

Memo

To: Docketing Division
From: Jill Henry, Chief, Rail Division
Cc: PUCO Legal Department
Date: 5/27/2021

Re: PUCO Case No. 21-635-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the Chicago Ft. Wayne & Eastern Railroad Crossing, Pevee Road/TR 237, DOT#532-686H in Allen County, Ohio.

On January 7, 2020, the Ohio Rail Development Commission (ORDC) authorized funding for Chicago Ft. Wayne & Eastern Railroad to install lights and gates at Pevee Road/TR 237, DOT#532-686H, in Allen County, Ohio. The crossing was surveyed, on July 26, 2019, and found to warrant the upgrade. The electric utility provider for this crossing is Mid-Ohio Energy. The service territory changes just south of the crossing with AEP-Ohio.

The project will be paid for with federal funds and is actual cost. The plans and estimates in the amount of \$214,260 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:

Genesee & Wyoming Railroad Services, Inc.
Dale Summers
AVP Engineering Northern
4349 Easton Way
Suite 110
Columbus, OH 43219

Ohio Rail Development Commission
Allen Bell
Manager Grade Crossing Safety Programs
1980 West Broad Street
Mail Stop #3140
Columbus, OH 43223

Jackson Township Trustees
Allen County
P.O. Box 7158
Lafayette, OH 45854

Allen County Engineer
Brion Rhodes
County Engineer
1501 North Sugar Street
Lima, OH 45801

Mid-Ohio Energy

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

TO: John Williams, Director, Transportation Department, PUCO

FROM: Allen Bell, Manager, Grade Crossing Safety Programs, ORDC

BY: Don Damron, ORDC Safety Section

SUBJECT: TR 237, Pevee Rd in Allen County
DOT# 532686H
PID# 111182

DATE: April 22, 2021

The Public Utilities Commission of Ohio (PUCO) established a diagnostic survey at the subject location on July 26, 2019. The Ohio Rail Development Commission (ORDC) attended the review. The ORDC recommends the upgrade of the warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached. The ORDC email concerning a change to the diagnostic team recommendation is also attached to the diagnostic form.

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. ORDC recommends a nine (9) month construction timeline. 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: CDL Railroad Signal Division Proposal
CDL Railroad Crossing Layout and Circuitry Plan
PUCO Letter Agreement
Diagnostic Review Team Survey
Construction Authorization

c: Jill Henry, Rail Specialist, PUCO
ORDC Project Manager (file)



Rail Development Commission

Mike DeWine, Governor
Jon Husted, Lt. Governor

Mark Policinski, Chair

April 22, 2021

Chicago Ft. Wayne & Eastern Railroad
Mr. Jarrod Rishell
AVP Engineering Northern Region
Genesee & Wyoming Inc.
4349 Easton Way, Suite 110
Columbus, OH 43219

RE: Construction Authorization, TR 237, Pevee Rd., Allen Count
DOT# 532686H
PID# 111182
CFER MP QF 250.13; Railroad # 19CFER25R

Dear Mr. Rishell:

The plan dated 1/25/2021 and estimate dated 3/29/2021 for the referenced project has been reviewed and is acceptable. The Chicago Fort Wayne & Eastern (CFER) may proceed with the construction of the proposed grade crossing warning system 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.

The estimate of \$214,260.00 is acceptable and reimbursement is limited to \$214,260.00. 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 the IORY accepting the following instructions:

1. CRER'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, and to the Public Utilities Commission of Ohio at Jill.henry@puc.state.oh.us. CFER'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. CFER 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 CFER.
3. CFER's project foremen will notify Don Damron at 614-917-8466 (mobile) or don.damron@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. CFER will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. CFER 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.

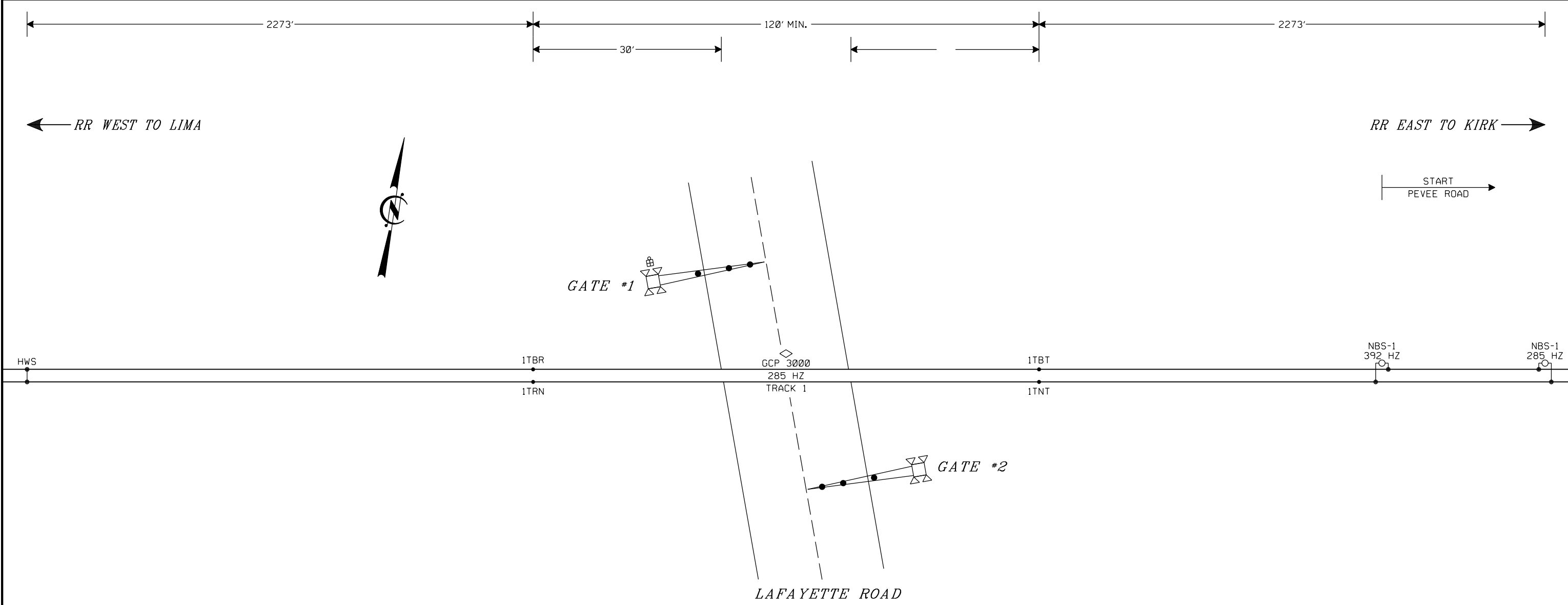
Thank you for your assistance with these matters.

Sincerely,



Donald J Damron
Project Manager

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



APPROACH CIRCUIT DISTANCE CALCULATION	
	TRACK 1
BASE WARNING TIME	27 SEC
PLUS TIME FOR CLEARANCE DISTANCE > 35'	0 SEC
EQUALS PLANNED WARNING TIME	27 SEC
PLUS TIME FOR EQUIPMENT RESPONSE	4 SEC
PLUS TIME FOR TRAFFIC PRE-EMPTION	0 SEC
EQUALS CIRCUIT APPROACH TIME	31 SEC
TIMES MAXIMUM PLANNED TRAIN SPEED	50 MPH
TIMES RATIO OF FEET PER SECOND TO MILE PER HOUR	22/15
EQUALS APPROACH CIRCUIT DISTANCE WITH ANY FRACTIONAL VALUE INCREASED TO FULL UNIT	2273 FT

CABLE TABULATION	
HOUSE TO GATE #1	17C (2)*6, (8)*9, (7)*14
HOUSE TO GATE #2	17C (2)*6, (8)*9, (7)*14
HOUSE TO AC SERVICE	
HOUSE TO TX+ & TX- RAIL CONNECTIONS	2C*6 TW
HOUSE TO RX+ & RX- RAIL CONNECTIONS	2C*6 TW




NOT TO SCALE

REVISIONS							
							1
							REDRAWN IN CAD A.P.D. 01-04-21

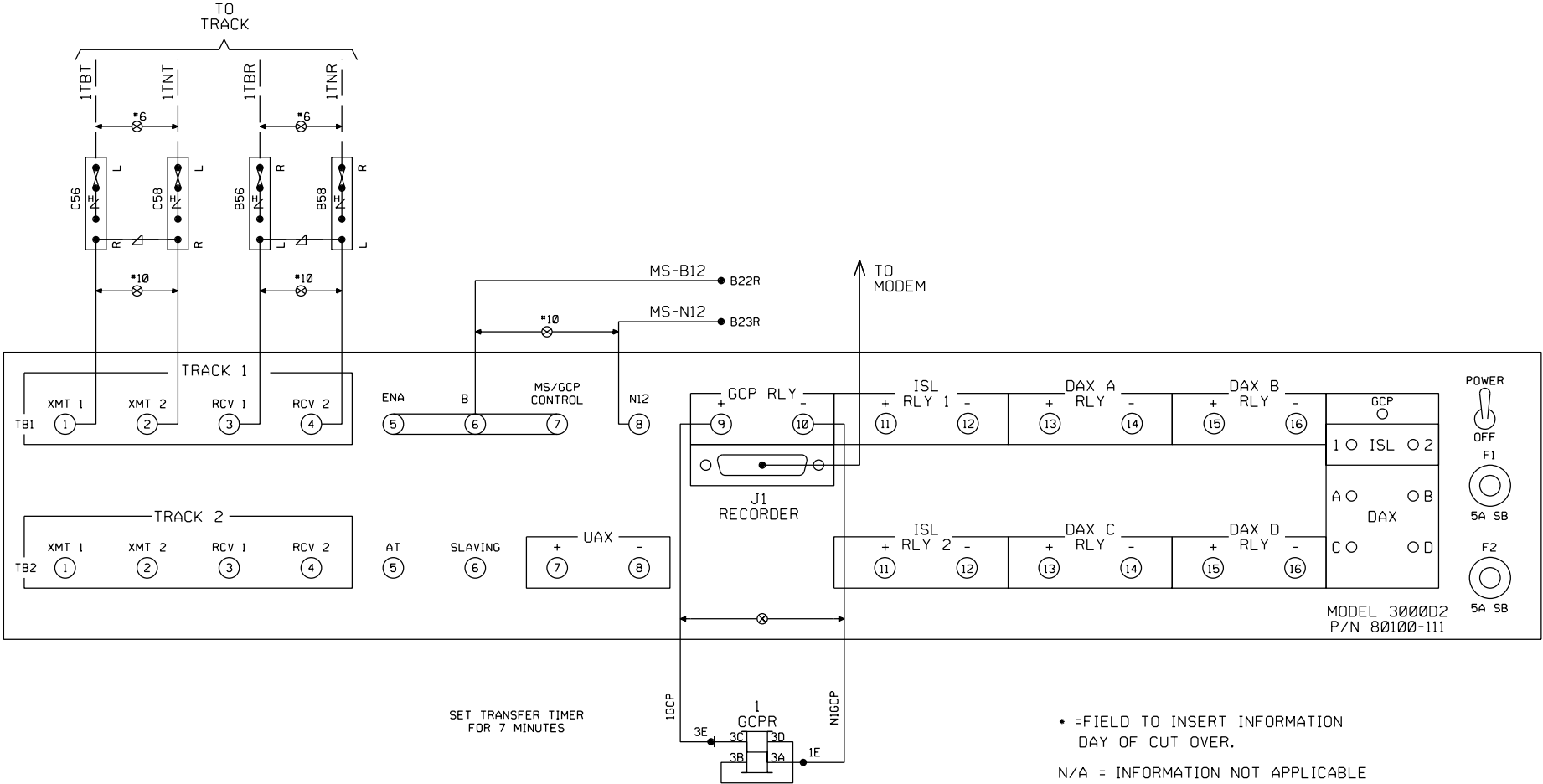
THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.





CHICAGO, FORT WAYNE & EASTERN RR
(CFER)

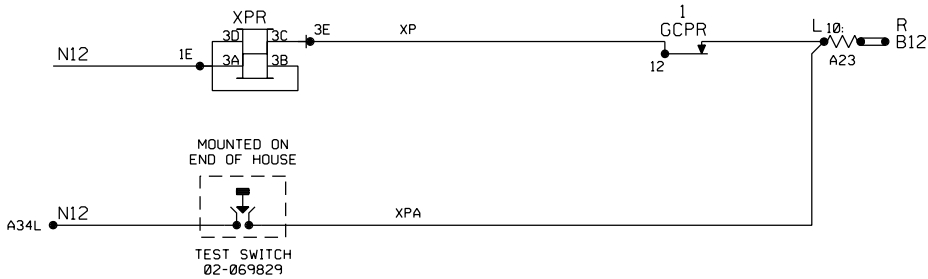
DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: --- DATE: 01-04-21	CROSSING TRACK PLAN LAFAYETTE ROAD LAFAYETTE, OHIO DOT# 532 688W MILEPOST# 250.77	DRAWING NO. 532688W SHEET 1 OF 9
---	--	--



ISLAND FREQUENCY:

TRACK 1: 7.1 KHz.

THIS UNIT TO BE EQUIPPED WITH "F" LEVEL SOFTWARE ON PROCESSOR MODULE (80014) AND DATA RECORDER MODULE (80015)



SYSTEM PROGRAMMING PARAMETERS		
PROMPT		RESPONSE
NUMBER OF TRACKS		1 TRACK
FREQUENCY (MS/GCP)		285 HZ
UNI/BIDIRECTIONAL	T1	BIDIRECTIONAL
UNI/BIDIRECTIONAL	T2	N/A
XMIT LEVEL	T1	MED
XMIT LEVEL	T2	N/A
PREDICTOR/MOTION SENSOR	T1	PREDICTOR
PREDICTOR/MOTION SENSOR	T2	N/A
WARNING TIME SELECTED	T1	31 SEC.
WARNING TIME SELECTED	T2	N/A
APPROACH DIST. SELECTED	T1	2566 FT.
APPROACH DIST. SELECTED	T2	N/A
APPROACH DIST. COMPUTED	T1	• FT.
APPROACH DIST. COMPUTED	T2	N/A
UAX PICKUP DELAY(0=OFF)	0-SEC.	
ENA/UAX2 PICKUP DELAY(0=ENA)	25-SEC.	
NUMBER OF DAX'S		0
ISLAND DISTANCE	T1	• FT.
ISLAND DISTANCE	T2	N/A
DAX A TRACK ASSIGNMENT		N/A
DAX A DISTANCE (0=PREEMPT)		N/A FT.
DAX A WARNING TIME		N/A SEC.
DAX B TRACK ASSIGNMENT		N/A
DAX B DISTANCE (0=PREEMPT)		N/A FT.
DAX B WARNING TIME		N/A SEC.
DAX C TRACK ASSIGNMENT		N/A
DAX C DISTANCE (0=PREEMPT)		N/A FT.
DAX C WARNING TIME		N/A SEC.
DAX D TRACK ASSIGNMENT		N/A
DAX D DISTANCE (0=PREEMPT)		N/A FT.
DAX D WARNING TIME		N/A SEC.
SLAVING MASTER/SLAVE		MASTER
PASSWORD ENABLED		DISABLED
RECORDER INSTALLED		INSTALLED
RS-232-C BAUD RATE		
RS-232-C DATA BITS		
RS-232-C STOP BITS		
RS-232-C PARITY		
DATE(E.G.,MON 16 NOV 1987)		•
TIME(E.G., 11:25:43 AM)		•
DAYLIGHT SAVINGS		ON/OFF
EXPANDED PROGRAMMING HISTORY		
SWITCH TO MS	T1	10-EZ
SWITCH TO MS	T2	N/A
TRANSFER DELAY MS TO GCP T1		0-SEC.
TRANSFER DELAY MS TO GCP T2		N/A
PRIME PREDICTION OFFSET	T1	0-FT.
PRIME PREDICTION OFFSET	T2	N/A
PICKUP DELAY PRIME		15-SEC.
PICKUP DELAY DAX A		15-SEC.
PICKUP DELAY DAX B		15-SEC.
PICKUP DELAY DAX C		15-SEC.
PICKUP DELAY DAX D		15-SEC.
COMPENSATION VALUE	T1	SET BY SYSTEM
COMPENSATION VALUE	T2	N/A
NUMBER OF TRACK WIRES T1		4 WIRES
NUMBER OF TRACK WIRES T2		N/A

