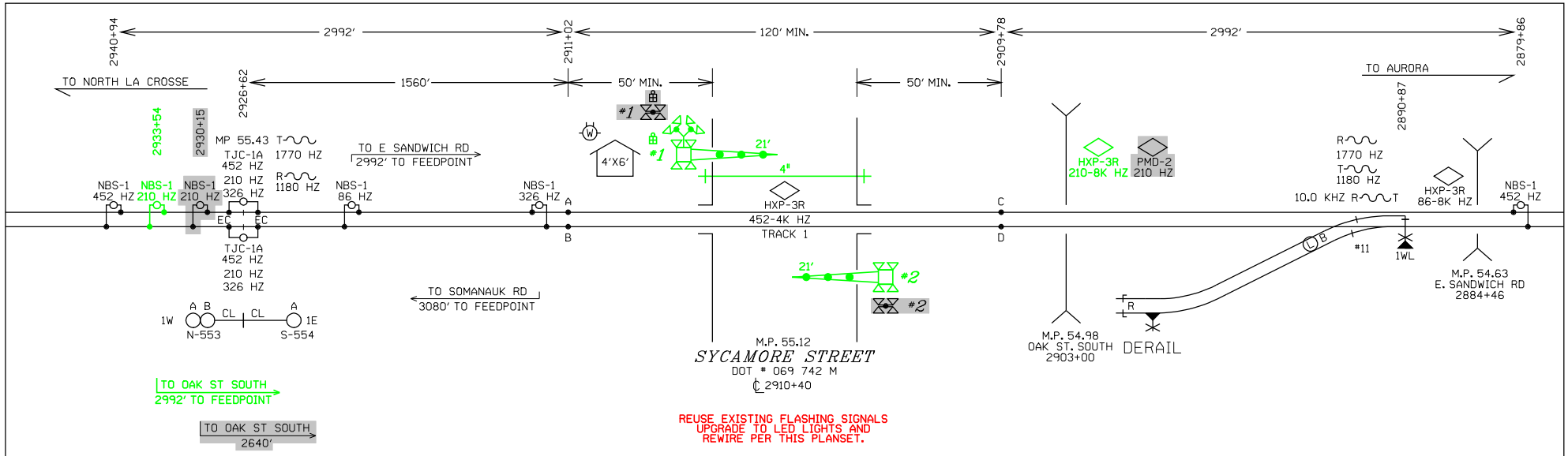
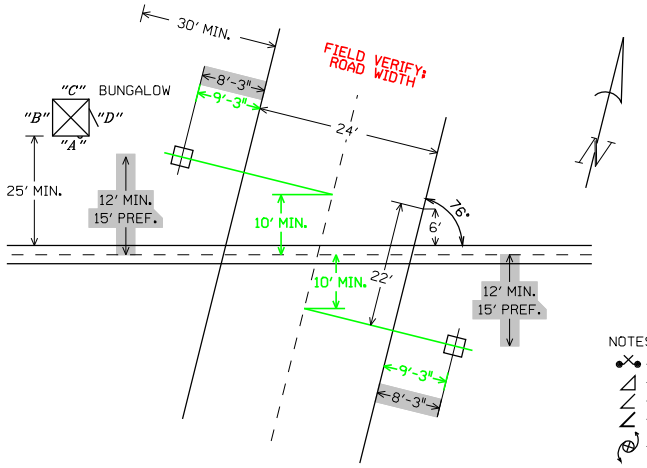
PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



REUSE EXISTING FLASHING SIGNALS
UPGRADE TO LED LIGHTS AND
REWIRE PER THIS PLANSET.



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

NOTES:

EQUIPMENT IS DESIGNED FOR 20 SECONDS MINIMUM WARNING TIME AT 60 MPH.
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.

