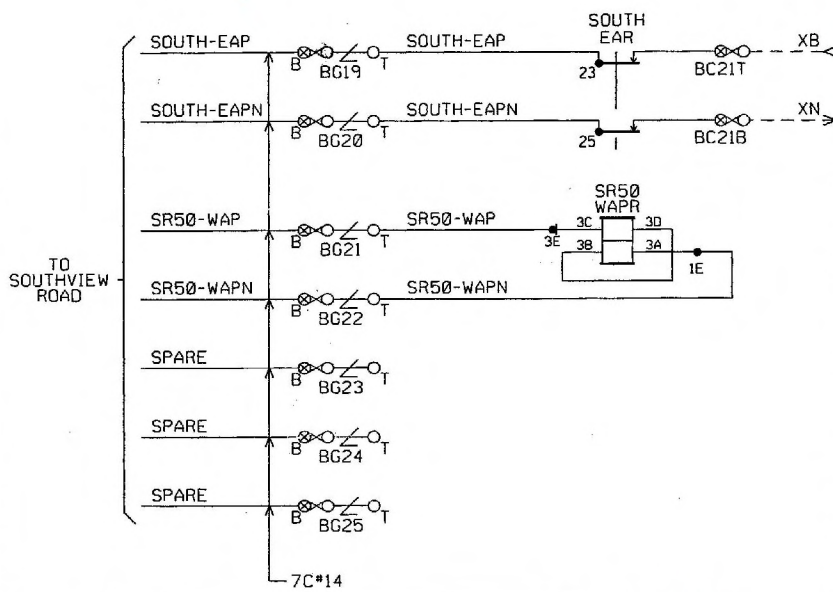


NOTE:
★ GATE #1 & #3 RELOCATED/REUSED, REWIRED



APPROACH CIRCUIT DISTANCE CALCULATION	
BASE WARNING TIME	TRACK 1 30 SEC
PLUS TIME FOR CLEARANCE DISTANCE > 35'	8 SEC
EQUALS PLANNED WARNING TIME	38 SEC
PLUS TIME FOR EQUIPMENT RESPONSE	3 SEC
PLUS TIME FOR TRAFFIC PRE-EMPTION	0 SEC
EQUALS CIRCUIT APPROACH TIME	41 SEC
TIMES MAXIMUM PLANNED TRAIN SPEED	15 MPH
TIMES RATIO OF FEET PER SECOND TO MILE PER HOUR	22/15
EQUALS APPROACH CIRCUIT DISTANCE WITH ANY FRACTIONAL VALUE INCREASED TO FULL UNIT	902 FT

CERTIFIED CORRECT PLANS

Donna M. Moody
Professional Engineer
Approved by Bureau of Technical Utility Services
PA PUBLIC UTILITY COMMISSION

ATTEST *Matthew L. Hunsaker* **06/30/2025**
Secretary **Docket: A-2023-3043240**

- NOTES:**
- ALL WIRING IN THE BUNGLOW IS #16 AWG FLEX UNLESS OTHERWISE NOTED.
 - SEE APPROACH CIRCUIT DISTANCE CALCULATION TABLE FOR PLANNED WARNING TIME AND TRAIN SPEED PER TRACK.
 - APPROACH DISTANCES ARE TO BE MEASURED 50 FEET FROM TRAVELLED WAY ON SR 50.
 - 1T TRACK IS TO CLEAR CONCRETE CROSSING SURFACE BY 5' FROM EACH SIDE OF CROSSING.

- LEGEND:**
- ⊗ -TEST TERMINAL
 - △ -EQUALIZER
 - ∠ -ARRESTER TO GROUND
 - ⊙ -TWISTED WIRE
2 TURNS PER FOOT
 - -INSULATED NUT

RED = IN
YELLOW = OUT
NST
05/01/2025

REVISIONS				
				<p>4 ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25</p> <p>3 UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13</p> <p>2 RELOCATE CANT. #2 & I.T. I.J. GETS-GS 07-30-12</p> <p>1 DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12</p>

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

Balfour Beatty Rail, Inc.

COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.	CROSSING TRACK PLAN	DRAWING NO.
DESIGNED: A.P.D.	SR-50	812543-120
CHECKED: R.E.D.	WASHINGTON COUNTY, PENNSYLVANIA	SHEET 1 OF 17
DATE: 04-02-12	DOT# 966 038R MILEPOST # 1.0	

NAS CONTROLLER SOFTWARE CONFIGURATION MANAGEMENT TABLE

APPLICATION	FILE NAME	DATE	DESCRIPTION
GFD EXEC	GFD_C4.S19	10-14-05	GFD MODULE EXECUTIVE

SW1 CURRENT 1/10 MA

POSITION	1	2	3	4	5	6	7	8
CLOSED	■	■	■	■	■	■	■	■
OPEN	■	■	■	■	■	■	■	■

SWITCH VALUES CLOSED POSITION (BINARY)

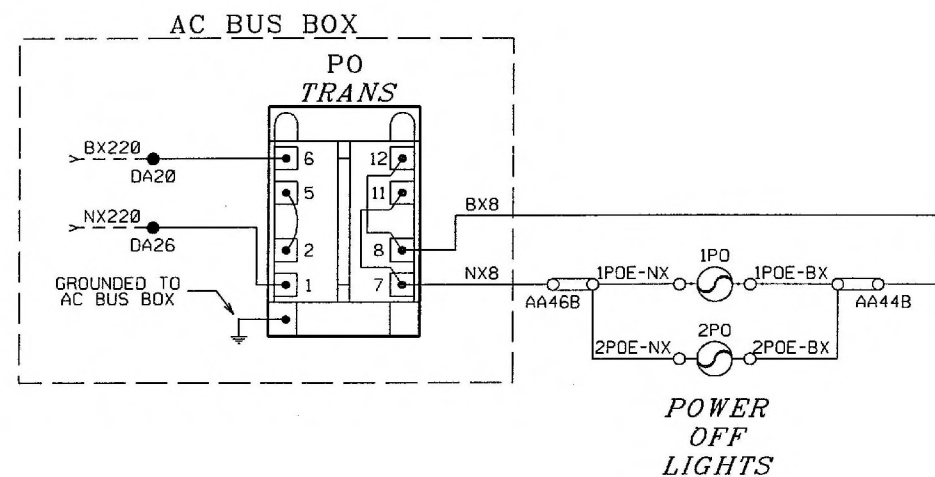
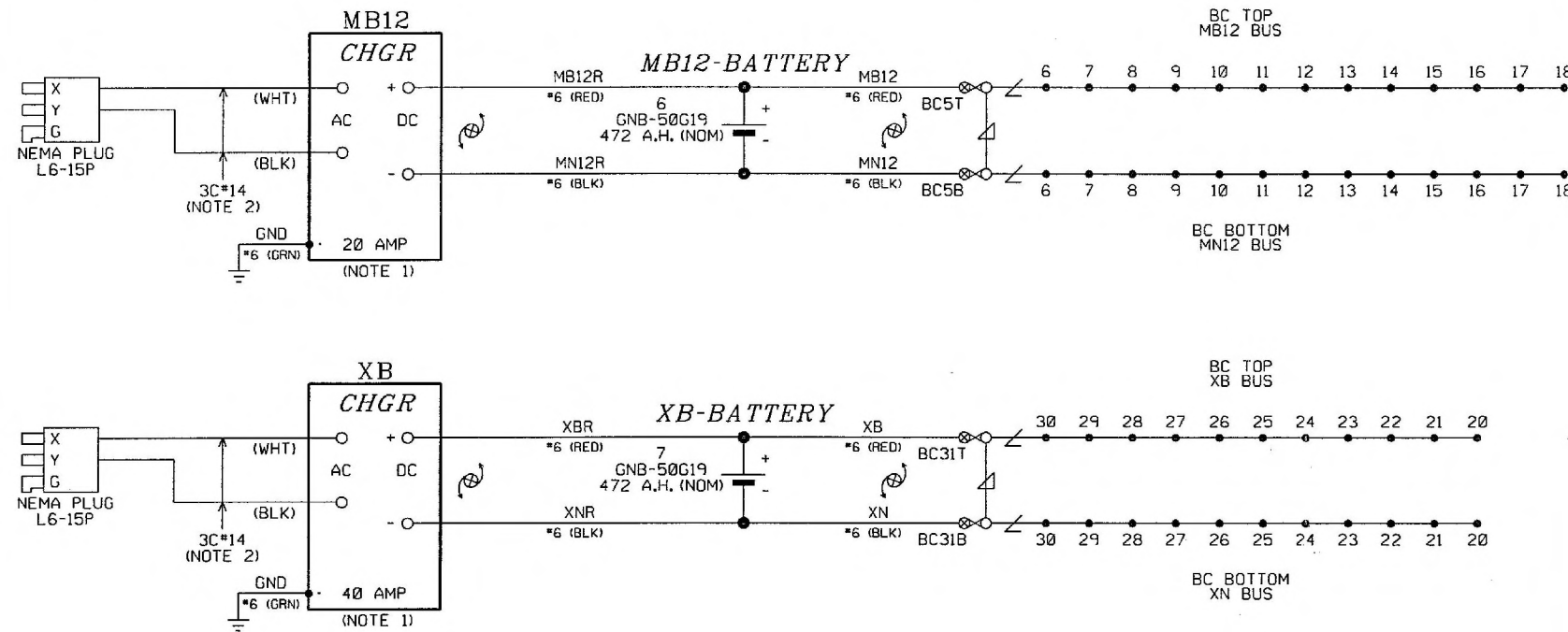
- SW1 = 1
- SW2 = 2
- SW3 = 4
- SW4 = 8
- SW5 = 16
- SW6 = 32
- SW7 = 64
- SW8 = 128

SW2 TIME INTERVAL

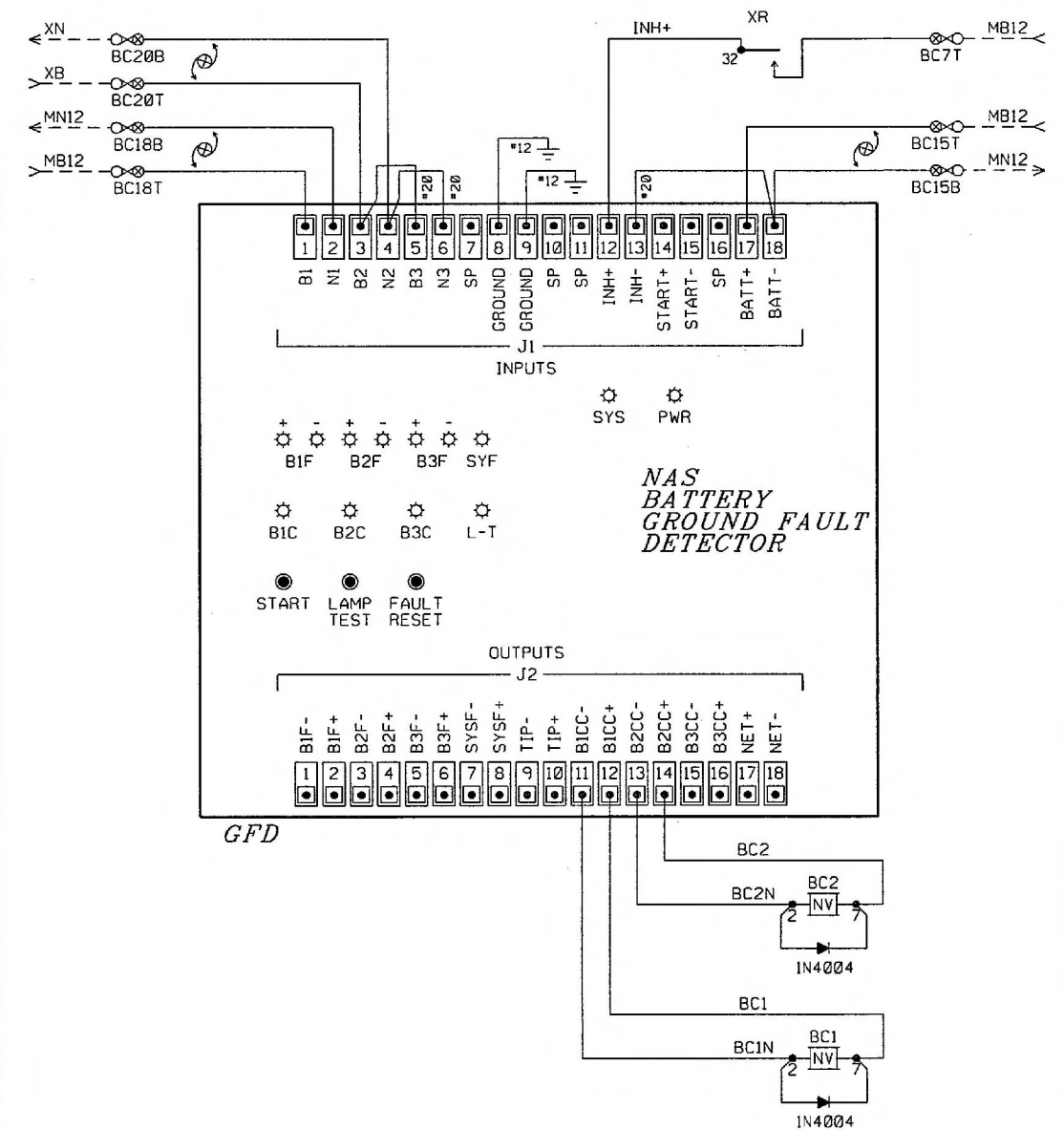
POSITION	1	2	3	4	5	6	7	8
CLOSED	■	■	■	■	■	■	■	■
OPEN	■	■	■	■	■	■	■	■

SWITCH VALUES CLOSED POSITION (BINARY)

- SW1 = 1
- SW2 = 2
- SW3 = 4
- SW4 = 8
- SW5 = 16
- SW6 = 32
- SW7 = 64
- SW8 = HOUR / DAYS SETTING



- NOTES:
- USE 240 VOLT SETTING.
 - GREEN GROUND CONDUCTOR NOT USED.



REVISIONS

NO.	DESCRIPTION	DATE
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13	
2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12	
1	DOT/MP UPDATE SIG. PER DWG MFR005 GETS-GS 07-09-12	

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

Balfour Beatty
Rail, Inc.

COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: R.E.D.
DATE: 04-02-12

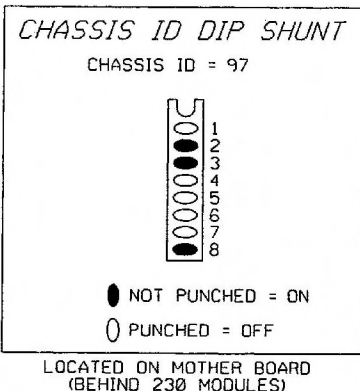
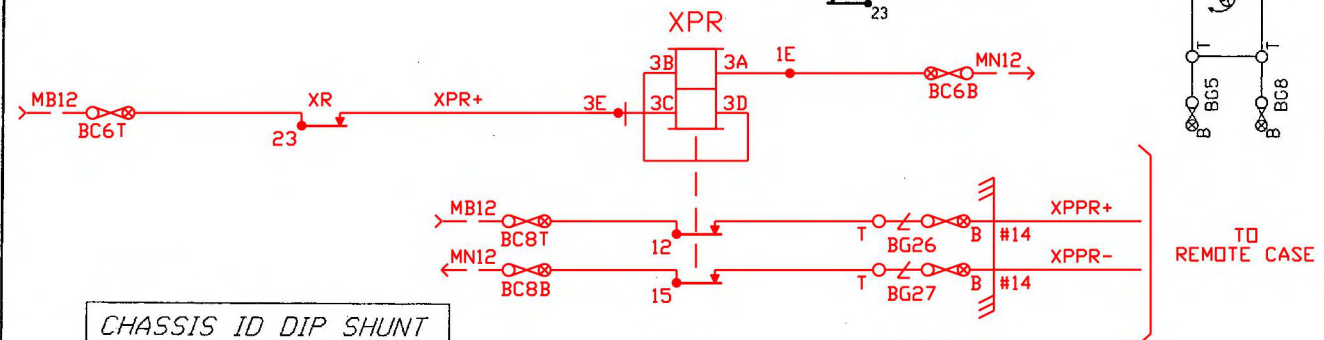
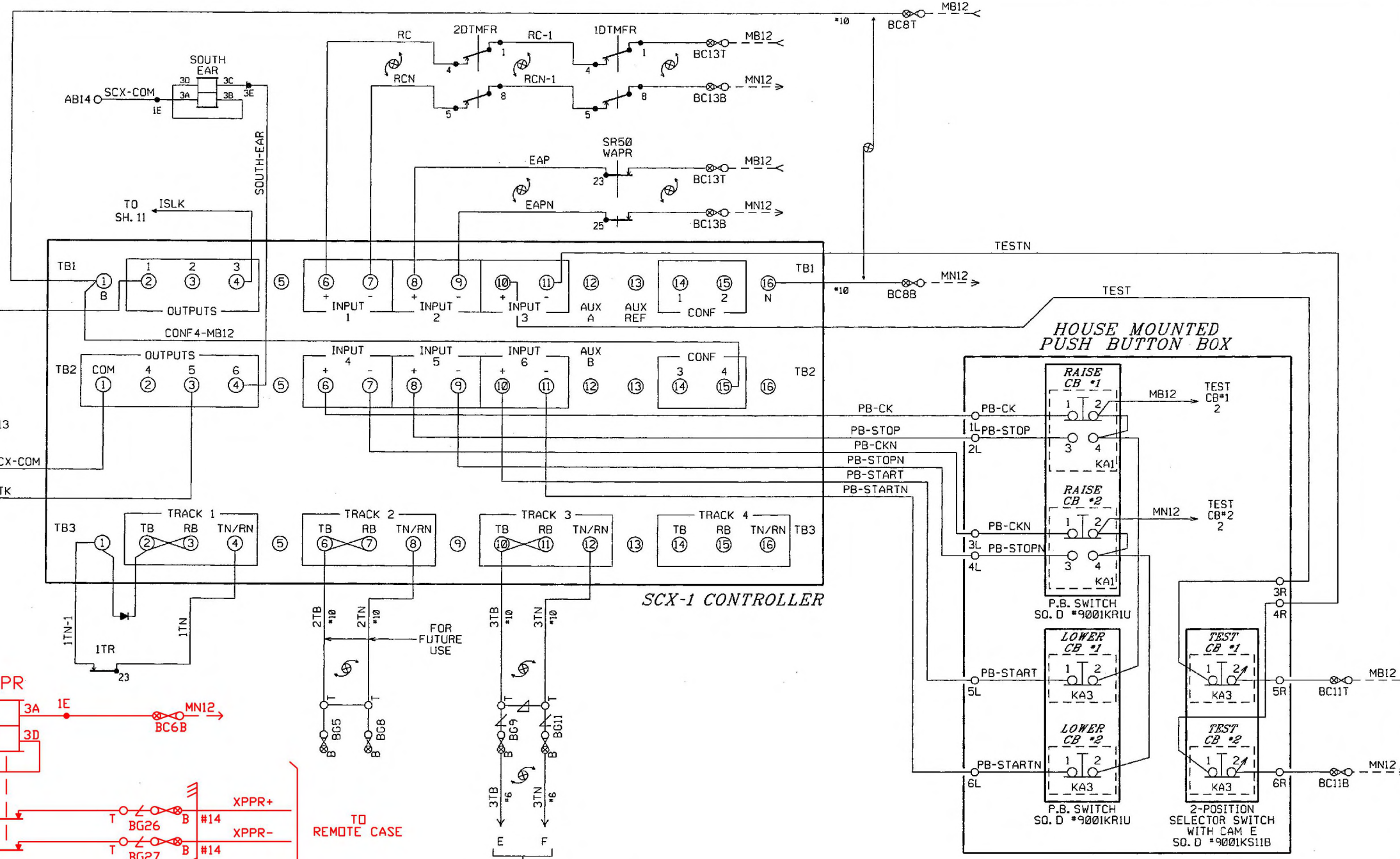
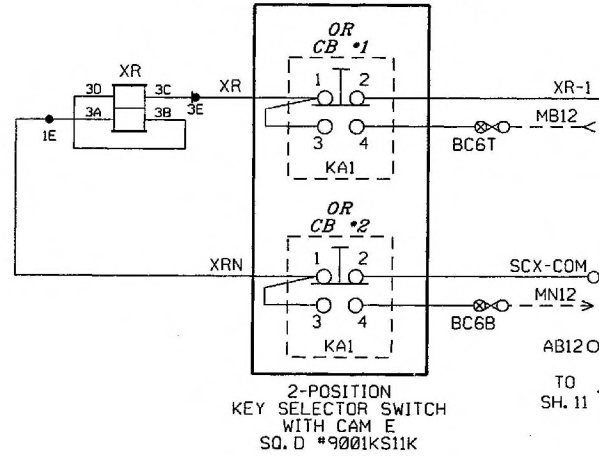
BATTERY CIRCUITS
SR-50
WASHINGTON COUNTY, PENNSYLVANIA
DOT# 966 038R MILEPOST # 1.0

DRAWING NO.
812543-120
SHEET 2 OF 17

WARNING!

PLACING CROSSING OVERRIDE SWITCH IN THE OVERRIDE POSITION COMPLETELY DISABLES THIS HIGHWAY CROSSING WARNING SYSTEM. PROPER AUTHORITIES MUST BE NOTIFIED PRIOR TO OVERRIDE.

VERRIDE SWITCH



- NOTES:
- SCX APPLICATION PROGRAM 'LXING097' UTILIZES FAIL SAFE DESIGN PRINCIPLES INCLUDING, BUT NOT LIMITED TO, A 15 MINUTE STICK RELEASE TIMER.
 - TRACK 2 IS NOT USED.

RED = IN
YELLOW = OUT
NST
05/01/2025

230A

1 LXING097
REV: 3-7-13
SUM: 22DA CRC: 2F4B
2 STDIXING
HPN 202832-000
REV F
:46A5 :3EB7

230B

3 LXING097
REV: 3-7-13
SUM: 22DA CRC: 2F4B
4 STDIXING
HPN 202832-000
REV F
:F594 :888D

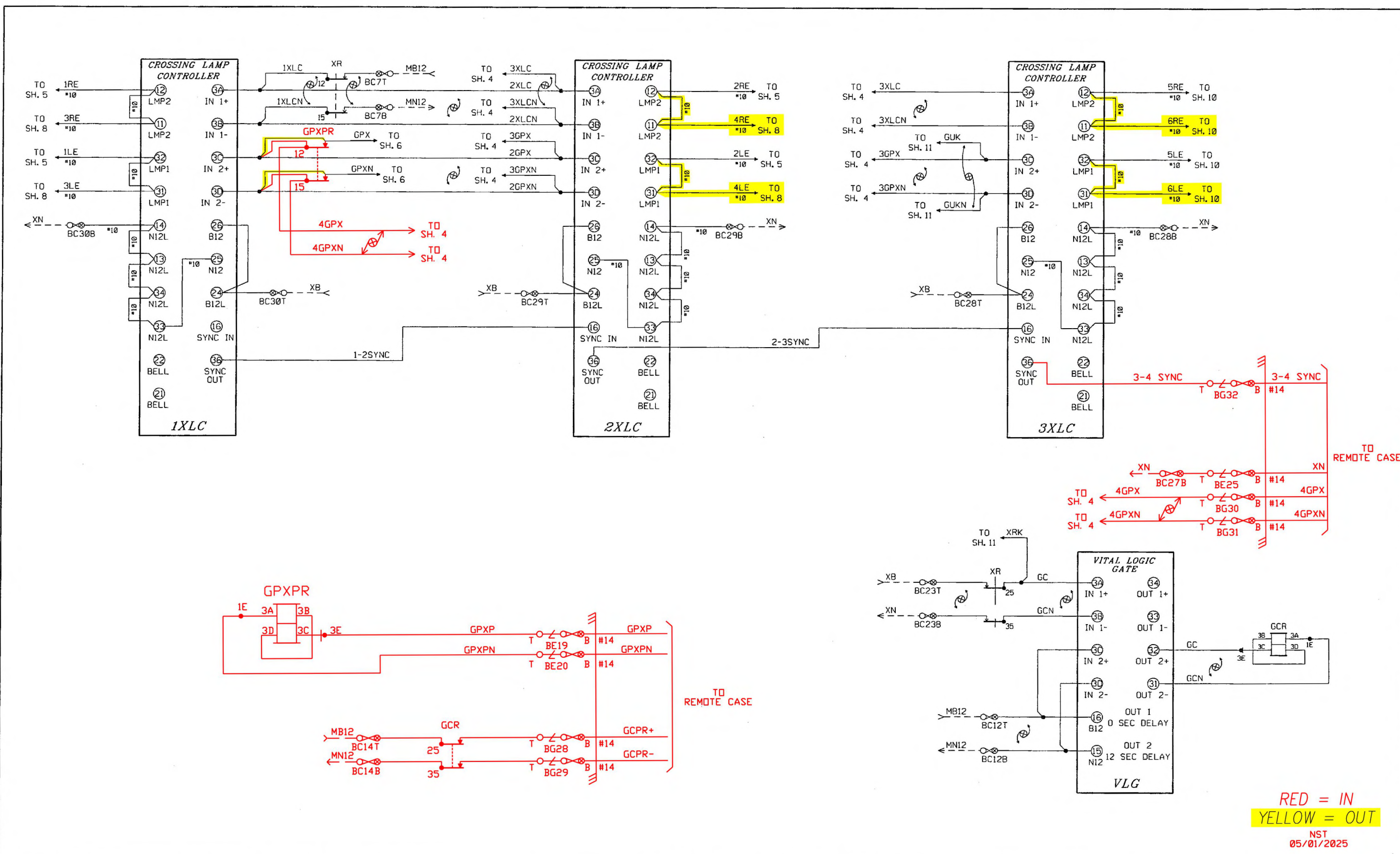
REVISIONS	1	2	3	4
	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12	RELOCATE CANT. #2 1T I.J. GETS-GS 07-30-12	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25

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

Balfour Beatty Rail, Inc.
COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.	SCX-1 CIRCUITS	DRAWING NO.
DESIGNED: A.P.D.	SR-50	812543-120
CHECKED: R.E.D.	WASHINGTON COUNTY, PENNSYLVANIA	SHEET 3 OF 17
DATE: 04-02-12	DOT# 966 038R MILEPOST = 1.0	



REVISIONS			
4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25	3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 IT I.J. GETS-GS 07-30-12	1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12


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

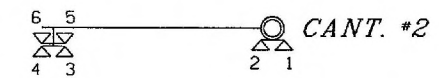
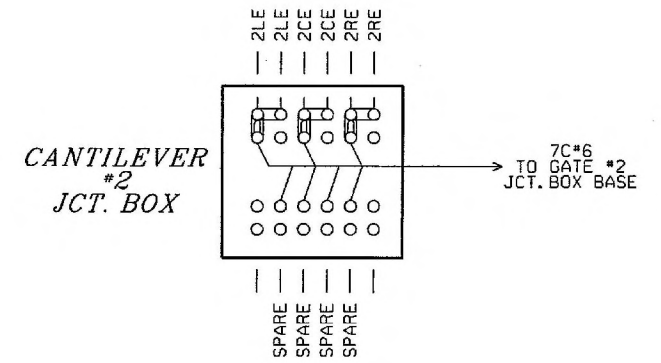
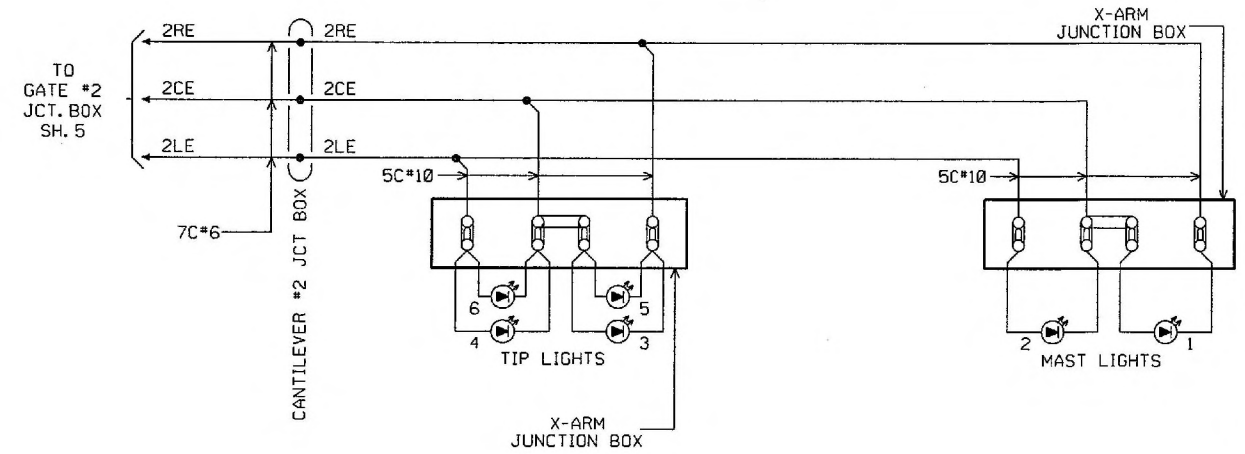
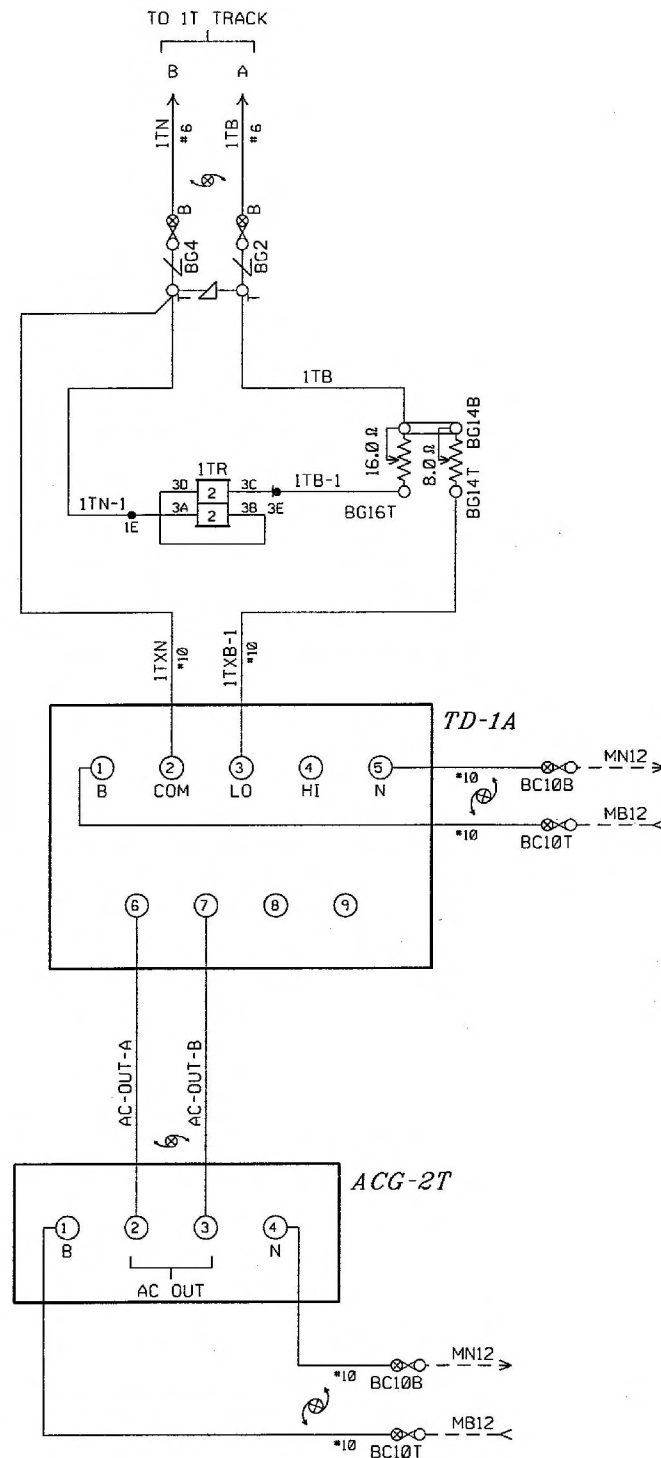
Balfour Beatty Rail, Inc.
COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.	FLASHING LAMP & GATE CONTROL SR-50	DRAWING NO. 812543-120
DESIGNED: A.P.D.	WASHINGTON COUNTY, PENNSYLVANIA	SHEET 4 OF 17
CHECKED: R.E.D.	DOT# 966 038R MILEPOST = 1.0	
DATE: 04-02-12		

NOTE:

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



REVISIONS

3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 & IT I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

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

Balfour Beatty
Rail, Inc.

