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= PLANS SENT TO FIELD (DISTRIBUTED)  
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REVISIONS				
REV. NO.	PROJECT NO.	DESIGN DATE	IN SERVICE DATE	REVISION DATE
1	PA2017338	10-24-16	11-02-18	01-28-19

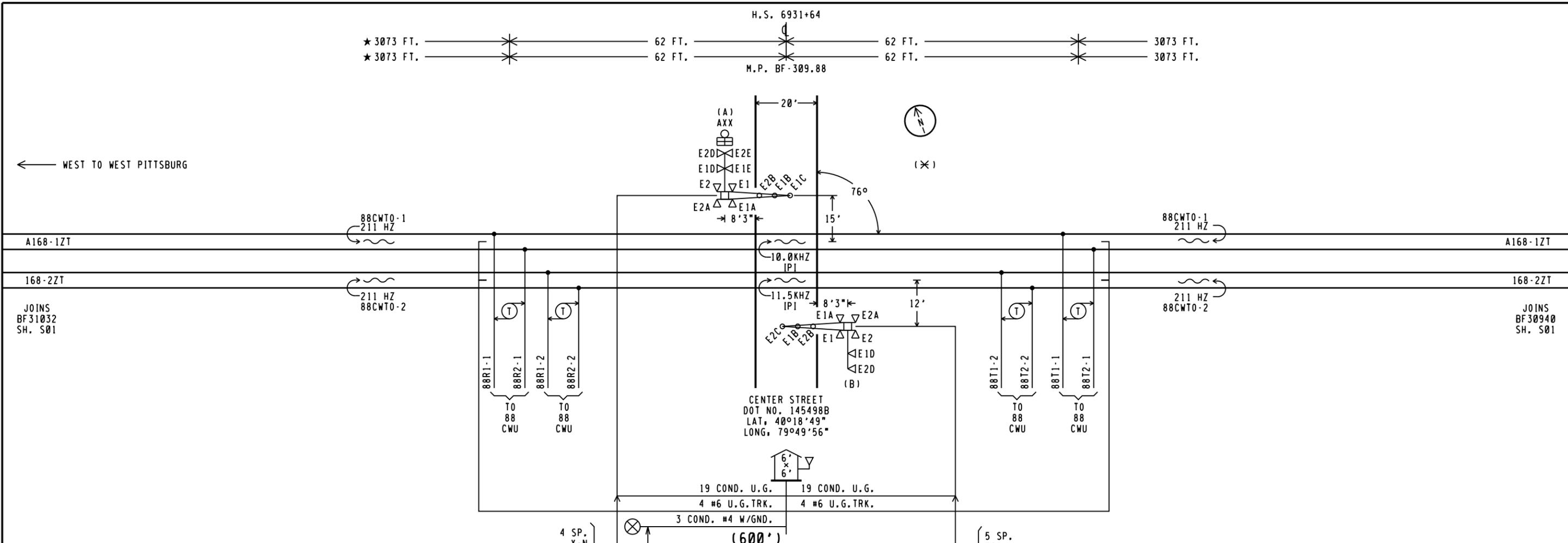
RAIL TRANSPORT GROUP ENGINEERING  
COMMUNICATIONS AND SIGNALS

**CENTER STREET 145498B**

INDEX AND REVISIONS  
VERSAILLES, PA M.P. BF-309.88

DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
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DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO .....	FILE BF30988	SHEET 101
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JOINS  
BF 31032  
SH. S01

JOINS  
BF 30940  
SH. S01

CENTER STREET  
DOT NO. 145498B  
LAT. 40°18'49"  
LONG. 79°49'56"

- NOTES:**
- 12" LED MAXIMUM CURRENT 1.0A AT 10 VOLTS  
LED GATE ARM LIGHTS .3A MAXIMUM
  - GATE LENGTH (A) 18' (B) 19'
  - (\*) = LOCATION OF HOUSE
  - (N) = APPROXIMATE COMPASS NORTH.
  - TRANSMITTER LEADS FOR MOTION  
OR PREDICTOR EQUIPMENT SHOULD BE  
CONNECTED ON THE BUNGALOW OR SHORT  
LEAD SIDE OF THE CROSSING.
  - ISLAND TRACK LEADS SHOULD BE CONNECTED  
50 FEET FROM ROAD EDGE BUT ON NARROW  
ROADS (20' OR LESS) ISLAND LENGTH  
SHALL BE 120 FEET.
  - WARNING SYSTEM APPROACH CIRCUIT  
DISTANCES ARE TO BE MEASURED FROM THE  
ISLAND TRACK CONNECTIONS.
  - \* = ACTUAL APPROACH DISTANCE IS LONGER  
THAN THE CALCULATED APPROACH  
DISTANCE TO BALANCE THE WESTSIDE APPROACH

APPROACH LENGTHS TABLE	WESTWARD TRACK 1 CWT	EASTWARD TRACK 1 CWT	WESTWARD TRACK 2 CWT	EASTWARD TRACK 2 CWT
DC, AFO, TYPE C, MOTION, CWT, OR OTHER				
STANDARD MINIMUM WARNING TIME IN SECONDS	25	25	25	25
ROADWAY GATE TIME IN SECONDS	5	5	5	5
CLEARANCE TIME IN SECONDS	1	1	1	1
DOT TRAFFIC LIGHT SIMULTANEOUS PREEMPT TIME IN SECONDS *	0	0	0	0
PRESCRIBED WARNING TIME FOR TRAINS AT TIME TABLE SPEED	31 SEC.	31 SEC.	31 SEC.	31 SEC.
DOT TRAFFIC LIGHT ADVANCE PREEMPT TIME IN SECONDS *	0	0	0	0
CONTROL EQUIPMENT DECISION TIME IN SECONDS	5	5	5	5
DESIGNED DETECTION TIME FOR TRAINS AT TIME TABLE SPEED	36 SEC.	36 SEC.	36 SEC.	36 SEC.
TIME TABLE MAXIMUM TRAIN SPEED IN MILES PER HOUR	45	45/60	45	45/60
BUFFER SPEED IN MILES PER HOUR	5	5	5	5
TOTAL WARNING SYSTEM DESIGN SPEED IN MILES PER HOUR	50	50/65	50	50/65
APPROACH DISTANCE TO ISLAND EDGE IN FEET	★ 2597	3073	★ 2597	3073
HALF WIDTH OF ISLAND IN FEET	62	62	62	62
APPROXIMATE MILE POSTS FOR APPROACH CIRCUIT	310.47	309.29	310.47	309.29

\* AUTHORIZING AGENCY, NONE  
 \* DATE OF REQUIREMENT, NONE  
 \* AMOUNT OF TIME (SEC.), NONE

RAIL TRANSPORT GROUP ENGINEERING  
 COMMUNICATIONS AND SIGNALS  
**CENTER STREET 145498B**  
 TRACK AND SIGNAL PLAN  
 VERSAILLES, PA M.P. BF-309.88

DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO .....
FILE BF30988	SHEET S01		

Minimum Program Steps Report

Location and SIN

DOT Number: 145498B  
 Milepost Number: BF-309.88  
 Site Name: CENTER STREET

SIN: 712548002816 \*

\* Parameter is part of office check number calculation.

MCF and Template Selection

MCF Name: GCP-T6X-02-6.mcf  
 MCF Revision: 26  
 MCFCRC: 494D2656

Template = 1A,6 Trk B1 (OCCN) \*

\* Parameter is part of office check number calculation.

