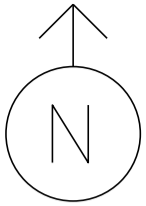


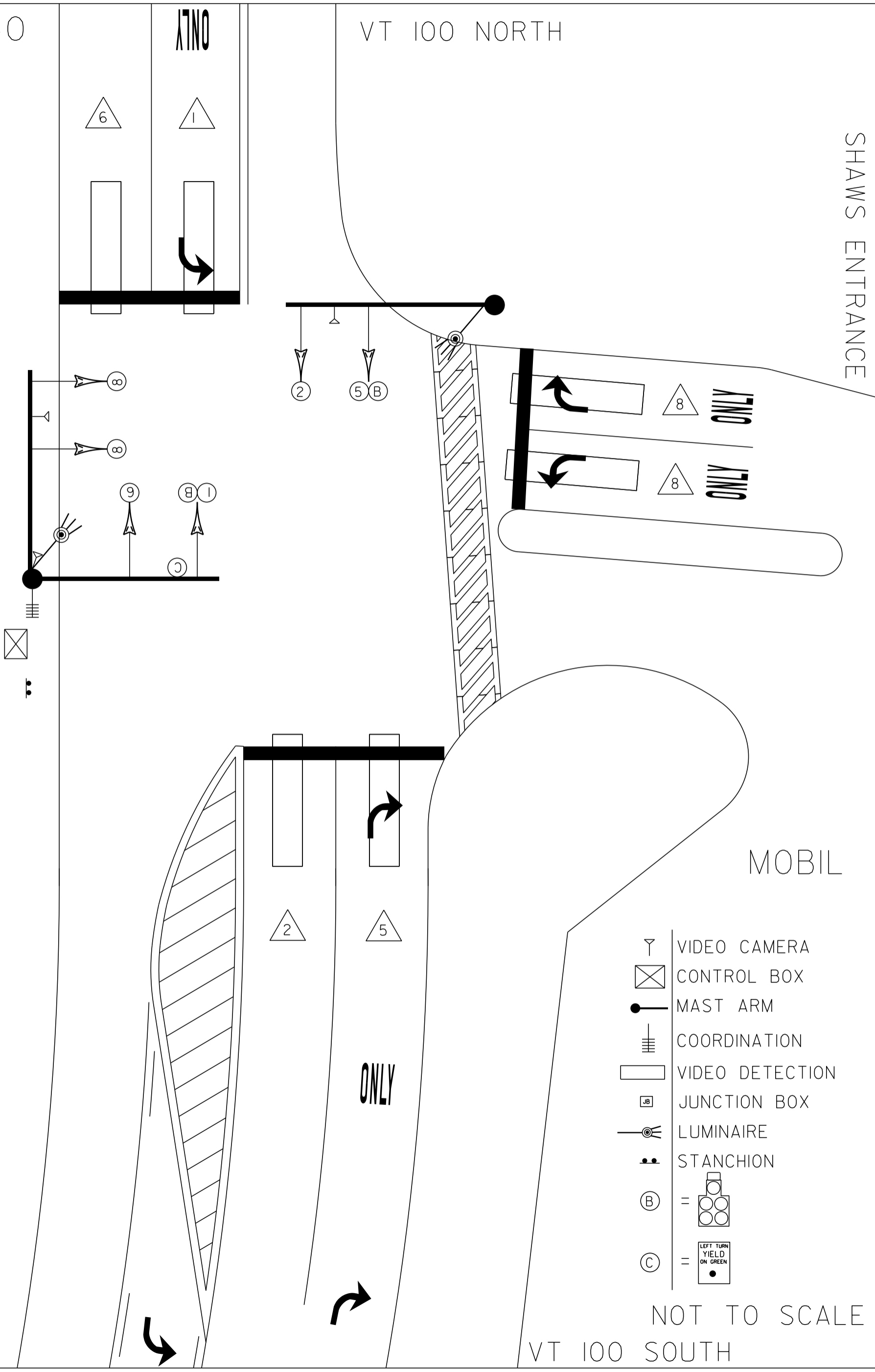
MS # 640



ONLY

VT 100 NORTH

SHAW'S ENTRANCE



6

1

2

5 B

8

8

9

1 B

C

8

ONLY

8













ONLY

MOBIL

2

5

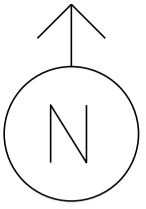
ONLY

-  VIDEO CAMERA
-  CONTROL BOX
-  MAST ARM
-  COORDINATION
-  VIDEO DETECTION
-  JUNCTION BOX
-  LUMINAIRE
-  STANCHION
-  B = 
-  C = 

NOT TO SCALE

VT 100 SOUTH

MS # 640



12'

LANE LINE 75'

11'



STOP BAR 23'

VT 100 NORTH

SHAW'S ENTRANCE