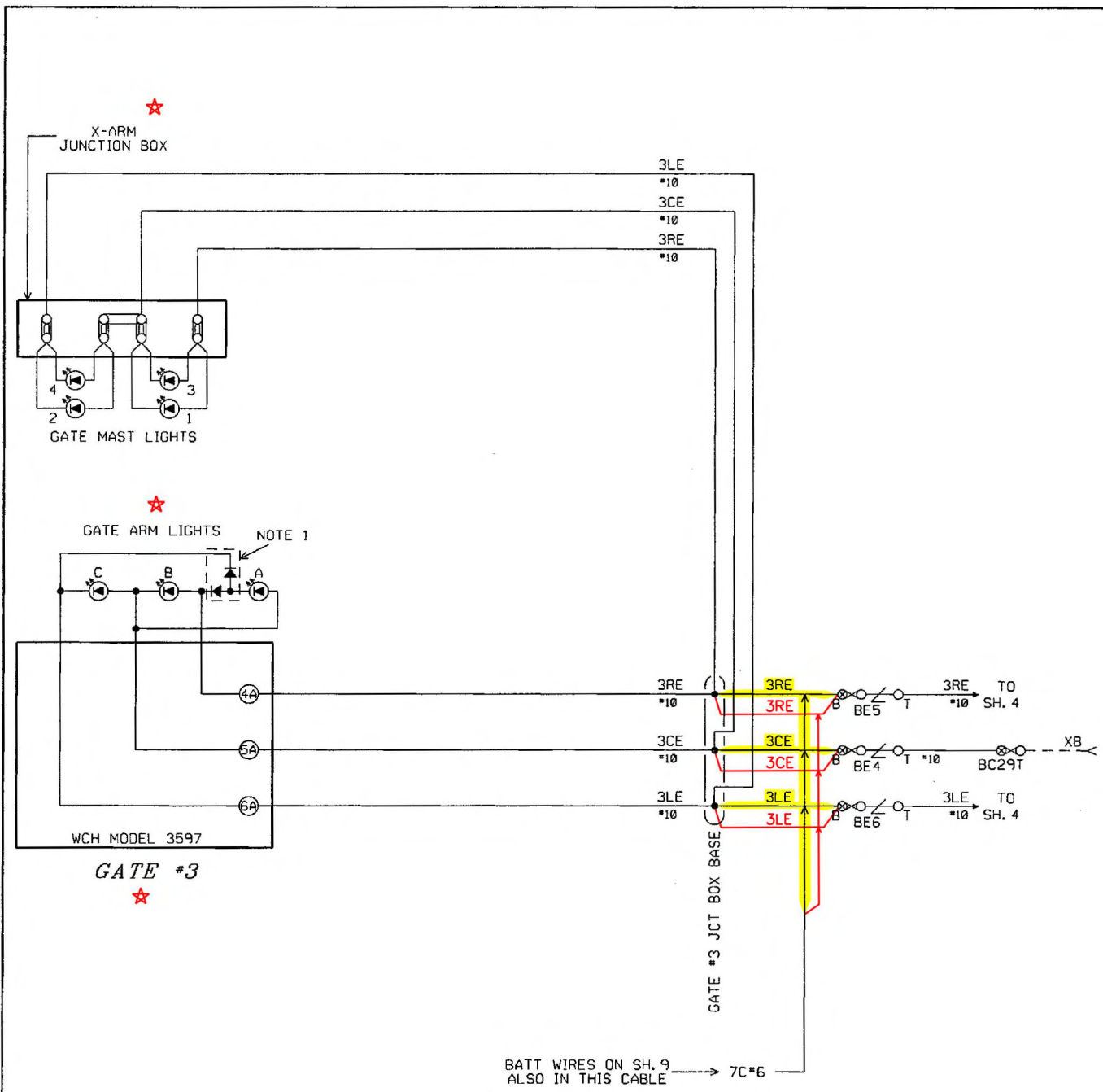
COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

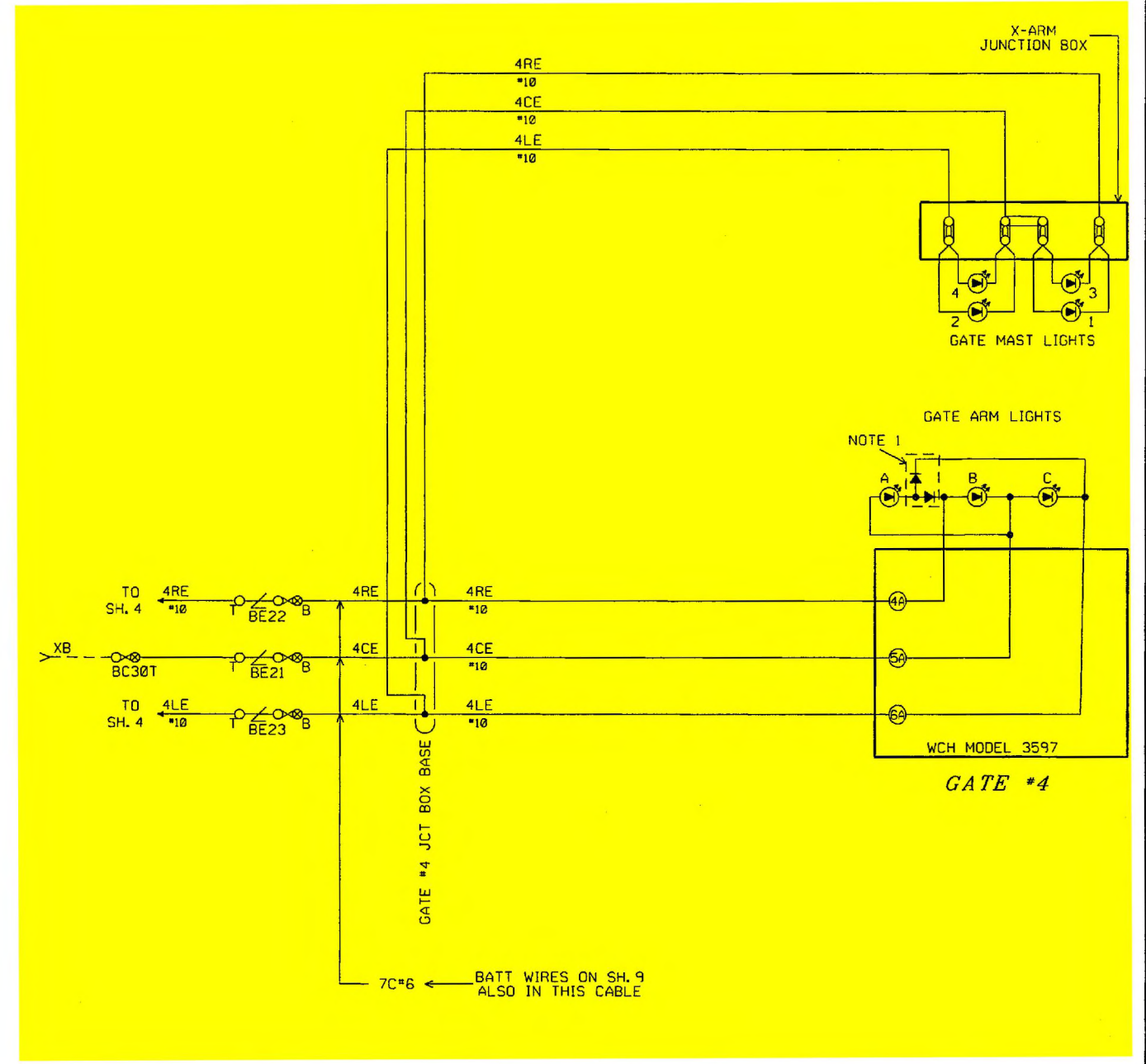
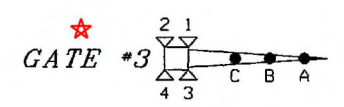
DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: R.E.D.
DATE: 04-02-12

CROSSING LAMP & AC/DC CIRCUITS
SR-50
WASHINGTON COUNTY, PENNSYLVANIA
DOT# 966 038R MILEPOST # 1.0

DRAWING NO.
812543-120
SHEET 7 OF 17

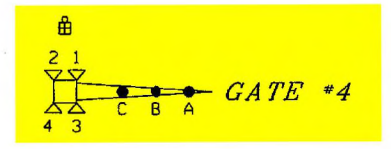


NOTE:
 ☆ GATE #3 RELOCATED/REUSED, REWIRED



RED = IN
 YELLOW = OUT

NST
 05/01/2025



- NOTES:
- GETS-GS P/N 076045-300 FOR USE WITH RECD EZLED LAMPS AND PLUG CABLES.
 - LED SIGNAL LAMP WITH 8.5 TO 16 VOLT WORKING VOLTAGE.

REVISIONS

4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

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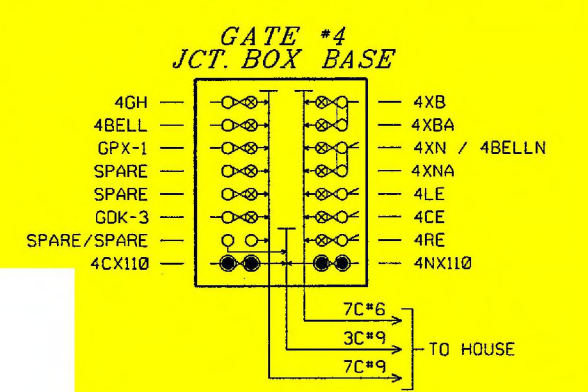
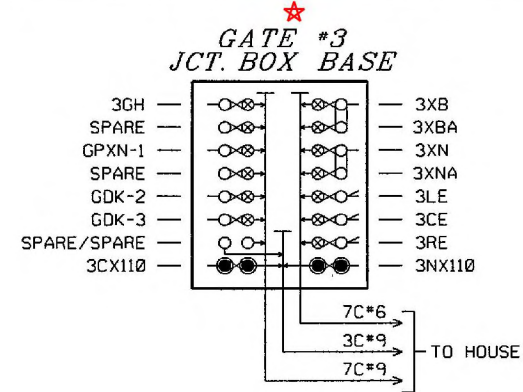
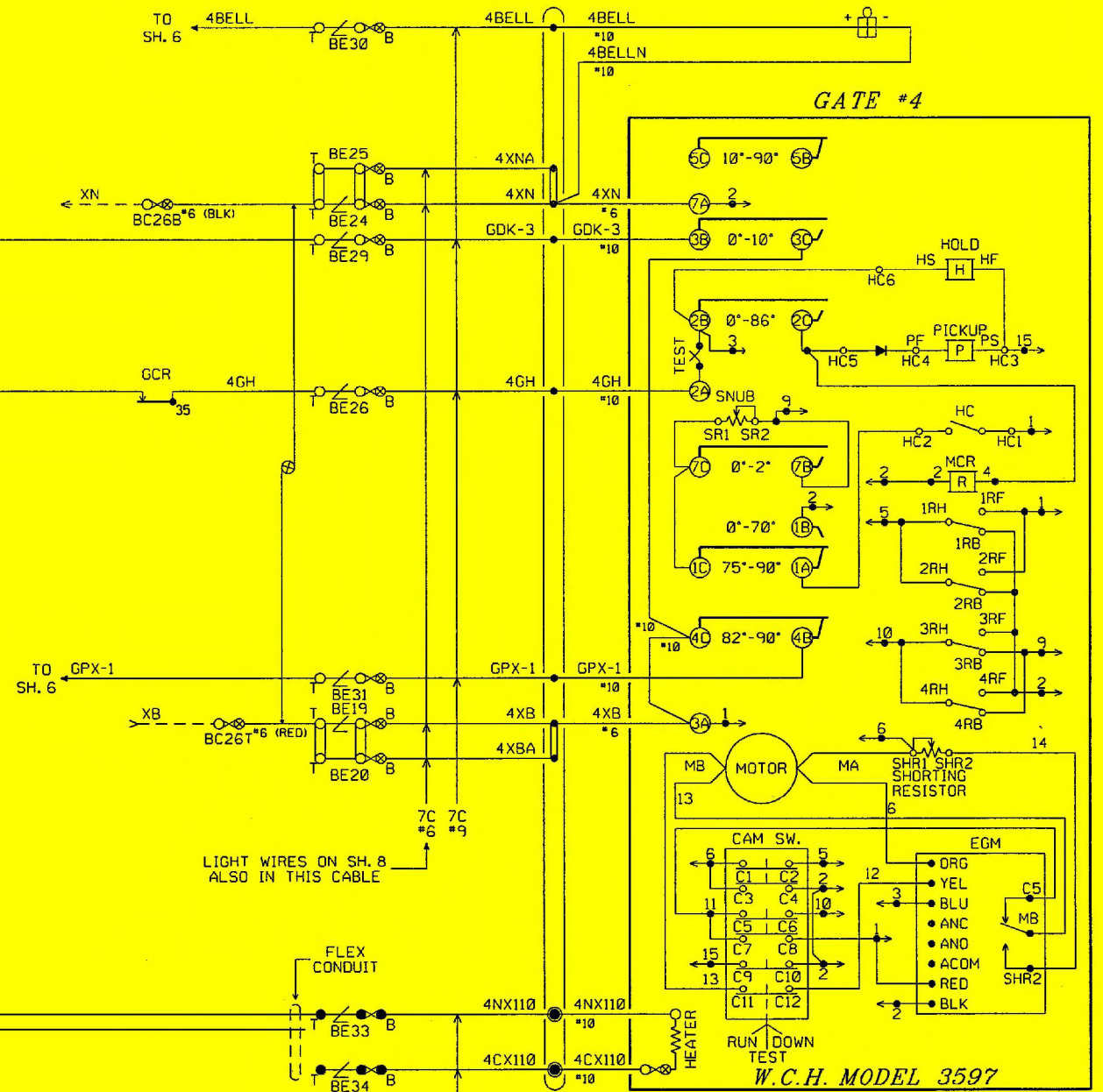
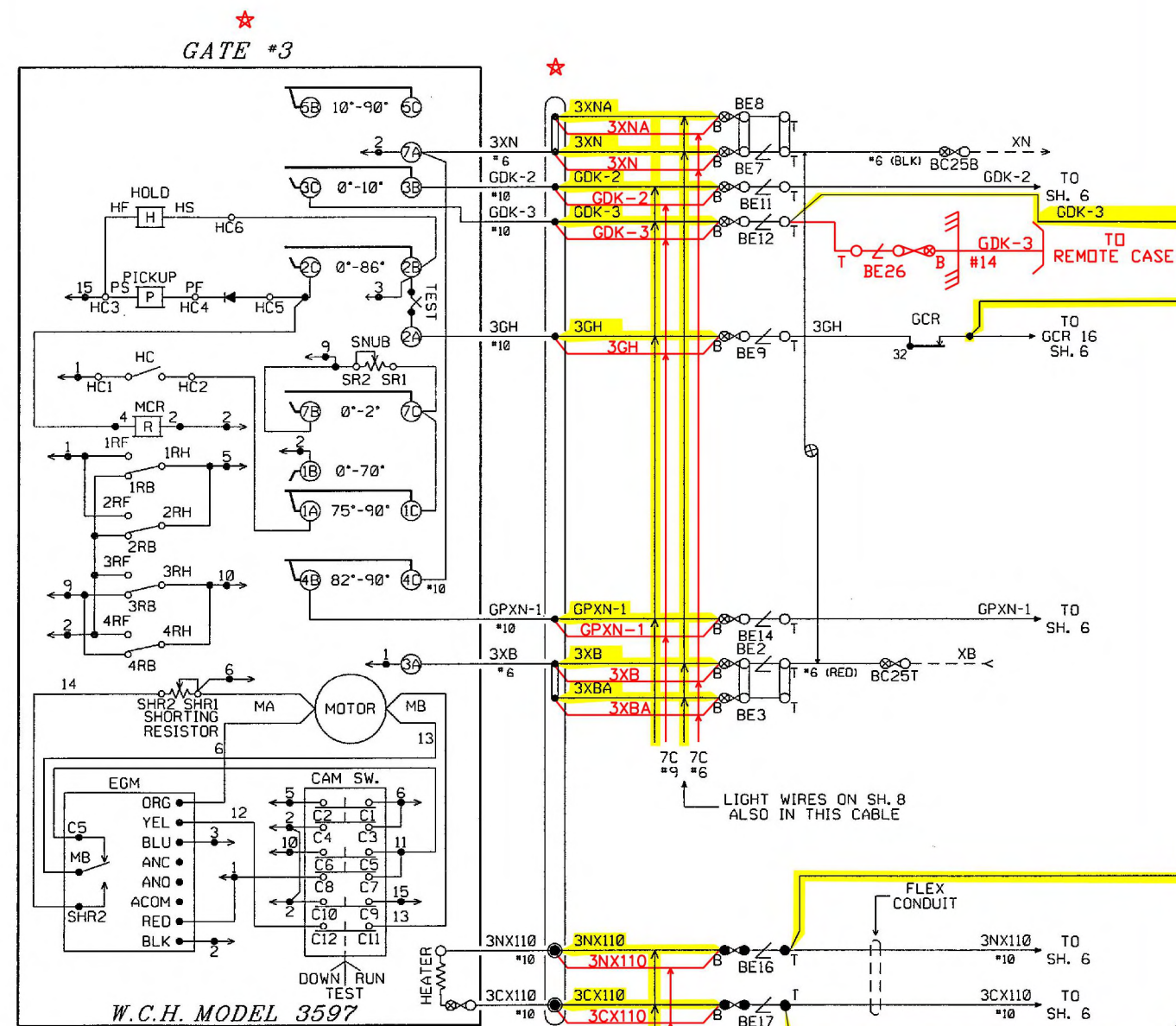
Balfour Beatty Rail, Inc.
 COURTHOUSE SQUARE TOWERS
 216 N. RIVER ST., SUITE 230
 WILKES BARRE, PA 18702

MARKWEST
 MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.
 DESIGNED: A.P.D.
 CHECKED: R.E.D.
 DATE: 04-02-12

CROSSING LAMP CIRCUITS
 SR-50
 WASHINGTON COUNTY, PENNSYLVANIA
 DOT# 966 038R MILEPOST # 1.0

DRAWING NO.
 812543-120
 SHEET 8 OF 17



NOTE: **★ GATE #3 RELOCATED/REUSED, REWIRED**

NOTE: 1. GATE MECHS SHOWN IN CLEAR POSITION.