Minimum Program Steps

TEMPLATE, module configuration  
 Chassis Type = Dual Two Track (OCCN) \*  
 Track 2/R10 1 Slot = Track (OCCN) \*

TEMPLATE, track 1-B1, Island  
 Track 1, GCP Frequency = 211 Hz (OCCN) \*  
 Track 1, Approach Distance = 3073 ft (OCCN) \*  
 Track 1, Prime Warning Time = 31 sec (OCCN) \*  
 Track 1, GCP Transmit Level = High (Set in Field,TCN)  
 Track 1, Isl Frequency = 10.0 kHz (OCCN) \*

TEMPLATE, track 2-B1, Island  
 Track 2, GCP Frequency = 211 Hz (OCCN) \*  
 Track 2, Approach Distance = 3073 ft (OCCN) \*  
 Track 2, Prime Warning Time = 31 sec (OCCN) \*  
 Track 2, GCP Transmit Level = High (Set in Field,TCN)  
 Track 2, Isl Frequency = 11.5 kHz (OCCN) \*

TEMPLATE, SSCC  
 SSCC-1 Number of GDs = 1 (OCCN) \*  
 SSCC-2 Number of GPs = 1 (OCCN) \*  
 SSCC-2 Number of GDs = 1 (OCCN) \*

TEMPLATE, OOS  
 OOS Control = Display OOS IPs (OCCN) \*  
 OOS Timeout = 1 hrs (Set in Field)  
 T2 OOS Control = OOS Input 1 (OCCN) \*

TEMPLATE, IP assignment SSCC  
 IN 7.2 = Not Used (OCCN) \*  
 IN 8.2 = Out Of Service IP 1 (OCCN) \*  
 IN 8.4 = GD 2.1 (OCCN) \*  
 IN 8.5 = GP 2.1 (OCCN) \*

GCP, track 1  
 Track 1, Island Distance = 124 ft (Set in Field,TCN)

GCP, track 2  
 Track 2, Island Distance = 124 ft (Set in Field,TCN)

ADVANCED, site options  
 Daylight Savings = 0n (Set in Field)

SSCC, 1  
 SSCC-1 Gate Delay = 5 sec (OCCN) \*  
 SSCC 1, Flash Rate = 55 (OCCN) \*

SSCC, 2  
 SSCC-2 Gate Delay = 5 sec (OCCN) \*  
 SSCC 2, Flash Rate = 55 (OCCN) \*

SEAR  
 DI 1 = Gnd Flt Tester 1 (OCCN) \*  
 DI 2 = Gnd Flt Tester 2 (OCCN) \*  
 Rly 1 = Ground Fault Test (OCCN) \*  
 Rly 2 = AC Control (OCCN) \*

SEAR, slot 7-8 inputs  
 IN 7.1 = TSS 1 (OCCN) \*  
 IN 8.1 = TSS 2 (OCCN) \*  
 IN 8.3 = POK 2 (OCCN) \*

\* Parameter is part of office check number calculation.

Check Numbers

Office Check Number: 029DDA10  
 Config. Check Number: 6127A830  
 (Based on MCF Revision 26)

Parameters not part of office check number calculation:

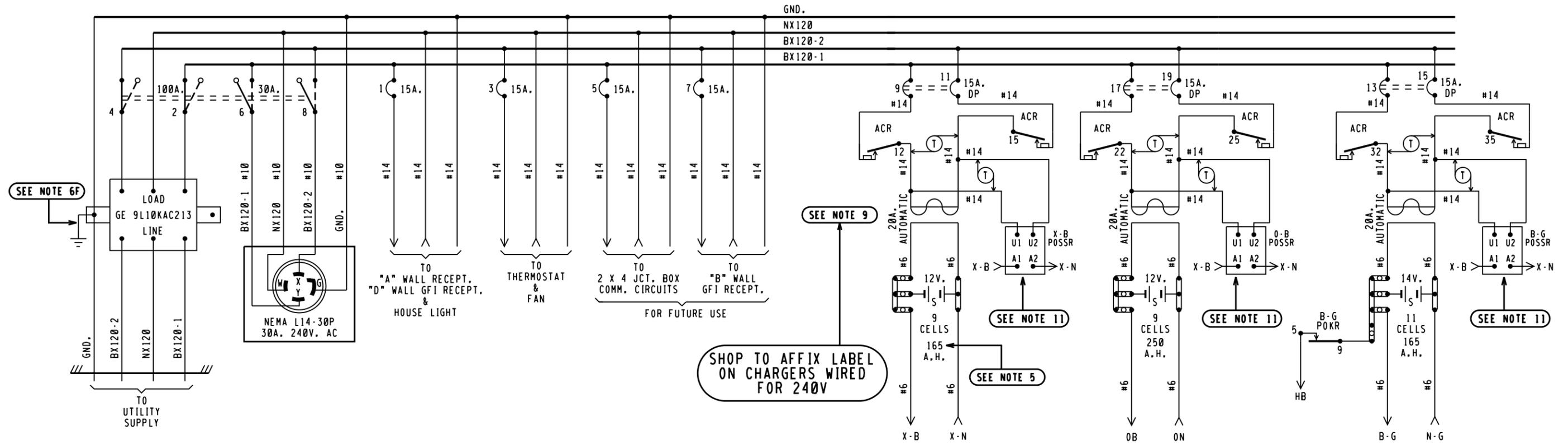
Track 1, GCP Transmit Level = High (Set in Field)  
 Track 2, GCP Transmit Level = High (Set in Field)  
 OOS Timeout = 1 hrs (Set in Field)  
 Track 1, Island Distance = 124 ft (Set in Field)  
 Track 2, Island Distance = 124 ft (Set in Field)  
 Daylight Savings = 0n (Set in Field)

Comments

<none>

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS					
<b>CENTER STREET 145498B</b>					
MINIMUM PROGRAM STEPS REPORT CWE-88 VERSAILLES, PA M.P. BF-309.88					
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16		
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO .....	FILE BF30988	SHEET P01

ACR		MCR	
12	B B77	9	F 11 N41
15	B C30	10	12 C48
22	B		C49
25	B	B-G POKR	
32	B	9	F 11 F N41
35	B	10	12 C48



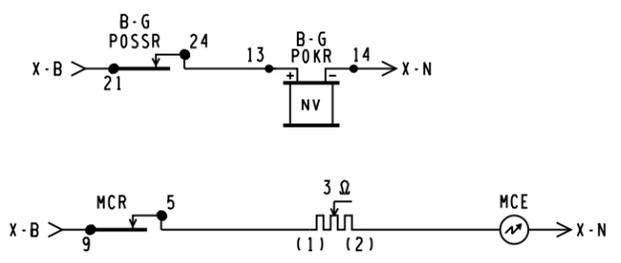
( BX120-1 | BX120-2 )  
 11.0 AMPS | 11.0 AMPS  
 MAXIMUM LOAD  
 CALCULATED PER SS360

- NOTES:**
- REFERENCES ARE PER SCMS-13.
  - ARRESTERS ARE PER SS382.
  - SHELF RELAY PLACEMENT ON CONSIST CHART HAS NO SIGNIFICANCE.
  - PLUG-IN RELAYS ARE VIEWED FROM THE FRONT OF RACK.
  - BATTERY A.H. CAPACITY SHOWN IS THE MINIMUM REQUIREMENT.
  - WIRING
    - A - FEED TO ALL BUSSES, LIGHT CIRCUITS, MOTOR CIRCUITS TO BE #10 FLEX.
    - B - 120-VOLT FEED FROM ENTRANCE TO POWER BUSS TO BE #10 FLEX.
    - C - ALL TRACK WIRES TO BE #10 FLEX.
    - D - ALL OTHERS TO BE #16 FLEX UNLESS NOTED.
    - E - ALL BATTERY OUTPUTS TO BE #6 PER SS360.
    - F - GROUND WIRE NOT NECESSARY WHEN GE ARRESTER IS MOUNTED ON GROUND PLANE OR METAL ENCLOSURE AFFIXED DIRECTLY TO BUNGALOW METALLIC STRUCTURAL MEMBER.
  - CIRCUIT INTERRUPTERS 2 & 4 ARE MECHANICALLY INTERLOCKED WITH CIRCUIT INTERRUPTERS 6 & 8.
  - LABEL ALL PRIMARY POWER WIRES WITH RED TAGS.
  - CHARGERS WIRED FOR 240VAC
  - CIRCUIT BREAKERS PANEL- 00124L125G (24 SPACES)
  - SOLID STATE VOLTAGE MONITOR BENDER MOD. VME 420-DW-1 DIN RAIL MOUNTED. OUTPUTS CONFIGURED NORMALLY CLOSED(INC). UNDERVOLTAGE SENSING MINIMUM OF 216 VOLTS AC.

