

# Memo

To: Docketing Division  
From: Jill Henry, Rail Specialist, Rail Division  
Cc: PUCO Legal Department  
Date: 3/8/17

Re: PUCO Case No. 17-682-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the RJ Corman Railroad Crossing, S. Copus Road/TR 146 DOT#261-647S in Allen County, Ohio.

---

On September 14, 2016, the Ohio Rail Development Commission (ORDC) authorized funding for RJ Corman Railroad to install lights and gates and a new crossing surface at S. Copus Road/TR 146 DOT#261-647S in Allen County, Ohio. The crossing was surveyed on April 4, 2016 and found to warrant the upgrades. The electric utility provider for this crossings is American Electric Power-Ohio Power.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amounts of \$178,281.55 for the installation of lights and gates and \$37,163.20 for reconstruction of the roadway surface (total project cost of \$215,444.75) 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:**

RJ Corman Railroad  
James Kelley  
Funded Projects Coordinator  
P.O. Box 788  
101 RJ Corman Drive  
Nicholasville, KY 40356

RJ Corman Railroad  
Deborah Hawley  
Funded Projects Coordinator  
P.O. Box 788  
101 RJ Corman Drive  
Nicholasville, KY 40356

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

Shawnee Township, Allen County  
David Belton  
Trustee  
2530 Ft. Amanda Road  
Lima, Ohio 45804

American Electric Power- Ohio Power

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

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

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

**BY:** Don Damron, Project Manager, ORDC

**SUBJECT:** Allen County, TR 146, S. Copus Rd. / RJC  
DOT# 261647S  
PID# 103521

**DATE:** February 9, 2017

---

The Ohio Rail Development Commission (ORDC) established a Diagnostic Review Team Survey at the subject highway/railroad crossing location on 4/4/2016. The Public Utilities Commission of Ohio (PUCO) attended the Diagnostic Survey.

The Diagnostic Review Team recommended the installation of new active warning devices, flashing lights and gates and the replacement of the roadway surface. A copy of the Diagnostic Review Team Survey form is attached.

The engineering plans and cost estimate have been provided by the railroad and ORDC has approved the site plan and estimate 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.

**Attachments:**

Diagnostic Review Team Survey dated 4/4/2016  
RJ Corman Railroad Company / Western Ohio Lines Cost Estimate  
Proposed Crossing Layout – PE Approved Signal Display Layout

**cc:** Jill Henry, PUCO  
ORDC Project Manager (file)



# OHIO RAIL DEVELOPMENT COMMISSION

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

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

February 9, 2017

Ms. Deborah J. Hawley  
Real Estate & Funded Projects Manager  
R. J. Corman Railroad Group  
PO Box 788  
Nicholasville, KY 40340

RE: Construction Authorization for Grade Crossing Warning Devices Improvement  
Allen County, TR 146, S. Copus Rd.  
DOT# 261 647S  
PID# 103521

Dear Ms. Hawley:

The cost estimate and the engineering plans for the referenced project have been reviewed and are acceptable. The R. J. Corman Railroad Group may proceed with the construction of the proposed grade crossing warning device improvement 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 \$215,444.75 and is broken down as follows: \$178,281.55 for the installation of the active warning devices, and \$37,163.20 for the reconstruction of the roadway surface. Additional costs related to the asphalt paving of the roadway surface and any other 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 RJ Corman Railroad Group accepting the following instructions:

1. RJ Corman Railroad's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Don Damron, ORDC, email [don.damron@dot.ohio.gov](mailto:don.damron@dot.ohio.gov), and to the Public Utilities Commission of Ohio at [Jill\\_Henry@puc.state.oh.us](mailto:Jill_Henry@puc.state.oh.us). RJ Corman Railroad Company'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. RJ Corman Railroad will coordinate with Shawnee Township and/or the Allen County Engineers office to finalize the construction schedule and coordinate the arrangements necessary to close TR 146, Copus Rd, control traffic, and arrange for and complete the reconstruction of the roadway surface including any asphalt paving that will be required.



[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

3. RJ Corman Railroad Group 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 RJ Corman Railroad Group.
4. RJ Corman Railroad Group's project foremen will notify Don Damron at 614-917-8466 (mobile telephone) or [don.damron@dot.state.oh.us](mailto:don.damron@dot.state.oh.us) (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.
5. The installation of the new warning device system will include any ancillary work needed to make the warning devices function as designed and to satisfy MUTCD requirements.
6. RJ Corman Railroad Group will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
7. RJ Corman Railroad Group 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,



Donald J. Damron  
Project Manager

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

**RJ Corman Railroad Company / Western Ohio Lines****County: Allen****Location: S. Copus Road (TR 146)****DOT#: 261647S****MP: SP 56.3****Estimate for Grade Crossing Surface and Signal Warning System****Crossing Surface**

<b>Material</b>	<b>Quantity</b>	<b>Unit</b>	<b>Description</b>	<b>Unit Price</b>	<b>Extension</b>
	42	TF	4' Concrete Crossing Module (Tub Type)	\$ 360.00	\$ 15,120.00
	120	Ft	115 RE New Rail (60 Ft Pieces)	\$ 30.00	\$ 3,600.00
	100	Tons	Stone	\$ 28.00	\$ 2,800.00
	3	Keg	Spikes (50#)	\$ 45.00	\$ 135.00
	26	Each	Ties (7x9 Grade 5)	\$ 75.00	\$ 1,950.00
	104	Each	Anchors (115 RE)	\$ 2.30	\$ 239.20
	52	Each	Plates	\$ 17.00	\$ 884.00
	4	Each	Field Welds (115 RE)	\$ 140.00	\$ 560.00
	1	Keg	Track Bolts w/ Washers (50/keg)	\$ 175.00	\$ 175.00
	50	Tons	Asphalt Paving	\$ 200.00	\$ 10,000.00
	1	LS	Traffic Control and Sign Upgrade	\$ 200.00	\$ 200.00
	1	LS	Asphalt/Tie Disposal	\$ 1,500.00	\$ 1,500.00
<b>Material Sub-total</b>					<b>\$ 37,163.20</b>

**Labor**

<b>Labor</b>	<b>Hours</b>				
	25	1	Supervisor	\$ 55.00	\$ 1,375.00
	25	4	Laborers	\$ 35.00	\$ 3,500.00
	25	2	Operator	\$ 40.00	\$ 2,000.00
	25	1	Welder	\$ 45.00	\$ 1,125.00
	3	1	Inspector	\$ 55.00	\$ 165.00
<b>Labor Sub-total</b>					<b>\$ 8,165.00</b>

**Equipment**

<b>Equipment</b>	<b>Hours</b>				
	25	1	Backhoe	\$ 42.00	\$ 1,050.00
	25	1	Prentice Truck	\$ 70.00	\$ 1,750.00
	25	1	P/U Truck (F-250)	\$ 22.00	\$ 550.00
	25	1	Dump Truck	\$ 83.00	\$ 2,075.00
	25	1	Work Truck (F-550)	\$ 35.00	\$ 875.00
	25	1	Backhoe Trailer	\$ 8.00	\$ 200.00
	25	1	Trackhoe	\$ 90.00	\$ 2,250.00
	5	1	Tamper	\$ 300.00	\$ 1,500.00
	5	1	Ballast Regulator	\$ 120.00	\$ 600.00
	3	1	Inspector Truck	\$ 24.00	\$ 72.00
<b>Equipment Sub-total</b>					<b>\$ 10,922.00</b>

**Crossing Surface Total****\$ 56,250.20****Signal**

			Complete Signal Warning System		\$ 157,764.55
	16	1	Signal Superintendent/Inspector Labor	\$ 60.00	\$ 960.00
	1	2	Lodging and Per Diem	\$ 230.00	\$ 230.00
	16	1	Work Truck	\$ 15.00	\$ 240.00
<b>Signal Warning System Total</b>					<b>\$ 159,194.55</b>

<b>Project Total:</b>	<b>Crossing Surface and Signal Warning System</b>	<b>\$ 215,444.75</b>
-----------------------	---	----------------------

\*Labor rates include hotel and per diem

SH. NO.	CONTENTS	REVISION NO.				
		1	2	3	4	5
NX1	INDEX SHEET					
1	TRACK PLAN					
2	PROFILE					
3	TRACK LAYOUT					
4	LOAD CENTER WIRING					
5	DC POWER					
6	SCX-1 CONNECTIONS					
7	CROSSING CONTROLLER HOOK-UP					
8	LIGHTING/SURGE PANEL HOOK-UP					
9	GATE & FLASHER CIRCUITS SIGNAL "A"					
10	GATE & FLASHER CIRCUITS SIGNAL "B"					
11	TERMINAL BOARD					
12	HOUSE SIDE A LAYOUT					
13	HOUSE SIDE B LAYOUT					
14	HOUSE SIDE C LAYOUT					
15	HOUSE SIDE D LAYOUT AND TOP VIEW					

REVISIONS					
1	08-31-16	DEW	RJC	XXX	
NEW PLAN DRAWN ACCOUNT NEW HOUSE INSTALL					
FILE: R-XXXX					
IN SERVICE: XX-XX-XX					
PER: XXX				XXX	XXX

ESTIMATING & MATERIALS

INDEX SHEET

RJ CORMAN RAILROAD

 = SHEETS AFFECTED

 = AIS COMPLETE

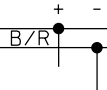


DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.NX1  
SHEET NX1

PDR\_SP5627\_DBA.pdf 10/18/2016



- #### 4. DOUBLE BOND JOINTED RAIL FOR 1103' APPROACHES.

## TRACK PLAN

RJ CORMAN RAILROAD

NOTES:

- NOTES:  
1. MAX TRAIN SPEED 25 MPH  
2. SIGNAL "A" TO HAVE BELL



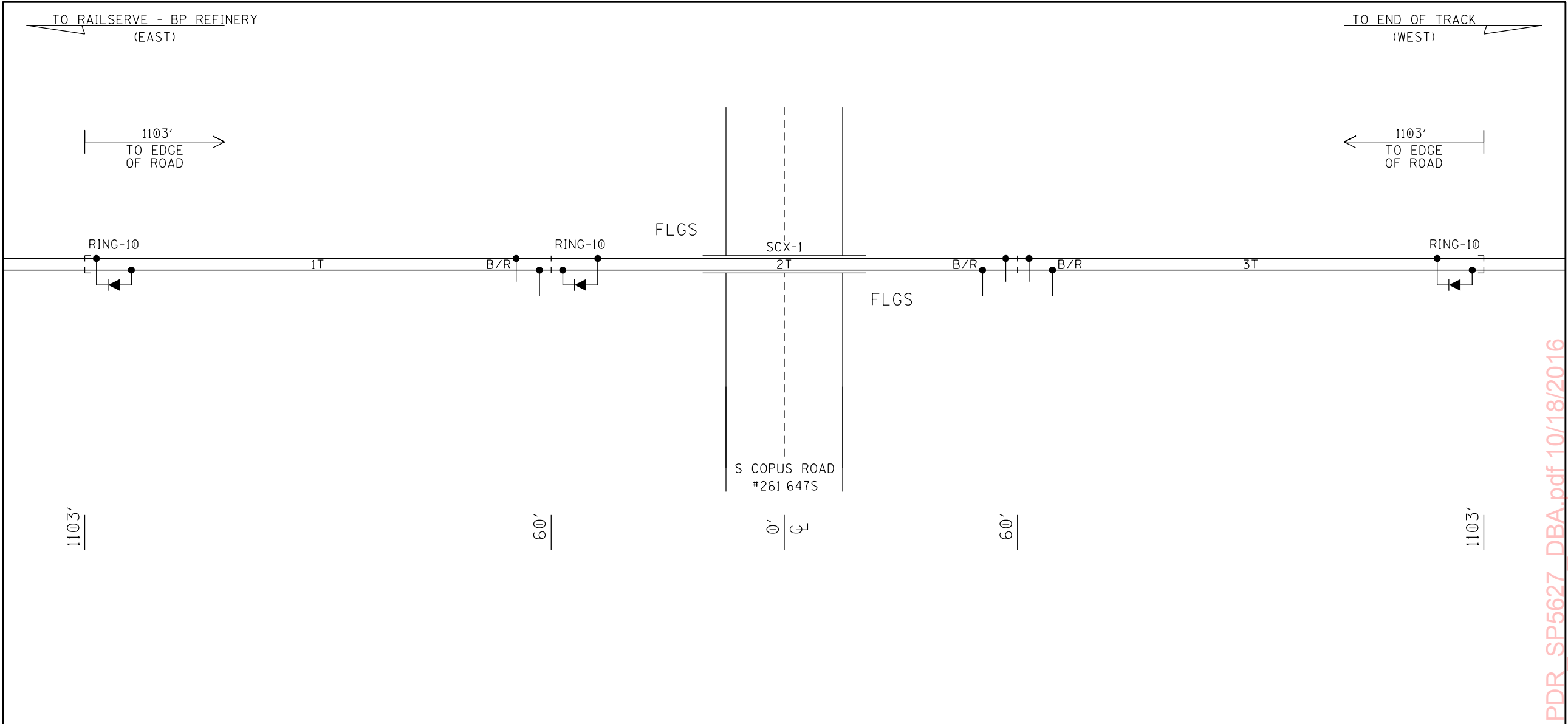
DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.01  
SHEET 01

