CROSSING DISABLE PROCEDURE

Street: **Yellow Banks Rd.**
Line Segment: **0013**
Mile Post: **163.30**
Plan Revision Date: **7/06/10**

Note: If the latest date stamp on the plan set is after the Plan Revision Date above, then this procedure is **VOID**.

Before following the Crossing Disable Procedure, comply with Signal Instruction 7.2, 7.2A, 7.2B, 7.2C as appropriate. An understanding of the highway/railroad crossing circuits is required before any work is performed.

IF YOU ARE UNSURE OF ANY OF THESE PROCEDURES, CONSULT YOUR SUPERVISOR.

Disable one approach (from Signal Instruction 7.2):

a. Shunt affected approach outside of the island and as close to track work as practicable.
b. Crossing should recover in approximately 20 seconds.
c. Verify crossing island circuit is effective.
d. Test unaffected track and approaches to make sure crossing warning system operates properly.

Note: Depending on location, the placement of the shunt may cause short or zero warning time for the opposite approach. Shunt placement may also cause short or zero warning time for the adjacent crossings. Before placing any shunts, verify if the adjacent crossings will be affected and insure that proper procedures have been followed to protect those crossings.

Disable both approaches but not the island (from Signal Instruction 7.2):

a. Shunt both approaches outside island and as close to track work as practicable in both directions.
b. Crossing should recover in approximately 20 seconds.
c. Verify crossing island circuit is effective.
d. Test unaffected track and approaches to make sure crossing warning system operates properly.

Note: Depending on location, the placement of the shunt(s) may cause short or zero warning time for the adjacent crossings. Before placing any shunts, verify if the adjacent crossings will be affected and insure that proper procedures have been followed to protect those crossings.

Disable track 1 including island:

a. Jumper TRK#1 OOS terminal (AA30) to (AA33).
b. Test unaffected track and approaches to make sure crossing warning system operates properly.

Disable track 2:

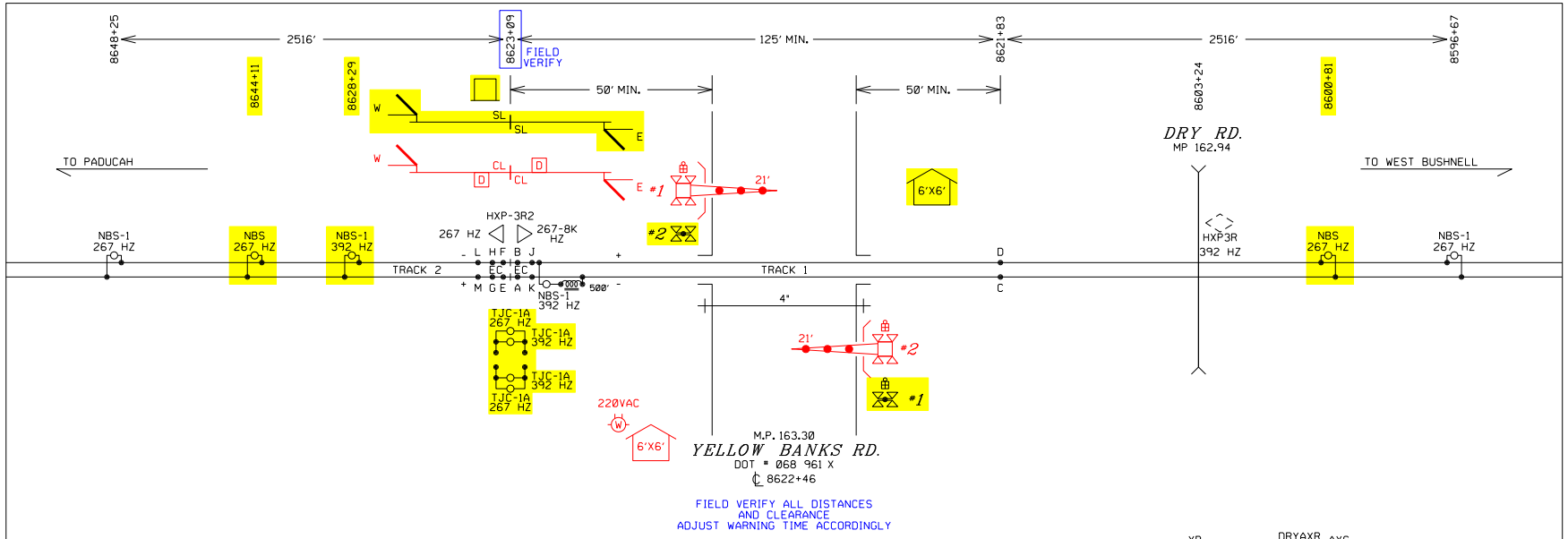
a. Jumper TRK#2 OOS terminal (AA20) to (AA23).
c. Test unaffected track and approaches to make sure crossing warning system operates properly.

Disable entire crossing (from Signal Instruction 7.2):

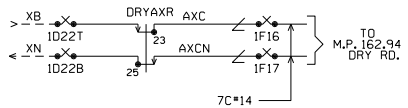
a. Jumper all OOS terminals.

Note: You have now energized the XR relay and crossing signals are now inoperative.

WHEN RESTORING SYSTEM, VERIFY THAT ALL SHUNTS, SIMULATED TRACKS (DONUTS) AND / OR TEST JUMPERS HAVE BEEN REMOVED AND ACCOUNTED FOR, AND CROSSING SIGNALS ARE TESTED FOR PROPER OPERATION.

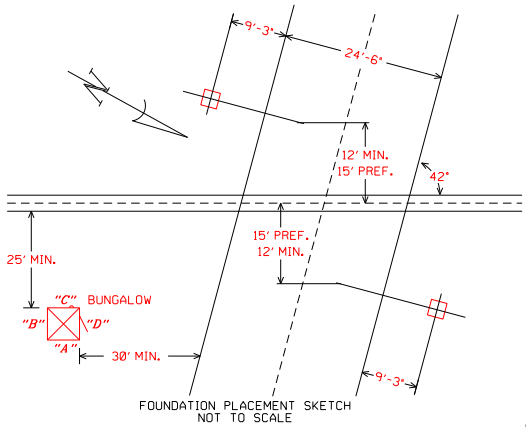


FIELD VERIFY ALL DISTANCES
AND CLEARANCE
ADJUST WARNING TIME ACCORDINGLY



NOTES:

EQUIPMENT IS DESIGNED FOR 20 SECONDS MINIMUM WARNING TIME AT 49 MPH.
APPROACHES WERE LENGTHENED 1 SECOND(S) FOR WIDE OR ANGLED CROSSING (CT).
APPROACHES WERE LENGTHENED 10 SECONDS FOR SPEED VARIANCE AND BALLAST CHANGES (BT).
APPROACHES WERE LENGTHENED 4 SECONDS FOR EQUIPMENT RESPONSE TIME (ERT).
ALL LAMPS TO BE LED
GATE LENGTH SHOWN IS MEASURED FROM MAST C/L TO GATE TIP.



FOUNDATION PLACEMENT SKETCH
NOT TO SCALE

NOTES:
-TEST TERMINAL
-EQUALIZER
-LINE ARRESTER
-HEAVY DUTY ARRESTER
-TWISTED WIRE 2 TURNS PER FOOT
-CONNECTION TO REC./RTU

ALL WIRES #16 AWG UNLESS OTHERWISE NOTED

ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

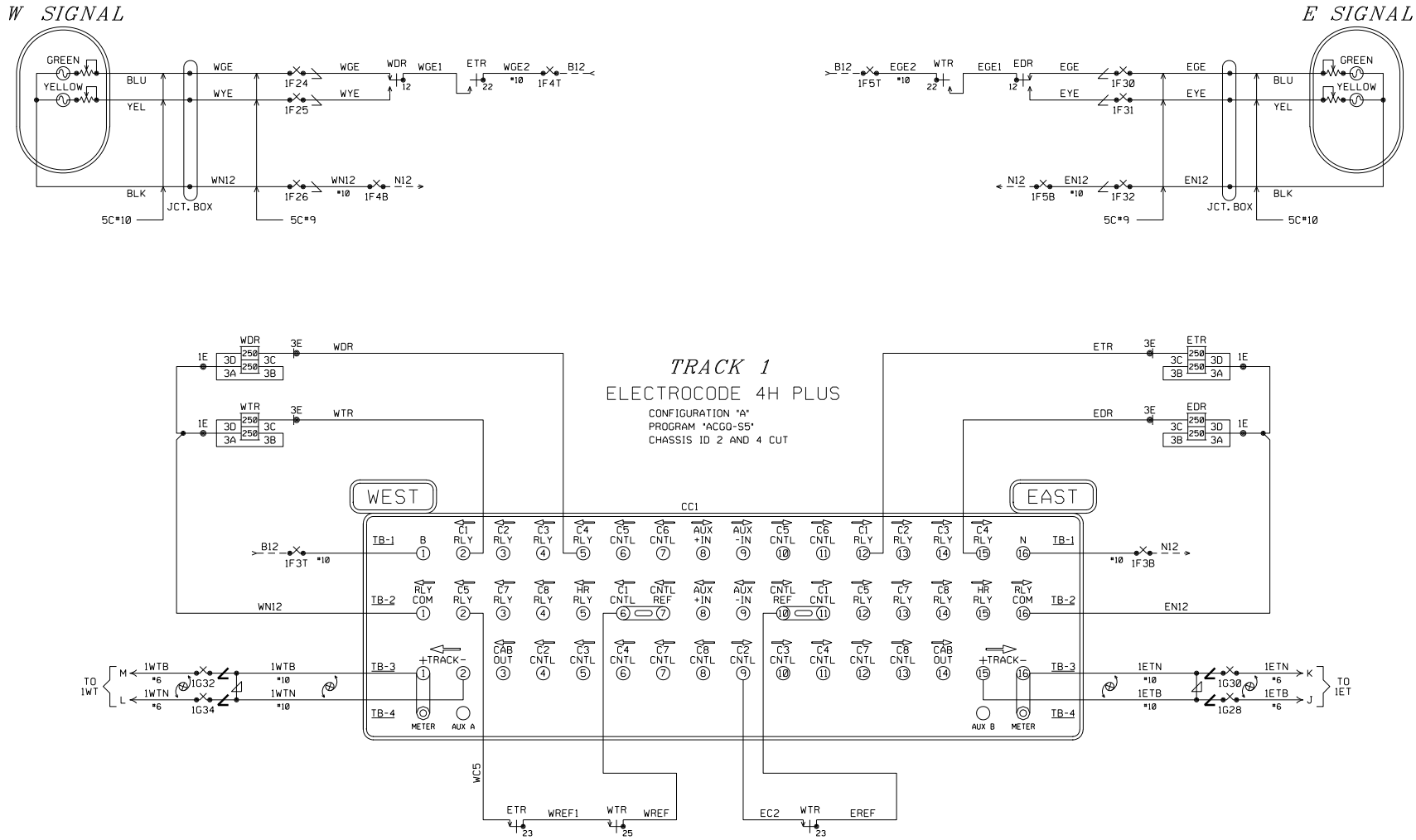
CROSSING CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SED.# 42729

LS 0013 | MP 163.30 | SH 01 OF 13

0013163_30x01c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON

RED = IN YELLOW = OUT



ALL NEW

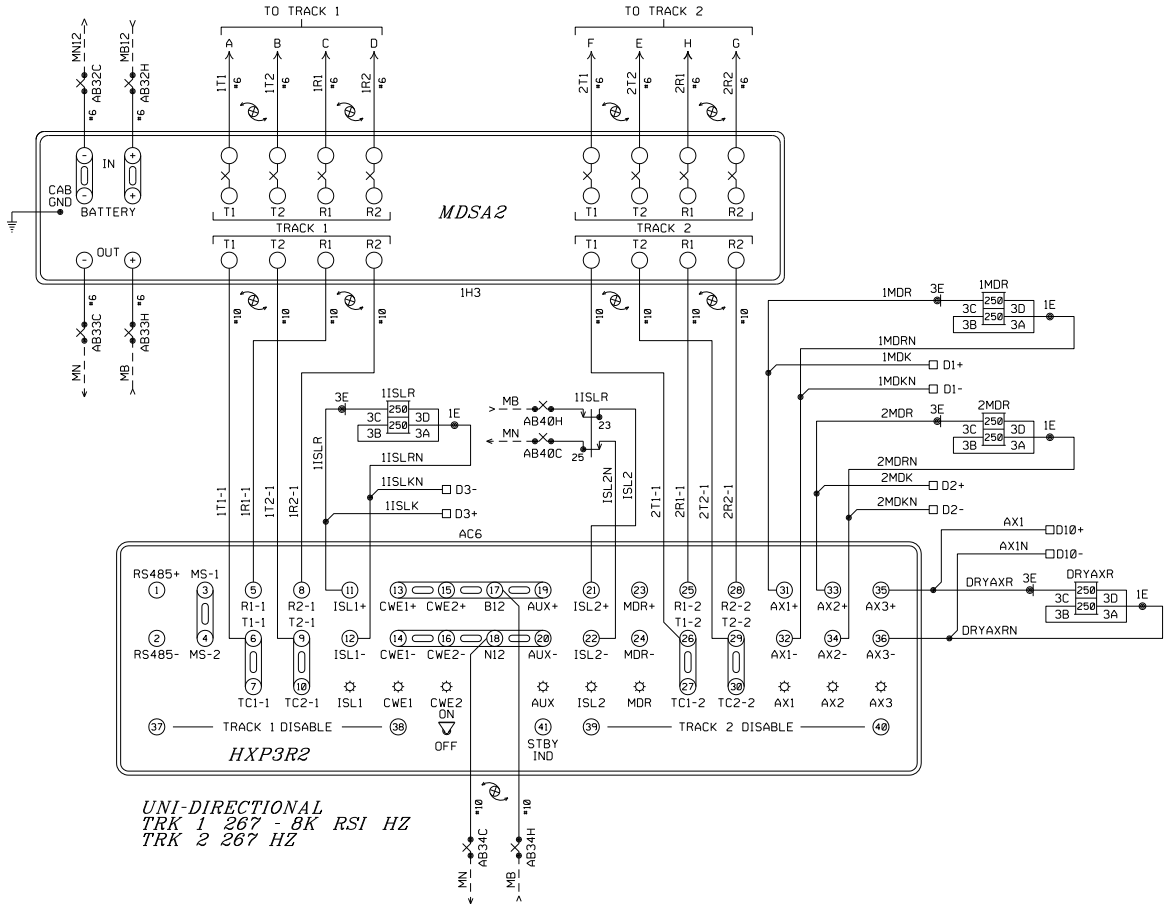
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

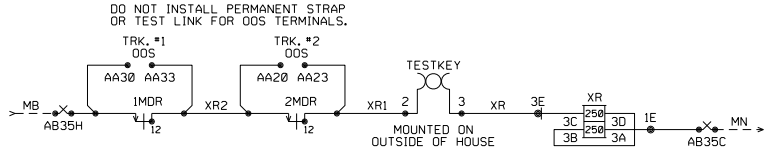
BURLINGTON NORTHERN SANTA FE RAILWAY

EC4H PLUS TRACK CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 02 OF 13

0013163_30x02c_.dgn July 6, 2010





ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/RSS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

HXP-3R2 TRACK CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 03 OF 13

0013163_30x03c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON

PROGRAM INFORMATION

PROGRAM VERSION 42.0 OR LATER

*=FIELD ADJUSTMENT TO BE MADE ACCORDING TO THE HXP-3 INSTRUCTION MANUAL 100052-001 AD0 & SUPPLEMENTS.