REVISIONS							
							1
							REDRAWN IN CAD A.P.D. 01-04-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



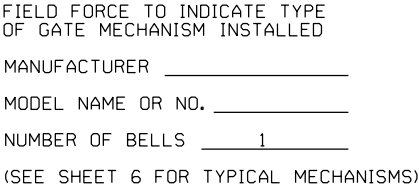
CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

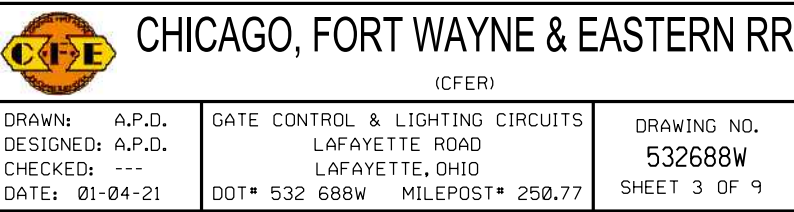
DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: ---
DATE: 01-04-21

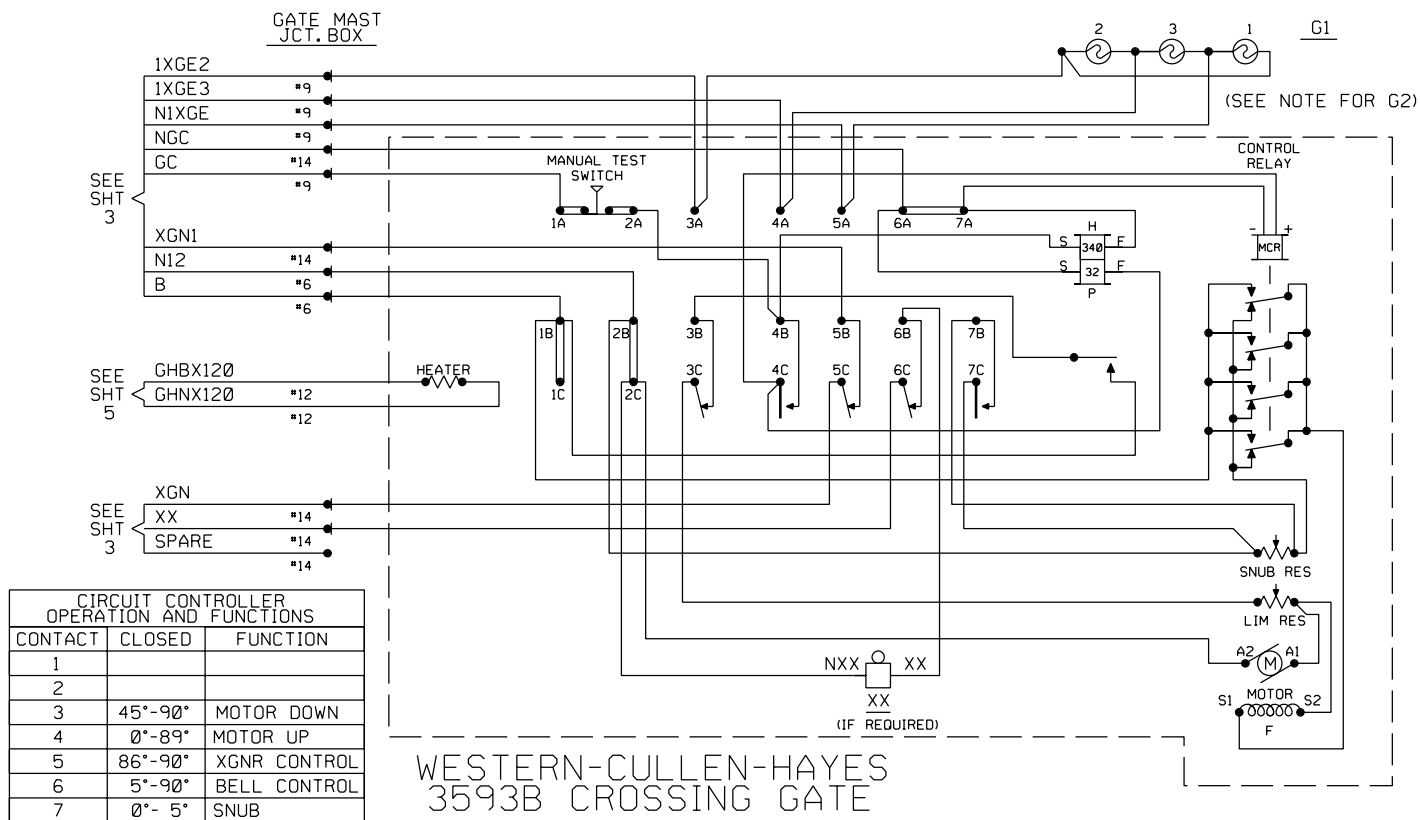
GCP 3000 CIRCUITS
LAFAYETTE ROAD
LAFAYETTE, OHIO
DOT# 532 688W MILEPOST# 250.77

DRAWING NO.
532688W
SHEET 2 OF 9



THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.





REVISIONS

1
REDRAWN IN CAD
A.P.D.
01-04-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: ---
DATE: 01-04-21

GATE MECHANISM
LAFAYETTE ROAD
LAFAYETTE, OHIO
DOT# 532 688W MILEPOST# 250.77

DRAWING NO.
532688W
SHEET 4 OF 9



- 1) ☆ = SUPPRESSOR TO BE LOCATED AS CLOSE AS POSSIBLE TO MAIN BREAKER. LEADS TO BE TWISTED WHENEVER POSSIBLE.
 - 2) 100A SERVICE REQUIRES #2 WIRE.
60A SERVICE REQUIRES #6 WIRE.
 - 3) ALL AC POWER WIRING TO BE IN CONDUIT.
 - 4) MAXIMUM BREAKER LOAD NOT TO EXCEED 80% OF RATING (IE, 20A BREAKER GOOD FOR 16A).
 - 5) Δ = 20A CIRCUIT BREAKER RESERVED FOR COMMUNICATIONS.
 - 6) 480V AC POWER SOURCE MUST BE PROTECTED BY 30A FUSING AT FEED END.
 - 7) LINE SERVICE DISCONNECT DOES NOT KILL LOCATION POWER. SHOP TO PROVIDE WARNING LABEL.
 - 8) ☆☆ = 20A GFI BREAKER
- ⊗ = TWISTED PAIR

REVISIONS							
							1 REDRAWN IN CAD A.P.D. 01-04-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: ---
DATE: 31.01.21

POWER DISTRIBUTION
LAFAYETTE ROAD
LAFAYETTE, OHIO

DRAWING NO.
532688W
SHEET 5 OF 9

REVISIONS						
						1
						REDRAWN IN CAD A.P.D. 01-04-21


THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



RAILROAD

SIGNAL SERVICES

PO Box 319 • Valley, NE 68064 • (402) 694-5884



CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

DRAWN: A.P.D.

DESIGNED: A.P.D.

CHECKED: ---

DATE: 01-04-21

TERMINAL BOARD

LAFAYETTE ROAD

LAFAYETTE, OHIO

DOT# 532 688W

MILEPOST# 250.77

DRAWING NO.

532688W

SHEET 6 OF 9

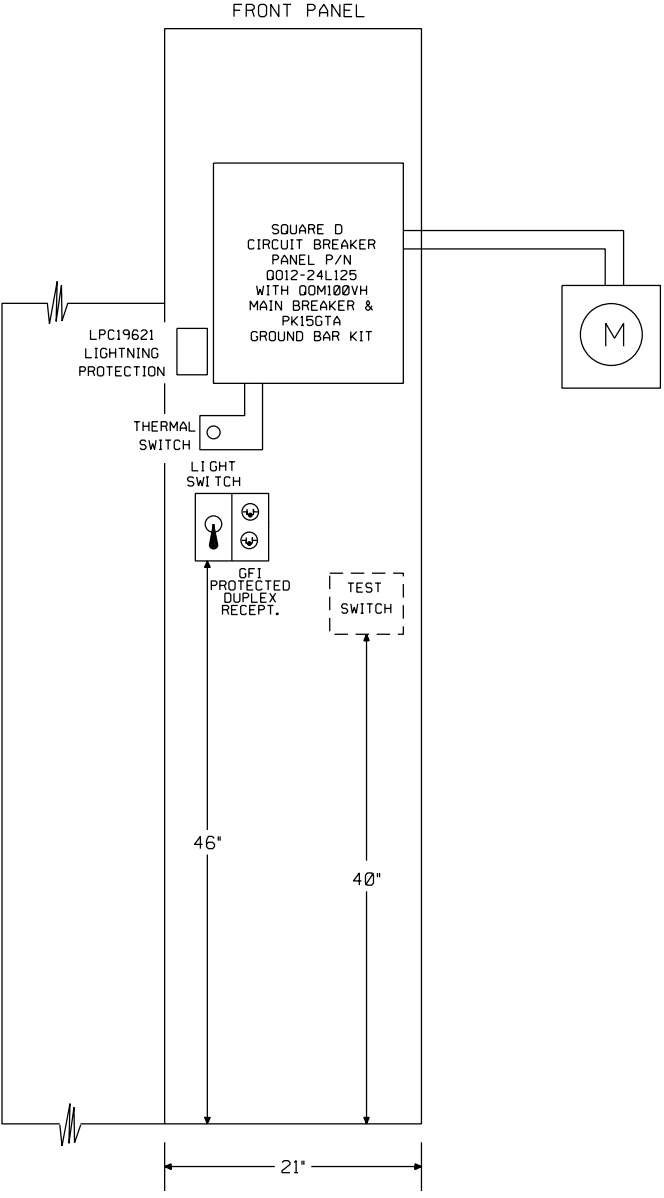
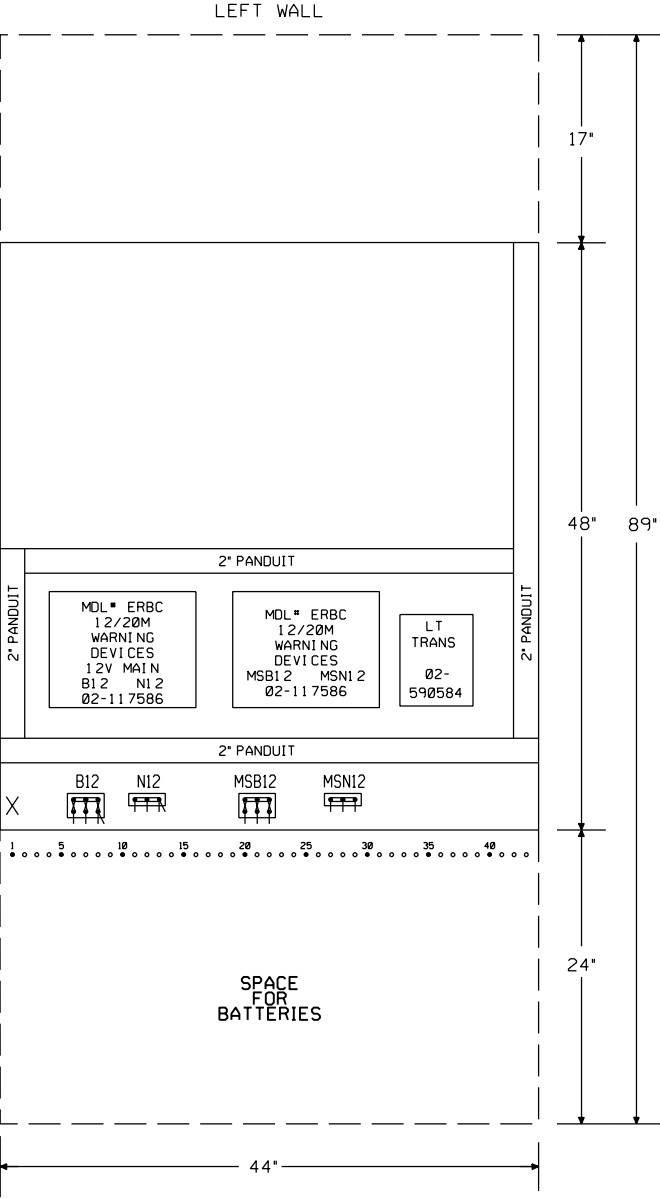
Diagram showing terminal board wiring and components. The board is divided into sections A, B, C, and D. Section A contains terminal blocks for MS-B12, B12, and N12. Section B contains terminal blocks for 1GC, N12, 1XGE2, 1XGE3, 1XX, N1XGE, N1GC, 1XFE2, 1XGN, 1XGN1, N1XFE2, SPARE, 1XFE1, SPARE, N1XFE1, SPARE, 1TBR, 1TNR. Section C contains terminal blocks for 2GC, N12, 2XGE2, 2XGE3, SPARE, N2XGE, N2GC, 2XFE2, 2XGN, 2XGN1, N2XFE2, SPARE, 2XFE1, SPARE, N2XFE1, SPARE, 1TBT, 1TNT. Section D contains terminal blocks for 2:ADJ., 2:ADJ., 2:ADJ., 2:ADJ., 2:ADJ., 2:ADJ., 2:ADJ. The diagram also shows ground busses welded to the floor and cable connections to gates 1 and 2.

NOTES:

1:ADJ. 02-425799 - RESISTOR
2:ADJ. 02-425807 - RESISTOR
10:FIXED 02-423588 - RESISTOR
500:FIXED 02-423711 - RESISTOR

02-036133 - 4 POST PORCELAIN BASE
02-050753 - TERMINAL BLOCK FOR EQUALIZER
02-048757 - TERMINAL STRIP
02-150009 - BUSS LINK
02-286662 - TEST LINK ASSEMBLY
02-023316 - ARRESTOR, HEAVY DUTY
02-025565 - ARRESTOR
02-197950 - EQUALIZER

GROUND CONNECTION TO BE IN ACCORDANCE WITH STANDARD PLAN CS-9001-A




REVISIONS							
							1
							REDRAWN IN CAD A.P.D. 01-04-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



RailRoad
SIGNAL SERVICES
PO Box 319 • Valley, NE 68064 • (402) 894-5884



CHICAGO, FORT WAYNE & EASTERN RR
(CFER)

DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: --- DATE: 01-04-21	FRONT AND LEFT WALL LAYOUT LAFAYETTE ROAD LAFAYETTE, OHIO DOT# 532 688W MILEPOST# 250.77	DRAWING NO. 532688W SHEET 7 OF 9
---	---	---

RELAY FUNCTIONS

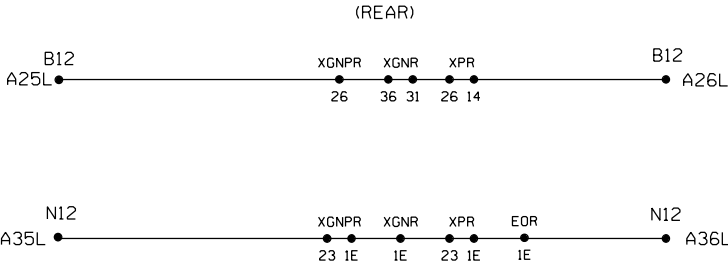
POR	EOR	XPR	XGNR	XGNPR
12- EBX	12- EX	12- XGN	HDB13- EBX	22-NGC
15- ENX	15- EX	15- XX	HDB15- EBX	25-GC
22- EBX	32- EX	22- NGC	32- EO	
25- ENX	35- EX	25- GC	35- XGNP	
32- EBX		32-		
35- ENX		35-		

1 GCPR
12- XP
15-
22-
25-
32-
35-

* = POR RELAY P/N A62-407 02-411542
POR RECTIFIER P/N A53-541 02-390142 MOUNTED
ON REAR OF RELAY.

RELAYS TO BE MOUNTED ON SWING-OUT RACK
ON SHELF.