STOP BAR 26'

LANE LINE 75'

12'

ONLY



12'

ONLY

CROSSWALK 62'

STOP BAR 26'

LANE LINE 75'

12'

11'

ONLY



MOBIL

NOT TO SCALE

VT 100 SOUTH





PROPERTY OF  
VT. AGENCY OF TRANS.  
MAINTENANCE DIV.  
IN EMERGENCY CALL  
DIST. TRAIL OFFICE  
←  
NIGHTS & WEEKDAYS  
INTERSECTION NO.

6-26-11  
CAMARA'S  
1-GREEN = 82  
2-GREEN = 86  
2-RED = 88  
~~2-RED =~~

**DANGER**  
115 VOLTS A.C.

TURN ON  
12-8-05

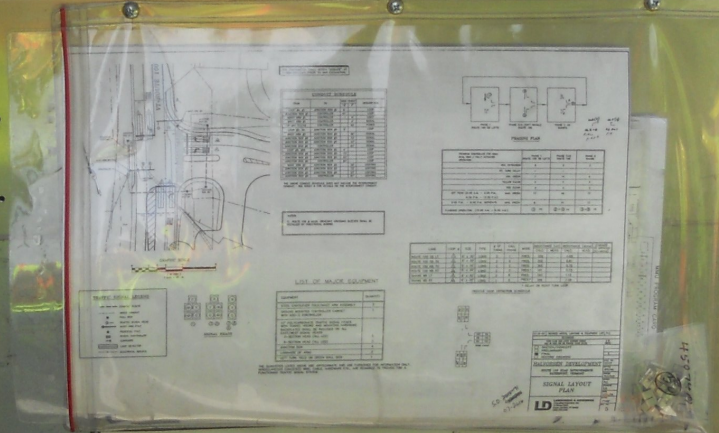
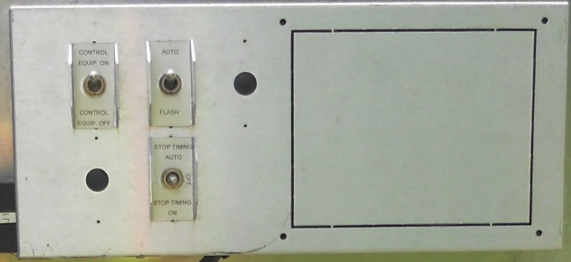
344193

