MULKEY ENGINEERS & CONSULTANTS	PROJECT REFERENCE NO.	SHEET NO.
	B-3157	SIG.6

4 PHASE
FULLY ACTUATED
(CENTER STREET CLOSED LOOP SYSTEM)

PHASING DIAGRAM

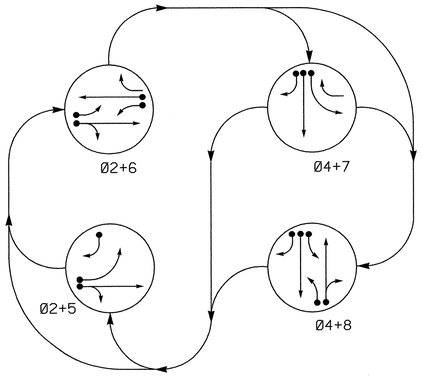
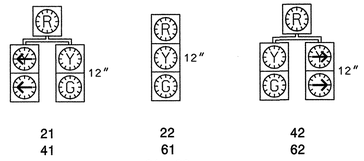


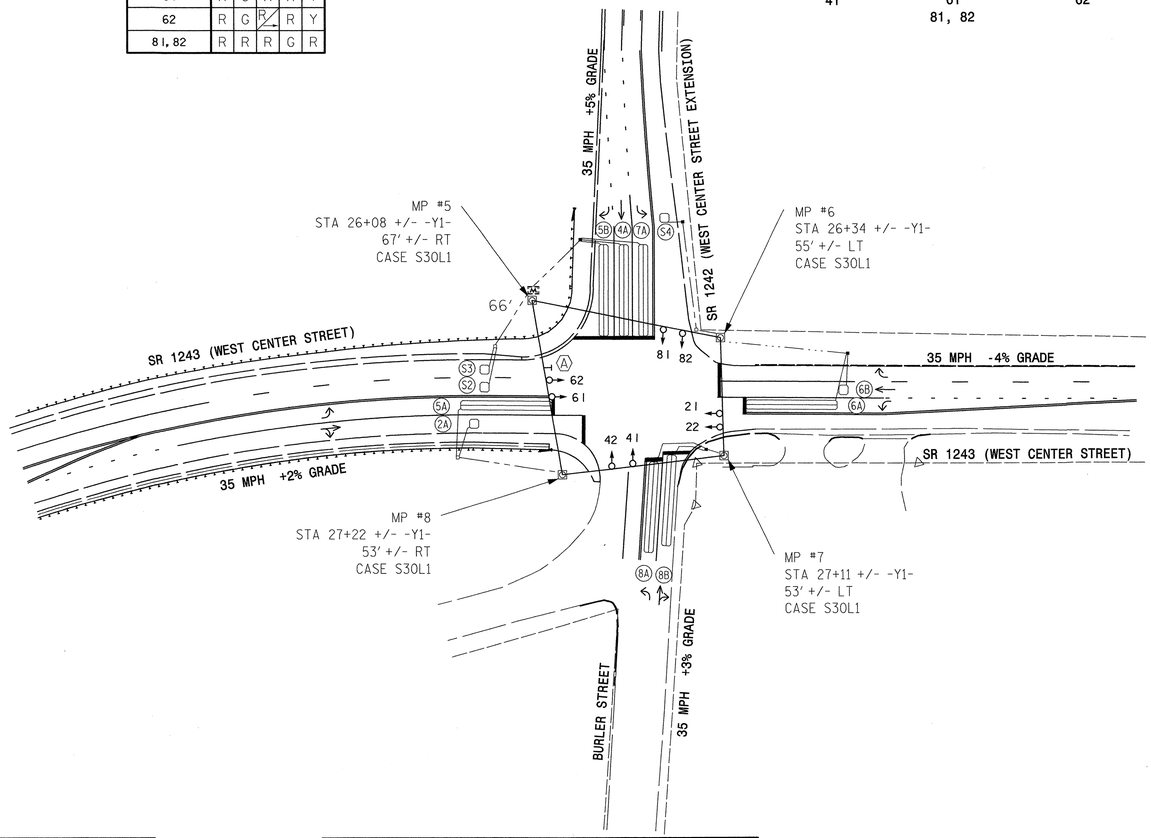
TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+5	Ø2+6	Ø4+7	Ø4+8	FLASH
21	G	G	R	R	Y
22	G	G	R	R	Y
41	R	R	G	G	R
42	R	R	G	G	R
61	R	G	R	R	Y
62	R	G	R	R	Y
81, 82	R	R	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.





PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Omit phase 5 during phase 6 on.
3. Omit phase 7 during phase 8 on.
4. Program controller to clear from phase 2+6 to phase 2+5 by progressing through phase 4+8 (see Electrical Details).
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
6. Set all detector units to presence mode.
7. Closed loop system data:
   Controller Asset No.: 0411
   Master Asset No.: 10907

PLAN QUANTITIES

Pay Item	Feet
Signal Cable	580
Messenger Cable	430
Lead-in Cable	780

2070L TIMING CHART

FEATURE	PHASE 2	4	5	6	7	8
Min Green 1 *	10	7	7	10	7	7
Extension 1 *	3.0	1.0	1.0	3.0	1.0	1.0
Max Green 1 *	50	30	15	50	25	30
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance	3.0	2.0	2.0	3.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduction *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL	-	-
Vehicle Call Memory	YELLOW	-	-	YELLOW	-	-
Dual Entry	-	ON	-	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS: LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	DETECTOR PROGRAMMING: PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
2A	6 X 6	4	70	Y	2	Y	Y	-	-	-	-	Y
4A	6 X 60	2-4-2	0	Y	4	Y	Y	-	-	-	-	Y
5A	6 X 60	2-4-2	0	Y	2	Y	Y	-	-	-	-	Y
					5	Y	Y	-	-	-	15	Y
5B	6 X 60	2-4-2	0	Y	5	Y	Y	-	-	-	15	Y
6A	6 X 60	2-4-2	0	Y	6	Y	Y	Y	-	-	3	Y
6B	6 X 6	4	70	Y	6	Y	Y	-	-	-	-	Y
7A	6 X 60	2-4-2	0	Y	4	Y	Y	-	-	-	3	Y
					7	Y	Y	-	-	-	15	Y
8A	6 X 60	2-4-2	0	Y	8	Y	Y	-	-	-	3	Y
8B	6 X 60	2-4-2	0	Y	8	Y	Y	-	-	-	10	Y
S2	6 X 6	4	+150	Y	-	-	-	-	Y	-	-	Y
S3	6 X 6	4	+150	Y	-	-	-	-	Y	-	-	Y
S4	6 X 6	4	+150	Y	-	-	-	-	Y	-	-	Y

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way with Marker	
	Directional Arrow	
	Pavement Marking Arrow	
	Metal Strain Pole	
M	Master Controller & Cabinet	M
N/A	Guardrail	
A	Right Arrow "ONLY" Sign (R3-5R)	A

SIGNAL UPGRADE

Prepared for: Traffic Engineering and Safety Systems Branch, NC DEPARTMENT OF TRANSPORTATION, Signals and Geometrics Section

122 N. McDowell St., Raleigh, NC 27603

SR 1243 (West Center Street)
at
SR 1242 (West Center Street Extension)
and Burler Street

DIVISION 9 DAVIDSON COUNTY LEXINGTON

PLAN DATE: JUNE 2003 REVIEWED BY: K BISBY

PREPARED BY: F D VESS REVIEWED BY:

SCALE 0 50 1"=50'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 21047 ENGINEER KEVIN W. BISBY

SIGNATURE 7/22/03 DATE

SIG. INVENTORY NO. 09-0411

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