Appendix B

Signal Timing Plans & Signal Warrant Worksheets

ID	N/S Street	E/W Street
1	I-5 SB Ramps	Tecolote Road
2	I-5 NB Ramps	Tecolote Road
3	I-805 SB Ramps	Phyllis Place
4	I-805 NB Ramps	Murray Ridge Road
5	Mission Center Road	Mission Valley Road/Civita Boulevard
6	Mission Center Road	Westside Drive
7	Sea World Drive	Friars Road
8	Napa Street	Friars Road
9	Colusa Street	Friars Road
10	Via Las Cumbres	Friars Road
11	Fashion Valley Road	Friars Road
12	Via De La Moda	Friars Road
13	Avenida De Las Tiendas	Friars Road
14	Ulric Street/SR-163 SB Ramps	Friars Road
15	SR-163 NB Ramps	Friars Road
16	Frazee Road	Friars Road
17	Mission Center Road	Friars Road WB Ramps
18	Mission Center Road	Friars Road EB Ramps
19	Qualcomm Way	Friars Road WB Ramps
20	Qualcomm Way	Friars Road EB Ramps
21	River Run Drive	Friars Road
22	Fenton Parkway	Friars Road
23	Northside Drive	Friars Road
24	Mission Village Drive	Friars Road WB Ramps
25	Mission Village Drive	Friars Road EB Ramps
26	I-15 SB Ramps	Friars Road
27	I-15 NB Ramps	Friars Road
28	Rancho Mission Road	Friars Road
29	Santo Road	Friars Road
30	Riverdale Street	Friars Road
31	Mission Gorge Road	Friars Road
32	Mission Center Road	Mission Center Court
33	Qualcomm Way	Rio San Diego Drive
34 (Stop Control)	River Run Drive	Rio San Diego Drive
35	Fenton Parkway	Rio San Diego Drive
36	Northside Drive	Rio San Diego Drive
37	Rancho Mission Road	San Diego Mission Road

ID	N/S Street	E/W Street
38	Mission Center Road	Hazard Center Drive
39	Avenida Del Rio	Camino De La Reina
40	Mission Center Road	Camino De La Reina
41	Camino Del Este	Camino De La Reina
42	Qualcomm Way	Camino De La Reina
43	Mission City Parkway	Camino Del Rio North
44	Ward Road	Camino Del Rio North
45	Fairmount Avenue	Camino Del Rio North
46	I-8 WB Ramps	Hotel Circle North
47 (Stop Control)	I-8 WB Ramps	Hotel Circle North
48	Fashion Valley Road	Hotel Circle North
49	Mission Center Road	Camino Del Rio North
50	I-8 Ramps	Camino Del Rio North
51	Camino Del Este	Camino Del Rio North
52	Qualcomm Way	Camino Del Rio North/ I-8 WB Ramps
53	Morena Boulevard	Taylor Street
54	I-8 Ramps	Taylor Street
55 (Stop Control)	Hotel Circle North	Hotel Circle South
56 (Stop Control)	I-8 EB Ramps	Hotel Circle South
57	Bachman Place	Hotel Cirle South
58	Mission Center Road	I-8 EB Ramps
59	Mission Center Road	Camino Del Rio South
60	Qualcomm Way	I-8 EB Ramps
61	Qualcomm Way/Texas Street	Camino Del Rio South
62	Mission City Parkway	Camino Del Rio South
63	I-15 SB Offramp	Camino Del Rio South
64	SR-15 SB Onramp	Camino Del Rio South
65	I-15 NB Onramp	Camino Del Rio South
66	I-8 EB/I-15 SB Offramps	Fairmount Avenue
67	Texas Street	Madison Avenue

1 LOCATION: **RTE 5 SB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 2/11/2015

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	7	1	1	1	1	1	CLK RST
1	DONT WALK	1	14	11	1	1	1	1	1	
2	MIN GREEN	5	14	5	5	1	13	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	2.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9	
6	MAX GAP	3.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9	
7	MIN GAP	1.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9	
8	MAX EXT	30	30	20	30	9	30	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.7	4.5	3.0	4.1	3.0	4.5	3.0	3.0	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		49	38						
	BIKE XING FT		101				90			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK	1			4					1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES		2	3						5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 5 SB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 9/28/2004

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	60	75	100	100	100	100								LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	10	15	15	15	15	20							GAPOUT CP1	LAG FZ CP 1	1		3			6		8	1
2														GAPOUT CP2	LAG FZ CP 2	1		3			6		8	2
3	FZ3 GRN FCTR	14	14	14	14	14	14							GAPOUT CP3	LAG FZ CP 3	1		3			6		8	3
4	FZ4 GRN FCTR	15	20	30	30	25	25				PERM TIME			GAPOUT CP4	LAG FZ CP 4	1		3			6		8	4
5	FZ5 GRN FCTR	0	0	0	0	0	0				LAG OFFSET			GAPOUT CP5	LAG FZ CP 5	1		3			6		8	5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6	1		3			6		8	6
7	FZ7 GRN FCTR	0	0	0	0	0	0				LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR	0	0	0	0	0	0				NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0	0	0							GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A	0	0	0	0	0	0				OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RTE 5 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 5 SB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 8/5/2003

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1	1			4					CP 1								
2	CP 2									CP 2	1			4					CP 2								
3	CP 3									CP 3	1			4					CP 3								
4	CP 4									CP 4	1			4					CP 4								
5	CP 5									CP 5	1			4					CP 5								
6	CP 6									CP 6	1			4					CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED			3						6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT			3						OLA ON	1	2		4		6			A
B	OLB NOT				4					OLB ON	1	2	3			6			B
C	OLC NOT	1			4					OLC ON		2	3			6			C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 5 SB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 8/5/2003

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	06	00	1	A		2	3	4	5	6	
1	07	00	2	A		2	3	4	5	6	
2	07	30	3	A		2	3	4	5	6	
3	08	00	2	A		2	3	4	5	6	
4	09	30	6	A		2	3	4	5	6	
5	15	30	4	A		2	3	4	5	6	
6	18	00	2	A		2	3	4	5	6	
7	18	30	E			2	3	4	5	6	
8	15	00	5	A	1						7
9	19	00	E		1						7
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

Dist.	County	Route	Post Mile Total Project	Sheet No.	Total Sheets
11	SD	5	R 21.0	2	15

District Traffic Engineer — Registered Civil Engineer No. 9361

Date Approved

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	FUNCTION & CIRCUIT	CONDUIT SIZE 2½" (1)	CONDUIT SIZE 2½" (2)
#14	1	TRAFFIC SIGNALS	5	
	2		3	
	4		6	
	6		3	
	2	WALK/DONT WALK	2	
	6		2	
	2	PED PUSH BUTTON	1	
	6		1	
		INTERCONNECT	4	
		PUSH BUTTON COMMON	1	
#14		SPARES	3	
		TOTAL #14	32	
#10		SIGNAL COMMON.	1	
	1	LOOP OLC		1
	2			1
OLC	4			1
MLC	6	MAGNETOMETER MLC		2
#4		SIGNAL SERVICE	2	
TOTAL CONDUCTORS/CABLES			35	5

DETECTOR ASSIGNMENTS

DET. NO	PHASE	SLOT	FIELD TERMINAL CONNECTIONS
1	2	I 2 U	T 2 - 5 & 6
2	4	I 6 U	T 4 - 9 & 10
3	1	I 1 U	T 2 - 1 & 2
PPB	2	I 12 U	T 10 - 9
PPB	6	I 13 U	T 10 - 11

MLC NO.	PHASE	TERMINAL NO.	W	B	R	G	FUNCTION	C1 CONN.
M6-1	6	MT-1	1	2	3	4	COUNT / EXT.	C-40
M6-2	6	MT-1	5	6	7	8	COUNT / EXT.	C-44

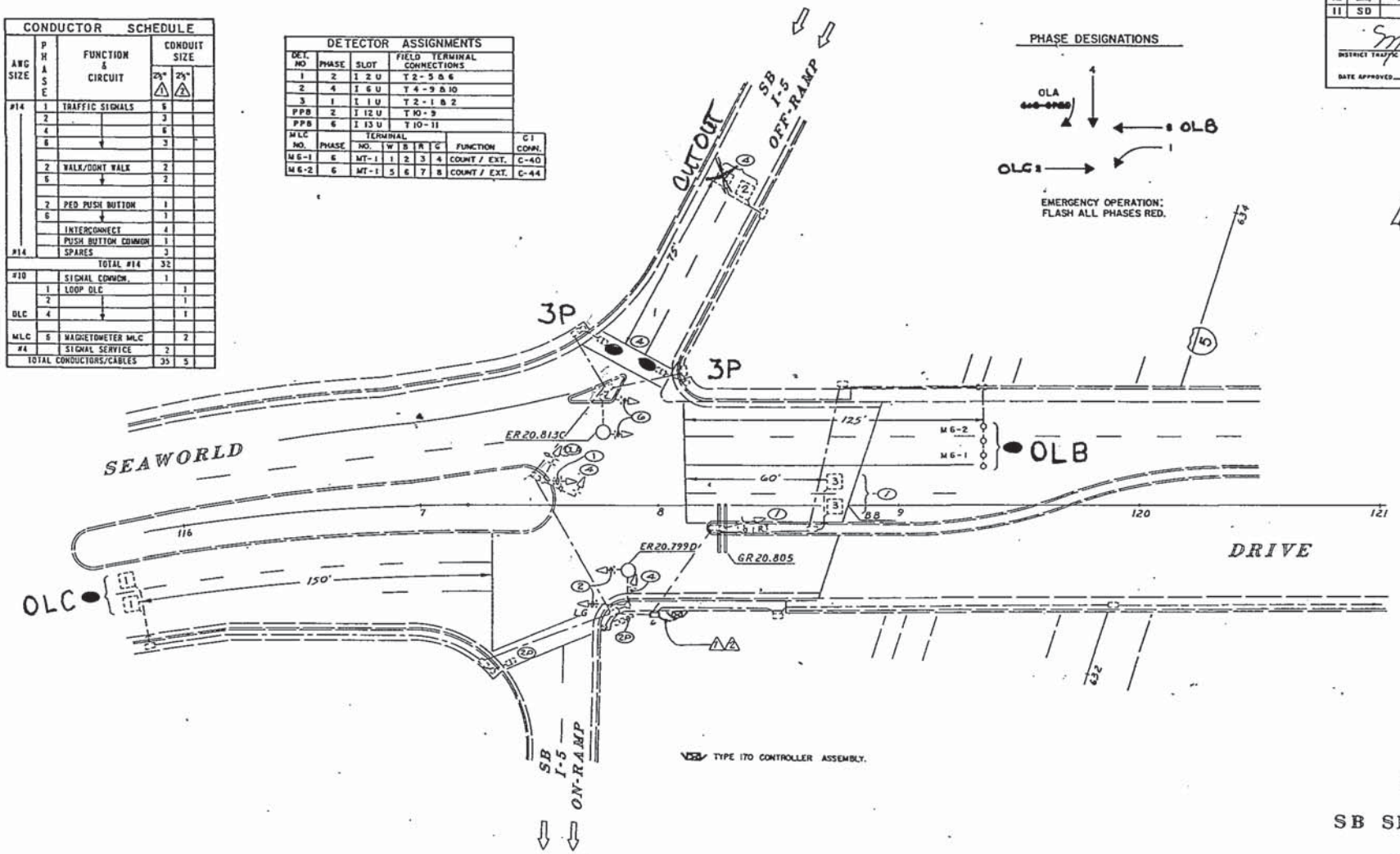
PHASE DESIGNATIONS

OLA

OLB

OLC

EMERGENCY OPERATION:
FLASH ALL PHASES RED.



ROUTE 5
AT
SB SEAWORLD DR
IN
SAN DIEGO
SIGNAL

LOCATION - 1
SIGNAL NO. EXIST: P20.817
NEW: P20.819

0 20 40
SCALE IN FEET

SHEET E-2

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
D.A. Gilmour	8-77	M.A. Chase	8-77	R.B. Findley	8-77

CU 11359, WO 182821

Revisions	Date	Checked
8-79		

2 LOCATION: **RTE 5 NB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 2/11/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	19	7	1	1	CLK RST
1	DONT WALK	1	11	1	1	1	16	1	1	
2	MIN GREEN	1	10	1	5	5	14	1	5	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	0.9	1.0	2.0	2.0	0.9	1.0	
6	MAX GAP	0.9	2.0	0.9	1.0	3.0	2.0	0.9	1.0	
7	MIN GAP	0.9	2.0	0.9	1.0	1.0	2.0	0.9	1.0	
8	MAX EXT	9	30	9	25	30	30	9	15	
9	MAX 2									YR
A	MAX 3				40					MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	4.5	3.0	4.1	3.7	4.5	3.0	4.0	MIN
F	RED	1.0	1.5	1.0	1.0	1.0	1.5	1.0	1.0	SEC
	PED XING FT		40				55			
	BIKE XING FT		50				106			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK				4	5				1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES		2			5	6			5
RT OLA									6
RT OLB									7
DBL ENTRY				4				8	8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES				4					D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 5 NB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 8/5/2003

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	60	75	100	100	100	100									LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	0	0	0	0	0	0							GAPOUT CP1	1	LAG FZ CP 1		2		4	5			8	1
2														GAPOUT CP2	1	LAG FZ CP 2		2		4	5			8	2
3	FZ3 GRN FCTR	0	0	0	0	0	0							GAPOUT CP3	1	LAG FZ CP 3		2		4	5			8	3
4	FZ4 GRN FCTR	10	15	20	30	25	35				PERM TIME			GAPOUT CP4	0	LAG FZ CP 4		2		4	5			8	4
5	FZ5 GRN FCTR	20	25	35	30	40	25				LAG OFFSET			GAPOUT CP5		LAG FZ CP 5		2		4	5			8	5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6		2		4	5			8	6
7	FZ7 GRN FCTR	0	0	0	0	0	0				LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR	10	15	15	15	15	15				NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0	0	0							GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A	50	60	70	70	70	70				OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RT5 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		
2		1
3		
4		
5		
6		
7		
8		

COO = 2

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 5 NB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1				4	5				CP 1					5			
2	CP 2									CP 2				4	5				CP 2					5			
3	CP 3									CP 3				4	5				CP 3								
4	CP 4					5				CP 4				4					CP 4								
5	CP 5					5				CP 5									CP 5								
6	CP 6									CP 6				4					CP 6					5			
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED					5				8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 5 NB / SEA WORLD DRIVE**

CALTRANS C8 Version 3 DATE: 8/5/2003

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	06	00	3	X	1	2	3	4	5	6	7
1	19	00	3		1	2	3	4	5	6	7
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	06	00	1	A		2	3	4	5	6	
1	07	00	2	A		2	3	4	5	6	
2	07	30	3	A		2	3	4	5	6	
3	08	00	2	A		2	3	4	5	6	
4	09	30	6	A		2	3	4	5	6	
5	15	30	4	A		2	3	4	5	6	
6	18	00	2	A		2	3	4	5	6	
7	18	30	E			2	3	4	5	6	
8	15	00	5		1						7
9	19	00	E		1						7
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R20.3/R30.0	114	137

REGISTERED CIVIL ENGINEER

3-15-93
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER F G CASTRO No. 34421 Exp. 9-30-94 CIVIL STATE OF CALIFORNIA

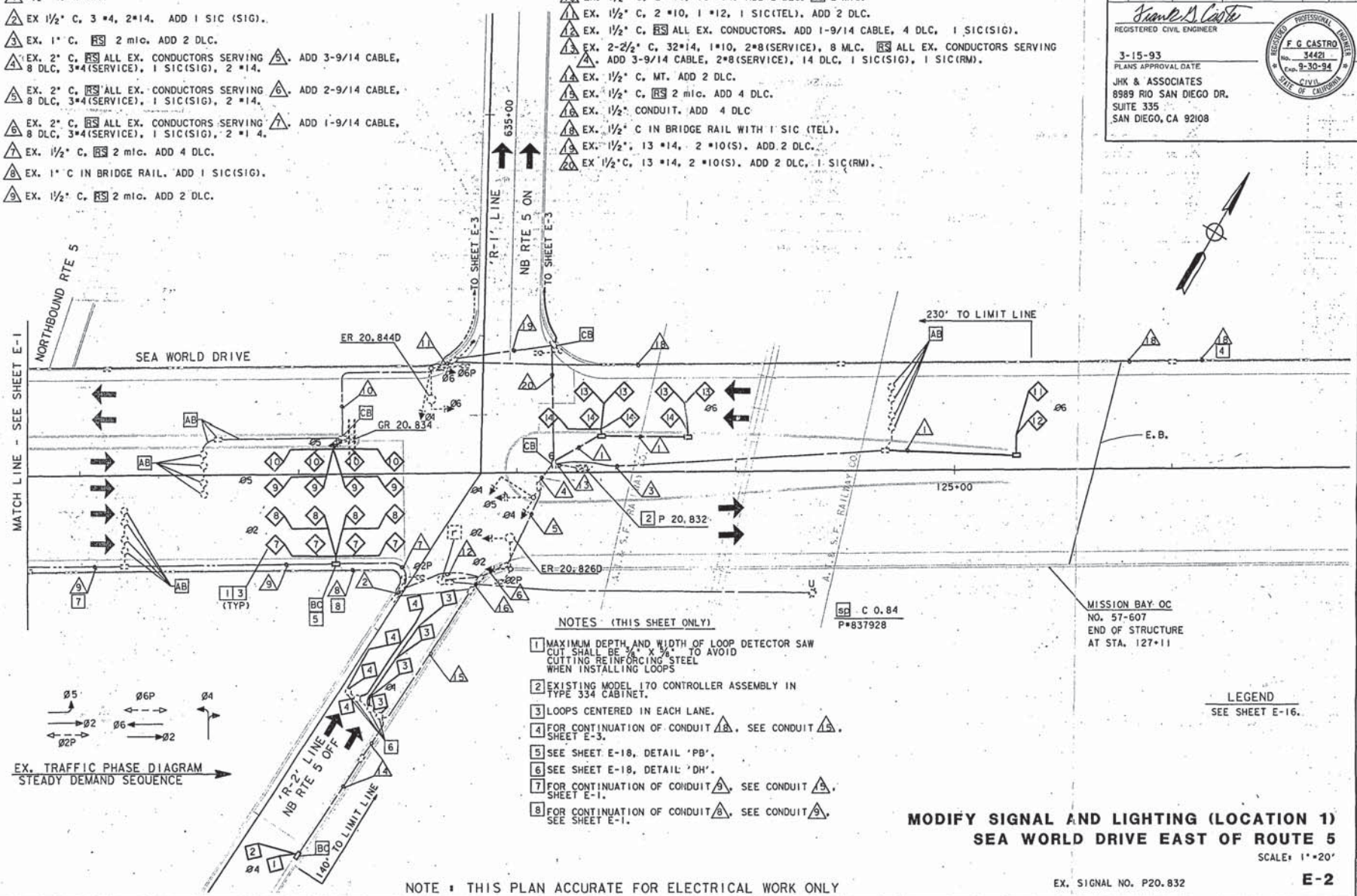
JHK & ASSOCIATES
8989 RIO SAN DIEGO DR.
SUITE 335
SAN DIEGO, CA 92108

CONDUIT NOTES (THIS SHEET ONLY)

1. 1½" C. 2 DLC.
2. EX 1½" C. 3 #4, 2#14. ADD 1 SIC (SIG).
3. EX. 1" C. RS 2 mlc. ADD 2 DLC.
4. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 5. ADD 3-9/14 CABLE, 8 DLC, 3#4(SERVICE), 1 SIC(SIG), 2 #14.
5. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 6. ADD 2-9/14 CABLE, 8 DLC, 3#4(SERVICE), 1 SIC(SIG), 2 #14.
6. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 7. ADD 1-9/14 CABLE, 8 DLC, 3#4(SERVICE), 1 SIC(SIG), 2 #14.
7. EX. 1½" C. RS 2 mlc. ADD 4 DLC.
8. EX. 1" C IN BRIDGE RAIL. ADD 1 SIC(SIG).
9. EX. 1½" C. RS 2 mlc. ADD 2 DLC.

CONDUIT NOTES (THIS SHEET ONLY-CONTINUED)

10. EX. 1½" C, 2 #10, 10 #14. ADD 2 DLC. RS 2 mlc.
11. EX. 1½" C, 2 #10, 1 #12, 1 SIC(TEL). ADD 2 DLC.
12. EX. 1½" C. RS ALL EX. CONDUCTORS. ADD 1-9/14 CABLE, 4 DLC, 1 SIC(SIG).
13. EX. 2-2½" C, 32#14, 1#10, 2#8(SERVICE), 8 MLC. RS ALL EX. CONDUCTORS SERVING 4. ADD 3-9/14 CABLE, 2#8(SERVICE), 14 DLC, 1 SIC(SIG), 1 SIC(RM).
14. EX. 1½" C. MT. ADD 2 DLC.
15. EX. 1½" C. RS 2 mlc. ADD 4 DLC.
16. EX. 1½" CONDUIT. ADD 4 DLC
17. EX. 1½" C IN BRIDGE RAIL WITH 1 SIC (TEL).
18. EX. 1½", 13 #14, 2 #10(S). ADD 2 DLC.
19. EX 1½"C, 13 #14, 2 #10(S). ADD 2 DLC, 1 SIC(RM).



NOTES (THIS SHEET ONLY)

1. MAXIMUM DEPTH AND WIDTH OF LOOP DETECTOR SAW CUT SHALL BE ¾" X ¾" TO AVOID CUTTING REINFORCING STEEL WHEN INSTALLING LOOPS
2. EXISTING MODEL 170 CONTROLLER ASSEMBLY IN TYPE 334 CABINET.
3. LOOPS CENTERED IN EACH LANE.
4. FOR CONTINUATION OF CONDUIT 8. SEE CONDUIT 5. SHEET E-3.
5. SEE SHEET E-18, DETAIL 'PB'.
6. SEE SHEET E-18, DETAIL 'DH'.
7. FOR CONTINUATION OF CONDUIT 9. SEE CONDUIT 5. SHEET E-1.
8. FOR CONTINUATION OF CONDUIT 8. SEE CONDUIT 9. SEE SHEET E-1.

LEGEND
SEE SHEET E-16.

MODIFY SIGNAL AND LIGHTING (LOCATION 1)
SEA WORLD DRIVE EAST OF ROUTE 5

SCALE: 1"=20'

EX. SIGNAL NO. P20.832

E-2

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU	11205	EA	085971

LAST REVISION 02-18-93

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC ELECTRICAL
DESIGN OVERSIGHT JESSIE CABUGAO
CALCULATED/DESIGNED BY BCS DATE 2/93 REVISED BY
CHECKED BY FGC 2/93 DATE REVISED

FORM DC-DE-90-PF (REV. 3/88)

District	County	Route	Total Project Miles	Sheet No.	Total Sheets
11	SD	5	R21.0	3	15

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER No. 32151

DATE APPROVED

PHASE DESIGNATIONS

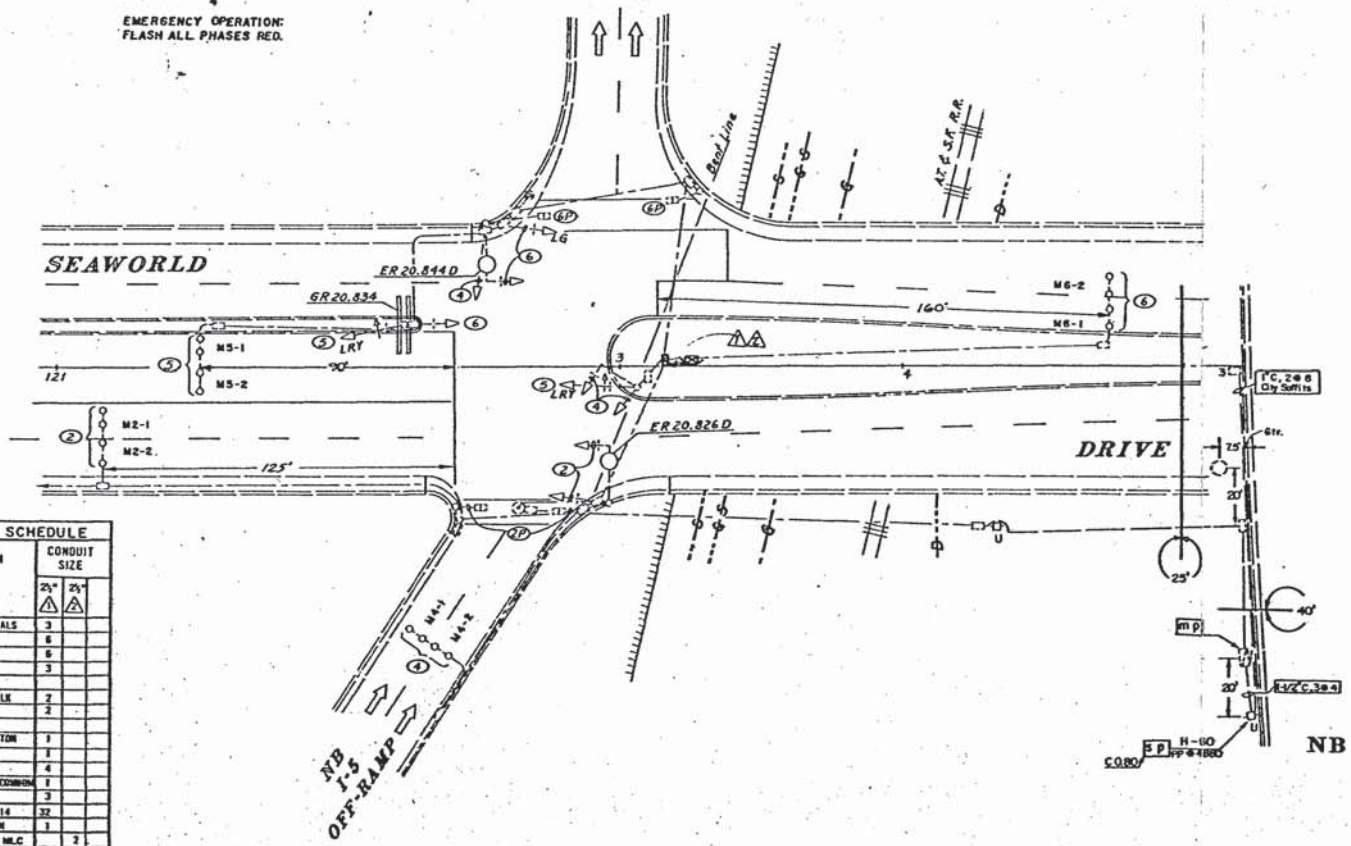
5 → 6

2 →

4 ↑

EMERGENCY OPERATION: FLASH ALL PHASES RED.

TYPE "170" CONTROLLER ASSEMBLY.



CONDUCTOR SCHEDULE				
AWG SIZE	PHASE	FUNCTION & SIZE	CONDUIT SIZE 2½"	CONDUIT SIZE 2½"
#14	2	TRAFFIC SIGNALS	3	
	4		6	
	5		6	
	6		3	
	2	WALK/DON'T WALK	2	
	6		2	
	2	PED PUSH BUTTON	1	
	6		1	
		INTERCONNECT	4	
		PUSH BUTTON COMMON	1	
#14		SPARES	3	
		TOTAL #14	32	
#10		SIGNAL COMMON	1	
	2	MAGNETOMETER WLC		2
	4			2
	5			2
	6			2
WLC				
#8		SIGNAL SERVICE	2	
TOTAL CONDUCTORS/CABLES			35	8

ROUTE 5 AT NB SEAWORLD DR IN SAN DIEGO

SIGNAL

LOCATION-2

EXST: P20.834

SIGNAL NO. NEW: P20.832

0 20 40 SCALE IN FEET

SHEET E-3

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
D. A. Gilmour	8-77	M. A. Chow	8-77	R. B. Findley	8-77

CU 11359 WO 182821

3 LOCATION: **RTE 805 SB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 2/26/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	1	7	1	1	CLK RST
1	DONT WALK	1	15	1	1	1	12	1	1	
2	MIN GREEN	5	12	1	5	1	11	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	2.0	2.0	0.9	2.0	0.9	2.0	0.9	0.9	
6	MAX GAP	2.0	2.0	0.9	2.0	0.9	2.0	0.9	0.9	
7	MIN GAP	2.0	2.0	0.9	2.0	0.9	2.0	0.9	0.9	
8	MAX EXT	35	5	9	25	9	40	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.7	4.8	3.0	4.5	3.0	4.8	3.0	3.0	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		53				42			
	PED XING FT		81				58			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK		2		4					1
YEL LOCK									2
V RECALL						6			3
P RECALL									4
PED PHASES		2				6			5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FC0	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 805 SB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 3/12/2009

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH															LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR													GAPOUT CP1		LAG FZ CP 1									1
2														GAPOUT CP2		LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3		LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4		LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5		LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A										OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 805 SB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 3/12/2009 PAGE 3

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 805 SB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 3/12/2009

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

POLE SCHEDULE

	STANDARD				LUMINAIRE	PLACEMENT		SIGNAL MOUNTING		PEDESTRIAN		REMARKS
NEL	TYPE	HGT.	SIG. M. A.	LUM. M. A.	HPS	A	B	VEHICLE		SIGNAL	PPB	
(A)	24-4-1[illegible]	30'	35'	15'	200W	5'	4'	1-MAT 1-MAS	SV-2-TD	SP-1-T	(DB) (SB)	PEU
(B)	15[illegible]	30'	-	15'	200W	-3'	4'	-	-	SP-1-T	(DB) (SB)	-
(C)	17-2-100	30'	15'	15'	200W	12'	4'	1-MAS	SV-2-TD	SP-1-T	(DB)	-
(D)	17-2-100	30'	15'	15'	200W	9'	4'	1-MAS	SV-1-T SV-2-TD	SP-1-T	(DB)	8

ISTRUCTION NOTES

E CONTROLLER ASSEMBLY WILL BE STATE-FURNISHED ALONG WITH A BATTERY CK UP SYSTEM (BBS). THE CONTRACTOR WILL BE REQUIRED TO INSTALL THE NTROLLER ASSEMBLY ON FOUNDATION. IN ADDITION TO THE 282 DISCRIMINATOR CARD E CONTRACTOR SHALL FURNISH AND INSTALL VIDEO DETECTION UNITS (VDU), A FLAT NEL DISPLAY, BATTERIES FOR THE BATTERY BACK UP SYSTEM AND ONE SERIAL TO HERNET CONVERTER UNIT (SECU). SEE SPECIAL PROVISION.

RNISH AND INSTALL TYPE III-BF SERVICE EQUIPMENT. CONFORM TO CALTRANS DETAILS

STALL EMERGENCY VEHICLE DETECTOR (EVD) PER CALTRANS STANDARD PLANS -4E.

RNISH AND INSTALL R3-4, R3-18 AND R61-7(CA) SIGNS PER CALTRANS STANDARD ANS ES-7N.

RNISH AND INSTALL R9-3a SIGN ON SIGNAL POLE. (STRAP AND SADDLE).

RNISH AND INSTALL VIDEO IMAGE SENSOR (VIS) AS SHOWN. SEE SPECIAL PROVISION.

NTRACTOR SHALL VERIFY SERVICE LOCATION AN REQUIREMENT WITH SAN DIEGO GAS D ELECTRIC CO.

ACE PHASE 2 SIGNAL HEAD 17' ABOVE BASE PLAT.

STING RAMP METER CONTROLLER. CONTRACTOR SHALL PLACE A TERMINAL STRIP EXISTING RAMP METER CONTROLLER CABINET TO LAND ALL THREE OCC'S. RNISH AND INSTALL ONE ETHERNET SWITCH IN THE EXISTING RAMP METER NTROLLER CABINET. SEE CONTROLLER DETAILS

R LOOP DETECTOR INSTALLATION ON EXISTING BRIDGE DECK SEE DETAIL "A".

TYPE 15 ELECTROLIER.

STING CONDUIT TO BE REMAIN FOR CONDUCTORS SEE CONDUIT NOTES RUN 17.

STING CONDUIT TO BE REMAIN. REMOVE ALL CONDUCTORS.

CONDUIT NOTES

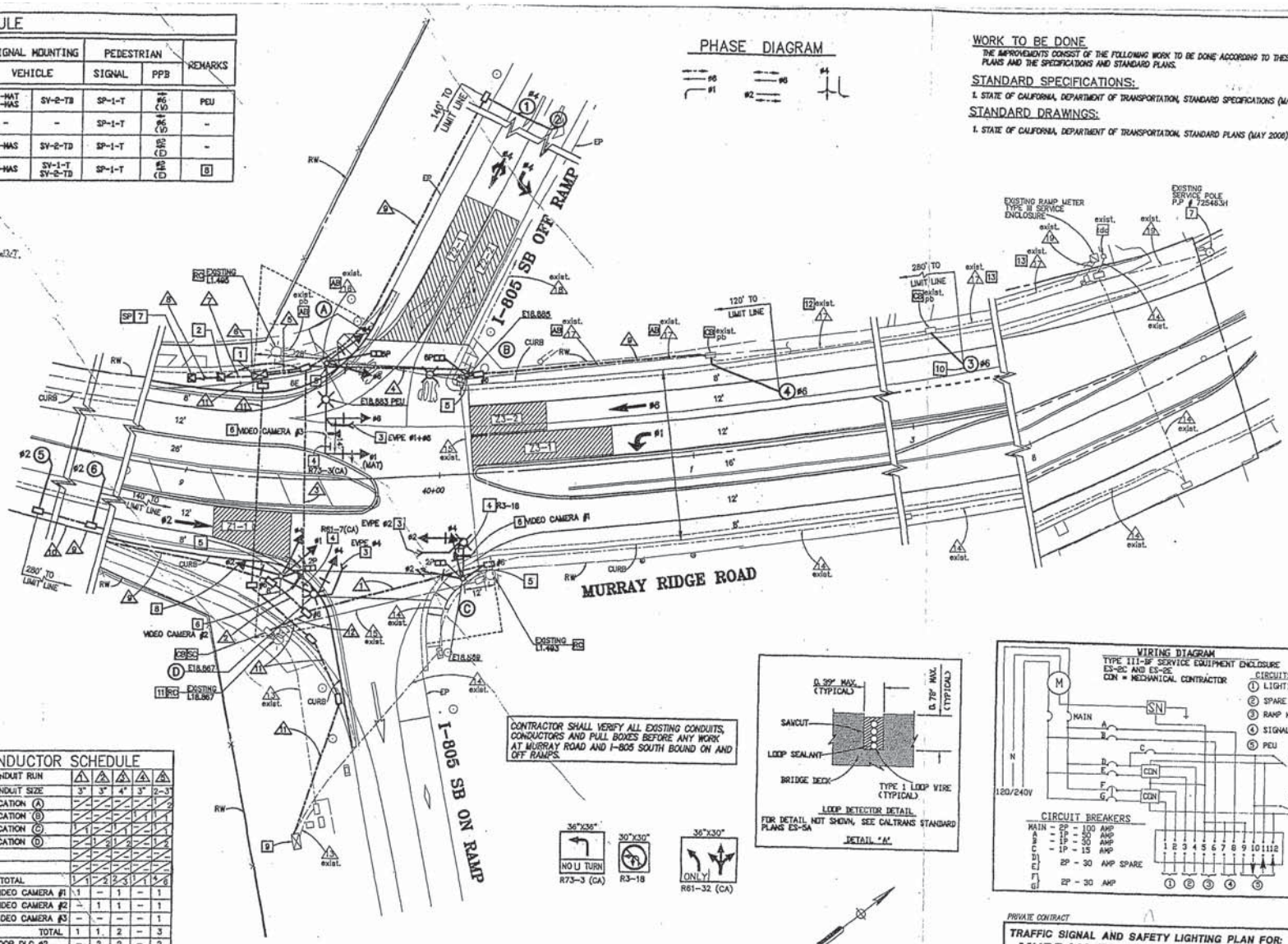
6. 2"C, ([illegible]ITING), 3#14 (PEU), 2#8 (RAMP METER POWER).
7. 2"C, 2#8 (SIGNAL).
8. 2"C, PER SDG&E REQUIREMENTS.
9. 2"C, 2DLC.
10. 2"C, 1DLC.
11. 2"C, 3-4 PAIR OUTDOOR CATEGORY 5E CABLE (OCC).
12. 2"C, 2#8 (RAMP METER POWER).
13. EXISTING 1 1/2"C, 2# 8 (RAMP METER POWER), 2dlc.
14. EXISTING 1 1/2"C, 1slc.
15. EXISTING 1 1/2"C, 2# 8 (RAMP METER POWER), 2#8 (ltg), 2dlc. REMOVE 4#8.
16. EXISTING 1 1/2"C, 2# 8 (ltg)
17. EXISTING 1 1/2"C, 2# 8 (RAMP METER POWER), 2#8 (ltg). REMOVE CONDUCTORS AND INSTALL 1DLC.
18. EXISTING 1"C, 2dlc.
19. EXISTING CONDUIT PER SDG&E.

CTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME D COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE TRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, S REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES D, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL RSAL OR ALLEGED LIABILITY IN CONNECTION WITH PERFORMANCE OF WORK ON THIS EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF DESIGN ONAL.

UNAUTHORIZED CHANGES & USES

N:
NEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE UTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE UST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE

PLAN SHEET ACCURATE FOR ELECTRICAL WORK ONLY



PHASE DIAGRAM

WORK TO BE DONE

THE IMPROVEMENTS CONSIST OF THE FOLLOWING WORK TO BE DONE ACCORDING TO THESE PLANS AND THE SPECIFICATIONS AND STANDARD PLANS.

STANDARD SPECIFICATIONS:

1. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS (MAY 2006)

STANDARD DRAWINGS:

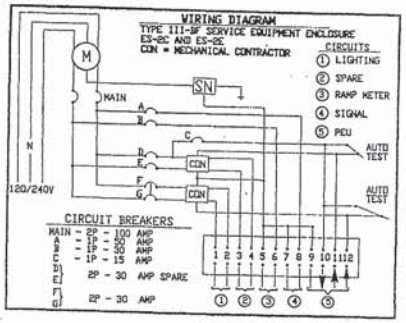
1. STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD PLANS (MAY 2006)

CONTRACTOR SHALL VERIFY ALL EXISTING CONDUITS, CONDUCTORS AND PULL BOXES BEFORE ANY WORK AT MURRAY ROAD AND I-805 SOUTH BOUND ON AND OFF RAMPS.

LOOP DETECTOR DETAIL

FOR DETAIL NOT SHOWN, SEE CALTRANS STANDARD PLANS ES-5A

DETAIL "A"



CONDUCTOR SCHEDULE

COND SIZE THW	CONDUIT RUN	1	2	3	4	5
	CONDUIT SIZE	3"	3"	4"	3"	2-3"
	LOCATION (A)	-	-	-	-	2
	LOCATION (B)	-	-	-	1	1
	LOCATION (C)	1	-	1	1	-
	LOCATION (D)	-	1	1	-	1
		-	-	-	-	-
		-	-	-	-	-
	TOTAL	1	1	2	3	4
VIDEO HARNESS	VIDEO CAMERA #1	1	-	1	-	1
	VIDEO CAMERA #2	-	1	1	-	1
	VIDEO CAMERA #3	-	-	-	-	1
	TOTAL	1	1	2	-	3
DLC TYPE II	LOOP DLC #2	-	2	2	-	2
	LOOP DLC #4	-	-	-	-	1
	LOOP DLC #6	-	-	-	2	2
	TOTAL DLC	-	2	2	2	5
	EVC	1	1	2	-	3
#6	LIGHTING	-	2	2	2	-
	GROUND	1	1	1	1	1
	RAMP METRER	-	-	2	-	-
#10	VIDEO SERVICE	-	-	-	-	-
#14	PEU	-	-	-	-	-
	TDC	-	-	-	-	-
INTERCONNECT CABLE (SIC)		-	-	-	-	-

PRELIMINARY PLANS
NOT FOR BID OR CONSTRUCTION
PLANS NOT APPROVED

BASE PROVIDED BY: STUART ENGINEERING
TRAFFIC SIGNAL PLAN BY:
URBAN SYSTEMS ASSOCIATES, INC.
4340 KEARNY VILLA ROAD, SUITE 106
SAN DIEGO, CA 92123, (858) 560-1011
©

ANDREW P. SCHLAEFLI - R.C.E. #15964 DATE

PRIVATE CONTRACT

TRAFFIC SIGNAL AND SAFETY LIGHTING PLAN FOR:

MURRAY RIDGE ROAD AND I-805 SB ON/OFF RAMPS SIGNAL NO. P18.875

CITY OF SAN DIEGO, CALIFORNIA
DEVELOPMENT SERVICES DEPARTMENT
SHEET 2 OF 42 SHEETS

W.O. NO. 427506
P.T.S NO. 124604

FOR CITY ENGINEER — DATE

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL	USAI			
AS-BUILTS				

V.T.M.

