Public Utilities Commission of Ohio

Memo

To: Docketing Division

From: Jill Henry, Rail Specialist, Rail Division

Cc: PUCO Legal Department

Date: 4/6/2020

Re: PUCO Case No. 20-712-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the RJ Corman Railroad Crossing, St Anthony Road/CR 110 DOT#477-034N in Mercer County, Ohio.

On November 18, 2019, the Ohio Rail Development Commission (ORDC) authorized funding for RJ Corman Railroad to install lights and gates at St Anthony Road/CR 110 DOT#477-034N in Mercer County, Ohio. The crossing was surveyed, on July 12, 2019, and found to warrant the upgrades. The electric utility provider for the crossing is Dayton Power and Light.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$192,253.90 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 <u>railroad will be responsible</u> 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, OH 43223

Mercer County Engineer Jim Wiechart County Engineer 4884 Mud Pike Celina, OH 45822

Dayton Power and Light

OHIO RAIL DEVELOPMENT COMMISSION INTER-OFFICE COMMUNICATION

TO: Randall Schumacher, Chief, Motor Carrier & Rail Enforcement, PUCO

FROM: Cathy Stout, Manager, Safety Section, ORDC

BY: Don Damron

SUBJECT: Mercer County, CR 110, St. Anthony Rd.

DOT# 477034N PID# 111127 RJC MP 123.12

DATE: March 31, 2020

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on 7/12/2019. The Ohio Rail Development Commission (ORDC) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached.

The plans and estimate have already been provided by the railroad. ORDC accepts 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 <u>railroad will be responsible</u> 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: Construction Authorization

Diagnostic Review Team Survey form RJC Plan, Estimate and Material Lists

PE Authorization

PUCO Letter Agreement State of Ohio Purchase Order

c: Jill Henry, Rail Division Specialist, PUCO

ORDC Project Manager (file)



Mike DeWine, Governor Jon Husted, Lt. Governor

Mark Policinski, Chair

March 31, 2020

Ms. Deborah J. Hawley Real Estate & Funded Projects Manager R. J. Corman Railroad Group PO Box 788, 101 RJ Corman Dr Nicholasville, KY 40340

RE: Construction Authorization for Grade Crossing Warning Device Upgrade RJ Corman Railroad Company / Western Ohio Lines Mercer County, CR 110, St. Anthony Rd.; DOT# 477034N PID# 111127 RJC MP 123.12

Dear Ms. Hawley:

The plan and estimate dated 2/24/2020, for the referenced project has been reviewed and is acceptable. R.J. Corman Railroad Group may proceed with the construction of the proposed grade crossing warning system in accordance with the abbreviated plan.

The estimate of \$192,253.90 is acceptable and reimbursement is limited to \$192,253.90. 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. 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 R.J. Corman Railroad Group accepting the following instructions:

- 1. R. J. Corman Railroad Group'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, cell: 614-917-8466, and to the Public Utilities Commission of Ohio at Jill.henry@puc.state.oh.us. R. J. Corman Railroad Group'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. R. J. 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 R. J. Corman Railroad Group.

- 3. R. J. Corman Railroad Group's project foremen will notify Don Damron at 614-917-8466 (cell) or 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. R. J. 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.
- 6. R. J. 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.
- 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,

Project Manager

C: Randall Schumacher, Chief, Motor Carrier & Rail Enforcement, PUCO Jill Henry, Rail Specialist, PUCO Heather Hamilton, ORDC ORDC (file) A Limited Liability Holding Company

101 RJ Corman Drive • PO Box 788 • Nicholasville, KY 40340-0788
(859) 881-7521 • Fax: (859) 885-7804 • www.rjcorman.com

2/24/2020

RJ Corman Railroad Company / Western Ohio Lines

County: Mercer

Location: St. Anthony Road / CR110

DOT #: 477034N MP: 123.12

Estimate for Signal Warning System & Installation

Materials	Qty.	Description	Extension
	1	Signal Materials	\$ 113,481.18
	1	Freight	\$ 1,035.00
	1	Power Service	\$ 11,500.00
	1	Road Bore and Conduit Install	\$ 6,000.00
	1	Miscellaneous Materials	\$ 500.00
	30 tons	Rock for Backfill	\$ 1,500.00
Labor		Description	Extension
	1	Engineering	\$ 6,104.10
	1	Shop Wiring/Test	\$ 4,956.40
	1	Field Installation (Equipment Included)	\$ 44,297.22
	1	Railroad Inspector	\$ 1,430.00
	1	Mobilization/Demobilization	\$ 1,450.00
Project Total			 192,253.90

SH.	CONTENTS	REV
NX1	INDEX SHEET	1
1	TRACK PLAN	1
2	PROFILE	1
3	TRACK LAYOUT	1
4	LOAD CENTER WIRING	1
5	DC POWER	1
6	PO LIGHT CIRCUITS	1
7	MS 4000 GCP	1
8	TRACK CONNECTIONS	1
9	CROSSING CONTROLLER HOOK-UP	1
10	GATE & FLASHER CIRCUITS SIGNAL "A"	1
11	GATE & FLASHER CIRCUITS SIGNAL "B"	1
12	TERMINAL BOARD FRONT LAYOUT	1
13	TERMINAL BOARD FRONT LAYOUT	1
14	TERMINAL BOARD REAR LAYOUT	1
15	TERMINAL BOARD REAR LAYOUT	1
16	TOP VIEW	1
17	HOUSE SIDE A LAYOUT	1
18	HOUSE SIDE B LAYOUT	1
19	HOUSE SIDE C LAYOUT	1
20	HOUSE SIDE D LAYOUT	1

