

MAIN PANEL 34810G4

ASC/2S-1000 CONTROLLER WITH:	LEGEND
<ul style="list-style-type: none"> ■ CONFIGURATION EEPROM 32790C7800 ■ SOFTWARE: V1.71 □ SPECIAL SOFTWARE: FUNCTION 	<ul style="list-style-type: none"> BIU BUS INTERFACE UNIT BU() C/C, BIU () CB() CIRCUIT BREAKER () C/C CONNECTING CABLE CCA CONTROLLER CABLE "A" CDP C/C, DR POWER CMA MMU/CMU CABLE "A" CMB MMU/CMU CABLE "B" CPO C/C PRE-EMPT OUTPUTS CPP C/C PRE-EMPT POWER DR DETECTOR RACK DS() DOOR SWITCH () FL() FLASHER () FR() FLASH XFER. RELAY LS() LOAD SWITCH MC MERCURY CONTACTOR MP MAIN PANEL PAP POWER-AUX PANEL PSP CAB. PWR. SUPPLY SA SURGE ARRESTOR TB-() TERM. BLOCK ()
<ul style="list-style-type: none"> ■ OVERLAPS <ul style="list-style-type: none"> □ IN EEPROM ■ KEYBOARD ENTERED □ ANALOG TELEMETRY MODULE: 32825G1 ■ F/O TELEMETRY MODULE: 33525G1 □ TEST INPUT A = □ TEST INPUT B = 	

A =
 B =5
 C =
 D =1

MAIN PANEL PLUG-IN REQUIREMENTS

BIU2 T&F	BIU3 T&F	LS9 PED 2 BEACONS	LS10 PED 4 BEACONS	LS11 PED 6 BEACONS	LS12 PED 8 BEACONS	LS13 OL "A"	LS14 OL "B"	LS15 OL "C"	LS16 OL "D"
BIU1 T&F	LS1 VEH 1	LS2 VEH 2	LS3 VEH 3	LS4 VEH 4	LS5 VEH 5	LS6 VEH 6	LS7 VEH 7	LS8 VEH 8	FL1 □ 1CKT ■ 2CKT
FR1 L/R V1 V5	FR2 L/R V2 V6	FR3 L/R V3 V7	FR4 L/R V4 V8	FR5 L/R A C	FR6 L/R B D	K1 LS 24V CONT.			

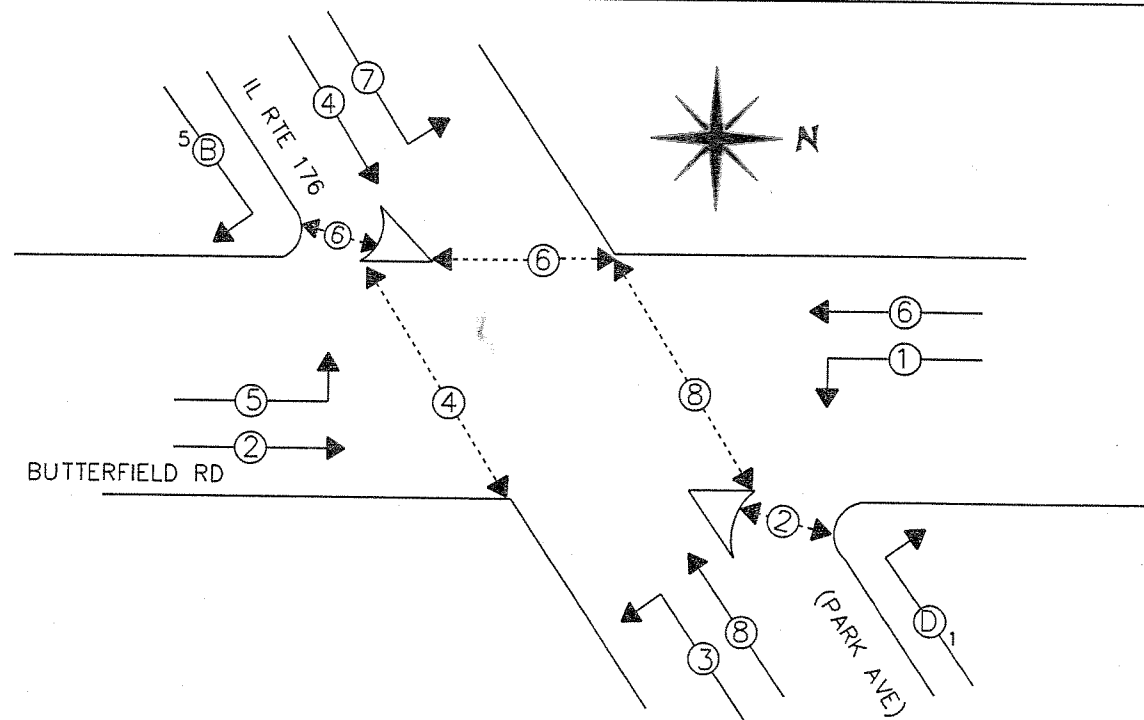
■ DENOTES TYPE OF OPERATION AND/OR WHERE PLUG-IN IS REQUIRED. L = LEFT, R = RIGHT.
 ⊗ DENOTES WHERE "UNUSED RED" JUMPER IS REQUIRED. INSTALL BETWEEN PINS 1 & 3 FOR LOAD SWITCH OR PINS 6 & 8 AND 5 & 7 FOR FLASH TRANSFER RELAY.

FLASH:
 □ YELLOW, ALL OTHERS RED
 ■ ALL RED.
 ■ RELAYS DE-ENERGIZED FOR FLASH.
 □ RELAYS ENERGIZED FOR FLASH.

FLASHER	
PIN	FUNCTION
7	CIRCUIT #1
8	CIRCUIT #2
9	CHASSIS GND
10	AC COMMON
11	115 VAC
12	-----

LOAD SWITCH	
PIN	FUNCTION
1	115 VAC
2	CHASSIS GND
3	RED/DW OUTPUT
4	-----
5	YEL OUTPUT
6	RED/DW INPUT
7	GRN/W OUTPUT
8	YEL INPUT
9	+24 VDC
10	GRN/W INPUT
11	AC COMMON
12	-----