1862-6281 NAD83 COORDINATES

222-1721 LAMBERT COORDINATES

CONTRACTOR — DATE STARTED
INSPECTOR — DATE COMPLETED

344E6-10-D

4 LOCATION: RTE 805 NB @ MURRAY RIDGE ROAD

CALTRANS C8 Version 3 DATE: 2/26/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	1	7	1	7	CLK RST
1	DONT WALK	1	15	1	1	1	29	1	37	
2	MIN GREEN	5	11	1	1	5	17	1	5	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	0.9	0.9	2.0	2.0	0.9	2.0	
6	MAX GAP	0.9	2.0	0.9	0.9	2.0	2.0	0.9	2.0	
7	MIN GAP	0.9	2.0	0.9	0.9	2.0	2.0	0.9	2.0	
8	MAX EXT	9	35	9	9	30	35	9	40	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	4.8	3.0	3.0	3.7	4.8	3.0	4.1	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		54				100		130	
	PED XING FT		64				157			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK									1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES		2				6		8	5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE								8	F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 805 NB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 6/5/2012

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH														LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR													GAPOUT CP1	LAG FZ CP 1									1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A										OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 805 NB @ MURRAY RIDGE ROAD

CALTRANS C8 Version 3 DATE: 6/5/2012

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 805 NB @ MURRAY RIDGE ROAD**

CALTRANS C8 Version 3 DATE: 6/5/2012

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
	HR	MIN	ACT	ON/ OFF	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	18.9/19.0	17	18

REGISTERED CIVIL ENGINEER — DATE 29OCT10

PLANS APPROVAL DATE

EDGAR A. CAMERINO No. 58844 Exp. 6-30-11 CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

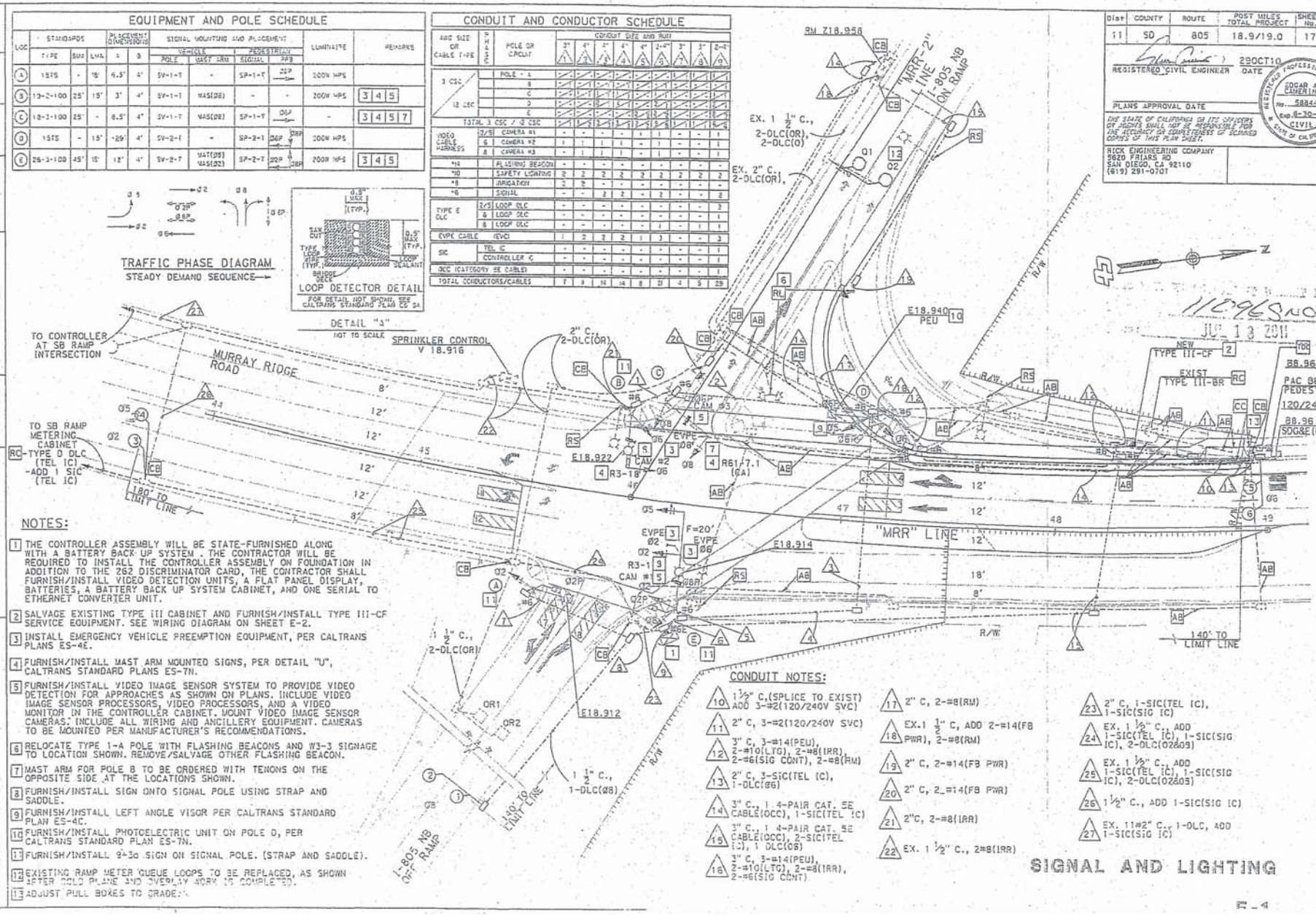
RICK ENGINEERING COMPANY
5620 FRIARS RD
SAN DIEGO, CA 92110
(619) 291-0707

EQUIPMENT AND POLE SCHEDULE

LOC	STANDARDS TYPE	SUM	LMA	PLACEMENT DIMENSIONS L	B	SIGNAL MOUNTING AND PLACEMENT VEHICLE POLE	VEHICLE MAST ARM	PEDESTRIAN SIGNAL	PEDESTRIAN PUSH BUTTON	LUMINAIRE	REMARKS
A	15TS	-	15'	6.5'	4'	SV-1-T	-	SP-1-T	2SP	200W HPS	
B	19-2-100	25'	15'	3'	4'	SV-1-T	MAS(Ø6)	-	-	200W HPS	3 4 5
C	18-2-100	25'	-	8.5'	4'	SV-1-T	MAS(Ø8)	SP-1-T	2SP	-	3 4 5 7
D	15TS	-	15'	-29'	4'	SV-2-T	-	SP-2-T	2SP / 2SP	200W HPS	
E	26-2-100	45'	15'	12'	4'	SV-2-T	MAT(Ø5) MAS(Ø2)	SP-2-T	2SP / 2SP	200W HPS	3 4 5

CONDUIT AND CONDUCTOR SCHEDULE

WIRE AND SIZE OR CABLE TYPE	FROM	POLE OR CIRCUIT	CONDUIT SIZE AND RUN 3" (1)	4" (2)	2" (3)	4" (4)	4" (5)	2-4" (6)	3" (7)	3" (8)	2-4" (9)
3 CSC / 12 CSC		POLE - A	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
		B	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -	- / -
		C	- / -	- / -	1 / -	- / -	- / -	- / -	- / -	- / -	- / -
		D	- / -	- / -	12 / -	3 / -	2 / -	2 / -	- / -	- / -	2 / -
		E	- / -	- / -	- / -	- / -	2 / 3	2 / 3	- / -	- / -	2 / 3
TOTAL 3 CSC / 12 CSC			- / -	1 / 2	2 / 3	3 / 3	2 / 3	2 / 3	1 / -	1 / -	4 / 6
VIDEO CABLE HARNESS	2/5	CAMERA #1	-	-	-	-	-	-	-	-	1
	6	CAMERA #2	1	1	1	1	-	1	-	-	1
	8	CAMERA #3	-	1	1	1	-	1	-	-	1
#14		FLASHING BEACON	-	-	-	-	-	-	-	-	-
#10		SAFETY LIGHTING	2	2	2	2	2	2	2	2	2
#8		IRRIGATION	2	2	-	-	-	-	-	-	-
#6		SIGNAL	-	-	2	2	-	2	-	-	2
TYPE E DLC	2/5	LOOP DLC	-	-	-	-	-	-	-	-	2
	6	LOOP DLC	-	-	-	-	-	-	-	-	1
	8	LOOP DLC	-	-	-	-	-	1	-	1	1
EVPE CABLE		(EVC)	1	2	2	2	1	3	-	-	3
SIC		TEL IC	-	-	-	-	-	-	-	-	1
		CONTROLLER IC	-	-	-	-	-	-	-	-	1
OCC (CATEGORY 5E CABLE)			-	-	-	-	-	-	-	-	1
TOTAL CONDUCTORS/CABLES			7	9	14	14	8	21	4	5	29



NOTES:

1. THE CONTROLLER ASSEMBLY WILL BE STATE-FURNISHED ALONG WITH A BATTERY BACK UP SYSTEM. THE CONTRACTOR WILL BE REQUIRED TO INSTALL THE CONTROLLER ASSEMBLY ON FOUNDATION IN ADDITION TO THE 262 DISCRIMINATOR CARD, THE CONTRACTOR SHALL FURNISH/INSTALL VIDEO DETECTION UNITS, A FLAT PANEL DISPLAY, BATTERIES, A BATTERY BACK UP SYSTEM CABINET, AND ONE SERIAL TO ETHERNET CONVERTER UNIT.
2. SALVAGE EXISTING TYPE III CABINET AND FURNISH/INSTALL TYPE III-CF SERVICE EQUIPMENT. SEE WIRING DIAGRAM ON SHEET E-2.
3. INSTALL EMERGENCY VEHICLE PREEMPTION EQUIPMENT, PER CALTRANS PLANS ES-4E.
4. FURNISH/INSTALL MAST ARM MOUNTED SIGNS, PER DETAIL "U", CALTRANS STANDARD PLANS ES-7N.
5. FURNISH/INSTALL VIDEO IMAGE SENSOR SYSTEM TO PROVIDE VIDEO DETECTION FOR APPROACHES AS SHOWN ON PLANS. INCLUDE VIDEO IMAGE SENSOR PROCESSORS, VIDEO PROCESSORS, AND A VIDEO MONITOR IN THE CONTROLLER CABINET. MOUNT VIDEO IMAGE SENSOR CAMERAS. INCLUDE ALL WIRING AND ANCILLERY EQUIPMENT. CAMERAS TO BE MOUNTED PER MANUFACTURER'S RECOMMENDATIONS.
6. RELOCATE TYPE 1-A POLE WITH FLASHING BEACONS AND W3-3 SIGNAGE TO LOCATION SHOWN. REMOVE/SALVAGE OTHER FLASHING BEACON.
7. MAST ARM FOR POLE B TO BE ORDERED WITH TENONS ON THE OPPOSITE SIDE AT THE LOCATIONS SHOWN.
8. FURNISH/INSTALL SIGN ONTO SIGNAL POLE USING STRAP AND SADDLE.
9. FURNISH/INSTALL LEFT ANGLE VISOR PER CALTRANS STANDARD PLAN ES-4C.
10. FURNISH/INSTALL PHOTOELECTRIC UNIT ON POLE D, PER CALTRANS STANDARD PLAN ES-7N.
11. FURNISH/INSTALL 9-3a SIGN ON SIGNAL POLE. (STRAP AND SADDLE).
12. EXISTING RAMP METER QUEUE LOOPS TO BE REPLACED, AS SHOWN AFTER COLD PLANE AND OVERLAY WORK IS COMPLETED.
13. ADJUST PULL BOXES TO GRADE.

CONDUIT NOTES:

10. 1 1/2" C.(SPLICE TO EXIST) ADD 3-#2(120/240V SVC)
11. 2" C, 3-#2(120/240V SVC)
12. 3" C, 3-#14(PEU), 2-#10(LTG), 2-#8(IRR), 2-#6(SIG CONT), 2-#8(RM)
13. 2" C, 3-SIC(TEL IC), 1-DLC(Ø6)
14. 3" C., 1 4-PAIR CAT. 5E CABLE(OCC), 1-SIC(TEL IC)
15. 3" C., 1 4-PAIR CAT. 5E CABLE(OCC), 2-SIC(TEL IC), 1 DLC(Ø8)
16. 3" C, 3-#14(PEU), 2-#10(LTG), 2-#8(IRR), 2-#6(SIG CONT)
17. 2" C, 2-#8(RM)
18. EX. 1 1/2" C, ADD 2-#14(FB PWR), 2-#8(RM)
19. 2" C, 2-#14(FB PWR)
20. 2" C, 2_#14(FB PWR)
21. 2"C, 2-#8(IRR)
22. EX. 1 1/2" C., 2#8(IRR)
23. 2" C, 1-SIC(TEL IC), 1-SIC(SIG IC)
24. EX. 1 1/2" C., ADD 1-SIC(TEL IC), 1-SIC(SIG IC), 2-DLC(O2&O3)
25. EX. 1 1/2" C., ADD 1-SIC(TEL IC), 1-SIC(SIG IC), 2-DLC(O2&O3)
26. 1 1/2" C., ADD 1-SIC(SIG IC)
27. EX. 11#2" C., 1-DLC, ADD 1-SIC(SIG IC)

SIGNAL AND LIGHTING

E-4

REVISED BY	DATE REVISED	CALCULATED-DESIGNED BY	CHECKED BY	CONSULTANT FUNCTIONAL SUPERVISOR
J. Cruz	M. Jugar			E. Camerino

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

DATE PLOTTED => 02-NOV-2010
TIME PLOTTED => 14:18
10-29-10

5

Mission Valley Rd @ Mission Center Rd

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: Mission Ce[illegible]
E/W Street Name: Civita Blvd. [illegible]n Valley Rd

Last Database Change:
System Ref. Number:

N

Row	Column # --->	1	2	3	4	5	6	7	8
		Mission Center	Mission Valley				Mission Center		Civita
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		21				20		21
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.8	3.0	5.6	2.0	6.1	2.0	5.4
6	Max Gap	2.0	3.8	3.0	5.6	2.0	6.1	2.0	5.4
7	Min Gap	2.0	0.2	3.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	15	40	30	60	30	15
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.8		0.6		0.5		0.6
E	Yellow	3.4	4.3	3.4	3.9	3.4	4.3	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2___6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	__3___7_

Phase Functions <F Page>
F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + O

Start / Revert Times

Drop Number	8	C + 0 + 0
Zone Number	8	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	72	C + 0 + 3
QuicNet Channel	COM89	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234_

Disable Communication Ports
D + D + 9

Timing Sheet By: KT
Approved By: FLG
Drawing Number: 35450-37-D
Timing Implemented On:

Row	Time	Function	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8	10.0			4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8	10.0			8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

TERSECTION: Civita Blvd/Mission Valley Rd @ Mis Center Rd — 223 Program

Coordination Timing By: KT
Implemented On:

Row	Column # --->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name --->	AM	MID	PM						
0	Cycle Length	104	102	108						
1	Phase 1 - ForceOff	84	83	88						
2	Phase 2 - ForceOff	24	20	17						
3	Phase 3 - ForceOff	41	37	35						
4	Phase 4 - ForceOff	71	69	75						
5	Phase 5 - ForceOff	24	20	17						
6	Phase 6 - ForceOff	0	0	0						
7	Phase 7 - ForceOff	38	36	42						
8	Phase 8 - ForceOff	71	69	75						
9	Ring Offset									
A	Offset A	103	44	9						
B	Offset B									
C	Offset C									
D	Permissive	24	20	17						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 30	2	A	_23456_
1	13 : 30	E	A	_23456_
2	15 : 00	3	A	_23456_
3	17 : 30	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6_8
Plan 1	6	1	Plan 1 - Lag	_2_45_8
Plan 2	6	2	Plan 2 - Lag	_2_45_8
Plan 3	6	3	Plan 3 - Lag	_2_45_8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

6

INTERSECTION: MISSION CENTER RD & MISSION CENTER DY/WESTSIDE DR

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N

N/S Street: Mission Center Rd
E/W Street: Mission Center Dy/Westside Dr

Timing sheets by: KT
Approved by: FLG
Timing implemented on:
Drawing Number: 35450-36-D

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
			Mss Ctr	Westside	Mss Ctr Dy		Mss Ctr		
			Phase						
0	Ped Walk		7	7			7		
1	Ped FDW		8	24			12		
2	Min Green	4	7	4	4	4	7		
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	3.9	3.8	2.0	2.0	4.5		
6	Max Gap	2.0	3.9	3.8	2.0	2.0	4.5		
7	Min Gap	2.0	0.2	0.2	2.0	2.0	0.2		
8	Max Limit	30	60	40	40	30	60		
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.8	0.8			0.7		
E	Yellow Change	3.4	4.3	3.9	3.9	3.4	4.5		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

Row		F
0	Permit	123456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	*View Set Peds*	_23__6_
6	Rest In Walk	
7	Red Rest	
8	Double Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond. Service	
D	Man Cntrl Calls	
E	Yellow Start	_2___6__
F	First Phases	___4____

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	7	<C/0+0+0>
Zone Number	7	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	71	<C/0+0+3>
QuicNet Channel	COM8	(QuicNet)

Communication Addresses

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	_2_4_6_	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Notes:

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	
Ped for 8P Output	3
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	3

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: MISSION CENTER RD & MSSION CENTER DY/WESTSIDE DR

233 Program

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39					1.8
1	6J2U	40					1.8
2	4I6U	41				10.0	
3		42					
4	2I2L	43					1.8
5	6J2L	44					1.8
6		45					
7		46					
8		47					
9		48					
A		49					
B		50					
C		55					
D		56					
E		57					
F	3I5	58					1.8

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59					
1		60					
2		61					
3		62					
4		63					
5	6J3U	64					1.8
6		65					
7		66					
8		67					
9		68					
A		69					
B	3 - 8PPB	70		3			
C		76					
D		77					
E		78					
F		79					

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	07 : 00	4	A	_23456_
1	09 : 00	E	A	_23456_
2	11 : 30	2	A	_23456_
3	14 : 00	3	A	_23456_
4	17 : 30	E	A	1234567
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row> (Bank 1)

Time	Funct.	Day of Week

TOD Function <7/0.1+Row>

Column 4 Phases/Bits

<E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row> (Bank 1)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.1+Row> (Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row> (Bank 2)

Time	Funct.	Holiday Type

Holiday TOD Function <7/0.2+Row>

Column 4 Phases/Bits

<E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row> (Bank 2)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.2+Row> (Bank 2)

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	2 MID	3 PM	4 AM	5	6	7	8	9	Row
0	Cycle Length		102	108	90						0
1	Phase 1 - ForceOff		64	67	61						1
2	Phase 2 - ForceOff		0	0	0						2
3	Phase 3 - ForceOff		33	33	31						3
4	Phase 4 - ForceOff		48	53	48						4
5	Phase 5 - ForceOff		71	75	65						5
6	Phase 6 - ForceOff		0	0	0						6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff										8
9	Ring Offset										9
A	Offset 1		52	3	83						A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End		10	10	10						D
E	Hold Release		255	255	255						E
F	Zone Offset		0	0	0						F

Coordination - Timing Plans <C/1+Plan+Row>

	E	Row
		0
Plan 1 - Sync		1
Plan 2 - Sync	_2__6__	2
Plan 3 - Sync	_2__6__	3
Plan 4 - Sync	_2__6__	4
Plan 5 - Sync		5
Plan 6 - Sync		6
Plan 7 - Sync		7
Plan 8 - Sync		8
Plan 9 - Sync		9
NEMA Sync		A
NEMA Hold		B
		C
		D
Coord Extra		E
		F

Sync Phases <C/1+E+Row>

Row											Row
0	Ped Adjustment										0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time										5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase										A
B	Perm 1 Ped Phase										B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Parameters <C/2+Plan+Row>

	F	Row
Free Lag	_2_4_6__	0
Plan 1 - Lag		1
Plan 2 - Lag	_2_4_6__	2
Plan 3 - Lag	_2_4_6__	3
Plan 4 - Lag	_2_4_6__	4
Plan 5 - Lag		5
Plan 6 - Lag		6
Plan 7 - Lag		7
Plan 8 - Lag		8
Plan 9 - Lag		9
External Lag		A
		B
		C
		D
		E
		F

Lag Phases <C/1+F+Row>

Coordination Timing B KT

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time		Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)		6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

7

INTERSECTION: Sea World Dr @ Friars Rd

223 Pr m

Group Assignment:
Field Master Assignment:

N/S Street Name: Friars
E/W Street Name: Sea World

Last Database Change:
System Ref. Number:

Row	Column # --->	Sea World					Sea World		Friars
	Phase # --->	1	2	3	4	5	6	7	8
									2+8
0	Ped Walk		7						7
1	Ped FDW		21						20
2	Min Green	4	7				7		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.0				5.2		2.0
6	Max Gap	2.0	4.0				5.2		2.0
7	Min Gap	2.0	0.2				0.2		2.0
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.8				0.6		
E	Yellow	3.4	5.2				4.4		5.2
F	Red Clear	1.0	1.0				1.0		1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12__6_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2__6__
4	Ped Recall	
5	Peds (View)	_2____8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2__6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2__6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: FLG
Approved By: EFF
Drawing Number:
Timing Implemented On:

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1_34
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

Sea World Sea World

Friars

PHASE TIMING

200 SA 1.e

INTERVAL		1	2	3	4	5	6	7	8	PREEMPT	E	
WALK	0		7						7	RR 1 DELAY		0
FLASH D/W	1		21						20	RR 1 CLEAR		1
MIN GREEN	2	4	7				7		4	EVA DELAY		2
TYPE 3 DET	3									EVA CLEAR		3
ADD PER VEH	4									EVB DELAY		4
VEH EXTN *	5	2.0	2.1				3.5		2.0	EVB CLEAR		5
MAX GAP *	6	2.0	2.1				3.5		2.0	EVC DELAY		6
MIN GAP *	7	2.0	0.2				0.2		2.0	EVC CLEAR		7
MAX EXTN	8	30	60				60		40	EVD DELAY		8
MAX 2	9									EVD CLEAR		9
BUS LEAD	A									RR2 DELAY		A
CALL TO PHS	B									RR 2 CLEAR		B
REDUCE BY	C		0.1				0.1			EV CLR TMR		C
EVERY	D		1.2				0.7			EV DLY TMR		D
YELLOW	E	3.0	~~5.5~~ 5.4				~~4.8~~ 4.4		5.0	RR CLR TMR		E
RED CLEAR	F	1.0	1.0				1.0		1.0	RR DLY TMR		F

* Must be the same for non-density operation

F + PHASE + LOCATION

MAX INITIAL (F-0-E) _____ RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0	X	X				X		X
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3		X				X		
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F								X

F + F + FUNCTION #

OVERLAP TIMING

	LOAD SWITCH		GREEN 9	YELLOW C	RED D
		OLAP A			
		OLAP B			
		OLAP C			
		OLAP D			

D + 0 + OVERLAP

F + COLOR + OVERLAP

PHASE SEQUENCE

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		X

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0) _____

TURN-ON DATE:

TIME:

DRAWING NO. D- 13352-18

LAST CHANGE: 04-08-1997

BY: MLG

LOCATION FRIARS ROAD & SEA WORLD DRIVE

DETECTOR TIMES

Y \ X	SET DELAY 1	2	SET CARRY 3	4	OBS COUNT 5	6	OBS DELAY 7	8	OBS CARRY 9	A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7	

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A								
EMVEH B	B								
EMVEH C	C								
EMVEH D	D								
EXTRA	E	X		X					
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAYLIGHT SAVINGS
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5		X						
PED 6P	6								
PED 4P	7								
PED 8P	8								X
FLH YELLOW	9								
OVERLAP A	A								X
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F	X							

E + F + INTERVAL

LOCATION	FRIARS ROAD	&	SEA WORLD DRIVE

8

INTERSECTION: FRIARS RD @ NAPA ST

223 Pr[illegible]ram

Group Assignment:
Field Master Assignment:

N/S Street Name: NAPA
E/W Street Name: FRIARS

N

Column # --->		FRIARS	PED	NAPA		FRIARS		
		Phase						
Phase # --->		1	2	3	4	5	6	7	8
Row					4+6				
0	Ped Walk		7	7			7		
1	Ped FDW		17	20			20		
2	Min Green		7	4	4	4	7		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		4.6	0.0	5.0	2.0	4.2		
6	Max Gap		4.6	0.0	5.0	2.0	4.2		
7	Min Gap		0.2	0.0	0.2	2.0	0.2		
8	Max Limit		30	0	20	30	30		
9	Max Limit 2		40		40		40		
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		
D	Every		0.7		0.6		0.8		
E	Yellow		5.0	3.0	3.9	3.4	4.6		
F	Red Clear		1.0		1.0	1.0	1.0		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E		F	Row
RR-1 Delay		Permit	_23456__	0
RR-1 Clear		Red Lock		1
EV-A Delay	0	Yellow Lock		2
EV-A Clear	0	Min Recall	_2___6__	3
EV-B Delay	0	Ped Recall		4
EV-B Clear	0	Peds (View)	_23__6__	5
EV-C Delay	0	Rest In Walk		6
EV-C Clear	0	Red Rest		7
EV-D Delay		Dbl Entry		8
EV-D Clear		Max Recall		9
RR-2 Delay		Soft Recall		A
RR-2 Clear		Max 2		B
View EV Delay	---	Cond Serv		C
View EV Clear	---	Ped Lock	12345678	D
View RR Delay	---	Yellow Start	_2___6__	E
View RR Clear	---	1st Phases	___4____	F

F + E + Row

F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	4	C + 0 + 0
Zone Number	4	C + 0 + 1
Area Number	5	C + 0 + 2
Area Address	81	C + 0 + 3
QuicNet Channel	COM 51	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_23__6__	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By: FLG
Drawing Number: 26904-82-D
Timing Implemented On: 05/03/10

Row	Time	Function	Day of Week	Column F Phases/Bits
0	16 : 00	B	_23456_	_2_4_6_
1	18 : 30	B	_23456_	
2	00 : 01	E	1234567	1_____
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	
8	Ped 8P	__3_____
9	Yellow Flash Phases	
A	Overlap A - Phases	___4_6__
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 = Bus Advance

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_____6__
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	___4____
C	EV-C Phases	_____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

N

PHASE TIMING

200 SA 1.e

INTERVAL		1	2	3	4	5	6	7	8
			FRIARS	PED	NAPA		FRIARS		
WALK	0		7	7			7		
FLASH D/W	1		17	20			20		
MIN GREEN	2		7	4	4	4	7		
TYPE 3 DET	3								
ADD PER VEH	4								
VEH EXTN *	5		4.2	0.0	3.4	2.0	4.3		
MAX GAP *	6		4.2	0.0	3.4	2.0	4.3		
MIN GAP *	7		0.2	0.0	0.2	2.0	0.2		
MAX EXTN	8		60	0	40	30	60		
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B								
REDUCE BY	C		0.1		0.1		0.1		
EVERY	D		0.8		0.9		0.7		
YELLOW	E		5.5	3.0	3.0	3.0	4.5		
RED CLEAR	F		1.0		1.0	1	1.0		

F + PHASE + LOCATION

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

* Must be the same for non-density operation

MAX INITIAL (F-0-E) 0 RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0		X	X	X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3		X				X		
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F				X				

F + F + FUNCTION #

OVERLAP TIMING

LOAD SWITCH		GREEN 9	YELLOW C	RED D
	OLAP A			
	OLAP B			
	OLAP C			
	OLAP D			

D + 0 + OVERLAP

F + COLOR + OVERLAP

PHASE SEQUENCE

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X	X			X		X

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0)

TURN-ON DATE: 12-09-1997

TIME: 11:20

DRAWING NO. D- 26904-77

LAST CHANGE: 04-02-1998

BY: FLG

New phasing implemented 4-2-98

LOCATION Friars Rd. & Napa St.

DETECTOR TIMES

Y \ X	1 (SET DELAY)	2 (SET DELAY)	3 (SET CARRY)	4 (SET CARRY)	5 (OBS COUNT)	6 (OBS COUNT)	7 (OBS DELAY)	8 (OBS DELAY)	9 (OBS CARRY)	A (OBS CARRY)
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U 1.8	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L 10.	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5						X		
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A		X			X			
EMVEH B	B				X				
EMVEH C	C						X		
EMVEH D	D								
EXTRA	E	X		X	X				
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAYLIGHT SAVINGS
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5		X						
PED 6P	6						X		
PED 4P	7								
PED 8P	8			X					
FLH YELLOW	9								
OVERLAP A	A				X		X		
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F	X							

E + F + INTERVAL

LOCATION Friars Rd. & Napa St.

9

INTERSECTION: COLUSA St & FRIARS Rd

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: COLUSA St
E/W Street Name: FRIARS Rd

Last Database Change:
System Ref. Number:

N

Row	Column # --->	FRIARS			COLUSA		FRIARS		COLUSA
	Phase # --->	1	2	3	4	5	6	7	8
	Phase								
0	Ped Walk		7		7		7		
1	Ped FDW		17		24		9		
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.1		2.0	2.0	6.4		2.0
6	Max Gap	2.0	6.1		2.0	2.0	6.4		2.0
7	Min Gap	2.0	0.2		2.0	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.5				0.5		
E	Yellow	3.4	4.7		3.9	3.4	5.0		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12_456_8	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_2_4_6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry	___4___8	8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	5	C + 0 + 2
Area Address	82	C + 0 + 3
QuicNet Channel	DIGI 47:	(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WXW
Approved By: EFF
Drawing Number:
Timing Implemented On: 2/24/05

INTERSECTION: COLUSA St & FRIARS Rd

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	
C	EV-C Phases	1____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: COLUSA St & FRIARS Rd — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8	10.0			4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8	10.0			8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

10

N

Friars Rd — Via las Cumbres — Friars Rd

200 SA 1.e

PHASE TIMING

INTERVAL		1	2	3	4	5	6	7	8
WALK	0				7		7		
FLASH D/W	1			26	~~22~~	19	~~15~~		
MIN GREEN	2		10		4	4	10		
TYPE 3 DET	3								
ADD PER VEH	4								
VEH EXTN *	5		2.3		2.0	2.0	2.0		
MAX GAP *	6		2.3		2.0	2.0	2.0		
MIN GAP *	7		0.2		2.0	2.0	0.2		
MAX EXTN	8		50		30	25	50		
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B								
REDUCE BY	C		0.1				0.1		
EVERY	D		1.0				1.1		
YELLOW	E		5.0		3.0	3.0	5.0		
RED CLEAR	F		1.0		1.0	1.0	1.0		

F + PHASE + LOCATION

* Must be the same for non-density operation

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY		2
EVA CLEAR		3
EVB DELAY		4
EVB CLEAR		5
EVC DELAY		6
EVC CLEAR		7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

9/30/96

MAX INITIAL (F-0-E) _____ RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		1	2	3	4	5	6	7	8
PERMIT	0		X		X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3		X				X		
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F				X				

F + F + FUNCTION

OVERLAP TIMING

	LOAD SWITCH		GREEN 9	YELLOW C	RED D
		OLAP A			
		OLAP B			
		OLAP C			
		OLAP D			

D + 0 + OVERLAP

F + COLOR +

PHASE SEQUENCE

	1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0) _____

TURN-ON DATE: 03-01-1997

TIME:

DRAWING NO. D- 16804-1

LAST CHANGE: 03-03-1997

BY: MLG

LOCATION FRIARS ROAD & VIA LAS CUMBRES

Audible Signal (FDW 3.5 FPS)

DETECTOR TIMES

Y \ X	SET DELAY 1	2	SET CARRY 3	4	OBS COUNT 5	6	OBS DELAY 7	8	OBS CARRY 9	A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L 10.	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7	

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A								
EMVEH B	B								
EMVEH C	C								
EMVEH D	D								
EXTRA	E	X		X	X				
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAVLIGHT
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5								
PED 6P	6						X		
PED 4P	7				X				
PED 8P	8								
FLH YELLOW	9								
OVERLAP A	A								
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F								

E + F + INTERVAL

LOCATION	FRIARS ROAD	&	VIA LAS CUMBRES

INTERSECTION: FRIARS RD @ VIA LAS CUMBRES

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: VIA LAS CUMBRES
E/W Street Name: FRIARS

FRIARS | VIA LAS CUMBRES | FR

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
	Phase		→		↓	↑	←		
0	Ped Walk				7		7		
1	Ped FDW				25		19		
2	Min Green		10		4	4	10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		2.4		2.0	2.0	2.4		
6	Max Gap		2.4		2.0	2.0	2.4		
7	Min Gap		0.2		2.0	2.0	0.2		
8	Max Limit		60		30	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		1.3				1.3		
E	Yellow		4.7		4.1	3.4	4.9		
F	Red Clear		1.0		1.0	1.0	1.0		

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

F + E + Row

	F	Row
Permit	_2_456__	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	___4_6__	5
Rest in Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4____	F

F + F + Row

Note: FDW calculated using 3.5 fps.

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	6	C + 0 + 0
Zone Number	6	C + 0 + 1
Area Number	5	C + 0 + 2
Area Address	83	C + 0 + 3
QuicNet Channel	COM51	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By: FLG
Drawing Number: 16804-1-D
Timing Implemented On:

INTERSECTION: FRIARS RD @ VIA LAS CUMBRES

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 = Bus Advance

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

Friars Rd - Via Cumbres 0620
C72

START
FIRST PHASES
DUAL ENTRY
G.P.T.
SIM. GAP
MAX. EXT.

CITY OF SAN DIEGO

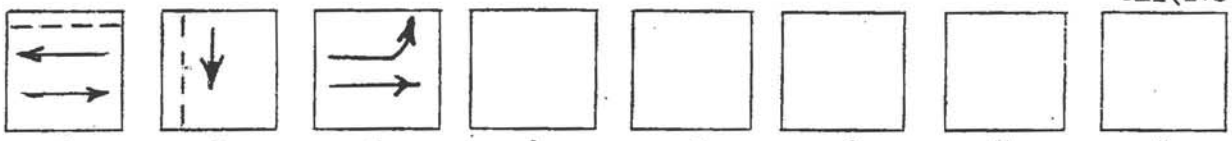
ACTUATED SIGNAL TIMING RECORD (Solid State)

TYPE CONTROLLER: MULTISONICS - 901

DATE TURNED ON 11-04-76 @ 0943

OL1(1+3)

Phase Diagrams



CONTROLLER PHASE	1	2	3	4	5	6	7	8
RECALL								
Secs. per Actuat.	1/2							
Non-Lock		Pin						
Minimum Initial	10	4 ~~2~~	4 ~~2~~					
Maximum Initial	22	2	2					
Walk	8"	8	-					
Ped. Clearance	16"	22	-					
Preset Veh. Extension	6	2	2					
Minimum Veh. Extension	2	2	2					
Start Reduction	16	-	-					
TIME TO REDUCE	16	-	-					
Maximum 1.	48	32	24					
Maximum 2.								
Yellow	6/22/77 4.0 ~~3.5~~	3.0	4.0 ~~3.0~~	4/22/82 TRM				4.0 ~~3.5~~
All Red	6/22/77 1.0 ~~3/4~~	1.0 ~~.5~~	1.0					1.0 ~~1/2~~
Mags EXT.	in - 1" out - Ø							
Detector Mode	calling on pulse	presence	presence					

NOTES:

Location: Friars & Via Las Cumbres

11

INTERSECTION: FASHION VALLEY RD @ FRIARS RD

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: FASHION VALLEY
E/W Street: FRIARS

Last Database Change:

Timing sheets by: M2S
Approved by: FLG
Timing implemented on: 04/13/10

Row	Phase Numbers—>	1	2	3	4	5	6	7	8
		FRIARS	FASHION VALLEY			FRIARS		FASHION VALLEY	
		1+8							
0	Ped Walk		7				7		10
1	Ped FDW		14				7		25
2	Min Green	4	10			4	10		4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	2.9			2.0	3.7		2.2
6	Max Gap	2.0	2.9			2.0	3.7		2.2
7	Min Gap	2.0	0.2			2.0	0.2		0.2
8	Max Limit	30	60			30	60		50
9	Max Limit 2								
A	Adv. / Delay Walk								10
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		1.1				0.8		1.5
E	Yellow Change	3.4	4.9			3.4	4.3		3.9
F	Red Clear	1.0	1.0			1.0	1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12__56_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds	_2___6_8	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2___6__	E
First Phases	_____8	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	1	<C/0+0+0>
Zone Number	1	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	81	<C/0+0+3>
QuicNet Channel	90	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes:

Free Lag	_2___6_8	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number	9							
1	Veh Set 1 - Phases	1							
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases	2							
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change	3.4							
F	Red Clear	1.0							

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases	8	6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	6
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3	8J6U	42	45_7_	8	123 8		1.8
4		43	45_7_	2	123 8		
5		44	45_7_	6	123 8		
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1	123 8		
E		57	45_7_	7	123 8		
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green	35								5
Overlap Yellow	37								6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	5	123 8		
1		60	45_7_	1	123 8		
2		61	45_7_	7	123 8		
3		62	45_7_	3	123 8		
4		63	45_7_	2	123 8		
5		64	45_7_	6	123 8		
6		65	45_7_	4	123 8		
7		66	45_7_	8	123 8		
8		67	2	2	123 8		
9		68	2	6	123 8		
A		69	2	4	123 8		
B		70	2	8	123 8		
C		76	45_7_	2	123 8		
D		77	45_7_	6	123 8		
E		78	45_7_	4	123 8		
F		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)

(View Redial Timer at E/2+D+6)

INTERSECTION: FASHION VALLEY RD @ FRIARS RD

233 Program

Row	Time	Plan	Offset	Day of Week
0	07 : 00	7	A	_23456_
1	09 : 00	E	A	_23456_
2	15 : 00	8	A	_23456_
3	18 : 30	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.1+Row>
(Bank 1)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <7/0.2+Row> <E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type

Holiday Events <9/1.2+Row>
(Bank 2)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	2	3	4	5	6	7 AM	8 PM	9
0	Cycle Length							112	136	
1	Phase 1 - ForceOff							34	80	
2	Phase 2 - ForceOff							0	0	
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff							87	62	
6	Phase 6 - ForceOff							0	0	
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff							74	49	
9	Ring Offset									
A	Offset 1							82	40	
B	Offset 2									
C	Offset 3									
D	Perm 1 - End							11	14	
E	Hold Release							255	255	
F	Zone Offset							0	0	

Coordination - Timing Plans <C/1+Plan+Row>

Row		E
0		
1	Plan 1 - Sync	
2	Plan 2 - Sync	
3	Plan 3 - Sync	
4	Plan 4 - Sync	
5	Plan 5 - Sync	
6	Plan 6 - Sync	
7	Plan 7 - Sync	_2___6__
8	Plan 8 - Sync	_2___6__
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

Row		1	2	3	4	5	6	7	8	9
0	Ped Adjustment									
1	Perm 2 - Start									
2	Perm 2 - End									
3	Perm 3 - Start									
4	Perm 3 - End									
5	Reservice Time									
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase									
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase									
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase									
F	Perm 3 Ped Phase									

Coordination - Parameters <C/2+Plan+Row>

Row		F
0	Free Lag	
1	Plan 1 - Lag	
2	Plan 2 - Lag	
3	Plan 3 - Lag	
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	1____6_8
8	Plan 8 - Lag	_2___6_8
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By: KH&A
Implemented on: 2/17/2010

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs **<E/126+Column+Row>**

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	81	6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs **<E/127+Column+Row>**

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Min Time (seconds)	0	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	0	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Low Pri. Channel		<E/125+C+8>

Disable Low Priority Channel

INTERSECTION: FASHION VALLEY RD @ FRIARS RD

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/27+5+F>
Limited Service Interval

Special Event Schedule -- Table 1 <C+0+E=27>

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/28+5+F>
Limited Service Interval

Special Event Schedule -- Table 2 <C+0+E=28>

IN RSECTION: FRIARS ROAD @ VIA DE LA MODA

233 F gram

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: VIA DE LA MODA
E/W Street: FRIARS

Last Database Change:

Timing sheets by: M2S
Approved by: FLG
Timing implemented on: 04/13/10

Row	Phase Numbers---->	1	2	3	4	5	6	7	8
		FRIARS				FRIARS		VIA DE LA MODA	
								Dummy	
0	Ped Walk		7						7
1	Ped FDW		15						24
2	Min Green	4	10			4	10	4	4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension	2.0	3.6			2.0	3.7	2.0	2.0
6	Max Gap	2.0	3.6			2.0	3.7	2.0	2.0
7	Min Gap	2.0	0.2			2.0	0.2	2.0	2.0
8	Max Limit	25	60			30	60	25	30
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.9				0.8		
E	Yellow Change	3.4	4.4			3.4	4.3	3.4	3.4
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12__56_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
View Set Peds		5
Rest In Walk		6
Red Rest		7
Double Entry	___4___8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2___6__	E
First Phases	_____8	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	- - -	- - -	- - -	- - -	- - -
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	2	<C/0+0+0>
Zone Number	2	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	82	<C/0+0+3>
QuicNet Channel	90	(QuicNet)

Communication Addresses

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Notes:

Free Lag	_2_5_8	<C/1+F+0>

How to Set Page Access Code:
F/1 -- C + 0 + F = 1

INTERSECTION: FRIARS ROAD @ VIA DE LA MODA

233 Program

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number	1	6						
1	Veh Set 1 - Phases	1____7_	____67_						
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases	_2____8	____5__8						
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change	3.4	4.3						
F	Red Clear	1.0	1.0						

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	12__5678
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	_2_____
Ped for 6P Output	
Ped for 4P Output	
Ped for 8P Output	_____8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	- - -
RR-2 *	- - -
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = S[illegible]ing

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard date[illegible]e used.

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39	45_7_	_2_____	123___8		1.8
1	6J2U	40	45_7_	____6__	123___8		1.8
2		41	45_7_	___4___	123___8		
3		42	45_7_	_____8	123___8		
4	2I2L	43	45_7_	_2_____	123___8		1.8
5	6J2L	44	45_7_	____6__	123___8		1.8
6		45	45_7_	___4___	123___8		
7	8J6L	46	45_7_	_____8	123___8	5.0	
8		47	67_	_2_____	123___8		
9		48	67_	____6__	123___8		
A		49	67_	___4___	123___8		
B		50	67_	_____8	123___8		
C		55	45_7_	____5__	123___8		
D		56	45_7_	1_____7_	123___8		
E		57	45_7_	_____7_	123___8		
F		58	45_7_	__3____	123___8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	____5__	123___8		
1		60	45_7_	1_____	123___8		
2		61	45_7_	_____7_	123___8		
3		62	45_7_	__3____	123___8		
4		63	45_7_	_2_____	123___8		
5		64	45_7_	____6__	123___8		
6		65	45_7_	___4___	123___8		
7		66	45_7_	_____8	123___8		
8		67	_2_____	_2_____	123___8		
9		68	_2_____	____6__	123___8		
A		69	_2_____	___4___	123___8		
B		70	_2_____	_____8	123___8		
C		76	45_7_	_2_____	123___8		
D		77	45_7_	____6__	123___8		
E		78	45_7_	___4___	123___8		
F		79	45_7_	_____8	123___8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	07 : 00	7	A	_23456_
1	09 : 00	E	A	_23456_
2	15 : 00	8	A	_23456_
3	18 : 30	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week

TOD Function <7/0.1+Row>

Column 4 Phases/Bits

<E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type

Holiday TOD Function <7/0.2+Row>

Column 4 Phases/Bits

<E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.2+Row>
(Bank 2)

Coord Extra
1 = Programmed WALK Time for Sy[illegible]ses
2 = Always Terminale Sync Phase Peds

Row	Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7 AM	Plan 8 PM	Plan 9
0	Cycle Length							112	136	
1	Phase 1 - ForceOff							48	75	
2	Phase 2 - ForceOff							0	0	
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff							46	70	
6	Phase 6 - ForceOff							0	0	
7	Phase 7 - ForceOff								23	
8	Phase 8 - ForceOff							35	58	
9	Ring Offset									
A	Offset 1							105	63	
B	Offset 2									
C	Offset 3									
D	Perm 1 - End							11	14	
E	Hold Release							255	255	
F	Zone Offset							0	0	

Coordination - Timing Plans <C/1+Plan+Row>

Row		E
0		
1	Plan 1 - Sync	
2	Plan 2 - Sync	
3	Plan 3 - Sync	
4	Plan 4 - Sync	
5	Plan 5 - Sync	
6	Plan 6 - Sync	
7	Plan 7 - Sync	_2___6__
8	Plan 8 - Sync	_2___6__
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

Row		Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Ped Adjustment									
1	Perm 2 - Start								10	
2	Perm 2 - End								40	
3	Perm 3 - Start								40	
4	Perm 3 - End								55	
5	Reservice Time								0	
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase								_____7_	
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase								_____8	
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase								1___5___	
F	Perm 3 Ped Phase									

Coordination - Parameters <C/2+Plan+Row>

Row		F
0	Free Lag	
1	Plan 1 - Lag	
2	Plan 2 - Lag	
3	Plan 3 - Lag	
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	_2___6_8
8	Plan 8 - Lag	_2___6_8
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By: KH&A
Implemented on: 2/17/2010

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1	210	Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)	203	AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)	0	AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2	210	TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	81	6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8	203	EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Min Time (seconds)	0	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	0	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

INTERSECTION: FRIARS ROAD @ VIA DE LA MODA

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

0 <E/27+5+F>
Limited Service Interval

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

0 <E/28+5+F>
Limited Service Interval

13

INTERSECTION: AVENIDA DE LAS TIENDAS @ FRIARS R

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: AVENIDA DE LAS TIENDAS
E/W Street: FRIARS

Last Database Change:

Timing sheets by: M2S
Approved by: FLG
Timing implemented on: 04/13/10

Phase Numbers--->	1	2	3	4	5	6	7	8
	FRIARS	AVE DE LAS TIENDAS		FRIARS	AVE DE LAS TIENDAS			
Row							Dummy	
0 Ped Walk		7		5		7		
1 Ped FDW		18		25		9		
2 Min Green	4	10		4	4	10	4	4
3 Type 3 Disconnect								
4 Added per Vehicle								
5 Veh Extension	2.0	3.6		2.0	2.0	3.7	2.0	2.0
6 Max Gap	2.0	3.6		2.0	2.0	3.7	2.0	2.0
7 Min Gap	2.0	0.2		2.0	2.0	0.2	2.0	2.0
8 Max Limit	25	60		30	30	60	25	30
9 Max Limit 2								
A Adv. / Delay Walk								
B PE Min Ped FDW								
C Cond Serv Check								
D Reduce Every		0.9				0.8		
E Yellow Change	3.4	4.4		3.9	3.4	4.3	3.4	3.9
F Red Clear	1.0	1.0		1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	12_456_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2__6__	3
Ped Recall		4
View Set Peds	_2_4_6__	5
Rest In Walk		6
Red Rest		7
Double Entry	__4__8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	__4__8	E
First Phases	1__6__	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	3	<C/0+0+0>
Zone Number	3	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	83	<C/0+0+3>
QuicNet Channel	90	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	_2_4_6_8	<C/1+F+0>

How to Set Page Access Code:
F/1 -- C + 0 + F = 1

Notes: Yellow Start Must be phases 4 & 8.
Phase 7 is permitted only during plan 8. Phase 7 must be flagged as Exclusive.
Phase 7 must be flagged at E+2+D (Detector Timing).

INTERSECTION: AVENIDA DE LAS TIENDAS @ FRIARS RD

233 Program

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number	1	6						
1	Veh Set 1 - Phases	1____7_	____67_						
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases	_2_4__8	__45__8						
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change	3.4	4.3						
F	Red Clear	1.0	1.0						

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	_____7_
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	___4___
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	12_45678
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	_2_____
Ped for 6P Output	_____6__
Ped for 4P Output	___4____
Ped for 8P Output	
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard date will be used.