SCOTT L WERTANS E-73435

INDEX SHEET



DESIGNED BY: MGH

DIGITIZED BY: RJC

CHECKED BY: RWM

REV 01

RJ Corman Railroad



REVISIONS 1 01-24-20 MGH RJC RWM

NEW XING AT ST. ANTHONY RD MS4000

xxx xxx

PROJECT:19WL-SIGSTANTHO IN SERVICE: XX-XX-XX

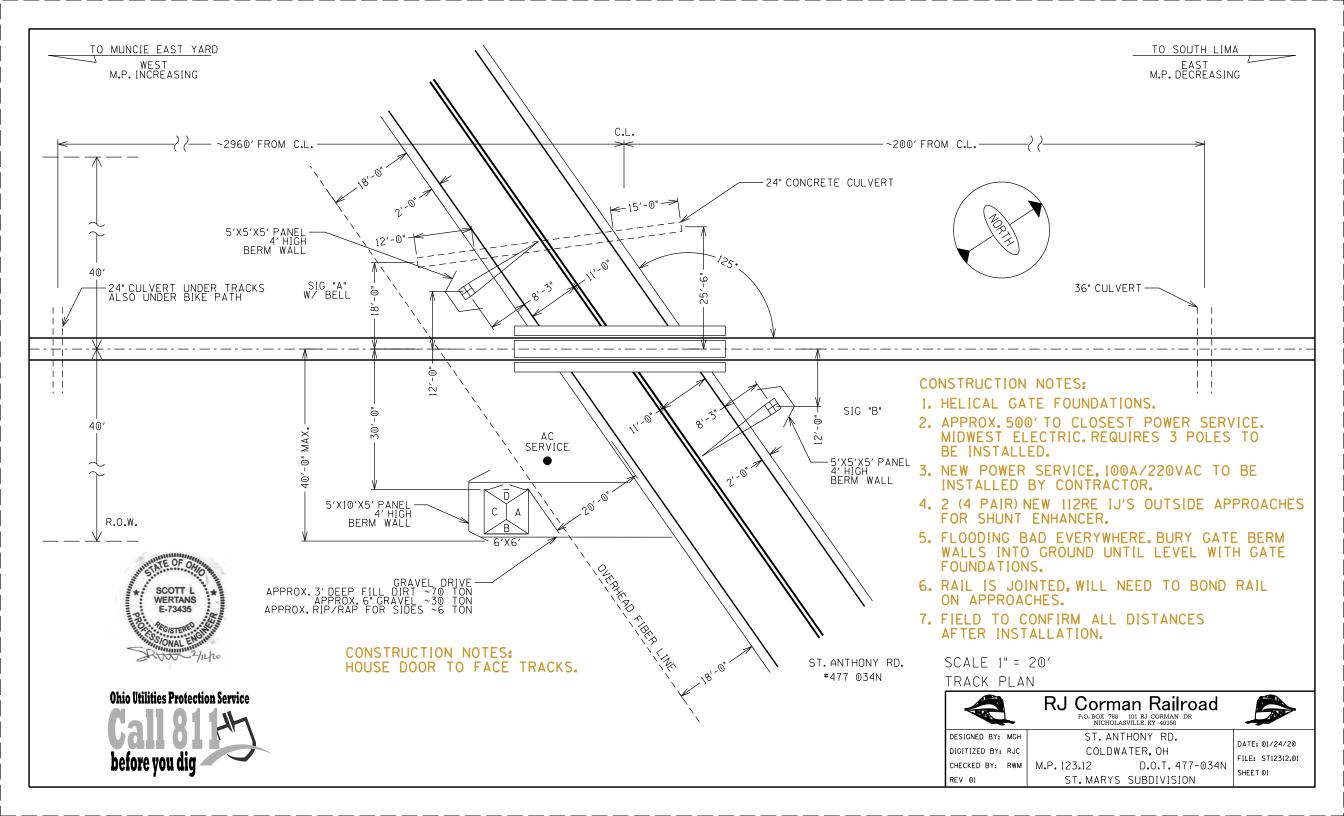
PER: XXX

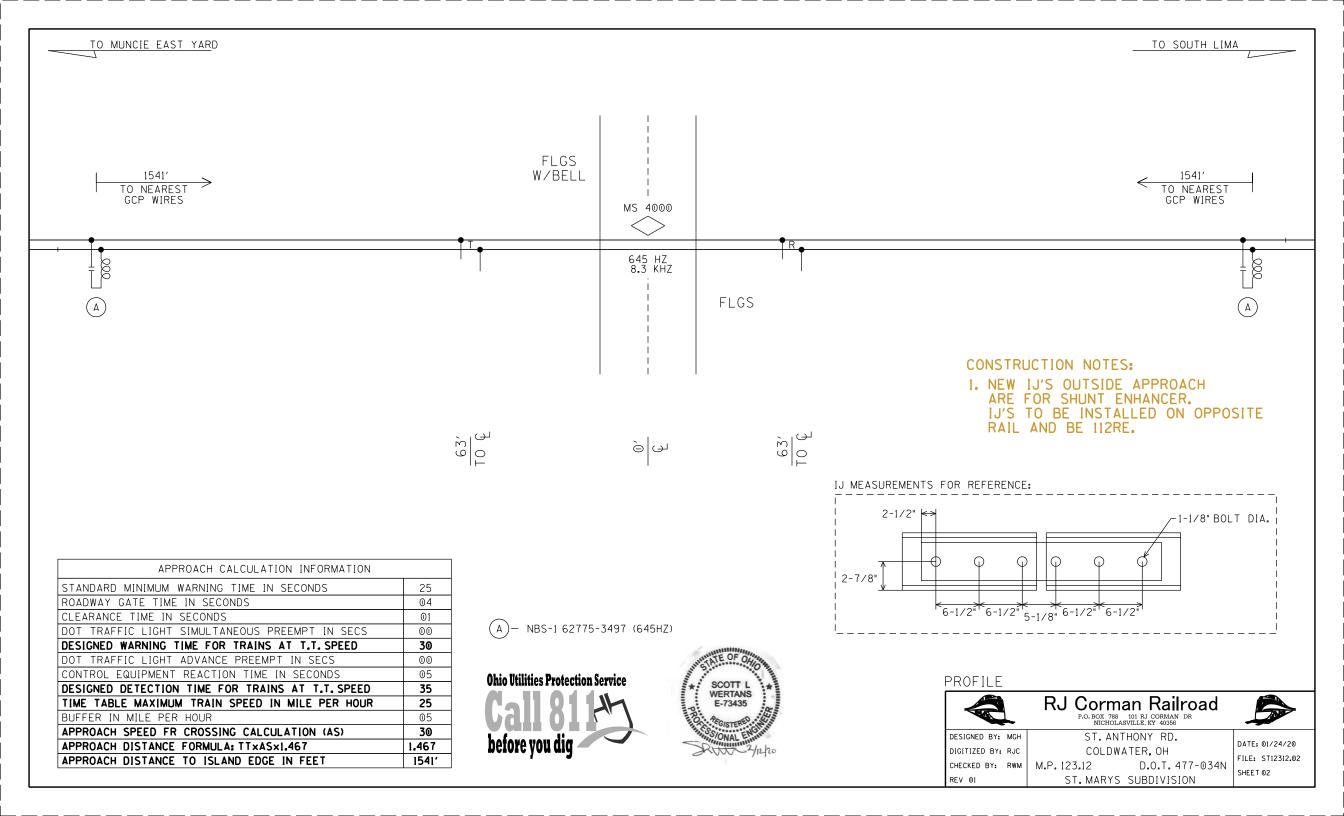
ST. ANTHONY RD. COLDWATER, OH M.P. 123.12 D.O.T. 477-034N ST. MARYS SUBDIVISION

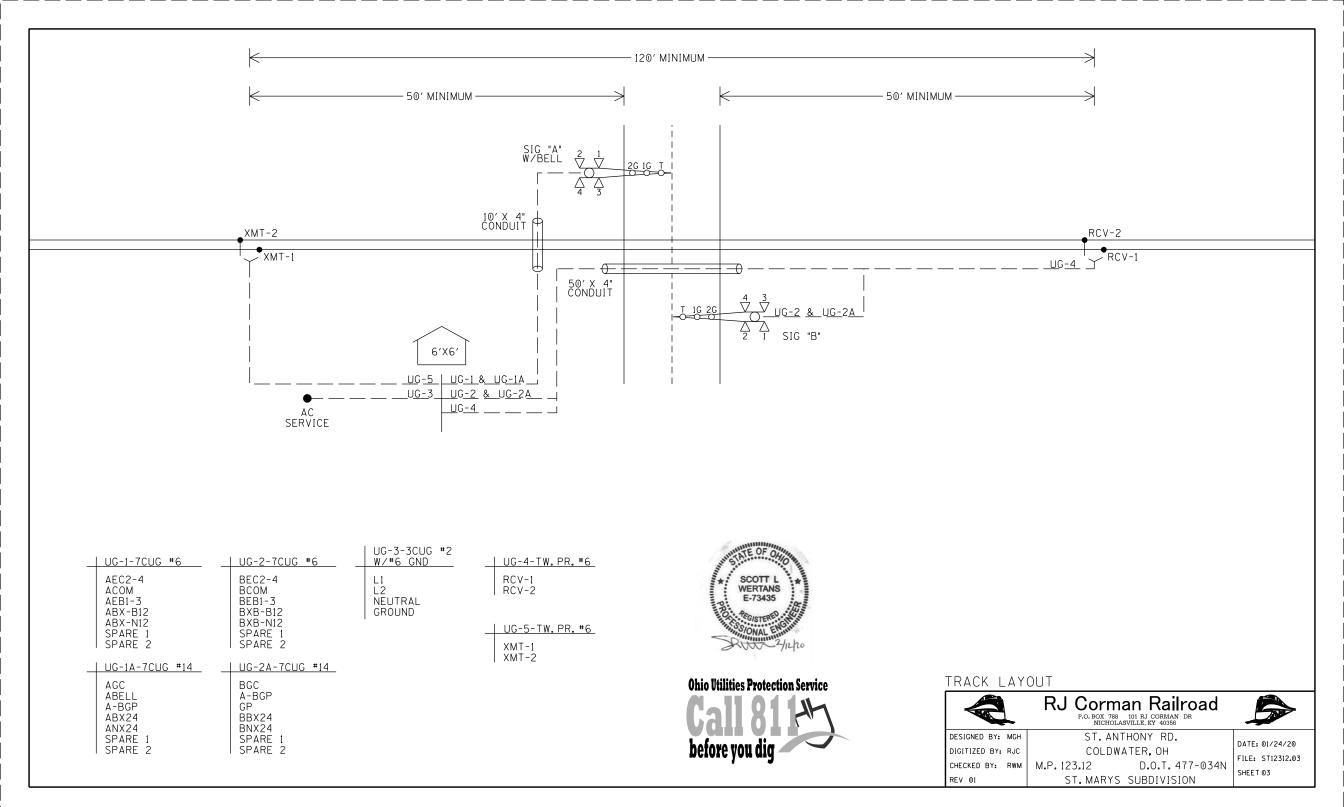
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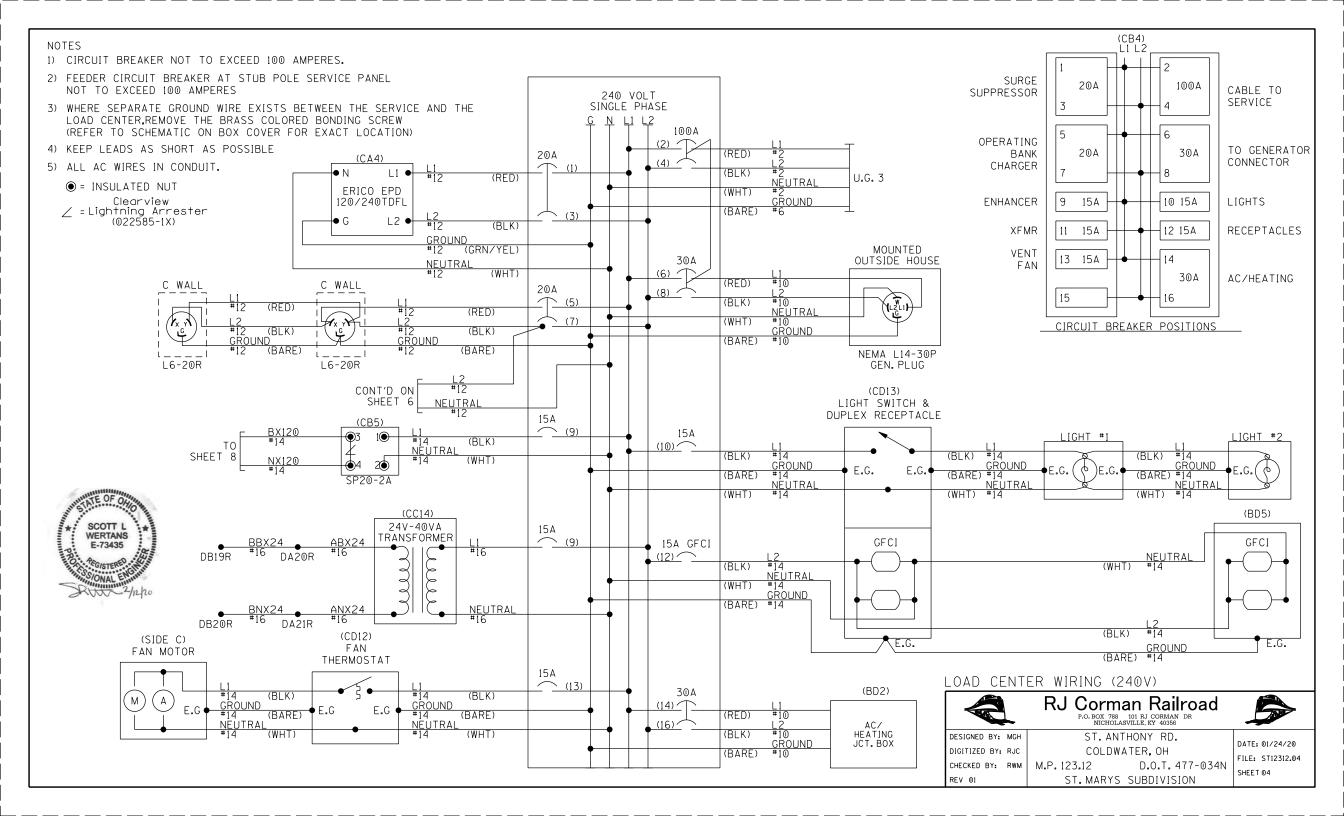