HXP-3R2 ADJUST SELECT ADJUSTMENTS

NO.	ADJUSTMENT NAME	TRACK 1	TRACK 2
1	APPROACH LENGTH	2516'	2516'
2	WARNING TIME	31 SEC.	31 SEC.
3	LIA	*	*
4	TC	*	*
5	MD RESTART	*	*

NOTE:

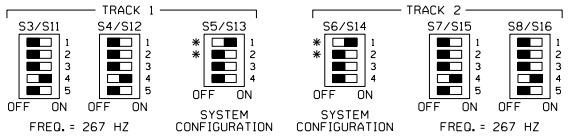
BEFORE PROGRAMMING ANY PARAMETERS/OPTIONS FOR THE HXP GO TO 'OPTION 49' AND RESET ALL LOCAL PARAMETERS TO FACTORY DEFAULT VALUES. SEE HXP-3 MANUAL 100052-001 AD0 PAGE 4-14.

OPTION ADJUSTMENTS

NO.	ABBREVIATION	TRACK 1	TRACK 2
1	TK-ENA	"UP"	"UP"
2	TK FO	267 HZ	267 HZ
3	CW/MD	"C"	"C"
4	UNI-BI	"U" (UNI)	"U" (UNI)
5	NBS-C	* RX	* RX
		* FEET	* FEET
6	CWEWT	DL (80 SEC.)	DL (80 SEC.)
7	LOS	DL (16 SEC.)	DL (16 SEC.)
8	IJ-LOS	DL (5 SEC.)	DL (5 SEC.)
9	BC	*	*
10	P-COMP	*	*
11	AX1	SEE AX ADJ.	SEE AX ADJ.
12	AX2	SEE AX ADJ.	SEE AX ADJ.
13	AX3	SEE AX ADJ.	SEE AX ADJ.
17	MDR-AX/OF-TK	0'	0'
	CJ-LOS	DL (0)	DL (0)
	PJ-DET	DL (15 SEC.)	DL (15 SEC.)
	PJ-RX	DL (15)	DL (15)
18	MD-TMR	DL (10 MIN.)	DL (10 MIN.)
19	MIN-WT	DL (0)	DL (0)
20	FS-RX	DL (0)	DL (0)
	FS-TM	DL (10 MIN.)	DL (10 MIN.)
21	POS-RX	DL (0)	DL (0)
	POS-TM	DL (0)	DL (0)
22	AR-RX	DL (0)	DL (0)
	AR-TM	DL (10 MIN.)	DL (10 MIN.)
47	ATO-RX	UP	UP
48	PF-ENA	"dn"	"dn"

AX ADJUSTMENTS

NO.	ABBREVIATION	AX 1	AX 2	AX 3
1	TK-ASN	1	2	2
2	OF-TK1	0'	NA	NA
3	OF-TK2	NA	0'	1925'
4	WT	31 SEC.	31 SEC.	30 SEC.
5	MD-RST	(0)	(0)	(0)
6	CW/MD	"C"	"C"	"C"
7	CJ-LOS	DL (0)	DL (0)	DL (0)
8	PJ-DET	DL (15 SEC.)	DL (15 SEC.)	DL (15 SEC.)
9	PJ-RX	DL (15)	DL (15)	DL (15)
10	POS-ST	"dn"	"dn"	"dn"



NOTES: FOR S5/S13 AND S6/S14

*1.) ACTUATOR 1 SELECTS NORMAL APPROACH WHEN SET TO ON POSITION.

*2.) WITH ACTUATOR 1 IN OFF POSITION ACTUATOR 2 SELECTS SHORT APPROACH WHEN OFF AND SELECTS VERY SHORT WHEN ON.

3.) ACTUATOR 3 OFF SELECTS HXP OPERATION.

4.) ACTUATOR 4 OFF = NORMAL MUX TABLE
ACTUATOR 4 ON = ALTERNATE MUX TABLE

SWITCH INFORMATION

SWITCH	TRACK 1	TRACK 2
MASTER/SLAVE	MASTER	NA
RSI FAULT JUMPER	0	NA
RSI-LOS JUMPER	1	NA
TLM W1 JUMPER	PINS 1-2	
TLM W2 JUMPER	PINS 1-2	
TLM W3 JUMPER	PINS 2-3	
MINUTE TIMEOUT	5 MIN	
CW/MD	CW	
STANDBY/AUTO/NORMAL	AUTO	

NOTES: DL= DEFAULT LEVEL
NA= NON APPLICABLE

FIELD VERIFY ALL DISTANCES AND ADJUST UNIT ACCORDINGLY

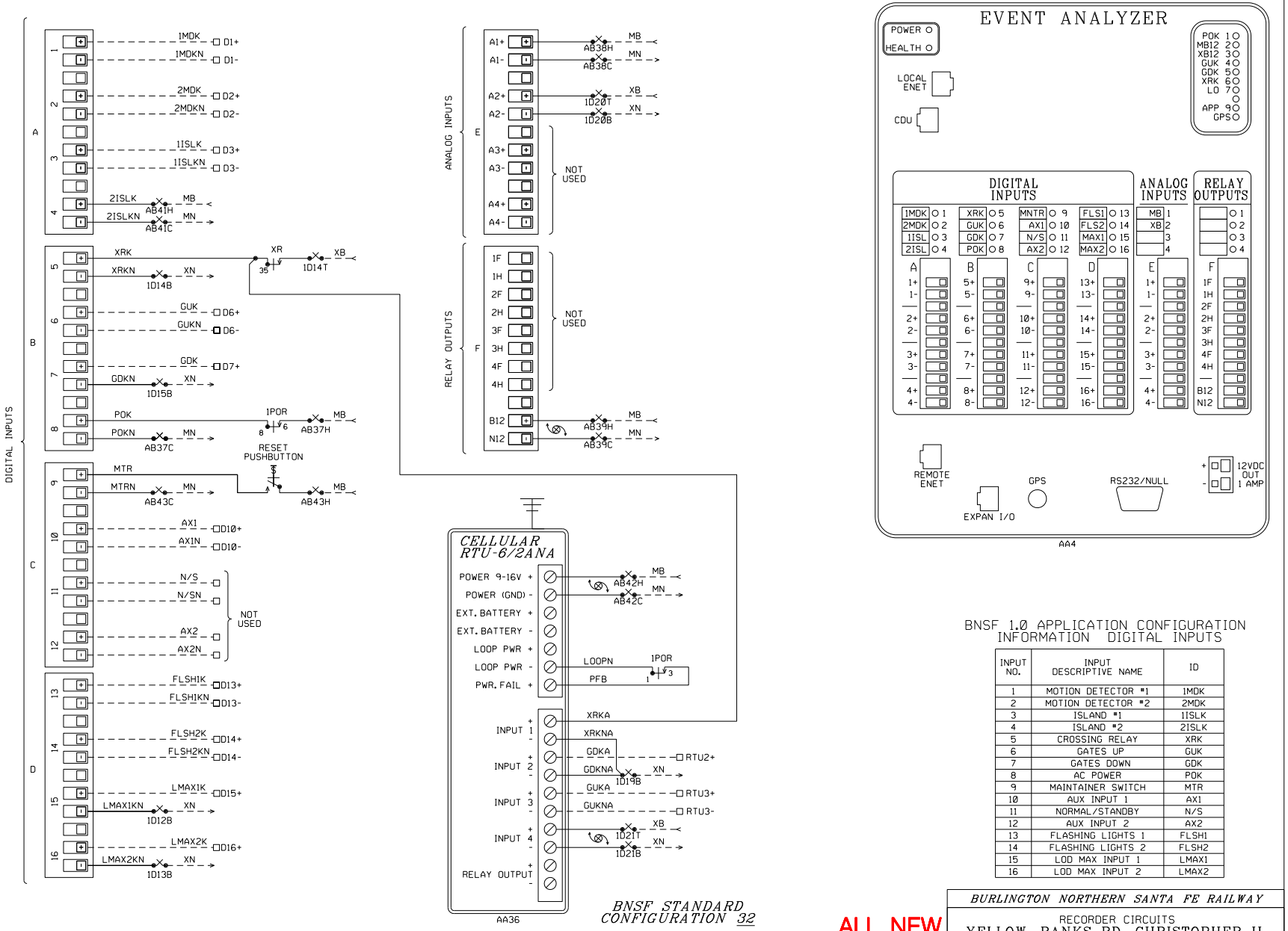
ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

HXP-3R2 PROGRAM INFORMATION
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 04 OF 13



BNSF 1.0 APPLICATION CONFIGURATION INFORMATION DIGITAL INPUTS

INPUT NO.	INPUT DESCRIPTIVE NAME	ID
1	MOTION DETECTOR #1	1MDK
2	MOTION DETECTOR #2	2MDK
3	ISLAND #1	1ISLK
4	ISLAND #2	2ISLK
5	CROSSING RELAY	XRK
6	GATES UP	GUK
7	GATES DOWN	GDK
8	AC POWER	POK
9	MAINTAINER SWITCH	MTR
10	AUX INPUT 1	AX1
11	NORMAL/STANDBY	N/S
12	AUX INPUT 2	AX2
13	FLASHING LIGHTS 1	FLSH1
14	FLASHING LIGHTS 2	FLSH2
15	LOD MAX INPUT 1	LMAX1
16	LOD MAX INPUT 2	LMAX2

ALL NEW

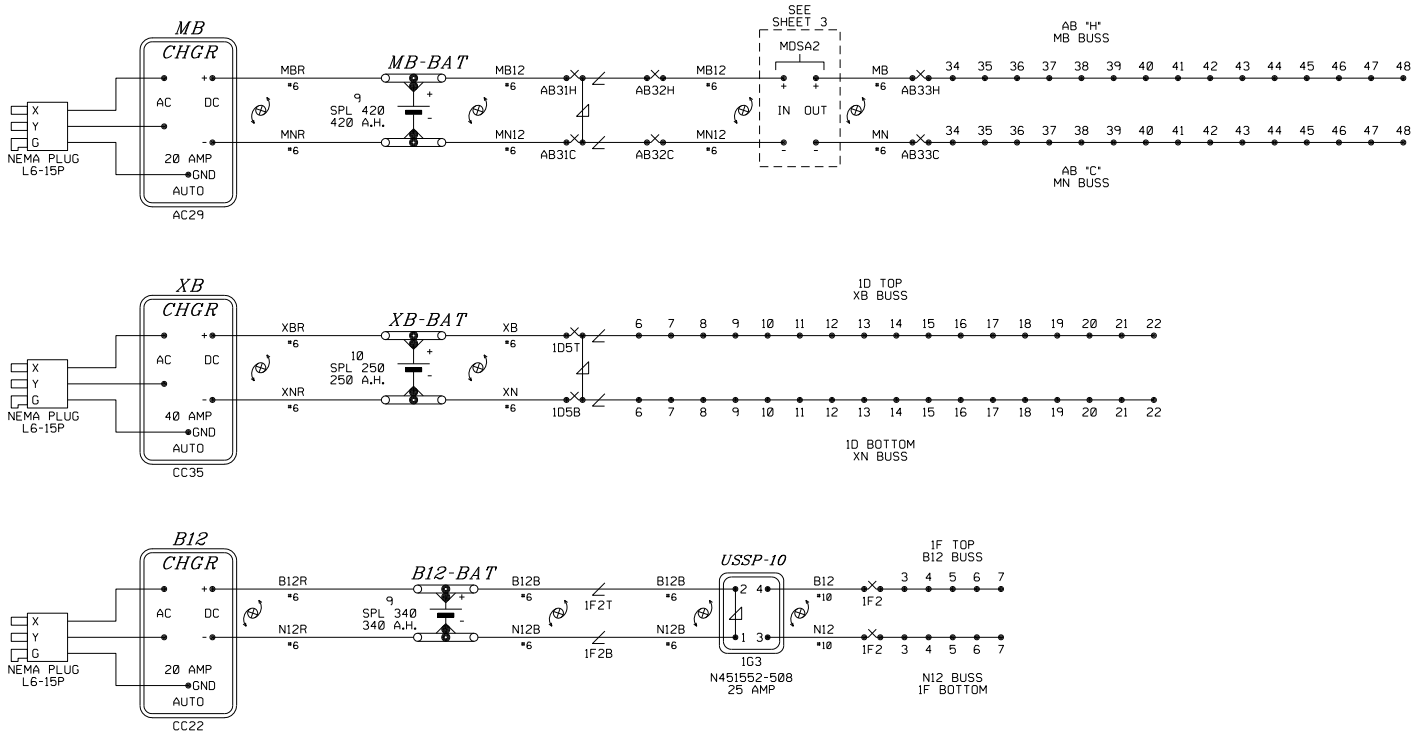
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