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0	2I2U	39	45_7_	2	123 8		1.8
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3		42	45_7_	8	123 8		
4	2I2L	43	45_7_	2	123 8		1.8
5	6J2L	44	45_7_	6	123 8		1.8
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1 7_	123 8		
E		57	45_7_	7_	123 8		
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	5	123 8		
1		60	45_7_	1	123 8		
2		61	45_7_	7_	123 8		
3		62	45_7_	3	123 8		
4		63	45_7_	2	123 8		
5		64	45_7_	6	123 8		
6		65	45_7_	4	123 8		
7		66	45_7_	8	123 8		
8		67	2	2	123 8		
9		68	2	6	123 8		
A		69	2	4	123 8		
B		70	2	8	123 8		
C		76	45_7_	2	123 8		
D		77	45_7_	6	123 8		
E		78	45_7_	4	123 8		
F		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	07 : 00	7	A	_23456_
1	09 : 00	E	A	_23456_
2	15 : 00	8	A	_23456_
3	18 : 30	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <7/0.2+Row> <E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.2+Row>
(Bank 2)

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

INTERSECTION: AVENIDA DE LAS TIENDAS @ FRIARS RD

233 Program

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7 AM	Plan 8 PM	Plan 9	Row
0	Cycle Length							112	136		0
1	Phase 1 - ForceOff							55	78		1
2	Phase 2 - ForceOff							0	0		2
3	Phase 3 - ForceOff										3
4	Phase 4 - ForceOff							38	58		4
5	Phase 5 - ForceOff							51	70		5
6	Phase 6 - ForceOff							0	0		6
7	Phase 7 - ForceOff								27		7
8	Phase 8 - ForceOff							38	58		8
9	Ring Offset										9
A	Offset 1							90	71		A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End							11	14		D
E	Hold Release							255	255		E
F	Zone Offset							0	0		F

Coordination - Timing Plans <C/1+Plan+Row>

	E	Row
		0
Plan 1 - Sync		1
Plan 2 - Sync		2
Plan 3 - Sync		3
Plan 4 - Sync		4
Plan 5 - Sync		5
Plan 6 - Sync		6
Plan 7 - Sync	_2___6__	7
Plan 8 - Sync	_2___6__	8
Plan 9 - Sync		9
NEMA Sync		A
NEMA Hold		B
		C
		D
Coord Extra		E
		F

Sync Phases <C/1+E+Row>

Row											Row
0	Ped Adjustment										0
1	Perm 2 - Start								10		1
2	Perm 2 - End								40		2
3	Perm 3 - Start								40		3
4	Perm 3 - End								55		4
5	Reservice Time								0		5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase								_____7_		A
B	Perm 1 Ped Phase										B
C	Perm 2 Veh Phase								___4___8		C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase								1___5___		E
F	Perm 3 Ped Phase										F

Coordination - Parameters <C/2+Plan+Row>

	F	Row
Free Lag		0
Plan 1 - Lag		1
Plan 2 - Lag		2
Plan 3 - Lag		3
Plan 4 - Lag		4
Plan 5 - Lag		5
Plan 6 - Lag		6
Plan 7 - Lag	_2_4_6_8	7
Plan 8 - Lag	_2_4_6_8	8
Plan 9 - Lag		9
External Lag		A
		B
		C
		D
		E
		F

Lag Phases <C/1+F+Row>

Coordination Timing By: KH&A
Implemented on: 2/17/2010

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1	210	Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)	203	AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)	0	AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2	210	TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)		6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8	203	EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

Row		Phase 1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
0.X = Shortway
1.X = Lengthen
X.1 thru X.4 = Number of cycles when lengthing

Transition Type	0.3	<C/5+1+9>

TBC Transition

Lag Hold Phases		<C/5+1+A>

Coordinated Lag Hold Phases

Sync Output Time	0.0	<C/5+1+C>

7-Wire Master

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	<F/1+D+E>
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Row		1	2	3	4	5	6	7	8
0	Ped Walk								
1	Ped FDW								
2	Min Green								
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension								
6	Max Gap								
7	Min Gap								
8	Max Limit								
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every								
E	Yellow Change								
F	Red Clear								

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Long Failure	0.5	<F/1+0+6>
Short Failure	0.5	<F/1+0+7>

Power Cycle Correction (Default = 0.7)

Min Time (seconds)	0	<F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes)	0	<F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds)	0	<F/1+0+A>

Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Low Pri. Channel	#NAME?	<E/125+C+8>

Disable Low Priority Channel

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/27+5+F>
Limited Service Interval

Special Event Schedule -- Table 1 <C+0+E=27>

Row	6 Clear	7 Time	8 Ped Call	9 Hold	A Advance	B Force Off	C Vehicle Call	D Permit Phases	E Ped Omit	F Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Notes:

0 <E/28+5+F>
Limited Service Interval

Special Event Schedule -- Table 2 <C+0+E=28>

14

TRAFFIC SIGNAL TIMING - BITS 152

PHASE TIMING

PHASE # →		1	2	3	4	5	6	7	8
WALK	0		7		7				
FLASH D/W	1		7		26				
MIN GREEN	2		10	4	4	2	10		
TYPE 3 DET	3								
ADD/VEH	4								
VEH EXTEN	5		3.2	2	2	2	3.2		
MAX GAP	6		3.2	2	2	2	3.2		
MIN GAP	7		0.2	2	2	2	0.2		
MAX EXTEN	8		45	30	30	20	45		
MAX 2	9		45	30	30	20	45		
	A								
	B								
REDUCE BY	C		0.1				0.1		
REDUCE EVERY	D		1.0				1.0		
YELLOW	E		3.5	3.5	3.5	3.0	3.5		
RED CLEAR	F		1.0	1.0	1.0	1.0	1.0		

PREEMPT

	E	
RRI DELAY		
RR1 CLEAR		
EV A DELAY		
EV A CLEAR		
EV B DELAY	5.	4
EV B CLEAR		5
EV C DELAY		6
EV C CLEAR		7
EV D DELAY		8
EV D CLEAR		9
RR2 DELAY		A
RR2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

MAX INITIAL (F–0–E) = 0 KEYSTROKES: F + PHASE + LOCATION RED REVERT (F–0–F) = 5.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0		X	X	X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEH RECALL	3		X				X		
PED RECALL	4								
PEDS	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
OVERLAP A	A								
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
STARTUP	E		X				X		
(RESERVED)	F								

KEYSTROKES: F + F + FUNCTION #

PHASE SEQUENCES

		PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)	0		X		X	X			X
LAG 1	1								
LAG 2	2								
LAG 3	3								
LAG 4	4								
LAG 5	5								
LAG 6	6								
LAG 7	7								
LAG 8	8								
LAG 9	9								
COOR MAX RECALL	A								
COOR LAG RECALL	B								
SYNC PHASES	C								
HOLD	D								
NEXT PHASE	E								
FORCE OFF	F								

KEYSTROKES: C + F + FUNCTION #

REMARKS:

LOC: Friars Rd. & Ulric / RT. 163 S/B ramps DATE: 9/30/85

PAGE 1 OF ___

ED-74 (5-83)

DETECTOR TIMES (332 CABINET)

Y ↓ / X →	SET DELAY 1	SET DELAY 2	SET CARRY 3	SET CARRY 4	OBS COUNT 5	OBS COUNT 6	OBS DELAY 7	OBS DELAY 8	OBS CARRY 9	OBS CARRY A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L			2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4			2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L			4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8			4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L
E										
F										

KEYSTROKES: D + X + Y

TIME OF DAY FUNCTION

	TIME (24 HOUR)	FUN	DAY OF WEEK 1	2	3	4	5	6	7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
A									
B									
C									
D									
E									
F									

KEYSTROKES: 7 + EVENT NUMBER

PEDESTRIAN ASSIGNMENTS

LOC	SWITCH-PACK	INPUT CI PIN	PHASE 1	2	3	4	5	6	7	8
EF5	2P	67		X						
EF6	6P	68								
EF7	4P	69				X				
EF8	8P	70								

EMERGENCY VEHICLE PREEMPT ASSIGNMENTS

LOC	PREEM	INPUT CI PIN	PHASE 1	2	3	4	5	6	7	8
EEA	EVA	71								
EEB	EVB	72								
EEC	EVC	73								
EED	EVD	74								

RAILROAD PREEMPTION ASSIGNMENTS

LOC	PHASE	1	2	3	4	5	6	7	8
EE1	RR1 CLEAR								
EE2	RR2 CLEAR								
EE3	RR2 LMT OPS								

CONDITIONAL SERVICE D-F-O _____

LONG POWER FAIL CORRECTION F-O-6 _____

SHORT POWER FAIL CORRECTION F-O-7 _____

CURRENT TIME AND DATE

8-0 HOUR, MINUTE, DAY OF WEEK

8-1 DAY OF MONTH, YEAR, MONTH

C-4-9 SECONDS

15 LOCATION: **RTE 163 NB / FRIARS RD**

CALTRANS C8 Version 3 DATE: 3/4/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	1	1	1	1	1	1	1	CLK RST
1	DONT WALK	1	1	1	1	1	1	1	1	
2	MIN GREEN	1	12	1	5	1	1	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	0.9	2.0	0.9	0.9	0.9	0.9	
6	MAX GAP	0.9	2.0	0.9	2.0	0.9	0.9	0.9	0.9	
7	MIN GAP	0.9	2.0	0.9	2.0	0.9	0.9	0.9	0.9	
8	MAX EXT	9	40	9	40	9	9	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	5.0	3.0	4.0	3.0	3.0	3.0	3.0	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT									
	BIKE XING FT		75							

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK									1
YEL LOCK									2
V RECALL		2							3
P RECALL									4
PED PHASES									5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2							E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 163 NB / FRIARS ROAD**

CALTRANS C8 DATE: 1/31/94

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH														LAG FZ FREE		X		X		X		X	0
1	FZ1 GRN FCTR													GAPOUT CP1	LAG FZ CP 1									1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A										OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		X				X			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRP																							F

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER :
RTE 163 SB @ FRIARS

LOCATION	OFF	ON
1		X
2	X	
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 163 NB / FRIARS ROAD**

CALTRANS C8 DATE 1/31/94

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 163 NB / FRIARS ROAD**

CALTRANS C8 DATE : 1/31/94 PAGE 4

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

DIST.	STATE
7	CALIF.

DIST.	COUNTY	ROUTE	SHEET NO.	TOTAL SHEETS
11	SD	163	4.4	

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 3381

DATE APPROVED

POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B	REMARKS
(A)	19-4-80	30' [1]	12'	DIM.	6	SV-1-T (LOCATE ON SIDE (1) ES-3B	MAS (BOTH)			HPS-250 LUMINAIRE PEU
(B)	15 [2]		12' [2]	DIM.						HPS-250 LUMINAIRE (480 VOLT BALLAST)
(C)	23-4-80	35' [3]		10' FROM NOSE	CTR.	SV-2-T8 (LOCATE ON SIDE (4) ES-3B	(4) - MAT SINGLE SECT-MAT SINGLE SECT-MAT			
(D)	PEDESTRIAN BARRICADE - ES-6A. INSTALL STATE-FURNISHED SIGN PANEL R 49-2.									
(E)	PEDESTRIAN BARRICADE - ES-6A. INSTALL STATE-FURNISHED SIGN PANEL R 49-2.									
(F)	STATE-FURNISHED CONTROLLER ASSEMBLY (TYPE-170 FOUNDATION, ES-4B)									

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	CIRCUIT	CONDUIT RUN & SIZE 1-1/2 (1)	1-1/2 (2)	2 (3)	1-1/2 (4)	2 (5)	1-1/2 (6)	1-1/2 (7)	1-1/2 (8)
#14	2	VEHICLE SIGNAL		3	3		3			
	4						3			
		CONTROLLER GREEN					1'			
		PHOTOELECTRIC UNIT		3	3		3	3	3	
#14		SPARES		3	3		3			
TOTAL NO. 14				9	9		13	3	3	
		SIGNAL COMMON		1	1		1			
#10		LIGHTING		2	2		2	2	2	
	2	LOOP DLC			1	2	3			
DLC	4		1	1	1		1			
#8		EXIST. SIGNAL & LTG.							4	
#4		SIGNAL CONTROLLER						2	2	
#4		SERVICE								3
TOTAL CONDUCTORS / CABLES			1	13	14	2	20	7	11	3

SP — TYPE H, EXIST. NO. A 4.44, NEW NO. A 4.42, P# 179930

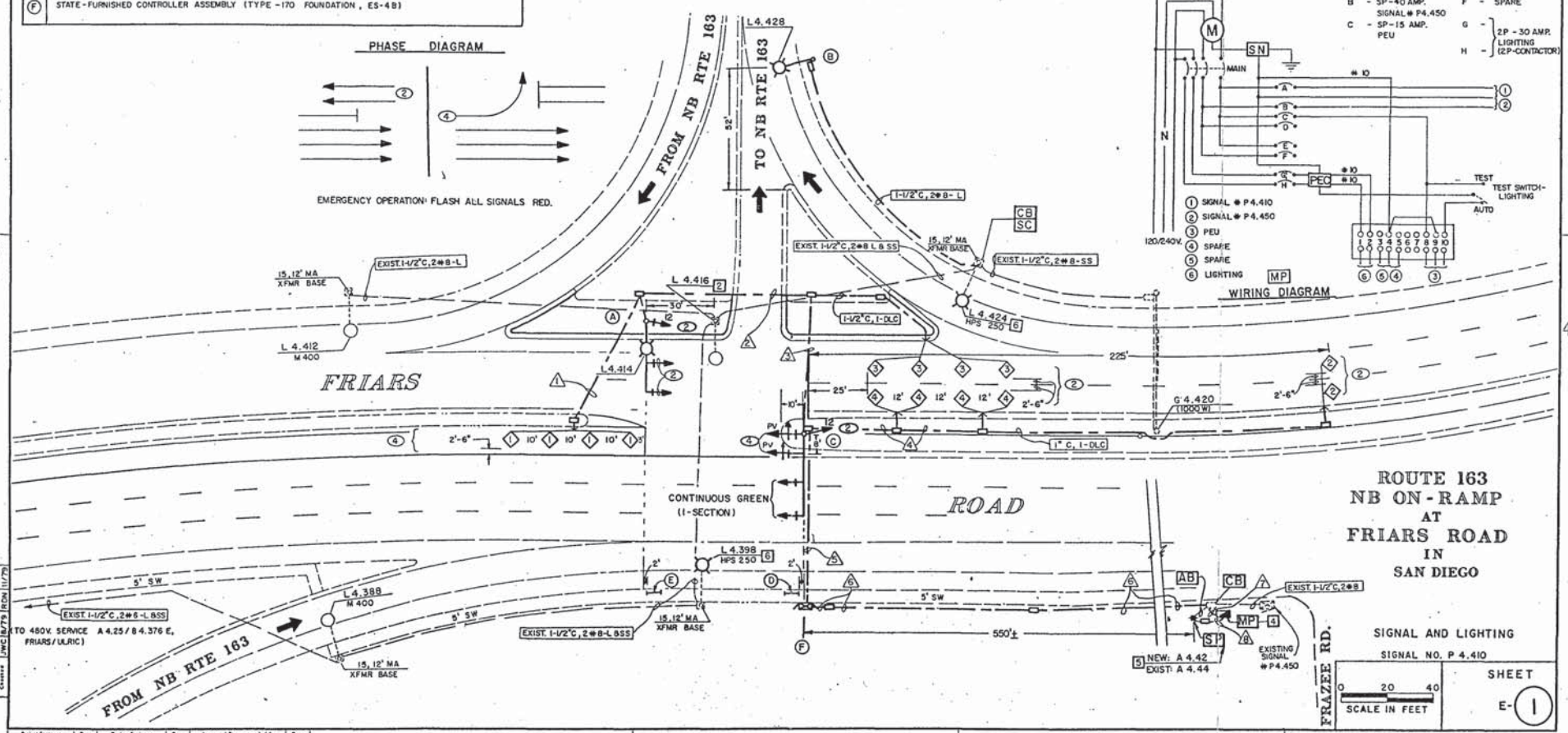
MP — TYPE III SERVICE EQUIPMENT CABINET (ES-2B)

CIRCUIT BREAKERS

MAIN - 4P-70 AMP.
A - SP-50 AMP. SIGNAL # P4.410
B - SP-40 AMP. SIGNAL # P4.450
C - SP-15 AMP. PEU
D - SPARE
E - SPARE
F - SPARE
G - 2P-30 AMP. LIGHTING (2P-CONTACTOR)
H - 2P-30 AMP. LIGHTING (2P-CONTACTOR)

PHASE DIAGRAM

EMERGENCY OPERATION: FLASH ALL SIGNALS RED.



ROUTE 163 NB ON-RAMP AT FRIARS ROAD IN SAN DIEGO

SIGNAL AND LIGHTING

SIGNAL NO. P 4.410

SCALE IN FEET: 0 20 40

SHEET E-1

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
D A GILMOUR	7/79	M A CHASE	7/79	R B FINDLAY	7/79

CU 11359 WO 188921

CHANGE	INIT.	DATE	APPR.
1	GN	10/79	RDW 11/79
	JWC	11-2-79	

40

16

INTERSECTION: FRAZEE RD & FRIARS RD

223 Pr[illegible]m

Group Assignment: 4097
Field Master Assignment: NONE

N/S Street Name: FRAZEE RD
E/W Street Name: FRIARS RD

Last Database Change:
System Ref. Number: 531

N

Row	Column # --->	Phase 1	2	3	4	5	6	7	8
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7				7		7
1	Ped FDW		20				22		42
2	Min Green	4	10	6	7	6	10	6	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.9	2.2	2.3	2.0	4.4	2.2	2.0
6	Max Gap	2.0	3.9	2.2	2.3	2.0	4.4	2.2	2.0
7	Min Gap	2.0	2.2	2.2	2.3	2.0	2.2	2.2	2.0
8	Max Limit	30	50	30	30	45	60	30	30
9	Max Limit 2	30	70	30	70	30	70	30	70
A	Bus Adv						7		
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.8				1.0		
E	Yellow	3.4	4.5	3.4	3.9	3.4	5.5	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	1
EV-B Delay	0
EV-B Clear	1
EV-C Delay	0
EV-C Clear	1
EV-D Delay	0
EV-D Clear	1
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall	_2_4_6__	3
Ped Recall		4
Peds (View)	_2___6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	20	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	5.0	F + C + O

Start / Revert Times

Drop Number	4	C + 0 + 0
Zone Number	4	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	84	C + 0 + 3
QuicNet Channel	DIGI5:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

Timing Sheet By:
Approved By: G.P.
Drawing Number: 24306-13-D
Timing Implemented On:

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	__3__7_
F	Assign 5 Outputs	_____8

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	_2___6__
C	EV-C Phases	1____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A	10.0	
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3	Bus Detect	
4	10.0	
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FRAZEE & FRIARS

22 Program

Group Assignment: 4097
Field Master Assignment: NONE

N/S Street Name: FRAZEE
E/W Street Name: FRIARS

Last Database Change:
Timing Sheet By: EFF
Approved By: MM
System Ref. Number: 531
Drawing Number: 24306-13-D
Timing Implemented On: 1/8/01

N

Row	Column # —> / Phase # —>	1	2	3	4	5	6	7	8
		FRIARS		FRAZEE		FRIARS			
	Phase	1	2	3	4	5	6	7	8
0	Ped Walk	0	7	7	0	0	7	0	0
1	Ped FDW	0	* 20 ~~17~~	* 42 ~~37~~	0	0	* 22 ~~19~~	0	0
2	Min Green	4	10	(1) 7 ~~4~~	(1) 7 ~~4~~	4	10	0	0
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extn	2.0	3.9	2.0	2.0	2.0	3.1	0.0	0.0
6	Max Gap	2.0	3.9	2.0	2.0	2.0	3.1	0.0	0.0
7	Min Gap	2.0	2.2 ~~0.2~~	2.0	2.0	2.0	2.2 ~~0.2~~	0.0	0.0
8	Max Limit	30	40	30	30	40	40	0	0
9	Max Limit 2	30	60	40	40	50	80 MM ~~60~~	0	0
A	Bus Adv	0	0	0	0	0	1/3/02 ~~5.0~~	7.0	0
B	Call to Phs	0	0	0	0	0	0	EFF 0	0
C	Reduce By	0.0	0.1	0.0	0.0	0.0	0.1	3/7/02 0.0	0.0
D	Every	0.0	0.8	0.0	0.0	0.0	1.0	0.0	0.0
E	Yellow	3.4 (1) ~~3.0~~	4.5	3.9 (1) ~~3.0~~	(1) 3.7 ~~3.0~~	(1) 3.4 ~~3.0~~	5.5	0.0	0.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0

Phase Timing - Bank 1
F + Phase + Row

EFF 1/4/02

	E		F	Row
RR-1 Delay	0	Permit	123456__	0
RR-1 Clear	0	Red Lock	_____	1
EV-A Delay	0	Yellow Lock	_____	2
EV-A Clear	0	Min Recall	_2___6__	3
EV-B Delay	0	Ped Recall	_____	4
EV-B Clear	0	Peds (View)	_23__6__	5
EV-C Delay	0	Rest In Wal	_____	6
EV-C Clear	0	Red Rest	_____	7
EV-D Delay	0	Dbl Entry	_____	8
EV-D Clear	0	Max Recall	_____	9
RR-2 Delay	0	Soft Recall	_____	A
RR-2 Clear	0	Max 2	_____	B
View EV Delay	---	Cond Serv	_____	C
View EV Clear	---	Ped Lock	12345678	D
View RR Delay	---	Yellow Start	_2___6__	E
View RR Clear	---	1st Phases	__3_____	F

Preempt Timing
F + E + Row

Phase Functions <F Page>
F + F + Row

*12/13/02 JD; ADJUSTED PED FDW USING 3.5 FPS WALK SPEED TO IMPROVE SAFETY FOR DISABLED PEDS.

DWH 6/11/03

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	4	C + 0 + 0
Zone Number	4	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	84	C + 0 + 3
QuicNet Channel	DIGI86:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

BUS PRIORITY SIGNAL WESTBOUND DRIVEN BY PHASE 6 PED YELLOW

Printed on 12/06/2000 10:40 AM

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	1.8		2I2U	1
2	0.0	0.0		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	4.0	0.0		3I5	16
7	0.0	0.0		4I6U	3
8	0.0	0.0		4I6L	7
9	0.0	0.0		4I7U	23
A	10.0	0.0		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	1.8		6J2U	2
2	0.0	0.0		6J2L	6
3	Bus Detect	0.0		6J3U	22
4	10.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	0.0	0.0		8J6U	4
8	0.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234___
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234___
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)
(These parameters are NOT downloaded.)

Group Assignment:
Field Master Assignment:

N/S Street Name: Mission C Rd
E/W Street Name: W/B Friar

Last Database Change:
System Ref. Number:

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
			Mission Center				Mission Center		W/B Friars
			↑			↰	↓		←
0	Ped Walk		7				7		7
1	Ped FDW		13				10		23
2	Min Green		10			4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		2.6			2.0	4.7		3.0
6	Max Gap		2.6			2.0	4.7		3.0
7	Min Gap		0.2			2.0	0.2		3.0
8	Max Limit		60			40	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		1.2				0.7		
E	Yellow		4.3			3.4	5.3		3.9
F	Red Clear		1.0			1.0	1.0		1.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	_2__56_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	_2___6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	_____8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

Start / Revert Times

F + 0 + E
F + 0 + F
F + C + O

Drop Number	6
Zone Number	6
Area Number	4
Area Address	70
QuicNet Channel	COM89

C + 0 + 0
C + 0 + 1
C + 0 + 2
C + 0 + 3
(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0
Manual Offset	0

C + A + 1
C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2__6_8	0

Lag Phases <C Page>

Downtime Flash	255 (minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234_

Disable Communication Ports
D + D + 9

Timing Sheet By: KT
Approved By: FLG
Drawing Number: 27009-20-D
Timing Implemented On:

ERSECTION: Mission Center Rd @ W/B Friars Rd

223 Progra.

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 01	E	1234567	1_____
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	_____8
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	_2_____

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	
C	EV-C Phases	_____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Prelimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3		1.8		2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7	10.0			8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

ERSECTION: Mission Center Rd @ W/B Friars Rd — 223 Program

Coordination Timing By: KT
Implemented On:

Row	Column # --->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name --->		MID	PM	AM					
0	Cycle Length		102	108	90		80			
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff		0	0	0		0			
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff		60	59	56		48			
6	Phase 6 - ForceOff		0	0	0		0			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		38	36	36		25			
9	Ring Offset									
A	Offset A		48	10	2		76			
B	Offset B									
C	Offset C									
D	Permissive		10	10	10		10			
E	Hold Release		255	255	255		255			
F	Ped Shift		0	0	0		10			

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	07 : 00	4	A	_23456_
1	09 : 00	E	A	_23456_
2	11 : 00	6	A	1____7
3	11 : 30	2	A	_23456_
4	14 : 00	3	A	_23456_
5	17 : 30	E	A	1234567
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E
Plan 1	
Plan 2	_2__6__
Plan 3	_2__6__
Plan 4	_2__6__
Plan 5	
Plan 6	_2__6__
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases
C + E + FUNCTION #

Row		F
0	Free Lag	_2__6_8
1	Plan 1 - Lag	
2	Plan 2 - Lag	_2__6_8
3	Plan 3 - Lag	_2__6_8
4	Plan 4 - Lag	_2__6_8
5	Plan 5 - Lag	
6	Plan 6 - Lag	_2__6_8
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: MISSION CENTER & W/B FRIARS

223 Proc n

Group Assignment: 4095
Field Master Assignment: None

N/S Street Name: MISSION CENTER
E/W Street Name: W/B FRIARS

Last Change:
Timing Sheet By: EFF
Approved By:

Drawing Number: 25843-12-D
System Ref. Num.: 525
Timing Implemented on: 12/5/01

N

Row	Column # ---->	MISSION CENTER				MISSION CENTER			W/B FRIARS
	Phase # ---->	1	2	3	4	5	6	7	8
			↑			←	↓		←
0	Ped Walk		7				7		5 ~~7~~
1	Ped FDW		12				9		24
2	Min Green		10			4	10		6 ~~4~~
3	Type ~~3~~ 1 limit								
4	Add/Veh								
5	Veh Extn		4.8			3 2.0	4.8		3.0
6	Max Gap		4.8			3 ~~2.0~~	4.8		3.0
7	Min Gap		4.8 ~~0.2~~			3 ~~2.0~~	0.2		3.0
8	Max Limit		60			40	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		~~0.1~~				0.1		
D	Every		~~0.6~~				0.6		
E	Yellow		4.0			3.4 ① ~~3.0~~	5.0		3.9 ② ~~3.0~~
F	Red Clear		1.0			1.0	1.0		1.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	_2__56_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	_2 ____
5	Peds (View)	_2___6_8
6	Rest in Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

① WH 10/8/03

EFF 12/5/01

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	6	C + 0 + 0
Zone Number	6	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	70	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

C + F + O		Row
Free Lag	_2___6_8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	10 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	~~0~~ 14	C + A + 1
Manual Offset	0	C + D + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

1

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00:01 ~~00 : 00~~	E 0	1234567	1
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest in Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TDC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(if set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	1 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2		1.8		2I2L	5
3		1.8		2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	2 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4		1.8		6J3L	26
5				6J4	10
6				7J5	15
7	10.0			8J6U	4
8	10	1.8		8J6L	8
9				8J7U	24
A		1.8		8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: MISSION CENTER Rd & WB FRIARS Rd

223 Program

		Plan								
	Column # --->	1	2	3	4	5	6	7	8	9
Row	Plan Name --->									
0	Cycle Length			70	75	70	80			
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff			0	0	0	0			
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff			50	55	50	48			
6	Phase 6 - ForceOff			0	0	0	0			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff			25	25	25	25			
9	Ring Offset									
A	Offset A			56	18	56	76			
B	Offset B									
C	Offset C									
D	Permissive			10	10	10	10			
E	Hold Release			255	255	255	255			
F	Ped Shift			10	10	10	10			

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: EFF/ WH
Implemented On: 3/15/2005

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	6	A	1234567
1	13 : 00	3	A	_23456_
2	15 : 00	4	A	_23456_
3	17 : 30	E	A	1234567
4	10 : 00	5	A	1_____7
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2		2	Plan 2 - Lag	
Plan 3	_2___6__	3	Plan 3 - Lag	_2___6_8
Plan 4	_2___6__	4	Plan 4 - Lag	_2___6_8
Plan 5	_2___6__	5	Plan 5 - Lag	_2___6_8
Plan 6	_2___6__	6	Plan 6 - Lag	_2___6_8
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: MISSION CENTER @ W/B FRIARS

223 Prog n

Coordination Timing By: EFF
Implemented On: 12/5/01

Row	Column # --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
	Plan Name --->									
0	Cycle Length			70	75					
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff	0	0	0	0					
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff		0	50 ~~0~~	55 ~~0~~					
6	Phase 6 - ForceOff	0		~~28~~	~~28~~					
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff			25 ~~50~~	25 ~~50~~					
9	Ring Offset									
A	Offset A			56	18 ~~4~~					
B	Offset B									
C	Offset C									
D	Permissive			10	10					
E	Hold Release			255	255					
F	Ped Shift			10 ~~0~~	10 ~~0~~					

Coordination <C Page>
C + Plan + ROW

Row	Time	Plan	Offset	Day of Week
0	11 : 00	3	A	1234567
1	15 : 00	4	A	23456
2	1730 ~~19 : 00~~	E	A	1234567
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	2 6 8
Plan 1	2 6	1	Plan 1 - Lag	2 6 8
Plan 2	2 5	2	Plan 2 - Lag	2 6 8
Plan 3	2 ~~5~~ 6	3	Plan 3 - Lag	2 6 8
Plan 4	2 ~~5~~ 6	4	Plan 4 - Lag	2 6 8
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

Coordination Timing By:	EFF
Implemented On:	12/5/01

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

18

INTERSECTION: E/B Friars Rd @ Mission Center Rd

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: Mission Cer
E/W Street Name: E/B Friars R

Last Database Change:
System Ref. Number:

N

Row	Column # --->	Phase 1	2	3	4	5	6	7	8
	Phase # --->		Mission Center		E/B Friars		Mission Center		
0	Ped Walk		7				7		
1	Ped FDW		12				13		
2	Min Green	4	10		10		10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.0		3.0		3.5		
6	Max Gap	2.0	4.0		3.0		3.5		
7	Min Gap	2.0	4.0		3.0		0.2		
8	Max Limit	30	60		40		60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By						0.1		
D	Every						0.9		
E	Yellow	3.4	4.3		3.9		4.8		
F	Red Clear	1.0	1.0		1.0		1.0		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	B
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12_4_6__	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	_2___6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4____	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	69	C + 0 + 3
QuicNet Channel	COM89	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0
	Lag Phases	<C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234_

Disable Communication Ports
D + D + 9

Timing Sheet By: KT
Approved By: FLG
Drawing Number: 27089-19-D
Timing Implemented On:

NTERSECTION: E/B FRIARS & MISSION CENTER

223 | qram

Group Assignment: 4095
Field Master Assignment: NONE

N/S S[illegible]ame: MISSION CENTER
E/W Street Name: E/B FRIARS

Last Database Change: 06/12/200[illegible]
System Ref. Number: 524
Drawing Number: 25843-11-D
Timing Implemented On: 12/5/01

Timing Sheet By: EFF
Approved By: [illegible]

Row	Column # --->	1	2	3	4	5	6	7	8
		MISSION CTR			E/B FRIARS		MISSION CTR		
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	0	0	7	0	0
1	Ped FDW	0	14	0	0	0	13	0	0
2	Min Green	~~8~~ 4	10	0	10 ~~4~~	0	10	0	0
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extn	3 ~~2.0~~	4.0	0.0	3.0	0.0	3.7	0.0	0.0
6	Max Gap	3 ~~2.0~~	4.0	0.0	3.0	0.0	3.7	0.0	0.0
7	Min Gap	3 ~~2.0~~	4.0	0.0	3.0	0.0	0.2	0.0	0.0
8	Max Limit	30	60	0	40	0	60	0	0
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Bus Adv	0	0	0	0	0	0	0	0
B	Call to Phs	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
D	Every	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
E	Yellow	3.4 ① ~~3.0~~	4.0	0.0	3.9 ① ~~3.0~~	0.0	4.6	0.0	0.0
F	Red Clear	1.0	1.0	0.0	1.0	0.0	1.0	0.0	0.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

① 10/8/03 WLT

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	0 ~~3~~
EV-B Delay	0
EV-B Clear	0 ~~3~~
EV-C Delay	0
EV-C Clear	0 ~~3~~
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12_4_6__	0
Red Lock	_____	1
Yellow Lock	~~3~~ 4	2
Min Recall	_2___6__	3
Ped Recall	_____	4
Peds (View)	_2___6__	5
Rest In Walk	_____	6
Red Rest	_____	7
Dbl Entry	_____	8
Max Recall	_____	9
Soft Recall	_____	A
Max 2	_____	B
Cond Serv	_____	C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4____	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	69	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	~~14~~ 0	C + A + 1
Manual Offset	0	C + B + 1

0 EFF 12/5/01

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

8

Row	1 Delay	3 Carry-over
0		
1		
2		
3		
4		
5		
6		
7	10.0	
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: MISSION CENTER Rd & EB FRIARS Rd

223 Prog. n

Row	Column # --->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name --->									
0	Cycle Length			70	75	70	80			
1	Phase 1 - ForceOff			40	46	40	50			
2	Phase 2 - ForceOff			0	0	0	0			
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff			19	21	19	26			
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff			0	0	0	0			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A			50	1	50	73			
B	Offset B									
C	Offset C									
D	Permissive			10	10	10	10			
E	Hold Release			255	255	255	255			
F	Ped Shift			0	0	0	0			

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: EFF/ WH
Implemented On: 3/15/2005

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	6	A	1234567
1	13 : 00	3	A	_23456_
2	15 : 00	4	A	_23456_
3	17 : 30	E	A	1234567
4	10 : 00	5	A	1____7
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2		2	Plan 2 - Lag	
Plan 3	_2___6__	3	Plan 3 - Lag	_2_4_6__
Plan 4	_2___6__	4	Plan 4 - Lag	_2_4_6__
Plan 5	_2___6__	5	Plan 5 - Lag	_2_4_6__
Plan 6	_2___6__	6	Plan 6 - Lag	_2_4_6__
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

ERSECTION: E/B Friars Rd @ Mission Center Rd

223 Program

Coordination Timing By: KT
Implemented On:

Row	Column # —> / Plan Name —>	Plan 1	2 MID	3 PM	4 AM	5	6	7	8	9
0	Cycle Length		102	108	90		80			
1	Phase 1 - ForceOff		25	32	20		50			
2	Phase 2 - ForceOff		0	0	0		0			
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		55	66	50		26			
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff		25	32	20		0			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A		45	107	6		73			
B	Offset B									
C	Offset C									
D	Permissive		25	32	20		10			
E	Hold Release		255	102	255		255			
F	Ped Shift		0	0	0		0			

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	07 : 00	4	A	_23456_
1	09 : 00	E	A	_23456_
2	11 : 00	6	A	1____7
3	11 : 30	2	A	_23456_
4	14 : 00	3	A	_23456_
5	17 : 30	E	A	1234567
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6__
Plan 1		1	Plan 1 - Lag	
Plan 2	_2_____	2	Plan 2 - Lag	1__4_6__
Plan 3	_2_____	3	Plan 3 - Lag	1__4_6__
Plan 4	_2_____	4	Plan 4 - Lag	1__4_6__
Plan 5		5	Plan 5 - Lag	
Plan 6	_2___6__	6	Plan 6 - Lag	_2_4_6__
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: E/B FRIARS & MISSION CENTER

223 Proc n

Row	Time	Function	Day of Week	Column F: Phases/Bits
0	00:01 ~~00 : 00~~	E 0	1234567	1
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Preimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: E/B FRIARS & MISSION CENTER

223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	0.0		2I2U	1
2	0.0	0.0		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	0.0	0.0		3I5	16
7	10.0	0.0		4I6U	3
8	0.0	0.0		4I6L	7
9	0.0	0.0		4I7U	23
A	0.0	1.8 ~~0.0~~		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	1.8		6J2U	2
2	0.0	0.0		6J2L	6
3	0.0	0.0		6J3U	22
4	0.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	0.0	0.0		8J6U	4
8	0.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.0	F+0+6
Short Failure	0.0	F+0+7

Power Cycle Correction (Default = 0.5)

TRAFFIC SIGNAL TIMING - PROGRAM 2005

8

4 N

PHASE TIMING — MISS CUT, E/B RAMP, MISS CUT

INTERVAL		1	2	3	4	5	6	7	8
WALK	0		7				7		
FLASH D/W	1		14				13		
MIN GREEN	2	4	10		4		10		
TYPE 3 DET	3								
ADD/VEH	4								
VEH EXTEN *	5	2.0	4.0		3.0		3.4		
MAX GAP *	6	2.0	4.0		3.0		3.4		
MIN GAP *	7	2.0	4.0		3.0		0.2		
MAX EXTEN	8	30	60		40		60		
MAX 2	9								
	A								
CALL TO PHASE	B								
REDUCE BY	C						0.1		
REDUCE EVERY	D						0.9		
YELLOW	E	~~3.0~~ 3.4	4.0		~~3.0~~ 3.90		4.0		
RED CLEAR	F	1.0	1.0		1.0		1.0		

PREEMPT	E	
RR1 DELAY		0
RR1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

KEYSTROKES: F + PHASE + LOCATION

MAX INITIAL (F-0-E) = 0

RED REVERT (F-0-F) = 5.0

ALL RED START (F-C-0) = 0

* MUST BE SAME FOR NON-DENSITY OPERATION

PHASE FUNCTION FLAGS

KEYSTROKES: F+F+FUNCTION#

FUNCTION		1	2	3	4	5	6	7	8
PERMIT	0	X	X		X		X		
RED LOCK	1								
YELLOW LOCK	2								
VEH RECALL	3		X				X		
PED RECALL	4								
PEDS	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVE	C								
RESERVED	D								
STARTUP	E		X				X		
FIRST PHASES	F				X				

OVERLAP TIMING

KEYSTROKE: F+ COLOR CODE+OVERLAP

	9 GREEN	C YELLO	D RED
OVERLAP A			
OVERLAP B			
OVERLAP C			
OVERLAP D			

PHASE SEQUENCES (CFO)

	1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		

DRAWING No. 25843-11-D

7-24-92

LOC: FRIARS RD (E/B RAMP) & MISSION GAT RD

DATE: T.D. 11:30 10-08-92

PAGE 1 OF 3

DETECTOR TIMES (332 CABINET)

X → SET DELAY, SET CARRY, OBS COUNT, OBS DELAY, OBS CARRY

Y ↓

Y	1	2	3	4	5	6	7	8	9	A
0	111	5J1	111	5J1	111	5J1	111	5J1	111	5J1
1	212U	6J2U	212U	6J2U 1.8	212U	6J2U	212U	6J2U	212U	6J2U
2	212L	6J2L	212L	6J2L	212L	6J2L	212L	6J2L	212L	6J2L
3	213U	6J3U	213U	6J3U	213U	6J3U	213U	6J3U	213U	6J3U
4	213L	6J3L	213L	6J3L			213L	6J3L	213L	6J3L
5	214	6J4	214	6J4			214	6J4	214	6J4
6	315	7J5	315	7J5	315	7J5	315	7J5	315	7J5
7	416U 10	8J6U	416U	8J6U	416U	8J6U	416U	8J6U	416U	8J6U
8	416L	8J6L	416L	8J6L	416L	8J6L	416L	8J6L	416L	8J6L
9	417U	8J7U	417U	8J7U	417U	8J7U	417U	8J7U	417U	8J7U
A	417L	8J7L	417L 1.8	8J7L			417L	8J7L	417L	8J7L
B	418	8J8	418	8J8			418	8J8	418	8J8
C	119U	5J9U	119U	5J9U	119U	5J9U	119U	5J9U	119U	5J9U
D	319L	7J9L	319L	7J9L	319L	7J9L	319L	7J9L	319L	7J9L
E										
F										

KEYSTROKES: D + X + Y

TIME OF DAY FEATURES

EVENT	TIME	FUNCT	DAY OF WEEK S	M	T	W	T	F	S
FLG 4-B-B 0	0830	3	X	X	X	X	X	X	X
1	1500	3	X	X	X	X	X	X	X
2									
3									
4									
5									
6									
7									
8									
9									
A									
B									
C									
D									
E									
F									

KEYSTROKES: 7+EVENT#

FUNCTION BY PHASE

	1	2	3	4	5	6	7	8
0	X	X				X		
1		X				X		
2								
3								
4								
5								
6								
7								
8								
9								
A								
B								
C								
D								
E								
F								

KEYSTROKES: D-F-EVENT #

TIME OF DAY LOCAL FUNCTION CODES

0 - PERMIT	7 - RED REST	E - 1 - LOCAL OVERIDE	F - TOD OUTPUTS
1 - RED LOCK	8 - DBL ENTRY	2 - PHASE BANK 2	1 - TOD OUT 1
2 - YELLOW OCK	9 - VEH MAX RCL	3 - PHASE BANK 3	2 - TOD OUT 2
3 - VEH RECALL	A - SOFT RECALL	7 - DET COUNT	3 - TOD OUT 3
4 - PED RECALL	B - MAX II EXT	8 - SPLIT MONITOR	4 - TOD OUT 4
5 - RESERVED	C - COND SERVE		
6 - REST IN WALK	D - TOD LAG Ø		

CURRENT TIME AND DATE

8-0 HOUR, MINUTE, DAY OF WEEK

8-1 DAY OF MONTH, YEAR, MONTH

8-F SECONDS

CONFIGURATION DATA

NOTE "E" KEY ENABLED (F-9-E = 0)

KEYSTROKES: E+E+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0	EXCLU PH								
1	RR1 GRN CL								
2	RR2 GRN CL								
3	RR2 LTD								
4									
5	OLA GOMIT								
6	OLB GOMIT								
7	OLC GOMIT								
8	OLD GOMIT								
9	OV FL YEL								
A	EMVEH A		X						
B	EMVEH B				X				
C	EMVEH C	X					X		
D	EMVEH D								
E	EXTRA	X		X	X				
F	TC SELECT								

EXTRA (E+E+E)
- 1-TBC TYPE
- 2-NEMA COOD
- 3-DAYLIGHT SAV
- 4-EV ADVANCE
- 6-SPECIAL EVENT
- 7-PRETIMED
- 8-SPLIT RING

TCSEL: (E+E+F)
- 1- SIMPLEX IN
- 2-2-WAY MODEM
- 3-7 WIRE IN
- 4-FLH/FREE
- 5-SIMPLEX OUT
- 7-7 WIRE OUT

ASSIGNS (E+F+F)
- 1-RT OVERLAP
- 2-TOD OUTPUTS
- 3-STEADY EV BEAC
- 4-FLASH EV BEAC

KEYSTROKES: E+F+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0									
1	RR OLAP H								
2	RR OLAP E								
3	RR OLAP C								
4	RR OLAP D								
5	PED2P		X						
6	PED6P						X		
7	PED4P								
8	PED8P								
9	FLH YELO								
A	OVERLAP A								
B	OVERLAP B								
C	OVERLAP C								
D	OVERLAP D								
E	RESTRICT								
F	ASSIGNS								

200SA

COORDINATION TIMING

KEYSTROKES: C+PLAN+FEATURE

FEATURE		PLAN 1	2	3	4	5	6	7	8	9	
CYCLE	0	60	50	65							0
FORCE1	1	40	25	40							1
FORCE2	2	—	—	—							2
FORCE3	3	/	/	/							3
FORCE4	4	20	13	20							4
FORCE5	5	/	/	/							5
FORCE6	6	—	—	—							6
FORCE7	7	/	/	/							7
FORCE8	8	/	/	/							8
RING OFFSET	9										9
OFFSET A	A	28	5	22							A
OFFSET B	B										B
OFFSET C	C										C
PERMISSIVE	D	10	5	10							D
HOLD RELEASE	E	255	255	255							E
ZONE OFFSET	F	0	0	0							F

ADDRESS (C-0-0)= 0

MANUAL PLAN: (C-A-1)= 0

AUTO = 0
PLAN = 1-9
FREE = 14
FLASH = 15

TRANSITION TYPE (C-D-D)= 0

SHORTWAY = 0
DWELL > 0

FORCEOFF SHIFT FOR PEDESTRIAN (C-D-F) 0

FOR OBSERVATION ONLY

MASTER PLAN (C-A-2)
CURRENT PLAN (C-A-3)
TOD PLAN (C-A-5)
MASTER CYCLE (C-A-0)
RING A CYCLE (C-B-0)
RING B CYCLE (C-D-0)
MINIMUM CYCLE (C-A-E)
MAXIMUM CYCLE (C-B-E)

TIME BASE COORDINATION

KEYSTROKES: 9+EVENT#

EVENT	TIME	PLAN	OFFSET	DAY OF WEEK S	M	T	W	T	F	S
0	0700	1	A		X	X	X	X	X	
1	0900	2	A		X	X	X	X	X	
2	1500	3	A		X	X	X	X	X	
3	1700	E	A	X	X	X	X	X	X	X
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

PLAN = 1...9 (DIAL)
E (FREE)
F (FLASH)

OFFSET = A...C

SYNCHRONIZED PHASES

KEYSTROKES: C+E+PLAN

PLAN		PHASE 1	2	3	4	5	6	7	8
0									
1	SYNC 1		X				X		
2	SYNC 2		X				X		
3	SYNC 3		X				X		
4	SYNC 4								
5	SYNC 5								
6	SYNC 6								
7	SYNC 7								
8	SYNC 8								
9	SYNC 9								
A	CPEDRCL								
B	NEMA HLD								
C	SCANMEM								
D	BADPROM								
E	TODFN E								
F	TODFN F								

PHASE SEQUENCES

KEYSTROKES: C+F+FUNCTION#

FUNCTION		PHASE 1	2	3	4	5	6	7	8
0	LAG 0 (FREE)		X		X		X		
1	LAG 1		X		X		X		
2	LAG 2		X		X		X		
3	LAG 3		X		X		X		
4	LAG 4								
5	LAG 5								
6	LAG 6								
7	LAG 7								
8	LAG 8								
9	LAG 9								
A	COOR MAX RECALL								
B	COOR LAG RECALL								
C	SYNC PHASES								
D	HOLD								
E	NEXT PHASE								
F	FORCE OFF								

INTERSECTION: Frairs Rd EB RampS at Mission CTR Rd

by: ARS Date: 3-9-94

(COORDINATION ONLY)

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INTERSECTION: FRIARS RD (W/B Ramps) & QUALCOMM WY, NORTH

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: QUALCOMM
E/W Street Name: FRIARS

Last Change:
Timing Sheet By: BJU
Approved By:

Drawing Number: 33251-4-D
Sys. Ref. Number:
Timing implemented on: 05/26/05 BUrias
10:45

Row	Column # --->	1	2	3	4	5	6	7	8
	Phase # --->		QUALCOMM				QUALCOMM		FRIARS
	N						video		
0	Ped Walk		7						7
1	Ped FDW		9						21
2	Min Green		10			4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		3.4			~~2.0~~ 3.4	~~2.0~~ 3.0		2.0
6	Max Gap		3.4			~~2.0~~ 3.4	~~2.0~~ 3.0		2.0
7	Min Gap		0.2			~~2.0~~ 0.2	~~2.0~~ 3.4		2.0
8	Max Limit		60			30	60		30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1			0.1			
D	Every		1.4			1.4			
E	Yellow		4.1			~~3.4~~ 3.9	3.9		3.9
F	Red Clear		1.0			1.0	1.0		1.0

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	_2__56_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_____8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	~~95~~
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4____

Phase Functions
F + F + Row
<F Page>

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

	F	Row
C + F + O		
Free Lag	_2_5~~6~~8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	~~8~~ 14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

INTERSECTION: FRIARS RD (W/B Ramps) & QUALCOMM WY, North — 223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	
C	EV-C Phases	_____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: FRIARS RD (W/B Ramps) & QUALCOMM WY, North — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1	10.0			6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C		1.8		5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	5678
E	– – – – – – – –	1234
F	– 25 26 27 28 – – –	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: FRIARS RD (W/B Ramps) & QUALCOMM WY, North

223 Program

Coordination Timing By: BJU
Implemented On:

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	80	100	100						
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff	0								
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff	0	40	40						
5	Phase 5 - ForceOff	0								
6	Phase 6 - ForceOff	54								
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff	33	40	40						
9	Ring Offset									
A	Offset A	10	90	5						
B	Offset B									
C	Offset C									
D	Permissive	10	10	10						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Tim e	Plan	Offset	Day of Week
0	~~06:30~~	1	A	23456
1	~~13:00~~	E	A	23456
2	~~16:00~~	1	A	23456
3	~~18:00~~	E	A	23456
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E
Plan 1	2 5
Plan 2	
Plan 3	
Plan 4	
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases
C + E + FUNCTION #

Row		F
0	Free Lag	XXXXXXXXXXXXXXXX
1	Plan 1 - Lag	2 5 8
2	Plan 2 - Lag	
3	Plan 3 - Lag	
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

20

INTERSECTION: FRIARS RD (E/B Ramps) & QUALCOMM WY, SOUTH

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: QUALCOMM
E/W Street Name: FRIARS

Last Change:
Timing Sheet By: BJU
Approved By:

Drawing Number: 33261-5-D
Sys. Ref. Number:
Timing implemented on: 05/26/05 BUrias
10:20

Row	Column # --->	1	2	3	4	5	6	7	8
		QUALCOMM			FRIARS		QUALCOMM		
	Phase # --->	1	2	3	4	5	6	7	8
	N								
0	Ped Walk				7		7		
1	Ped FDW				27		9		
2	Min Green	4	10		4		10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.4		2.0		2.0		
6	Max Gap	2.0	3.4		2.0		2.0		
7	Min Gap	2.0	0.2		2.0		2.0		
8	Max Limit	30	60		40		60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1						
D	Every		0.9						
E	Yellow	3.4	4.1		3.9		3.9		
F	Red Clear	1.0	1.0		1.0		1.0		

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_4_6__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	___4_6__
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___

Phase Functions
F + F + Row
<F Page>

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

Row		9	C	D	0
		Green Clear	Yellow Change	Red Clear	Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	~~0~~ 1
Manual Offset	0

C + A + 1
C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O

F	Row
_2_4_6__	0

Free Lag
Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

INTERSECTION: FRIARS RD (E/B Ramps) & QUALCOMM WY, South — 223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: FRIARS RD (E/B Ramps) & QUALCOMM WY, South

223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4	5.0			2I3L	25
5				2I4	9
6				3I5	16
7	~~10.0~~ 5.0			4I6U	3
8	10.0			4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: FRIARS RD (E/B Ramps) & QUALCOMM WY, South

223 Program

Row	Column # -->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name -->									
0	Cycle Length	80	100	120						
1	Phase 1 - ForceOff	54								
2	Phase 2 - ForceOff	0								
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff	39	40	40						
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff	0								
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		40	40						
9	Ring Offset									
A	Offset A	4	90	5						
B	Offset B									
C	Offset C									
D	Permissive	10	10	10						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: BJU
Implemented On:

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06:30	1	A	23456
1	13:30	E	A	23456
2	16:00	1	A	23456
3	18:00	E	A	23456
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	XXXXXXXXXXXXXXXX
Plan 1	2 4 6	1	Plan 1 - Lag	2 4 6
Plan 2		2	Plan 2 - Lag	
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases — C + E + FUNCTION #

Lag Phases <C Page> — C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

ERSECTION: FRIARS RD. & RIVER RUN DR.