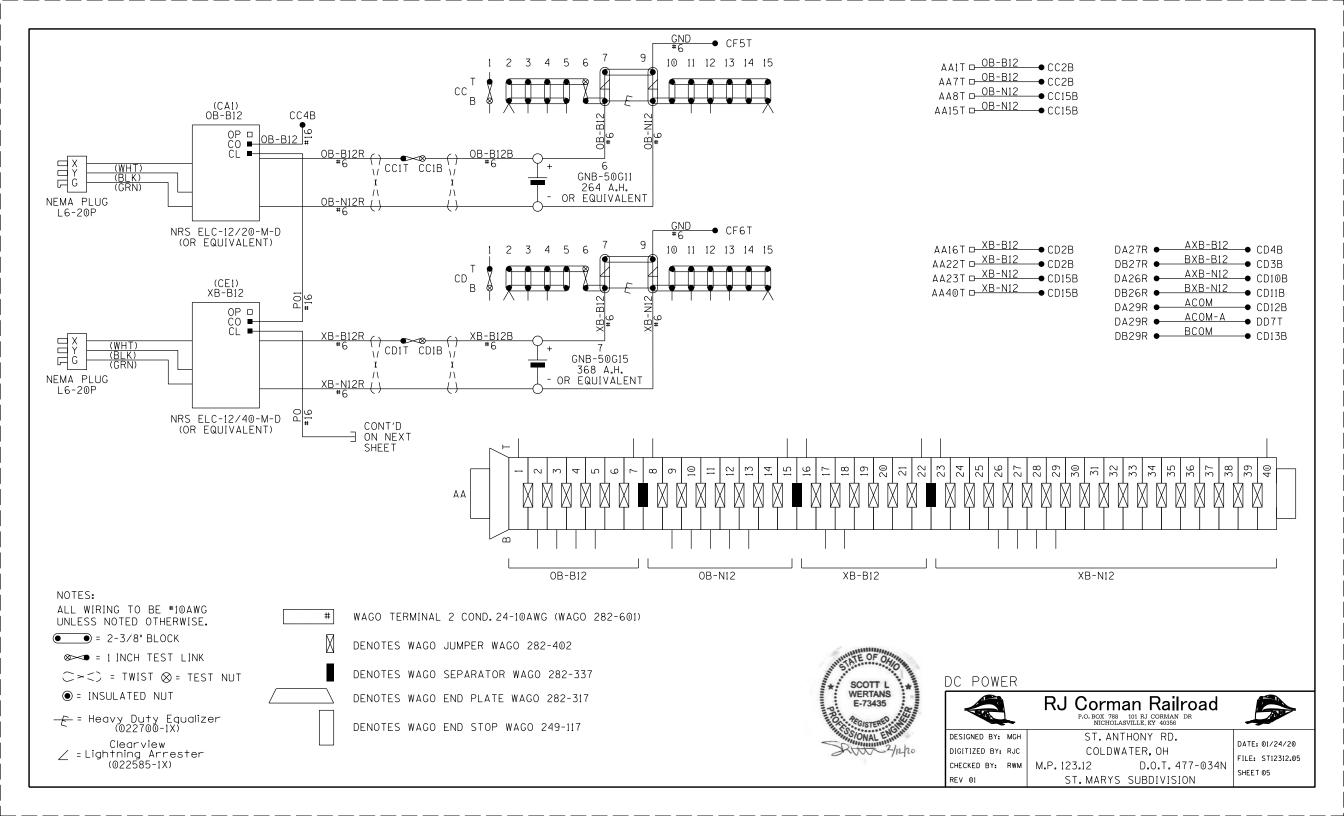
Ohio Utilities Protection Service

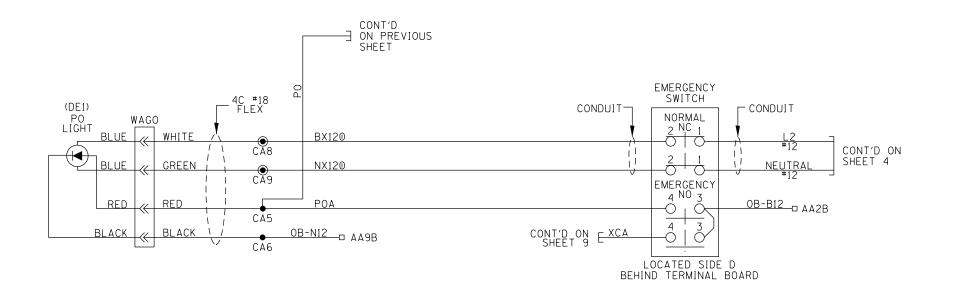














PO LIGHT CIRCUIT





DESIGNED BY: MGH DIGITIZED BY: RJC CHECKED BY: RWM REV 01

ST. ANTHONY RD. COLDWATER, OH

M.P. 123.12 D.O.T. 477-034N ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.06 SHEET 06

NOTES:

1. ALL WIRING TO BE #16AWG UNLESS NOTED OTHERWISE.

• = INSULATED NUT

MAIN PROGRAM MENU

**	PARAMETER	VALUE	
1	TEMPLATE	MTF-MS MOTION SENSOR	
1 A	SET TEMPLATE DEFAULTS	(YES ON INITIAL SETUP)	
	MS 4000 C	CONFIGURATION	
2	APPR FREQUENCY	. 645 HZ	
3	APPR TRANSMIT LEVEL	# ★ HIGH	
4	UNI/BI/SEM-BIDIRNL	BIDIRNL	
5	DIRECTIONALLY WIRED	! ★ NO	
6	MS PICKUP DELAY	. ★ 15 SEC	
7	UAX USED	. YES	
7Δ	* PRIME UAX PICKUP	L ★ 5 SEC	
8	ISLAND USED	! ★ INTERNAL	
88	* ISL FREQUENCY	. 8.3 KHZ	
8B	* ISL PICKUP DELAY	(2s+) 3 SECONDS	
9	IN 1.1	L UAX	
10	IN 1.2	NOT USED	
11	PRIME MS/GCP MODE	₽RED	
11 A	* PRIME WARNING TIME	. di sec	
	ADV	ANCED	
12	POSITIVE START	. ★ OFF	
13	SUDDEN SHUNT DET USED	L ★ NO	
14	LOW EZ DET USED	. NO	
15	MS SENSITIVITY LEVEL	#☆ 36	
16	COMPENSATION LEVEL	#☆ 1300	
17	LOW EX ADJUSTMENT	# ☆ 39	
18	INBOUND PS SENSITIVITY	# ★ HIGH	
19	SPEED LIMITING USED	#★ YES	
20	OUTBOUND FALSE ACT LVL	#☆ NORMAL	
		HER	
21	OOS TIMEOUT	# ★ 1 HRS	
22	DAYLIGHT SAVINGS TIME	# A ON	
23	EZ/EX LOGGING	# ★ CHANGE	
24	EZ/EX POINT CHANGE	# 🖈 3	
25	ATCS SITE ID	<u> </u>	

CONTINUE MAIN PROGRAM MENU

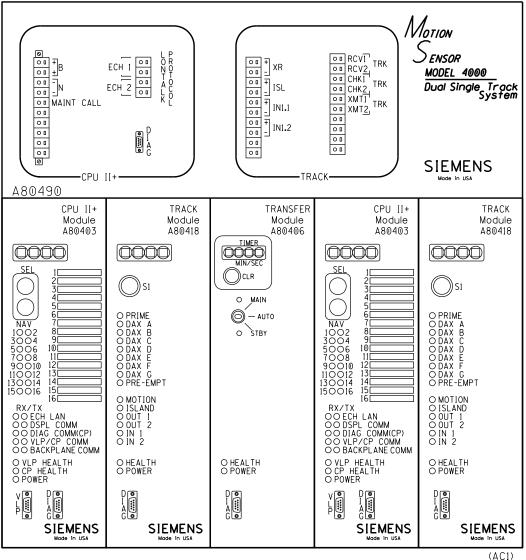
**	PARAMETER	VALUE
26	LO	CATION
26A	*DOT NUMBER	# 477 034N
26B	*MILE POST	# 123.12
26C	*SITE NAME	# ST ANTHONY RD

	MCF AND OCCN
MCF NAM	E GCP-T6X-02-9.mcf
OCCN	7A87DD75



NOTES:

- AVAILABLE WHEN PRIOR PARAMETER SELECTED
- SET BY FIELD AS REQUIRED
- 3. ★ DEFAULT SETTING
- IMPACTS OCCN
- 5. ** STEP SEQUENCE WHEN USING DIAGNOSTIC TERMINAL (DT) VER. 5.7.3 TO SET PROGRAM PARAEMTERS. ALPHA NUMERIC STEPS ARE SUB MENUS OF PREVIOUS STEP.



MS 4000 GCP



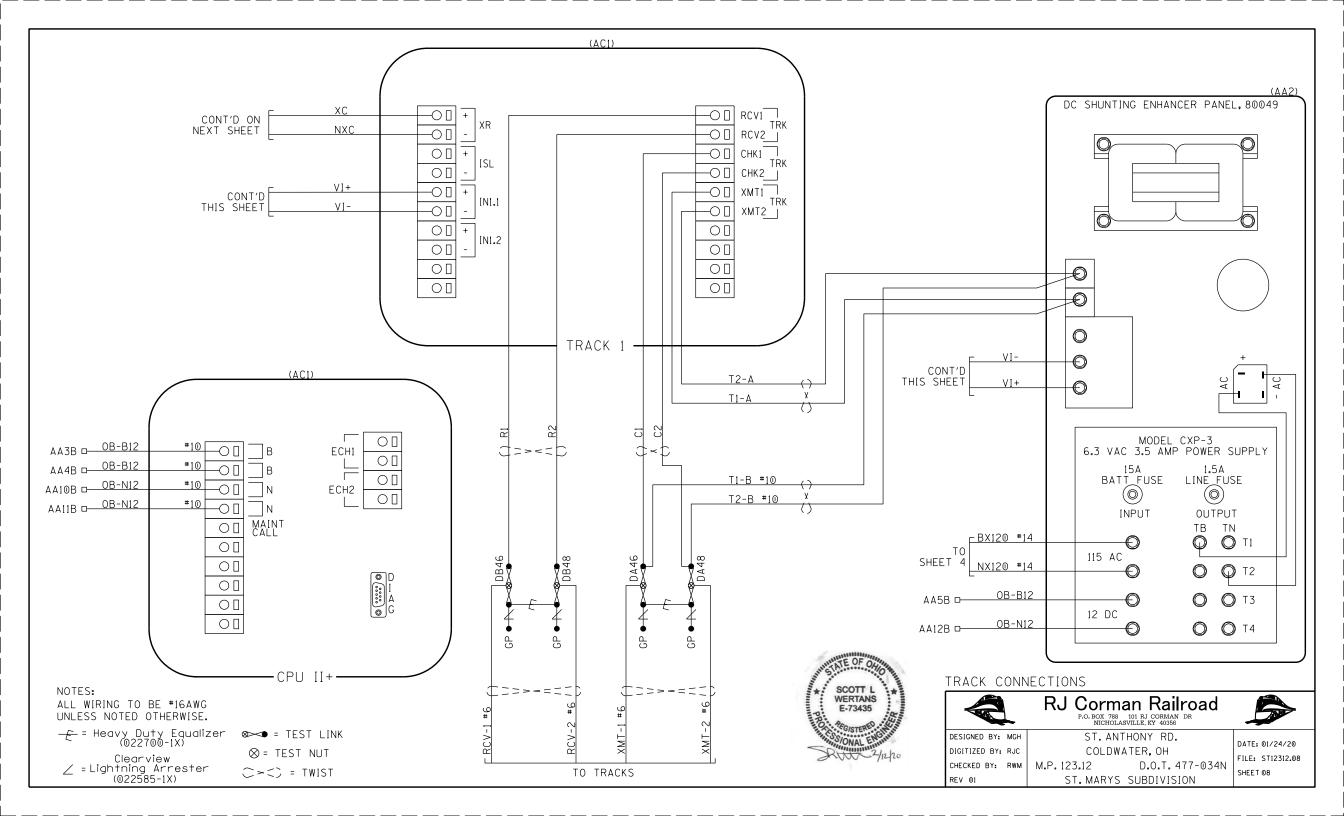


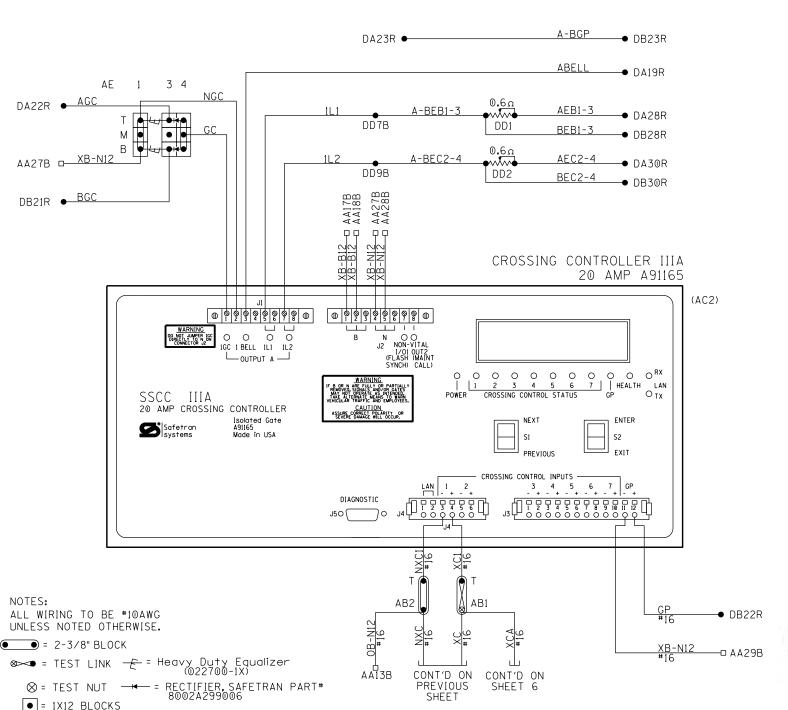
DESIGNED BY: MGH DIGITIZED BY: RJC CHECKED BY: RWM REV 01

ST. ANTHONY RD. COLDWATER, OH

M.P. 123.12 D.O.T. 477-034N ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.07 SHEET 07