① 2.2K 10W

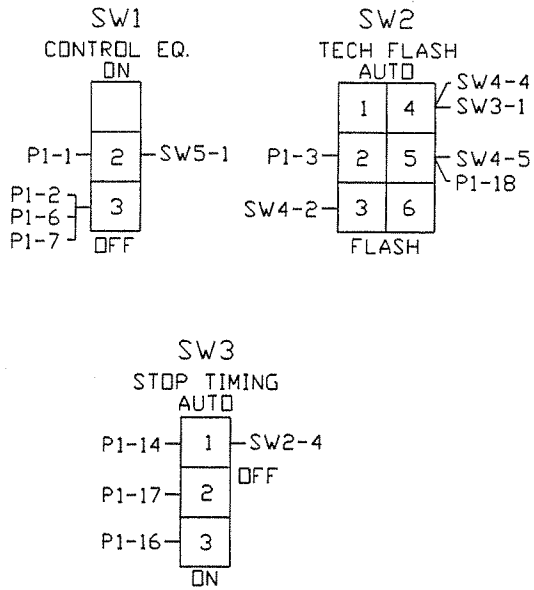


SHEET 1 OF 10

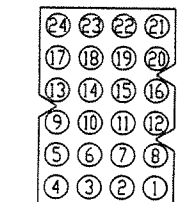
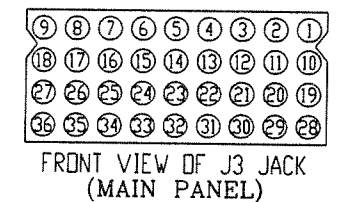
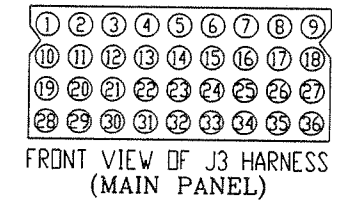
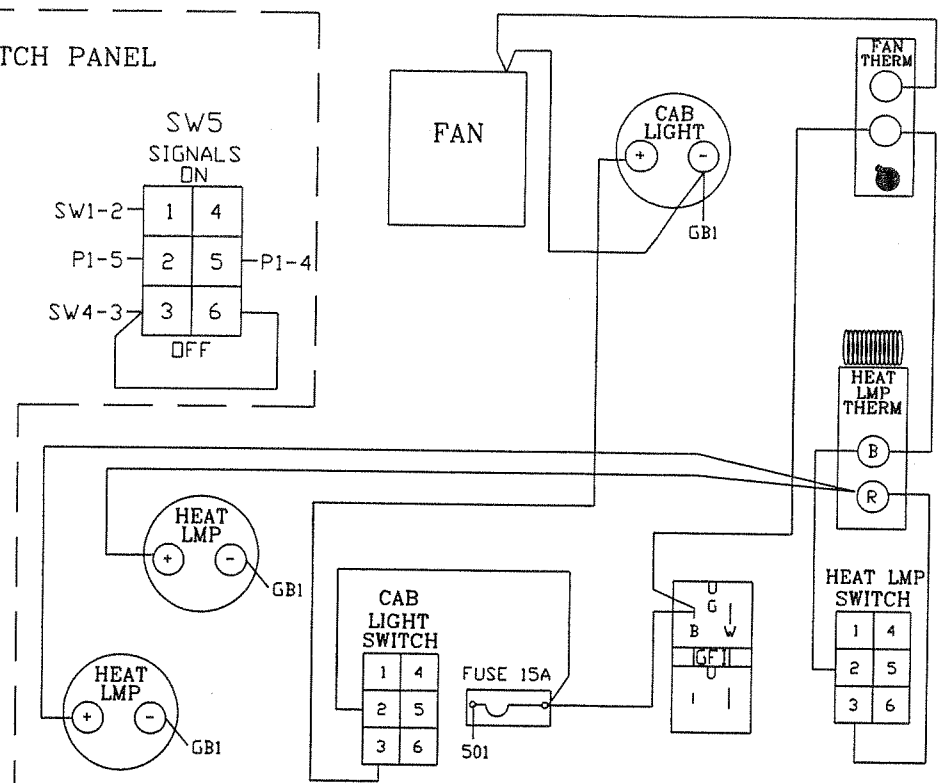
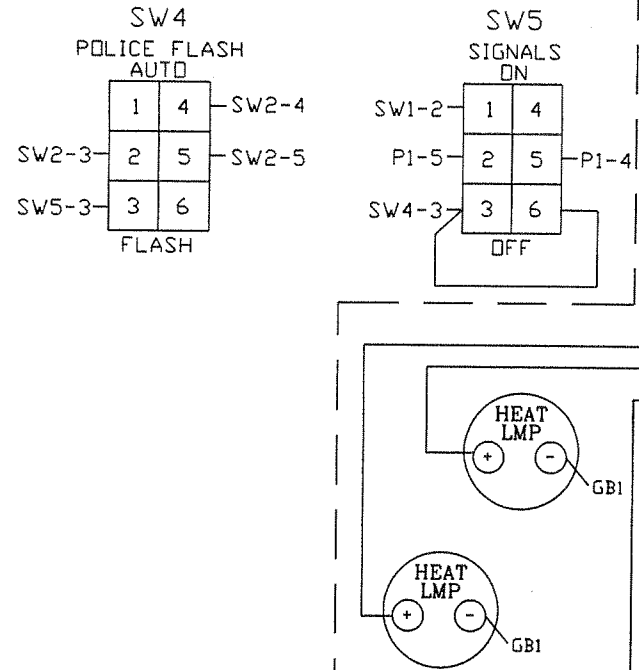
3 USE ONLY COPPER CONDUCTORS FOR FIELD AND SERVICE CONNECTIONS.
 2 CONNECT A.C. SERVICE TO TERMINAL BLOCK 501 (LINE), 502 (NEUTRAL) AND GB2 (EARTH) ON RIGHT SIDEWALL OF CABINET.
 ① INSTALL 2.2K, 10 WATT LOAD RESISTORS BETWEEN PINS 7 AND 11 ON LOAD SWITCHES 9, 10, 11 & 12.
 NOTES: UNLESS SPECIFIED OTHERWISE

DESIGNER G.V. T.C.C.	DATE 02/03/97	ECONOLITE CONTROL PRODUCTS INC.	TRAFFIC CONTROL CORPORATION	780 W. BELDEN SUITE D ADDISON, IL 60101	
DRAWN EH TCC	9/17/03			CABINET SPECIFICATION: TS2TYPE1 99 SPEC PLUG AND GO	
CAB SIZE:	P	CUSTOMER: LAKE COUNTY		CONTROLLER	
INSPECTED		INTERSECTION: IL RTE 176(PARK AVE) @ BUTTERFIELD RD		FLASHER	
APPROVED		LOCATION: LIBERTYVILLE		SW.PACKS	
CONTRACT NO.	INSTALLED BY HOMETOWNE	SALES ORDER NO. 771301-C-IL8272	SIZE B	DRAWING #TS29916PGIL8272C RTE 176 @ BUTTERFIELD	REV.

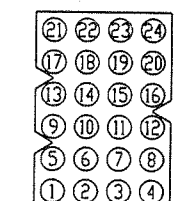
AUXILLARY SWITCH PANEL



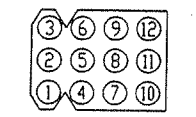
POLICE SWITCH PANEL



FRONT VIEW OF J1 JACK (SWITCH PANEL)



FRONT VIEW OF J1-J6 HARNESSES (POWER BUS PANEL)



FRONT VIEW OF J1-J6 JACKS (POWER BUS PANEL)

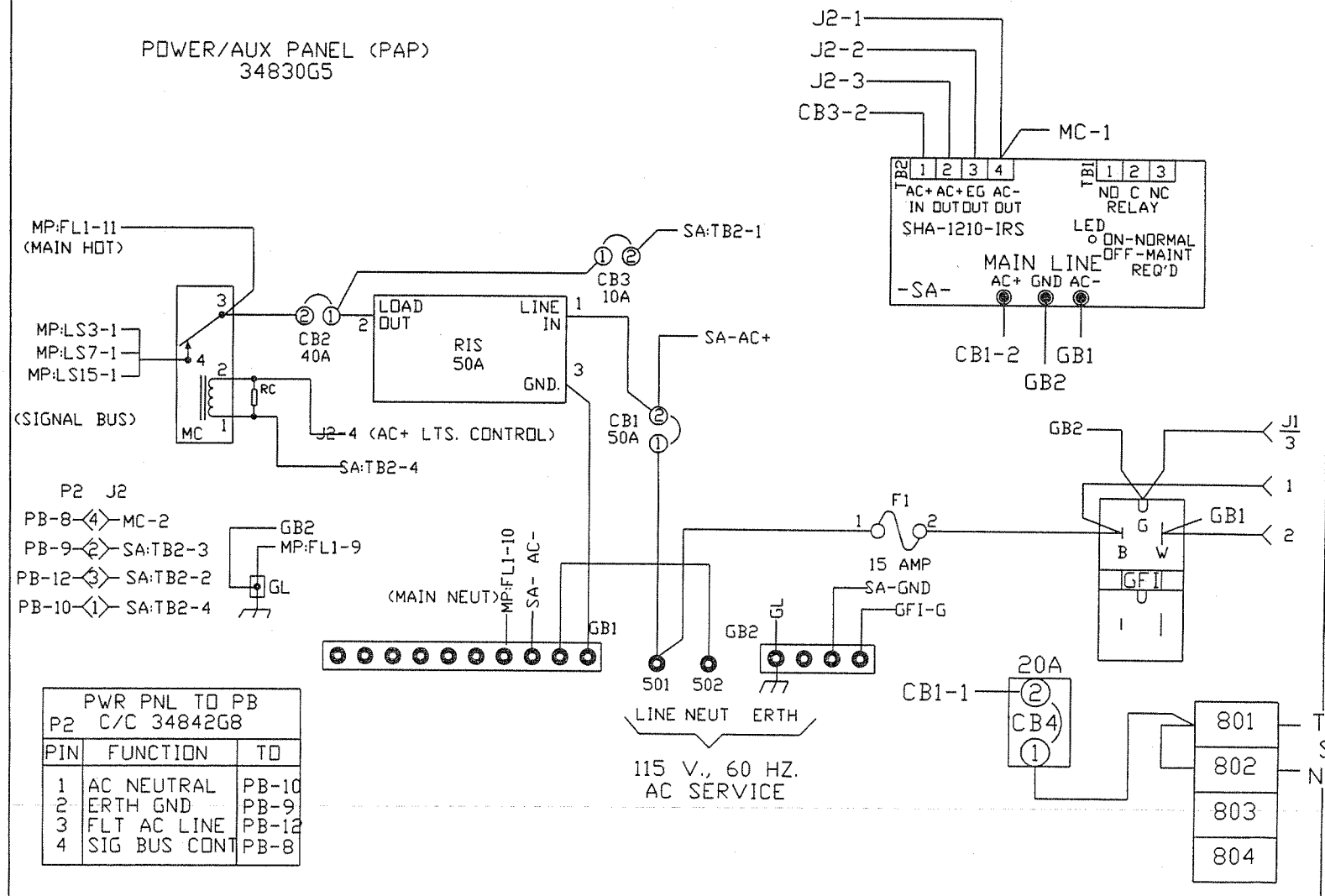
J3		P1	
J3-36	1 FILTER AC LINE (OUT)	P1-1	SW1-2
MMB-1	2 SWITCHED AC LINE (IN)	P1-2	SW1-3
MMA-37	3 FLASH CONTROL BUS (OUT)	P1-3	SW2-3
K1-10	4 SIGNAL BUS CONTROL (IN)	P1-4	SW5-5
FR6-2	5 FLASH RELAY CONTROL (IN)	P1-5	SW5-2
MMB-2	6 START DELAY AC BUS (IN)	P1-6	SW1-3
MMA-20	7 MMU FLASH CONTROL BUS (IN)	P1-7	SW1-3
	8 SPARE	P1-8	----
	9 SPARE	P1-9	----
	10 SPARE	P1-10	----
	11 SPARE	P1-11	----
	12 SPARE	P1-12	----
A-39	13 OPT-MANUAL CONT. ENABLE (IN)	P1-13	----
A-35	14 LOGIC GROUND	P1-14	SW3-1
A-40	15 OPT-INTERVAL ADVANCE (IN)	P1-15	----
A-31	16 MMU STOP TIME (OUT)	P1-16	SW3-3
A-30	17 CONTROLLER STOP TIME (IN)	P1-17	SW3-2
A-32	18 LOCAL FLASH STATUS (IN)	P1-18	SW2-5
A-38	19 OPT-COORD FREE (IN)	P1-19	----
A-33	20 OPT-ALARM 1 (IN)	P1-20	----
A-34	21 OPT-ALARM 2 (IN)	P1-21	----
K1-9	22 OPT-LOADSWITCH TEST (IN)	P1-22	----
B-3	23 MMU 24V MON. 2 (IN)	P1-23	----
B-4	24 +24 VDC	P1-24	----