PDR\_SP5627\_DBA.pdf 10/18/2016





# ESTIMATING & MATERIALS

PROFILE

## RJ CORMAN RAILROAD

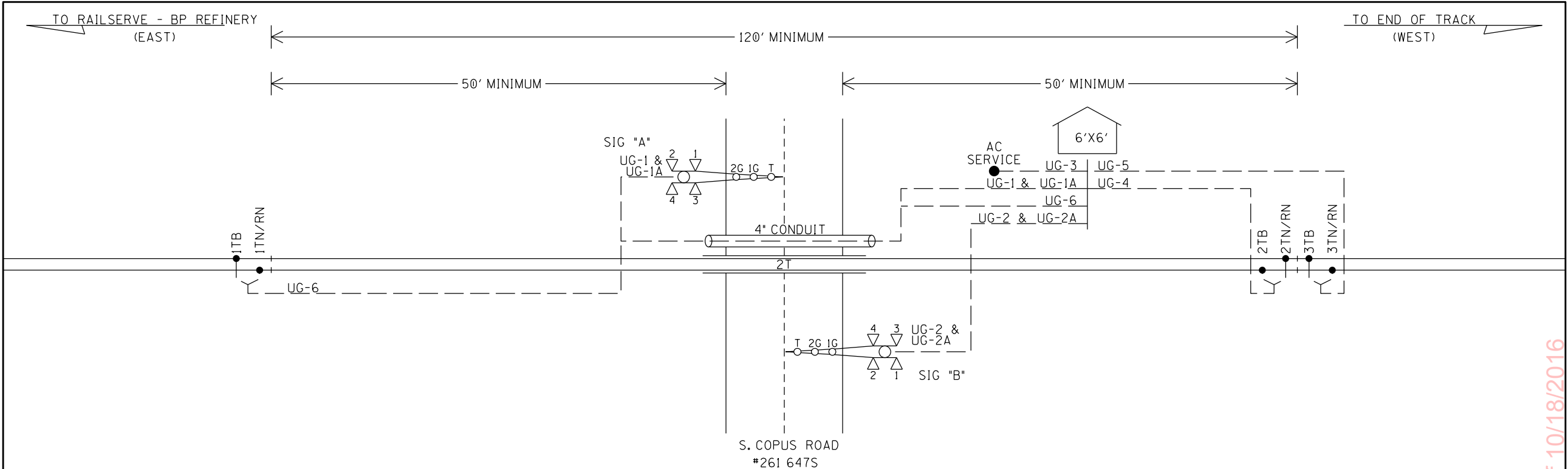
- NOTES:
- 1. MAX TRAIN SPEED 25 MPH
  - 2. SIGNAL "A" TO HAVE BELL

**RJ Corman  
Signaling, LLC**

101 RJ CORMAN DRIVE  
NICHOLASVILLE, KY 40356

DESIGNED BY: DEW	S. COPUS ROAD LIMA, OH SPEG SUBDIVISION	DATE: 08/31/16
DIGITIZED BY: RJC		FILE: SP5627.02
CHECKED BY: DBA		SHEET 02

PDR\_SP5627\_DBA.pdf 10/18/2016



UG-1-5CUG #6		UG-1A-5CUG #14	UG-3-3CUG #6 W/#8 GND	UG-4-TW, PR. #6
AEC		1GC-A	BX120-A	1TB
AEZ		1BELL-A	BX120-B	1TN/RN
AEB		GP	NX120	
B16-A		GP1-A	GND	UG-5-TW, PR. #6
N16-A		SPARE 1		2TB
				2TN/RN
UG-2-5CUG #6		UG-2A-5CUG #14		UG-6-TW, PR. #6
BEC		1GC-B		3TB
BEZ		SPARE 1		3TN/RN
BEB		GP1-B		
B16-B		SPARE 2		
N16-B		SPARE 3		

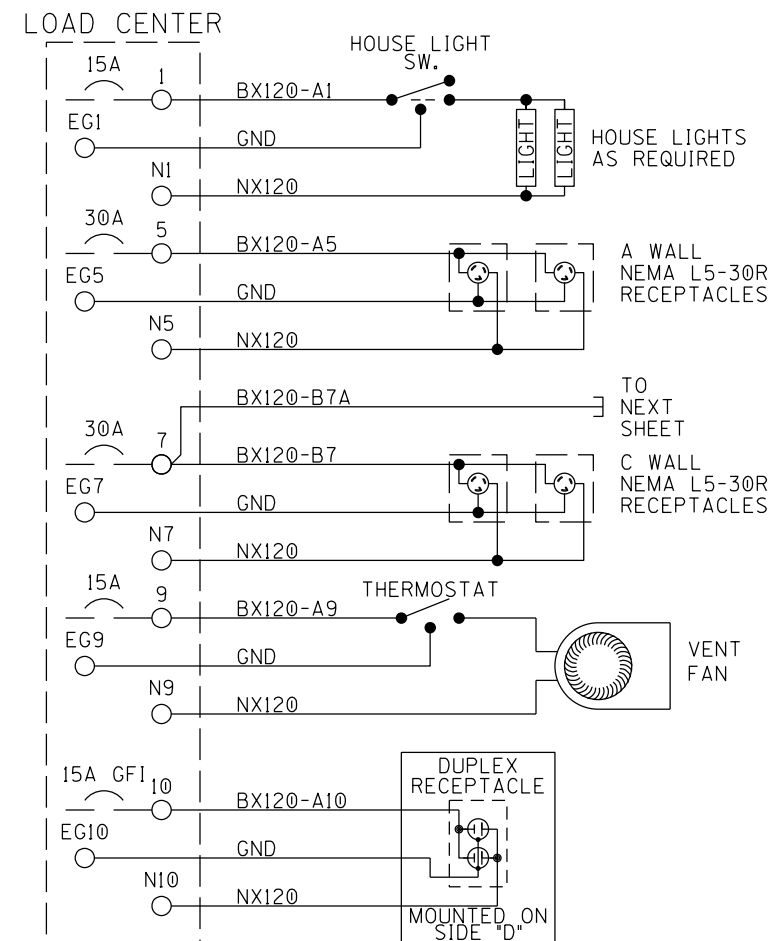
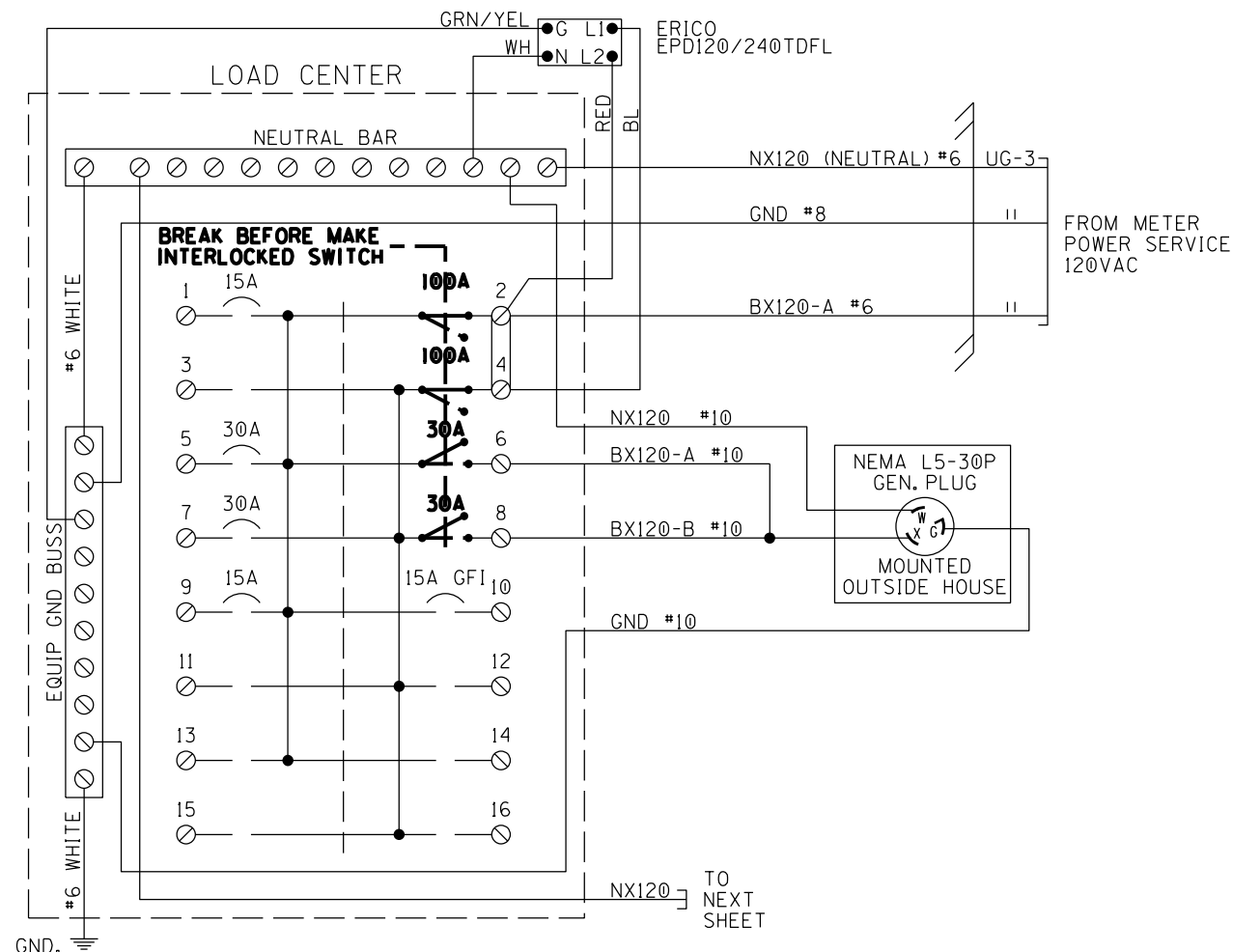
# ESTIMATING & MATERIALS

TRACK LAYOUT

RJ CORMAN RAILROAD		
DESIGNED BY: DEW	S. COPUS ROAD	DATE: 08/31/16
DIGITIZED BY: RJC	LIMA, OH	FILE: SP5627.03
CHECKED BY: DBA	SPEG SUBDIVISION	SHEET 03



PDR\_SP5627\_DBA.pdf 10/18/2016



#### SQUARE "D" PART NUMBERS:

LOAD CENTER — Q0116L125G  
 10A 1P CIR BKR — Q0110  
 10A 2P CIR BKR — Q0210  
 15A 1P GFI CIR BKR — Q0115GFI  
 15A 1P CIR BKR — Q0115  
 20A 1P CIR BKR — Q0120  
 30A 1P CIR BKR — Q0130  
 30A 2P CIR BKR — Q0230  
 60A 2P CIR BKR — Q0260  
 100A 2P CIR BKR — Q02100  
 MECH INTERLOCK — PK4DTIM4LA

NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS. ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDED. ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

DO NOT USE OR INSTALL 240VAC EQUIPMENT IN THIS HOUSE.

ESTIMATING & MATERIALS

CONSTRUCTION NOTE:  
 FIELD TO VERIFY IF 120VAC OR 240VAC USED  
 AND MARK THE SHEETS APPROPRIATELY.