Group Assignment:
Field Master Assignment:

N/S Street Name: RIVER RUN
E/W Street Name: FRIARS RD

Last Database Change:
System Ref. Number:

N

	FRIARS	private d/w	FRIARS	RIVER RUN

Phase

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		14		23		9		23
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh		2.0				2.0		
5	Veh Extn	2.0	7.2		3.5	2.0	7.0		2.5
6	Max Gap	2.0	7.2		3.5	2.0	7.0		2.5
7	Min Gap	2.0	2.0		3.5	2.0	2.0		2.5
8	Max Limit	30	60		40	40	60		30
9	Max Limit 2				65				
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.6				0.9		
E	Yellow	3.4	5.2		3.9	3.4	5.2		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_456_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	___4___8
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	46	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	1	C + 0 + 0
Zone Number	1	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	33	C + 0 + 3
QuicNet Channel	DIGI83:	(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WXH
Approved By:
Drawing Number:
Timing Implemented On:

INTERSECTION: FRIARS RD. & RIVER RUN DR. 223 gram

Row	Time	Function	Day of Week	Column F Phases/Bits
0	1600	B	_23456_	___4____
1	1700	B	_23456_	
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5__
B	EV-B Phases	___4___8
C	EV-C Phases	1____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

ERSECTION: FRIARS RD. & RIVER RUN DR. — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7	3.0			4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FRIARS RD. & RIVER RUN DR. 223 Program

Coordination Timing By: WXH
Implemented On:

Row	Column # --->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name --->			Pm Peak						
0	Cycle Length	125	135	135						
1	Phase 1 - ForceOff	70	70	20						
2	Phase 2 - ForceOff	0	0	0						
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff	50	40	70						
5	Phase 5 - ForceOff	70	70	20						
6	Phase 6 - ForceOff	0	0	0						
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff	50	40	70						
9	Ring Offset									
A	Offset A	91	27	27						
B	Offset B									
C	Offset C									
D	Permissive	12	13	13						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	1	A	_23456_
1	15 : 00	2	A	_23456_
2	16 : 00	3	A	_23456_
3	17 : 00	2	A	_23456_
4	20 : 00	E	A	1234567
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1	_2__6__	1	Plan 1 - Lag	_2_4_6_8
Plan 2	_2__6__	2	Plan 2 - Lag	_2_4_6_8
Plan 3	_2__6__	3	Plan 3 - Lag	1__45__8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

22

INTERSECTION: FENTON & FRIARS

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: FENTON PKWY
E/W Street Name: FRIARS RD

Last Database Change:
System Ref. Number:

N

Column # ---->		FRIARS		FENTON		FRIARS		FENTON	
		Phase							
Row	Phase # ---->	1	2	3	4	5	6	7	8
				OLA		OLB		OLC	
0	Ped Walk		7		7		7		7
1	Ped FDW		27		35		24		32
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	6.2	2.0	7.0	2.0	6.1	2.0	5.4
6	Max Gap	2.0	6.2	2.0	7.0	2.0	6.1	2.0	5.4
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.5		0.4		0.5		0.6
E	Yellow	3.4	5.2	3.4	3.9	3.4	5.2	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	2	C + 0 + 0
Zone Number	2	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	34	C + 0 + 3
QuicNet Channel	DIGI83:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> F + COLOR +

<D Page> D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WXH
Approved By: EFF
Drawing Number:
Timing Implemented On:

2

INTERSECTION: FENTON & FRIARS

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	_23____
B	Overlap B - Phases	___45___
C	Overlap C - Phases	_____67_
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_2_____
6	Overlap B - Green Omit	___4____
7	Overlap C - Green Omit	_____6__
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5__
B	EV-B Phases	___4__7_
C	EV-C Phases	1____6__
D	EV-D Phases	__3____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4	10.0			2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8				4I6L	7
9				4I7U	23
A	5.0			4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4	10.0			6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8				8J6L	8
9				8J7U	24
A	5.0			8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FENTON & FRIARS

223 Program

DJM 1
6/11/10

Coordination Timing By: WXH
Implemented On: 03/29/04

Row	Column # --->	Plan 1	2	3	4	5	6	7	8	9
	Plan Name --->									
0	Cycle Length	125	135					110	136	
1	Phase 1 - ForceOff	80	85					① 72 ~~69~~	79	
2	Phase 2 - ForceOff	0	0					0	0	
3	Phase 3 - ForceOff	26	21					53	61	
4	Phase 4 - ForceOff	66	65					37	40	
5	Phase 5 - ForceOff	80	85					67	81	
6	Phase 6 - ForceOff	0	0					0	0	
7	Phase 7 - ForceOff	26	21					17	17	
8	Phase 8 - ForceOff	66	65					① 53 ~~52~~	61	
9	Ring Offset									
A	Offset A	96	30					46	90	
B	Offset B									
C	Offset C									
D	Permissive	12	13					11	14	
E	Hold Release	255	255					255	255	
F	Ped Shift	6	0					① 11 ~~10~~	4	

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	1	A	_23456_
1	15 : 00	8 ~~2~~	A	_23456_
2	20 : 00	E	A	1234567
3	7:00	7	A	23456
4	9:00	E	A	1234567
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E
Plan 1	_2__6__
Plan 2	_2__6__
Plan 3	
Plan 4	
Plan 5	
Plan 6	
Plan 7	2 6
Plan 8	2 6
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases
C + E + FUNCTION #

Row		F
0	Free Lag	
1	Plan 1 - Lag	_2_4_6_8
2	Plan 2 - Lag	_2_4_6_8
3	Plan 3 - Lag	
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	2360
8	Plan 8 - Lag	2360
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

Lag Phases <C Page>
C + F + FUNCTION #

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

23

INTERSECTION: FRIARS & NORTHSIDE

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: NORTHSIDE DR
E/W Street Name: FRIARS RD

Last Database Change:
System Ref. Number:

N

Row	Column # ---->	1	2	3	4	5	6	7	8
		FRIARS			NORTHSIDE		FRIARS		NORTHSIDE
	Phase # ---->	1	2	3	4	5	6	7	8
		OLB						OLA	
0	Ped Walk		7				7		7
1	Ped FDW		22				20		30
2	Min Green	4	10	4	4 ~~7~~	4	10	4	7
3	Type 3 Limit				WH 8/10/05				
4	Add/Veh								
5	Veh Extn	2.0	5.4	2.0	8.5	2.0	5.3	2.0	5.6
6	Max Gap	2.0	5.4	2.0	8.5	2.0	5.3	2.0	5.6
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	35	60	30	15	30	60	30	25 ~~15~~
9	Max Limit 2								MT 4/13/05
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.6		0.4		0.6		0.6
E	Yellow	3.4	5.0	3.4	3.9	3.4	5.2	3.4	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2___6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	3	C + 0 + 0
Zone Number	3	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	35	C + 0 + 3
QuicNet Channel	DIGI83:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WXH
Approved By: EFF
Drawing Number:
Timing Implemented On: 4/12/05

3

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	_____67_
B	Overlap B - Phases	1_____8
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_____6__
6	Overlap B - Green Omit	_____8
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5__
B	EV-B Phases	___4__7_
C	EV-C Phases	1____6__
D	EV-D Phases	__3____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

JM1 TEMP
4/29/10

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4	10.0			2I3L	25
5				2I4	9
6				3I5	16
7	10.0	1.8	RT	4I6U	3
8			LT	4I6L	7
9		1.8	ADV	4I7U	23
A	10.0		THRU	4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4	10.0			6J3L	26
5				6J4	10
6				7J5	15
7		1.8		8J6U	4
8				8J6L	8
9				8J7U	24
A	10.0			8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

'TERSECTION: FRIARS @ NORTHSIDE

223 Program

Coordination Timing By:
Implemented On:

Row	Column # ---> / Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Cycle Length	125	135					110	136	
1	Phase 1 - ForceOff	83	80					76	80	
2	Phase 2 - ForceOff	0	0					0	0	
3	Phase 3 - ForceOff	26	26					17	25	
4	Phase 4 - ForceOff	0 48 ~~63~~	63					52	59	
5	Phase 5 - ForceOff	83	80					65	76	
6	Phase 6 - ForceOff	0	0					0	0	
7	Phase 7 - ForceOff	26	26					21	25	
8	Phase 8 - ForceOff	0 48 ~~63~~	63					52	59	
9	Ring Offset									
A	Offset A	0 90 ~~95~~	35					100	84	
B	Offset B									
C	Offset C									
D	Permissive	12	13					11	14	
E	Hold Release	255	255					255	255	
F	Ped Shift	0 10 ~~5~~	5					5	4	

0 JMI
4/29/10

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	1	A	_23456_
1	15 : 00	8	A	_23456_
2	20 : 00	E	A	1234567
3	07 : 00	7	A	_23456_
4	09 : 00	E	A	1234567
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1	_2__6__	1	Plan 1 - Lag	_2_4_6_8
Plan 2	_2__6__	2	Plan 2 - Lag	_2_4_6_8
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7	_2__6__	7	Plan 7 - Lag	_2_4_6_8
Plan 8	_2__6__	8	Plan 8 - Lag	_2_4_6_8
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: FRIARS & NORTHSIDE

223 Program

		Plan								
	Column # --->	1	2	3	4	5	6	7	8	9
Row	Plan Name --->									
0	Cycle Length	125	135							
1	Phase 1 - ForceOff	83	80							
2	Phase 2 - ForceOff	0	0							
3	Phase 3 - ForceOff	26	26							
4	Phase 4 - ForceOff	63	63							
5	Phase 5 - ForceOff	83	80							
6	Phase 6 - ForceOff	0	0							
7	Phase 7 - ForceOff	26	26							
8	Phase 8 - ForceOff	63	63							
9	Ring Offset									
A	Offset A	95	35							
B	Offset B									
C	Offset C									
D	Permissive	12	13							
E	Hold Release	255	255							
F	Ped Shift	5	5							

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: WXH
Implemented On: 03/29/04

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	1	A	_23456_
1	15 : 00	2	A	_23456_
2	20 : 00	E	A	1234567
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E
Plan 1	_2__6__
Plan 2	_2__6__
Plan 3	
Plan 4	
Plan 5	
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases

C + E + FUNCTION #

Row		F
0	Free Lag	
1	Plan 1 - Lag	_2_4_6_8
2	Plan 2 - Lag	_2_4_6_8
3	Plan 3 - Lag	
4	Plan 4 - Lag	
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

24

INTERSECTION: FRIARS RD WB & MISSION VILLAGE

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: MISSION VILLAGE
E/W Street: FRIARS RD WB

Last Database Change:

Timing sheets by: LEM
Approved by: EFF
Timing implemented on:

Row	Phase Numbers--->	1	2	3	4	5	6	7	8
						OLA	OLA		
0	Ped Walk				7	7	7		7
1	Ped FDW				5	5	5		22
2	Min Green			4	4	6	10		4
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension			2.0	2.0	2.0	3.7		2.0
6	Max Gap			2.0	2.0	2.0	3.7		2.0
7	Min Gap			2.0	2.0	2.0	0.2		2.0
8	Max Limit			30	30	60	60		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every						0.9		
E	Yellow Change			3.9	3.0	4.3	6.0		3.9
F	Red Clear			1.0		1.0	1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	3456_8	0
Red Lock		1
Yellow Lock		2
Min Recall	3 6	3
Ped Recall		4
View Set Peds	4 6 8	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	3 6	E
First Phases	4 8	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	8	<C/0+0+0>
Zone Number	8	<C/0+0+1>
Area Number	4	<C/0+0+2>
Area Address	40	<C/0+0+3>
QuicNet Channel	COM87:	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B

Manual Plan	0	<C/0+A+1>
Manual Offset	0	<C/0+B+1>

Manual Selection

Free Lag	3 6 8	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Notes: Split ring operation, OLA-Full Overlap.

INTERSECTION: FRIARS RD WB & MISSION VILLAGE

233 Program

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number	2							
1	Veh Set 1 - Phases	56							
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases	8							
5	Neg Ped Phases	8							
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change	4.3							
F	Red Clear	1.0							

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls	12345678	E
Start-up Ped Calls	12345678	F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 45 8
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	6
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C
EV-A	
EV-B	
EV-C	
EV-D	
RR-1 *	---
RR-2 *	---
SE-1	0
SE-2	0

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

	2
Phase 1	0
Phase 2	0
Phase 3	0
Phase 4	0
Phase 5	0
Phase 6	0
Phase 7	0
Phase 8	0

<C/5+2+Row>

Coordination Transition Minimums

Row
0
1
2
3
4
5
6
7
8
9
A
B
C
D
E
F

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

INTERSECTION: FRIARS RD WB & MISSION VILLAGE

233 Program

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0		39	45_7_	2	123 8		
1	6J2U	40	45_7_	6	123 8		1.8
2		41	45_7_	4	123 8		
3		42	45_7_	8	123 8		
4		43	45_7_	2	123 8		
5		44	45_7_	6	123 8		
6		45	45_7_	4	123 8		
7		46	45_7_	8	123 8		
8		47	67_	2	123 8		
9		48	67_	6	123 8		
A		49	67_	4	123 8		
B		50	67_	8	123 8		
C		55	45_7_	5	123 8		
D		56	45_7_	1 7_	123 8		
E		57	45_7_	7_	123 8		
F		58	45_7_	3	123 8		

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0		59	45_7_	5	123 8		
1		60	45_7_	1 7_	123 8		
2		61	45_7_	7_	123 8		
3		62	45_7_	3	123 8		
4		63	45_7_	2	123 8		
5		64	45_7_	6	123 8		
6		65	45_7_	4	123 8		
7		66	45_7_	8	123 8		
8		67	2	6	123 8		
9		68	2	6	123 8		
A		69	2	4	123 8		
B		70	2	8	123 8		
C		76	45_7_	2	123 8		
D		77	45_7_	6	123 8		
E		78	45_7_	4	123 8		
F		79	45_7_	8	123 8		

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	1	A
DELAY-B	1	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	#NAME?

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

INTERSECTION: FRIARS RD WB & MISSION VILLAGE

233 Program

Row	Time	Plan	Offset	Day of Week
0	16 : 00	2	A	_23456_
1	18 : 15	E	A	1234567
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week

INTERSECTION: FRIARS RD WB & MISSION VILLAGE

233 Program

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9	Row
0	Cycle Length		100								0
1	Phase 1 - ForceOff										1
2	Phase 2 - ForceOff										2
3	Phase 3 - ForceOff		0								3
4	Phase 4 - ForceOff		68								4
5	Phase 5 - ForceOff		67								5
6	Phase 6 - ForceOff		0								6
7	Phase 7 - ForceOff										7
8	Phase 8 - ForceOff		40								8
9	Ring Offset										9
A	Offset 1		39								A
B	Offset 2										B
C	Offset 3										C
D	Perm 1 - End		10								D
E	Hold Release		255								E
F	Zone Offset		0								F

Coordination - Timing Plans <C/1+Plan+Row>

Row		E	Row
0			0
1	Plan 1 - Sync		1
2	Plan 2 - Sync	_3__6_	2
3	Plan 3 - Sync		3
4	Plan 4 - Sync		4
5	Plan 5 - Sync		5
6	Plan 6 - Sync		6
7	Plan 7 - Sync		7
8	Plan 8 - Sync		8
9	Plan 9 - Sync		9
A	NEMA Sync		A
B	NEMA Hold		B
C			C
D			D
E	Coord Extra		E
F			F

Sync Phases <C/1+E+Row>

Row											Row
0	Ped Adjustment										0
1	Perm 2 - Start										1
2	Perm 2 - End										2
3	Perm 3 - Start										3
4	Perm 3 - End										4
5	Reservice Time										5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase		12345678								A
B	Perm 1 Ped Phase		12345678								B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Parameters <C/2+Plan+Row>

	F	Row
Free Lag	_3_6_8	0
Plan 1 - Lag		1
Plan 2 - Lag	_3__6_8	2
Plan 3 - Lag		3
Plan 4 - Lag		4
Plan 5 - Lag		5
Plan 6 - Lag		6
Plan 7 - Lag		7
Plan 8 - Lag		8
Plan 9 - Lag		9
External Lag		A
		B
		C
		D
		E
		F

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time		Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)		6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

'ERSECTION: FRIARS RD & MISSION VILLAGE DR (NORTH INT.) 223 Pro n

Group Assignment: None
Field Master Assignment: None

N/S Street Nam SION VILLAGE
E/W Street Name: FRIARS

Last Change:
Timing Sheet By: EFF
Approved By: MMh

Drawing Number: 25787-4-D
System Ref. Num.:
Timing implemented on: 11/30/00

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
						MISSION VILLAGE			FRIARS
						OLA	OLA		
0	Ped Walk				7	7	7		7
1	Ped FDW				5	5	5		21
2	Min Green			4	4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn			2.0	2.0	2.0	3.9		2.0
6	Max Gap			2.0	2.0	2.0	3.9		2.0
7	Min Gap			2.0	2.0	2.0	0.2		2.0
8	Max Limit			30	30	60	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By						0.1		
D	Every						0.8		
E	Yellow			4.2	3.0	3.0	6.0		4.2
F	Red Clear			1.0	1.0	1.0	1.0		1.0

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	3
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	3
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
P	Permit	3456_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	3 6
4	Ped Recall	
5	Peds (View)	456_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	3 6
F	1st Phases	8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	8	C + 0 + 0
Zone Number	8	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	40	C + 0 + 3
QuicNet Channel	DIGI 83:	(QuicNet)

Communication Addresses

Row		B Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A		4.0		2.0
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O

Free Lag	F	Row
	3 6 8	0

Lag Phases <C Page>

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

*NOTE: SPLIT RING OPERATION, OLA-FULL OVERLAP.

INTERSECTION: FRIARS RD & MISSION VILLAGE DR (NORTH INT.) 223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	____6__
6	Ped 6P	____6__
7	Ped 4P	___4____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	____56__
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	____5___
B	EV-B Phases	
C	EV-C Phases	_____6__
D	EV-D Phases	__3____8
E	Extra 1 Config. Bits	1_345__8
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3	10.0			6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: FRIARS RD & MISSION VILLAGE DR (NORTH INT.)

223 Program

Coordination Timing By: EFF
Implemented On: 11/30/00

Row	Column # --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
	Plan Name --->									
0	Cycle Length	110	100							
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff	74	68							
5	Phase 5 - ForceOff	72	67							
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff	43	40							
9	Ring Offset									
A	Offset A	25	39							
B	Offset B									
C	Offset C									
D	Permissive	15	15							
E	Hold Release	255	255							
F	Ped Shift	0	0							

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	16:00	2	A	_23456_
1	18:15	E	A	1234567
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	__3__6__8
Plan 1	__3__6__	1	Plan 1 - Lag	__3__6__8
Plan 2	__3__6__	2	Plan 2 - Lag	__3__6__8
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases — Lag Phases <C Page>

C + E + FUNCTION # — C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

25

ERSECTION: FRIARS RD & MISSION VILLAGE DR (SOUTH INT.)

223 Pr m

Group Assignment: None
Field Master Assignment: None

N/S Street Nar: SION VILLAGE
E/W Street Name: FRIARS/SD MISSION RD

Last Change:
Timing Sheet By: EFF
Approved By: MM
Drawing Number: 25787-4-D
System Ref. Num.:
Timing Implemented on: 11/30/00

N

Row	Column # --->	1	2	3	4	5	6	7	8
		MISSION VILLAGE		SD MISSSION	FRIARS				
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk	5	5	5					
1	Ped FDW	10	18	20					
2	Min Green	4	4	4	4				
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	3.0	3.0	3.0	3.0				
6	Max Gap	3.0	3.0	3.0	3.0				
7	Min Gap	3.0	3.0	3.0	3.0				
8	Max Limit	60	60	40	40				
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By								
D	Every								
E	Yellow	5.2	3.9 ~~3.0~~	4.4	4.2				
F	Red Clear	1.0	1.0	1.0	1.0				

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	3
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	3
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	1234
1	Red Lock	
2	Yellow Lock	
3	Min Recall	1
4	Ped Recall	
5	Peds (View)	123
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	1
F	1st Phases	4

Phase Functions
F + F + Row
<F Page>

WH 4/27/05

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	7	C + 0 + 0
Zone Number	7	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	39	C + 0 + 3
QuicNet Channel	DIGI 83:	(QuicNet)

Communication Addresses

C + F + O

	F	Row
Free Lag	23	0

Lag Phases <C Page>

Row		B Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

2

INTERSECTION: FRIARS RD & MISSION VILLAGE DR (SOUTH INT.) **223 Program**

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	1
7	Ped 4P	3
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	4
C	EV-C Phases	1
D	EV-D Phases	3
E	Extra 1 Config. Bits	1_345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

(This parameter is NOT downloaded)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: FRIARS RD & MISSION VILLAGE DR (SOUTH INT.)

223 Program

Coordination Timing By: EFF
Implemented On: 11/30/00

Row	Column # --> / Plan Name --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Cycle Length	110	100							
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff	31	30							
3	Phase 3 - ForceOff	84	79							
4	Phase 4 - ForceOff	51	49							
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A	0	14							
B	Offset B									
C	Offset C									
D	Permissive	10	10							
E	Hold Release	255	255							
F	Ped Shift	0	0							

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	16:00	2	A	_23456_
1	18:15	E	A	1234567
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_23_____
Plan 1	1_____	1	Plan 1 - Lag	_23_____
Plan 2	1_____	2	Plan 2 - Lag	_23_____
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases — Lag Phases <C Page>
C + E + FUNCTION # — C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

26

LOCATION: RTE 15 SB / FRIARS ROAD

CALTRANS C8 Version 3 DATE: 7/15/2010 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	1	1	1	1	1	1	1	CLK RST
1	DONT WALK	1	1	1	1	1	1	1	1	
2	MIN GREEN	5	14	1	5	5	13	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	1.0	2.0	0.9	1.0	2.0	2.0	0.9	0.9	
6	MAX GAP	1.0	2.0	0.9	1.0	2.0	2.0	0.9	0.9	
7	MIN GAP	1.0	2.0	0.9	1.0	2.0	2.0	0.9	0.9	
8	MAX EXT	35	45	9	60	40	45	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.2	5.0	3.0	3.6	3.2	5.0	3.0	3.0	MIN
F	RED	1.0	2.0	1.0	1.5	1.5	2.0	1.0	1.0	SEC
	PED XING FT									
	BIKE XING FT		110				94			

PRE-EMPTION E	
EV SET	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK				4					1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES									5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FC0	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 15 SB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 9/1/2009

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	**110**		**136**	**136**											LAG FZ FREE		**2**		**4**		**6**		**8**	0
1	FZ1 GRN FCTR	**33**		**24**	**20**									GAPOUT CP1		LAG FZ CP 1		**2**		**4**	**5**			**8**	1
2														GAPOUT CP2		LAG FZ CP 2									2
3	FZ3 GRN FCTR	**0**		**0**	**0**									GAPOUT CP3		LAG FZ CP 3		**2**		**4**		**6**		**8**	3
4	FZ4 GRN FCTR	**33**		**44**	**54**						PERM TIME			GAPOUT CP4		LAG FZ CP 4		**2**		**4**		**6**		**8**	4
5	FZ5 GRN FCTR	**23**		**42**	**36**						LAG OFFSET			GAPOUT CP5		LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6									6
7	FZ7 GRN FCTR	**0**		**0**	**0**						LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR	**0**		**0**	**0**						NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A	**53**		**119**	**119**						OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RE 15 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		
2		1
3		
4		
5		
6		
7		
8		

COO = **2**

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 15 SB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 5/4/2005 PAGE 3

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 15 SB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 9/1/2009

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
	HR	MIN	ACT	ON/ OFF	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0	**06**	**45**	**1**	**A**		**2**	**3**	**4**	**5**	**6**	
1	**09**	**00**	**E**			**2**	**3**	**4**	**5**	**6**	
2	**15**	**00**	**3**	**A**		**2**	**3**	**4**	**5**	**6**	
3	**17**	**00**	**4**	**A**		**2**	**3**	**4**	**5**	**6**	
4	**18**	**00**	**E**			**2**	**3**	**4**	**5**	**6**	
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET TOTAL SHEETS
11	SD	15	R10.2/R12.3	442

Enrique P Bernal 11-12-02
REGISTERED ELECTRICAL ENGINEER — DATE

5-12-03
PLANS APPROVAL DATE

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

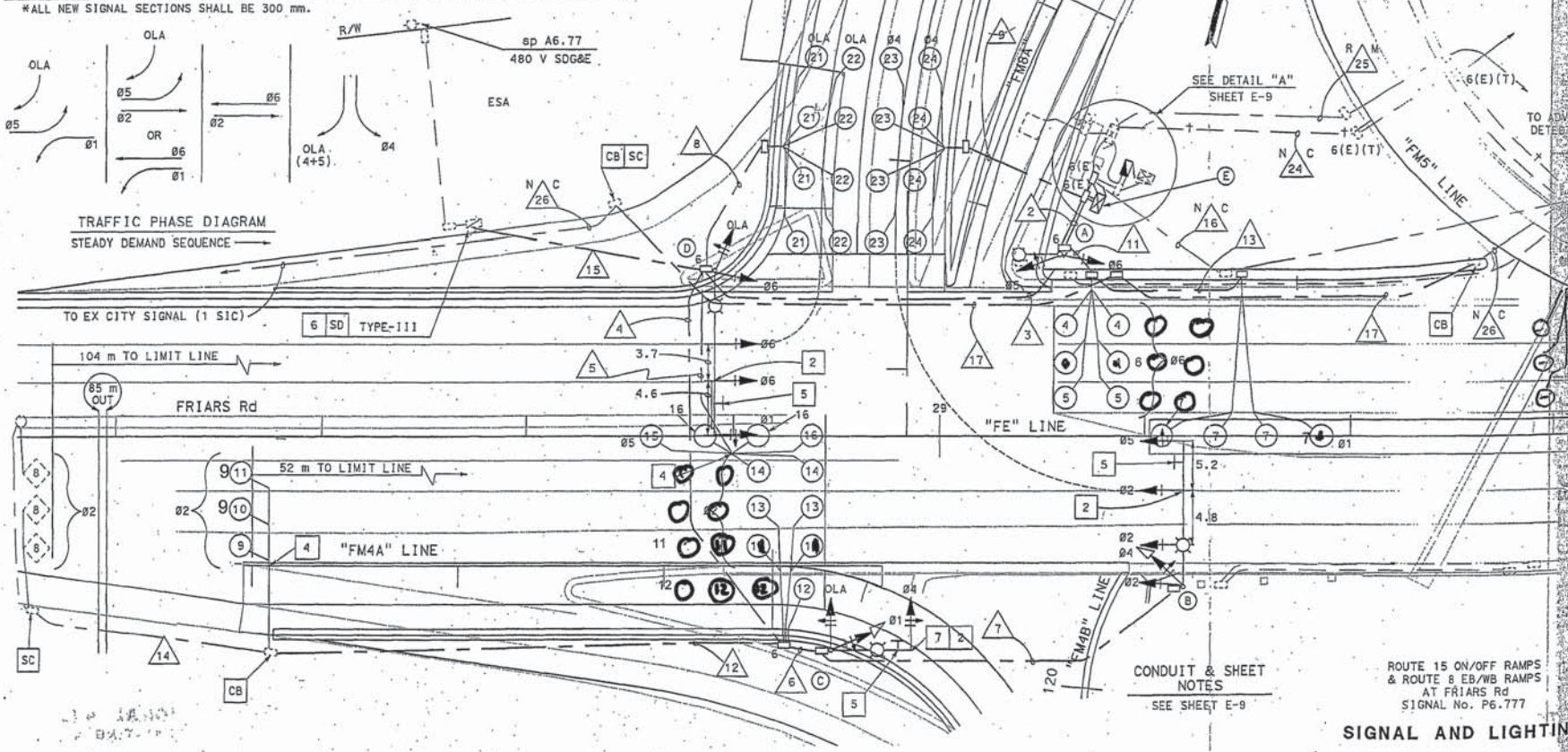
Caltrans now has a web site! To get to the web site, go to http://www.dot.ca.gov

REGISTERED PROFESSIONAL ENGINEER — E. P. BERNAL — NO. 13625 — ELECTRICAL — STATE OF CALIFORNIA

EQUIPMENT AND POLE SCHEDULE*

Loc	STANDARD TYPE	SMA (m)	LMA (m)	PLACEMENT DIMENSIONS A (m)	B (m)	SIGNAL MOUNTING AND PLACEMENT VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN PPB	REMARKS
A	TYPE 15	—	3.7	SEE STA	1.0	SV-2-TD	—	—	—	200 W HPS, PEU, E6.783
B	26-4-129	13.7	3.7	SEE STA	1.0	SV-2-TD	1-MAT 2-MAS	—	—	310 W HPS, E6.775
C	19-3-129	7.6	4.3	5.6	0.6	SV-2-TD	MAS-4B 7	—	—	200 W HPS, E6.769
D	29-5-129	15.2	3.7	4.6	0.6	SV-2-TD	1-MAT 2-MAS	—	—	310 W HPS, E6.779
E	STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY WITH BATTERY BACK-UP SYSTEM, CONSTRUCT FOUNDATION PER ES-3C.									

*ALL NEW SIGNAL SECTIONS SHALL BE 300 mm.



ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SHOWN

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

SCALE 1:200

ROUTE 15 ON/OFF RAMPS & ROUTE 8 EB/WB RAMPS AT FRIARS Rd SIGNAL No. P6.777

SIGNAL AND LIGHTING

E-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans

TRAFFIC ELECTRICAL

PROJECT ENGINEER: E. P. BERNAL

CALCULATED/DESIGNED BY: M. D. FULLENWIDER — DATE 5/02

CHECKED BY

REVISED BY — DATE REVISED

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => trstrk
DGN FILE => b06490u008.dgn

CU 11393 — EA 064901

LOCATION: **RTE 15 NB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 7/14/2010 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	1	1	1	1	1	1	1	CLK RST	EV SEL	0	PERMIT	1	2	3	4	5	6	7	8	0
1	DONT WALK	1	1	1	1	1	1	1	1		RR1 CLR	5	RED LOCK					5				1
2	MIN GREEN	1	1	1	1	5	14	1	1		EVA DLY	0	YEL LOCK									2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	0.9	0.9	0.9	0.9	2.0	2.0	0.9	0.9		EVB CLR	5	PED PHASES									5
6	MAX GAP	0.9	0.9	0.9	0.9	2.0	2.0	0.9	0.9		EVC DLY	0	RT OLA									6
7	MIN GAP	0.9	0.9	0.9	0.9	2.0	2.0	0.9	0.9		EVC CLR	5	RT OLB									7
8	MAX EXT	9	9	9	9	25	50	9	9		EVD DLY	0	DBL ENTRY									8
9	MAX 2					40				YR	EVD CLR	5	MAX 2 PHASES					5				9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR			MAX 3 PHASES									D
E	YELLOW	3.0	3.0	3.0	3.0	3.5	5.0	3.0	3.0	MIN			YEL START UP		2				6			E
F	RED	1.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	SEC			FIRST PHASE				4					F
	PED XING FT													1	2	3	4	5	6	7	8	
	BIKE XING FT						108															

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 15 NB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 9/1/2009

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	**110**													LAG FZ FREE		**2**		**4**		**6**		**8**	0
1	FZ1 GRN FCTR	**0**												GAPOUT CP1	LAG FZ CP 1		**2**		**4**		**6**		**8**	1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR	**0**												GAPOUT CP3	LAG FZ CP 3		**2**		**4**		**6**		**8**	3
4	FZ4 GRN FCTR	**0**									PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR	**35**									LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR	**0**									LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR	**0**									NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A	**64**									OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RTE 15 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = **1**

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 15 NB / FRIARS ROAD

CALTRANS C8 DATE 7/19/94 PAGE 3

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 15 NB / FRIARS ROAD**

CALTRANS C8 Version 3 DATE: 9/1/2009

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	**06**	**45**	**2**	**X**		**2**	**3**	**4**	**5**	**6**	
1	**18**	**00**	**2**			**2**	**3**	**4**	**5**	**6**	
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	**06**	**45**	**1**	**A**		**2**	**3**	**4**	**5**	**6**	
1	**09**	**00**	**E**			**2**	**3**	**4**	**5**	**6**	
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	15	R6.3/R10.5	81	107

REGISTERED CIVIL ENGINEER — 12-30-91 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER T. C. MARTIN No. 14728 Exp. 3-31-93 CIVIL STATE OF CALIFORNIA

AWG SIZE OR CABLE TYPE	PHASE	POLE OR CIRCUIT	CONDUIT SIZE AND RUN 2" (1)	3" (2)	EX 1½" (3)	EX 2 1½" (4)
NO. 14 CABLES						
CONDUCTORS 3 / CONDUCTORS 12		POLE - A	1	1		1
		B		1		1
		C			1	
TOTAL CABLES-3 CONDUCTOR/12 CONDUCTOR			1	2	1	2
6		SIC		1		1
		RM POWER (240V)		2		
		SIG POWER (240V)		2		2
TYPE B DLC	5	DETECTOR LOOPS			1	
	6		2	8		8
EV-DLC						
TOTAL CONDUCTORS / CABLES			5	15	2	13

CONDUIT NOTES

(5) - EXIST. 1½"C., 1 DLC

(6) - 1½"C., 4 LOOP WIRES

(6a) - 1½"C., 8 LOOP WIRES

(7) - 1½"C., 2 #6 RM POWER
2 #6 SIGNAL POWER
1 SIC
6 DLC

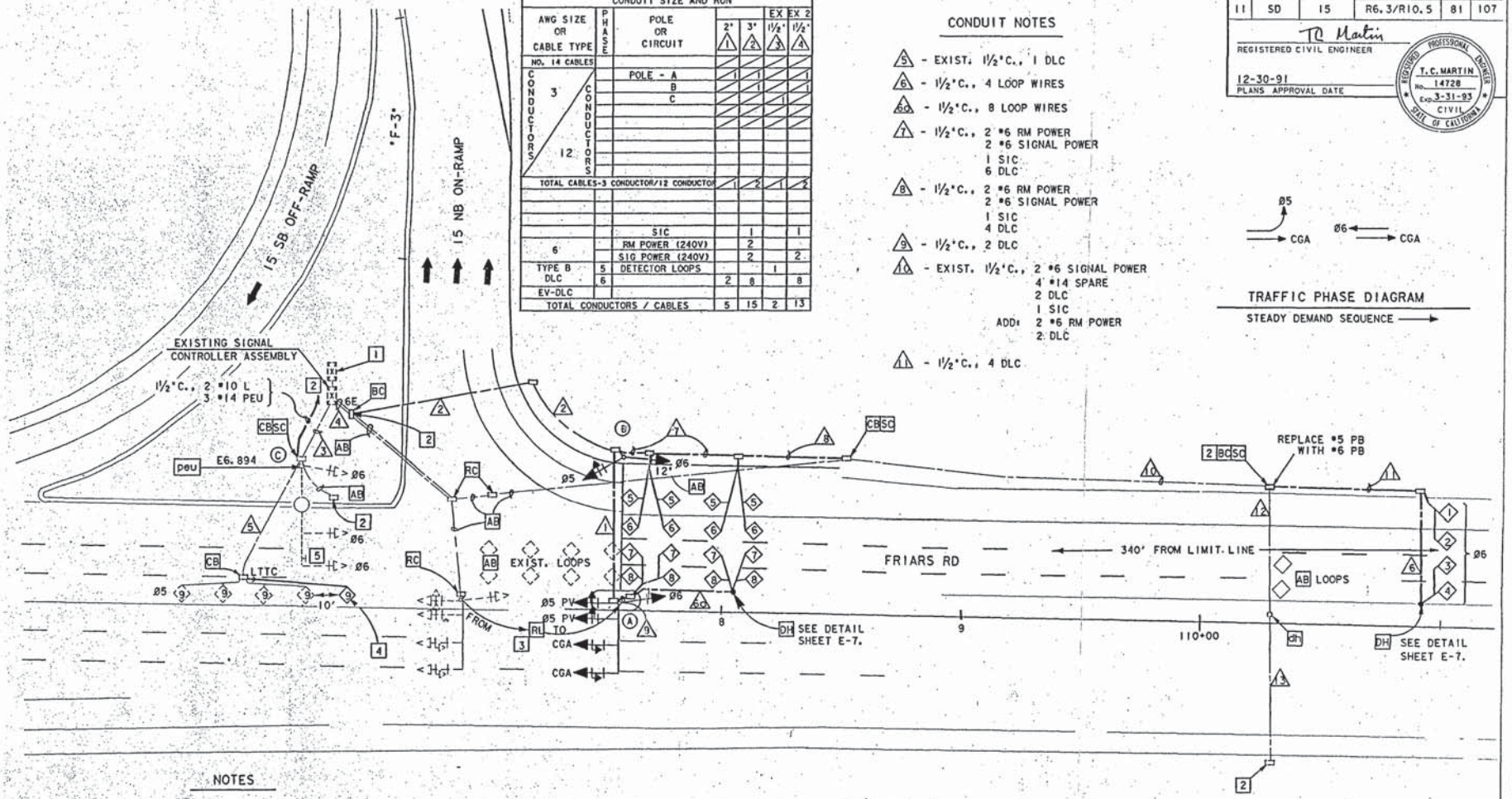
(8) - 1½"C., 2 #6 RM POWER
2 #6 SIGNAL POWER
1 SIC
4 DLC

(9) - 1½"C., 2 DLC

(10) - EXIST. 1½"C., 2 #6 SIGNAL POWER
4 #14 SPARE
2 DLC
1 SIC
ADD: 2 #6 RM POWER
2 DLC

(11) - 1½"C., 4 DLC

TRAFFIC PHASE DIAGRAM
STEADY DEMAND SEQUENCE →



NOTES

1. NEW RAMP METER CONTROLLER ASSY. SEE SHEET E-2.
2. SEE SHEET E-2 FOR CIRCUIT CONTINUITY.
3. - RL EXIST. TYPE 18-4-80 SIGNAL STANDARD WITH 30' SMA TO CENTER OF NEW ISLAND AS SHOWN.
4. - TYPE B DETECTOR LOOP. SEE ES-5B.
5. - DETAIL 'U' ES-6T REQUIRED.

(12) - EXIST. 1½"C., 2 #6 SIGNAL POWER
4 #14 SPARE
1 DLC
1 SIC
DISCONNECT 2 #6, 1 DLC
TAPE ENDS.

(13) - EXIST. 1½"C., 2 #6 SIGNAL POWER
4 #14 SPARE
1 SIC
DISCONNECT 2 #6
TAPE ENDS.