MCF PART NUMBER	MCF NAME	MCF CRC
9V61Ø-AØØ1F	BASIC.MCF	1D24Ø612

PROGRAM		
SUBMENU	NOTES	SETTINGS
FLASH RATE:	30-70 FLASH/MIN DEF.=50	50
GATES USED:	YES/NO DEF.=YES	YES
1GC DELAY:	3-20 SEC.DEF.=4	4 SEC.
GATE RISING BELL:	ON/OFF DEF.=ON	OFF
MIN ACTIVATE TMR:	0-60 SEC.DEF.=0	20 SEC.
ENABLED INPUTS:	1 THRU 1 TO 7 DEF.=1 THRU 7	1 THRU 1
TIME:	24 HOUR FORMAT	
DATE:	YYYY MMM DD	
DAYLIGHT SAVING:	ENABLED/DISABLED DEF.=DISABLED	ENABLED
PASSWORD:	ENABLED/DISABLED DEF.=DISABLED	DISABLED

	CONFIGURE	
SUBMENU	NOTES	SETTINGS
LOS TIMERS:	0-20 SEC.	INPUT 1: Ø
	INPUTS 1-7 DEF.=Ø	INPUT 2:0
	DEI :-0	INPUT 3: Ø
		INPUT 4:0
		INPUT 5:0
		INPUT 6:0
		INPUT 7:0
ATCS ADDRESS:	DEF.=700000000000	7000000000000
LOW BATTERY:	9.0-15.0 VOLTS OR DISABLED DEF.=DISABLED	9.Ø VOLTS
AUX I/O:	NONVITAL OUTPUT, FLASH SYNC IN, FLASH SYNC OUT DEF.=NONVITAL OUTPUT	NONVITAL OUTPUT
DETECT LAMP NEUTRAL WIRE:	YES/NO DEF.=YES	NO

SETUP LAMP VOL	TAGES #
SUBMENU	PARAMETERS
OUTPUT 1 L1	XX.X VOLTS
OUTPUT 1 L2	XX.X VOLTS

CONSTRUCTION TO MARK VOLTAGE SETTINGS FOR AS BUILT REVISION.

REV 01



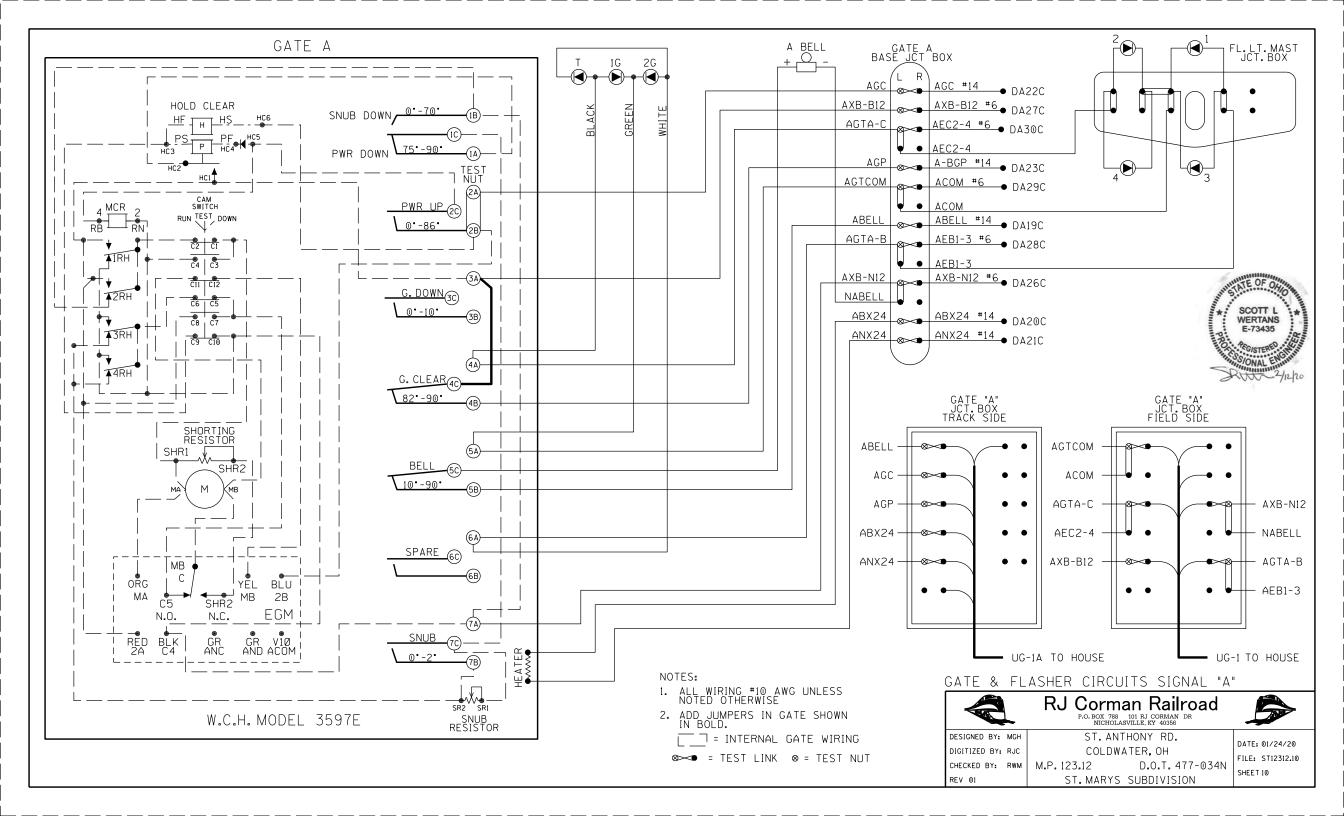
CROSSING CONTROLLER HOOK-UP

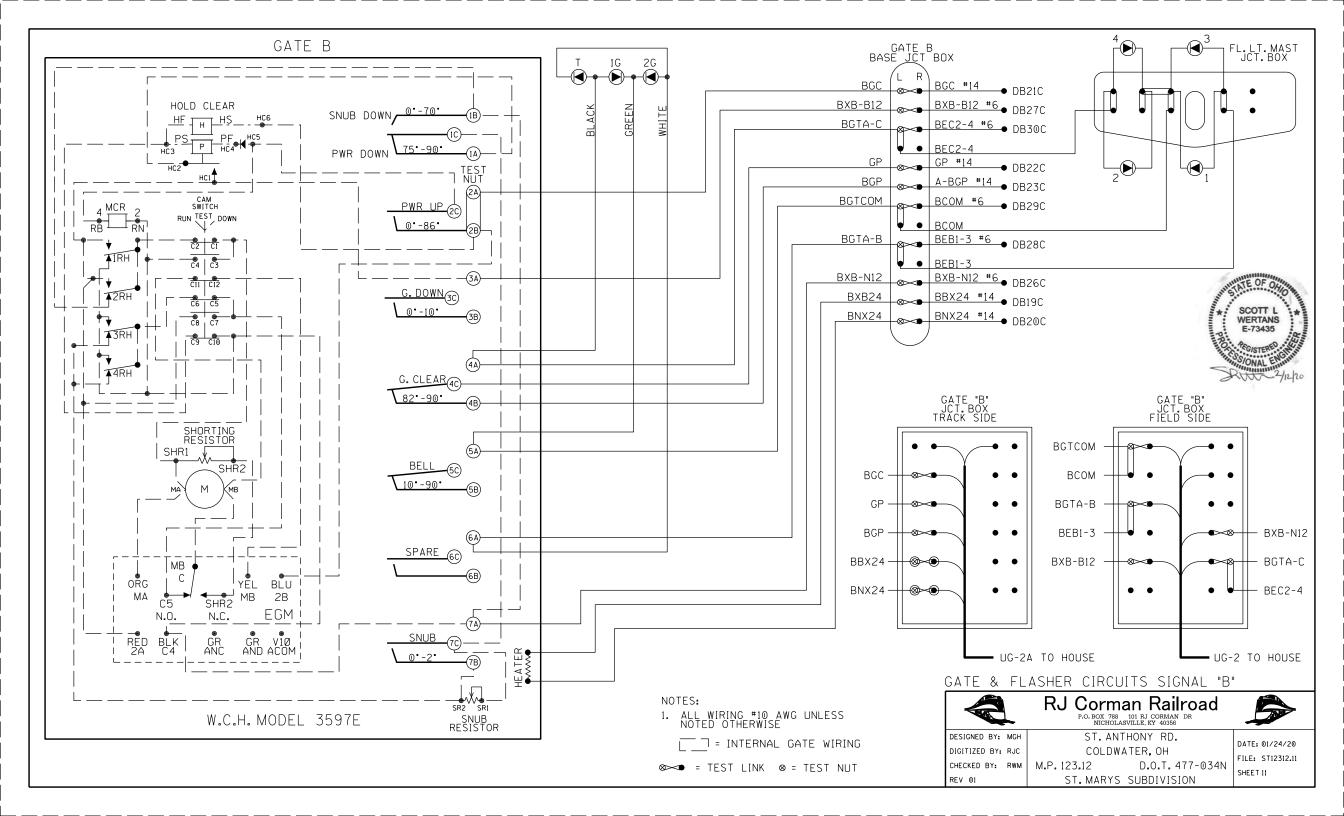


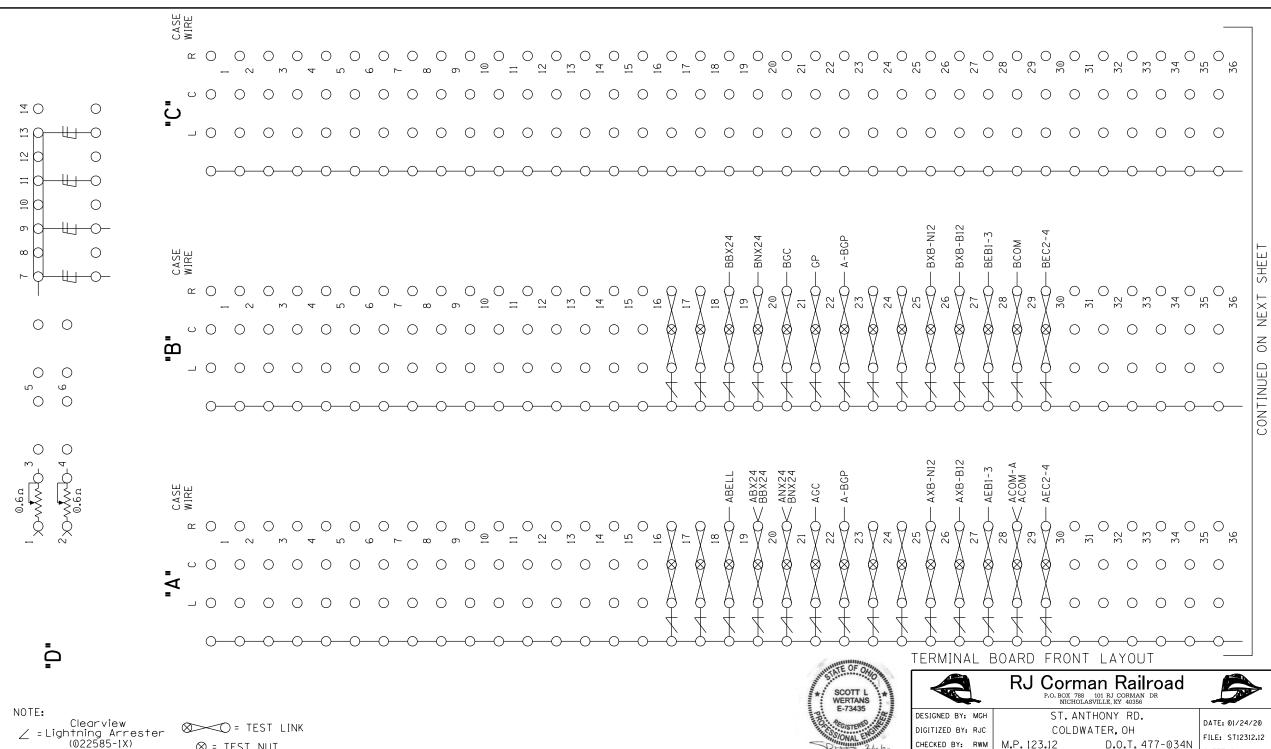


ST. ANTHONY RD. DESIGNED BY: MGH COLDWATER, OH DIGITIZED BY: RJC CHECKED BY: RWM M.P. 123.12 D.O.T. 477-034N ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.09 SHEET 09