TO POL/AUX P1

TO PB J1

J3		J1	
A-35	25 LOGIC GROUND	J1-1	TB1-1
K1-11	26 +24 VDC (IN)	J1-2	TB1-2
	27 ----		TB1-3
B-5	28 MMU FAULT MONITOR (IN)	J1-4	TB1-4
J1-31B	29 LINE FREQ. REFERENCE (IN)	J1-5	TB1-5
	30 ----		TB1-6
J1-27B	31 +12 VAC (IN)	J1-7	TB1-7
K1-10	32 SIGNAL BUS CONTROL (IN)	J1-8	TB1-8
	33 ----		TB1-9
K1-2	34 FILTERED AC NEUTRAL (IN)	J1-10	TB1-10
MMB-18	35 CONT. EQUIP. AC LINE (OUT)	J1-11	TB1-11
J3-1	36 FILTERED AC LINE (IN)	J1-12	TB1-12

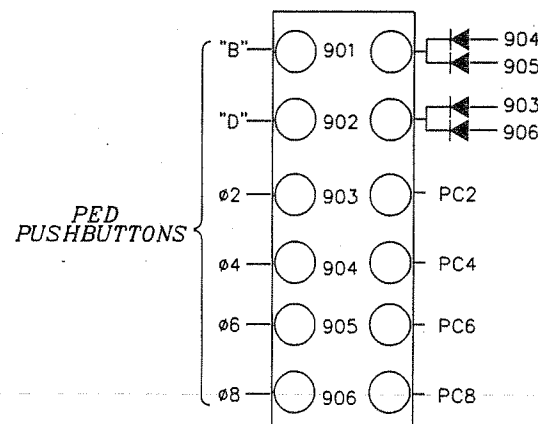
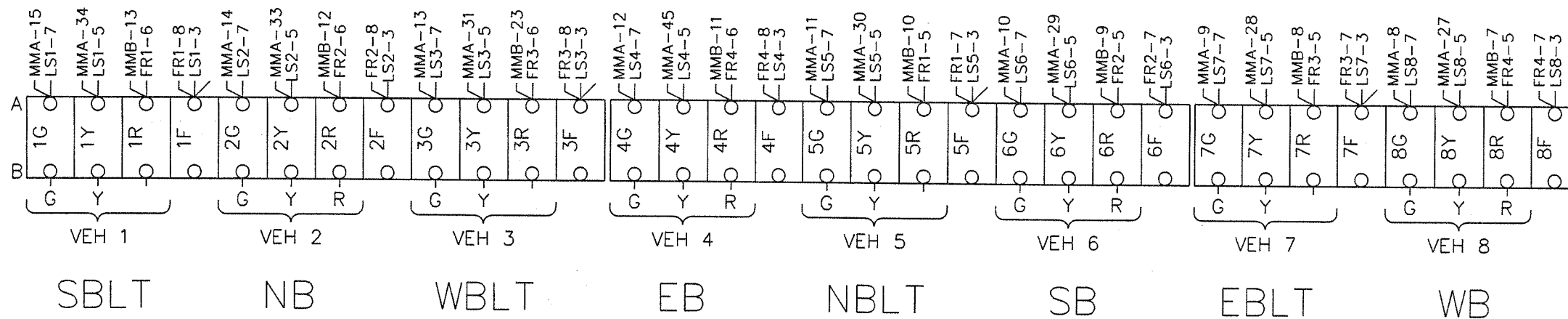
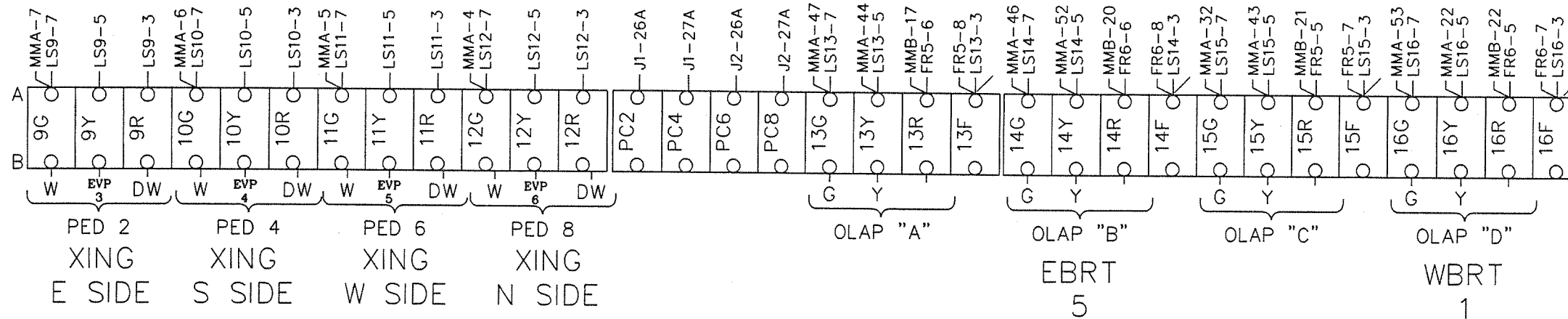
POWER/AUX PANEL (PAP) 34830G5



PWR PNL TO PB P2 C/C 34842G8		
PIN	FUNCTION	TO
1	AC NEUTRAL	PB-10
2	ERTH GND	PB-9
3	FLT AC LINE	PB-12
4	SIG BUS CONT	PB-8