**WARNING**  
DO NOT OPERATE  
CABINET WITHOUT  
CMU / MMU

CONTROL EQUIP. ON  
CONTROL EQUIP. OFF

AUTO  
FLASH

STOP TUNING  
AUTO  
STOP TUNING ON



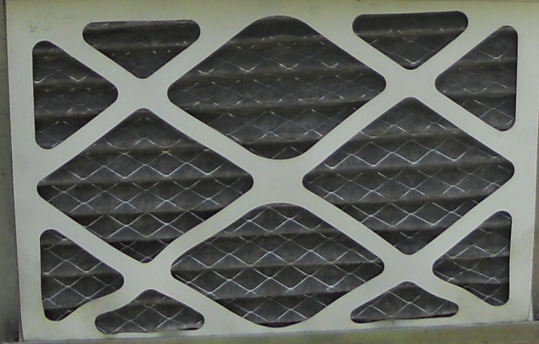
WARRANTY INFORMATION

DATE OF INSTALLATION

LIST OF MAJOR EQUIPMENT

LD

RECONOLITE



344193-10001 E. Mount No. 44-074

6-26-11  
CAMARA'S  
1-GREEN = 82  
2-GREEN = 86  
2-RED = 88  
~~2-RED =~~

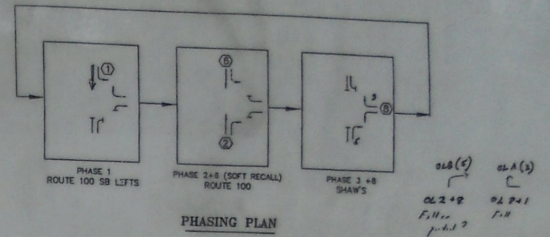
THE CONTRACTOR SHALL NOTIFY "DIGSAFE" AT 1-888-DIG-SAFE PRIOR TO ANY EXCAVATION.



CONDUIT SCHEDULE				
FROM	TO	WIRED CONDUIT	DESCRIPTION	
LOOP #1	JUNCTION BOX #1	1"	2'	LOOP
JUNCTION BOX #1	CONTROLLER	4"		LOOP
MAST ARM #1	CONTROLLER	4"		LIGHT
MAST ARM #1	CONTROLLER	4"		SIGNAL
UP #41 111/40	CONTROLLER	4"		POWER
LOOP #2, 2A	JUNCTION BOX #4	0"		LOOP
MAST ARM #2	JUNCTION BOX #2	4"	30'	SIGNAL
JUNCTION BOX #2	JUNCTION BOX #3	4"	73'	SIGNAL
JUNCTION BOX #3	JUNCTION BOX #4	4"	23'	SIGNAL
JUNCTION BOX #4	CONTROLLER	4"	87'	SIGNAL
LOOP #8, #8A	JUNCTION BOX #2	4"		LOOP
JUNCTION BOX #2	JUNCTION BOX #3	4"	73'	LOOP
JUNCTION BOX #3	JUNCTION BOX #4	4"	23'	LOOP
JUNCTION BOX #4	CONTROLLER	4"	87'	LOOP
MAST ARM #2	JUNCTION BOX #2	4"	73'	LIGHTING
JUNCTION BOX #2	JUNCTION BOX #3	4"	23'	LIGHTING
JUNCTION BOX #3	JUNCTION BOX #4	4"	23'	LIGHTING
JUNCTION BOX #4	CONTROLLER	4"	87'	LIGHTING

THE ABOVE CONDUIT SCHEDULE DOES NOT INCLUDE THE INTERCONNECT CONDUIT. SEE SHEET 9 FOR DETAILS ON THE INTERCONNECT CONDUIT.

NOTES:  
1) ROUTE 100 & MOBIL DRIVEWAY CROSSING SLEEVES SHALL BE INSTALLED BY DIRECTIONAL BORING.

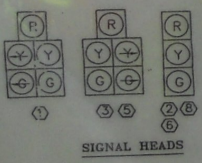
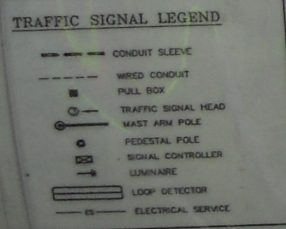


PROGRAM CONTROLLER FOR NEMA DUAL RING / FULLY ACTUATED OPERATION	PHASE 1 ROUTE 100 SB LEFTS	PHASE 2+8 ROUTE 100	PHASE 8 SHAWS
VEH. EXTENSION	2	2	2
RT. TURN DELAY	-	-	-
MIN. GREEN	7	14	8
YELLOW CLEAR	4	4	4
RED CLEAR	2	2	2
OFF PEAK (6:00 A.M. - 3:00 P.M., 6:00 P.M. - 12:00 P.M.)	MAX. GREEN 17	48	17
3:00 P.M. - 6:00 P.M. WEEKDAYS	MAX. GREEN 8	77	17
FLASHING OPERATION (12:00 A.M. - 6:00 A.M.)	① FY	②+③ FY	③+⑧ FR

