

Memo

To: Docketing Division
From: Jill Henry, Rail Specialist, Rail Division
Cc: PUCO Legal Department
Date: 12/3/18

Re: PUCO Case No. 18-1788-RR-FED- In the Matter of a Request for an Upgrade at CSX Transportation Inc. Grade Crossing, DOT#523-793Y, on Erie Street in Lake County, Ohio.

On December 11, 2017 the Ohio Rail Development Commission (ORDC) authorized funding for CSX Transportation, Inc. (CSX) to upgrade to LED lights, add bells, and relocated the warning devices in the NW and SE quadrants at Erie Street, DOT#523-793Y, in Lake County, Ohio. The crossing was surveyed, on June 16, 2016, and was found to warrant the upgrade. The electric utility provider for this crossing is Cleveland Electric Illuminating- First Energy Corp.

The project will be paid for with federal funds and is actual cost. The plans and estimates for the project in the amount of \$125,463.00 have been approved. Construction may commence at once. **Staff requests a Finding & Order with completion of the project in twelve 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:

CSX Transportation, Inc.
Amanda DeCesare
CSX Public Projects
500 Meijer Drive
Suite 305
Florence, KY 41042

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

City of Willoughby
Jim Sayles
City Engineer
One Public Square
Willoughby, OH 44094

Cleveland Electric Illuminating- First Energy
Corp.

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

TO: Randall Schumacher, Supervisor, Rail Division, PUCO
FROM: Cathy Stout, Manager, Safety Section, ORDC
BY: James Tucker, Project Manager, ORDC J.T.
SUBJECT: Lake County, Erie Street, CSX
DOT#523793Y, PID#106388, OH 1219
DATE: October 18, 2018

The Ohio Rail Development Commission (ORDC) established a diagnostic survey at the subject location on June 16, 2016. The Diagnostic Team recommended that the crossing be upgraded to receive L.E.D. flashing lights, bells and minor relocation to meet MUTCD. Copies of the diagnostic review form and the plan and estimate are attached.

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

It is expected that all work necessary for FHWA acceptance of the warning devices will be completed by the in-service due date and that the railroad will be responsible for this work. This work includes, but is not limited to:

- Any ancillary work to make warning devices function as designed and visible to the roadway user, and
- MUTCD compliance – including minor roadway work if necessary.

Thank you for your assistance with these matters.

Attachment: Diagnostic Review
Plan & Estimate

c: Jill Henry, PUCO
Heather Hamilton, ORDC
ORDC Project Manager (file)



OHIO RAIL DEVELOPMENT COMMISSION

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

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

October 18, 2018

Ms. Amanda DeCesare
Project Manager
500 Meijer Drive, Suite 305
Florence, Ky 41042

RE: Lake County, Erie Street, DOT 523793Y
PID 106388, OH1219

Dear Ms. DeCesare:

The plan dated June 6, 2018 and estimate dated May 10, 2018, for the referenced project has been reviewed and is acceptable. **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.** CSX may proceed with the construction of the proposed LED flasher upgrade and signal relocation with curb provided by Sunesis in accordance with the abbreviated plan. This authorization is made with the stipulation and understanding that the approved estimate may contain entries for items or activities that may be cited and found to be ineligible for federal participation during the project audit. Reimbursement of eligible actual cost is limited to \$125,463.00. Additional costs must be approved in writing by the 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 CSX accepting the following instructions:

1. CSX's project foreman will furnish written notification five (5) working days prior to the date work will start at the project site to James Tucker, ORDC, email james.tucker@dot.ohio.gov and to the Public Utilities Commission of Ohio, at jill.henry@puco.ohio.gov. CSX'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. CSX 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 CSX.
3. CSX's project foremen will notify James Tucker at 614-398-6897 or james.tucker@dot.ohio.gov 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. CSX will furnish two (2) **copies** of each partial bill to ORDC. Please find the enclosed ODOT Purchase Order to reference when billing.



www.rail.ohio.gov

phone: 614.644.0306

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6. CSX 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,

James Tucker
Project Manager

C: Randall Schumacher, Rail Division Supervisor, PUCO
Jill Henry, Grade Crossing Planner, PUCO
Heather Hamilton, ORDC
ORDC (file)

**CSX TRANSPORTATION, INC.
FORCE ACCOUNT ESTIMATE**

Page 1

ACCT. CODE : 709 - OH1219

ESTIMATE SUBJECT TO REVISION AFTER: 11/4/2018	DOT NO.: 523793Y
CITY: Willoughby	COUNTY: Lake
STATE: OH	
DESCRIPTION: Erie St. - Relocate existing FLS&G signals and upgrade with 12" LEDs and bells.	

DIVISION: Great Lakes	SUB-DIV: Erie West	MILE POST: QD-163.65
AGENCY PROJECT NUMBER: PID #106388		

PRELIMINARY ENGINEERING:

212 Contracted & Administrative Engineering Services	\$ 3,500
Subtotal	\$ 3,500

CONSTRUCTION ENGINEERING/INSPECTION:

212 Contracted & Administrative Engineering Services	\$ 1,500
Subtotal	\$ 1,500

FLAGGING SERVICE: (Contract Labor)

070 Labor (Conductor-Flagman)	\$ -
050 Labor (Foreman/Inspector)	\$ -
070 Additive 117.39% (Transportation Department)	\$ -
050 Additive 118.86% (Engineering Department)	\$ -
230 Per Diem (Engineering Department)	\$ -
230 Expenses	\$ -
Subtotal	\$ -

<u>SIGNAL & COMMUNICATIONS WORK:</u> (Details Attached)	\$ 98,703
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<u>TRACK WORK:</u> (Details Attached)	\$ -
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<u>PROJECT SUBTOTAL</u>	\$ 103,703
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900 <u>CONTINGENCIES:</u>	\$ -
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GRAND TOTAL *****	\$ 103,703
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DIVISION OF COST:

Agency	100.00%	\$ 103,703
Railroad		\$ -
TOTAL *****		\$ 103,703

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

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 CSXT 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

Office of Assistant Chief Engineer Public Projects--Jacksonville, Florida

Estimated prepared by: BSE	Approved by: AJD	CSXT Public Project Group
DATE: 5/8/2018	REVISED:	DATE: 5/10/2018

CSX Transportation

Erie St.
Willoughby
Ohio

DOT-523793Y

OP-OH1219

CSX Project-OH2017458

Summary

Material	.....	\$14,431.34
Sales Tax	.....	\$0.00
Labor		
Construction Labor	52.00 man-days	\$19,760
Shop Labor	0 man-days	\$0
Track Labor	0.00 man-days	\$0
Subsistence	52 man-days	\$7,800
Railroad Engineering, Preliminary	.....	\$1,160
Railroad Engineering, Construction	.....	\$2,964
Additives to Construction Labor	.....	\$23,487
Additives to Shop Labor	.....	\$0
Additives to Track Labor	.....	\$0
Additives to Engineering	.....	\$0
Equipment Expenses	.....	\$0
Waste Management	.....	\$125
Contract Engineering	.....	\$18,910.50
Freight	.....	\$2,066
Poleline Removal	.....	\$0
AC Power Service:		
No Meter Service Upgrade	.....	\$0
Salvage	.....	-\$1
VAC TRUCK	.....	\$8,000
SHORING BOXES	.....
TOTAL ESTIMATE COST	.....	\$98,702

Date: 16-Apr-2018
Estimated By: Olonda McIver

NOTE: This estimate should be considered void one year from date of estimate

Field Bill of Material, Location 1

QD-163.65 OH, Eris Street, Grade Crossing Warning Device Modifications,

CATALOG_NUM	QTY	Unit Price	COST	SHORT_DESC
020.0052502.1	1	464.01	464.01	ARM GATE FIBERGLASS ASSY ADJ 19' TO 28' HI-INTENSITY GRADE REFLECTIVE INCL 8' ALM SLEEVE, 16' FRBG BASE SECT, 3 GATE LTS W/WIRING HRNSS, 2 SHEAR BLTS, SS ASSY HDWARE PER SS222 NEG P/N 8001-28S8 (GATE ONLY)
020.0052501.1	1	308.85	308.85	ARM GATE FIBERGLASS ASSY ADJ TO 18' HI-INTENSITY GRADE REFLECTIVE INCL 3' ALM SLEEVE, 16' FRBG BASE SECT, 3 GATE LTS W/WIRING HRNSS, 2 SHEAR BLTS, SS ASSY HDWARE PER SS222 NEG P/N 8001-18S3 (GATE ONLY)
020.0013908.1	400	6.36	2544.00	CABLE UG COMPOSITE 19 CONDUCTOR INCLUDES 13 CONDUCTOR #14 AWG SOLID AND 6 CONDUCTOR #6 AWG SOLID CSX SS360 SHOW LENGTH ON EACH REEL FURNISH IN 1000 FT LENGTHS OKONITE P/N 206-11-6283
020.0057077.1	2	1335.97	2671.94	SIGNAL CROSSARM FLX-4000 LED & 2-WAY JB CROSSARM NO 042074-79XS 5" PIPE MTG FRONT & BACK LIGHTS FOR MODEL "S" STYLE GATE SAFETRAN P/N 042003-L01249
020.0167501.1	18	38.51	693.18	ARRESTER HYBRID LOW VOLTAGE, 2, 0-30V DC OR 0-24V AC RATED AT 15 AMP COMPLETE WITH FAIL SAFE OPEN MECHANISM, FUSED SEMICONDUCTOR, TEST EYE WITH NUT, 6" BLUE LEAD, SEE SS382 BOURNS P/N 1675-01
020.3901895.1	2	100.52	201.04	TIP FLEX HWY CROSSING GATE 24 IN LONG ENGINEERING GRADE RED & WHITE STRIPES W/2 MTG BOLTS & INSTALL INSTRUCTIONS ONE SMALL & ONE LARGE RIBBED ADAPTERS USE W/FIBERGLASS GATE ARMS TIP MADE BY MARCUM DEVELOPMENT CO, MARCUM P/N RAC-230RFK
020.3930010.1	2	3.70	7.40	KIT GATE ARM WARNING STICKER KIT INCLUDES 1-EA 5"X3" STICKER 1-EA 5"X3" PADLOCK TAG 2-EA 11"X3" STICKER PER SS222
020.3932536.1	2	650.59	1301.18	COUNTERWEIGHT SAFETRAN 070755-28500X KIT 28 INCLUDES 1 EA 070921-LX SHORT ARM SUPPORT 1 EA 070920-RX LONG ARM SUPPORT 4 EA 070755-4 COUNTERWEIGHTS 1EA 070757-26X STUD ASSY PLATE AND HARDWARE FOR GATES FROM 19 TO 28
020.7300030.1	2	189.28	378.56	BRACKET BELL FITS SAFETRAN JUNCTION BOX MOUNT, 5" BENT ALUM PIPE, TDH SOLUTIONS P/N 730-0030
020.3920200.1	2	178.76	357.52	BELL GCWD ELECTRONIC 4" OR 5" MAST 8 TO 13 VOLTS DC GSI PN EB-3-360-5 ASC PN 81848
020.4200900.1	6	0.17	1.02	CONNECTOR SHEATHING AMP 329860 FOR NO. 14 WIRE
020.0770060.1	4	15.46	61.84	ARRESTER US&S N451552-0201 TRACK SERIES RED LABEL USGA 250V DC 175V AC W/O BASE (DO NOT USE ON AC CIRCUITS FOR NEW WORK, SEE SS382) US&S RSE-17A1
020.0054075.1	2	963.20	1926.40	GATE SAVER COMPLETE WITH SHEAR PIN AND RETURN SPRING USE WITH 18' TO 32' GATE ARMS RIGHT OR LEFT OF TRAFFIC DIRECTION, NEG P/N NEG385102GS
020.0054563.1	2	133.79	267.58	GATE LIGHT KIT LED FOR 16' TO 42' GATES INCLUDES 3 EA 4" LED LIGHT UNITS, 2 EA COIL CORDS 9298-0401, 1 EA STRAIGHT CORD 9298-0601, SEE SS222 RAILWAY EQ. CO. P/N 9298-1120
Total Cost:		\$	11,184.52	

Consumable Bill of Material, Location 1
QD-163.65 OH, Eris Street, Grade Crossing Warning Device Modifications,

