO
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

July 26, 2017

Mr. Scott Patsolic
Mgr. Training and Safety
Ashland Railway
803 North Main St.
Mansfield, Ohio 44902

RE: ASD-TR1455 (Ashland County) - PID 103087
WAY – SR301 (Wayne County) - PID 103086
ASD-SR96 (Ashland County) - PID 103088

The plans and estimate dated July 24, 2017 for the referenced projects are acceptable. The Ashland Railway may proceed with the construction of the proposed grade crossing warning systems 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 $449,840.00 (Total Project Cost $499,840.00 less 10% Ashland Rail match at $49,984.00) 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 the Ashland Railway accepting the following instructions:

1. The Ashland Railway's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Eric Neff, ORDC, email: eric.neff@dot.ohio.gov and to Jill Henry the Public Utilities Commission of Ohio at email: jill.henry@puco.ohio.gov. Ashland Railway'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. The Ashland Railway's 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 the Ashland Railway.

3. The Ashland Railway's project foremen will notify Eric Neff at 614-745-6760 (telephone) or eric.neff@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. 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. The Ashland Railway will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order and PID number to reference when billing.

6. The Ashland Railway 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,

Eric Neff

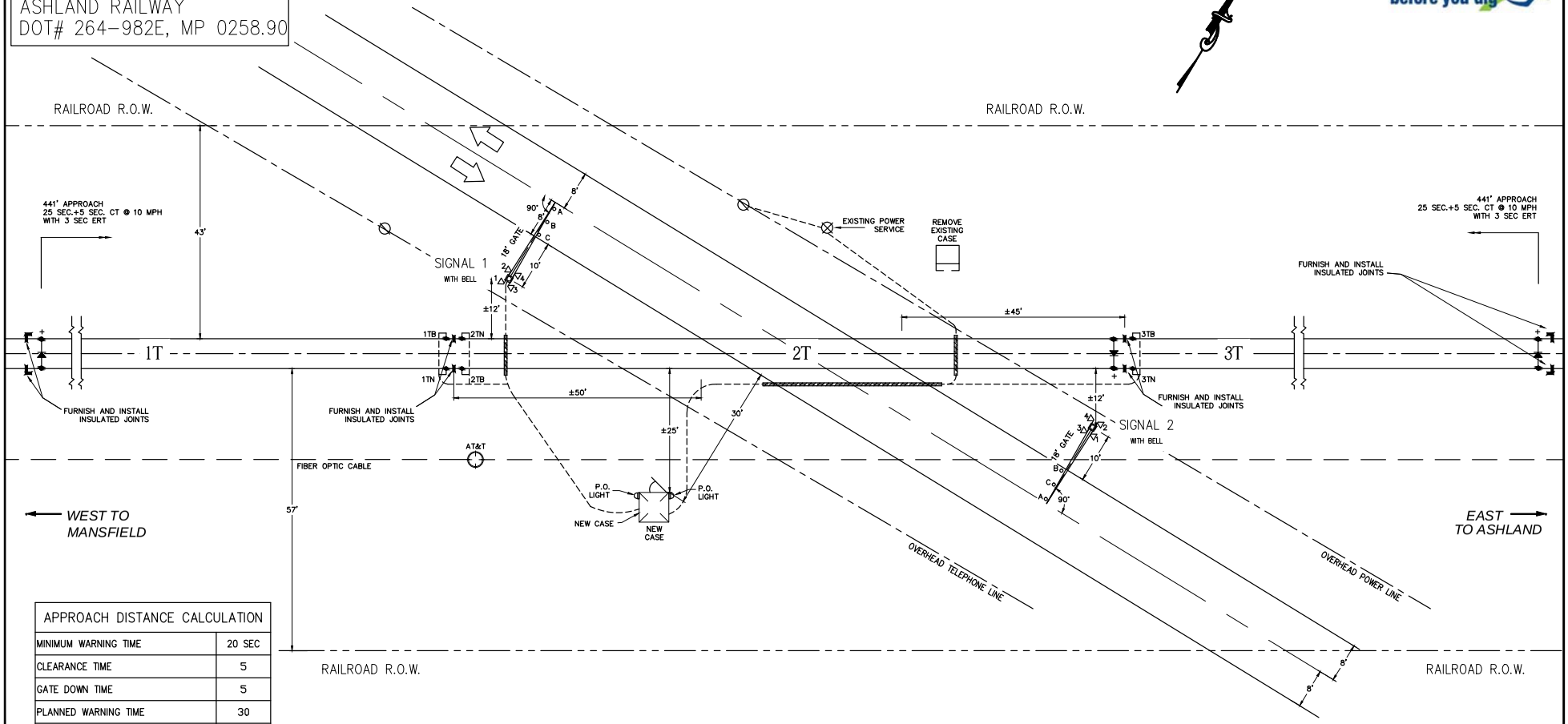
Eric Neff
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO
Jill Henry, Rail Division Specialist, PUCO
Susan Arduini, ORDC
ORDC (file)

ASHLAND RAILWAY SIGNAL SYSTEM IMPROVEMENT PROJECT					
PRELIMINARY OPINION OF PROBABLE COST					
DATE: APRIL 17, 2017					
ITEM NO.	**DESCRIPTION**	**QUANTITY**	**UNIT**	**UNIT PRICE**	**AMOUNT**
SOUTH MAIN STREET - WEST SALEM, OH					
1	Furnish & Install Signal Warning Systems (Flashing Lights & Gates)	1.0	LS	$ 140,000.00	$ 140,000.00
2	Conduilt 4 Inch Jack & Bore (HDPE) or PVC SH80	1.0	LS	$ 4,000.00	$ 4,000.00
3	Railroad Commercial Power Service with fees	1.0	EA	$ 5,000.00	$ 5,000.00
4	Furnish Non-Bonded Insulated Joint Assembly	8.0	EA	$ 500.00	$ 4,000.00
5	Furnish and Place Ballast Walkway Course	30.0	TN	$ 60.00	$ 1,800.00
6	Mobilization	1.0	LS	$ 15,480.00	$ 15,480.00
	SUBTOTAL - SOUTH MAIN STREET				$ 170,280.00
OLIVESBURG ROAD (SR 96) - ASHLAND, OH					
1	Furnish & Install Signal Warning Systems (Flashing Lights & Gates)	1.0	LS	$ 140,000.00	$ 140,000.00
2	Conduilt 4 Inch Jack & Bore (HDPE) or PVC SH80	1.0	LS	$ 4,000.00	$ 4,000.00
3	Railroad Commercial Power Service with fees	0.0	EA	$ 5,000.00	$ -
4	Furnish Non-Bonded Insulated Joint Assembly	8.0	EA	$ 500.00	$ 4,000.00
5	Furnish and Place Ballast Walkway Course	30.0	TN	$ 60.00	$ 1,800.00
6	Mobilization	1.0	LS	$ 14,980.00	$ 14,980.00
	SUBTOTAL - OLIVESBURG ROAD (SR 96)				$ 164,780.00
CR 1455 - ASHLAND, OH					
1	Furnish & Install Signal Warning Systems (Flashing Lights & Gates)	1.0	LS	$ 140,000.00	$ 140,000.00
2	Conduilt 4 Inch Jack & Bore (HDPE) or PVC SH80	1.0	LS	$ 4,000.00	$ 4,000.00
3	Railroad Commercial Power Service with fees	0.0	EA	$ 5,000.00	$ -
4	Furnish Non-Bonded Insulated Joint Assembly	8.0	EA	$ 500.00	$ 4,000.00
5	Furnish and Place Ballast Walkway Course	30.0	TN	$ 60.00	$ 1,800.00
6	Mobilization	1.0	LS	$ 14,980.00	$ 14,980.00
	SUBTOTAL - CR 1455				$ 164,780.00
	TOTAL ESTIMATE FOR CONSTRUCTION				**$ 499,840.00**
	REQUIRED MATCH (10%)				$ 49,984.00
	WORK BY RAILROAD - PROJECT MATCH				
	Install Non-Bonded Insulated Joint Assembly	24.0	EA	$ 1,099.29	$ 26,382.96
	Remove Existing Grade Crossing Warning System	3.0	EA	$ 5,599.09	$ 16,797.27
	Railroad Flagging Services	24.0	Days	$ 834.40	$ 20,025.60
	TOTAL WORK BY RAILROAD				**$ 63,205.83**

TR1455
ASHLAND, OH
ASHLAND COUNTY
ASHLAND RAILWAY
DOT# 264-982E, MP 0258.90

Ohio Utilities Protection Service
Call 811 before you dig



APPROACH DISTANCE CALCULATION	
MINIMUM WARNING TIME	20 SEC
CLEARANCE TIME	5
GATE DOWN TIME	5
PLANNED WARNING TIME	30
EQUIPMENT RESPONSE TIME	0
APPROACH CIRCUIT TIME	30
PLANNED TRACK SPEED	10
FT/SEC.	14.7
TOTAL APPROACH DISTANCE TIME	441'

NOTES:
1. THE INSTALLATION OF THIS WARNING SYSTEM SHALL BE IN ACCORDANCE WITH THE US DOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, OR AS ORDERED BY THE OHIO PUC.
2. CROSSING ACTIVATED BY ALSTOM SCX-1 CONTROLLER.
3. ALL SIGNAL HEADS TO BE 12 INCH LED TYPE.
4. USE EXISTING POWER SERVICE.

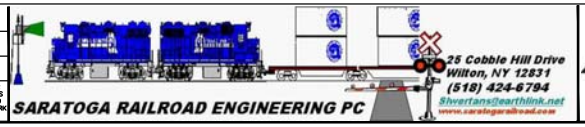
---------- = UNDERGROUND CABLE

▭▭▭▭▭▭▭▭▭▭ = BURIED CONDUIT

STATE OF OHIO
SCOTT L WERTANS
E-73435
REGISTERED PROFESSIONAL ENGINEER
5/4/2017

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
Drawn By: SLW Date: 1/17
Checked By: SLW Date: 1/17



ASHLAND RAILWAY

ASHLAND RAILWAY
6055 KELLERS CHURCH RD.
PIPERSVILLE, PA 18947

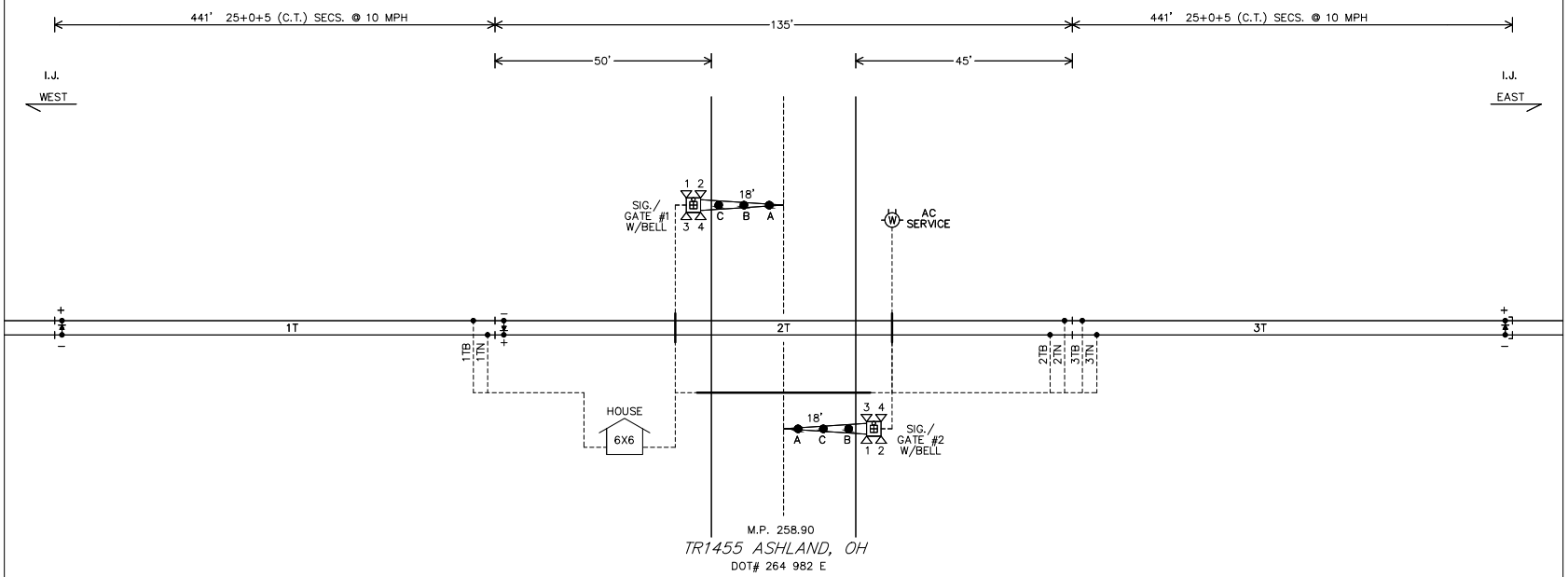
GRADE CROSSING WARNING SIGNALS LAYOUT

TR1455 ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. PL-0

SHEET 0 OF 11



CABLE TABULATION

HOUSE TO SIGNAL/GATE #1 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO SIGNAL/GATE #2 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO 1TB & 1TN – 2C#6 TW. PAIR
HOUSE TO 2TB & 2TN – 2C#6 TW. PAIR
HOUSE TO 3TB & 3TN – 2C#6 TW. PAIR
HOUSE TO AC SERVICE – 3C#6 AWG

LEGEND

——— CONDUIT – MIN 36" DEEP
------ UNDERGROUND CABLE – MIN 36" DEEP

NOTES:

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. ALL FLASHING LIGHT SIGNALS AND GATE LIGHTS TO BE LIGHT EMITTING DIODE (LED) ASSEMBLIES.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
Drawn By: SLW Date: 1/17
Checked By: SLW Date: 1/17

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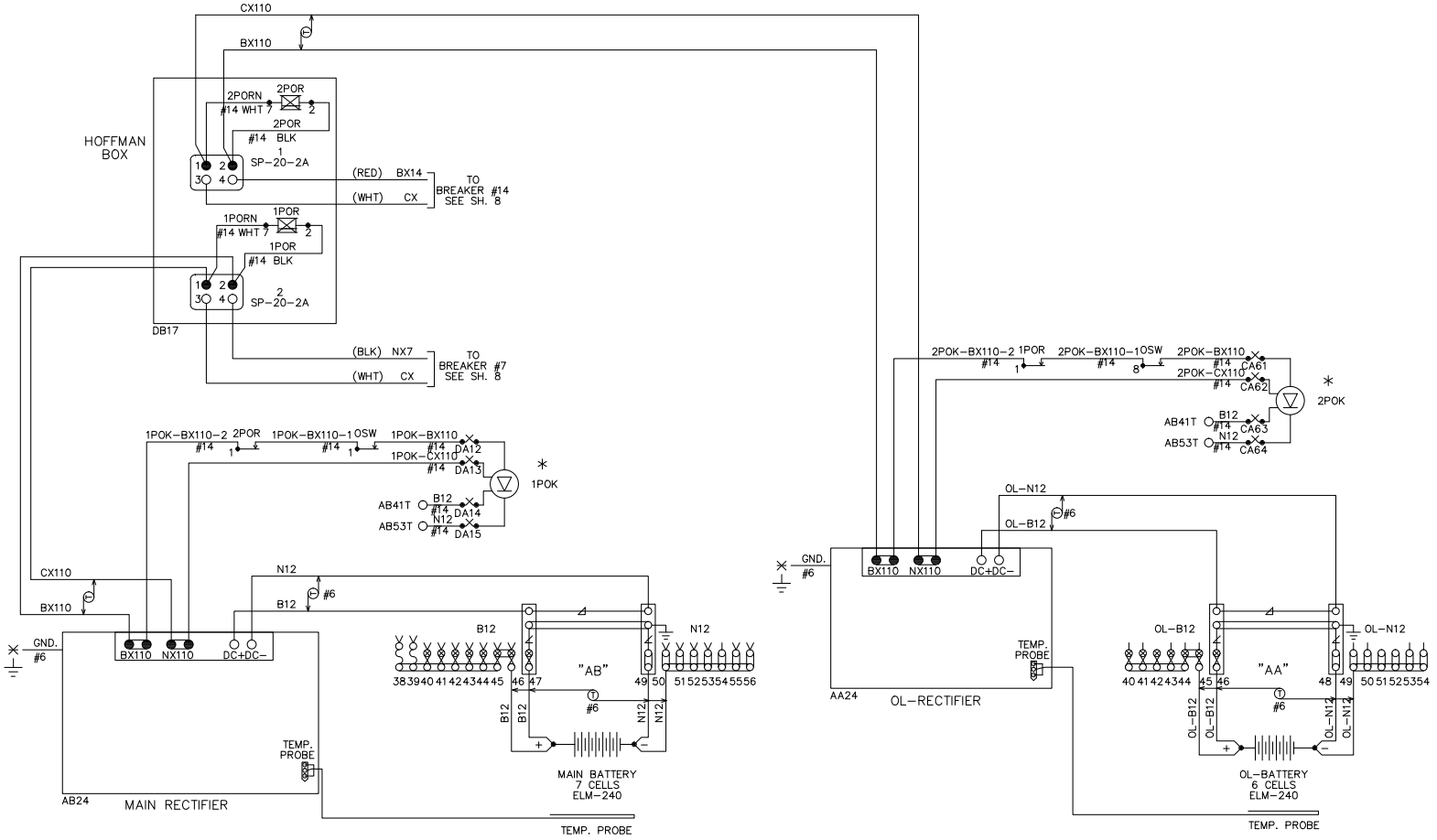
GRADE CROSSING WARNING SIGNALS LAYOUT

TR1455 ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. PL-1

SHEET 1 OF 11



NOTES:

1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. * = LIGHTS ARE 12VDC, 4-WIRE LED. (P/N: LC2-001WB-WG4) VELCORP GEMS
3. POWER OFF LAMP CONSTANT LIT WHEN:
   - AC POWER ON AND
   - CROSSING IS NOT OUT OF SERVICE

   POWER OFF LAMP FLASHES WHEN:
   - AC POWER OFF OR
   - CROSSING IS OUT OF SERVICE

   POWER OFF LAMP DARK WHEN:
   - ALL POWER OFF

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
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SLW	1/17

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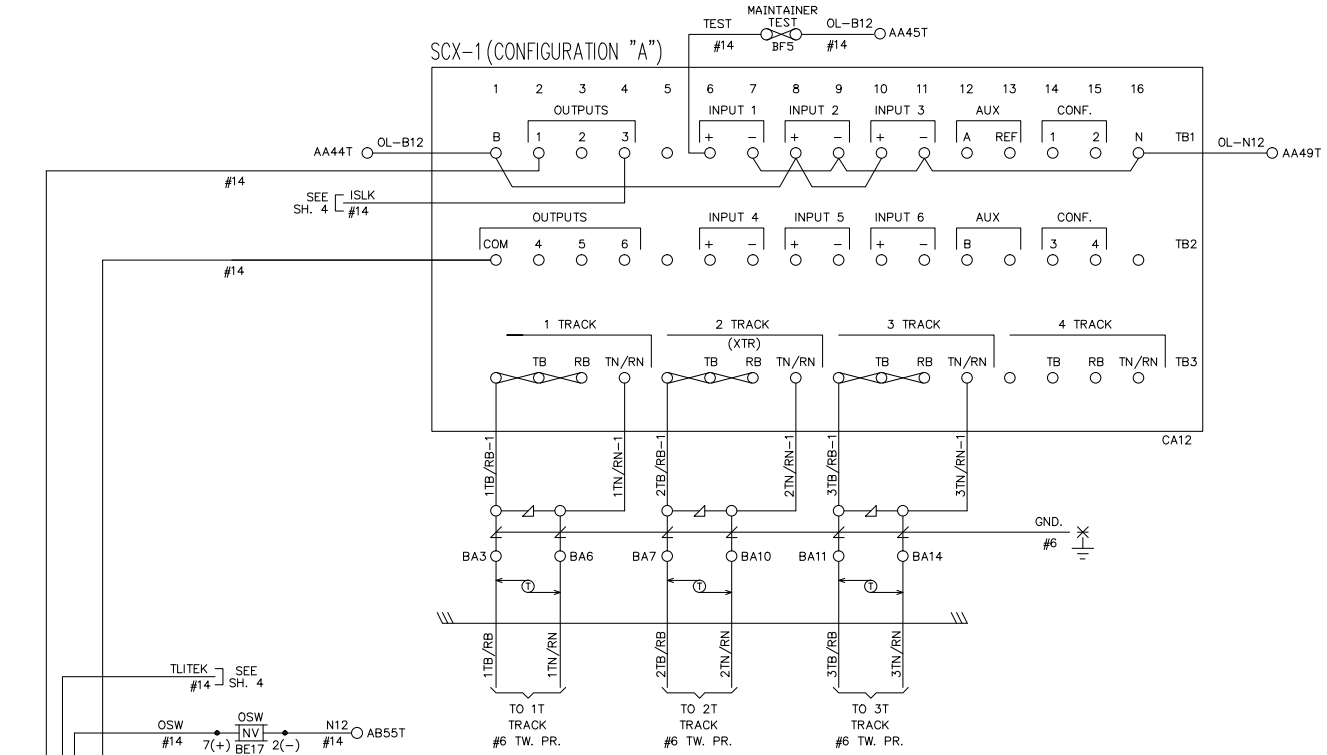
GRADE CROSSING WARNING SIGNALS
BATTERY CHARGER CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **BC-1**

SHEET 2 OF 11



SCX-1 PROGRAM		
ID:	STDXING	
INPUT #	POSITION	FUNCTION
INPUT 1	TB1-6/7	MAINTENANCE TEST (KCNOR)
INPUT 2	TB1-8/9	4TH TRACK PLUG (4TKPLUG)
INPUT 3	TB1-10/11	GATE POSITION MONITOR (XGNPR)
OUTPUT #	POSITION	FUNCTION
OUTPUT 1	TB1-1	XR RELAY
OUTPUT 2	TB1-2	GATE CONTROL
OUTPUT 3	TB1-3	ISLAND

NOTES:
1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. (T) DENOTES TWISTED PAIR.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
Drawn By: SLW Date: 1/17
Checked By: SLW Date: 1/17

