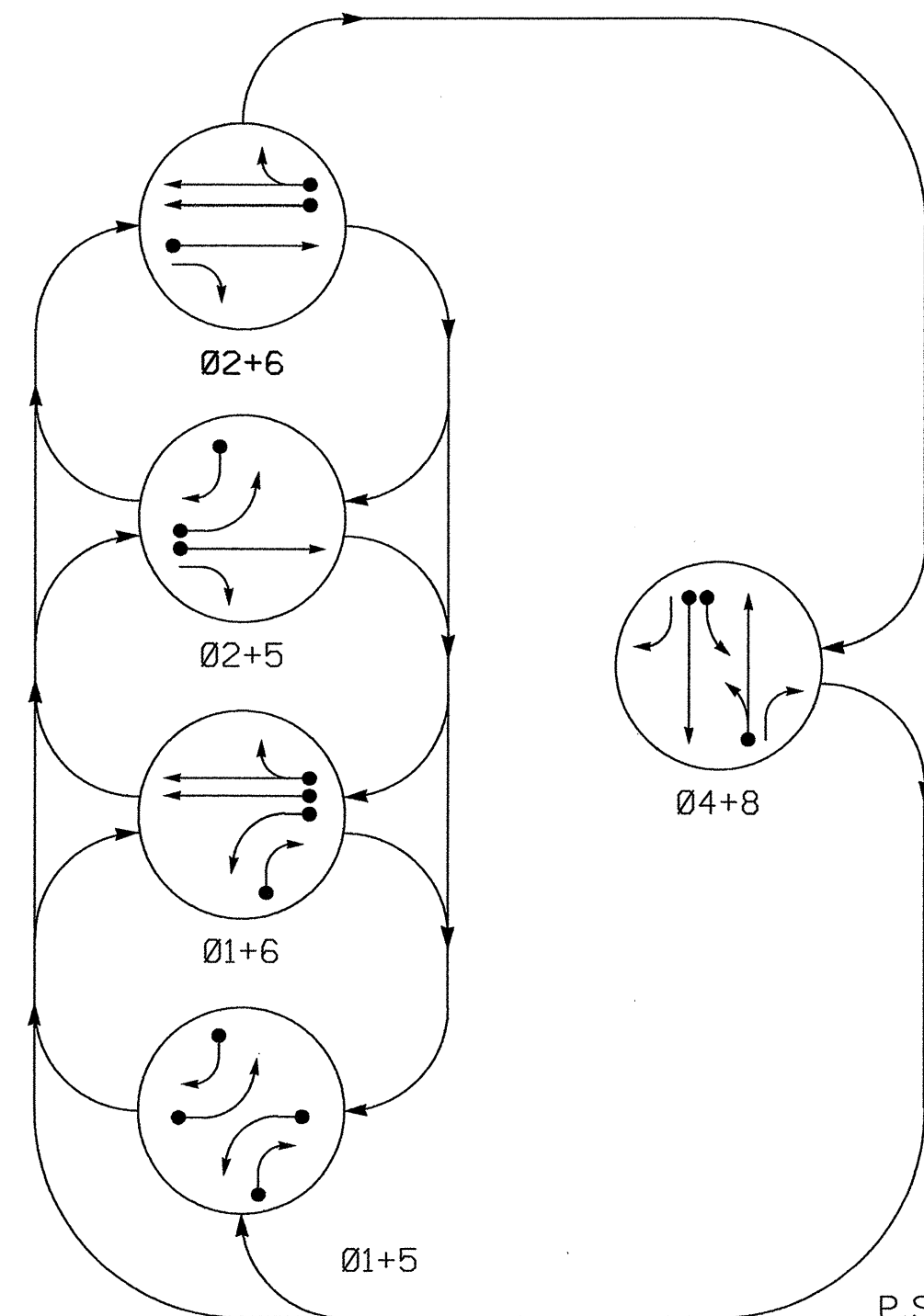


PHASING DIAGRAM



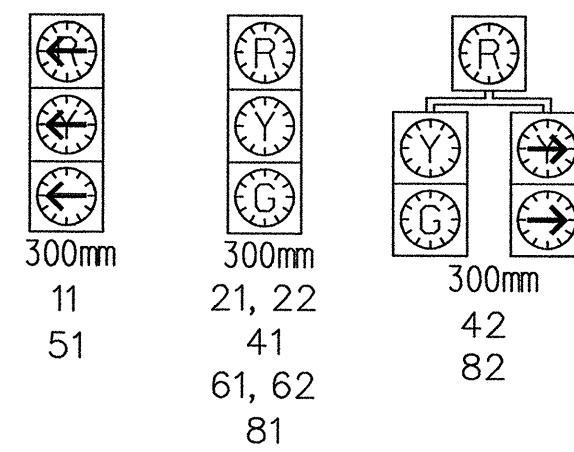
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 4+8
11	←	←	←	←	←
21, 22	R	R	G	G	R
41	R	R	R	R	G
42	R	R	R	R	G
51	←	←	←	←	←
61, 62	R	G	R	G	R
81	R	R	R	R	G
82	R	R	R	R	G

SIGNAL FACE I.D.

