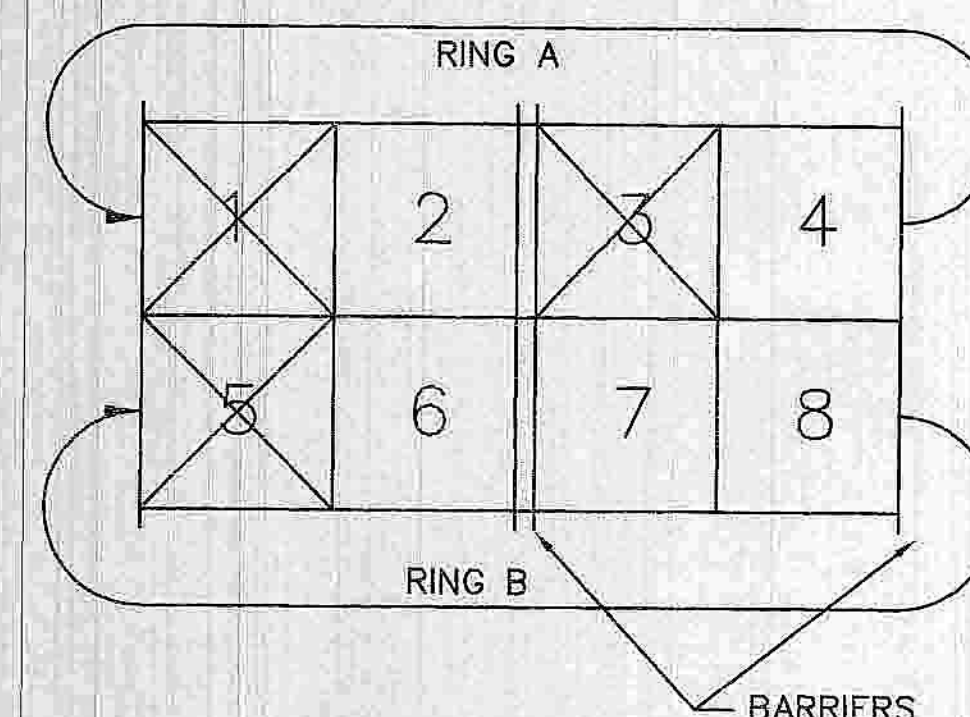


STREET	DIRECTION	FACES	1	2	3	4	5	6	7	8	9	13	14	15	10	11	12	OPERATION	16	17	18	
GARFIELD STREET	EB	A,B	R	R	R		G	Y	R			R	R	R		R	R	R	FR	R	R	R
COVE ROAD	WB	E,F	R	R	R		R	R	R			R	R	R		G	Y	R	FR	R	R	R
DARTMOUTH STREET	SB	D	R	R	R		R	R	R			G	Y	R		R	R	R	FY	R	R	R
DARTMOUTH STREET	SB RT	C	R	R	R		R	R	R			G	Y	R		R	R	R	FY	R	R	R
DARTMOUTH STREET	NB	J	G	Y	R		R	R	R			R	R	R		R	R	R	FY	R	R	R
DARTMOUTH STREET	NB RT	K	G	Y	R		R	R	R			R	R	R		R	R	R	FY	R	R	R
RUSSELLS MILLS ROAD	NEB	G,H	R	R	R		R	R	R			R	R	R		R	R	R	FR	R	R	R
PEDESTRIAN		ALL	DW	DW	DW		DW	DW	DW			DW	DW	DW		DW	DW	DW	OUT	W	FDW	DW
VEHICLE EXTENSION			2				2					2				2						
MINIMUM GREEN INITIAL			4				4					4				4						
MAXIMUM GREEN			22				16					22				16						
CLEARANCE INTERVAL				3	4			3	4				3	4			3	4				
PEDESTRIAN																						
RECALL (SOFT)			SOFT			OFF			SOFT			OFF			OFF					5	15	1
MEMORY			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK			NON-LOCK					OFF LOCK		