SIGNAL AND LIGHTING (MODIFY) LOCATION 1

SCALE: 1" = 20'

NOTE: THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

E-10

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 11206 | EA 167361

FORM DC-OE-92-PF (REV. 3/88)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC ELECTRICAL
PROJECT ENGINEER: DUY T. TON
CALCULATED/DESIGNED BY: HP
CHECKED BY: JFC
DATE
REVISED BY
DATE REVISED

28

INTERSECTION: FRIARS & RANCHO MSN

2 rogram

Group Assignment: 4104
Field Master Assignment: NONE

N/S Street Name: RANCHO MSN
E/W Street Name: FRIARS

Last Database Change: 07/3 1 14:32
Timing Sheet By: MBF
Approved By: mm
System Ref. Number: 570
Drawing Number: 27089-7-D
Timing Implemented On:

Row	Column # --->	1	2	3	4	5	6	7	8
		FRIARS RD					FRIARS RD		RANCHO MSN RD
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7						7
1	Ped FDW		22						25
2	Min Green	4	10				10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.1 (2) ~~3.6~~				5.0 (2) ~~3.6~~		2.0
6	Max Gap	2.0	4.1 (2) ~~3.6~~				5.0 (2) ~~3.6~~		2.0
7	Min Gap	2.0	0.2				0.2		2.0
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.8 (2) ~~0.9~~				0.6 (2) ~~0.9~~		4.1 (2)
E	Yellow	3.4 (1) ~~3.0~~	4.8				5.0 (2) ~~4.8~~		3.4 (1) ~~3.0~~
F	Red Clear	1.0	1.0				1.0		1.0

Phase Timing - Bank 1
F + Phase + Row

(2) MJS 7/8/15

<F Page>

Row		E
	RR-1 Delay	
	RR-1 Clear	
	EV-A Delay	
	EV-A Clear	
	EV-B Delay	
	EV-B Clear	
	EV-C Delay	
	EV-C Clear	
	EV-D Delay	
	EV-D Clear	
	RR-2 Delay	
	RR-2 Clear	
	View EV Delay	---
	View EV Clear	---
	View RR Delay	---
	View RR Clear	---

Proompt Timing
F + E + Row

Row		F
0	Permit	12___6_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	_____
5	Peds (View)	_2____8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

(1) WH 7/24/03
(2) WH 9/8/04

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	2	C + 0 + 0
Zone Number	2	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	18	C + 0 + 3
QuicNet Channel	DIGI82:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2___6_8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	_2____8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_2_____
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2_____
B	EV-B Phases	
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.0		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7	10.0			8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12_456_8
B	9 10 11 12 -- -- -- --	12_4____
C	13 14 15 16 17 18 19 20	12345_78
D	-- -- -- -- 21 22 23 24	____56_8
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_23_5___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FRIARS & RANCHO MSN

223 Program

Coordination Timing By: MBF
Implemented On: 6/13/00

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	120	105	120			110		136	
1	Phase 1 - ForceOff	63	54	58			22		59	
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff						22			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff	42	38	38			63		38	
9	Ring Offset									
A	Offset A	80	45	62			14		20	
B	Offset B									
C	Offset C									
D	Permissive	12	10	12			22		14	
E	Hold Release	255	255	255			255		255	
F	Ped Shift	0	0	0			0		0	

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 45	6 ~~1~~	A	_23456_
1	09 : 00	2	A	_23456_
2	15 : 00	8 ~~3~~	A	_23456_
3	18 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2__6_8
Plan 1	_2__6__	1	Plan 1 - Lag	_2__6_8
Plan 2	_2__6__	2	Plan 2 - Lag	_2__6_8
Plan 3	_2__6__	3	Plan 3 - Lag	_2__6_8
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6	2	6	Plan 6 - Lag	1 6 8
Plan 7		7	Plan 7 - Lag	
Plan 8	2 6	8	Plan 8 - Lag	2 6 8
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	_____
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

UPDATED COORDINATION - TLSP - 2010

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Longthon

Printed 1 ... 3:00 PM

29

INTERSECTION: FRIARS & SANTO

22 ·ogram

Group Assignment: 4104
Field Master Assignment: NONE

Street Name: SANTO
E/W Street Name: FRIARS

Last Database Change: 07/2. 14:14
Timing Sheet By: MBF
Approved By: mm
System Ref. Number: 571
Drawing Number: 25883-7-D
Timing Implemented On:

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
			FRIARS RD		SANTO RD		FRIARS RD		
					Phase				
			→		↔	4+5 ↓	←		
0	Ped Walk				5		7		
1	Ped FDW				32		19		
2	Min Green		10		4	4	10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		3.4		2.0	2.0	3.4		
6	Max Gap		3.4		2.0	2.0	3.4		
7	Min Gap		0.2		2.0	2.0	0.2		
8	Max Limit		60		30	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.9				0.9		
E	Yellow		5.5		3.4 (1) ~~3.0~~	3.4 (2) ~~3.0~~	4.8		
F	Red Clear		1.0		1.0	1.0	1.0		

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	_2_456__	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	___4_6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4____	F

Phase Functions <F Page>
F + F + Row

(1) WH 7/24/03

Max Initial	0	F + 0 + E
Rod Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	3	C + 0 + 0
Zone Number	3	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	19	C + 0 + 3
QuicNet Channel	DIGI82:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

2

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	45
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	4
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week

8-1 Day-of-Month, Year, Month

8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program

C + C + F = version

Remote Download

C + 0 + 4 = 1 -255

w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9	10.0			4I7U	23
A	10.0			4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				0J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0.0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FRIARS & SANTO

Coordination Timing By: MBF
Implemented On: 6/13/00

Row	Column # --->	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
	Plan Name --->									
0	Cycle Length	120	105	120						
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff	42	42	32 ~~42~~						
5	Phase 5 - ForceOff	62	58	62						
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff	20								
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A	63	36	110						
B	Offset B									
C	Offset C									
D	Permissive	12	10	12						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

WH 4/26/05

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 45	1	A	_23456_
1	09 : 00	2	A	_23456_
2	15 : 00	3	A	_23456_
3	18 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6__
Plan 1	_2___6__	1	Plan 1 - Lag	_2_4_6__
Plan 2	_2___6__	2	Plan 2 - Lag	_2_4_6__
Plan 3	_2___6__	3	Plan 3 - Lag	_2_4_6__
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Pod*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases — Lag Phases <C Page>

C + E + FUNCTION # — C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

30

INTERSECTION: FRIARS @ RIVERDALE

22' 'rogram

Group Assignment: 4104
Field Master Assignment: NONE

N/S Street Name: RIVERDALE
E/W Street Name: FRIARS

Last Database Change: 9/3/2009 10:23
System Ref. Number: 572

N

Row	Column # ---> / Phase # --->	1	2	3	4	5	6	7	8
		FRIARS RD			RIVERDALE ST		FRIARS RD		RIVERDALE ST
		Phase							
0	Ped Walk		7		5		7		5
1	Ped FDW		16		30		16		30
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.7		2.0	2.0	3.0		2.0
6	Max Gap	2.0	3.7		2.0	2.0	3.0		2.0
7	Min Gap	2.0	0.2		2.0	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.9				1.1		
E	Yellow	3.4	4.7		3.9	3.4	4.9		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_456_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	___4___8
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	4	C + 0 + 0
Zone Number	4	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	20	C + 0 + 3
QuicNet Channel	DIGI82:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: MC1
Approved By: EFF
Drawing Number:
Timing Implemented On: 6/25/2010

Row	Time	Function	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		
2		
3		1.8
4		
5		
6		
7	10.0	
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

31

INTERSECTION: FRIARS & MSN GORGE

Program

Group Assignment: 4104
Field Master Assignment: NONE

N/S Street Name: MSN GORGE
E/W Street Name: FRIARS

Last Database Change: 0[illegible]/25/2001 12:29
Timing Sheet By: MBF
Approved By: MM
System Ref. Number: 573
Drawing Number: 27089-10-D
Timing Implemented On:

Row	Column # --->	Msn Gorge Rd	Friars Rd	Msn Gorge Rd					
		Phase							
	Phase # --->	1	2	3	4	5	6	7	8
		↓ ↱	→	← ↱					
D	Ped Walk		7						
1	Ped FDW		18						
2	Min Green	4	10	4					
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.3	2.0					
6	Max Gap	2.0	3.3	2.0					
7	Min Gap	2.0	0.2	2.0					
8	Max Limit	30	60	30					
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1						
D	Every		1.0						
E	Yellow	3.4 ~~3.0~~	4.8	3.4 ~~3.0~~					
F	Red Clear	1.0	1.0	1.0					

Phase Timing - Bank 1
F + Phase + Row
<F Page>

AR 3/6/03

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	123
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	2
6	Rest in Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	2
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	2
F	1st Phases	3

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	5	C + 0 + 0
Zone Number	5	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	21	C + 0 + 3
QuicNet Channel	DIGI82:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	1 3	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				8
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communication Ports
D + D + 9

4

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	1 3
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	
C	EV-C Phases	1
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12_456_8
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____56_8
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_23_5___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: FRIARS & MSN GORGE

223 Program

Coordination Timing By: MBF
Implemented On: 6/13/01

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	120	105	120						
1	Phase 1 - ForceOff	21	21	21						
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff	46 ~~43~~	52	54						
4	Phase 4 - ForceOff									
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A	10 ~~110~~	94	97						
B	Offset B									
C	Offset C									
D	Permissive	12	10	12						
E	Hold Release	255	255	255						
F	Ped Shift	0	0	0						

Coordination <C Page>

C + Plan + ROW

3/1/00 DH

Row	Time	Plan	Offset	Day of Week
0	06 : 45	1	A	_23456_
1	09 : 00	2	A	_23456_
2	15 : 00	3	A	_23456_
3	18 : 00	E	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	1_3_____
Plan 1	_2_____	1	Plan 1 - Lag	1_3_____
Plan 2	_2_____	2	Plan 2 - Lag	1_3_____
Plan 3	_2_____	3	Plan 3 - Lag	1_3_____
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases — C + E + FUNCTION #

Lag Phases <C Page> — C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

INTERSECTION: Mission Center Rd @ Mission Center Ct

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: Mission Ce d
E/W Street Name: Mission Ce

Last Database Change:
System Ref. Number:

N

Mission Center | Mission Center Ct | Mission Center

Column # ---> Phase

Row	Phase # --->	1	2	3	4	5	6	7	8
		L	↑		⇄	↰	↓		
0	Ped Walk		7		7		7		
1	Ped FDW		11		22		16		
2	Min Green	4	10		4	4	10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	2.6		2.0	2.0	4.0		
6	Max Gap	2.0	2.6		2.0	2.0	4.0		
7	Min Gap	2.0	0.2		2.0	2.0	4.0		
8	Max Limit	30	60		40	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1						
D	Every		1.2						
E	Yellow	3.4	4.3		3.9	3.4	4.3		
F	Red Clear	1.0	1.0		1.0	1.0	1.0		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_4_6__
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4____

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	4	C + 0 + 0
Zone Number	4	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	68	C + 0 + 3
QuicNet Channel	COM89	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234_

Disable Communication Ports
D + D + 9

Timing Sheet By: KT
Approved By: FLG
Drawing Number: 27089-18-D
Timing Implemented On:

Row	Time	Function	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

ERSECTION: Mission Center Rd @ Mission Center

223 Program

Coordination Timing By: KT
Implemented On:

Row	Column # --> / Plan Name -->	Plan 1	2 MID	3 PM	4 AM	5	6	7	8	9
0	Cycle Length		102	108	90		80			
1	Phase 1 - ForceOff		23	26	18		49			
2	Phase 2 - ForceOff		0	0	0		0			
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		57	62	52		30			
5	Phase 5 - ForceOff		75	79	70		49			
6	Phase 6 - ForceOff		23	26	18		0			
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A		37	102	79		73			
B	Offset B									
C	Offset C									
D	Permissive		23	26	18		10			
E	Hold Release		255	255	255		255			
F	Ped Shift		0	0	0		0			

Coordination <C Page>
C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	07 : 00	4	A	_23456_
1	09 : 00	E	A	_23456_
2	11 : 00	6	A	1____7
3	11 : 30	2	A	_23456_
4	14 : 00	3	A	_23456_
5	17 : 30	E	A	1234567
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination
<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6__
Plan 1		1	Plan 1 - Lag	
Plan 2	_2_____	2	Plan 2 - Lag	1__4_6__
Plan 3	_2_____	3	Plan 3 - Lag	1__4_6__
Plan 4	_2_____	4	Plan 4 - Lag	1__4_6__
Plan 5		5	Plan 5 - Lag	
Plan 6	_2___6__	6	Plan 6 - Lag	_2_4_6__
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases
C + E + FUNCTION #

Lag Phases <C Page>
C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

33

INTERSECTION: QUALCOMM & RIO S.D.

22 [illegible]ogram

Group Assignment: 4097
Field Master Assignment: NONE

N/S Street Name: QUALCOMM
E/W Street Name: RIO S.D.

Last Database Change: 06/12/2001 9:36
Timing Sheet By: MBF
Approved By: mm
System Ref. Number: 548
Drawing Number: 27270-107-D
Timing Implemented On:

N

Row	Column # ----> / Phase # ---->	Phase 1	2	3	4	5	6	7	8
			QUALCOMM WY		RIO SAN DIEGO		QUALCOMM WY		RIO SAN DIEGO
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	24	0	29	0	26	0	29
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extn	2.0	4.0	2.0	3.0	2.0	4.5	2.0	3.0
6	Max Gap	2.0	4.0	2.0	3.0	2.0	4.5	2.0	3.0
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Bus Adv	0	0	0	0	0	0	0	0
B	Call to Phs	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
D	Every	0.0	0.8	0.0	1.1	0.0	0.7	0.0	1.1
E	Yellow	3.4 ~~3.0~~	4.1	3.4 ~~3.0~~	4.3	3.4 ~~3.0~~	4.0	3.4 ~~3.0~~	4.3
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	3
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	3
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	_____
2	Yellow Lock	_____
3	Min Recall	_____
4	Ped Recall	_____
5	Peds (View)	_2_4_6_8
6	Rest In Walk	_____
7	Red Rest	_____
8	Dbl Entry	_____
9	Max Recall	_____
A	Soft Recall	_2___6__
B	Max 2	_____
C	Cond Serv	_____
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

TWH 11/14/03

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	2	C + 0 + 0
Zone Number	2	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	50	C + 0 + 3
QuicNet Channel	DIGI84:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 00	0		
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	5
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	1.8		2I2U	1
2	0.0	3.6		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	0.0	0.0		3I5	16
7	0.0	1.8		4I6U	3
8	0.0	3.2		4I6L	7
9	0.0	0.0		4I7U	23
A	10.0	0.0		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	1.8		6J2U	2
2	0.0	3.6		6J2L	6
3	0.0	0.0		6J3U	22
4	0.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	0.0	1.8		8J6U	4
8	10.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	~~0.0~~	F+0+6	0.5
Short Failure	~~0.0~~	F+0+7	0.5

Power Cycle Correction (Default = 0.5)

MBF 8/3/01

INTERSECTION: FENTON Pkwy @ RIO SAN DIEGO Dr

223 Pr am

Group Assignment:
Field Master Assignment:

N/S Street Name: FENTON Pkwy
E/W Street Name: RIO SAN DIEGO Dr

Last Database Change: 12/9/02 10:38
System Ref. Number: 184

N

Column # --->		FENTON Pkwy	RIO SAN DIEGO	RIO SAN DIEGO		FENTON Pkwy		
		Phase						
Row	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7	7	7		7		
1	Ped FDW		16	23	23		19		
2	Min Green	4	7	4	4	4	7		
3	Type 3 Limit								
4	Add/Veh								
#	Veh Extn	2.0	①7.2 ~~4.4~~	2.0	2.3	2.0	①7.2 ~~4.4~~		
6	Max Gap	2.0	4.4	2.0	2.3	2.0	4.4		
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2		
8	Max Limit	30	60	40	40	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		
D	Every		①0.4 ~~0.7~~		1.4		①0.4 ~~0.7~~		
E	Yellow	3.4	4.3	3.9	4.2	3.4	4.4		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		
	Grade		0.0%	0.0%	0.0%		-1.0%		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	#
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		#
0	Permit	123456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
#	Peds (View)	_234_0_
6	Rest in Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	__3_____

Phase Functions <F Page>
F + F + Row

①WH 3/17/03

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel	DIGI56:	(QuicNet)

Communication Addresses

C + F + O	#	Row
Free Lag	_23__6__	0

Lag Phases <C Page>

Overlap Timing

	Row	# Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WH
Approved By: MM
Drawing Number:
Timing Implemented On:

INTERSECTION: FENTON Parkway & Rio San Diego Drive

223 Program

Row	00			Column F
	Time	Function	Day of Week	Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	__3_____
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	___4____
C	EV-C Phases	1____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

NTERSECTION: FENTON Parkway & Rio San Di) Drive — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7		1.8		4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.6)

36

INTERSECTION: FENTON @ NORTHSIDE

22. rogram

Group Assignment: 4097
Field Master Assignment: NONE

N/S Street Name: NORTHSIDE
E/W Street Name: FENTON

Last Database Change: 2/14/03 9:10
System Ref. Number: 547

N

NORTHSIDE FENTON MARKETPLACE NORTHSIDE

Row	Column # ⟶ / Phase # ⟶	Phase 1	2	3	4	5	6	7	8
					4+6				
0	Ped Walk		7	7	7		7		
1	Ped FDW		9	23	21		15		
2	Min Green	4	7	4	4	4	7		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	2.0	2.0	2.0	2.0	5.4		
6	Max Gap	2.0	2.0	2.0	2.0	2.0	5.4		
7	Min Gap	2.0	2.0	2.0	2.0	2.0	0.2		
8	Max Limit	30	60	40	40	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By						0.1		
D	Every						0.6		
E	Yellow	3.4	3.9	3.9	3.9	3.4	3.9		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		
	Grade		0.0%	-1.0%	-3.0%		-3.0%		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	123456__
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4____

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	5.0	F + C + O

Start / Revert Times

Drop Number	6	C + 0 + 0
Zone Number	6	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	38	C + 0 + 3
QuicNet Channel	DIGI83:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> F + COLOR +

<D Page> D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: WXW
Approved By: mm
Drawing Number:
Timing Implemented On:

INTERSECTION: FENTON @ NORTHSIDE

223 Program

Row	Time	Functio	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Leg Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	3
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	4 6
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	6
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	3
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

37

INTERSECTION: RANCHO MSN & SAN DIEGO MSN

22 rogram

Group Assignment: NONE
Field Master Assignment: NONE

N/S Street Name: RANCHO MSN
E/W Street Name: SAN DIEGO MSN

Timing Sheet By: MBF
Approved By: mm

Last Database Change: 06/08/2001 9:11
System Ref. Number: 569
Drawing Number: 20268-D
Timing Implemented On: 7/24/01

Row	Column # --->	San Diego Msn	Rancho Msn	San Diego Msn	Rancho Msn				
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk	0	10	0	7	0	7	0	10
1	Ped FDW	0	19	0	20	0	17	0	19
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extn	2.0	4.2	2.0	2.0	2.0	4.4	2.0	2.0
6	Max Gap	2.0	4.2	2.0	2.0	2.0	4.4	2.0	2.0
7	Min Gap	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
8	Max Limit	35	50	30	50	35	50	30	50
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Bus Adv	0	0	0	0	0	0	0	0
B	Call to Phs	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0
D	Every	0.0	0.7	0.0	0.0	0.0	0.7	0.0	0.0
E	Yellow	3.0	4.5	3.0	4.1	3.0	4.3	3.0	3.9
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	3
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	3
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	2 6
4	Ped Recall	
5	Peds (View)	12345678
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	2 6
F	1st Phases	4 8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	1	C + 0 + 0
Zone Number	1	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	17	C + 0 + 3
QuicNet Channel	DIGI82:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	2 4 6 8	0

Lag Phases <C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan	Manual Offset
0 = Automatic	0 = Automatic
1-9 = Plan 1-9	1 = Offset A
14 = Free	2 = Offset B
15 = Flash	3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 0

Disable Ports	234

Disable Communication Ports
D + D + 0

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 00	0		
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1-255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	1.8		2I2U	1
2	0.0	0.0		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	0.0	0.0		3I5	16
7	0.0	0.0		4I6U	3
8	0.0	0.0		4I6L	7
9	0.0	0.0		4I7U	23
A	10.0	0.0		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	1.8		6J2U	2
2	0.0	0.0		6J2L	6
3	0.0	0.0		6J3U	22
4	0.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	10.0	0.0		8J6U	4
8	0.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	~~0.0~~ 0.5	F+0+6
Short Failure	~~0.0~~ 0.5	F+0+7

Power Cycle Correction (Default = 0.5)

MGF 8/3/01

38

INTERSECTION: HAZARD CTR & MISSION CEN . _R

2: Program

Group Assignment: 4095
Field Master Assignment: NONE

N/S Street Name: MISSION CENTER
E/W Street Name: HAZARD CTR

Last Database Change:
Timing Sheet By: EFF
Approved By: MM
System Ref. Number: 522
Drawing Number: 27089-17-D
Timing Implemented On: 1/8/01

N

Column # --->	MISSION CTR		HAZARD CTR		MISSION CTR			
Phase # --->	Phase 1	2	3	4	5	6	7	8
Row								
0 Ped Walk	0	7	0	7	0	7	0	0
1 Ped FDW	0	14	0	25	0	19	0	0
2 Min Green	4	10	4	4	4	10	0	0
3 Type 3 Limit	0	0	0	0	0	0	0	0
4 Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5 Veh Extn	2.0	4.8	2.0	3.7	2.0	4.7	0.0	0.0
6 Max Gap	2.0	4.8	2.0	3.7	2.0	4.7	0.0	0.0
7 Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	0.0	0.0
8 Max Limit	20	60	20	40	40	60	0	0
9 Max Limit 2	0	0	0	0	0	0	0	0
A Bus Adv	0	0	0	0	0	0	0	0
B Call to Phs	0	0	0	0	0	0	0	0
C Reduce By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
D Every	0.0	0.6	0.0	0.9	0.0	0.7	0.0	0.0
E Yellow	3.0	4.3	3.0	3.0	3.0	4.2	0.0	0.0
F Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0

Phase Timing - Bank 1
F + Phase + Row
<F Page>

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	3
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	123456__
1	Red Lock	_____
2	Yellow Lock	_____
3	Min Recall	_2___6__
4	Ped Recall	_____
5	Peds (View)	_2_4_6__
6	Rest In Wal	_____
7	Red Rest	_____
8	Dbl Entry	_____
9	Max Recall	_____
A	Soft Recall	_____
B	Max 2	_____
C	Cond Serv	_____
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4____

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	3	C + 0 + 0
Zone Number	3	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	67	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

	F	Row
C + F + O		
Free Lag	_2_4_6_8	0
	Lag Phases	<C Page>

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan	Manual Offset
0 = Automatic	0 = Automatic
1-9 = Plan 1-9	1 = Offset A
14 = Free	2 = Offset B
15 = Flash	3 = Offset C

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

10

Printed on 12/06/2000 10:49 AM

INTERSECTION: HAZARD CTR & MISSION CENTER

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 00	0		
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)
(This parameter is NOT downloaded)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: HAZARD CTR & MISSION CEN ER

223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	1.8		2I2U	1
2	0.0	0.0		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	5.0	0.0		3I5	16
7	0.0	0.0		4I6U	3
8	10.0	0.0		4I6L	7
9	10.0	0.0		4I7U	23
A	0.0	0.0		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	1.8		6J2U	2
2	0.0	0.0		6J2L	6
3	0.0	0.0		6J3U	22
4	0.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	0.0	0.0		8J6U	4
8	0.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)
(These parameters are NOT downloaded.)

39

INTERSECTION: CAMINO DE LA REINA & AVENIDA DEL R 223 ›gram

Group Assignment:
Field Master Assignment:

N/S Street Name: AVENIDA DEL RIO
E/W Street Name: CAMINO DE LA REINA

Last Database Change:
System Ref. Number:

N

Row	Column # ----> / Phase # ---->	Phase 1	2	3	4	5	6	7	8
			→		↓ ↑	↑	←		
0	Ped Walk				7		7		
1	Ped FDW				9		17		
2	Min Green		7		4	4	7		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn		2.0		2.0	2.0	2.0		
6	Max Gap		2.0		2.0	2.0	2.0		
7	Min Gap		2.0		2.0	2.0	2.0		
8	Max Limit		60		40	30	60		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By								
D	Every								
E	Yellow		3.9		3.9	3.4	3.9		
F	Red Clear		1.0		1.0	1.0	1.0		

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	0
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	_2_456__	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	___4_6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4_____	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: LEM
Approved By: EFF
Drawing Number:
Timing Implemented On: 3/8/12

INTERSECTION: CAMINO DE LA REINA & AVENIDA DEL RIO

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 01	E	1234567	1
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	4 6
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	6
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 = Quicknet
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8	10.0			4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

40

TERSECTION: CMN DE LA REINA & MISSION CENTER

223 P ram

Group Assignment: 4096
Field Master Assignment: NONE

N/S S. ame: MISSION CENTER
E/W Street ame: CMN DE LA REINA

Last Database Change: 08/29/200
Timing Sheet By: EFF
Approved By: MM
System Ref. Number: 5
Drawing Number: 29103-8
Timing Implemented On: 10/17/01

Row	Column # --->	1	2	3	4	5	6	7	8
		MISSION CTR	CMN DE LA REINA			MISSION CTR		CMN DE LA REINA	
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		21 ~~22~~		26 ~~25~~		21		29
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.6 ~~4.4~~	2.0	3.1	2.0	4.8 ~~4.0~~	2.0	4.8 ~~3.3~~
6	Max Gap	2.0	4.6 ~~4.4~~	2.0	3.1	2.0	4.8 ~~4.0~~	2.0	4.8 ~~3.3~~
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	60	30	40	30	60	30	40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		0.7		1.0		0.7 ~~0.8~~		0.7 ~~1.0~~
E	Yellow	3.4 ~~3.0~~	4.2 ~~3.0~~	3.4 ~~3.0~~	3.9 ~~4.0~~	3.4 ~~3.0~~	4.0 ~~4.1~~	3.4 ~~3.0~~	3.9 ~~4.0~~
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

7/15/08
MC1

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	2	C + 0 + 0
Zone Number	2	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	66	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> **Overlap Timing** <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

INTERSECTION: CMN DE LA REINA & MISSION CENTER

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 01	E	1234567	1_____
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2_____
6	Ped 6P	_____6_
7	Ped 4P	___4___
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2_5___
B	EV-B Phases	___4_7_
C	EV-C Phases	1____6__
D	EV-D Phases	__3____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		1.8
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Dot. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: CMN DE LA REINA & MISSION CENTER

223 Proc[illegible]

Coordination Timing By: REJ
Implemented On: 11/25/98

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	120								
1	Phase 1 - ForceOff	87								
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff	18								
4	Phase 4 - ForceOff	53								
5	Phase 5 - ForceOff	87								
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff	18								
8	Phase 8 - ForceOff	53								
9	Ring Offset									
A	Offset A	14								
B	Offset B									
C	Offset C									
D	Permissive	10								
E	Hold Release	255								
F	Ped Shift	0								

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 30	1	A	1234567
1	19 : 00	E	A	1234567
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6_8
Plan 1	_2___6__	1	Plan 1 - Lag	_2_4_6_8
Plan 2		2	Plan 2 - Lag	
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: CMN DE LA REINA @ MISSION C TER 223 Proc

Coordination Timing By: EFF
Implemented On: 12/3/2001

Row	Column # —>	1	2	3	4	5	6	7	8	9
	Plan Name —>									
0	Cycle Length			140	150	140				
1	Phase 1 - ForceOff			103	111	96				
2	Phase 2 - ForceOff			0	0	0				
3	Phase 3 - ForceOff			25	24	25				
4	Phase 4 - ForceOff			64	75	64				
5	Phase 5 - ForceOff			88	101	96				
6	Phase 6 - ForceOff			0	0	0				
7	Phase 7 - ForceOff			25	36	28				
8	Phase 8 - ForceOff			64	75	64				
9	Ring Offset									
A	Offset A			86	6	110				
B	Offset B									
C	Offset C									
D	Permissive			10	10	10				
E	Hold Release			255	255	255				
F	Ped Shift			0	0	0				

Plan

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	3	A	_23456_
1	15 : 00	4	A	_23456_
2	19 : 00	E	A	1234567
3	10 : 00	5	A	1____7
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4_6_8
Plan 1		1	Plan 1 - Lag	
Plan 2		2	Plan 2 - Lag	
Plan 3	_2__6__	3	Plan 3 - Lag	_2_4_6_8
Plan 4	_2__6__	4	Plan 4 - Lag	_2_4_6_8
Plan 5	_2__6__	5	Plan 5 - Lag	_2_4_6_8
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

MISSION CENTER RD — CAMINO DE LA REINA

MISSION CENTER RD — CAMINO DE LA REINA

200 SA 1.e

PHASE TIMING

INTERVAL		1	2	3	4	5	6	7	8
WALK	0		7		7		7		7
FLASH D/W	1		22		25		20		29
MIN GREEN	2	4	10	4	7	4	10	4	7
TYPE 3 DET	3								
ADD PER VEH	4								
VEH EXTN *	5	2.0	2.7	2.0	3.1	2.0	3.4	2.0	3.8
MAX GAP *	6	2.0	2.7	2.0	3.1	2.0	3.4	2.0	3.8
MIN GAP *	7	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
MAX EXTN	8	30	60	30	40	30	60	30	40
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B								
REDUCE BY	C		0.1		0.1		0.1		0.1
EVERY	D		1.2		1.0		0.9		0.8
YELLOW	E	3.0	3.6	3.0	3.9	3.0	4.1	3.0	3.6
RED CLEAR	F	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

F + PHASE + LOCATION

* Must be the same for non-density operation

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY	0	8
EVD CLEAR	3	9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

MAX INITIAL (F-0-E) 0 RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0	X	X	X	X	X	X	X	X
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3								
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A		X				X		
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F				X				X

F + F + FUNCTION

OVERLAP TIMING

	LOAD SWITCH		GREEN 9	YELLOW C	RED D
		OLAP A			
		OLAP B			
		OLAP C			
		OLAP D			

D + 0 + OVERLAP

F + COLOR +

PHASE SEQUENCE

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		X

C + F + 0

MANUAL (C-A-1) 0

ADDRESS (C-0-0) 1

TURN-ON DATE: 11-15-1971

TIME: 11:30

DRAWING NO. D- 29103-8

LAST CHANGE: 11-25-1998

BY: REJ

LOCATION CAMINO DE LA REINA & MISSION CENTER RD

DETECTOR TIMES

Y \ X	SET DELAY 1	SET DELAY 2	SET CARRY 3	SET CARRY 4	OBS COUNT 5	OBS COUNT 6	OBS DELAY 7	OBS DELAY 8	OBS CARRY 9	OBS CARRY A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L 1.8	6J2L 1.8	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U 1.8	8J6U 1.8	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7	PHASE OR FUNCTION 1	2	3	4	5	6	7
0	0001	E	X	X	X	X	X	X	X	X						
1																
2																
3																
4																
5																
6																
7																
8																
9																

7 + EVENT # D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A		X			X			
EMVEH B	B				X			X	
EMVEH C	C	X					X		
EMVEH D	D			X					X
EXTRA	E	X		X	X				
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAVLIGHT
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5		X						
PED 6P	6						X		
PED 4P	7				X				
PED 8P	8								X
FLH YELLOW	9								
OVERLAP A	A								
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F								

E + F + INTERVAL

LOCATION	CAMINO DE LA REINA & MISSION CENTER RD

COORDINATION PARAMETERS

200 SA 1.e

PLAN

FEATURE		1	2	3	4	5	6	7	8	9
CYCLE	0	120								
FORCE 1	1	87								
FORCE 2	2	-								
FORCE 3	3	18								
FORCE 4	4	53								
FORCE 5	5	87								
FORCE 6	6	-								
FORCE 7	7	18								
FORCE 8	8	53								
RING OFFSET	9									
OFFSET A	A	14								
OFFSET B	B									
OFFSET C	C									
PERMISSIVE	D	10								
HOLD RELEASE	E	255								
ZONE OFFSET	F									

C + PLAN + FEATURE

TRANSITION TYPE
C - D - D = 0

SHORTWAY = 0
DWELL > 0

PEDESTRIAN FORCEOFF SHIFT
C - D - F = 0

FOR OBSERVATION ONLY

MASTER PLAN	C - A - 2
CURRENT PLAN	C - A - 3
T.O.D. PLAN	C - A - 5
MASTER CYCLE	C - A - 0
RING A CYCLE	C - B - 0
RING B CYCLE	C - D - 0
MINIMUM CYCLE	C - A - E
MAXIMUM CYCLE	C - B - E

PLAN TIMETABLE

EVENT	TIME	PLAN	OFFSET	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7
0	1130	1	A	X	X	X	X	X	X	X
1	1900	E	A	X	X	X	X	X	X	X
2										
3										
4										
5										
6										
7										
8										
9										
A										
B										
C										
D										
E										
F										

9 + EVENT

SYNC PHASES

		PHASE 1	2	3	4	5	6	7	8
	0								
SYNC 1	1		X				X		
SYNC 2	2								
SYNC 3	3								
SYNC 4	4								
SYNC 5	5								
SYNC 6	6								
SYNC 7	7								
SYNC 8	8								
SYNC 9	9								
CPEDRCL	A								
NEMA HLD	B								
SCANMEM	C								
BADPROM	D								
TODFN E	E								
TODFN F	F								

C + E + FUNCTION

PHASE SEQUENCES

		PHASE 1	2	3	4	5	6	7	8
	0								
LAG 1	1	X			X		X		X
LAG 2	2								
LAG 3	3								
LAG 4	4								
LAG 5	5								
LAG 6	6								
LAG 7	7								
LAG 8	8								
LAG 9	9								
COOR MAX RCL	A								
COOR LAG RCL	B								
SYNC PHASES	C								
HOLD	D								
NEXT PHASE	E								
FORCE OFF	F								

C + F + FUNCTION

Date: 11/25/1998

LOCATION Camino de la Reina & Mission Center Road

41

TERSECTION: Camino del Este & Camino de la Reina

223 Pr am

Group Assignment:
Field Master Assignment:

N/S Street Name: Camino de la Reina
E/W Street Name: Camino del Este

Last Database Change:
System Ref. Number:

N

Row	Column # ---> / Phase # --->	Phase 1	2	3	4	5	6	7	8
		↓	→		↓	↑	←		↑
0	Ped Walk		7		7		7		7
1	Ped FDW		21		27		23		25
2	Min Green	4	10		4	4	10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.1		2.4	2.0	3.0		2.4
6	Max Gap	2.0	3.1		2.4	2.0	3.0		2.4
7	Min Gap	2.0	0.2		0.2	2.0	0.2		0.2
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By								
D	Every		1.0		1.4		1.1		1.4
E	Yellow	3.4	4.0		3.9	3.4	4.1		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12_456_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	___4___8
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> F + COLOR +

<D Page> D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: FA1
Approved By: EFF
Drawing Number: 28204-12
Timing Implemented On: 10/25/13

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	___4____
C	EV-C Phases	1____6__
D	EV-D Phases	_____8
E	Extra 1 Config. Bits	1_34____
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

42

INTERSECTION: CMN DEL RIO (N) @ QUALCOMM

223 Program

Group Assignment: 4097
Field Master Assignment: NONE

N/S Street Name: QUALCOMM
E/W Street Name: CMN DEL RIO (N)

Last Database Change: 7/7/2003 6:00
System Ref. Number: 549

N

Row	Column # --->	1	2	3	4	5	6	7	8
		QUALCOMM		CAM DE LA REINA		QUALCOMM		CAM DEL RIO N.	
	Phase # --->	1	2	3	4	5	6	7	8
						4+5			
0	Ped Walk		7				7		7
1	Ped FDW		24				25		27
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit		EFF						
4	Add/Veh		6/11/09						
5	Veh Extn	2.0	2.8 ~~2.0~~	2.0	2.5	2.0	5.4	2.0	2.0
6	Max Gap	2.0	2.8 ~~2.0~~	2.0	2.5	2.0	5.4	2.0	2.0
7	Min Gap	2.0	0.2	2.0	0.2	2.0	0.2	2.0	0.2
8	Max Limit	30	50	30	30	30	50	30	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1		0.1		0.1		0.1
D	Every		1.1 ~~1.7~~		1.3		0.6		1.7
E	Yellow	3.4	4.7	3.4	4.1	3.4	3.9	3.4	4.7
F	Red Clear	1.0	2.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2__6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	___4___8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	1	C + 0 + 0
Zone Number	1	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	49	C + 0 + 3
QuicNet Channel	DIGI84:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: EFF
Approved By: MM
Drawing Number: 27270-25
Timing Implemented On: 7/7/2003

NOTE:
yellow yield operation - this signal phase 2 holds Cam Del Rio N. & I-8 phase 2.

INTERSECTION: CMN DEL RIO (N) @ QUALCOMM

223 Prc m

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	45
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0

D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A	10.0	
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		2.4
3		
4		
5		
6		
7		1.8
8	10.0	
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234___
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	___5678
E	– – – – – – – –	1234___
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

43

INTERSECTION: CAMINO DEL RIO N @ MISSION CITY ... 22 ...ogram

Group Assignment:
Field Master Assignment:

...treet Name: MISSION CITY PKWY
E/W Street Name: CAMINO DEL RIO N

Last Database Change: N/A
Timing Sheet By: JD
Approved By: mm
System Ref. Number:
Drawing Number: 23248-14-D
Timing Implemented On:

N

Row	Column # --->	CAMINO DEL RIO N					CAMINO DEL RIO N		MISSION CITY
	Phase # --->	1	2	3	4	5	6	7	8
		1+8		DUMMY					2+3
0	Ped Walk		7						7
1	Ped FDW		19						12
2	Min Green	4	7	4			7		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.2	2.0			3.2		2.0
6	Max Gap	2.0	3.2	2.0			3.2		2.0
7	Min Gap	2.0	0.2	2.0			0.2		2.0
8	Max Limit	30	60	50			60		50
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		1.0				1.0		
E	Yellow	3.4 ~~3.0~~	4.6	3.0			4.3		3.9 ~~3.0~~
F	Red Clear	1.0	1.0	1.0			1.0		1.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	
View EV Clear	
View RR Delay	
View RR Clear	

Preempt Timing
F + E + Row

Row		F
0	Permit	123__6_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	Peds (View)	_2_____8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	_3__8
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan	Manual Offset
0 = Automatic	0 = Automatic
1-9 = Plan 1-9	1 = Offset A
14 = Free	2 = Offset B
15 = Flash	3 = Offset C

C + F + O	F	Row
Free Lag	_2___6_8	

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

SEE NOTE ON DETECTOR ASSIGNMENTS: PHASE 3 SHALL BE CONNECTED TO PHASE DETECTORS.

@ JCM 2/27/09

INTERSECTION: CAMINO DEL RIO N @ MISSION CITY

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	1_____8
B	Overlap B - Phases	_23____
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_____8
6	Overlap B - Green Omit	_2_____
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J6	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

N

CAM. DEL RIO N. — WARD — CAM. DEL RIO N.

200 SA 1.e

PHASE TIMING

INTERVAL		1	2	3	4	5	6	7	8
WALK	0				7		7		
FLASH D/W	1				21		17		
MIN GREEN	2		10		4	4	10		
TYPE 3 DET	3								
ADD PER VEH	4								
VEH EXTN *	5		4.2		2.0	2.0	4.2		
MAX GAP *	6		4.2		2.0	2.0	4.2		
MIN GAP *	7		0.2		2.0	2.0	0.2		
MAX EXTN	8		60		40	40	60		
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B								
REDUCE BY	C		0.1			[illegible]	0.1		
EVERY	D		0.7	4.3	3.9	3.4 ①	0.7	5.0	
YELLOW	E		~~4.5~~		~~3.0~~	~~3.0~~	~~4.5~~		
RED CLEAR	F		1.0		1.0	1.0	1.0		

F + PHASE + LOCATION

* Must be the same for non-density operation

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

DJM
10/13/10

MAX INITIAL (F-0-E) 0 RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		1	2	3	4	5	6	7	8
PERMIT	0		X		X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3								
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A		X			X			
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X			X			
FIRST PHASES	F				X				

F + F + FUNCTION #

OVERLAP TIMING

	LOAD SWITCH	GREEN 9	YELLOW C	RED D
OLAP A				
OLAP B				
OLAP C				
OLAP D				

D + 0 + OVERLAP

F + COLOR + OVERLAP

PHASE SEQUENCE

	1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0)

TURN-ON DATE: 12-19-95

TIME: 14:15

DRAWING NO. D- 27457-4

LAST CHANGE: 12-04-1995

BY: MPS DRH

LOCATION CAMINO DEL RIO NORTH & WARD ROAD

DETECTOR TIMES

Y \ X	SET DELAY 1	SET DELAY 2	SET CARRY 3	SET CARRY 4	OBS COUNT 5	OBS COUNT 6	OBS DELAY 7	OBS DELAY 8	OBS CARRY 9	OBS CARRY A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L 10.	2I2L 1.8	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U 1.8	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U 10.	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S	M	T	W	T	F	S	PHASE OR FUNCTION 1	2	3	4	5	6	7
0																
1																
2																
3																
4																
5																
6																
7																
8																
9																

7 + EVENT # D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6				X				
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A		X			X			
EMVEH B	B				X				
EMVEH C	C						X		
EMVEH D	D								
EXTRA	E	X		X	X				
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAVLIGHT SAVINGS
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5								
PED 6P	6						X		
PED 4P	7				X				
PED 8P	8								
FLH YELLOW	9								
OVERLAP A	A				X	X			
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F	X							

E + F + INTERVAL

LOCATION CAMINO DEL RIO NORTH & WARD ROAD

45 OCATION: **RTE 8 WB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	1	7	1	7	CLK RST
1	DONT WALK	1	36	1	1	1	32	1	29	
2	MIN GREEN	13	15	1	1	13	15	14	14	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	1.0	2.0	0.9	0.9	1.0	2.0	2.0	2.0	
6	MAX GAP	1.0	2.0	0.9	0.9	1.0	2.0	3.0	3.0	
7	MIN GAP	1.0	2.0	0.9	0.9	1.0	2.0	1.0	1.0	
8	MAX EXT	25	45	9	9	25	45	25	25	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.7	4.1	3.0	3.0	3.7	4.1	4.1	4.1	MIN
F	RED	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		125				113		101	
	BIKE XING FT	95	121			94	130	105	113	

PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
EV SEL	0	PERMIT	1	2	3	4	5	6	7	8	0
RR1 CLR	5	RED LOCK					5			8	1
EVA DLY	0	YEL LOCK							7	8	2
EVA CLR	5	V RECALL		2				6			3
EVB DLY	0	P RECALL									4
EVB CLR	5	PED PHASES		2		4		6		8	5
EVC DLY	0	RT OLA									6
EVC CLR	5	RT OLB									7
EVD DLY	0	DBL ENTRY									8
EVD CLR	5	MAX 2 PHASES									9
MAX EV	255	LAG PHASES	READ ONLY								A
RR2 CLR	5	RED REST									B
		REST-IN-WALK									C
		MAX 3 PHASES									D
		YEL START UP		2				6			E
		FIRST PHASE							7		F
			1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 WB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 5/14/2007

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	115	125	130	125										LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	8	8	10	8									GAPOUT CP1	LAG FZ CP 1		2		4	5			8	1
2														GAPOUT CP2	LAG FZ CP 2		2		4	5			8	2
3	FZ3 GRN FCTR	0	0	0	0									GAPOUT CP3	LAG FZ CP 3		2		4	5			8	3
4	FZ4 GRN FCTR	0	0	0	0						PERM TIME			GAPOUT CP4	LAG FZ CP 4		2		4	5			8	4
5	FZ5 GRN FCTR	27	25	20	20						LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR	10	12	19	12						LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR	25	28	25	20						NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0									GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A	90	30	41	30						OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP *SYSTEM MASTER:*
CO4 LAST CP *WB OFF CABINTE*
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		
2		1
3		
4		
5		
6		
7		
8		

COO = 2

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 WB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 12/9/2009

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1					5				CP 1								
2	CP 2									CP 2					5				CP 2								
3	CP 3									CP 3					5				CP 3								
4	CP 4									CP 4					5				CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 WB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 3/10/2004

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	07	15	1	A		2	3	4	5	6	
1	08	30	2	A		2	3	4	5	6	
2	15	00	3	A		2	3	4	5	6	
3	18	30	E			2	3	4	5	6	
4	10	00	4	A	1						7
5	17	00	E		1						7
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

AWG SIZE	WIRE	CIRCUIT	1"	1½"	1"	2½"	1"	2½"	1"	1"	1"
NO. 14 CABLES	1	SIGNAL						J	J		J
	OLA			2	2		2				
	2				3			3	3		3
	8						3			3	3
	7		3	3	6					3	3
	5				3	3					
	OLB		2		2					2	2
	6					J					J
	7			3	3						
	8			3	3		3				
	2	PEDESTRIAN SIGNAL			2			2	2		2
	6					2					2
	8			2	2		2				
	2	PED. PUSHBUTTON	1		1			1	1		1
	6						1			1	1
	8				1	1	1				
	2	PPB COMMON	1		1			1	1		1
	6/8	PPB COMMON			1	1	1			1	1
		PEU					3				
		SPARES	3	3	3	3	3	3	3	3	3
TOTAL NO. 14			10	16	33	13	19	13	13	13	28
10		LIGHTING			2		2	2	2		2
		FLASHING BEACONS						2	2		2
8		SIGNAL COMMON	1	1	1	1	1	1	1	1	1
TYPE "B"	1					1					
	2							5	5		5
	5								1		1
	6					5					
	7									5	5
	8		4	3	7						
EV-DLC/INTERCONNECT CABLE											
TOTAL CONDUCTORS/CABLES			15	20	45	20	25	24	25	19	46

RC EXISTING CABLES, PULL ~~1 NEW DLC-1~~ Stranded Pair Loop Wire

AB EXISTING 1"C, 2-DLC

EXISTING 1½"C, 3-#6-120/240V SERVICE

EXISTING 2"C, 3-#6-120/240V SERVICE

EXISTING 1½"C, 3-#14 PEU
4-#10 LIGHTING
2-#6 SIGNAL SERVICE

EXISTING 1½"C, 4-DLC

EXISTING 1½"C, 4-DLC

EXISTING 1"C, 1-DLC

EXISTING 1½"C, 2-#10 FLASHERS
2-#10 LIGHTING
3-DLC
1-SIC

EXISTING 1½"C, 2-#10 FLASHERS
2-#10 LIGHTING
1-SIC

EXISTING 1½"C, 3-#10 FLASHERS AND LIGHTING
1-SIC

EXISTING 2"C, 1-SIC

2"C, 6-DLC
1-SIC

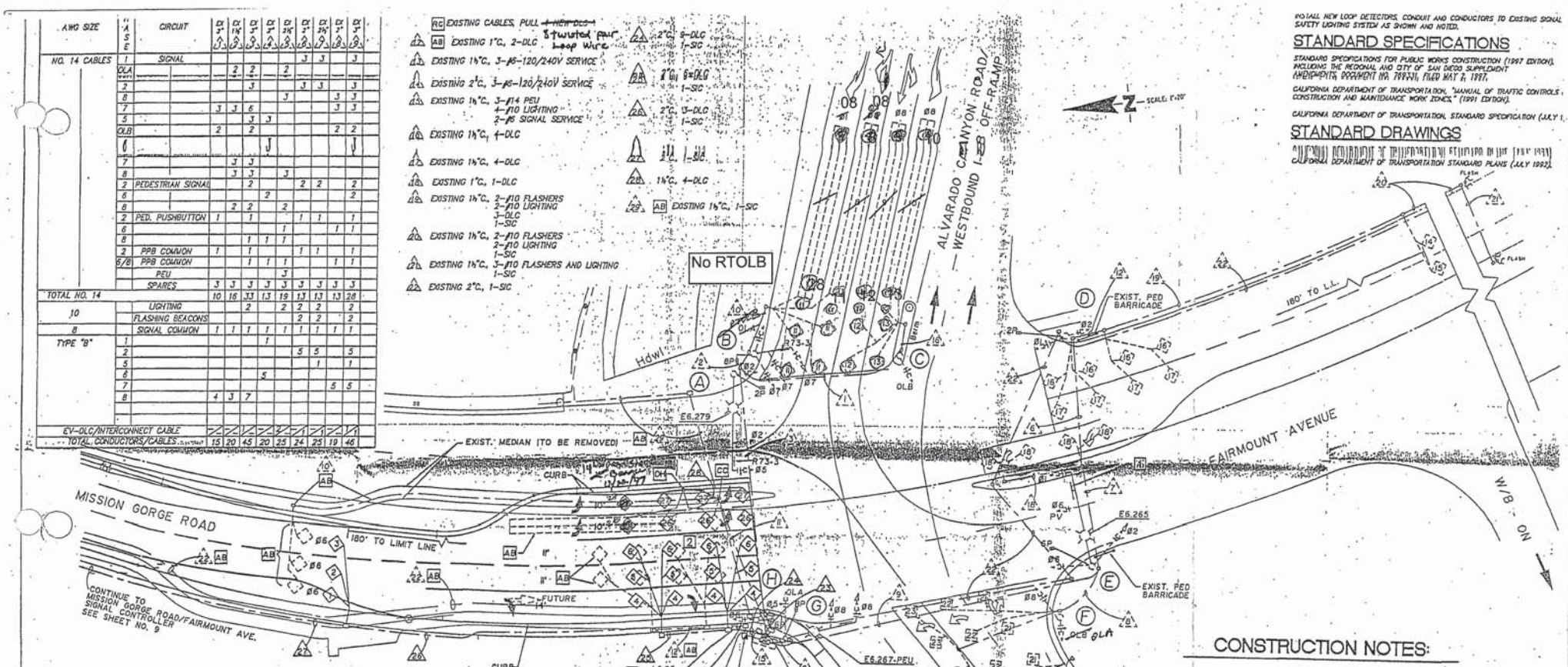
2"C, 6-DLC
1-SIC

2"C, 3-DLC
1-SIC

1½"C, 1-DLC

1½"C, 4-DLC

AB EXISTING 1½"C, 1-SIC



POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS (FROM E-WEST E-W) B.	E.	C.	SIGNAL MOUNTING AND PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN PPB/LOC.	REMARKS
(A)	26-4-80	40'	8'	-	EX'	EX'	SV-1-T (2)	MAT (4) MAS (7)	SP-1-T (8P)	(8P)	EXISTING STANDARD
(B)	16-3-80	15'	-	EX'	-	EX'	SV-2-TB (OLA) (7)	MAT (7) MAS (7)	SP-1-T (8P)	(8P)	EXISTING STANDARD
(C)	1-A	-	-	-	EX'	EX'	TV-1-T (OLB)	-	-	(8P)	EXISTING STANDARD
(D)	1-A (10')	-	-	-	EX'	EX'	TV-2-T (1) (2)	-	SP-1-T (8P)	(8P)	EXISTING STANDARD
(E)	26-4-80	40'	12'	-	EX'	EX'	SV-2-TA (2) (4)	MAT (1) MAS (4)	SP-1-T (8P)	(8P)	EXISTING STANDARD
(F)	1-A (10')	-	-	-	EX'	EX'	TV-2-T (OLB) (8)	-	-	(8P)	EXISTING STANDARD
(G)	19-4-80	30'	12'	-	5'	8'	SV-1-T (OLA)	MAT (6) MAS (6)	SP-1-T (8P)	(8P) (8P)	EXISTING STANDARD
(H)	1-A (10')	-	-	-	0	2'	TV-2-T (6) (5)	-	SP-1-T (8P)	(8P)	EXISTING STANDARD
(J)	EXISTING MODEL 170 CONTROLLER ASSEMBLY.										

PHASE DESIGNATIONS

NO RTOLB

(X) = PHASE NUMBER

RC EXISTING CABLES, PULL ~~1 NEW DLC-1~~ Stranded Pair Loop Wire

INSTALL NEW LOOP DETECTORS, CONDUIT AND CONDUCTORS TO EXISTING SIGNAL SAFETY LIGHTING SYSTEM AS SHOWN AND NOTED.