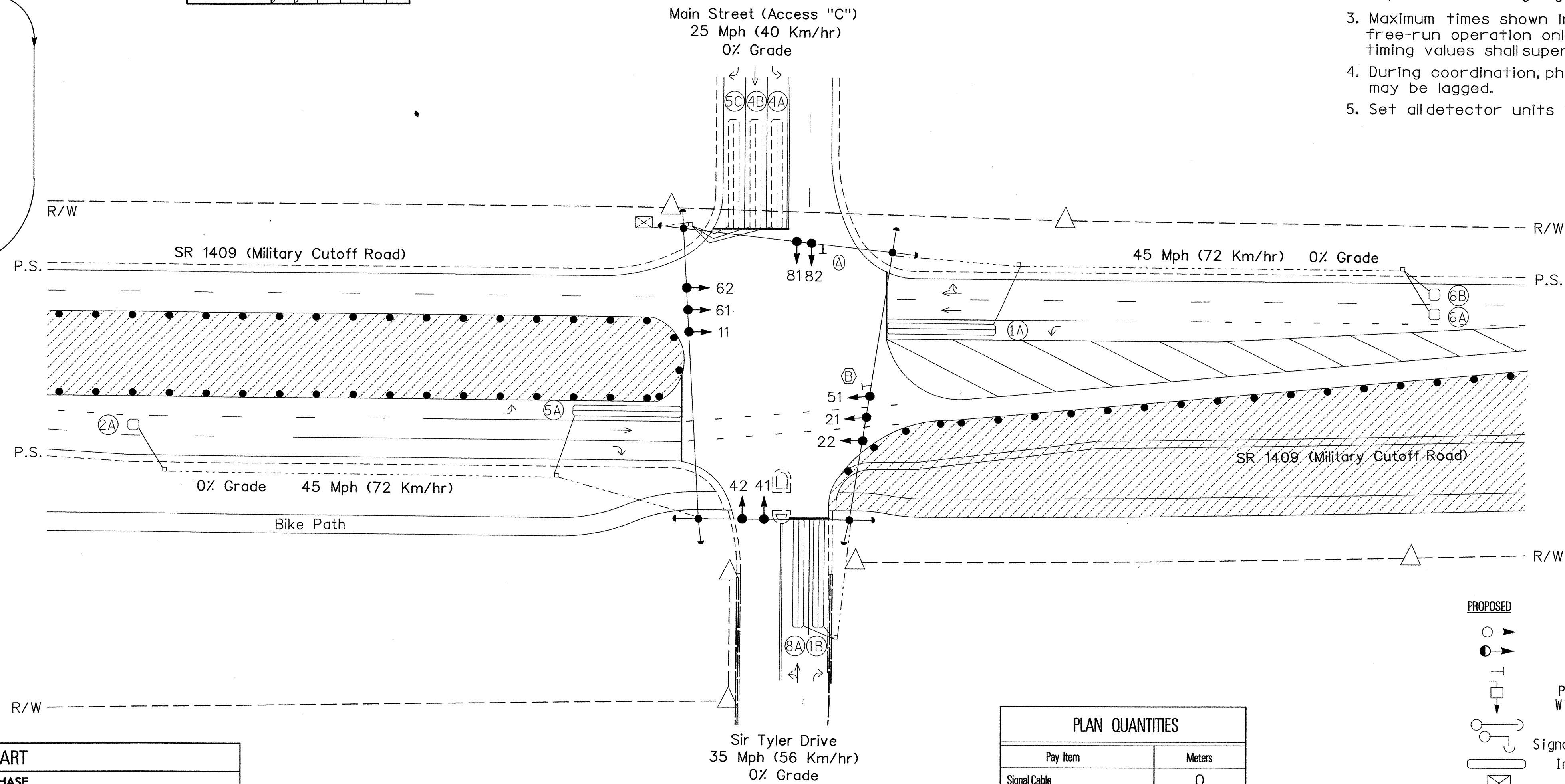
Denotes L.E.D.



5 Phase
(Fully Actuated)
(Time - Based Coordination)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Reposition existing signalheads numbered 11, 21, 22, and 51.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- During coordination, phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.



FEATURE	2070L TIMING CHART						
	1	2	4	5	6	8	
Min Green 1 *	7	12	7	7	12	7	
Extension 1 *	1.0	6.0	1.0	1.0	6.0	1.0	
Max Green 1 *	15	100	25	15	100	25	
Yellow Clearance	4.0	4.7	4.0	4.0	4.7	4.0	
Red Clearance	3.0	1.5	3.5	3.0	1.5	3.5	
Walk 1 *	-	-	-	-	-	-	
Don't Walk 1	-	-	-	-	-	-	
Seconds Per Actuation *	-	1.5	-	-	1.5	-	
Max Variable Initial *	-	34	-	-	34	-	
Time Before Reduction *	-	15	-	-	15	-	
Time To Reduce *	-	30	-	-	30	-	
Minimum Gap	-	3.0	-	-	3.0	-	
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.