CONFIRMATION BEACONS

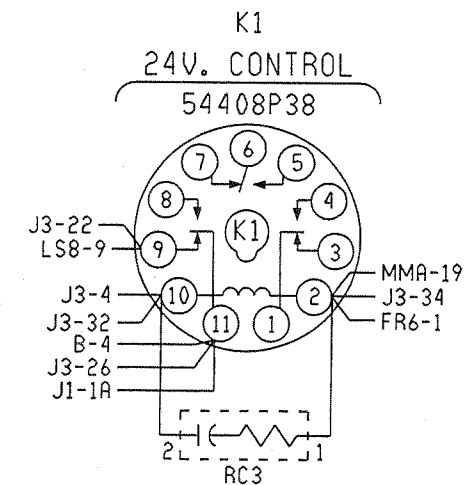
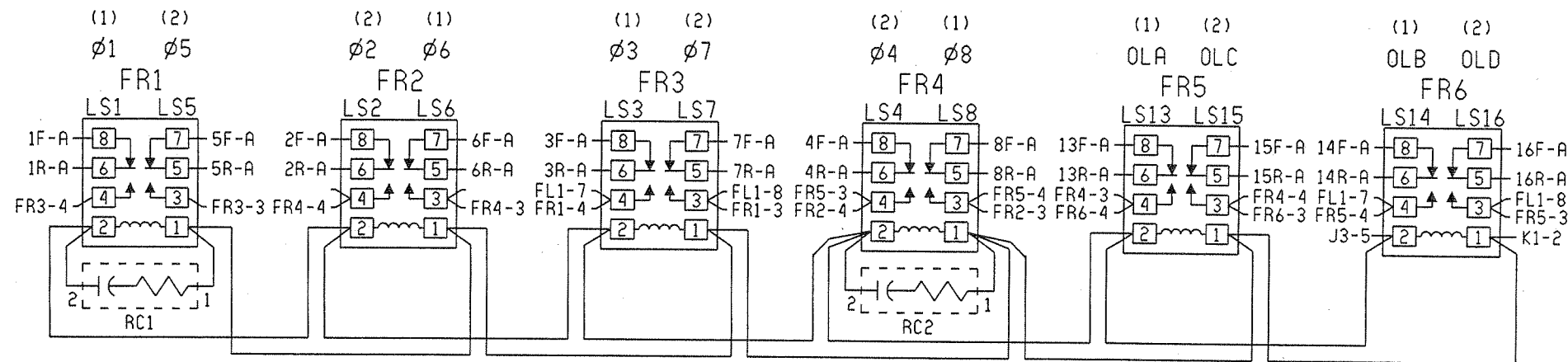
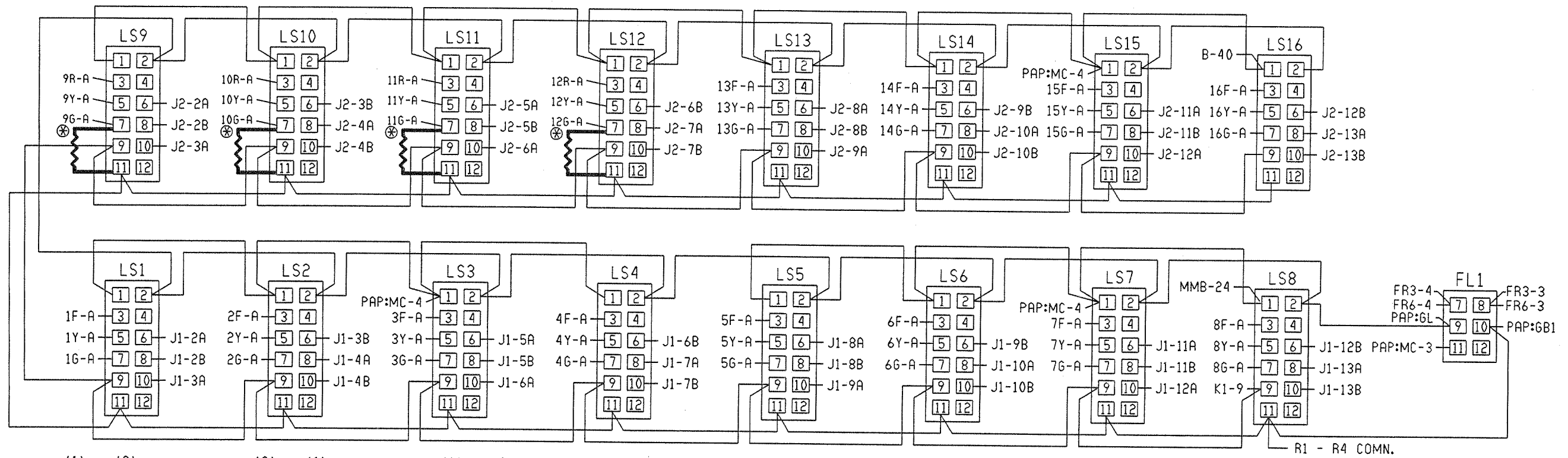
EVP 3 = N-SB
 EVP 4 = E-WB
 EVP 5 =
 EVP 6 =



P.B. "B" S.W. ISLAND CALLS ø'S 4&6
 P.B. "D" N.E. ISLAND CALLS ø'S 2&8

SIGNAL FIELD TERMINALS

①
2.2K
10W



LOADBAY AND FLASH RELAY'S

1	M.M.U. RESET	MMA-49	J2-21B	RG. 1 INHBT. MAX.
2	24 V. MON. INHBT.	MMA-36	J2-22A	RG. 2 INHBT. MAX.
3	M.M.U. +24 V. MON. 2	J3-23	J1-23B	RG. 1 FORCE OFF
4	M.M.U. +24 V. MON. 1	K1-11 J3-24 MMA-16	J1-24A	RG. 2 FORCE OFF
5	FAULT MON.	J3-28	J1-22B	RG. 1 MAX. 2 SEL.
6	PC1 PED. DET. 1	J1-25B	J1-23A	RG. 2 MAX. 2 SEL.
7	PC3 PED. DET. 3	J1-26B	J1-24B	CALL NON.ACT 1
8	PC5 PED. DET. 5	J2-25B	J2-19A	CALL NON.ACT 2
9	PC7 PED. DET. 7	J2-26B	J1-25A	WALK REST MDFR.
10	B.I.U. SPR. 1	J2-19B	J1-20A	EXT. MIN. RECALL
11	B.I.U. SPR. 2	J2-20A	J1-20B	EXT. START
12	B.I.U. SPR. 3	J2-20B	J1-17A	TEST INPUT A
13	B.I.U. SPR. 4	J2-21A	J1-17B	TEST INPUT B
14	LOGIC GND.	MMA-17 J1-32A A-20	J2-25A	TEST INPUT C
15	PMT. CALL 1	J1-16A	J1-21A	T.B.C. ON LINE
16	PMT. CALL 2	J1-16B	J1-14A	T.B.C. AUX. 1
17	PMT. CALL 3	J2-17A	J1-14B	T.B.C. AUX. 2
18	PMT. CALL 4	J2-17B	J2-14A	T.B.C. AUX. 3
19	PMT. CALL 5	J2-18A	J2-14B	COORD. STATUS OUT
20	PMT. CALL 6	J2-18B	B-14 MMA-55 A-27	LOGIC GND.

21	MMA AC+ I IN	MMA-1	J1-15A	PMT. 1 ACTV.
22	OR1 OPEN	MMA-2	J1-15B	PMT. 2 ACTV.
23	OR2 CLSD	MMA-3	J2-15A	PMT. 3 ACTV.
24	MMA SPR 1	MMA-48	J2-15B	PMT. 4 ACTV.
25	CAB INTLK A	MMA-50	J2-16A	PMT. 5 ACTV.
26	CAB INTLK B	MMA-51	J2-16B	PMT. 6 ACTV.
27	MMA SPR 2	MMA-54 A-20 A-35	MMA-21 A-20 A-35	LOGIC GND
28	SDR OPEN	MMB-3		LOGIC GND
29	MMB SPR 1	MMB-14		LOGIC GND
30	MMB SPR 2	MMB-16	J1-21B J1-22A J3-17	STOP TIMING 1 & 2
31	MMB SPR 3	MMB-25	MMA-38 J2-23A J3-16	MMU STOP TIMING
32			J2-22B J3-18	LOCAL FLASH STATUS
33			J2-23B	ALARM 1
34			J3-20 J2-24A	ALARM 2
35			J3-21 A-27 J3-25 J3-14	LOGIC GND
36			J1-18B	DJM. ENABLE
37	AC+	MMB-6	J1-18A	AUTO FLASH
38	AC+	MMB-19	J2-24B J3-19	COORD. FREE
39	AC+	MMB-5	J1-19A J3-13	MANUAL CONT. ENABLE
40	AC+	MMB-4 LS16-1	J1-19B J3-15	INTRVL. ADV.

INTERFACE TERMINAL BLOCKS

SHEET 5 OF 10

SIZE
B

DRAWING #TS29916PGIL8272C
RTE 176 @ BUTTERFIELD

REV.

BIU #1		
PIN	FUNCTION	TO
1A	+24 VDC	K1-11
1B	+24 VDC	J2-1B
2A	LS1 RED	LS1-6
2B	LS1 YELLOW	LS1-8
3A	LS1 GREEN	LS1-10
3B	LS2 RED	LS2-6
4A	LS2 YELLOW	LS2-8
4B	LS2 GREEN	LS2-10
5A	LS3 RED	LS3-6
5B	LS3 YELLOW	LS3-8
6A	LS3 GREEN	LS3-10
6B	LS4 RED	LS4-6
7A	LS4 YELLOW	LS4-8
7B	LS4 GREEN	LS4-10
8A	LS5 RED	LS5-6
8B	LS5 YELLOW	LS5-8
9A	LS5 GREEN	LS5-10
9B	LS6 RED	LS6-6
10A	LS6 YELLOW	LS6-8
10B	LS6 GREEN	LS6-10
11A	LS7 RED	LS7-6
11B	LS7 YELLOW	LS7-8
12A	LS7 GREEN	LS7-10
12B	LS8 RED	LS8-6
13A	LS8 YELLOW	LS8-8
13B	LS8 GREEN	LS8-10
14A	TBC AUX 1	A-16
14B	TBC AUX 2	A-17
15A	PMT ACT 1	A-21
15B	PMT ACT 2	A-22
16A	PMT CALL 1	B-15
16B	PMT CALL 2	B-16
17A	TEST A	A-12
17B	TEST B	A-13
18A	AUTO FLASH	A-37
18B	DIM. ENABLE	A-36
19A	MANUAL CONT.	A-39
19B	INT. ADVANCE	A-40
20A	EXT. MIN. RECALL	A-10
20B	EXT. START	A-11
21A	TBC ONLINE	A-15
21B	STOP TIME (1)	A-30
22A	STOP TIME (2)	A-30
22B	MAX. 2 (1)	A-5
23A	MAX. 2 (2)	A-6
23B	FORCE OFF (1)	A-3
24A	FORCE OFF (2)	A-4
24B	CNA 1	A-7
25A	WALK REST MOD.	A-9
25B	PED. ISO. 1	B-6
26A	PED. ISO. 2	PC2-A
26B	PED. ISO. 3	B-7
27A	PED. ISO. 4	PC4-A
27B	PED. ISO. COMN.	J3-31
28A	ADDR. SEL. 0	-----
28B	ADDR. SEL. 1	-----
29A	ADDR. SEL. 2	-----
29B	ADDR. SEL. 3	-----
30A	RESERVED	-----
30B	RESERVED	-----
31A	EARTH GND.	LS12-2
31B	LINE FREQ. REF.	J3-29
32A	LOGIC GND.	B-14
32B	LOGIC GND.	J2-32A