LANE	LOOP #	SIZE	TYPE	# OF TURNS	CALL PHASE	MODE	INDUCTANCE (uH) CALC. MEAS.	RESISTANCE (ohms) CALC. MEAS.	LEAKAGE TO GROUND (m-ohms)
ROUTE 100 SB LT	1	6' x 30'	LONG	2	1	PRES.	355	0.65	
ROUTE 100 SB TH	2	6' x 30'	LONG	2	8	PRES.	352	0.61	
ROUTE 100 NB TH	3	6' x 30'	LONG	2	2	PRES.	365	0.75	
ROUTE 100 NB RT	4	6' x 30'	LONG	2	2	PRES.*	361	0.73	
SHAWS WB LT	5	6' x 30'	LONG	2	8	PRES.	392	1.12	
SHAWS WB RT	6	6' x 30'	LONG	2	8	PRES.*	389	1.09	

\* DELAY ON RIGHT TURN LOOP

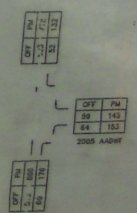
VEHICLES LOOP DETECTOR SCHEDULE



LIST OF MAJOR EQUIPMENT

EQUIPMENT	QUANTITY
STEEL CANTILEVER POLE/MAST ARM ASSEMBLY	2
GROUND MOUNTED CONTROLLER CABINET WITH ASC-2 CONTROLLER	1
12" POLYCARBONATE TRAFFIC SIGNAL HEADS WITH TUNNEL VISORS AND MOUNTING HARDWARE. BACKPLATES SHALL BE INCLUDED ON ALL EAST/WEST SIGNAL HEADS	3
3-SECTION HEAD (ALL LED)	3
5-SECTION HEAD (ALL LED)	3
JUNCTION BOX	4
LUMINAIRE (6' ARM)	2
LEFT TURN YIELD ON GREEN BALL SIGN	1

THE QUANTITIES LISTED ABOVE ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY. MISCELLANEOUS (UNLISTED) WIRE, CABLE, HARDWARE ETC., ARE REQUIRED TO PROVIDE FOR A FUNCTIONING TRAFFIC SIGNAL SYSTEM.



11-5-04 REVISED NOTES, LIGHTING & EQUIPMENT LIST PLC

REVISIONS

NO.	DATE	BY	REVISIONS
1			PLC
2			PLC
3			PLC
4			PLC
5			PLC

HALVORSEN DEVELOPMENT

ROUTE 100 ROAD IMPROVEMENTS WATERBURY, VERMONT

SIGNAL LAYOUT PLAN

DATE: 7/21/04

SCALE: 1"=20'

LD

S.O. 07-2010



TURN ON  
12-8-05

BUS INTERFACE UNIT  
POWER ON  
TRANSMIT  
WILD DATA  
PORT 1

Model 155-85-10



CABINET POWER SUPPLY

24 VDC 2.0A 48W  
12 VDC 2.0A 24W  
12 VDC 2.0A 24W  
12 VDC 2.0A 24W

POWER SUPPLY

ECONOLITE CONTROL PRODUCTS, INC.

ASC/2M-100

ENCOR Model 8300

ECONOLITE CONTROL PRODUCTS, INC.