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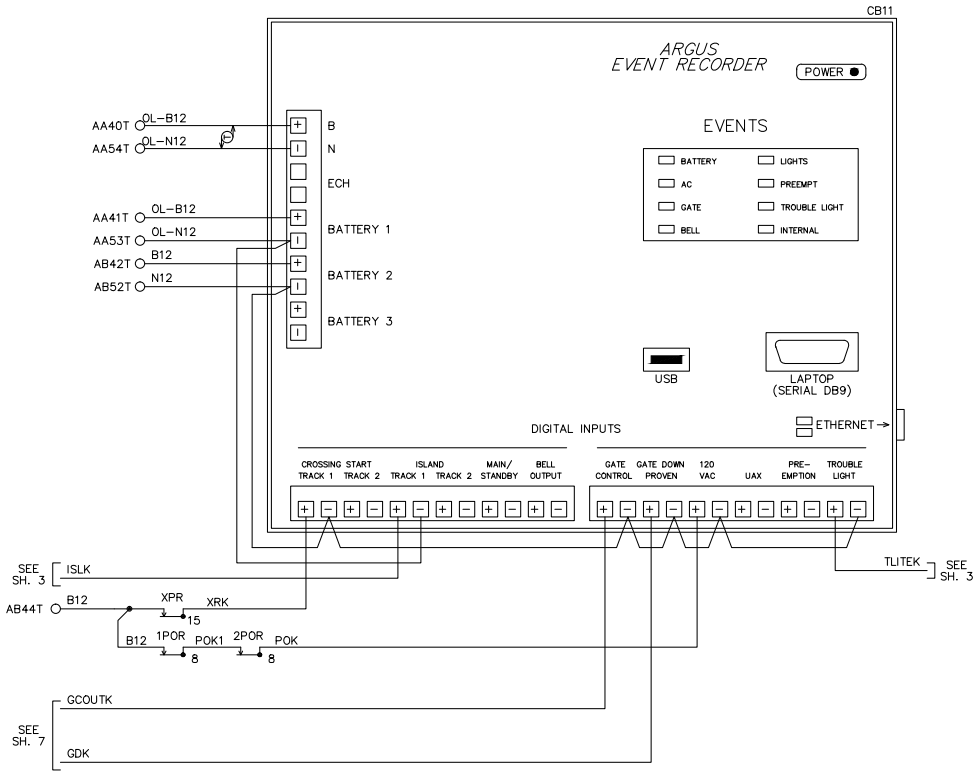
GRADE CROSSING WARNING SIGNALS
SCX-1 TRACK CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. **TB-1**

SHEET 3 OF 11



INDICATOR LED CONFIGURATION

LED	ALARM NUMBERS	DESIGNATOR
I01	18	BATTERY
I02	5	AC
I03	9, 70	GATE
I04	16	BELL
I05	13, 71, 72	LIGHTS
I06	22	PREEMPT
I07	1	TROUBLE LIGHT
I08	7	INTERNAL

APPLICATION CONFIGURATION INFORMATION DIGITAL INPUTS 9V914–A01L

INPUT NO.	INPUT NAME	ENERGIZED	DE–ENERGIZED
1	XR1	UP	DOWN
2	XR2	UP	DOWN
3	ISL1	UP	DOWN
4	ISL2	UP	DOWN
5	M/S	STANDBY	MAIN
6	BELL OUT	ON	OFF
7	GCOUT	ON	OFF
8	GDP	ON	OFF
9	120 VAC	ON	OFF
10	UAX	UP	DOWN
11	PREEMPT	ON	OFF
12	TLITE	ON	OFF

NOTES:

1. LEDS ARE ON (RED) WHEN NO ALARM HAS BEEN GENERATED OR AN ALARM HAS BEEN CLEARED USING THE CLEAR ALARM KEY.
2. LEDS FLASH FAST WHEN AN ALARM CONDITION EXIST.
3. LEDS FLASH SLOW IF AN ALARM HAS OCCURRED BUT IS CURRENTLY CLEARED.
4. THE CLEAR ALARM KEY WILL NOT CLEAR OUT ALARMS IF THEY CURRENTLY EXIST.
5. ALL WIRE THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
6. ⓣ DENOTES TWISTED PAIR.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
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Checked By: SLW Date: 1/17

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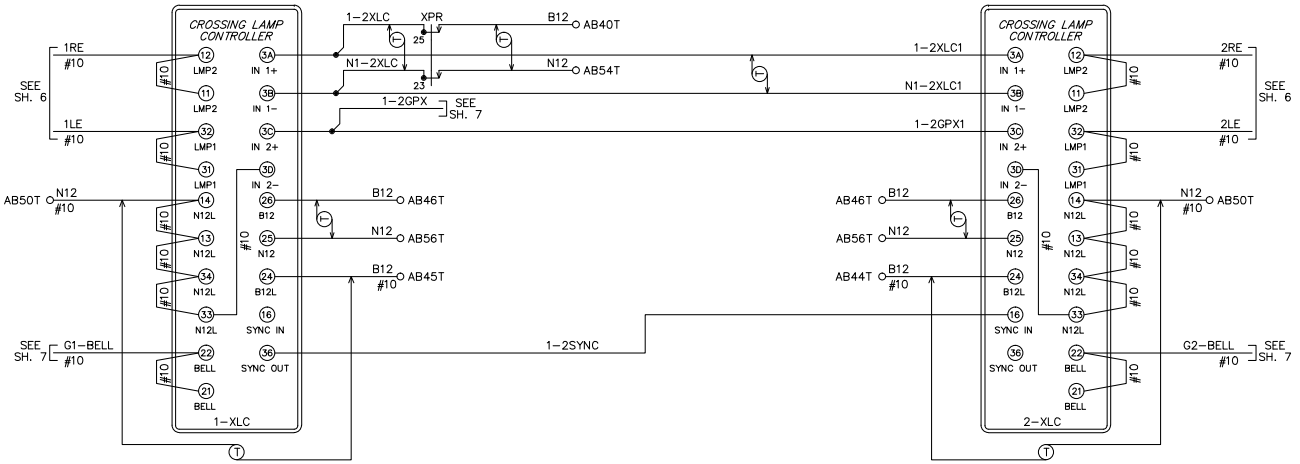
GRADE CROSSING WARNING SIGNALS DATA RECORDER

TR1455 ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. DR-1

SHEET 4 OF 11



NOTE:
1. ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED

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SLW	1/17

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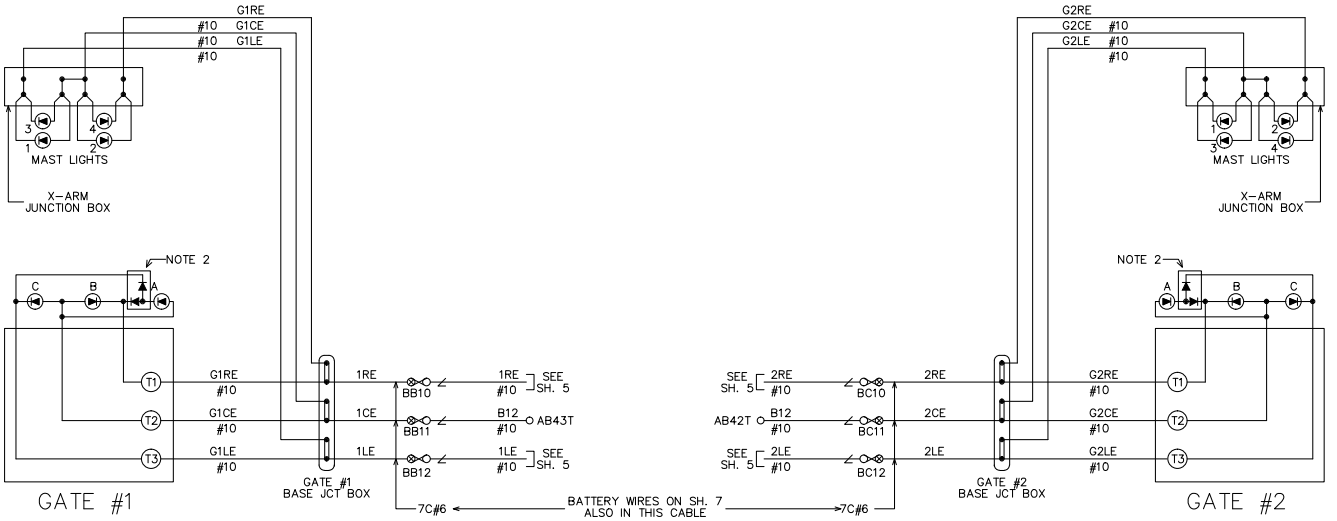
GRADE CROSSING WARNING SIGNALS
XLC CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **XL-1**

SHEET 5 OF 11



NOTES:

1) ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2) GETS-GS P/N 076045-300 FOR USE WITH RECO EZLED LAMPS AND PLUG CABLES.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
Checked By:	Date:
SLW	1/17

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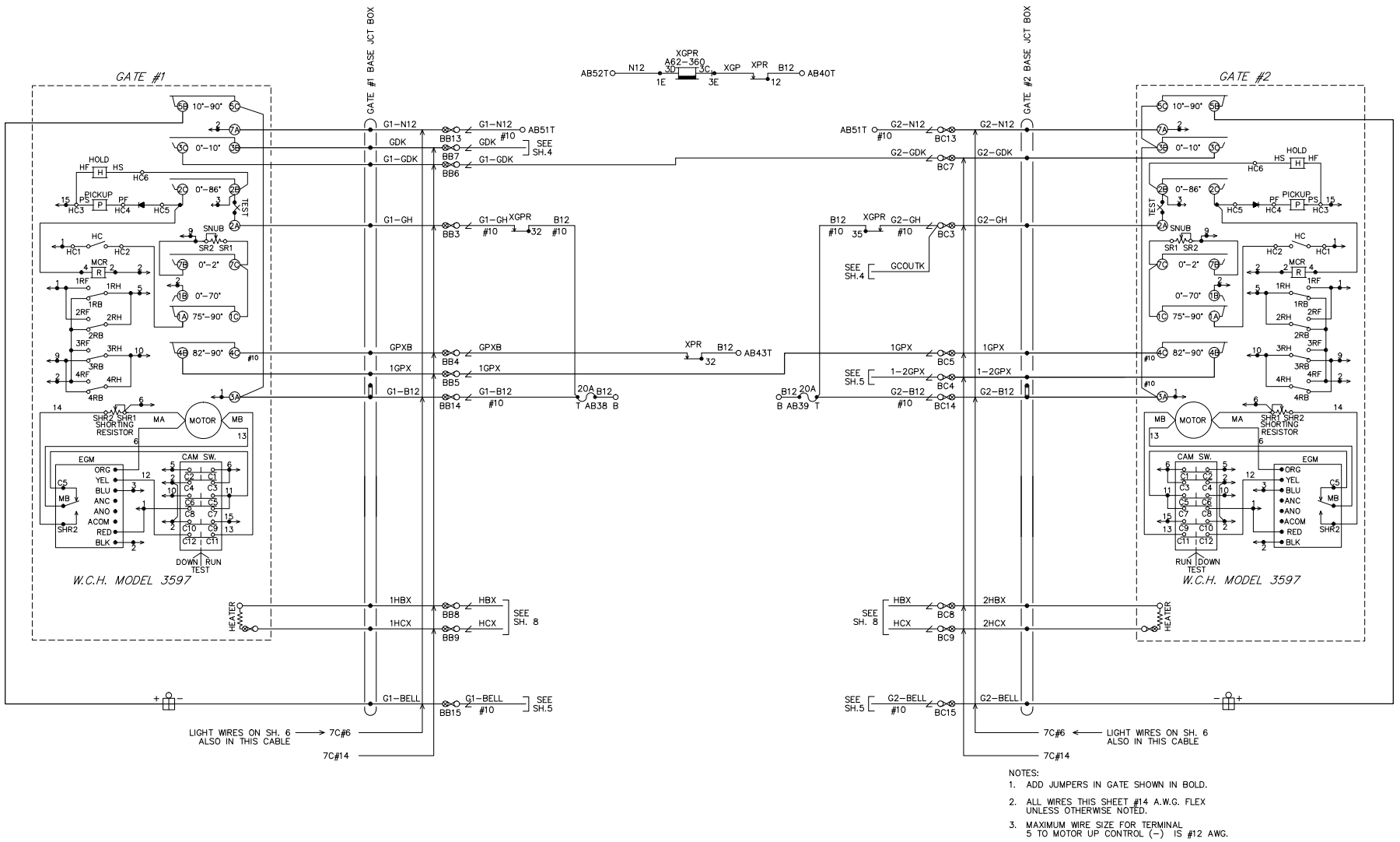
GRADE CROSSING WARNING SIGNALS
FLASHER CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **FL-1**

SHEET 6 OF 11



NOTES:

1. ADD JUMPERS IN GATE SHOWN IN BOLD.
2. ALL WIRES THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
3. MAXIMUM WIRE SIZE FOR TERMINAL 5 TO MOTOR UP CONTROL (–) IS #12 AWG.

Revisions:	Drawn By:	App'd. By:	Date:

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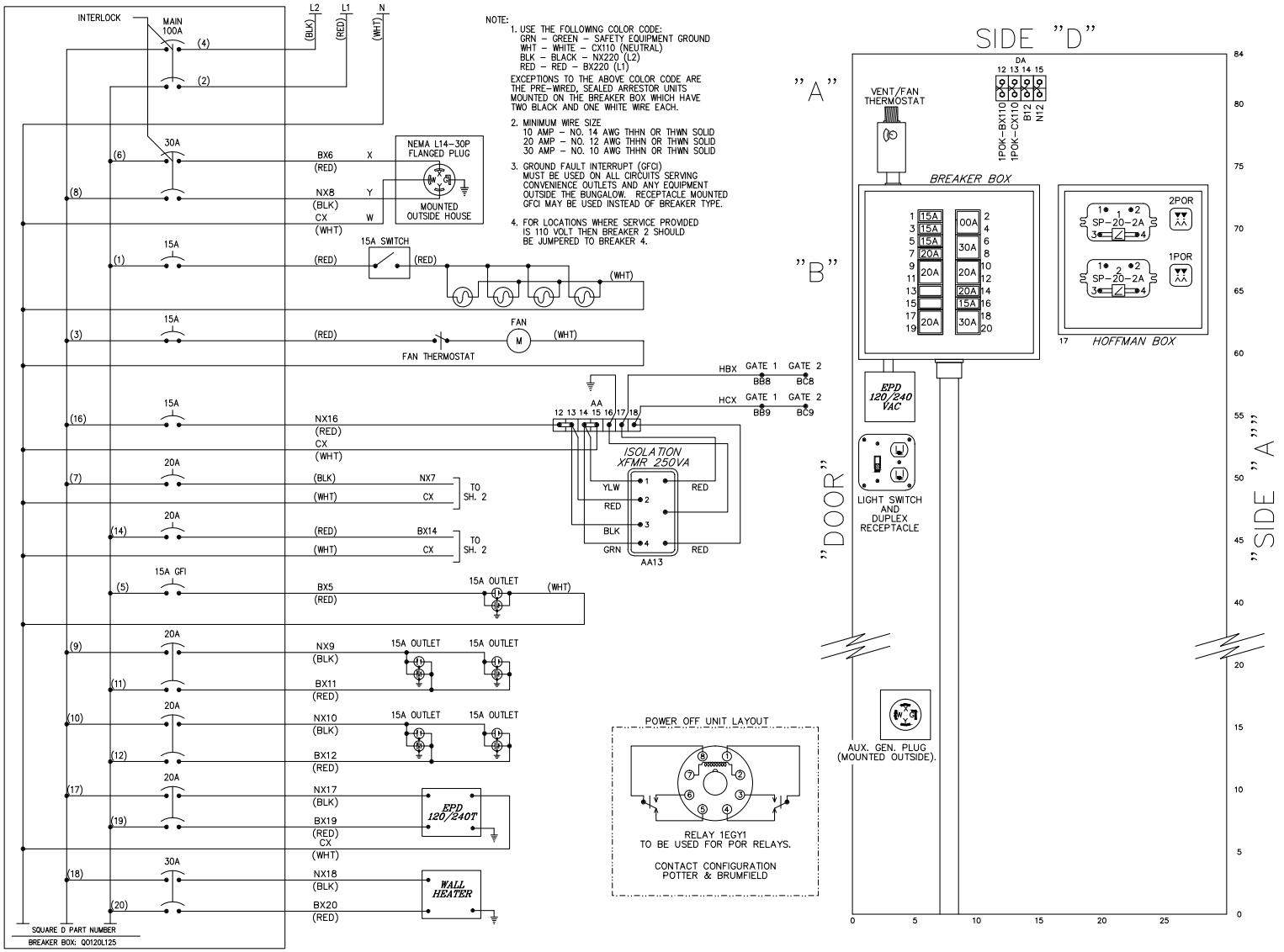
GRADE CROSSING WARNING SIGNALS
GATE CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. G-1

SHEET 7 OF 11



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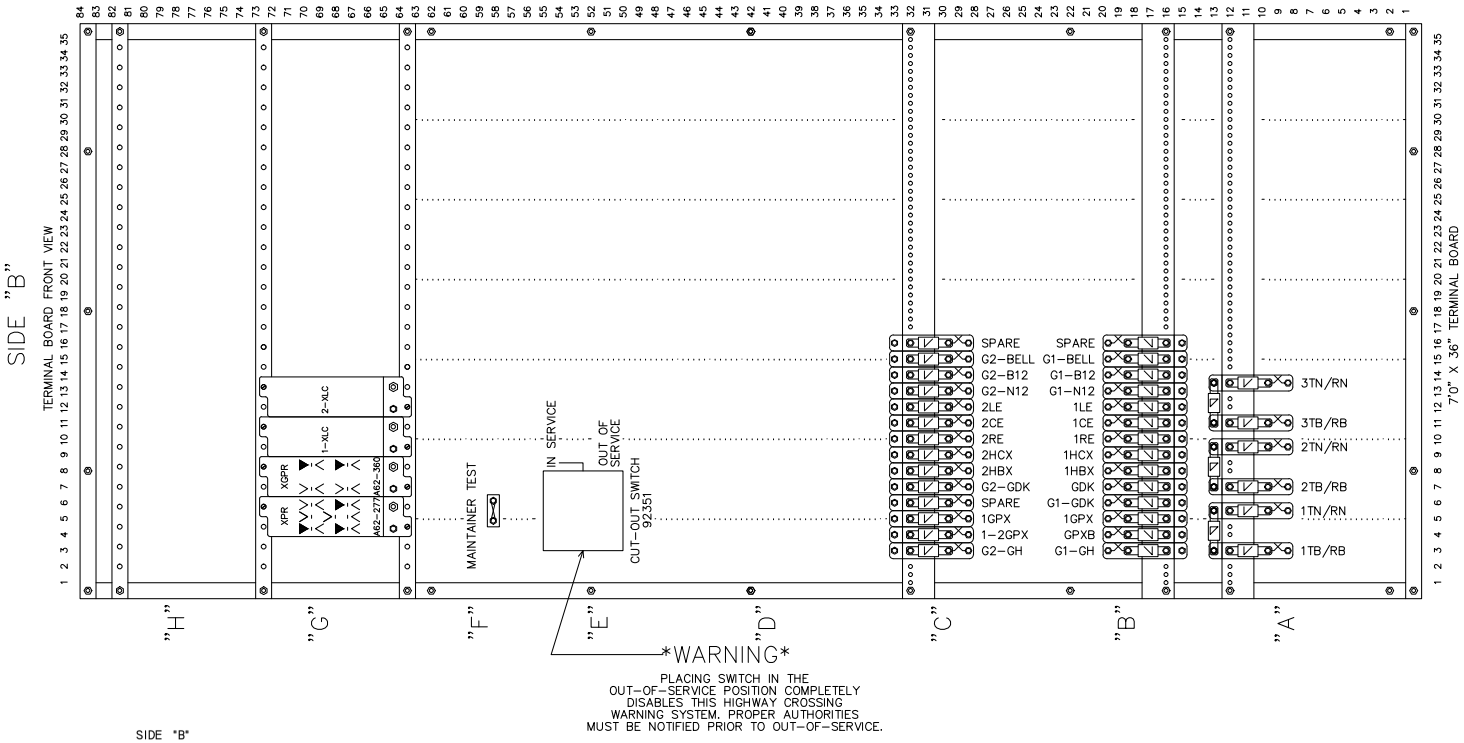
GRADE CROSSING WARNING SIGNALS
POWER DISTRIBUTION CIRCUITS

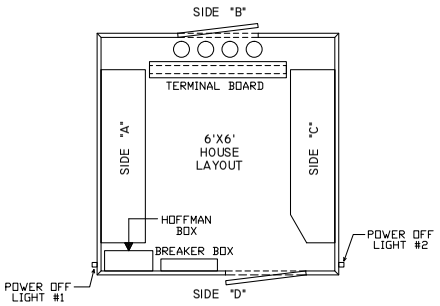
TR1455 ASHLAND, OH

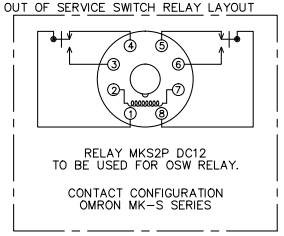
SCALE: NONE | DATE: MAR 2017

Drawing No. P-1

SHEET 8 OF 11

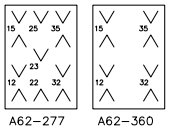






RELAY CROSS REFERENCE

GRS	SAFETRAN
A62-277	400004
A62-360	400200



▼ = CONTACT USED

▽ = CONTACT NOT USED

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PIPERSVILLE, PA 18947

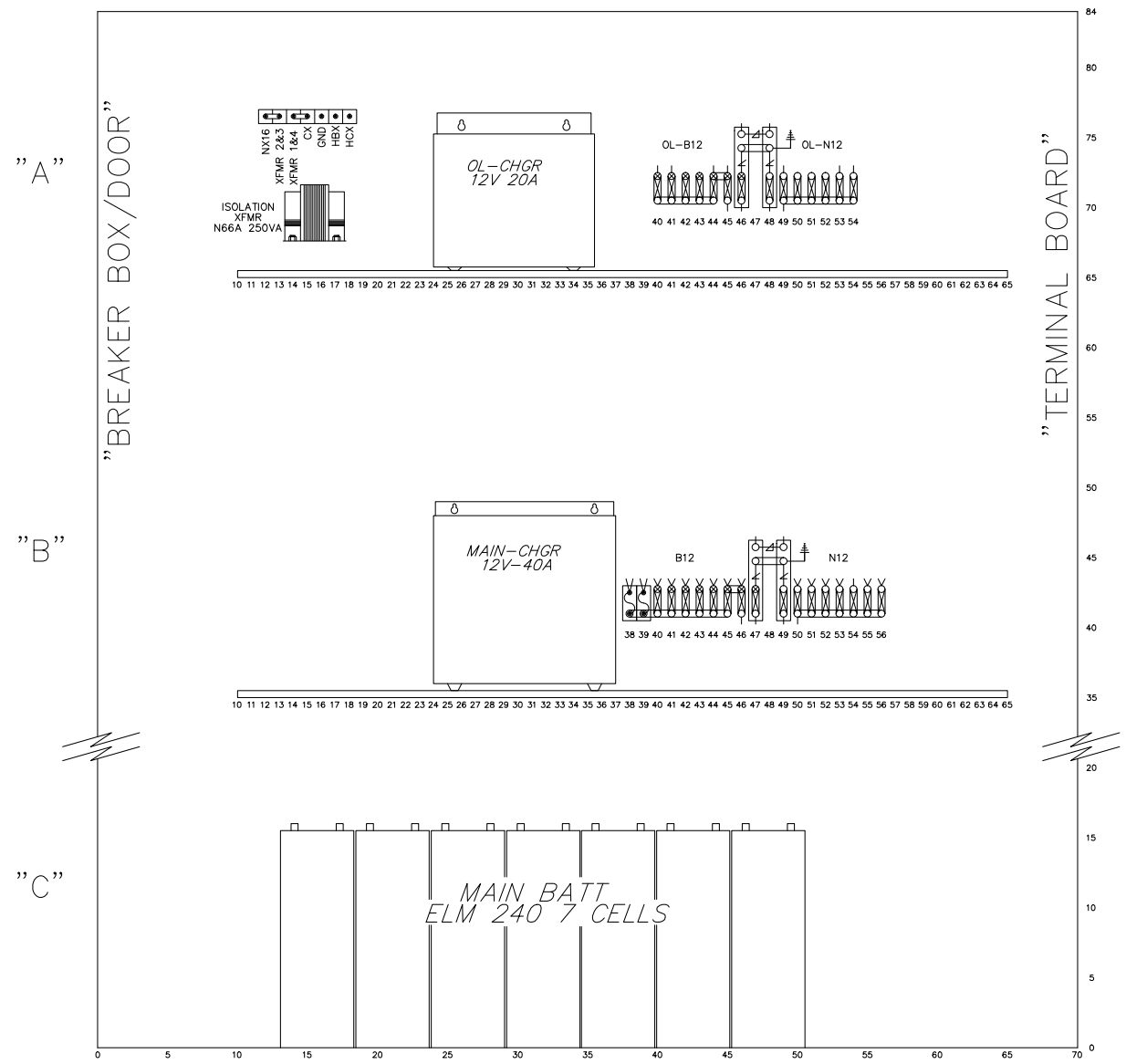
GRADE CROSSING WARNING SIGNALS
TERMINAL BOARD CIRCUITS

TR1455 ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. **TB-1**

SHEET 9 OF 11



SIDE "A"