SHOP TO AFFIX LABEL ON CHARGERS WIRED FOR 240V

X-B POSSR				OB POSSR				B-G POSSR						
11	F	21	F	N70	11	F	21	F	N70	11	F	21	F	N70

WALL/DIN RAIL MOUNTED



6' X 6' PTC CROSSING HOUSE

**CSX TRANSPORTATION**  
 RAIL TRANSPORT GROUP ENGINEERING  
 COMMUNICATIONS AND SIGNALS

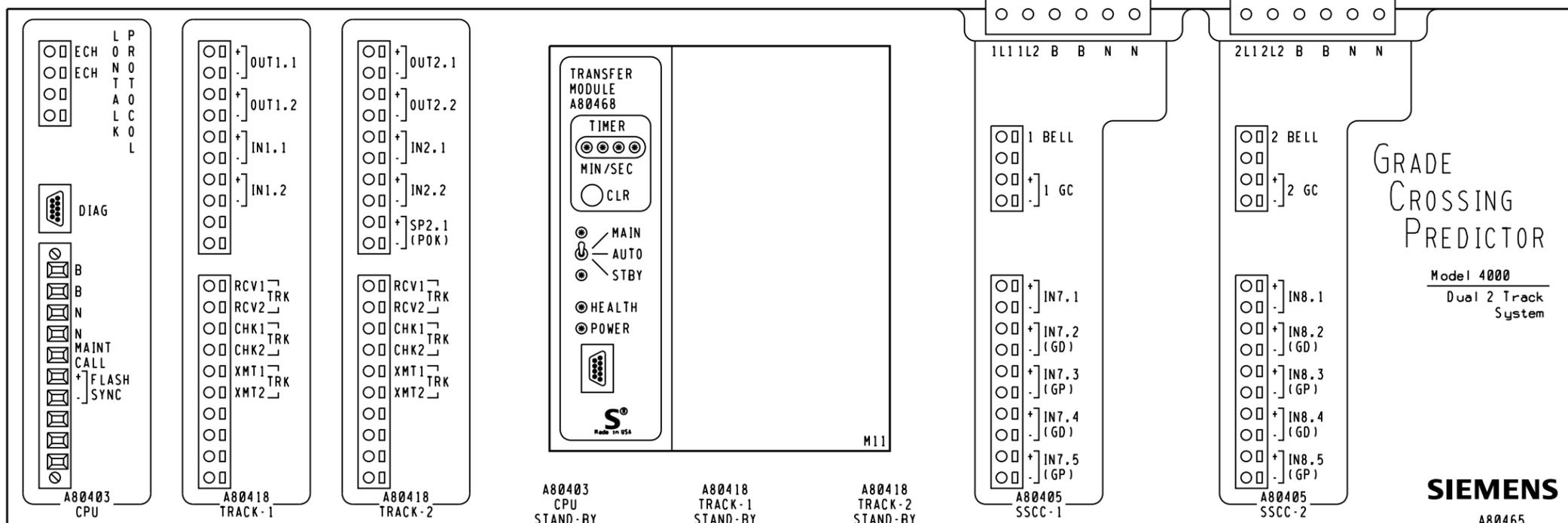
**CENTER STREET 145498B**

POWER DISTRIBUTION  
 VERSAILLES, PA M.P. BF-309.88

DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING	SHEET NO
		FILE BF30988	SHEET E01

00S B

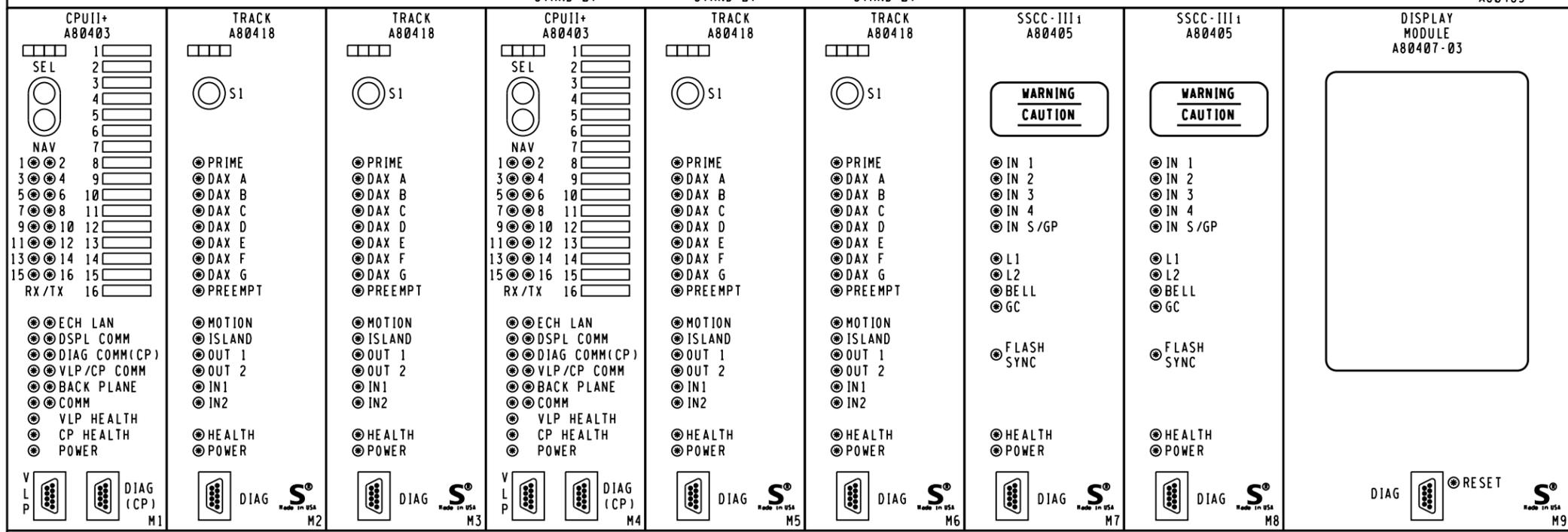
00S A



GRADE  
CROSSING  
PREDICTOR

Model 4000  
Dual 2 Track  
System

SIEMENS



SIEMENS

SEAR II<sub>1</sub> INTERNAL EVENT RECORDER



DIMENSIONS 23.25"W X 22.15"H X 12.38"D

GCP 4000 APPLICATION NOTES:

1. THE GRADE CROSSING PREDICTOR (GCP) IS A MODULAR MICROPROCESSOR CONTROLLED SYSTEM THAT IS DEPLOYED TO CONTINUALLY MONITOR THE APPROACHES TO RAILROAD GRADE CROSSINGS AND TO CONTROL THE LAMPS, GATES AND BELLS ASSOCIATED WITH THOSE CROSSINGS. WHEN EQUIPPED WITH THE SEAR II<sub>1</sub> MODULE THE GCP 4000 WILL RECORD EVENTS AND REPORT ALARMS WHEN CONNECTED TO AN OFFICE SYSTEM.

2. THE GCP 4000 GCP (A80465) IS A TWO TRACK REDUNDANT UNIT CAPABLE OF DRIVING 4 INDEPENDENT FLASHER AND GATE SIGNALS AND RECORDING EVENTS AND REPORTING ALARMS. THIS A80465 INCLUDES THE FOLLOWING MODULES:

SLOT	MODULE	FUNCTION	PART NO.
M1	CPU-11+	MAIN	A80403
M2	TRACK-1	MAIN	A80418
M3	TRACK-2	MAIN	A80418
M4	CPU-11+	STANDBY	A80403
M5	TRACK-1	STANDBY	A80418
M6	TRACK-2	STANDBY	A80418
M7	SSCC-III <sub>1</sub>	A SIGNAL	A80405
M8	SSCC-III <sub>1</sub>	B SIGNAL	A80405
M9	DISPLAY MODULE		A80407-03
TOP CENTER	TRANSFER UNIT		A80468
LOWER BAY	SEAR II <sub>1</sub>	RECORDER	A80410

3. EACH TRACK MODULE HAS TWO PROGRAMMABLE INPUTS AND TWO PROGRAMMABLE OUTPUTS.

4. THE SEAR II<sub>1</sub> INTERNAL EVENT RECORDER HAS INPUTS FOR ONE BATTERY MONITOR, TWO NON-VITAL INPUTS AND TWO PROGRAMMABLE RELAY DRIVES (HEEL/FRONT).

5. LOCATED ON THE FRONT OF EACH MODULE THERE ARE LED LIGHTS TO INDICATE THE ACTIVITY OF CERTAIN FUNCTIONS OCCURRING INSIDE THE GCP.

6. BETWEEN SLOT 1 & 2 THERE IS A CHASSIS IDENTIFICATION CHIP (CIC) SOCKET AND AN ECD CONNECTOR (DB-25 FEMALE).

7. UPON THE FAILURE OF A MODULE IN SLOTS M1-M3 THE AUTOMATIC TRANSFER UNIT SWITCHES TO THE STANDBY MODULES IN SLOTS M4-M6.

