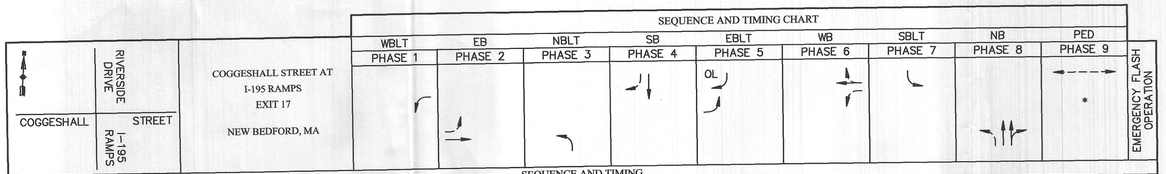


SEQUENCE AND TIMING

APPROACH	DIRECTION	FACE	ø/ø	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	R/W	CL1	CL2	
RIVERSIDE DRIVE	SBLT	A	7	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	~~CR~~	FRA
RIERSIDE DRIVE	SB	B	4	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FR
RIVERSIDE DRIVE	SB/SBRT	C,D	4/5	R	R	R	R	R	R	R	R	R	G	Y	R	R/~~G~~	R/~~G~~	R/~~Y~~	R	R	R	R	R	R	R	R	R	G	Y	R	FR
I-195 RAMP	NBLT	E,P	3/8	R	R	R	R	R	R	~~CG~~/R	~~CY~~/R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	FR
I-195 RAMP	NB	F,G	8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	FR
COGGESHALL STREET	EBLT	H,K	5/2	R	R	R	G	Y	R	R	R	R	R	R	R	~~CG~~/R	~~CY~~/R	R	R	R	R	R	R	R	R	R	R	R	R	FY
COGGESHALL STREET	EB	J	2	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
COGGESHALL STREET	WBLT	L,N	1/6	~~CG~~/R	~~CY~~/R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	FY
COGGESHALL STREET	WB	M	6	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	FY
PEDESTRIAN	E/W	P1-P2	9	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	OUT

TIMING IN SECONDS

MINIMUM GREEN	6			10			6			6			6			10			6			6							
VEHICLE INTERVAL	2			2			2			2			2			2			2			2							
MAXIMUM GREEN I FREE OPERATION (TP1)	20			40			20			20			20			40			20			20							
MAXIMUM GREEN II TIMING PLAN OPERATION	25			44			15			15			25			49			15			15							
YELLOW CLEAR		4			4			4			4			4			4			4				4					
ALL RED CLEAR			2			2			2			2			2			2			2			2			6			1
WALK INTERVAL																												30		
PED. CLEARANCE																														
DETECTOR	NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK				LOCK			
RECALL	OFF			SOFT			OFF			OFF			OFF			SOFT			OFF			OFF				OFF			

MAXIMUM PHASE TIMING

TIMING PLAN	SEC.	SEC.	SEC.	SEC.	SEC.	SEC.	SEC.	SEC.	SEC.
TP2 M-F (6AM-NOON)	18	44	13	15	13	49	13	15	
TP3 M-F (NOON-7PM)	20	40	15	15	20	40	15	15	
TP4 SAT (10AM-6PM)	25	35	15	15	25	35	15	15	
TP5 SUN (10AM-6PM)	25	35	15	15	25	35	15	15	

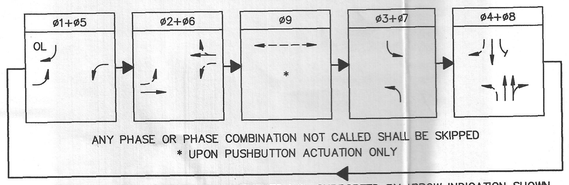
NOTES: 1. FLASHING OPERATION PER M.U.T.C.D. SECTION 4D.12