Clearview ∠ = Lightning Arrester (022585-1X)

⊗ = TEST NUT

M.P. 123.12 D.O.T. 477-034N

ST. MARYS SUBDIVISION

REV 01

SHEET 12



DATE: 01/24/20

TERMINAL BOARD FRONT LAYOUT



RJ Corman Railroad

P.O. BOX 788 101 RJ CORMAN DR NICHOLASVILLE, KY 40356

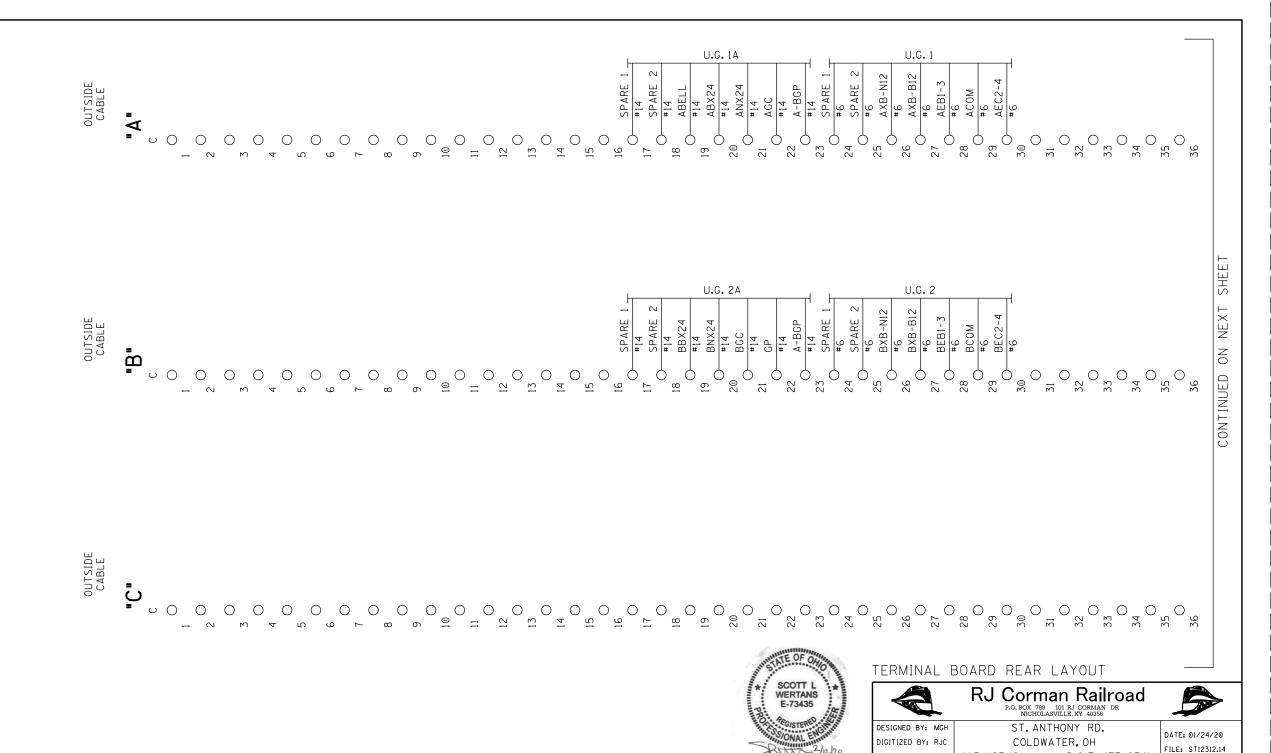
ST. ANTHONY RD. COLDWATER, OH

D.O.T. 477-034N ST. MARYS SUBDIVISION

DESIGNED BY: MGH DIGITIZED BY: RJC CHECKED BY: RWM REV 01

M.P. 123.12

FILE: ST12312.13 SHEET 13



D.O.T. 477-034N

ST. MARYS SUBDIVISION

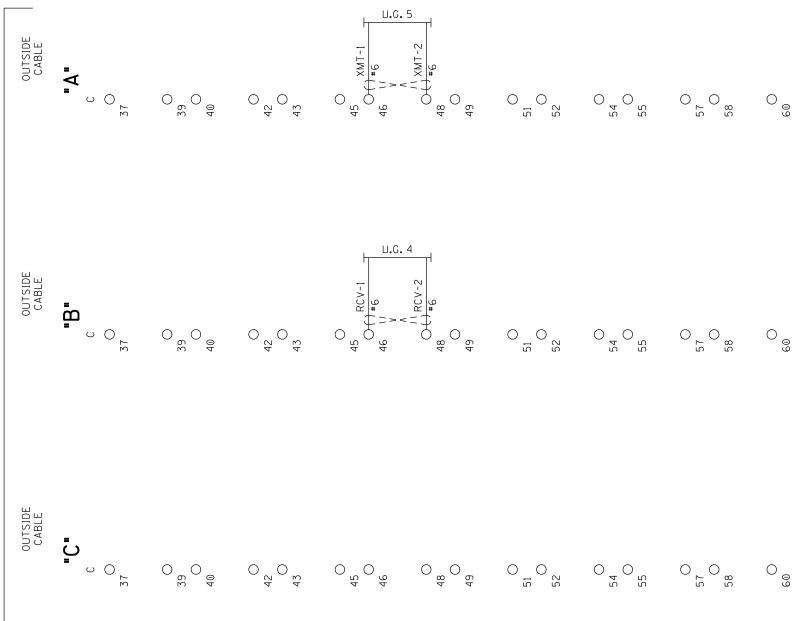
SHEET 14

CHECKED BY: RWM

REV 01

M.P. 123.12









RJ Corman Railroad

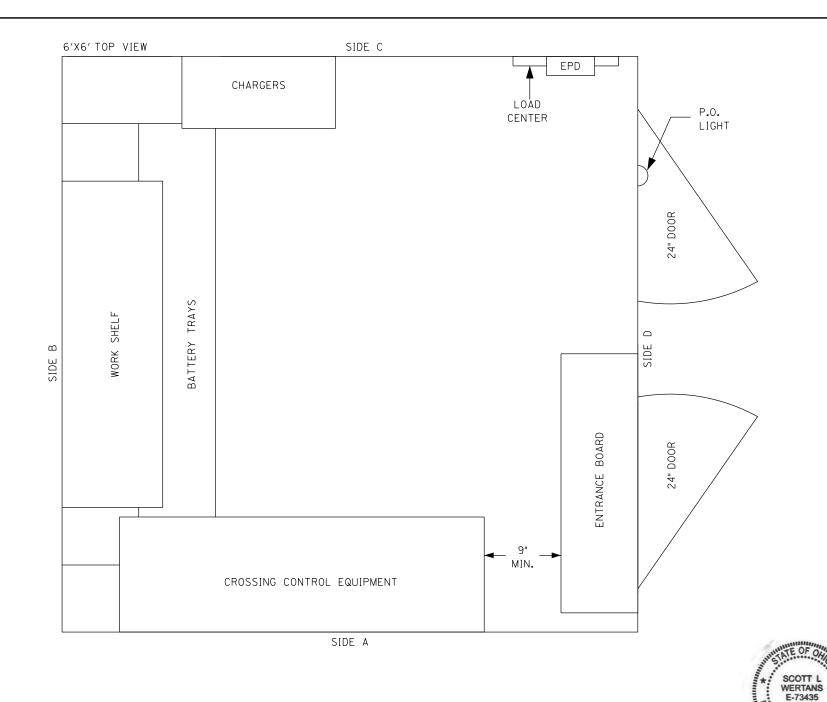
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ST. ANTHONY RD. COLDWATER, OH

D.O.T. 477-034N M.P. 123.12 ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.15 SHEET 15

NOTE: C><> = TWIST



6'X6' SHELTER LAYOUT - TOP VIEW



RJ Corman Railroad

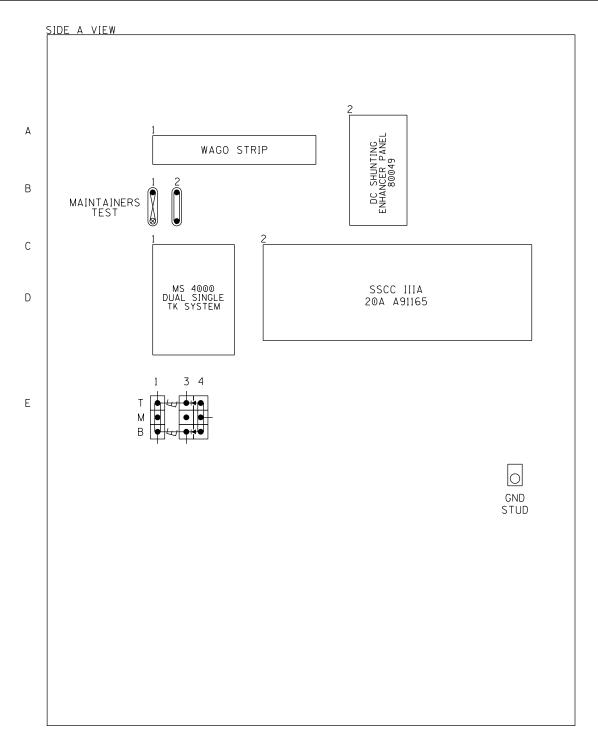


DESIGNED BY: MGH
DIGITIZED BY: RJC
CHECKED BY: RWM
REV 01

ST. ANTHONY RD. COLDWATER, OH M.P. 123.12 D.O.T. 4

123.12 D.O.T. 477-034N ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.16 SHEET 16



NOTE:

⇒ = TEST LINK

• = 2-3/8" BLOCK

= Heavy Duty Equalizer (022700-1X)

---- = RECTIFIER, SAFETRAN PART# 8002A299006

• = 1X12 BLOCKS



6' X 6' HOUSE - SIDE "A"