RED = IN
YELLOW = OUT
NST
05/01/2025

REVISIONS

4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

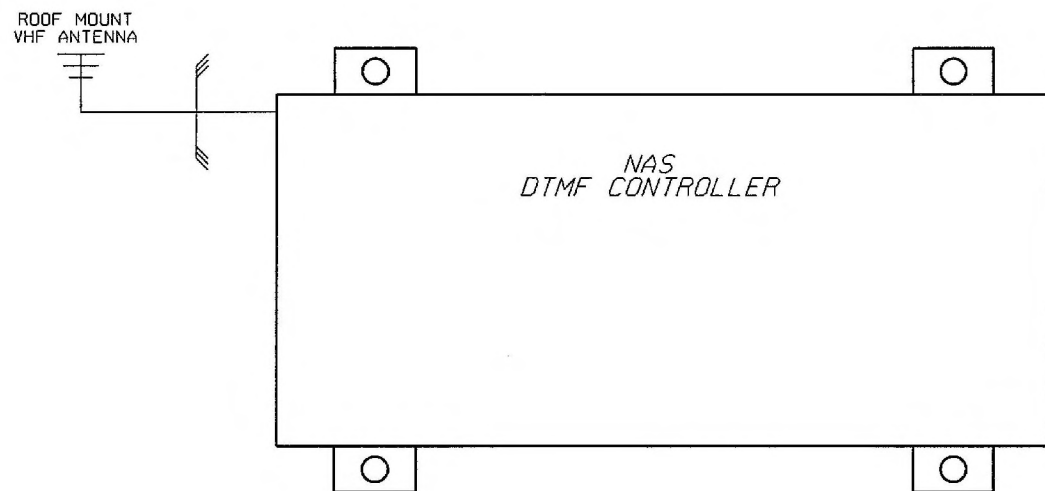
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Balfour Beatty Rail, Inc.

COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: R.E.D. DATE: 04-02-12	GATE CONTROL & MECHANISMS SR-50 WASHINGTON COUNTY, PENNSYLVANIA DOT# 966 038R MILEPOST # 1.0	DRAWING NO. 812543-120 SHEET 9 OF 17
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NAS CONTROLLER SOFTWARE CONFIGURATION

APPLICATION	FILE NAME	DATE	DESCRIPTION
DTMF EXEC	DTMFC14-S19	9-22-02	DTMF MODULE EXECUTIVE

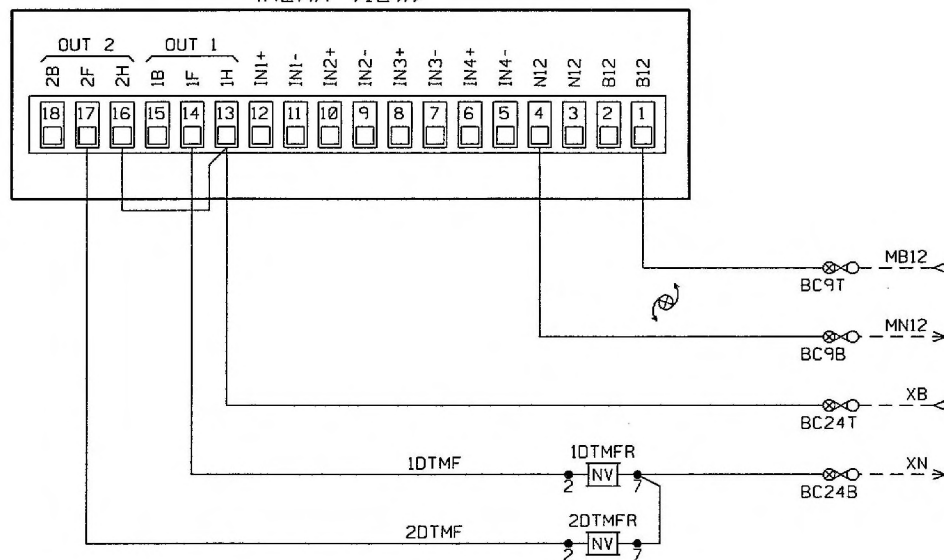
CHANNEL SELECTOR SWITCH

1	2	3	4	CHANNEL
0	0	0	0	8
0	0	CL	0	7
0	CL	0	0	6
0	CL	CL	0	5
CL	0	0	0	4
CL	0	CL	0	3
CL	CL	0	0	2
CL	CL	CL	0	1

SW2			
POSITION			
CLOSED			
OPEN	○	○	○

0 = SWITCH DOWN (OPEN POSITION)
 CL = SWITCH DOWN (CLOSED POSITION)

WAGO TERMINAL STRIP TB-1 (REAR VIEW)



CODE	DESCRIPTION
038 *	ACTIVATE CROSSING W/90 SEC TIMER
038 #	NORMAL CROSSING 038 * CODE
0381 *	ACTIVATE CROSSING
0381 #	NORMAL CROSSING

REVISIONS

NO.	DESCRIPTION	DATE
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13	
2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12	
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**Balfour Beatty
Rail, Inc.**

COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

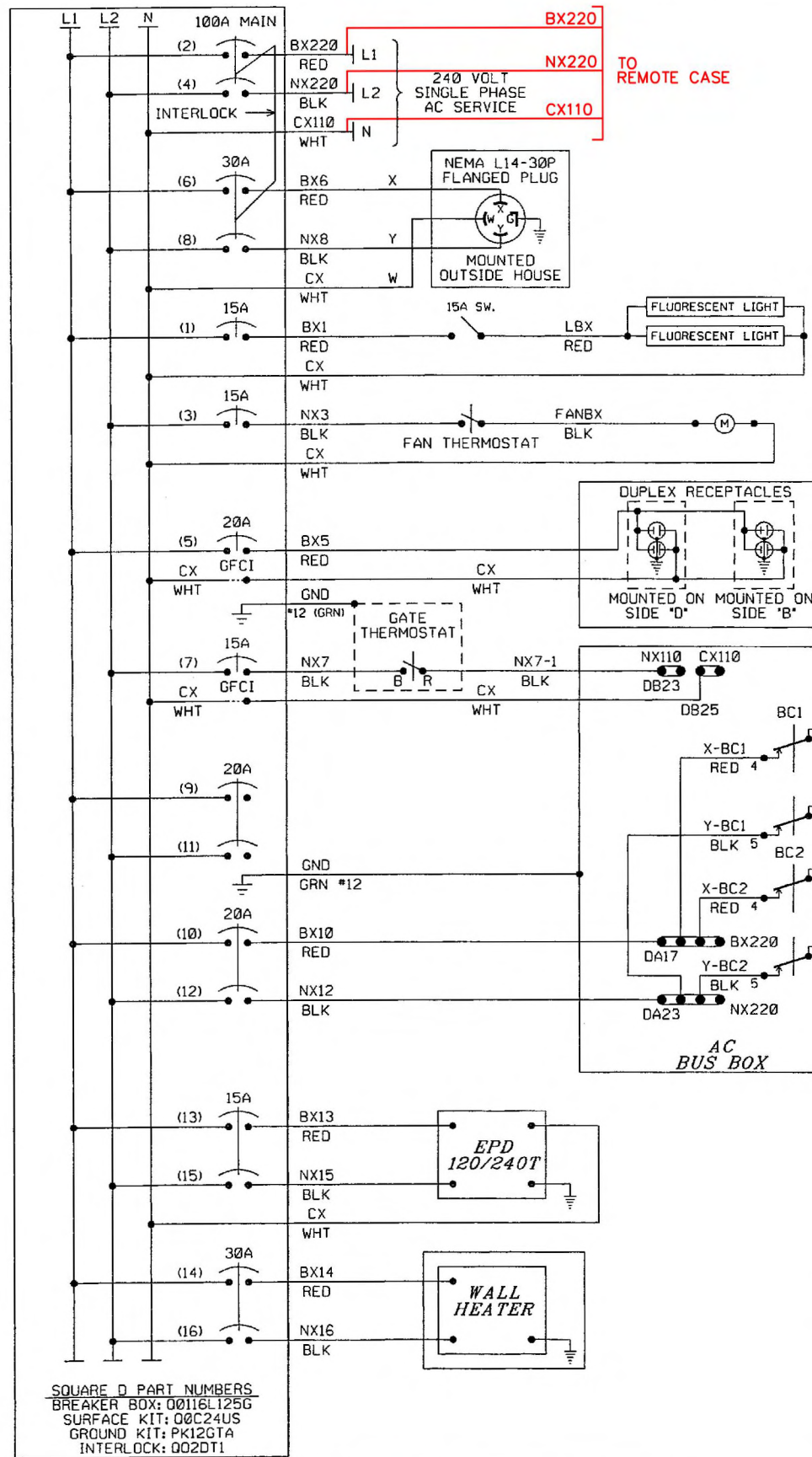
MARKWEST

MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: R.E.D.
DATE: 04-02-12

DTMF RADIO CONTROL CIRCUITS
SR-50
WASHINGTON COUNTY, PENNSYLVANIA
DOT# 966 038R MILEPOST = 1.0

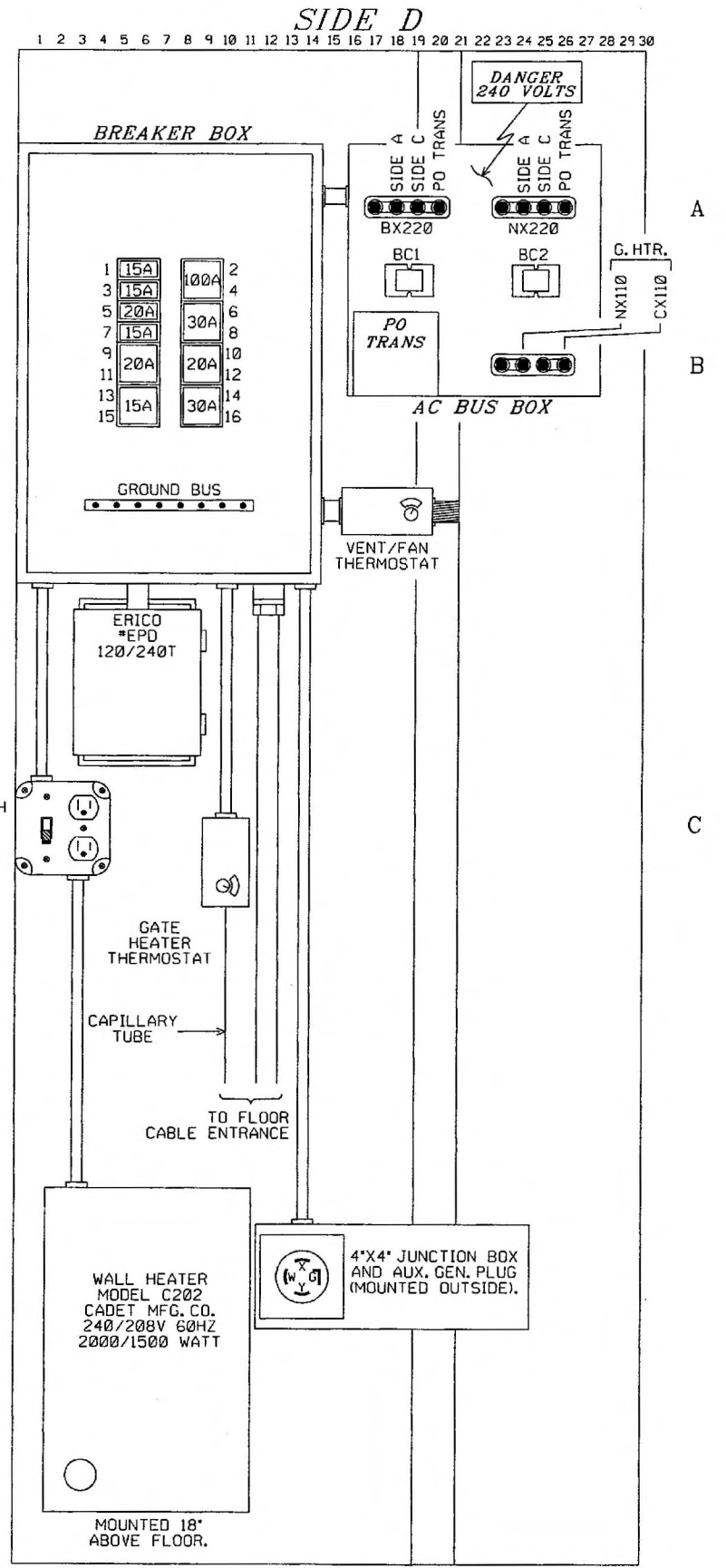
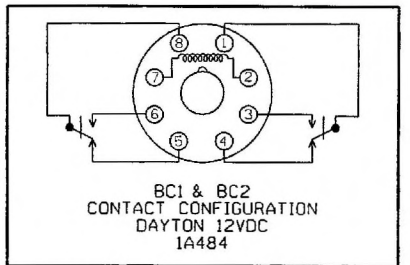
DRAWING NO.
812543-120
SHEET 12 OF 17



- NOTES:
- USE THE FOLLOWING COLOR CODE:
 GRN - GREEN - SAFETY EQUIPMENT GROUND
 WHT - WHITE - CX110 (NEUTRAL)
 BLK - BLACK - NX220 (L2)
 RED - RED - BX220 (L1)
 EXCEPTIONS TO THE ABOVE COLOR CODE ARE THE PRE-WIRED, SEALED ARRESTOR UNITS MOUNTED ON THE BREAKER BOX WHICH HAVE TWO BLACK AND ONE WHITE WIRE EACH.
 - MINIMUM WIRE SIZE
 10 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 OUTSIDE THE BUNGALOW MUST BE USED INSTEAD OF BREAKER TYPE.
 - ALL GROUND WIRES, THIS SHEET, RUN TO BREAKER BOX GROUND BUS

BX220
NX220
CX110
 TO REMOTE CASE

RED = IN
YELLOW = OUT
 NST
 05/01/2025



SQUARE D PART NUMBERS
 BREAKER BOX: 00116L125G
 SURFACE KIT: 00C24US
 GROUND KIT: PK12GT
 INTERLOCK: 002DT1

REVISIONS

4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

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Balfour Beatty
 Rail, Inc.