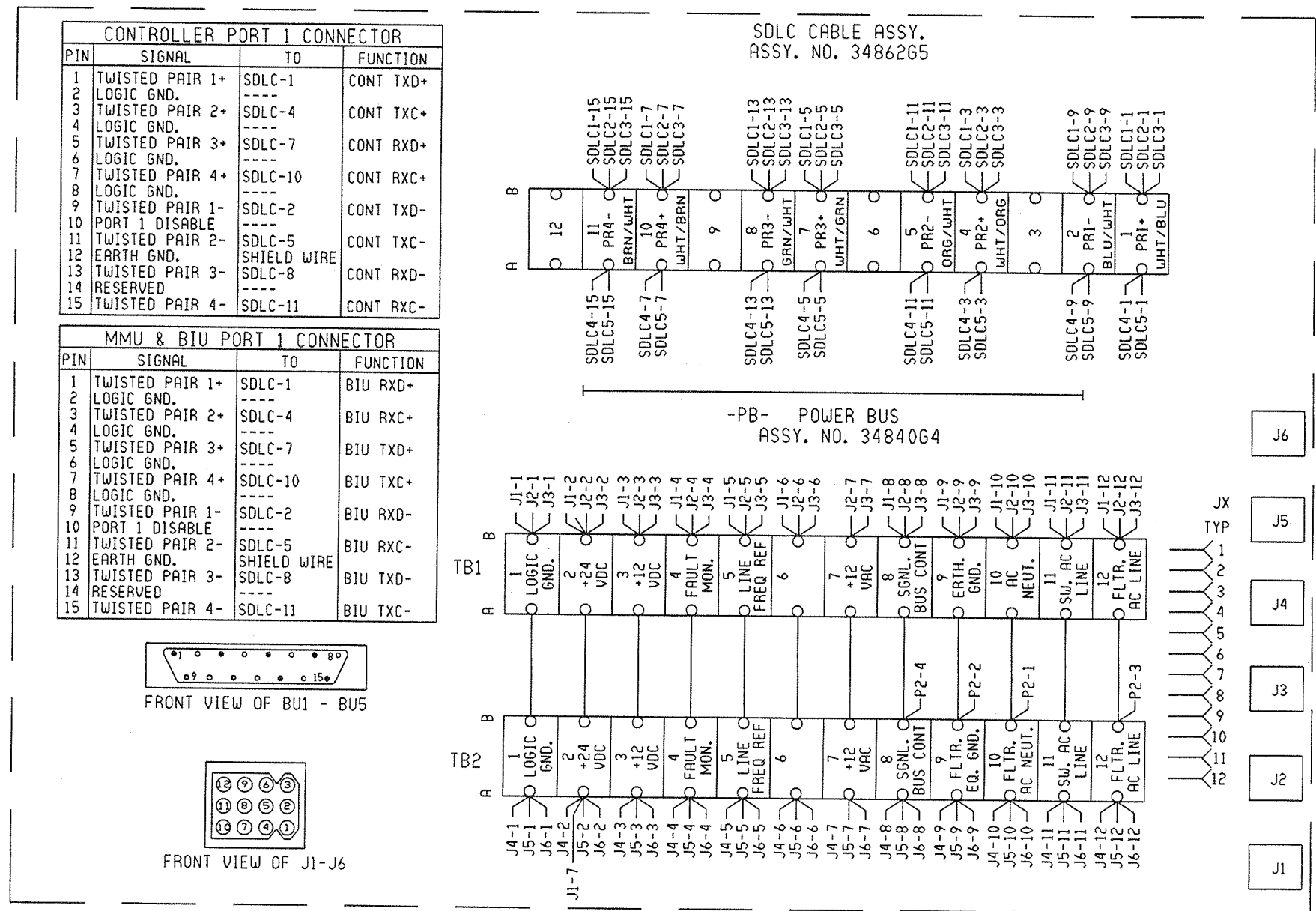
BIU #2		
PIN	FUNCTION	TO
1A	+24 VDC	J2-1B
1B	+24 VDC	J1-1B
2A	LS9 RED	LS9-6
2B	LS9 YELLOW	LS9-8
3A	LS9 GREEN	LS9-10
3B	LS10 RED	LS10-6
4A	LS10 YELLOW	LS10-8
4B	LS10 GREEN	LS10-10
5A	LS11 RED	LS11-6
5B	LS11 YELLOW	LS11-8
6A	LS11 GREEN	LS11-10
6B	LS12 RED	LS12-6
7A	LS12 YELLOW	LS12-8
7B	LS12 GREEN	LS12-10
8A	LS13 RED	LS13-6
8B	LS13 YELLOW	LS13-8
9A	LS13 GREEN	LS13-10
9B	LS14 RED	LS14-6
10A	LS14 YELLOW	LS14-8
10B	LS14 GREEN	LS14-10
11A	LS15 RED	LS15-6
11B	LS15 YELLOW	LS15-8
12A	LS15 GREEN	LS15-10
12B	LS16-RED	LS16-6
13A	LS16-YELLOW	LS16-8
13B	LS16-GREEN	LS16-10
14A	TBC AUX 3	A-18
14B	COORD. STATUS	A-19
15A	PMT ACT 3	A-23
15B	PMT ACT 4	A-24
16A	PMT ACT 5	A-25
16B	PMT ACT 6	A-26
17A	PMT CALL 3	B-17
17B	PMT CALL 4	B-18
18A	PMT CALL 5	B-19
18B	PMT CALL 6	B-20
19A	CNA 2	A-8
19B	SPARE 1	B-10
20A	SPARE 2	B-11
20B	SPARE 3	B-12
21A	SPARE 4	B-13
21B	INHIBIT MAX (1)	A-1
22A	INHIBIT MAX (2)	A-2
22B	LOCAL FLASH	A-32
23A	MMU FLASH	A-31
23B	ALARM 1	A-33
24A	ALARM 2	A-34
24B	COORD FREE IN	A-38
25A	TEST C	A-14
25B	PED. ISO. 5	B-8
26A	PED. ISO. 6	PC6-A
26B	PED. ISO. 7	B-9
27A	PED. ISO. 8	PC8-A
27B	PED. ISO. COMN.	J1-27B
28A	ADDR. SEL. 0	J2-32A
28B	ADDR. SEL. 1	-----
29A	ADDR. SEL. 2	-----
29B	ADDR. SEL. 3	-----
30A	RESERVED	-----
30B	RESERVED	-----
31A	EARTH GND.	J1-31A
31B	LINE FREQ. REF.	J1-31B
32A	LOGIC GND.	J1-32B
32B	LOGIC GND.	J2-32A

MAIN PANEL CONTROL POWER C/C 3484264	
PIN	FUNCTION
1	LOGIC GROUND
2	+24 VDC (IN)
3	-----
4	MMU FAULT MONITOR (IN)
5	LINE FREQ. REFERENCE (IN)
6	-----
7	+12 VAC (IN)
8	SIGNAL BUS CONTROL (IN)
9	-----
10	FILTERED AC NEUTRAL (IN)
11	CONT. EQUIP. AC LINE (OUT)
12	FILTERED AC LINE (IN)

CONTROLLER POWER (CCA2) C/C 3484263			
WIRE	PIN	SIGNAL	TO
1	A	FAULT MONITOR	PB-4
2	U	AC NEUTRAL	PB-10
3	V	EARTH GROUND	PB-9
4	W	LOGIC GROUND	PB-1
5	P	AC LINE	PB-11
6	SHL	EARTH GROUND	CCA2-V

TYPE 1 CONTROLLER POWER C/C 3484262		
PIN	FUNCTION	TO
A	AC NEUTRAL	PB-10
B	-----	-----
C	AC LINE	PB-11
D	+12 VDC	PB-3
E	+24 VDC	PB-2
F	RESERVED	-----
G	FAULT MON.	PB-4
H	LOGIC GND.	PB-1
I	EARTH GND.	PB-9
J	-----	-----
SHL	EARTH GND.	PIN H

CABINET POWER SUPPLY C/C 3484261		
PIN	FUNCTION	TO
A	AC NEUTRAL	PB-10
B	LINE FREQUENCY REF.	PB-5
C	AC LINE	PB-11
D	+12 VDC	PB-3
E	+24 VDC	PB-2
F	RESERVED	-----
G	LOGIC GND.	PB-1
H	EARTH GND.	PB-9
I	+12 VAC	PB-7
J	RESERVED	-----
SHL	EARTH GND.	PIN H