RECORDER CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 05 OF 13

0013163_30x05c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

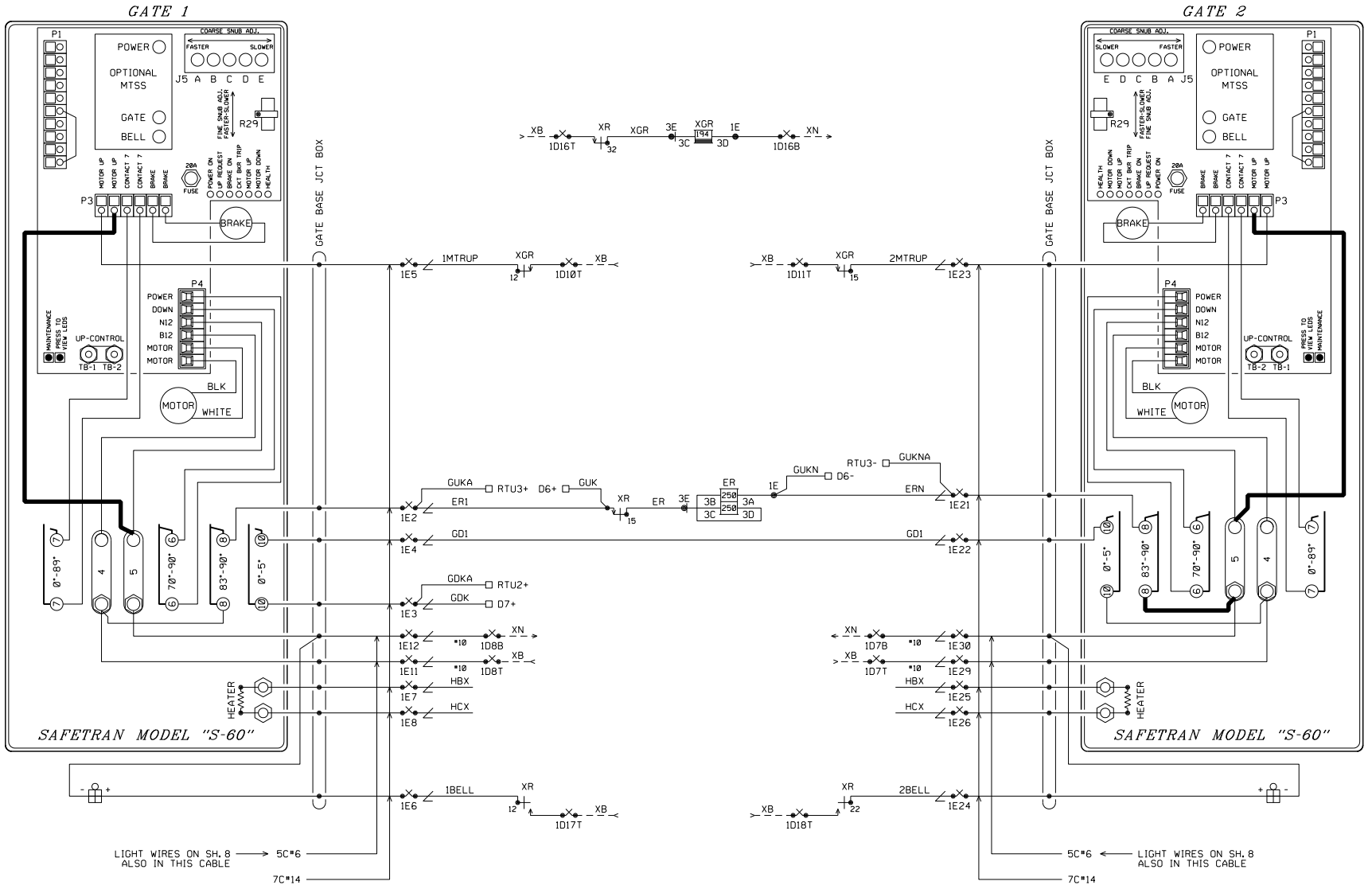
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

BATTERY CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 06 OF 13

0013163_30x06c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



NOTES:
1. ADD JUMPERS IN GATE SHOWN IN BOLD.
2. MAXIMUM WIRE SIZE FOR TERMINAL 5 TO MOTOR UP CONTROL (-) IS #12 AWG.

ALL NEW

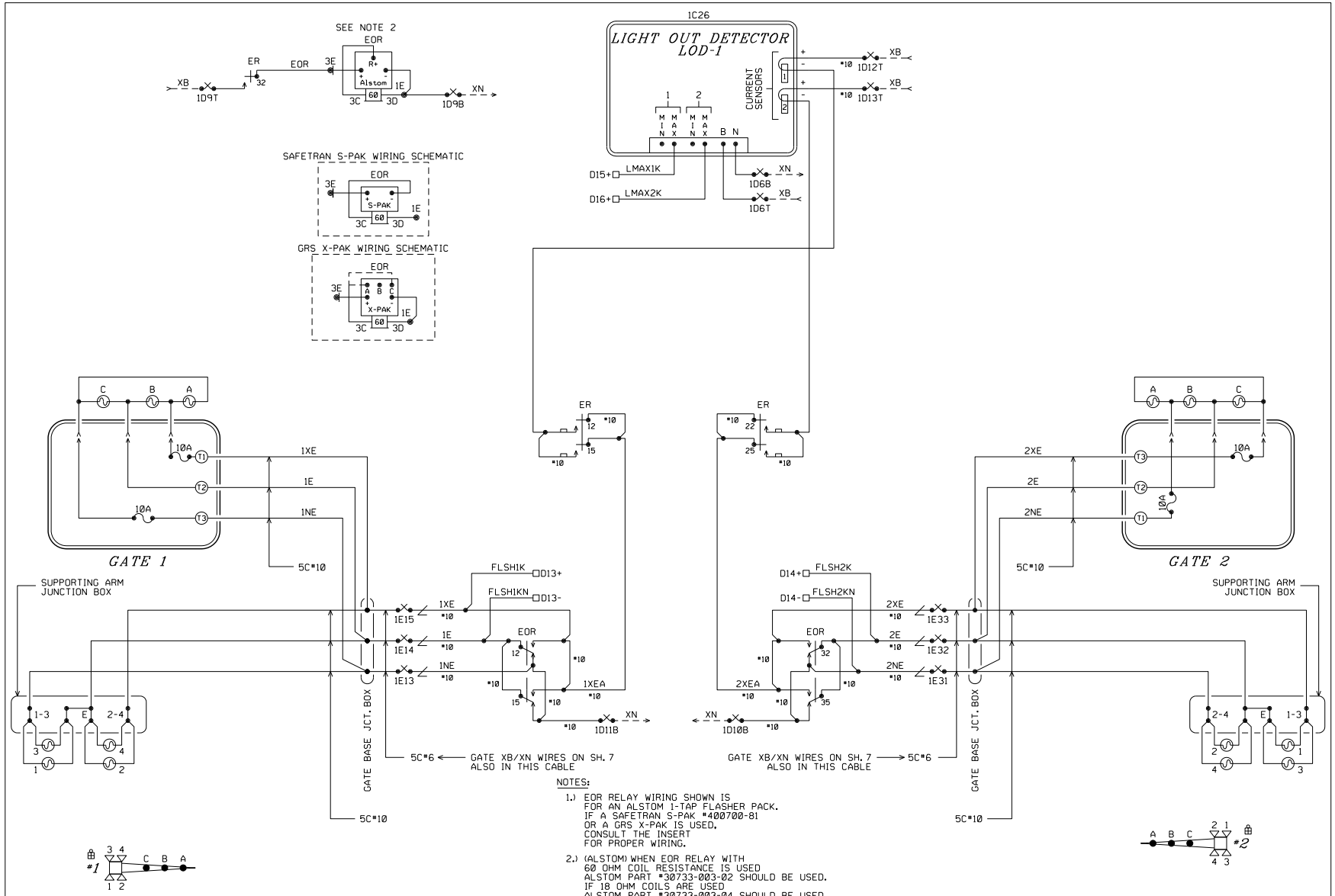
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

GATE CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 07 OF 13

0013163_30x07c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



NOTES:

1.) EOR RELAY WIRING SHOWN IS FOR AN ALSTOM 1-TAP FLASHER PACK. IF A SAFETRAN S-PAK #400700-81 OR A GRS X-PAK IS USED, CONSULT THE INSERT FOR PROPER WIRING.

2.) (ALSTOM) WHEN EOR RELAY WITH 60 OHM COIL RESISTANCE IS USED ALSTOM PART #30733-003-02 SHOULD BE USED. IF 18 OHM COILS ARE USED ALSTOM PART #30733-003-04 SHOULD BE USED.

3.) (X-PAK) WHEN EOR RELAY WITH 60 OHM COIL RESISTANCE IS USED CONNECT JUMPER FROM 3C TO "A". IF 18 OHM COILS ARE USED CONNECT JUMPER FROM 3C TO "C".

4.) (S-PAK) DO NOT USE S-PAK WITH 18 OHM COILS

ALL NEW

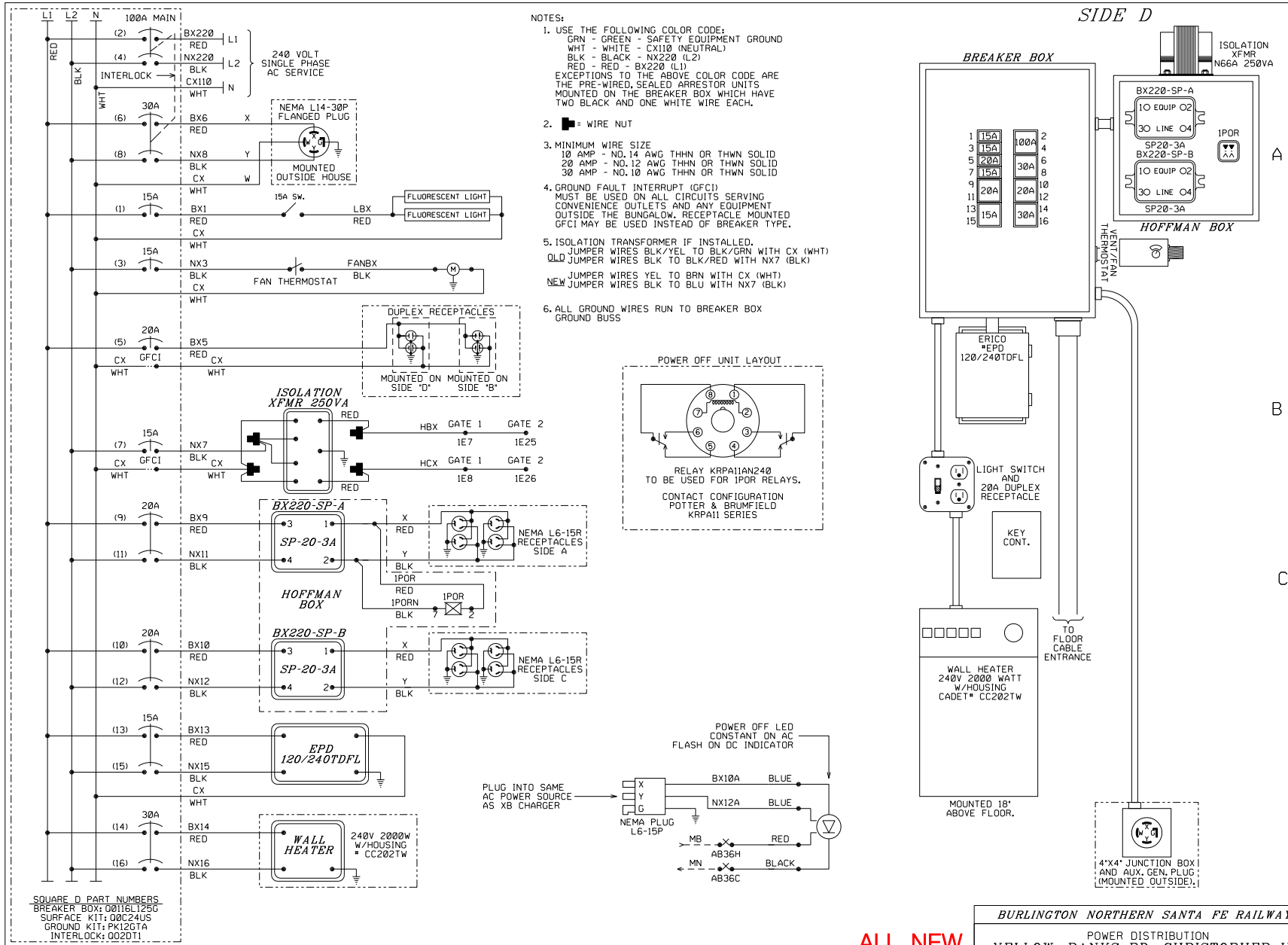
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