ASCI/2S-2100

ECONOLITE M8U-100

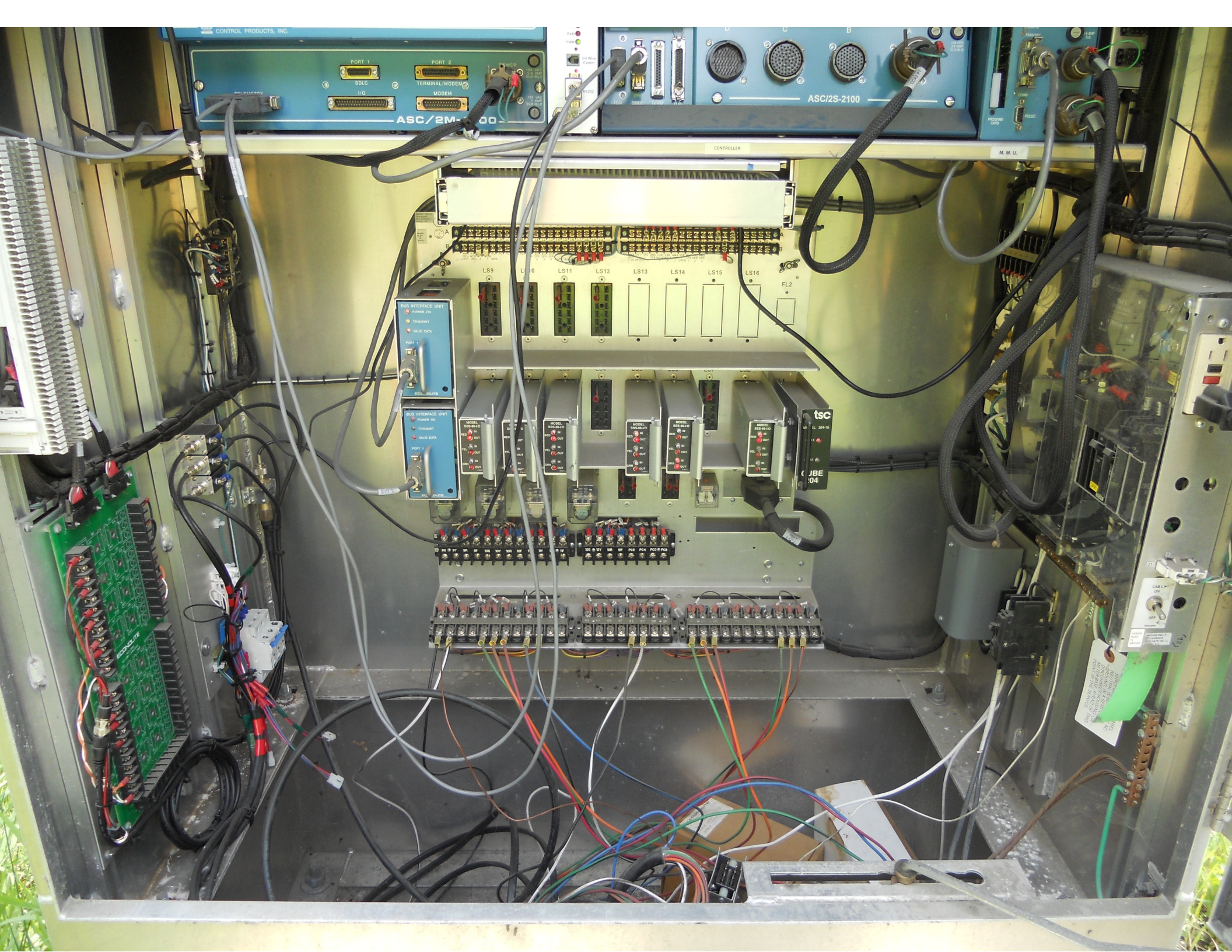
M. M. U.