BIU AND CONNECTING CABLES

WIRE LIST FOR NEMA MALFUNCTION MANAGEMENT UNIT			
CONNECTOR "A" (MMA)		CONNECTOR "B" (MMB)	
PIN	WIRE	MON. FUNCTION	SIG. FUNCTION
A	A-1	AC+ I INPUT	B21
B	A-2	OUT RLY 1 OPEN	B22
C	A-3	OUT RLY 2 CLSD	B23
D	A-4	CH. 12 GREEN	12G-A
E	A-5	CH. 11 GREEN	11G-A
F	A-6	CH. 10 GREEN	10G-A
G	A-7	CH. 9 GREEN	9G-A
H	A-8	CH. 8 GREEN	8G-A
J	A-9	CH. 7 GREEN	7G-A
K	A-10	CH. 6 GREEN	6G-A
L	A-11	CH. 5 GREEN	5G-A
M	A-12	CH. 4 GREEN	4G-A
N	A-13	CH. 3 GREEN	3G-A
P	A-14	CH. 2 GREEN	2G-A
R	A-15	CH. 1 GREEN	1G-A
S	A-16	+24V MON. I	B-4
T	A-17	LOGIC GND	B-14
U	A-18	CHASSIS GND	LS7-2
V	A-19	AC- (COMMON)	K1-2
W	A-20	OUT RLY 1 COM.	J3-7
X	A-21	OUT RLY 2 COM.	A-27
Y	A-22	CH. 12 YELLOW	-T-
Z	A-23	CH. 11 YELLOW	-T-
a	A-24	CH. 10 WALK	----
b	A-25	CH. 10 YELLOW	-T-
c	A-26	CH. 9 YELLOW	-T-
d	A-27	CH. 8 YELLOW	8Y-A
e	A-28	CH. 7 YELLOW	7Y-A
f	A-29	CH. 6 YELLOW	6Y-A
g	A-30	CH. 5 YELLOW	5Y-A
h	A-31	CH. 3 YELLOW	3Y-A
i	A-32	CH. 15 GREEN	15G-A
j	A-33	CH. 2 YELLOW	2Y-A
k	A-34	CH. 1 YELLOW	1Y-A
m	A-35	CONT. VOLT. MON.	B-5
n	A-36	+24V MON. INH.	B-2
p	A-37	OUT RLY 1 CLSD	J3-3
q	A-38	OUT RLY 2 OPEN	A-31
r	A-39	CH. 12 WALK	----
s	A-40	CH. 11 WALK	----
t	A-41	CH. 9 WALK	----
u	A-42	CH. 16 YELLOW	16Y-A
v	A-43	CH. 15 YELLOW	15Y-A
w	A-44	CH. 13 YELLOW	13Y-A
x	A-45	CH. 4 YELLOW	4Y-A
y	A-46	CH. 14 GREEN	14G-A
z	A-47	CH. 13 GREEN	13G-A
AA	A-48	(SPARE 1)	B24
BB	A-49	RESET	B-1
CC	A-50	CAB. INTLK A	B25
DD	A-51	CAB. INTLK B	B26
EE	A-52	CH. 14 YELLOW	14Y-A
FF	A-53	CH. 16 GREEN	16G-A
GG	A-54	(SPARE 2)	B27
HH	A-55	TYPE SELECT	A-20
	A-56	SHELL GND	LS15-2

PIN	WIRE	MON. FUNCTION	SIG. FUNCTION
A	B-1	AC+ II INPUT	J3-2
B	B-2	S. DLY RLY COMM.	J3-6
C	B-3	S. DLY RLY OPEN	B28
D	B-4	CH. 12 RED	B40
E	B-5	CH. 11 RED	B39
F	B-6	CH. 9 RED	B37
G	B-7	CH. 8 RED	8R-A
H	B-8	CH. 7 RED	7R-A
J	B-9	CH. 6 RED	6R-A
K	B-10	CH. 5 RED	5R-A
L	B-11	CH. 4 RED	4R-A
M	B-12	CH. 2 RED	2R-A
N	B-13	CH. 1 RED	1R-A
P	B-14	(SPARE 1)	B29
R	B-15	+24V MONITOR II	B-3
S	B-16	(SPARE 2)	B30
T	B-17	CH. 13 RED	13R-A
U	B-18	S. DLY RLY CLSD	J3-35
V	B-19	CH. 10 RED	B38
W	B-20	CH. 14 RED	14R-A
X	B-21	CH. 15 RED	15R-A
Y	B-22	CH. 16 RED	16R-A
Z	B-23	CH. 3 RED	3R-A
o	B-24	RED ENABLE	LS8-1
b	B-25	(SPARE 3)	B31
c	B-26	LOCAL FLASH IN	-T-
	B-27	SHELL GROUND	LS6-2

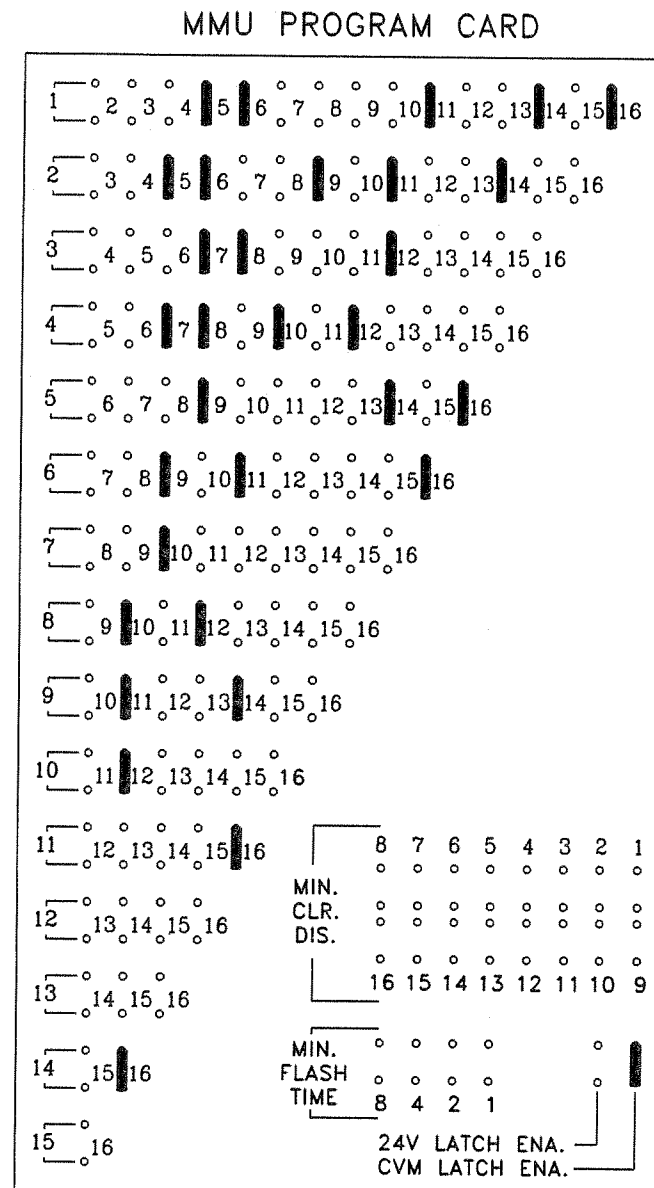
NOTES FOR 16 CHANNEL M.M.U.

(1) RELAY CONTACT POSITIONS SPECIFIED ARE FOR NON-CONFLICT MODE.

(2) TO PROGRAM MMU, SOLDER JUMPERS IN PROGRAMMING CARD FOR ALL PERMISSABLE PHASE MOVEMENTS, MINIMUM CHANGE DISABLE FOR ALL PEDESTRIAN CHANNELS, AND MIN. FLASH, VOLTAGE MON., AND 24V. MON. LATCH OPTIONS AS DESIRED.

M.M.U. CHANNEL ASSIGNMENTS

CH. 1 = L/S 1 = Ø1 VEH.
 CH. 2 = L/S 2 = Ø2 VEH.
 CH. 3 = L/S 3 = Ø3 VEH.
 CH. 4 = L/S 4 = Ø4 VEH.
 CH. 5 = L/S 5 = Ø5 VEH.
 CH. 6 = L/S 6 = Ø6 VEH.
 CH. 7 = L/S 7 = Ø7 VEH.
 CH. 8 = L/S 8 = Ø8 VEH.
 CH. 9 = L/S 9 = Ø2 PED.
 CH. 10 = L/S 10 = Ø4 PED.
 CH. 11 = L/S 11 = Ø6 PED.
 CH. 12 = L/S 12 = Ø8 PED.
 CH. 13 = L/S 13 = O'LAP A VEH.
 CH. 14 = L/S 14 = O'LAP B VEH.
 CH. 15 = L/S 15 = O'LAP C VEH.
 CH. 16 = L/S 16 = O'LAP D VEH.