FLASHER CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 08 OF 13

Typ: 012210 Ch: N



ALL NEW

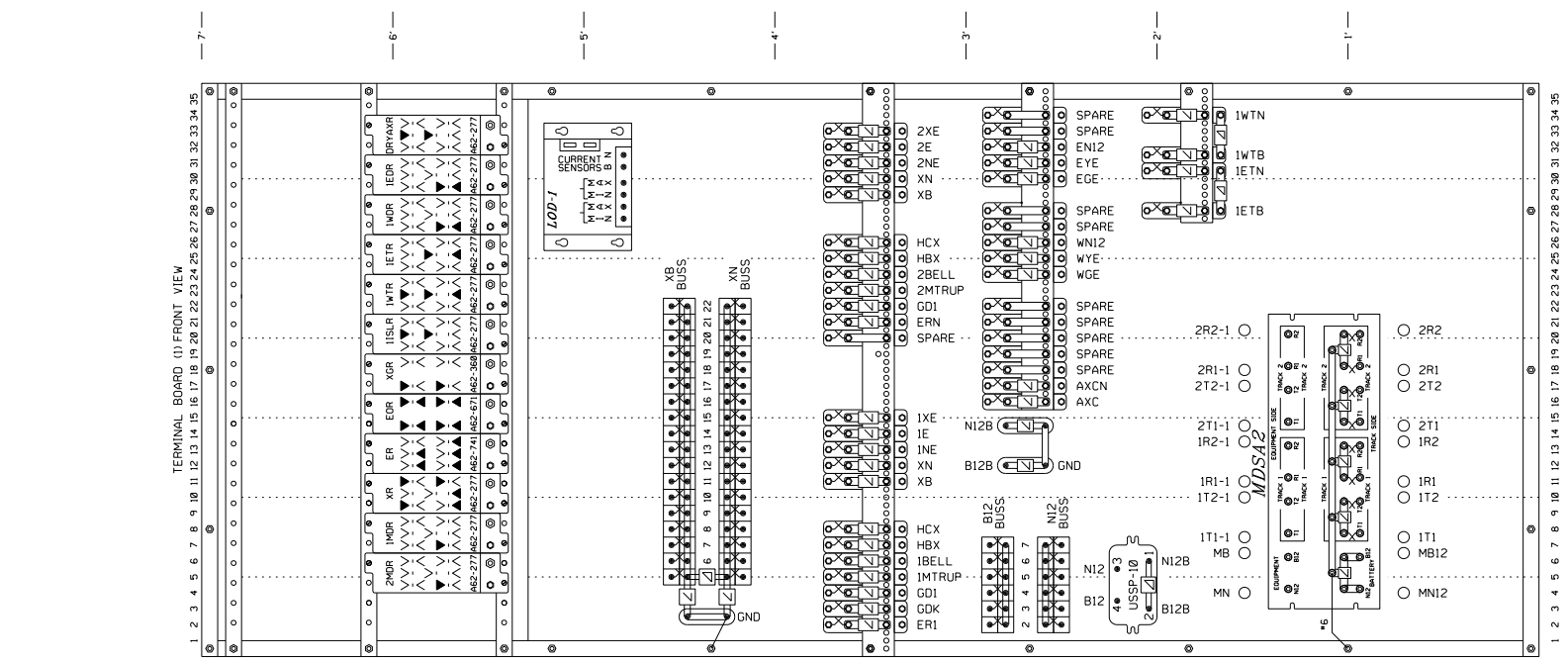
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

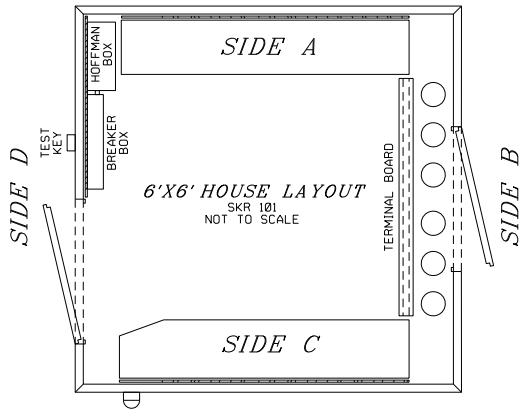
BURLINGTON NORTHERN SANTA FE RAILWAY

POWER DISTRIBUTION
YELLOW BANKS RD. CHRISTOPHER, IL

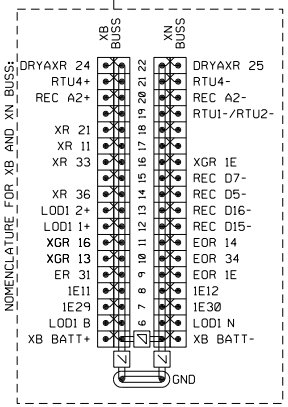
LS 0013	MP 136.30	SH 09 OF 13

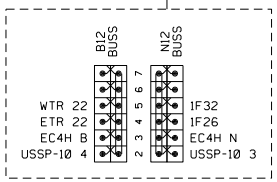
0013163_30x09c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON





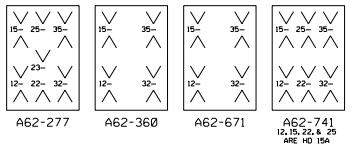
NOTE: INSTALL POWER OFF INDICATOR LIGHT ON TRACK SIDE NEAREST THE HIGHWAY AND NEAR EAVE OF HOUSE.





RELAY CROSS REFERENCE

GRS	SAFETRAN
A62-277	400004
A62-741	400005
A62-671	400700
A62-360	400200



ALL NEW

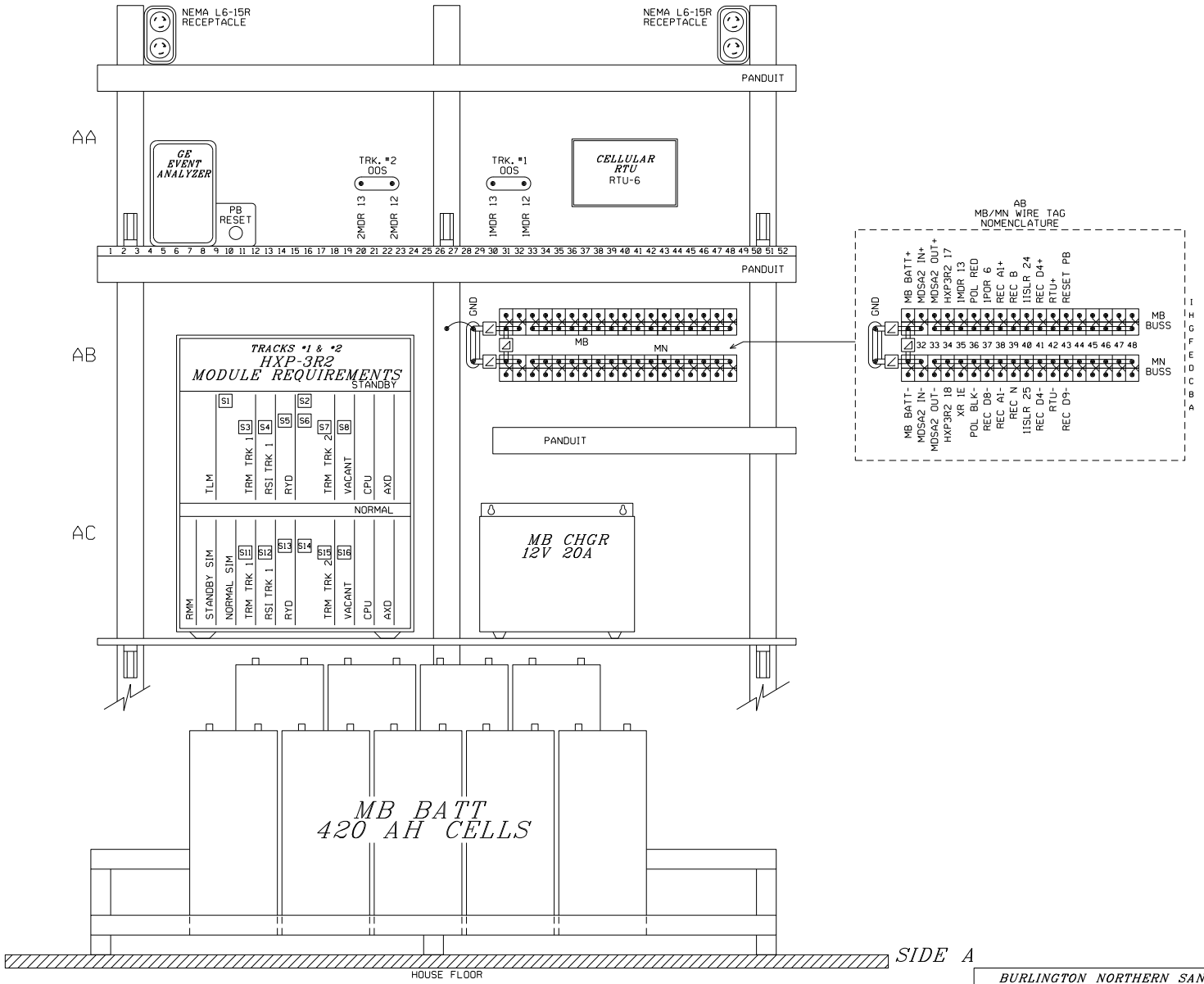
DESIGNED 07-26-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

TERMINAL BOARD LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 10 OF 13

0013163_30x10c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

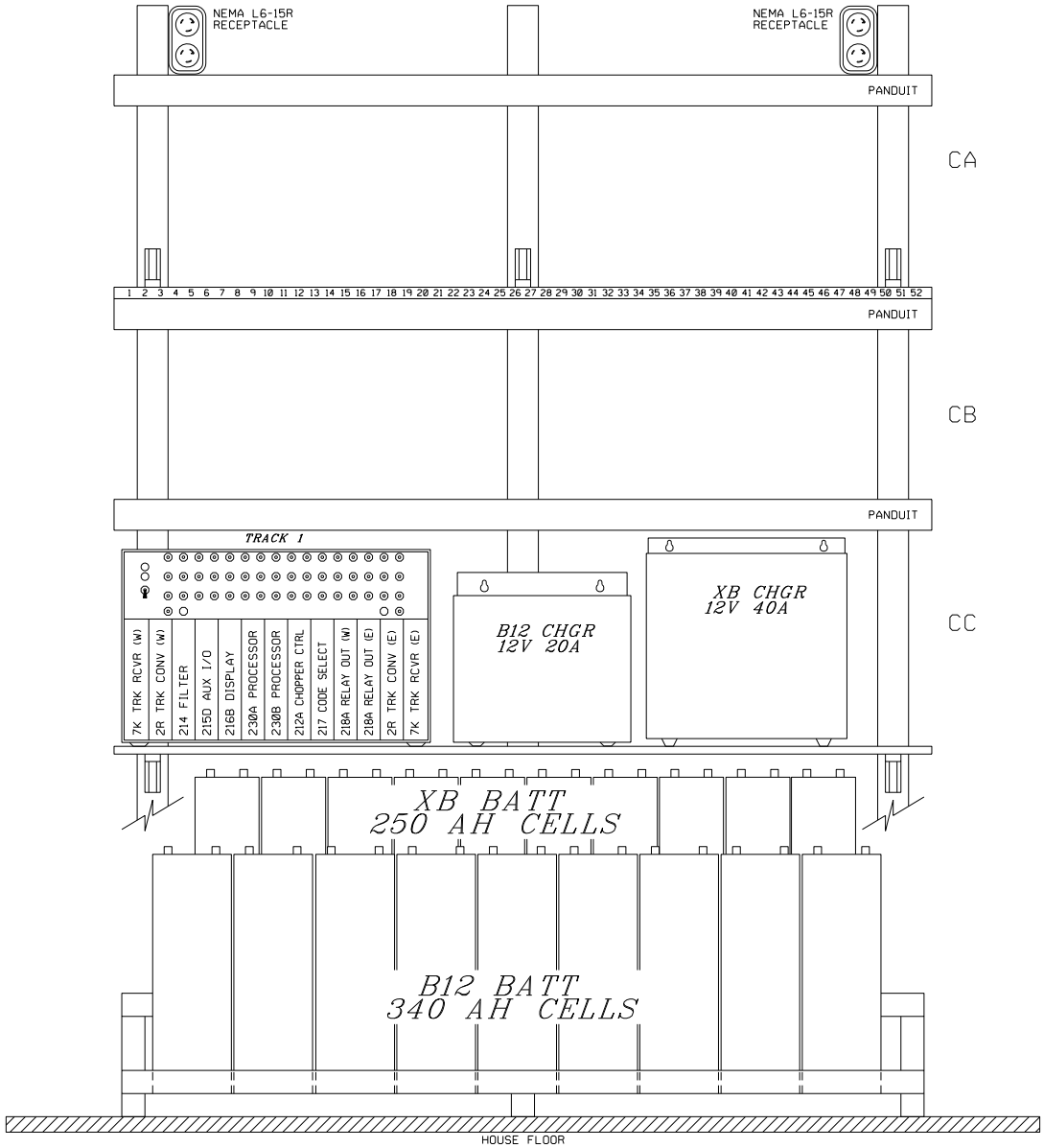
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "A" SHELF LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 11 OF 13

0013163_30x11c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

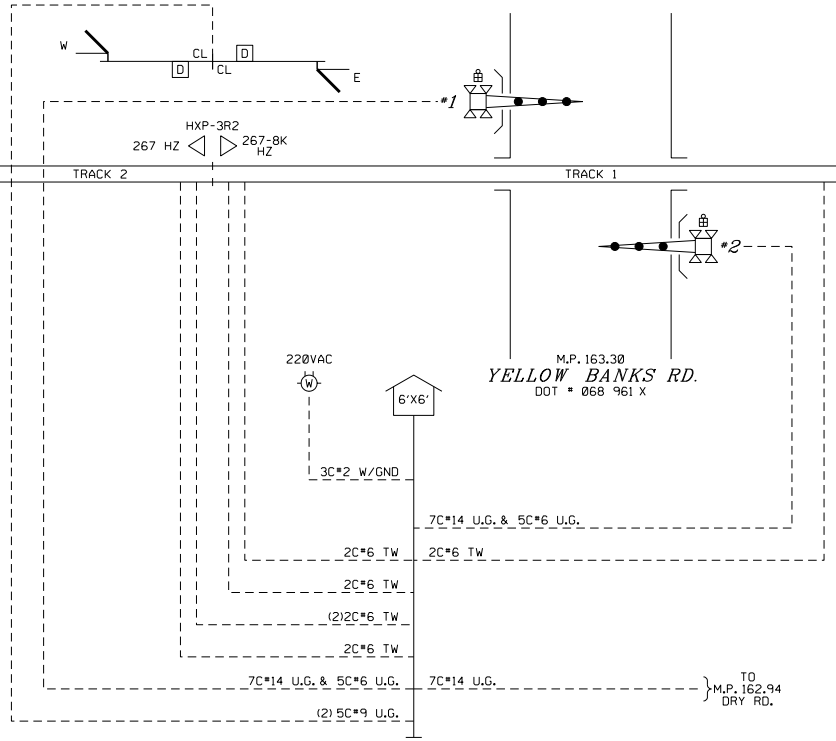
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "C" SHELF LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 12 OF 13

0013163_30x12c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

CABLE LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 13 OF 13

0013163_30x13c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON

CROSSING DISABLE PROCEDURE

Street: **Yellow Banks Rd.**
Line Segment: **0013**
Mile Post: **163.30**
Plan Revision Date: **7/06/10**

Note: If the latest date stamp on the plan set is after the Plan Revision Date above, then this procedure is **VOID**.