DIGITIZED BY: RJC

CHECKED BY: RWM

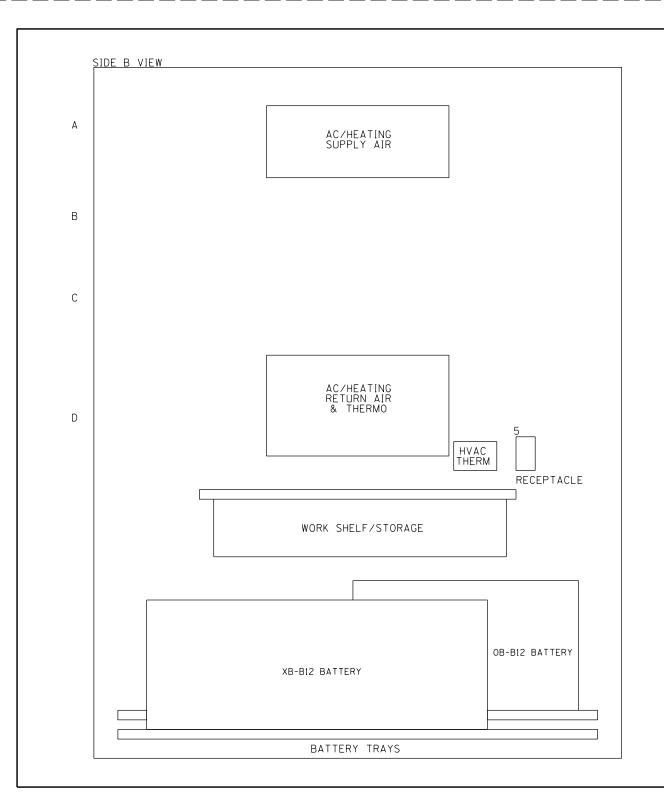
REV 01

RJ Corman Railroad

ST. ANTHONY RD. COLDWATER, OH M.P. 123.12 D.O.T. 477-034N

ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.17 SHEET 17





6' X 6' HOUSE - SIDE "B"



REV 01

RJ Corman Railroad

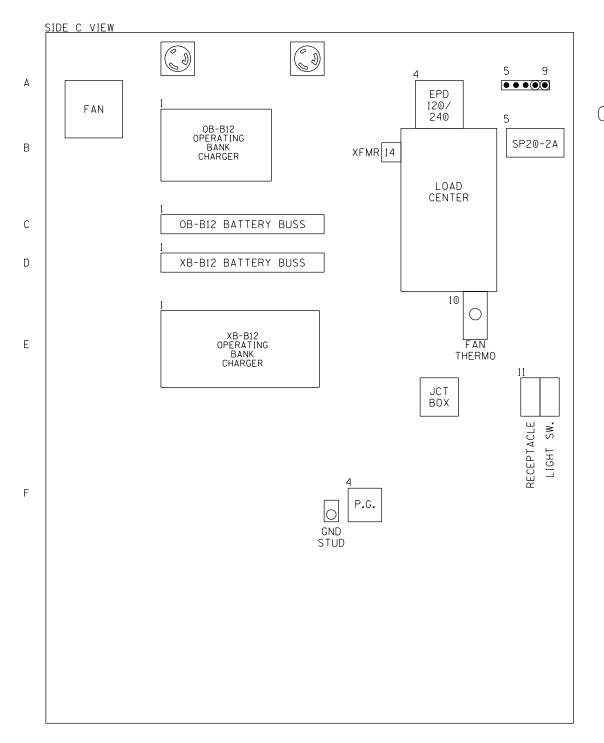
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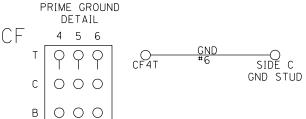
DESIGNED BY: MGH DIGITIZED BY: RJC M.P. 123.12 CHECKED BY: RWM

COLDWATER, OH D.O.T. 477-034N

ST. MARYS SUBDIVISION

DATE: 01/24/20 FILE: ST12312.18 SHEET 18







6' X 6' HOUSE - SIDE "C"



DIGITIZED BY: RJC

CHECKED BY: RWM

REV 01

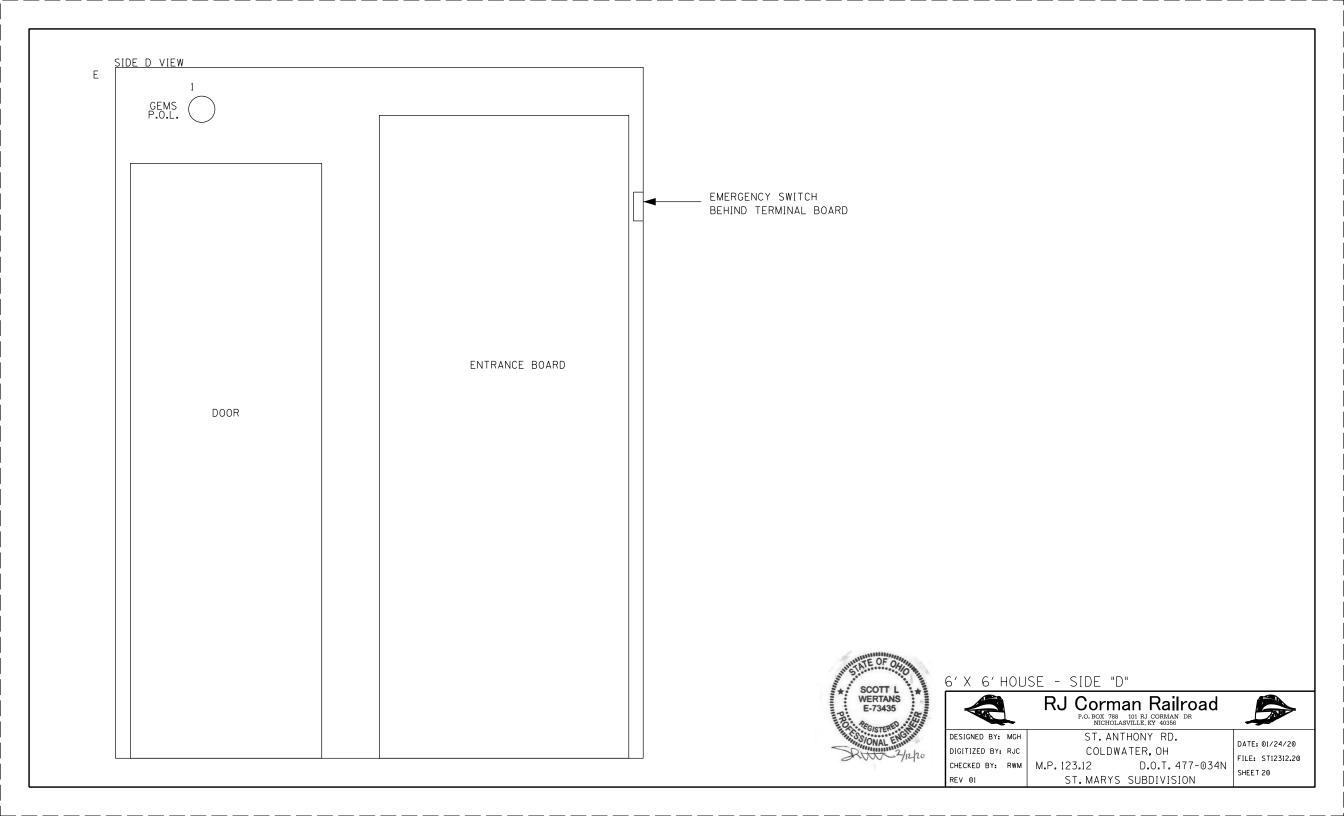
RJ Corman Railroad

ST. ANTHONY RD.

M.P. 123.12 ST. MARYS SUBDIVISION

COLDWATER, OH D.O.T. 477-034N

DATE: 01/24/20 FILE: ST12312.19 SHEET 19



Vendor P/N	Description	Order Qty	UOM
RJC66B-A	ENCLOSURE, HOUSE, 6'X6' ALUMINUM, CN, INCL BARD UNIT (A2982)	1	1 ea
A3001	STENCIL, W/ ROAD NAME, M.P., DOT#, RAILROAD NAME	1	1 ea
LC2-001WB-WG4	LIGHT, POWER OFF INDICATOR, 2 EYE, 4 WIRE, W/ WAGO, POL	1	1 ea
3A900436	ROTARY SWITCH BOX, ASSY, 2-POSITION, "NORMAL-EMERGENCY", 2NO/2NC CONTACTS	1	1 ea
4000-44807-06AX	SURGE PROTECTOR, AC LINE, SP20-2A	1	1 ea
EPD120/240TDFL	ERICO PROTECTION DEVICE, PRIMARY,120/240V, EPD	1	1 ea
4000-44585-001X	ARRESTER, HD CLEARVIEW, W/ COVER	32	1 ea
9A2231	TERMINAL BLOCK, AAR, 1" CENTERS, 2X6, WITH NUT AND WASHER ONLY	8	1 ea
9A2230	TERMINAL BLOCK, AAR, 1" CENTERS, 1X12, WITH FLAT NUT AND WASHER ONLY	4	1 ea
9A2233	TERMINAL BLOCK, AAR, 2-3/8" CENTERS, 1X2, WITH NUT AND WASHER ONLY	2	1 ea
ELC-12/20 MD	BATTERY CHARGER, 115/230V IN, 10-17V OUT, 20A OUT MAX, CURRENT MONITOR, ELC- 12/20 MD, 27550-10	1	1 ea
ELC-12/40 MD	BATTERY CHARGER, 115/230V IN, 10-17V OUT, 40A OUT MAX, CURRENT MONITOR, ELC- 12/40 MD, 27560-10	1	1 ea
50G11	BATTERY CELL, 2V, 264 AH, 50G11	6	1 ea
50G15	BATTERY CELL, 2V, 368 AH, 50G15	7	1 ea
82687-3-P	BATTERY TRAY, 12"X38"	2	1 ea
152-11-3038	WIRE, CASE, T.C. BLUE, #10, OKONITE	800	1 ft
152-11-3002	WIRE, CASE, T.C. BLUE, #16, OKONITE	600	1 ft
282-601	WAGO, TERMINAL BLOCK, 2 COND, 24-10 AWG, 282-601, CN	40	1 ea
282-337	WAGO, SEPARATOR, THROUGH BLOCK, 282-337, CN	3	1 ea
282-402	WAGO, ADJACENT JUMPER, 24-10 AWG, 282-402, CN	36	1 ea
282-317	WAGO, END PLATE, ORANGE, 282-317, CN	1	1 ea
249-117	WAGO, END STOP, 249-117, CN	1	1 ea
210-112	WAGO, DIN RAIL, SLOTTED CARRIER, 2 METERS, 210-112	1	1 ea
793-566	WAGO, MARKER CARD, 1-50, 5-PACK, 793-566	1	1 ea
9000-91165-0101	ELECTRONICS, SOLID STATE CROSSING CONTROLLER, 20 AMP, (SSCC IIIA)	1	1 ea
8421-80490-0001	ELECTRONICS, MS 4000, SINGLE, 1 TRK UNIT, REDUNDANT	1	1 ea
8000-8A299-0006	ELECTRONICS, RECTIFIER DIODES, 8000-8A299-0006	4	1 ea
TBD	80049 - TRACK ENHANCER PANEL	1	1 ft
4000-44700-0000	EQUALIZER, BASIC 44700	8	1 ea
023275-12X	TERMINAL BLOCK, BAKELIGHT, THROUGH-HOLE, 1" CENTERS, 1X12	4	1 ea
023275-2	TERMINAL INSULATION BLOCK, BAKELIGHT, 1X6 (2 EA REQUIRED PER 1x12 THROUGH- HOLE)	8	1 ea
023390-11X	TERMINAL BLOCK, BAKELIGHT, 1" CENTERS, 1X12	6	1 ea
023612-1X	TERMINAL BLOCK, BAKELITE, 2-3/8" CENTERS, 1X2, W/O LINK	10	1 ea
029603-3X	RESISTOR, ADJUSTABLE, 6.3 OHM	2	1 ea
9A2200	CONNECTOR, FLAT STRAP, 1" CENTER, 2 HOLE	20	1 ea
9A2211	CONNECTOR, TEST LINK, STRAIGHT, 2-3/8"	40	1 ea
9A2201	CONNECTOR, FLAT STRAP, 2-3/8" CENTER, 2 HOLE	20	1 ea
9A2208	NUT, AAR, TEST, GOLD, #14-24	50	1 ea
9A2204	NUT, AAR, BINDING, BRASS, #14-24	300	1 ea
9A2202	NUT, AAR, CLAMP, #14-24 HEX	150	1 ea
013986-000	NUT, AAR, INSULATED	8	1 ea