DETECTOR NUMBER	# OF SECTIONS SIZE	# OF TURNS	OPERATION	CALL DELAY	CALL PHASE	LOOP CONNECTION
1, 3	3-6'X6'	3	PRESENCE	NO	6	SERIES
2, 4	1-6'X6' (D-1)	3	PRESENCE/BICYCLE	NO	6	SINGLE
5	3-6'X6'	3	PRESENCE	NO	8	SERIES
6	1-6'X6' (D-1)	3	PRESENCE/BICYCLE	NO	8	SINGLE
7, 9	3-6'X6'	3	PRESENCE	NO	2	SERIES
8, 10	1-6'X6' (D-1)	3	PRESENCE/BICYCLE	NO	2	SINGLE
11	3-6'X6'	3	PRESENCE	NO	7	SERIES
12	1-6'X6' (D-1)	3	PRESENCE/BICYCLE	NO	7	SINGLE
13	3-6'X6'	3	PRESENCE	NO	4	SERIES
14	1-6'X6' (D-1)	3	PRESENCE/BICYCLE	NO	4	SINGLE

DUAL RING STRUCTURE



* UPON PUSH BUTTON ACTIVATION

DETECTOR AND PRIORITY	PRE-EMPT PHASE ASSIGNMENT	DIRECTION	VEHICLE PHASE CALLED
OPT 1	1	NB	02
OPT 2	2	NEB	07
OPT 3	3	WB	08
OPT 4	4	SB	06

1. EMERGENCY VEHICLE PRE-EMPTION SIGNALS SHALL BE OPTICALLY TRANSMITTED BY OPTICAL EMITTERS MOUNTED IN EMERGENCY VEHICLES AND RECEIVED BY OPTICAL DETECTORS LOCATED AT EACH INTERSECTION.
2. PRE-EMPTION SIGNALS SHALL BE SERVICED ON A PRIORITY BASIS WITH DETECTORS 1, 2, 3, AND 4 ASSIGNED DESCENDING PRIORITIES AS FOLLOWS: 1 HIGHEST AND 4 LOWEST.
3. IN RESPONSE TO A PRE-EMPTION SIGNAL RECEIVED AT AN INTERSECTION BY OPTICAL DETECTOR #1 (OR #2, #3, #4) THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD IN EMERGENCY VEHICLE PRE-EMPTION PHASE #1 (OR #2, #3, #4) GREEN FOR A MINIMUM OF TEN (10) SECONDS OR UNTIL PRE-EMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME RED IN PRE-EMPTION PHASE CLEARANCE (3 SECONDS: YELLOW AND 1 SECONDS: ALL RED) AND SERVICE EMERGENCY VEHICLE PRE-EMPTION PHASE #2 (OR #3, #4, #1) IF NECESSARY, THEN TIME PRE-EMPTION PHASE CLEARANCE AND RESUME NORMAL SIGNAL OPERATION.
4. MINIMUM GREEN, NORMAL VEHICLE CLEARANCE, SHALL BE PROVIDED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.
5. STROBE SHALL BE ILLUMINATED WHENEVER ANY EMERGENCY VEHICLE PRE-EMPTION GREEN IS ON.