Before following the Crossing Disable Procedure, comply with Signal Instruction 7.2, 7.2A, 7.2B, 7.2C as appropriate. An understanding of the highway/railroad crossing circuits is required before any work is performed.

IF YOU ARE UNSURE OF ANY OF THESE PROCEDURES, CONSULT YOUR SUPERVISOR.

Disable one approach (from Signal Instruction 7.2):

a. Shunt affected approach outside of the island and as close to track work as practicable.
b. Crossing should recover in approximately 20 seconds.
c. Verify crossing island circuit is effective.
d. Test unaffected track and approaches to make sure crossing warning system operates properly.

Note: Depending on location, the placement of the shunt may cause short or zero warning time for the opposite approach. Shunt placement may also cause short or zero warning time for the adjacent crossings. Before placing any shunts, verify if the adjacent crossings will be affected and insure that proper procedures have been followed to protect those crossings.

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a. Shunt both approaches outside island and as close to track work as practicable in both directions.
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Note: Depending on location, the placement of the shunt(s) may cause short or zero warning time for the adjacent crossings. Before placing any shunts, verify if the adjacent crossings will be affected and insure that proper procedures have been followed to protect those crossings.

Disable track 1 including island:

a. Jumper TRK#1 OOS terminal (AA30) to (AA33).
b. Test unaffected track and approaches to make sure crossing warning system operates properly.

Disable track 2:

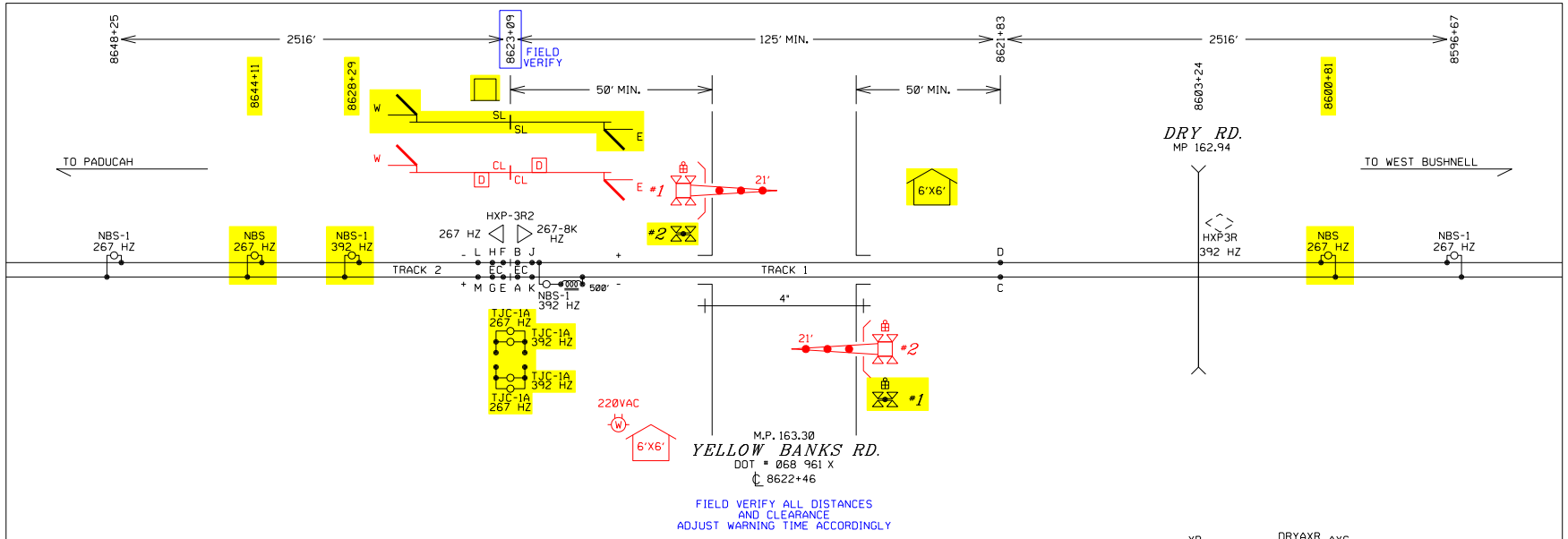
a. Jumper TRK#2 OOS terminal (AA20) to (AA23).
c. Test unaffected track and approaches to make sure crossing warning system operates properly.

Disable entire crossing (from Signal Instruction 7.2):

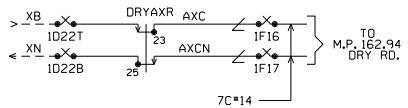
a. Jumper all OOS terminals.

Note: You have now energized the XR relay and crossing signals are now inoperative.

WHEN RESTORING SYSTEM, VERIFY THAT ALL SHUNTS, SIMULATED TRACKS (DONUTS) AND / OR TEST JUMPERS HAVE BEEN REMOVED AND ACCOUNTED FOR, AND CROSSING SIGNALS ARE TESTED FOR PROPER OPERATION.

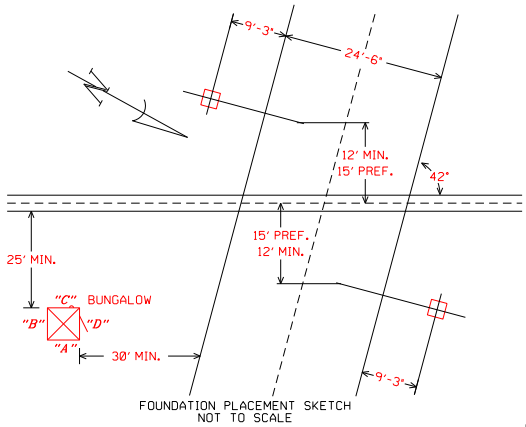


FIELD VERIFY ALL DISTANCES
AND CLEARANCE
ADJUST WARNING TIME ACCORDINGLY



NOTES:

EQUIPMENT IS DESIGNED FOR 20 SECONDS MINIMUM WARNING TIME AT 49 MPH.
APPROACHES WERE LENGTHENED 1 SECOND(S) FOR WIDE OR ANGLED CROSSING (CT).
APPROACHES WERE LENGTHENED 10 SECONDS FOR SPEED VARIANCE AND BALLAST CHANGES (BT).
APPROACHES WERE LENGTHENED 4 SECONDS FOR EQUIPMENT RESPONSE TIME (ERT).
ALL LAMPS TO BE LED
GATE LENGTH SHOWN IS MEASURED FROM MAST C/L TO GATE TIP.



FOUNDATION PLACEMENT SKETCH
NOT TO SCALE

NOTES:
-TEST TERMINAL
-EQUALIZER
-LINE ARRESTER
-HEAVY DUTY ARRESTER
-TWISTED WIRE 2 TURNS PER FOOT
-CONNECTION TO REC./RTU

ALL WIRES #16 AWG UNLESS OTHERWISE NOTED

ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

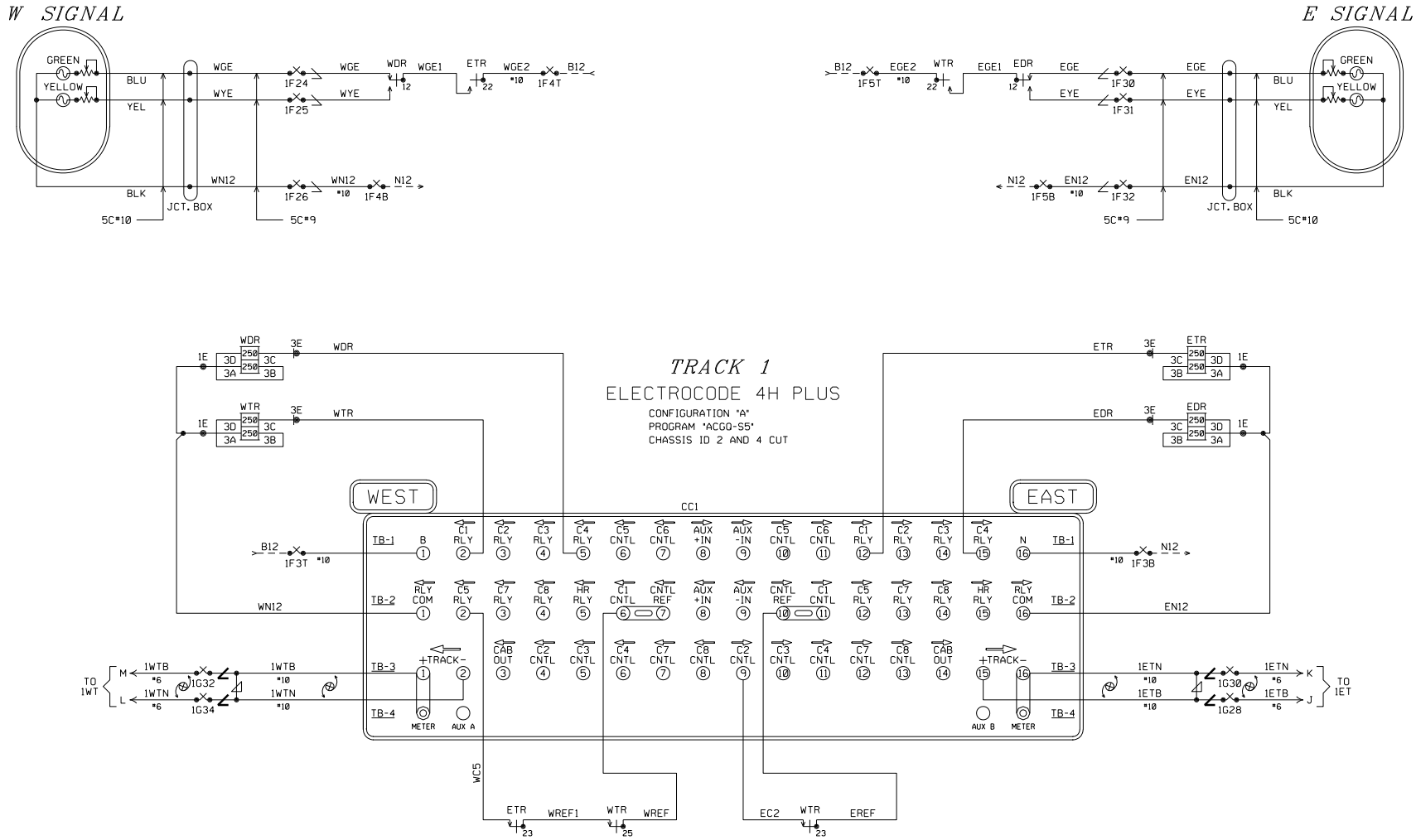
CROSSING CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SED.# 42729

LS 0013 | MP 163.30 | SH 01 OF 13

0013163_30x01c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON

RED = IN YELLOW = OUT



ALL NEW

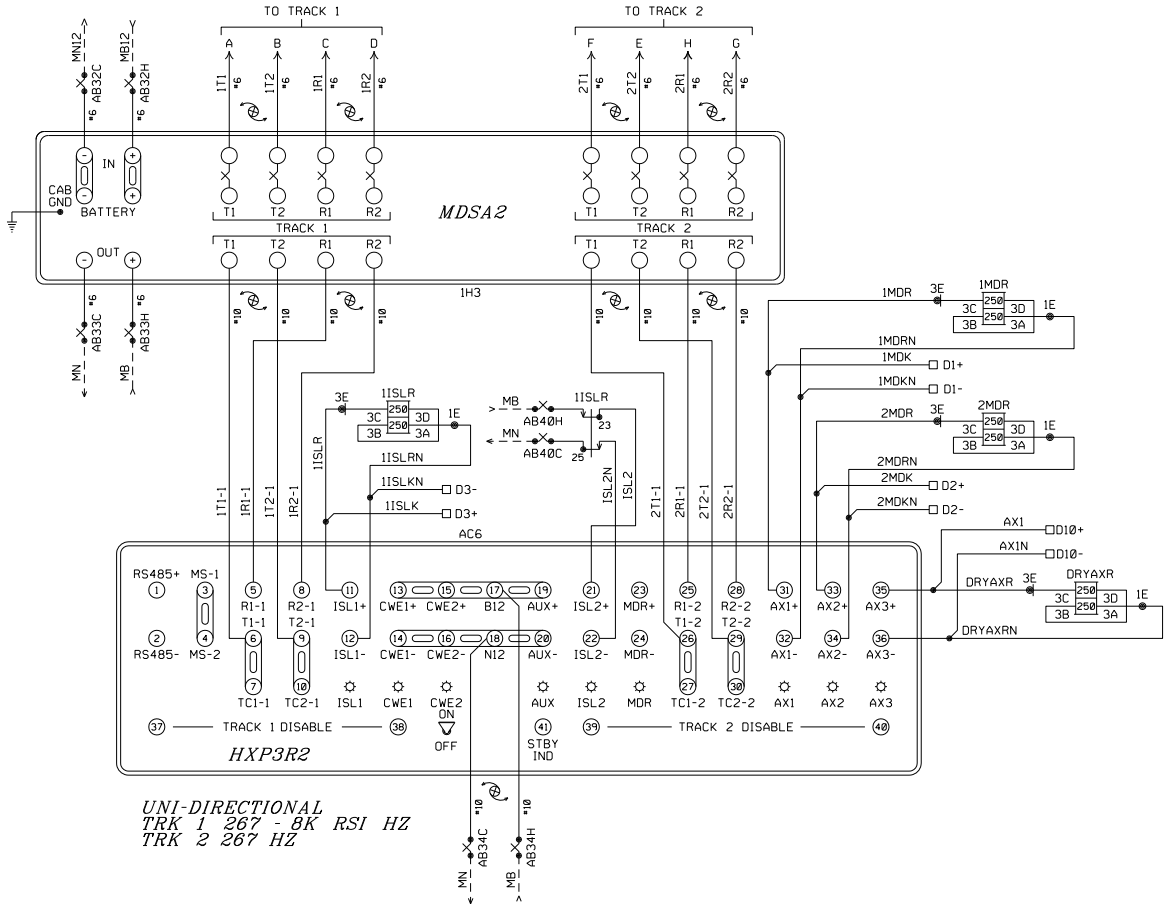
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

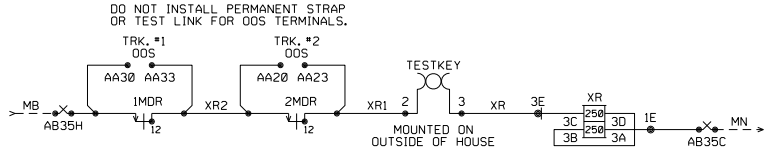
BURLINGTON NORTHERN SANTA FE RAILWAY

EC4H PLUS TRACK CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 02 OF 13

0013163_30x02c_.dgn July 6, 2010





ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/RSS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

HXP-3R2 TRACK CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 03 OF 13

0013163_30x03c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON

PROGRAM INFORMATION

PROGRAM VERSION 42.0 OR LATER

*=FIELD ADJUSTMENT TO BE MADE ACCORDING TO THE HXP-3 INSTRUCTION MANUAL 100052-001 AD0 & SUPPLEMENTS.