STANDARD SPECIFICATIONS

STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1997 EDITION), INCLUDING THE REGIONAL AND CITY OF SAN DIEGO SUPPLEMENT AMENDMENTS, DOCUMENT NO. 769931, FILED MAY 7, 1997.

CALIFORNIA DEPARTMENT OF TRANSPORTATION, "MANUAL OF TRAFFIC CONTROLS CONSTRUCTION AND MAINTENANCE WORK ZONES," (1991 EDITION).

CALIFORNIA DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATION (JULY 1,

STANDARD DRAWINGS

CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS (JULY 1992).

CONSTRUCTION NOTES:

1. REPLACE EXISTING R73-3 MAST ARM MOUNTED SIGN WITH AN R73-6 SIGN.
2. INSTALL NEW TYPE B LOOP DETECTORS AT 10' SPACING AS SHOWN.
3. NO SPLICES ALLOWED IN DETECTOR MANHOLE

REGISTERED PROFESSIONAL ENGINEER RICHARD H. CRAPTS No 34512 Exp. 9-30-99 CIVIL STATE OF CALIFORNIA

RCE TRAFFIC AND TRANSPORTATION ENGINEERING
RICHARD H. CRAPTS R.C.E. 34512
REGISTRATION EXPIRES 9-30-99

DESIGNER:
DRAWN:
CHECKED:
JOB NO.:

PRIVATE CONTRACT SEP 2

TRAFFIC SIGNAL INSTRUCTION PLAN FOR:
W/B ROUTE 8 OFF-RAMP AT FAIRMOUNT AVENUE

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING DEPARTMENT
SHEET 10 OF 28 SHEETS

5/22/97

28767-

LOCATION: **RTE 8 WB @ HOTEL CIRCLE NORTH (TAYLOR STREET)**

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	1	1	1	1	1	1	1	CLK RST	EV SEL	0	PERMIT	1	2	3	4	5	6	7	8	0
1	DONT WALK	1	1	1	1	1	1	1	1		RR1 CLR	5	RED LOCK	1	2	3	4	5	6	7	8	1
2	MIN GREEN	1	1	1	5	1	5	5	5		EVA DLY	0	YEL LOCK								8	2
3	TYPE 3 DET	0	0	0	0	0	60	0	0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	0.9	0.9	0.9	1.0	0.9	4.0	1.0	1.0		EVB CLR	5	PED PHASES									5
6	MAX GAP	0.9	0.9	0.9	1.0	0.9	6.0	1.0	1.0		EVC DLY	0	RT OLA									6
7	MIN GAP	0.9	0.9	0.9	1.0	0.9	2.0	1.0	1.0		EVC CLR	5	RT OLB									7
8	MAX EXT	9	9	9	25	9	35	25	25		EVD DLY	0	DBL ENTRY				4				8	8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES									9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	0.6	1.0	1.0	HR			MAX 3 PHASES									D
E	YELLOW	3.0	3.0	3.0	4.0	3.0	5.5	4.0	4.0	MIN			YEL START UP		2				6			E
F	RED	0.0	0.0	0.0	1.0	0.0	2.0	1.0	1.0	SEC			FIRST PHASE				4			7		F
	PED XING FT													1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: RTE 8 WB @ HOTEL CIRCLE NORTH (TAYLOR STREET)

CALTRANS C8 DATE: 9/11/95

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH															LAG FZ FREE		X		X		X		X	0
1	FZ1 GRN FCTR													GAPOUT CP1	0	LAG FZ CP 1									1
2														GAPOUT CP2	0	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	0	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	0	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	0	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	0	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	0	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	0	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	0	LAG FZ CP 9									9
A	OFFSET A										OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		X				X			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRP																								F

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER :
WB @ HOTEL CIRCLE

LOCATION	OFF	ON
1		X
2	X	
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 8 WB @ HOTEL CIRCLE NORTH (TAYLOR STREET)

CALTRANS C8 DATE 9/11/95

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 WB @ HOTEL CIRCLE NORTH (TAYLOR STREET)**

CALTRANS C8 DATE : 9/11/95 PAGE 4

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

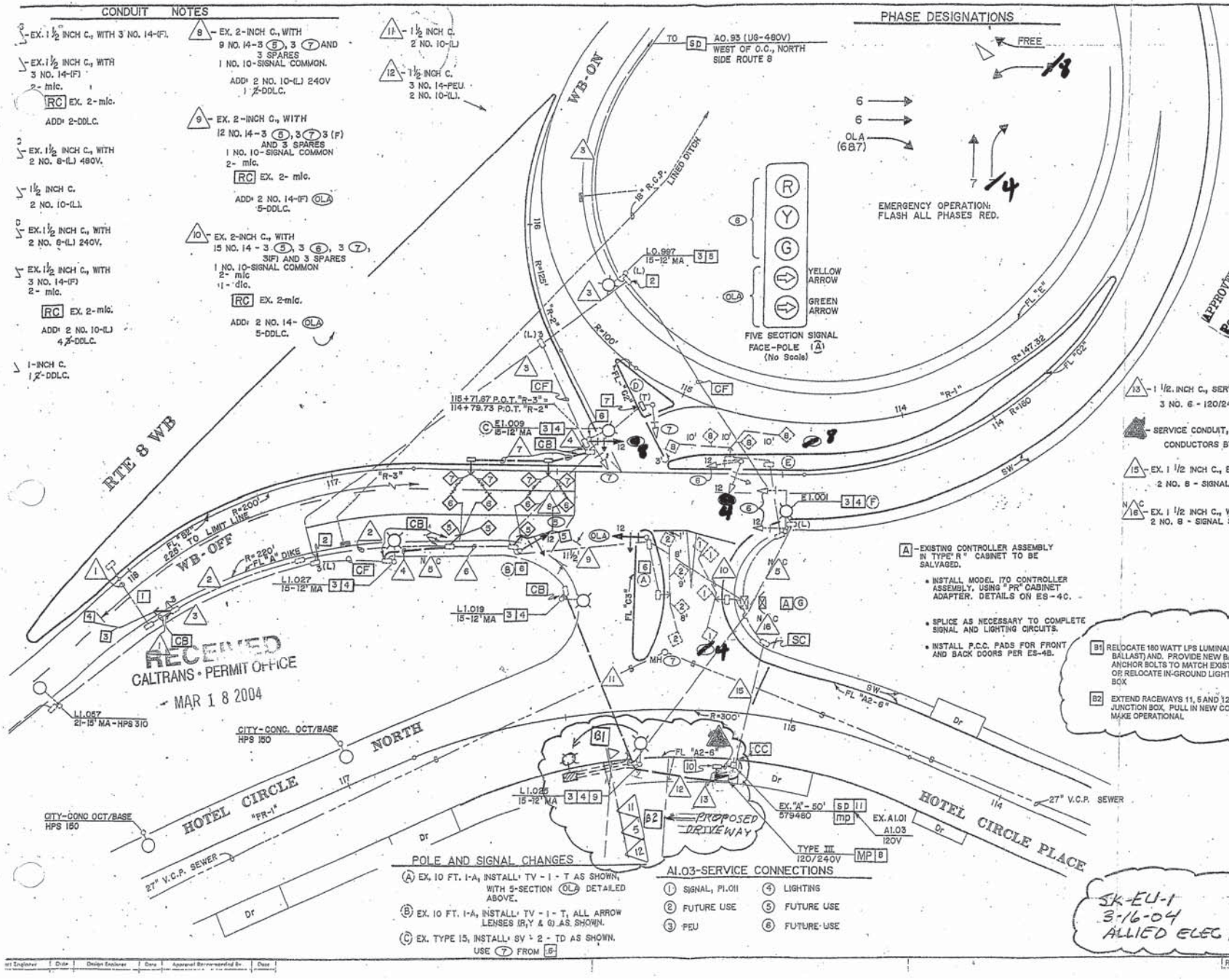
DIST.	COUNTY	ROUTE		POST MILE	SHEET NO.
11	SD	5, 8	R22.2/R33.9, 0.9/9.7	7	

H. Bragger Thrall
DISTRICT TRAFFIC ENGINEER — REGISTERED ELECTRICAL ENGINEER No. 50
DATE APPROVED December 23, 1985

CONDUIT NOTES

- EX. 1 1/2" INCH C., WITH 3 NO. 14-(F).
- EX. 1 1/2 INCH C., WITH 3 NO. 14-(F) 2- mlc. RC EX. 2-mlc. ADD: 2-DDLC.
- EX. 1 1/2 INCH C., WITH 2 NO. 8-(L) 480V.
- 1 1/2 INCH C. 2 NO. 10-(L).
- EX. 1 1/2 INCH C., WITH 2 NO. 8-(L) 240V.
- EX. 1 1/2 INCH C., WITH 3 NO. 14-(F) 2- mlc. RC EX. 2-mlc. ADD: 2 NO. 10-(L) 4 3/4-DDLC.
- 1-INCH C. 1 3/4-DDLC.
- (8) EX. 2-INCH C., WITH 9 NO. 14-3 (5), 3 (7) AND 3 SPARES 1 NO. 10-SIGNAL COMMON. ADD: 2 NO. 10-(L) 240V 1 3/4-DDLC.
- (9) EX. 2-INCH C., WITH 12 NO. 14-3 (5), 3 (7) 3 (F) AND 3 SPARES 1 NO. 10-SIGNAL COMMON 2- mlc. RC EX. 2- mlc. ADD: 2 NO. 14-(F) (OLA) 5-DDLC.
- (10) EX. 2-INCH C., WITH 15 NO. 14-3 (5), 3 (6), 3 (7), 3(F) AND 3 SPARES 1 NO. 10-SIGNAL COMMON 2- mlc 1- dlc. RC EX. 2-mlc. ADD: 2 NO. 14- (OLA) 5-DDLC.
- (11) 1 1/2 INCH C. 2 NO. 10-(L)
- (12) 1 1/2 INCH C. 3 NO. 14-PEU 2 NO. 10-(L).

PHASE DESIGNATIONS



POLE AND SIGNAL CHANGES

(A) EX. 10 FT. I-A, INSTALL: TV - I - T AS SHOWN, WITH 5-SECTION (OLA) DETAILED ABOVE.

(B) EX. 10 FT. I-A, INSTALL: TV - I - T, ALL ARROW LENSES (R, Y & G) AS SHOWN.

(C) EX. TYPE 15, INSTALL: SV - 2 - TD AS SHOWN. USE (7) FROM (6)

A1.03-SERVICE CONNECTIONS

1. SIGNAL, P1.011
2. FUTURE USE
3. PEU
4. LIGHTING
5. FUTURE USE
6. FUTURE USE

- (13) 1 1/2. INCH C., SERVICE 3 NO. 6 - 120/240V.
- SERVICE CONDUIT, 2-INCH. CONDUCTORS BY OTHERS.
- (15) EX. 1 1/2 INCH C., EXTENDED. 2 NO. 8 - SIGNAL SERVICE.
- (16) EX. 1 1/2 INCH C., WITH 2 NO. 8 - SIGNAL SERVICE.

- (A) - EXISTING CONTROLLER ASSEMBLY IN TYPE "R" CABINET TO BE SALVAGED.
  - INSTALL MODEL 170 CONTROLLER ASSEMBLY, USING "PR" CABINET ADAPTER. DETAILS ON ES-4C.
  - SPLICE AS NECESSARY TO COMPLETE SIGNAL AND LIGHTING CIRCUITS.
  - INSTALL P.C.C. PADS FOR FRONT AND BACK DOORS PER ES-4B.

- (B1) RELOCATE 180 WATT LPS LUMINAIRE (240 VOLT BALLAST) AND. PROVIDE NEW BASE WITH ANCHOR BOLTS TO MATCH EXISTING. REPLACE OR RELOCATE IN-GROUND LIGHT POLE JUNCTION BOX
- (B2) EXTEND RACEWAYS 11, 5 AND 12 TO LIGHT POLE JUNCTION BOX, PULL IN NEW CONDUCTORS AND MAKE OPERATIONAL

NOTES

1. (AB) EX. DETECTORS, PULL BOXES AND CONDUITS NOT USED IN THE NEW WORK, UNLESS SHOWN OTHERWISE.
2. (SC) AS REQUIRED TO MAINTAIN 480V (L) & SIGN ILLUM. CIRCUIT.
3. (RS) EX. HPS 200 LUMINAIRE. ADD: EXTENDED PIPE TENON AS DETAILED ON SHEET E-(1).
4. INSTALL: 180 WATT LPS LUMINAIRE. (240V BALLAST)
5. INSTALL: 180 WATT LPS LUMINAIRE. (480V BALLAST)
6. (RS) EX. SIGNALS AND MOUNTINGS AT 10 FT. (3-PV)
7. REPLACE EX. PULL BOX WITH "TRAFFIC BEARING" NO. 5 PULL BOX.
8. (MP) TYPE III SERVICE EQUIPMENT ENCLOSURE. WIRING DIAGRAM ON SHEET E-(1). SHEET E-1 LOCATED IN ROUTE 5 PLAN @ [illegible]
9. INSTALL: PEU (SIGN TYPE).
10. TERMINATING PULL BOX, NO. 6. MARKING AND LABELING AS REQUIRED BY UTILITY COMPANY.
11. (RC) EX. SERVICE EQUIPMENT.

APPROVED ENGINEERING PLANS
Permit # 1036450735
Date: MAR 19 04

AS BUILT
CONTRACT 11-189434
YEAR COMPLETED [illegible]

ROUTE 8 WB RAMPS AT HOTEL CIRCLE NO. & HOTEL CIRCLE PLACE IN SAN DIEGO

LOCATION 6
SIGNAL AND LIGHTING
EXISTING SIGNAL NO. P1.009 P1.011

SK-EU-1
3-16-04
ALLIED ELEC EG

0 20 40
SCALE IN FEET

SHEET E-7

REVISED — CU 11358 — WO 189431

48

INTERSECTION: FASHION VALLEY RD @ HOTEL CIRCLE N

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: FASHION VALLEY
E/W Street Name: HOTEL CIRCLE N

Column # --->		Phase 1	2	3	4	5	6	7	8
		HOTEL CIRCLE N			FASHION VALLEY		HOTEL CIRCLE N		
Phase # --->	Row								
			→		↓	↑	←		
	0	Ped Walk			7		7		
	1	Ped FDW			10		12		
	2	Min Green		4	4	4	4		
	3	Type 3 Limit							
	4	Add/Veh							
	5	Veh Extn		2.8	2.0	2.0	3.9		
	6	Max Gap		2.8	2.0	2.0	3.9		
	7	Min Gap		0.2	2.0	2.0	0.2		
	8	Max Limit		40	40	30	40		
	9	Max Limit 2							
	A	Bus Adv							
	B	Call to Phs				2			
	C	Reduce By		0.1			0.1		
	D	Every		1.1			0.8		
	E	Yellow		3.9	3.9	3.4	3.9		
	F	Red Clear		1.0	1.0	1.0	1.0		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

F + E + Row

	F	Row
Permit	_2_456__	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	___4_6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4____	F

F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6__	0
	Lag Phases	<C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: M2S
Approved By: FLG
Drawing Number: 27700-4-D
Timing Implemented On:

Sent to Street Div. for implementation
~~on~~ Mariana

INTERSECTION: FASHION VALLEY RD @ HOTEL CIRCLE N

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest in Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 = Bus Advance

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5	10.0	
6		
7		
8		
9		1.8
A		
B		
C		
D		
E		
F	---	---

Note: 336 Controller Cabinet

Detector Name	336 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	3I3U	21
	3I3L	25
	4I4U	9
	4I4L	16
	5I5U	3
	5I5L	7
	6I6U	23
	6I6L	27
	7I7U	11
	7I7L	18
	8I8U	20
	8I8L	
---	---	---

Row	2 Delay	4 Carry-over
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Delay & Carryover <D Page>

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

4

Hotel Circle — Fashion Valley — Hotel Circle

200 SA 1.e

PHASE TIMING

INTERVAL		1	2	3	4	5	6	7	8
WALK	0				7		7		
FLASH D/W	1				9		12		
MIN GREEN	2		4		4	4	4		
TYPE 3 DET	3								
ADD PER VEH	4								
VEH EXTN *	5		3.1		2.0	2.0	3.1		
MAX GAP *	6		3.1		2.0	2.0	3.1		
MIN GAP *	7		0.2		2.0	2.0	0.2		
MAX EXTN	8		40		40	30	40		
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B					2			
REDUCE BY	C		0.1				0.1		
EVERY	D		1.0				1.0		
YELLOW	E		3.9		4.2	3.0	3.9		
RED CLEAR	F		1.0		1.0	1.0	1.0		

F + PHASE + LOCATION

* Must be the same for non-density operation

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY		2
EVA CLEAR		3
EVB DELAY		4
EVB CLEAR		5
EVC DELAY		6
EVC CLEAR		7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

MAX INITIAL (F-0-E) 0 RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0		X		X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3								
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A		X				X		
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F				X				

F + F + FUNCTION

OVERLAP TIMING

	LOAD SWITCH		GREEN 9	YELLOW C	RED D
		OLAP A			
		OLAP B			
		OLAP C			
		OLAP D			

D + 0 + OVERLAP

F + COLOR +

PHASE SEQUENCE

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0)

TURN-ON DATE: 03-14-1978

TIME:

DRAWING NO. D- 27700-4-D

LAST CHANGE: 11-24-1998

BY: BJU

W.O. #620027

T.O. 10:00

LOCATION Fashion Valley Rd & Hotel Circle North

DETECTOR TIMES (Type 336 Cabinet)

Y \ X	SET DELAY 1	SET DELAY 2	SET CARRY 3	SET CARRY 4	OBS COUNT 5	OBS COUNT 6	OBS DELAY 7	OBS DELAY 8	OBS CARRY 9	OBS CARRY A
0	1I1U	5I5U	1I1U	5I5U	1I1U	5I5U	1I1U	5I5U	1I1U	5I5U
1	2I2U	6I6U	2I2U 1.8	6I6U 1.8	2I2U	6I6U	2I2U	6I6U	2I2U	6I6U
2	2I2L	6I6L	2I2L	6I6L	2I2L	6I6L	2I2L	6I6L	2I2L	6I6L
3										
4										
5	2I1L	6I5L	2I1L	6I5L	2I1L	6I5L	2I1L	6I5L	2I1L	6I5L
6	3I3U	7I7U	3I3U	7I7U	3I3U	7I7U	3I3U	7I7U	3I3U	7I7U
7	4I4U 10.	8I8U	4I4U	8I8U	4I4U	8I8U	4I4U	8I8U	4I4U	8I8U
8	4I4L	8I8L	4I4L	8I8L	4I4L	8I8L	4I4L	8I8L	4I4L	8I8L
9										
A										
B	4I3L	8I7L	4I3L	8I7L	4I3L	8I7L	4I3L	8I7L	4I3L	8I7L
C										
D										

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S 1	M 2	T 3	W 4	T 5	F 6	S 7
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7	8

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5				X				
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A								
EMVEH B	B								
EMVEH C	C								
EMVEH D	D								
EXTRA	E	X		X					
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAVLIGHT
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5								
PED 6P	6						X		
PED 4P	7				X				
PED 8P	8								
FLH YELLOW	9								
OVERLAP A	A				X	X			
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F	X							

E + F + INTERVAL

LOCATION	Fashion Valley Rd	&	Hotel Circle North

INTERSECTION: CMN DEL RIO (N) @ MISSION CENTER

223 Program

Group Assignment: 4096
Field Master Assignment: NONE

N/S Street Name: MISSION CENTER
E/W Street Name: CMN DEL RIO (N)

Last Database Change:
System Ref. Number: 520

N

Column # ---->		AUTO CIRCLE	CAM DEL RIO (N)		MISSION CENTER		CAM DEL RIO (N)	
		Phase						
Row	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk						7		7
1	Ped FDW						16		24
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	3.0	2.0	2.0	3.0	2.0	4.4	2.0	2.0
6	Max Gap	3.0	2.0	2.0	3.0	2.0	4.4	2.0	2.0
7	Min Gap	3.0	2.0	2.0	3.0	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	35	30	60	30	35
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By						0.1		
D	Every						0.7		
E	Yellow	3.4	3.9	3.4	3.9	3.4	3.9	3.4	4.3
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_____6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	1	C + 0 + 0
Zone Number	1	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	65	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0
	Lag Phases	<C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: EFF
Approved By: EFF
Drawing Number:
Timing Implemented On: 11/14/06

INTERSECTION: CMN DEL RIO (N) @ MISSION CENTER

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: CMN DEL RIO (N) @ MISSION CENTER

223 Program

Coordination Timing By: EFF
Implemented On: 12/5/2001

Row	Column # —>	Plan 1	2	3	4	5	6	7	8	9
	Plan Name —>									
0	Cycle Length			140	150	140				
1	Phase 1 - ForceOff			102	115	107				
2	Phase 2 - ForceOff			0	0	0				
3	Phase 3 - ForceOff			38	32	30				
4	Phase 4 - ForceOff			71	68	64				
5	Phase 5 - ForceOff			102	104	102				
6	Phase 6 - ForceOff			0	0	0				
7	Phase 7 - ForceOff			34	32	28				
8	Phase 8 - ForceOff			71	68	64				
9	Ring Offset									
A	Offset A			98	6	114				
B	Offset B									
C	Offset C									
D	Permissive			10	10	10				
E	Hold Release			255	255	255				
F	Ped Shift			0	0	0				

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 00	3	A	_23456_
1	15 : 00	4	A	_23456_
2	19 : 00	E	A	1234567
3	10 : 00	5	A	1_____7
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination

<9 Key with C+0+9=1>

	E
Plan 1	
Plan 2	
Plan 3	_2__6__
Plan 4	_2__6__
Plan 5	_2__6__
Plan 6	
Plan 7	
Plan 8	
Plan 9	
Coord Ped*	
NEMA Hold	

Sync Phases

C + E + FUNCTION #

Row		F
0	Free Lag	_2_4_6_8
1	Plan 1 - Lag	
2	Plan 2 - Lag	
3	Plan 3 - Lag	_2_4_6_8
4	Plan 4 - Lag	_2_4_6_8
5	Plan 5 - Lag	_2_4_6_8
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	Coord Max *	
B	Coord Lag *	
C		
D		
E		
F		

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

INTERSECTION: CMN DEL RIO (N) & MISSION CENTER / AUTO CIRCLE 223 gram

Group Assignment: 4096
Field Master Assignment: NONE

N/S Street Name: MISSION CENTER / AUTO CIRCLE
E/W Street Name: CMN DEL RIO (N)

Timing Sheet By: EFF
Approved By: MM

Last Database Change: 08/28/200
System Ref. Number: 520
Drawing Number: 29103-25
Timing Implemented On: 10/17/01

N

Row	Column # —> / Phase # —>	1 AUTO CIRCLE	2	3	4 CMN DEL RIO N.	5	6 MISSION CTR	7	8 CMN DEL RIO N.
0	Ped Walk						7		7
1	Ped FDW						16		24
2	Min Green	4	10	4	7	4	10	4	7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	3.0 ~~2.0~~	2.0	2.0	3.0 ~~2.0~~	2.0	4.4	2.0	2.0
6	Max Gap	3.0 ~~2.0~~	2.0	2.0	3.0 ~~2.0~~	2.0	4.4	2.0	2.0
7	Min Gap	3.0 ~~2.0~~	2.0	2.0	3.0 ~~2.0~~	2.0	0.2	2.0	2.0
8	Max Limit	30	60	30	35 ~~40~~	30	60	30	35 ~~40~~
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By						0.1		
D	Every						0.7		
E	Yellow	3.4 ~~3.0~~	3.9 ~~3.2~~	3.4 ~~3.0~~	3.9	3.4 ~~3.0~~	3.9 ~~3.0~~	3.4 ~~3.0~~	4.3
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

EFF 8/5/02

11-8-06 9011

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E	Row
RR-1 Delay		
RR-1 Clear		
EV-A Delay	0	
EV-A Clear	0	
EV-B Delay	0	
EV-B Clear	0	
EV-C Delay	0	
EV-C Clear	0	
EV-D Delay	0	
EV-D Clear	0	
RR-2 Delay		
RR-2 Clear		
View EV Delay	---	
View EV Clear	---	
View RR Delay	---	
View RR Clear	---	

Preempt Timing
F + E + Row

	F	Row
Permit	12345678	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_____6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	1	C + 0 + 0
Zone Number	1	C + 0 + 1
Area Number	4	C + 0 + 2
Area Address	65	C + 0 + 3
QuicNet Channel	DIGI85:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page> **Overlap Timing** <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234___

Disable Communication Ports
D + D + 9

2

INTERSECTION: CMN DEL RIO (N) & MISSION CENTER

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 01	E	1234567	1_____
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4 7
C	EV-C Phases	1 6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Preimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I0U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: CMN DEL RIO (N) & MISSION CENTER

223 Program

Coordination Timing By: ARS
Implemented On: 5/17/94

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	120								
1	Phase 1 - ForceOff	92								
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff	31								
4	Phase 4 - ForceOff	60								
5	Phase 5 - ForceOff	92								
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff	31								
8	Phase 8 - ForceOff	60								
9	Ring Offset									
A	Offset A	19								
B	Offset B									
C	Offset C									
D	Permissive	10								
E	Hold Release	255								
F	Ped Shift	6								

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	11 : 30	1	A	1234567
1	19 : 00	E	A	1234567
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	2 4 6 8
Plan 1	2 6	1	Plan 1 - Lag	2 4 6 8
Plan 2		2	Plan 2 - Lag	
Plan 3		3	Plan 3 - Lag	
Plan 4		4	Plan 4 - Lag	
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Held		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Transition Type
0 = Shortway
Non-zero = Lengthen

Plan Select
1 thru 9 = Coordination
Plan 1 thru 9
14 or E = Free
15 or F = Flash

50 LOCATION: **RTE 8 WB @ CAMINO DEL RIO NORTH**

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	1	1	40	1	1	1	1	CLK RST	EV SEL	0	PERMIT	1	2		4	5	6			0
1	DONT WALK	1	1	1	1	1	1	1	1		RR1 CLR	5	RED LOCK	1								1
2	MIN GREEN	5	12	1	8	6	10	1	1		EVA DLY	0	YEL LOCK		2				6			2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL				4					3
4	ADD/VEH	0.0	3.0	0.0	3.0	0.0	3.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	2.0	3.0	0.9	4.0	0.9	3.0	0.9	0.9		EVB CLR	5	PED PHASES				4					5
6	MAX GAP	2.0	3.0	0.9	4.0	0.9	3.0	0.9	0.9		EVC DLY	0	RT OLA									6
7	MIN GAP	2.0	3.0	0.9	4.0	0.9	3.0	0.9	0.9		EVC CLR	5	RT OLB									7
8	MAX EXT	30	20	9	45	20	20	9	9		EVD DLY	0	DBL ENTRY		2				6			8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES									9
A	MAX 3				75					MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR			MAX 3 PHASES				4					D
E	YELLOW	3.7	5.0	3.0	5.0	3.0	5.0	3.0	3.0	MIN			YEL START UP		2				6			E
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC			FIRST PHASE				4					F
	PED XING FT													1	2	3	4	5	6	7	8	
	BIKE XING FT		81				56															

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	15
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 WB @ CAMINO DEL RIO NORTH**

CALTRANS C8 Version 3 DATE: 12/14/2004

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	140	150												LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	25	30											GAPOUT CP1	LAG FZ CP 1		2		4	5			8	1
2														GAPOUT CP2	LAG FZ CP 2		2		4	5			8	2
3	FZ3 GRN FCTR	0	0											GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR	70	70								PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR	20	25								LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR	0	0								LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR	0	0								NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE	0	0											GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A	65	85								OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP *SYSTEM MASTER:*
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 WB @ CAMINO DEL RIO NORTH**

CALTRANS C8 Version 3 DATE: 12/4/2001

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1					5				CP 1		2				6			CP 1				4				
2	CP 2					5				CP 2		2				6			CP 2				4				
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 WB @ CAMINO DEL RIO NORTH**

CALTRANS C8 Version 3 DATE: 12/4/2001

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	11	00	3	X	1	2	3	4	5	6	7
1	19	00	3		1	2	3	4	5	6	7
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	11	00	1	A		2	3	4	5	6	
1	15	00	2	A		2	3	4	5	6	
2	19	00	E	A		2	3	4	5	6	
3	11	00	1	A	1						7
4	18	00	E	A	1						7
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

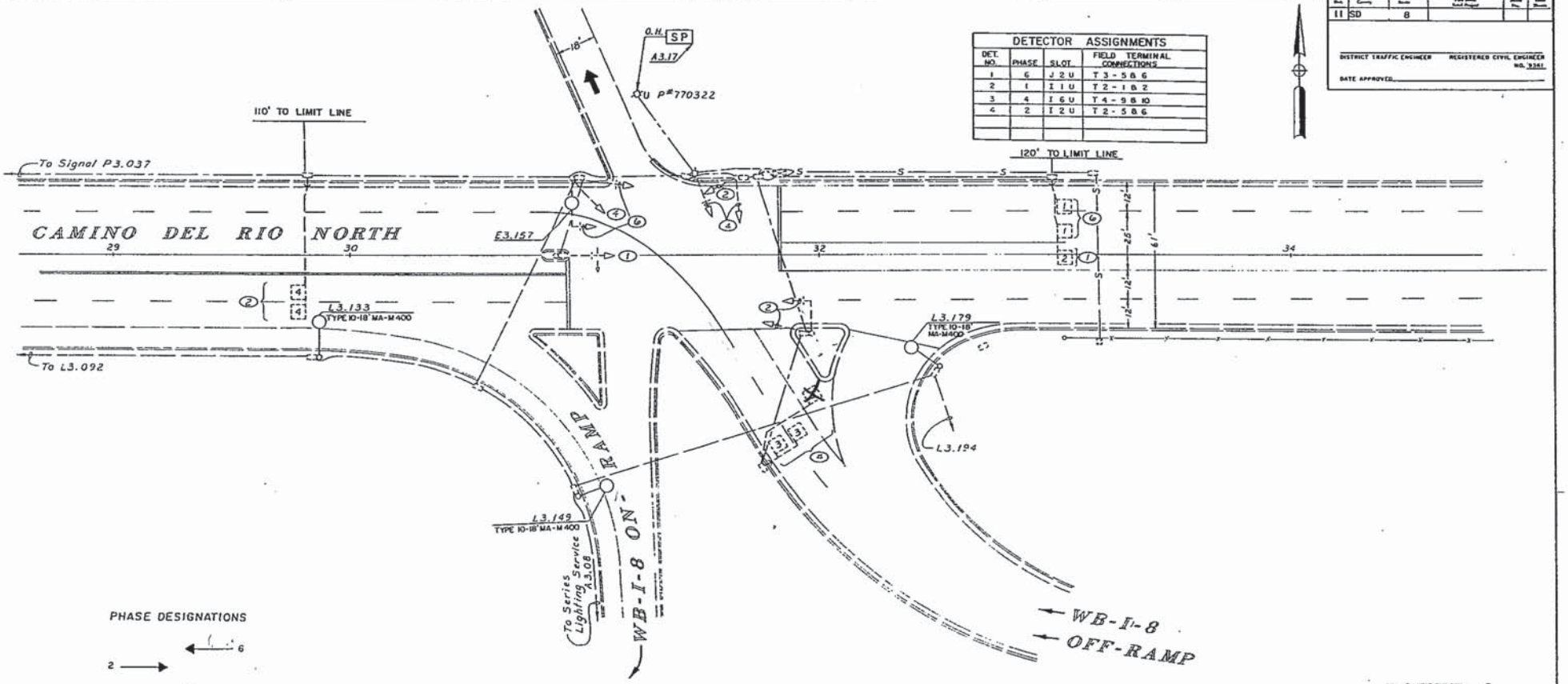
1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

Dist.	County	Route	Post Mile Prefix Road Number	Sheet No.	Total Sheets
11	SD	8			

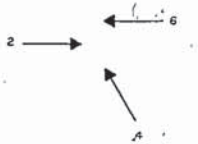
DISTRICT TRAFFIC ENGINEER REGISTERED CIVIL ENGINEER NO. 9361

DATE APPROVED

DETECTOR ASSIGNMENTS			
DET. NO.	PHASE	SLOT	FIELD TERMINAL CONNECTIONS
1	6	J 2 U	T 3 - 5 & 6
2	1	I 1 U	T 2 - 1 & 2
3	4	I 6 U	T 4 - 9 & 10
4	2	I 2 U	T 2 - 5 & 6



PHASE DESIGNATIONS



EMERGENCY OPERATION:
FLASH ALL PHASES RED.

ROUTE 8
AT
W. B. RAMPS
TO
CAMINO DEL RIO NORTH
IN
SAN DIEGO

SIGNAL AND LIGHTING

SIGNAL NO. P 3.157

0 20 40
SCALE IN FEET

SHEET
E-

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date

CU 11359 WO 182811

FORM WH 23A-PF

CAM DEL RIO N CAM DEL ESTE CAM DEL RIO N

200 SA 1.e

PHASE TIMING

INTERVAL		1	2	3	4	5	6	7	8
WALK	0				7		7		
FLASH D/W	1				10		23		
MIN GREEN	2		4		4	4	4		
TYPE 3 DET	3								
ADD PER VEH	4				3.8				
VEH EXTN *	5		~~3.02~~		~~3.0~~	2.0	~~3.02~~ 5		
MAX GAP *	6		~~3.02~~ 5		~~3.03~~ 8	2.0	~~3.02~~ 5		
MIN GAP *	7		0.2		0.2	2.0	0.2		
MAX EXTN	8		60		40	30	60		
MAX 2	9								
BUS LEAD	A								
CALL TO PHS	B								
REDUCE BY	C		0.1		0.1		0.1		
EVERY	D		~~1.1~~ 3		~~1.1~~ 0.8		~~1.1~~ 3		
YELLOW	E		3.5		3.5	3.0	3.5		
RED CLEAR	F		1.0		1.0	1.0	1.0		

F + PHASE + LOCATION

* Must be the same for non-density operation

PREEMPT

	E	
RR 1 DELAY		0
RR 1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY		8
EVD CLEAR		9
RR2 DELAY		A
RR 2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

MAX INITIAL (F-0-E) 0 RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		1	2	3	4	5	6	7	8
PERMIT	0		X		X	X	X		
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3								
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A		X			X			
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X			X			
FIRST PHASES	F				X				

F + F + FUNCTION

OVERLAP TIMING

	LOAD SWITCH		GREEN 9	YELLOW C	RED D
		OLAP A			
		OLAP B			
		OLAP C			
		OLAP D			

D + 0 + OVERLAP

F + COLOR +

PHASE SEQUENCE

	1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		

C + F + 0

MANUAL (C-A-1) 14

ADDRESS (C-0-0) 0

TURN-ON DATE: 02-04-1998

TIME: 10:40

DRAWING NO. D- 28634-2-D

LAST CHANGE: 01-21-1998

BY: JMV

WO 967082

LOCATION CAMINO DEL ESTE & CAMINO DEL RIO N

DETECTOR TIMES

Y \ X	SET DELAY 1	2	SET CARRY 3	4	OBS COUNT 5	6	OBS DELAY 7	8	OBS CARRY 9	A
0	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1	1I1	5J1
1	2I2U	6J2U	2I2U 1.8	6J2U 1.8	2I2U	6J2U	2I2U	6J2U	2I2U	6J2U
2	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L	2I2L	6J2L
3	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U	2I3U	6J3U
4	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L	2I3L	6J3L
5	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4	2I4	6J4
6	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5	3I5	7J5
7	4I6U	8J6U	4I6U 1.8	8J6U	4I6U	8J6U	4I6U	8J6U	4I6U	8J6U
8	4I6L 10.	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L	4I6L	8J6L
9	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U	4I7U	8J7U
A	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L	4I7L	8J7L
B	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8	4I8	8J8
C	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U	1I9U	5J9U
D	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L	3I9L	7J9L

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S	M	T	W	T	F	S
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7	8

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-[RESERVED]
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A		X			X			
EMVEH B	B				X				
EMVEH C	C						X		
EMVEH D	D								
EXTRA	E	X		X	X				
IC SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAVLIGHT
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLH/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGN5 (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

		PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5								
PED 6P	6						X		
PED 4P	7				X				
PED 8P	8								
FLH YELLOW	9								
OVERLAP A	A								
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGN5	F								

E + F + INTERVAL

LOCATION	CAMINO DEL ESTE & CAMINO DEL RIO N

LOCATION: **RTE 8 WB @ TEXAS ST. / QUALCOMM WAY**

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	7	7	1	7	1	1	CLK RST
1	DONT WALK	1	10	30	34	1	23	1	1	
2	MIN GREEN	1	12	15	5	14	13	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	2.0	2.0	1.0	5.0	0.9	0.9	
6	MAX GAP	0.9	2.0	2.0	2.0	1.0	3.0	0.9	0.9	
7	MIN GAP	0.9	2.0	2.0	2.0	1.0	3.0	0.9	0.9	
8	MAX EXT	30	45	30	30	20	45	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	5.0	4.1	4.1	3.7	5.0	3.0	3.0	MIN
F	RED	1.0	2.0	1.0	1.0	1.0	2.0	1.0	1.0	SEC
	PED XING FT		32	104	120		80			
	BIKE XING FT		86	122		106	89			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT	1	2	3	4	5	6	7	8	0
RED LOCK	1								1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES		2	3	4		6			5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE			3						F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 WB @ TEXAS ST. / QUALCOMM WAY**

CALTRANS C8 Version 3 DATE: 1/27/2015

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH														LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR													GAPOUT CP1	LAG FZ CP 1									1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME		5	GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET		5	GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF		230	GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN		100	GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN		200	GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A										OFFSET		5		LAG C COORD									A
B	OFFSET B														LAG D COORD	1			4		6		8	B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
WB @ QUALCOMM WAY

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 WB @ TEXAS ST. / QUALCOMM WAY**

CALTRANS C8 Version 3 DATE: ########

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL	1								3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED			3						8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 WB @ TEXAS ST. / QUALCOMM WAY**

CALTRANS C8 Version 3 DATE: 3/3/2005

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
	HR	MIN	ACT	ON/ OFF	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0	06	45	D	X	1	2	3	4	5	6	7
1	21	00	D		1	2	3	4	5	6	7
2	10	00	9	X	1	2	3	4	5	6	7
3	18	45	9		1	2	3	4	5	6	7
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
	HR	MIN	CP	OS	S 1	M 2	T 3	W 4	T 5	F 6	S 7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

DIST.	COUNTY	ROUTE	POST MILES-TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	8			

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 3331

DATE APPROVED

POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B.	REMARKS
Ⓐ	26-4-80	[1] 45'	12'		2-1/2	SV-1-T	MAT — (5) MAS — (2)	SP-1-T	←W-(8P)	150W. HPS LUMINAIRE
Ⓑ	[3] 1-A				2-1/2	TV-2-T		SP-1-T	(2P)-W→	
Ⓒ	15-1-70	15'		STA.	2-1/2	SV-1-T [B]	MAS — [5]	SP-2-T	(2P)-W→ (4P)-W→	
Ⓓ	24-460	[2] 35'	12'		2-1/2	SV-1-T	MAS — [5]	SP-1-T	←W-(4P)	150W. HPS LUMINAIRE
Ⓔ	[3] 1-A				2-1/2	TV-2-T [B]		SP-1-T	(6P)-W→	
Ⓕ	[4] 17-1-70	16' EXIST.	12' EXIST.	EXIST.	EXIST.	SV-1-T	MAS (EXIST)	SP-1-T	←W-(6P) (EXIST)	150 W. HPS LUMINAIRE (USE EXIST. Pau)
Ⓖ	1-A			6	2-1/2	TV-1-T [A]		SP-1-T	(8P)-W→	
Ⓗ	STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY. (FOUNDATION DETAILS ES-4B).									

[A] "FAR LEFT" LEFT TURN FACES SHALL BE ALL 12 INCH ARROW LENSES (RYG).

LEGEND

■ = (LTTC) LEFT-TURN TERMINATION CONDUIT, ES-8.

= MODEL 170 CONTROLLER ASSEMBLY. ORIENT DOORS PER PLAN SITE.

EV-DLC = EMERGENCY VEHICLE DETECTOR LEAD-IN CABLE.
TERMINATE CABLE IN GREEN SECTION ON END OF MAST ARM SIGNAL HEAD.
LEAVE ONE FOOT OF SLACK.

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	CIRCUIT	2" △1	2" △2	2" △3	1-1/4" △4	2" △5	2-1/2" △6	3" △7	1-1/4" △8	2" △9	2" △10	2" △11	3" △12
#14	2	VEHICLE SIGNAL					3	3	3					
	8									3	3	3		3
	4		3	3	3	3		6	6	3	3	3		3
	OLA		2	2				2	2	2	2	2		2
	5						3	3	3				3	3
	6									3	3	3		3
	8													
	2P	WALK/DON'T WALK	2	2			2	2	2					
	8P				2	2		2	2					2
	4P		2	2				2	2	2	2	2		2
	6P										2	2	2	4
	2P	PED. PUSH BUTTON	1	1	1	1		2	2					
	8P						1	1	1				1	1
	4P		1	1				1	1		1	1		1
	6P									1	1	1		1
	2/4	P.P.B. COMM. #6	1	1	1	1	1	1	1		1	1	1	1
	6/8	P.P.B. COMM. #9								1	1	1		1
		PHOTOELECTRIC UNIT												3
#14		SPARES	3	3	3	3	3	3	3	3	3	3	3	3
		TOTAL NO. 14	15	15	10	10	13	28	28	15	22	22	10	33
#8		SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1	1	1
#10		LIGHTING					2	2	2		2	2		2
TYPE	2	LOOP-DLC	6	6				6	6					
"B"	8			1		3		4	4					
	4									3	3	4		4
	5		1	1				1	1					
DLC	6								4					
EV-DLC		EMERG. VEH.-DLC	1	1				1	1		1	1		1
#6		SIGNAL CONTROLLER												
		INTERCONNECT CABLE							1					
TOTAL CONDUCTORS/CABLES			23	24	11	14	16	43	48	19	29	30	11	41

CONDUIT NOTES

△13 - EXIST. 1 INCH C., 1-DLC.
[RC] EXIST. DLC.
INSTALL 2-DLC.

△14 - EXIST. 1 INCH C., 1-DLC.
[RC] EXIST. DLC.
INSTALL 3-DLC.

△15 - EXIST. 1 INCH C., 1-DLC.
[RC] EXIST. DLC.
INSTALL: 2-DLC
1-INTERCONNECT CABLE.

△16 - EXIST. 1-1/4 INCH C., 1-DLC,
[RC] EXIST. DLC.
INSTALL: 2-DLC
1-INTERCONNECT CABLE.

△17 - 1 INCH C., 3-DLC.

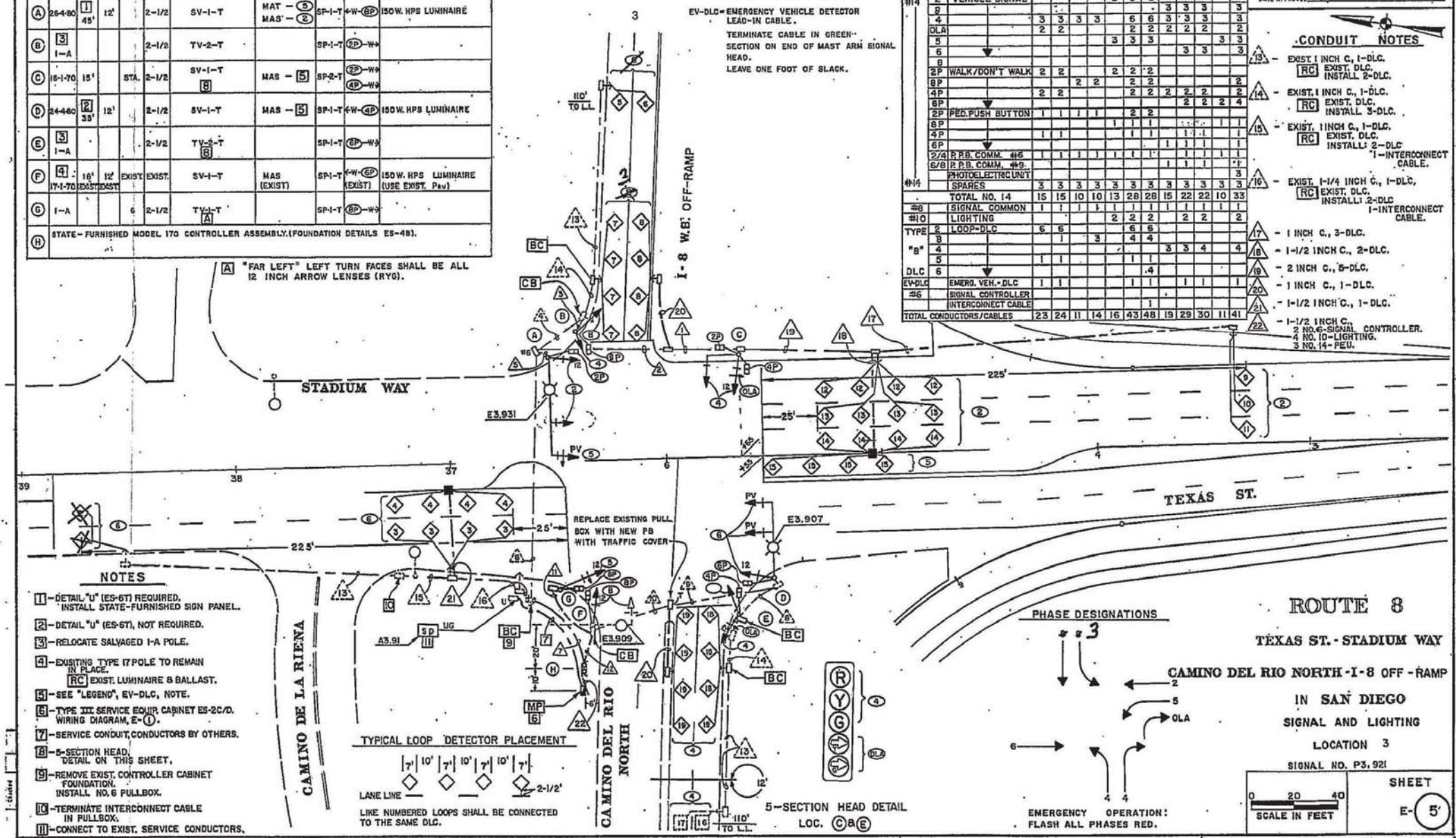
△18 - 1-1/2 INCH C., 2-DLC.