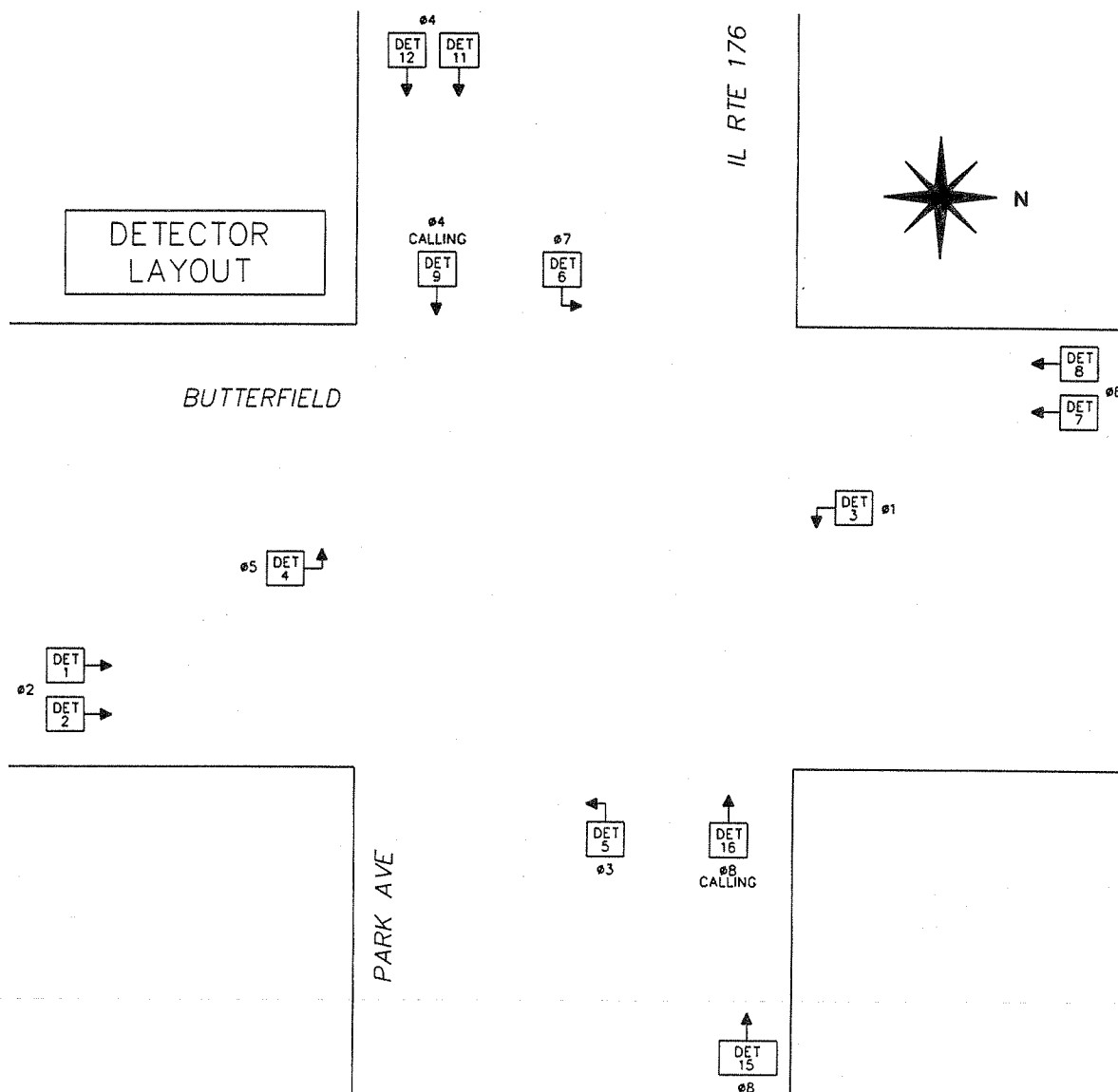
DETECTOR RACK 34030G1

POWER SUPPLY OR B.I.U.	L3	L1	L7	L5	L11	L9	L15	L13	PMT 5	PMT 3 Ø2&6 N-SB	PGM. CARD
	Ø1 SBLT	Ø2 NBLL	Ø6 SBLL	Ø3 WBLT	Ø4 EBTH BACK	Ø4 EB FRNT CALL	Ø8 WB BACK	Ø8 WB FRNT CALL	□ 2CH OPTICOM/ OPIC CH. C CH. D	■ 2CH OPTICOM/ OPIC CH. A CH. B Ø4&8 E-WB	
	■ 2CH Ø5 NBLT	■ 2CH Ø2 NBRL	■ 2CH Ø6 SBRL	■ 2CH Ø7 EBLT	■ 2CH Ø4 EBRT BACK	■ 2CH	□ 2CH	□ 2CH	□ 2CH	□ 2CH	
	L4	L2	L8	L6	L12	L10	L16	L14	PMT 6	PMT 4	

■ J13 C/C 34842G5 DC POWER	■ J16 C/C 33284G84 EXP. OUTPUTS	■ J14 C/C 33284G2 LPS 1-8	□ J18 C/C 33284G9 SYS. OUTPUTS	■ J15 C/C 33284G3 LPS 9-16	■ J17 C/C 34842G5 AC POWER	■ J19 C/C 33284G17 PGM. CARD
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ADDRESS TABLE					
RACK #	JMPR	DET. #'S	RACK #	JMPR	DET. #'S
1	000	1-16	5	000	65-80
2	000	17-32	6	000	81-96
3	000	33-48	7	000	97-112
4	000	49-64	8	000	113-128

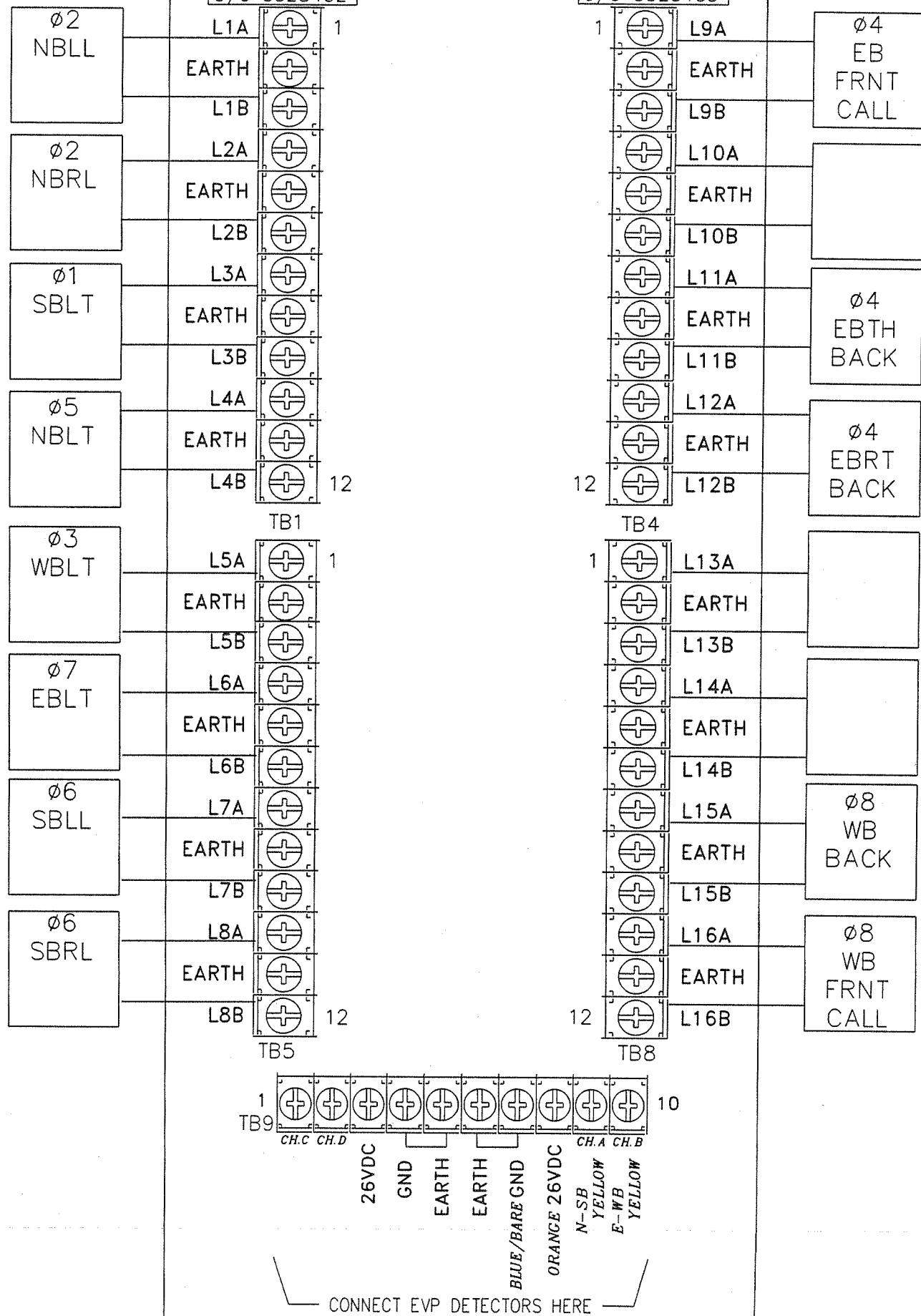
DETECTOR ASSIGNMENTS		
CONT. INPUT	PHASE ASGN.	DETECTOR TYPE
1	2	1
2	2	1
3	1	1
4	5	1
5	3	1
6	7	1
7	6	1
8	6	1
9	4	6
10		
11	4	1
12	4	1
13		
14		
15	8	1
16	8	6
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DETECTOR RACK PROGRAMMING JUMPERS																																															
DC POWER ①				CONFIGURATION ④								CONFIGURATION ④								CONFIGURATION ④								CONFIGURATION ④								DET. CMNS.											
				SLOT 1/2								SLOT 3/4								SLOT 5/6								SLOT 7/8																			
				DET. TYPE								SLOT 1/2								SLOT 3/4								SLOT 5/6								SLOT 7/8											
JP31	JP32	JP33	JP34	JP3	JP4	JP5	JP6	JP7	JP8	JP9	JP10	JP11	JP12	JP13	JP14	JP15	JP16	JP17	JP18	JP19	JP20	JP21	JP22	TP1	JP23	JP24	JP25	JP26	JP27	JP28	TP2	JP29	JP30	JP38-JP55													
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- ① INSTALL JUMPERS ON JP31 THRU JP34 WHEN A SHELF MOUNT POWER SUPPLY IS USED. WARNING - DO NOT INSTALL JUMPERS WHEN A PLUG-IN POWER SUPPLY IS USED.
- ② INSTALL JUMPERS ON JP38 - JP55 WHEN PGM. CARD IS NOT USED.
- ③ PROGRAM CARD AND PLUG-IN POWER SUPPLY ARE FOR TS-1 APPLICATIONS ONLY. REMOVE FOR TS-2 APPLICATIONS.
- ④ PROGRAM JUMPERS USING CONFIGURATION NUMBER AS SHOWN BY ASTERISK.