9A2203	WASHER, AAR, BEVELED, FLAT, 1/4" STUD	200	1 ea
63129	CABLE TIE, NYLON, 14.5" L, 100 PK	2	100 pk
L1420PZ	PLUG, TWIST LOCK, 20A, 125/250V, 4-WIRE, *DO NOT USE*	2	1 ea
55809904	WIRE, SOOW, 600V, BLACK, #14, 3 CONDUCTOR	20	1 ft
9A2205	CONNECTOR, TEST LINK, STRAIGHT, 1"	30	1 ea
KUP-14D15-24	RELAY, POWER, 3PDT, 10A, 24VDC, 11-PIN, CN GATE HEATER/SNOW MELTER	1	1 ea
9A2205-7	CONNECTOR, TEST LINK, OFFSET, 1"	4	1 ea
BE2G	TRANSFORMER, 40VA, 24V, BE2G	1	1 ea
206-11-6247	CABLE, SIGNAL, SOLID, BLACK, #6, 7 CONDUCTOR, OKONITE	300	1 ft
206-11-6887	CABLE, SIGNAL, SOLID, BLACK, #14, 7 CONDUCTOR, OKONITE	300	1 ft
150-12-3933	CABLE, TRACK, DUPLEX, BLACK/RED, #6, 2 CONDUCTOR, OKONITE	250	1 ft
206-11-6130	CABLE, POWER, AC SERVICE, #2, 3 CONDUCTOR, W/ #6 GROUND, OKONITE	150	1 ft
SW-BG-SOL6	WIRE, BARE, SOLID, #6	150	1 ft
615880	GROUNDING, ROD, 5/8" X 8'	4	1 ea
CA900940-04	SHUNT ENCLOSURE, PVC, L&W	2	1 ea
M-10-RJCM-32-2-BL	GATE MECHANISM, 3597, 19' - 32' GATE W/ LED LIGHTS, 5" BASE & MAST, 2-WAY LED, COUNTERWEIGHT, X-BUCK SIGN, CONVERSION BRACKET, HIGH WIND BRACKET, ELECTRONIC BELL	2	1 ea
DA-10807	FOUNDATION, HELICAL, 10" X 7', 8" BOLTS, 285 #	2	1 ea
2511L003-750	GATE MECHANISM, HEATER ASSY, 25A THERMOSTAT, 50 OPEN, 40 CLOSE	2	1 ea
SBNT1161G	GROUNDING, ONE SHOT, NT 3-HOLE, 5/8" DIA GRD ROD TO #6 SOLID	4	1 ea
SB20136	GROUNDING, HEAD BOND, 3/16"X7-1/2" TAB, BOX 100	80	1 ea
RJC-ENS-1	SIGNS, CROSSING, EMERGENCY NOTIFICATION, 9"x12", HI-INTENSITY	2	1 ea
ZB1772	DUCT SEAL, 5LB BAG	1	1 ea
NA1658-0	GREASE, NO-OXIDE, 14 OZ CAN	1	1 ea
561185	TAPE, SCOTCH® SUPER 33+ VINYL ELECTRICAL, 3/4x66FT	1	1 ea
974102	TAPE, SCOTCH® LINERLESS RUBBER SPLICING, 3/4x30FT	1	1 ea
6E00-62775-3497	SHUNT, NARROW BAND, MULTI-FREQUENCY, ERICO BONDSTRAND, 348 - 970HZ	2	1 ea
998031-T06938	HOSE, RUBBER, 3/4"	60	1 ft
BA2363J	GROUNDING, SLEEVE, REDUCING, 3/16", #6, TINNED	8	1 ea
SBTBBU4A	GROUNDING, BOOTLEG, W/COUPLER, BOX 100	80	1 ea
A248B	RAIL CLIP, (1) 3/8 PERPENDICULAR, BOX 50	8	1 ea
111BC	TRACK CONNECTION, FLOWER POT, 10" W X 12" H	2	1 ea
SBS8LINSUL	WIRE, BONDSTRAND, S8, INSULATED 4/64 PVC, BLACK, 500 FT	500	1 ft
TBD	INS. JTS	2	1 ea
TBD	BARRACADE FOR HOUSE AND SIGNALS -PER LINEAR FOOT	45	1 ft
TBD	FILL/DGA	107	TON



Mike DeWine, Governor Jon Husted, Lt. Governor Mark Policinski, Chair

November 18, 2019

RJ Corman Railroad Ms. Deborah Hawley, Real Estate & Funded Projects Manager PO Box 788 101 R. J. Corman Drive Nicholasville, KY 40340

RE: Mercer County, Saint Anthony Rd.; CR 110, DOT# 477034N

Dear Ms. Hawley:

A diagnostic review was held at the above grade crossing on July 12, 2019. The crossing has been recommended for the installation of lights and gates.

RJ Corman Railroad is authorized to proceed with the site plans and cost estimates or bid package 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. Please note that the railroad must provide ORDC with a plan stamped by a professional engineer licensed in the State of Ohio prior to acceptance and close out of the project.

The diagnostic review form is attached. Please note any recommendations (page 5), if any, made by the team about 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 Don Damron. Don can be reached at (614) 917-8466, or don.darmon@dot.ohio.gov, if you have any questions.

Sincerely,

Don Damron Project Manager

C: Randall Schumacher, Chief, Motor Carrier & Rail Enforcement, PUCO

Jill Henry, Rail Specialist, PUCO Heather Hamilton, ORDC

ORDC (file)

Attachments: 3 (Diagnostic Review form, Letter Agreement, State of Ohio Purchase Order)

614 644 0306

www.rail.ohio.gov



M. Beth Trombold Lawrence K. Friedeman Dennis P. Deters Daniel R. Conway

October 15, 2019

RJ Corman Railroad Ms. Deborah Hawley Real Estate & Funded Projects Manager PO Box 788 101 R. J. Corman Drive Nicholasville, KY 40340

> Re: Mercer County, Saint Anthony Road, CR 110, DOT#477-034N, hereinafter referred to as the "Project"

Dear Ms. Hawley:

The Public Utilities Commission of Ohio (PUCO) has identified and the Ohio Rail Development Commission (ORDC) surveyed, on July 12, 2019, the above mentioned grade crossing for warning device upgrades. The location has been approved for flashing lights and roadway gates.

The Project shall comply with Agreement No. 004-A, dated May 29, 1991, entered into by the State of Ohio and RJ Corman Railroad (RAILROAD). Furthermore, the RAILROAD shall comply with all applicable state and federal laws governing grade crossing safety programs.

Reimbursable costs will be limited by ORDC based upon approved estimates and bid tabulations, if applicable. These limits will be quantified by the ORDC in its construction authorization to the RAILROAD and may be amended by the ORDC based upon revised estimates and bid tabulations. Additional costs must be approved in writing by the ORDC prior to being incurred. Emergency verbal authorizations by ORDC may be permitted but must be confirmed in writing within ten (10) business days of the verbal approval.

The RAILROAD shall complete plans and estimates for the Project within ninety (90) days after the RAILROAD is notified of authorization to proceed unless otherwise agreed by ORDC/PUCO and the RAILROAD.

The RAILROAD shall not commence construction prior to PUCO's Order and ORDC's construction authorization. The RAILROAD shall provide written notification of the construction start date to PUCO and ORDC no later than five (5) business days prior to such date.

Page 2 of 2 Saint Anthony Road CR 110 Mercer County RJ Corman

Please indicate your acceptance of the terms and conditions of this Letter of Agreement by signing and returning one (1) copy to Ms. Jill Henry, Rail Specialist, Rail Division, Public Utilities Commission of Ohio, 180 E. Broad Street, Columbus, Ohio 43215-3793.

Sincerely,

John D. Williams

Director, Transportation

	Public Utilities Commission of Ohio
RJ Corman Railroad	Matthew Dietrich
Ву	Executive Director
Title	Ohio Rail Development Commission
Date	Date 10 - 25 - 19

Page 2 of 2 Saint Anthony Road CR 110 Mercer County RJ Corman

Please indicate your acceptance of the terms and conditions of this Letter of Agreement by signing and returning one (1) copy to Ms. Jill Henry, Rail Specialist, Rail Division, Public Utilities Commission of Ohio, 180 E. Broad Street, Columbus, Ohio 43215-3793.

Sincerely,

John D. Williams
Director, Transportation

Public Utilities Commission of Ohio

RJ (Corman Railroad	
By Title	Schorale & Hawley	Matthew Dietrich Executive Director Ohio Rail Development Commission
2 4046	DIECOLI COMINCIS TICKES	
Date	10/23/19	Date

CR 110 /Saint Anthony Road (DOT #477034N), Mercer County, RJ Corman 7/12/2019

Crossing at a glance: Rank 918

ORDC Notes:

Incident 8/18. Track slightly skewed. Constituent 9/18 - visual obstruction.

Please Sign In

Don Damro	on Project Mana	ager ORDC	
Name	Title	Organizat	ion
	614-917-8466	don.damron@dot.ohio.gov	Della Sance
	Phone Number	Email	Signature
Tim Flessne	r	PUCO	
Name	Title	Organization	_
	419-204-7337	timothy.flessner@puco.ohio.gov	Twistle Fl
	Phone Number	Email .	Signature
Jim Wiechar	t Engineer	Mercer County	
Name	Title	Organization	
	419-586-7759	jim.wiechart@mercercountyohio.org	
	Phone Number	Email	Signature
Michael Clar	·k	RJC ^	nichael Clock
Name	Title	Organization	=
	859-361-7824	michael.clark@rjcorman.com	
	Phone Number	Email	Signature
Guy Denning	gs	RJC	
Name	Title	Organization	1 ()
	859-221-2634	guy.dennings@rjcorman.com	Aylenning
	Phone Number	Email	Signature
Name	Title	Organization	\
	Phone Number	Email	Signature
Name	Title	Organization	
-			
	Phone Number	Email	Signature
Name	Title	Organization	
-			
	Phone Number	Email	Signature

Reason for Request: Formula (e.g. formula, accident, constituent, etc.)