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
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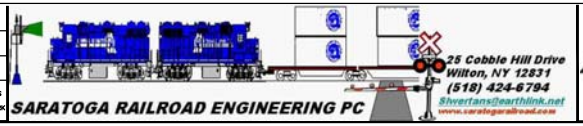
SLW	1/17



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PIPERSVILLE, PA 18947

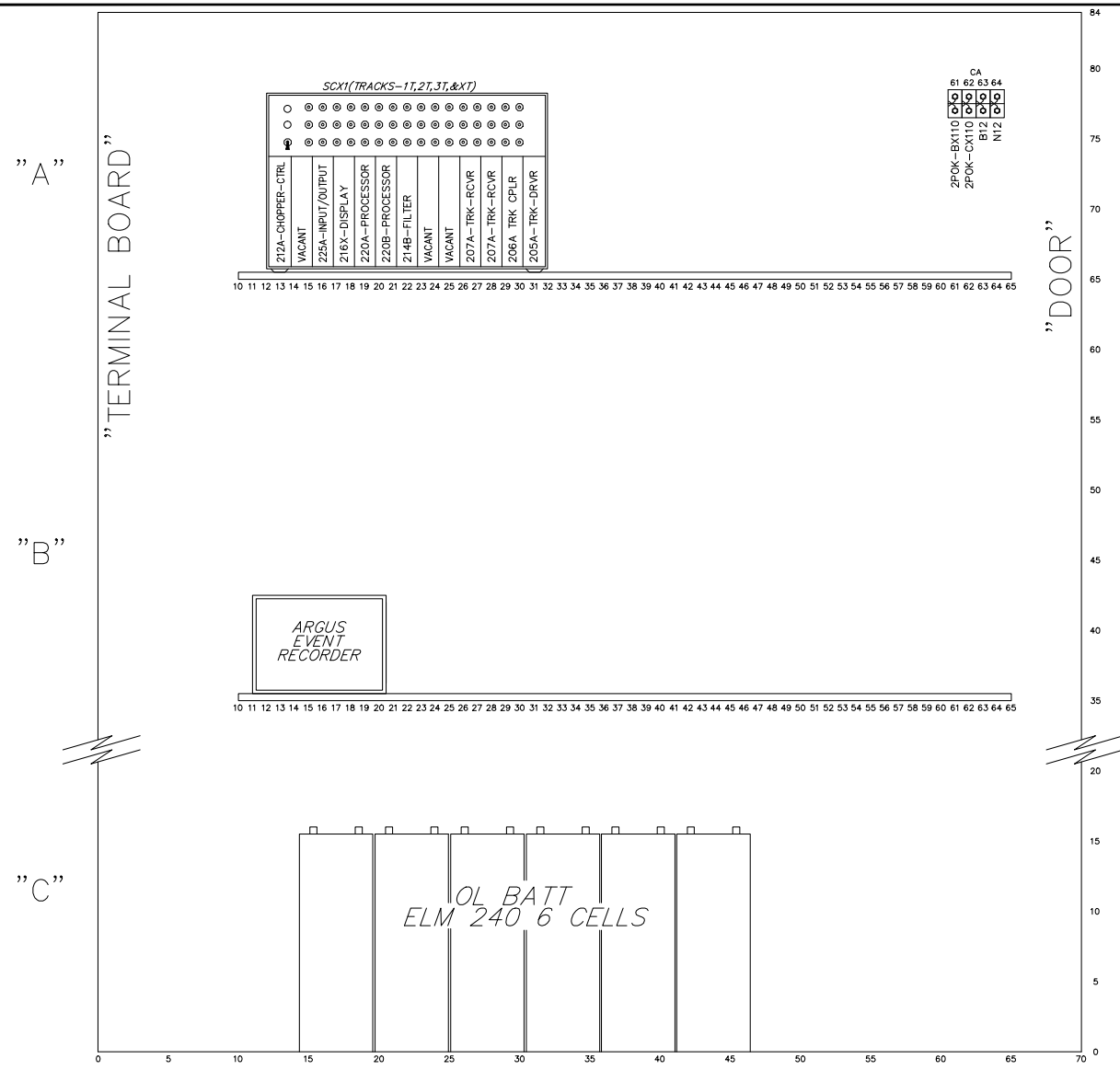
GRADE CROSSING WARNING SIGNALS
SIDE "A" LAYOUT

TR1455 ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **L-1**

SHEET 10 OF 11



SIDE "C"

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
Checked By:	Date:
SLW	1/17

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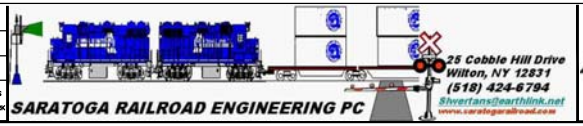

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PIPERSVILLE, PA 18947

GRADE CROSSING WARNING SIGNALS
SIDE "C" LAYOUT

TR1455 ASHLAND, OH

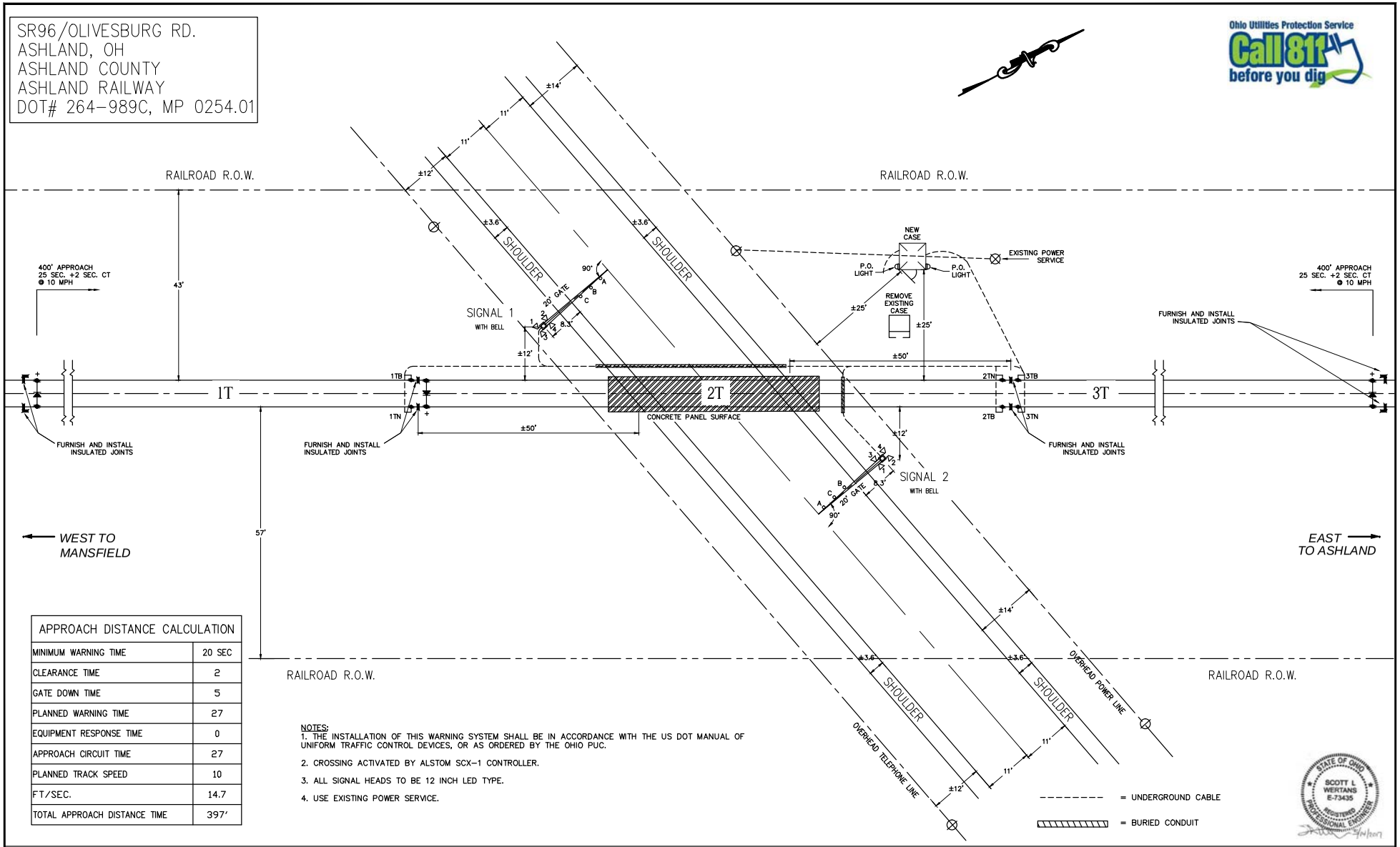
SCALE: NONE | DATE: MAR 2017

Drawing No. L-2

SHEET 11 OF 11

SR96/OLIVESBURG RD.
ASHLAND, OH
ASHLAND COUNTY
ASHLAND RAILWAY
DOT# 264-989C, MP 0254.01

Ohio Utilities Protection Service
Call 811 before you dig



APPROACH DISTANCE CALCULATION	
MINIMUM WARNING TIME	20 SEC
CLEARANCE TIME	2
GATE DOWN TIME	5
PLANNED WARNING TIME	27
EQUIPMENT RESPONSE TIME	0
APPROACH CIRCUIT TIME	27
PLANNED TRACK SPEED	10
FT/SEC.	14.7
TOTAL APPROACH DISTANCE TIME	397'

NOTES:
1. THE INSTALLATION OF THIS WARNING SYSTEM SHALL BE IN ACCORDANCE WITH THE US DOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, OR AS ORDERED BY THE OHIO PUC.
2. CROSSING ACTIVATED BY ALSTOM SCX-1 CONTROLLER.
3. ALL SIGNAL HEADS TO BE 12 INCH LED TYPE.
4. USE EXISTING POWER SERVICE.

STATE OF OHIO
SCOTT L WERTANS
E-73435
REGISTERED PROFESSIONAL ENGINEER

Revisions:	Drawn By:	App'd. By:	Date:

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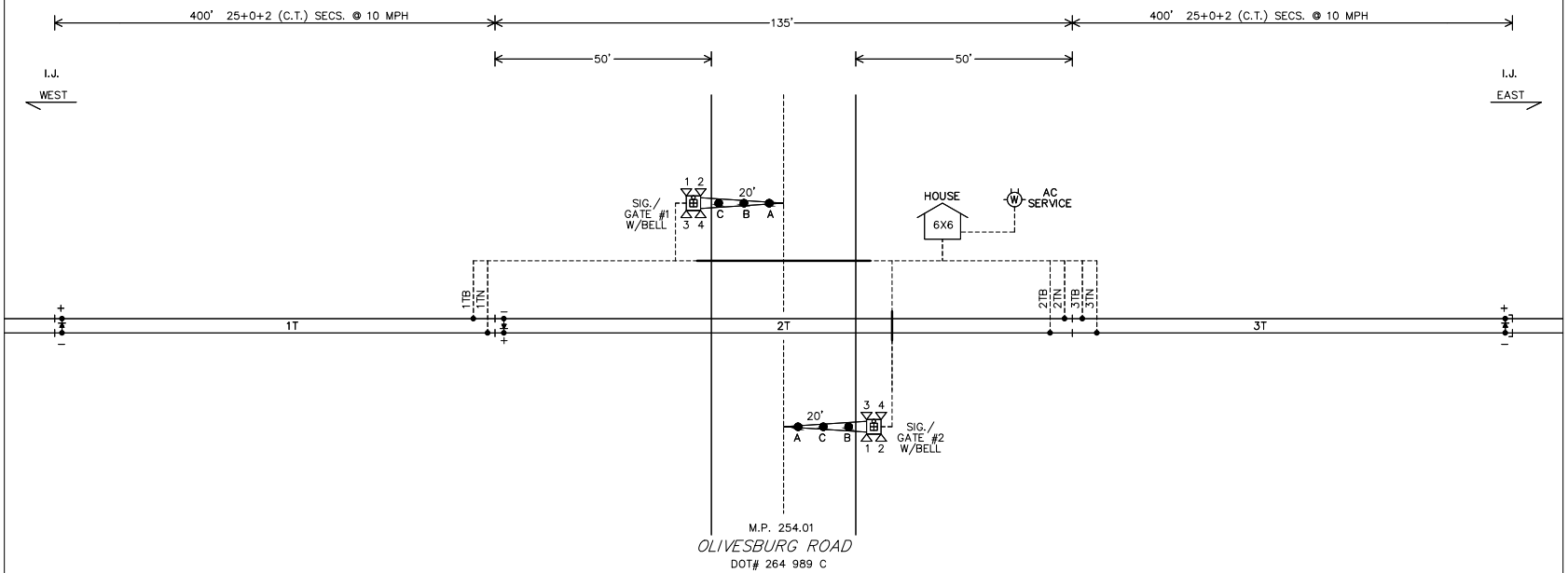
GRADE CROSSING WARNING SIGNALS LAYOUT

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. PL-0

SHEET 0 OF 11



CABLE TABULATION

HOUSE TO SIGNAL/GATE #1 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO SIGNAL/GATE #2 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO 1TB & 1TN – 2C#6 TW. PAIR
HOUSE TO 2TB & 2TN – 2C#6 TW. PAIR
HOUSE TO 3TB & 3TN – 2C#6 TW. PAIR
HOUSE TO AC SERVICE – 3C#6 AWG

LEGEND

——— CONDUIT – MIN 36" DEEP
------ UNDERGROUND CABLE – MIN 36" DEEP

NOTES:

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. ALL FLASHING LIGHT SIGNALS AND GATE LIGHTS TO BE LIGHT EMITTING DIODE (LED) ASSEMBLIES.

Revisions:	Drawn By:	App'd. By:	Date:

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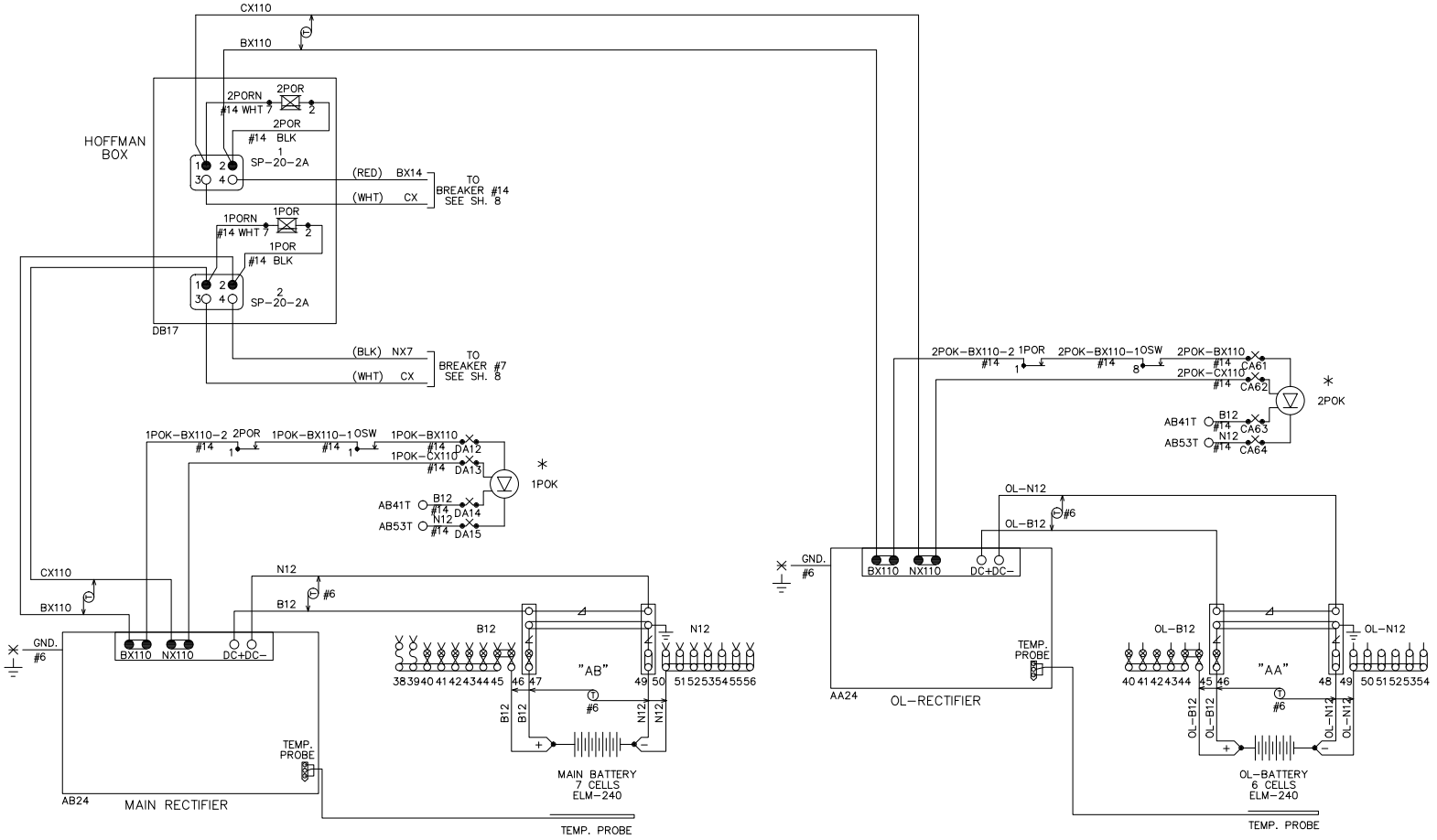
GRADE CROSSING WARNING SIGNALS LAYOUT

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. PL-1



NOTES:

1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. * = LIGHTS ARE 12VDC, 4-WIRE LED. (P/N: LC2-001WB-WG4) VELCORP GEMS
3. POWER OFF LAMP CONSTANT LIT WHEN:
   - AC POWER ON AND
   - CROSSING IS NOT OUT OF SERVICE

   POWER OFF LAMP FLASHES WHEN:
   - AC POWER OFF OR
   - CROSSING IS OUT OF SERVICE

   POWER OFF LAMP DARK WHEN:
   - ALL POWER OFF

Revisions:	Drawn By:	App'd. By:	Date:

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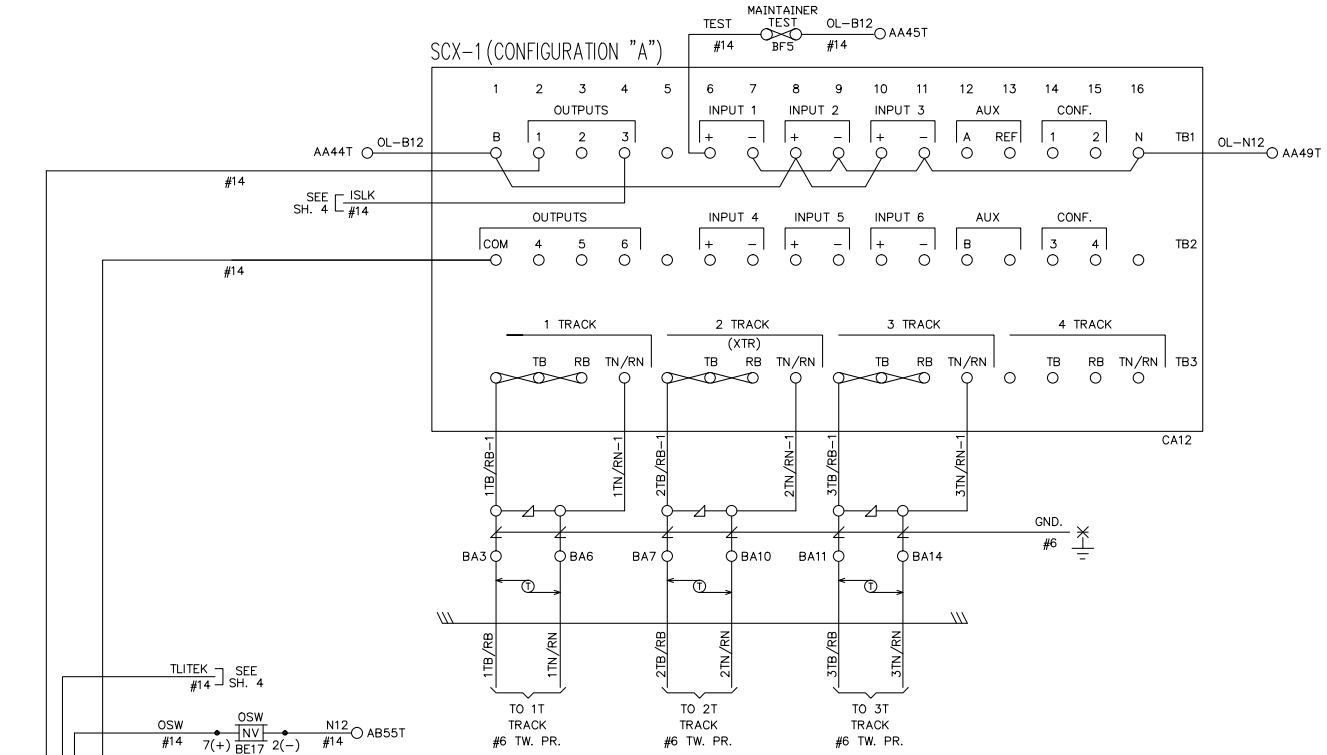
GRADE CROSSING WARNING SIGNALS
BATTERY CHARGER CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **BC-1**



SCX-1 PROGRAM		
ID:	STDXING	
INPUT #	POSITION	FUNCTION
INPUT 1	TB1-6/7	MAINTENANCE TEST (KCNOR)
INPUT 2	TB1-8/9	4TH TRACK PLUG (4TKPLUG)
INPUT 3	TB1-10/11	GATE POSITION MONITOR (XGNPR)
OUTPUT #	POSITION	FUNCTION
OUTPUT 1	TB1-1	XR RELAY
OUTPUT 2	TB1-2	GATE CONTROL
OUTPUT 3	TB1-3	ISLAND

NOTES:
1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. (T) DENOTES TWISTED PAIR.