CATALOG_NUM	QTY	Unit Price	COST	SHORT_DESC
N/A	5	50.00	250.00	FILL MATERIAL, 1CY
020.0017605.1	350	0.27	94.50	WIRE CASE 10 AWG FLEX CSX SPEC SS796 OKONITE P/N 152-11-3038 FURNISH 1000 FT SPOOL SHOW LENGTH ON EACH SPOOL
020.0017607.1	500	0.65	325.00	WIRE CASE TW PR NO 10 AWG FLEX CSX SPEC SS796 TWIST 2 TURNS PER FT FURNISH ON 500 FT SPOOLS OKONITE P/N 152-11-3039
020.0017625.1	150	0.42	63.00	WIRE CASE TWISTED PAIR AWG #14 FLEX TWIST 2 TURNS PER FT FURNISH ON 500 FT SPOOLS OKONITE P/N 152-11-3025
020.0017630.1	200	0.13	26.00	WIRE CASE NO 16 AWG FLEX CSX SPEC SS796 FURN 1000 FT SPOOL SHOW LENGTH ON EACH SPOOL OKONITE P/N 152-11-3002
020.0017636.1	130	0.75	97.50	WIRE SIGNAL AWG 6 STRANDED COPPER, T&C BLUE, FOR BATTERY CONNECTIONS OKONITE P/N 152-11-3015 STD PKG 250 PER REEL
020.0028610.1	100	0.23	23.00	TERMINAL RING PANDUIT PN12-14HDR-D YELLOW NYLON HVY DUTY 1/4 IN STUD WIRE SIZE 16-14 AWG DO NOT SUBSTITUTE USE ON VITAL SIGNAL CIRCUITS
020.1710055.1	350	2.00	700.00	CONDUIT SDR 13.5 4" ORANGE POLYETHYLENE 750 FT REELS W/ PULL TAPE TRENCHLESS TECHNOLOGY PRODUCTS ASTM D-3035 O.D. 4.500 I.D. 3.834 MIN/MULT ORDER QTY 750 FT
020.2060072.1	2	442.00	884.00	FOUNDATION HELICAL SCREW-IN ASSEMBLY 7" X 10", USED FOR SIGNAL MASTS WITH 11-11/16" BOLT SPACING, 8" LEVELING BOLT SET (020.2060078.1) INCLUDED
020.2060074.1	2	366.00	732.00	EXTENSION 10" X 3" USE WITH XING GATE AND SIGNAL MAST HELICAL SCREW-IN FOUNDATION ASSY COMPLETE WITH 4 EACH 1"X4" GALVANIZED BOLTS NUTS AND WASHERS WITH 11-11/16" BOLT SPACING DIXIE PRECAST P/N DE-1003
020.4200880.1	2	0.53	1.06	CONNECTOR TERMINAL 2-3/8" CENTERS AAR 14.1.15-4 NICKEL PLATED COPPER NON-ADJUST STRAP SAFETRAN 023839-1 NEG -982238
020.4200892.1	27	0.44	11.88	CONNECTOR TERMINAL 1" CENTERS AAR 14.1.15-3 NICKEL PLATED COPPER CONNECTOR ONLY 2 HOLE FLAT 1-9/16" OVERALL SAFETRAN 023839-2 NEG -872231
020.4251190.1	120	0.14	16.80	TERMINAL RING PANDUIT PV10-14RD YELLOW VINYL SIZE 10-12 AWG 1/4" STUD SIZE DO NOT SUBSTITUTE FOR VITAL SIGNAL CIRCUITS (REPLACED BLACK AMP TERMINAL)
020.4251290.1	30	0.53	15.90	TERMINAL RING PANDUIT PV6-14R-T BLUE VINYL SIZE 6 AWG 1/4" STUD SIZE (REPLACED BLUE AMP TERMINAL)
020.4251295.1	6	0.53	3.18	TERMINAL RING PANDUIT PV6-38R-T BLUE VINYL SIZE 6 AWG 3/8" STUD SIZE (REPLACED BLUE AMP TERMINAL)
450.0019212.1	100	0.03	3.00	SCREW SHEETMETAL PAN HD 10 X 1" TYPE A COARSE THREAD PHILLIPS BOWMAN 32096 MIN/MULT ORD QTY 50
Total Cost:		\$	3,246.82	



September 8, 2018

Mr. Don Damron
Ohio Rail Development Commission
Mail Stop #3140
1980 W. Broad Street
Columbus, Ohio 43223

RE: CSX
Erie Street, Willoughby, Ohio

Dear Mr. Damron

Sunesis Construction is pleased to present a price of **\$21,760** to construct the above referenced project as outlined on the attached pages.

Included in this price is the following:

- Mobilization/Demobilization of all required equipment, materials, etc
- Crew Travel Expenses
- Removal and disposal (to an approved dump site) of all existing pavements, sidewalks etc.
- Railroad Insurance to cover work within the Right-of Way of CS Tracks

Excluded from the price is the following:

- Local/Municipal Permits
- Right of Entry Agreement (if required)
- Utility Relocations
- Unforeseen Conditions (i.e. unknown utility interferences, etc.)
- Railroad Flagging

Sunesis will contact OUPS for existing utility marking and will rely on CSX to mark their private utilities.

Pricing for this work is good through November, 2018.

Please do not hesitate to contact me with any questions regarding this pricing

Respectfully Submitted,
Sunesis Construction Company

Joseph M. Salzano

Joseph M. Salzano, Secretary/Treasurer

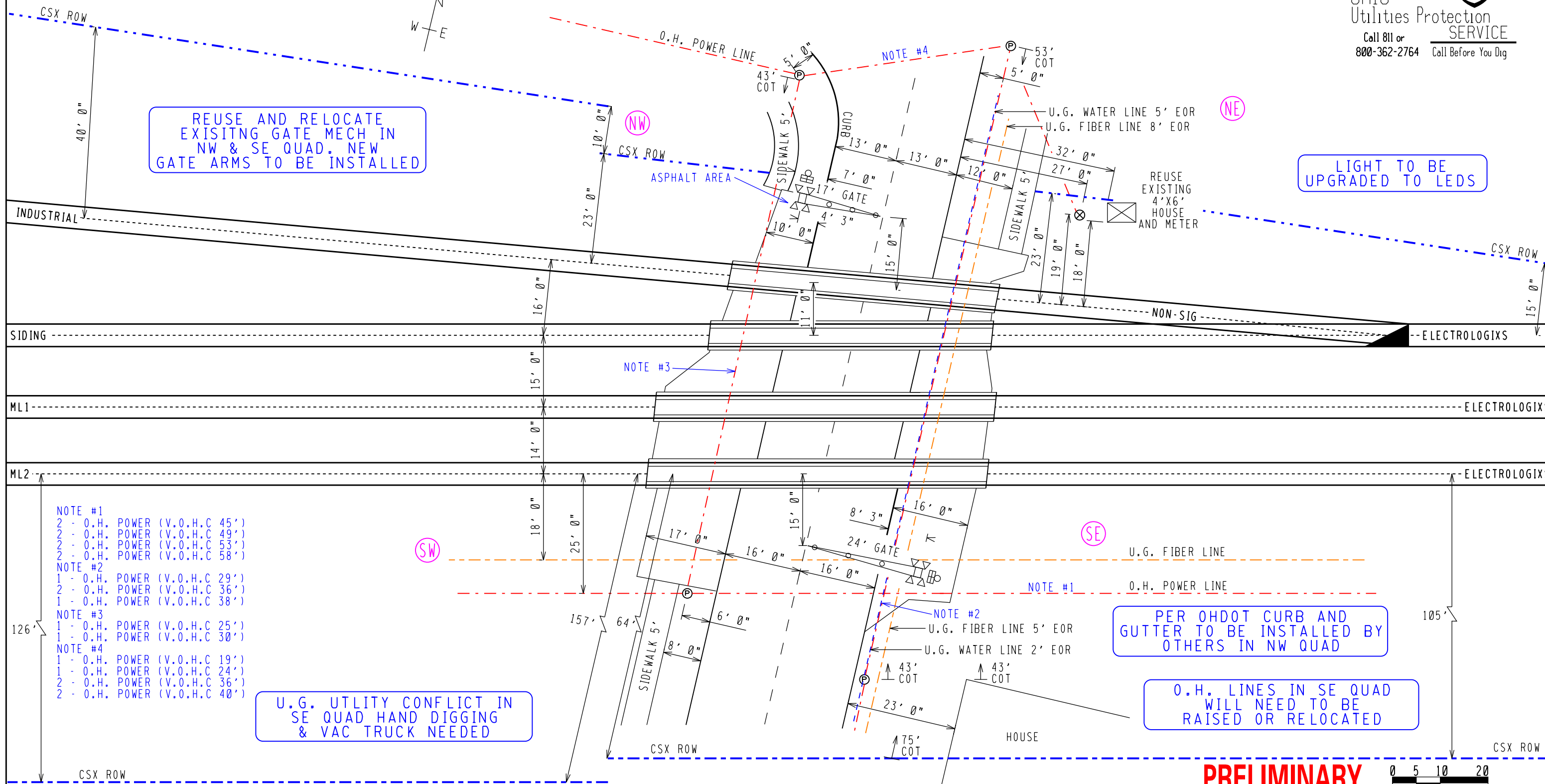
R.R. WEST TO CLEVELAND



OHIO
Utilities Protection
SERVICE
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800-362-2764 Call Before You Dig

REUSE AND RELOCATE
EXISTING GATE MECH IN
NW & SE QUAD. NEW
GATE ARMS TO BE INSTALLED

LIGHT TO BE
UPGRADED TO LEDS



- NOTE #1
2 - O.H. POWER (V.O.H.C 45')
2 - O.H. POWER (V.O.H.C 49')
2 - O.H. POWER (V.O.H.C 53')
2 - O.H. POWER (V.O.H.C 58')
- NOTE #2
1 - O.H. POWER (V.O.H.C 29')
2 - O.H. POWER (V.O.H.C 36')
1 - O.H. POWER (V.O.H.C 38')
- NOTE #3
1 - O.H. POWER (V.O.H.C 25')
1 - O.H. POWER (V.O.H.C 30')
- NOTE #4
1 - O.H. POWER (V.O.H.C 19')
1 - O.H. POWER (V.O.H.C 24')
2 - O.H. POWER (V.O.H.C 36')
2 - O.H. POWER (V.O.H.C 40')