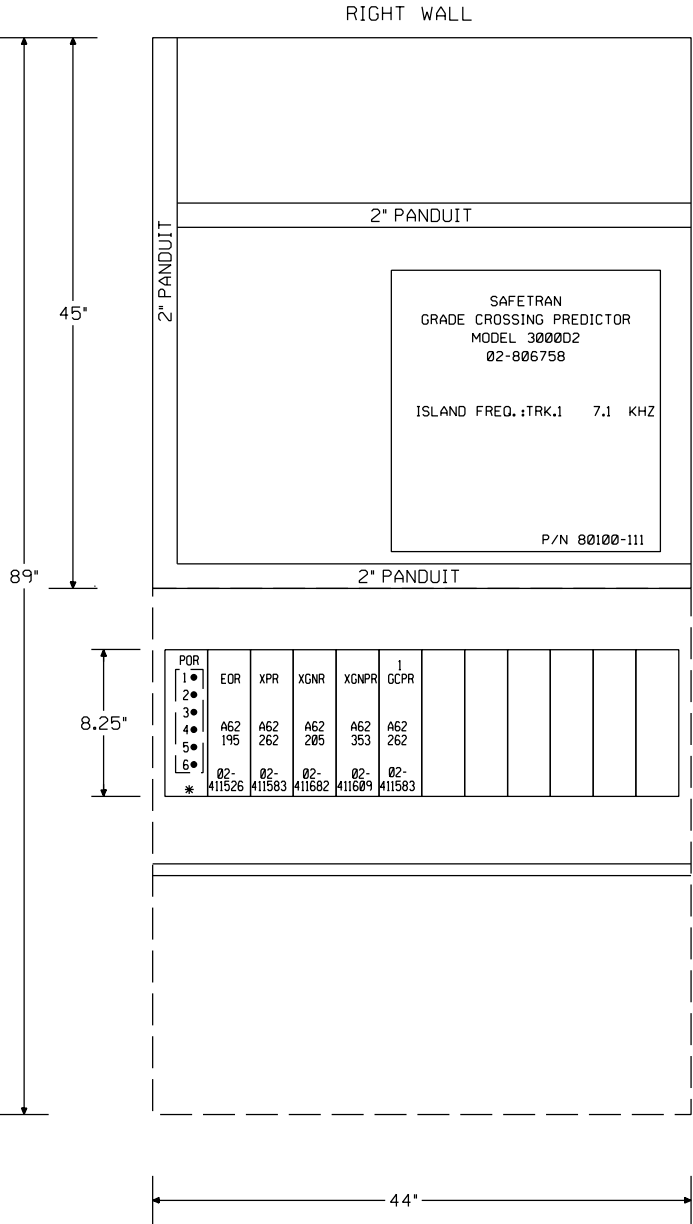
RELAY ENERGY LOOPS



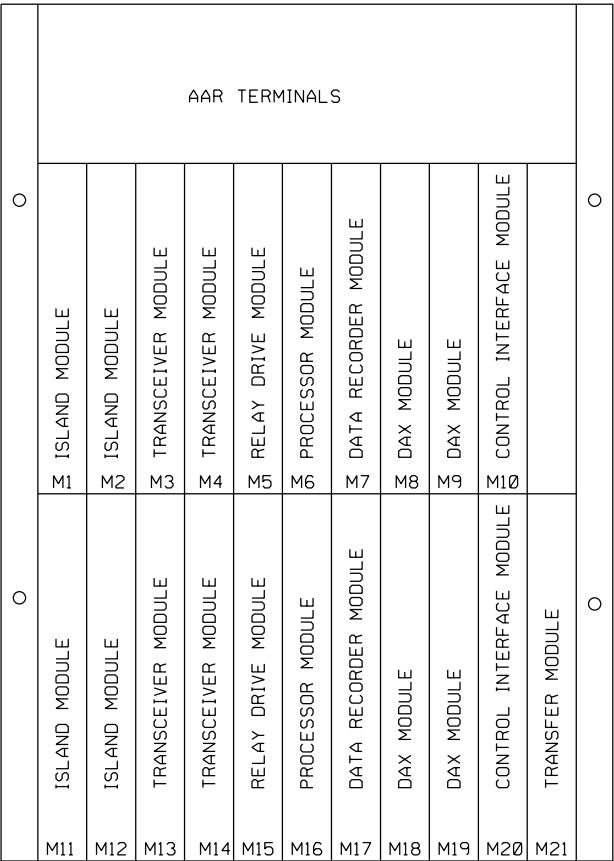
8 7 6 5 4 3 2 1

RELAYS

A62-407 = 02-411542 B1-PT, 6FB-HD, 100-/100:
A62-195 = 02-411526 B1, FLASHER 4FB-HD
A62-205 = 02-411682 B1, 2FB, 2B-HD, 210:
A62-353 = 02-411609 B1SR (3 SEC.), 2FB, 460:
A62-262 = 02-411583 B1N, 6FB, 500:



REQUIRED MODULES		
PART NUMBER AND MODULE NAME	UPPER BAY	LOWER BAY
80011-F (HZ) ISLAND MODULE	M1	M11
80012 TRANSCEIVER MODULE	M3	M13
80013 RELAY DRIVE MODULE	M5	M15
80014 PROCESSOR MODULE	M6	M16
80015 DATA RECORDER MODULE	M7	M17
80016-1,-2 DAX MODULE	NONE	NONE
80020 CONTROL MODULE INCLUDES 80017 KEYBOARD DISPLAY INTERFACE	M10	M20
80028 TRANSFER MODULE		M21



CARDFILE LAYOUT

REVISIONS

								1 REDRAWN IN CAD A.P.D. 01-04-21
--	--	--	--	--	--	--	--	---

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



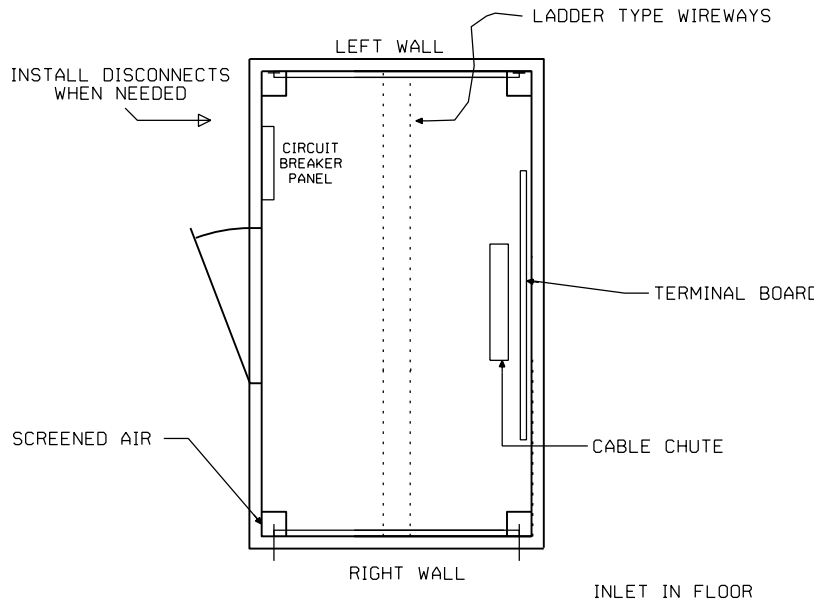
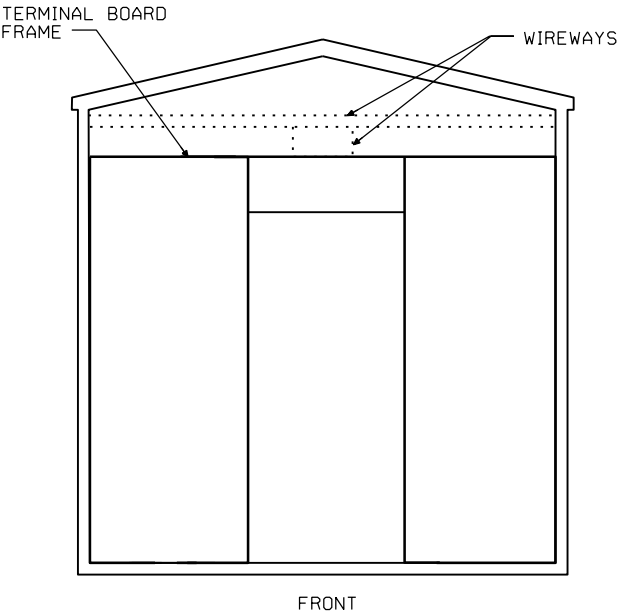
CHICAGO, FORT WAYNE & EASTERN RR

(CFER)



DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: ---
DATE: 01-04-21

RIGHT SIDE OF HOUSE
LAFAYETTE ROAD
LAFAYETTE, OHIO
DOT# 532 688W MILEPOST# 250.77

DRAWING NO.
532688W
SHEET 8 OF 9



4 x 6 STYLE BUNGALOW

REVISIONS								THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.	 PO Box 319 • Valley, NE 68064 • (402) 894-5864	 CHICAGO, FORT WAYNE & EASTERN RR (CFER)	DRAWN: A.P.D.		HOUSE LAYOUT		DRAWING NO.	
						1 REDRAWN IN CAD A.P.D. 01-04-21	DESIGNED: A.P.D.				LAFAYETTE ROAD		LAFAYETTE, OHIO		532688W	
								CHECKED: ---	DATE: 01-04-21	DOT# 532 688W MILEPOST# 250.77		SHEET 9 OF 9				



Location/Description	QTY	
Pevee Road		
Control Shelter		
HSE 6X6 AL S/L SKR101 L/EPD/KY	1	EA
SYS XP4 1TR VPM-3 W/UCI-3, 2-XTI-1	1	EA
ASSY MDSA-1XS	1	EA
ASSY IXS XIP-20B CROSSING INTERFAC~	1	EA
KIT HARDWARE WALL MT BRKT XIP-20B	1	EA
CABLE XIP-20 1 12FT	1	EA
CABLE XIP-20 2 12FT	1	EA
PROT AC LINE 230V SP20-3	2	EA
ELC 12/20 W/10' LEAD	1	EA
ELC 12/40 W/10' LEAD	1	EA
MICRO DATA ANLZ II/DTMF RA PKG	1	EA
ASSY 4 POST TERM BLOCK	28	EA
ASSY AGA-1	28	EA
ASSY AGE-2 HD	2	EA
RELAY COMP, B1	1	EA
PLUGBOARD COMPLETE, B1 RELAY MTG KIT	1	EA
"POST,TERMINAL VOLTAGE TEST 1E POST"	1	EA
TEST LINK W/PLT & INSUL	88	EA
RLY DPDT 240VAC 10A OCT W/LAMP	2	EA
SCKT RLY 8-PIN OCT SCREW PNLMT	2	EA
WIRE 14AWG/19 TC EPR/PVC BLU	200	FT
WIRE 16AWG/19 TC EPR/PVC BLU	500	FT
WIRE 10AWG/19 TC EPR/PVC BLU	450	FT
WIRE 6AWG/19THHN BLK	120	FT
WIRE 6AWG/19 THHN RED	120	FT
WIRE 6AWG/19 THHN GRN	20	FT
ASSY 2WAY TERM BLK W/AAR HARD	10	EA
ASSY TERM STRIP DBL POST 12	10	EA
ASSY SINGLE ROW TERM 12 POST	1	EA
NUT INSULATED HARMON	24	EA
LIGHT POWER OFF LED W/WAGO CON	2	EA
PLATE MOUNTING VELCORP PO LT	1	EA
GROUND POST, 5/16	3	EA
KIT SM PRTS/TAGS GENERIC	1	EA
LABEL, DANGER 240 V, 1.75 X 2.	1	EA
SIGN, HSE ID	1	EA
DIGITAL RECORDER SYS. W/5 CAMERAS & UPS	1	EA
Field Material		
FND SIG 48"H STL 11-11/16"BS	2	EA
GATE ASSY 3593E CTWT 16-32'	2	EA
HEATER GATE MECH 115VAC WCH	2	EA
BASE 5" SPLIT JCT BOX DBL	2	EA
MAST AL 5	2	EA



GATE KEEPER SK1000-2W DUAL DIR	2	EA
HIGH WIND BKT W/5"HDW LINCOLN	2	EA
GATEARM 16-24' UHI VERT W/LED	2	EA
GATEARM SLEEVE ALUM 2' REC	2	EA
DIODE GATEARM TIP LIGHT REC	2	EA
SIGN XING HI NO MTG HDW	2	EA
CROSSARM 2W L/LED 24"H/B 5" 06	2	EA
LENS LED FLASHING 12" RED -H7	8	EA
BELL ELECTRONIC CROSSING 4/5"	1	EA
PINNACLE 5 MCHINED W/SETSCRW	1	EA
CABLE UG 3C4 7X W/GROUND	80	FT
CABLE UG 7 COND #6 AWG SOLID	300	FT
CABLE UG 7 COND #14 AWG SOLID	300	FT
WIRE UG TRK #6 AWG DUPLEX	300	FT
TAPE MARKER BURIED RR CABLE	1	Roll
BATT GNB 50G11 1 CELL	7	EA
BATT GNB 50G15 1 CELL	6	EA
ASSY NBS-1 W/10' LEADS 285HZ	1	EA
ASSY NBS-1 W/10' LEADS 430HZ	1	EA
PLATE SHUNT 22"X26"X1/4" GAL	2	EA
SCREW LAG 1/2X4 JOSLYN J8754P	8	EA
WIRE #6 SOFT BARE COPPER	40	FT
ROD 5/8 X 8 NS GRD ***	4	EA
CLAMP GROUND FOR 5/8 ROD	4	EA
BOND STRAND 8-STR 3/16" TINNED	125	FT
BOOTLEG BOND W/COUPLER KIT	12	EA
TAPE ELECTRICAL 3M #33+ 3/4"	3	EA
TAPE ELECTRICAL 3M #130-C	3	EA
COMPOUND INSULATING ELECTRIC	1	EA
HOSE RUBBER 3/4"	50	FT
STAPLE GROUND WIRE 1-1/16"X3"	12	EA
TIE CABLE .184 X 7.31" HIG T	20	EA
CABLE TIE TY-RAP 342MM W/ INOX BARB	20	EA
LUG RNG 1/4" 12-10AWG INS BLK	40	EA
WIRE DIESEL 10AWG 2000 VOLTS	350	FT
WIRE DIESEL 6AWG 600V	50	FT
LUG RNG 1/4 6AWG AMP ONLY	8	EA
NUT TEST 14-24 GOLD PLTD BRASS	32	EA
TEST LINK W/PLT & INSUL	32	EA
NUT INSULATED HARMON	8	EA
STAPLE COPPERWELD 3/8 X 1-3/4	85	EA
GREASE RUST PREVENTIVE NO OXID	1	EA
SLEEVE NICO 3/16"-#6 AWG REDUC	4	EA
CLIP TRACK WIRE RETAINER	12	EA
COMPOUND DUCT SEAL 5 LB PLUG	3	EA
PADLOCK SIGNAL CASE	5	EA
SIGN, ENS W/MTG	2	EA



SIGN HDW F/5"MAST RIBBED XING	4	EA
Field Cable Tag Kit	1	EA
TRAY BATTERY 12 X 27"	4	EA
WRENCH TORQUE WCH 3590-K-9	1	EA
WRENCH	1	EA
WRENCH AAR TERMINAL	1	EA
RETAINING WALL	1	LOT

Force Account Estimate

Estimate to Complete

Railroad:	Chicago, Ft. Wayne & Eastern Railroad	Region:	NORTHERN
Agency:	ORDC	State:	OH
DOT #:	532686H	COUNTY:	Allen
ROADWAY:	Pevee Rd (TR 237)	CITY:	Lafayette
DESCRIPTION:	Installation of Flashing Lights and Gates, 1 bell, new 6x6 bungalow with XP4-R, camera system. Closest power approximately 2000' away down the road.		
AGENCY PROJECT NUMBER:	PID 111182	ESTIMATE SUBJECT TO REVISION AFTER:	09/25/21

PRELIMINARY ENGINEERING:

Contracted & Administrative Engineering Services	\$	14,100
Subtotal	\$	14,100

CONSTRUCTION & CLOSEOUT:

Contracted & Administrative Engineering Services	\$	10,900
Subtotal	\$	10,900

FLAGGING SERVICE:

Contracted or Railroad Flagmen Services	7 Days	\$	9,800
Subtotal		\$	9,800

UTILITY WORK:

Power Service	\$	20,000
Other	\$	-
Subtotal	\$	20,000

CONTRACT WORK:

Outside Services	\$	10,000
Design & Labor & Material	\$	149,460
Subtotal	\$	159,460