Revisions:	Drawn By:	App'd. By:	Date:

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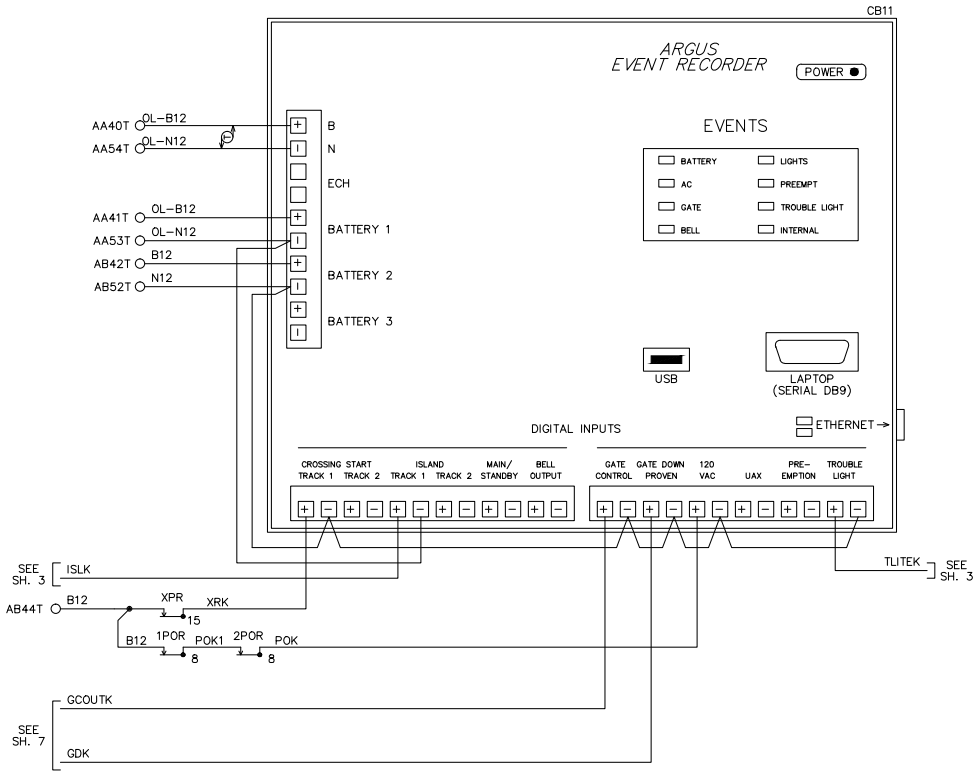
GRADE CROSSING WARNING SIGNALS
SCX-1 TRACK CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. TB-1

SHEET 3 OF 11



INDICATOR LED CONFIGURATION

LED	ALARM NUMBERS	DESIGNATOR
I01	18	BATTERY
I02	5	AC
I03	9, 70	GATE
I04	16	BELL
I05	13, 71, 72	LIGHTS
I06	22	PREEMPT
I07	1	TROUBLE LIGHT
I08	7	INTERNAL

APPLICATION CONFIGURATION INFORMATION DIGITAL INPUTS 9V914–A01L

INPUT NO.	INPUT NAME	ENERGIZED	DE–ENERGIZED
1	XR1	UP	DOWN
2	XR2	UP	DOWN
3	ISL1	UP	DOWN
4	ISL2	UP	DOWN
5	M/S	STANDBY	MAIN
6	BELL OUT	ON	OFF
7	GCOUT	ON	OFF
8	GDP	ON	OFF
9	120 VAC	ON	OFF
10	UAX	UP	DOWN
11	PREEMPT	ON	OFF
12	TLITE	ON	OFF

NOTES:

1. LEDS ARE ON (RED) WHEN NO ALARM HAS BEEN GENERATED OR AN ALARM HAS BEEN CLEARED USING THE CLEAR ALARM KEY.
2. LEDS FLASH FAST WHEN AN ALARM CONDITION EXIST.
3. LEDS FLASH SLOW IF AN ALARM HAS OCCURRED BUT IS CURRENTLY CLEARED.
4. THE CLEAR ALARM KEY WILL NOT CLEAR OUT ALARMS IF THEY CURRENTLY EXIST.
5. ALL WIRE THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
6. ⓣ DENOTES TWISTED PAIR.

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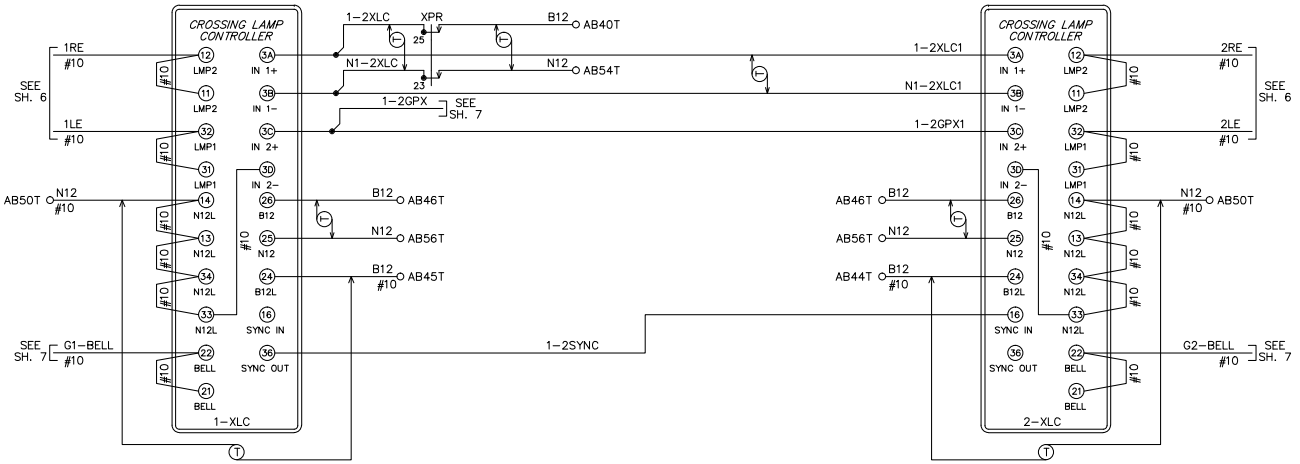
GRADE CROSSING WARNING SIGNALS DATA RECORDER

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. DR-1

SHEET 4 OF 11



NOTE:
1. ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED

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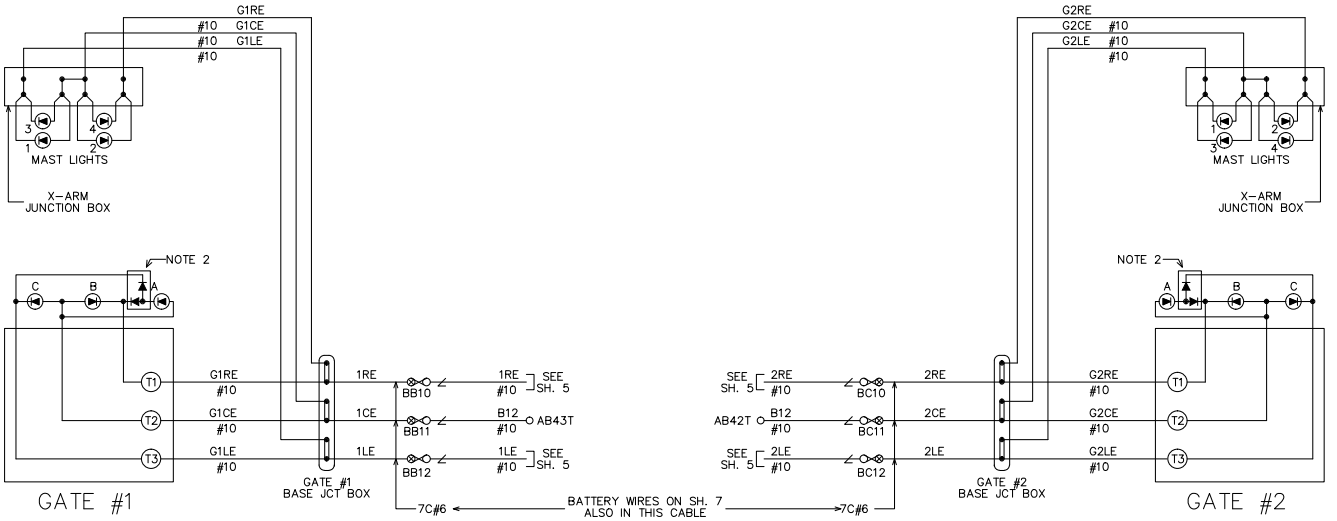
GRADE CROSSING WARNING SIGNALS
XLC CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **XL-1**

SHEET 5 OF 11



NOTES:

1) ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2) GETS-GS P/N 076045-300 FOR USE WITH RECO EZLED LAMPS AND PLUG CABLES.

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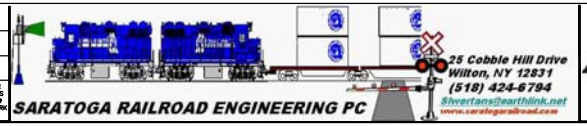
Checked By: SLW	Date: 1/17



ASHLAND RAILWAY

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PIPERSVILLE, PA 18947

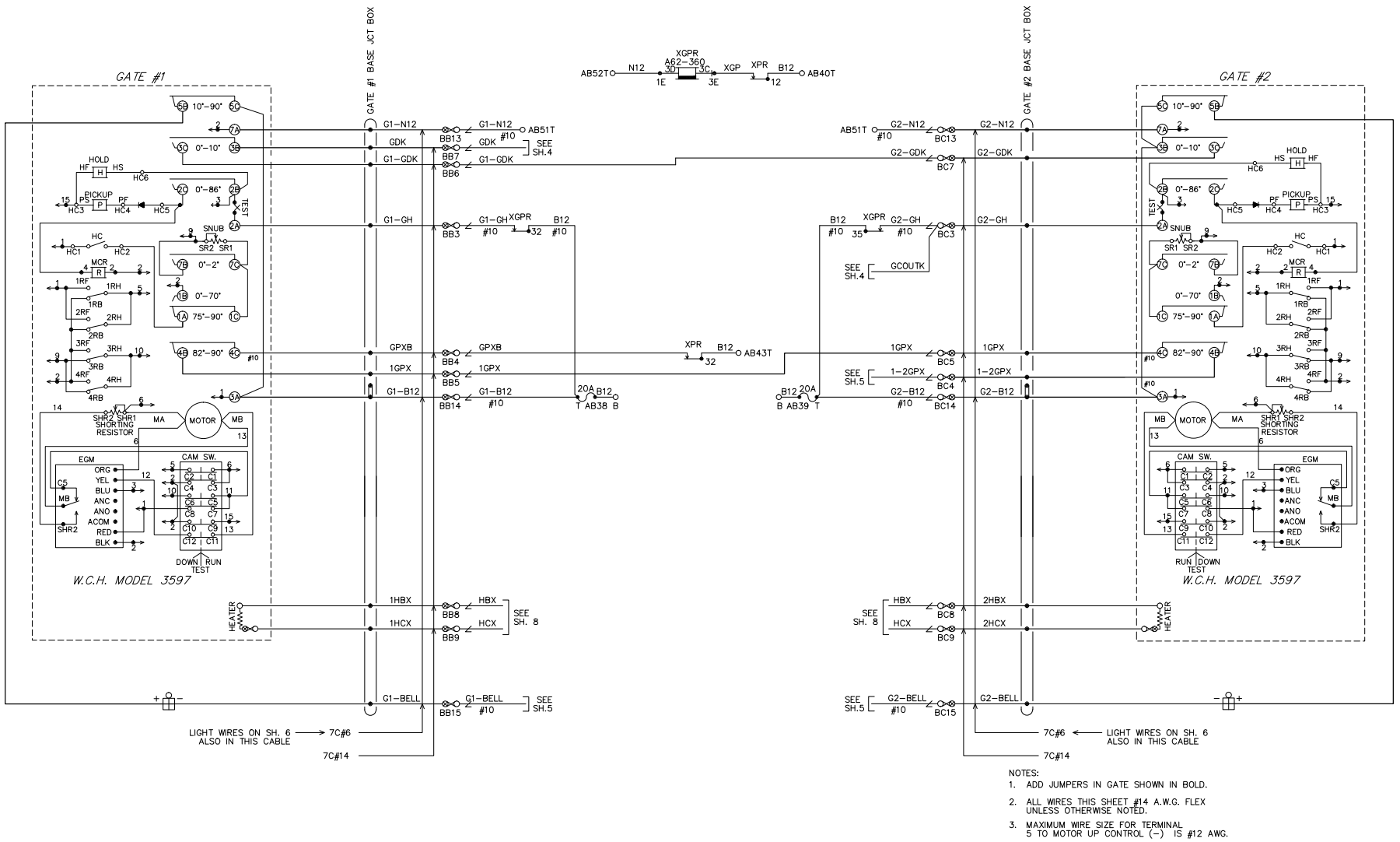
GRADE CROSSING WARNING SIGNALS
FLASHER CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **FL-1**

SHEET 6 OF 11



NOTES:

1. ADD JUMPERS IN GATE SHOWN IN BOLD.
2. ALL WIRES THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
3. MAXIMUM WIRE SIZE FOR TERMINAL 5 TO MOTOR UP CONTROL (–) IS #12 AWG.

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PIPERSVILLE, PA 18947

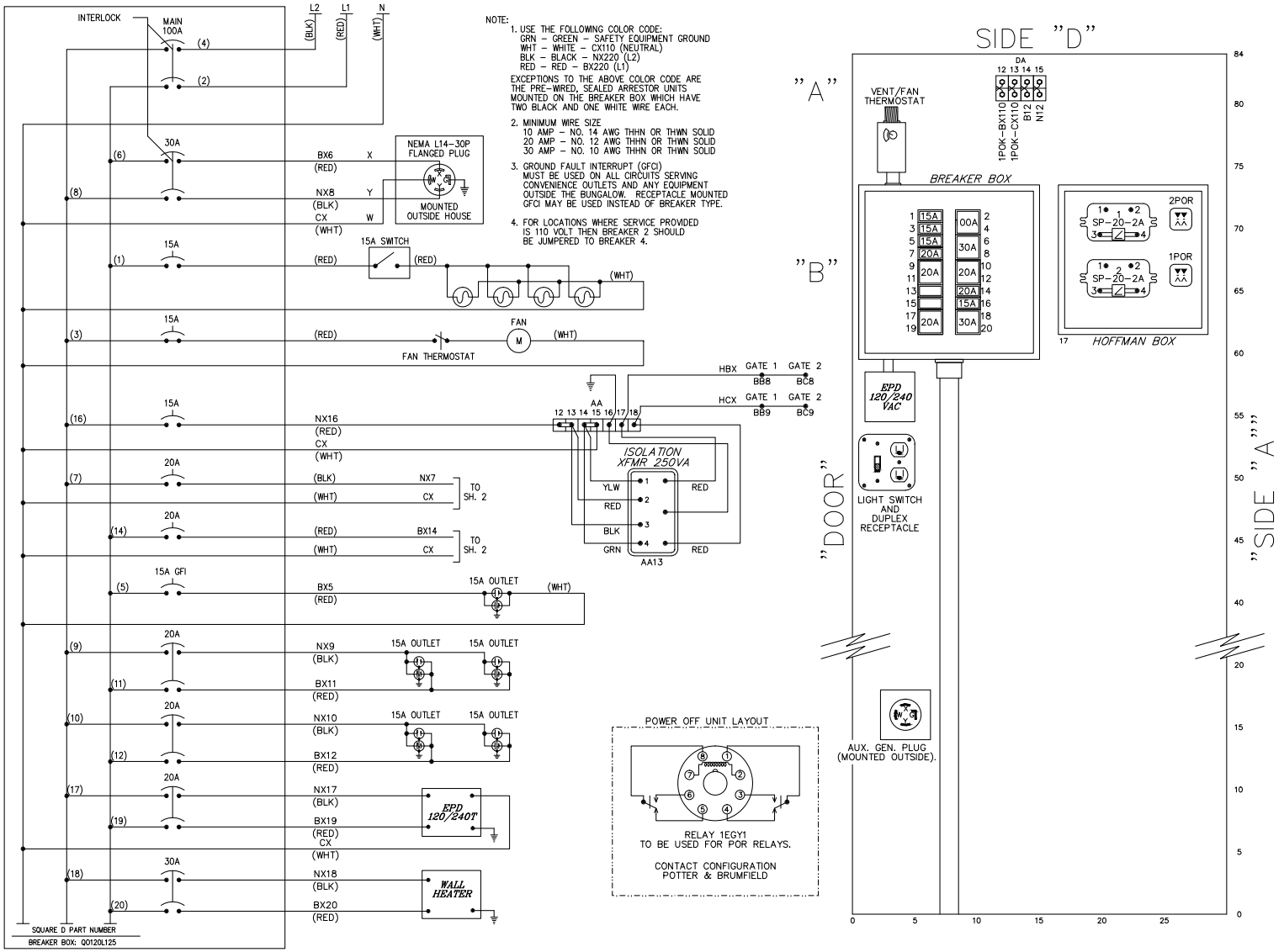
GRADE CROSSING WARNING SIGNALS GATE CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. G-1

SHEET 7 OF 11



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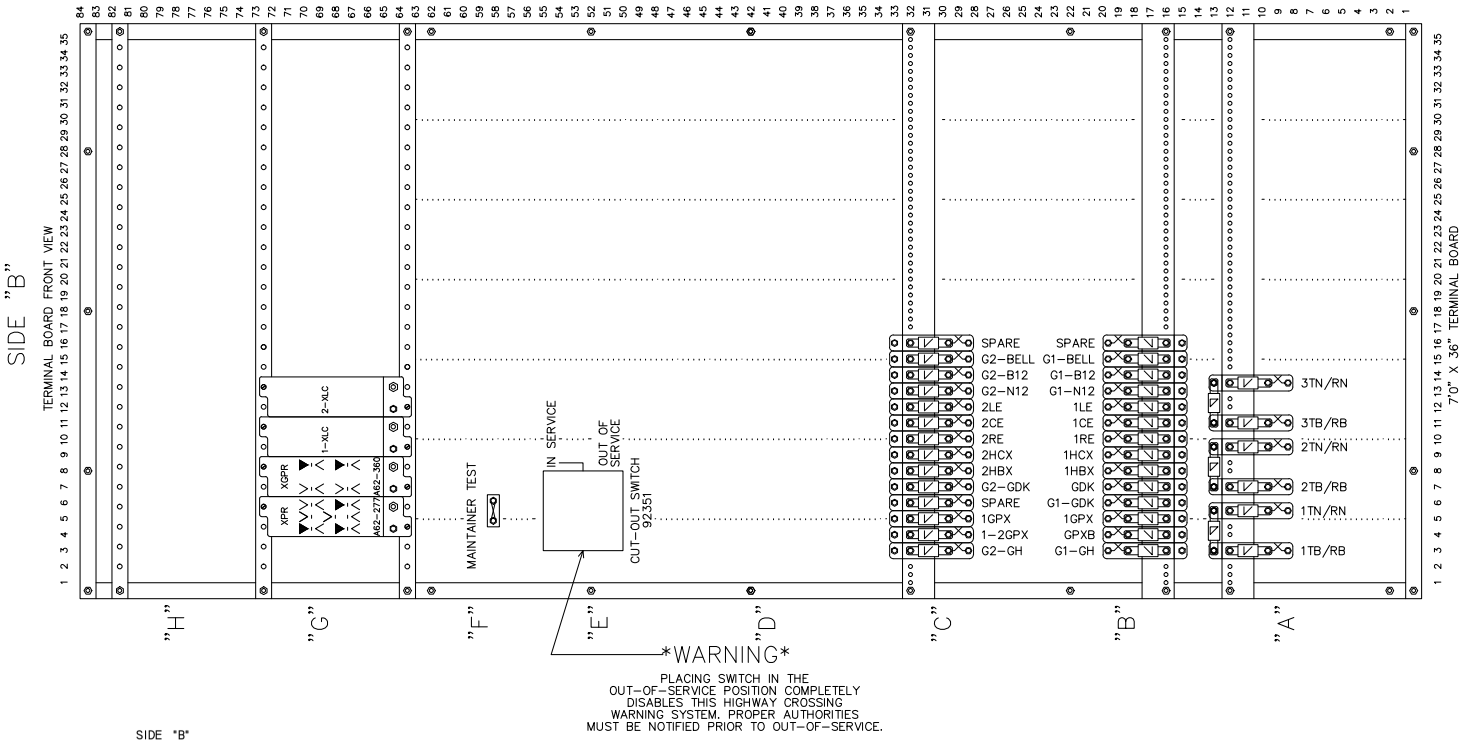
GRADE CROSSING WARNING SIGNALS
POWER DISTRIBUTION CIRCUITS