LS9 LS10 LS11 LS12 LS13 LS14 LS15 LS16

FL2

BUS INTERFACE UNIT  
POWER ON  
TRANSMIT  
WILD DATA  
PORT 1

tsc



CONTROL PRODUCTS, INC.  
PORT 1  
SDLC  
PORT 2  
TERMINAL/MODEM  
I/O  
MODEM  
ASC/2M-100

ASC/2S-2100

LS9 LS10 LS11 LS12 LS13 LS14 LS15 LS16  
FL2

BUS INTERFACE UNIT  
POWER ON  
TRANSMIT  
WILD DATA  
PORT 1  
SDLC/RS485

BUS INTERFACE UNIT  
POWER ON  
TRANSMIT  
WILD DATA  
PORT 1  
SDLC/RS485

MODEL  
IN  
OUT  
TEL  
OUT

MODEL  
IN  
OUT  
TEL  
OUT

MODEL  
IN  
OUT  
TEL  
OUT

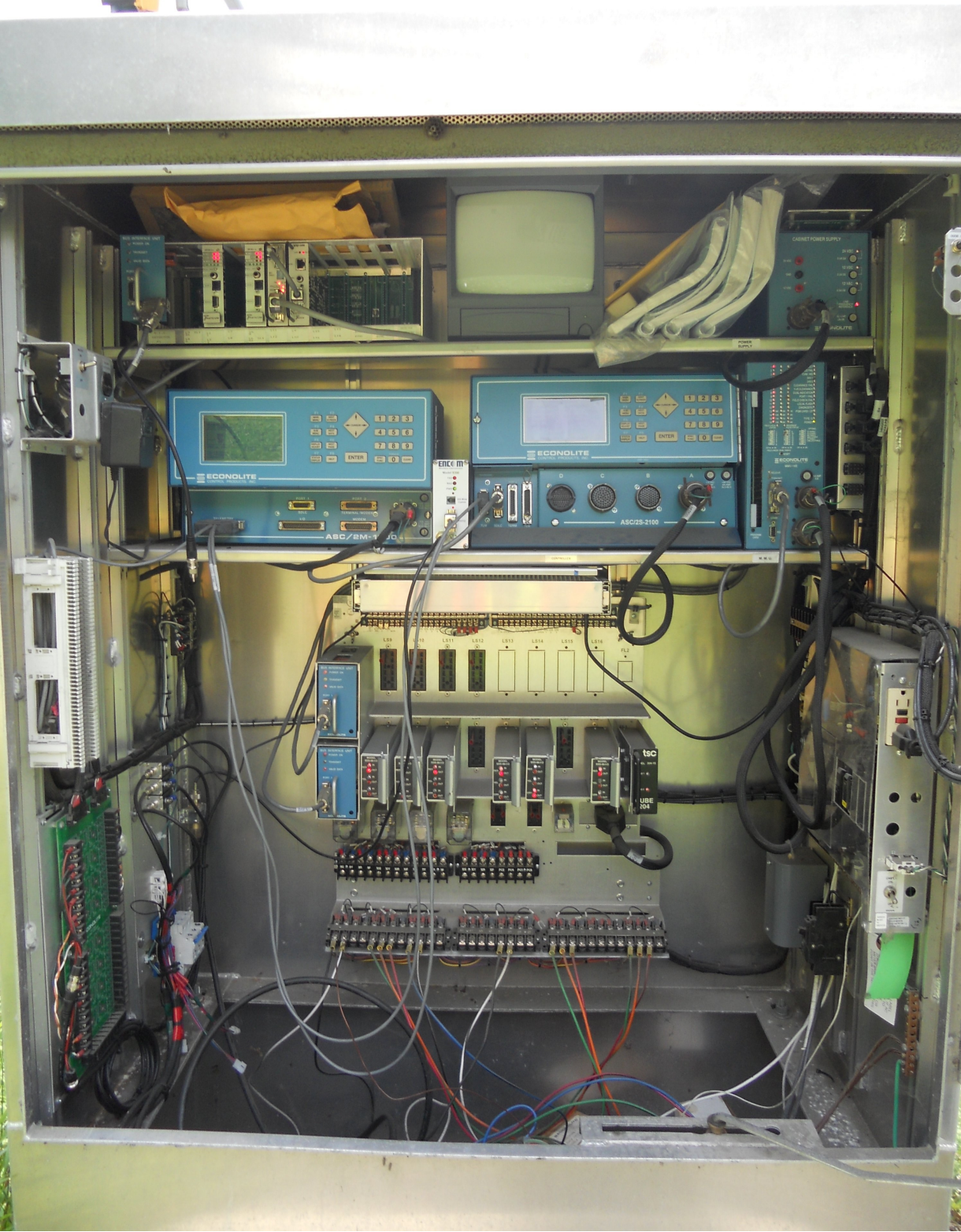
MODEL  
IN  
OUT  
TEL  
OUT

MODEL  
IN  
OUT  
TEL  
OUT

tsc  
EL 200-15  
JBE  
04

SDLC/RS485

Handwritten label with technical specifications and a green arrow pointing to a component.