U.G. UTILITY CONFLICT IN
SE QUAD HAND DIGGING
& VAC TRUCK NEEDED

PER OHDOT CURB AND
GUTTER TO BE INSTALLED BY
OTHERS IN NW QUAD

O.H. LINES IN SE QUAD
WILL NEED TO BE
RAISED OR RELOCATED

PRELIMINARY

PRODUCED FOR, CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS	PRODUCED BY, Xorail A Wabtec Company	LEGEND CSX ROW --- R/R POLELINE --- GAS --- FIBER OPTIC ---	GUARD RAIL --- O.H. POWER --- FENCE --- WATER --- SEWER ---	METER SERVICE ⊗ POLE ⊕ FIRE PLUG ⊕ SEWER CAP ⊕ GAS VENT ⊕	GPS COORDINATES 41°38'48" N 81°24'23" W ELEV. 639'	REVISION DATES 05-07-2018 06-06-2018 - - - -	FILE NAME: QD16365.H01 DATE DRAWN: 03-13-2017 DRAWN BY: XRL CHECKED BY: XRL XRL #: 106536	STREET NAME: ERIE ST. CITY & STATE: WILLOUGHBY, OH / M.P. QD-163.65 DOT: 523793Y PROJECT #: OH2017458 OP #: OH1219	PROPOSED CROSSING LAYOUT SCALE = 20:1
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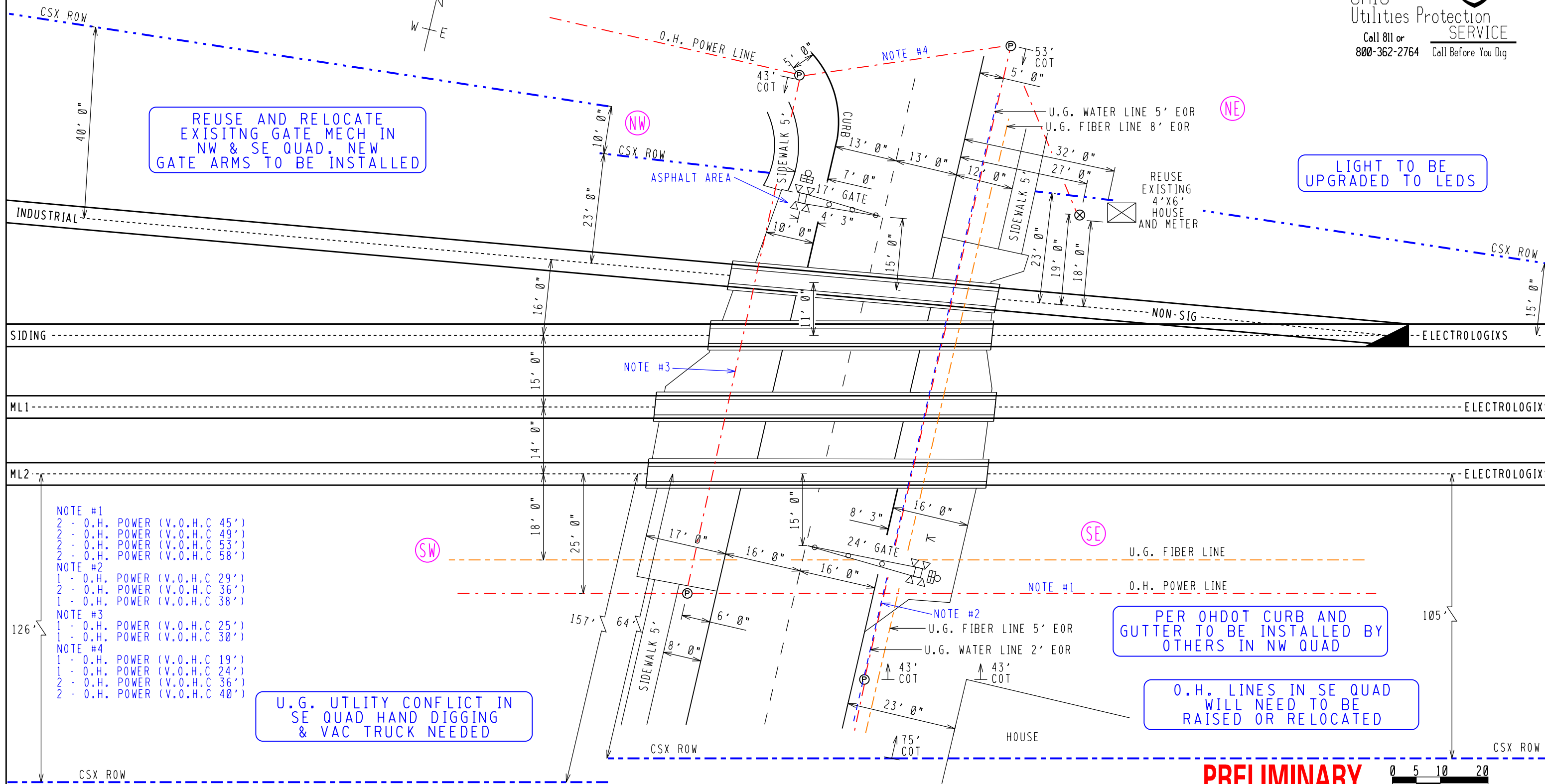
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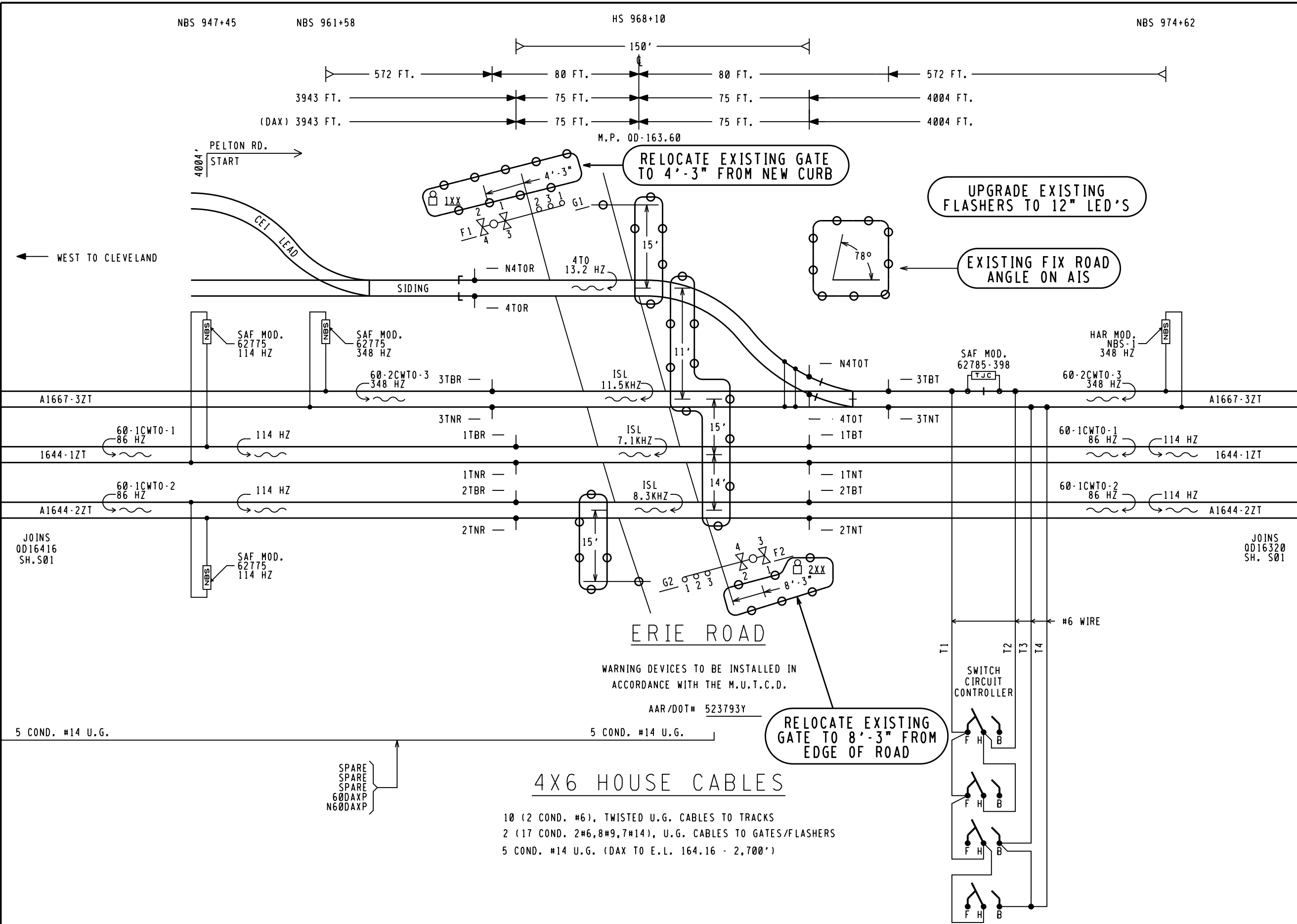
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* AUTHORIZING AGENCY, "NONE" IF NOT USED
* DATE OF REQUIREMENT, "NONE" IF NOT USED
* AMOUNT OF TIME (SEC.), "NONE" IF NOT USED

APPROACH LENGTHS TABLE				
DC, AFO, TYPE C, MOTION, CWT, OR OTHER	WESTWARD TRACK 1 CWT	EASTWARD TRACK 1 CWT	WESTWARD TRACK 2 CWT	EASTWARD TRACK 2 CWT
STANDARD MINIMUM WARNING TIME IN SECONDS	30	30	30	30
ROADWAY GATE TIME IN SECONDS	5	5	5	5
CLEARANCE TIME IN SECONDS	0	0	0	0
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	0	0	0	0
DESIGNED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	35 SEC.	35 SEC.	35 SEC.	35 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	4	4	4	4
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	39 SEC.	39 SEC.	39 SEC.	39 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	70	70	70	70
BUFFER SPEED IN MILES PER HOUR	0	0	0	0
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	70	70	70	70
APPROACH DISTANCE TO ISLAND EDGE IN FEET	3943	4004	3943	4004
HALF WIDTH OF ISLAND IN FEET	60	60	60	60
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	164.37	162.85	164.37	162.85

NOTE:
1. EACH PAIR OF TRACK WIRES (TRANSMIT AND RECEIVE) SHOULD BE TWISTED AT LEAST TWO TURNS PER FOOT. THE TRANSMITTER PAIR SHOULD BE SEPARATED TO THE MAXIMUM EXTENT POSSIBLE FROM THE GCP RECEIVER PAIR BELOW GROUND AND IN INSTRUMENT HOUSING. TRANSMITTER WIRES MUST BE RUN TO THE NEAR SIDE OR BUNGALOW SIDE OF THE CROSSING.

2. 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS
LED GATE ARM LIGHTS .3A MAXIMUM
3. GATE LENGTH (A) 17' (B) 24'

