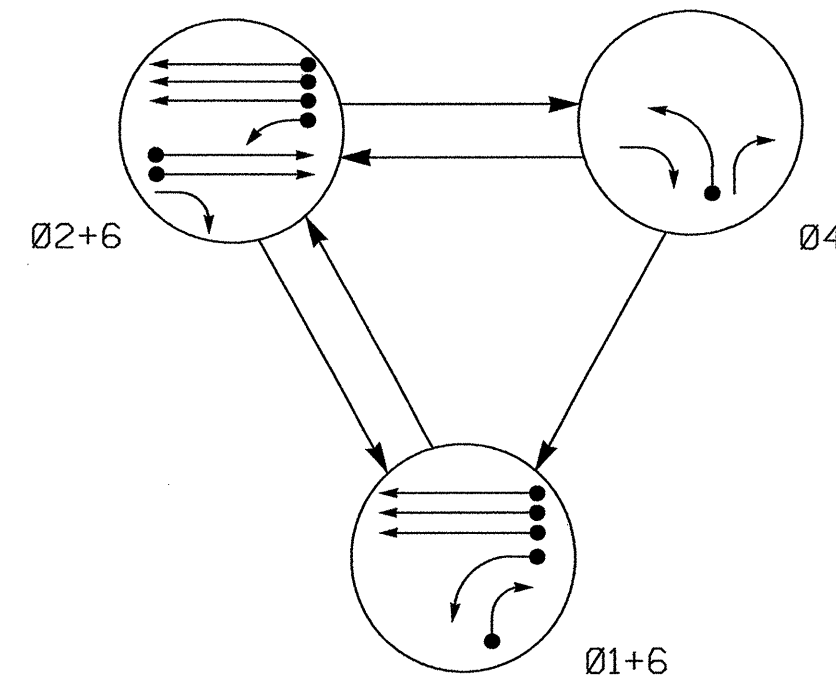


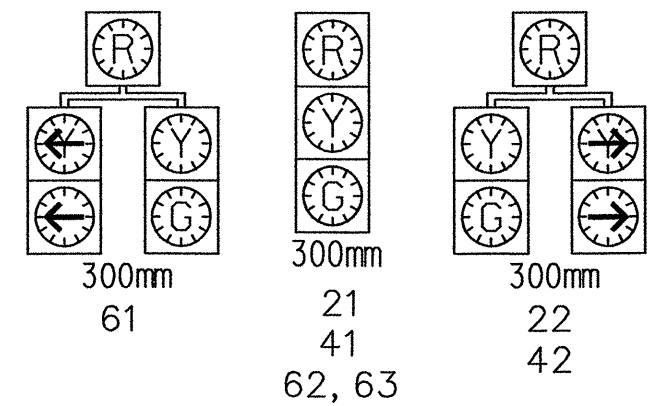
PHASING DIAGRAM



SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 4	FLASH
21	R	G	R	Y
22	R	G	R	Y
41	R	R	G	R
42	R	R	G	R
61	G	G	R	Y
62, 63	G	G	R	Y

SIGNAL FACE I.D.

Denotes L.E.D.