ITEM 815.1
TRAFFIC SIGNAL CONSTRUCTION
LIST OF MAJOR ITEMS REQUIRED

QUANTITY	DESCRIPTION
1	T.S. CABINET AND CONTROLLER: 8 PHASE TS2-TYPE 1, OPTICOM PREEMPTION, GRAPHICS, CLOSED LOOP SYSTEM READY, GPS-TBC, FULL INPUT AND OUTPUT SUPPRESSION PACKAGE W/FOUNDATION PLUS 2 SPARE B14'S
2	35' GALV. STEEL MAST ARM
2	40' GALV. STEEL MAST ARM
1	ELECTRIC SERVICE CONNECTION
6	SIGNAL HEAD 1-WAY 3-SECTION YELLOW HOUSING 12" L.E.D. W/LOUVERED BACKPLATE & VISOR
8	SIGNAL HEAD 1-WAY 5-SECTION YELLOW HOUSING 12" L.E.D. W/LOUVERED BACKPLATE & VISOR
2	PEDESTRIAN SIGNAL HEAD 16" YELLOW HOUSING L.E.D. W/SOLID HAND & MAN, PUSHBUTTONS & SIGNS
1	PREEMPTION CONFIRMATION HIGH INTENSITY CLEAR STROBE
4	OPTICOM DETECTOR (MODEL 711)
2	2-CHANNEL PHASE SELECTOR AND RACK (700 SERIES)
14	VEHICLE DETECTION LOOP 6'x6' (4 TURNS)
20	QUADRUPOLE VEHICLE DETECTION LOOP 6'x23' (2 TURNS)
18	2 CHANNEL LOOP DETECTOR AMPLIFIER - RACK MOUNTED (INCLUDES 2 SPARE)
3	R10-12 (LT YIELD ON GREEN BALL) SIGN, 30"X36"

PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING TRAFFIC CONTROL SIGNAL SYSTEM.

PREFERENTIAL PHASE SEQUENCE



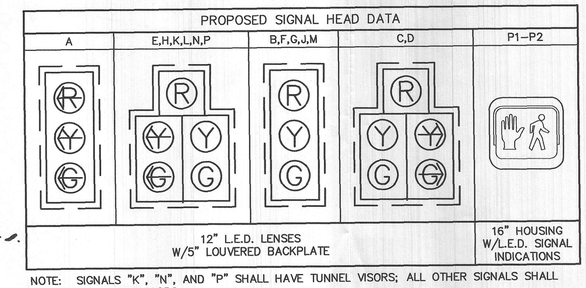
PLAN NOTE: 1. VEHICLE TURNING MOVEMENTS NOT SUPPORTED BY ARROW INDICATION SHOWN AS A DASHED ARROW ON PLAN.

RECEIVER/ PREEMPT 1	RECEIVER/ PREEMPT 2	RECEIVER/ PREEMPT 3	RECEIVER/ PREEMPT 4
ø4+ø7	ø3+ø8	ø1+ø6	ø2+ø5

EMERGENCY VEHICLE PREEMPTION OPERATION:

1. EMERGENCY VEHICLE PREEMPTION SHALL BE ACTUATED BY AN OPTICAL SIGNAL FROM AN OPTICAL EMITTER MOUNTED ON AN EMERGENCY VEHICLE AND RECEIVED BY AN OPTICAL DETECTOR LOCATED AT THE INTERSECTION. A SEPARATE RECEIVING DETECTOR IS REQUIRED FOR EACH DETECTED APPROACH.
2. PREEMPTION SIGNALS FROM MULTIPLE APPROACHES SHALL BE SERVICED ON A FIRST DETECTED FIRST SERVED BASIS.
3. IN RESPONSE TO A PREEMPTION SIGNAL RECEIVED AT AN INTERSECTION BY OPTICAL DETECTOR, THE CONTROLLER SHALL TIME THE CLEARANCE INTERVALS OF THE ACTIVE PHASE (IF DIFFERENT THAN THAT TO BE SERVICED) AND ADVANCE TO AND/OR HOLD IN EMERGENCY VEHICLE PREEMPTION PHASE UNTIL PREEMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME CLEARANCES AND SIMILARLY SERVICE OTHER EMERGENCY VEHICLE PREEMPTION SEQUENCES IN THE ORDER RECEIVED (IF RECEIVED). OTHERWISE, RETURN TO MAIN LINE PHASE (ø2+ø6).
4. NORMAL CLEARANCES SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PREEMPTION DEMAND.
5. MINIMUM GREEN FOR PREEMPTION SEQUENCES SHALL BE 6 SECONDS.