RAILROAD TRACK:

Labor & Material	\$	-
Subtotal	\$	-

RAILROAD SIGNAL & COMMUNICATION:

Labor & Material	\$	-
Subtotal	\$	-

PROJECT SUBTOTAL:

		\$	214,260
Public Project Admin:	0.00%	\$	-
Contingencies:	0.00%	\$	-

PROJECT TOTAL:

	*****	\$	214,260
--	-------	-----------	----------------

CURRENT AUTHORIZED BUDGET:

	*****	\$	-
--	-------	----	---

TOTAL SUPPLEMENT REQUESTED:

	*****	\$	214,260
--	-------	-----------	----------------

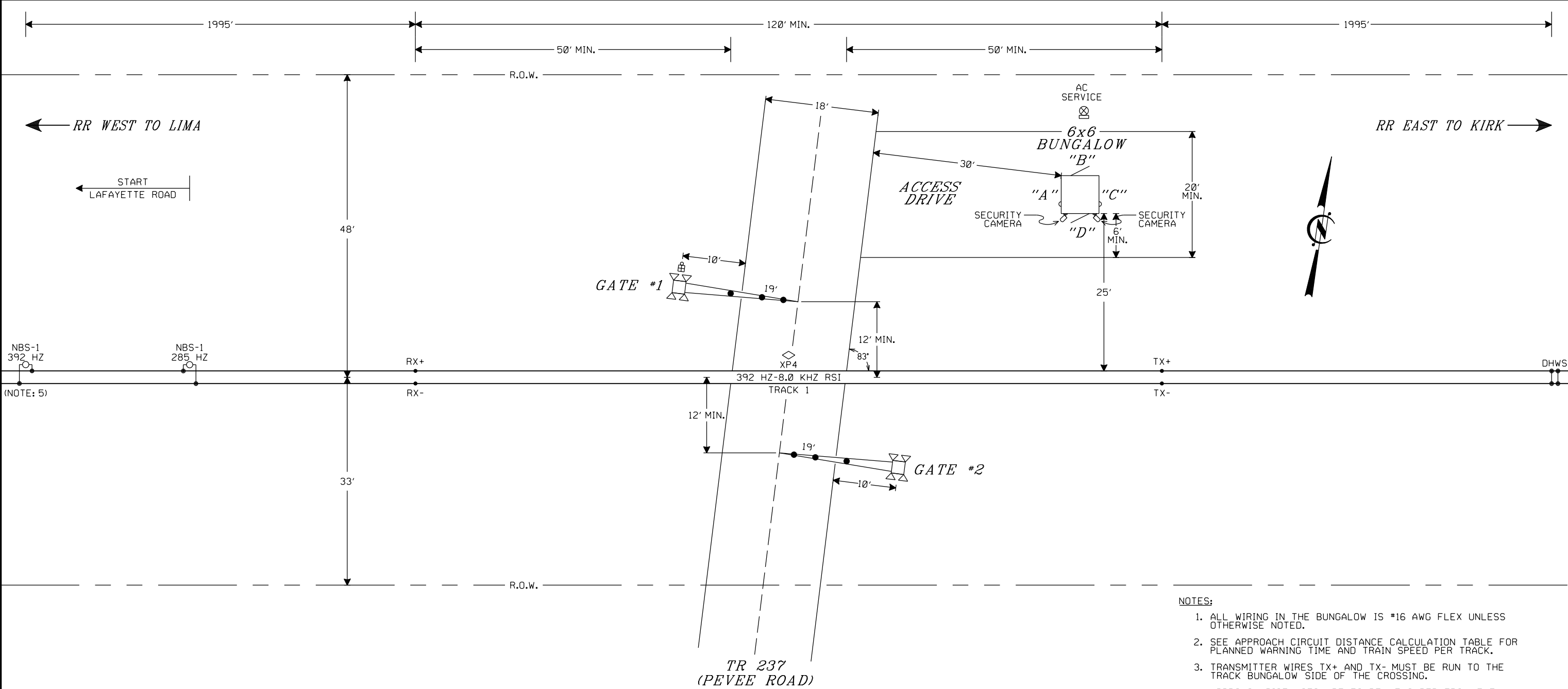
DIVISION OF COST:

Agency	100.00%	\$	214,260
Railroad	0.00%	\$	-

NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces & Contractors.

This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for the railroad work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work.

Estimated prepared by: BPB Approved by: Public Project Department
DATE: 01/13/20 REVISED: 03/29/21 DATE: 03/29/21



APPROACH CIRCUIT DISTANCE CALCULATION	
	TRACK 1
BASE WARNING TIME	30 SEC
PLUS TIME FOR CLEARANCE DISTANCE > 35'	0 SEC
EQUALS PLANNED WARNING TIME	30 SEC
PLUS TIME FOR EQUIPMENT RESPONSE	4 SEC
PLUS TIME FOR TRAFFIC PRE-EMPTION	0 SEC
EQUALS CIRCUIT APPROACH TIME	34 SEC
TIMES MAXIMUM PLANNED TRAIN SPEED	40 MPH
TIMES RATIO OF FEET PER SECOND TO MILE PER HOUR	22/15
EQUALS APPROACH CIRCUIT DISTANCE WITH ANY FRACTIONAL VALUE INCREASED TO FULL UNIT	1995 FT

- NOTES:
- ALL WIRING IN THE BUNGALOW IS #16 AWG FLEX UNLESS OTHERWISE NOTED.
 - SEE APPROACH CIRCUIT DISTANCE CALCULATION TABLE FOR PLANNED WARNING TIME AND TRAIN SPEED PER TRACK.
 - TRANSMITTER WIRES TX+ AND TX- MUST BE RUN TO THE TRACK BUNGALOW SIDE OF THE CROSSING.
 - APPROACH DISTANCES ARE TO BE MEASURED FROM THE CIRCUIT FEED POINTS.
 - WHEN TERMINATING WITH NARROW BAND SHUNTS, BONDING SHOULD BE EXTENDED AN ADDITIONAL 20% (399') BEYOND THE TERMINATIONS.
 - SIGNALS AND HOUSE TO BE INSTALLED PER MUTCD, STATE, AND / OR RAILROAD STANDARDS.
 - ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS. ALL MEASUREMENTS SHOULD BE VERIFIED UPON AIS.

- LEGEND:
- TEST TERMINAL
 - EQUALIZER
 - HEAVY DUTY EQUALIZER
 - ARRESTER TO GROUND
 - TWISTED WIRE
2 TURNS PER FOOT
 - INSULATED NUT
 - RIGID CONDUIT



NOT TO SCALE

REVISIONS							
							1
							REVISED PLAN PER CUSTOMER REQUEST A.P.D. 01-25-21

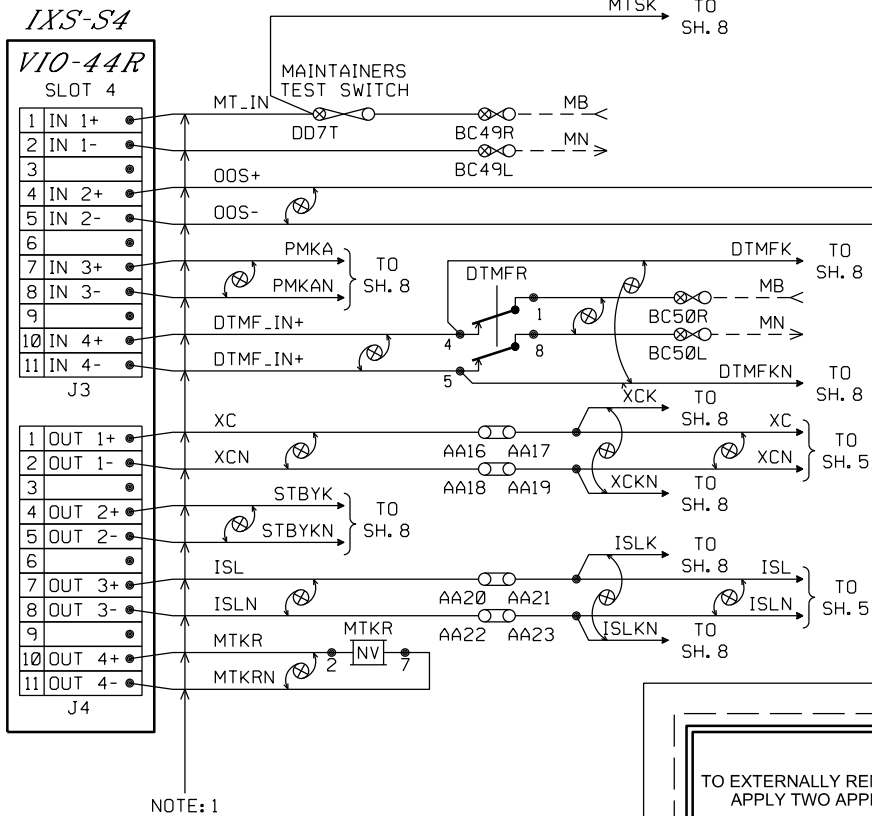
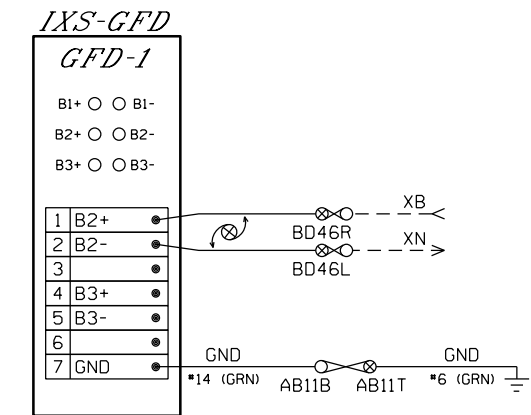
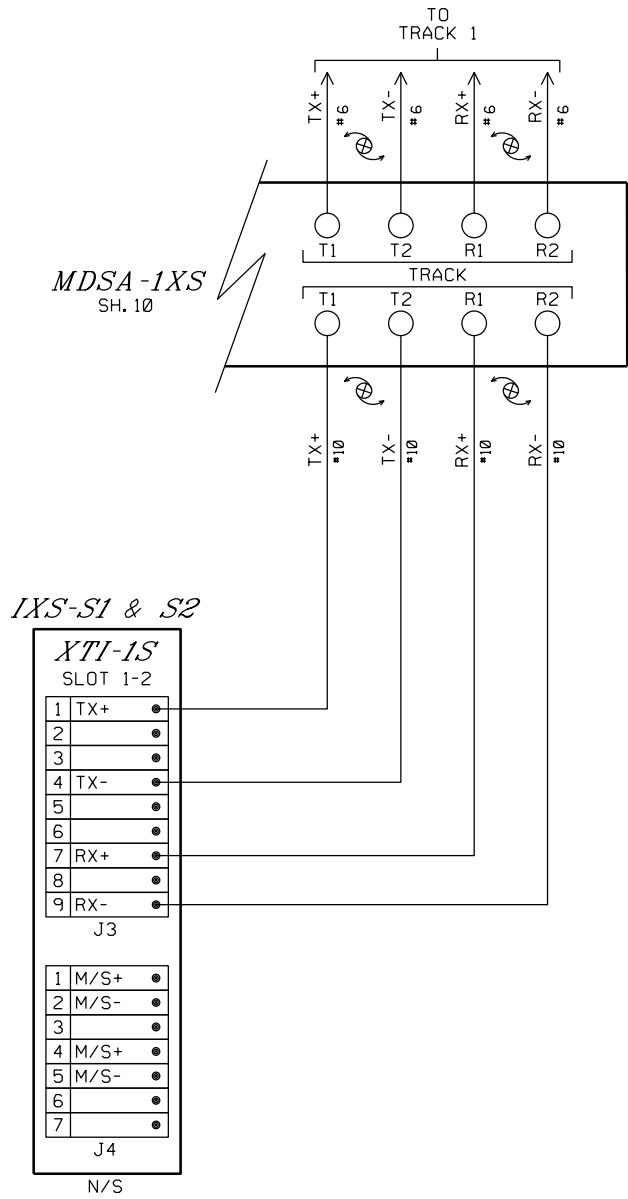
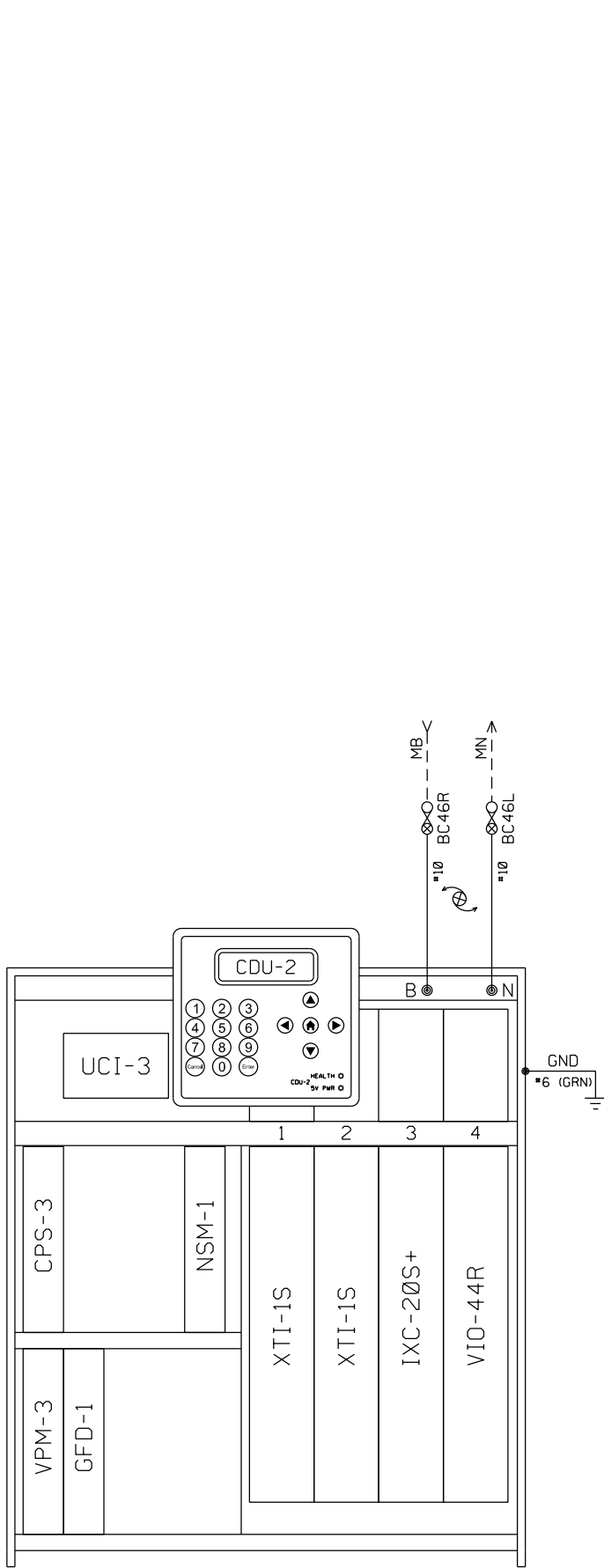
THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



CHICAGO, FORT WAYNE & EASTERN RR

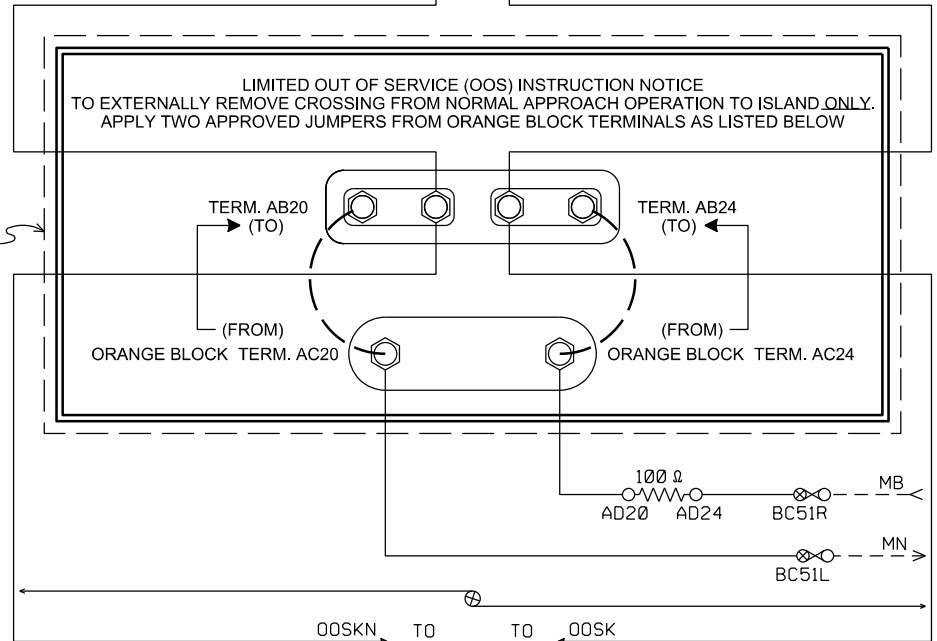
(CFER)

DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: J. XU DATE: 12-29-20	CROSSING TRACK PLAN TR 237 / PEVEE ROAD LAFAYETTE, OHIO DOT# 532 686H MILEPOST# 250.13	DRAWING NO. PE-2054-8500 SHEET 1 OF 15
---	---	--



NOTE: 1

MOUNTED ON
SIDE "B"
TERMINAL BOARD



NOTES:

- ALL WIRING TO ELECTROLOGIX VIO-44R MODULE TO BE #16 PVC BLUE ALSTOM P/N 012635-406.