LOAD CENTER WIRING (120V)

RJ CORMAN RAILROAD

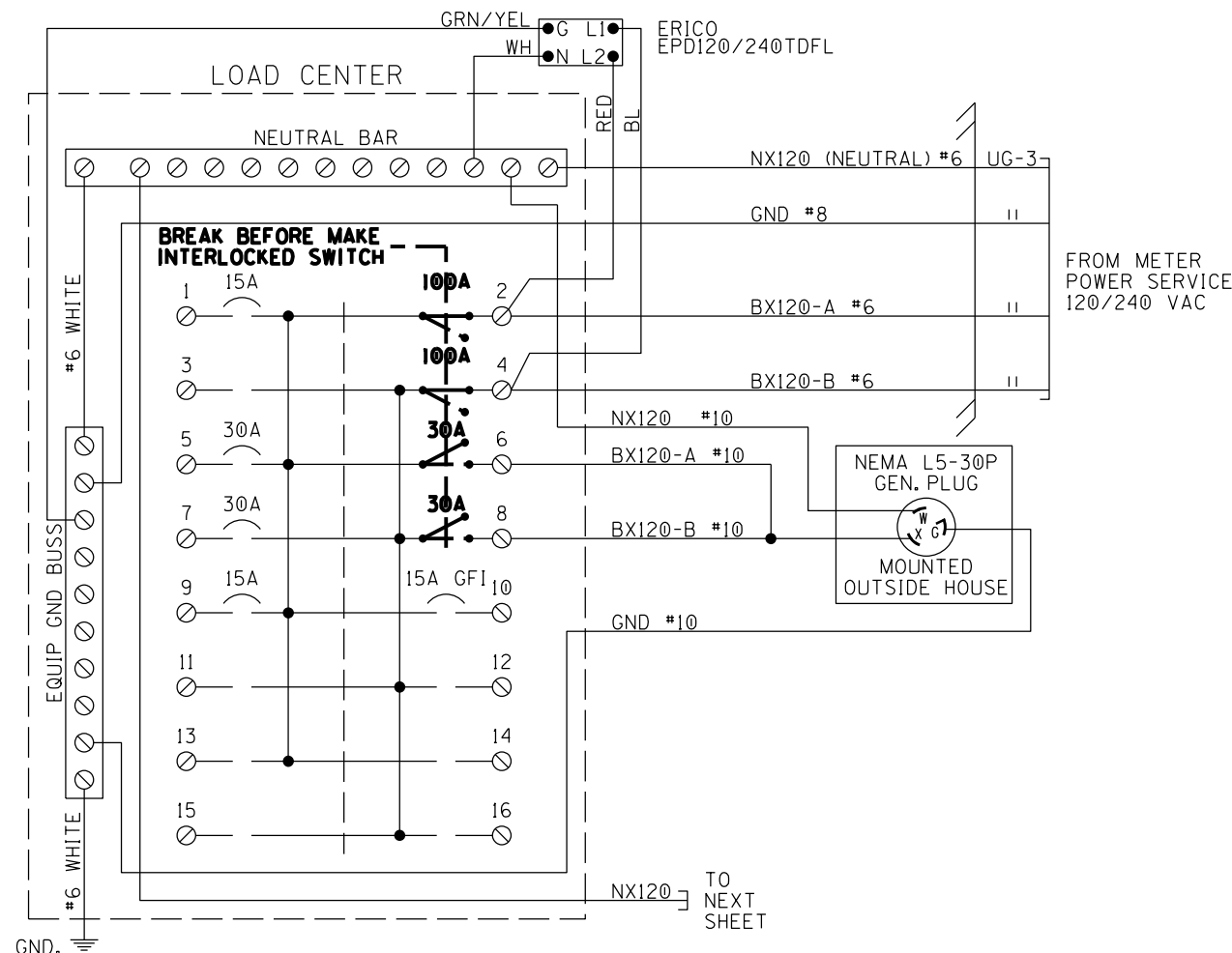


DESIGNED BY: DEW  
 DIGITIZED BY: RJC  
 CHECKED BY: DBA

S. COPUS ROAD  
 LIMA, OH  
 SPEG SUBDIVISION

DATE: 08/31/16  
 FILE: SP5627.04  
 SHEET 04

PDR\_SP5627\_DBA.pdf 10/18/2016

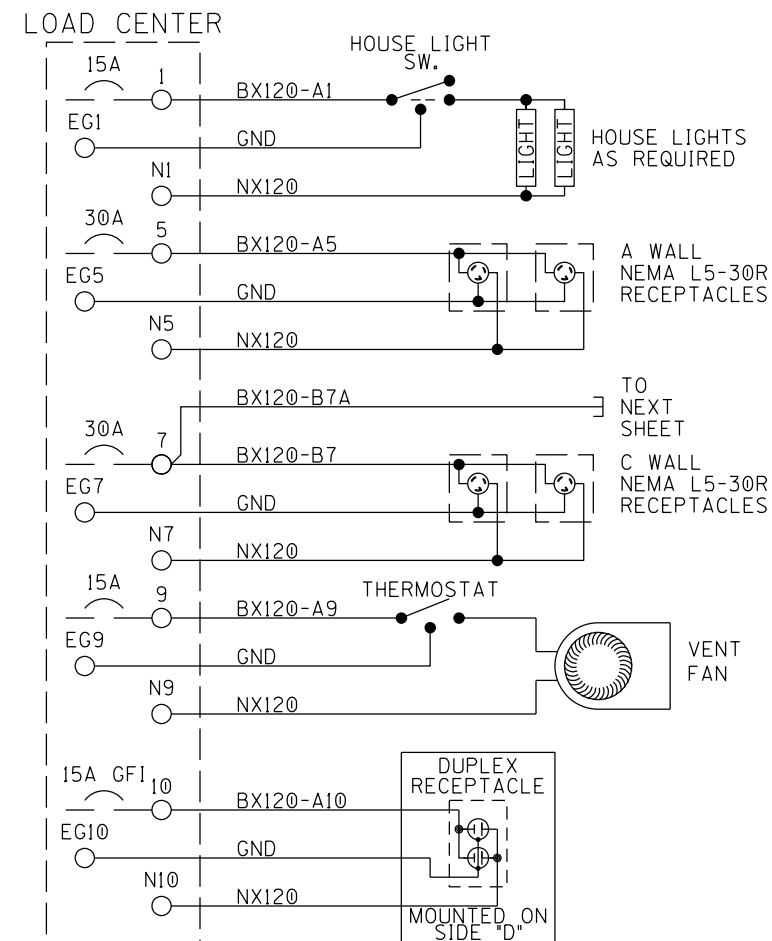


#### SQUARE "D" PART NUMBERS:

LOAD CENTER — Q0116L125G  
 10A 1P CIR BKR — Q0110  
 10A 2P CIR BKR — Q0210  
 15A 1P GFI CIR BKR — Q0115GFI  
 15A 1P CIR BKR — Q0115  
 20A 1P CIR BKR — Q0120  
 30A 1P CIR BKR — Q0130  
 30A 2P CIR BKR — Q0230  
 60A 2P CIR BKR — Q0260  
 100A 2P CIR BKR — Q02100  
 MECH INTERLOCK — PK4DTIM4LA

NOTE: ALL AC WIRING IS TO BE IN METALLIC CONDUIT WITH NO EXPOSED TERMINALS.  
 ALL AC 120V AND 240V EQUIPMENT IS TO BE PROPERLY GROUNDED.  
 ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

DO NOT USE OR INSTALL 240VAC EQUIPMENT IN THIS HOUSE.



CONSTRUCTION NOTE:  
 FIELD TO VERIFY IF 120VAC OR 240VAC USED  
 AND MARK THE SHEETS APPROPRIATELY.

LOAD CENTER WIRING (240V)

## RJ CORMAN RAILROAD



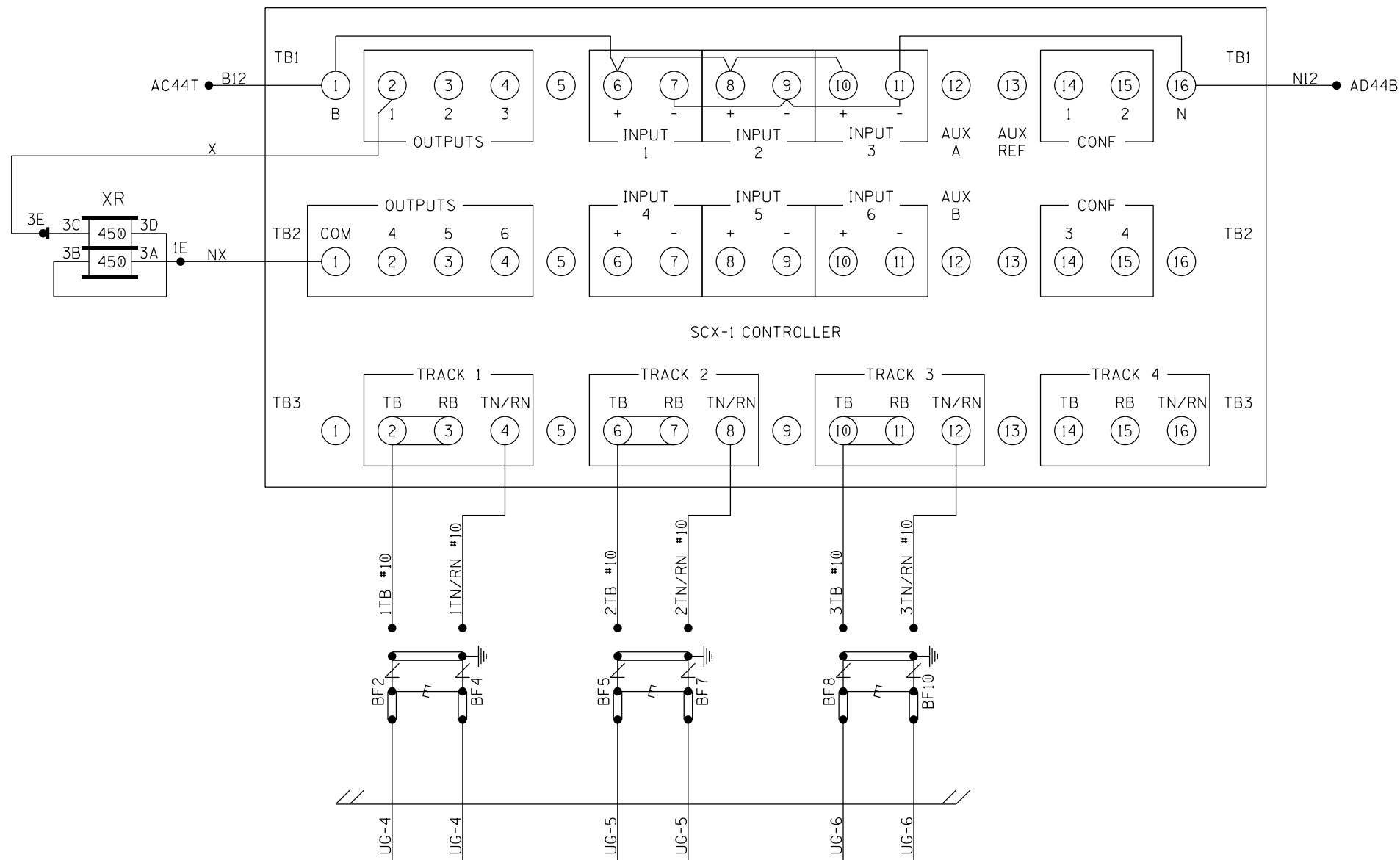
DESIGNED BY: DEW  
 DIGITIZED BY: RJC  
 CHECKED BY: DBA

S. COPUS ROAD  
 LIMA, OH  
 SPEG SUBDIVISION

DATE: 08/31/16  
 FILE: SP5627.04A  
 SHEET 04A

PDR\_SP5627\_DBA.pdf 10/18/2016





NOTES:  
ALL WIRING TO BE #16AWG  
UNLESS NOTED OTHERWISE.