Date: 7/12/2019

Location Data				
Street or Road Name: CR 110 / Saint Anthony Road				The second secon
County: Mercer	Township:		US DOT No.:	477034N
City (in or near): near Coldwater	Railroad Name:	RJC	RR Milepost:	123.12
Safety Data (Obtain crash repor	is, if possible)			
	Initial Informati	on (from database)		Revised
Number & dates of vehicle crashes in previous 5 years:	1-8/18	(non injury)		
Number & dates of pedestrian/bicycle crashes in previous 5 years:				
Hazard Ranking: 918	Date Run:	03/18/2019	1	The Control of the Co

Existing Traffic Control Devices			
Type of Warning Devices	Installed?	Quantity/Comments	
HIGHWAY			
Advance Warning Signs (condition?)	(≸ Yes □ No		
'Stop' Signs	☐ Yes 反 No		
'Stop Ahead' Signs	□ Yes Ø No		
Pavement Markings (condition?)	Ø Yes □ No		
Dynamic Envelope Markings (condition?)	□ Yes 💆 No		
Illumination	□ Yes ▼ No		
'No Turn' Signs (highway/passive)	□ Yes Ø No		
Barriers/fencing (pedestrian/bicycle)	☐ Yes Ø No		
LOOK Sign	□ Yes ¼ No		
Do Not Stop On Track Sign	□ Yes Ø No		
RAILROAD			
Crossbucks	⊠ Yes □ No		
Crossbucks – assembly with Stop	□ Yes 🌠 No		
Crossbucks – assembly with Yield	Ø (Yes □ No		
Mast-Mounted Flashing Lights	□ Yes 💆 No		
Cantilever Flashing Lights	□ Yes ¤ No	Number: Length:	
Side Lights	□ Yes 📈 No		
LED or Incandescent Lights? Size?	☐ Yes ② No		
Automatic Gates	□ Yes 🌠 No	Number: Length:	
Bells	□ Yes	Number:	
Sidewalk/Pedestrian Gate Arms	□ Yes 💆 No	Number: Length:	
'No Turn' Signs (railroad/active)	□ Yes 💆 No		
Is crossing flagged by train crew?	□ Yes 🙀 No		
OTHER	□ Yes □ No		

Railroad Data				
Type of Train: ☑ Freight ☐ Intercity Passenger ☐ Transit ☐ Shared Use Transit ☐ Commuter ☐ Tourist/Other				
Railroad Characteristics	Initial Information (from database)	Revised		
Total trains per day	2	1/DAY		
<1 per day? Trains per week	4	8/WEEK (4 RT/WEEK TRAIN COUNT MAY INCREASE		
Day thru trains	0	TRAIN COUNT MAY INCREASE		
Night thru trains	0			
Switching	Switching 0			
Total number of tracks	1			
Number of main tracks 1				
Number of other tracks _				
Maximum train speed	25	25 MPH		
Typical train speed 25-25		V 25 MPH V 25 MPH		
Amtrak				
Are there other track(s) crossing this same roadway within 100ft of this crossing?				
If yes, Crossing DOT# (if different)				
If yes, distance (take measurement between track centerlines at closest point along roadway)				
If multiple tracks, can two trains occupy crossing at the same time?				
Can one train block the motorists' view of another train at the crossing? Yes (explain below)				
Can one or more tracks be eliminated through the crossings?				
Comments:				
Circuitry: Constant Warning Time Motion Detection AFO PTC DC Other				

Roadway Data				
Local Highway Authority:	Mercer County			
Roadway Characteristics	Initial Information (from database)		Revised	
Average Daily Traffic	1,485		VOK	
Highway Paved	X Yes □ No		¥ Yes □ No	
Roadway Surface: d Blacktop □ Gravel □	Concrete Other			
Roadway width (paved/travelled way):	2 4ft			
Number of Highway Lanes	2	2		
Urban or Rural	Rural -	- Local		
Vehicle Speed:55MPH			V	
School Bus Operation: ☐ Yes ☐ No	Amount1	_ UNKNOWN		
			LANGTER AND CELWA SCHOOLS	
	No Amount (from		LHA verified/changed?	
Shoulders: ✓Yes □ No 2′				
Is the Shoulder Surfaced? XYes No If yes, shoulder width: ft.				
Is there existing guardrail along the roadway in crossing vicinity? Yes No				
Crossing Angle 🗆 0-29° 🗹 30-59° 🗖 60-90° Measured in				
Quadrant Curb & Gutter:		Quadrant	Curb & Gutter:	
☐ Functional (Curb height = 4" or more)		☐ Functional (Curb h	eight = 4" or more)	
□ Non-functional (Curb height = less than 4")		□ Non-functional (Curb height = less than 4")		
(▼None		ØNone		
Is there a nearby intersection that could cause queuing over the crossing? Yes				
If yes, distance				
Is this intersection signalized? Yes No				
Are there signals currently interconnected with the existing crossing warning devices?				
Is there a 'Do Not Stop on Track' sign? Yes No				
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? Yes				
If yes:				
Improvement type	Lead Agency	Ti	meline/completion	

Pedestrian & Bicycle Data
Regular pedestrian usage: Yes □ No Volumes: □ Occasional □ <20 □ 20-60 □ >60
Is sidewalk present in the approach? Tes No Quadrants: CELINA TO COLOWATER BICYCLE TRAIL PARALLELS TRACES/CROSSES ROADWOY.
Does crossing surface accommodate pedestrians? Yes No
Both sides of roadway? Yes No If no, which side is paved?
Pedestrian generators in close proximity (e.g. schools, sports/entertainment venues)? XYes \(\text{No TRAIL} \)
Comments:
Regular bicycle usage: Yes No TRAIL USERS MUST CROSS ROADWAY TO ACCESS TRAIL
□Roadway □ Dedicated Lane (on street) ☑ Dedicated Path (off street) □ Shared Use (pedestrian/bicycle) Path
Bikes must use sidewalk TRAIL DOES NOT CROSS TRACES (PARALLEL TO TRACES)
Future plans for pedestrian or bicycle routes? Yes No
Comments:
Utility Information Is commercial power available? A Yes DP+L TERMINATES EAST OF CROSSING
Utility Provider (Company Name) MIDWEST ELECTRIC/CITY OF CELINA TERMINATES WEST OF XING
Nearest Available Power Source DP+L TRANMISSION LINE PARALLES TRACKS
What other utilities are present? ☐ Gas ☐ Cable ☐ Telephone ☐ Fiber Optic Cable (add locations to sketch)
Comments: Sanitary Sewer Other NO OUPS MARKINGS ON SITE
Surface
Surface review form completed? Tes MNO CONCRETE PANEL SURFACE (APPROX 10 YRS OLD)
Sight Preview (REFER TO TABLES)
If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table I)
Is stopping sight distance adequate? (See Table 2) 🗷 Yes 🗆 No If no, which quadrant?
When considering recommendations for bicycle treatments:
Bicycle sight distance adequate? 🙎 Yes 🗆 No If no, which quadrant?
When considering recommendations for pedestrian treatments:
Pedestrian sight distance adequate? 🕰 Yes 🗆 No If no, which quadrant?

Potential Red Flags / Project Challenges
Traffic Signal Preemption (include traffic signal intersection name and LHA with jurisdiction over traffic signal, if known):
NA
Crossing Consolidation or Closure:
No
Real Estate or ROW:
ROADWAY = 60' ROW
ROADWAY = 60' ROW (40' FROM CENTER)
Culvert / Drainage / Ballast Conditions: CULVERT LOCATIONS MUST BE IDENTIFIED PRIOR TO SELECTING LOCATION FOR BUNGALOW. SITE FLOODING RESULTS IN FLOWS THROUGH TRACK BALLAST. COUNTY ENGINEER REQUESTS AN OPPORTUNITY TO REVIEW THE PLAN (SITE LAYOUT) PRIOR TO APPROVAL.
Roadway and/or Sidewalks:
NA .
Circuitry (e.g. reaches out to other crossings, specific needs, etc.):
DARK TERRITORY
Environmental:
MA
Utilities:
NA
Other:

Potential Closure	
Is it the consensus of the Diagnostic Review Team that this is a pote	ntial closure project? Vo
Explain reasons:	nual closure project? 700
Expiair reasons.	
Diagnostic Team Recommendations	
☐ No improvements needed	Quadrants Needed
☐ Install/upgrade active devices	
☐ Automatic Flashing Lights (AFLS)	
☐ AFLS /Cants	
X AFLS / Gates	
☐ AFLS / Gates / Cants	
Bells / number	ONE BELL
☐ Upgrade circuitry / type	
☐ Sidelights	
☐ LED Upgrades	
☐ Guardrail Needed	
☐ Install/Replace curb	0.50
Bungalow placement & offset from rail & highway	SE QUADRANT PREFERRED
Comments: 1	1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Other (define) Comments: Cows.pcm USING RETAINING WAL	OTO PROTECT US WIRE IN
FLOOD SITUATIONS.	
☐ Install/upgrade traffic signal preemption	
☐ Install/upgrade traffic signal preemption	
☐ Install/upgrade traffic signal preemption	
☐ Install/upgrade traffic signal preemption Other (define):	
☐ Install/upgrade traffic signal preemption	
☐ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.)	
☐ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.) PEDESTRIAN/BICYCLE Treatments (additional, not include	ed above)
□ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.) PEDESTRIAN/BICYCLE Treatments (additional, not included a control of the control of	ed above) □Sidewalk (specify)
□ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.) PEDESTRIAN/BICYCLE Treatments (additional, not included □ Crossing Surface (specify) □ Detectable warning surfaces	ed above) Sidewalk (specify) LOOK Sign (R15-8)
□ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.) PEDESTRIAN/BICYCLE Treatments (additional, not includ □ Crossing Surface (specify) □ Detectable warning surfaces □ Stop lines	ed above) Sidewalk (specify) LOOK Sign (R15-8) Illumination
□ Install/upgrade traffic signal preemption Other (define): Diagnostic Team Recommendations (cont.) PEDESTRIAN/BICYCLE Treatments (additional, not included □ Crossing Surface (specify) □ Detectable warning surfaces	ed above) Sidewalk (specify) LOOK Sign (R15-8) Illumination Channelization
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Field Sketch (optional)			
Include utilities as marked by OUPS and LHA; include ROW be	oundaries as indicated l	by railroad and LHA.	
4			

Clearing Sight Distances

	T
Maximum Authorized Train	Distance (dT) Along
Speed	Railroad from Crossing (ft)
· ·	
1 - 10	240
1 - 10	240
15	360
20	480
	400
	1-2-
(25)	(600)
30	720
1	720
35	840
40	960
	900
45	1080
1	
50	1200
30	1200
55	1320
60	1440
00	1440
65	1560
70	1/00
/0	1680
75	1800
90	1000
80	1920
85	2040
00	21.0
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 <u>non-gated crossings</u> 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.

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)	670
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.

Bicycle & Pedestrian Clearing Sight Distances

Clearing Sight Distance from Stop Position*											
Crossing of one track								Crossing 2 Tracks		Crossing 3 Tracks	
Train Speed	Car	Single-unit Truck	Bus	WB-50 Semitruck	65-foot Double Truck	Pedestrian ¹	Bicyclist ²	Pedestrian ¹	Ricyclist ²	Pedestrian ¹	Bicyclist ²
10	105	185	200	225	240	120	100	180	120	240	140
20	205	365	400	450	485	240	200	360	240	480	270
25	255	455	500	560	605	300	250	450	290	590	340
30	310	550	600	675	725	360	290	530	350	710	410
40	410	730	795	895	965	480	390	710	470	950	540
50	515	910	995	1,120	1,205	590	490	890	580	1180	670
60	615	1,095	1,195	1,345	1,445	710	580	1060	700	1420	810
70	715	1,275	1,395	1,570	1,680	830	680	1240	810	1650	940
80	820	1,460	1,590	1,790	1,925	950	780	1420	930	1890	1080
90	920	1,640	1,790	2,015	2,165	1060	870	1590	1040	2120	1210

^{*}A single track, 90-degree, level crossing

¹ Walking 3.5 feet per second across tracks 15 feet apart, with a 2-second reaction time to reach a decision point 10 feet before the center of the first track, and clearing 10 feet beyond the centerline of the second track.

² Bicycling 8 miles per hour across tracks 15 feet apart, from a stopped position 10 feet before the center of the first track with an acceleration of 2.5 feet per second, and clearing 10 feet beyond the centerline of the second track on a bike of 6 feet length.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

4/7/2020 11:50:20 AM

in

Case No(s). 20-0712-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at the RJ Corman Railroad Crossing, St Anthony Road/CR 110 DOT#477-034N in Mercer County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division