REVISIONS

1
REVISED PLAN
PER CUSTOMER
REQUEST
A.P.D.
01-25-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: J. XU
DATE: 12-29-20

XP4 CIRCUITS
TR 237 / PEEVEE ROAD
LAFAYETTE, OHIO
DOT# 532 686H MILEPOST# 250.13

DRAWING NO.
PE-2054-8500
SHEET 2 OF 15

MAINTENANCE TROUBLE ALARM INDICATION
VITAL CONFIGURATION SETTINGS

NAME	STATE	FUNCTION	DEFAULT	SET
B1_FAULT_ON	TRUE	B1_FAULT DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B1_FAULT DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B1_HALRM_ON	TRUE	B1_HALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B1_HALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B1_LALRM_ON	TRUE	B1_LALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B1_LALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B2_FAULT_ON	TRUE	B2_FAULT DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B2_FAULT DOESN'T DROP THE S4_OUT4_MTKOUTPUT.		
B2_HALRM_ON	TRUE	B2_HALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B2_HALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B2_LALRM_ON	TRUE	B2_LALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B2_LALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B3_FAULT_ON	TRUE	B3_FAULT DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B3_FAULT DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B3_HALRM_ON	TRUE	B3_HALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B3_HALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
B3_LALRM_ON	TRUE	B3_LALRM DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	B3_LALRM DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		
OOS.IN_MTR	TRUE	S4_IN2_OOS DROPS THE S4_OUT4_MTK OUTPUT.	TRUE	TRUE
	FALSE	S4_IN2_OOS DOESN'T DROP THE S4_OUT4_MTK OUTPUT.		

(ALSO SEE NOTES 2 & 4)

VIO-44R VITAL INPUTS

MODULE	SLOT	4
INPUT 1		S4_IN1_MT
INPUT 2		S4_IN2_OOS
INPUT 3		S4_IN3_PMK
INPUT 4		S4_IN4_DTMF

IXC-20S+ INPUTS

MODULE	SLOT	3
INPUT 1		S3_IN1_GPX
INPUT 2		S3_IN2_ISL
INPUT 3		S3_IN3_XC
INPUT 4		NOT USED

INPUT HEALTH RECOVERY DELAY

IHRD ENABLED	ENABLED
INPUT HEALTH RECOVERY INTERVAL	30 SEC.
IHRD FOR DISCRETE VITAL INPUTS	ENABLED

CROSSING MAINTENANCE

ADJUSTMENT NAME	TRACK 1
ENABLE/DISABLE	ENABLE
DISABLE TIMEOUT	2 HRS
BALLAST COMP	* 143
PHASE COMP	*
SHUNT TEST MODE	DISABLE ALL TRACKS

BASIC TRACK SETUP

ADJUSTMENT NAME	TRACK 1
FREQUENCY	392 HZ
MASTER/SLAVE	MASTER
RX ADJUST	100
TCA/TCI	*
DIRECTION MODE	BI
LIA	*
ADVANCED APR. CAL	INACTIVE
NBS COMP RX	*
TRK ISLAND ASSIGN	ISL1_ASSIGN
APPROACH LENGTH	1995 FT
AUTO RX	ENABLE

VIO-44R VITAL OUTPUTS

MODULE	SLOT	4
OUTPUT 1		S4_OUT1_XC
OUTPUT 2		S4_OUT2_STBY
OUTPUT 3		S4_OUT3_ISL
OUTPUT 4		S4_OUT4_MTK

IXC-20S+ OUTPUTS

MODULE	SLOT	3
GATE 1		S3_G1_CNTRL
GATE 2		S3_G2_CNTRL
BELL		S3_BELL_OUT
NV OUT		NOT USED

IXC SETUP

ADJUSTMENT NAME	IXC
CROSSING TEST MODE	OFF
FLASH RATE	55 FPM
INTERFACE	XIP
VOLTAGE REGULATION	OFF
L1 VOLTAGE	12V
L2 VOLTAGE	12V
GATE 1 DELAY	3 SEC
GATE 2 DELAY	3 SEC

GROUND FAULT DETECTOR SETUP

	CAL VOLTS	GF THRESHOLD	GF TIME	LOW ALARM	HIGH ALARM
B1: MB	* 13.5 (TYP)	10 K	5 SEC.	* 10.5	* 15.5
B2: XB	* 15.7 (TYP)	10 K	5 SEC.	* 14.0	* 16.5
B3: BATTERY 3	NA	NA	NA	NA	NA

XP4 PROGRAM
SETUP

* = FIELD ADJUSTMENT TO BE MADE ACCORDING
TO THE XP4 INSTRUCTION MANUAL.

ISLAND SETUP

ADJUSTMENT NAME	ISL
TRACK	TRACK 1
ENABLE/DISABLE	ENABLE
DISABLE TIMEOUT	2 HR *
FREQUENCY	8.0 KHZ
LOSS OF SHUNT	2 SEC
FAULT DELAY	1

ADVANCE TRACK SETUP

ADJUSTMENT NAME		TRACK 1
MOTION DET TIMER	MDEN	ENABLE
	MDTT	10 MIN
FALSE SHUNT	FSEN	DISABLE
	FSRX	0
	FST	10M
APPROACH RELEASE	AREN	DISABLE
	ARRX	0
	ART	10M
LOS TIME		16 SEC
IJ-LOS TIME		5 SEC
NRM_SHRT_VRYSHRT		NRML *
VOLTAGE TEST		ENABLE

MDR SETUP

ADJUSTMENT NAME		MDR 1
MDR		MDR1
WARNING TIME		30 SEC
CW/MD		CW
CWE-WT		NA
AUX RECOVERY DELAY		0 SEC
TRACK ASSIGNED		SLT 1 TRK 1
OFFSET DISTANCE		0 FT
MD RESTART		0
SUDDEN SHUNT ZONE		0
CLEAR JOINT LOS	CJ MODE	STANDARD
	CJRX	15
	CJT	CALC
POST JOINT DETECT	PJEN	DISABLE
	PJRX	15
	PJDT	15
POSITIVE START	PSEN	DISABLE
	PSRX	0
	PST	0 MIN

(SHOP TO VERIFY)
EXECUTIVE INFORMATION

VPM3	VERSION	PART NUMBER
VPM-A PROCESSOR	7.26	083024-726
VPM-B PROCESSOR	7.26	083024-726
VPM-C PROCESSOR	7.26	083024-726

(SHOP TO VERIFY)
VITAL APPLICATION
SOFTWARE INFORMATION

APPLICATION NAME	qwrr-1r1l1x0
REVISION	01-04-21
CHECKSUM	75A8
CRC	14AD
CHASSIS ID	255
ID STRAPING	IIIIIIII

NOTE: DL= DEFAULT LEVEL
NA= NON APPLICABLE

NOTES:

- THE S4_OUT1_XC CROSSING CONTROL OUTPUT IN THE INTERNAL LOGIC CHECKS EXTERNAL INPUTS S4_IN1_MT AND S4_IN4_DTMF, ISL_ASSIGN MUST ALSO BE TRUE FOR THE S4_OUT1_XC TO BE TRUE.
- S4_OUT4_MTK IS TRUE IF THE APPROACH AND ISLAND DISABLE'S ARE FALSE, ANY GROUND FAULT ALARMS ARE NOT ACTIVE WITH CORRESPONDING CONFIGURATION SWITCH SET TRUE, AN ACTIVE GROUND FAULT ALARM IS NOT CHECKED IN THE S4_OUT4_MTK OUTPUT WITH THE CORESPONDING CONFIGURATION SWITCH SET FALSE, ADDITIONALLY THE S4_OUT4_MTK OUTPUT IS FALSE IF THE S4_IN2_OOS INPUT TRUE WITH THE CONFIGURATION SWITCH OOS.IN_MTR SET TRUE.
- THE APPROACH DISABLE AND ISLAND DISABLE FEATURE WILL NOT ALLOW AN S4_OUT1_XC CROSSING CONTROL OUTPUT, THE APPROACH ONLY CAN BE TAKEN OUT OF SERVICE WITH APPROVED OOS JUMPERS AS DESCRIBED ON SHEET 2, USE OF THE ISLAND DISABLE FEATURE WILL NOT ALLOW AN S4_OUT3_ISL OUTPUT.
- INPUT S4_IN3_PMK, APPROACH ENABLE AND ISLAND ENABLE MUST BE TRUE FOR S4_OUT4_MTK OUTPUT TO BE TRUE.
- THE AUX INTERNALLY CHECKS THE S4_IN1_MT & S4_IN4_DTMF INPUTS IN INTERNAL APPLICATION LOGIC.

REVISIONS

							1
							REVISED PLAN PER CUSTOMER REQUEST A.P.D. 01-25-21

THE OPERATION OF THE CIRCUITS AND
EQUIPMENT REPRESENTED HEREIN
CANNOT BE FULLY CHECKED UNTIL
ALL CIRCUITS AND DEVICES ARE
CONNECTED TO FORM A COMPLETE
SYSTEM, OR AN EFFECTIVE
SUBSYSTEM, SUCH SYSTEM OR
SUBSYSTEM MUST BE GIVEN
COMPLETE CIRCUIT AND
OPERATIONAL TESTS BEFORE BEING
PLACED IN REGULAR OPERATION.



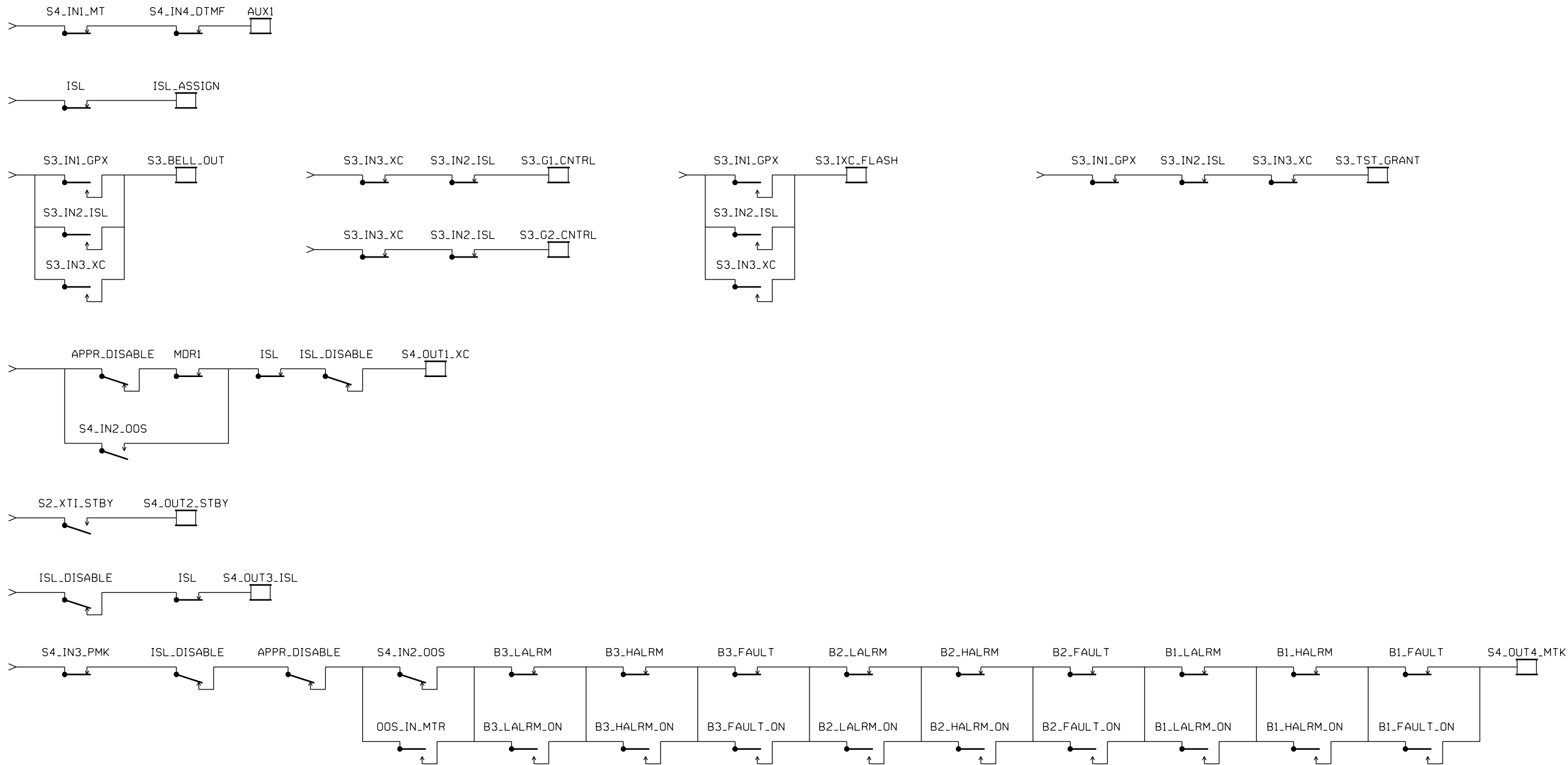
CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: J. XU
DATE: 12-29-20

XP4 PROGRAM SETUP
TR 237 / PEEVEE ROAD
LAFAYETTE, OHIO
DOT# 532 686H MILEPOST# 250.13

DRAWING NO.
PE-2054-8500
SHEET 3 OF 15




VITAL APPLICATION
SOFTWARE INFORMATION

APPLICATION NAME	gwrr-1rl1xa
AUTHOR	ALSTOM
ACE VERSION	5.10.2.29.719
REVISION	01-04-21
CHECKSUM	75A8
CRC	14AD
VALIDATION CRC	62D48067

REVISIONS						
						1
						REVISED PLAN PER CUSTOMER REQUEST A.P.D. 01-25-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.