REVISIONS

04-19-05 SWE	0H2005030
10-21-08 IRS 0H2007037	
06-16-15 XRL	0H2011045, 0H2011045E

106536
03-26-18

0H2017458
XRL/RJJ/

xorail

CSX TRANSPORTATION

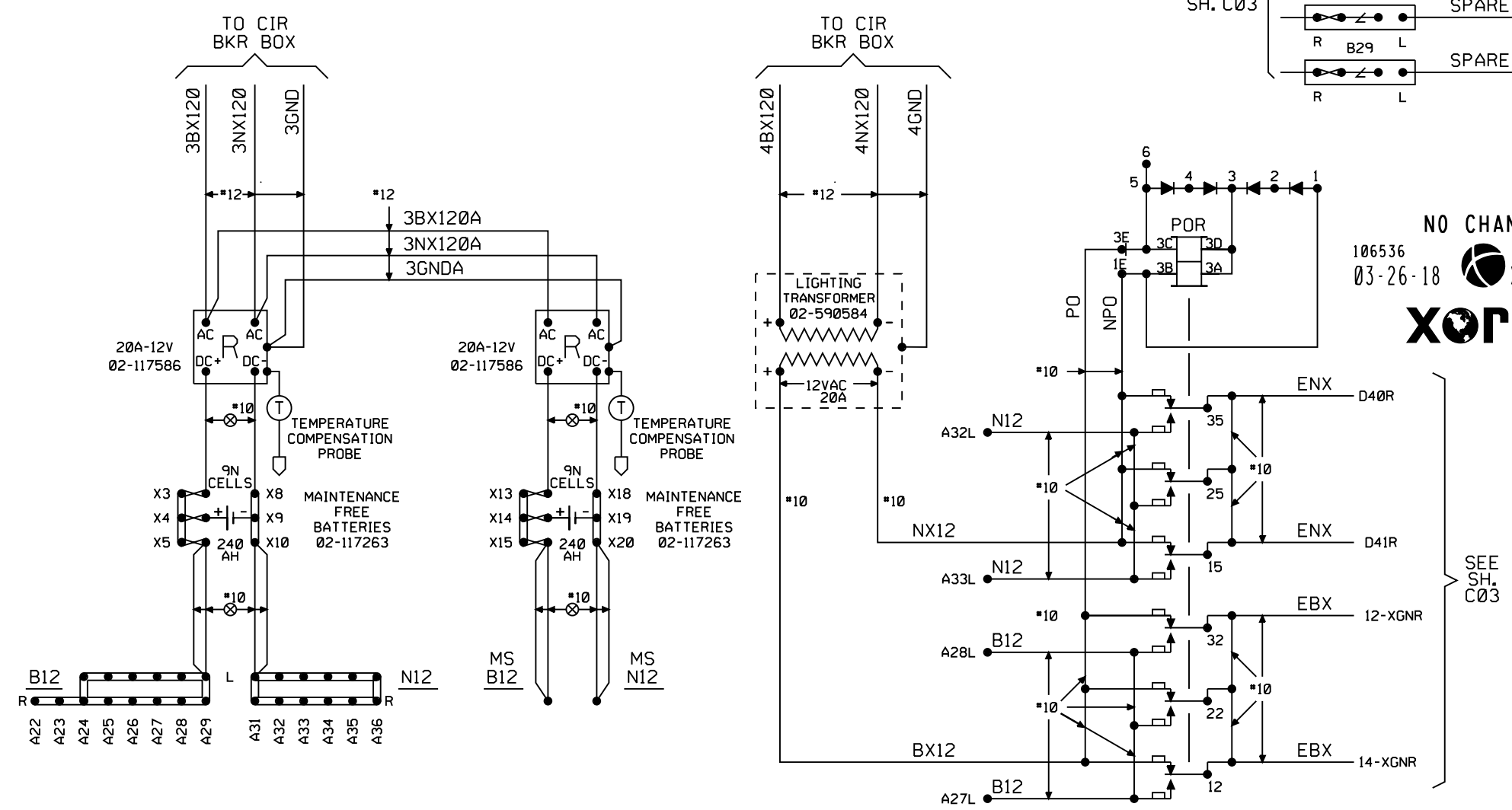
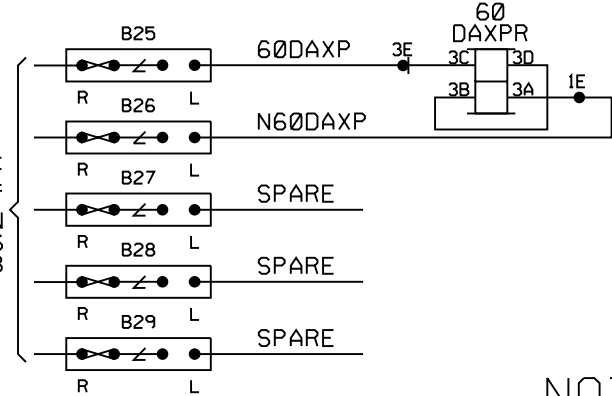
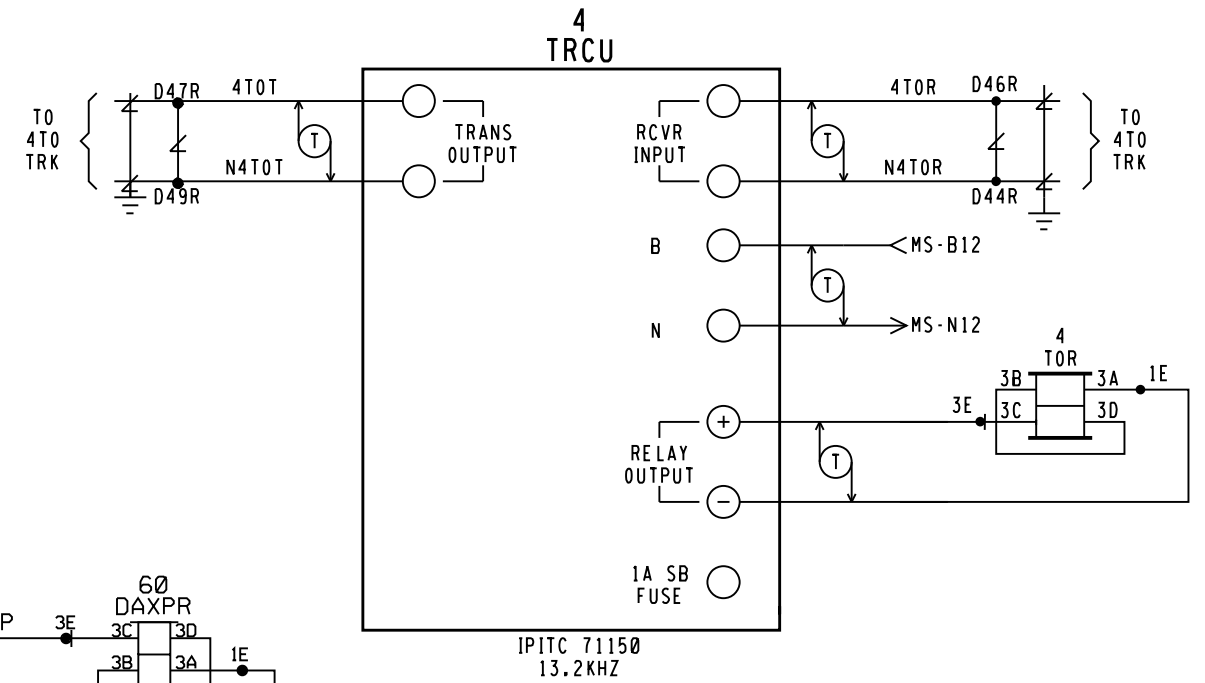
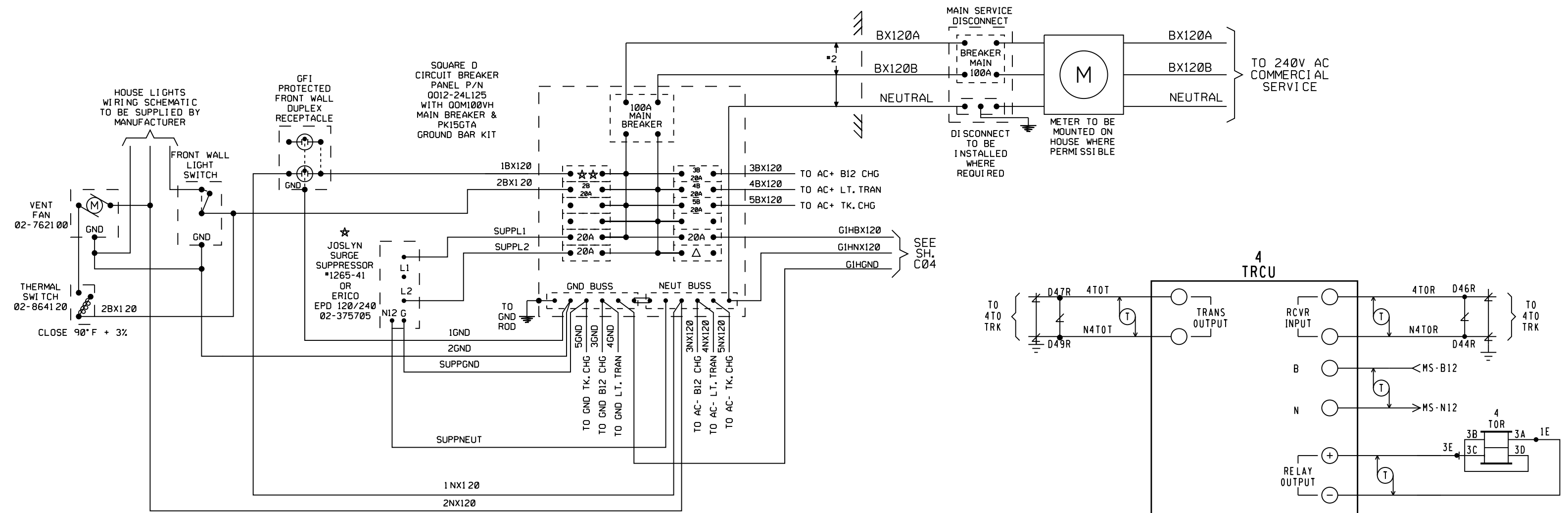
RAIL TRANSPORT GROUP ENGINEERING
COMMUNICATIONS AND SIGNALS

ERIE RD. 523793Y

TRACK AND SIGNAL PLAN
WILLOUGHBY, OH M.P. 0D-163.60

DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05
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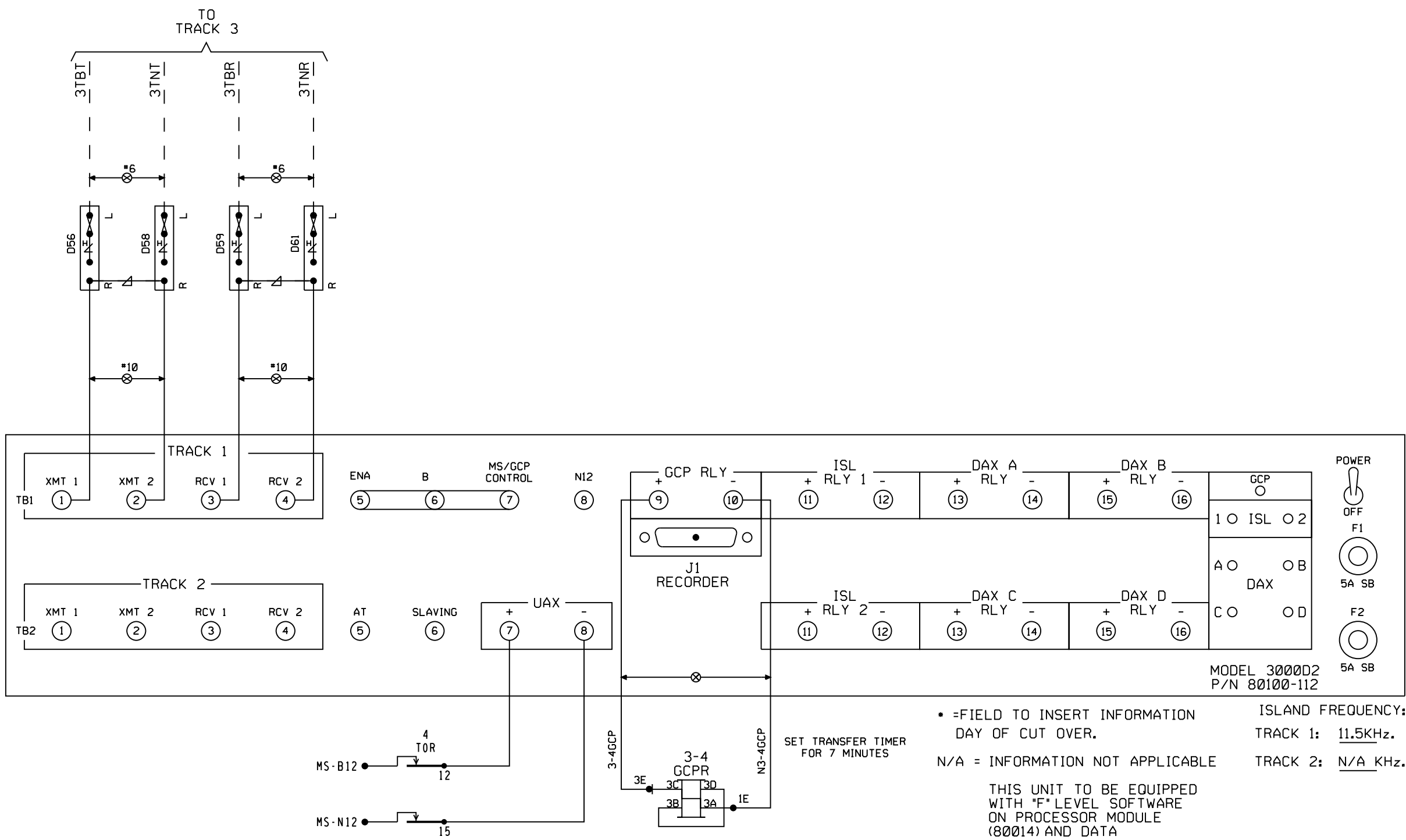
DRAWING	SHEET NO -----	NEXT SH -----	NEXT FILE 0D16360	NEXT SH E01	FILE 0D16360	SHEET S01
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- NOTES:
- 1) ★ = SUPPRESSOR TO BE LOCATED AS CLOSE AS POSSIBLE TO MAIN BREAKER. LEADS TO BE TWISTED WHENEVER POSSIBLE.
 - 2) 100A SERVICE REQUIRES #2 WIRE. 60A 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
 - 9) ⊗ = TWISTED PAIR

NO CHANGES
106536 0H2017458
03-26-18 XRL/RJJ/
xorail

REVISIONS			CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
04-19-05 SWE	0H2005030		ERIE RD. 523793Y			
06-16-15 XRL	0H2011045, 0H2011045E		POWER DISTRIBUTION WILLOUGHBY, OH M.P. 00-163.60			
DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05			
DRAWING	SHEET NO	NEXT SH	NEXT FILE 0016360	NEXT SH C01	FILE 0016360	SHEET E01