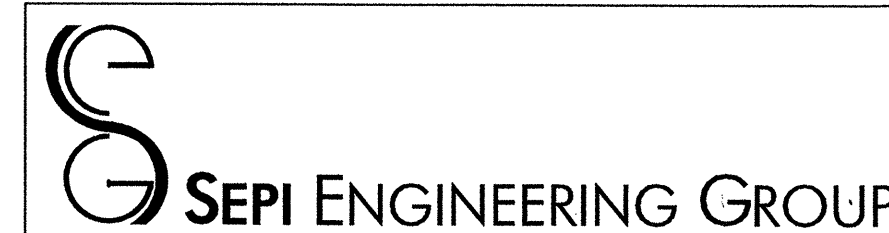
2070L LOOP & DETECTOR INSTALLATION												
INDUCTIVE LOOPS				DETECTOR PROGRAMMING								
LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM	STRETCH TIME	DELAY TIME	NEW CARD
1A	1.8X1.8	2-4-2	0	Y	1	Y	Y	-	-	-	-	-
1B	1.8X1.8	2-4-2	0	Y	1	Y	Y	-	-	-	15	-
2A	1.8X1.8	5	90	Y	2	Y	Y	-	-	-	-	-
4A	1.8X1.8	2-4-2	0	-	4	Y	Y	-	-	-	3	-
4B	1.8X1.8	2-4-2	0	-	4	Y	Y	-	-	-	-	-
5A	1.8X1.8	2-4-2	0	Y	5	Y	Y	-	-	-	-	-
5C	1.8X1.8	2-4-2	0	-	5	Y	Y	-	-	-	15	-
6A	1.8X1.8	5	90	Y	6	Y	Y	-	-	-	-	-
6B	1.8X1.8	5	90	Y	6	Y	Y	-	-	-	-	-
8A	1.8X1.8	2-4-2	0	Y	8	Y	Y	-	-	-	-	-

PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	0
Messenger Cable	0
Lead-in Cable	880

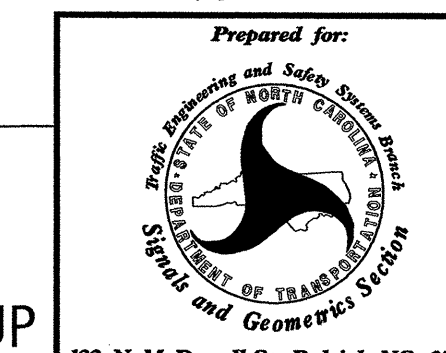
LEGEND

- | | | | |
|--|---|--|---|
| | PROPOSED Traffic Signal Head | | EXISTING Traffic Signal Head |
| | PROPOSED Modified Signal Head | | EXISTING N/A |
| | PROPOSED Pedestrian Signal Head With Push Button & Sign | | EXISTING N/A |
| | PROPOSED Signal Pole with Guy | | EXISTING Signal Pole with Guy |
| | PROPOSED Signal Pole with Sidewalk Guy | | EXISTING Signal Pole with Sidewalk Guy |
| | PROPOSED Inductive Loop Detector | | EXISTING Inductive Loop Detector |
| | PROPOSED Controller & Cabinet | | EXISTING Controller & Cabinet |
| | PROPOSED Junction Box | | EXISTING Junction Box |
| | PROPOSED 50mm Underground Conduit | | EXISTING 50mm Underground Conduit |
| | PROPOSED Right of Way with Marker | | EXISTING Right of Way with Marker |
| | PROPOSED Directional Arrow | | EXISTING Directional Arrow |
| | PROPOSED Pavement Marking Arrow | | EXISTING Pavement Marking Arrow |
| | PROPOSED Construction Zone | | EXISTING Construction Zone |
| | PROPOSED Construction Zone Drums | | EXISTING Construction Zone Drums |
| | PROPOSED Right Arrow "ONLY" Sign (R3-5R) | | EXISTING Right Arrow "ONLY" Sign (R3-5R) |
| | PROPOSED "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | | EXISTING "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |

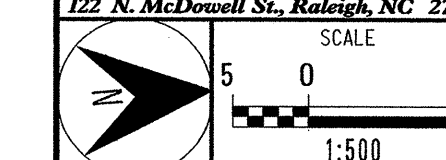
Signal Upgrade Temporary Design 2 Construction Phase II



2300 Rexwoods Drive
Suite 370
Raleigh, NC 27607
Tel: 919-789-9977 Fax: 789-9591



SR 1409 (Military Cutoff Road) at Sir Tyler Drive and Main Street (Access "C")	
Division 3	New Hanover County
Wilmington	
PLAN DATE: Sept 2003	REVIEWED BY: L. M. Eddins
PREPARED BY: H. M. Surti	REVIEWED BY: S. S. Asefina
REVISIONS	INIT. DATE



SEAL

1/7/04

SIGNATURE DATE

SIG. INVENTORY NO. 03-095112