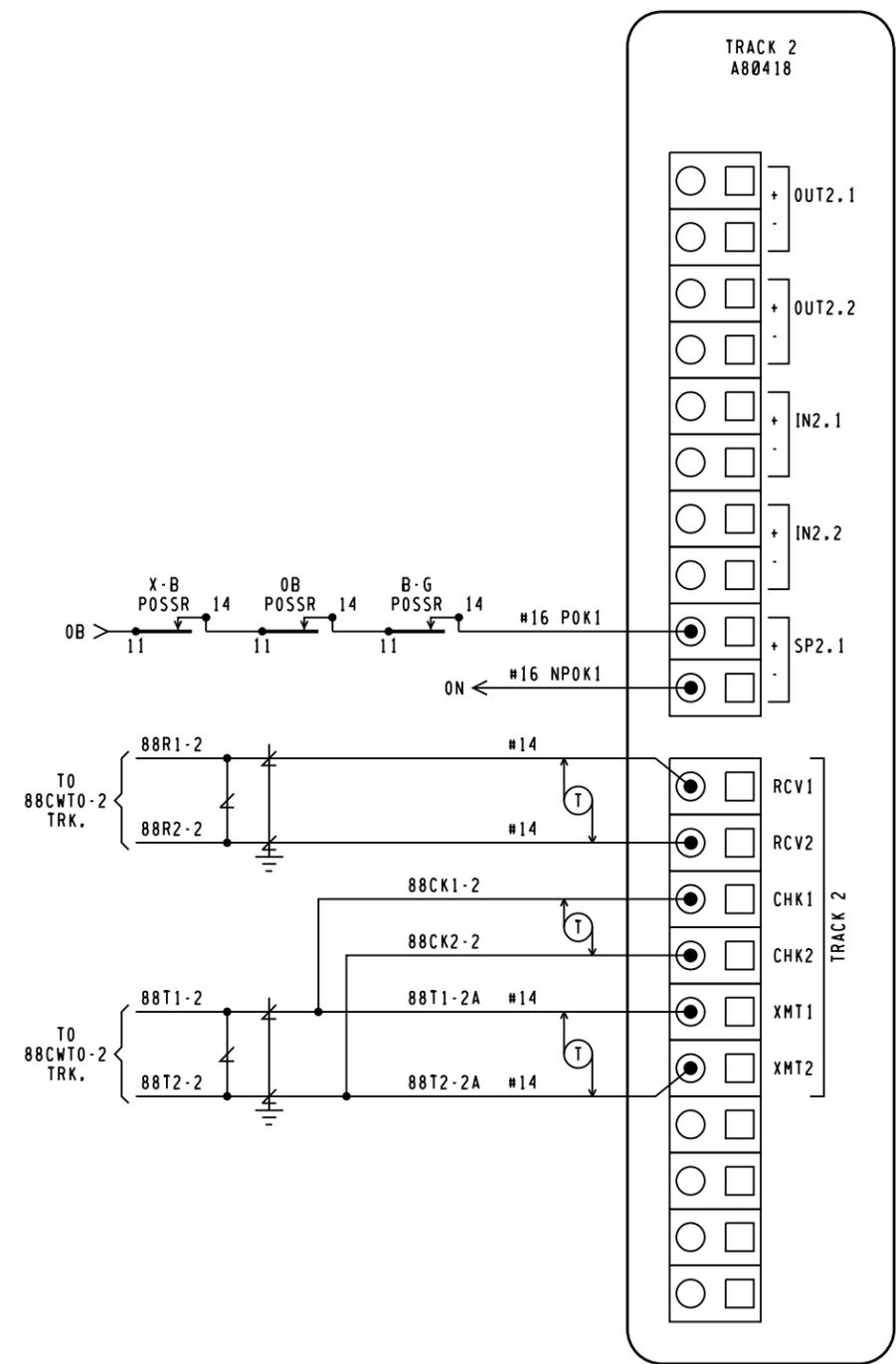
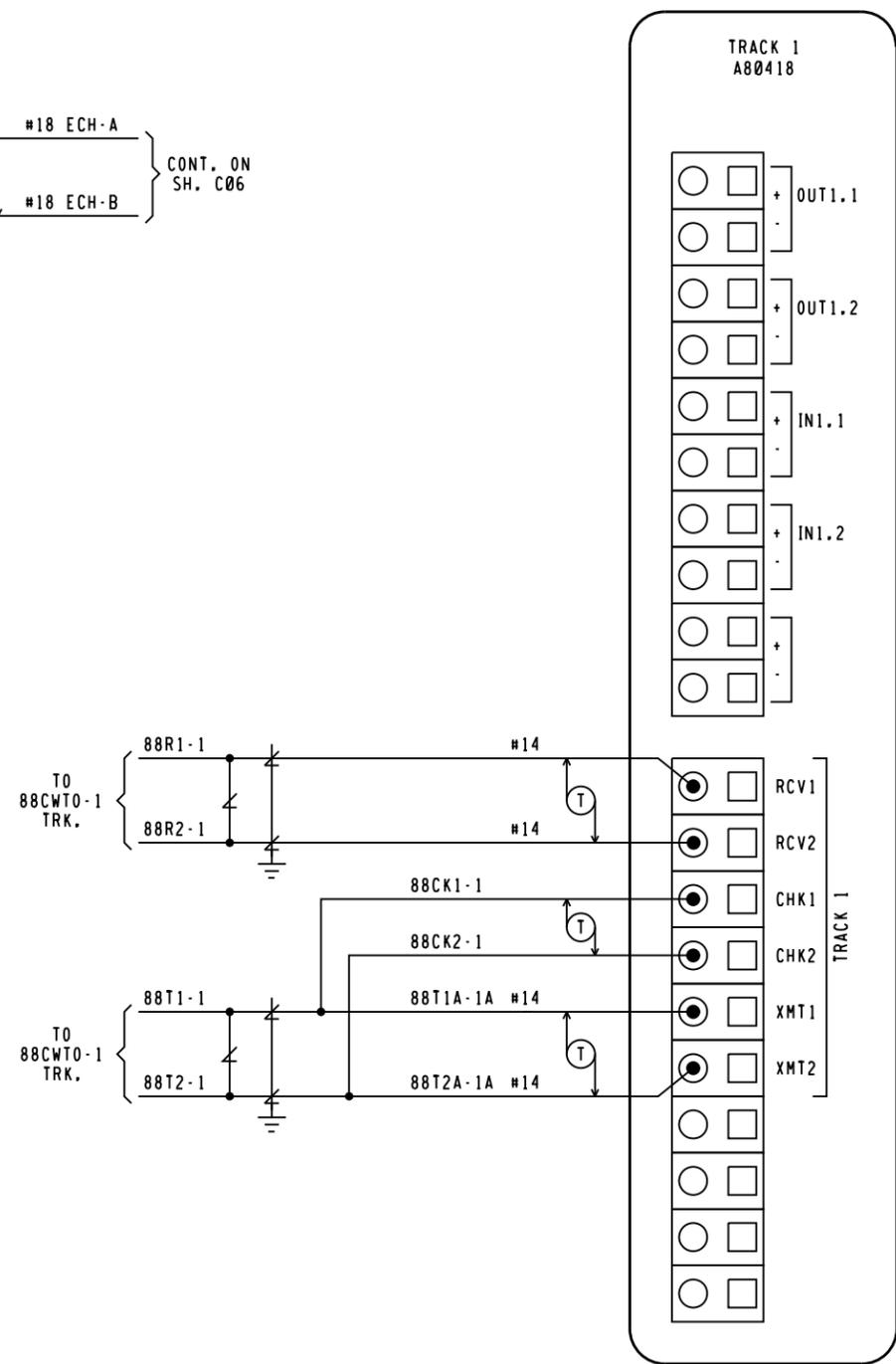
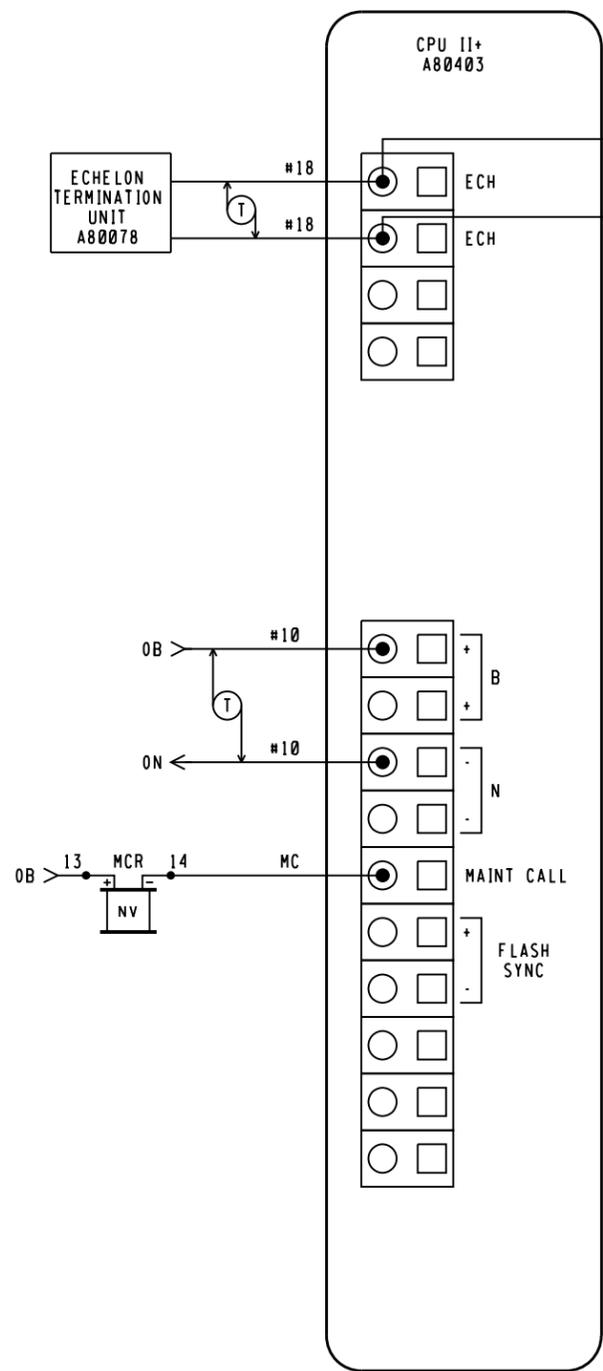
8. THE GCP 4000 GCP (A80465) MAY USE RIO MODULES IN SLOTS M3 AND M6.

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RAIL TRANSPORT GROUP ENGINEERING  
COMMUNICATIONS AND SIGNALS

**CENTER STREET 145498B**

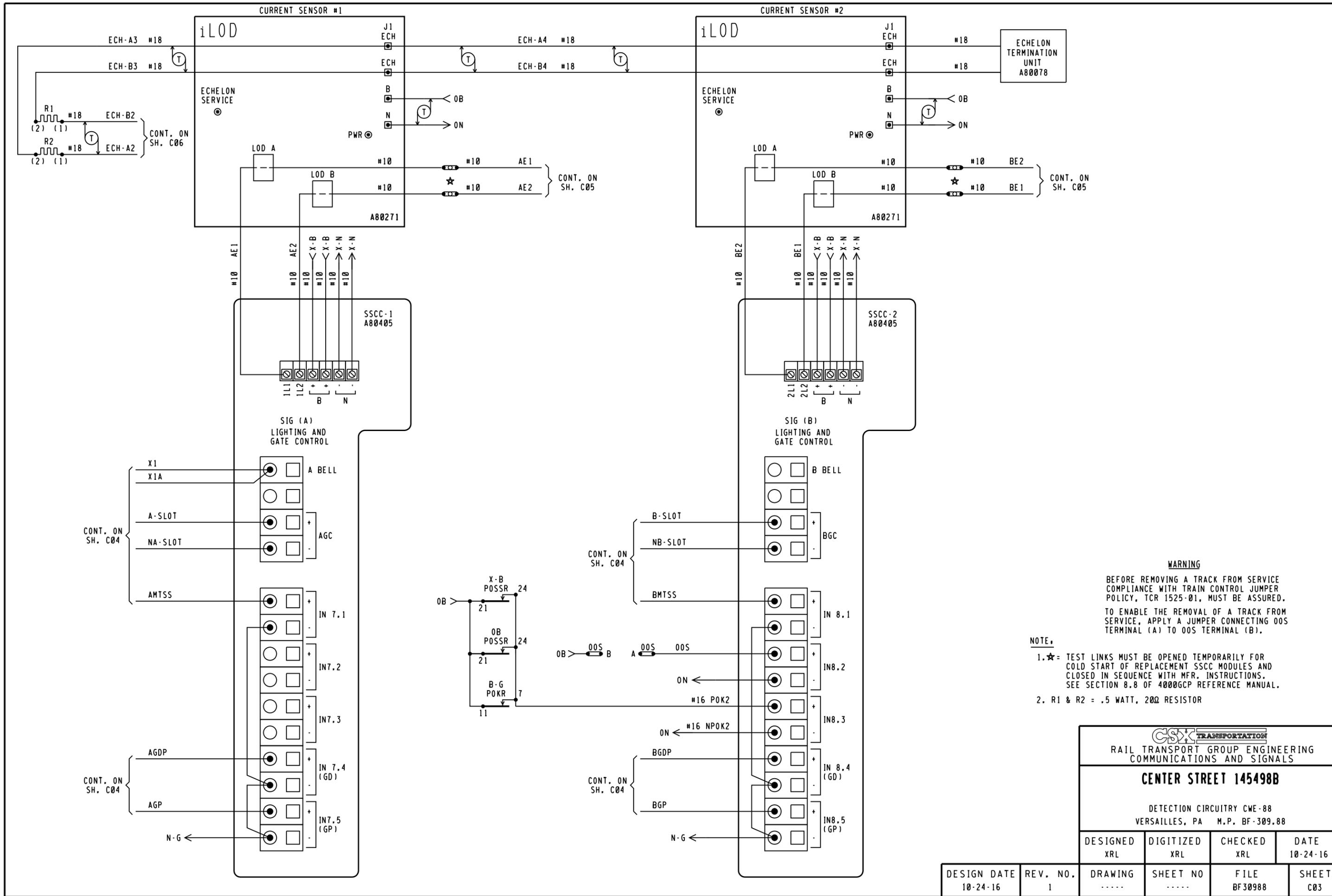
DETECTION DEVICE CONSIST CWE-88  
VERSAILLES, PA M.P. BF-309.88

DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING -----	SHEET NO -----
FILE BF30988	SHEET C01		



NOTE,  
ECHELON CONNECTIONS NOT TO EXCEED 53' IN LENGTH AND TOTAL LENGTH COMBINED NOT TO EXCEED 430' WITH A MAXIMUM OF 8 NODES. RECOMMEND USE BELDEN WIRE CABLE #8461 OR EQUIVALENT.

<b>CSX TRANSPORTATION</b>			
RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
<b>CENTER STREET 145498B</b>			
DETECTION CIRCUITRY CWE-88 VERSAILLES, PA M.P. BF-309.88			
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO .....
FILE BF30988		SHEET C02	



RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
<b>CENTER STREET 145498B</b>			
DETECTION CIRCUITRY CWE-88 VERSAILLES, PA M.P. BF-309.88			
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET C03

DESIGN DATE  
10-24-16

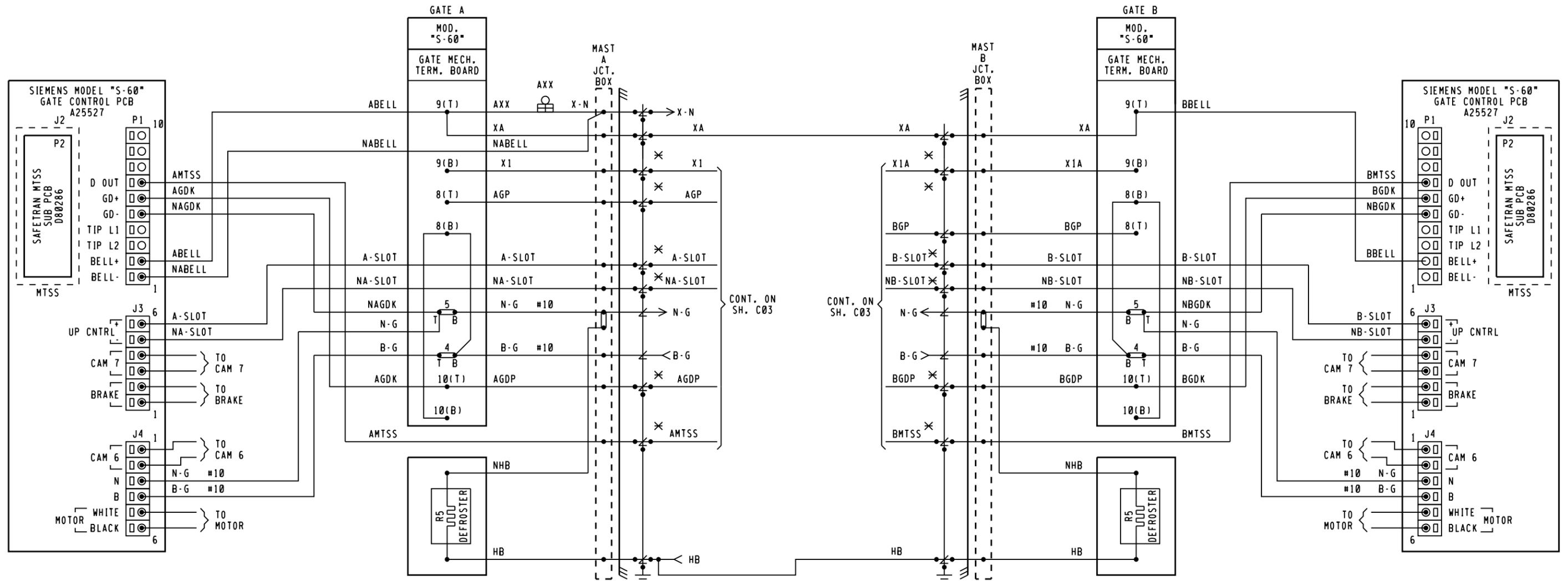
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DRAWING  
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SHEET NO  
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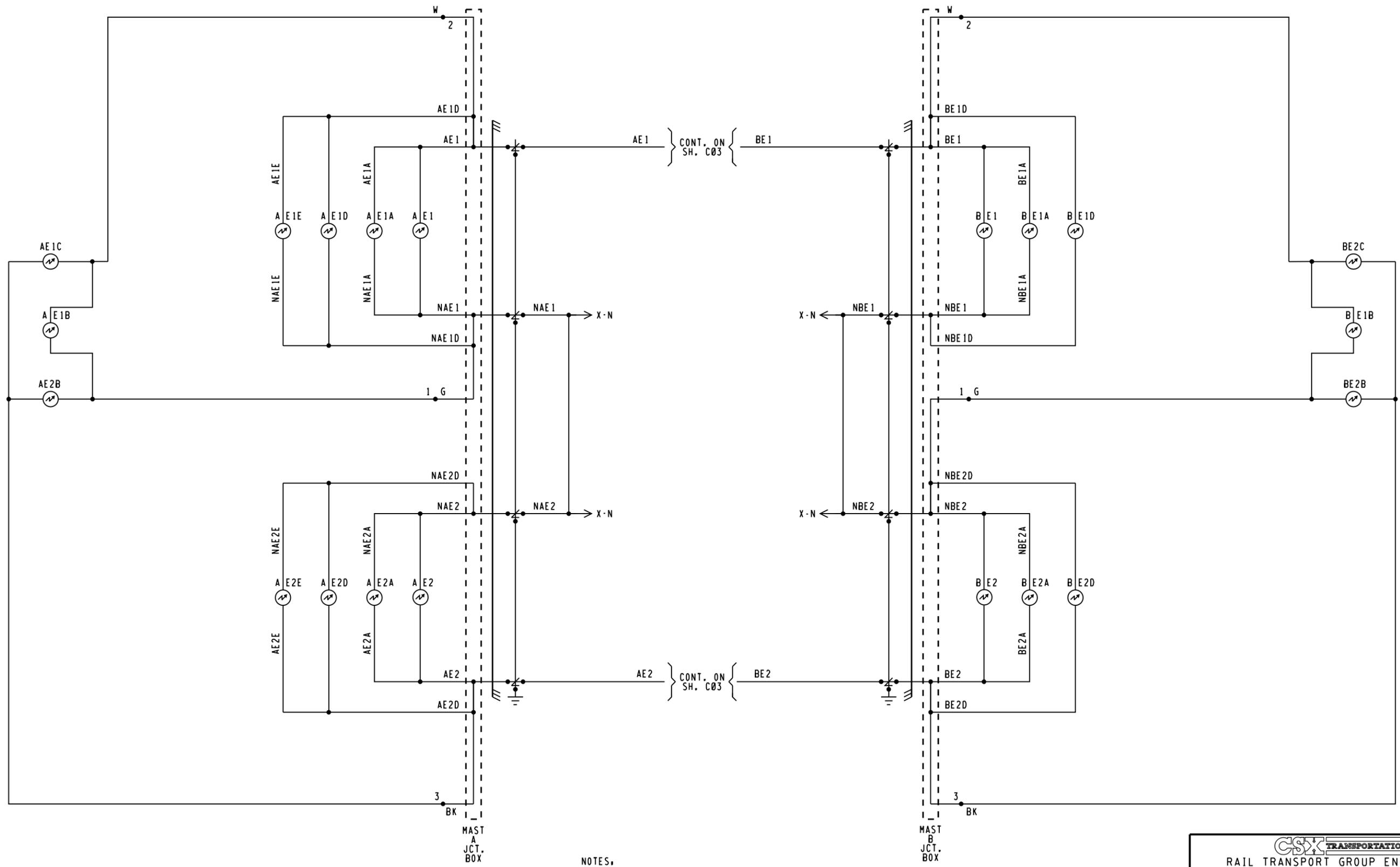
FILE  
BF30988

SHEET  
C03



- NOTES:
- ✖ = TEST LINKS MUST BE OPEN TEMPORARILY FOR COLD START OF REPLACEMENT SSCC MODULES AND CLOSED IN SEQUENCE WITH MFR. INSTRUCTIONS. SEE SECTION 8.8 OF 4000GCP REFERENCE MANUAL.
  - ⊙ = TERMINAL IN JCT. BOX BASE
  - ALL WIRING #16 UNLESS NOTED OTHERWISE.

 <b>RAIL TRANSPORT GROUP ENGINEERING</b> <b>COMMUNICATIONS AND SIGNALS</b>					
<b>CENTER STREET 145498B</b>					
CROSSING WARNING DEVICE GATE CIRCUITRY VERSAILLES, PA M.P. BF-309.88					
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16		
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO .....	FILE BF30988	SHEET C04



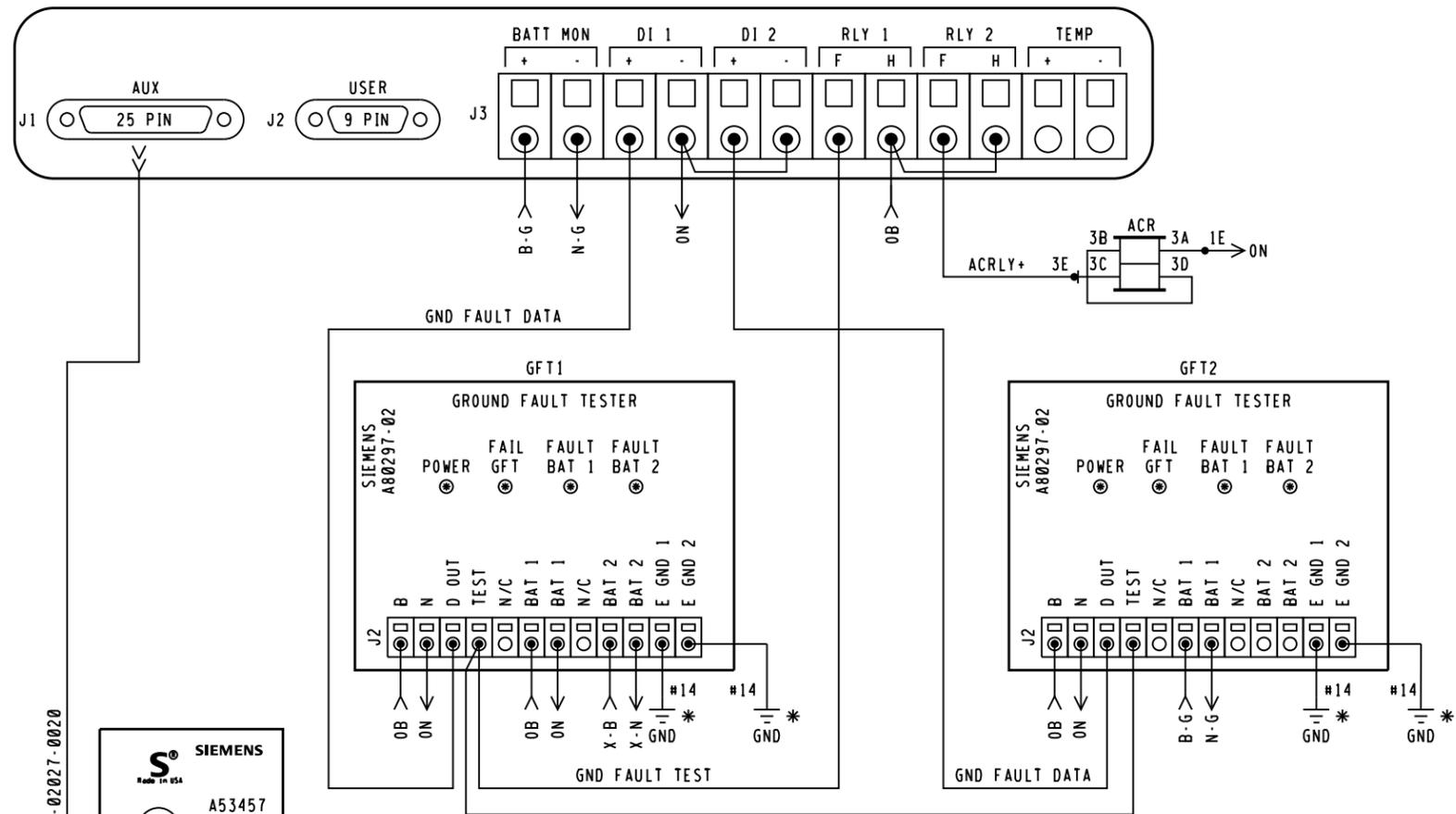
- NOTES:**
1. = TERMINAL IN JUNCTION BOX
  2. WHEN 7 OR MORE LIGHTS ON A SINGLE STRUCTURE REFER TO SS382 FOR REQUIRED ARRESTERING
  3. FEEDS TO ALL BUSES AND LIGHT CIRCUITS ARE #10 FLEX
  4. UNLESS NOTED ALL OTHER WIRING #16
  5. CABLING SPECIFICATIONS SHOWN ON SH. S01

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
<b>CENTER STREET 145498B</b>			
CROSSING WARNING DEVICE LIGHT CIRCUITRY VERSAILLES, PA M.P. BF-309.88			
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET C05

DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET C05
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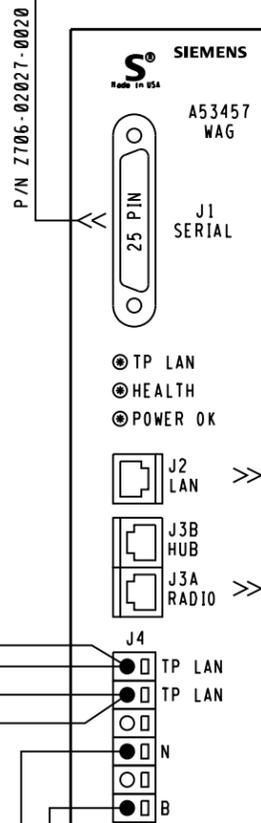
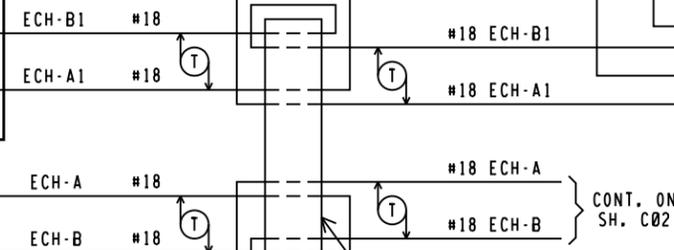
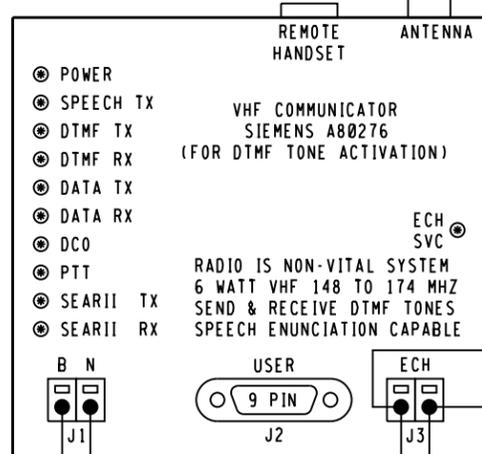
WAYSIDE ACCESS GATEWAY CONFIGURATION	
SITE ATCS ADDRESS	7.125.304.012.07.01 7.125.LLL.GGG.SS.DD
SERIAL INTERFACE	38,400,NONE,8,1/NOFLOW
SERIAL FORMAT	RAW
WAG TEST MODE	DISABLED
ECHOLON ADDRESS	01.07
UDP PORTS	5000, 5001, 5002, 5003
ROUTE TABLE EXPIRY	5400 SEC
BROADCAST MEDIUM	IP ETHERNET
TCP PORTS	23, 10023, 6001, 6002
DHCP SERVER	DISABLED
IP ADDRESS	192.168.13.1
TYPE 7 ROUTE LENGTH	12--7RRLLLGGGSS
IP NETWORK MASK	255.255.255.0
WAG CIRCUIT ID	DISABLE
ROUTING REGION DOMAIN 1	OCGSERVER1.JAX.COM
ATCS SERVER UDP PORT NUMBER	6001
TELNET NUMBERS	WAG 6002, SERIAL 10023
DEFAULT GATEWAY IP	192.168.013.031

**NOTE TO INSPECTOR,  
AT INSTALLATION OF WAG,  
OR UPDATE OF THE  
CONFIGURATION, OR UPDATE  
OF THE EXECUTIVE PROGRAM,  
MARK-UP CONFIGURATION  
TABLE FOR AS IN SERVICE  
PLANS**



\*\* POLYPHASE SURGE PROTECTOR  
100 TO 512 MHZ  
MODEL# VHF 150HN

\*\* SHIELDED COAXIAL  
CABLE TO ANTENNA



- COMM NOTES,**
- WAG J3A PINOUTS,  
4 & 5 = +12VDC RADIO OUT  
7 & 8 = GND RADIO RETURN
  - WAG AND SEARII: ECHOLON COMM  
THROUGH GCP4000 LONTALK  
PROTOCOL CONNECTION
  - REFER TO WAG INSTALLATION AND  
SETUP IN APPENDIX "A" GCP4000 SYSTEM  
CUT OVER TEST PROCEDURE AND CHECK  
OFF SHEET.

**GCP PROGRAMMING FOR VHF RADIO**

REMOTE DTMF CROSSING ACTIVATION  
(ACTIVATES ENTIRE CROSSING)  
TO ACTIVATE PRESS, 498#  
TO DE-ACTIVATE PRESS, 498\*  
(ACTIVATION WILL TIME OUT AFTER 60 SEC.)

**NOTES,**

- ALL WIRING #16 UNLESS NOTED OTHERWISE.
- \* = EARTH GROUND REF. TERMINALS REQUIRED FOR  
DETECTION. DO NOT JUMPER TERMINALS. MUST BE  
CONNECTED TO DIFFERENT POINTS OF BUNGALOW.
- \*\* = TO BE PROVIDED BY COMMUNICATIONS
- LOOP WIRE THROUGH FERRITE BEAD TWICE.