HXP-3R2 ADJUST SELECT ADJUSTMENTS

NO.	ADJUSTMENT NAME	TRACK 1	TRACK 2
1	APPROACH LENGTH	2516'	2516'
2	WARNING TIME	31 SEC.	31 SEC.
3	LIA	*	*
4	TC	*	*
5	MD RESTART	*	*

NOTE:

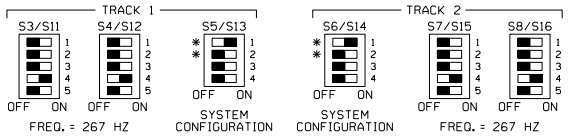
BEFORE PROGRAMMING ANY PARAMETERS/OPTIONS FOR THE HXP GO TO 'OPTION 49' AND RESET ALL LOCAL PARAMETERS TO FACTORY DEFAULT VALUES. SEE HXP-3 MANUAL 100052-001 AD0 PAGE 4-14.

OPTION ADJUSTMENTS

NO.	ABBREVIATION	TRACK 1	TRACK 2
1	TK-ENA	"UP"	"UP"
2	TK FO	267 HZ	267 HZ
3	CW/MD	"C"	"C"
4	UNI-BI	"U" (UNI)	"U" (UNI)
5	NBS-C	* RX	* RX
		* FEET	* FEET
6	CWEWT	DL (80 SEC.)	DL (80 SEC.)
7	LOS	DL (16 SEC.)	DL (16 SEC.)
8	IJ-LOS	DL (5 SEC.)	DL (5 SEC.)
9	BC	*	*
10	P-COMP	*	*
11	AX1	SEE AX ADJ.	SEE AX ADJ.
12	AX2	SEE AX ADJ.	SEE AX ADJ.
13	AX3	SEE AX ADJ.	SEE AX ADJ.
17	MDR-AX/OF-TK	0'	0'
	CJ-LOS	DL (0)	DL (0)
	PJ-DET	DL (15 SEC.)	DL (15 SEC.)
	PJ-RX	DL (15)	DL (15)
18	MD-TMR	DL (10 MIN.)	DL (10 MIN.)
19	MIN-WT	DL (0)	DL (0)
20	FS-RX	DL (0)	DL (0)
	FS-TM	DL (10 MIN.)	DL (10 MIN.)
21	POS-RX	DL (0)	DL (0)
	POS-TM	DL (0)	DL (0)
22	AR-RX	DL (0)	DL (0)
	AR-TM	DL (10 MIN.)	DL (10 MIN.)
47	ATO-RX	UP	UP
48	PF-ENA	"dn"	"dn"

AX ADJUSTMENTS

NO.	ABBREVIATION	AX 1	AX 2	AX 3
1	TK-ASN	1	2	2
2	OF-TK1	0'	NA	NA
3	OF-TK2	NA	0'	1925'
4	WT	31 SEC.	31 SEC.	30 SEC.
5	MD-RST	(0)	(0)	(0)
6	CW/MD	"C"	"C"	"C"
7	CJ-LOS	DL (0)	DL (0)	DL (0)
8	PJ-DET	DL (15 SEC.)	DL (15 SEC.)	DL (15 SEC.)
9	PJ-RX	DL (15)	DL (15)	DL (15)
10	POS-ST	"dn"	"dn"	"dn"



NOTES: FOR S5/S13 AND S6/S14

*1.) ACTUATOR 1 SELECTS NORMAL APPROACH WHEN SET TO ON POSITION.

*2.) WITH ACTUATOR 1 IN OFF POSITION ACTUATOR 2 SELECTS SHORT APPROACH WHEN OFF AND SELECTS VERY SHORT WHEN ON.

3.) ACTUATOR 3 OFF SELECTS HXP OPERATION.

4.) ACTUATOR 4 OFF = NORMAL MUX TABLE
ACTUATOR 4 ON = ALTERNATE MUX TABLE

SWITCH INFORMATION

SWITCH	TRACK 1	TRACK 2
MASTER/SLAVE	MASTER	NA
RSI FAULT JUMPER	0	NA
RSI-LOS JUMPER	1	NA
TLM W1 JUMPER	PINS 1-2	
TLM W2 JUMPER	PINS 1-2	
TLM W3 JUMPER	PINS 2-3	
MINUTE TIMEOUT	5 MIN	
CW/MD	CW	
STANDBY/AUTO/NORMAL	AUTO	

NOTES: DL= DEFAULT LEVEL
NA= NON APPLICABLE

FIELD VERIFY ALL DISTANCES AND ADJUST UNIT ACCORDINGLY

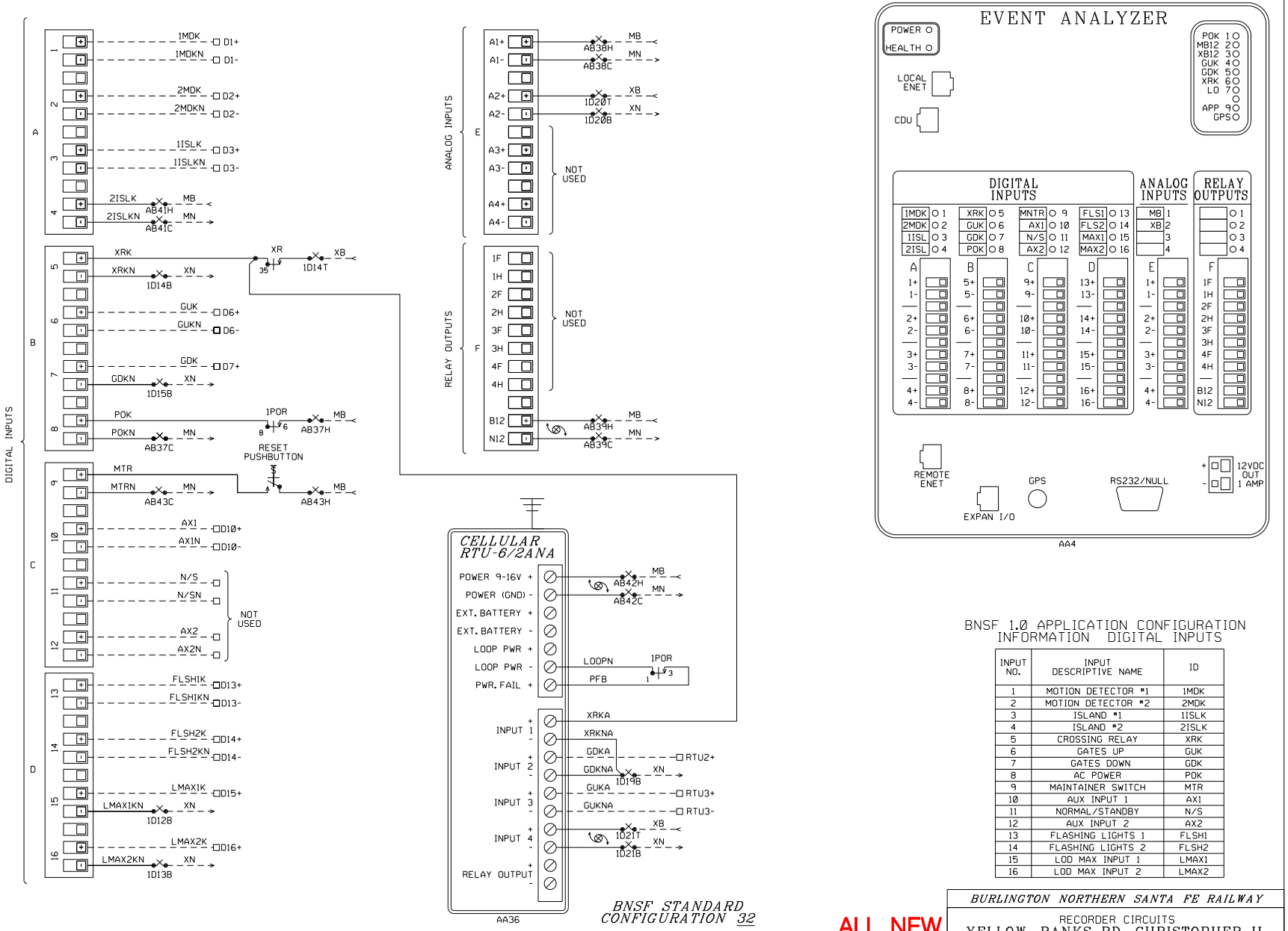
ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

HXP-3R2 PROGRAM INFORMATION
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 04 OF 13



BNSF 1.0 APPLICATION CONFIGURATION INFORMATION DIGITAL INPUTS

INPUT NO.	INPUT DESCRIPTIVE NAME	ID
1	MOTION DETECTOR #1	1MDK
2	MOTION DETECTOR #2	2MDK
3	ISLAND #1	1ISLK
4	ISLAND #2	2ISLK
5	CROSSING RELAY	XRK
6	GATES UP	GUK
7	GATES DOWN	GDK
8	AC POWER	POK
9	MAINTAINER SWITCH	MTR
10	AUX INPUT 1	AX1
11	NORMAL/STANDBY	N/S
12	AUX INPUT 2	AX2
13	FLASHING LIGHTS 1	FLSH1
14	FLASHING LIGHTS 2	FLSH2
15	LOD MAX INPUT 1	LMAX1
16	LOD MAX INPUT 2	LMAX2

ALL NEW

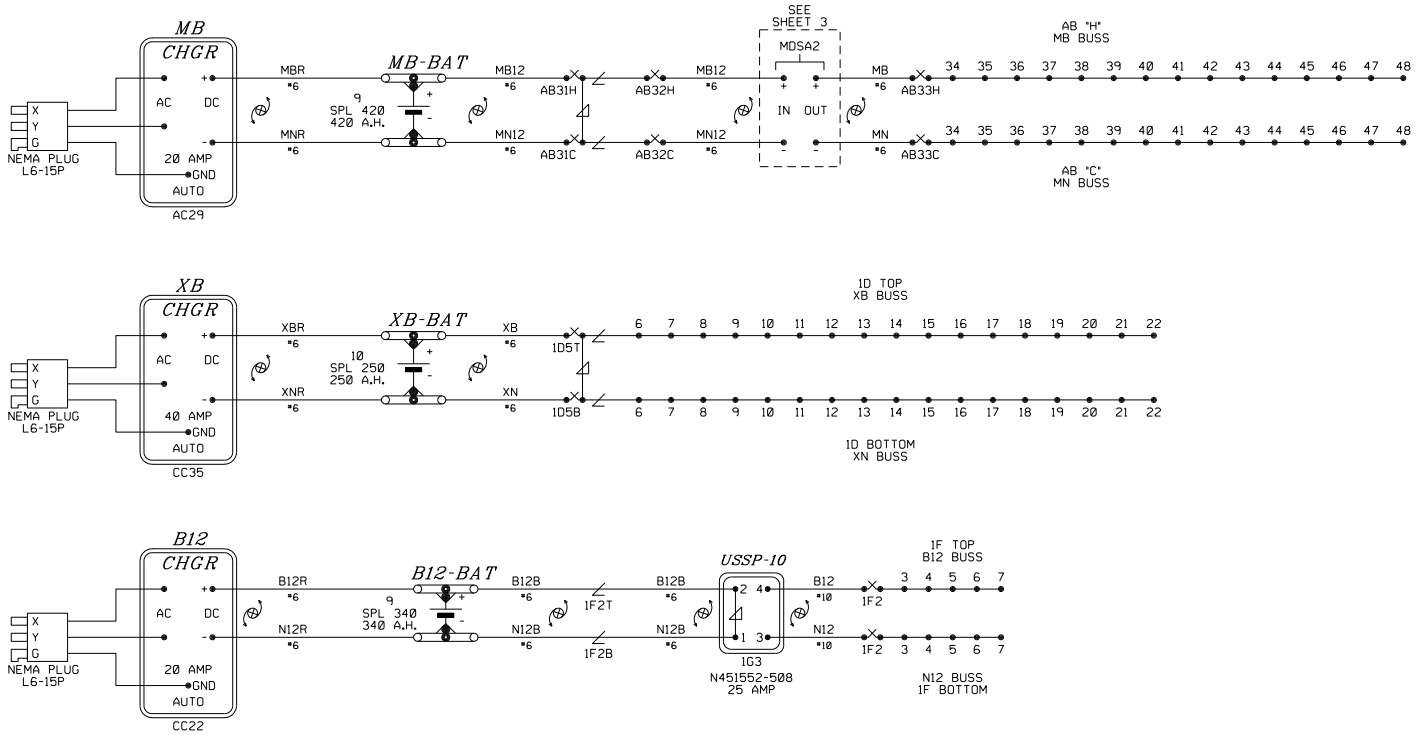
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