PHASING DIAGRAM DETECTION LEGEND

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

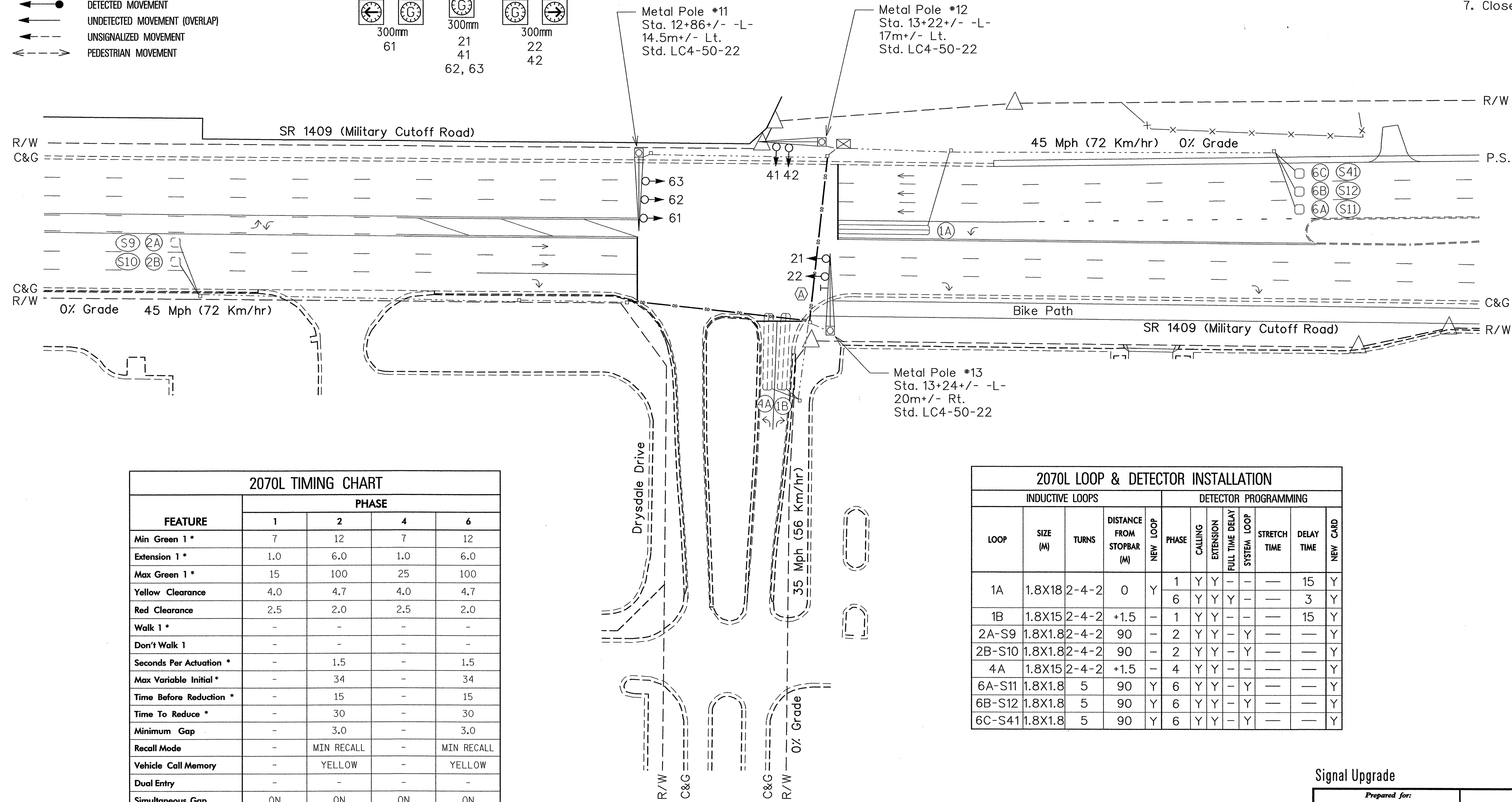
PLAN QUANTITIES

Pay Item	Meters
Signal Cable	165
Messenger Cable	0
Lead-in Cable	650

3 Phase
(Fully-Actuated)
(Military Cutoff Road Closed Loop System)

NOTES

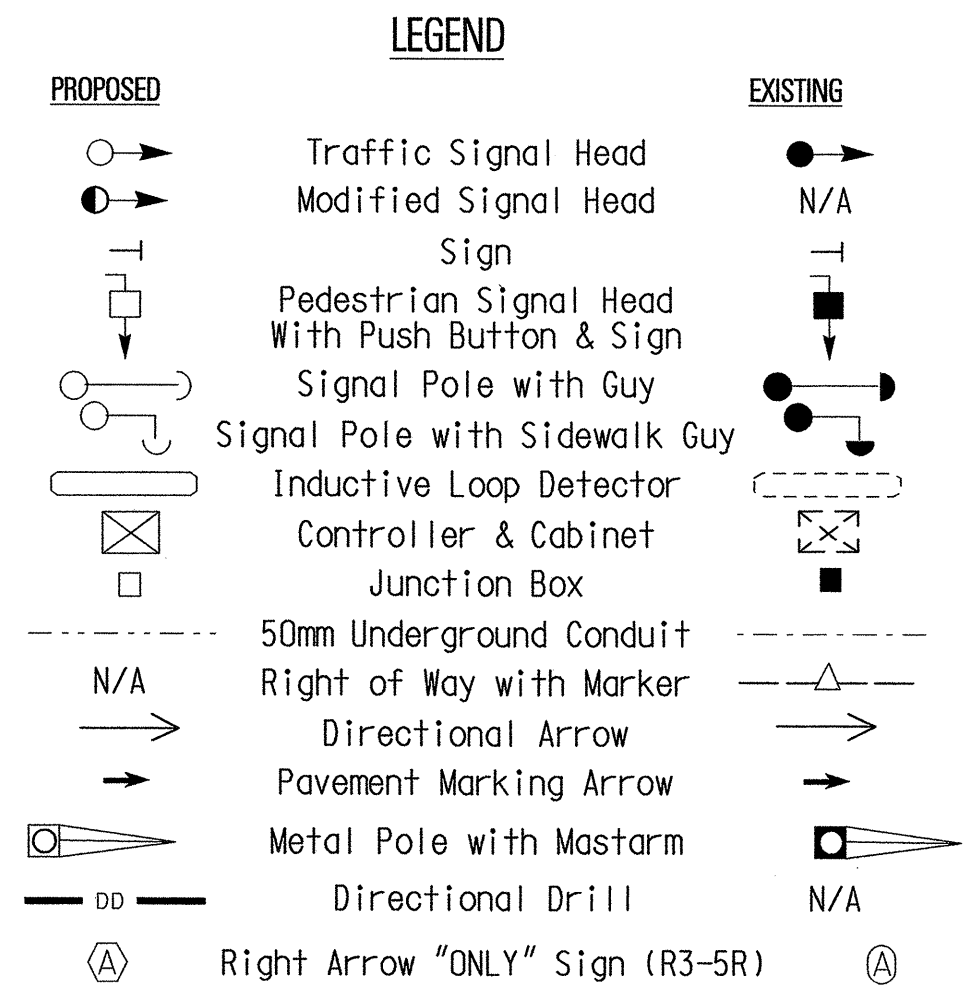
- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Pavement markings are existing.
- Abandon existing loops 2C and 2D.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- During coordination, phase 1 may be lagged.
- Set all detector units to presence mode.
- Closed Loop System Data: Controller Asset #0752.



FEATURE	2070L TIMING CHART PHASE			
	1	2	4	6
Min Green 1 *	7	12	7	12
Extension 1 *	1.0	6.0	1.0	6.0
Max Green 1 *	15	100	25	100
Yellow Clearance	4.0	4.7	4.0	4.7
Red Clearance	2.5	2.0	2.5	2.0
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	-	-	-	-