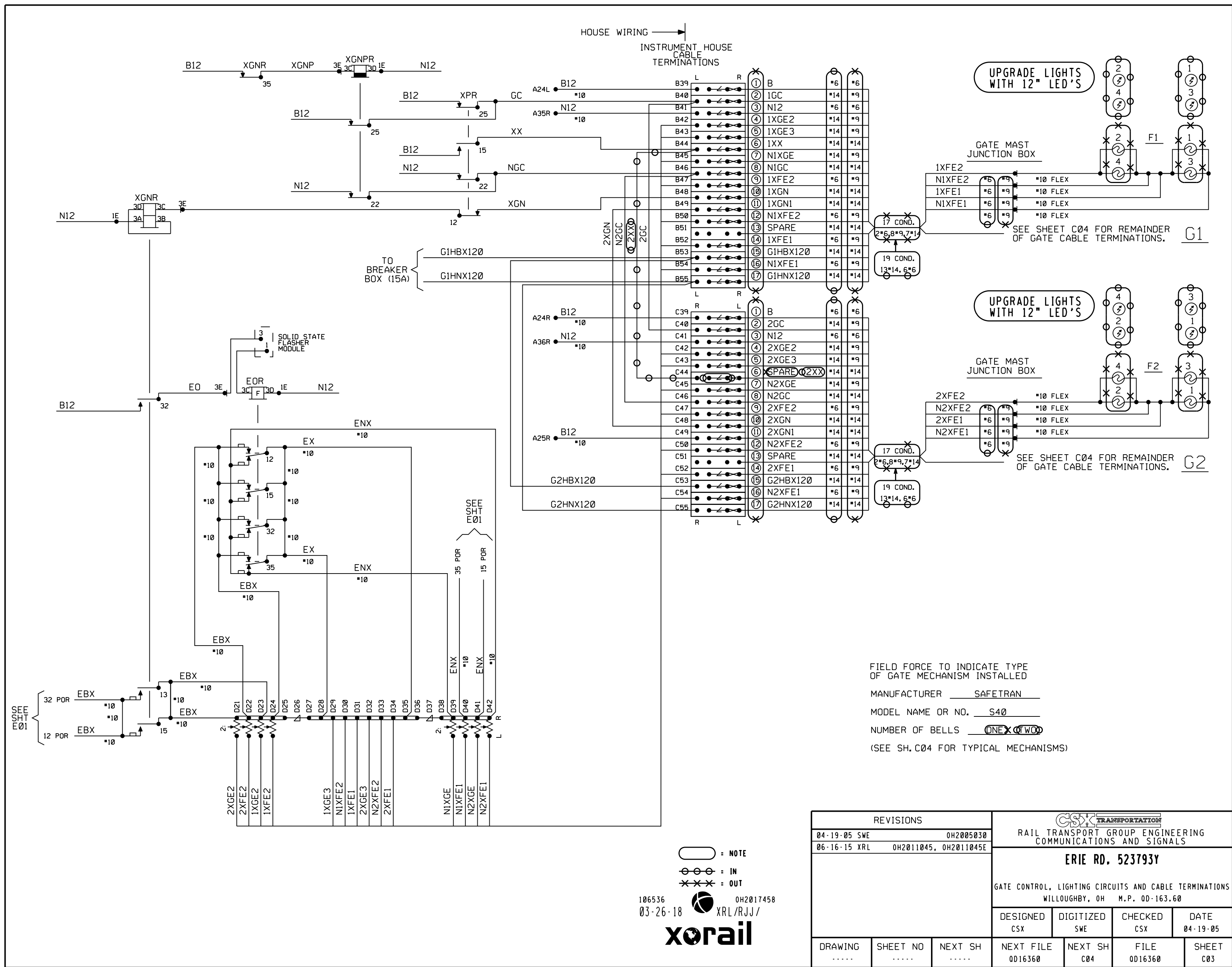
SYSTEM PROGRAMMING PARAMETERS				EXPANDED PROGRAMMING HISTORY	
PROMPT	RESPONSE	PROMPT	RESPONSE	PROMPT	RESPONSE
NUMBER OF TRACKS	1 TRACK	DAX A TRACK ASSIGNMENT	N/A	SWITCH TO MS T1	10-EZ
FREQUENCY (MS/GCP)	348 HZ	DAX A DISTANCE (0=PREEMPT)	N/A FT.	SWITCH TO MS T2	N/A
UNI/BIDIRECTIONAL T1	BIDIRECTIONAL	DAX A WARNING TIME	N/A SEC.	TRANSFER DELAY MS TO GCP T1	0-SEC.
UNI/BIDIRECTIONAL T2	N/A	DAX B TRACK ASSIGNMENT	N/A	TRANSFER DELAY MS TO GCP T2	N/A
XMIT LEVEL T1	MED	DAX B DISTANCE (0=PREEMPT)	N/A FT.	PRIME PREDICTION OFFSET T1	0-FT.
XMIT LEVEL T2	N/A	DAX B WARNING TIME	N/A SEC.	PRIME PREDICTION OFFSET T2	N/A
PREDICTOR/MOTION SENSOR T1	PREDICTOR	DAX C TRACK ASSIGNMENT	N/A	PICKUP DELAY PRIME	15-SEC.
PREDICTOR/MOTION SENSOR T2	N/A	DAX C DISTANCE (0=PREEMPT)	N/A FT.	PICKUP DELAY DAX A	15-SEC.
WARNING TIME SELECTED T1	35 SEC.	DAX C WARNING TIME	N/A SEC.	PICKUP DELAY DAX B	15-SEC.
WARNING TIME SELECTED T2	N/A	DAX D TRACK ASSIGNMENT	N/A	PICKUP DELAY DAX C	15-SEC.
APPROACH DIST. SELECTED T1	572 FT.	DAX D DISTANCE (0=PREEMPT)	N/A FT.	PICKUP DELAY DAX D	15-SEC.
APPROACH DIST. SELECTED T2	N/A	DAX D WARNING TIME	N/A SEC.	COMPENSATION VALUE T1	SET BY SYSTEM
APPROACH DIST. COMPUTED T1	• FT.	SLAVING MASTER/SLAVE	MASTER	COMPENSATION VALUE T2	N/A
APPROACH DIST. COMPUTED T2	• FT.	PASSWORD ENABLED	DISABLED	NUMBER OF TRACK WIRES T1	4 WIRES
UAX PICKUP DELAY(0=OFF)	0-SEC.	RECORDER INSTALLED	INSTALLED	NUMBER OF TRACK WIRES T2	N/A
ENA/UAX2 PICKUP DELAY(0=ENA)	25-SEC.	RS-232-C BAUD RATE			
NUMBER OF DAX'S	0	RS-232-C DATA BITS			
ISLAND DISTANCE T1	160 FT.	RS-232-C STOP BITS			
ISLAND DISTANCE T2	N/A	RS-232-C PARITY			
		DATE(E.G., MON 16 NOV 1987)	•		
		TIME(E.G., 11:25:43 AM)	•		
		DAYLIGHT SAVINGS	ON/OFF		

NO CHANGES

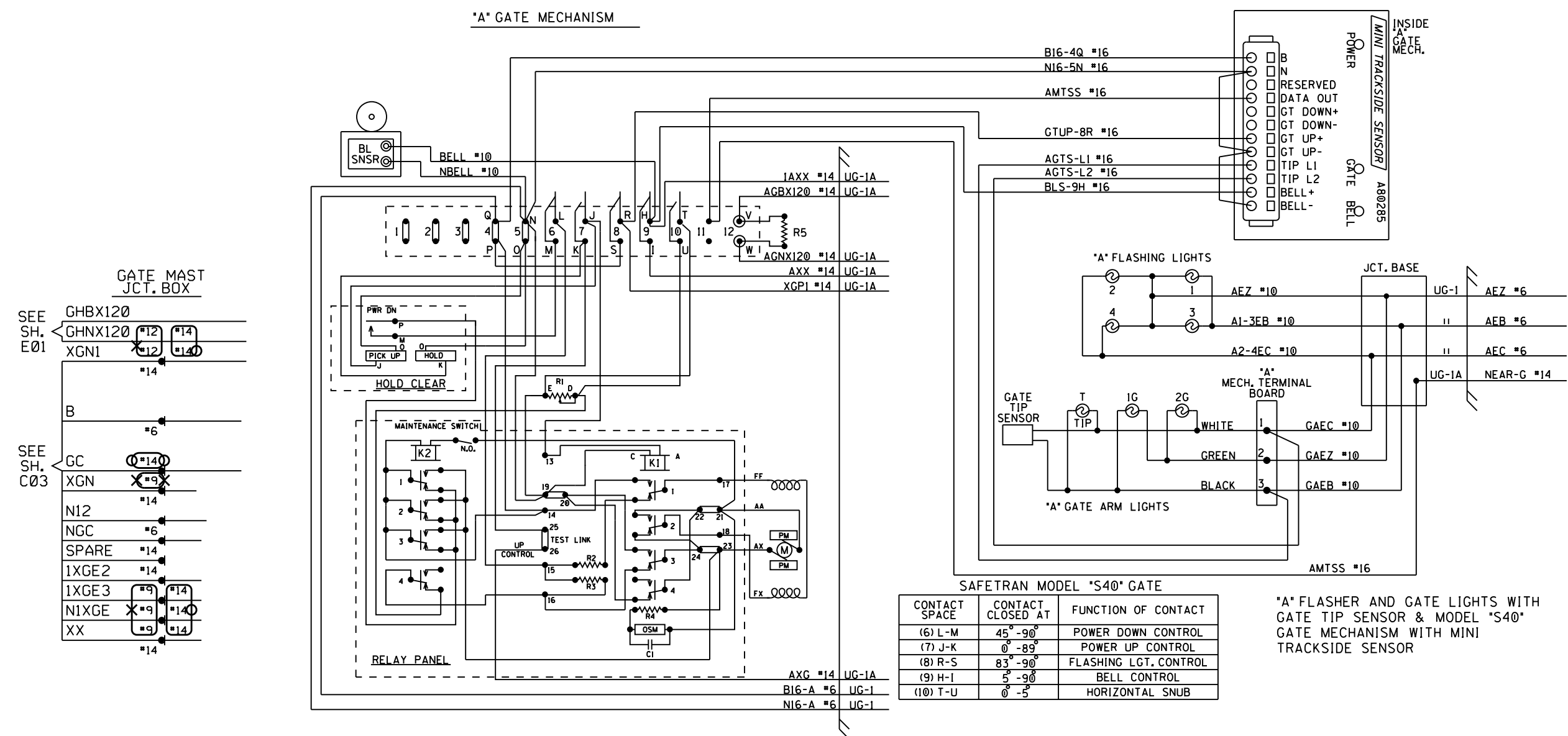
106536 03-26-18 0H2017458 XRL/RJJ/

xorail

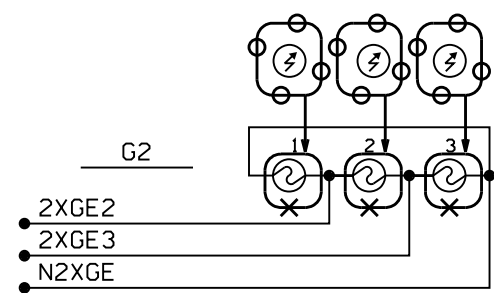
REVISIONS				RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
04-19-05 SWE	0H2005030			ERIE RD. 523793Y			
06-16-15 XRL	0H2011045, 0H2011045E			3000D2 SAFETRAN GCP CIRCUITRY WILLOUGHBY, OH M.P. 0D-163.60			
		DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05		
DRAWING	SHEET NO	NEXT SH	NEXT FILE	NEXT SH	FILE	SHEET	
.....	.....	.....	0D16360	C03	0D16360	C02	



INSTALL BELL ON
GATE 1 AND GATE 2



INSTALL
12" LED'S



NOTE: MECHANISMS SHOWN FOR GATE ARMS IN VERTICAL POSITION. EACH HIGHWAY GATE TO BE WIRED SAME AS SHOWN, EXCEPT FOR LIGHTS (SEE DIAGRAM G2). SIDEWALK ARMS ON HIGHWAY GATES TO HAVE STEADY-LIT LIGHT. 2XGN1 IN G2 WILL BECOME B12..