RECORDER CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 05 OF 13

0013163_30x05c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

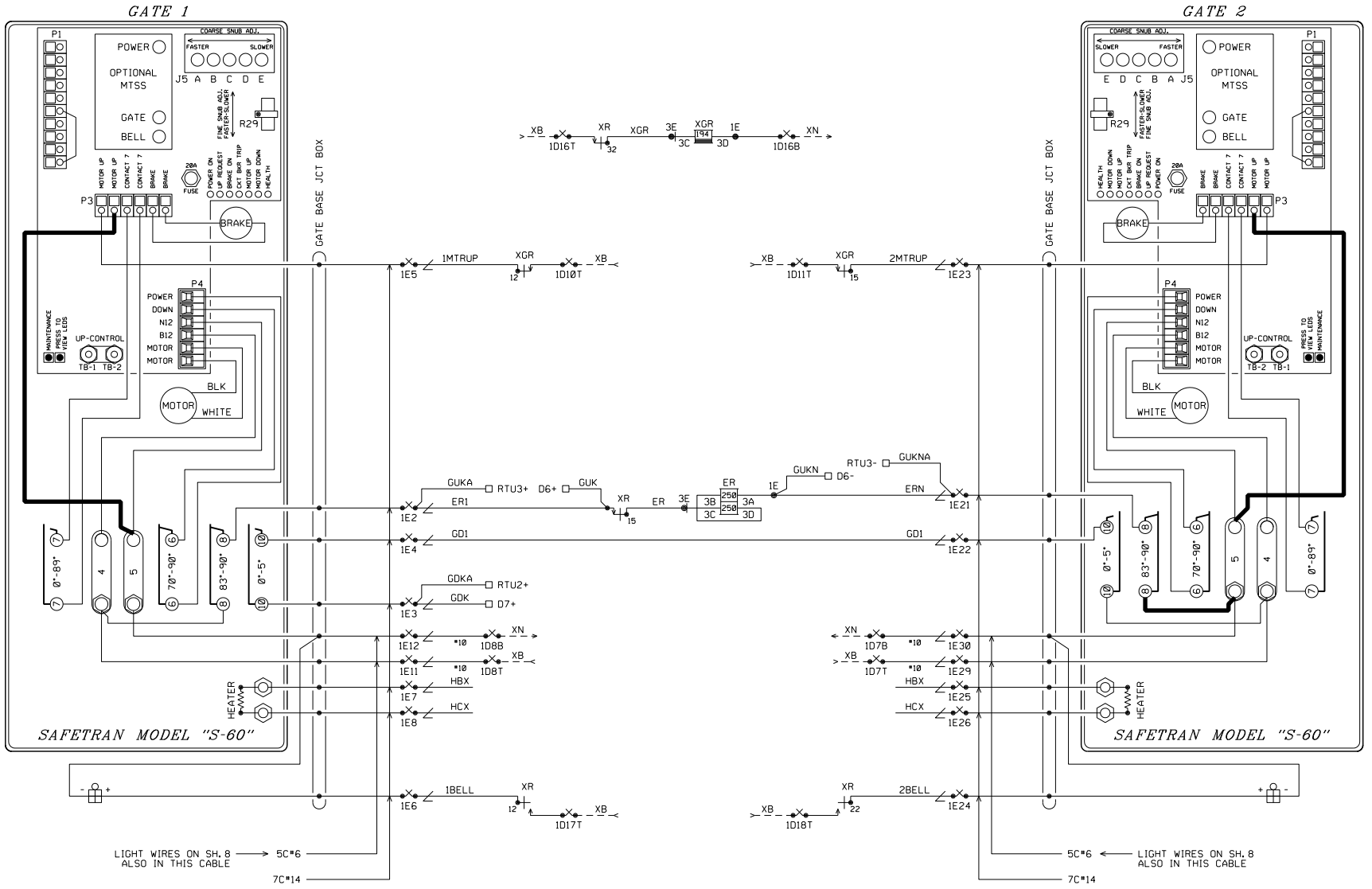
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

BATTERY CIRCUITS
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 06 OF 13

0013163_30x06c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



NOTES:
1. ADD JUMPERS IN GATE SHOWN IN BOLD.
2. MAXIMUM WIRE SIZE FOR TERMINAL 5 TO MOTOR UP CONTROL (-) IS #12 AWG.

ALL NEW

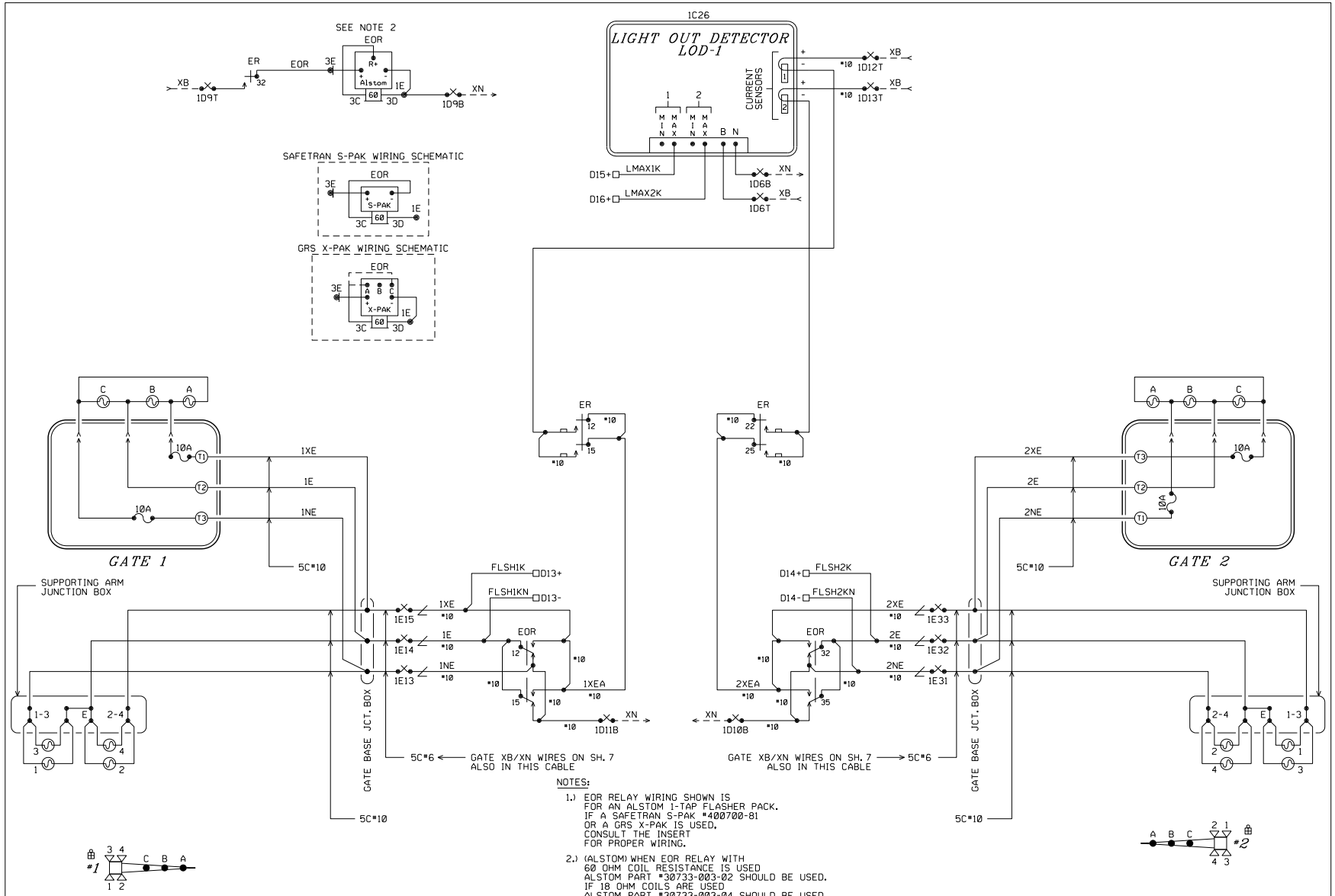
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

GATE CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 07 OF 13

0013163_30x07c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



NOTES:

1.) EOR RELAY WIRING SHOWN IS FOR AN ALSTOM 1-TAP FLASHER PACK. IF A SAFETRAN S-PAK #400700-81 OR A GRS X-PAK IS USED, CONSULT THE INSERT FOR PROPER WIRING.

2.) (ALSTOM) WHEN EOR RELAY WITH 60 OHM COIL RESISTANCE IS USED ALSTOM PART #30733-003-02 SHOULD BE USED. IF 18 OHM COILS ARE USED ALSTOM PART #30733-003-04 SHOULD BE USED.

3.) (X-PAK) WHEN EOR RELAY WITH 60 OHM COIL RESISTANCE IS USED CONNECT JUMPER FROM 3C TO "A". IF 18 OHM COILS ARE USED CONNECT JUMPER FROM 3C TO "C".

4.) (S-PAK) DO NOT USE S-PAK WITH 18 OHM COILS

ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

FLASHER CIRCUIT PLAN
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 08 OF 13

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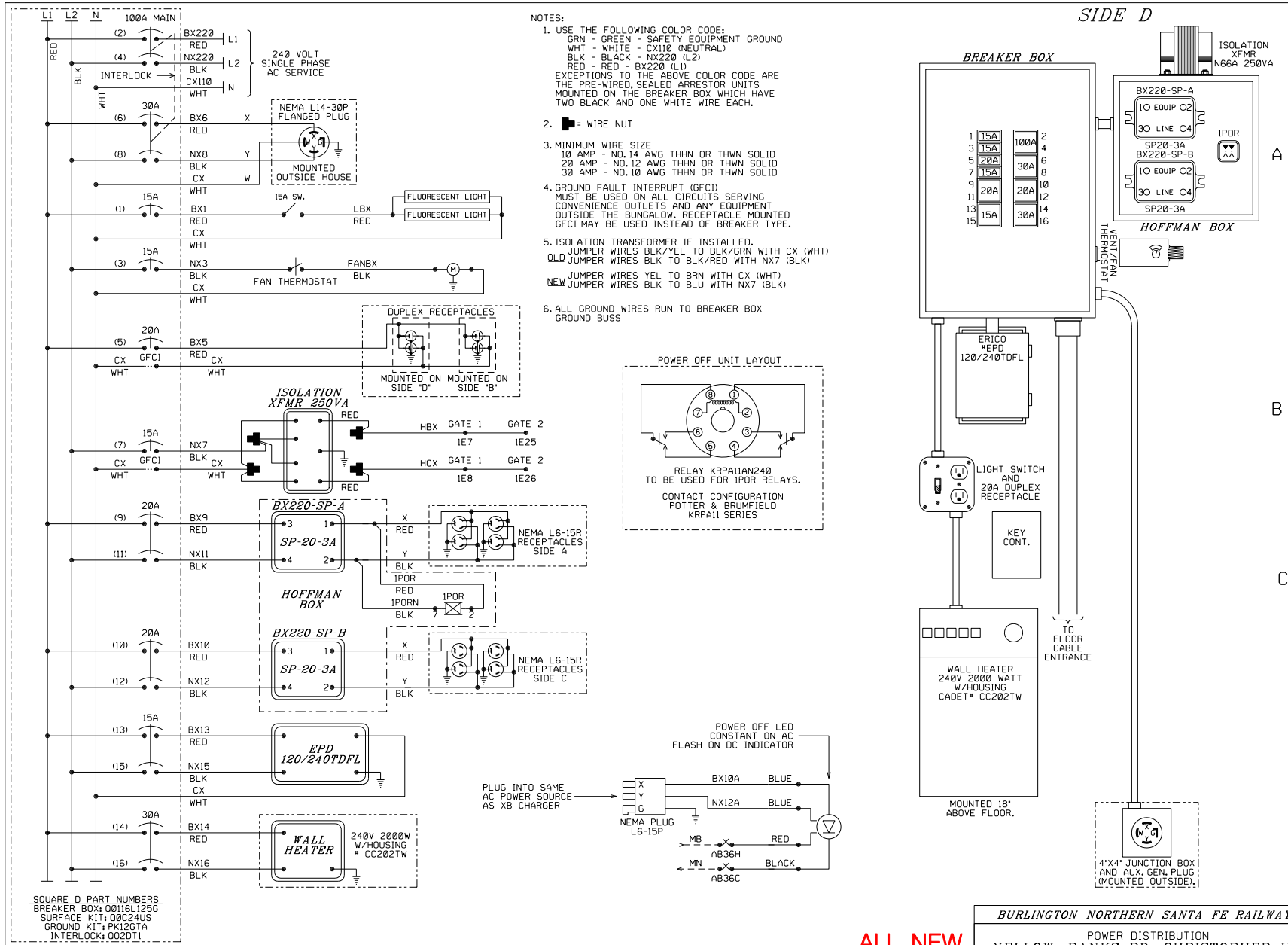