Shell's Drop

ONLY





#4 - 250W - H.P.S. - III

U.M.C. 07/05  
3E-12.0X32'0"  
3E-8.50X30'0"  
55KSI





shaws

Osco

PRARDICK







ONLY

shau



shaus  
Osco

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

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TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS

TRAFFIC LIGHTS



LEFT TURN  
YIELD  
ON GREEN

BEGIN  
CENTER  
LANE







Coordination Patterns

```

-----
Pattern 1
Cycle Length . . . 100   COS . . . . . 111
Offset . . . . . 0
Vehicle Permissive . . [1] 0 [2] 0
Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
Splits: Phase 1- 23 2- 54 3- 0 4- 0
          Phase 5- 0 6- 54 7- 0 8- 23
          Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0
Split Extension/Ring [1] 0 [2] 0
Split Demand Pattern [1] 0 [2] 0
XRT Pattern. . . 0
  Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12
Coord Phases . . . X . . . X . . . . .
Veh Recall . . . . . . . . . . . . . . .
Veh Max Recall . . . . . . . . . . . . . . .
Ped Recall . . . . . . . . . . . . . . .
Veh Omit . . . . . . . . . . . . . . .
Alt Sequence . . A: . B: . C: . D: . E: . F: .
-----

```

```

-----
Pattern 2
Cycle Length . . . 120   COS . . . . . 211
Offset . . . . . 0
Vehicle Permissive . . [1] 0 [2] 0
Vehicle Perm 2 Displacement 0 Phase Reservice. . NO
Splits: Phase 1- 14 2- 83 3- 0 4- 0
          Phase 5- 0 6- 83 7- 0 8- 23
          Phase 9- 0 10- 0 11- 0 12- 0 Split Sum: 0
Split Extension/Ring [1] 0 [2] 0
Split Demand Pattern [1] 0 [2] 0
XRT Pattern. . . 0
  Phase Number: 1 2 3 4 5 6 7 8 9 10 11 12
Coord Phases . . . X . . . X . . . . .
Veh Recall . . . . . . . . . . . . . . .
Veh Max Recall . . . . . . . . . . . . . . .
Ped Recall . . . . . . . . . . . . . . .
Veh Omit . . . . . . . . . . . . . . .
Alt Sequence . . A: . B: . C: . D: . E: . F: .
-----

```



NIC Program Steps

---

Step	Program	Step Begins	Pattern	Override
1	1	0600	1	NO
2	1	1500	2	NO
3	1	1800	1	NO
4	1	1900	3	NO
5	1	2200	0	NO
7	2	0600	1	NO
8	2	0000	0	NO

TOD Program Steps

-----  
 Step 1            Program 1            Step Begins    0600

Flash. . . . . Dimming Enable. . . . .  
 Red Rest . . . . . Alt Veh Extension . . . . .  
 Spare 5. . . . . Det Log Enable. . . . .  
 Spare 3. . . . . Spare 4 . . . . .  
 Type 0 Dly Enable. . . Spare 2 . . . . .  
 Det Diag Plan. . . . 0

	Phase Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Max 3 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service Inhibit. . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Phase Omit . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Special Function . . . . .	.	.	.	.	.	.	.	.	.	.	.	.

Alt Sequence . . . . . A B C D E F  
 -----

Step 2            Program 1            Step Begins    1500

Flash. . . . . Dimming Enable. . . . .  
 Red Rest . . . . . Alt Veh Extension . . . . .  
 Spare 5. . . . . Det Log Enable. . . . .  
 Spare 3. . . . . Spare 4 . . . . .  
 Type 0 Dly Enable. . . Spare 2 . . . . .  
 Det Diag Plan. . . . 0

	Phase Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable . . . . .	X	X	.	.	.	X	.	X	.	.	.	.
Max 3 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service Inhibit. . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Phase Omit . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Special Function . . . . .	.	.	.	.	.	.	.	.	.	.	.	.