ESTIMATING & MATERIALS

SCX-1 CONNECTIONS

RJ CORMAN RAILROAD



DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.06  
SHEET 06

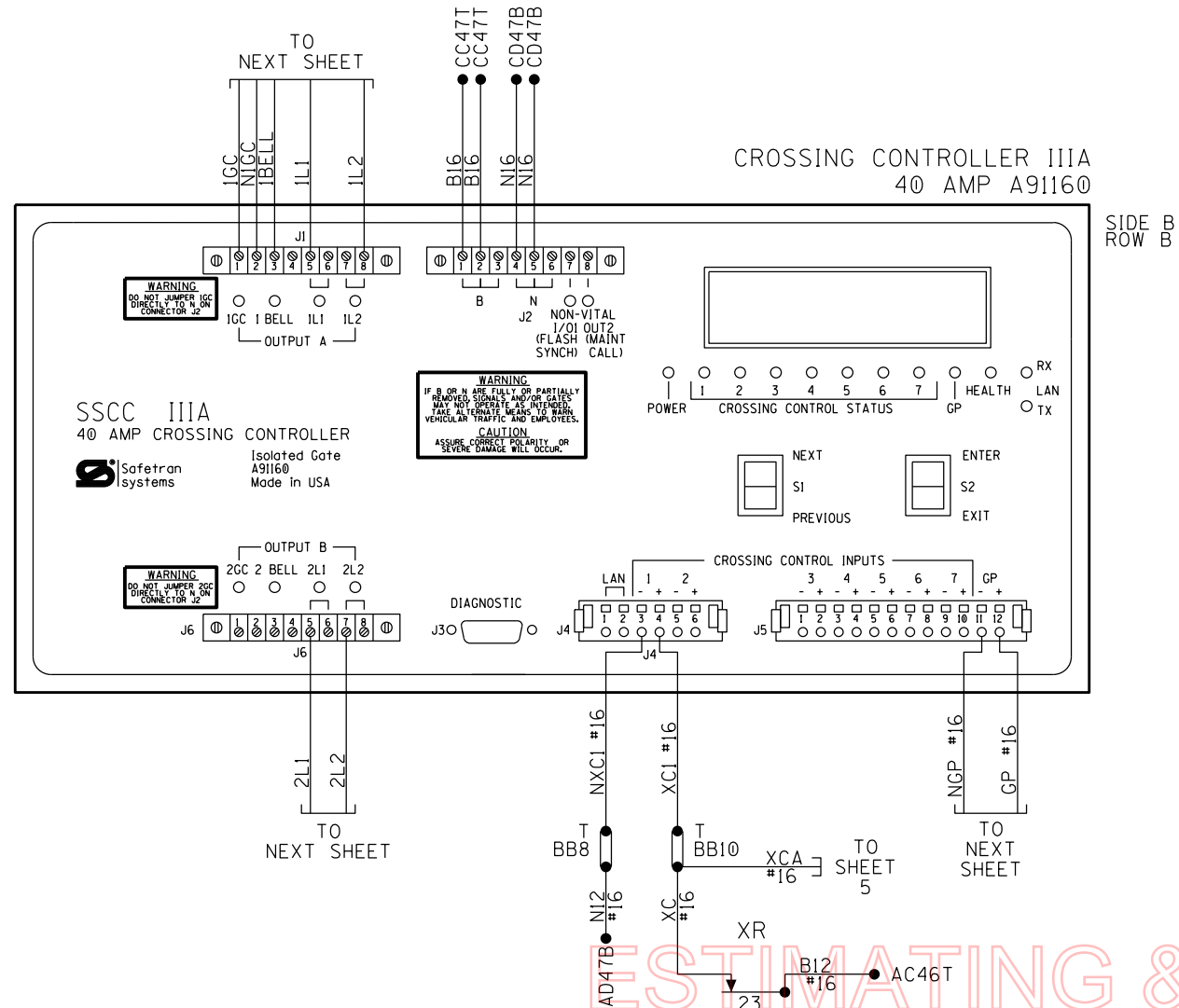
PDR\_SP5627\_DBA.pdf 10/18/2016

PROGRAM	
FLASHER RATE	50
1 GC DELAY	4 SEC.
2 GC DELAY	SEC.
BELL-ON GATE RISING	NO
ENABLE INPUTS	1 THRU 1
ENABLE OUTPUTS	A AND B
LOW BATT	DISABLED
SET TO DEFAULT	SKIP
TIME	
DATE	
DAYLIGHT SAVINGS	ON
PASSWORD	DISABLED

SETUP LAMP VOLTAGE #
SETUP OUTPUT 1L1 XX.X VOLTS
SETUP OUTPUT 1L2 XX.X VOLTS
SETUP OUTPUT 2L1 XX.X VOLTS
SETUP OUTPUT 2L2 XX.X VOLTS

# CONSTRUCTION TO MARK VOLTAGE SETTINGS FOR AS BUILT REVISION.

NOTES:  
ALL WIRING TO BE #10AWG  
UNLESS NOTED OTHERWISE.



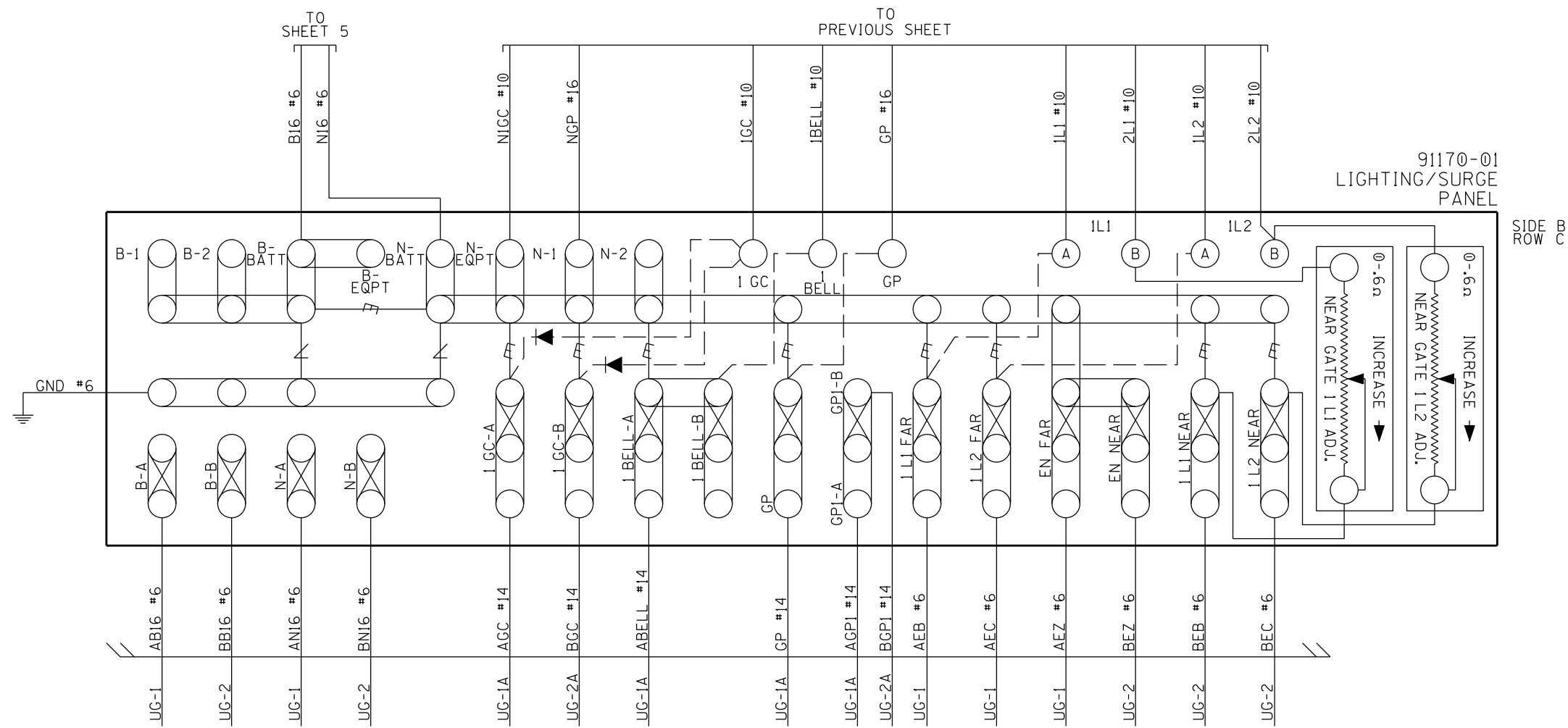
ESTIMATING & MATERIALS

CROSSING CONTROLLER HOOK-UP

RJ CORMAN RAILROAD



DESIGNED BY: DEW	S. COPUS ROAD	DATE: 08/31/16
DIGITIZED BY: RJC	LIMA, OH	FILE: SP5627.07
CHECKED BY: DBA	SPEG SUBDIVISION	SHEET 07



# ESTIMATING & MATERIALS

LIGHTING/SURGE PANEL HOOK-UP

NOTE:

- = HEAVY DUTY EQUALIZER 022700-1X
- ∠ = HEAVY DUTY CLEARVIEW ARRESTER 022585-1X



## RJ CORMAN RAILROAD

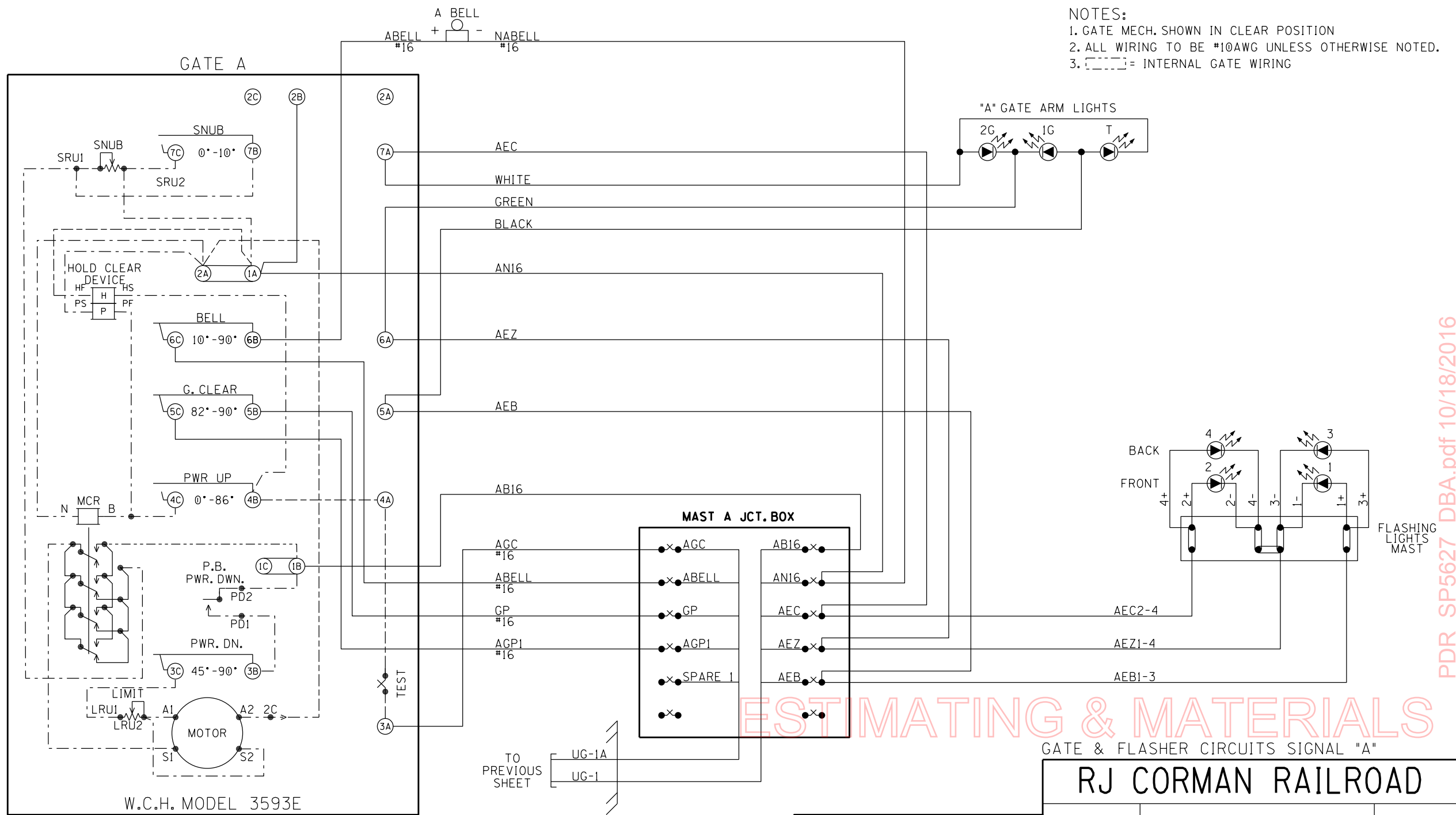
DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