CHICAGO, FORT WAYNE & EASTERN RR
(CFER)

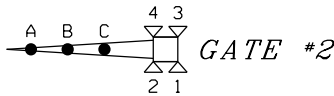
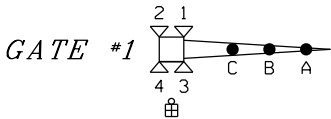
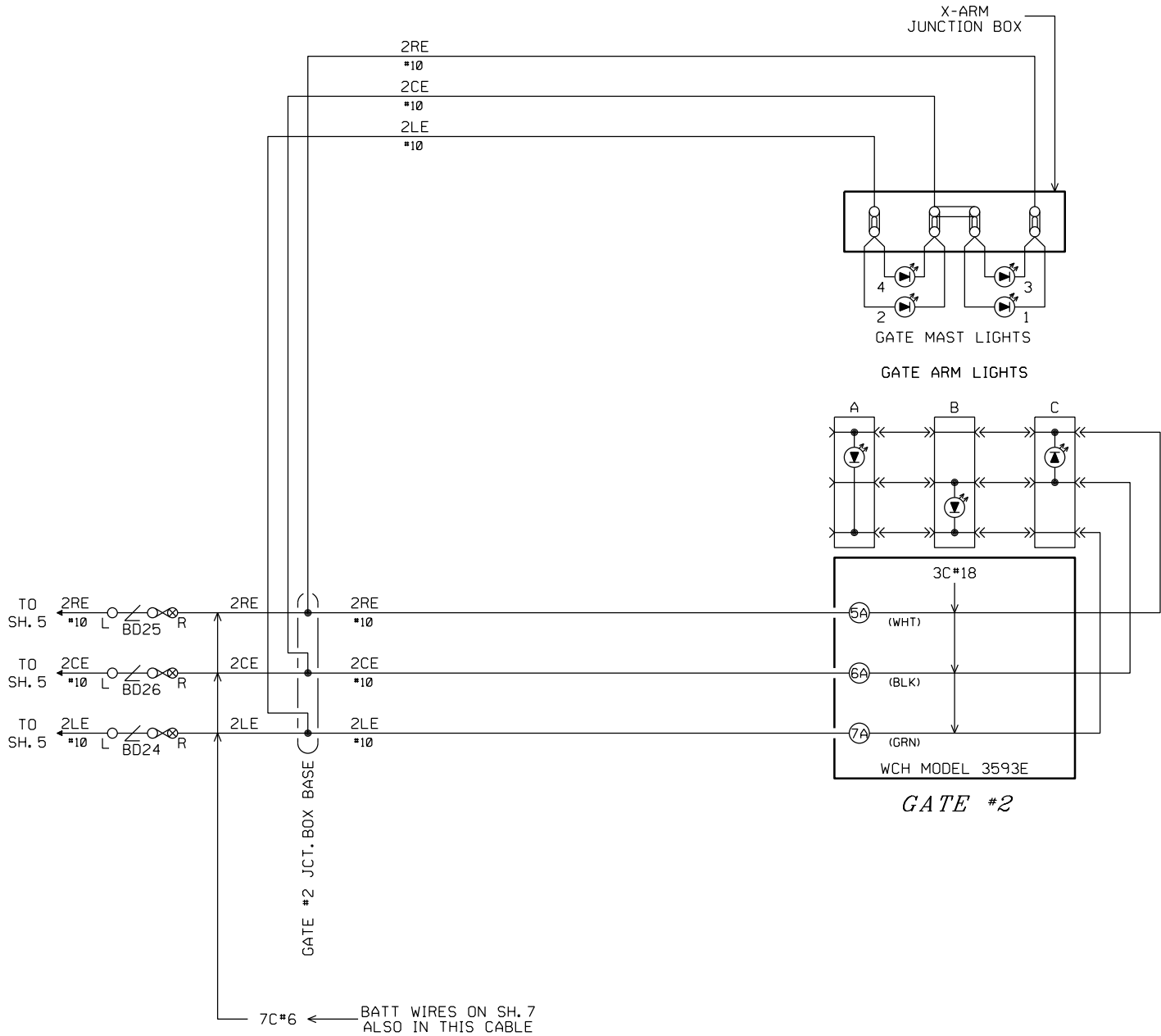
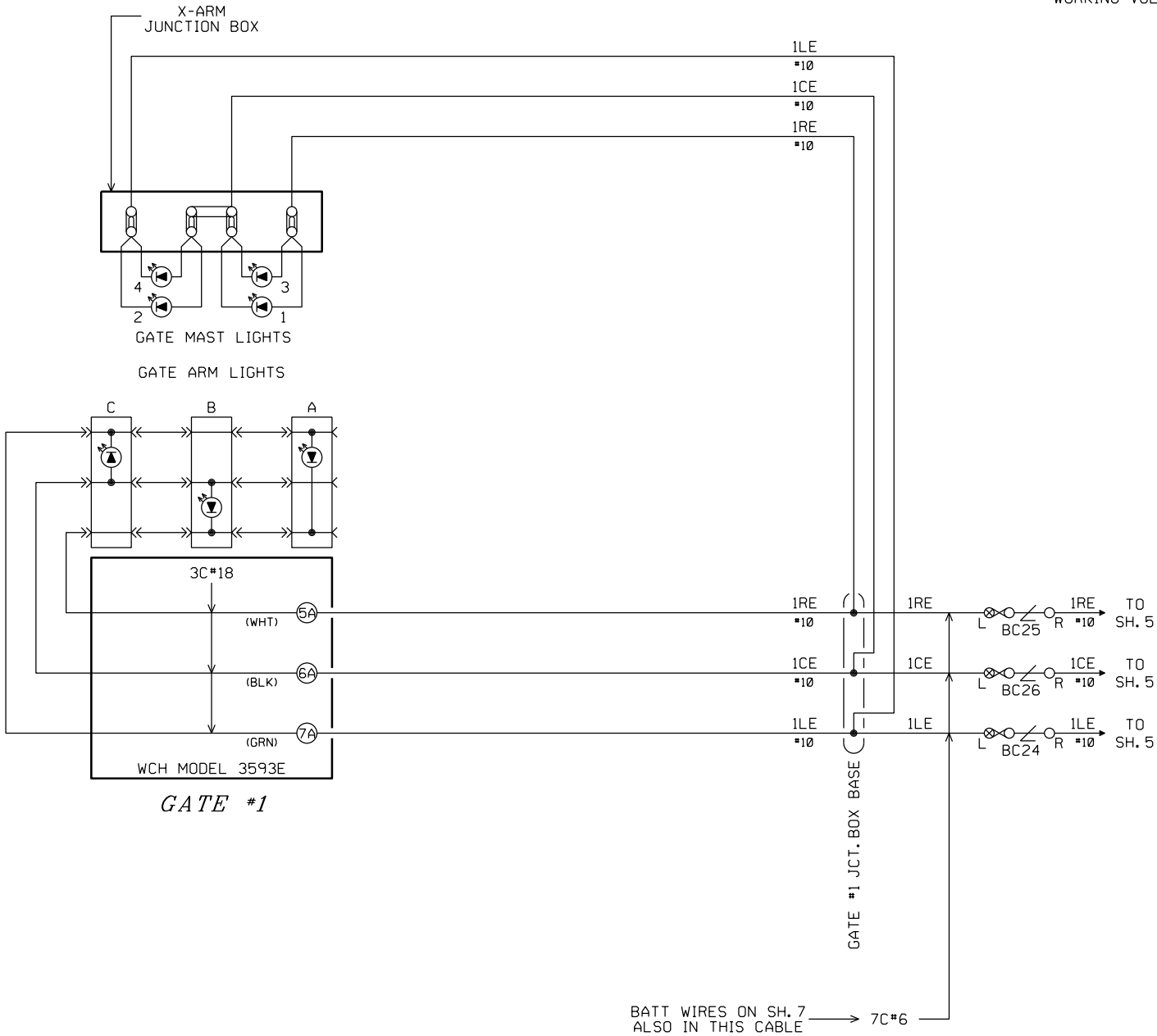
DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: J. XU
DATE: 12-29-20

XP4 LOGIC EQUATIONS
TR 237 / PEEVEE ROAD
LAFAYETTE, OHIO
DOT# 532 686H MILEPOST# 250.13

DRAWING NO.
PE-2054-8500
SHEET 4 OF 15

NOTES:

1.  = LED SIGNAL LAMP WITH 8.5 TO 16 VOLT WORKING VOLTAGE.



REVISIONS

1
REVISED PLAN
PER CUSTOMER
REQUEST
A.P.D.
01-25-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



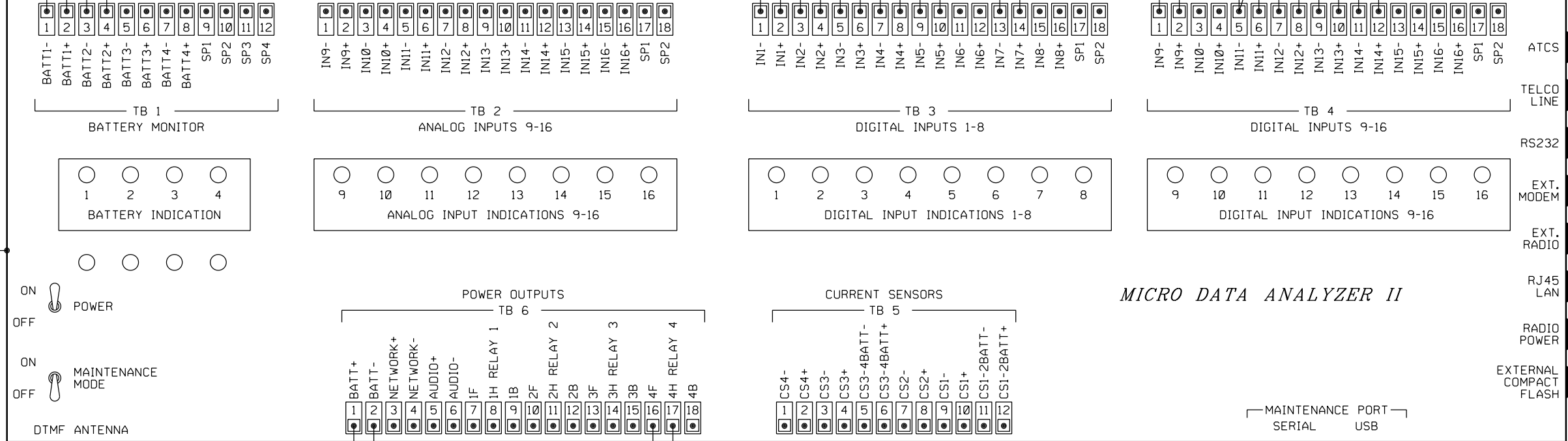
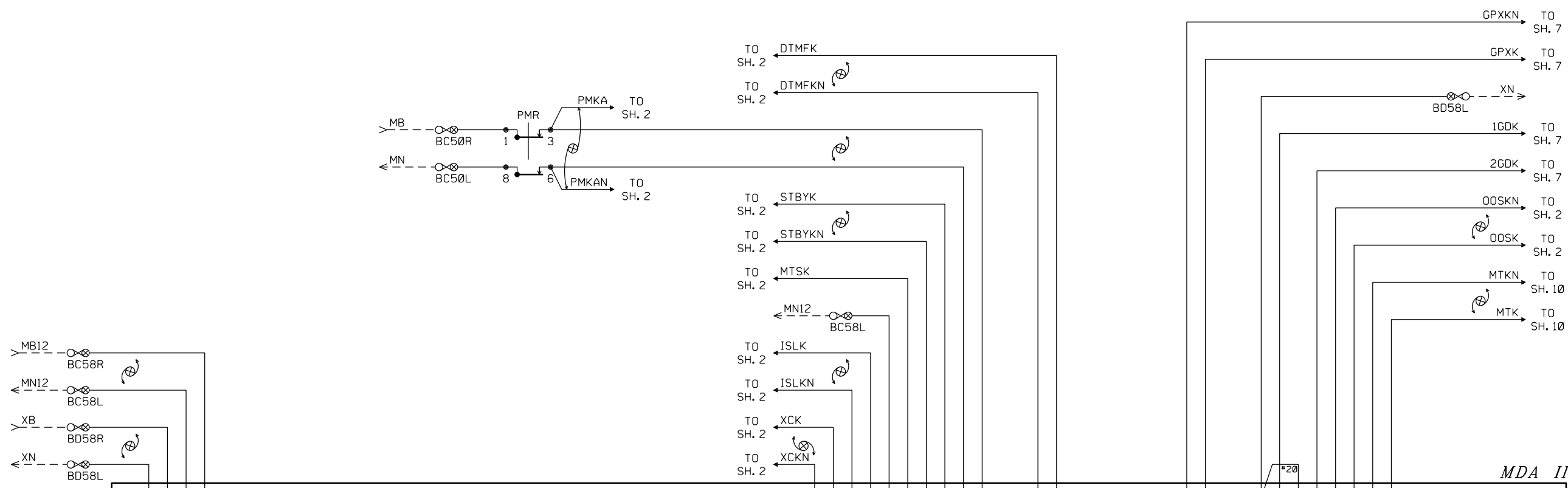
CHICAGO, FORT WAYNE & EASTERN RR

(CFER)

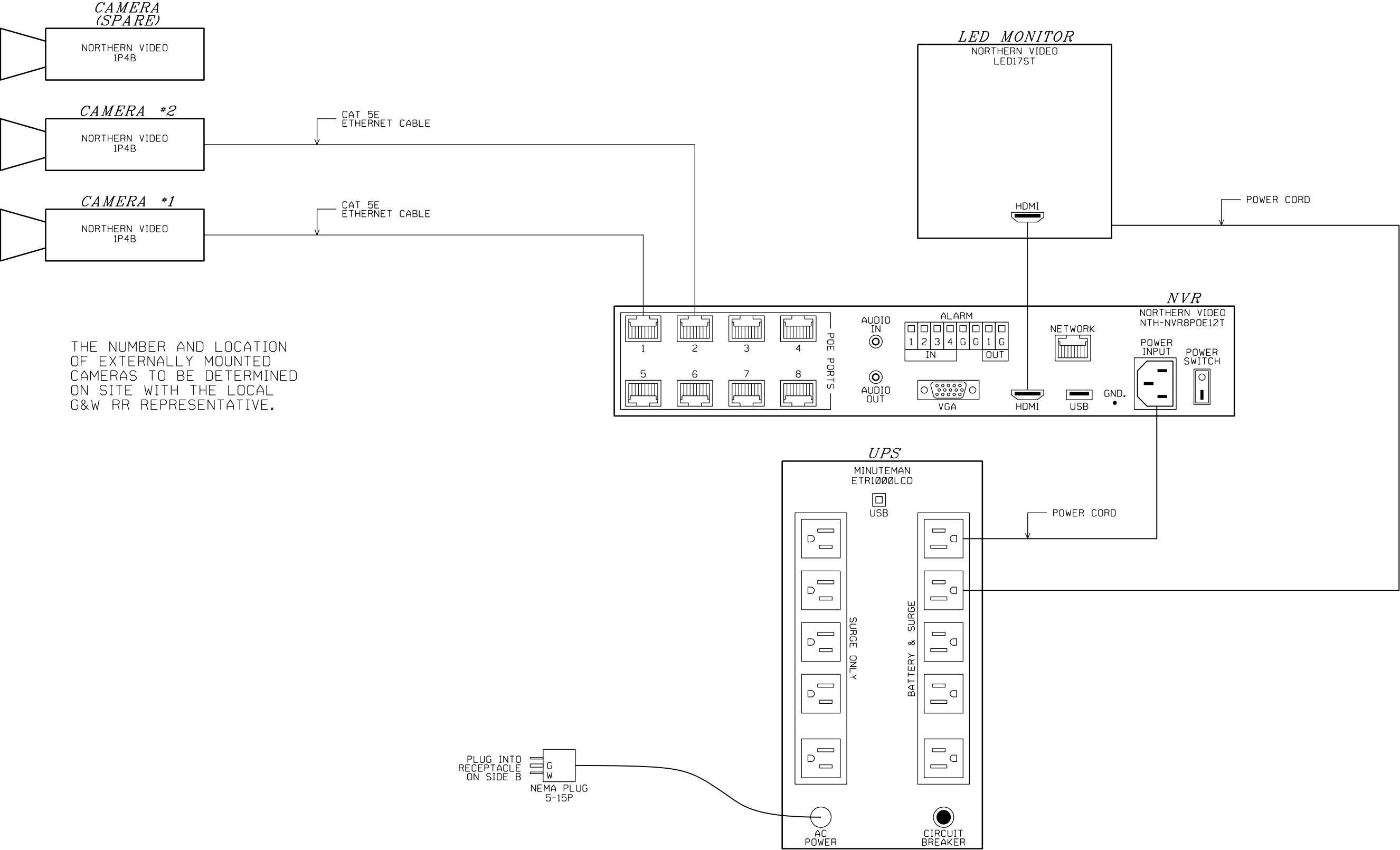
DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: J. XU
DATE: 12-29-20

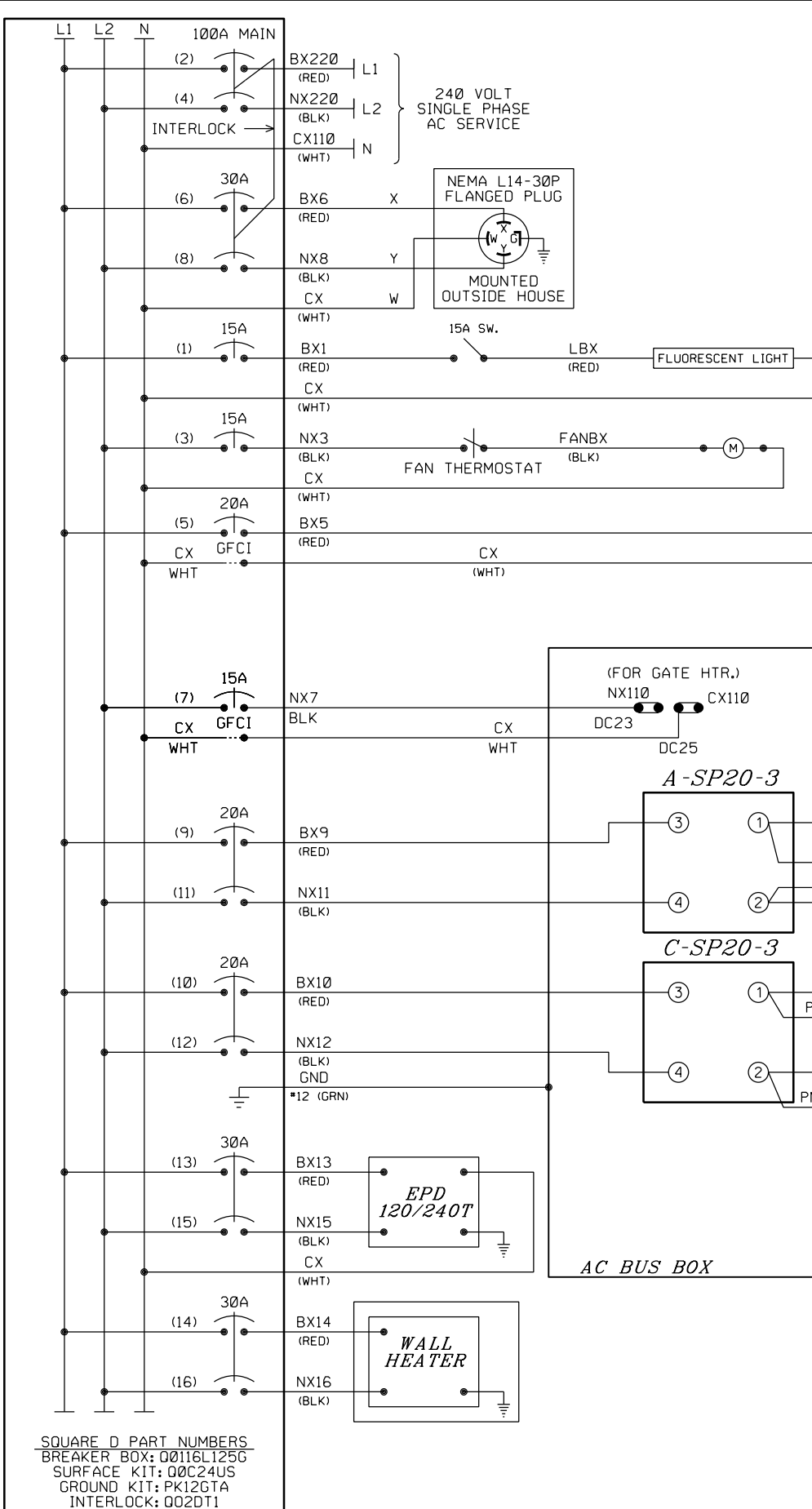
CROSSING LAMP CIRCUITS
TR 237 / PEEVEE ROAD
LAFAYETTE, OHIO
DOT# 532 686H MILEPOST# 250.13

DRAWING NO.
PE-2054-8500
SHEET 6 OF 15

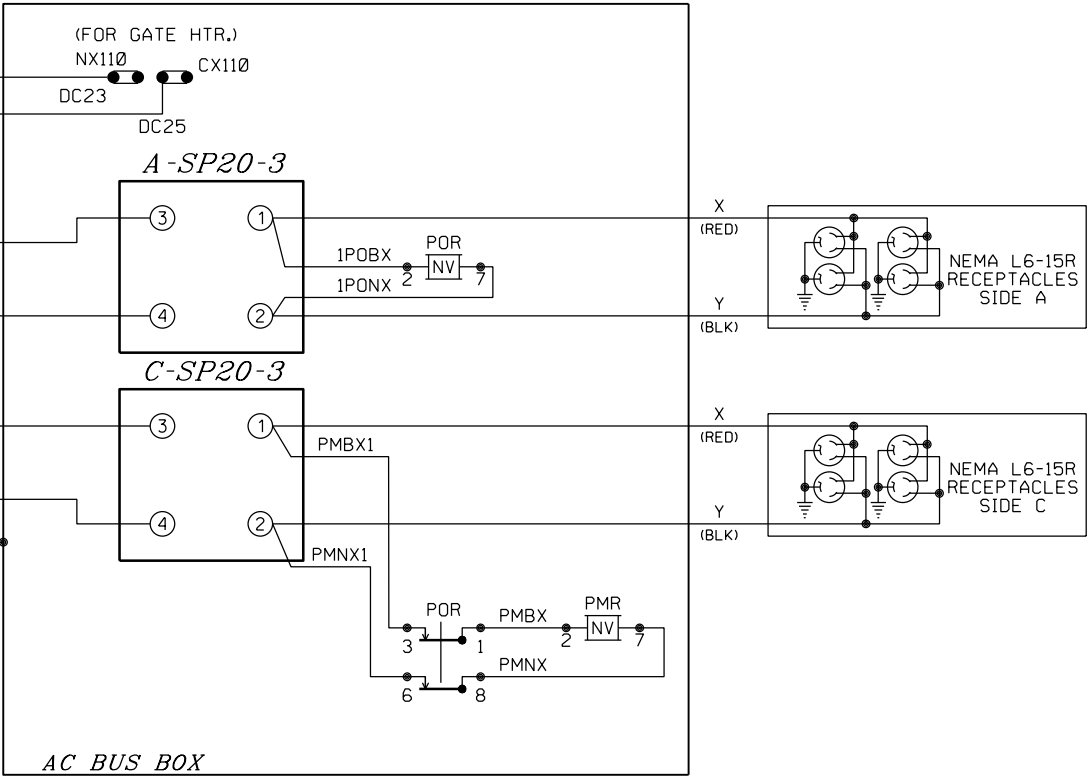
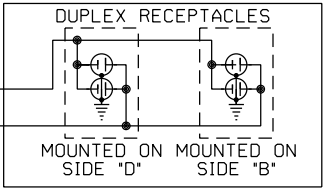
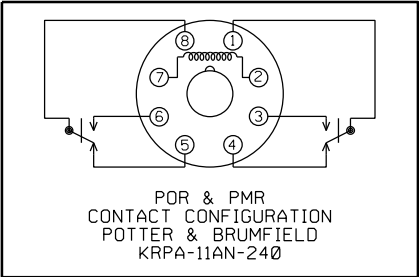


CODE	DESCRIPTION
686 *	ACTIVATE CROSSING W/60 SEC TIMER
686 #	DE-ACTIVATE CROSSING 686 *
6861 *	ACTIVATE CROSSING
6861 #	DE-ACTIVATE CROSSING 6861 *

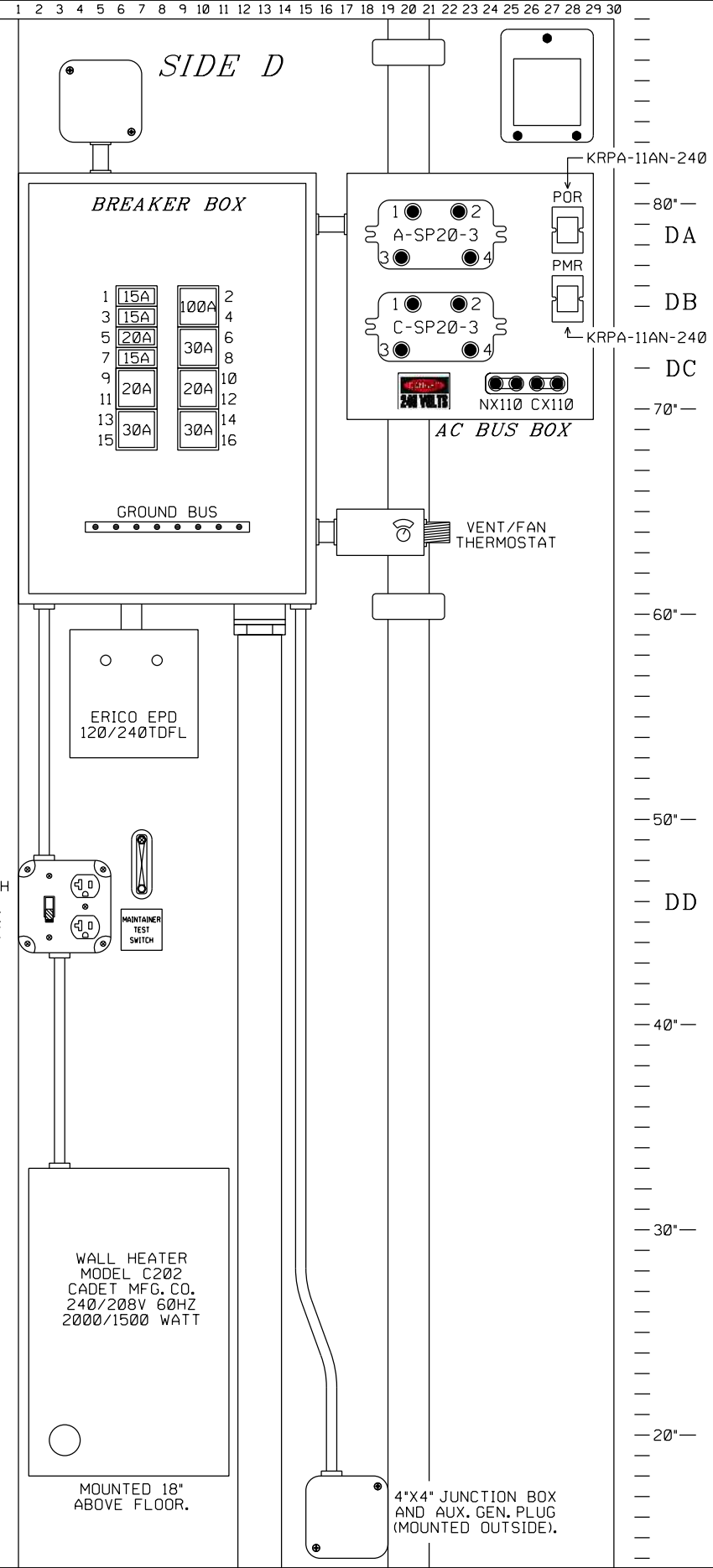




- NOTES:
- USE THE FOLLOWING COLOR CODE:
GRN - GREEN - SAFETY EQUIPMENT GROUND
WHT - WHITE - CX110 (NEUTRAL)
BLK - BLACK - NX220 (L2)
RED - RED - BX220 (L1)
EXCEPTIONS TO THE ABOVE COLOR CODE ARE THE PRE-WIRED, SEALED ARRESTOR UNITS MOUNTED ON THE BREAKER BOX WHICH HAVE TWO BLACK AND ONE WHITE WIRE EACH.
 - MINIMUM WIRE SIZE
15 AMP - NO. 14 AWG THHN OR THWN SOLID
20 AMP - NO. 12 AWG THHN OR THWN SOLID
30 AMP - NO. 10 AWG THHN OR THWN SOLID
 - GROUND FAULT INTERRUPT (GFCI) MUST BE USED ON ALL CIRCUITS SERVING CONVENIENCE OUTLETS AND ANY EQUIPMENT OUTSIDE THE BUNGALOW. RECEPTACLE MOUNTED GFCI MAY BE USED INSTEAD OF BREAKER TYPE.
 - ALL GROUND WIRES, THIS SHEET, RUN TO BREAKER BOX GROUND BUS



SQUARE D PART NUMBERS
BREAKER BOX: Q0116L125G
SURFACE KIT: Q0C24US
GROUND KIT: PK12GTA
INTERLOCK: Q02DT1



REVISIONS

1
REVISED PLAN
PER CUSTOMER
REQUEST
A.P.D.
01-25-21

THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



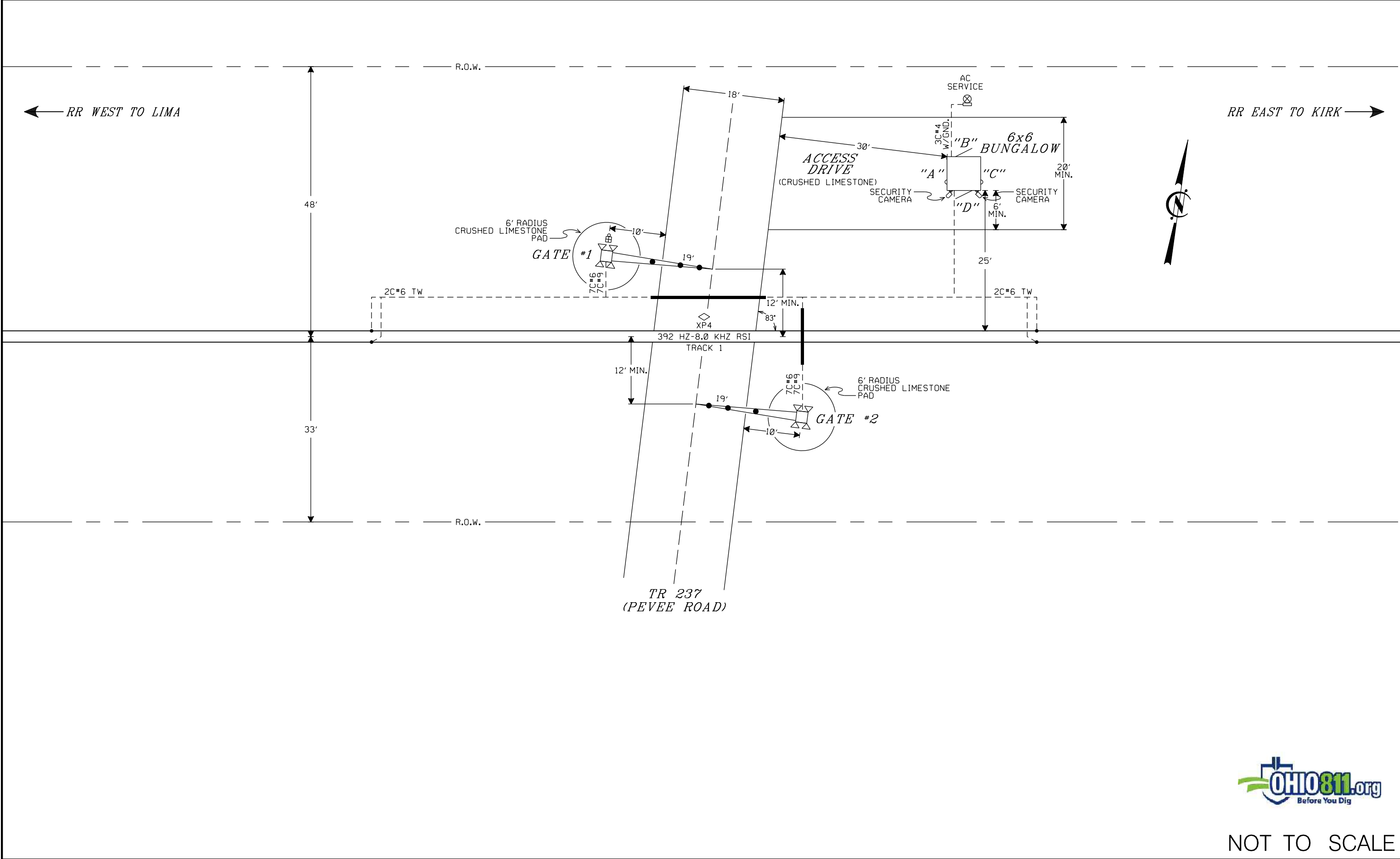
CHICAGO, FORT WAYNE & EASTERN RR

(CFER)



DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: J. XU
DATE: 12-29-20

AC POWER DISTRIBUTION
TR 237 / PEEVEE ROAD
LAFAYETTE, OHIO
DOT# 532 686H MILEPOST# 250.13

DRAWING NO.
PE-2054-8500
SHEET 11 OF 15



NOT TO SCALE

REVISIONS								THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM. SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.	 <p>PO Box 319 • Valley, NE 68064 • (402) 694-5884</p>	 <p>CHICAGO, FORT WAYNE & EASTERN RR (CFER)</p>	DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: J. XU DATE: 12-29-20	FOUNDATION AND CABLE PLAN TR 237 / PEVEE ROAD LAFAYETTE, OHIO DOT# 532 686H MILEPOST# 250.13	DRAWING NO. PE-2054-8500 SHEET 15 OF 15
						1 REVISED PLAN PER CUSTOMER REQUEST A.P.D. 01-25-21							



Rail Development Commission

Mike DeWine, Governor
Jon Husted, Lt. Governor

Mark Policinski, Chair

January 7, 2020

Mr. Jacob Smith
Director of Public Projects
Genesee & Wyoming Railroad Services, Inc.
13901 Sutton Park Drive STE 345
Jacksonville, FL 32224

RE: Authorization for Engineering, Plans and Estimates for Grade Crossing Warning Device Upgrade
Allen County, TR 237 North Pevee Rd.; DOT# 532686H; PID# 111182

Dear Mr. Smith:

A diagnostic review was held at the above grade crossing on 7/26/2019. The crossing has been recommended for an upgrade to automatic flashing lights and gates with 1 bell.