Alt Sequence . . . . . A B C D E F  
 -----

TOD Program Steps

-----  
 Step 3            Program 1            Step Begins    1800

Flash. . . . . Dimming Enable. . . . .  
 Red Rest . . . . . Alt Veh Extension . . . . .  
 Spare 5. . . . . Det Log Enable. . . . .  
 Spare 3. . . . . Spare 4 . . . . .  
 Type 0 Dly Enable. . . Spare 2 . . . . .  
 Det Diag Plan. . . . 0

	Phase Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Max 3 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service Inhibit. . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Phase Omit . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Special Function . . . . .	.	.	.	.	.	.	.	.	.	.	.	.

Alt Sequence . . . . . A B C D E F  
 -----

Step 4            Program 1            Step Begins    1900

Flash. . . . . Dimming Enable. . . . .  
 Red Rest . . . . . Alt Veh Extension . . . . .  
 Spare 5. . . . . Det Log Enable. . . . .  
 Spare 3. . . . . Spare 4 . . . . .  
 Type 0 Dly Enable. . . Spare 2 . . . . .  
 Det Diag Plan. . . . 0

	Phase Number											
	1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Max 3 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service Inhibit. . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Phase Omit . . . . .	.	.	.	.	.	.	.	.	.	.	.	.
Special Function . . . . .	.	.	.	.	.	.	.	.	.	.	.	.

Alt Sequence . . . . . A B C D E F  
 -----

TOD Program Steps

Step 5 Program 1 Step Begins 2200

Flash. . . . . X
Red Rest . . . . .
Spare 5. . . . .
Spare 3. . . . .
Type 0 Dly Enable. . .
Det Diag Plan. . . . 0
Dimming Enable. . . . .
Alt Veh Extension . . . .
Det Log Enable. . . . .
Spare 4 . . . . .
Spare 2 . . . . .

Phase Number

1 2 3 4 5 6 7 8 9 10 11 12
Max 2 Enable . . . . .
Max 3 Enable . . . . .
Veh Recall . . . . .
Veh Max Recall . . . . .
Ped Recall . . . . .
Cond Service Inhibit. . . . .
Phase Omit . . . . .
Special Function . . . . .

A B C D E F

Alt Sequence . . . . .

Step 6 Program 2 Step Begins 0600

Flash. . . . .
Red Rest . . . . .
Spare 5. . . . .
Spare 3. . . . .
Type 0 Dly Enable. . .
Det Diag Plan. . . . 0
Dimming Enable. . . . .
Alt Veh Extension . . . .
Det Log Enable. . . . .
Spare 4 . . . . .
Spare 2 . . . . .

Phase Number

1 2 3 4 5 6 7 8 9 10 11 12
Max 2 Enable . . . . .
Max 3 Enable . . . . .
Veh Recall . . . . .
Veh Max Recall . . . . .
Ped Recall . . . . .
Cond Service Inhibit. . . . .
Phase Omit . . . . .
Special Function . . . . .

A B C D E F

Alt Sequence . . . . .

TOD Program Steps

-----

Step 7            Program 2            Step Begins    0000

Flash. . . . .	X	Dimming Enable. . . . .
Red Rest . . . . .	.	Alt Veh Extension . . . . .
Spare 5. . . . .	.	Det Log Enable. . . . .
Spare 3. . . . .	.	Spare 4 . . . . .
Type 0 Dly Enable. . . . .	.	Spare 2 . . . . .
Det Diag Plan. . . . .	0	

		Phase Number											
		1	2	3	4	5	6	7	8	9	10	11	12
Max 2 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Max 3 Enable . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Veh Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Veh Max Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Ped Recall . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Cond Service Inhibit. . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Phase Omit . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.
Special Function . . . . .	.	.	.	.	.	.	.	.	.	.	.	.	.

		A	B	C	D	E	F
Alt Sequence . . . . .	.	.	.	.	.	.	.

-----