1. IF THE ASSIGNED RIGHT-OF-WAY FOR ANY TRAFFIC MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT TRAFFIC MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.
2. IF THE ASSIGNED RIGHT-OF-WAY FOR ANY TRAFFIC MOVEMENT IS TO CHANGE DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATION FOR THAT TRAFFIC MOVEMENT WILL DISPLAY THE APPROPRIATE CLEARANCE INTERVALS.
3. THE RIGHT-OF-WAY MAY BE ASSIGNED TO ANY PHASE, OR ANY COMBINATION OF NONCONFLICTING PHASES.
4. IF CALLS EXIST ON ALL PHASES, THE ASSIGNMENT OR RIGHT OF WAY SHALL BE IN ACCORDANCE WITH THE PREFERENTIAL PHASE SEQUENCE.
5. EXCLUSIVE PEDESTRIAN PHASE SHALL BE ACTIVATED BY THE PEDESTRIAN PUSH BUTTON ACTUATION. IF NO PEDESTRIAN SIGNAL CALL IS RECEIVED THAT PHASE WILL BE SKIPPED.
6. FLASHING OPERATIONS IS FOR EMERGENCY ONLY. THE SIGNAL SHALL FUNCTION 24 HRS. DAILY.
7. PAVEMENT MARKINGS AND WINDING DETAILS FOR BICYCLE DETECTION SHALL CONFORM TO THE BICYCLE DETECTOR DETAIL SHEET.
8. EACH DETECTOR GROUP NUMBER SHALL BE CONNECTED TO A SINGLE LOOP AMPLIFIER CHANNEL.