ALL NEW

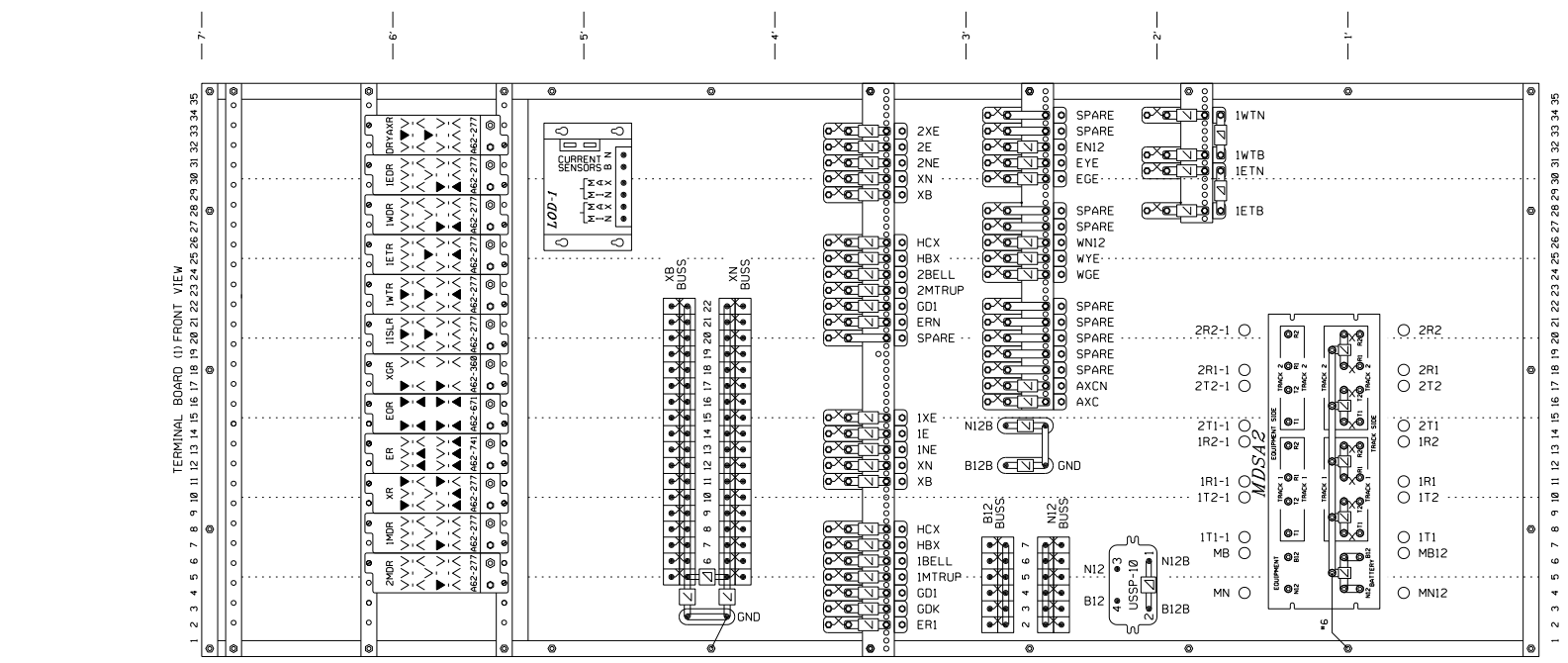
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

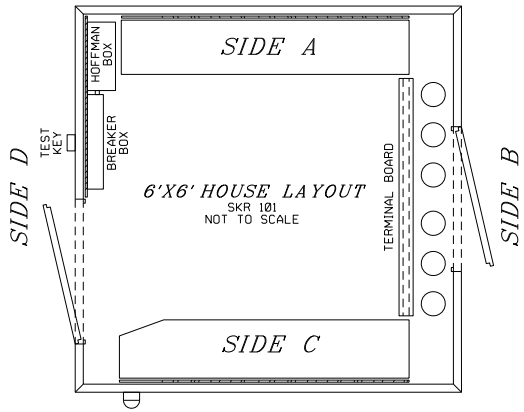
BURLINGTON NORTHERN SANTA FE RAILWAY

POWER DISTRIBUTION
YELLOW BANKS RD. CHRISTOPHER, IL

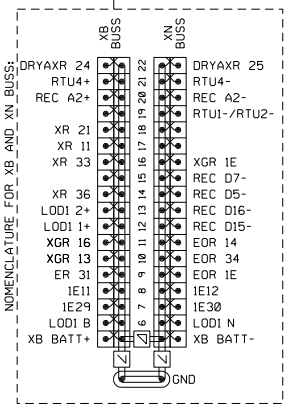
LS 0013	MP 136.30	SH 09 OF 13

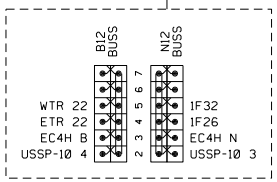
0013163_30x09c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON





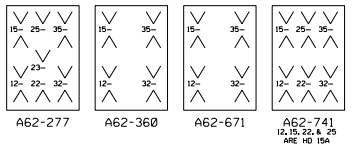
NOTE: INSTALL POWER OFF INDICATOR LIGHT ON TRACK SIDE NEAREST THE HIGHWAY AND NEAR EAVE OF HOUSE.





RELAY CROSS REFERENCE

GRS	SAFETRAN
A62-277	400004
A62-741	400005
A62-671	400700
A62-360	400200



ALL NEW

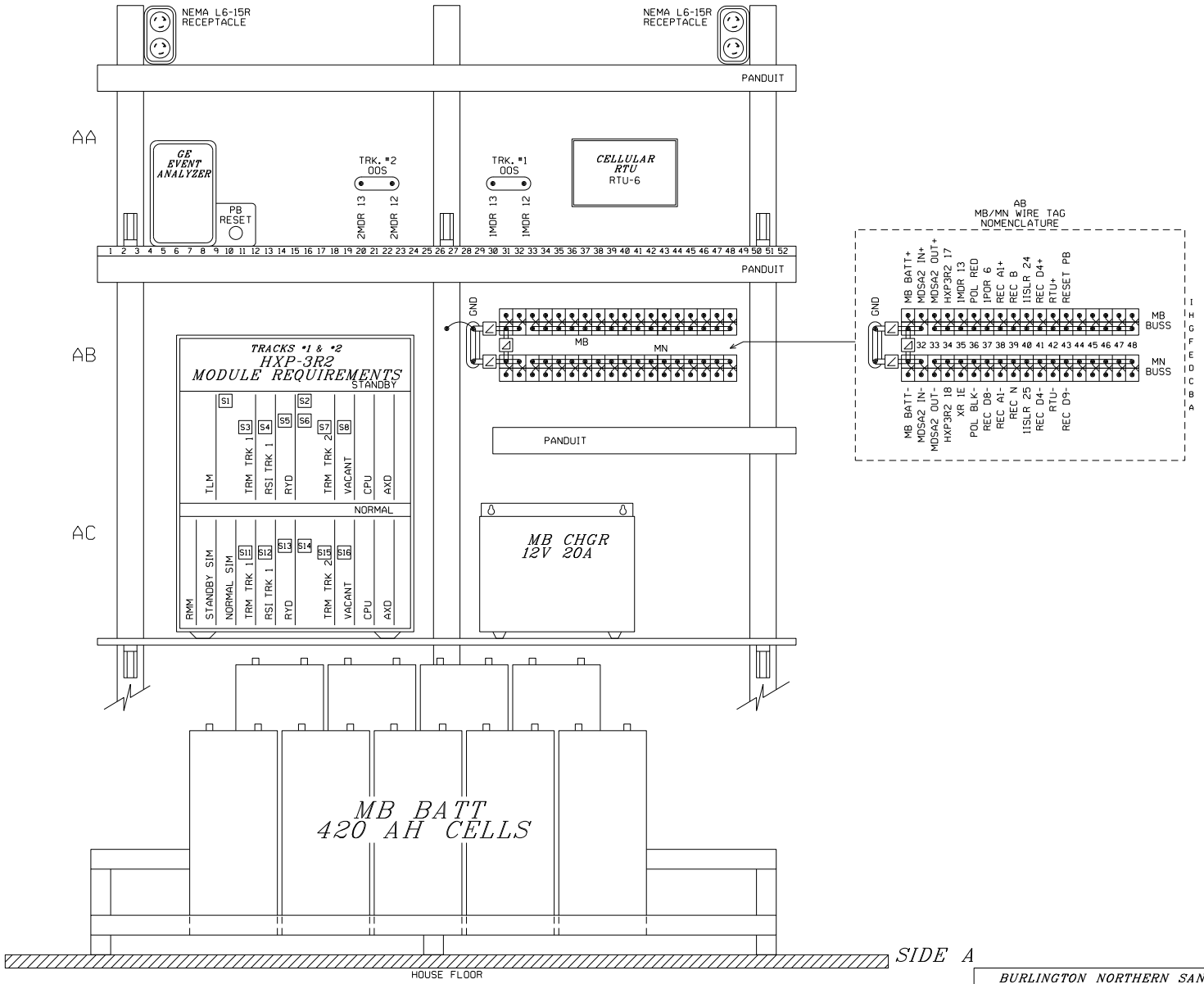
DESIGNED 07-26-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

TERMINAL BOARD LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 10 OF 13

0013163_30x10c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

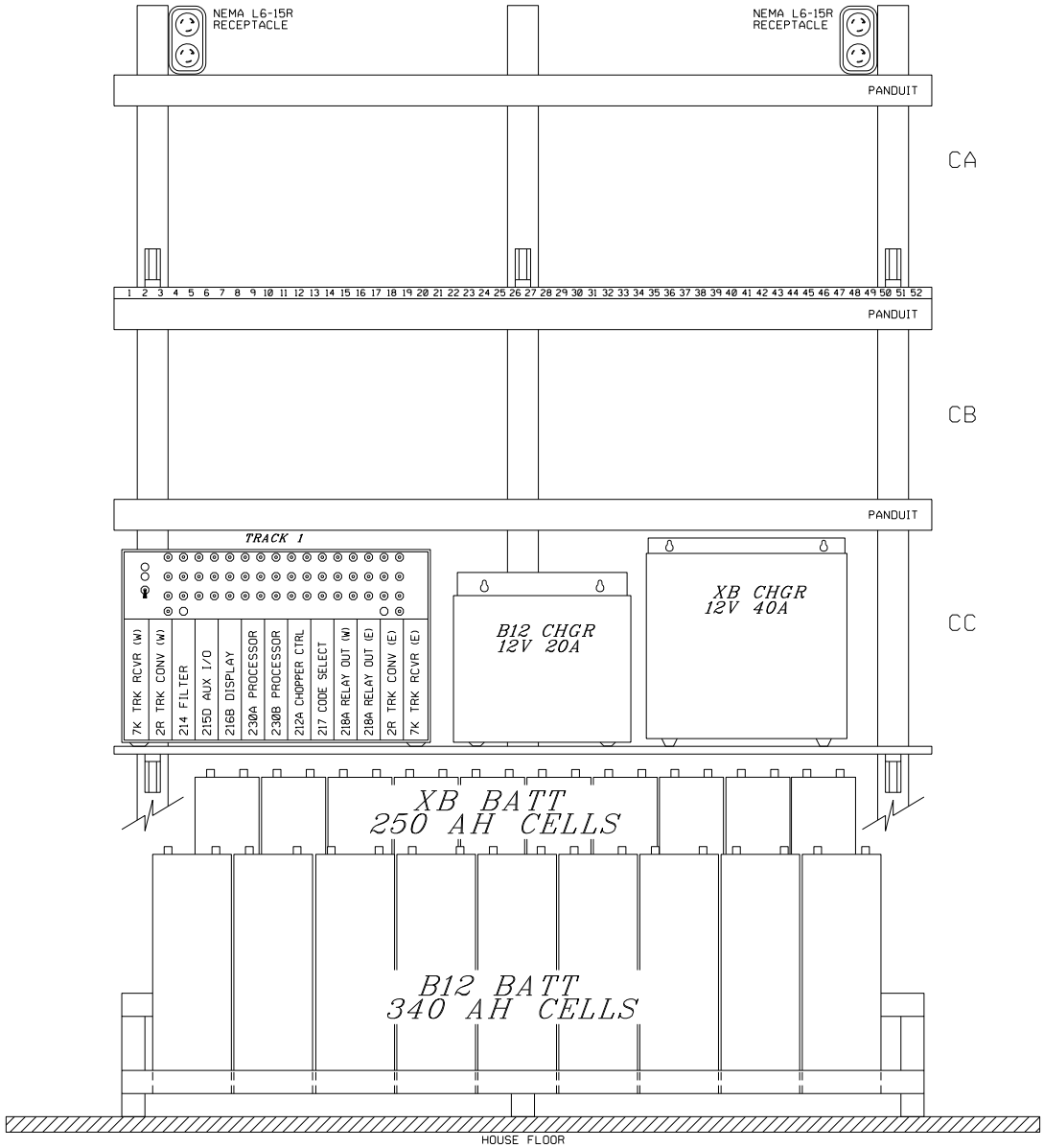
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "A" SHELF LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 MP 136.30 SH 11 OF 13

0013163_30x11c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

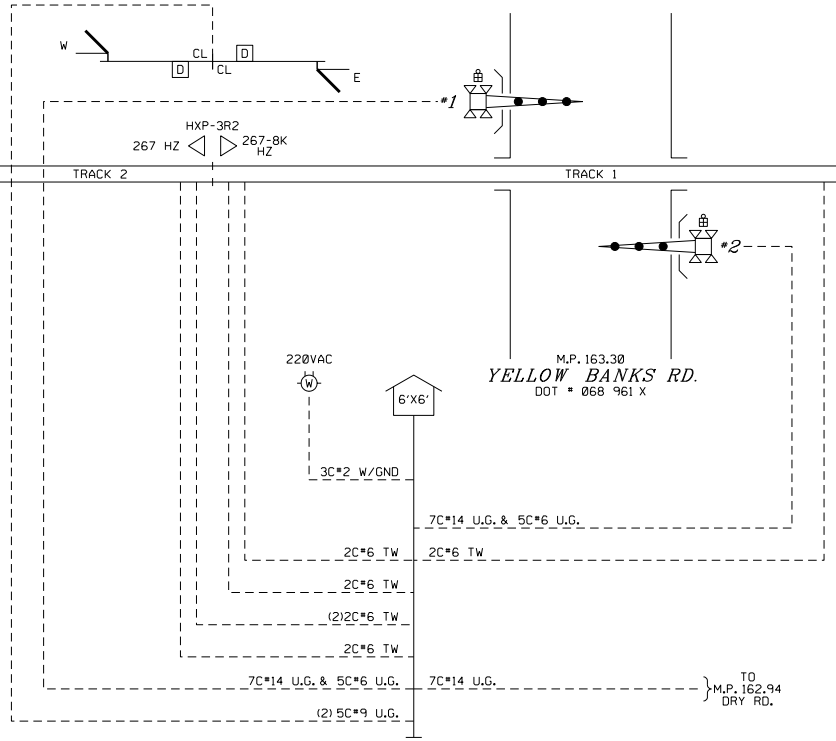
DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "C" SHELF LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013 | MP 136.30 | SH 12 OF 13

0013163_30x12c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON



ALL NEW

DESIGNED 07-06-10
INSTALL NEW HOUSE
JML/ASS SEQ.# 42729

BURLINGTON NORTHERN SANTA FE RAILWAY

CABLE LAYOUT
YELLOW BANKS RD. CHRISTOPHER, IL

LS 0013	MP 136.30	SH 13 OF 13

0013163_30x13c_.dgn July 6, 2010 LEVEL 5 = ON LEVEL 9 = ON LEVEL 14 = ON