△19 - 2 INCH C., 5-DLC.

△20 - 1 INCH C., 1-DLC.

△21 - 1-1/2 INCH C., 1-DLC.

△22 - 1-1/2 INCH C.,
2 NO. 6-SIGNAL CONTROLLER.
4 NO. 10-LIGHTING.
3 NO. 14-PEU.



NOTES

[1] - DETAIL "U" (ES-6T) REQUIRED. INSTALL STATE-FURNISHED SIGN PANEL.

[2] - DETAIL "U" (ES-6T), NOT REQUIRED.

[3] - RELOCATE SALVAGED 1-A POLE.

[4] - EXISTING TYPE 17 POLE TO REMAIN IN PLACE.
[RC] EXIST. LUMINAIRE & BALLAST.

[5] - SEE "LEGEND", EV-DLC, NOTE.

[6] - TYPE III SERVICE EQUIP. CABINET ES-2C/D. WIRING DIAGRAM, E-(1).

[7] - SERVICE CONDUIT, CONDUCTORS BY OTHERS.

[8] - 5-SECTION HEAD. DETAIL ON THIS SHEET.

[9] - REMOVE EXIST. CONTROLLER CABINET FOUNDATION. INSTALL NO. 6 PULLBOX.

[10] - TERMINATE INTERCONNECT CABLE IN PULLBOX.

[11] - CONNECT TO EXIST. SERVICE CONDUCTORS.

ROUTE 8

TEXAS ST. - STADIUM WAY

CAMINO DEL RIO NORTH - I-8 OFF-RAMP

IN SAN DIEGO

SIGNAL AND LIGHTING

LOCATION 3

SIGNAL NO. P3, 921

SCALE IN FEET 0 20 40

SHEET E-5'

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
W.J. FRENDO	3/82	M.A. CHASE	3/82	R.B. FINDLAY	3/82

CU 11203 WO 111801

REV: 4/82

INTERSECTION: Morena Bl & Taylor St — 223 Program

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		1.8
8		
9		
A	10.0	
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: Morena Bl & Taylor St

223 Pr[illegible]am

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	45
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	4
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

LOCATION: **RTE 8 EB @ TAYLOR STREET**

CALTRANS C8 Version 3 DATE: 1/28/2015

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	1	1	7	1	7	1	1	CLK RST
1	DONT WALK	1	1	1	15	1	23	1	1	
2	MIN GREEN	1	10	1	5	5	15	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	0.9	1.0	1.0	2.0	0.9	0.9	
6	MAX GAP	0.9	2.0	0.9	1.0	1.0	2.0	0.9	0.9	
7	MIN GAP	0.9	2.0	0.9	1.0	1.0	2.0	0.9	0.9	
8	MAX EXT	9	25	9	35	45	25	9	9	
9	MAX 2					20				YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	4.5	3.0	5.0	3.7	4.5	3.0	3.0	MIN
F	RED	0.0	1.0	0.0	1.0	1.0	1.0	0.0	0.0	SEC
	PED XING FT				52		81			
	BIKE XING FT		38				121			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT		2		4	5	6			0
RED LOCK				4	5				1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES				4		6			5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES					5				9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FC0	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 EB @ TAYLOR ST.**

CALTRANS C8 DATE: 1/18/95 PAGE 2

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH															LAG FZ FREE		X		X		X		X	0
1	FZ1 GRN FCTR													GAPOUT CP1	0	LAG FZ CP 1									1
2														GAPOUT CP2	0	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	0	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	0	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	0	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	0	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	0	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	0	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	0	LAG FZ CP 9									9
A	OFFSET A										OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		X				X			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRP																								F

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER :
EB OFF

LOCATION	OFF	ON
1		X
2	X	
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 EB @ TAYLOR ST.**

CALTRANS C8 DATE 10/21/93

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 EB @ TAYLOR ST.**

CALTRANS C8 DATE : 10/21/93

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	15	20	2	X		X	X	X	X	X	
1	17	40	2			X	X	X	X	X	
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

D.P.W. REC. NO.	STATE
7	CALIF.

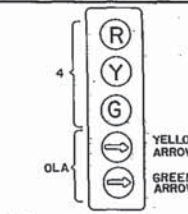
DIST.	COUNTY	ROUTE	POST MILES-TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	8			

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 9261

DATE APPROVED

POLE SCHEDULE

LOC.	STANDARD TYPE	STANDARD MASTARM SIG.	STANDARD MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B.	REMARKS
(A)	EXIST. 17	18'	15'			EXIST. SV-1-T	EXIST. MAS	[2]	EXIST. 4 ⟶ ⟵ 6	EXIST. 200 WATT HPS LUMINAIRE
(B)	EXIST. PPB POST	—	—			—	—	—	EXIST. ⟵ 6 ⟶	
(C)	1-A (10')	—	—	8 1/2 E. OF NOSE	3	TV-1-T [3]	—	SP-1-T	6 ⟶	
(D)	79-4-BC	25' [1]	12'	PER PLAN	2-1/2	SV-2-TD	2 - MAS 5 - MAT [3]	—	—	[4] PEU-SIGN TYPE
(E)	1-A (10')	—	—	PER PLAN	2-1/2	TV-1-T	—	—	—	
(F)	1-A (10')	—	—	PER PLAN	3	TV-1-T [5]	—	SP-1-T	4 ⟶	
(G)	1-A (10')	—	—	PER PLAN	3	TV-1-T [5]	—	—	—	
(H)	STATE-FURNISHED, MODEL 170 CONTROLLER ASSEMBLY. FOUNDATION DETAILS, ES-4B.									



[5] FIVE SECTION SIGNAL FACE POLES (F) & (G) (No Scale)

NOTES

[1] - DETAIL "U", ES-6T, REQUIRED.
INSTALL: STATE-FURNISHED SIGN PANEL.

[2] - [RS] EXISTING SP-2-T PEDESTRIAN HEADS
INSTALL: NEW SP-2-T PEDESTRIAN HEADS.

[3] - LEFT TURN SIGNAL FACE SHALL CONSIST OF 3-12 INCH ARROW SECTIONS (R,Y & G).

[4] - INSTALL SALVAGED HPS 200 LUMINAIRE.

[5] - INSTALL 5-SECTION SIGNAL FACE PER DETAIL THIS PLAN.

CONTINUED BELOW

CONDUIT NOTES

(9) - 1-INCH C. 1-DLC.

(10) - EXISTING 1 1/2 INCH C. WITH 2 NO.8-LIGHTING & ILLUM. SIGNS (480V).

(11) - EXISTING 1-INCH C. WITH 1-dlc. [RC] 1-dlc. INSTALL: 1-DLC.

(12) - 1 1/2 INCH C. 2 NO. 6-SIGNAL SERVICE 2 NO. 8-LIGHTING. 3 NO. 14-PEU.

(13) - 1 1/2 INCH C. 4-DLC.

(14) - SERVICE CONDUIT, 2-INCH C. 3 NO.6 - 120/240V SERVICE.

(15) - 1-INCH C. 2-DLC.

(16) - SERVICE CONDUIT, 2-INCH C. CONDUCTORS BY OTHERS.

(17) - 1 1/2 INCH C. 2 NO.8-LIGHTING & ILLUM. SIGNS (480V).

(18) - EXISTING 1-INCH C. WITH 1-dlc. [RC] 1-dlc. INSTALL: 2-DLC.

(19) - EXISTING 1-INCH C. WITH 2 NO. 10-LIGHTING.

CONDUCTOR SCHEDULE

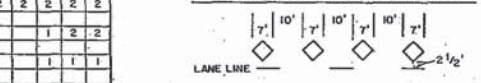
AWG SIZE	PHASE	CIRCUIT	CONDUIT SIZE & RUN 2 (1)	2 (2)	2 1/2 (3)	2 (4)	1 1/2 (5)	2 (6)	1 (7)	2 1/2 (8)
14	2	SIGNAL				3	3	3	3	3
	4					3	3	3	3	3
	OLA							2	2	2
	5		3	3	3	3	3	3	3	3
	6				3					
	4	PED SIGNAL			2			2	2	2
	6		2	2	2					
	4	PED PUSH BUTTON			1			1	1	1
	6		1	1	1					
	4/6	PPB COMMON	/1	/1	1/1	/	/	1/	1/	1/
		SPARES	3	3	3	3	3	3	3	3
TOTAL NO. 14			10	10	17	12	12	18	18	18
10		SIGNAL COMMON	1	1	1	1	1	1	1	1
		LIGHTING	2	2	2	2				
8		LIGHTING				2	2	2	2	2
6		SIGNAL SERVICE				2	2	2	2	2
TYPE "B" DLC	2	LOOP LEAD-IN						1	2	2
	4			1	2					
	5							1	1	1
	6		4	4	4					
		EV-DLC				2	2	2	2	2
TOTAL CONDUCTORS/CABLES			17	18	26	19	19	27	28	28

LEGEND

EV-DLC = EMERGENCY VEHICLE DETECTOR LEAD IN CABLE (FUTURE USE).
TERMINATE CABLES IN GREEN SECTION ON END OF MASTARM SIGNAL HEAD. LEAVE ONE FOOT OF SLACK.

◿ = ANGLE VISORS, SHALL BE: 12" / 16"
(SETS REQUIRED: 1-LEFT & 1-RIGHT)

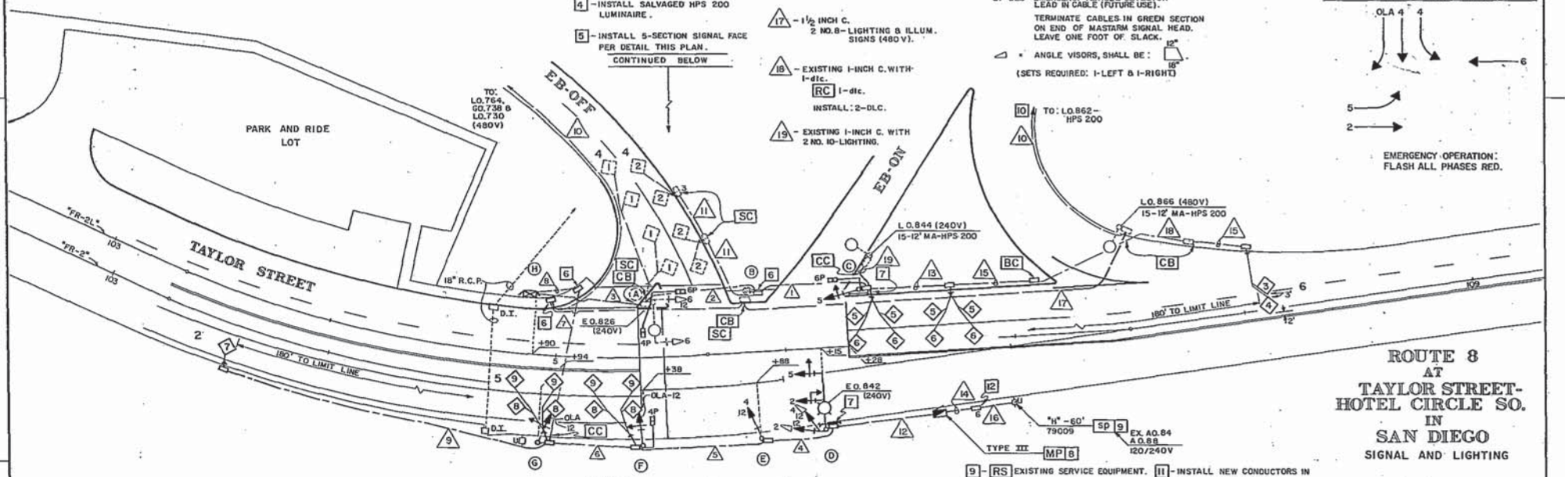
TYPICAL LOOP DETECTOR PLACEMENT



LIKE NUMBERED LOOPS SHALL BE CONNECTED TO THE SAME DLC.

PHASE DESIGNATIONS

EMERGENCY OPERATION: FLASH ALL PHASES RED.



[6] - [AB] EXISTING PULL BOX

[CC] EXISTING CONDUITS AND EXTEND TO NEW PULL BOX.
INSTALL: NO. 5 PULL BOX, 4-FT. FROM EXISTING F/L.

[7] - PEDESTRIAN BARRICADE, ES-6A.
INSTALL: STATE-FURNISHED SIGN PANEL.

[8] - [MP] TYPE III SERVICE EQUIPMENT CABINET, ES-2C & ES-2D.
WIRING DIAGRAM ON SHEET E-1.

[9] - [RS] EXISTING SERVICE EQUIPMENT.
INSTALL: TYPE "H" SERVICE.

[10] - EXISTING 480V, "UG", [SP] FOR ILLUM. SIGNS AND HIGHWAY LIGHTING LOCATED ON HOTEL WALL AT SE CORNER OF PROPERTY (N. OF ROUTE 8 & W. OF PRESIDIO O.C. U-XFMR 490-52-SERVICE NO. A0.93).

[11] - INSTALL NEW CONDUCTORS IN EXISTING 2-INCH C.

[12] - TERMINATING PULL BOX.
MARKING AND LABELING AS REQUIRED BY UTILITY COMPANY.

ROUTE 8 AT TAYLOR STREET-HOTEL CIRCLE SO. IN SAN DIEGO
SIGNAL AND LIGHTING

SIGNAL NO. P0.830

0 20 40
SCALE IN FEET

SHEET E-2

Project Engineer	Date	Design Engineer	Date	Approved Recommended By	Date

CU 11212 WO 185831

REV. 3/83

FORM WH23A PF

57

Bac... n Place @ Hotel Circle South

223 Pr... am

Group Assignment:
Field Master Assignment: None

N/S Street Name: Bachman Place
E/W Street Name: Hotel Circle south

Last Change:
Timing Sheet By: Dino
Approved By:

Drawing Number: 31015-D
System Rel. Number:
Timing implemented on:

Row	Column # ---->	1	2	3	4	5	6	7	8
		Hotel Circle South					Hotel Circle South		Bachman Place
	Phase # ---->	1	2	3	4	5	6	7	8
0	Ped Walk		7						7
1	Ped FDW		9						10
2	Min Green	4	10				10		4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.4 ~~2.0~~	3.7				3.7		2.4 ~~2.0~~
6	Max Gap	2.4 ~~2.0~~	3.7				3.7		2.4 ~~2.0~~
7	Min Gap	2.4 ~~2.0~~	0.2				0.2		2.4 ~~2.0~~
8	Max Limit	30	60				60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs	6							
C	Reduce By		0.1				0.1		
D	Every		0.9				0.9		
E	Yellow	3.0	4.0				4.0		3.0
F	Red Clear	1.0	1.0				1.0		1.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12___6_8
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____8

Phase Functions <F Page>
F + F + Row

Max Initial		F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

	F	Row
C + F + O	_2___6_8	0
Free Lag	Lag Phases	<C Page>

Row		9	C	D	0
		Green Clear	Yellow Change	Red Clear	Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset 0
= Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

Ø1 + Ø8 loops cut too close ∴ Gap timing increased 2 to 4"

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2		1.8		6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7	12.0			8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____
7	Ped 4P	_____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2_____
B	EV-B Phases	_____8
C	EV-C Phases	1____6__
D	EV-D Phases	__3_____
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)
(This parameter is NOT downloaded)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

LOCATION: RTE 8 EB @ MISSION CENTER ROAD / CAMINO DEL RIO SOUTH

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	7	1	1	1	1	7	1	1	CLK RST	EV SEL	0	PERMIT	1	2			5	6	7	8	0
1	DONT WALK	31	1	1	1	1	20	1	1		RR1 CLR	5	RED LOCK		2			5		7	8	1
2	MIN GREEN	18	5	1	1	5	5	16	10		EVA DLY	0	YEL LOCK									2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL	1					6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	2.0	2.0	0.9	0.9	3.0	2.0	2.0	2.0		EVB CLR	5	PED PHASES	1					6			5
6	MAX GAP	4.0	4.0	0.9	0.9	2.0	4.0	3.0	4.0		EVC DLY	0	RT OLA									6
7	MIN GAP	1.0	1.0	0.9	0.9	2.0	1.0	1.0	1.0		EVC CLR	5	RT OLB									7
8	MAX EXT	45	30	9	9	7	30	15	35		EVD DLY	0	DBL ENTRY									8
9	MAX 2	55	60				60			YR	EVD CLR	5	MAX 2 PHASES	1	2				6			9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1	DOW			REST-IN-WALK									C
D	EVERY	0.6	0.6	1.0	1.0	1.0	0.6	0.6	0.6	HR			MAX 3 PHASES									D
E	YELLOW	4.1	4.1	3.0	3.0	4.1	4.1	4.1	4.1	MIN			YEL START UP		2				6			E
F	RED	2.0	2.0	0.0	0.0	2.0	2.0	2.0	2.0	SEC			FIRST PHASE							7		F
	PED XING FT	108					69							1	2	3	4	5	6	7	8	
	BIKE XING FT	170						140	70													

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: RTE 8 EB @ MISSION CENTER ROAD / CAMINO DEL RIO SOUTH

CALTRANS C8 Version 3 DATE: 5/19/2012 PAGE 2

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	140	150	140	140											LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	40	50	46	36									GAPOUT CP1		LAG FZ CP 1		2		4		6		8	1
2														GAPOUT CP2		LAG FZ CP 2		2		4		6		8	2
3	FZ3 GRN FCTR	0	0	0	0									GAPOUT CP3		LAG FZ CP 3		2		4		6		8	3
4	FZ4 GRN FCTR	0	0	0	0						PERM TIME			GAPOUT CP4		LAG FZ CP 4		2		4		6		8	4
5	FZ5 GRN FCTR	8	8	8	8						LAG OFFSET			GAPOUT CP5		LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6									6
7	FZ7 GRN FCTR	10	10	10	10						LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR	22	32	18	18						NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0									GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A	130	15	14	18						OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 EB @ MISSION CENTER ROAD / CAMINO DEL RIO SOUTH**

CALTRANS C8 Version 3 DATE: 4/30/2002

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1	1								CP 1		2				6			CP 1								
2	CP 2	1								CP 2		2				6			CP 2								
3	CP 3	1								CP 3		2				6			CP 3								
4	CP 4	1								CP 4		2				6			CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED	1								5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT	1	2			5	6			OLB ON							7	8	B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 EB @ MISSION CENTER ROAD / CAMINO DEL RIO SOUTH**

CALTRANS C8 Version 3 DATE: 4/30/2002

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	10	00	2	X	1	2	3	4	5	6	7
1	19	00	2		1	2	3	4	5	6	7
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	11	00	1	A		2	3	4	5	6	
1	15	00	2	A		2	3	4	5	6	
2	19	00	E			2	3	4	5	6	
3	10	00	4	A	1						7
4	14	00	3	A	1						7
5	18	00	E		1						7
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

DIST.	COUNTY	ROUTE		POST MILE	TOTAL SHEETS
11	SD	5 & 8	VARIOUS		

STATE: CALIF.

H. Burgess Thysell
DISTRICT TRAFFIC ENGINEER — REGISTERED ELECTRICAL ENGINEER NO. 2023.

DATE APPROVED

CONDUIT NOTES

1 - EX. 1/2 INCH C., WITH 2 NO. 10-ILLUM. SIGNS.

2 - EX. 1/2 INCH C., WITH 3 - mlc.
RC EX. 3-mlc.
INSTALL: 1-DDLC.

3 - EX. 1/2 INCH C., WITH 4 NO. 10 -2 ILLUM. SIGNS, 2 SPRINKLER CONTROL, 2 NO. 8-(L) 480V.

4 - EX. 1 1/2 INCH C., WITH 2 NO. 10-ILLUM. SIGNS.
ADD: 3-DDLC.

5 - EX. 1 1/2 INCH C., WITH 3-mlc & 1-dlc.
RC EX. 3-mlc &dlc.
INSTALL: 1-DDLC.

6 - EX. 2-INCH C., WITH 16 NO. 14 - 3 (1), 3 (2), 3 (F), 2 (IP), (IP) PB, PPB COMMON & 3 SPARES, 1 NO. 10-SIGNAL COMMON, 3- mlc, 1- dlc.
RC EX. 3- mlc & dlc.
ADD: 2 NO. 10-(L), 3-DDLC.

7 - EX. 2-INCH C., WITH 16 NO. 14-SAME AS 6, 1 NO. 10-SIGNAL COMMON, 3- mlc, 4- dlc.
RC EX. 3-mlc & 1-dlc.
ADD: 3-DDLC, 2 NO. 6-480V SIG. SERVICE.

8 - EX. 2-INCH C., WITH 19 NO. 14-3 (1), 3 (2), 3 (5), 3 (F), 2 (IP), (IP) PB, PPB COMMON & 3 SPARES, 1 NO. 10-SIGNAL COMMON, 3-mlc, 5-dlc.
RC EX. 3-mlc & 1-dlc.
ADD: 3-DDLC, 2 NO. 6-480V SIG. SERVICE.

9 - EX. 2-INCH C., WITH 10 NO. 14 - 3 (7), 2 (2P), (2P) PB, PPB COMMON & SPARES, 1 NO. 10-SIGNAL COMMON, 3- dlc.
ADD: 3 NO. 14- (5).

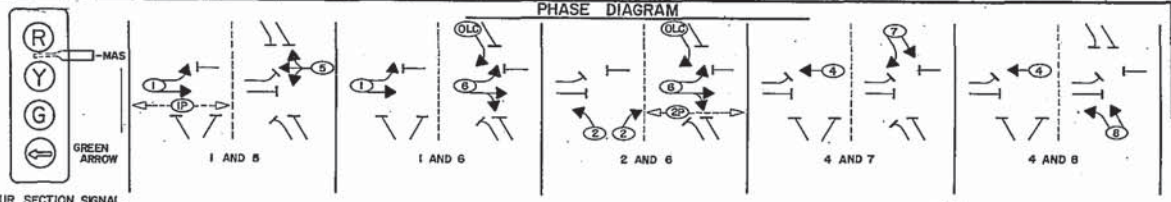
10 - 1 1/2 INCH C. (12), 2 NO. 10-(L), 2 NO. 6-480V SIGNAL SERVICE.

11 - 1 1/2 INCH C. (12), 2 NO. 10-RAMP METER 120V).

12 - EX. 1 1/2 INCH C., WITH 3 NO. 4-120/240V SERVICE.
RS EX. CONDUCTORS.
INSTALL: 2 NO. 10-MTR. 120V).

13 - 1 1/2 INCH C. (12), 2 NO. 10-RAMP METER 120V).

PHASE DIAGRAM



NOTES

1 - AB EX. DETECTORS, PULL BOXES AND CONDUITS NOT USED IN NEW WORK, UNLESS OTHERWISE SHOWN.

2 - ON BRIDGE DECK, MAXIMUM DEPTH AND WIDTH OF LOOP DETECTOR SAW KERF SHALL BE 1/2 INCH. REINFORCING STEEL SHALL NOT BE CUT.

3 - SAW CUT EX. BARRIER RAIL NEATLY TO PROVIDE ENTRY FOR LOOP DETECTORS INTO CORE DRILLED ACCESS HOLE TO EX. PULL BOXES, SW SIDE OF BARRIER.

4 - SC NEW DDLC'S FOR LOOP DETECTORS, NO. 7, HERE AND (L) CONDUCTORS.

5 - RC EX. M400 LUMINAIRE.
ADD: EXTENDED PIPE TENON AS DETAILED ON SHEET E- (1).

6 - INSTALL: 180 WATT LPS LUMINAIRE. (480V BALLAST)

7 - RS EX. TYPE III SERVICE EQUIPMENT ENCLOSURE. REMOVE FOUNDATION.

8 - RECONNECT CONDUCTORS IN mp AS FOLLOWS: 30A BREAKER-(L) & SIGNS, 30A BREAKER-NO. 6'x-SIGNAL, RAMP METER & EX. SPRINKLER CONTROL.

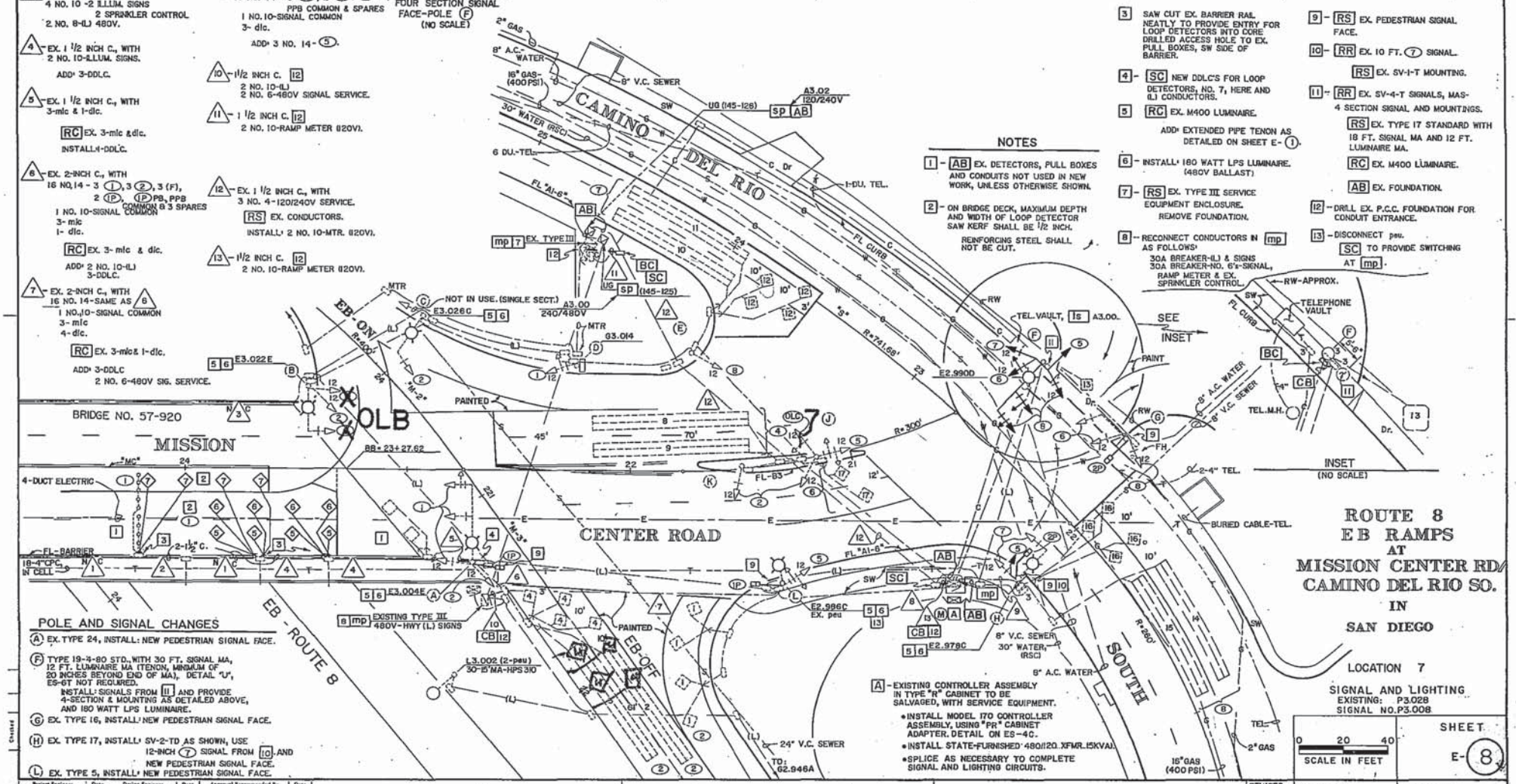
9 - RS EX. PEDESTRIAN SIGNAL FACE.

10 - RR EX. 10 FT. (7) SIGNAL.
RS EX. SV-1-T MOUNTING.

11 - RR EX. SV-4-T SIGNALS, MAS-4 SECTION SIGNAL AND MOUNTINGS.
RS EX. TYPE 17 STANDARD WITH 18 FT. SIGNAL MA AND 12 FT. LUMINAIRE MA.
RC EX. M400 LUMINAIRE.
AB EX. FOUNDATION.

12 - DRILL EX. P.C.C. FOUNDATION FOR CONDUIT ENTRANCE.

13 - DISCONNECT peu. SC TO PROVIDE SWITCHING AT mp.



POLE AND SIGNAL CHANGES

(A) EX. TYPE 24, INSTALL: NEW PEDESTRIAN SIGNAL FACE.

(F) TYPE 19-4-80 STD., WITH 30 FT. SIGNAL MA, 12 FT. LUMINAIRE MA (TENON, MINIMUM OF 20 INCHES BEYOND END OF MA), DETAIL "U", ES-6T NOT REQUIRED.
INSTALL: SIGNALS FROM (11) AND PROVIDE 4-SECTION & MOUNTING AS DETAILED ABOVE, AND 180 WATT LPS LUMINAIRE.

(G) EX. TYPE 16, INSTALL: NEW PEDESTRIAN SIGNAL FACE.

(H) EX. TYPE 17, INSTALL: SV-2-TD AS SHOWN, USE 12-INCH (7) SIGNAL FROM (10) AND NEW PEDESTRIAN SIGNAL FACE.

(L) EX. TYPE 5, INSTALL: NEW PEDESTRIAN SIGNAL FACE.

(A) - EXISTING CONTROLLER ASSEMBLY IN TYPE "R" CABINET TO BE SALVAGED, WITH SERVICE EQUIPMENT.
- INSTALL MODEL 170 CONTROLLER ASSEMBLY, USING "PR" CABINET ADAPTER. DETAIL ON ES-4C.
- INSTALL STATE-FURNISHED 480/120 XFMR. 15KVA.
- SPLICE AS NECESSARY TO COMPLETE SIGNAL AND LIGHTING CIRCUITS.

ROUTE 8 EB RAMPS AT MISSION CENTER RD/ CAMINO DEL RIO SO. IN SAN DIEGO

LOCATION 7

SIGNAL AND LIGHTING
EXISTING: P3.028
SIGNAL NO. P3.008

SCALE IN FEET: 0 20 40

SHEET E-8

Project Engineer	Div.	Design Engineer	Date	Approval Recommended By	Date

REVISED

CU 11359 — WO 189431

FORM WH23A-PF

60

LOCATION: **RTE 8 EB @ TEXAS ST**

CALTRANS C8 Version 3 DATE: 1/27/2015 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	1	1	1	1	7	1	1	CLK RST
1	DONT WALK	1	1	1	1	1	14	1	1	
2	MIN GREEN	1	1	1	5	1	15	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	0.9	0.9	2.0	0.9	2.0	0.9	0.9	
6	MAX GAP	0.9	0.9	0.9	2.0	0.9	2.0	0.9	0.9	
7	MIN GAP	0.9	0.9	0.9	2.0	0.9	2.0	0.9	0.9	
8	MAX EXT	9	9	9	40	9	45	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	3.0	3.0	4.1	3.0	4.5	3.0	3.0	MIN
F	RED	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	SEC
	PED XING FT						48			
	BIKE XING FT						54			

PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
EV SEL	0	PERMIT		2		4		6			0
RR1 CLR	5	RED LOCK				4					1
EVA DLY	0	YEL LOCK									2
EVA CLR	5	V RECALL		2				6			3
EVB DLY	0	P RECALL									4
EVB CLR	5	PED PHASES						6			5
EVC DLY	0	RT OLA									6
EVC CLR	5	RT OLB									7
EVD DLY	0	DBL ENTRY									8
EVD CLR	5	MAX 2 PHASES									9
MAX EV	255	LAG PHASES	READ ONLY								A
RR2 CLR	5	RED REST									B
		REST-IN-WALK									C
		MAX 3 PHASES									D
		YEL START UP		2				6			E
		FIRST PHASE				4					F
			1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 EB @ TEXAS ST**

CALTRANS C8 DATE: 11/20/95

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH															LAG FZ FREE		X		X		X		X	0
1	FZ1 GRN FCTR													GAPOUT CP1	0	LAG FZ CP 1									1
2														GAPOUT CP2	0	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	0	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	0	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	0	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	0	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	0	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	0	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	0	LAG FZ CP 9									9
A	OFFSET A										OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		X				X			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRP																								F

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER :
WB @ STADIUM WAY

LOCATION	OFF	ON
1	X	
2		X
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	

COO = **2**

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 EB @ TEXAS ST**

CALTRANS C8 DATE 11/20/95

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 EB @ TEXAS ST**

CALTRANS C8 DATE : 11/20/95 PAGE 4

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

D.P.S. & M.C. No.	STATE
7	CALIF.

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	8			

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 5561

DATE APPROVED

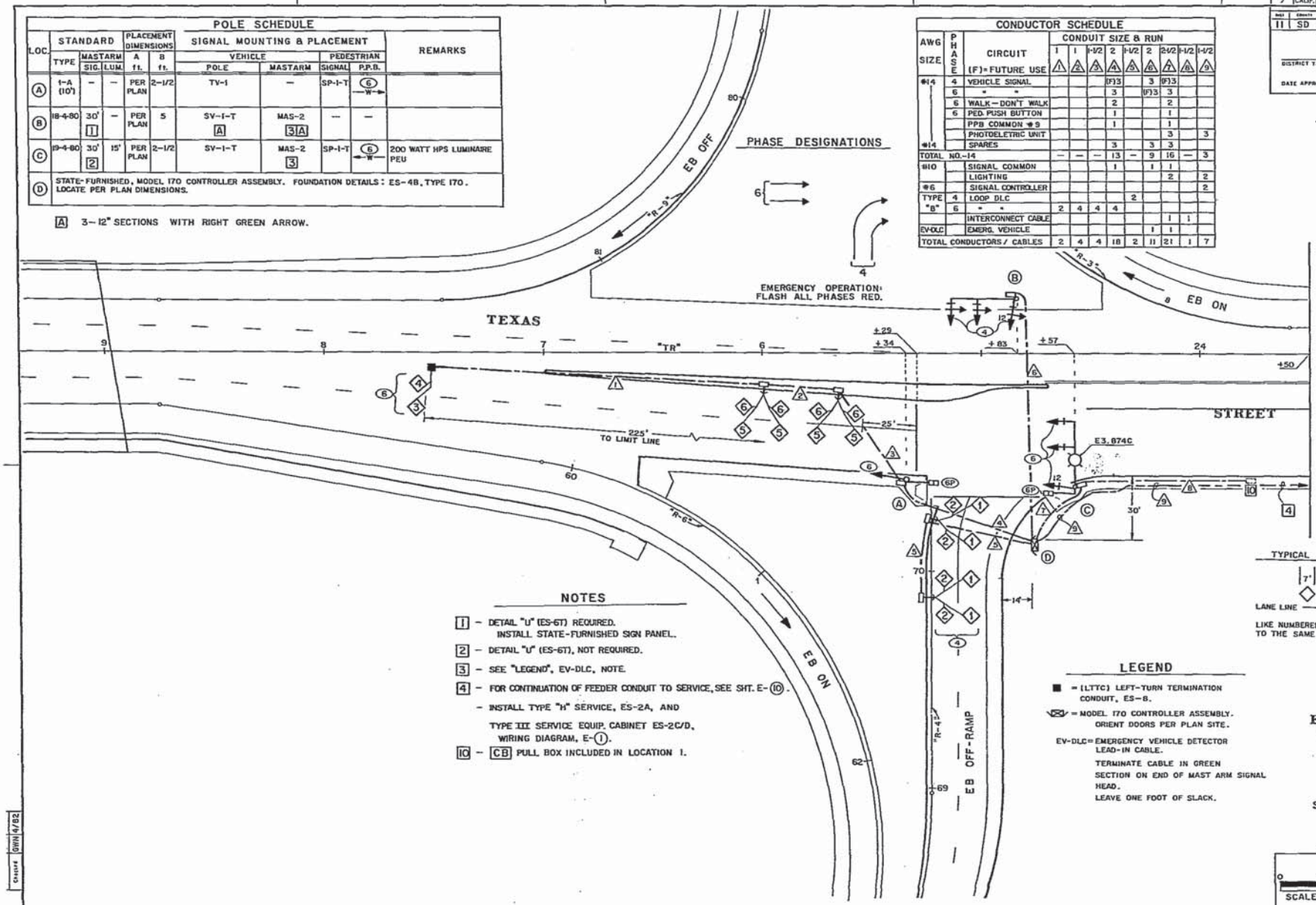
POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B.	REMARKS
(A)	1-A (10')	–	–	PER PLAN	2-1/2	TV-1	–	SP-1-T	(6) W	
(B)	18-4-80	30' [1]	–	PER PLAN	5	SV-1-T [A]	MAS-2 [3A]	–	–	
(C)	19-4-80	30' [2]	15'	PER PLAN	2-1/2	SV-1-T	MAS-2 [3]	SP-1-T	(6) W	200 WATT HPS LUMINAIRE PEU
(D)	STATE-FURNISHED, MODEL 170 CONTROLLER ASSEMBLY. FOUNDATION DETAILS: ES-4B, TYPE 170. LOCATE PER PLAN DIMENSIONS.									

[A] 3-12" SECTIONS WITH RIGHT GREEN ARROW.

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	CIRCUIT (F)=FUTURE USE	CONDUIT SIZE & RUN 1 (1)	1 (2)	1-1/2 (3)	2 (4)	1-1/2 (5)	2 (6)	2-1/2 (7)	1-1/2 (8)	1-1/2 (9)
#14	4	VEHICLE SIGNAL				(F)3		3	(F)3		
	6	" "				3		(F)3	3		
	6	WALK – DON'T WALK				2			2		
	6	PED. PUSH BUTTON				1			1		
		PPB COMMON #9				1			1		
		PHOTOELETRIC UNIT							3		3
#14		SPARES				3		3	3		
TOTAL NO.-14			–	–	–	13	–	9	16	–	3
#10		SIGNAL COMMON				1		1	1		
		LIGHTING							2		2
#6		SIGNAL CONTROLLER									2
TYPE	4	LOOP DLC					2				
"B"	6	" "	2	4	4	4					
		INTERCONNECT CABLE							1	1	
EV-DLC		EMERG. VEHICLE						1	1		
TOTAL CONDUCTORS / CABLES			2	4	4	18	2	11	21	1	7



NOTES

[1] – DETAIL "U" (ES-6T) REQUIRED. INSTALL STATE-FURNISHED SIGN PANEL.

[2] – DETAIL "U" (ES-6T), NOT REQUIRED.

[3] – SEE "LEGEND", EV-DLC, NOTE.

[4] – FOR CONTINUATION OF FEEDER CONDUIT TO SERVICE, SEE SHT. E-(10).

– INSTALL TYPE "H" SERVICE, ES-2A, AND TYPE III SERVICE EQUIP. CABINET ES-2C/D, WIRING DIAGRAM, E-(1).

[10] – [CB] PULL BOX INCLUDED IN LOCATION 1.

LEGEND

■ = (LTTC) LEFT-TURN TERMINATION CONDUIT, ES-8.

= MODEL 170 CONTROLLER ASSEMBLY. ORIENT DOORS PER PLAN SITE.

EV-DLC = EMERGENCY VEHICLE DETECTOR LEAD-IN CABLE. TERMINATE CABLE IN GREEN SECTION ON END OF MAST ARM SIGNAL HEAD. LEAVE ONE FOOT OF SLACK.

TYPICAL LOOP DETECTOR PLACEMENT

LIKE NUMBERED LOOPS SHALL BE CONNECTED TO THE SAME DLC.

ROUTE 8 AT EB OFF-RAMP & TEXAS STREET IN SAN DIEGO

SIGNAL AND LIGHTING LOCATION 2

SIGNAL NO. P3.882

0 20 40 SCALE IN FEET

SHEET E-3

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
W. J. FRENDO	3/82	M. A. CHASE	3/82	R. B. FINDLAY	3/82

CU 11203 WO 111801

REV. 4/82, 10/82

DRAWN 4/82

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INTERSECTION: CAMINO DEL RIO SOUTH @ TEXAS

22 ogram

Group Assignment: 4087
Field Master Assignment: NONE

N/S Street Name: TEXAS
E/W Street Name: CAMINO DEL RIO SOUTH

Last Database Change: n/a
System Ref. Number: n/a

N

TEXAS St | CAMINO DEL RIO SOUTH | TEXAS St

Row	Column # ---> / Phase # --->	1 (1+3)	2	3	4	5 (4+5)	6	7	8
0	Ped Walk		7	7	7		7		
1	Ped FDW		15	23	20		23		
2	Min Green	4	10	4	4	4	10		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	① 0.5 ~~4.8~~	2.0	3.0 ③ ~~2.0~~	2.0	3.7		
6	Max Gap	2.0	① 0.5 ~~4.8~~	2.0	3.0 ③ ~~2.0~~	2.0	3.7		
7	Min Gap	2.0	① 0.5 ~~0.2~~	2.0	3.0 ③ ~~2.0~~	2.0	0.2		
8	Max Limit	35	40	30	30	25	90 ~~60~~		
9	Max Limit 2		50		④ 40				
A	Bus Adv								
B	Call to Phs	③ 6							
C	Reduce By		0.1				0.1		
D	Every		0.6				0.9		
E	Yellow	3.4	6.0 ③ ~~5.8~~	4.2	3.9	3.4	3.9		
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0		
	Grade		-10%	0%	0%		0%		

Phase Timing - Bank 1
F + Phase + Row
<F Page>

① WH 1/5/04
③ WH 2/10/04
④ WH 2/20/04
② WH 1/29/04

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	123456__	0
Red Lock		1
Yellow Lock		2
Min Recall		3
Ped Recall		4
Peds (View)	_234_6__	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall	_2___6__	A
Max 2		B
Cond Serv	1_____	C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	__3_____	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel	DIGI56:	(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2_4_6__	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: JD
Approved By: [signature]
Drawing Number: 24525-10-D
Timing Implemented On: 4/2/03

INTERSECTION: CAMINO DEL RIO SOUTH @ TEXAS

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0	16 : 00	B	23456	2
1	18 : 00	B	23456	
2	19:00	B	23456	4
3	21:00	B	23456	
4	09:00	B	1 7	4
5	19:00	B	1 7	
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

(4)

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	3
9	Yellow Flash Phases	
A	Overlap A - Phases	1 3
B	Overlap B - Phases	45
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	3
6	Overlap B - Green Omit	4
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Configuration

E + E + ROW

For access, set F + 9 + E = 1

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry over
0		
1		1.8
2		1.8
3		2.0
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
BIKE LOOP	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		1.8
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 - - - -	1234____
C	13 14 15 16 17 18 19 20	12345678
D	- - - - 21 22 23 24	____5678
E	- - - - - - - -	1234____
F	- 25 26 27 28 - - -	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

TRAFFIC SIGNAL TIMING - PROGRAM 2009

PHASE TIMING

INTERVAL		NOT USED	Camino Del Rio South →	NOT USED	NOT USED	Camino Del Rio South ↗	← →	Mission City Pkwy ↑	NOT USED	PREEMPT	E	
		1	2	3	4	5	6	7	8			
WALK	0						7	7		RR1 DELAY		0
FLASH D/W	1						16	10		RR1 CLEAR		1
MIN GREEN	2		10			4	10	4		EVA DELAY	0	2
TYPE 3 DET	3									EVA CLEAR	3	3
ADD/VEH	4									EVB DELAY	0	4
VEH EXTEN *	5		3.4			2.0	3.4	2.0		EVB CLEAR	3	5
MAX GAP *	6		3.4			2.0	3.4	2.0		EVC DELAY	0	6
MIN GAP *	7		0.2			2.0	0.2	2.0		EVC CLEAR	3	7
MAX EXTEN	8		60			30	60	40		EVD DELAY		8
MAX 2	9									EVD CLEAR		9
	A									RR2 DELAY		A
CALL TO PHASE	B									RR2 CLEAR		B
REDUCE BY	C		0.1				0.1			EV CLR TMR		C
REDUCE EVERY	D		0.9				0.9			EV DLY TMR		D
YELLOW	E		4.0			~~3.0~~ 3.4	4.0	~~3.0~~ 3.4		RR CLR TMR		E
RED CLEAR	F		1.0			1.0	1.0	1.0		RR DLY TMR		F

MAX INITIAL (F-0-E) = 0 (KEYSTROKES: F + PHASE + LOCATION)

RED REVERT (F-0-F) = 5

ALL RED START (F-C-0) = 0

* MUST BE SAME FOR NON-DENSITY OPERATION

DNH 4/18/03

PHASE FUNCTION FLAGS

KEYSTROKES: F+F+FUNCTION#

FUNCTION		PHASE 1	2	3	4	5	6	7	8
PERMIT	0		X			X	X	X	
RED LOCK	1								
YELLOW LOCK	2								
VEH RECALL	3		X				X		
PED RECALL	4								
PEDS	5								
REST IN WALK	6								
PED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVE	C								
RESERVED	D								
STARTUP	E		X				X		
FIRST PHASES	F							X	

OVERLAP TIMING

KEYSTROKE: F+ COLOR CODE+OVERLAP

	9 GREEN	C YELLO	D RED
OVERLAP A			
OVERLAP B			
OVERLAP C			
OVERLAP D			

PHASE SEQUENCES (CFO)

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X				X	X	

DWG 26357-2-D

LOC Camino Del Rio South + Mission City Parkway

DATE: 12/23/92

DETECTOR TIMES (332 CABINET)

X → SET DELAY, SET CARRY, OBS COUNT, OBS DELAY, OBS CARRY

Y ↓

Y	1	2	3	4	5	6	7	8	9	A
0	111	5J1	111	5J1	111	5J1	111	5J1	111	5J1
1	212U	6J2U	212U 1.8	6J2U 1.8	212U	6J2U	212U	6J2U	212U	6J2U
2	212L	6J2L	212L	6J2L 1.8	212L	6J2L	212L	6J2L	212L	6J2L
3	213U	6J3U	213U 1.8	6J3U	213U	6J3U	213U	6J3U	213U	6J3U
4	213L	6J3L	213L	6J3L			213L	6J3L	213L	6J3L
5	214	6J4	214	6J4			214	6J4	214	6J4
6	315	7J5	315	7J5	315	7J5	315	7J5	315	7J5
7	416U	8J6U	416U	8J6U	416U	8J6U	416U	8J6U	416U	8J6U
8	416L	8J6L	416L	8J6L	416L	8J6L	416L	8J6L	416L	8J6L
9	417U	8J7U	417U	8J7U	417U	8J7U	417U	8J7U	417U	8J7U
A	417L	8J7L	417L	8J7L			417L	8J7L	417L	8J7L
B	418	8J8	418	8J8			418	8J8	418	8J8
C	119U	5J9U	119U	5J9U	119U	5J9U	119U	5J9U	119U	5J9U
D	319L	7J9L	319L	7J9L	319L	7J9L	319L	7J9L	319L	7J9L
E										
F										

KEYSTROKES: D + X + Y

TIME OF DAY FEATURES

EVENT	TIME	FUNCT	DAY OF WEEK S	M	T	W	T	F	S
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
A									
B									
C									
D									
E									
F									

KEYSTROKES: 7+EVENT#

FUNCTION BY PHASE

	1	2	3	4	5	6	7	8

KEYSTROKES: D-F-EVENT #

TIME OF DAY LOCAL FUNCTION CODES

0 - PERMIT	7 - RED REST	E - 1 - LOCAL OVERIDE	F - TOD OUTPUTS
1 - RED LOCK	8 - DBL ENTRY	2 - PHASE BANK 2	1 - TOD OUT 1
2 - YELLOW OCK	9 - VEH MAX RCL	3 - PHASE BANK 3	2 - TOD OUT 2
3 - VEH RECALL	A - SOFT RECALL	7 - DET COUNT	3 - TOD OUT 3
4 - PED RECALL	B - MAX II EXT	8 - SPLIT MONITOR	4 - TOD OUT 4
5 - RESERVED	C - COND SERVE		
6 - REST IN WALK	D - TOD LAG Ø		

CURRENT TIME AND DATE

8-0 HOUR, MINUTE, DAY OF WEEK

8-1 DAY OF MONTH, YEAR, MONTH

8-F SECONDS

CONFIGURATION DATA

NOTE "E" KEY ENABLED (F-9-E ≠ 0)

KEYSTROKES: E+E+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0	EXCLU PH								
1	RR1 GRN CL								
2	RR2 GRN CL								
3	RR2 LTD								
4									
5	OLA GOMIT						X		
6	OLB GOMIT								
7	OLC GOMIT								
8	OLD GOMIT								
9	OV FL VEL								
A	EMVEH A		X			X			
B	EMVEH B							X	
C	EMVEH C						X		
D	EMVEH D								
E	EXTRA	X		X	X				
F	TC SELECT		X						

EXTRA (E+E+E)
- 1-TBC TYPE 1
- 2-NEMA COOD
- 3-DAYLIGHT SAV
- 4-EV ADVANCE
- 6-SPECIAL EVENT
- 7-PRETIMED
- 8-SPLIT RING

TCSEL: (E+E+F)
- 1- SIMPLEX IN
- 2-2-WAY MODEM
- 3-7 WIRE IN
- 4-FLH/FREE
- 5-SIMPLEX OUT
- 7-7 WIRE OUT

ASSIGNS (E+F+F)
- 1-RT OVERLAP
- 2-TOD OUTPUTS
- 3-STEADY EV BEAC
- 4-FLASH EV BEAC

KEYSTROKES: E+F+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0									
1	RR OLAP H								
2	RR OLAP E								
3	RR OLAP C								
4	RR OLAP D								
5	PED2P								
6	PED6P						X		
7	PED4P								
8	PEDSP								
9	FLH YELO								
A	OVERLAP A								
B	OVERLAP B						X	X	
C	OVERLAP C								
D	OVERLAP D								
E	RESTRICT								
F	ASSIGNS	X							

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LOCATION: RTE 15 SB @ CAMINO DEL RIO SOUTH

CALTRANS C8 Version 3 DATE: 10/10/2012 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	1	1	1	1	CLK RST
1	DONT WALK	1	15	1	1	1	1	1	1	
2	MIN GREEN	5	20	5	5	1	11	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	1.0	2.0	2.0	1.0	0.9	2.0	0.9	0.9	
6	MAX GAP	1.0	2.0	2.0	1.0	0.9	2.0	0.9	0.9	
7	MIN GAP	1.0	2.0	2.0	1.0	0.9	2.0	0.9	0.9	
8	MAX EXT	15	40	15	20	9	40	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.2	4.5	3.5	3.6	3.0	4.5	3.0	3.0	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		54							
	BIKE XING FT		192				64			

PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
EV SEL	0	PERMIT	1	2	3	4		6			0
RR1 CLR	5	RED LOCK	1		3	4					1
EVA DLY	0	YEL LOCK									2
EVA CLR	5	V RECALL		2				6			3
EVB DLY	0	P RECALL									4
EVB CLR	5	PED PHASES		2							5
EVC DLY	0	RT OLA									6
EVC CLR	5	RT OLB									7
EVD DLY	0	DBL ENTRY									8
EVD CLR	5	MAX 2 PHASES									9
MAX EV	255	LAG PHASES	READ ONLY								A
RR2 CLR	5	RED REST									B
		REST-IN-WALK									C
		MAX 3 PHASES									D
		YEL START UP		2				6			E
		FIRST PHASE			3						F
			1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: RTE 15 SB @ CAMINO DEL RIO SOUTH

CALTRANS C8 DATE: 6/13/96

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH														LAG FZ FREE		X		X		X		X	0
1	FZ1 GRN FCTR													GAPOUT CP1	LAG FZ CP 1									1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A										OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		X				X			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRP																							F

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER :
SB OFF

LOCATION	OFF	ON
1		X
2	X	
3	X	
4	X	
5	X	
6	X	
7	X	
8	X	

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 15 SB @ CAMINO DEL RIO SOUTH

CALTRANS C8 DATE 6/13/96

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT	X								OLA ON		X	X	X		X			A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 15 SB @ CAMINO DEL RIO SOUTH**

CALTRANS C8 DATE : 6/13/96 PAGE 4

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	15	R5.2/R6.2	171	282

STATE 7 CALIF.

DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 9361

DATE APPROVED August 22, 1983

POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B.	REMARKS
A	19-4-80	30' [1]	12'	3 1/2	2 1/2	SV-1-T	MAS-7 MAT-5-4			150 WATT HPS LUMINAIRE, [5]
B	16-2-80	15		-23	5 1/2	SV-1-T	MAS			
C	1-A			CTR. IN ISLD.	CTR. IN ISLD.	TV-1 [5]				
D	19-4-80	25' [2]	12'	8	2 1/2	SV-1-T	MAS MAS	SP-1-T	←W-2P	150 WATT HPS LUMINAIRE,
E	15 [3]		12'	STA.	8					150 WATT HPS LUMINAIRE,
F	15		12'	3	5 1/2					150 WATT HPS LUMINAIRE,
G	1-A			8	2 1/2	TV-1-T [5]		SP-1-T	2P-W→	
H	19-4-80	30' [2]	12'	DIM.	5 1/2	SV-2-T8 (1)	MAS MAS [4]	SP-1-T	6P-W→	150 WATT HPS LUMINAIRE, PEU.
J	1-A			DIM.	5 1/2	TV-3-T [5]		SP-1-T	←W-6P	
K	15-2-80	18'		DIM.	5 1/2	SV-1-T	MAS [4]			
L	STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY. (FOUNDATION DETAILS ES-4B, ORIENT DOORS AS INDICATED).									

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	CIRCUIT	2" (1)	2" (2)	2 1/2" (3)	2" (4)	2" (5)	1 1/2" (6)	2 1/2" (7)	2 1/2" (8)	3" (9)	3" (10)	3" (11)	1 1/2" (12)
14	1	VEHICLE SIGNAL						3	3	3	3	3	3	
	2					3	3		3	3	3	3	3	
	3		3	3	3						3	3	3	
	4											3	3	
	5				3									
	6										3	3	3	
	7				3									
	2P	PED. INTERVAL SIGNAL				2	2		2	2	2	2	2	
	4P	(F)			2									
	6P										2	2	2	
	2P	PED. PUSHBUTTON				1	1		1	1	1	1	1	
	4P				1									
	6P										1	1	1	
	2/4	PPB COMMON			1	1	1		1	1	1	1	1	
	6/8					1					1	1	1	
		PHOTOELECTRIC UNIT									3	3	3	3
14		SPARES	3	3	3	3	3	3	3	3	3	3	3	
		TOTAL NO. 14	6	6	16	10	10	6	13	13	26	29	29	3
8		SIGNAL COMMON	1	1	1	1	1	1	1	1	1	1	1	
10		LIGHTING			2	2	2		2	2	2	2	2	4
		SPRINKLER CONTROL					2		2	2	2	2	2	2
2		SIGNAL CONTROLLER												2
TYPE 8	1	LOOP-DLC				1	1		1	1	1	1	1	
	2									2	2	2	2	
	3										1	1	1	
	4			1	1									
	5								1	1	1	1	1	
	6													
DLC	7		4	4	4									
DDLC	4	MAGNETOMETER			2									
EV-DLC		EMERG. VEH. PREEMPT.			1						1	1	2	
TOTAL CONDUCTORS/CABLES			11	12	27	14	16	7	19	22	37	40	41	11

CONDUIT NOTES

(13) - 2"C., 4 TWISTED PAIR, (LOOP CONDUCTORS).

(14) - 1"C., 2-BDLC

(15) - 1"C., 1-BDLC

(16) - 1 1/2"C., 1-BDLC

(17) - 1"C., 2 #10-LTG.

(18) - SERVICE CONDUIT. 2"C., 3 #4.

(19) - 2"C., 4-BDLC

(20) - 1"C., 2 #10-SC.

(21) - 3"C., 2 #2-SIGNAL. 4-DLC. 4 #10-LTG., 2 #10-S.C. 3 #14-PEU.

(22) - 1"C., 1-DDLC

(23) - 1"C., 2-DDLC

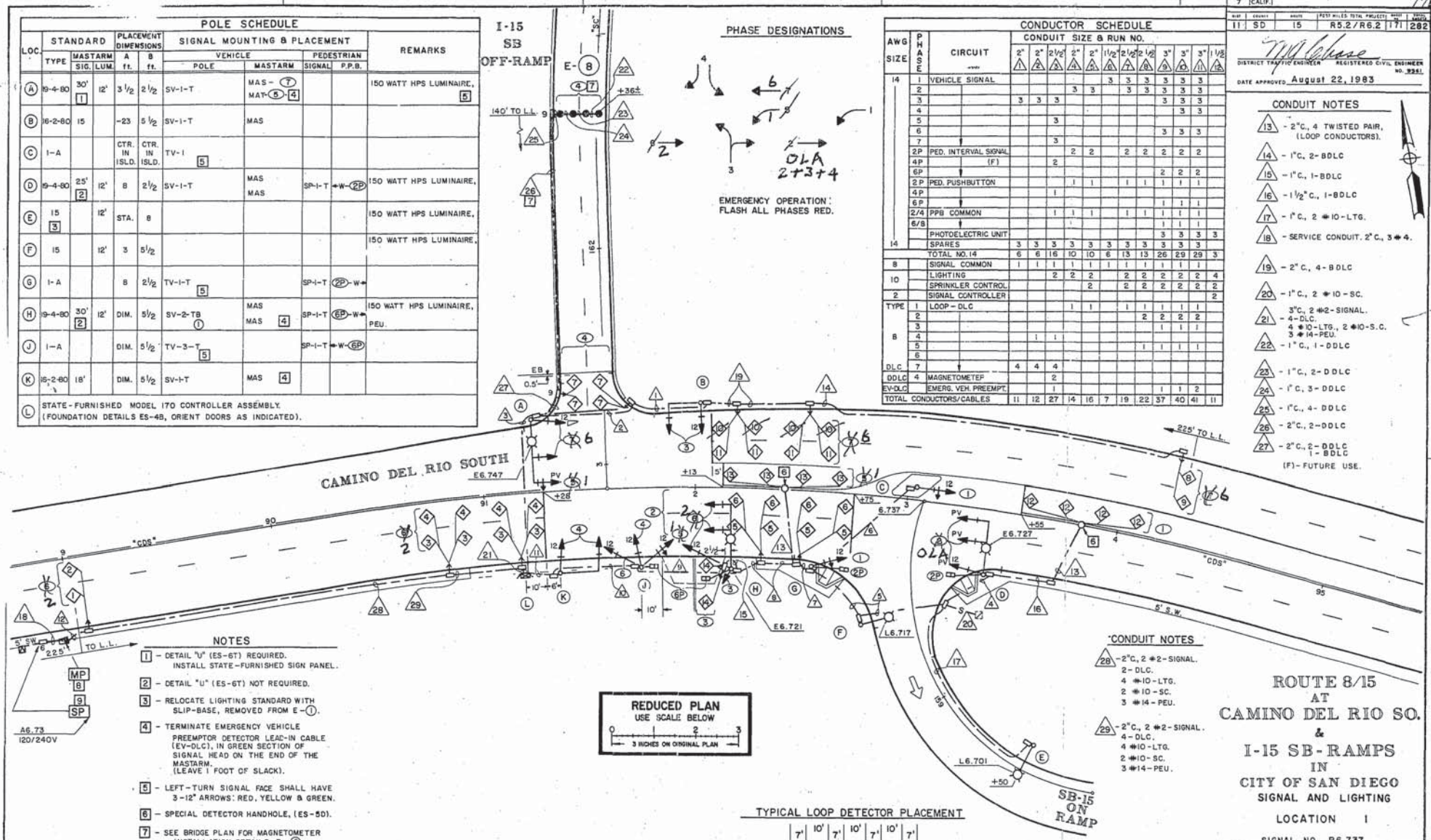
(24) - 1"C., 3-DDLC

(25) - 1"C., 4-DDLC

(26) - 2"C., 2-DDLC

(27) - 2"C., 2-DDLC 1-BDLC

(F) - FUTURE USE.



NOTES

1 - DETAIL "U" (ES-6T) REQUIRED. INSTALL STATE-FURNISHED SIGN PANEL.

2 - DETAIL "U" (ES-6T) NOT REQUIRED.

3 - RELOCATE LIGHTING STANDARD WITH SLIP-BASE, REMOVED FROM E-(1).

4 - TERMINATE EMERGENCY VEHICLE PREEMPTOR DETECTOR LEAD-IN CABLE (EV-DLC), IN GREEN SECTION OF SIGNAL HEAD ON THE END OF THE MASTARM. (LEAVE 1 FOOT OF SLACK).

5 - LEFT-TURN SIGNAL FACE SHALL HAVE 3-12" ARROWS: RED, YELLOW & GREEN.

6 - SPECIAL DETECTOR HANDHOLE, (ES-5D).

7 - SEE BRIDGE PLAN FOR MAGNETOMETER INSTALLATION DETAILS. E-(8).

8 - TYPE III SERVICE EQUIPMENT CABINET, (ES-2 C/D). WIRING DIAGRAM, SHEET E-(4).

9 - TERMINATING PULL BOX, LABELING AND MARKING AS REQUIRED BY SERVING UTILITY.

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

TYPICAL LOOP DETECTOR PLACEMENT

7' 10' 7' 10' 7' 10' 7'

LANE LINE — 2 1/2', OR CENTER.

LIKE NUMBERED LOOPS SHALL BE CONNECTED TO THE SAME DLC.

CONDUIT NOTES

(28) - 2"C., 2 #2-SIGNAL. 2-DLC. 4 #10-LTG. 2 #10-SC. 3 #14-PEU.

(29) - 2"C., 2 #2-SIGNAL. 4-DLC. 4 #10-LTG. 2 #10-SC. 3 #14-PEU.

ROUTE 8/15 AT CAMINO DEL RIO SO. & I-15 SB-RAMPS IN CITY OF SAN DIEGO

SIGNAL AND LIGHTING

LOCATION 1

SIGNAL NO. P6.737

0 20 40 SCALE IN FEET

SHEET E-(2)

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
M.C. GUINESS	6/83	M.A. CHASE	6/83	J.O. GRASBERGER	6/83

REVISED 8/83

CU 11206

WO 169611

FORM 8H274 P

LOCATION: RTE 15 NB @ CAMINO DEL RIO SOUTH

CALTRANS C8 Version 3 DATE: 10/10/2012 PAGE 1

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9
0	WALK	1	7	1	1	1	1	1	1	CLK RST
1	DONT WALK	1	15	1	1	1	1	1	1	
2	MIN GREEN	1	12	1	5	5	14	1	1	
3	TYPE 3 DET	0	0	0	0	0	0	0	0	
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
5	PASSAGE	0.9	2.0	0.9	2.0	1.0	2.0	0.9	0.9	
6	MAX GAP	0.9	2.0	0.9	2.0	1.0	2.0	0.9	0.9	
7	MIN GAP	0.9	2.0	0.9	2.0	1.0	2.0	0.9	0.9	
8	MAX EXT	9	40	9	25	20	40	9	9	
9	MAX 2									YR
A	MAX 3									MO
B										DAY
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR
E	YELLOW	3.0	4.5	3.0	4.0	3.2	4.0	3.0	3.0	MIN
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC
	PED XING FT		56							
	BIKE XING FT		70				102			

PRE-EMPTION E	
EV SEL	0
RR1 CLR	5
EVA DLY	0
EVA CLR	5
EVB DLY	0
EVB CLR	5
EVC DLY	0
EVC CLR	5
EVD DLY	0
EVD CLR	5
MAX EV	255
RR2 CLR	5

F FLAGS	1	2	3	4	5	6	7	8	
PERMIT		2		4	5	6			0
RED LOCK				4	5				1
YEL LOCK									2
V RECALL		2				6			3
P RECALL									4
PED PHASES		2							5
RT OLA									6
RT OLB									7
DBL ENTRY									8
MAX 2 PHASES									9
LAG PHASES	READ ONLY								A
RED REST									B
REST-IN-WALK									C
MAX 3 PHASES									D
YEL START UP		2				6			E
FIRST PHASE				4					F
	1	2	3	4	5	6	7	8	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 15 NB @ CAMINO DEL RIO SOUTH**

CALTRANS C8 Version 3 DATE: 5/2/2001

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH														LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR													GAPOUT CP1	LAG FZ CP 1									1
2														GAPOUT CP2	LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3	LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4	LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5	LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A										OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD FAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP *SYSTEM MASTER:*
CO4 LAST CP *RTE 15 NB RAMP*
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		
2		1
3		
4		
5		
6		
7		
8		

COO = 2

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 15 NB @ CAMINO DEL RIO SOUTH

CALTRANS C8 DATE 12/6/94 PAGE 3

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4					X				0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 15 NB @ CAMINO DEL RIO SOUTH**

CALTRANS C8 DATE : 12/6/94

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	15	00	4	X		X	X	X	X	X	
1	18	30	4			X	X	X	X	X	
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION

2 MAX 2

3 MAX 3

4 COND SERV (1ST SELECT)

5 COND SERV (2ND SELECT)

6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)

A TRAFFIC ACT. MAX 2 OPERATION

B TIME OF DAY MAX RECALL (2ND SELECT)

C YELLOW YIELD COORDINATION

D YELLOW YIELD COORDINATION

E TIME OF DAY FREE OPERATION

F FLASHING OPERATION

REG. NO.	STATE		
7	CALIF.		17

DIST.	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	15	R5.2/R6.2	172	282

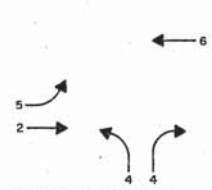
DISTRICT TRAFFIC ENGINEER — REGISTERED CIVIL ENGINEER NO. 35351

DATE APPROVED August 22, 1983

POLE SCHEDULE

LOC.	STANDARD TYPE	MASTARM SIG.	MASTARM LUM.	PLACEMENT DIMENSIONS A ft.	PLACEMENT DIMENSIONS B ft.	SIGNAL MOUNTING & PLACEMENT: VEHICLE POLE	VEHICLE MASTARM	PEDESTRIAN SIGNAL	PEDESTRIAN P.P.B.	REMARKS
(A)	17-2-80	20' [2]	12'	-5	2 1/2	SV-2-TB	MAS [4]			150 WATT HPS LUMINAIRE,
(B)	15 [3]		12'	STA.	6					150 WATT HPS LUMINAIRE,
(C)	15		12'	1	5 1/2	SV-1-T (17' MTG. HT.)				150 WATT HPS LUMINAIRE,
(D)	1-A			23	2 1/2	TV-3-T [5]				
(E)	26-4-80	40 [1]	12'	-1	2 1/2	SV-2-TB	MAT-(5)-[4] MAS-(2) [5]	SP-1-T	→W-(2P)	150 WATT HPS LUMINAIRE, PEU
(F)	1-A			5	2 1/2	TV-1		SP-1-T	(2P)-W→	
○										
○										
(G)	STATE-FURNISHED MODEL 170 CONTROLLER ASSEMBLY. (FOUNDATION DETAILS ES-4B, ORIENT DOORS AS INDICATED).									

PHASE DESIGNATIONS



EMERGENCY OPERATION: FLASH ALL PHASES RED.

CONDUCTOR SCHEDULE

AWG SIZE	PHASE	CIRCUIT	1 1/2" △1	2" △2	2" △3	2 1/2" △4	2 1/2" △5	3" △6	2 1/2" △7	1 1/2" △8	2" △9	2" △10	2 1/2" △11	3" △12
14	2	VEHICLE SIGNAL					3	3						
	4		3			3	3		3					
	5					3	3							
	6					3	3		3					
	2P	PED. INTER. SIGNAL					2	2						
	4P	(F)				2	2	2	2					
	6P	(F)				2	2		2					
	2P	PED. PUSHBUTTON					1	1						
	4P					1	1		1					
	6P		1			1	1		1					
	2/4	P.P.B. COMMON				1	1	1	1					
	6/8					1	1		1					
		PHOTOELECTRIC UNIT					3				3	3	3	3
14		SPARES	3			3	3	3	3					
TOTAL NO. 14			8			20	29	12	17		3	3	3	3
8		SIGNAL COMMON	1			1	1	1	1					
10		LIGHTING	2			2	2		2		4	4	4	4
2		SIGNAL CONTROLLER									2	2	2	2
EV-DLC		EMERG. VEH. PREEMPT.					2		1					
TYPE B	2	LOOP DLC										2	4	4
	4						1			3				
	5													1
DLC	6			4	4	4	4							
TOTAL CONDUCTORS/CABLES			11	4	4	27	39	14	21	3	9	11	13	14

CONDUIT NOTES

△13 - 2"C., 4 TWISTED PAIR, (LOOP CONDUCTORS).

△14 - 1 1/2"C., 2-BDLC

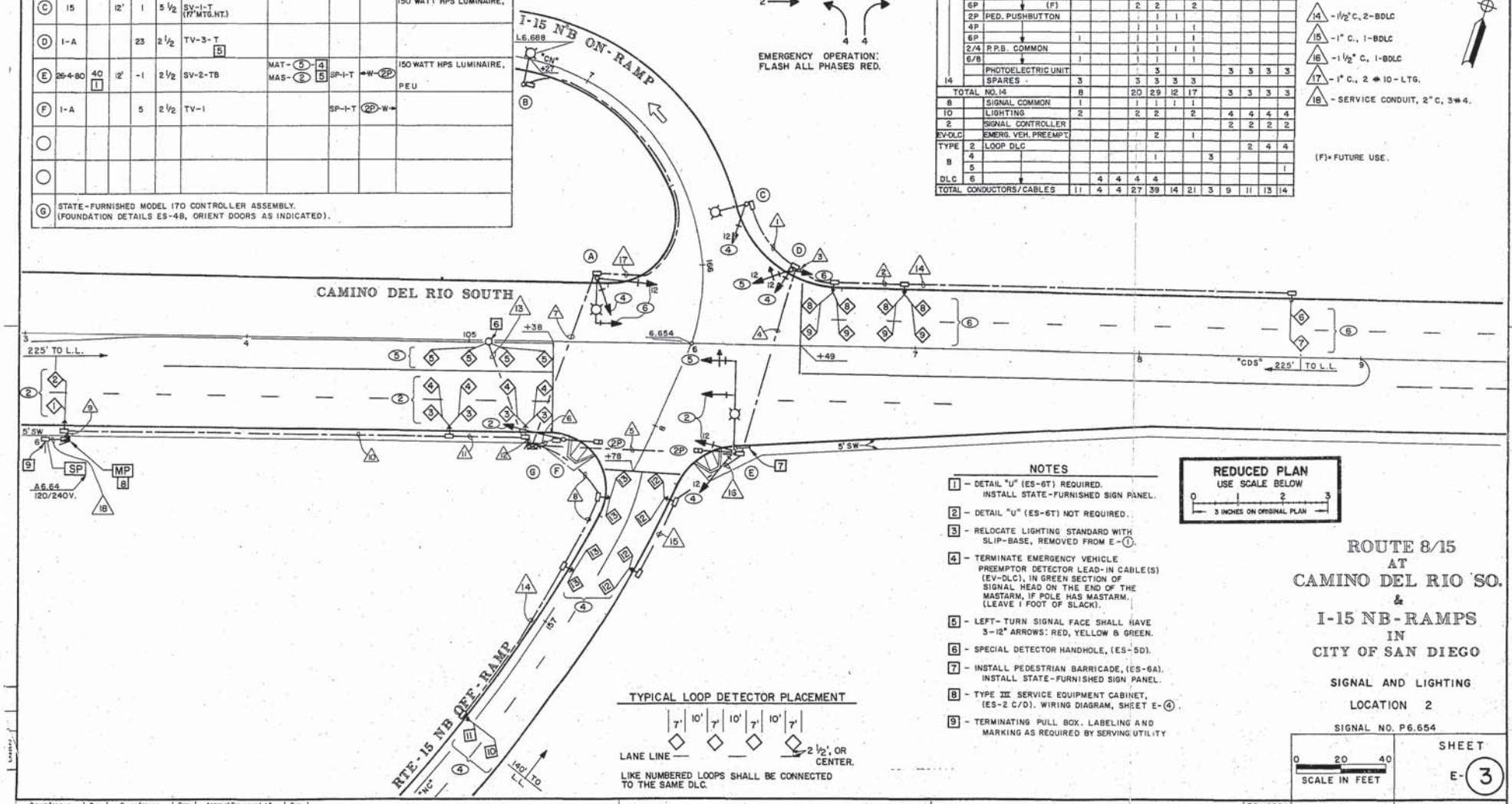
△15 - 1"C., 1-BDLC

△16 - 1 1/2"C., 1-BDLC

△17 - 1"C., 2 #10-LTG.

△18 - SERVICE CONDUIT, 2"C, 3#4.

(F) = FUTURE USE.



TYPICAL LOOP DETECTOR PLACEMENT

7'	10'	7'	10'	7'	10'	7'

LANE LINE — 2 1/2', OR CENTER.

LIKE NUMBERED LOOPS SHALL BE CONNECTED TO THE SAME DLC.

NOTES

1 - DETAIL "U" (ES-6T) REQUIRED. INSTALL STATE-FURNISHED SIGN PANEL.

2 - DETAIL "U" (ES-6T) NOT REQUIRED.

3 - RELOCATE LIGHTING STANDARD WITH SLIP-BASE, REMOVED FROM E-(1).

4 - TERMINATE EMERGENCY VEHICLE PREEMPTOR DETECTOR LEAD-IN CABLE(S) (EV-DLC), IN GREEN SECTION OF SIGNAL HEAD ON THE END OF THE MASTARM, IF POLE HAS MASTARM. (LEAVE 1 FOOT OF SLACK).

5 - LEFT-TURN SIGNAL FACE SHALL HAVE 3-12" ARROWS: RED, YELLOW & GREEN.

6 - SPECIAL DETECTOR HANDHOLE, (ES-5D).

7 - INSTALL PEDESTRIAN BARRICADE, (ES-6A). INSTALL STATE-FURNISHED SIGN PANEL.

8 - TYPE III SERVICE EQUIPMENT CABINET, (ES-2 C/D). WIRING DIAGRAM, SHEET E-(4).

9 - TERMINATING PULL BOX. LABELING AND MARKING AS REQUIRED BY SERVING UTILITY

REDUCED PLAN
USE SCALE BELOW
0 1 2 3
3 INCHES ON ORIGINAL PLAN

ROUTE 8/15 AT CAMINO DEL RIO SO. & I-15 NB-RAMPS IN CITY OF SAN DIEGO

SIGNAL AND LIGHTING

LOCATION 2

SIGNAL NO. P6.654

0 20 40
SCALE IN FEET

SHEET E-3

Project Engineer	Date	Design Engineer	Date	Approval Recommended By	Date
M.C. GUINESS	6/83	M.A. CHASE	6/83	J.O. GRASBERGER	6/83

REVISED 7/83

CU 11206

WO 169611

LOCATION: **RTE 8 EB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 4/21/2011

F PAGE

	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	1	1	1	1	1	1	1	CLK RST	EV SEL	0	PERMIT	1	2	3	4		6			0
1	DONT WALK	1	1	1	1	1	1	1	1		RR1 CLR	5	RED LOCK			3						1
2	MIN GREEN	5	1	5	12	1	5	1	1		EVA DLY	0	YEL LOCK	1			4					2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	2.0	1.0	1.0	2.0	0.9	2.0	0.9	0.9		EVB CLR	5	PED PHASES									5
6	MAX GAP	2.0	1.0	1.0	2.0	0.9	2.0	0.9	0.9		EVC DLY	0	RT OLA									6
7	MIN GAP	2.0	1.0	1.0	2.0	0.9	2.0	0.9	0.9		EVC CLR	5	RT OLB									7
8	MAX EXT	40	9	15	40	9	65	9	9		EVD DLY	0	DBL ENTRY									8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES									9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR			MAX 3 PHASES									D
E	YELLOW	4.1	3.0	3.7	5.0	3.0	5.0	3.0	3.0	MIN			YEL START UP		2				6			E
F	RED	1.0	1.0	1.0	1.0	0.0	1.0	0.0	0.0	SEC			FIRST PHASE				4					F
	PED XING FT													1	2	3	4	5	6	7	8	
	BIKE XING FT				86																	

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FDO TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: **RTE 8 EB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 6/2/00

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAG									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH															LAG FZ FREE	**1**			**4**		**6**		**8**	0
1	FZ1 GRN FCTR													GAPOUT CP1		LAG FZ CP 1									1
2														GAPOUT CP2		LAG FZ CP 2									2
3	FZ3 GRN FCTR													GAPOUT CP3		LAG FZ CP 3									3
4	FZ4 GRN FCTR										PERM TIME			GAPOUT CP4		LAG FZ CP 4									4
5	FZ5 GRN FCTR										LAG OFFSET			GAPOUT CP5		LAG FZ CP 5									5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6									6
7	FZ7 GRN FCTR										LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR										NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE													GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A										OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		**2**				**6**			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
WB OFF CABINTE

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = **1**

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: **RTE 8 EB @ FAIRMONT AVENUE**

CALTRANS C8 DATE: 3/4/96

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1									CP 1								
2	CP 2									CP 2									CP 2								
3	CP 3									CP 3									CP 3								
4	CP 4									CP 4									CP 4								
5	CP 5									CP 5									CP 5								
6	CP 6									CP 6									CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		X							5
6										6 PED						X			6
7										4 PED				X					7
8										8 PED								X	8
9																			9
A	OLA NOT	X					X			OLA ON			X	X					A
B	OLB NOT	X					X			OLB ON			X	X					B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES

(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES

(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: **RTE 8 EB @ FAIRMONT AVENUE**

CALTRANS C8 Version 3 DATE: 6/2/00

7 PAGE

TIME OF DAY ACTIVITY TABLE										
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS										
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE C09 = 0 or 1

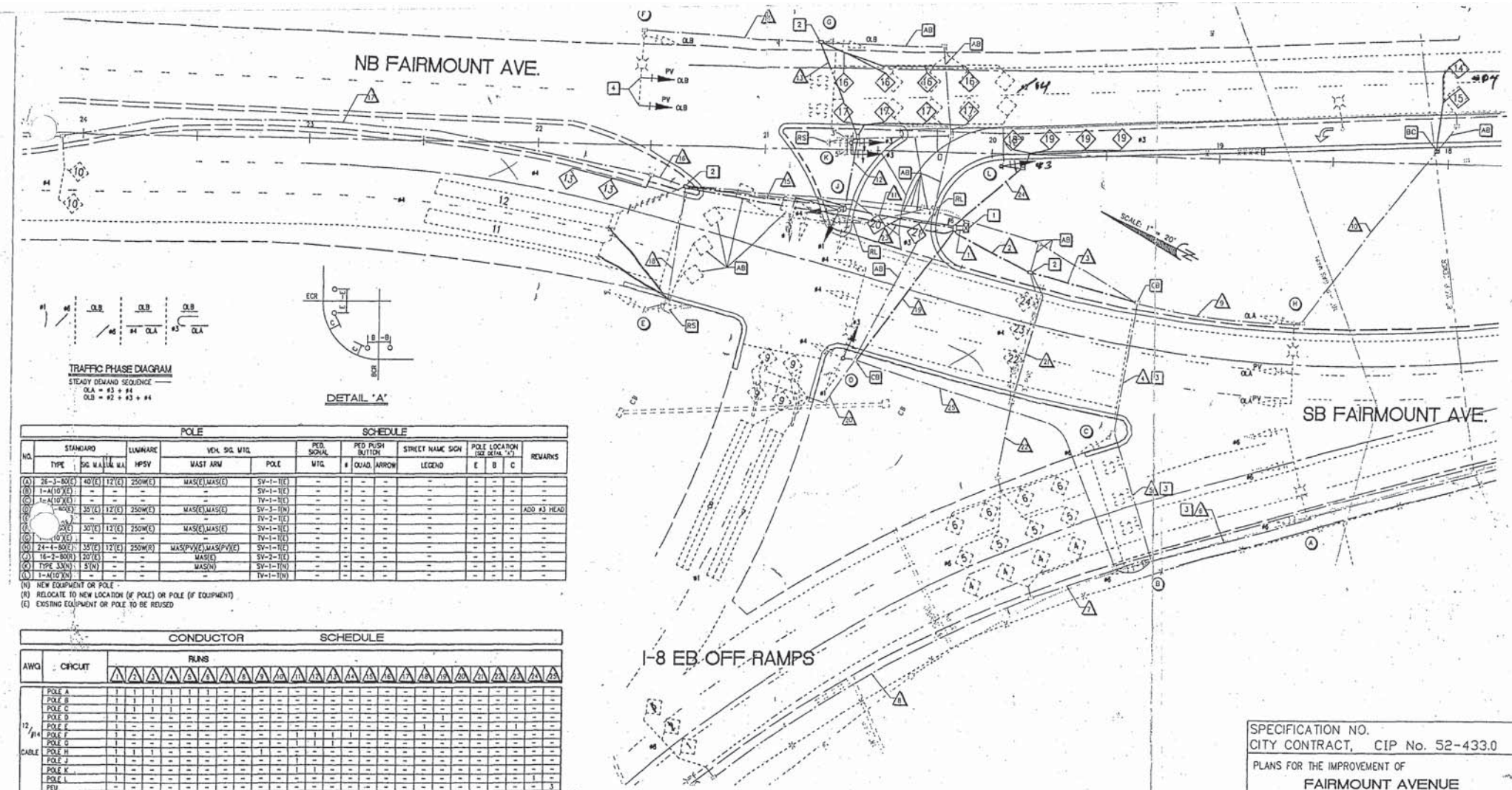
CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED
7 ENERGIZE AUX OUTPUT-GREEN
8 ENERGIZE AUX OUTPUT-YELLOW
9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION



POLE SCHEDULE

NO.	STANDARD TYPE	STANDARD SIG. MA	STANDARD LUM. MA	LUMINAIRE HPSV	VEH. SIG. MTG. MAST ARM	VEH. SIG. MTG. POLE	PED. SIGNAL MTG.	PED PUSH BUTTON #	PED PUSH BUTTON QUAD.	PED PUSH BUTTON ARROW	STREET NAME SIGN LEGEND	POLE LOCATION (SEE DETAIL "A") E	POLE LOCATION B	POLE LOCATION C	REMARKS
(A)	26-3-80(E)	40'(E)	12'(E)	250W(E)	MAS(E),MAS(E)	SV-1-T(E)	-	-	-	-	-	-	-	-	-
(B)	1-A(10')(E)	-	-	-	-	SV-1-T(E)	-	-	-	-	-	-	-	-	-
(C)	1-A(10')(E)	-	-	-	-	TV-1-T(E)	-	-	-	-	-	-	-	-	-
(D)	1-80(E)	35'(E)	12'(E)	250W(E)	MAS(E),MAS(E)	SV-3-T(N)	-	-	-	-	-	-	-	-	ADD #3 HEAD
(E)	[illegible]	-	-	-	-	TV-2-T(E)	-	-	-	-	-	-	-	-	-
(F)	[illegible]-80(E)	30'(E)	12'(E)	250W(E)	MAS(E),MAS(E)	SV-1-T(E)	-	-	-	-	-	-	-	-	-
(G)	1-A(10')(E)	-	-	-	-	TV-1-T(E)	-	-	-	-	-	-	-	-	-
(H)	24-4-80(E)	35'(E)	12'(E)	250W(R)	MAS(PV)(E),MAS(PV)(E)	SV-1-T(E)	-	-	-	-	-	-	-	-	-
(J)	16-2-80(R)	20'(E)	-	-	MAS(E)	SV-2-T(E)	-	-	-	-	-	-	-	-	-
(K)	TYPE 3(N)	5'(N)	-	-	MAS(N)	SV-1-T(N)	-	-	-	-	-	-	-	-	-
(L)	1-A(10')(N)	-	-	-	-	TV-1-T(N)	-	-	-	-	-	-	-	-	-

(N) NEW EQUIPMENT OR POLE
(R) RELOCATE TO NEW LOCATION (IF POLE) OR POLE (IF EQUIPMENT)
(E) EXISTING EQUIPMENT OR POLE TO BE REUSED

CONDUCTOR SCHEDULE

AWG	CIRCUIT	RUNS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
12/#14 CABLE	POLE A	1	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE B	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE C	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE D	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	POLE E	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-
	POLE F	1	-	-	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	-	-	-	-	-	-	-
	POLE G	1	-	-	-	-	-	-	-	-	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	-
	POLE H	1	1	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE J	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE K	1	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	POLE L	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	PEU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
	TOTAL	11	4	4	3	2	1	-	-	1	-	4	3	2	1	-	-	-	1	1	-	-	-	1	1	3
#10	LUMINAIRE	-	2	2	2	2	2	-	-	2	-	2	2	2	2	-	-	-	-	2	-	-	-	-	-	-
	TOTAL	-	2	2	2	2	2	-	-	2	-	2	2	2	2	-	-	-	-	2	-	-	-	-	-	-
#2	SIGNAL SERVICE	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2
TYPE B DLC	#1 DETECTOR	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	3	-	-	-	-	-
	#2 DETECTOR	4	2	2	-	-	-	-	-	2	2	2	2	1	-	-	-	-	-	-	-	-	-	-	-	-
	#3 DETECTOR	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
	#4 DETECTOR	7	3	-	-	-	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	1	-	4	-	-
	#6 DETECTOR	6	6	4	4	4	-	4	3	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	-	-
	TOTAL	24	11	6	4	4	-	4	3	2	2	2	2	1	-	-	2	1	-	3	3	3	2	4	2	-
	DISCONNECT	8	4	4	4	4	4	-	-	-	-	4	-	-	-	4	4	4	-	-	-	-	-	-	-	-
	SIZE	3-3" (N)	3" (N)	3" (N)	2" (E)	2" (E)	1 1/2" (E)	1 1/2" (E)	1 1/2" (E)	1 1/2" (E)	1 1/2" (E)	3" (N)	3" (N)	3" (N)	1 1/2" (E)	2" (N)	1 1/2" (E)	1 1/2" (E)	1 1/2" (E)	3" (N)	1 1/2" (E)	1 1/2" (E)	1 1/2" (E)	3" (N)	1 1/2" (E)	1 1/2" (E)

(N) NEW EQUIPMENT OR POLE
(E) EXISTING EQUIPMENT OR POLE TO BE REUSED

STANDARD NOTES:

- AB – ABANDON. IF APPLIED TO CONDUIT REMOVE CONDUCTORS.
- BC – INSTALL PULLBOX IN EXISTING CONDUIT RUN.
- CB – INSTALL CONDUIT INTO EXISTING PULLBOX.
- RL – RELOCATE EQUIPMENT.
- RS – REMOVE AND SALVAGE EQUIPMENT.

CONSTRUCTION NOTES (THIS SHEET):

1. INSTALL EXISTING TYPE 170 CONTROLLER AND CABINET COMPLETE ON NEW FOUNDATION.
2. INSTALL NEW PULLBOX IN SAME LOCATION AS EXISTING PULLBOX.
3. REMOVE DISCRETE #14 SIGNAL CONDUCTOR. ADD 12/14 CABLE AS SHOWN.
4. RS EXISTING SIGNAL HEADS. FURNISH AND INSTALL PROGRAMMED VISIBILITY TYPE.

REGISTERED PROFESSIONAL ENGINEER — JOHN A. TAYLOR — No. 042118 — Exp. 3-31-96 — CIVIL — STATE OF CALIFORNIA

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SPECIFICATION NO.
CITY CONTRACT, CIP No. 52-433.0

PLANS FOR THE IMPROVEMENT OF
FAIRMOUNT AVENUE
MONTEZUMA ROAD TO INTERSTATE 8

SIGNAL MODIFICATION PLAN

CITY OF SAN DIEGO, CALIFORNIA
ENGINEERING AND DEVELOPMENT DEPARTMENT
SHEET 28 OF 72 SHEETS

W.O. NO. 119446

FOR CITY ENGINEER — DATE: APR. 28, 1995

SECTION HEAD

PROJECT MANAGER

DESCRIPTION	BY	APPROVED	DATE	FILMED
ORIGINAL				

CONTROL CERTIFICATION: 220-1739
LAMBERT COORDINATES: 27276-28-D

CONTRACTOR ____ DATE STARTED ____
INSPECTOR ____ DATE COMPLETED ____

4-27-95

N:\T\53111267\1367-T28.DWG DATE: FEB 06, 1995 TIME: 1:43 PM

67

INTERSECTION: MADISON @ TEXAS

223 P[illegible]am

Group Assignment: 4027
Field Master Assignment: NONE

N/S Street Name: TEXAS
E/W Street Name: MADISON

Last Database Change: 5/10/01 11:[illegible]
System Ref. Number: 281
Timing Sheet By:
Approved By:
Drawing Number: —
Timing Implemented On:

N

Row	Column # ---> / Phase # --->	Phase 1	2	3	4	5	6	7	8
		↳	↑			↰	↓	↗	↖
0	Ped Walk		7				7	7	7
1	Ped FDW		13				12	13	12
2	Min Green	4	10			4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.9			2.0	3.9	2.0	2.0
6	Max Gap	2.0	3.9			2.0	3.9	2.0	2.0
7	Min Gap	2.0	0.5			2.0	0.2	2.0	2.0
8	Max Limit	20	70 ~~60~~			20	70 ~~50~~	25	25
9	Max Limit 2	20	50			20	50	25	25
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.8				0.8		
E	Yellow	3.4 ~~3.0~~	3.9 ~~3.3~~			3.4 ~~3.0~~	3.9 ~~3.5~~	3.9 ~~3.0~~	3.9 ~~4.2~~
F	Red Clear	1.0	1.0			1.0	1.0	1.0	1.0

DOC 12/27/02

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	3
EV-B Delay	
EV-B Clear	
EV-C Delay	0
EV-C Clear	3
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12__5678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	_2___6__
4	Ped Recall	
5	Peds (View)	_2___678
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	_____7_

Phase Functions <F Page>
F + F + Row

Max Initial	0
Red Revert	5.0
All Red Start	0.0

F + 0 + E
F + 0 + F
F + C + O

Start / Revert Times

Drop Number	9	C + 0 + 0
Zone Number	9	C + 0 + 1
Area Number	2	C + 0 + 2
Area Address	13	C + 0 + 3
QuicNet Channel	DIGI66:	(QuicNet)

Communication Addresses

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	14 ~~0~~	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O

	F	Row
Free Lag	_2___67_	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Row	Time	Functio	Day of Week	Column F Phases/Bits
0	:			
1	:			
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	_____7_
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	
C	EV-C Phases	1____6__
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234____
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	____5678
E	– – – – – – – –	1234____
F	– 25 26 27 28 – – –	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: MADISON @ TEXAS

223 Program

Row	Column # —> / Plan Name —>	Plan 1	Plan 2	Plan 3	Plan 4	Plan 5	Plan 6	Plan 7	Plan 8	Plan 9
0	Cycle Length	110	122							
1	Phase 1 - ForceOff	61	67							
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	255	255							
4	Phase 4 - ForceOff	255	255							
5	Phase 5 - ForceOff	61	67							
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	47	51							
8	Phase 8 - ForceOff	24	26							
9	Ring Offset									
A	Offset A	108	67		75					
B	Offset B									
C	Offset C									
D	Permissive	11	12							
E	Hold Release	255	255							
F	Ped Shift	0	0							

Coordination <C Page>

C + Plan + ROW

Coordination Timing By:
Implemented On:

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	07 : 00	1	A	_23456_
1	10 : 00	2	A	_23456_
2	15 : 00	E	A	1234567
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2___67_
Plan 1	_2___6__	1	Plan 1 - Lag	_2_4_67_
Plan 2	_2___6__	2	Plan 2 - Lag	_2_4_67_
Plan 3	_2___6__	3	Plan 3 - Lag	_2_4_6_8
Plan 4	_2___6__	4	Plan 4 - Lag	_2_4_6_8
Plan 5	_2___6__	5	Plan 5 - Lag	_2_4_6_8
Plan 6	_2___6__	6	Plan 6 - Lag	_2_4_6_8
Plan 7	_2___6__	7	Plan 7 - Lag	_2_4_6_8
Plan 8	_2___6__	8	Plan 8 - Lag	_2_4_6_8
Plan 9	_2___6__	9	Plan 9 - Lag	_2_4_6_8
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen