

### SIGNAL PHASING

Ring Configuration: 1, 2, 3, 4, 5, 6, 7, 8

1 NOT USED	5 NOT USED
2	6
3 NOT USED	7 NOT USED
4	8 NOT USED

### SIGNAL SEQUENCE

RING 1	PHASE 1		PHASE 2		PHASE 3		PHASE 4		FLASH
SIGNAL ID NUMBER	R/W	OTH	R/W	OTH	R/W	OTH	R/W	OTH	Y
21,22			▲	Y			G	Y	R
41							G	Y	R
42							G	Y	R

  

RING 2	PHASE 5		PHASE 6		PHASE 7		PHASE 8		FLASH
SIGNAL ID NUMBER	R/W	OTH	R/W	OTH	R/W	OTH	R/W	OTH	Y
61,62,63			G	Y					Y

### OVERLAP PHASE

OVERLAP PHASE	DL-A/-+/-	DL-B/-+/-	DL-C/-+/-	DL-D/-+/-	FLASH				
SIGNAL ID NUMBER	R/W	OTH	R/W	OTH	R/W	OTH	R/W	OTH	Y
---	---	---	---	---	---	---	---	---	---

◀ RED ARROW ◁ YELLOW ARROW  
 ◀ GREEN ARROW ✨ FLASHING YELLOW ARROW

### TURNING MOVEMENT COUNT

Phase	1	2	3	4	5	6	7	8
% Grade	0.0%	-3.0%	0.0%	-4.5%	0.0%	3.0%	0.0%	0.0%
Distance		60		115		65		
Approach Speed (mph)		55		35		55		
Yellow		5.5		4.2		4.9		
All Red		1.0		2.5		1.0		
Total Clearance		6.5		6.7		5.9		

### SIGN ID

A R4-7 24" x 30"  
 B R5-1 30" x 30"  
 C R5-1a 36" x 24"  
 D R3-2 24" x 24" 30" x 30"  
 E R3-1 24" x 24" 30" x 30"  
 F R6-1L 48" x 18"  
 G R6-1R 48" x 18"  
 J R2-1-55 24" x 30"  
 M W13-1 24" x 24"  
 P BROADWAY RD. 1000

### CLEARANCE INTERVALS

Phase	1	2	3	4	5	6	7	8
% Grade	0.0%	-3.0%	0.0%	-4.5%	0.0%	3.0%	0.0%	0.0%
Distance		60		115		65		
Approach Speed (mph)		55		35		55		
Yellow		5.5		4.2		4.9		
All Red		1.0		2.5		1.0		
Total Clearance		6.5		6.7		5.9		

### SIGNAL HEAD ID

### MALFUNCTION MANAGEMENT UNIT / CONFLICT MONITOR

### PROGRAMMING DETAIL

(program card and tables as shown)

### ECONOLITE EOS-2070 SPECIAL MMU PROGRAMMING

(program controller as shown)

- From Main Menu select **1. CONFIGURATION**
- From CONFIGURATION Submenu select **1. CABINET**
- From PORT 1 (SDLC) Submenu select **4. MONITOR PROGRAMMING**

**CAUTION!**  
 Set intersection to Flash before attempting to enter or change any MMU programming data.  
 This programming and that of the MMU programming card must match exactly. If they do not, the intersection will be placed into Flash.

CHANNEL NUMBER	ENABLE/DISABLE
1	DISABLE
2	ENABLE
3	DISABLE
4	ENABLE
5	DISABLE
6	ENABLE
7	DISABLE
8	DISABLE
9	DISABLE
10	DISABLE
11	DISABLE
12	DISABLE
13	DISABLE
14	DISABLE
15	DISABLE
16	DISABLE

UNIT OPTIONS	SETTING
RECURRENT PULSE	ON
WALK DISABLE	OFF
LOG CVM FAULTS	ON
EXTERN WATCHDOG	OFF
24V-2=12VDC	OFF
PGM CARD MEMORY	ON
LEDguard	ON
FORCE TYPE 16	OFF
TYPE 12-SDLC	OFF
VM 3xDay Latch	ON

FLASHING YELLOW ARROW	SETTING
CONFIG MODE	B
ENABLE CHANNEL PAIR, FYA	
CH 1-13	OFF
CH 3-14	OFF
CH 5-15	OFF
CH 7-16	OFF
RED/YEL INPUT ENABLE	
CH 1	OFF
CH 3	OFF
CH 5	OFF
CH 7	OFF
FLASH RATE FAULT	ON
FYA TRAP DETECT	ON

```

MMU PROGRAM [ MANUAL ]
CH 6 5 4 3 2 1 0 9 8 7 6 5 4 3 2
1 . . . . .
2 . . . . . X . . .
3 . . . . .
4 . . . . .
5 . . . . .
6 . . . . .
7 . . . . .
8 . . . . .
9 . . . . .
10 . . . . .
11 . . . . .
12 . . . . .
13 . . . . .
14 . . . . .
15 . . . . .
    
```

END PROGRAMMING

MMU PROGRAMMING NOTE:  
 ENSURE YELLOW CHANGE PLUS RED CLEARANCE MONITORING IS ENABLED FOR ALL CHANNELS.

### DETECTOR RACK SETUP

INSERT DETECTOR CARDS IN RACK ACCORDING TO THE DETAIL SHOWN BELOW. PARTICULAR DETECTOR CHANNELS WILL CALL PHASES INDICATED.

DET BIU #1	DETECTION	CH3	CH1	COMMUNICATIONS	SLOT	SLOT	SLOT	SLOT	DET BIU #2
		L7 ø 4	L5 ø 4	REMOTE	EMPTY	EMPTY	EMPTY	EMPTY	
		L8 NOT USED	L6 ø 4	MODULATIONS					

DETECTOR NUMBER	AMP. NO.	SIZE / ZONE	ø	AMP. TYPE	DELAY DISABLE	COMMENTS:
V21,V22	1	6'x20'	2	N		130' FROM STOPLINE (THRU) (CAMERA #1)
V23,V24	2	6'x20'	2	N		280' FROM STOPLINE (THRU) (CAMERA #1)
42	3	6'x25'	4	N		STOPBAR
43	8	6'x25'	4	D	4	STOPBAR
45	4	6'x6'	4	S		55' FROM STOPBAR
V61,V62,63	5	6'x20'	6	N		130' FROM STOPLINE (THRU) (CAMERA #2)
V64,V65,V66	6	6'x20'	6	N		280' FROM STOPLINE (THRU) (CAMERA #2)

NOTE:  
 ALL STOPBAR LOOPS EXTEND TO THE PROJECT CURB LINE UNLESS OTHERWISE NOTED.  
 ALL LOOPS RECEIVE THREE TURNS.

Brookshire Blvd. @ I-485 Inner Ramp  
 TEMPORARY SIGNAL DETAILS

PROJECT REFERENCE NO. **I-5973**  
 SHEET NO. **SIG. 3.3**

Plans Prepared By: **Kimley-Horn**  
 421 FAIRVIEW STREET, SUITE 600  
 RAINIER, WA 98148  
 PHONE: 206-487-2600

NO.	DATE	BY	REVISION DESCRIPTION

DocuSigned by: **SALPH** 2/16/2022  
 SEAL 032607  
 PREPARED BY: **SIP** 9/2021  
 DATE: 9/2021

SHEET **SIG3.3** OF **SIG3.6**