

# Memo

To: Docketing Division  
From: Jill Henry, Rail Specialist, Rail Division  
Cc: PUCO Legal Department  
Date: 11/2/2020

Re: PUCO Case No. 20-1657-RR-FED- In the Matter of a Request for the Installation of Active Warning Devices at the Columbus & Ohio River Railroad Crossing, DOT#517-370K, TR 255 in Coshocton County, Ohio.

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On August 20, 2019, the Ohio Rail Development Commission (ORDC) authorized funding for the Columbus & Ohio River Railroad (CUOH) to install flashing lights and gates at the TR 255 (DOT#517-370K) grade crossing in Coshocton County, Ohio. The crossing was surveyed, on April 17, 2019, and was found to warrant the upgrade. The electric utility provider for this crossing is the Frontier Power Company.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$168,980.00 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:**

Columbus & Ohio River Railroad  
Len Wagner  
Senior Vice-President  
Northern Region/Genesee & Wyoming Inc.  
201 N. Penn Street  
Punxsutawney, PA 15767

Columbus & Ohio River Railroad  
Jared Rishel  
AVP Engineering Northern Region  
Genesee & Wyoming Inc.  
4349 Easton Way  
Suite 110  
Columbus, OH 43219

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

Oxford Township, Coshocton County  
Trustees  
23021 SR 751  
West Lafayette, Ohio 43845

The Frontier Power Company  
770 South 2<sup>nd</sup> Street  
P.O. Box 280  
Coshocton, Ohio 43812

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

**TO:** John Williams, Director, Transportation Department, PUCO  
**FROM:** Cathy Stout, Manager, Safety Section, ORDC  
**BY:** Greg Gronbach, Project Manager, Safety Section, ORDC  
**SUBJECT:** Coshocton County, TR255, DOT# 517370K, PID# 110492  
**DATE:** September 10, 2020

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The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on April 17, 2019. The Public Utilities Commission of Ohio (PUCO) attended the review. The Diagnostic Team recommended the improvement of warning devices to flashing lights and roadway gates. Copies of the diagnostic review form and the plan and estimate are attached.

PE has already been provided by the railroad. ORDC accepts the site plans and estimates as provided. Please issue a construction-only order for the project outlined above. 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.

  
Greg Gronbach  
Project Manager

Attachment: Diagnostic Review  
Letter Agreement  
PE Authorization  
Plan, Estimate & Material List  
Construction Authorization

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



September 10, 2020

Mr. Len Wagner  
President & Legal Official (SVP)  
Genesee & Wyoming/CUOH  
201 N. Penn Street  
Punxsutawney, PA 15767

RE: Construction Authorization  
Coshocton County, TR255, DOT# 517370K, PID# 110492

Dear Mr. Wagner:

The plan dated 3/25/2020 and estimate dated 9/3/2020, for the referenced project is acceptable. Genesee & Wyoming/CUOH 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.

This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$168,980.00. 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 Genesee & Wyoming/CUOH accepting the following instructions:

1. Genesee & Wyoming/CUOH's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to Greg Gronbach, ORDC, email [Gregory.Gronbach@dot.ohio.gov](mailto:Gregory.Gronbach@dot.ohio.gov), and to the Public Utilities Commission of Ohio at [Jill.henry@puc.state.oh.us](mailto:Jill.henry@puc.state.oh.us). Genesee & Wyoming/CUOH'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. Genesee & Wyoming/CUOH 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 Genesee & Wyoming/CUOH.
3. Genesee & Wyoming/CUOH's project foremen will notify Greg Gronbach at 614-745-6760 (telephone) or [Gregory.Gronbach@dot.ohio.gov](mailto:Gregory.Gronbach@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. Genesee & Wyoming/CUOH will furnish two (2) copies of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.
6. Genesee & Wyoming/CUOH 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,

  
Greg Gronbach  
Project Manager

C: John Williams, Director, Transportation Department, PUCO  
Jill Henry, Rail Division Specialist, PUCO  
Heather Hamilton, ORDC  
ORDC (file)



## Rail Development Commission

Mike DeWine, Governor  
Jon Husted, Lt. Governor

Mark Policinski, Chair

October 24, 2019

Mr. Len Wagner  
President & Legal Official (SVP)  
Genesee & Wyoming/CUOH  
201 N. Penn Street  
Punxsutawney, PA 15767


RE: PE Submitted RR Solicit Bids  
COS TR255 DOT# 517370K PID# 110492

Dear Mr. Wagner:

The plan and estimate transmitted October 23, 2019, for the referenced project has been reviewed and is acceptable. Genesee & Wyoming/CUOH may proceed with soliciting bids for the proposed grade crossing warning system in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit.

A construction authorization will be sent once the bid documents have been received and approved. No field work may be started without a construction authorization from this office.

Sincerely,

  
Greg Gronbach  
Project Manager

Ohio Railroad Development Commission

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



# Force Account Estimate

Estimate to Complete

Railroad:	Columbus & Ohio River Rail Road (CUOH)	Region:	NORTHERN
Agency:	ORDC	State:	OH
DOT #:	517370K	COUNTY:	Coshocton
ROADWAY:	TR 255	CITY:	Newcomerstown
DESCRIPTION:	Force Account Estimate for the installation of Flashing Lights and Gates, new 6x6 bungalow with PMD-4R Constant Warning Time Circuitry. Single track through crossing. No costs included for utility relocation.		
AGENCY PROJECT NUMBER:	PID 110492	ESTIMATE SUBJECT TO REVISION AFTER:	03/02/21

## PRELIMINARY ENGINEERING:

Contracted & Administrative Engineering Services	\$	13,100
<b>Subtotal</b>	<b>\$</b>	<b>13,100</b>

## CONSTRUCTION & CLOSEOUT:

Contracted & Administrative Engineering Services	\$	14,900
<b>Subtotal</b>	<b>\$</b>	<b>14,900</b>

## FLAGGING SERVICE:

Contracted or Railroad Flagmen Services	10	Days	\$	14,000
<b>Subtotal</b>			<b>\$</b>	<b>14,000</b>

## UTILITY WORK:

Power Service	\$	25,000
Other	\$	-
<b>Subtotal</b>	<b>\$</b>	<b>25,000</b>

## CONTRACT WORK:

Outside Services	\$	-
Design & Labor & Material	\$	101,980
<b>Subtotal</b>	<b>\$</b>	<b>101,980</b>

## RAILROAD TRACK:

Labor & Material	\$	-
<b>Subtotal</b>	<b>\$</b>	<b>-</b>

## RAILROAD SIGNAL & COMMUNICATION:

Labor & Material	\$	-
<b>Subtotal</b>	<b>\$</b>	<b>-</b>

## PROJECT SUBTOTAL:

		<b>\$</b>	<b>168,980</b>
Public Project Admin:	0.00%	\$	-
Contingencies:	0.00%	\$	-

## PROJECT TOTAL:

	*****	<b>\$</b>	<b>168,980</b>
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## CURRENT AUTHORIZED BUDGET:

	*****	<b>\$</b>	<b>-</b>
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## TOTAL SUPPLEMENT REQUESTED:

	*****	<b>\$</b>	<b>168,980</b>
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## DIVISION OF COST:

Agency	100.00%	\$	168,980
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: 07/26/19 REVISED: 09/03/20 DATE: 09/03/20

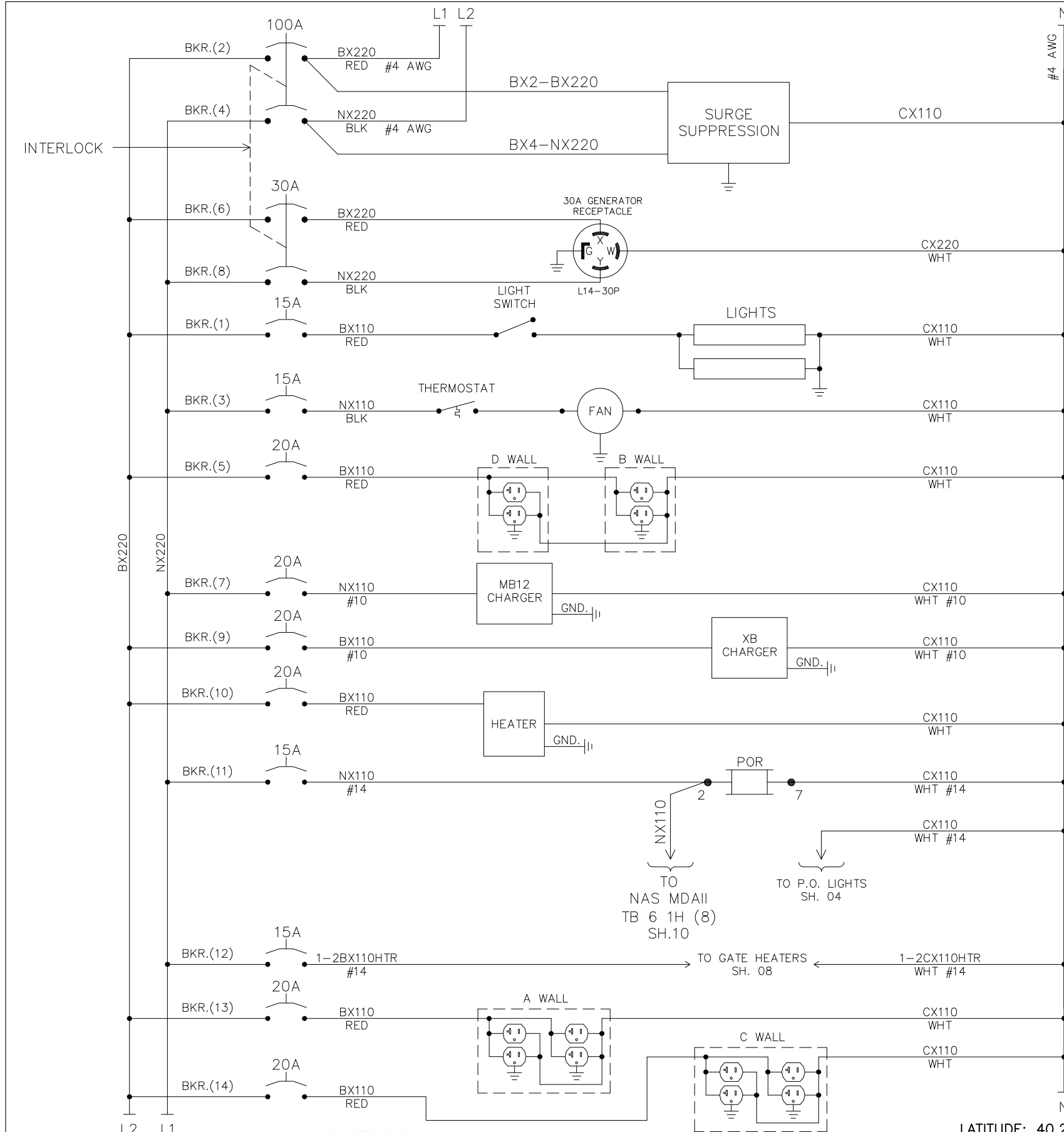




	A	B	C
1	CUOH TR 255 #517370K NEWCOMERSTOWN, OH		
2	TCR RAIL SYSTEMS SUPPLIED MATERIAL		
3	6X6 CONTROL HOUSE	1	EA
4	PMD-4R	1	EA
5	XLC LAMP CONTROLLER	2	EA
6	VLG LOGIC GATE	1	EA
7	VITAL RELAY	2	EA
8	NAS II	1	EA
9	CAMERA SYSTEM	1	EA
10	BATTERY CHARGER 20A	1	EA
11	BATTERY CHARGER 40A	1	EA
12	BATTERY 368 AH	6	CELL
13	BATTERY 264 AH	7	CELL
14	4-POST BLOCK	38	EA
15	6-POST DBL BLOCK	9	EA
16	LIGHTNING ARRESTER, HEAVY DUTY	38	EA
17	EQUALIZER, HEAVY DUTY	4	EA
18	INSUL. TEST LINK ASSEMBLY	70	EA
19	AAR HARDWARE	1	LOT
20	WIRE TERMINATION	1	LOT
21	WIRE TAGS	1	LOT
22	WIRE, #14 TOWER & CASE WIRE (BLUE)	400	FT
23	WIRE, #10 TOWER & CASE WIRE (BLUE)	400	FT
24	WIRE, #6, GREEN	30	FT
25	2C#6 TWISTED CABLE (TRACK)	200	FT
26	3C#6 POWER CABLE	75	FT
27	7C#6 UG CABLE	200	FT
28	7C#14 UG CABLE	200	FT
29	3C#9 UG CABLE	200	FT
30	RAILROAD SIGNAL LOCK	5	EA
31	METER SERVICE	1	EA

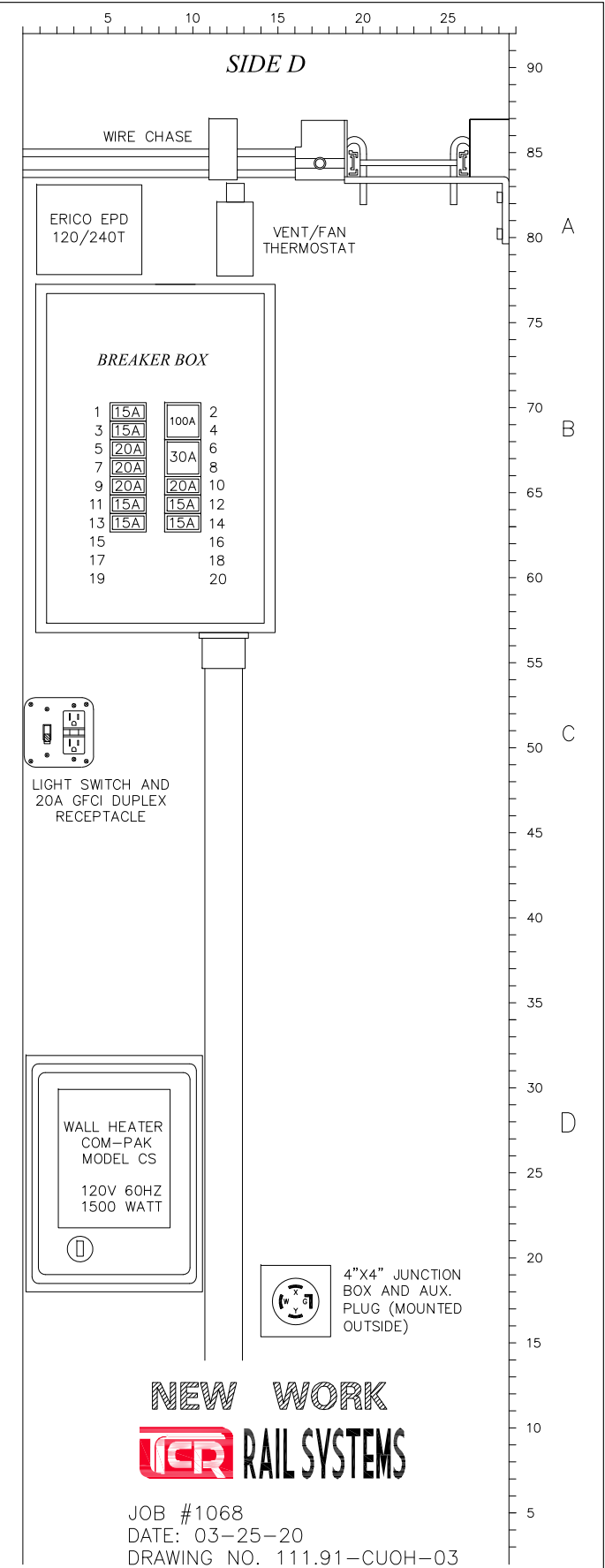
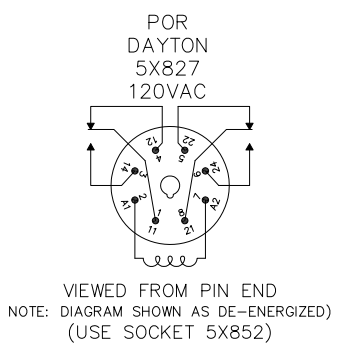




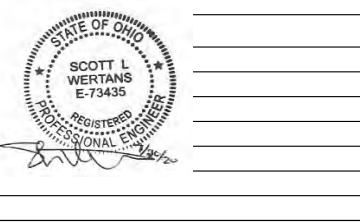


BREAKER BOX		
100A EPD 120/240T		
L1	1. LIGHTS	2. 240VAC SERVICE & SURGE PROTECTOR
L2	3. THERM./FAN	4. 240VAC SERVICE & SURGE PROTECTOR
L1	5. B & D WALL RECPT.	6. GENERATOR PLUG
L2	7. MB12 CHARGER	8. GENERATOR PLUG
L1	9. XB CHARGER	10. HEATER
L2	11. POR & P.O. LIGHTS	12. GATE HEATERS
L1	13. A WALL RECPT.	14. C WALL RECPT.
L2	15.	16.
L1	17.	18.
L2	19.	20.

- 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 ARRESTER UNITS MOUNTED ON THE BREAKER BOX WHICH HAVE TWO BLACK AND ONE WHITE WIRE EACH.
  - THE MB12 CHARGER AND XB CHARGER AC POWER WIRES WHICH USES A TWO CONDUCTOR SJO CABLE THAT HAS ONE BLACK WIRE AND ONE WHITE WIRE.
  - 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 ON THIS SHEET RUN TO BREAKER BOX GROUND BUS.



NOTE	DATE	NOTES

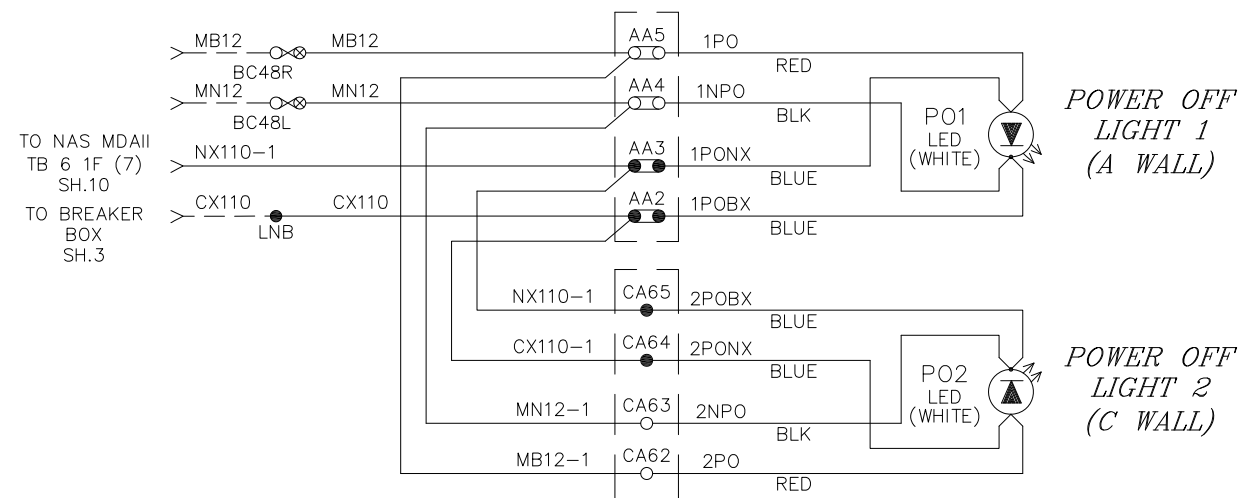
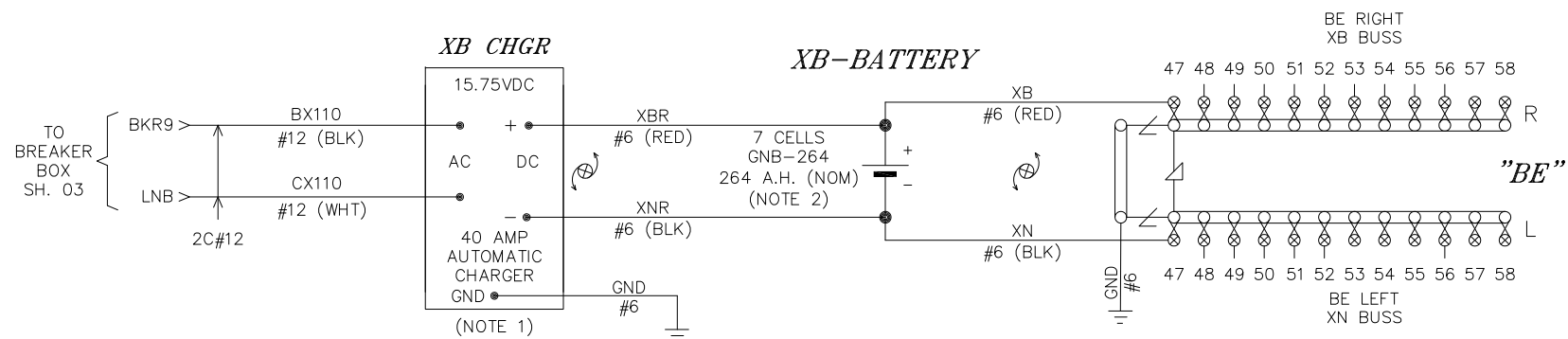
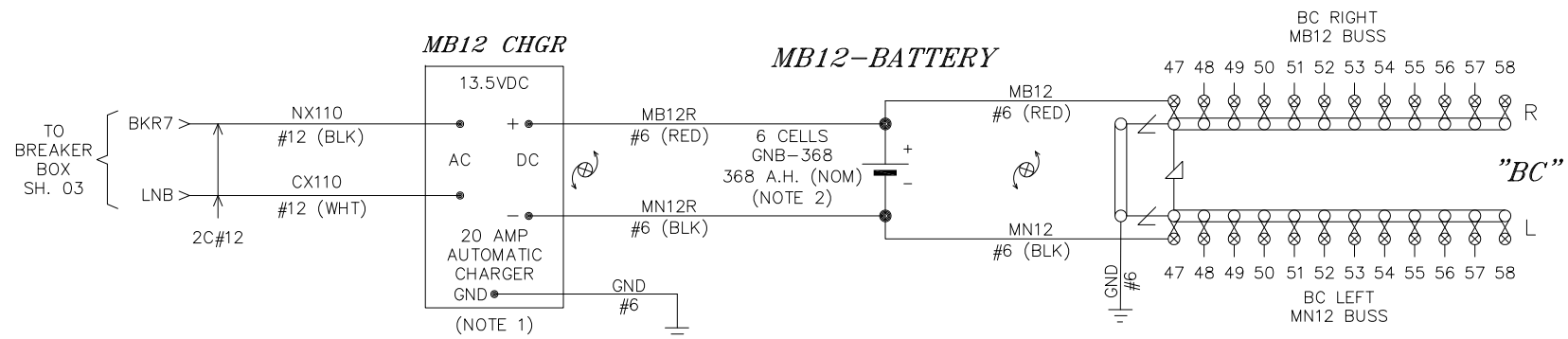


REV.	DATE	REVISIONS

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



AC POWER DISTRIBUTION	
COLUMBUS AND OHIO RIVER RAILROAD	
AUTOMATIC WARNING DEVICES AT	
TR-255	
NEWCOMERSTOWN, (COSHOCOTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 03 OF 14



# LEGEND:

- TEST TERMINAL
- EQUALIZER
- ARRESTER TO GROUND
- TWISTED WIRE  
2 TURNS PER FOOT
- INSULATED NUT

## NOTES:

- USE 120 VOLT SETTING.
- USE 1/4" TERMINALS AT BATTERY CONNECTIONS.



REV.	DATE	REVISIONS

LATITUDE: 40.2716507

LONGITUDE: -81.6773526

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

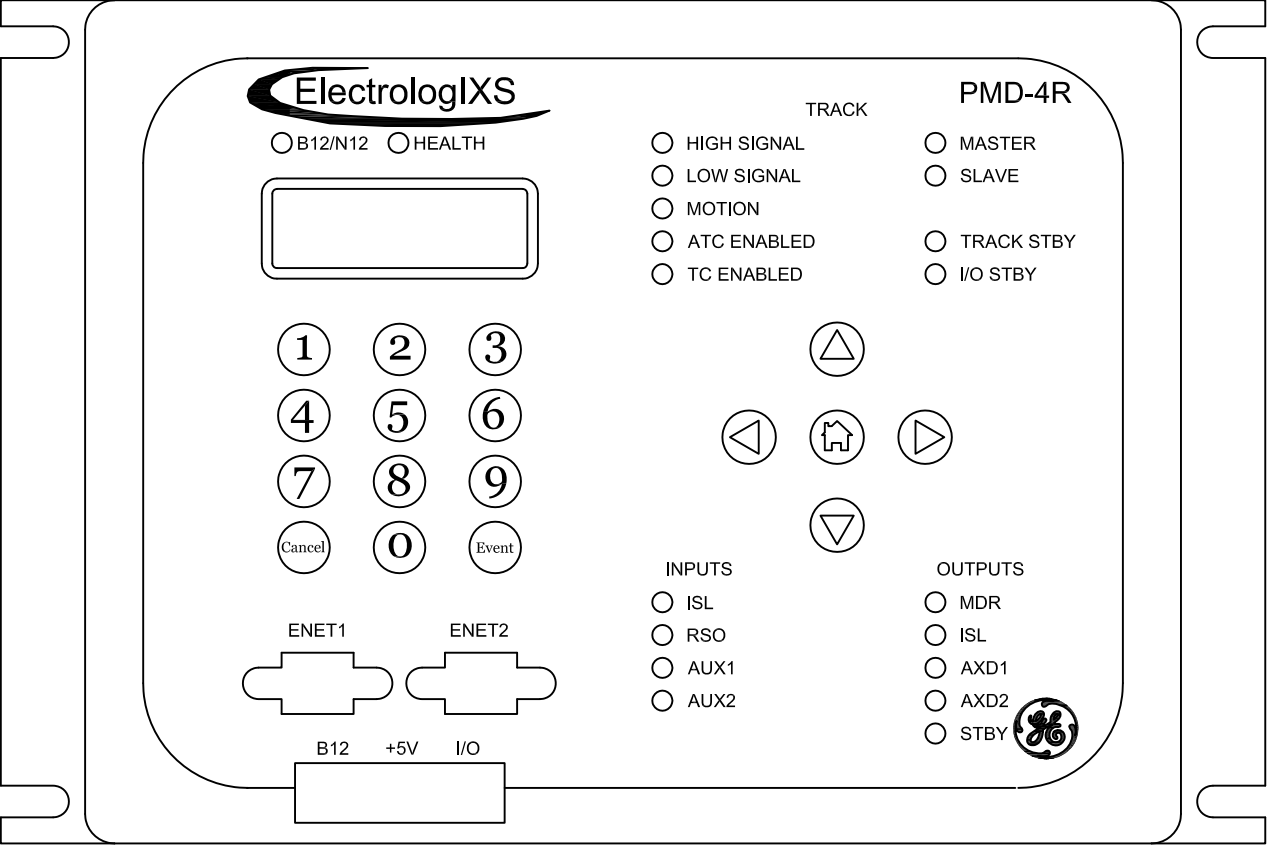


NEW WORK  
C&OR RAIL SYSTEMS

JOB #0993  
DATE: 10-03-19  
DRAWING NO. 277.68-LIMA-04

BATTERY AND P. O. CIRCUITS

COLUMBUS AND OHIO RIVER RAILROAD  
AUTOMATIC WARNING DEVICES AT  
TR-255  
NEWCOMERSTOWN, (COSHOCKTON), OH  
DOT# 517370K MILE 111.91  
SUBDIVISION: PAN SUBDIVISION PG. 04 OF 14



PMD-4/4R Power Connectors

PMD-4R/4R J1 PIN OUTS	
1	2
B12	N12

PMD-4R J16, J17, and J18 Connectors

PMD-4R J16 PIN OUTS									
1	2	3	4	5	6	7	8	9	10
TX+	N/C	TX-	N/C	RX+	N/C	RX-	N/C	MDR+ Out	MDR- Out
PMD-4R J17 PIN OUTS									
1	2	3	4	5	6	7	8	9	10
ISL+ Out	ISL- Out	N/C	AX01+ Out	AX01- Out	N/C	AX02+ Out	AX02- Out	N/C	ISL+ In
PMD-4R J18 PIN OUTS									
1	2	3	4	5	6	7	8	9	10
ISL- In	N/C	RSO+ In	RSO- In	N/C	AUX1+ In	AUX1- In	N/C	AUX2+ In	AUX2- In

PMD-4/4R Front Panel Fuses

F7 - 10A MAIN POWER FUSE
F1 - 7.5A +5 VOLT POWER FUSE
F3 - 3A INPUT OUTPUT MODULE FUSE

PMD-4R Right Side Fuses

F5 - 4A Sandby XTI Fuse
F6 - 4A Normal XTI Fuse
F2 - 3A Normal/Standby Module Fuse

PMD-4 Right Side Fuses

F4 - 4A XTI Fuse

BALLAST COMPENSATION

I	FREQ	BC
1	86 Hz	122
2	114 Hz	125
3	151 Hz	129
4	156 Hz	129
5	172 Hz	130
6	210 Hz	133
7	211 Hz	133
8	267 Hz	137
9	285 Hz	138
10	326 Hz	141
11	348 Hz	142
12	392 Hz	143
13	430 Hz	145
14	452 Hz	145
15	522 Hz	147
16	525 Hz	147
17	560 Hz	148
18	630 Hz	148
19	645 Hz	149
20	686 Hz	149
21	753 Hz	149
22	790 Hz	149
23	816 Hz	149
24	881 Hz	149
25	970 Hz	150
26	979 Hz	150

PMD-4R J19 Connectors

PMD-4R J19 PIN OUTS					
1	2	3	4	5	6
MS+	MS-	MS+	MS-	STBY- Out	STBY+ Out



JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-05

PROGRAM INFORMATION

\* FIELD ADJUSTMENT TO BE MADE ACCORDING TO THE PMD-4R INSTRUCTION MANUAL.

PROGRAMMING & SETUP		
CHASSIS ID	3	WARNING TIME CRC 12B24E16
LOCATION	TR-255	
MILEPOST	111.91	
DOT NO.	517370K	
DATE	____/____/____	
OPERATING PROGRAM	VER. ____	CRC ____
EXECUTIVE SOFTWARE PROGRAM		
	VER. ____	CRC. ____
A PROCESSOR	7.21 Bid0217C	D9863857
B PROCESSOR	7.21 Bid0217C	94B80C99
C PROCESSOR	7.21 Bid0217C	D73DAB0E
APPLICATION PROGRAM		
NAME pmd-4r md[cw]v	CHECKSUM 3362	CRC DBCD
TRACK SETUP		
APPROACH FREQUENCY	686 Hz.	_____
MASTER/SLAVE OPERATION	MASTER __X__	SLAVE _____
TRANSMITTER CHECK VALUE (-7.0 TO 13.0 OHMS)		*
APPROACH DIRECTION MODE	UNI ____	BI __X__
LUMPED IMPEDANCE ADJUSTMENT VALUE (-9 TO +9)		*
AUTO RX	DISABLED _____	ENABLED __X__
FALSE SHUNT DETECT SETTING		
	DISABLED __X__	ENABLED RX ____ TIME (MIN) ____
APPROACH RELEASE SETTING		
	DISABLED __X__	ENABLED RX ____ TIME (MIN) ____
LOS TIME (SECONDS)		15 SEC.
APPROACH MAINTENANCE		
PHASE COMPENSATION VALUE (0 TO 10 DEGREES)		*
BALLAST COMPENSATION VALUE (50 TO 250)		149
ISLAND SETUP		
ISLAND TYPE	EXTERNAL	INTERNAL X
ISLAND SETUP (WHEN INTERNAL IS SELECTED)		
ISLAND FREQUENCY (KHz)		
	__0__X__4.0__4.4__4.9__5.4__5.9__6.4__7.1__7.7__X__8.0	
ISLAND LOS (SECONDS)	__5__X__2.0__4.0	
ISLAND FAULT SETTING	__1__X__2	

ETHERNET PORTS:  
ENET1 = 192.168.0.11  
ENET2 = 192.168.1.12

NOTE	DATE	NOTES



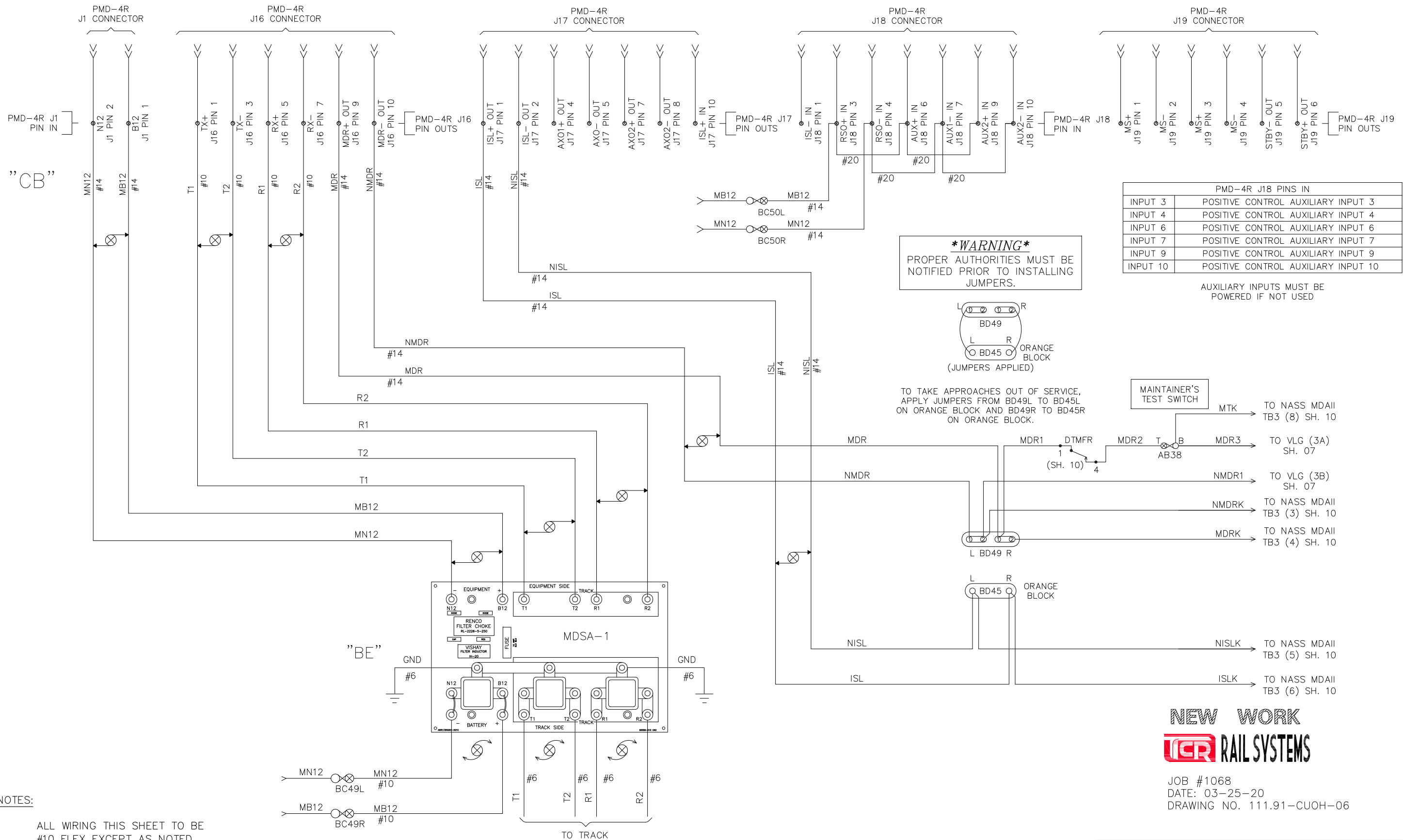
REV.	DATE	REVISIONS

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

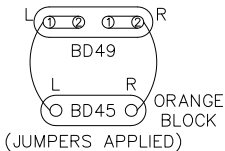


PMD-4R PROGRAMMING AND SETUP	
COLUMBUS AND OHIO RIVER RAILROAD AUTOMATIC WARNING DEVICES AT TR-255 NEWCOMERSTOWN, (COSHOCOTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 05 OF 14





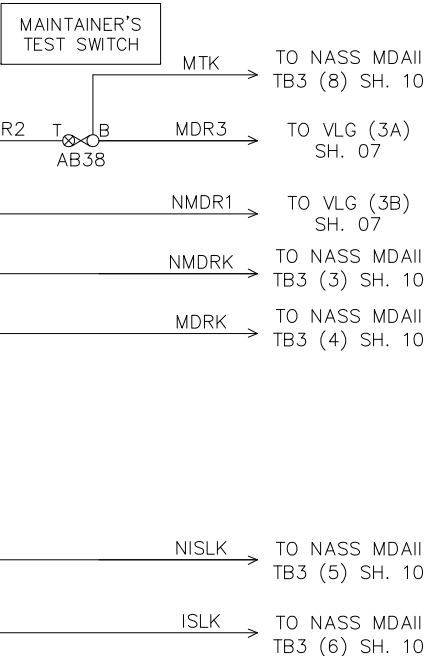
**\*WARNING\***  
PROPER AUTHORITIES MUST BE NOTIFIED PRIOR TO INSTALLING JUMPERS.



TO TAKE APPROACHES OUT OF SERVICE, APPLY JUMPERS FROM BD49L TO BD45L ON ORANGE BLOCK AND BD49R TO BD45R ON ORANGE BLOCK.

PMD-4R J18 PINS IN	
INPUT 3	POSITIVE CONTROL AUXILIARY INPUT 3
INPUT 4	POSITIVE CONTROL AUXILIARY INPUT 4
INPUT 6	POSITIVE CONTROL AUXILIARY INPUT 6
INPUT 7	POSITIVE CONTROL AUXILIARY INPUT 7
INPUT 9	POSITIVE CONTROL AUXILIARY INPUT 9
INPUT 10	POSITIVE CONTROL AUXILIARY INPUT 10

AUXILIARY INPUTS MUST BE POWERED IF NOT USED



**NEW WORK**  
**CR RAIL SYSTEMS**

JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-06

LATITUDE: 40.2716507 LONGITUDE: -81.6773526

NOTE	DATE	NOTES

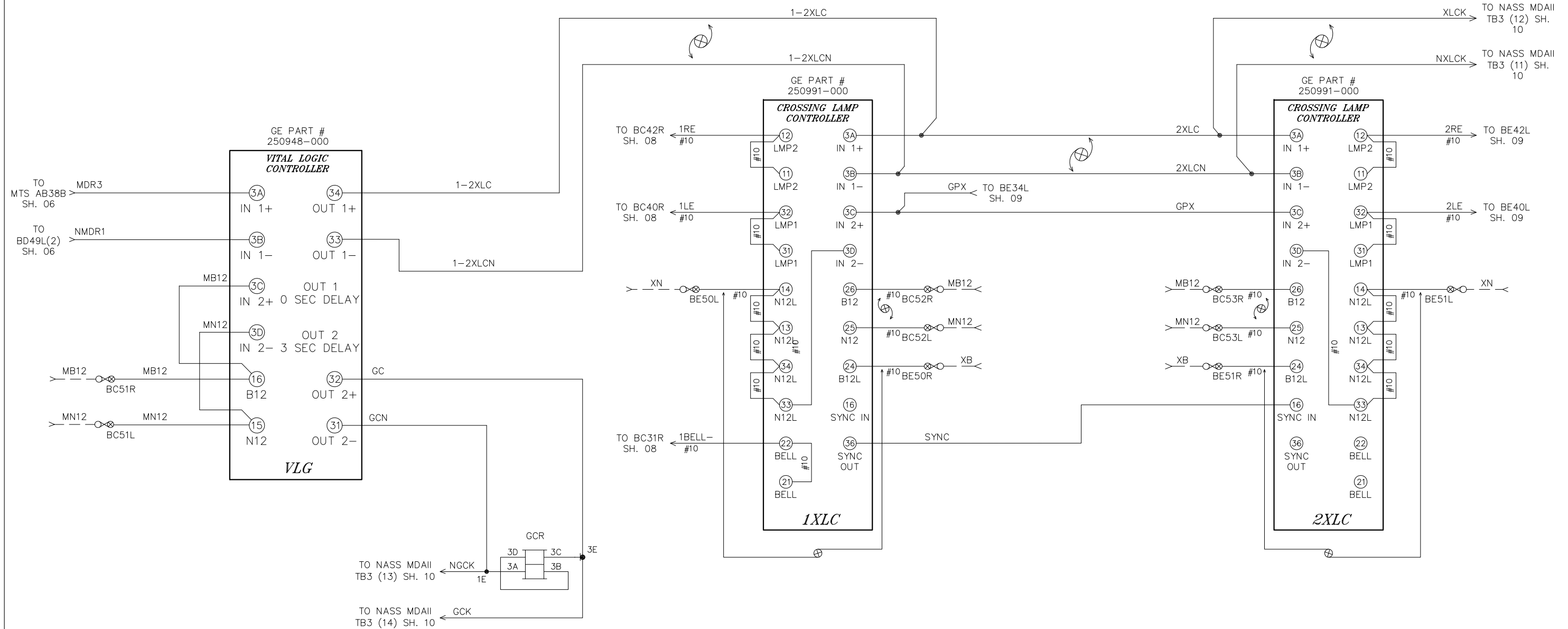


REV.	DATE	REVISIONS

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



PMD-4R CROSSING CONTROL CIRCUITS	
<b>COLUMBUS AND OHIO RIVER RAILROAD</b> AUTOMATIC WARNING DEVICES AT TR-255 NEWCOMERSTOWN, (COSHOCOTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 06 OF 14



NOTE:  
ALL WIRE THIS SHEET IS NO. 14 FLEX  
UNLESS OTHERWISE NOTED.

LATITUDE: 40.2716507 LONGITUDE: -81.6773526

NOTE	DATE	NOTES



REV.	DATE	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 SUBSYSTEMS MUST BE  
GIVEN COMPLETE CIRCUIT AND  
OPERATIONAL TESTS BEFORE BEING  
PLACED IN REGULAR OPERATION.



CROSSING CONTROL CIRCUITS - VLC, GCR, 1XLC, & 2XLC	
<b>COLUMBUS AND OHIO RIVER RAILROAD</b> AUTOMATIC WARNING DEVICES AT TR-255 NEWCOMERSTOWN, (COSHOCKTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 07 OF 14



JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-07



NEW WORK  
TCR RAIL SYSTEMS

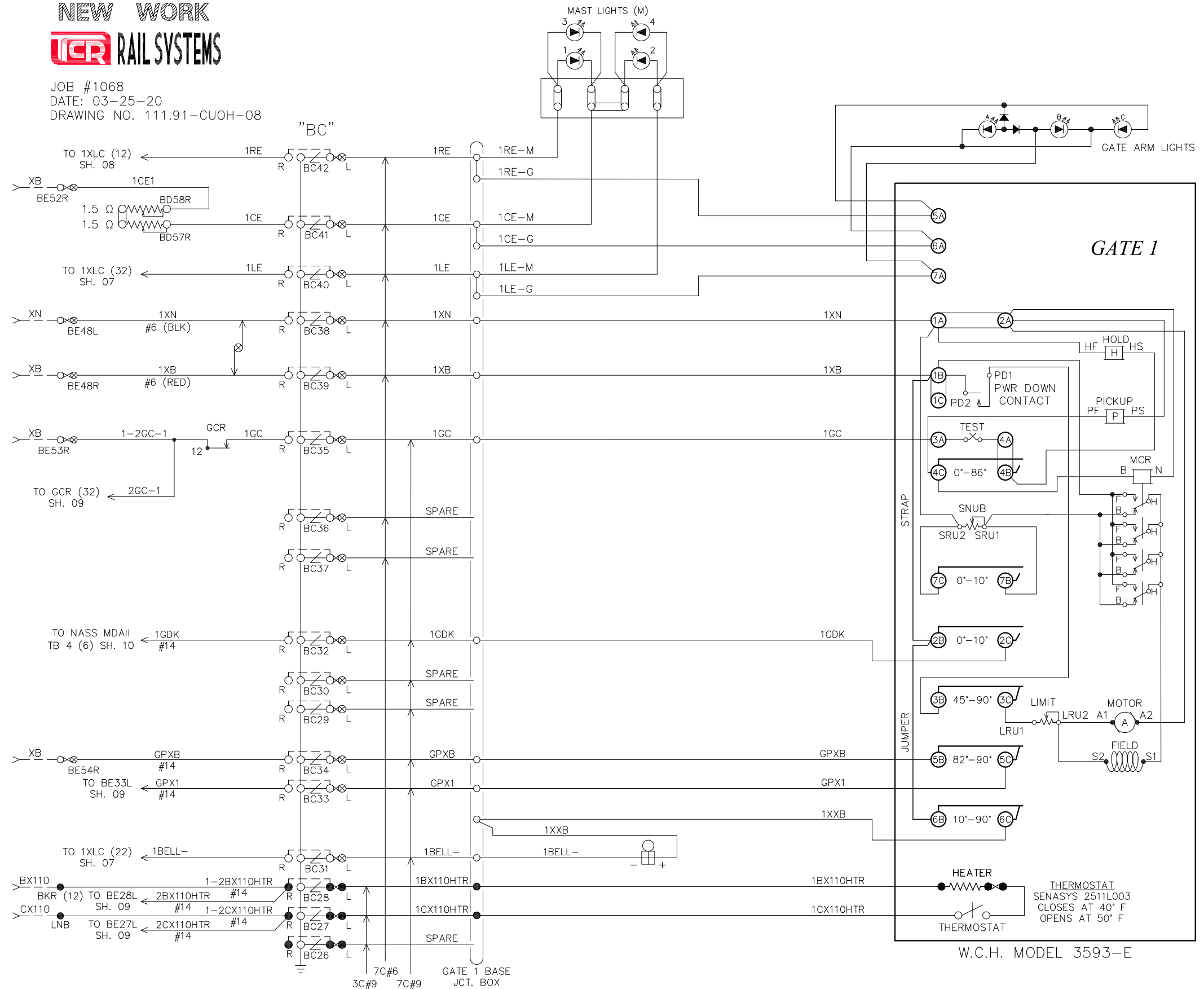
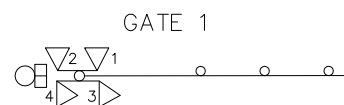
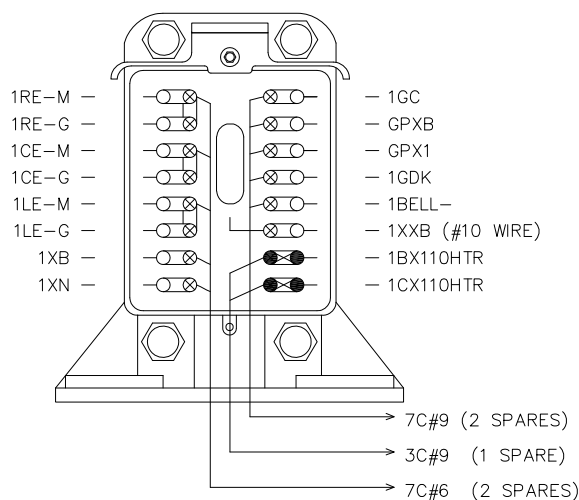
JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-08

NOTES:

1. GATE MECHANISM SHOWN IN CLEAR POSITION.
2. ALL WIRING THIS SHEET IS #10 FLEX UNLESS OTHERWISE NOTED.
3. ADD STRAP FROM 1B TO 2B FOR 1GDK CIRCUIT.
4. ADD JUMPER FROM 2B TO 6B FOR BELL CIRCUIT.
5. ● = INSULATED NUT.

CONTACT	CLOSED	FUNCTION
2	0° - 10°	GATE DOWN
3	45° - 90°	POWER DOWN
4	0° - 86°	POWER UP
5	82° - 90°	GATE CLEAR
6	10° - 90°	BELL
7	0° - 10°	SNUB

GATE 1  
BASE JCT. BOX



LATITUDE: 40.2716507

LONGITUDE: -81.6773526

GATE CONTROL AND LIGHTING CIRCUITS GATE 1

COLUMBUS AND OHIO RIVER RAILROAD

AUTOMATIC WARNING DEVICES AT

TR-255

NEWCOMERSTOWN, (COSHOCOTON), OH

DOT# 517370K

MILE 111.91

SUBDIVISION: PAN SUBDIVISION

PG. 08 OF 14

NOTE	DATE	NOTE



REV.	DATE	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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

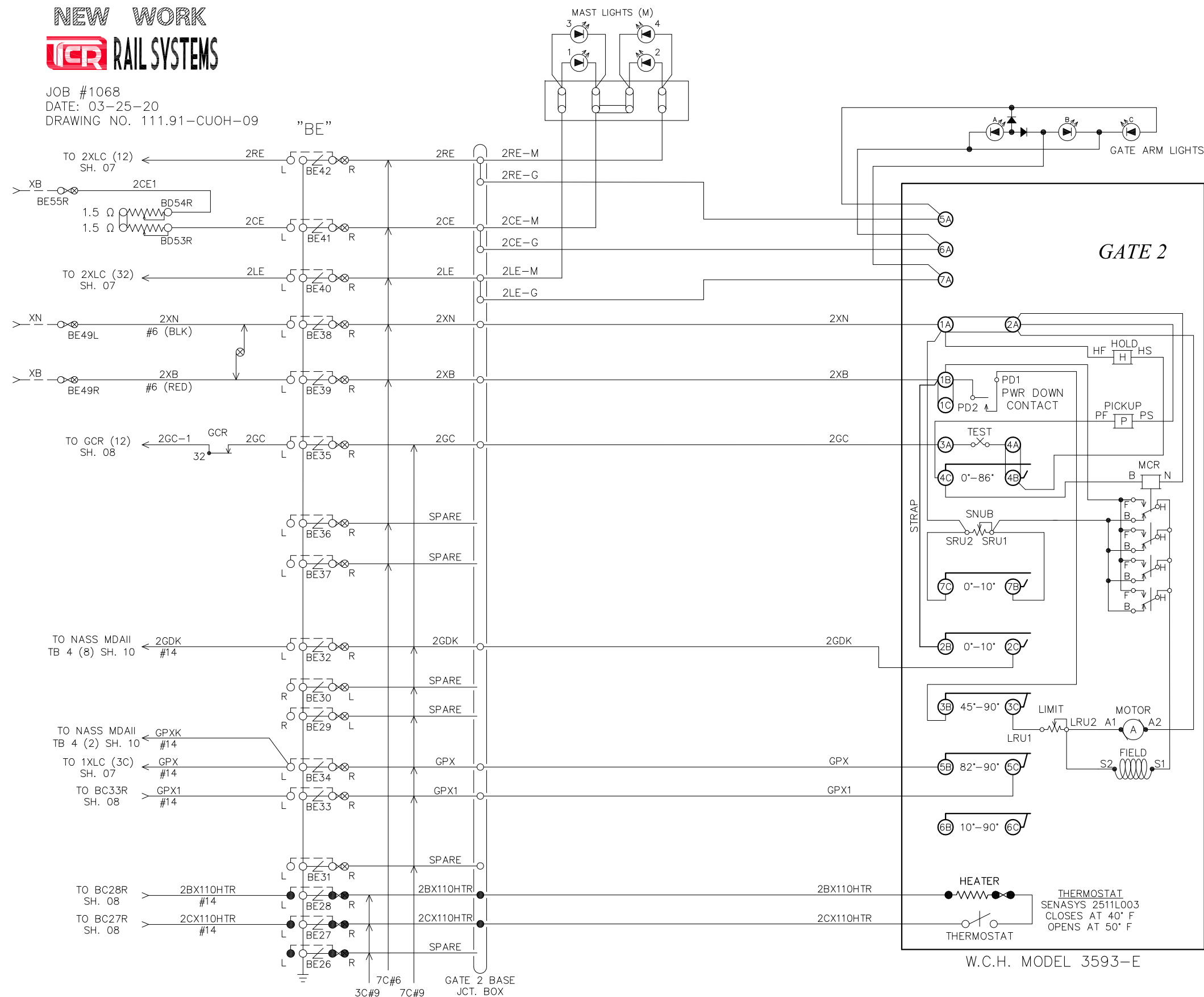
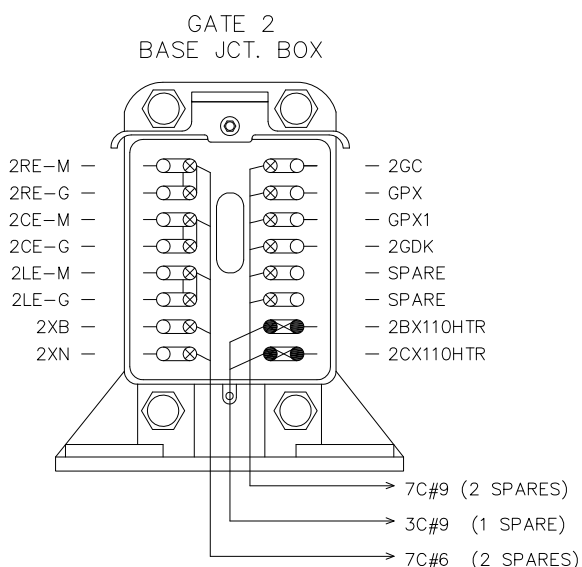


JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-09

NOTES:

1. GATE MECHANISM SHOWN IN CLEAR POSITION.
2. ALL WIRING THIS SHEET IS #10 FLEX UNLESS OTHERWISE NOTED.
3. ADD STRAP FROM 1B TO 2B FOR 1GDK CIRCUIT.
4. ● = INSULATED NUT.

CONTACT	CLOSED	FUNCTION
2	0° – 10°	GATE DOWN
3	45° – 90°	POWER DOWN
4	0° – 86°	POWER UP
5	82° – 90°	GATE CLEAR
6	10° – 90°	BELL
7	0° – 10°	SNUB



LATITUDE: 40.2716507

LONGITUDE: -81.6773526

GATE CONTROL AND LIGHTING CIRCUITS GATE 2

## COLUMBUS AND OHIO RIVER RAILROAD

## AUTOMATIC WARNING DEVICES AT

TR-255

NEWCOMERSTOWN, (COSHOCTON), OH

DOT# 517370K

MILE 111.91

SUBDIVISION: PAN SUBDIVISION

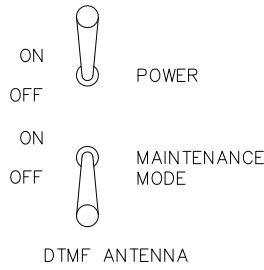
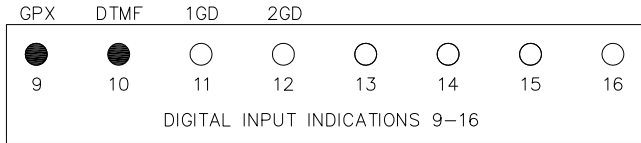
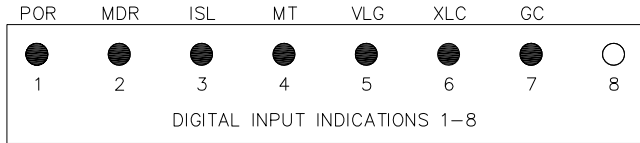
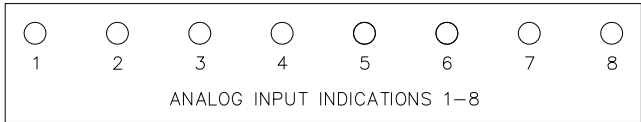
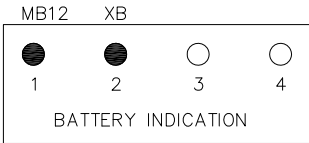
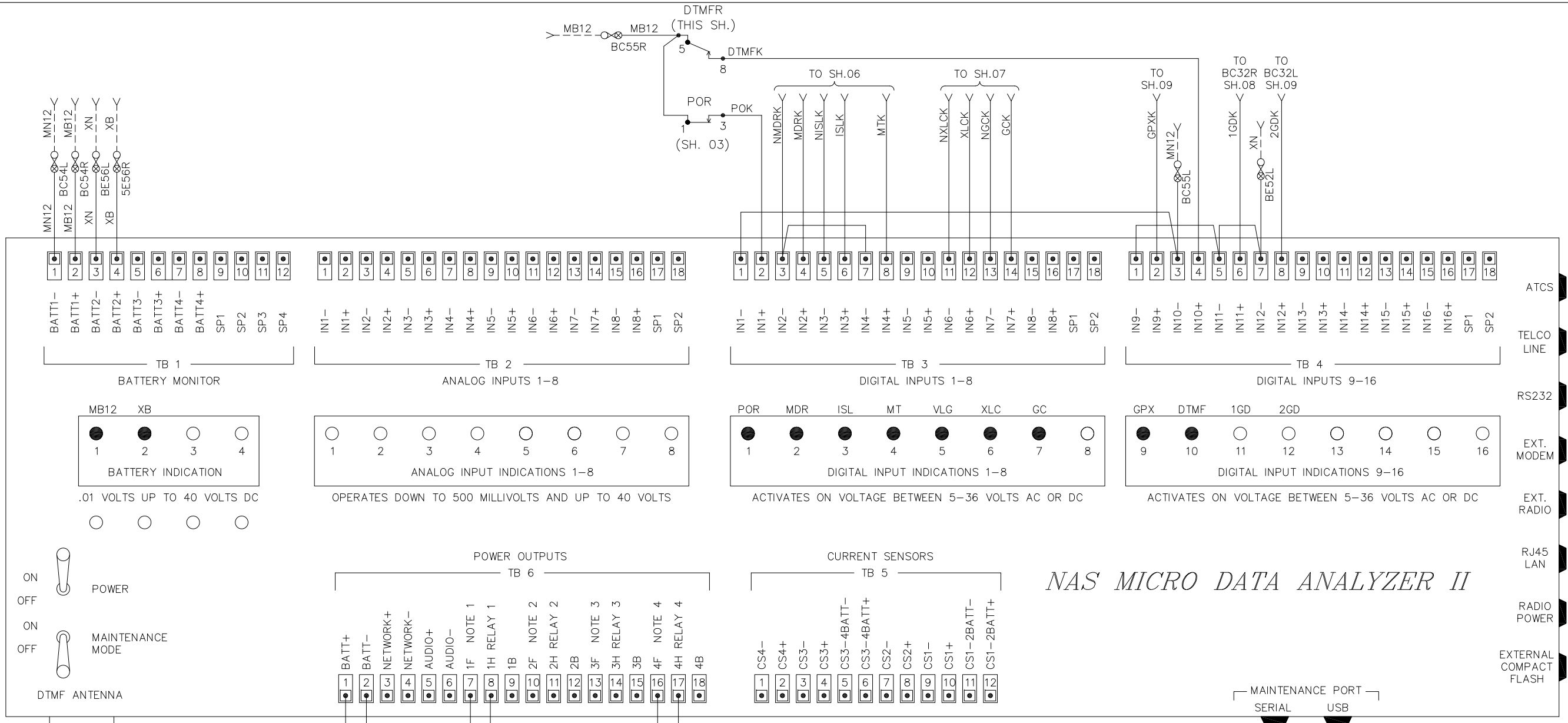
PG. 09 OF 14

[illegible][illegible]

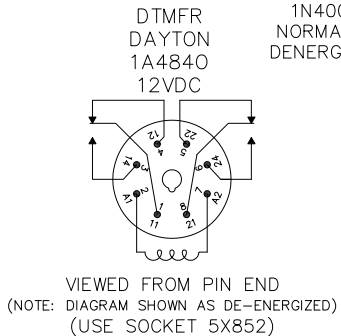
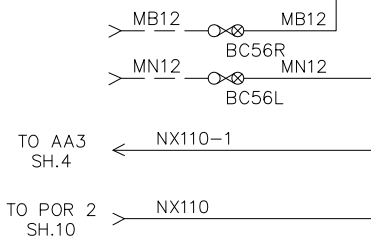
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ROOF MOUNT  
VHF ANTENNA



ANTENNA CABLE  
NAS PART NO:  
NAS-DTMF-AK-10



NEW WORK  
TCR RAIL SYSTEMS

JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-10

- NOTES:
- RELAY 1 SHOULD REMAIN ENERGIZED BY THE RECORDER EXCEPT FOR THE FOLLOWING CONDITIONS:
    - THERE IS A POWER OFF CONDITION, (I.E. DIGITAL INPUT 1 IS DOWN FOR 30 SECONDS)
    - THERE ARE LOW BATTERY CONDITIONS FOR AT LEAST 5 MINUTES, (I.E. MB12 BATTERIES ARE 10.8 VOLTS OF LESS OR XB BATTERIES ARE 13.0 VOLTS OR LESS).
    - THERE ARE HIGH BATTERY CONDITIONS FOR AT LEAST 5 MINUTES, (I.E. MB12 BATTERIES ARE GREATER THAN 14.8 VOLTS OR XB BATTERIES ARE GREATER THAN 17.0 VOLTS).
  - RELAY 2 IS USED TO RELAY PO INFORMATION TO AN OPTIONAL RTU AND SHOULD REMAIN ENERGIZED BY THE RECORDER EXCEPT FOR THE FOLLOWING CONDITIONS:
    - THERE IS A POWER OFF CONDITION, (I.E. DIGITAL INPUT 1 IS DOWN FOR 30 SECONDS).
  - RELAY 3 IS USED TO RELAY GATE DOWN INFORMATION TO A RTU AND SHOULD REMAIN DE-ENERGIZED BY THE RECORDER EXCEPT FOR THE FOLLOWING CONDITION:
    - ALL GATES ARE DOWN, (I.E. DIGITAL INPUTS 10 & 11 ARE DOWN).
  - RELAY 4 IS USED FOR DTMF CROSSING CONTROL, (NORMALLY DE-ENERGIZED).

NOTE:  
ALL WIRE THIS SHEET NO. 14  
FLEX UNLESS OTHERWISE NOTED.

OPERATING FREQUENCY - 160.215	
CODE	DESCRIPTION
370 *	ACTIVATE CROSSING W/70 SEC TIMER
370 #	DE-ACTIVATE CROSSING XXX* CODE
3701 *	ACTIVATE CROSSING
3701 #	DE-ACTIVATE CROSSING

NOTE	DATE



ES

REV.	DATE	REVISIONS

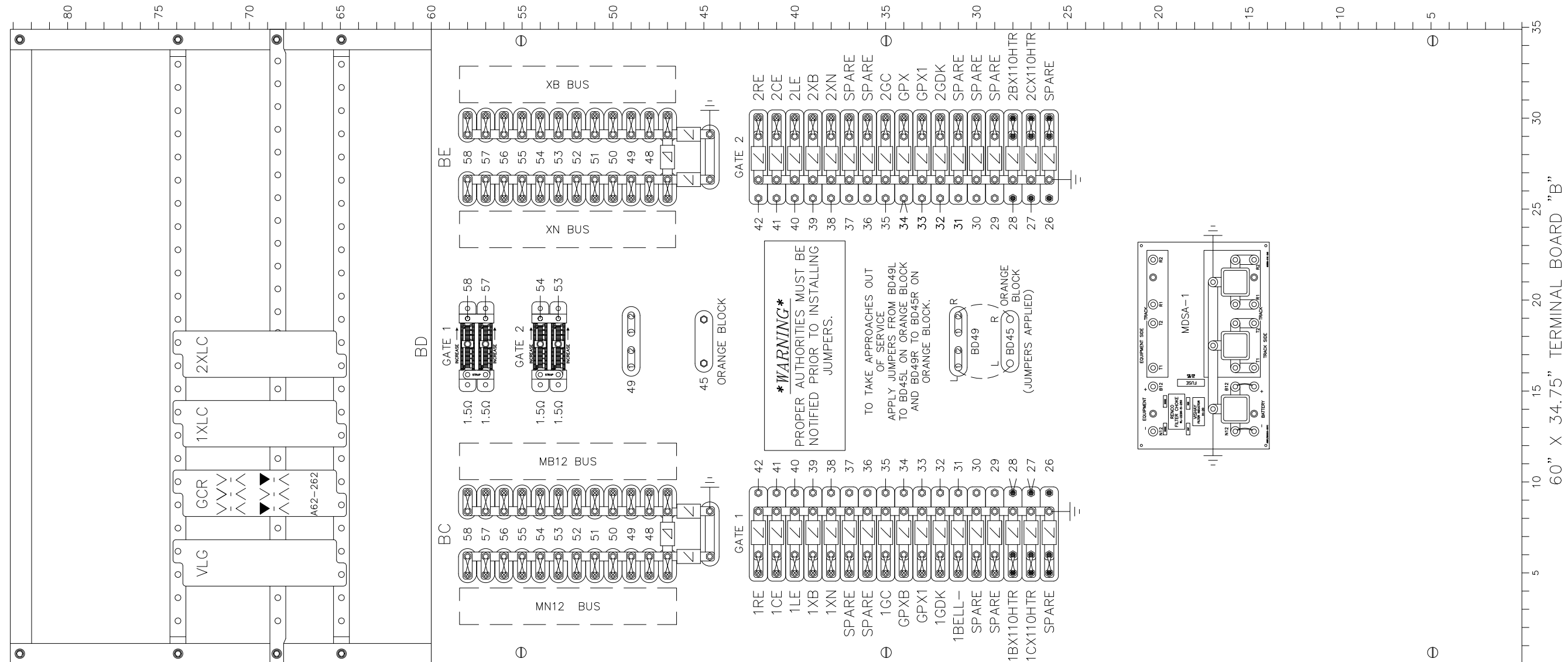
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RECORDER CIRCUITS	
COLUMBUS AND OHIO RIVER RAILROAD AUTOMATIC WARNING DEVICES AT TR-255 NEWCOMERSTOWN, (COSHOCOTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 10 OF 14



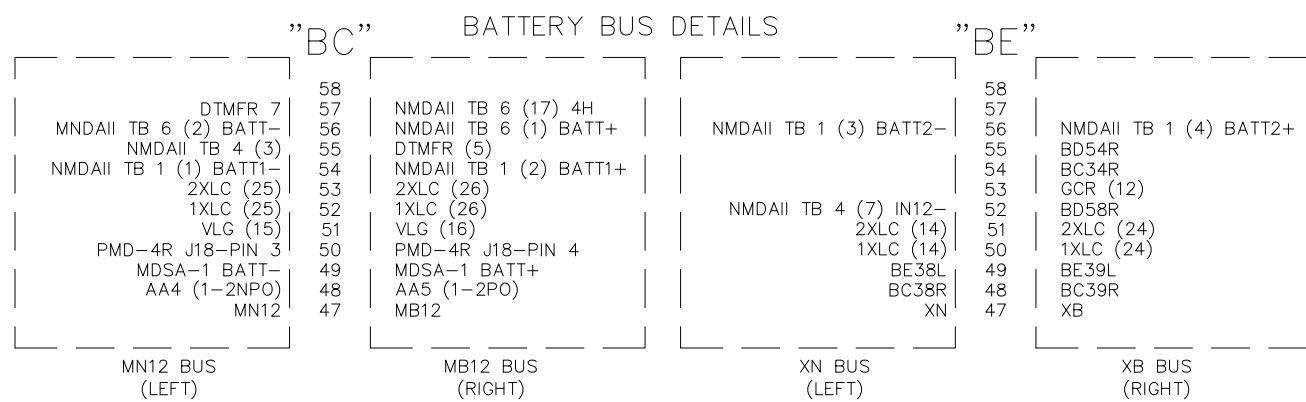
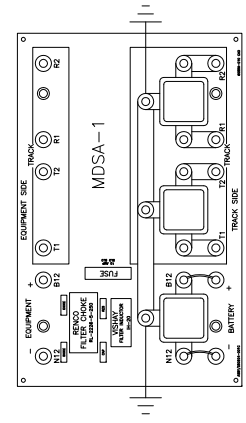




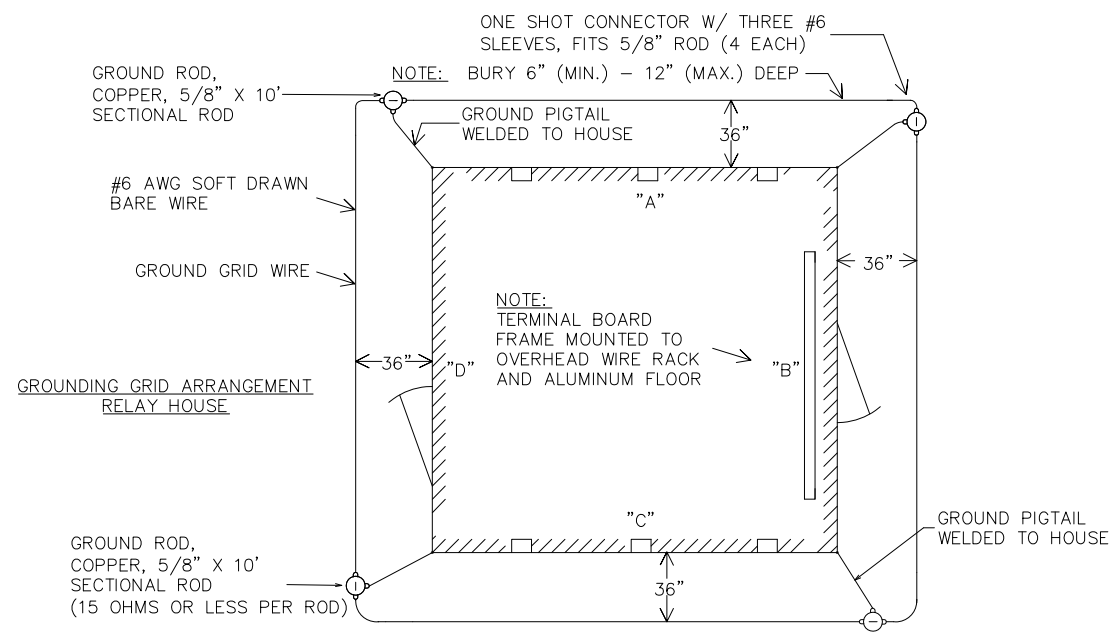
**\*WARNING\***  
PROPER AUTHORITIES MUST BE NOTIFIED PRIOR TO INSTALLING JUMPERS.

TO TAKE APPROACHES OUT OF SERVICE  
APPLY JUMPERS FROM BD49L TO BD45L ON ORANGE BLOCK AND BD49R TO BD45R ON ORANGE BLOCK.

( L R )  
( BD49 )  
( L R )  
( BD45 )  
( JUMPERS APPLIED )



JOB #1068  
DATE: 03-25-20  
DRAWING NO. 111.91-CUOH-12



NOTE	DATE

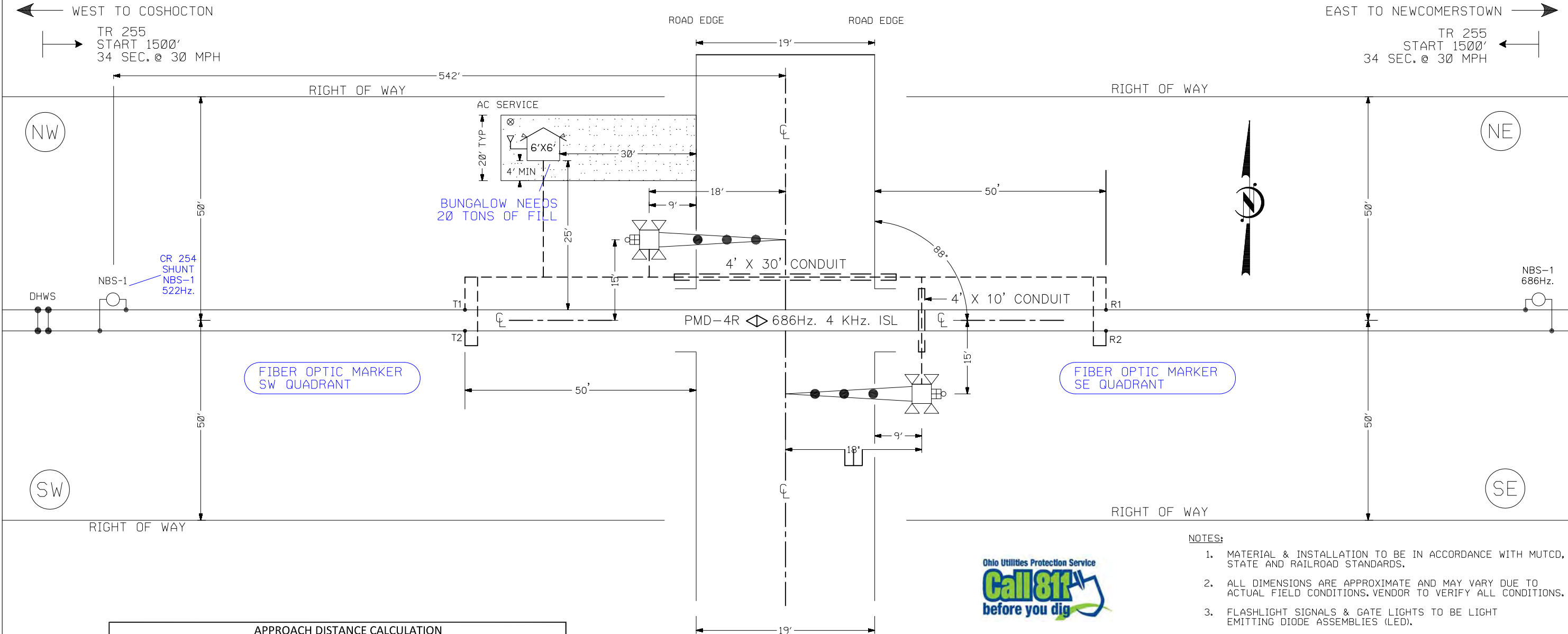



REV.	DATE	REVISIONS

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



TERMINAL BOARD LAYOUT – SIDE B	
COLUMBUS AND OHIO RIVER RAILROAD	
AUTOMATIC WARNING DEVICES AT	
TR-255	
NEWCOMERSTOWN, (COSHOCOTON), OH	
DOT# 517370K	MILE 111.91
SUBDIVISION: PAN SUBDIVISION	PG. 12 OF 14



APPROACH DISTANCE CALCULATION		
	SOUTH	NORTH
ACTUAL PRIME CROSSING WARNING TIME	30 SEC	30 SEC
TIME FOR CROSSING CLEARANCE DISTANCE > 35'	+ 0 SEC	+ 0 SEC
TRAFFIC PRE-EMPTION TIME	+ 0 SEC	+ 0 SEC
TOTAL CALCULATED DESIGN WARNING TIME	30 SEC	30 SEC
EQUIPMENT RESPONSE TIME	+ 4 SEC	+ 4 SEC
BUFFER TIME	+ 0 SEC	+ 0 SEC
TOTAL WARNING TIME FOR APPROACH DISTANCE CALCULATION	34 SEC	34 SEC
CALCULATED AT MAXIMUM TRAIN SPEED	x 30 MPH	x 30 MPH
RATIO OF FEET PER SECOND TO MILES PER HOUR	x 1.470	x 1.470
APPROACH LENGTH (ROUNDED UP TO THE NEXT FOOT)	1500 FEET	1500 FEET

MP# 111.91  
TR 255  
DOT #517370K

CABLE RUN TABULATIONS

HOUSE TO AC SERVICE ----- 3/C#6  
HOUSE TO GATE NO. 1 ----- 3/C#9, 7/C#6 & 7/C#9  
HOUSE TO GATE NO. 2 ----- 3/C#9, 7/C#6 & 7/C#9  
HOUSE TO T1/T2 ----- #6 TW. PR.  
HOUSE TO R1/R2 ----- #6 TW. PR.

- NOTES:
- MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
  - ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS. VENDOR TO VERIFY ALL CONDITIONS.
  - FLASHLIGHT SIGNALS & GATE LIGHTS TO BE LIGHT EMITTING DIODE ASSEMBLIES (LED).
  - SEE APPROACH CIRCUIT DISTANCE CALCULATION TABLE FOR PLANNED WARNING TIME AND TRAIN SPEED PER TRACK.
  - APPROACH DISTANCES ARE TO BE MEASURED FROM THE TERMINATIONS TO CLOSEST SET OF TRACK LEADS AT CROSSING.
  - CONDUIT MUST BE BORED.
  - VENDOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL UTILITIES WITHIN LIMITS OF CONSTRUCTION.
  - INSTALL FOUNDATIONS TO AVOID UNDERGROUND UTILITIES.
  - ENSURE ALL DITCHES ALONG THE TRACKS IN ALL FOUR QUADRANTS HAVE POSITIVE DRAINAGE FLOW TO 100' FROM THE HIGHWAY.
  - CAMERA SYSTEM TO BE SUPPLIED BY VENDOR AND INSTALLED BY RAILROAD.
  - ENSURE THE FREQUENCY FOR CR 254 NBS DOES NOT CONFLICT WITH TR 255.

LEGEND:

⊗ - LOCATION OF AC SERVICE

NOTE

DATE

STATE OF OHIO

SCOTT L. WERTANS

E-73435

REGISTERED PROFESSIONAL ENGINEER

REV.


DATE

REVISIONS

LATITUDE: 40.2716507

LONGITUDE: -81.6773526

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 SUBSYSTEMS MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.



SITE LAYOUT

COLUMBUS AND OHIO RIVER RAILROAD

AUTOMATIC WARNING DEVICES AT

TR-255

NEWCOMERSTOWN, (COSHOCOTON), OH

DOT# 517370K

MILE 111.91

SUBDIVISION: PAN SUBDIVISION

PG. 13 OF 14

RR WEST TO COSHOCTON

RR EAST TO NEWCOMERSTOWN

EBA 1500'  
TR-255

EBA  
CR-254

WBA 1500'  
TR-255

WBA  
CR-254

TR-255  
DOT# 517370K  
MP 111.91  
XBS  
(FG)  
PMD-4R  
686HZ / 4.0KHZ ISL  
VIDEO EVENT RECORDER  
DTMF W/KEY-DOWN

CR-254  
DOT# 517369R  
MP 111.71  
(FG)  
HXP-3R  
522 HZ / 8.0 KHZ RSI

REPLACE EXISTING DHWS WITH NBS DUE TO CIRCUIT OVERLAP.

M/L

DHWS

DHWS  
NBS  
522HZ

T1/T2

6'X6'  
HOUSE

R1/R2

115# RE (JTD)

NBS  
686HZ

DHWS

INSTALL / RENEW BONDING  
OF ALL MECHANICAL JOINTS

END OF SURVEY 1600'

EBS (START CR-255) 1549.5'

EBS (START CR-254) 542'

METER SERVICE 66'  
ISL 63'  
HOUSE 42.5'

0'

ISL 63'

ISL 1032'

1091'

METER 1038'  
ISL 1050'  
HOUSE 1060'

WBS (START TR-255) 1559.5'

START CR-254 2690'

END OF SURVEY 2700'

NOTE: TIMETABLE MAX SPEED IS 30 MPH.  
TYPICAL SPEED RANGE OVER CROSSING 0-30 MPH.

BY RR CONTRACTOR:

\* INSTALL / RENEW DOUBLE BONDING OF ALL JOINTS WITHIN  
APPROACH LIMITS.

LEGEND



= NEW WORK BY RAILROAD FORCES



= TO BE REMOVED

FOR REFERENCE ONLY

ACTUAL CONDITIONS & DESIGN PARAMETERS ARE  
RESPONSIBILITY OF THE DESIGN BUILD VENDERS

PRELIMINARY

NOT YET APPROVED  
SUBJECT TO CHANGE

LATITUDE: 40.2716507

LONGITUDE: -81.6773526

(PROPOSED TRACK PLAN)

COLUMBUS AND OHIO RIVER RAILROAD  
AUTOMATIC WARNING DEVICES AT  
TR-255  
NEWCOMERSTOWN, (COSHOCTON), OH

DOT# 517370K

MILE 111.91

SUBDIVISION: PAN SUBDIVISION

PG. 14 OF 14

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





## Rail Development Commission

Mike DeWine, Governor  
Jon Husted, Lt. Governor

Mark Policinski, Chair

August 20, 2019

Mr. Len Wagner  
President & Legal Official (SVP)  
Genesee & Wyoming/CUOH  
201 N. Penn Street  
Punxsutawney, PA 15767

RE: PE Authorization for COS TR255 DOT# 517370K PID# 110492

Dear Mr. Wagner:

A diagnostic review was held at the above grade crossing on April 17, 2019. The crossing has been recommended for the installation of lights and gates at the Columbus & Ohio River Railroad grade crossing DOT# 513370K.

Columbus & Ohio River 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 Greg Gronbach. Greg Gronbach can be reached at (614) 745-6760, or [Gregory.Gronbach@dot.ohio.gov](mailto:Gregory.Gronbach@dot.ohio.gov), if you have any questions.

Sincerely,

  
Greg Gronbach  
Project Manager

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





Attachments: 3 (diagnostic review form, letter agreement, purchase order)



# OHIO RAIL DEVELOPMENT COMMISSION

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

Mike DeWine, Governor • Mark Policinski, ORDC Chairman

July 16, 2019

Len Wagner  
SVP, Northeast Region Railroads  
Genesee & Wyoming/CUOH  
400 Meridian Center, Ste. 300  
Rochester, NY 14618

Subject: Grade Crossing Warning Device Improvement  
Coshocton County, TR 225, DOT# 517370K, PID 110492

Dear Mr. Wagner:

A diagnostic review was conducted at the subject grade crossing on 4/17/2019. As a result of the review, the warning devices will be upgraded to flashing lights.

This project shall be completed in compliance with Agreement No. 0009-A dated May 28, 2001, entered into by the State of Ohio and Columbus and Ohio River Railroad (CUOH) and incorporated as if fully rewritten herein. This construction shall also meet the general terms and conditions under the Fixing America's Surface Transportation Act and subsequent amendments and the State of Ohio's Federally Funded Warning Device Program.

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

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

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

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

Sincerely,

Matthew Dietrich  
Executive Director



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

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

Columbus and Ohio River Railroad:

By: Leonard L. Jara

Title: Resident

Date: 8/1/19

COS TR 225 CUOH 110492 517370K

# SIGN-INS

## NAME

## ORGANIZATION

## PHONE #

## EMAIL

1.) GREG GONBACH

ORDC

614-745-6760

GREGORY.GONBACH@DOH.OHIO.GOV

2.) SHAWN ZUCKER

PULC

614-466-1150

SHAWN.ZUCKER@PULC.OHIO.GOV

3.) PATTY RAUSCH

Oxford

740-502-1369

4.) ALLEN MUESS

Oxford

545 5090

5.) GAIL HENSLEY

OHCR

740-502-7214

6.)

7.)

8.)

9.)

10.)



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

Date: 4/17/2019

Location Data			
Street or Road Name:		TR 255	
County:	Coshocton	Township:	Oxford Township
		US DOT No.:	517370K
City (in or near):	near Newcomerstown	Railroad Name:	CUOH
		RR Milepost:	111.91
Safety Data (Obtain crash reports, if possible)			
	Initial Information (from database)		Revised
Number & dates of vehicle crashes in previous 5 years:	N/A		
Number & dates of pedestrian/bicycle crashes in previous 5 years:	N/A		
Hazard Ranking:	2342	Date Run:	01/15/2019

Existing Traffic Control Devices		
Type of Warning Devices	Installed?	Quantity/Comments
<b>HIGHWAY</b>		
Advance Warning Signs (condition?)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2
'Stop' Signs	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
'Stop Ahead' Signs	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Pavement Markings (condition?)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHIP SEAL PAVEMENT
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	
<b>RAILROAD</b>		
Crossbucks	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2
Crossbucks – assembly with Stop	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	2
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 checked="" type="checkbox"/> No	
<b>OTHER</b>	<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	4	
<1 per day? Trains per week		
Day thru trains	2	
Night thru trains	1	
Switching	1	
Total number of tracks	1	
Number of main tracks	1	
Number of other tracks	0	
Maximum train speed	30	
Typical train speed	30	
Amtrak	0	
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 checked="" type="checkbox"/> No		
Can one train block the motorists' view of another train at the crossing? <input type="checkbox"/> Yes (explain below) <input checked="" type="checkbox"/> No		
Can one or more tracks be eliminated through the crossings? <input type="checkbox"/> Yes <input checked="" 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 checked="" type="checkbox"/> Other <u><del>None</del> NONE</u>		



Roadway Data		
Local Highway Authority:		Oxford Township
Roadway Characteristics	Initial Information (from database)	Revised
Average Daily Traffic	306	
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 _____		
Roadway width (paved/travelled way): <u>19'</u> ft		
Number of Highway Lanes	2	
Urban or Rural	Rural - Minor Collector	
Vehicle Speed: <u>55</u> MPH		
School Bus Operation: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No Amount <u>2</u> <u>RIDGEWOOD ELEMENTARY 4 MI WEST</u>		
Location of nearby schools: <del>PACKER HOLLOW SCHOOL</del> <u>RIDGEWOOD ELEMENTARY 4 MI WEST</u>		
Hazardous Materials Trucks: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Amount (from FRA) <u>7%</u> LHA verified/changed?		
Shoulders: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
Is the Shoulder Surfaced? <input type="checkbox"/> Yes <input checked="" 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 <u>NW</u> Curb & Gutter:	Quadrant <u>SE</u> 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 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If yes:		
Improvement type _____ Lead Agency _____ Timeline/completion _____		

### Pedestrian & Bicycle Data

Regular pedestrian usage: ☒ Yes ☒ No Volumes: ☒ Occasional ☐ <20 ☐ 20-60 ☐ >60

Is sidewalk present in the approach? ☐ Yes ☒ No Quadrants:

Does crossing surface accommodate pedestrians? ☐ Yes ☒ No

Both sides of roadway? ☐ Yes ☒ No If no, which side is paved? NEITHER IS PAVED

Pedestrian generators in close proximity (e.g. schools, sports/entertainment venues)? ☐ Yes ☒ No

Comments: RURAL AREA - ALL FARM FIELDS

Regular bicycle usage: ☒ Yes ☒ No

☒ Roadway ☐ Dedicated Lane (on street) ☐ Dedicated Path (off street) ☐ Shared Use (pedestrian/bicycle) Path  
☐ Bikes must use sidewalk

Future plans for pedestrian or bicycle routes? ☐ Yes ☒ No

Comments:

### Utility Information

Is commercial power available? ☐ Yes ☒ No

Utility Provider (Company Name) FRONTIER POWER + AGP

Nearest Available Power Source CROSSING TO THE EAST DOT # 517369R (CR254)

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

Comments:

### Surface

Surface review form completed? ☐ Yes ☒ No SURFACE IN VERY GOOD CONDITION

### Sight Preview (REFER TO TABLES)

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

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):

N/A

Crossing Consolidation or Closure:

NO

Real Estate or ROW:

NO

Culvert / Drainage / Ballast Conditions:

NO

Roadway and/or Sidewalks:

NO

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

MAY OVERLAP WITH CROSSING TO THE EAST.  
DOT# 5173692 (CR254)

Environmental:

NO

Utilities:

FIBER OPTIC IN BOTH SE + NW QUADS

Other:

### Potential Closure

Is it the consensus of the Diagnostic Review Team that this is a potential closure project? **NO**

Explain reasons:

**DISCUSSED IN PAST - NEGATIVE RESPONSE FROM COMMUNITY.**

### 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

**1**

☐ Upgrade circuitry / type

☐ Sidelights

☐ LED Upgrades

☐ Guardrail Needed

☐ Install/Replace curb

☐ Bungalow placement & offset from rail & highway

☐ Other (define)

Comments:

**CIRCUITRY TO OVERLAP DOT#517369R**

☐ Install/upgrade traffic signal preemption

Other (define):

### 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:

**NO IMPROVEMENTS**

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

**GWK**

**[Signature]**

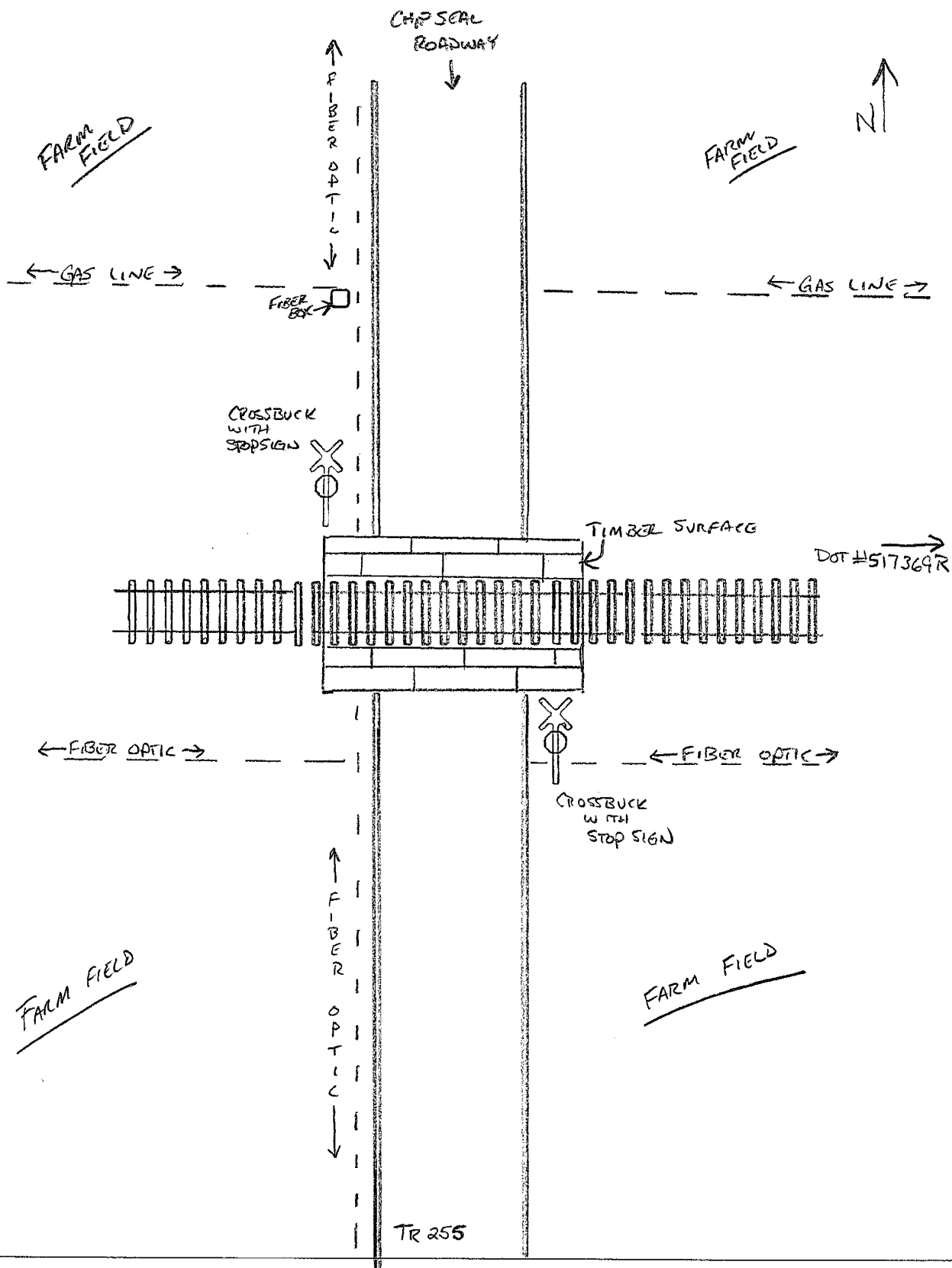
**par**

**RAG**

**GPA**

## 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 <sup>1</sup>	Bicyclist <sup>2</sup>	Pedestrian <sup>1</sup>	Bicyclist <sup>2</sup>	Pedestrian <sup>1</sup>	Bicyclist <sup>2</sup>
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

<sup>1</sup> 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.

<sup>2</sup> 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**

**11/6/2020 7:52:26 AM**

**in**

**Case No(s). 20-1657-RR-FED**

Summary: Application In the Matter of a Request for the Installation of Active Warning Devices at the Columbus & Ohio River Railroad Crossing, DOT#517-370K, TR 255 in Coshocton County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division