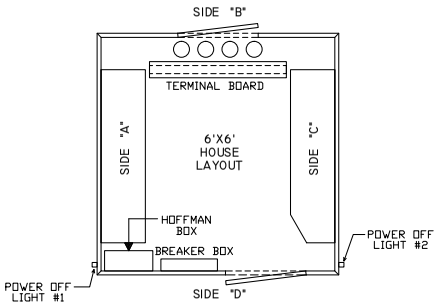
OLIVESBURG RD. ASHLAND, OH

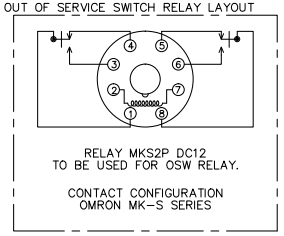
SCALE: NONE | DATE: MAR 2017

Drawing No. P-1

SHEET 8 OF 11







RELAY CROSS REFERENCE

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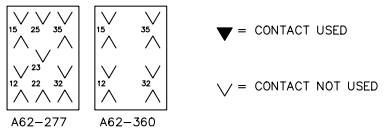
A62-277	400004
A62-360	400200



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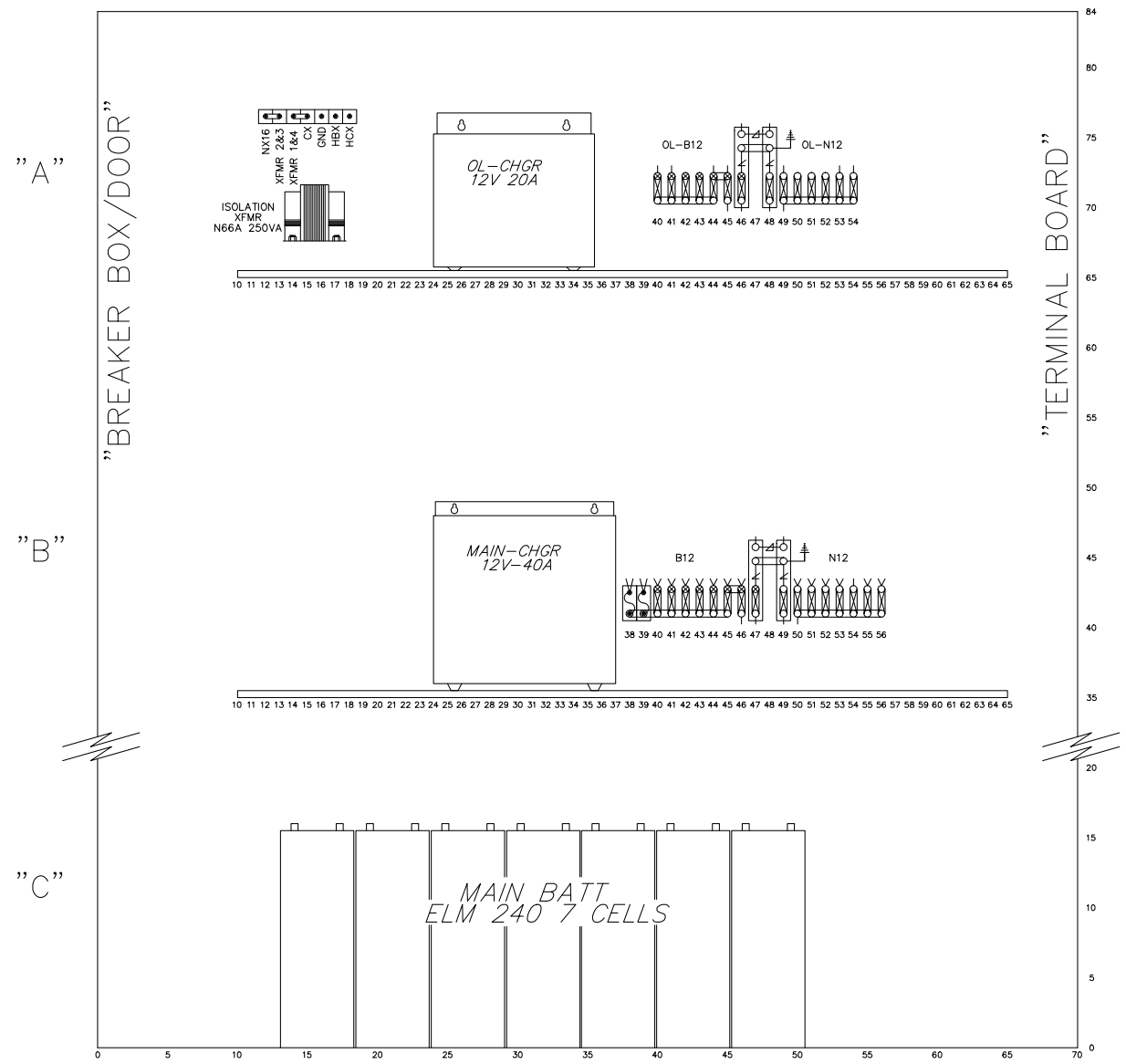
GRADE CROSSING WARNING SIGNALS
TERMINAL BOARD CIRCUITS

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE DATE: MAR 2017

Drawing No. **TB-1**

SHEET 9 OF 11



SIDE "A"

Revisions:	Drawn By:	App'd. By:	Date:

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Drawn By:	Date:
SLW	1/17
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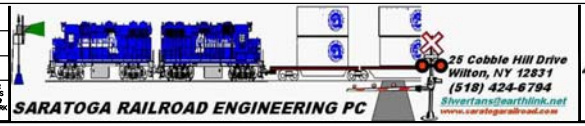
SLW	1/17



ASHLAND RAILWAY

ASHLAND RAILWAY
6055 KELLERS CHURCH RD.
PIPERSVILLE, PA 18947

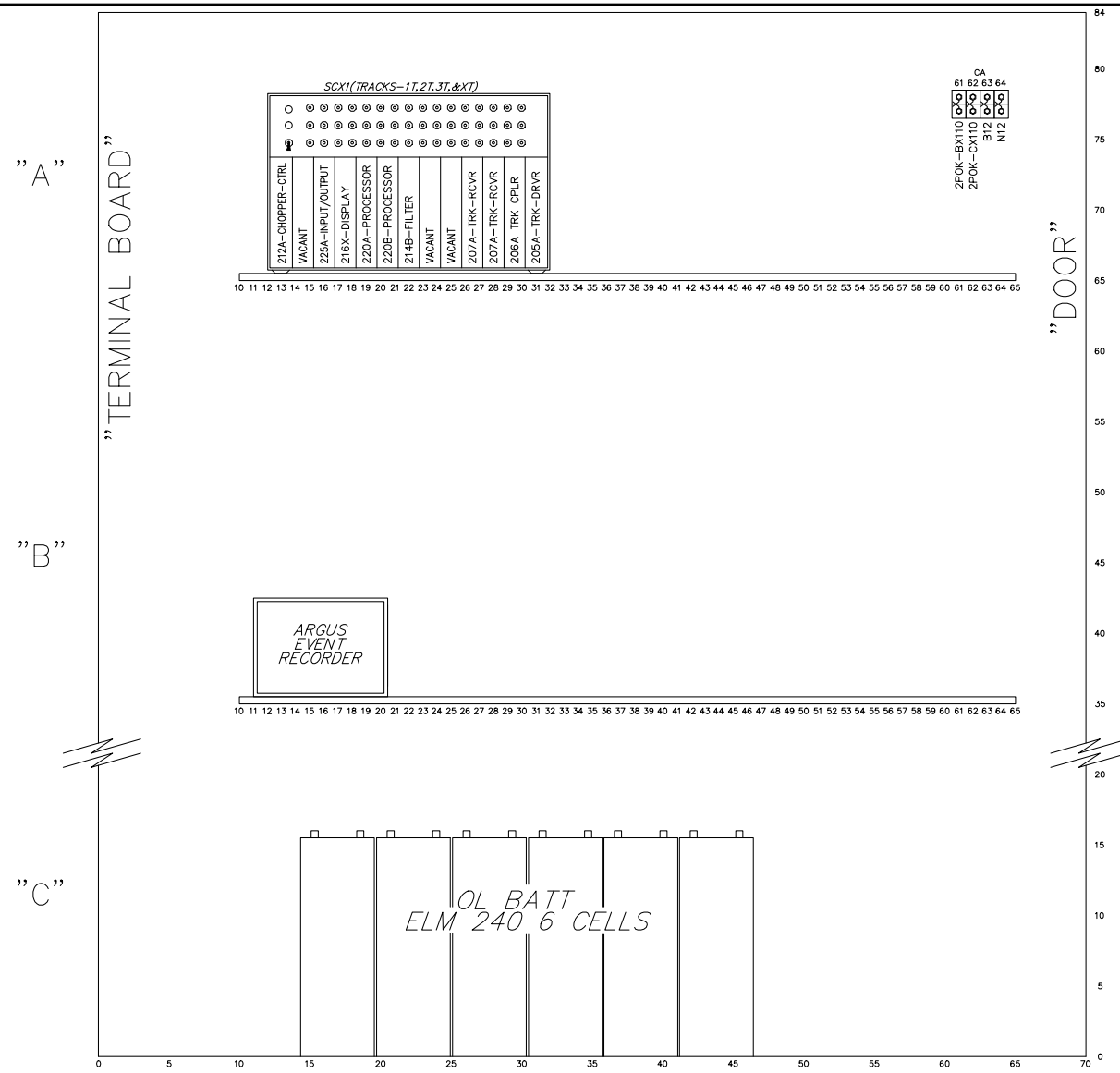
GRADE CROSSING WARNING SIGNALS
SIDE "A" LAYOUT

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **L-1**

SHEET 10 OF 11



SIDE "C"

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW	Date: 1/17
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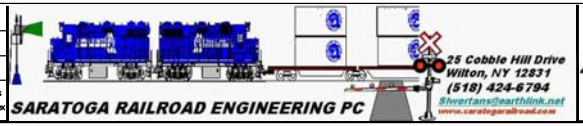

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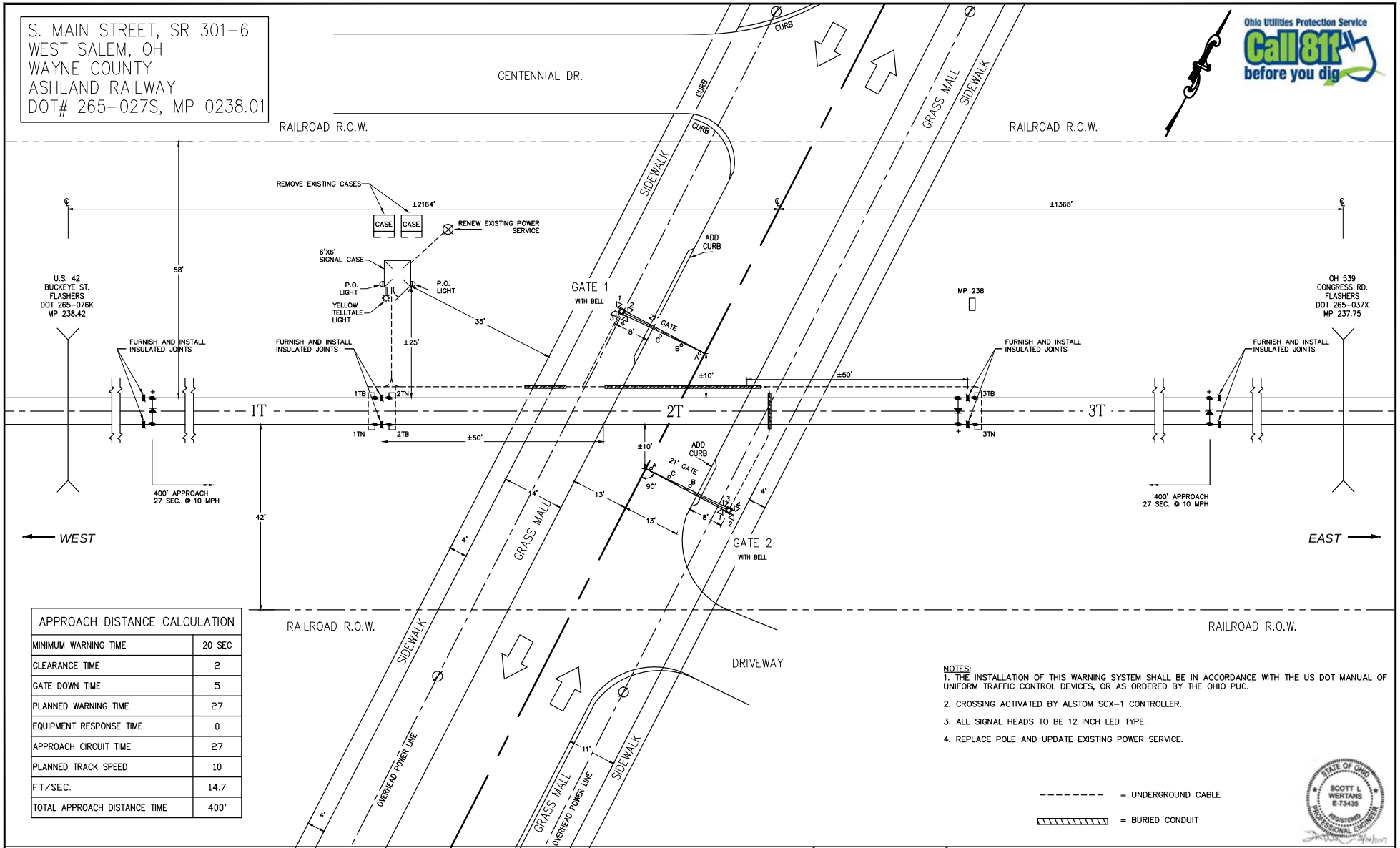
GRADE CROSSING WARNING SIGNALS
SIDE "C" LAYOUT

OLIVESBURG RD. ASHLAND, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **L-2**

S. MAIN STREET, SR 301-6
WEST SALEM, OH
WAYNE COUNTY
ASHLAND RAILWAY
DOT# 265-027S, MP 0238.01



APPROACH DISTANCE CALCULATION	
MINIMUM WARNING TIME	20 SEC
CLEARANCE TIME	2
GATE DOWN TIME	5
PLANNED WARNING TIME	27
EQUIPMENT RESPONSE TIME	0
APPROACH CIRCUIT TIME	27
PLANNED TRACK SPEED	10
FT/SEC.	14.7
TOTAL APPROACH DISTANCE TIME	400'

NOTES:
1. THE INSTALLATION OF THIS WARNING SYSTEM SHALL BE IN ACCORDANCE WITH THE US DOT MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, OR AS ORDERED BY THE OHIO PUC.
2. CROSSING ACTIVATED BY ALSTOM SCX-1 CONTROLLER.
3. ALL SIGNAL HEADS TO BE 12 INCH LED TYPE.
4. REPLACE POLE AND UPDATE EXISTING POWER SERVICE.

= UNDERGROUND CABLE

= BURIED CONDUIT

Ohio Utilities Protection Service Call 811 before you dig

STATE OF OHIO SCOTT L WERTANS E-73435 REGISTERED PROFESSIONAL ENGINEER

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
Drawn By: SLW Date: 1/17
Checked By: SLW Date: 1/17

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ASHLAND RAILWAY

ASHLAND RAILWAY
6055 KELLERS CHURCH RD.
PIPERSVILLE, PA 18947

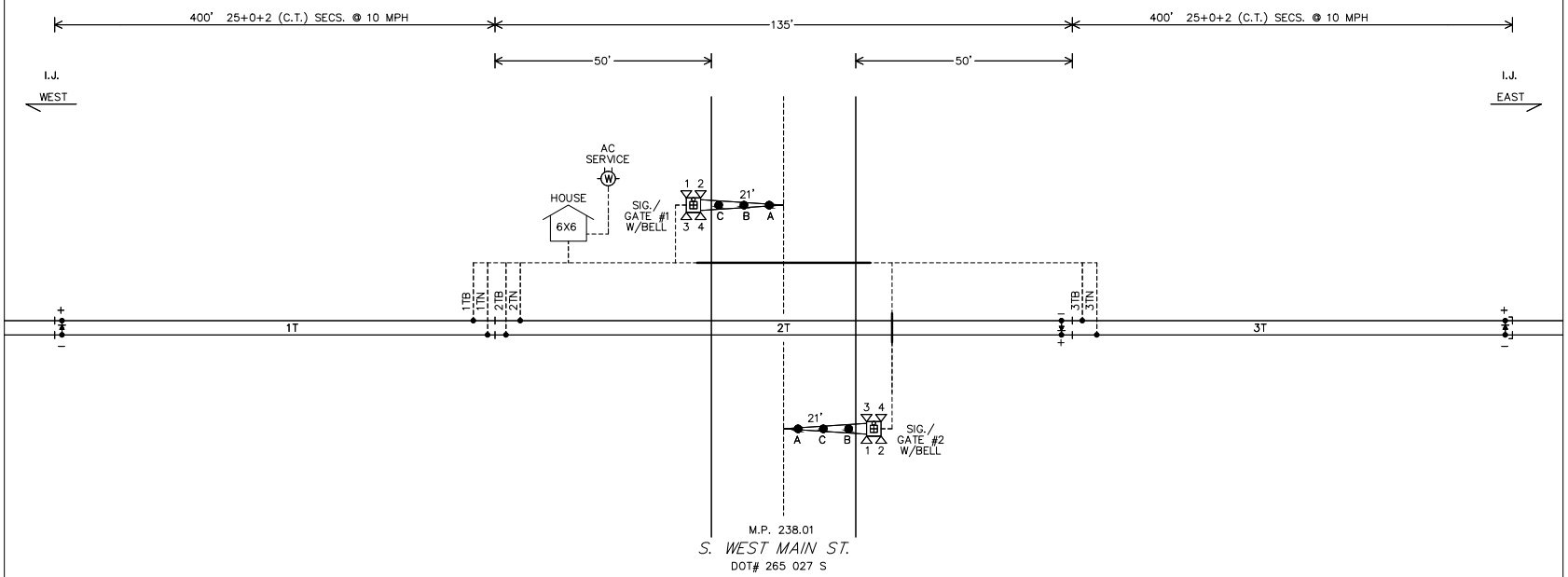
GRADE CROSSING WARNING SIGNALS LAYOUT

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. PL-0

SHEET 0 OF 11



CABLE TABULATION

HOUSE TO SIGNAL/GATE #1 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO SIGNAL/GATE #2 – 7C#6 AWG
– 7C#14 AWG
HOUSE TO 1TB & 1TN – 2C#6 TW. PAIR
HOUSE TO 2TB & 2TN – 2C#6 TW. PAIR
HOUSE TO 3TB & 3TN – 2C#6 TW. PAIR
HOUSE TO AC SERVICE – 3C#6 AWG

LEGEND

——— CONDUIT – MIN 36" DEEP
------ UNDERGROUND CABLE – MIN 36" DEEP

NOTES:

1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. ALL FLASHING LIGHT SIGNALS AND GATE LIGHTS TO BE LIGHT EMITTING DIODE (LED) ASSEMBLIES.

Revisions:	Drawn By:	App'd. By:	Date:

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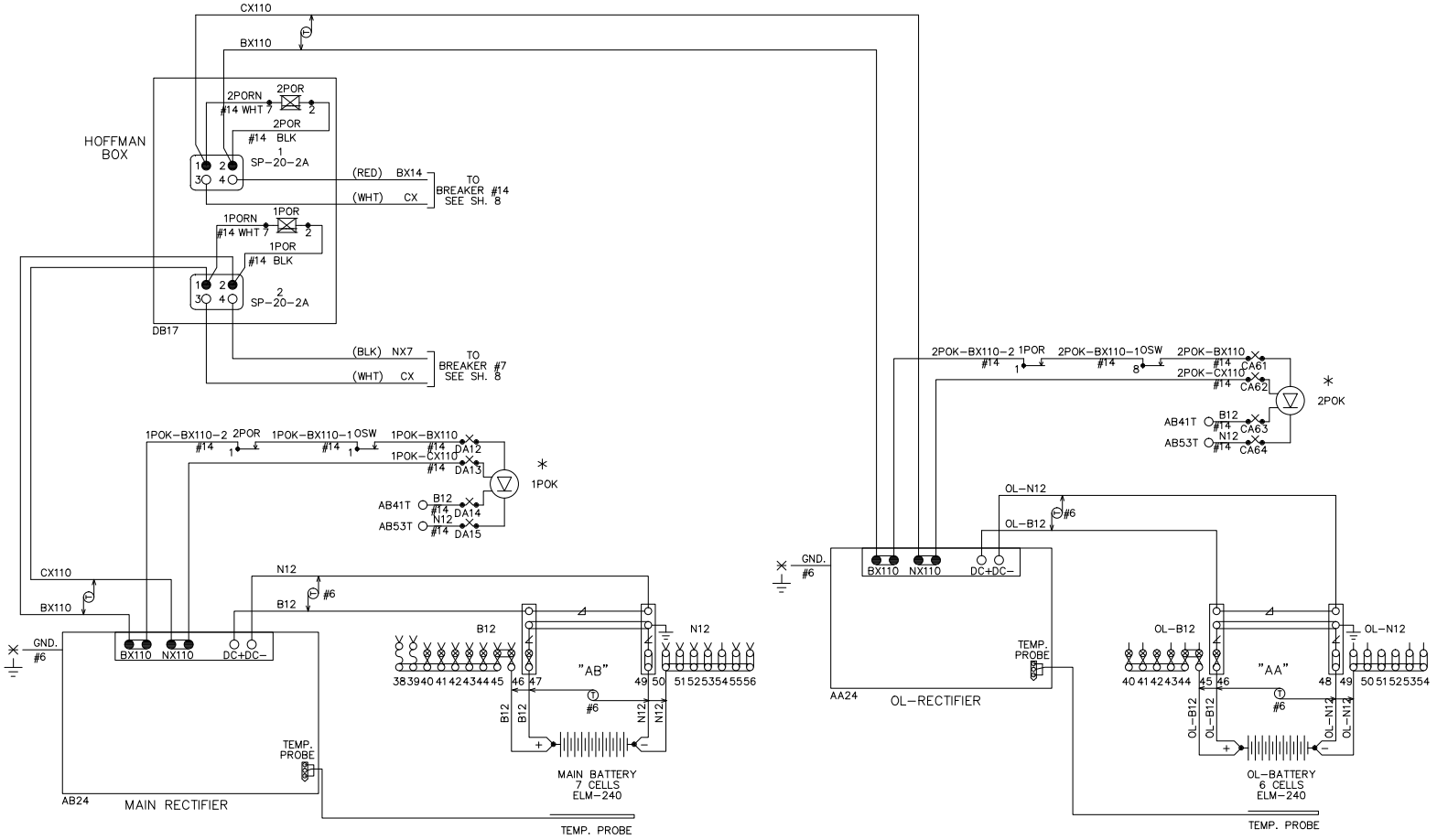
GRADE CROSSING WARNING SIGNALS LAYOUT

S. MAIN ST., WEST SALEM, OH

SCALE: NONE DATE: MAR 2017

Drawing No. PL-1

SHEET 1 OF 11



NOTES:

1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. * = LIGHTS ARE 12VDC, 4-WIRE LED. (P/N: LC2-001WB-WG4) VELCORP GEMS
3. POWER OFF LAMP CONSTANT LIT WHEN:
   - AC POWER ON AND
   - CROSSING IS NOT OUT OF SERVICE

   POWER OFF LAMP FLASHES WHEN:
   - AC POWER OFF OR
   - CROSSING IS OUT OF SERVICE

   POWER OFF LAMP DARK WHEN:
   - ALL POWER OFF

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
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SLW	1/17

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ASHLAND RAILWAY

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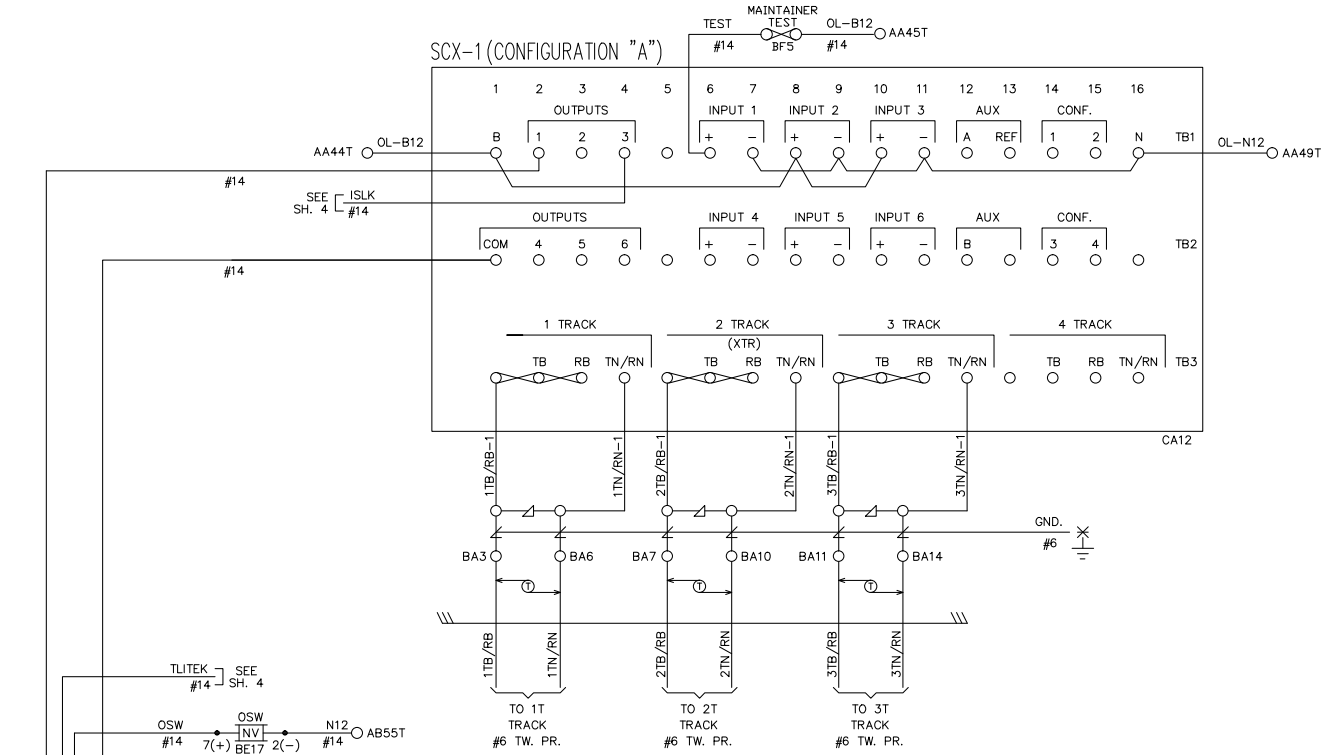
PIPERSVILLE, PA 18947

GRADE CROSSING WARNING SIGNALS
BATTERY CHARGER CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **BC-1**



SCX-1 PROGRAM		
ID:	STDXING	
INPUT #	POSITION	FUNCTION
INPUT 1	TB1-6/7	MAINTENANCE TEST (KCNOR)
INPUT 2	TB1-8/9	4TH TRACK PLUG (4TKPLUG)
INPUT 3	TB1-10/11	GATE POSITION MONITOR (XGNPR)
OUTPUT #	POSITION	FUNCTION
OUTPUT 1	TB1-1	XR RELAY
OUTPUT 2	TB1-2	GATE CONTROL
OUTPUT 3	TB1-3	ISLAND

NOTES:
1. ALL WIRE THIS SHEET NO. 10 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2. (T) DENOTES TWISTED PAIR.

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW Date: 1/17
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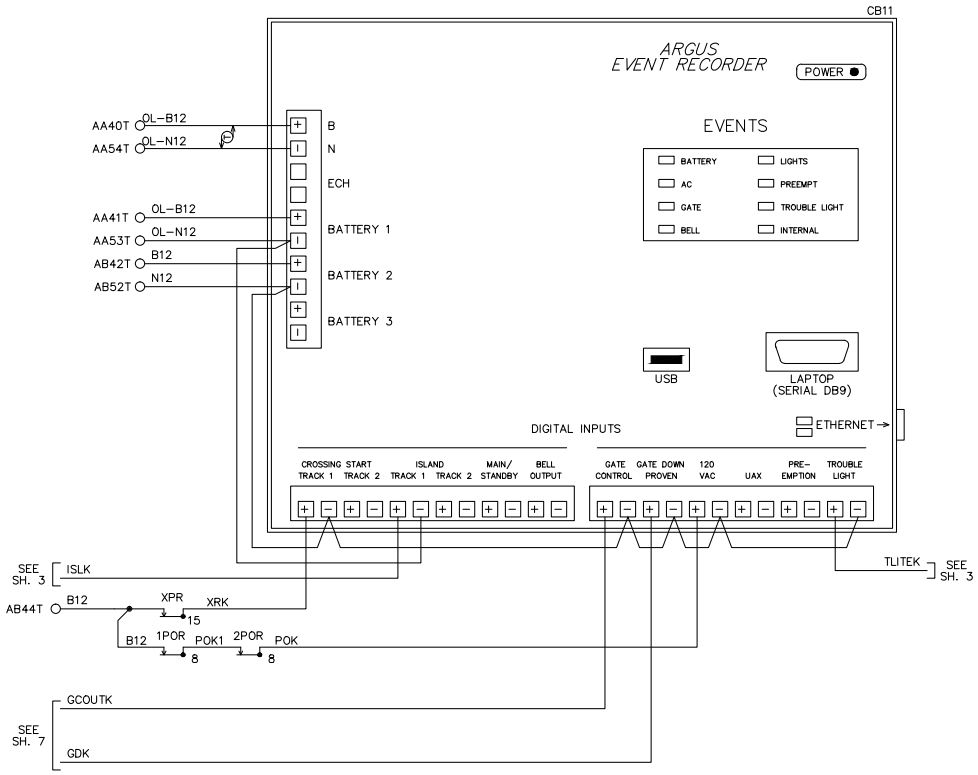
PIPERSVILLE, PA 18947

GRADE CROSSING WARNING SIGNALS
SCX-1 TRACK CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE DATE: MAR 2017

Drawing No. **TB-1**



INDICATOR LED CONFIGURATION

LED	ALARM NUMBERS	DESIGNATOR
IO1	18	BATTERY
IO2	5	AC
IO3	9, 70	GATE
IO4	16	BELL
IO5	13, 71, 72	LIGHTS
IO6	22	PREEMPT
IO7	1	TROUBLE LIGHT
IO8	7	INTERNAL

APPLICATION CONFIGURATION INFORMATION DIGITAL INPUTS 9V914–A01L

INPUT NO.	INPUT NAME	ENERGIZED	DE–ENERGIZED
1	XR1	UP	DOWN
2	XR2	UP	DOWN
3	ISL1	UP	DOWN
4	ISL2	UP	DOWN
5	M/S	STANDBY	MAIN
6	BELL OUT	ON	OFF
7	GCOUT	ON	OFF
8	GDP	ON	OFF
9	120 VAC	ON	OFF
10	UAX	UP	DOWN
11	PREEMPT	ON	OFF
12	TLITE	ON	OFF

NOTES:

1. LEDS ARE ON (RED) WHEN NO ALARM HAS BEEN GENERATED OR AN ALARM HAS BEEN CLEARED USING THE CLEAR ALARM KEY.
2. LEDS FLASH FAST WHEN AN ALARM CONDITION EXIST.
3. LEDS FLASH SLOW IF AN ALARM HAS OCCURRED BUT IS CURRENTLY CLEARED.
4. THE CLEAR ALARM KEY WILL NOT CLEAR OUT ALARMS IF THEY CURRENTLY EXIST.
5. ALL WIRE THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
6. ⓣ DENOTES TWISTED PAIR.

Revisions:	Drawn By:	App'd. By:	Date:

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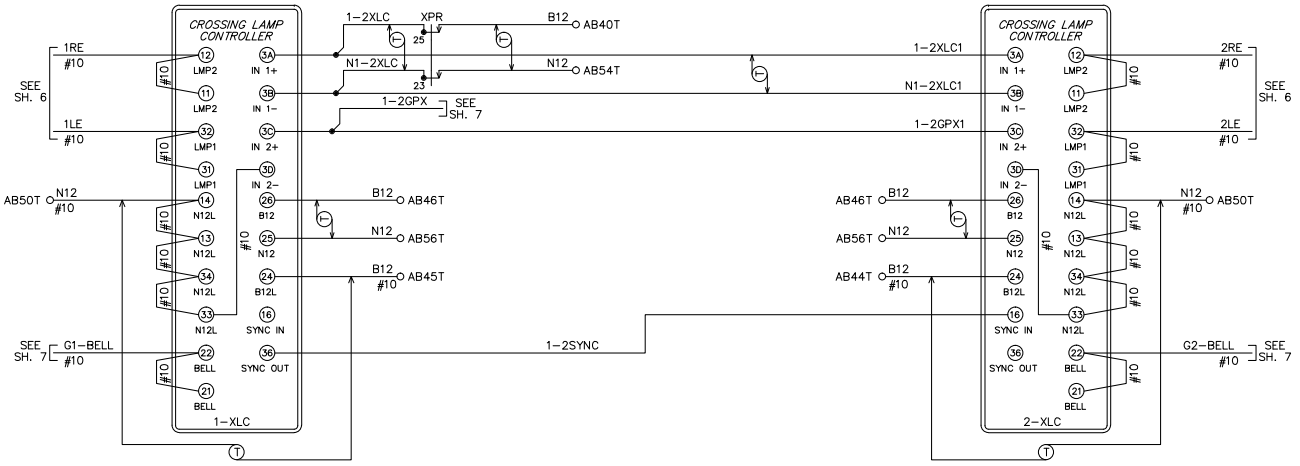
GRADE CROSSING WARNING SIGNALS
DATA RECORDER

S. MAIN ST., WEST SALEM, OH

SCALE: NONE DATE: MAR 2017

Drawing No. DR-1

SHEET 4 OF 11



NOTE:
1. ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED

Revisions:	Drawn By:	App'd. By:	Date:

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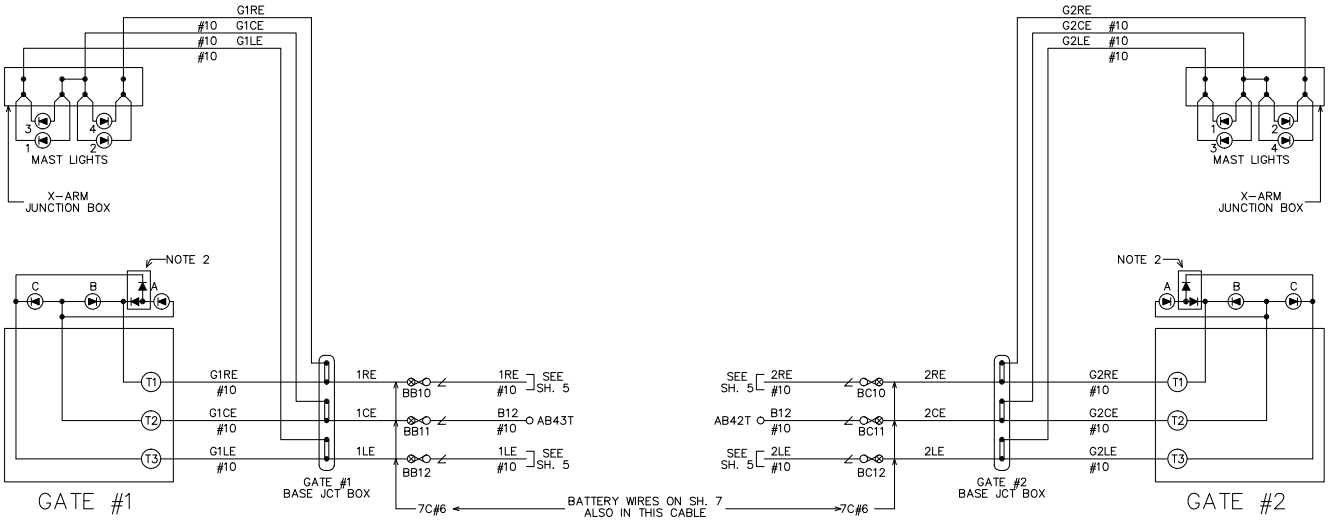
GRADE CROSSING WARNING SIGNALS
XLC CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **XL-1**



NOTES:

1) ALL WIRE THIS SHEET NO. 14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
2) GETS-GS P/N 076045-300 FOR USE WITH RECO EZLED LAMPS AND PLUG CABLES.

Revisions:	Drawn By:	App'd. By:	Date:

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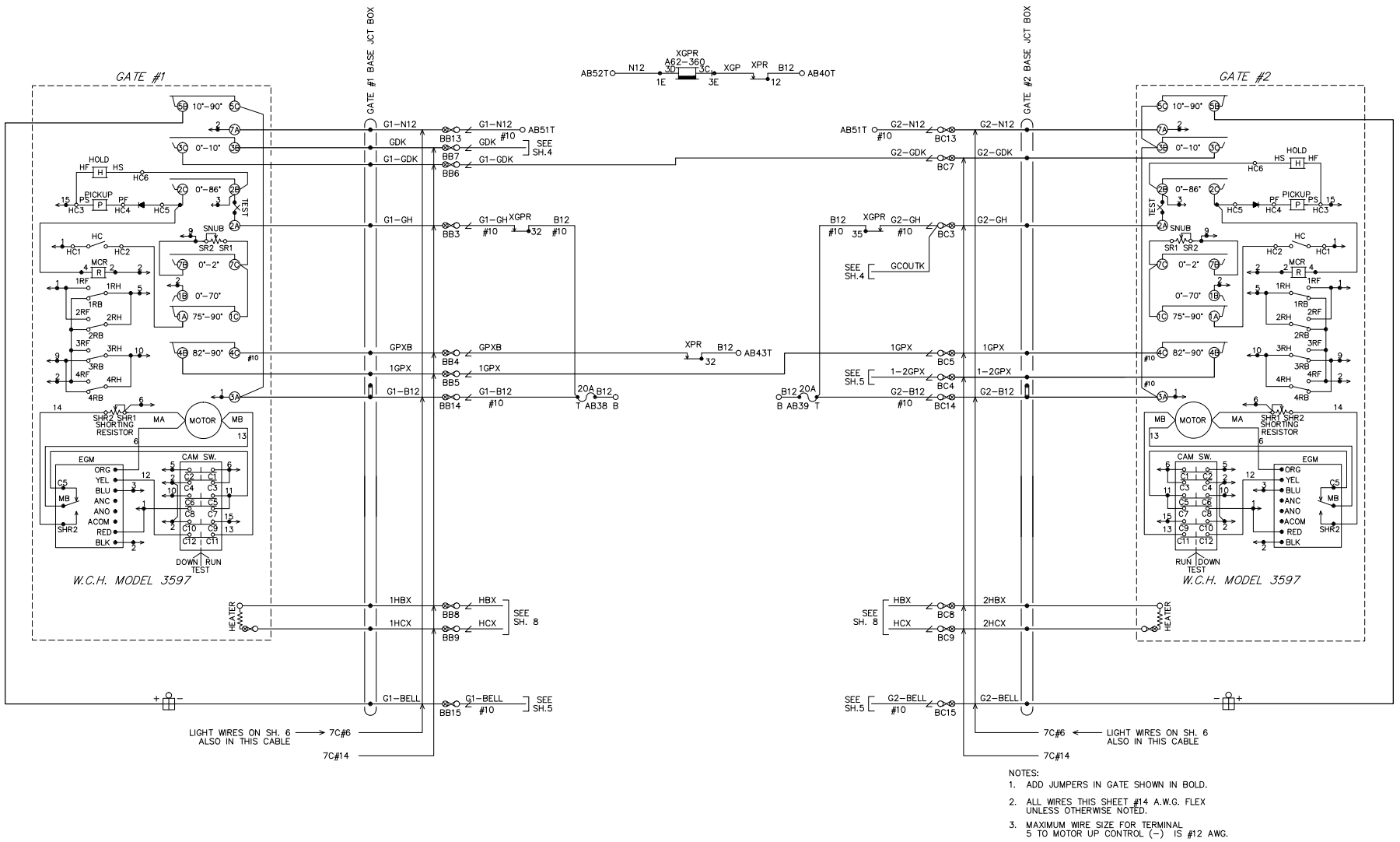
GRADE CROSSING WARNING SIGNALS
FLASHER CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **FL-1**



NOTES:

1. ADD JUMPERS IN GATE SHOWN IN BOLD.
2. ALL WIRES THIS SHEET #14 A.W.G. FLEX UNLESS OTHERWISE NOTED.
3. MAXIMUM WIRE SIZE FOR TERMINAL 5 TO MOTOR UP CONTROL (−) IS #12 AWG.

Revisions:	Drawn By:	App'd. By:	Date:

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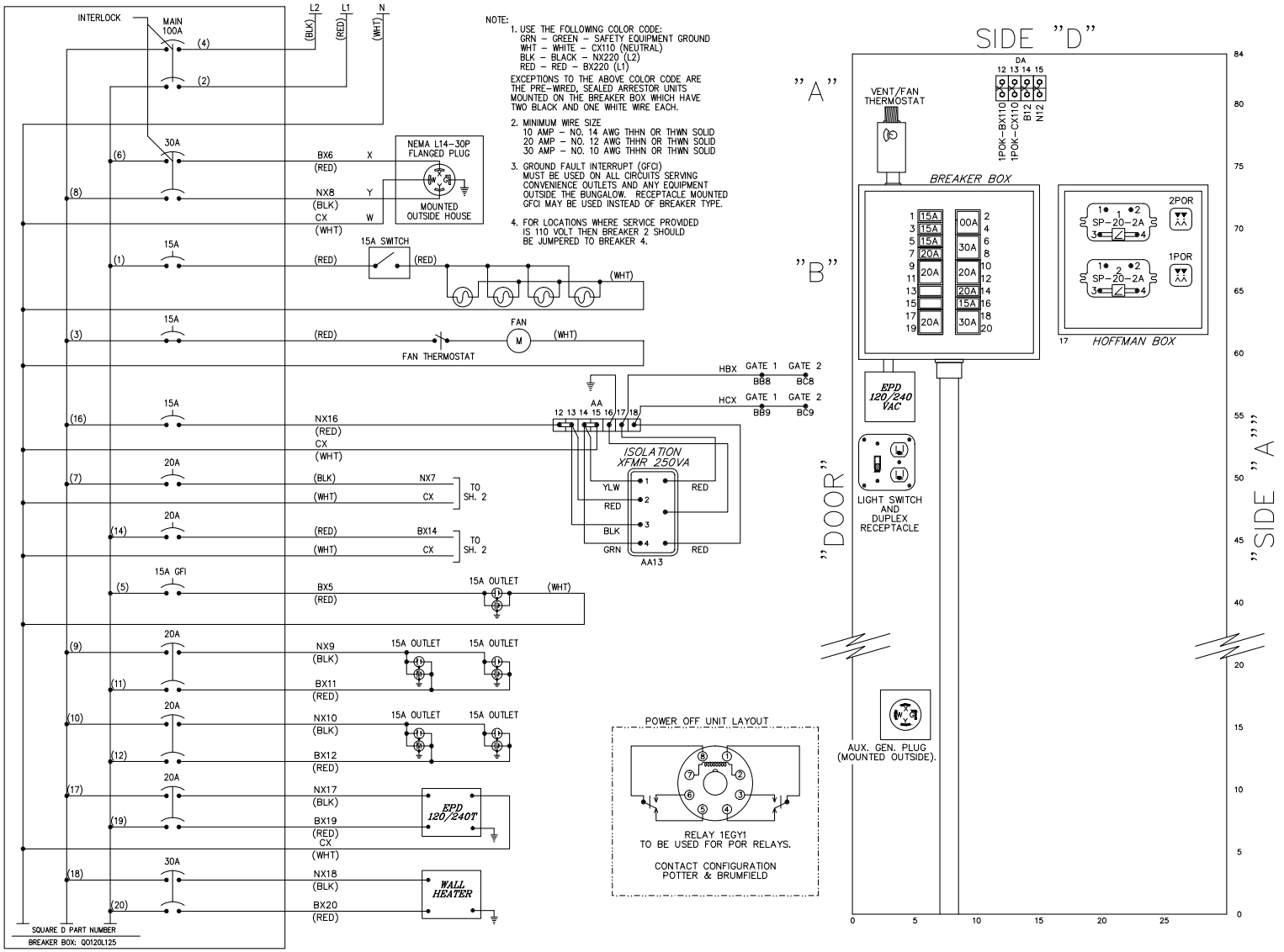
GRADE CROSSING WARNING SIGNALS GATE CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE DATE: MAR 2017

Drawing No. G-1



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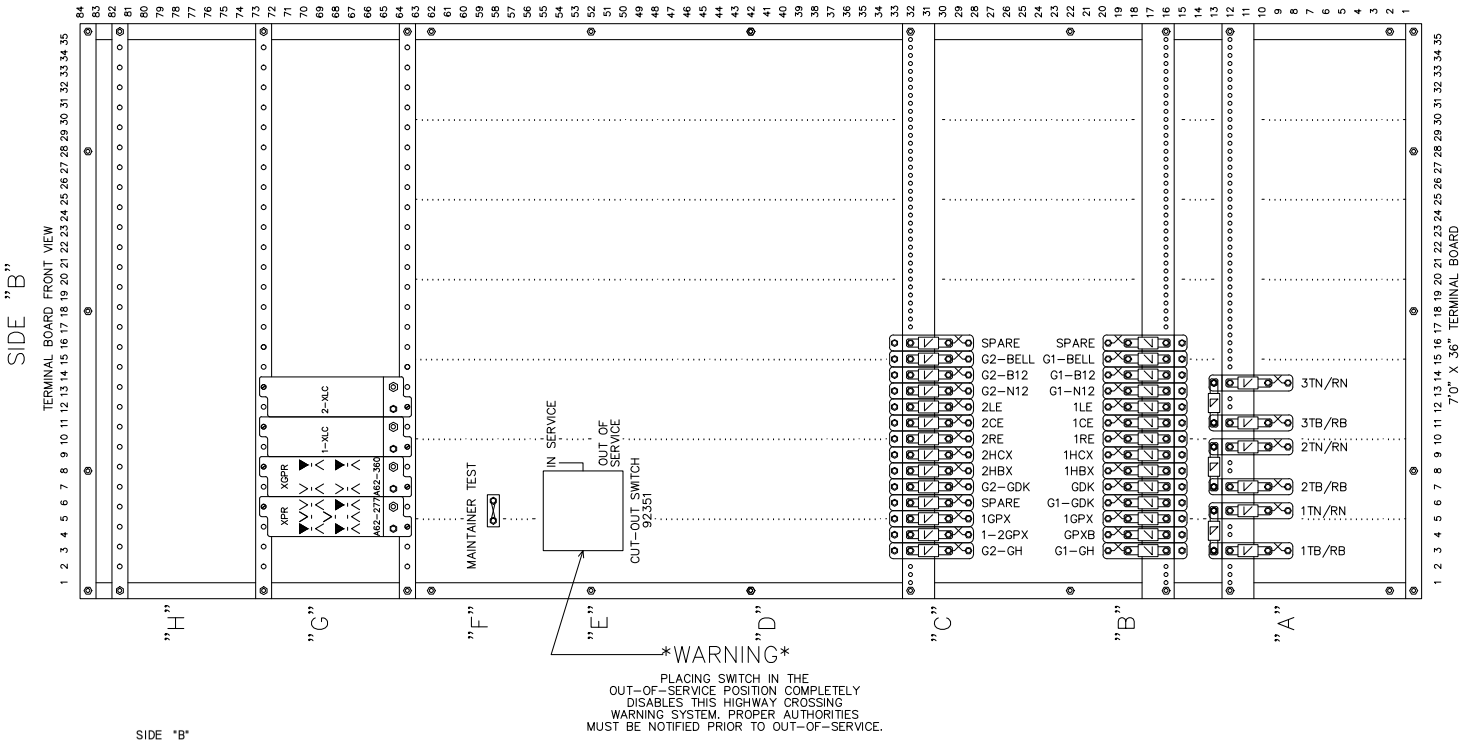
GRADE CROSSING WARNING SIGNALS
POWER DISTRIBUTION CIRCUITS

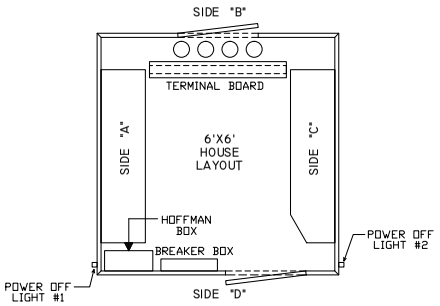
S. MAIN ST., WEST SALEM, OH

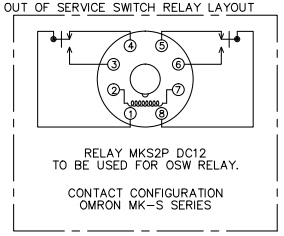
SCALE: NONE | DATE: MAR 2017

Drawing No. **P-1**

SHEET 8 OF 11

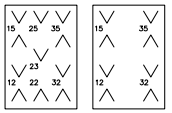






RELAY CROSS REFERENCE

GRS	SAFETRAN
A62-277	400004
A62-360	400200



▼ = CONTACT USED

⋁ = CONTACT NOT USED

Revisions:	Drawn By:	App'd. By:	Date:

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PIPERSVILLE, PA 18947

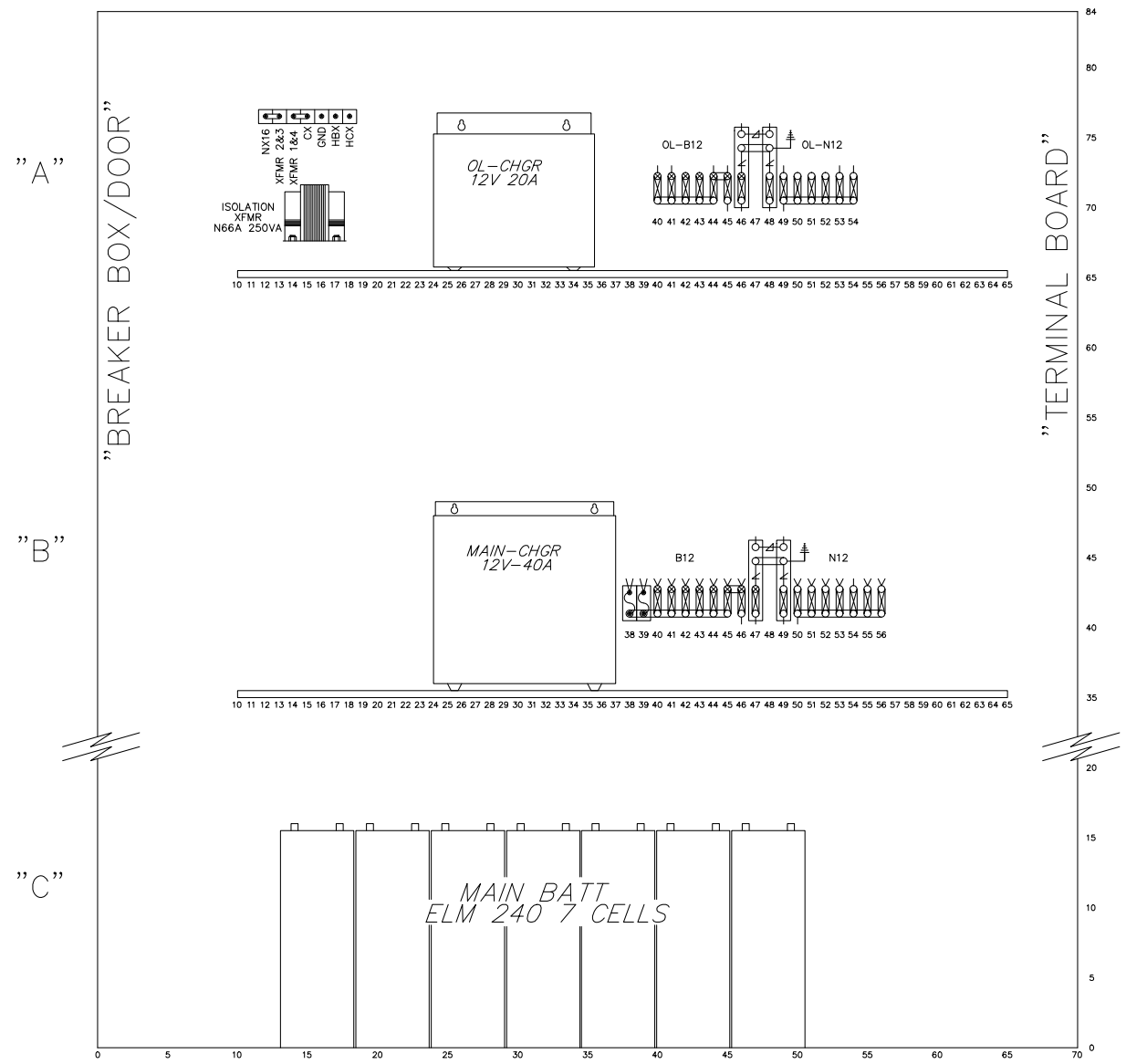
GRADE CROSSING WARNING SIGNALS
TERMINAL BOARD CIRCUITS

S. MAIN ST., WEST SALEM, OH

SCALE: NONE DATE: MAR 2017

Drawing No. **TB-1**

SHEET 9 OF 11



SIDE "A"

Revisions:	Drawn By:	App'd. By:	Date:

Designed By:	Date:
SLW	1/17
Drawn By:	Date:
SLW	1/17
Checked By:	Date:
SLW	1/17

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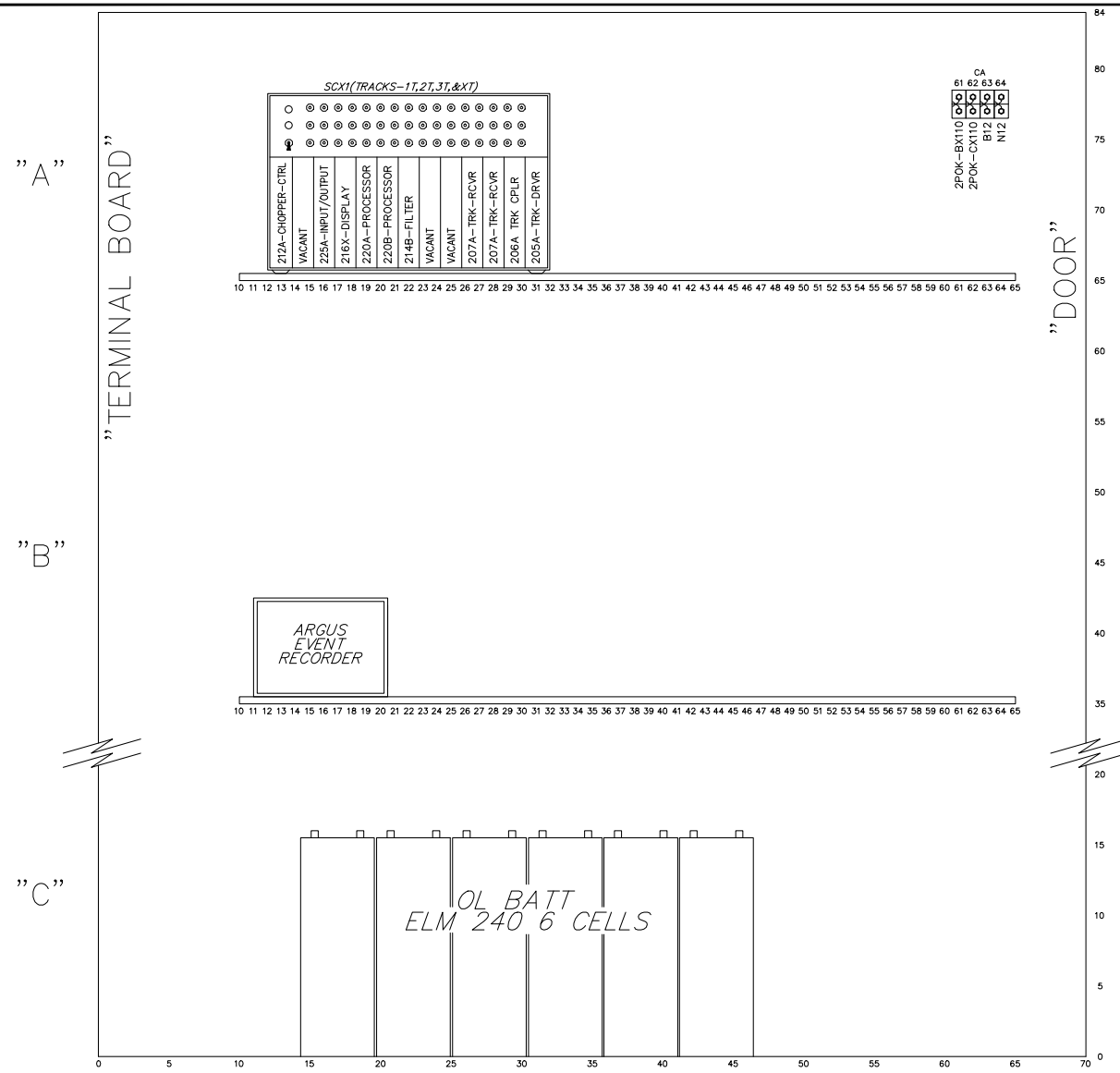
PIPERSVILLE, PA 18947

GRADE CROSSING WARNING SIGNALS
SIDE "A" LAYOUT

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **L-1**



SIDE "C"

Revisions:	Drawn By:	App'd. By:	Date:

Designed By: SLW	Date: 1/17
Drawn By: SLW	Date: 1/17
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PIPERSVILLE, PA 18947

GRADE CROSSING WARNING SIGNALS
SIDE "C" LAYOUT

S. MAIN ST., WEST SALEM, OH

SCALE: NONE | DATE: MAR 2017

Drawing No. **L-2**

SHEET 11 OF 11

OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223
John R. Kasich, Governor • Mark Policinski, ORDC Chairman

August 30, 2016

Mr. Don Cleland
P O Box 1528
1427 Sprang Pkwy.
Mansfield, Ohio 44903

RE: Ashland County, TR 1455
DOT 264982E, PID 103087

Dear Mr. Cleland:

A diagnostic review was held at the above grade crossing on March 29, 2016. The crossing has been recommended for the installation of lights and gates.

ASRY is authorized to proceed with the site plans and cost estimates (PE) for this project. This authorization is made with the stipulation and understanding that any field work needs prior approval before 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.

The ORDC is not requesting that the PUCO issue an Order at this time. When the ORDC receives the PE it will be evaluated and a construction-only Order will be requested from PUCO. Please submit the PE to ORDC within 90 days of receipt of this letter.

The diagnostic review form is attached. Please note any recommendations (page 5), if any, made by the team with regard to requirements for this location. Any minor roadway work necessary for MUTCD compliance should be incorporated into the PE and such costs will flow through the railroad reimbursement process

The Project Manager for this project is Joe Reinhardt. He can be reached at (614) 644.0291, or Joe.Reinhardt@dot.state.oh.us, if you have any questions.

Sincerely,

Joseph N. Reinhardt

Joseph N. Reinhardt
Project Manager

C: George Martin, PUCO, Grade Crossing Planner
ORDC (file)

OHIO RAIL DEVELOPMENT COMMISSION

Mail Stop #3140, 1980 West Broad Street, Columbus OH 43223
John R. Kasich, Governor • Mark Policinski, ORDC Chairman

August 30, 2016

Mr. Don Cleland
P O Box 1528
1427 Sprang Pkwy.
Mansfield, Ohio 44903

RE: Ashland County, SR96-3.54
DOT 264989C, PID 103088

Dear Mr. Cleland:

A diagnostic review was held at the above grade crossing on March 29, 2016. The crossing has been recommended for the installation of lights and gates.

ASRY is authorized to proceed with the site plans and cost estimates (PE) for this project. This authorization is made with the stipulation and understanding that any field work needs prior approval before 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.

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The Project Manager for this project is Joe Reinhardt. He can be reached at (614) 644.0291, or Joe.Reinhardt@dot.state.oh.us, if you have any questions.

Sincerely,

Joseph N. Reinhardt
Project Manager

C: George Martin, PUCO, Grade Crossing Planner
ORDC (file)

OHIO RAIL DEVELOPMENT COMMISSION

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

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

August 30, 2016

Mr. Don Cleland
P O Box 1528
1427 Sprang Pkwy.
Mansfield, Ohio 44903

RE: ~~Ashland~~ Wayne County, SR 301
DOT 265027S, PID 103086

Dear Mr. Cleland:

A diagnostic review was held at the above grade crossing on March 29, 2016. The crossing has been recommended for the installation of lights and gates.

ASRY is authorized to proceed with the site plans and cost estimates (PE) for this project. This authorization is made with the stipulation and understanding that any field work needs prior approval before 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.

The ORDC is not requesting that the PUCO issue an Order at this time. When the ORDC receives the PE it will be evaluated and a construction-only Order will be requested from PUCO. Please submit the PE to ORDC within 90 days of receipt of this letter.

The diagnostic review form is attached. Please note any recommendations (page 5), if any, made by the team with regard to requirements for this location. Any minor roadway work necessary for MUTCD compliance should be incorporated into the PE and such costs will flow through the railroad reimbursement process

The Project Manager for this project is Joe Reinhardt. He can be reached at (614) 644.0291, or Joe.Reinhardt@dot.state.oh.us, if you have any questions.

Sincerely,

Joseph N. Reinhardt

Joseph N. Reinhardt
Project Manager

C: George Martin, PUCO, Grade Crossing Planner
ORDC (file)

OHIO RAIL DEVELOPMENT COMMISSION

Ohio Rail Development Commission
Mail Stop 3140, 1980 W. Broad Street,
Columbus, OH 43223

Diagnostic Review Team Survey

Reason for Survey: (e.g. formula, accident, constituent, etc.) Constituent – Railroad

Date: 3/29/2016

Location Data

Street or Road Name:					
Route/Road Number (i.e. Twp., Co., SR or US)	TR 1455			US DOT No.:	264982E
County: ASD	Township: Milton	City: (In or Near)	Near Ashland		
Railroad Name: Ashland Railway	Railroad Division: Pittsburgh			Branch/Line Name:	ML Sal&Galion
Nearest RR Timetable Station: Pavonia				RR Milepost:	258.9

On-Site Review Team

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

1. Joe Krehbiel ORDC 614-644-0291
2. BERNIE MARTIN PUCO 614-752-9107
3. FRANK GOSCHINSKI MILTON TWP 419-651 1930
4. MATT CAITER MILTON TWP 419-606-1784
5. DAVE RICHARDSON ASHLAND RAILWAY 419-566-4350
6. SCOTT PATSCHIC ASHLAND RAILWAY 419-525-2822
7.
8.
9.

Existing Traffic Control Devices

Type of Warning Devices	Installed?	Quantity/Comments
Advance Warning Signs (condition?)	☒ Yes ☐ No	2
'Stop' Signs	☐ Yes ☒ No	
'Stop Ahead' Signs	☐ Yes ☒ No	
Pavement Markings (condition?)	☐ Yes ☒ No	
Crossbucks	☒ Yes ☐ No	2
Number of Tracks Signs	☐ Yes ☒ No	
Inventory Tags	☐ Yes ☒ No	
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: Length:
Bells	☐ Yes ☒ No	Number:
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	0	
Hazard Ranking	4835 Date Run: 1/12/2016	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	2	
< 1 per day		
Day thru trains		
Night thru trains		
Daytime switching movements	2	
Nighttime switching movements		
Total number of tracks	1	ONE
Number of main tracks	1	
Number of other tracks	1 Side Track	
Maximum train speed	10	
Typical train speed	10	
Amtrak		

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

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: Milton Township

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	139 (2013)	
Highway paved	X Yes ☐ No	☐ Yes ☐ No

Roadway Surface: ☒ Blacktop ☐ Gravel ☐ Concrete ☐ Other _____

Roadway width: 12 ft.

Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: 55 MPH		

School Bus Operation: ☐ No X Yes 6 Amount

Hazardous Materials Trucks: ☐ No ☒ Yes .05 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 NW Curb and Gutter:	Quadrant SW Curb and Gutter:
☐ Functional (Curb height = 4" or more)	☐ Functional (Curb height = 4" or more)
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")
☒ None	☒ None

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 there a 'Do not Stop on Track' sign? ☒ No ☐ 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? ☒ No ☐ 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: ☒ No ☐ Yes

Explain reasons: Too many school buses

Type of Development

☒ Open Space ☐ Institutional

☐ Industrial ☐ Commercial

☒ Residential

Location of nearby schools: Taft Elementary - Ashland

Utility Information

Is commercial power available? ☐ No ☒ Yes

Utility Provider (Company Name) Ohio Edison Phone Number _____

Nearest Available Power Source _____

What other utilities are present? (add locations to sketch)
☒ Gas ☒ Cable ☒ Telephone ☒ Fiber Optic Cable
☐ Petroleum ☐ Water ☐ Sanitary Sewer
☐ Other _____

Is(are) there potential utility conflict(s) ☐ Yes ☐ No ☒ Unknown

Comments:

Potential Red Flags / Project Challenges
Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):
Crossing Consolidation or Closure:
Real Estate or ROW:
Culverts / Drainage / Ballast Conditions:
Roadway and/or Sidewalks:
Circuitry (e.g. reaches out to other crossings, specific needs, etc.):
Environmental:
Other:

3/29/16

Diagnostic Team Recommendations

	Quadrants Needed
☒ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
☒ AFLS / Gates	NE & SW
☐ AFLS / Gates / Cants	
☐ Bells / number	
☐ Upgrade circuitry / type	
☐ Sidelights	
☐ Guardrail Needed	
☐ Install/Replace curb	
☐ Bungalow placement & offset from rail & highway	
☐ Other (define)	

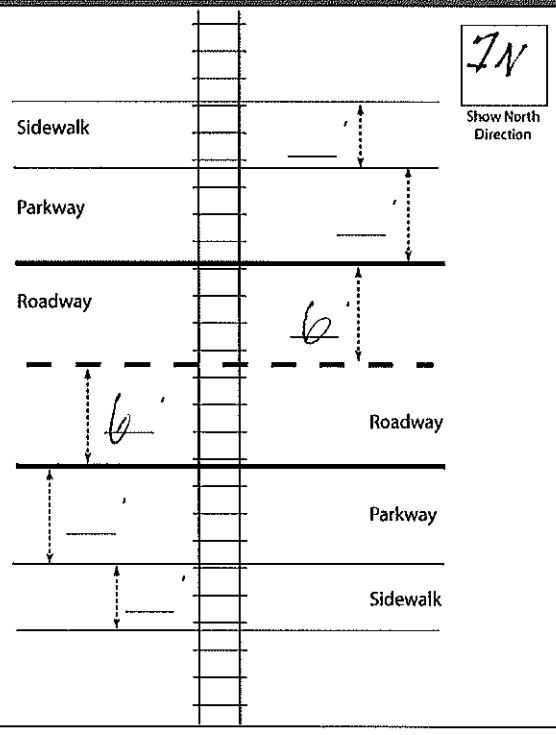
Comments:
Poor visibility because of angle of track & roadway

☐ 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):

Field Dimensions



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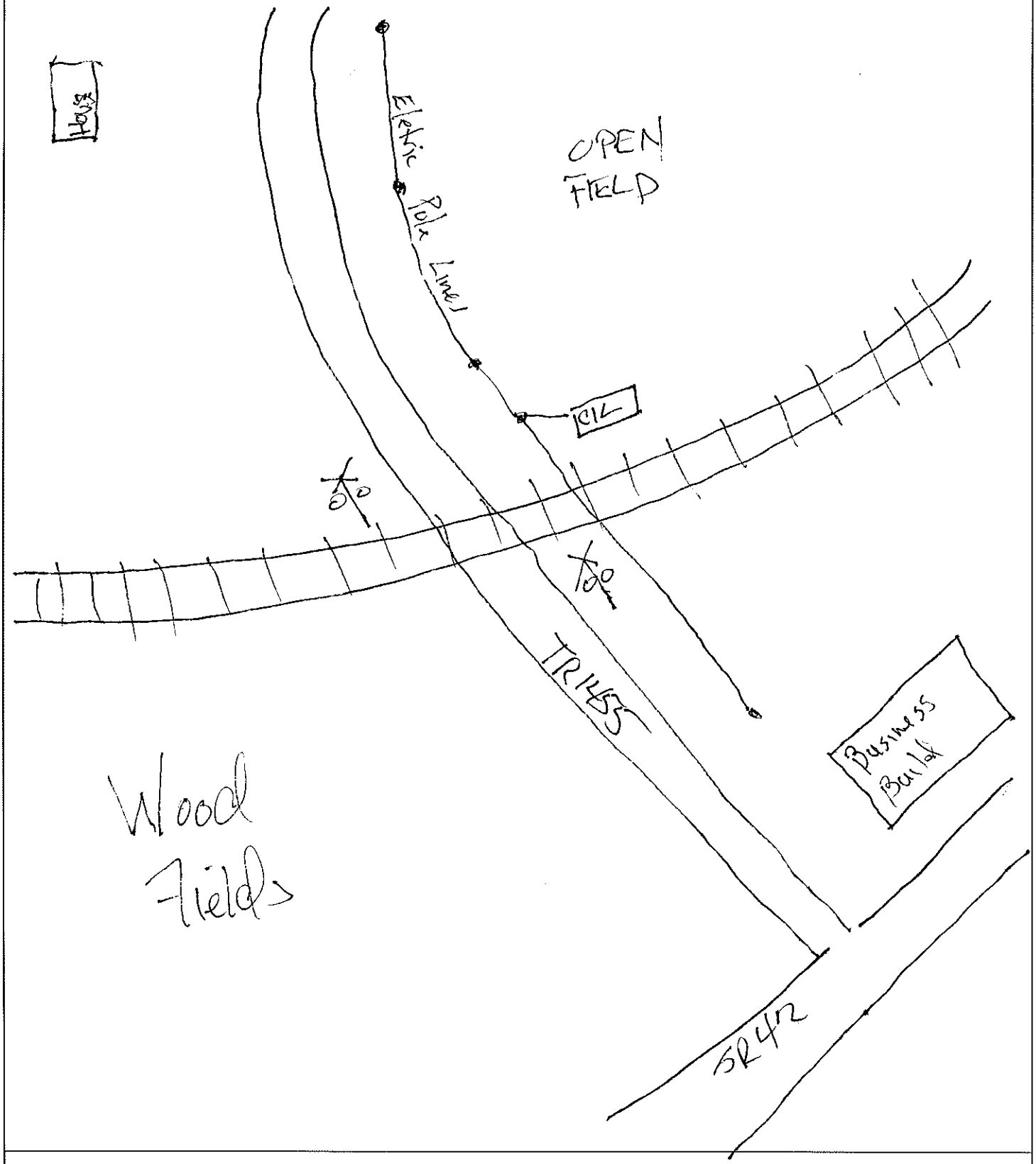


Crossing Angle ☐ 0-29° ☒ 30-59° ☐ 60-90° Measured in _____ Quadrant?

Sketch by: _____

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.

2/30/16

OHIO RAIL DEVELOPMENT COMMISSION

Ohio Rail Development Commission
Mail Stop 3140, 1980 W. Broad Street,
Columbus, OH 43223

Diagnostic Review Team Survey

Reason for Survey: (e.g. formula, accident, constituent, etc.) Constituent – Railroad

Date: 3/29/2016

Location Data

Street or Road Name:

Route/Road Number (i.e. Twp., Co., SR or US): SR 96-3.54

US DOT No.: 264989C

County: ASD

Township: -

City: (In or Near) Near Ashland

Railroad Name: Ashland Railway

Railroad Division: Pittsburgh

Branch/Line Name: ML Sal&Galion

Nearest RR Timetable Station: Ashland

RR Milepost: 254.01

On-Site Review Team

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

1. Joe Bernhardt ORDC 614-644-0291
2. Steve Patrick Ashland Railway 419-525-2822
3. Dave Richardson/ Ashland Railway 419-566-4350
4. Charlie Mahan PUCO 614-752-9107
5. Jon Welch ODOT 419-207-7028
6.
7.
8.
9.

Existing Traffic Control Devices

Type of Warning Devices	Installed?	Quantity/Comments
Advance Warning Signs (condition?)	☒ Yes ☐ No	2 Good
'Stop' Signs	☐ Yes ☐ No	
'Stop Ahead' Signs	☐ Yes ☐ No	
Pavement Markings (condition?)	☒ Yes ☐ No	2 - Good
Crossbucks	☒ Yes ☐ No	2
Number of Tracks Signs	☐ Yes ☐ No	
Inventory Tags	☐ Yes ☐ No	
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: Length:
Bells	☐ Yes ☒ No	Number:
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	0	
Hazard Ranking	3827 Date Run: 1/8/2016	

Railroad Data

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

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

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: State of Ohio

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	3171 (2014)	
Highway paved	X Yes ☐ No	☐ Yes ☐ No

Roadway Surface: ☒ Blacktop ☐ Gravel ☐ Concrete ☐ Other _____

Roadway width: 20 ft.

Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: 50 MPH		

School Bus Operation: ☐ No X Yes 6 Amount

Hazardous Materials Trucks: ☐ No ☒ Yes .04 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 NE Curb and Gutter:	Quadrant SW Curb and Gutter:
☐ Functional (Curb height = 4" or more)	☐ Functional (Curb height = 4" or more)
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")
☒ None	☒ None

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 there a 'Do not Stop on Track' sign? ☒ No ☐ 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? ☒ No ☐ 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: ☒ No ☐ Yes

Explain reasons: State Route Xing

Type of Development

☒ Open Space ☐ Institutional

☐ Industrial ☐ Commercial

☒ Residential

Location of nearby schools: City of Ashland

Utility Information

Is commercial power available? ☐ No ☒ Yes

Utility Provider (Company Name) Unknown Phone Number _____

Nearest Available Power Source _____

What other utilities are present? (add locations to sketch)

☒ Gas ☒ Cable ☒ Telephone ☐ Fiber Optic Cable

☐ Petroleum ☒ Water ☐ Sanitary Sewer

☐ Other _____

Is(are) there potential utility conflict(s) ☐ Yes ☐ No ☒ Unknown

Comments:

Potential Red Flags / Project Challenges
Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):
Crossing Consolidation or Closure:
Real Estate or ROW:
Culverts / Drainage / Ballast Conditions:
Roadway and/or Sidewalks:
Circuitry (e.g. reaches out to other crossings, specific needs, etc.):
Environmental:
Other:

3/29/12

Diagnostic Team Recommendations

	Quadrants Needed
☒ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
☒ AFLS / Gates	2 ; NE | SW
☐ AFLS / Gates / Cants	
☐ Bells / number	
☐ Upgrade circuitry / type	
☐ Sidelights	
☐ Guardrail Needed	
☐ Install/Replace curb	
☐ Bungalow placement & offset from rail & highway	
☐ Other (define)	

Comments:

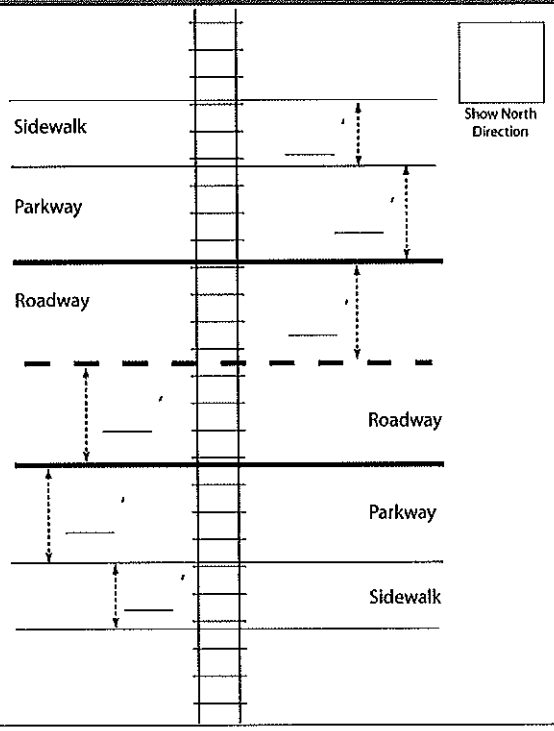
People can't see signals because of sunrise/sunset. Also, folks try to beat the flashing lights w/ train.

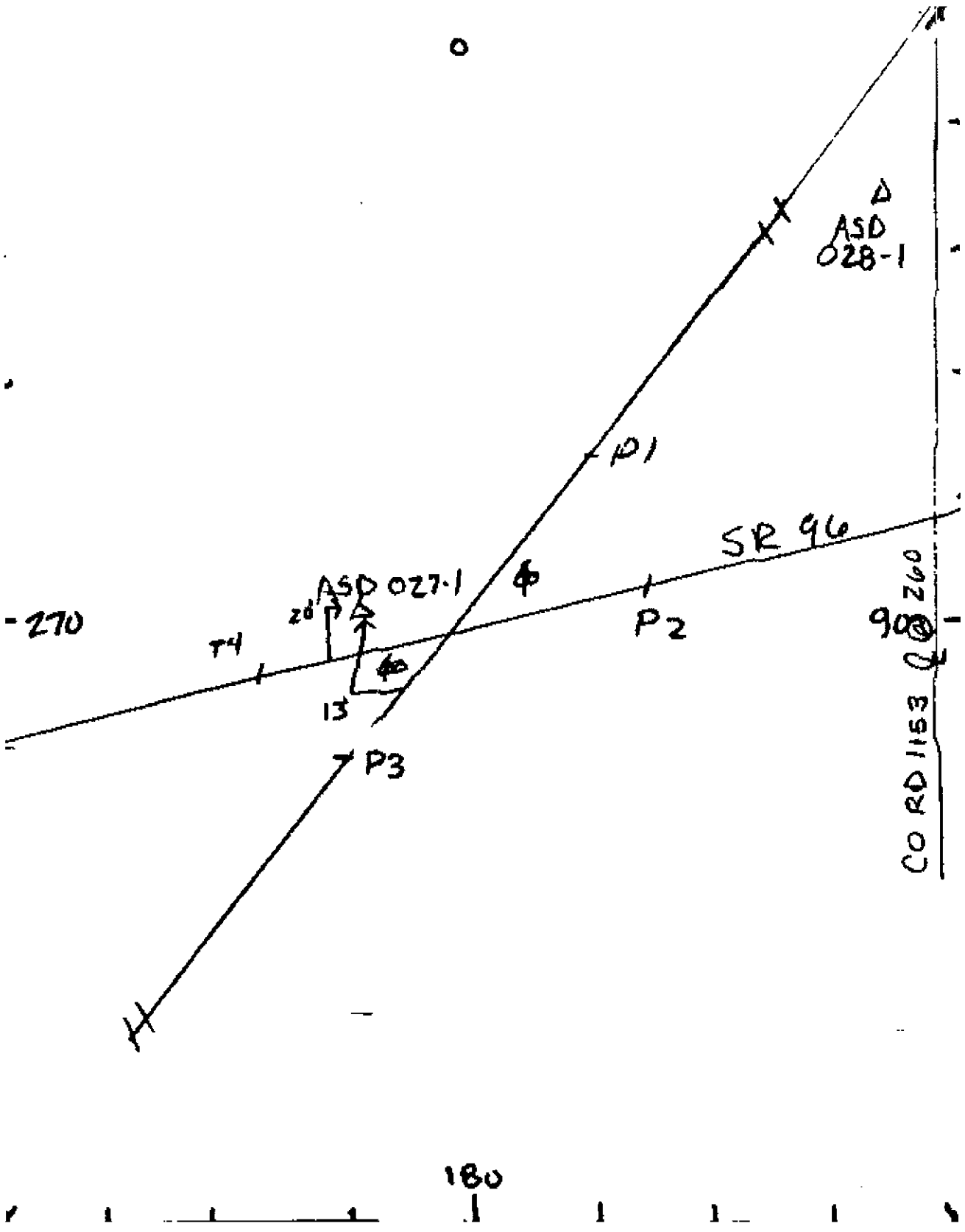
☐ Install/upgrade traffic signal preemption	
☐ No improvements needed	

☐ Other (define)

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

Field Dimensions

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ASD
028-1
D1
SR 96
ASD 027-1
270
T4
20'
40
13
P2
P3
90
260
CO RD 1163
180

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.

3/29/16

OHIO RAIL DEVELOPMENT COMMISSION

Ohio Rail Development Commission
Mail Stop 3140, 1980 W. Broad Street,
Columbus, OH 43223

Diagnostic Review Team Survey

Reason for Survey: (e.g. formula, accident, constituent, etc.) Constituent – Railroad

Date: 3/29/2016

Location Data

Street or Road Name:	Main Street				
Route/Road Number (i.e. Twp., Co., SR or US)	SR 301-6.19			US DOT No.:	265027S
County: WAY	Township: -	City: (In or Near)	Village of West Salem		
Railroad Name: Ashland Railway	Railroad Division: Pittsburgh			Branch/Line Name:	ML Sal&Galion
Nearest RR Timetable Station: West Salem				RR Milepost:	238.01

On-Site Review Team

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

1. Jo Rehrdt ORDC 614-644-0291
2. Dave Richardson Ashland Railway 419-566-4350
3. Jason Schraibman ODOT 419-207-7028
4. Scott Patsolic Ashland RR. 419-325-2822
5. George Mann PUCO 614-752-9107
6.
7.
8.
9.

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	☒ Yes	☐ No	2
'Stop' Signs	☐ Yes	☒ No	
'Stop Ahead' Signs	☐ Yes	☒ No	
Pavement Markings (condition?)	☒ Yes	☐ No	2
Crossbucks	☒ Yes	☐ No	2
Number of Tracks Signs	☐ Yes	☒ No	
Inventory Tags	☐ Yes	☒ No	
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: 141
Bells	☒ Yes	☐ No	Number: 1
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	0	
Hazard Ranking	4276 Date Run: 3/8/2016	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	2	
< 1 per day		
Day thru trains		
Night thru trains		
Daytime switching movements	2	
Nighttime switching movements		
Total number of tracks	1	ONE
Number of main tracks	1	0
Number of other tracks	1 Side Track	0
Maximum train speed	10	
Typical train speed	10	
Amtrak		

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

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: Village of West Salem

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	3036 (2014)	
Highway paved	X Yes ☐ No	☐ Yes ☐ No

Roadway Surface: ☒ Blacktop ☐ Gravel ☐ Concrete ☐ Other _____

Roadway width: 20 ft.

Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: __MPH	25	

School Bus Operation: ☐ No ☒ Yes __ Amount

Hazardous Materials Trucks: ☒ No ☐ Yes .08 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 _____ Curb and Gutter:	Quadrant _____ Curb and Gutter:
☐ Functional (Curb height = 4" or more)	☐ Functional (Curb height = 4" or more)
☐ Non-functional (Curb height = Less than 4")	☐ Non-functional (Curb height = Less than 4")
☒ None	☒ None

Pedestrians: ☐ No ☑ Yes

Is sidewalk present? ☐ No ☒ Yes Two

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 there a 'Do not Stop on Track' sign? ☒ No ☐ 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? ☒ No ☐ 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: ☒ No ☐ Yes

Explain reasons: State Route King

Type of Development

☒ Open Space	☐ Institutional	Location of nearby schools:
☒ Industrial	☐ Commercial	
☑ Residential		

Utility Information

Is commercial power available? ☐ No ☒ Yes

Utility Provider (Company Name) Unknown Phone Number _____

Nearest Available Power Source _____

What other utilities are present? (add locations to sketch)
☒ Gas ☒ Cable ☒ Telephone ☐ Fiber Optic Cable
☐ Petroleum ☐ Water ☐ Sanitary Sewer
☐ Other _____

Is(are) there potential utility conflict(s) ☐ Yes ☐ No ☑ Unknown

Comments:

Potential Red Flags / Project Challenges

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

Crossing Consolidation or Closure:

Real Estate or ROW:

Culverts / Drainage / Ballast Conditions:

Roadway and/or Sidewalks:

Sidewalks on Outside of F/g's on Both Quadrants

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

Environmental:

Other:

(1) Possible painted edge lines 8'3"

(2) Curbs ~~may~~ be required and may be sidewalk relocation. 4'3"

3/29/16

Diagnostic Team Recommendations

	Quadrants Needed
☒ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
☒ AFLS / Gates	Total Upgrade; OR
☐ AFLS / Gates / Cants	
☒ Bells / number	ONE
☐ Upgrade circuitry / type	
☐ Sidelights	
☐ Guardrail Needed	
☒ Install/Replace curb	
☐ Bungalow placement & offset from rail & highway	
☒ Other (define)	Resolve the gate mech Issues & 12" LEDs.

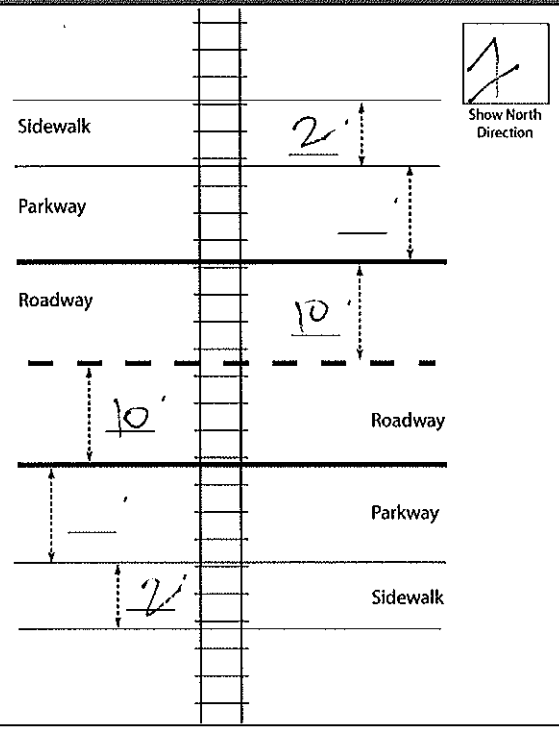
Comments: Trucks keep hitting the gates at this location.
Gate keepers with springs & NO PINS REQUIRED.

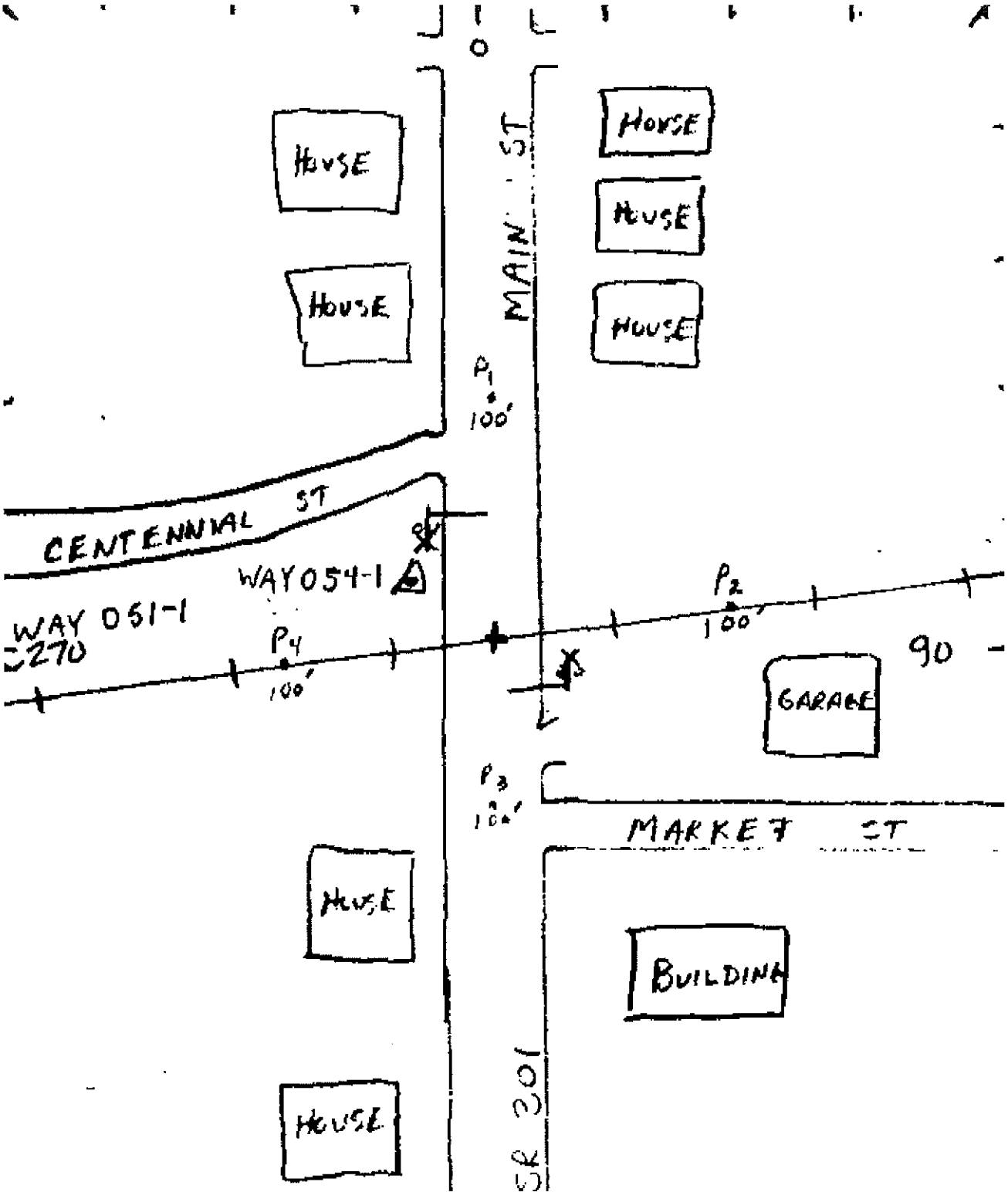
☐ Install/upgrade traffic signal preemption	
☐ No improvements needed	

☐ Other (define)

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

Field Dimensions

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100'
P2
100'
90
GARAGE
P3
100'
MARKET ST
HOUSE
BUILDING
HOUSE
SR 201

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.

3/29/16

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

9/12/2017 1:58:16 PM

in

Case No(s). 17-1975-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at Ashland Railway Crossings, DOT#264-982E, TR 1455 & DOT#264-989C, SR 96 in Ashland County & DOT#265-027S, SR 301, in Wayne County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division