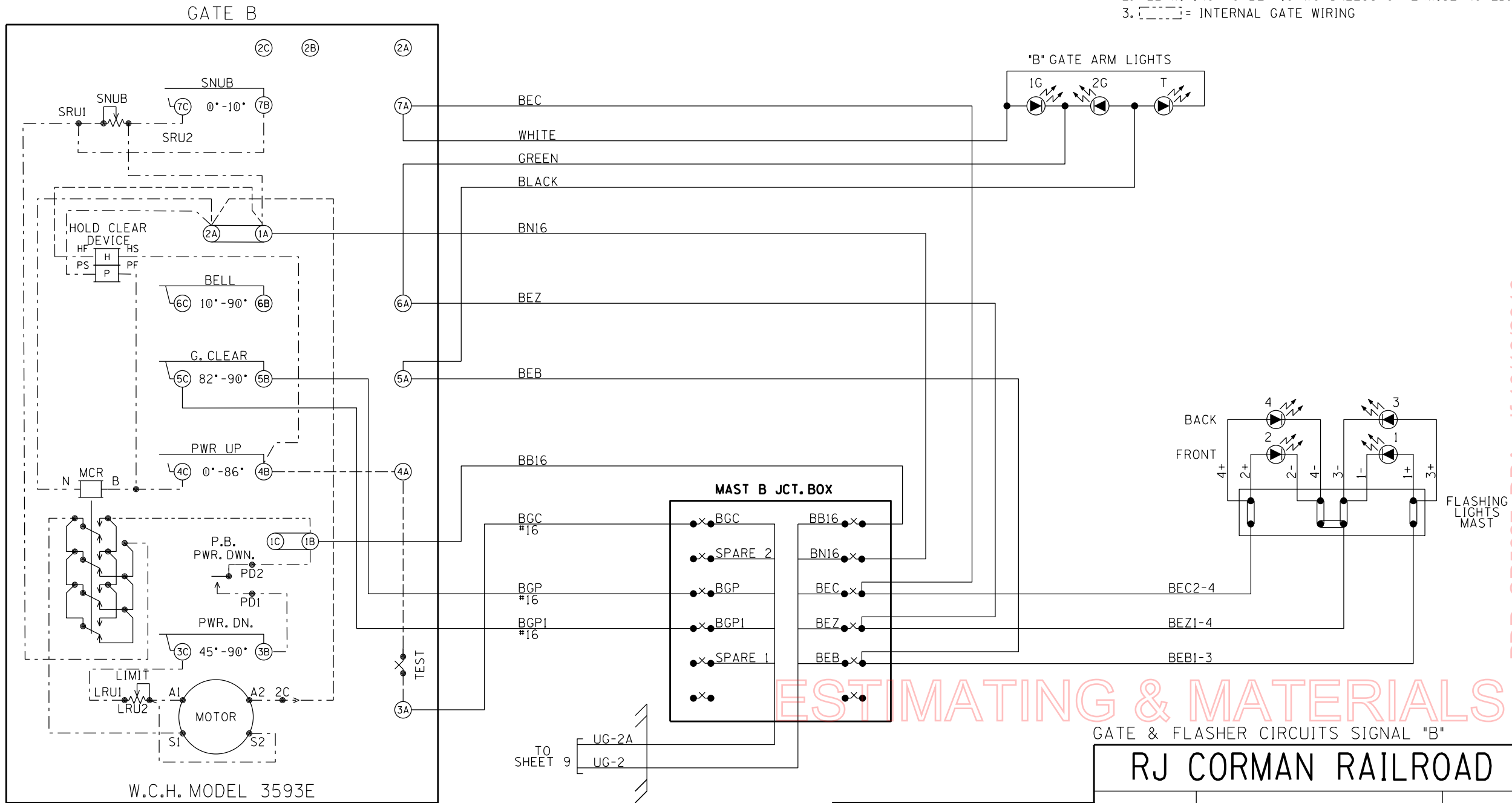
DATE: 08/31/16  
FILE: SP5627.08  
SHEET 08

PDR\_SP5627\_DBA.pdf 10/18/2016






- NOTES:  
1. GATE MECH. SHOWN IN CLEAR POSITION  
2. ALL WIRING TO BE #10AWG UNLESS OTHERWISE NOTED.  
3. [---] = INTERNAL GATE WIRING



RJ CORMAN RAILROAD		
DESIGNED BY: DEW	S. COPUS ROAD	DATE: 08/31/16
DIGITIZED BY: RJC	LIMA, OH	FILE: SP5627.10
CHECKED BY: DBA	SPEG SUBDIVISION	SHEET 10

PDR\_SP5627\_DBA.pdf 10/18/2016

NOTE: INSTALL TEST LINKS ON ALL TRACK  
WIRES AND ON ALL LOW VOLTAGE  
UNDERGROUND CABLE TERMINATIONS.

 = Heavy Duty Equalizer  
(022700-1X)

 = Clearview  
= Lightning Arrestor  
(022585-1X)



TERMINAL BOARD

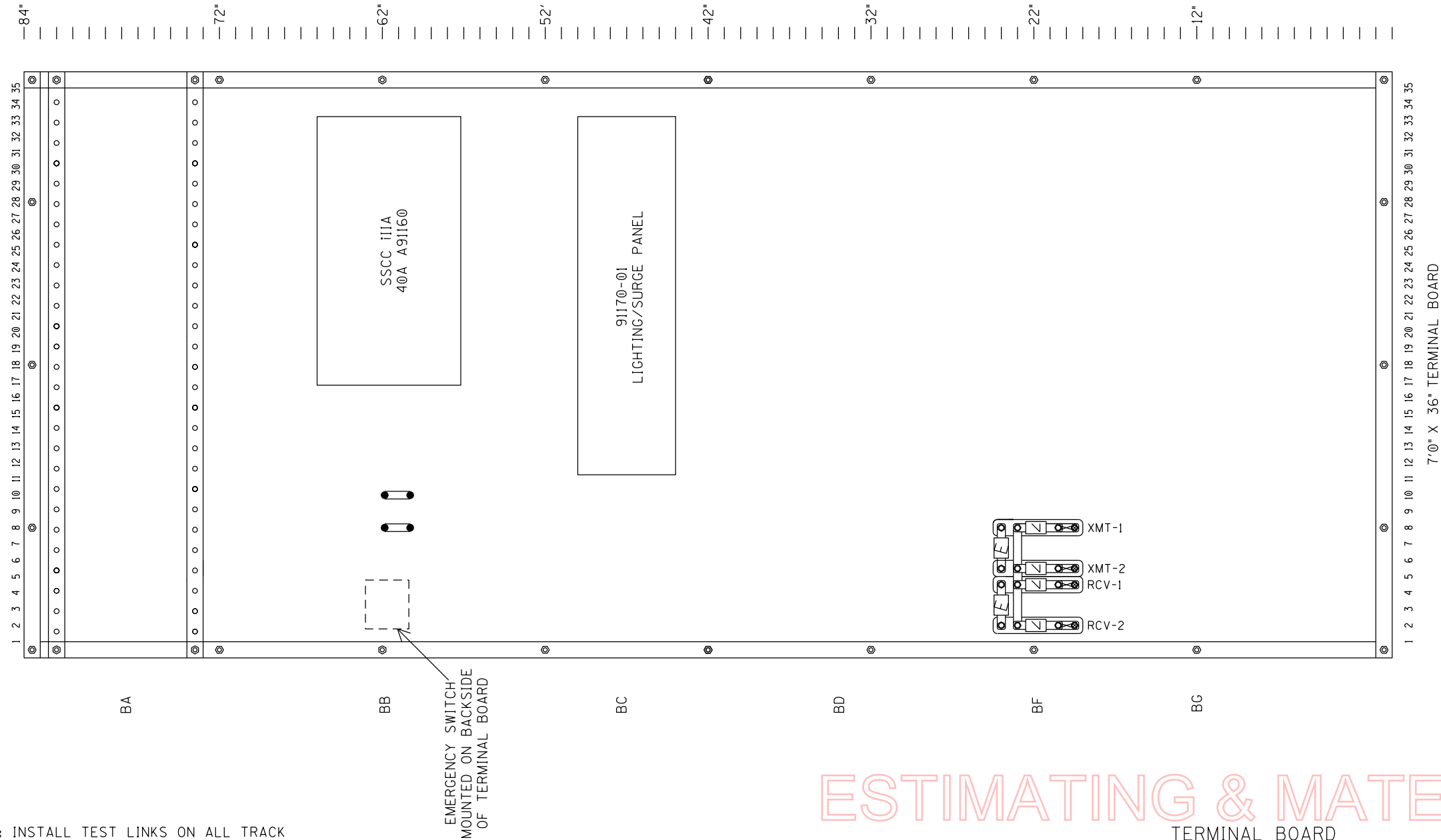
**RJ CORMAN RAILROAD**

DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

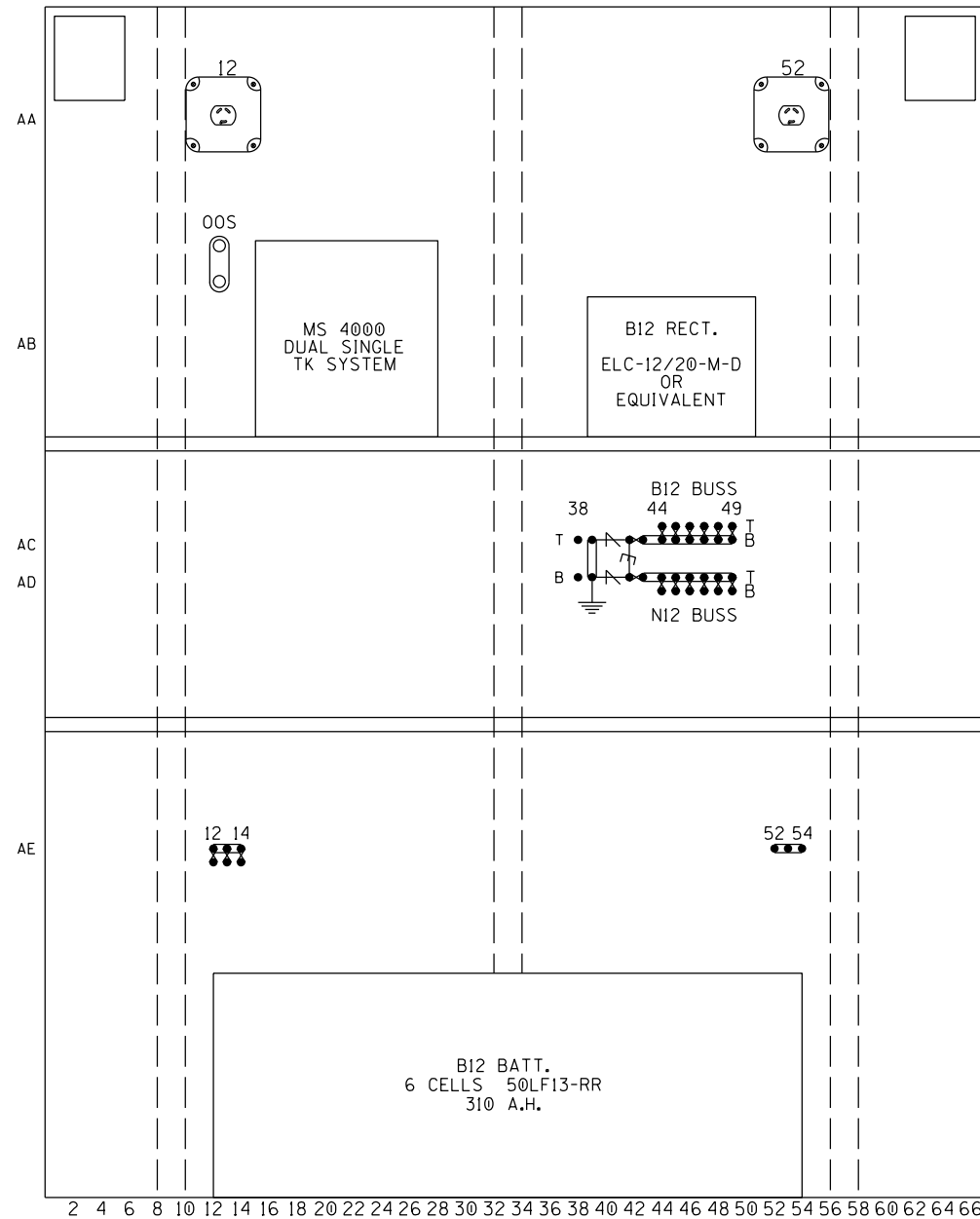
S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.11  
SHEET 11

ESTIMATING & MATERIALS



# SIDE "A"



NOTE: NEMA RECEPTACLES  
ARE L5-30.