○ = NOTE

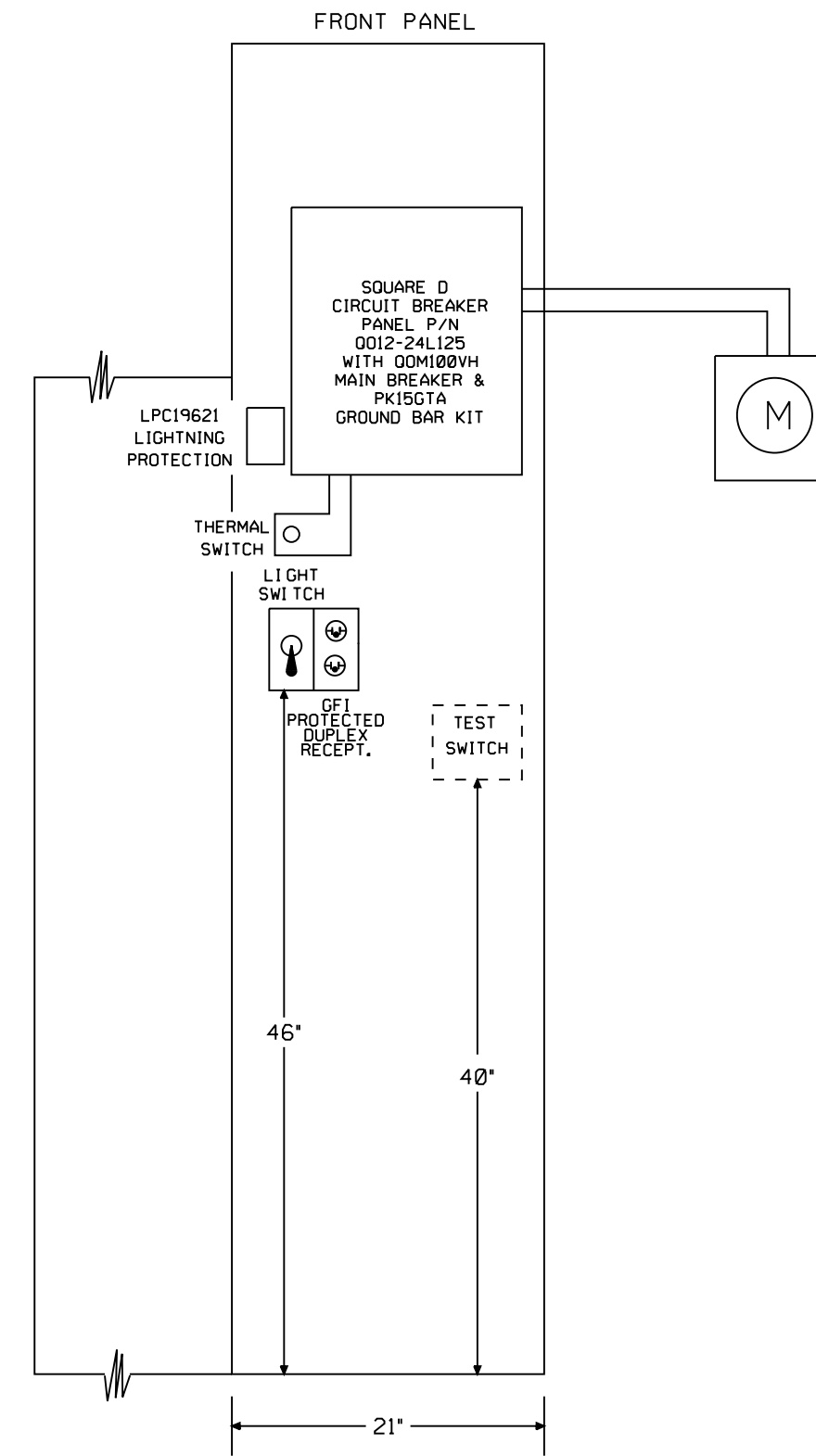
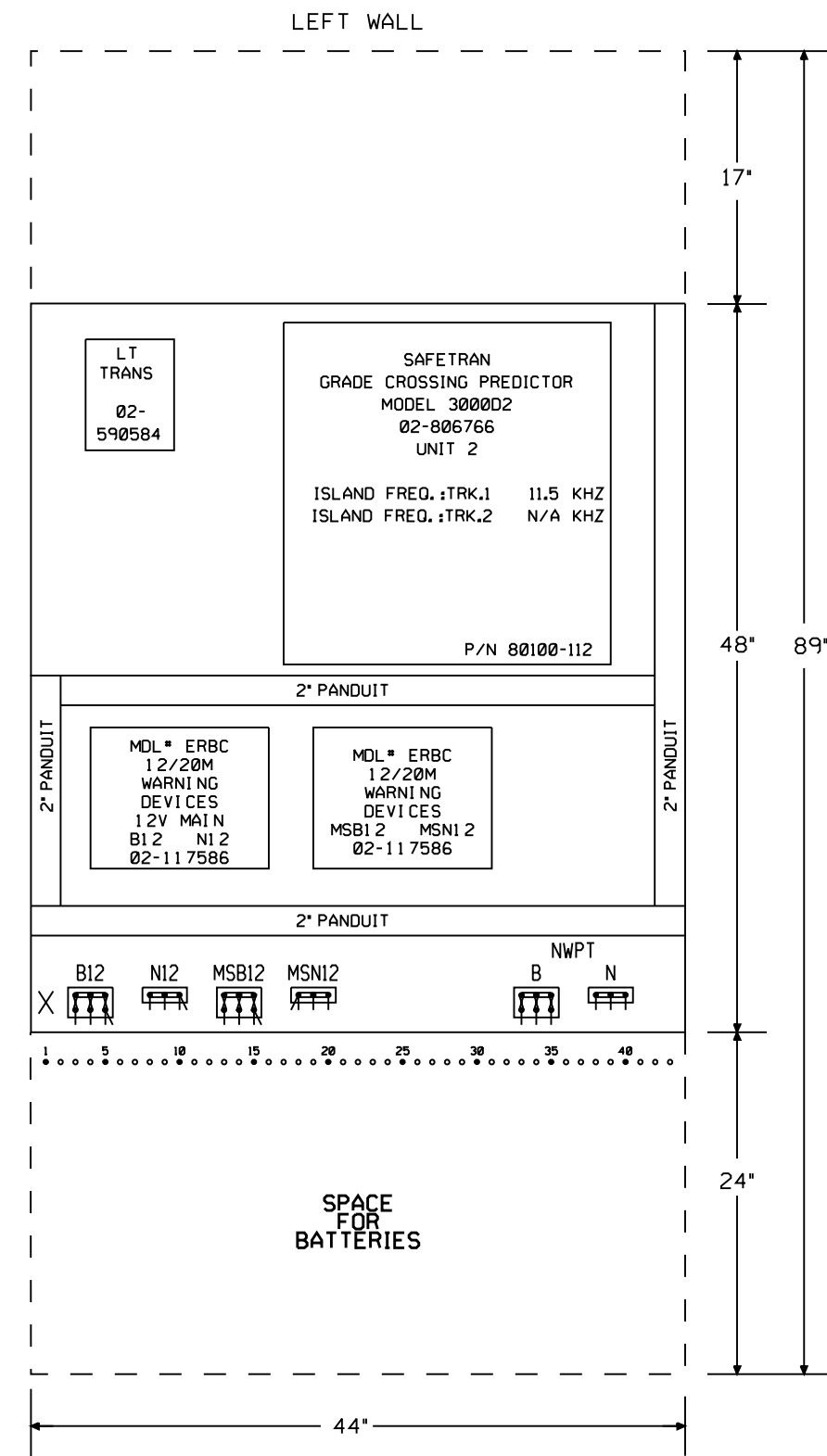
⊙ = IN

⊗ = OUT

106536 0H2017458
03-26-18 XRL/RJJ/

xorail

REVISIONS			<div>CSXTRANSPORTATION</div>				
04-19-05 SWE		0H2005030		RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
06-16-15 XRL		0H2011045					
			ERIE RD. 523793Y				
			GATE MECHANISM TYPICAL				
			WILLOUGHBY, OH M.P. 00-163.60				
			DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05	
DRAWING	SHEET NO	NEXT SH	NEXT FILE 0016360	NEXT SH C05	FILE 0016360	SHEET C04	



NO CHANGES
106536 0H2017458
03-26-18 XRL/RJJ/
xorail

REVISIONS			CSX TRANSPORTATION			
04-19-05 SWE			RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
06-16-15 XRL			ERIE RD. 523793Y			
			FRONT AND LEFT WALL LAYOUT WILLOUGHBY, OH M.P. 00-163.60			
DESIGNED CSX		DIGITIZED SWE		CHECKED CSX	DATE 04-19-05	
DRAWING	SHEET NO	NEXT SH	NEXT FILE 0016360	NEXT SH C06	FILE 0016360	SHEET C05

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- E0	
25- ENX	35- EX	25- GC	35- XGNP	
32- EBX		32-		
35- ENX		35-		

1-2 GCPR	3-4 GCPR	60 DAXPR
12- XP	12- XP	12- UAX+
15-	15-	15- UAX-
22-	22-	22-
25-	25-	25-
32-	32-	32-
35-	35-	35-

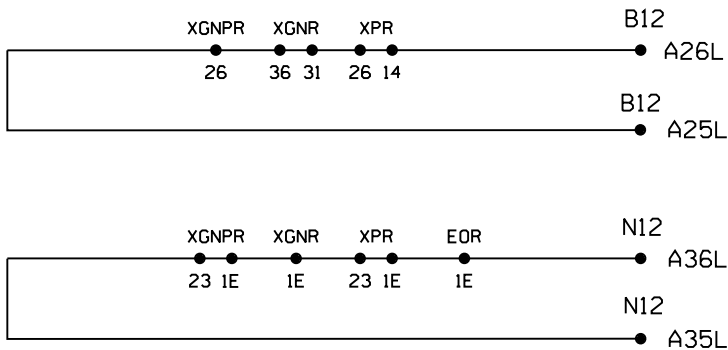
4TOR
12 AUX+
15 UAX-
22
23
25
32
35

* = 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

(REAR)

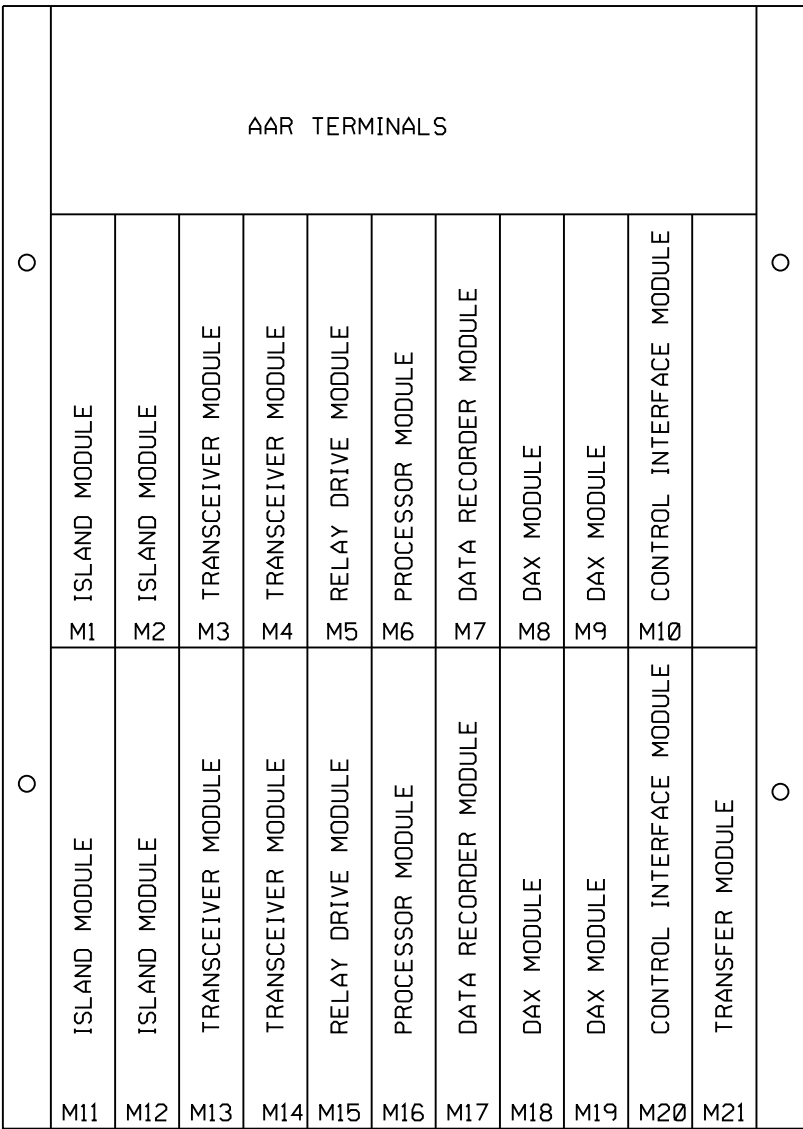
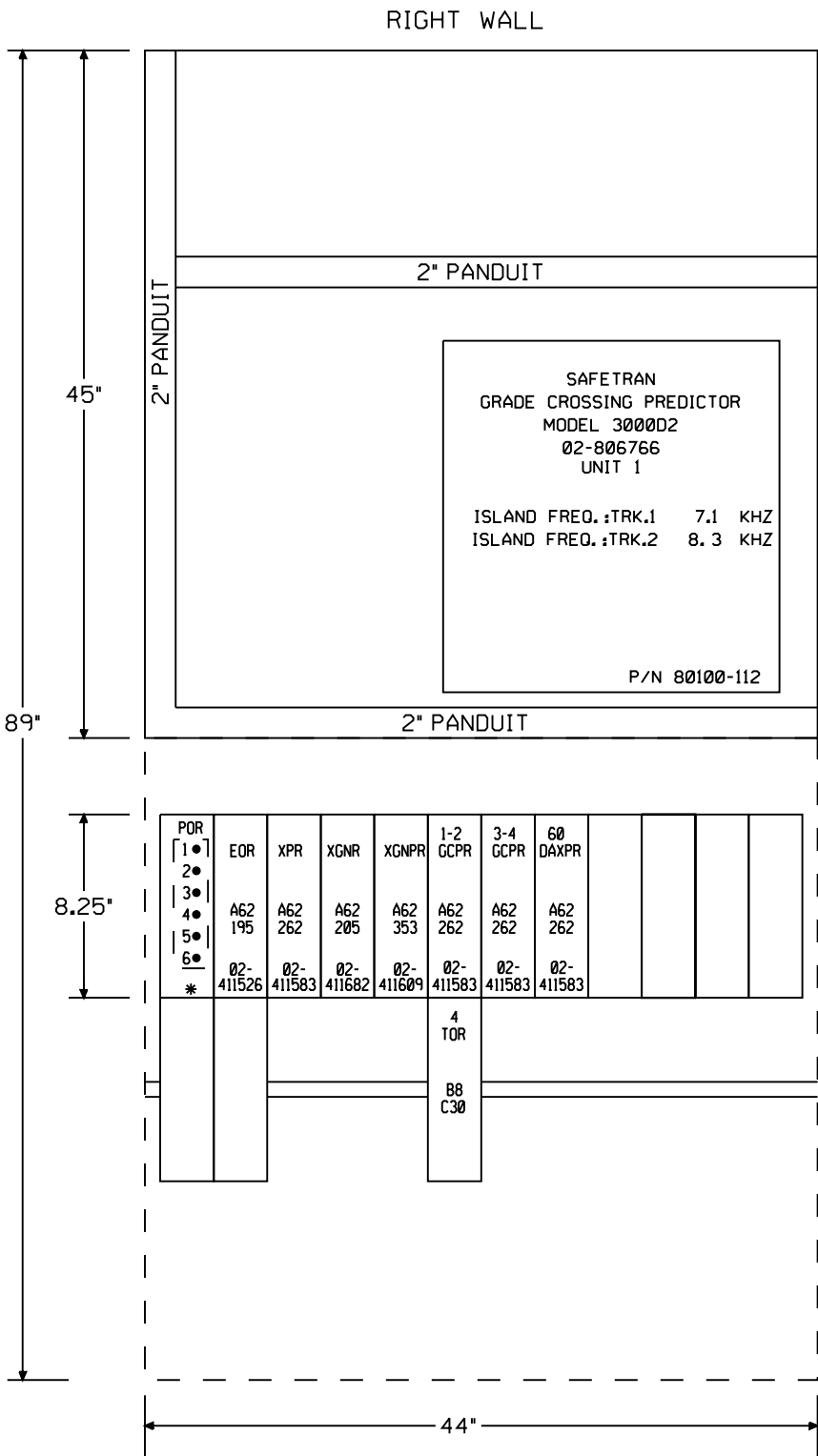


11 10 9 8 7 6 5 4 3 2 1

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:
A62-633 = 02-395075 B1, 5F4B, 0.5<

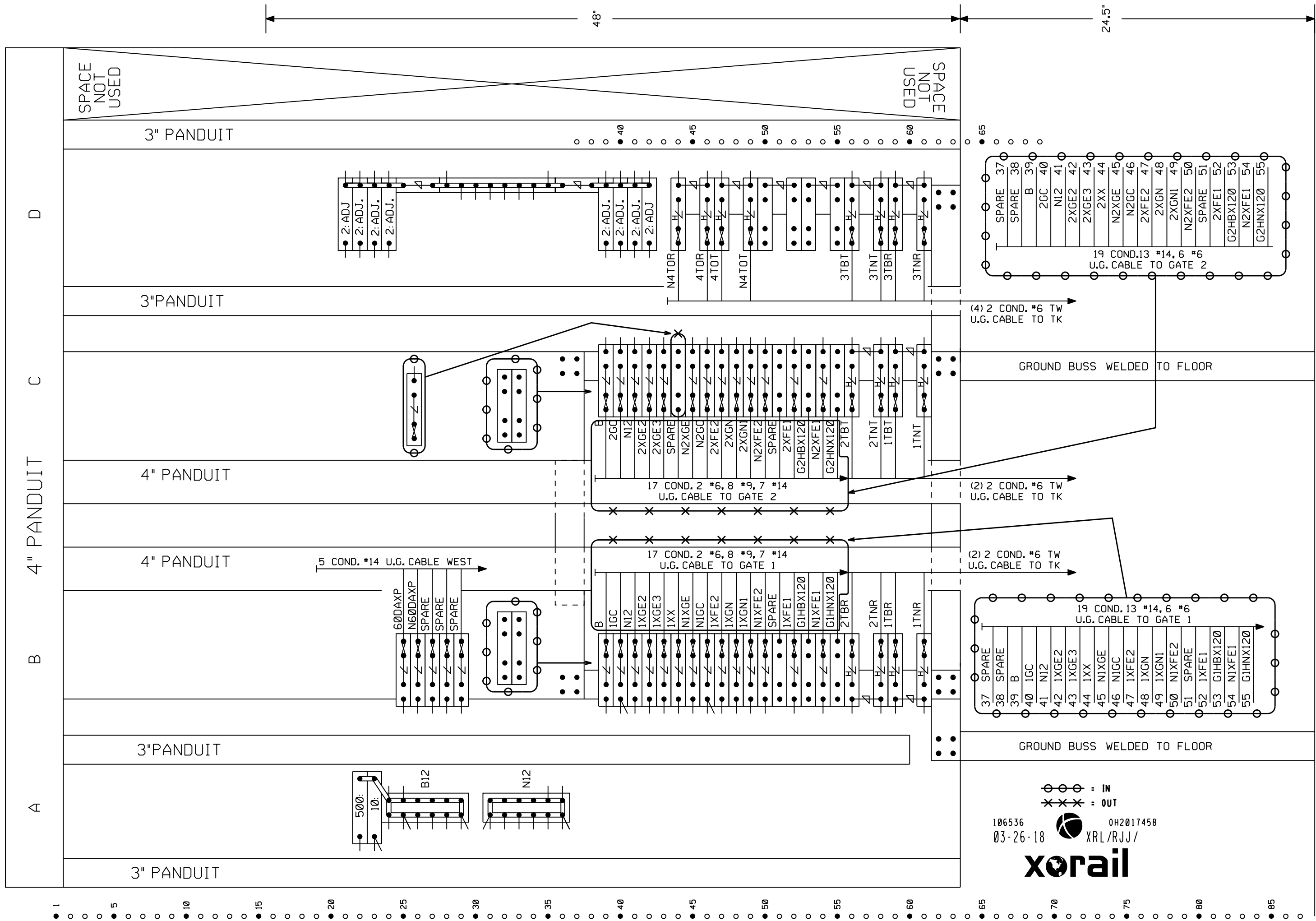
REQUIRED MODULES - UNIT 1 & UNIT 2		
PART NUMBER AND MODULE NAME	UPPER BAY	LOWER BAY
80011-F (HZ) ISLAND MODULE	M1-M2	M11-M12
80012 TRANSCEIVER MODULE	M3-M4	M13-M14
80013 RELAY DRIVE MODULE	M5	M15
80014 PROCESSOR MODULE	M6	M16
80015 DATA RECORDER MODULE	M7	M17
80016-1,-2 DAX MODULE	NONE	NONE
80020 CONTROL MODULE INCLUDES 80017 KEYBOARD DISPLAY INTERFACE	M10	M20
80028 TRANSFER MODULE		M21



CARDFILE LAYOUT

NO CHANGES
106536 03-26-18 XRL/RJJ/
0H2017458
xorail

REVISIONS			CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
04-19-05 SWE	0H2005030		ERIE RD. 523793Y			
06-16-15 XRL	0H2011045, 0H2011045E		RIGHT SIDE OF HOUSE, RELAY RACK & FUNCTIONS WILLOUGHBY, OH M.P. 0D-163.60			
DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05			
DRAWING	SHEET NO	NEXT SH	NEXT FILE 0D16360	NEXT SH C07	FILE 0D16360	SHEET C06



NOTES:

- 1: ADJ.

2: ADJ.

10: FIXED

500: FIXED
- • • •

• •

• • •
- 02-425799 - RESISTOR

02-425807 - RESISTOR

02-423588 - RESISTOR

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

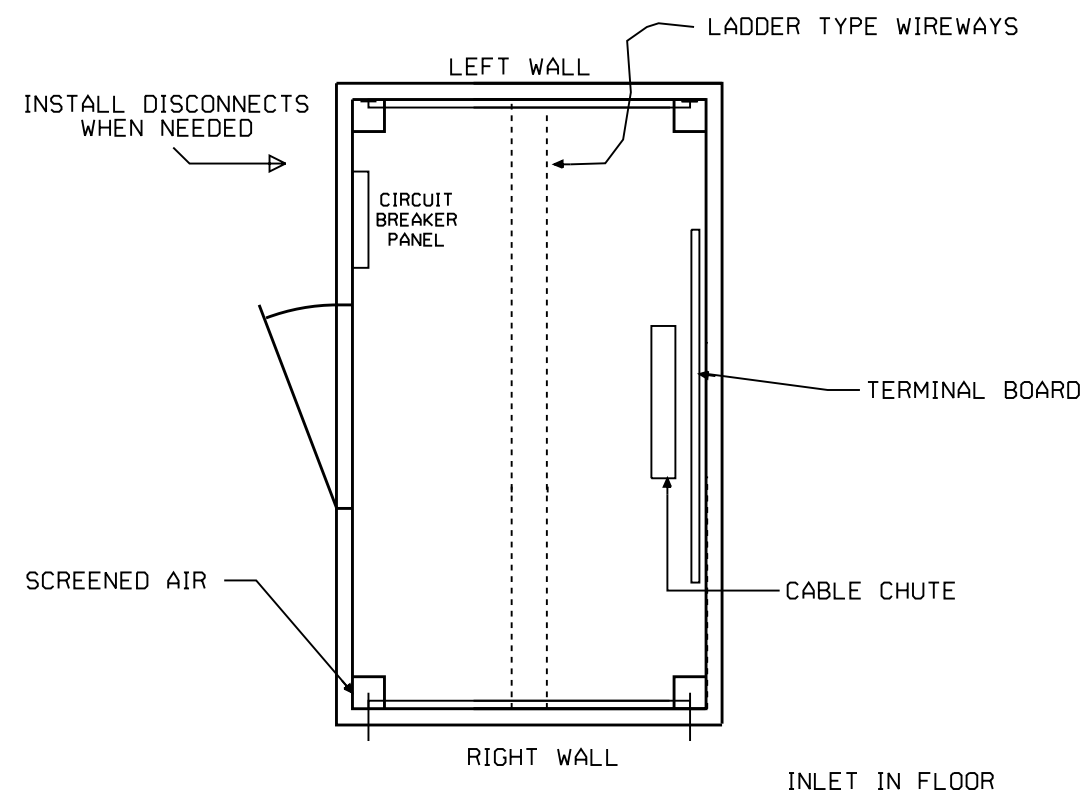
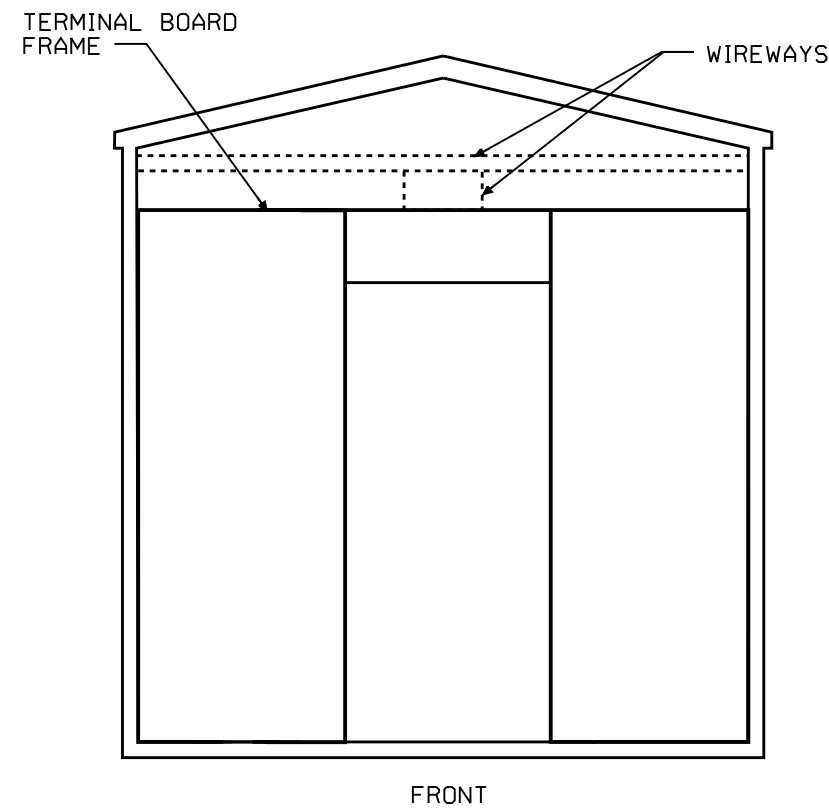
02-023316 - ARRESTOR, HEAVY DUTY

02-025565 - ARRESTOR

02-197950 - EQUALIZER

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

REVISIONS			CSX TRANSPORTATION			
04-19-05 SWE			RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
06-16-15 XRL			ERIE RD. 523793Y			
			TERMINAL BOARD ARRANGEMENT WILLOUGHBY, OH M.P. 00-163.60			
DESIGNED CSX		DIGITIZED SWE		CHECKED CSX	DATE 04-19-05	
DRAWING	SHEET NO	NEXT SH	NEXT FILE 0016360	NEXT SH C08	FILE 0016360	SHEET C07



4 x 6 STYLE BUNGALOW

NO CHANGES
106536 03-26-18 0H2017458 XRL/RJJ/
xorail

REVISIONS			CSX TRANSPORTATION RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
04-19-05 SWE			0H2005030			
10-21-08 IRS			0H2007037			
06-16-15 XRL			0H2011045			
			ERIE RD. 523793Y			
			HOUSE LAYOUT WILLOUGHBY, OH M.P. 00-163.60			
			DESIGNED CSX	DIGITIZED SWE	CHECKED CSX	DATE 04-19-05
DRAWING	SHEET NO	NEXT SH	NEXT FILE	NEXT SH	FILE 0016360	SHEET C08



OHIO RAIL DEVELOPMENT COMMISSION

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

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

December 11, 2017

CSX Transportation
Ms. Amanda DeCesare
Project Manager – Public Projects
500 Meijer Drive
Suite 305
Florence, KY 41042

RE: Grade Crossing Warning Device Modifications
Lake County, Erie Street, DOT#523793Y, PID#106388

Dear Ms. DeCesare:

A diagnostic review was held at the above grade crossing on June 16, 2016. The crossing has been recommended to receive a LED light upgrade, bells and relocation.

CSX 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 1), if any, made by the team with regard to requirements for this location. Any minor roadway work necessary for MUTCD compliance should be incorporated into the PE and such costs will flow through the railroad reimbursement process.

The Project Manager for this project is James Tucker. James can be reached at (614) 398-6897, or james.tucker@dot.ohio.gov, if you have any questions.

Sincerely,

Project Manager

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

Attachment: 1 (diagnostic review form)



www.rail.ohio.gov

phone: 614.644.0306

IMPROVING RAIL TODAY FOR TOMORROW'S ECONOMY

6/16/2016

[illegible]



High Hazard Crossing With Active Warning Devices			
Street Name: Erie Street		County: LAK	
LHA: City of Willoughby		USDOT#: 523793Y	
Nearest City: Willoughby		Hazard Rank: 2	
Roadway Information			
ADT: 8799 (2011) 11,200 (18)		Posted Speed Limit: 25 mph	
Railroad: CSX Transportation		Number of Tracks: 4 (2 Mains, 1 Siding, 1 Industrial) Amtrak Service	
Train Count: 48		Speed Over Crossing: 70 mph	
Storage Distance (Ft.): Not listed.		Train Detection Type: CWT	
Accidents			
Accident Factors		3 of Accident in Last 5 Years:	
		0 of Fatalities in Last 5 Years:	
Accident Date	10/18/2015	5/22/2015	1/2/2014
Position of Accident	Moving over crossing	Moving over crossing	Moving over crossing
Circumstance	Rail equipment struck by highway user	Rail equipment struck by highway user	Rail equipment struck by highway user
Visibility/Time of Day	Day	Dark	Day
Weather Conditions	Cloudy	Clear	Snow
Crossing Interconnect.	No	Yes	No
Crossing Illuminated	Yes	Yes	No
Drove Around Train	No	No	No
Highway User Action	Went around the gate.	Went through the gate.	Went around the gate.
Alcohol/Drug Related?			
Driver Speeding?			
Other Notes: 10/18/2015 – CSX train was struck by vehicle at road crossing. 5/22/2015 - Police were in high speed pursuit of a stolen van; the van struck the train at the crossing. After striking train the vehicle's driver escaped from the police by climbing under the moving train. This resulted in the driver's arm being cut off. 1/2/2014 – Car went around the gates and was struck by the train.			
Recommendations: LED upgrade w/ Bells, Do not Stop on Tracks.			
4 Quad might be an option CSX is concerned about veh. detection.			

County: LAK

Route: Erie Street

DOT#: 523793Y

Date: 6/16/2016

Existing Traffic Control Devices

Type of Warning Devices	Installed?		Quantity/Comments
Advance Warning Signs (condition?)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	2
'Stop' Signs	Yes	<input checked="" type="radio"/> No	
'Stop Ahead' Signs	Yes	<input checked="" type="radio"/> No	
Pavement Markings (condition?)	<input checked="" type="radio"/> Yes	<input type="radio"/> No	2 fair
Crossbucks	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Number of Tracks Signs	<input checked="" type="radio"/> Yes	<input type="radio"/> No	4
Inventory Tags	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Interconnected Highway Traffic Signal	Yes	<input checked="" type="radio"/> No	
Mast-Mounted Flashing Lights	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cantilever Flashing Lights	Yes	<input checked="" type="radio"/> No	Number: Length:
Side Lights	Yes	<input checked="" type="radio"/> No	
Automatic Gates	<input checked="" type="radio"/> Yes	<input type="radio"/> No	Number: 2 Length:
Bells	Yes	<input checked="" type="radio"/> No	Number:
Sidewalk Gate Arms	Yes	<input checked="" type="radio"/> No	
'No Turn' Signs	Yes	<input checked="" type="radio"/> No	
Illumination	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Is crossing flagged by train crew?	Yes	<input checked="" type="radio"/> No	
Other	Yes	<input type="radio"/> No	

Railroad Data

Railroad Characteristics	Initial Information (from database)	Revised
Total trains per day	48	
< 1 per day		
Day thru trains	23	22
Night thru trains	22	19
Daytime switching movements	3	
Nighttime switching movements		1
Total number of tracks	4	
Number of main tracks	2	
Number of other tracks	2 (1 siding, 1 Industrial lead)	
Maximum train speed	70	10-70
Typical train speed		
Amtrak	yes	

If multiple tracks, can two trains occupy crossing at the same time?

☒ Yes ☐ No

Can one train block the motorists' view of another train at crossing?

☒ Yes (Explain below) ☐ No

Can one or more tracks be eliminated through the crossing?

Yes ☒ No

Are there other track(s) crossing this same roadway within 100 ft of this crossing?

Yes ☒ No

If yes, Crossing DOT #(if different) _____

If yes, distance _____ (take measurement between track centerlines at closest point along roadway)

County: LAK

Route: Erie Street

DOT#: 523793Y

Date: 6/16/2016

Roadway Data

Local Highway Authority: City of Willoughby

Roadway Characteristics	Initial Information (from database)	Revised
Average daily traffic	8799 (2011)	11,200 (2018)
Highway paved	Yes X No	Yes No
Roadway Surface: <u>Blacktop</u> Gravel <u>Concrete</u> Other _____		
Roadway width: <u>47</u> ft.		
Number of highway lanes	2	
Urban or Rural	Urban	
Vehicle Speed: _____ MPH <u>25</u>		
School Bus Operation: <u>No</u> Yes Amount _____		
Hazardous Materials Trucks: <u>No</u> Yes X Amount <u>.04</u>		
Shoulders: <u>No</u> Yes		
Is the shoulder surfaced? <u>No</u> Yes <u>web/gutter</u>		
Is there existing guardrail along roadway in crossing vicinity? <u>No</u> Yes		
Is stopping site distance adequate? (See Table 2) <u>Yes</u> No If no, deficient approach(es) _____		
Quadrant _____ Curb and Gutter: <u>Functional (Curb height = 4" or more)</u> Non-functional (Curb height = Less than 4") None	Quadrant _____ Curb and Gutter: <u>Functional (Curb height = 4" or more)</u> Non-functional (Curb height = Less than 4") None	
Pedestrians: <u>No</u> <u>Yes</u>		
Is sidewalk present? <u>No</u> <u>Yes</u>		
Is there a nearby intersection that could cause queuing over the crossing? <u>No</u> <u>Yes</u>		
If yes, Street Name <u>Stevens Blvd</u> Distance _____ Is this intersection signalized? <u>No</u> Yes Are the signals currently interconnected with the existing crossing warning devices? <u>No</u> Yes Is there a 'Do not Stop on Track' sign? <u>No</u> Yes		
Is a roadway improvement project (e.g. widening, turn lanes, nearby new or upgraded traffic signal, sidewalk) planned at or near this location in the foreseeable future? <u>No</u> <u>Yes</u>		
If yes, Improvement type _____ Lead Agency _____ Timeline/completion <u>4+ YEARS OUT</u>		
Is it the consensus of the Diagnostic Review Team that this is a potential closure project? <u>No</u> Yes		
Explain reasons:		

Type of Development

Open Space Institutional <u>Industrial Commercial</u> <u>Residential</u>	Location of nearby schools: <u>Willoughby City Schools</u> <u>.89 + 1.33 miles</u>
--	--

County: LAK

Route: Erie Street

DOT#: 523793Y

Date: 6/16/2016

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:

N/A

Real Estate or ROW: possible utilities would conflict

Culverts / Drainage / Ballast Conditions:

N/A

Roadway and/or Sidewalks: sidewalk could be an issue

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

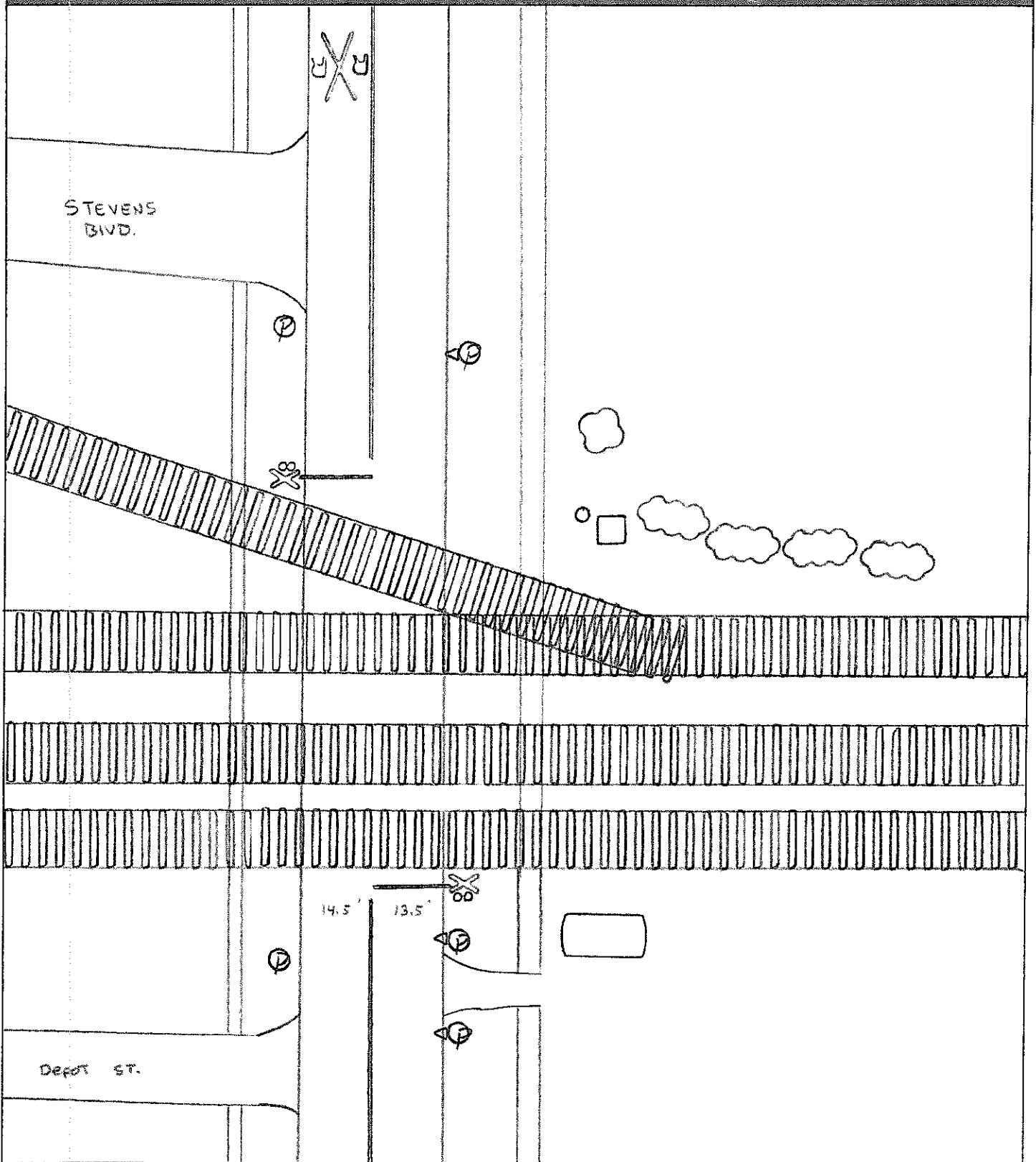
70 mph. distance

Environmental:

N/A

Other:

Field Sketch



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

Sketch by: _____

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.

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Case No(s). 18-1788-RR-FED

Summary: Application In the Matter of a Request for an Upgrade at CSX Transportation Inc. Grade Crossing, DOT#523-793Y, on Erie Street in Lake County, Ohio. electronically filed by Mrs. Jill A Henry on behalf of PUCO/Rail Division