Simultaneous Gap	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	LOOP SYSTEM	STRETCH TIME	DELAY TIME	NEW CARD
1A	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	-	15	Y
1B	1.8X15	2-4-2	+1.5	-	1	Y	Y	-	-	-	3	Y
2A-S9	1.8X1.8	2-4-2	90	-	2	Y	Y	-	Y	-	-	Y
2B-S10	1.8X1.8	2-4-2	90	-	2	Y	Y	-	Y	-	-	Y
4A	1.8X15	2-4-2	+1.5	-	4	Y	Y	-	-	-	-	Y
6A-S11	1.8X1.8	5	90	Y	6	Y	Y	-	Y	-	-	Y
6B-S12	1.8X1.8	5	90	Y	6	Y	Y	-	Y	-	-	Y
6C-S41	1.8X1.8	5	90	Y	6	Y	Y	-	Y	-	-	Y



Signal Upgrade

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

SR 1409 (Military Cutoff Road)
at
Drysdale Drive

Division 3 New Hanover County Wilmington

PLAN DATE: Aug. 2003 REVIEWED BY: L. M. Eddins
PREPARED BY: H. M. Surti REVIEWED BY: S. S. Asefina

REVISIONS INIT. DATE

SEAL
20104
ENGINEER
S. S. ASEFINA

12-11-03
SIGNATURE DATE
SIG. INVENTORY NO. 03-0752

*****SYSTEMS*****
 *****DESIGN*****
 *****DRAWING*****
 *****DATE*****