## ESTIMATING & MATERIALS

6' X 6' HOUSE - SIDE "A"

### RJ CORMAN RAILROAD

DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

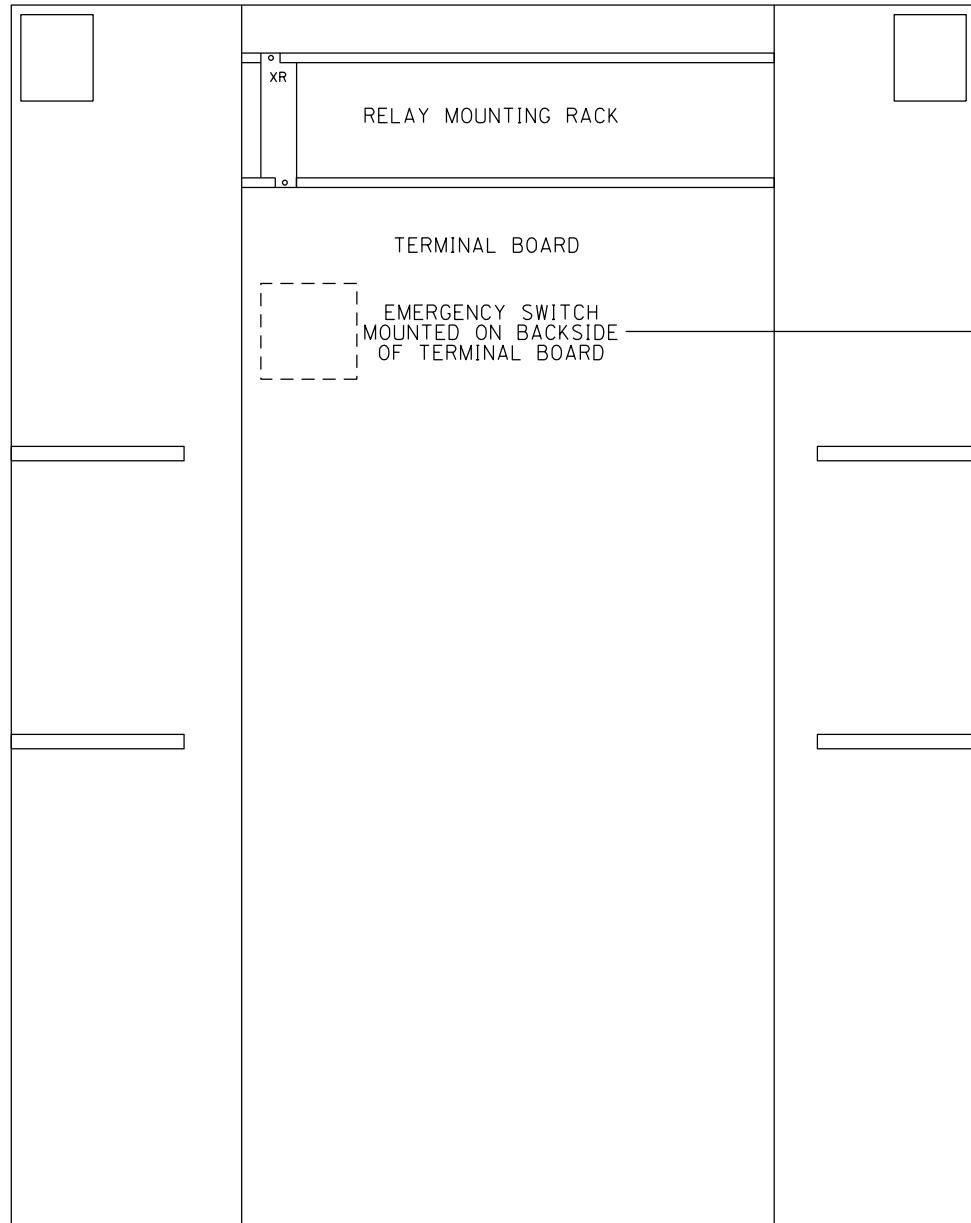
S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.12  
SHEET 12

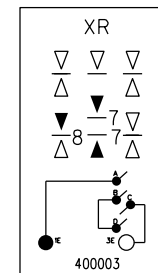
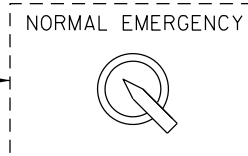
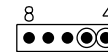


PDR\_SP5627\_DBA.pdf 10/18/2016

SIDE "B"



REAR VIEW  
TERMINAL BOARD



RELAY CROSS REFERENCE  
SAFETRAM ALSTROM  
400003 A62-308

ESTIMATING & MATERIALS

6' X 6' HOUSE - SIDE "B"

RJ CORMAN RAILROAD



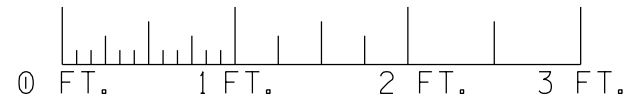
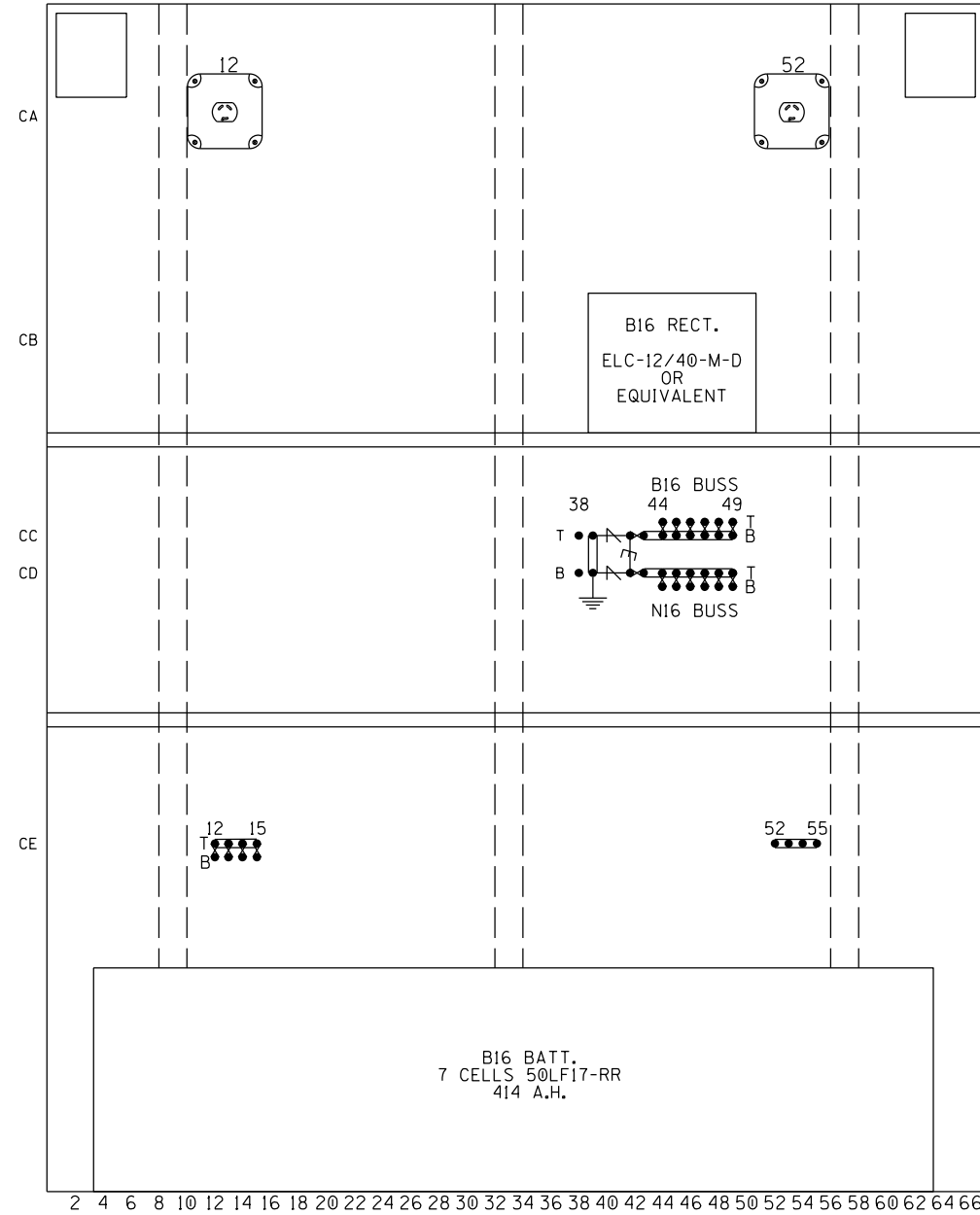
DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.13  
SHEET 13

PDR\_SP5627\_DBA.pdf 10/18/2016

SIDE "C"



NOTE: NEMA RECEPTACLES  
ARE L5-30.

ESTIMATING & MATERIALS

6' X 6' HOUSE - SIDE "C"

RJ CORMAN RAILROAD



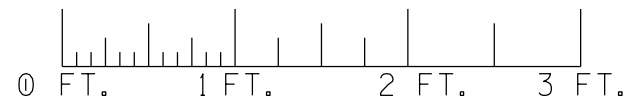
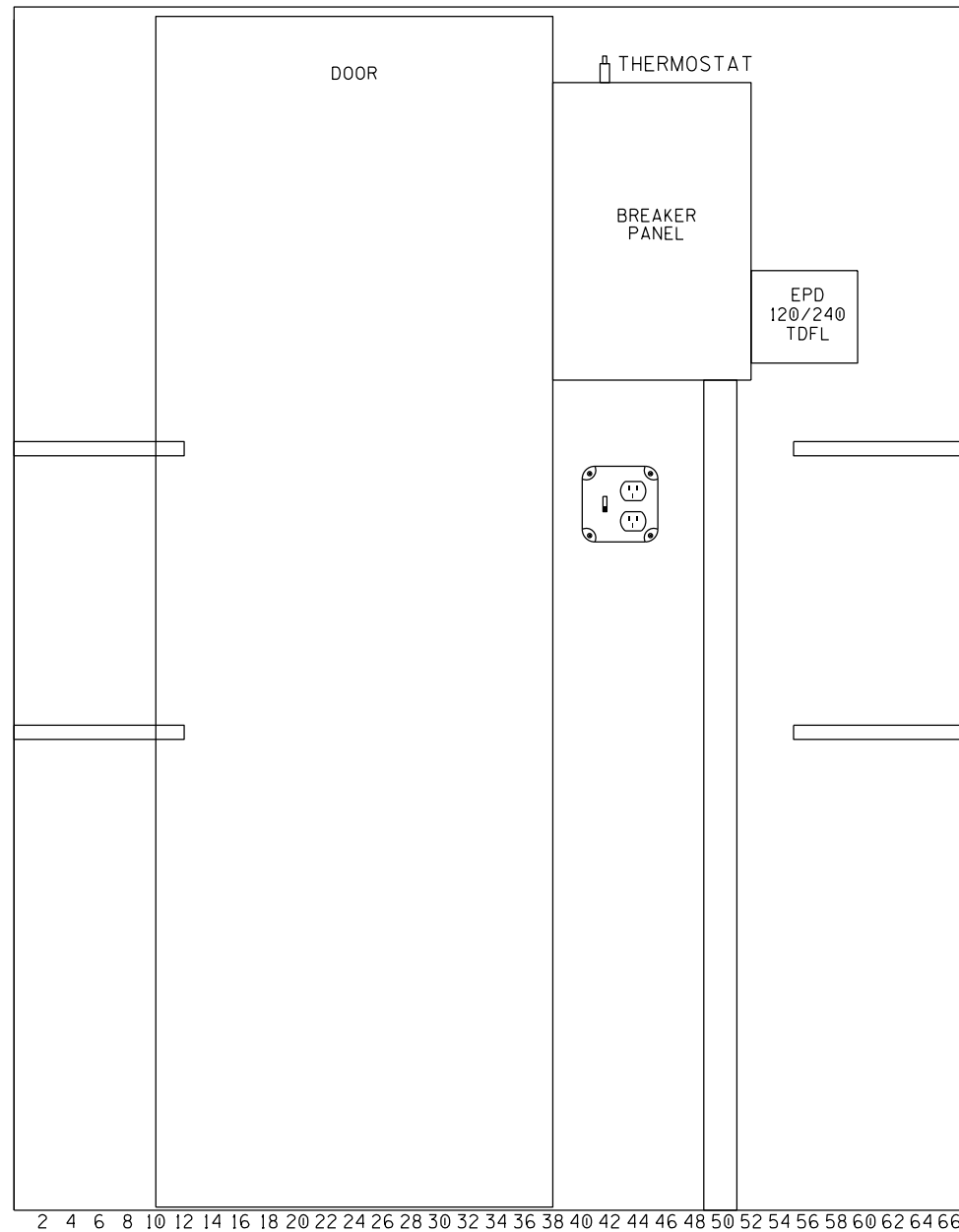
DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.14  
SHEET 14

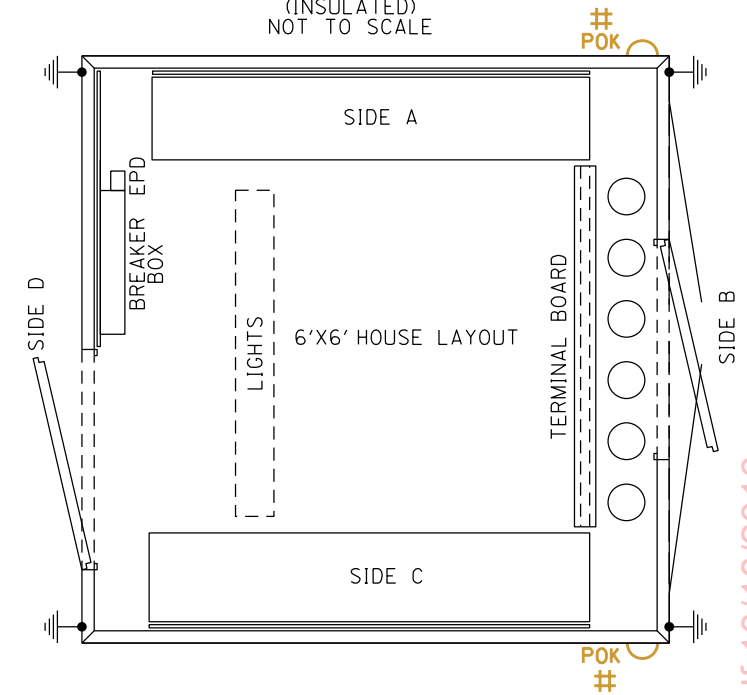
PDR\_SP5627\_DBA.pdf 10/18/2016

SIDE "D"



TOP VIEW\*

6'X6' HOUSE  
(INSULATED)  
NOT TO SCALE



# = FIELD TO DETERMINE PLACEMENT  
OF POK.  
REMOVE LIGHT NOT NEEDED.

6' X 6' HOUSE - SIDE "D" & TOP VIEW

RJ CORMAN RAILROAD



DESIGNED BY: DEW  
DIGITIZED BY: RJC  
CHECKED BY: DBA

S. COPUS ROAD  
LIMA, OH  
SPEG SUBDIVISION

DATE: 08/31/16  
FILE: SP5627.15  
SHEET 15

PDR\_SP5627\_DBA.pdf 10/18/2016



# OHIO RAIL DEVELOPMENT COMMISSION

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

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

September 14, 2016

Ms. Deborah J. Hawley  
Real Estate & funded Projects Manager  
R.J. Corman Railroad Company, LLC  
PO Box 788  
Nicholasville, KY 40340

RE: Grade Crossing Warning Device Improvement, Authorization to Proceed with Engineering Design  
Allen County, TR 146, S. Copus Rd. DOT #261647S, PID 103521, RJC

Dear Ms. Hawley:

A diagnostic review was held at the above grade crossing on 4/4/2016. The crossing has been recommended for the installation of lights and gates.

RJ Corman is authorized to proceed with the engineering design, site plans and cost estimates for this safety 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 Engineering Design and Site Layout Plan it will be evaluated and a construction-only Order will be requested from PUCO. Please submit the Engineering Design 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 crossing. This project will include the installation of a new roadway surface. Any other minor roadway or sidewalk work necessary for MUTCD compliance should be incorporated into the Site Layout Plan and such costs will flow through the railroad reimbursement process.

The ORDC Project Manager for this project is Don Damron. If you have any questions, I can be reached at 614-466-2509 (office), or 614-917-8466 (cell), or [don.damron@dot.state.oh.us](mailto:don.damron@dot.state.oh.us).

Sincerely,

Donald J. Damron  
Project Manager

Copy: Randall Schumacher, Supervisor, Rail Division, Transportation Department, PUCO  
Jill Henry, Grade Crossing Specialist, PUCO  
ORDC (file)

Attachments: Diagnostic Review Team Survey dated 4/4/2016  
ORDC Letter Agreement dated 8/5/2016  
State of Ohio Purchase Order



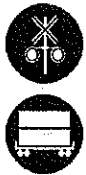
[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY



File



# OHIO RAIL DEVELOPMENT COMMISSION

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

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

August 5, 2016

Deborah J. Hawley  
Real Estate & Funded Projects Manager  
R.J. Corman Railroad Group  
P.O. Box 788  
Nicholasville, KY 40340

Re: Grade Crossing Warning Device Improvements  
Allen County, TR 146/S. Copus Road, DOT # 261647S, PID # 103521

Dear Ms. Hawley:

A diagnostic review was conducted at the subject grade crossing on 4/4/2016. As a result of the review, the crossing will receive flashing lights and roadway gates plus surface reconstruction.

This project shall be completed in compliance with Agreements No. 004-A, dated May 21, 1991 and No. 6962 dated April 23, 1992, entered into by the State of Ohio and R.J. Corman Railroad Group (RJC) and incorporated as if fully rewritten herein. This construction shall also meet the general terms and conditions under the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and subsequent amendments and the State of Ohio's Federally Funded Warning Device Program.

Preliminary engineering (PE) and construction costs shall be borne one hundred percent (100%). Reimbursable costs will be limited by the ORDC based on approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to RJC and may be amended by the ORDC based on revised estimates and bid tabulations.

This Letter Agreement and the approved plans constitute the scope of the project. RJC shall notify ORDC in writing of any changes in the scope of work which are not in the approved plans and estimates and secure approval in writing of same before the work is performed.

PE will not be commenced by RJC prior to ORDC issuing a PE authorization. PE will be submitted by RJC to ORDC within ninety (90) days or other time specified by ORDC in the PE authorization. Construction will not be commenced by RJC prior to ORDC issuing a construction authorization. Construction will be completed by RJC within nine (9) months or other time specified in the time specified by ORDC in the construction authorization.



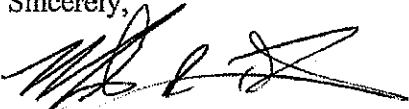
[www.rail.ohio.gov](http://www.rail.ohio.gov)

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

Please indicate your acceptance of the terms and conditions of this Letter Agreement by signing and returning one (1) copy to me at the address listed above and retain a copy for your files. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be a duplicate original, but all of which taken together shall be deemed to constitute a single Agreement.

Sincerely,



Matthew R. Dietrich  
Executive Director

R.J Corman Railroad Group: <sup>Company, LLC</sup>

By: Brian Miller

Title: President

Date: 9/1/2016

ALL TR 146 S. Copus Rd RJC PID 103521

## Diagnostic Review Team Survey

**Reason for Survey:**

(e.g. formula, accident, constituent, etc.)

Constituent - AOT

**Date:**

4/4/2016

**Location Data**

Street or Road Name:

S. Copus Rd

Route/Road Number

TR 146

(i.e. Twp., Co., SR or US)

US DOT No.:

2616475

County:

ALL

Township:

Shawnee

City:

(In or Near)

Near Lima

Railroad Name:

R.J. Corman Railroad

Railroad Division:

Western OH Line

Branch/Line Name:

Nearest RR

Timetable Station:

Kemp

RR Milepost:

56.27

**On-Site Review Team**

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

1. DON DAMRON, ORDC, 614 917-8466, don.damron@dot.ohio.gov.
2. Chris Clark, RJ Corman chris.clark@rjcorman.com 859-361-7524
3. Guy Dennings RJ Corman 859-221-2434 guy.dennings@rjcorman.com
4. Keith Wilson PUCU 1/Keith.Wilson@puc.state.ohio.us
5. Cory Augustine Buckeye 419-371-5103 Caugustine@GentingConst.com
6. Aaron Regedanz Buckeye 419-516-2032 aregedanz@yahoo.com
7. Todd Truxel Shawnee Twp Trust (419) 234-1446 ttruxel@shawneetwp.org
8. DAVID BELTON Shawnee Twp Trustee 419-991-8706 trustee.dave@shawneetwp.org
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	
'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 checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	YIELD SIGN WILL REMAIN ONE TRACK
Number of Tracks Signs	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Inventory Tags	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
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 type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Other	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

\* Note train count reduction is seasonal

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	2782	Date Run: 3/8/2016
Railroad Data		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	1	(1/1 WEEK) * 2 TRAINS / WEEK
< 1 per day		Day
Day thru trains	1	
Night thru trains		OUT AND BACK
Daytime switching movements		SERVES LOCAL
Nighttime switching movements		INDUSTRY OR
Total number of tracks	1	WEST SIDE OF LIMA
Number of main tracks	1	* (HIGH SEASON TRAIN COUNT = 1/DAY)
Number of other tracks		
Maximum train speed	25	10 MPH
Typical train speed	25	10 MPH
Amtrak		
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 checked="" type="checkbox"/> No		
Can one train block the motorists' view of another train at crossing? <input type="checkbox"/> Yes (Explain below) <input checked="" 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:		Shawnee Township
Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	1412 (2014)	3179 REVISED
Highway paved	X 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:	20 ft.	
Number of highway lanes	2	
Urban or Rural	Rural	
Vehicle Speed: 55 MPH		
School Bus Operation:	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Amount 4 EACH WAY AT LEAST 2-PM + 2-AM	
Hazardous Materials Trucks:	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes .05 Amount	
Shoulders:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is the shoulder surfaced?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is there existing guardrail along roadway in crossing vicinity?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes	
Is stopping site distance adequate? (See Table 2)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, deficient approach(es) _____	

\* ROADWAY CROSSING SURFACE IS IN POOR CONDITION.

Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None	Quadrant _____ Curb and Gutter: <input type="checkbox"/> Functional (Curb height = 4" or more) <input type="checkbox"/> Non-functional (Curb height = Less than 4") <input checked="" type="checkbox"/> None
Pedestrians: <input type="checkbox"/> No <input checked="" 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 checked="" type="checkbox"/> Open Space <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Residential	<input type="checkbox"/> Institutional <input type="checkbox"/> Commercial Location of nearby schools: <b>ACADEMY: APPLESEED LOCATED SOUTH OF CROSSING</b>
Utility Information	
Is commercial power available? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes Utility Provider (Company Name) _____ Phone Number _____ Nearest Available Power Source _____	
What other utilities are present? (add locations to sketch) <input checked="" type="checkbox"/> Gas <input type="checkbox"/> Cable <input checked="" type="checkbox"/> Telephone <input checked="" type="checkbox"/> Fiber Optic Cable <input checked="" type="checkbox"/> Petroleum <input type="checkbox"/> Water <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other _____	
Is(are) there potential utility conflict(s) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	
Comments: <b>* UG PETROLEUM</b> <b>* UG GAS</b> <b>* OH POWER</b> <b>* OH CABLE</b>	

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:

NA

Real Estate or ROW:

NA

Culverts / Drainage / Ballast Conditions:

NA

Roadway and/or Sidewalks:

POSSIBLE NEW SURFACE NEEDED.