PROPOSED SIGNAL HEAD DATA



NOTE: SIGNALS "K", "N", AND "P" SHALL HAVE TUNNEL VISORS; ALL OTHER SIGNALS SHALL HAVE CAP VISORS.

CONSTRUCTION NOTES:

1. CONTROLLER PROGRAMMING SHALL BE ACCOMPLISHED BY QUALIFIED FACTORY REPRESENTATIVES.

DETECTOR DATA

DETECTOR NUMBER	NUMBER SECTION/ SIZE	NUMBER OF TURNS	OPERATIONS	CALL DELAY	CALL PHASE	EXT. PHASE	LOOP CONN.
1	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	6	6	DIRECT
2	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	1/6	1/6	DIRECT
3	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	6	6	DIRECT
4	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	1/6	1/6	DIRECT
5	1-6'x6'	4	PRESENCE	-	6	6	DIRECT
6	1-6'x6'	4	PRESENCE	-	1/6	1/6	DIRECT
7	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	2/5	2/5	DIRECT
8	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	2	2	DIRECT
9	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	2/5	2/5	DIRECT
10	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	2	2	DIRECT
11	1-6'x6'	4	PRESENCE	-	2/5	2/5	DIRECT
12	1-6'x6'	4	PRESENCE	-	2	2	DIRECT
13	1-6'x6'	4	PRESENCE	-	2	2	DIRECT
14	1-6'x6'	4	PRESENCE	-	6	6	DIRECT
15	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	4	4	DIRECT
16	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	7	7	DIRECT
17	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	4	4	DIRECT
18	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	7	7	DIRECT
19	2-6'x23'	2 QUADRUPOLE	PRESENCE	-	8	8	SERIES
20	1-6'x23'	2 QUADRUPOLE	PRESENCE	5	4	4	DIRECT
21	1-6'x23'	2 QUADRUPOLE	PRESENCE	5	4	4	DIRECT
22	2-6'x23'	2 QUADRUPOLE	PRESENCE	-	8	8	SERIES
23	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	3/8	3/8	DIRECT
24	1-6'x23'	2 QUADRUPOLE	PRESENCE	-	3/8	3/8	DIRECT
25	1-6'x6'	4	PRESENCE	-	3/8	3/8	DIRECT
26	1-6'x6'	4	PRESENCE	-	8	8	DIRECT
27	1-6'x6'	4	PRESENCE	-	8	8	DIRECT
28	1-6'x6'	4	PRESENCE	-	8	8	DIRECT
29	1-6'x6'	4	PRESENCE	-	8	8	DIRECT
30	1-6'x6'	4	PRESENCE	-	3/8	3/8	DIRECT
31	1-6'x6'	4	PRESENCE	10	3/8	3/8	DIRECT
32	1-6'x6'	4	PRESENCE	10	3/8	3/8	DIRECT

NOTE: LOOPS 31 AND 32 CALL LOW PRIORITY PREEMPTION PE5, (PHASES 3 & 8 WITH A 60 SECOND HOLD TIME MAX.)

PROJECT TITLE

Coggeshall Street at I-195 Westbound Ramps

New Bedford, Massachusetts

PREPARED FOR

City of New Bedford

New Bedford, Massachusetts

Vanasse & Associates, Inc.
Transportation Engineers & Planners

ANDOVER, MASSACHUSETTS
10 N.E. BUSINESS CENTER DRIVE
ANDOVER, MA 01810-1066
TEL: (978) 474-8800
FAX: (978) 688-6508

FORT MYERS, FLORIDA
12730 NEW BRITTANY BLVD., SUITE 600
FORT MYERS, FL 33907
TEL: (239) 437-4601
FAX: (239) 437-4636

DESIGNED BY	AJD
DRAWN BY	BPD
CHECKED BY	--
DATE	JUNE 2009
SCALE	NTS
STAMP	

REVISIONS

NO.	DESCRIPTION	DATE

DRAWING TITLE

Traffic Signal Data
Coggeshall Street at I-195 Ramps

SHEET 38 OF 45	DRAWING NUMBER
JOB NO. 5554	TR11
--	

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