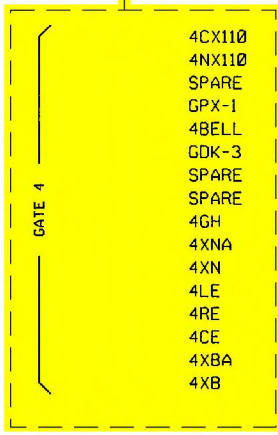
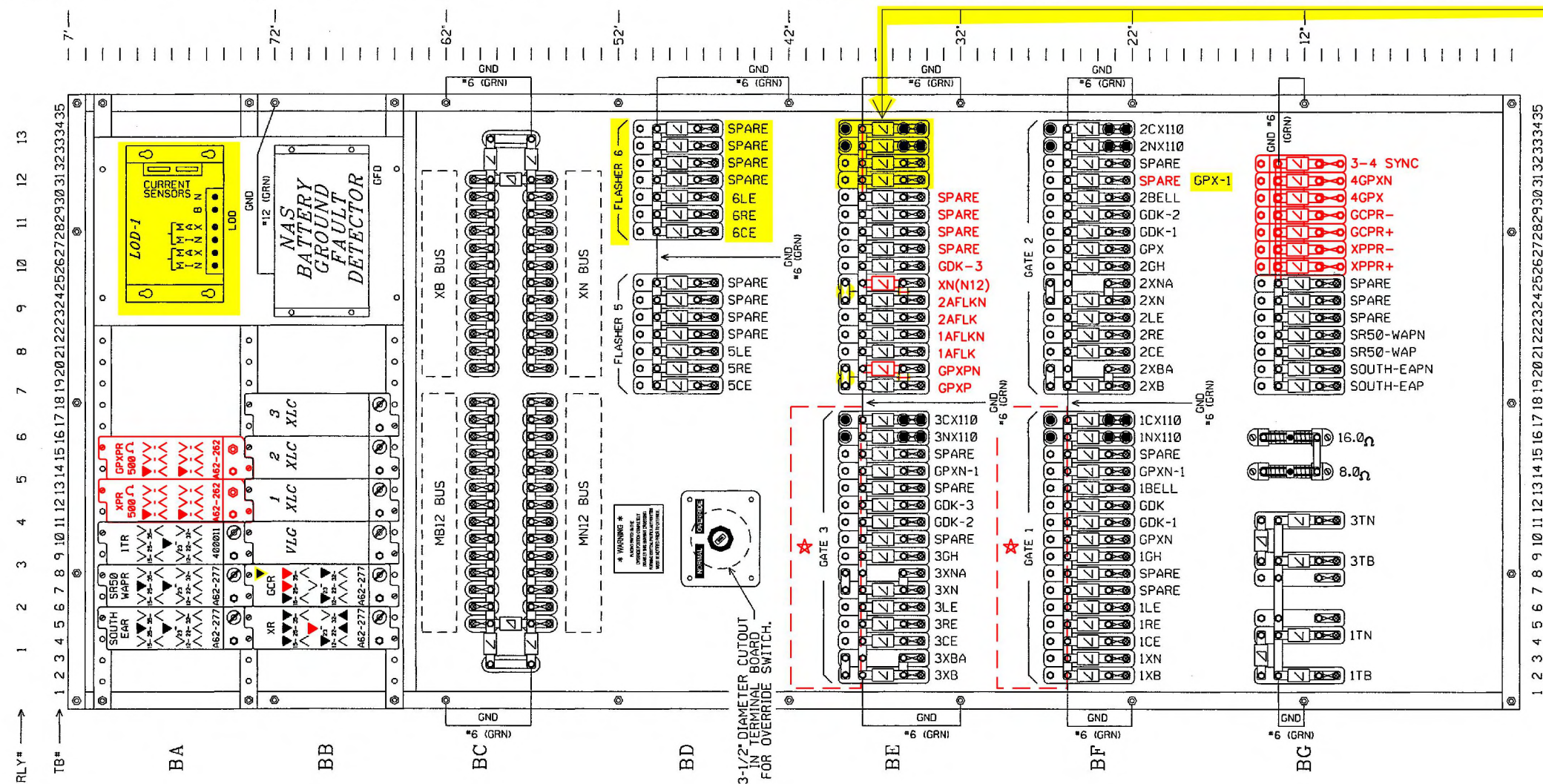
COURTHOUSE SQUARE TOWERS
 216 N. RIVER ST., SUITE 230
 WILKES BARRE, PA 18702

MARKWEST
 MarkWest Liberty Midstream and Resources, LLC

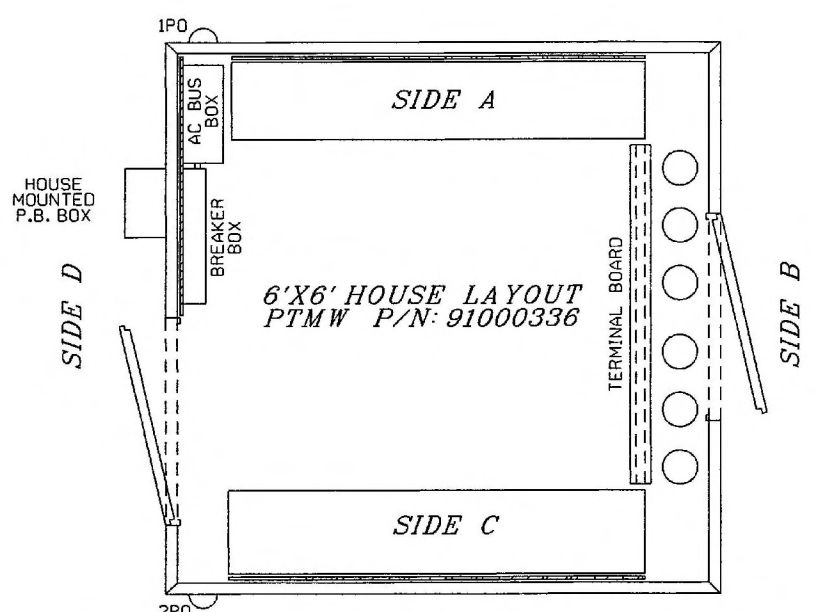
DRAWN: A.P.D.
 DESIGNED: A.P.D.
 CHECKED: R.E.D.
 DATE: 04-02-12

AC POWER DISTRIBUTION
 SR-50
 WASHINGTON COUNTY, PENNSYLVANIA
 DOT# 966 038R MILEPOST # 1.0

DRAWING NO.
 812543-120
 SHEET 13 OF 17



7'-0" X 36" TERMINAL BOARD



BC BATTERY BUS DETAILS		BC	
GFD B1	18	GFD N1	31
PMR 8	17	HCA DI14(-)	30
AA37T	16	HCA AI01(-)	29
GFD BATT+	15	GFD BATT-	28
GCR 25	14	LOD N	27
IDTMFR 1; SR50-WAPR	24	BE19T; BF19T	26
VLG 16	12	BE2T; BF2T	25
TEST CB1 2	11	(6CE) BD28T; DTMF 1H	24
TD-1A B/ACG-2T B	10	XR 21; XR 26	23
DTMF B12	9	HCA B	22
XPR 12; SCX-1 B	8	SCX-1 N; XPR 15	21
XR 13; XR 31	7	XR 16	20
XR 23; OR CB1 4	6	OR CB2 4; XPR 1E	
MB12 BATT+	5	MB12 BATT-	
MB12 BUS (TOP)		MN12 BUS (BOTTOM)	
		XB BATT+	31
		(4CE) BE21T; 1XLC 24	30
		(3CE) BE4T; 2XLC 24	29
		3XLC 24; (2CE) BF21T	28
		(5CE) BD19T; (1CE) BF4T	27
		BE19T; BF19T	26
		BE2T; BF2T	25
		(6CE) BD28T; DTMF 1H	24
		XR 21; XR 26	23
		HCA B	22
		SCX-1 N; XPR 15	21
		XR 16	20
		OR CB2 4; XPR 1E	
		MB12 BATT-	
		XB BUS (TOP)	
		XN BUS (BOTTOM)	

RED = IN
YELLOW = OUT
NST
05/01/2025

NOTE:
★ GATE #1 & #3 RELOCATED/REUSED, REWIRED

REVISIONS

4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 IT I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. MR DWG MR005 GETS-GS 07-09-12

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

Balfour Beatty
Rail, Inc.

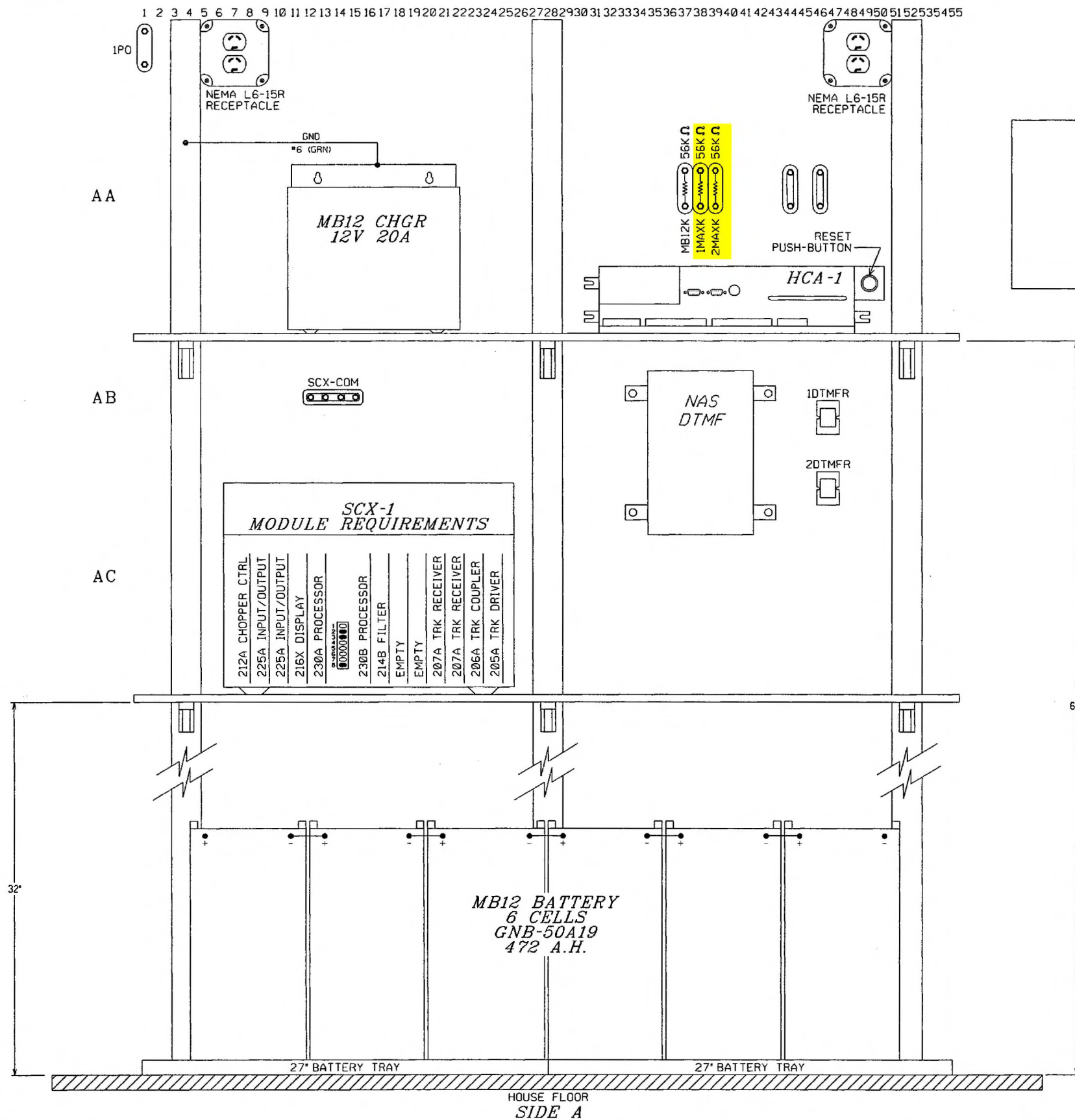
COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: R.E.D.
DATE: 04-02-12

TERMINAL BOARD
SR-50
WASHINGTON COUNTY, PENNSYLVANIA
DOT# 966 038R MILEPOST # 1.0

DRAWING NO.
812543-120
SHEET 14 OF 17



RED = IN
 YELLOW = OUT
 NST
 05/01/2025

REVISIONS

4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25
3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 1T I.J. GETS-GS 07-30-12
1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

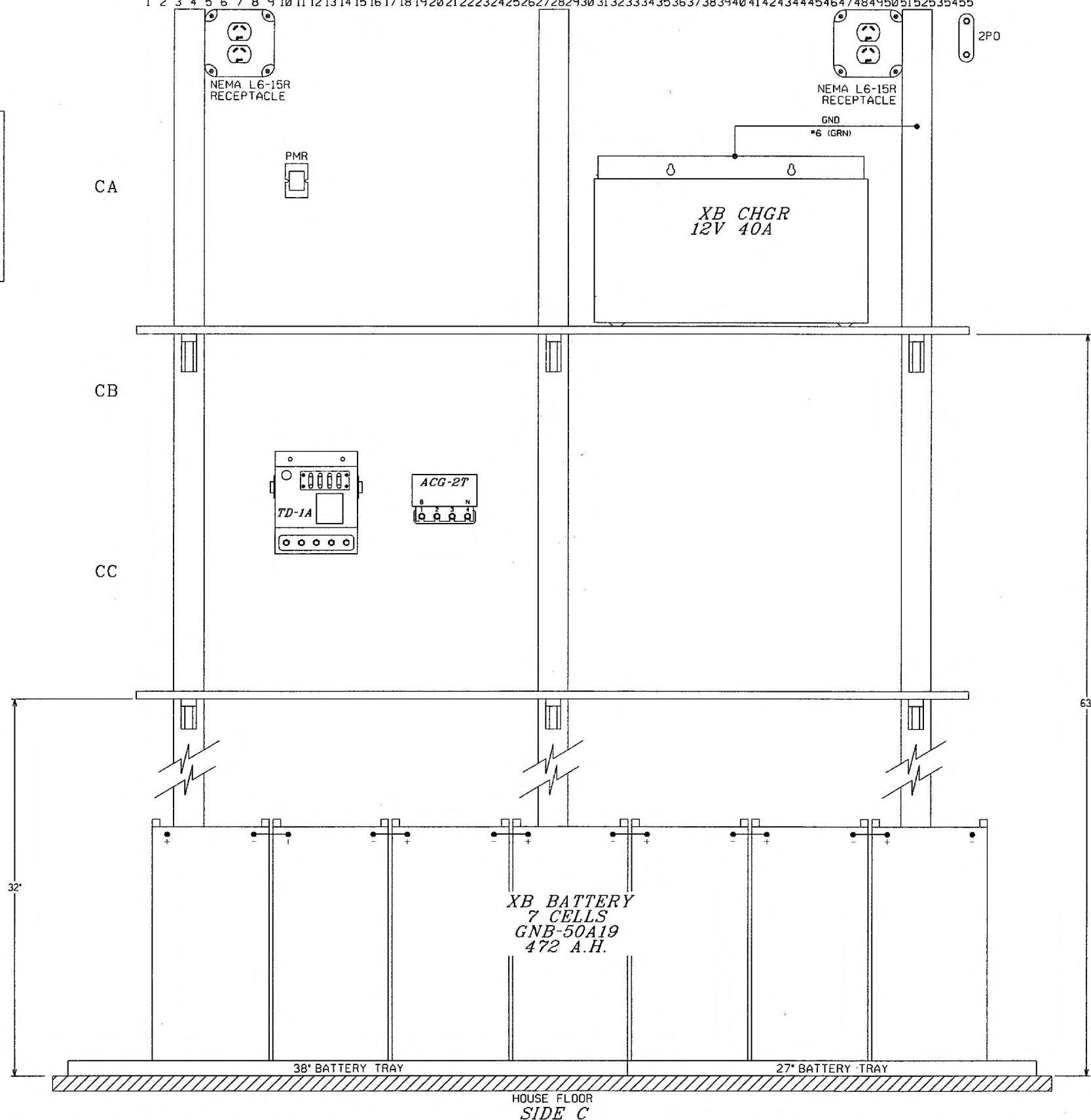
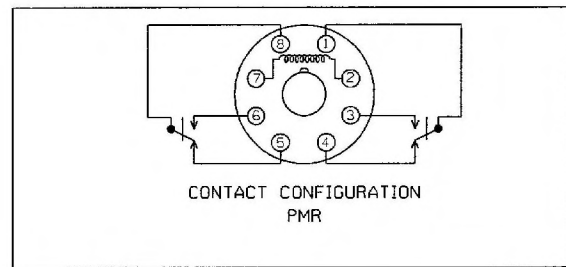
THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

**Balfour Beatty
 Rail, Inc.**
 COURTHOUSE SQUARE TOWERS
 216 N. RIVER ST., SUITE 230
 WILKES BARRE, PA 18702

MARKWEST
 MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: R.E.D. DATE: 04-02-12	SIDE A LAYOUT SR-50 WASHINGTON COUNTY, PENNSYLVANIA DOT# 966 038R MILEPOST # 1.0	DRAWING NO. 812543-120 SHEET 15 OF 17
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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55



32'

63'

38" BATTERY TRAY 27" BATTERY TRAY

HOUSE FLOOR
SIDE C

REVISIONS

3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13	2	RELOCATE CANT. #2 & 1T I.J. GETS-GS 07-30-12	1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12
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THE OPERATION OF THE CIRCUITS AND EQUIPMENT REPRESENTED HEREIN CANNOT BE FULLY CHECKED UNTIL ALL CIRCUITS AND DEVICES ARE CONNECTED TO FORM A COMPLETE SYSTEM, OR AN EFFECTIVE SUBSYSTEM, SUCH SYSTEM OR SUBSYSTEM MUST BE GIVEN COMPLETE CIRCUIT AND OPERATIONAL TESTS BEFORE BEING PLACED IN REGULAR OPERATION.

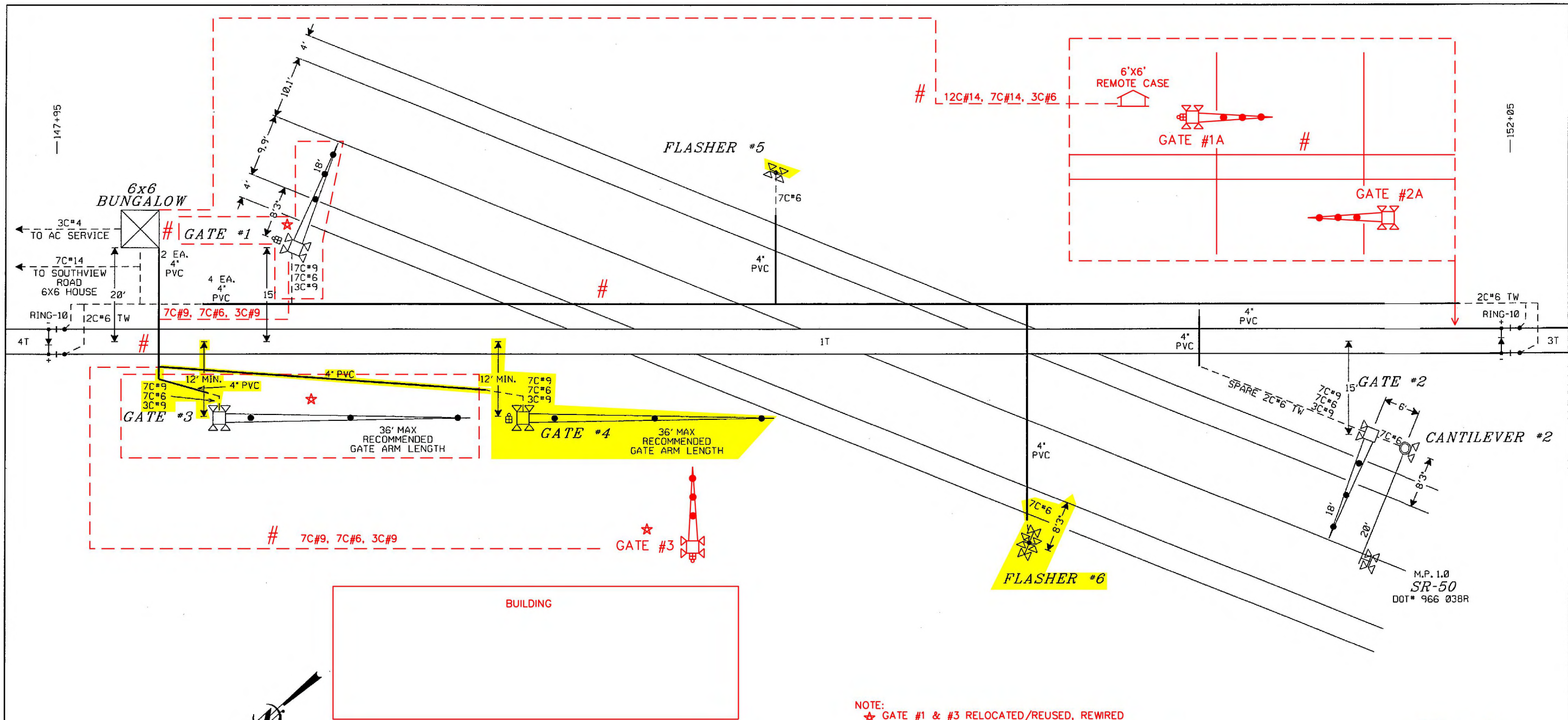
Balfour Beatty
Rail, Inc.
COURTHOUSE SQUARE TOWERS
216 N. RIVER ST., SUITE 230
WILKES BARRE, PA 18702

MARKWEST
MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D.
DESIGNED: A.P.D.
CHECKED: R.E.D.
DATE: 04-02-12

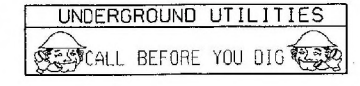
SIDE C LAYOUT
SR-50
WASHINGTON COUNTY, PENNSYLVANIA
DOT# 966 038R MILEPOST = 1.0

DRAWING NO.
812543-120
SHEET 16 OF 17



NOTE:
 ★ GATE #1 & #3 RELOCATED/REUSED, REWIRED
 # FIELD TO VERIFY CONDUIT/CABLE RUNS AND DISTANCES

RED = IN
 YELLOW = OUT
 NST
 05/01/2025



ALL DIMENSIONS SHOWN AS TYPICAL.
 FIELD TO VERIFY ALL FOUNDATION PLACEMENTS.

LEGEND:
 ——— RIGID CONDUIT
 - - - - - UNDERGROUND CABLE

REVISIONS			
4	ADD REMOTE CASE, ADD NEW GATES AND RELOCATE AS REQUESTED NST 05-01-25	3	UPDATE AIS 3-8-13 ADD AC/DC TK GETS-GS 4-3-13
2	RELOCATE CANT. #2 & I.J. GETS-GS 07-30-12	1	DOT/MP UPDATE SIG. PER DWG MR005 GETS-GS 07-09-12

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

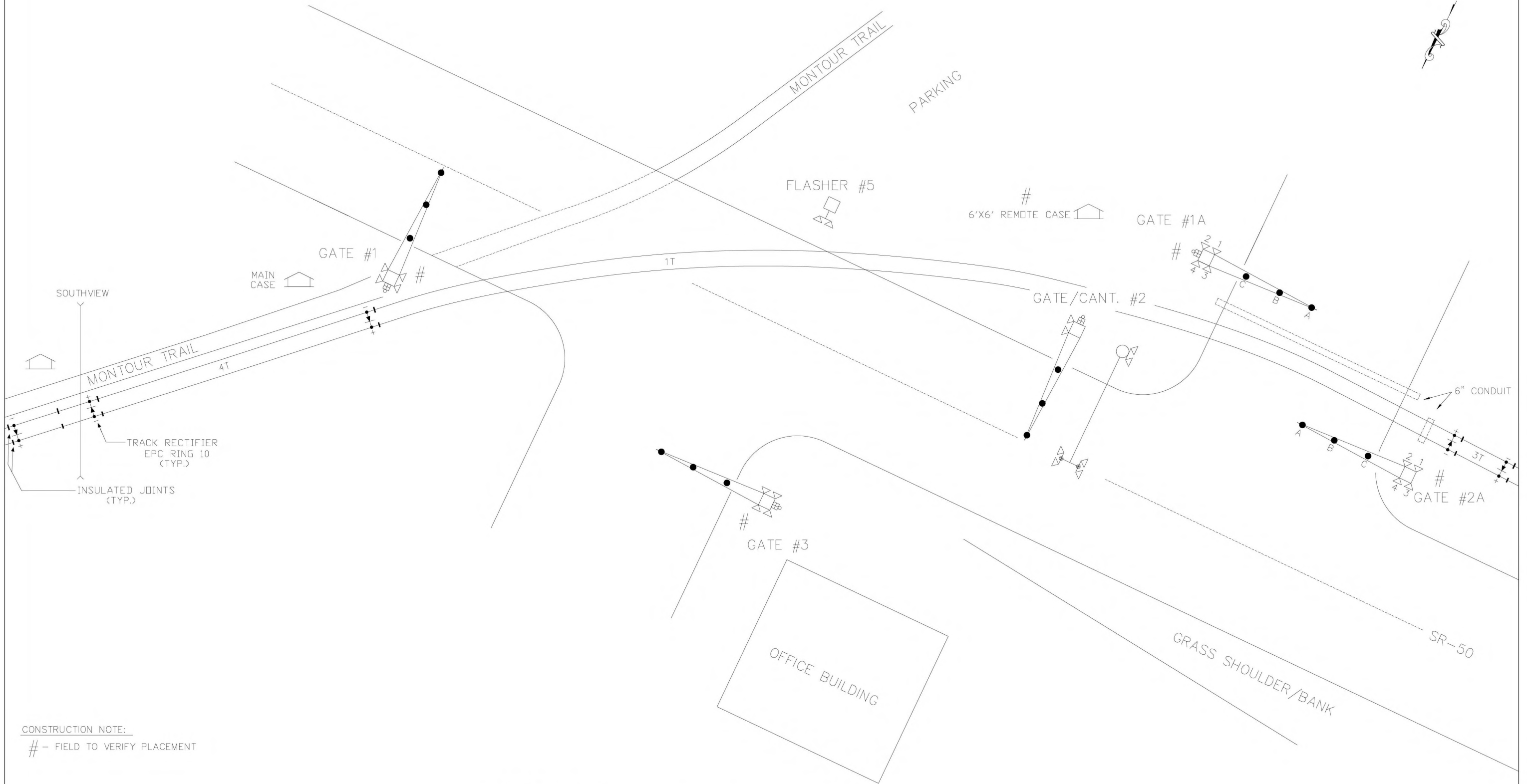
Balfour Beatty Rail, Inc.
 COURTHOUSE SQUARE TOWERS
 216 N. RIVER ST., SUITE 230
 WILKES BARRE, PA 18702

MARKWEST
 MarkWest Liberty Midstream and Resources, LLC

DRAWN: A.P.D. DESIGNED: A.P.D. CHECKED: R.E.D. DATE: 04-02-12	CABLE & FOUNDATION PLAN SR-50 WASHINGTON COUNTY, PENNSYLVANIA DOT* 966 038R MILEPOST = 1.0	DRAWING NO. 812543-120 SHEET 17 OF 17
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← EAST

WEST →



CONSTRUCTION NOTE:

- FIELD TO VERIFY PLACEMENT

NOTES:

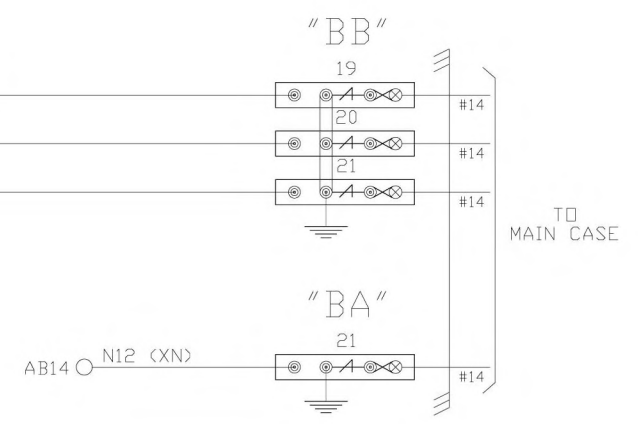
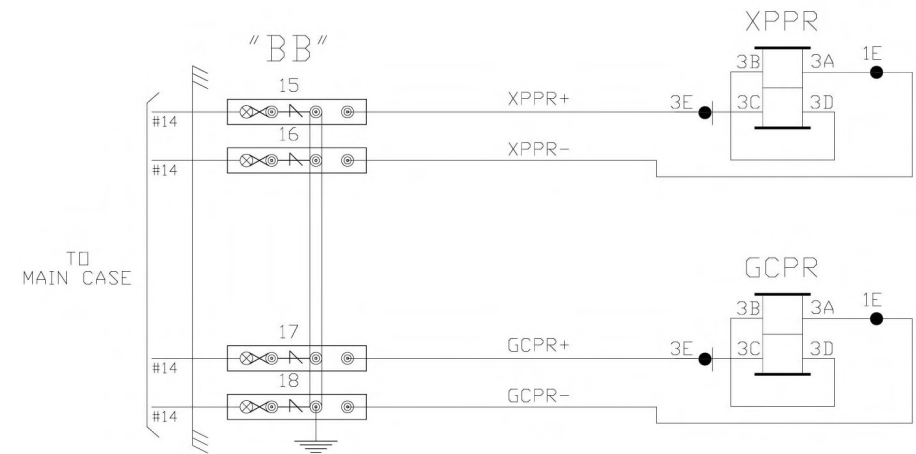
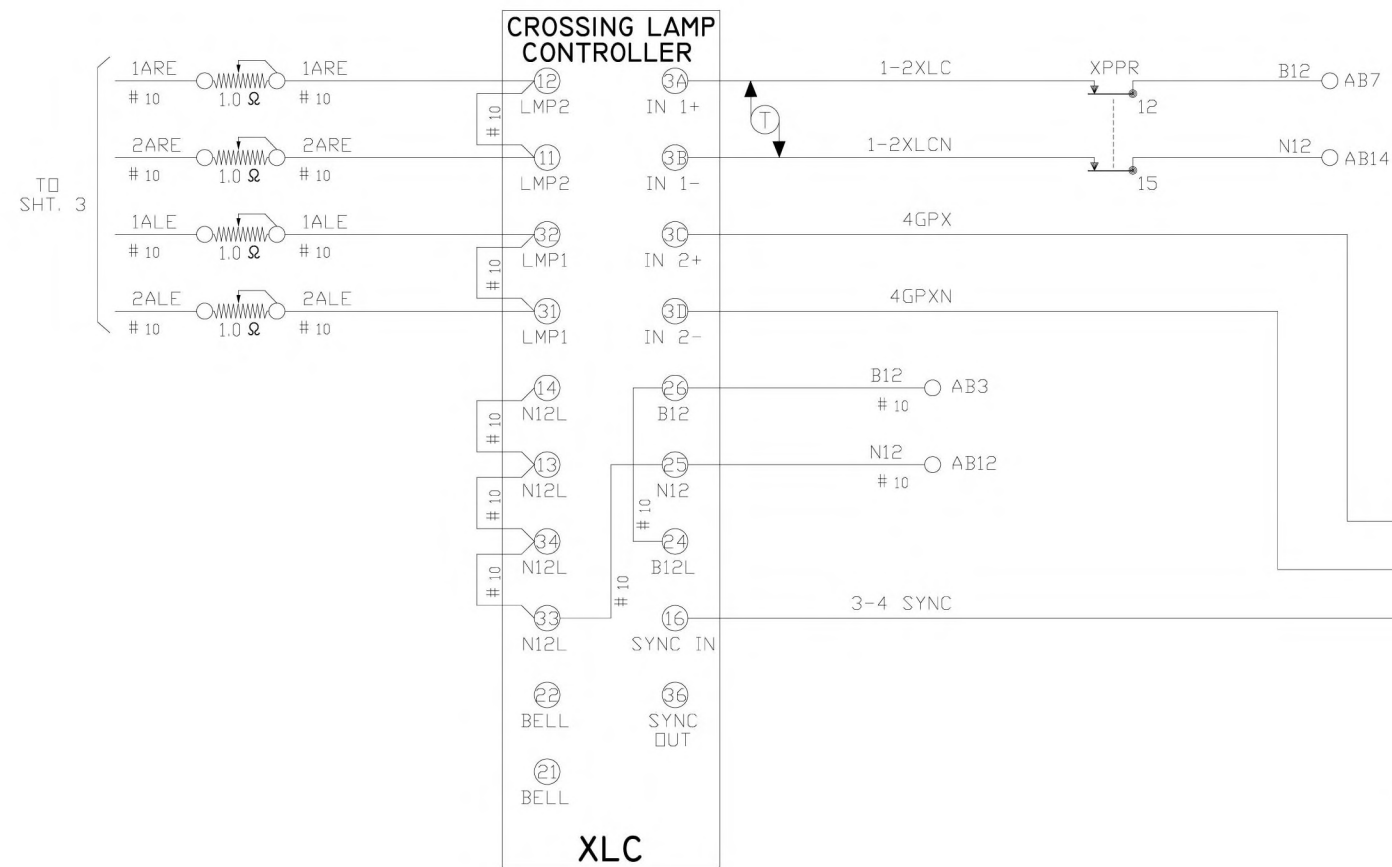
1. MATERIAL & INSTALLATION TO BE IN ACCORDANCE WITH MUTCD, STATE AND RAILROAD STANDARDS.
2. ALL DIMENSIONS ARE APPROXIMATE AND MAY VARY DUE TO ACTUAL FIELD CONDITIONS.
3. FLASHLIGHT SIGNALS & GATE LIGHTS TO BE LIGHT EMITTING DIODE ASSEMBLIES, (LED).
4. Ⓢ DENOTES TWIST PAIR.

CABLE RUN TABULATION

- REMOTE HOUSE TO GATE #1A - 7/C #6 UG CABLE
- 7/C #9 UG CABLE
- REMOTE HOUSE TO GATE #2A - 7/C #6 UG CABLE
- 7/C #9 UG CABLE
- REMOTE HOUSE TO MAIN HOUSE - 3/C #6 UG CABLE
- 12/C #14 UG CABLE
- 7/C #14 UG CABLE

AS WIRED XX/XX/XXXX AS INSTALLED XX/XX/XXXX

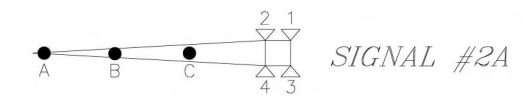
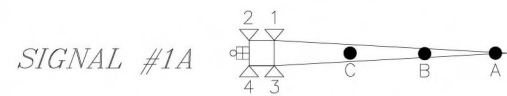
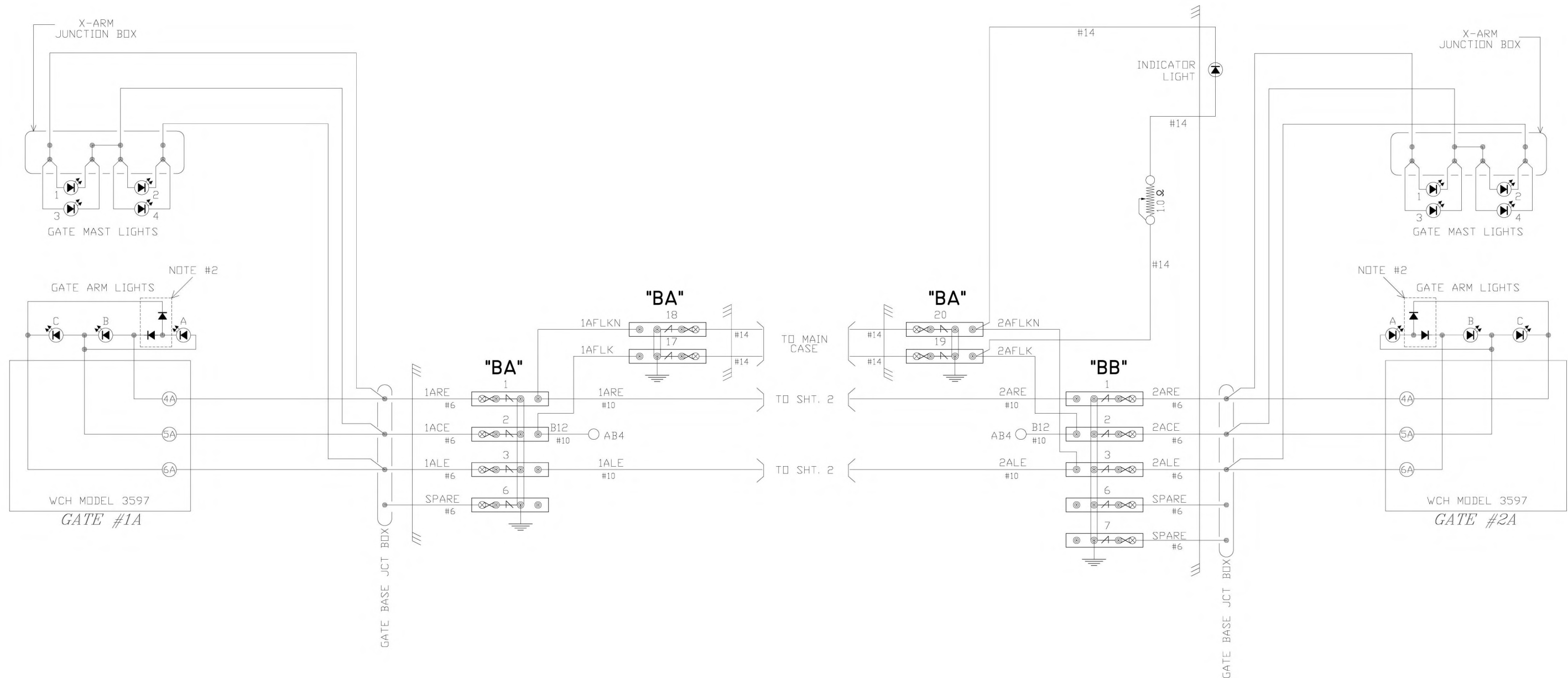
DIAMONDBACK SIGNAL (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	WHEELING & LAKE ERIE RAILWAY RAILROAD CROSSING WARNING DEVICES		SCALE: NONE	APPROVED BY:	DRAWN BY: NST
	DATE: 05/01/2025	SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00 MCDONALD, WASHINGTON COUNTY, PA		REVISED:	DRAWING NUMBER
	CROSSING LAYOUT				



NOTES:

1. ALL WIRE THIS SHEET IS #14 AWG. FLEX UNLESS OTHERWISE NOTED.
2. DENOTES TWISTED PAIR.

DIAMONDBACK SIGNAL (410) 795-9601 5965 EXCHANGE DRIVE SUITE 'D' SYKESVILLE, MD 21784		AS WIRED XX/XX/XXXX		AS INSTALLED XX/XX/XXXX	
		WHEELING & LAKE ERIE RAILWAY RAILROAD CROSSING WARNING DEVICES			
SCALE: NONE	APPROVED BY:	DATE: 05/01/2025		DRAWN BY: NST	
SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00 MCDONALD, WASHINGTON COUNTY, PA				REVISED:	
CIRCUIT PLAN "A"				DRAWING NUMBER	

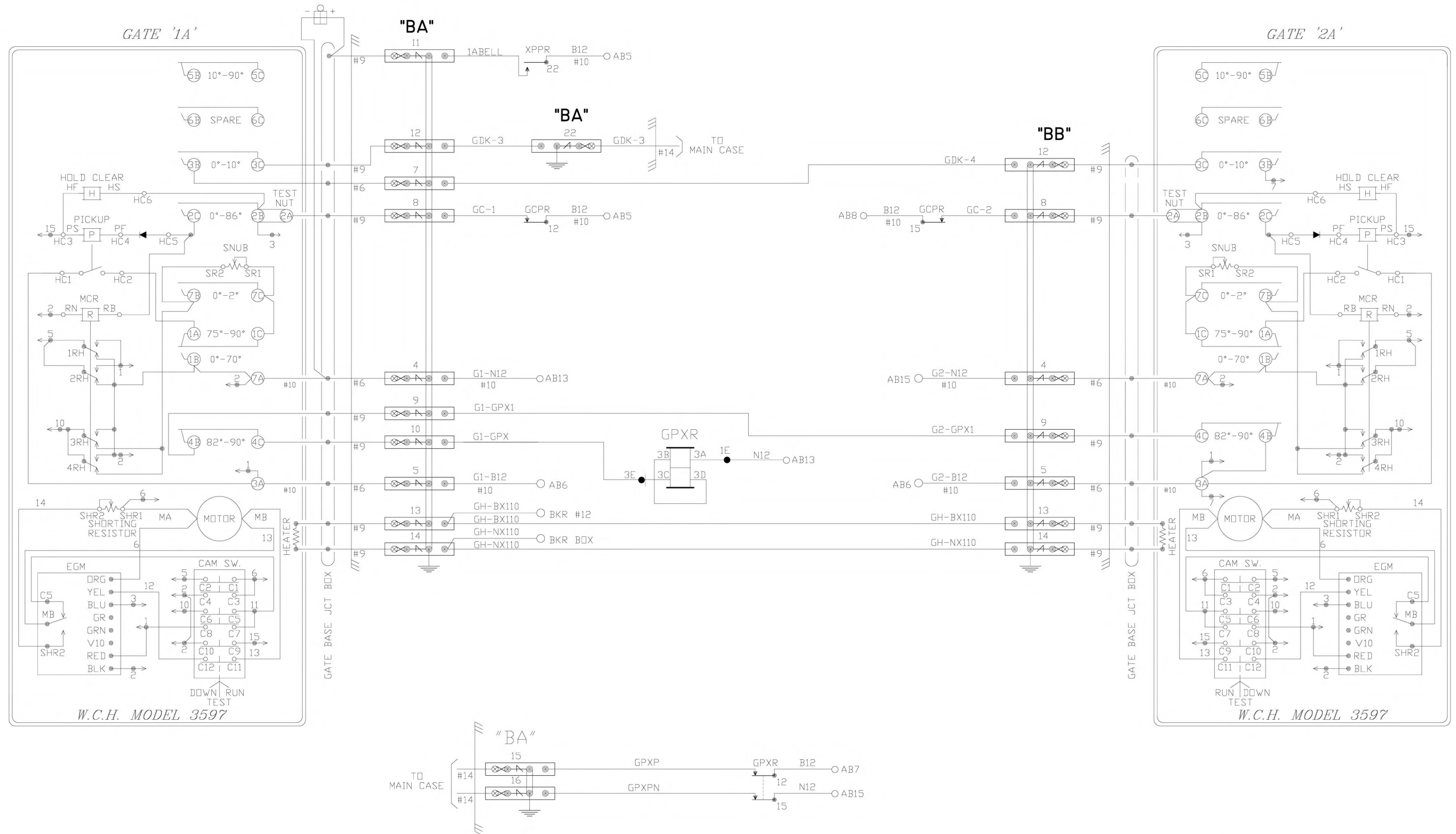


NOTES:

1. ALL WIRING TO BE #10 AWG UNLESS OTHERWISE NOTED.
2. GETS-GS P/N 076045-300 FOR USE WITH RECD EZLED LAMPS AND PLUG CABLES.
3. = LED SIGNAL LAMP WITH 8.5 16 VOLT WORKING VOLTAGE.

AS WIRED XX/XX/XXXX AS INSTALLED XX/XX/XXXX

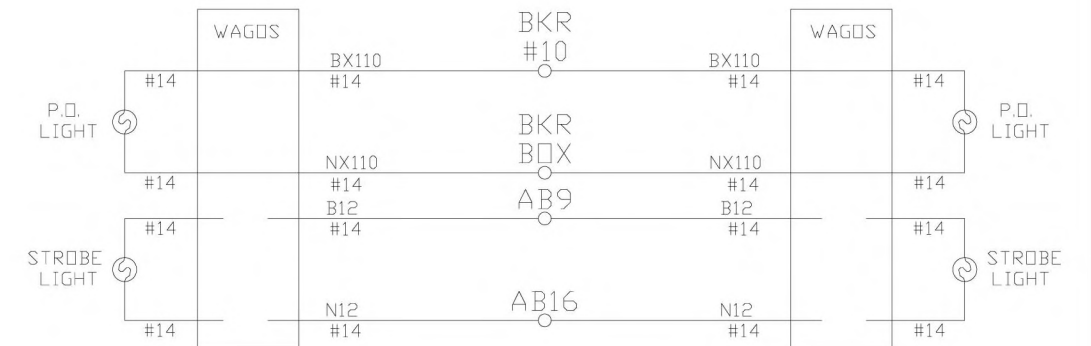
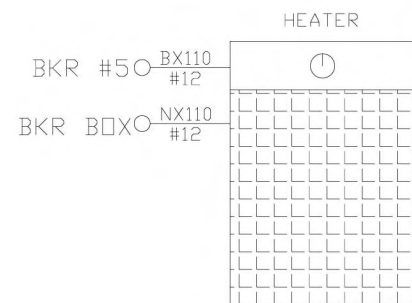
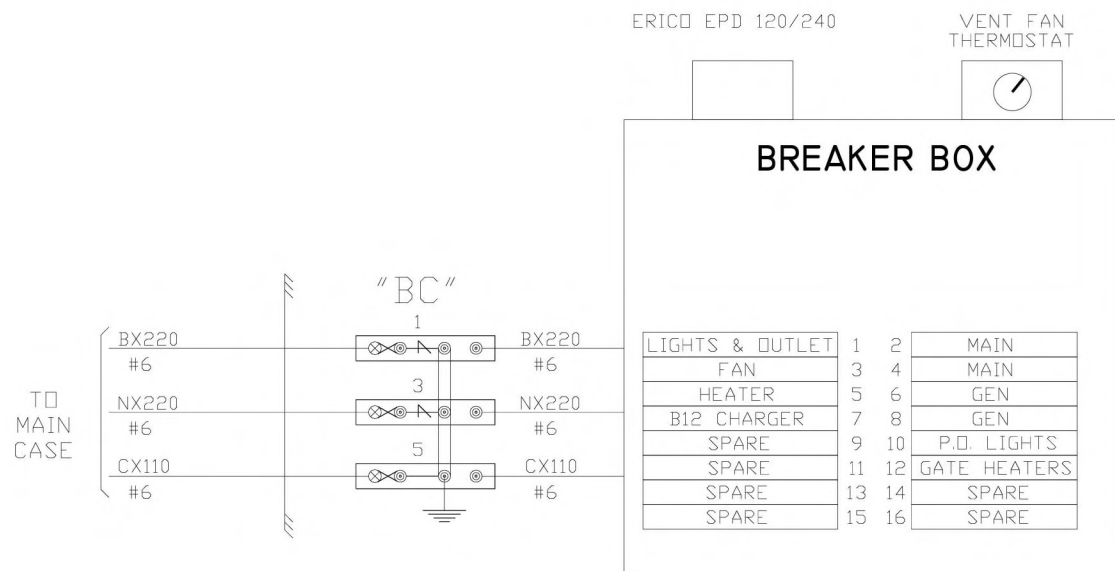
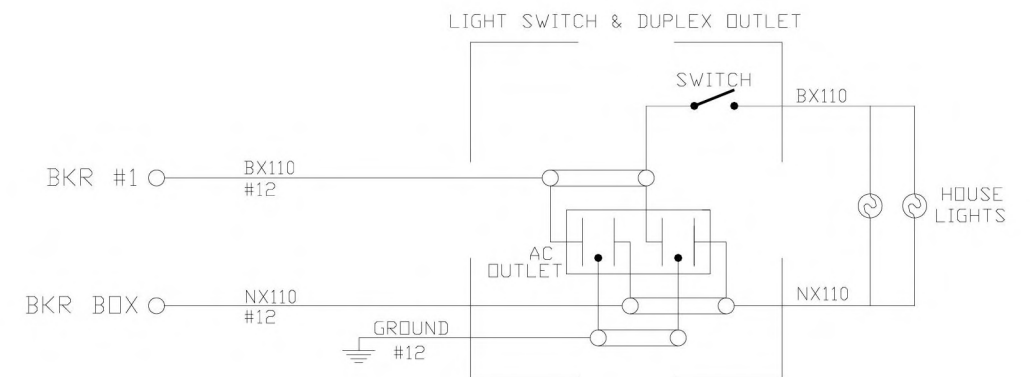
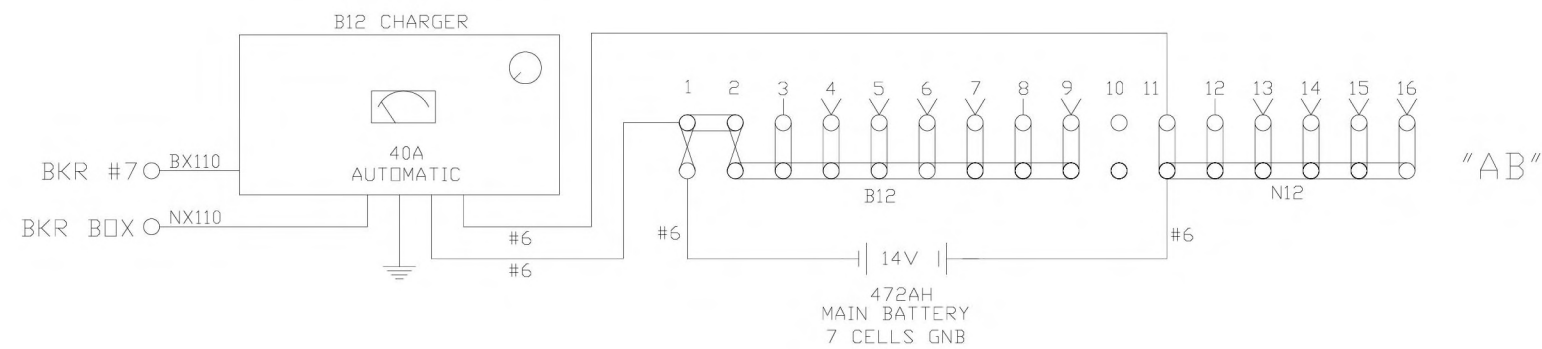
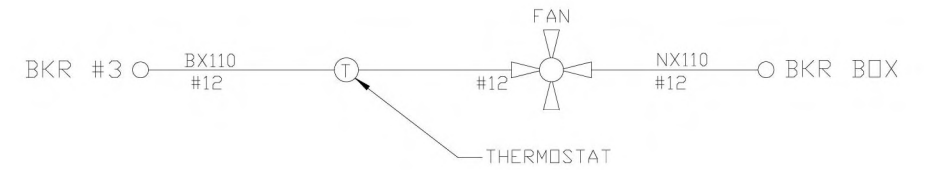
DIAMONDBACK SIGNAL		WHEELING & LAKE ERIE RAILWAY RAILROAD CROSSING WARNING DEVICES	
		SCALE: NONE	APPROVED BY:
(410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784		DATE: 05/01/2025	REVISED:
SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00 MCDONALD, WASHINGTON COUNTY, PA			DRAWING NUMBER
CIRCUIT PLAN "B"			



- NOTES:
1. ALL WIRING TO BE #14 AWG UNLESS OTHERWISE NOTED.
 2. GATE MECHS SHOWN IN CLEAR POSITION.

AS WIRED XX/XX/XXXX AS INSTALLED XX/XX/XXXX

DIAMONDBACK SIGNAL		WHEELING & LAKE ERIE RAILWAY RAILROAD CROSSING WARNING DEVICES	
		SCALE: NONE	APPROVED BY:
(410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784		DATE: 05/01/2025	REVISED:
SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00 MCDONALD, WASHINGTON COUNTY, PA			BRAWING NUMBER
CIRCUIT PLAN "C"			



NOTE:
ALL WIRE THIS SHEET IS #10 AWG FLEX
UNLESS OTHERWISE NOTED.

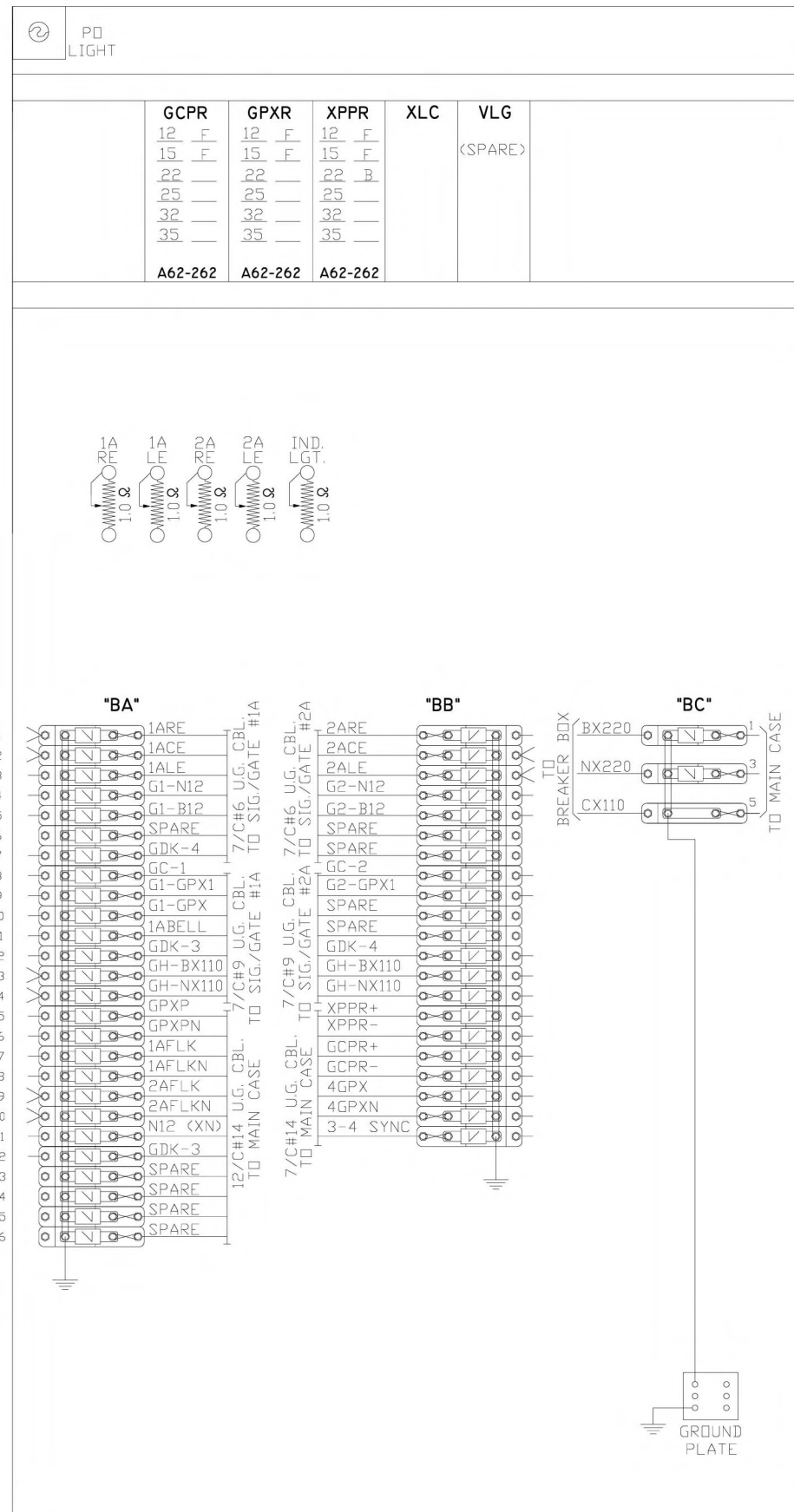
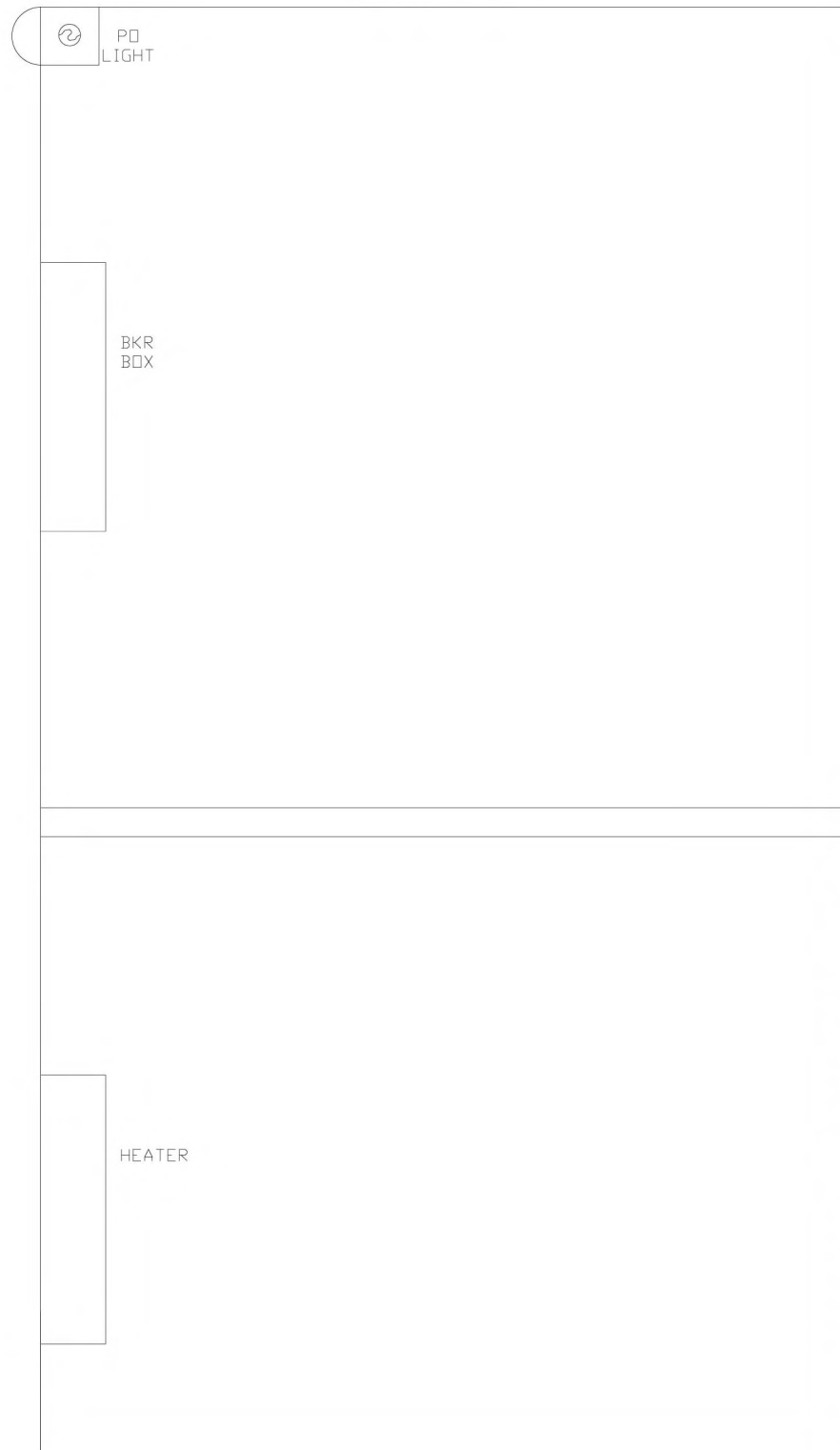
AS WIRED XX/XX/XXXX AS INSTALLED XX/XX/XXXX

DIAMONDBACK SIGNAL (410) 795-9601 5965 EXCHANGE DRIVE SUITE "D" SYKESVILLE, MD 21784	WHEELING & LAKE ERIE RAILWAY RAILROAD CROSSING WARNING DEVICES		DRAWN BY: NST
	SCALE: NONE	APPROVED BY:	REVISION:
	DATE: 05/01/2025	SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00 MCDONALD, WASHINGTON COUNTY, PA	
	CIRCUIT PLAN "D"		

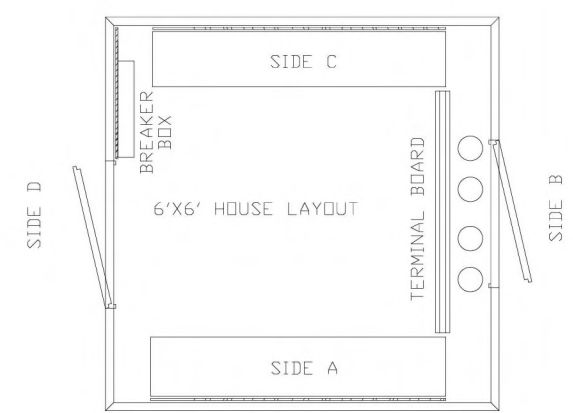
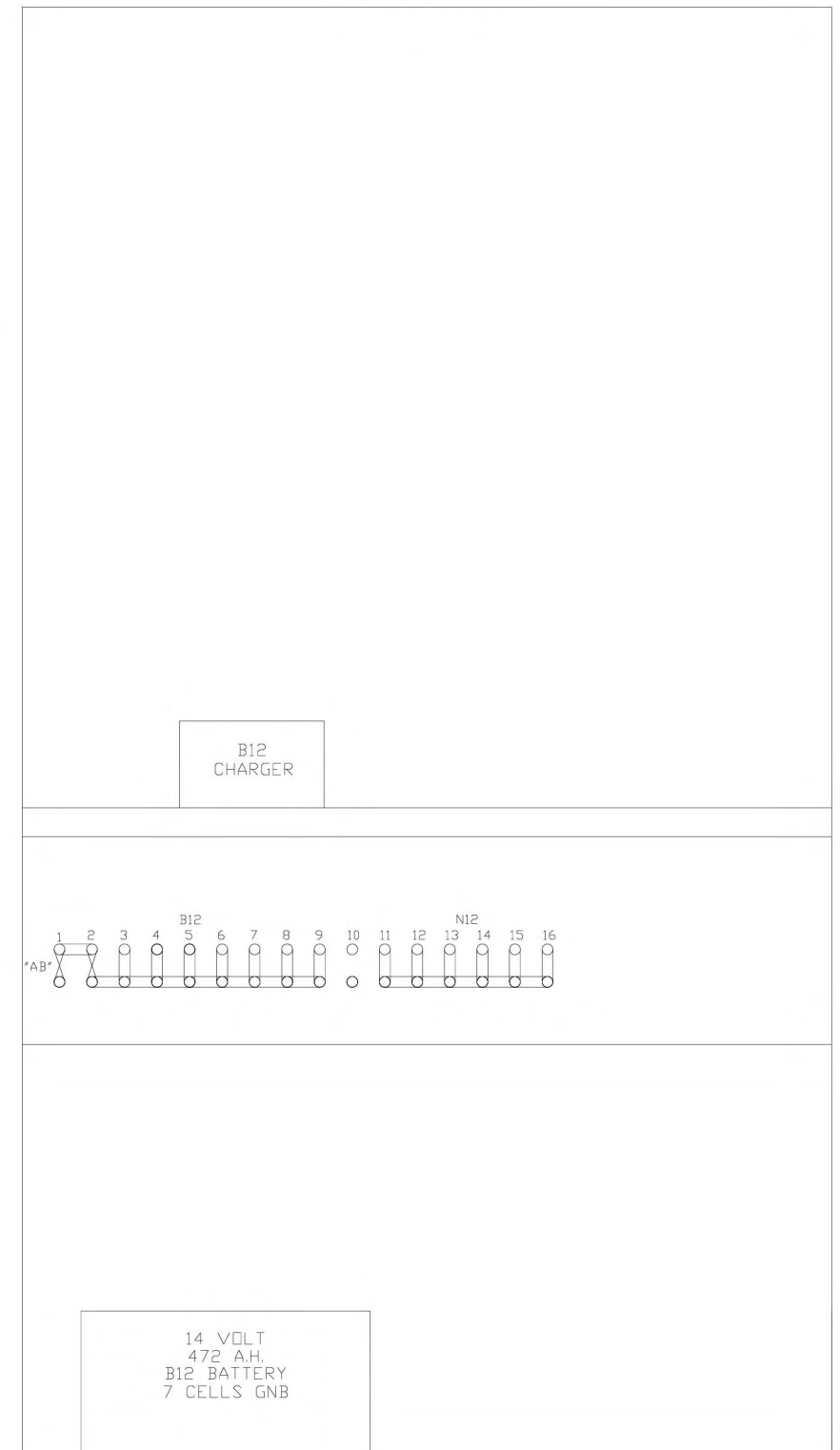
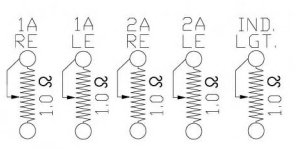
SIDE "C"

SIDE "B"

SIDE "A"



GCPR	GPXR	XPPR	XLC	VLG
12 F	12 F	12 F		(SPARE)
15 F	15 F	15 F		
22	22	22 B		
25	25	25		
32	32	32		
35	35	35		
A62-262	A62-262	A62-262		



AS WIRED XX/XX/XXXX AS INSTALLED XX/XX/XXXX

DIAMONDBACK SIGNAL

WHEELING & LAKE ERIE RAILWAY
RAILROAD CROSSING WARNING DEVICES

(410) 795-9601
5965 EXCHANGE DRIVE
SUITE "D"
SYKESVILLE, MD
21784

SCALE: NONE APPROVED BY: DRAWN BY: NST
DATE: 05/01/2025 REVISED:

SR-50 (REMOTE) - DOT# 966 038R - M.P. 1.00
MCDONALD, WASHINGTON COUNTY, PA

RELAY HOUSE LAYOUT DRAWING NUMBER