The Chicago, Fort Wayne & Eastern Railroad is authorized to proceed with the engineering design, plans and cost estimates 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 CFER 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 ORDC is not requesting that the PUCO issue an Order at this time. After ORDC receives and approves the engineering design, plans and cost estimates, a construction-only Order will be requested from PUCO. Please submit the preliminary engineering to ORDC within 90 days of receipt of this letter.

The diagnostic review form is attached. Please note any recommendations made by the team about requirements for this crossing. Minor roadway work necessary for MUTCD compliance should be incorporated into the plans/estimates and such costs will flow through the CSX reimbursement process.

The ORDC Project Manager for this project is Don Damron. I can be reached at 614-466-2509 (office), or 614-917-8466 (cell), or don.damron@dot.ohio.gov, if you have any questions.

Sincerely,

Donald J. Damron
Project Manager

Copies: Randall Schumacher, Chief, Rail Division, PUCO
Jill Henry, Rail Specialist, PUCO
Heather Hamilton, ORDC and ORDC (file)

Attachments: 3 (Diagnostic Review Team Survey, letter agreement, purchase order)





**Public Utilities
Commission**

Mike DeWine, Governor
Sam Randazzo, Chairman

Commissioners

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

October 15, 2019

Chicago Ft. Wayne & Eastern Railroad
Mr. Jacob Smith
Director of Public Projects
Genesee& Wyoming Railroad Services, Inc.
13901 Sutton Park Drive STE 345
Jacksonville, FL 32224

Re: Allen County, Pevee Road/TR 237,
DOT#532-686H, hereinafter referred to
as the "Project"

Dear Mr. Smith:

The Public Utilities Commission of Ohio (PUCO) has identified and the Ohio Rail Development Commission (ORDC) surveyed, on July 26, 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. 00037-C, dated August 27, 2004, entered into by the State of Ohio and Chicago Ft. Wayne & Eastern 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
Pevee Road/TR 237
Allen County
Chicago Ft. Wayne & Eastern Railroad

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

Chicago Ft. Wayne & Eastern Railroad

By _____

Title _____

Date _____



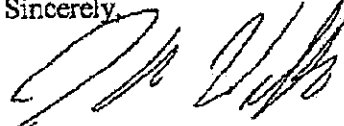
Matthew Dietrich
Executive Director
Ohio Rail Development Commission

Date 10-25-19

Page 2 of 2
Pevee Road/TR 237
Allen County
Chicago Ft. Wayne & Eastern Railroad

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

Chicago Ft. Wayne & Eastern Railroad

By



Title President

Date

11-1-19

Matthew Dietrich
Executive Director
Ohio Rail Development Commission

Date

APPENDIX C

CONTRACT SUMMARY SHEET			
PART I [Requesting Party to Complete]			
Requesting Party: Jacob Smith		Department: Engineering	Counterparties: Ohio Public Utilities Commission
GWI Subsidiary: CFER		Region: Midwest	Contract File Number: CFER.2019.10.25.OHI.01
Contract Type (check one) [See Appendix A for Contract Type]:			
<input type="checkbox"/> Operations/Transportation Related <input type="checkbox"/> Supplier/Vendor <input type="checkbox"/> Employment/Labor/Consulting <input type="checkbox"/> Legal Settlement <input type="checkbox"/> Finance <input type="checkbox"/> Partnerships <input type="checkbox"/> Acquisitions/Dispositions/Lease Arrangements <input type="checkbox"/> Locomotive and Railcar Leases and Related Agreements <input type="checkbox"/> Intellectual Property <input checked="" type="checkbox"/> Other			
Joint Facilities Related <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Joint Facilities #			
Contract Sub-Type [See Appendix A for Contract Sub-Type]: Public Project Agreement			
Status (check one): <input checked="" type="checkbox"/> New Contract <input type="checkbox"/> If Amendment, Amendment No <input type="checkbox"/> Renewal <input type="checkbox"/> Termination			
If Termination, Termination Date:			
If Amendment, Renewal, or Termination:			
Contract File Number of Initial Contract:		Effective Date of Initial Contract:	
Estimated Contract Value: \$220,000.00		Effective Date: 10/15/2019	
Term and Contract Expiration:			
Initial Term: year(s) month(s); termination date:			
Renewal Term(s):			
Renewal term duration: year(s) month(s); GWI renewal notice period: (days) in advance of then current term;			
renewal term(s) capped (if specified): ; GWI deadline to provide notice for renewal:			
Evergreen Term(s):			
Evergreen term duration: year(s) month(s); GWI evergreen termination notice period: (days) in advance of then current term;			
evergreen term capped (if specified): ; GWI deadline to provide notice for evergreen termination:			
Terminable at Will by GWI? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Termination Notice Period:			
Consequential Damages Limitation: <input checked="" type="checkbox"/> NO, no indemnity <input type="checkbox"/> YES			
Non-Standard Terms: Governed by master agreement dated 8/27/2004			
Any non-standard deadlines? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, Deadline:			
Ongoing Insurance Obligations of GWI:		<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
Rate Adjustment Mechanism for Multi-year Contract (check one):		<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
		If YES, insert Adjustment Date for Reminder:	
PART II [Requesting Party to Complete. Must Complete for All Operations/Transportation Related Contracts]			
Fuel Surcharge included (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
Volume Guarantee (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
Refund Provision (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
GWI Fleet Addition/Equipment Required (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
HAZMAT/Passenger Involvement (check one):		<input type="checkbox"/> NO <input type="checkbox"/> YES, (insert explanation)	
PART III [Signatures Required – To Be Coordinated by Requesting Party]			
Approved for	Alfred Q. Ricotta	Deputy General Counsel	10/25/2019
Legal Sufficiency	Name	Title	Date
Approved for	/s/ Andrea Alexander	Manager BC&TA	10/28/2019
Accounting Sufficiency	Name	Title	Date
Additional Approvals Required? <input type="checkbox"/> NO <input type="checkbox"/> YES, (department/business unit)			
PART IV [Finance Director to Complete Simultaneous to the Execution of the Material Contract]			
Approved by Finance Director	Name	Title	Date
Capex Approval Needed?	<input type="checkbox"/> NO <input type="checkbox"/> YES, Approval Date		
Approved by RSVP	Name	Title	Date

Diagnostic Review team survey
 ALL TR 237 North Pelee Rd 532686H
 1/26/19

Sign in sheet

name	org	email	phone #
CHRISTOPHER FRANK	GRST	CFRANK@GWRR.COM	704.314.4007
Trevor Conkle	CFE	Trevor.Conkle@GWRR.COM	419-204-1020
Tim Flessner	PUCO	timothy.flessner@puc.ohio.gov	
DON DAMRON	ORDC		614 917-8466
JIM SHILLING	TRUSTEE	jshilling@HeritageCooperatives.com	568-204-8663
RANDY ACKERMAN	TRUSTEE	RandyAckerman2205@gmail.com	
DAVID LOUTH	ACE	dlouth@allencountyohio.com	419-228-3196
Ron Meyer	ACE	rmeyer@allencountyohio.com	

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

Date: 7/26/2019

Location Data			
Street or Road Name: TR 237 / North Pevee Road			
County: Allen	Township: Jackson	US DOT No.: 532686H	
City (in or near): near La Fayette	Railroad Name: CFE	RR Milepost: 250.13	
Safety Data (Obtain crash reports, if possible)			
	Initial Information (from database)	Revised	
Number & dates of vehicle crashes in previous 5 years:	1 - 1/21/19		
Number & dates of pedestrian/bicycle crashes in previous 5 years:			
Hazard Ranking: 259	Date Run: 03/18/2019		

Existing Traffic Control Devices			
Type of Warning Devices	Installed?		Quantity/Comments
HIGHWAY			
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	
Dynamic Envelope Markings (condition?)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Illumination	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
'No Turn' Signs (highway/passive)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Barriers/fencing (pedestrian/bicycle)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
LOOK Sign	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Do Not Stop On Track Sign	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
RAILROAD			
Crossbucks	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Crossbucks – assembly with Stop	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Crossbucks – assembly with Yield	<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	
LED or Incandescent Lights? Size?	<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/Pedestrian Gate Arms	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Number: Length:
'No Turn' Signs (railroad/active)	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	
Is crossing flagged by train crew?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
OTHER	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Railroad Data		
Type of Train: <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input type="checkbox"/> Transit <input type="checkbox"/> Shared Use Transit <input type="checkbox"/> Commuter <input type="checkbox"/> Tourist/Other		
Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	10	OK
<1 per day? Trains per week	-	
Day thru trains	5	
Night thru trains	5	
Switching	0	
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks	-	
Maximum train speed	40	OK
Typical train speed	35 - 40	OK
Amtrak	-	
Are there other track(s) crossing this same roadway within 100ft 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)		
If multiple tracks, can two trains occupy crossing at the same time? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Can one train block the motorists' view of another train at the crossing? <input type="checkbox"/> Yes (explain below) <input type="checkbox"/> No		
Can one or more tracks be eliminated through the crossings? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Comments:		
Circuitry: <input type="checkbox"/> Constant Warning Time <input type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other _____		

ACTIVE CROSSING TO EAST & WEST

Roadway Data		
Local Highway Authority: Jackson Township		
Roadway Characteristics	Initial Information (from database)	Revised
Average Daily Traffic	123	289 2016 (RPC)
Highway Paved	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Roadway Surface: <input checked="" type="checkbox"/> Blacktop <input type="checkbox"/> Gravel <input type="checkbox"/> Concrete Other <u>CHIPSEAL</u>		
Roadway width (paved/travelled way): <u>18</u> ft		
Number of Highway Lanes	2	
Urban or Rural	Rural - Local	
Vehicle Speed: <u>55</u> MPH		
School Bus Operation: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Amount <u>YES 2 AM / 2 PM</u>		
Location of nearby schools: <u>ALLEN EAST</u>		
Hazardous Materials Trucks: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Amount (from FRA) <u>5%</u> LHA verified/changed?		
Shoulders: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is the Shoulder Surfaced? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, shoulder width: _____ ft.		
Is there existing guardrail along the roadway in crossing vicinity? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Crossing Angle <input type="checkbox"/> 0-29° <input type="checkbox"/> 30-59° <input checked="" type="checkbox"/> 60-90° Measured in _____ Quadrant?		
Quadrant _____ Curb & Gutter:	Quadrant _____ Curb & Gutter:	
<input type="checkbox"/> Functional (Curb height = 4" or more)	<input type="checkbox"/> Functional (Curb height = 4" or more)	
<input type="checkbox"/> Non-functional (Curb height = less than 4")	<input type="checkbox"/> Non-functional (Curb height = less than 4")	
<input checked="" type="checkbox"/> None	<input checked="" type="checkbox"/> None	
Is there a nearby intersection that could cause queuing over the crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes, distance _____		
Is this intersection signalized? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Are there signals currently interconnected with the existing crossing warning devices? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is there a 'Do Not Stop on Track' sign? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <u>CHIP & SEAL THIS SUMMER: NEXT SUMMER</u>		
If yes:		
Improvement type <u>NEXT YEAR</u>	Lead Agency <u>TWP.</u>	Timeline/completion _____

Pedestrian & Bicycle Data	
Regular pedestrian usage:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Volumes: <input type="checkbox"/> Occasional <input type="checkbox"/> <20 <input type="checkbox"/> 20-60 <input type="checkbox"/> >60
Is sidewalk present in the approach?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Quadrants:
Does crossing surface accommodate pedestrians?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Both sides of roadway?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If no, which side is paved?
Pedestrian generators in close proximity (e.g. schools, sports/entertainment venues)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comments:	
Regular bicycle usage: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<input type="checkbox"/> Roadway <input type="checkbox"/> Dedicated Lane (on street) <input type="checkbox"/> Dedicated Path (off street) <input type="checkbox"/> Shared Use (pedestrian/bicycle) Path <input type="checkbox"/> Bikes must use sidewalk	
Future plans for pedestrian or bicycle routes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Comments:	

Utility Information	
Is commercial power available?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No OH POWER AEP
Utility Provider (Company Name)	
Nearest Available Power Source <u>2000 - 3000 FT DOWN ROAD</u>	
What other utilities are present? <input type="checkbox"/> Gas <input type="checkbox"/> Cable <input type="checkbox"/> Telephone <input checked="" type="checkbox"/> Fiber Optic Cable (add locations to sketch) <input type="checkbox"/> Petroleum <input type="checkbox"/> Water <input type="checkbox"/> Sanitary Sewer <input type="checkbox"/> Other	
Comments:	

Surface	
Surface review form completed?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Sight Preview (REFER TO TABLES)	
If non-gated crossing, is clearing sight distance adequate in all quadrants? (See Table 1)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Is stopping sight distance adequate? (See Table 2)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, which quadrant? _____
When considering recommendations for bicycle treatments:	
Bicycle sight distance adequate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no, which quadrant? _____
When considering recommendations for pedestrian treatments:	
Pedestrian sight distance adequate?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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:

NA

Real Estate or ROW:

ROW = 30' ON S 60' ON N.
ROAD = 60'

Culvert / Drainage / Ballast Conditions:

NA

Roadway and/or Sidewalks:

NA

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

NA

Environmental:

NA

Utilities:

Other:

Potential Closure

Is it the consensus of the Diagnostic Review Team that this is a potential closure project?

No

Explain reasons:

EMS Access

Diagnostic Team Recommendations

☒ No improvements needed

Quadrants Needed

☐ Install/upgrade active devices

☐ Automatic Flashing Lights (AFLS)

☐ AFLS / Cants

☐ AFLS / Gates

☐ AFLS / Gates / Cants

☐ Bells / number

☐ Upgrade circuitry / type

☐ Sidelights

☐ LED Upgrades

☐ Guardrail Needed

☐ Install/Replace curb

☐ Bungalow placement & offset from rail & highway

☐ Other (define)

Comments:

☐ Install/upgrade traffic signal preemption

Other (define):

EXISTING SIGNAGE IS ADEQUATE FOR THE TIME BEING

Diagnostic Team Recommendations (cont.)

PEDESTRIAN/BICYCLE Treatments (additional, not included above)

☐ Crossing Surface (specify)

☐ Sidewalk (specify)

☐ Detectable warning surfaces

☐ LOOK Sign (R15-8)

☐ Stop lines

☐ Illumination

☐ Dynamic envelop markings

☐ Channelization

☐ Path delineation

☐ Fencing/barriers

☐ Other

Comments:

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

[Handwritten signatures and initials]

Field Sketch (optional)

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

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.

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.

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	Bicyclist 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

5/27/2021 5:25:08 PM

in

Case No(s). 21-0635-RR-FED

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at the Chicago Ft. Wayne & Eastern Railroad Crossing, Pevee Road/TR 237, DOT#532-686H in Allen County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division