ALL NEW

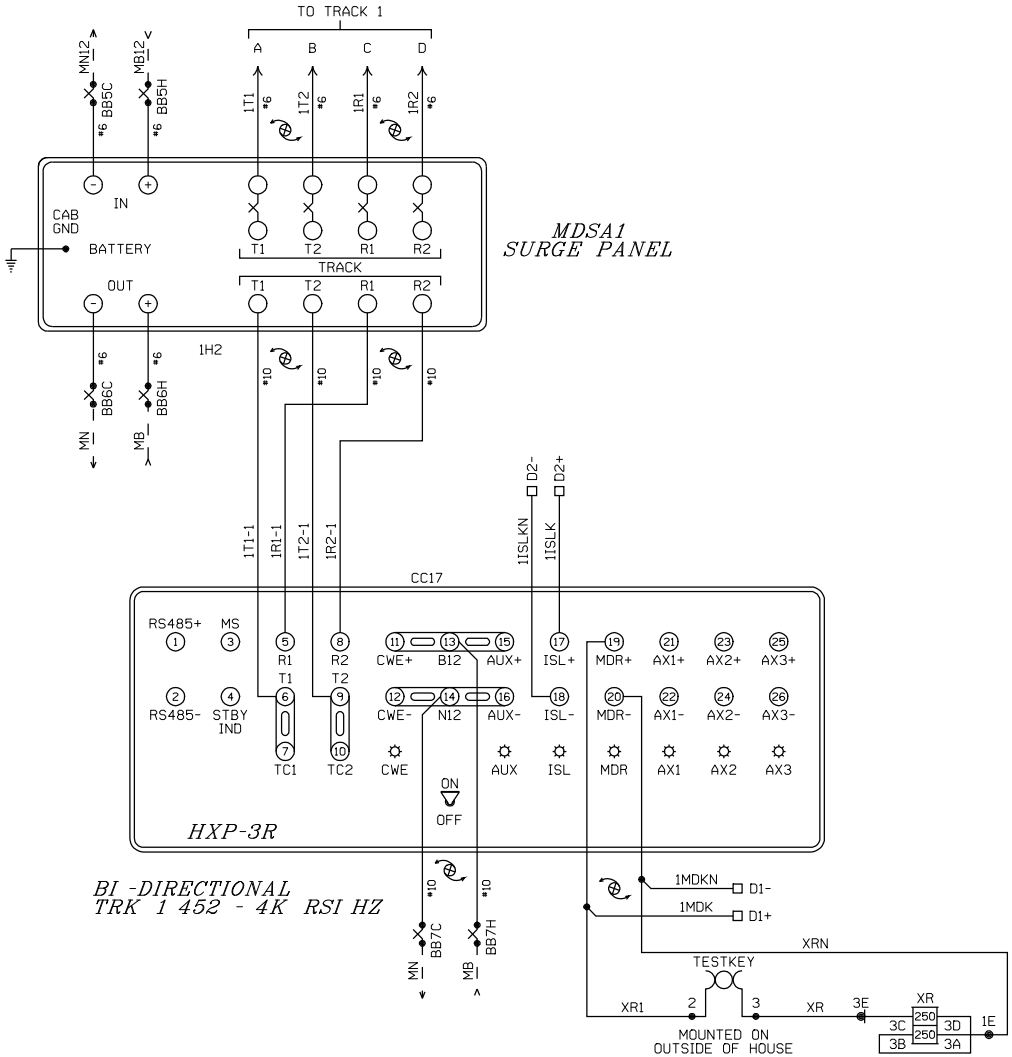
BURLINGTON NORTHERN SANTA FE RAILWAY

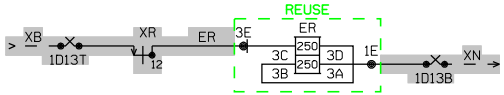
CROSSING CIRCUIT PLAN
SYCAMORE STREET HINCKLEY, IL

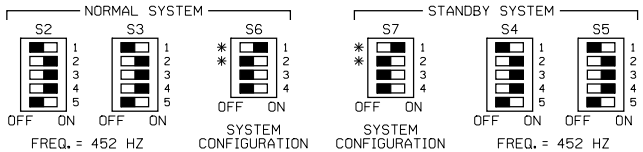
						DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057	DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047	LS 0003	MP 55.12	SH 01 OF 09

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING







NOTES: FOR S6 AND S7

✱ 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 RESERVED FOR FUTURE USE.

ALL NEW

PROGRAM INFORMATION

PROGRAM VERSION 41.0 OR LATER

✱=FIELD ADJUSTMENT TO BE MADE ACCORDING TO THE HXP-3 INSTRUCTION MANUAL AND SUPPLEMENTS.

HXP-3R ADJUSTMENTS

NO.	ADJUSTMENT NAME	TRACK 1
1	APP. LENGTH	2992'
2	WARNING TIME	30 SEC.
3	LIA	✱
4	TC	✱
5	MD RESTART	✱

OPTION ADJUSTMENTS

NO.	ABBREVIATION	TRACK 1
1	TK-ENA	"UP"
2	TK FO	452 HZ
3	CW/MD	"C"
4	UNI-BI	"b" (BI)
5	NBS-C	✱
6	CWEWT	DL (80 SEC.)
7	LOS	DL (16 SEC.)
8	IJ-LOS	DL (5 SEC.)
9	BC	✱
10	P-COMP	✱
11	AX1	NA
12	AX2	NA
13	AX3	NA
17	MDR-AX/OF-TK 1	DL (0)
	CJ-LOS	DL (0)
	PJ-DET	DL (15 SEC.)
	PJ-RX	DL (15)
18	MD-TMR	DL (10 MIN.)
19	MIN-WT	DL (0)
20	FS-RX	DL (0)
	FS-TM	DL (10 MIN.)
21	POS-RX	DL (0)
	POS-TM	DL (0)
22	AR-RX	DL (0)
	AR-TM	DL (10 MIN.)
47	ATO-RX	UP
48	PF-ENA	"dn"