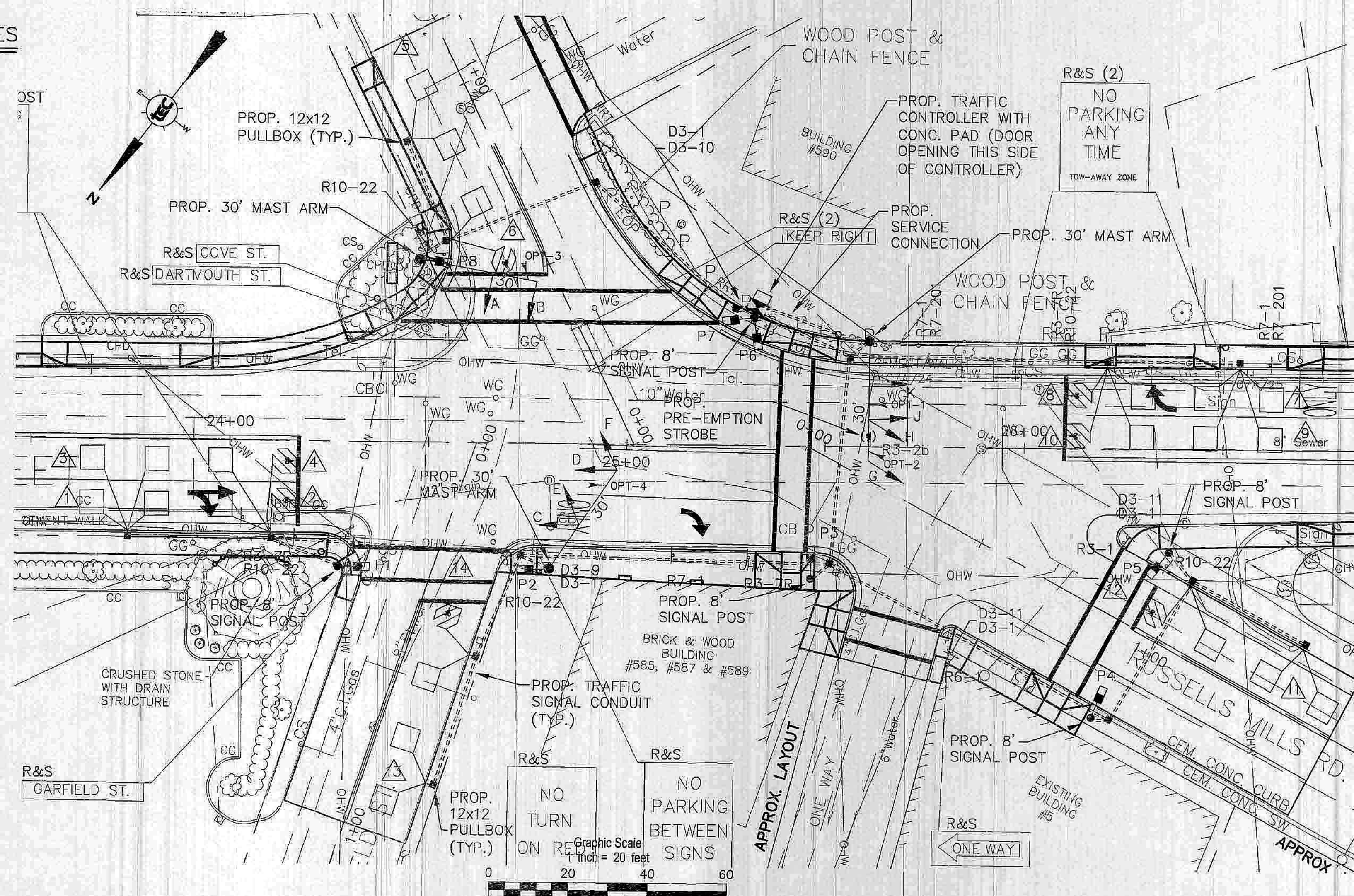


Diagram illustrating three types of signal heads:

- Left Head:** A vertical stack of five circular lenses labeled R, Y, G, Y, G. Below the stack is the letter 'K'. An arrow points to the second yellow lens with the label 'BIMODEL FIBEROPTIC'.
- Middle Head:** A vertical stack of four circular lenses labeled R, Y, G, G. Below the stack is the text 'A,B,C,D,E,F,G,H,J'.
- Right Head:** A rectangular head with a hand symbol, a diagonal slash, and a walking figure. Below it is the text 'P1-P8 LED'.

ALL HEADS SHALL HAVE 5 in LOUVERED BACKPLATES
 ALL SIGNALS SHALL HAVE 12 in LENSES
 ALL SIGNAL DISPLAYS SHALL BE EQUIPPED WITH L.E.D. MODULES
 ALL SIGNALS SHALL BE RIGID MOUNTED
 ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS

ITEM 816.02 - TRAFFIC SIGNAL RECONSTRUCTION, LOCATION NO. 2

QTY.	ITEM
1	CONTROLLER TS-2 TYPE 1 W/CABINET, FOUNDATION, & ELECTRICAL METER
1	FOUR CHANNEL PHASE SELECTOR
3	30 FT. MONOLEVER STEEL MAST ARM W/ CORED PIER FOUNDATION
5	8 FT. (PED.) SIGNAL POST & BASE, STANDARD
3	ONE WAY - 3 SECTION SIGNAL HEAD, 12 INCH LENS (L.E.D.)
3	TWO WAY - 3 SECTION SIGNAL HEAD, 12 INCH LENS (L.E.D.)
1	ONE WAY - 4 SECTION SIGNAL HEAD, 12 INCH LENS (L.E.D.)
8	PEDESTRIAN SIGNAL HEAD (L.E.D.)
21	VEHICLE WIRE LOOP DETECTORS INSTALLED IN ROADWAY
7	BICYCLE WIRE LOOP DETECTORS INSTALLED IN ROADWAY
7	DUAL CHANNEL LOOP DETECTOR AMPLIFIERS
1	SERVICE CONNECTION (OVERHEAD)
7	PED. PUSH BUTTON W/ SIGN & SADDLE MTD ON MAST ARMS & SIGNAL POSTS
4	EMERGENCY PRE-EMPTION DETECTORS AND DETECTOR CABLE
1	EMERGENCY PRE-EMPTION PHASE SELECTOR
1	EMERGENCY PRE-EMPTION SYSTEM CHASSIS
2	EMERGENCY PRE-EMPTION STROBE (WHITE LENS)

16	PULL BOX 12"x12" (SD2.031) - ITEM 811.31
800ft	3 INCH ELEC. CONDUIT TYPE NM - PLASTIC - ITEM 804.3
	REMOVE AND STACK EXISTING TRAFFIC SIGNAL EQUIPMENT
	Plus All Necessary Duct, Cable, Labor, Miscellaneous Materials and Equipment to Complete the Installation and Provide an Operating Traffic Control Signal.