**CSX TRANSPORTATION**  
RAIL TRANSPORT GROUP ENGINEERING  
COMMUNICATIONS AND SIGNALS

**CENTER STREET 145498B**

CROSSING WARNING DEVICE CIRCUITRY  
VERSAILLES, PA M.P. BF-309.88

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DEFAULTS AND/OR STYLE		FIELD RECORD
SEAR II EXECUTIVE PROGRAM	VERSION, 9V725A01	VERSION, _____
APPLICATION PROGRAM (IF LOADED)	VERSION, 9V864A01	VERSION, _____
SITE SET UP MENU		
FUNCTION	LED DISPLAY	
DATE / TIME	XX-XX-XXXX XX:XX:XX	
AUTOMATIC DST ADJUSTMENT	YES	
TIME ZONE	EASTERN	
SITE NAME	CENTER STREET	
MILEPOST	BF-309.88	
DOT NUMBER	145498B	
TESTER TYPE	CROSSING	
DATE FORMAT	MM-DD-YYYY	
TEMP FORMAT	FAHRENHEIT	
INDICATE HOLD (SEC)	0	
INDICATE REFRESH (SEC)	60	
SITE ATCS ADDRESS	7.125.480.028.99.01 (7.RRR.LLL.GGG.99.01)	
SITE TYPE	COLLECTOR	
OFFICE ADDRESS	2.125.00.0000 (2.RRR.NN.DDDD)	
POLL ID	1	
MODE	GEN/ATCS	
WAMS XID	DISABLED	
OFFICE COMM. DEVICE	<input checked="" type="checkbox"/> WAG (ECHELON) <input type="checkbox"/> DIRECT (RS232) <input type="checkbox"/> MCM (ECHELON) <input type="checkbox"/> MCM (RS232) <input type="checkbox"/> DIAL MODEM <input type="checkbox"/> S200 RADIO (RS422)	
RADIO ATCS ADDR	7.125.480.028.01.01 (7.RRR.LLL.GGG.NN.01)	
FIELD COMM. DEVICE	<input type="checkbox"/> WAG (ECHELON) <input checked="" type="checkbox"/> NONE <input type="checkbox"/> VHF COMM. (ECHELON) <input type="checkbox"/> VHF COMM. (RS232) <input type="checkbox"/> SPREAD-SPECTRUM (RS232)	
USER PORT BAUD	57,600	
USER PORT DATA BITS	8	
USER PORT PARITY	NONE	
USER PORT STOP BITS	1	
USER PORT FLOW CONTROL	NONE	
AUX PORT BAUD	38,400	
AUX PORT DATA BITS	8	
AUX PORT PARITY	NONE	
AUX PORT STOP BITS	1	
AUX PORT FLOW CONTROL	NONE	

LIT BULB COUNT ON EACH CIRCUIT	NO.	TYPE OF BULB	CURRENT READING IN AMP. AT APPROX. 10.0 V ARRAY VOLTAGE
CURRENT SENSOR (1) AE1, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	1.2A
CURRENT SENSOR (1) AE2, LAMP SET UP	6	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	1.2A
CURRENT SENSOR (2) BE1, LAMP SET UP	5	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	1.0A
CURRENT SENSOR (2) BE2, LAMP SET UP	5	<input type="checkbox"/> BULBS <input checked="" type="checkbox"/> LED	1.0A

VHF RADIO CHANNELS			
1	161.130	5	161.550
2	160.710	6	160.785
3	160.560	7	160.785
4	160.860	8	160.785

NOTE 7

MENU → CONFIGURATION →	
MODULES → ADD MODULE	
MODULE TYPE	WAG
MODULE NAME	DEFAULT
WAG ECHELON NODE	7

NOTE:  
REFER TO WAG INSTALLATION AND SETUP IN APPENDIX "A" GCP4000 SYTEM CUT OVER, TEST PROCEDURE AND CHECK OFF SHEET.

MEASURE BATTERY VOLTAGE AT INPUT		
BATTERY VOLTAGE 0B		14.1 VOLTS
BATTERY VOLTAGE X-B		14.1 VOLTS
BATTERY VOLTAGE B-G		15.7 VOLTS

NOTE 6

PROGRAM MENU SELECT	
EDIT DIGITAL INPUTS	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT BATTERIES	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT RELAYS	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT TEST LED'S	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT ILOD1 SENSOR ☆	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT ILOD2 SENSOR ☆	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT ILOD3 SENSOR ☆	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT ILOD4 SENSOR ☆	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
EDIT VHF SETTINGS	<input checked="" type="checkbox"/> NO <input type="checkbox"/> YES
GCP4K ATCS SUBNODE	16

☆ STAR = OPTIONS SHOWN DEPENDANT ON NUMBER OF ILODS SELECTED

NOTE 9 -

NOTE 8 -

NOTE 1 -

NOTE 2 -

NOTE 3 -

NOTE 4 -

NOTE 5 -

CONTROL SYSTEM CONFIGURATION MENU QUESTIONS		
OPTION	SELECTION	
RESET NAMES / MODULES	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
RAILROAD NUMBER	125	
CROSSING CONFIGURATION	NORMAL <input checked="" type="checkbox"/>	SPLIT GATE <input type="checkbox"/>
	EXTERNAL ENTRANCE GATE CONTROLLER(S) <input type="checkbox"/>	
AND1 USED AS XR	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
AND2 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND3 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND4 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND5 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND6 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND7 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
AND8 USED AS XR	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
ENTRANCE GATES*	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>	
GATE POSITION FAIL*	20 SECS.	
BATTERY BANKS*	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>	3 <input type="checkbox"/>
BATT MON USED*	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
OB RESOLUTION*	0.2 <input type="checkbox"/> 0.5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>	
X-B RESOLUTION*	0.2 <input type="checkbox"/> 0.5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>	NOT PRESENT <input type="checkbox"/>
X-B2 RESOLUTION*	0.2 <input type="checkbox"/> 0.5 <input type="checkbox"/> 1.0 <input type="checkbox"/>	NOT PRESENT <input checked="" type="checkbox"/>
BATT MON RESOLUTION*	0.2 <input type="checkbox"/> 0.5 <input type="checkbox"/> 1.0 <input checked="" type="checkbox"/>	NOT PRESENT <input type="checkbox"/>
INTERNAL CROSSING CONTROLLERS*	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>	
EXTERNAL CROSSING CONTROLLERS*	0 <input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/>	
VHF COMMUNICATOR*	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
DTMF ACTIVATION*	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
ACTIVATION CODE	498	
ACTIVATION TIMEOUT	(60 SEC)	
ILOD MODULES*	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	
ANY LED BULBS USED*	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
AUTO INSPECTIONS*	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
BELL SENSORS*	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	
BELL SENSOR TSS 1*	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
BELL SENSOR TSS 2*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 3*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 4*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 5*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 6*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 7*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL SENSOR TSS 8*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
BELL ON*	GATES LOWERING <input checked="" type="checkbox"/> GATES MOVING <input type="checkbox"/> ALWAYS <input type="checkbox"/>	
GFT'S	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
BATTERIES ON GFT1	1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/>	
GATE TIP SENSORS*	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
RTU	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
VHF VOICE CHANNEL	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>	
VHF DATA CHANNEL	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>	
USE NON-CRITICAL FEATURE*	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
FULL APPROACH MOVE ALARMS*	ACTIVATE <input checked="" type="checkbox"/>	DO NOT ACTIVATE <input type="checkbox"/>
ENABLE PASSWORD	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>

NOTES:

- OPTION AVAILABLE IF VHF COMMUNICATOR = YES LAST 3 DIGITS OF DOT NUMBER.
- OPTION AVAILABLE IF ILODS.
- OPTION AVAILABLE IF BELL SENSORS.
- OPTION AVAILABLE IF GATES.
- OPTION AVAILABLE IF VHF RADIO.
- ONLY YES IN SPECIAL CIRCUMSTANCES.
- SELECT "MENU" THEN "CONFIGURATION" FROM SEAR II INTERFACE KEYPAD TO ACCESS MODULE CONFIGURATION MENU.
- BATTERY BANKS\* = NUMBER OF BANKS EXCLUDING THE BANK APPLIED TO THE BAT MON SEAR INPUT
- YES ON INITIAL SETUP

 RAIL TRANSPORT GROUP ENGINEERING COMMUNICATIONS AND SIGNALS			
<b>CENTER STREET 145498B</b>			
SEAR II: CONFIGURATION & FUNCTIONS VERSAILLES, PA M.P. BF-309.88			
DESIGNED XRL	DIGITIZED XRL	CHECKED XRL	DATE 10-24-16
DESIGN DATE 10-24-16	REV. NO. 1	DRAWING .....	SHEET NO ..... FILE BF30988 SHEET C07