SWITCH INFORMATION

SWITCH	TRACK 1
MASTER/SLAVE	MASTER
RSI FAULT JUMPER	0
RSI-LOS JUMPER	1
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

NOTE: DL= DEFAULT LEVEL
NA= NON APPLICABLE

BURLINGTON NORTHERN SANTA FE RAILWAY

HXP-3R TRACK CIRCUITS
SYCAMORE STREET HINCKLEY, IL

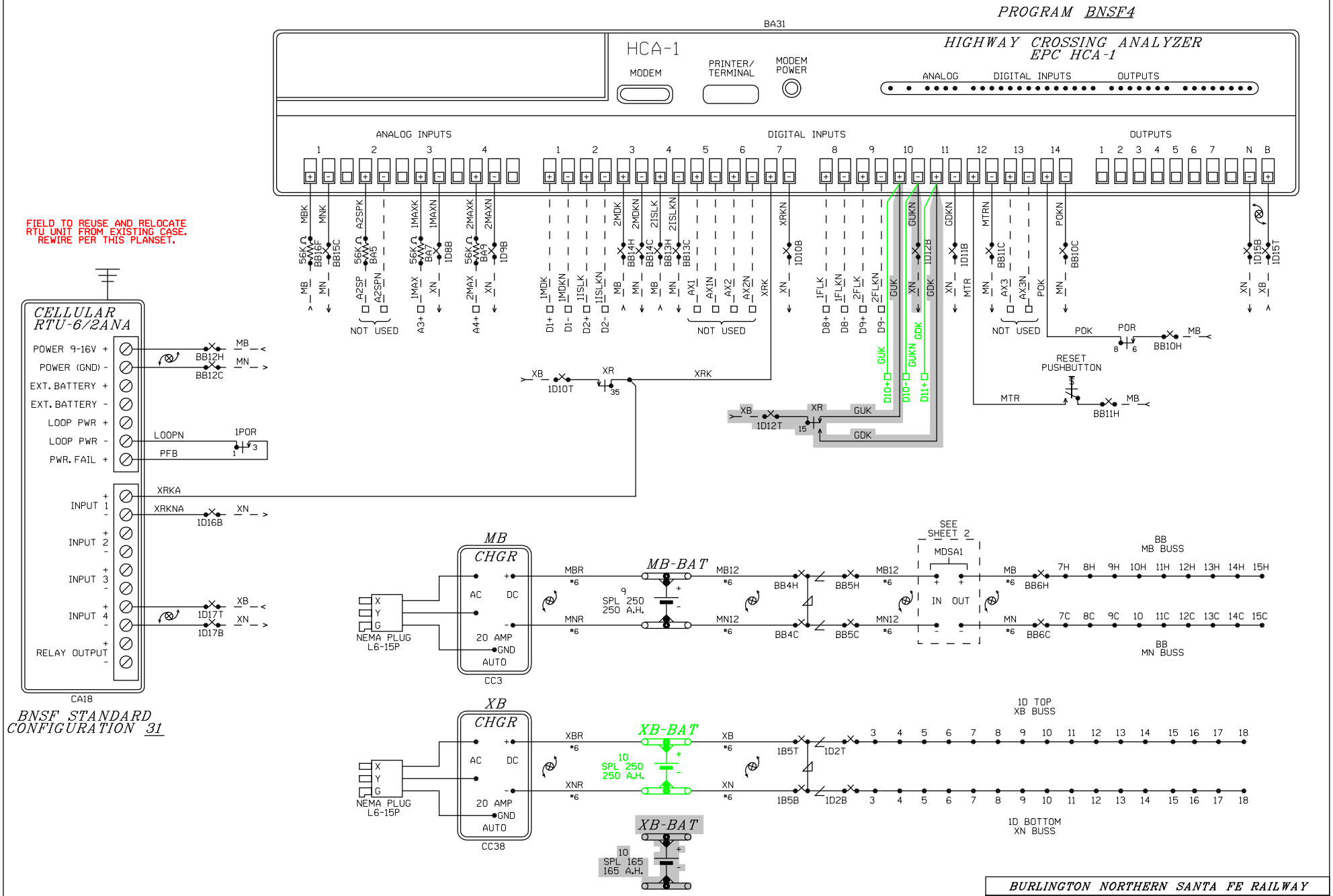
DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057

DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 02 OF 09

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

RECORDER AND BATTERY CIRCUITS
SYCAMORE STREET HINCKLEY, IL

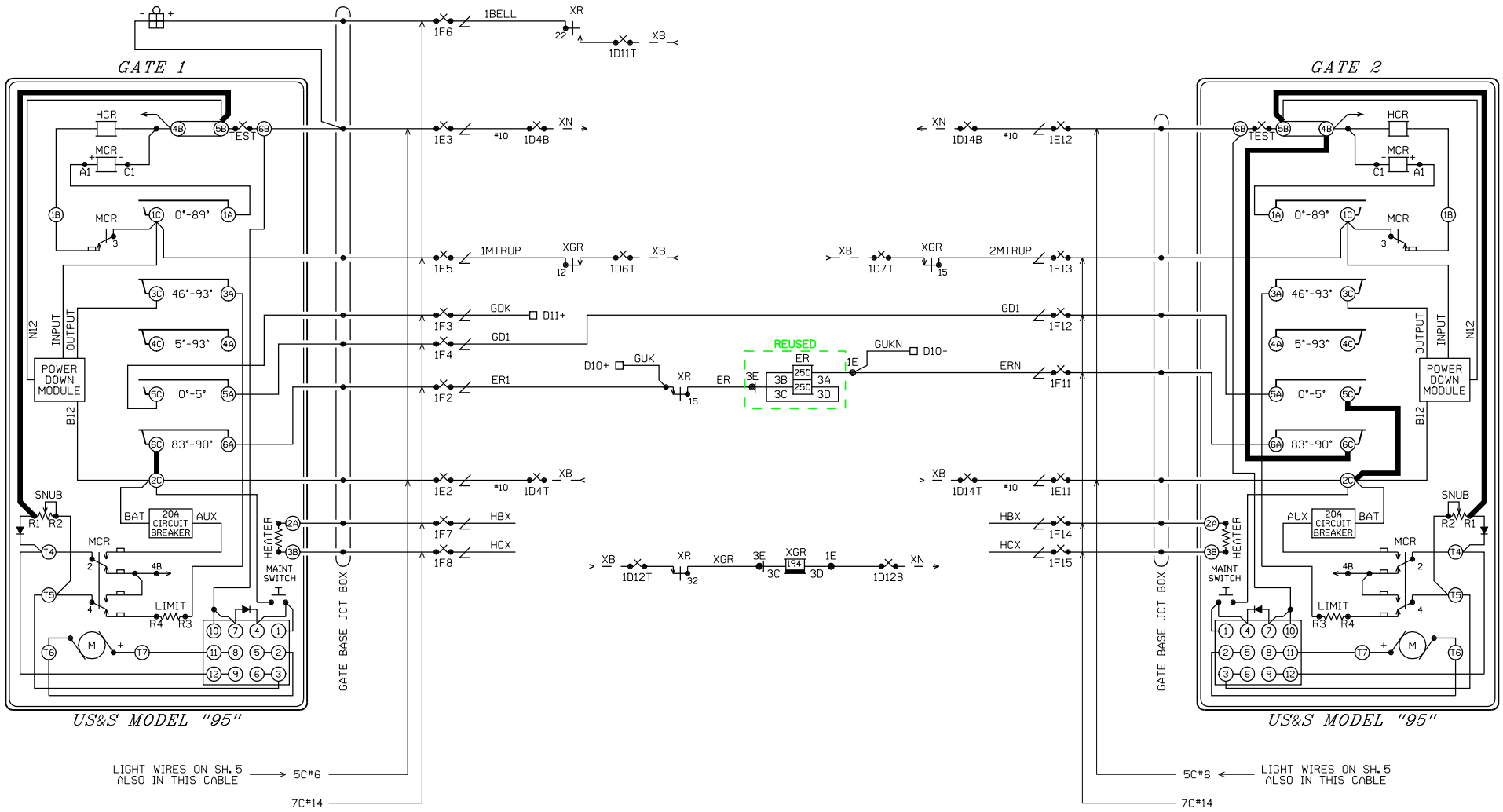
DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057

DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 03 OF 09

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



NOTE:
ADD JUMPERS IN GATE SHOWN IN BOLD.

ALL NEW

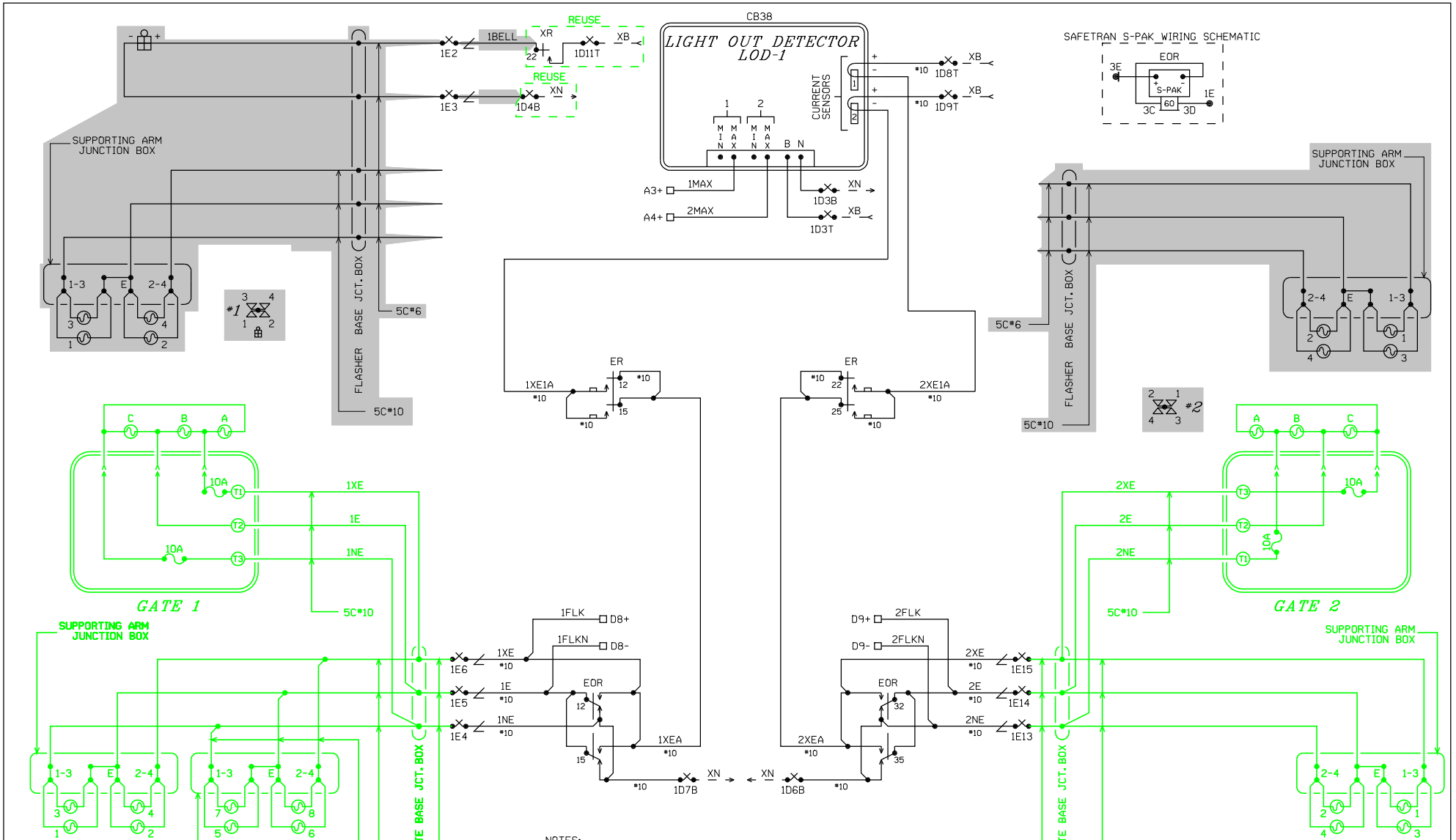
DESIGNED 05-17-08
INSTALL GATES MP 55.12
SSD/JRE SEQ.# 38057

BURLINGTON NORTHERN SANTA FE RAILWAY

GATE CIRCUIT PLAN
SYCAMORE STREET HINCKLEY, IL

LS	MP	SH
0003	55.12	04 OF 10

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



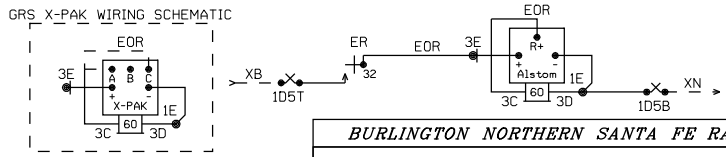
NOTES:

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

BURLINGTON NORTHERN SANTA FE RAILWAY

FLASHER CIRCUIT PLAN
SYCAMORE STREET HINCKLEY, IL

DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057

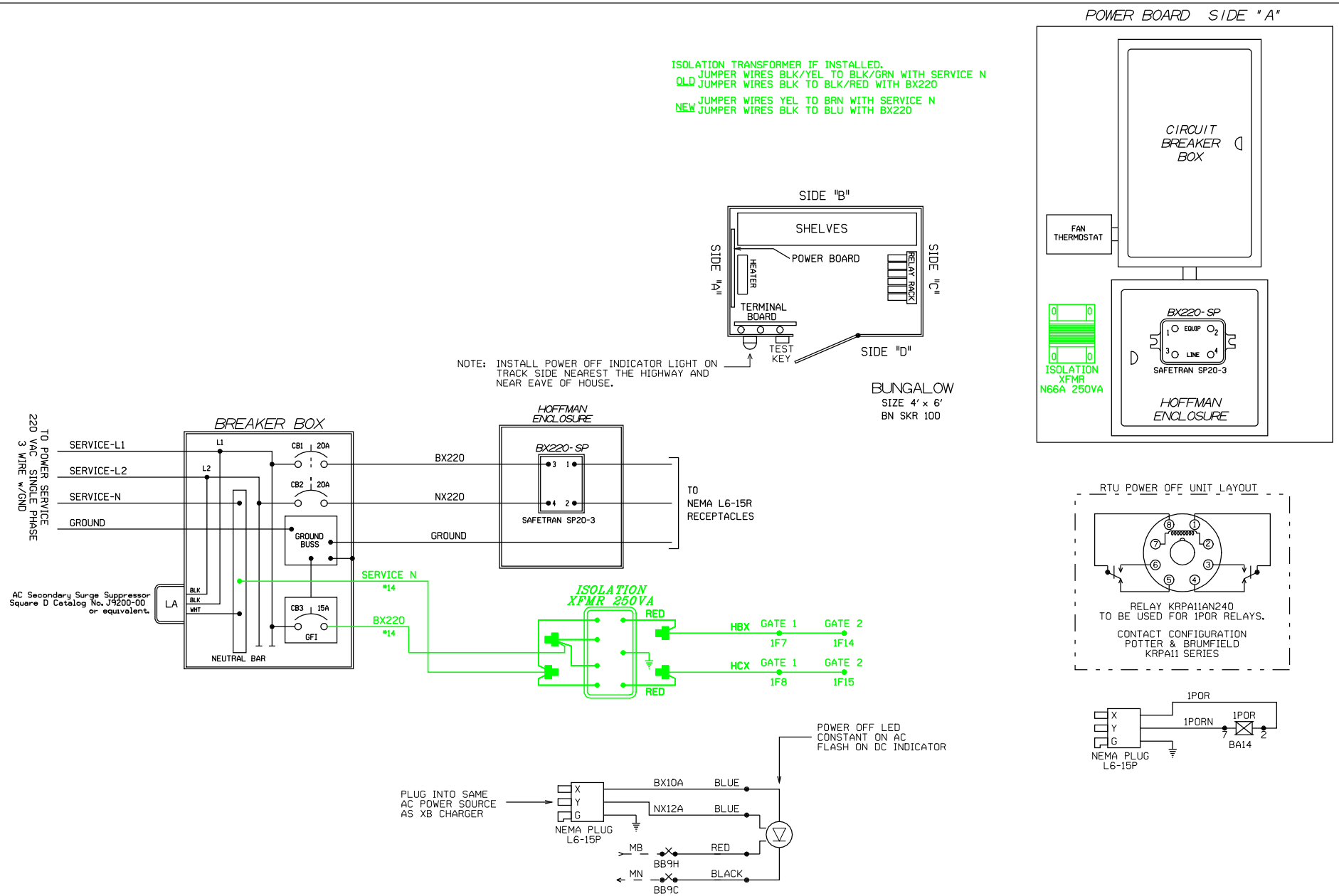
DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 04 OF 09

0003055_12x05c_.dgn May 17, 2008

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

POWER DISTRIBUTION
SYCAMORE STREET HINCKLEY, IL

DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057

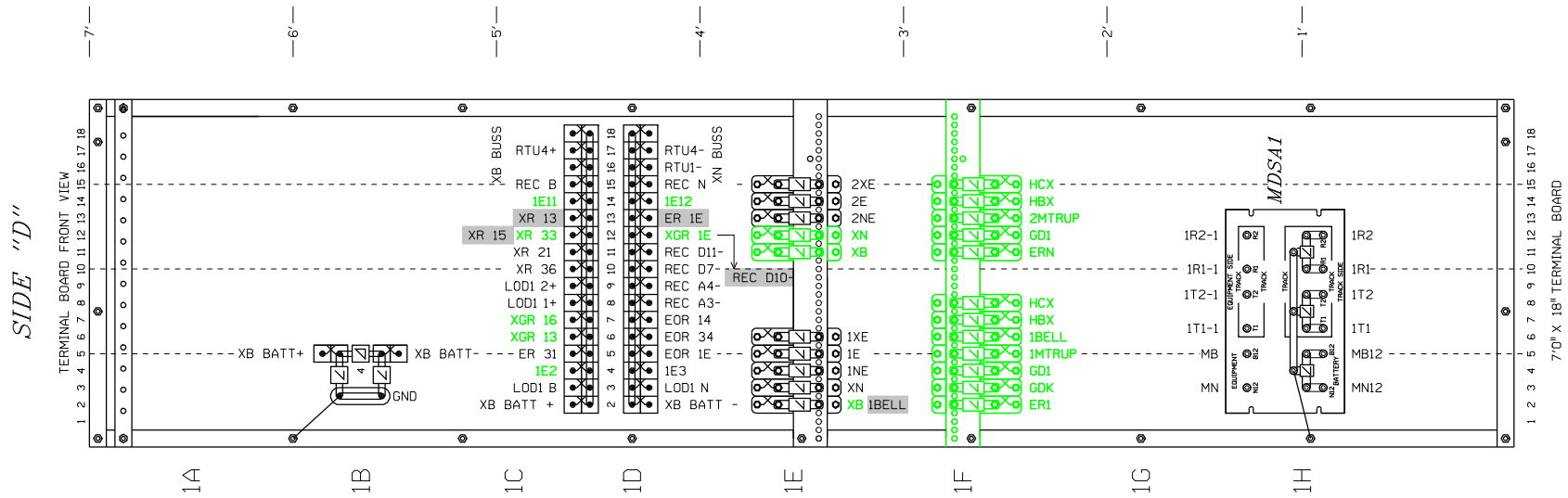
DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 05 OF 09

0003055_12x06c_.dgn May 17, 2008

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



ALL NEW

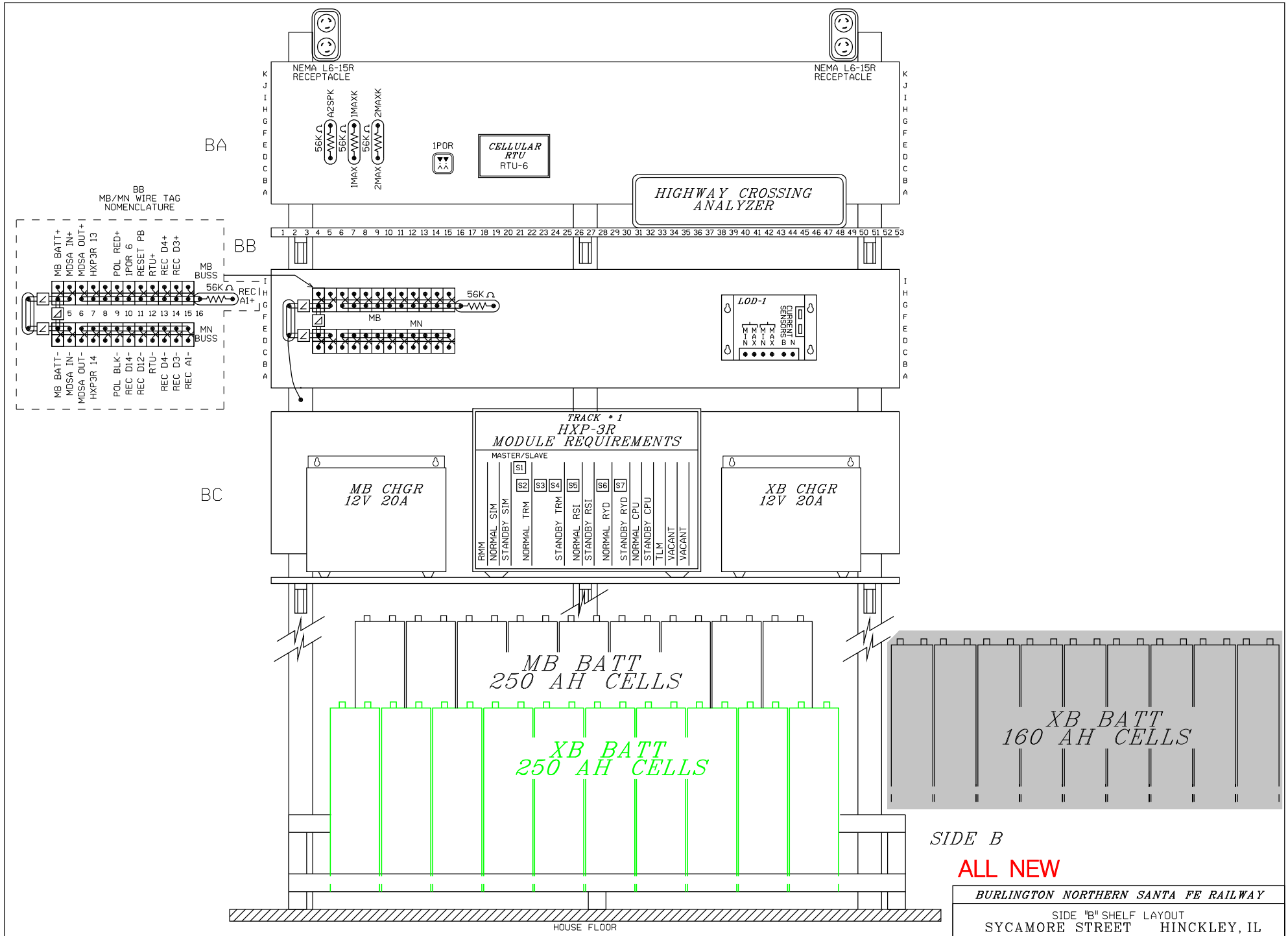
BURLINGTON NORTHERN SANTA FE RAILWAY		
TERMINAL BOARD 1 LAYOUT SYCAMORE STREET HINCKLEY, IL		
LS 0003	MP 55.12	SH 06 OF 09

DESIGNED 05-17-08
INSTALL GATES MP 55.12
SSD/JRE SEQ.# 38057

DESIGNED 9-27-06
UPGRADE CROSSING
SSD/TMJ SEQ.# 35047

GREEN = IN GREY = OUT

PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



SIDE B

ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "B" SHELF LAYOUT
SYCAMORE STREET HINCKLEY, IL

DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057

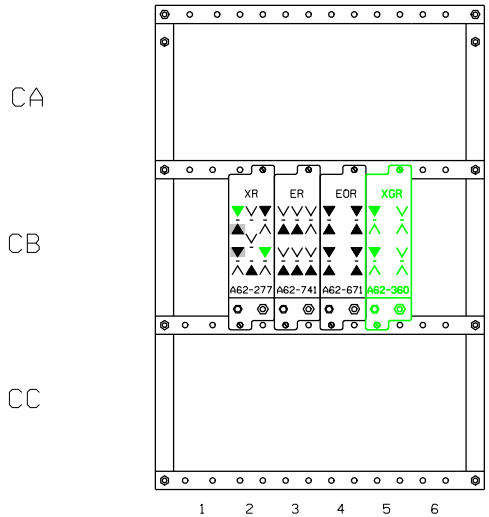
DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 07 OF 09

0003055_12x08c_.dgn May 17, 2008

GREEN = IN GREY = OUT

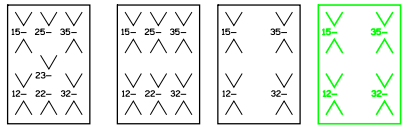
PLAN MUST NOT BE MODIFIED WITHOUT APPROVAL OF SIGNAL ENGINEERING



RELAY RACK

RELAY CROSS REFERENCE

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



▼ = CONTACT USED

V = CONTACT NOT USED

HOUSE FLOOR

SIDE C

ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

SIDE "C" LAYOUT
SYCAMORE STREET HINCKLEY, IL

DESIGNED 05-17-08
INSTALL GATES MP 55.12
SSD/JRE SEQ.# 38057

DESIGNED 9-27-06
UPGRADE CROSSING
SSD/TMJ SEQ.# 35047

LS 0003 MP 55.12 SH 08 OF 09

0003055_12x09c_.dgn May 17, 2008

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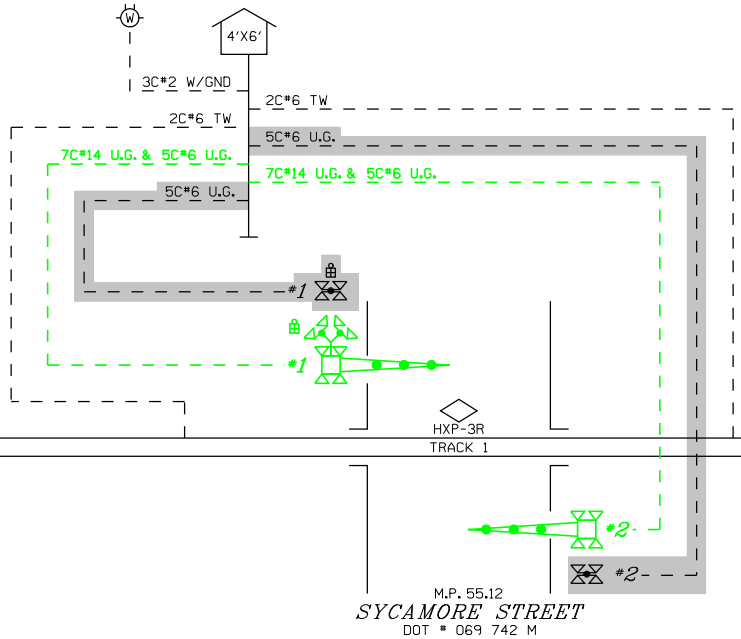

ALL NEW

BURLINGTON NORTHERN SANTA FE RAILWAY

CABLE LAYOUT
SYCAMORE STREET HINCKLEY, IL

						DESIGNED 05-17-08 INSTALL GATES MP 55.12 SSD/JRE SEQ.# 38057	DESIGNED 9-27-06 UPGRADE CROSSING SSD/TMJ SEQ.# 35047	LS 0003	MP 55.12	SH 09 OF 09

GREEN = IN GREY = OUT