DETECTOR LOOP
INTERFACE
ASSY. 34040G1



DET. LOOPS 9-16 (J15) C/C 33284G3

PIN	SIGNAL	TO
1	LOOP 9+	LPI2: TB4-1
2	LOOP 9-	LPI2: TB4-3
3	LOOP 10+	LPI2: TB4-4
4	LOOP 10-	LPI2: TB4-6
5	LOOP 11+	LPI2: TB4-7
6	LOOP 11-	LPI2: TB4-9
7	LOOP 12+	LPI2: TB4-10
8	LOOP 12-	LPI2: TB4-12
9	LOOP 13+	LPI2: TB8-1
10	LOOP 13-	LPI2: TB8-3
11	LOOP 14+	LPI2: TB8-4
12	LOOP 14-	LPI2: TB8-6
13	LOOP 15+	LPI2: TB8-7
14	LOOP 15-	LPI2: TB8-9
15	LOOP 16+	LPI2: TB8-10
16	LOOP 16-	LPI2: TB8-12
17	----	
18	----	
19	----	
20	----	

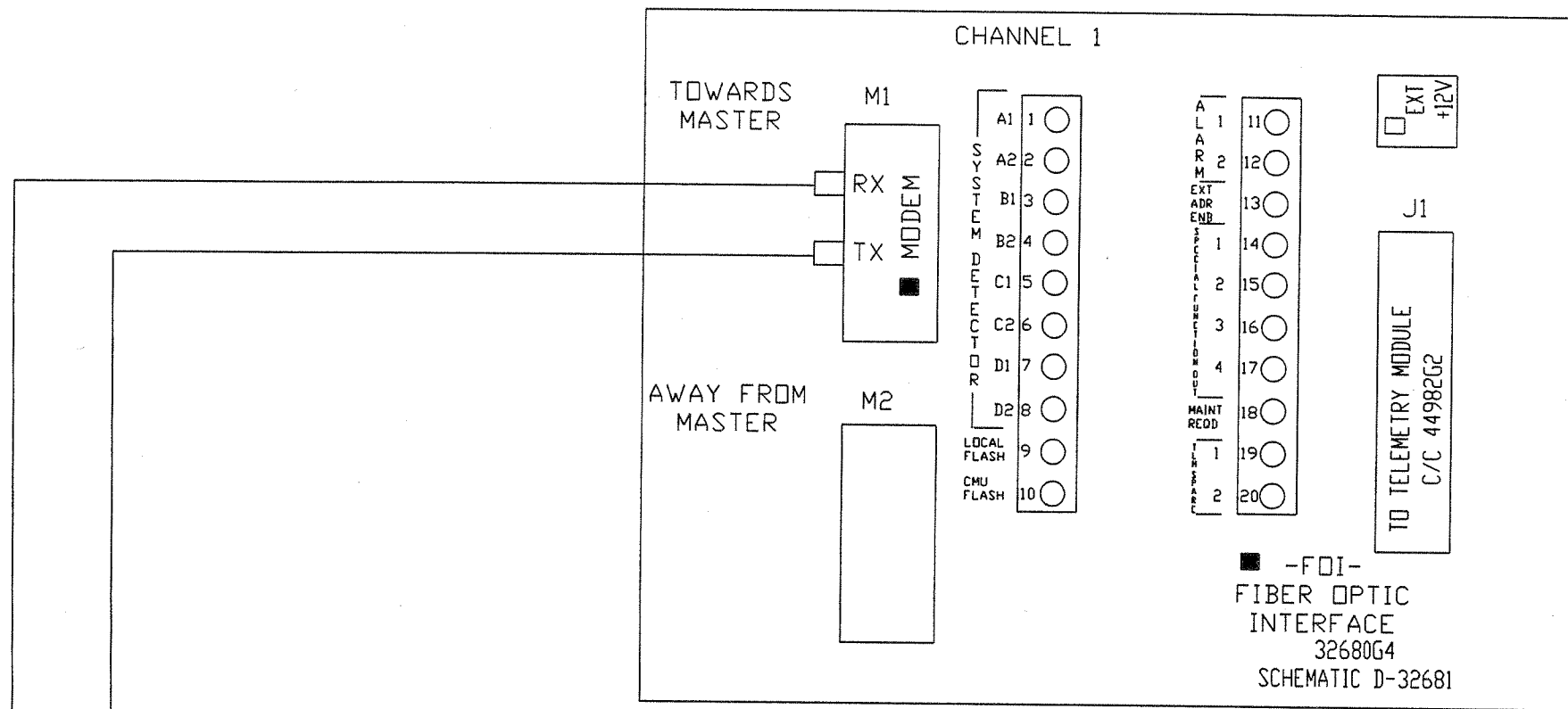
DET. RACK POWER C/C 34842G5			
P1/ DR: J13	P2/ DR: J17	FUNCTION	TO
1		+12 VDC (DET. POWER)	PB-3
2		+24 VDC (BIU POWER)	PB-2
3		LOGIC GROUND	PB-1
4		EARTH GROUND	PB-9
5		"KEY PIN"	
6		LINE FREQUENCY REF.	PB-5
	1	EARTH GROUND	----
	2	AC LINE	PB-12
	3	AC NEUTRAL	PB-10
	4	LOGIC GROUND	----

DET. LOOPS 1-8 (J14) C/C 33284G2

PIN	SIGNAL	TO
1	LOOP 1+	LPI1: TB1-1
2	LOOP 1-	LPI1: TB1-3
3	LOOP 2+	LPI1: TB1-4
4	LOOP 2-	LPI1: TB1-6
5	LOOP 3+	LPI1: TB1-7
6	LOOP 3-	LPI1: TB1-9
7	LOOP 4+	LPI1: TB1-10
8	LOOP 4-	LPI1: TB1-12
9	LOOP 5+	LPI1: TB5-1
10	LOOP 5-	LPI1: TB5-3
11	LOOP 6+	LPI1: TB5-4
12	LOOP 6-	LPI1: TB5-6
13	LOOP 7+	LPI1: TB5-7
14	LOOP 7-	LPI1: TB5-9
15	LOOP 8+	LPI1: TB5-10
16	LOOP 8-	LPI1: TB5-12
17	PMT. DET. CH. C	LPI1: TB9-1
18	PMT. DET. CH. D	LPI1: TB9-2
19	KEY PIN	
20	PMT. CH. C/D +26VDC	LPI1: TB9-3
21	PMT. DC GROUND	LPI1: TB9-4,7
22	PMT. CH. A/B +26VDC	LPI1: TB9-8
23	PMT. DET. CH. A	LPI1: TB9-9
24	PMT. DET. CH. B	LPI1: TB9-10
25	----	
26	----	

EXPANSION OUTPUTS C/C 33284G8		
J16	FUNCTION	TO
17	DET. 17 / PMT. A OUT	MP: B19
18	DET. 18 / PMT. B OUT	MP: B20
19	PMT. C OUT	MP: B17
20	PMT. D OUT	MP: B18

DETECTOR LOOP INTERFACE



		-LT- LOCAL TELEMETRY 32680G4	
CONT. TELM. PORT	FIBER OPTIC INTERF.	COLOR	FUNCTION
J3	J1		
3	A4	BLACK	TRANSMIT
2	A3	BLACK	RECEIVE
7	A5	RED	+12 VDC
5	A2	GRAY	SIG. GND.