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

SHUNT ENHANCERS MAY BE NEEDED.  
TOO FEW TRAINS IN OFF-SEASON.

Environmental:

NA

Other:

ALSO: SEE UPDATED RECOMMENDATIONS (ATTACHED)

### Diagnostic Team Recommendations

	Quadrants Needed
<input type="checkbox"/> Install/upgrade active devices	
<input type="checkbox"/> Automatic Flashing Lights (AFLS)	
<input type="checkbox"/> AFLS / Cants	
<input type="checkbox"/> AFLS / Gates	
<input type="checkbox"/> AFLS / Gates / Cants	
<input type="checkbox"/> Bells / number	
<input type="checkbox"/> Upgrade circuitry / type	
<input type="checkbox"/> Sidelights	
<input type="checkbox"/> Guardrail Needed	
<input type="checkbox"/> Install/Replace curb	
<input type="checkbox"/> Bungalow placement & offset from rail & highway	
<input checked="" type="checkbox"/> Other (define)	See attached

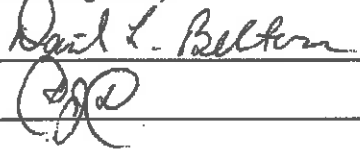
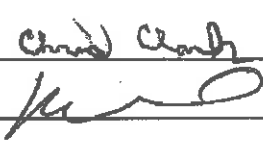
### Comments:

\* CONSIDER UPGRADE FOLLOWING DISCUSSION W/ PUCO AND RE-RUN FORMULA RANK THEN DISCUSS W/ TWP. (FOR DECISION)

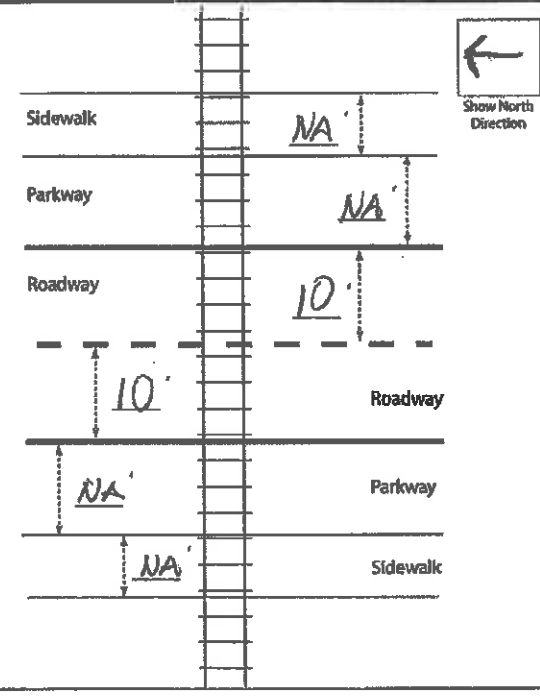
<input type="checkbox"/> Install/upgrade traffic signal preemption	
<input type="checkbox"/> No improvements needed	
<input checked="" type="checkbox"/> Other (define)	5-23-16: ALSO SEE UPDATED RECOMMENDATIONS. (ATTACHED)

\* SEE COMMENTS BELOW

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


### Field Dimensions



\* SCHOOL BUSES: 4/DAY.

\* OBSTRUCTED VISIBILITY.

\* SAFETY UPGRADE MAY BE WARRANTED BASE ON CONSTITUENT CONCERNS.

\* BUT: RR DOWNGRADE (SPEED TRAINS)

- 10 MPH TRACK + PROBLEM W/ SHUNTING. - TOO FEW TRAINS.

\* WILL NEED STYLE - C CIRCUITS - SHUNT ENHANCERS.

\* MAY NEED A NEW SURFACE.

\* NO STOP SIGN; YIELD SIGN WILL REMAIN.

# UPDATED RECOMMENDATIONS 5-23-16:

## Diagnostic Team Recommendations

### Quadrants Needed

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

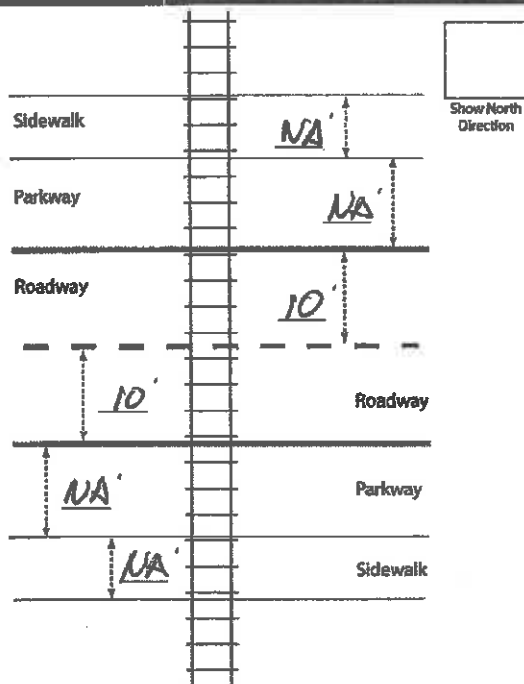
Comments: CONVERSATION WITH RAILROAD CONFIRMED SEASONAL TRAIN COUNT WITH A HIGH COUNT OF ONE / DAY, WHICH CONFIRMS INITIAL HAZARD RANK.

- ☐ Install/upgrade traffic signal preemption
- ☐ No improvements needed

☒ Other (define) CROSSING SURFACE WILL LIKELY NEED TO BE REPLACED AND SHOULD BE EVALUATED BY THE RAILROAD

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

## Field Dimensions

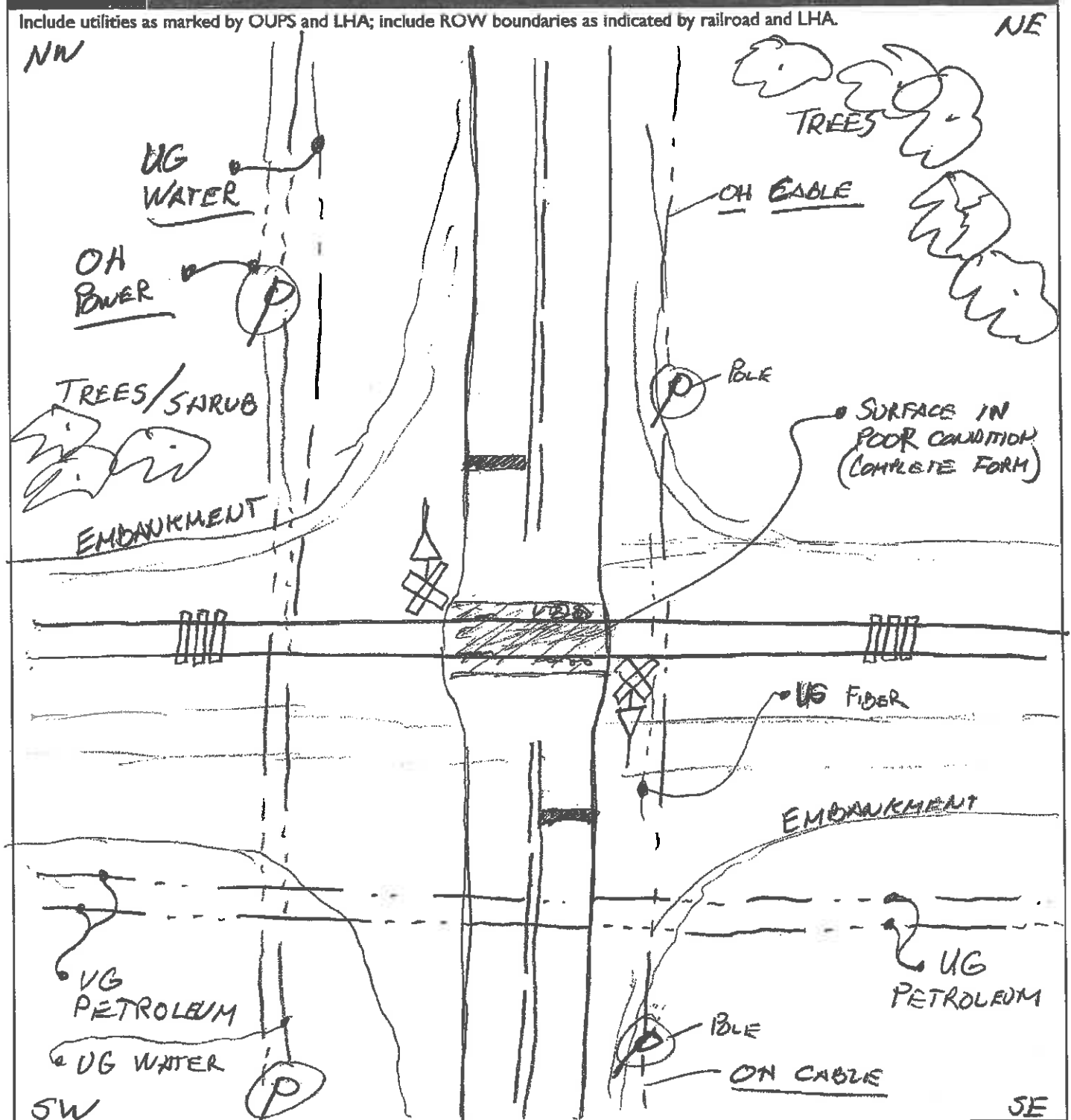


5-26-16  
SEE ATTACHED REVIEW OF SURFACE  
"NEW SURFACE IS RECOMMENDED."



# Field Sketch

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



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

Sketch by: DJD 4-2-2016

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.

County: ALL Route: TR 146 DOT#: 261647

<b>Surface type</b> <input type="checkbox"/> Rubber seal and asphalt <input type="checkbox"/> Timber and asphalt <input checked="" type="checkbox"/> Asphalt <input type="checkbox"/> Composite <input type="checkbox"/> Concrete panel <input type="checkbox"/> Full-depth timber <input type="checkbox"/> Full-depth rubber <input type="checkbox"/> Other _____	<b>Condition</b> <input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor Comments: <u>CRACKED ASPHALT</u> <u>FILLED POT HOLES; RAIL BED</u> <u>AND TIES DETERIATED</u>
Is the surface good and sufficient? Yes / <u>(No)</u>	
Vehicle type (cars, trucks, etc.): <u>MOSTLY AUTOMOBILE TRAFFIC IN RESIDENTIAL AREA.</u>	
<b>Surface conditions:</b> Can vehicles cross at posted speed? <u>NO, RAIL/SURFACE IS ROUGH</u> Local observations/driver behaviors: <u>MOST SLOW DOWN OVER CROSSING</u> Relevant crash history: _____ _____ _____	
Do existing surface conditions have negative effects on the current or proposed warning devices? Explain: <u>YES, THE SURFACE HAS TWO RAIL JOINTS ON/OR NEAR TRAVEL EDGE OF ASPHALT ROADWAY</u> <u>TRACK BED VIBRATES AS AUTOS PASS OVER CROSSING</u>	
Comments: <u>IF UPGRADE OF WARNING DEVICES IS RECOMMENDED THAN THE SURFACE CONDITION WILL NEED TO BE ADDRESSED BY THE RAILROAD TO ENSURE WARNING DEVICES OPERATE EFFECTIVELY</u>	

Form completed by: DJD

Date: 5-26-16

**This foregoing document was electronically filed with the Public Utilities**

**Commission of Ohio Docketing Information System on**

**3/8/2017 12:39:15 PM**

**in**

**Case No(s). 17-0682-RR-FED**

Summary: Memorandum In the Matter of a Request for the Installation of Active Warning Devices at the RJ Corman Railroad Crossing, S. Copus Road/TR 146 DOT#261-647S in Allen County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division