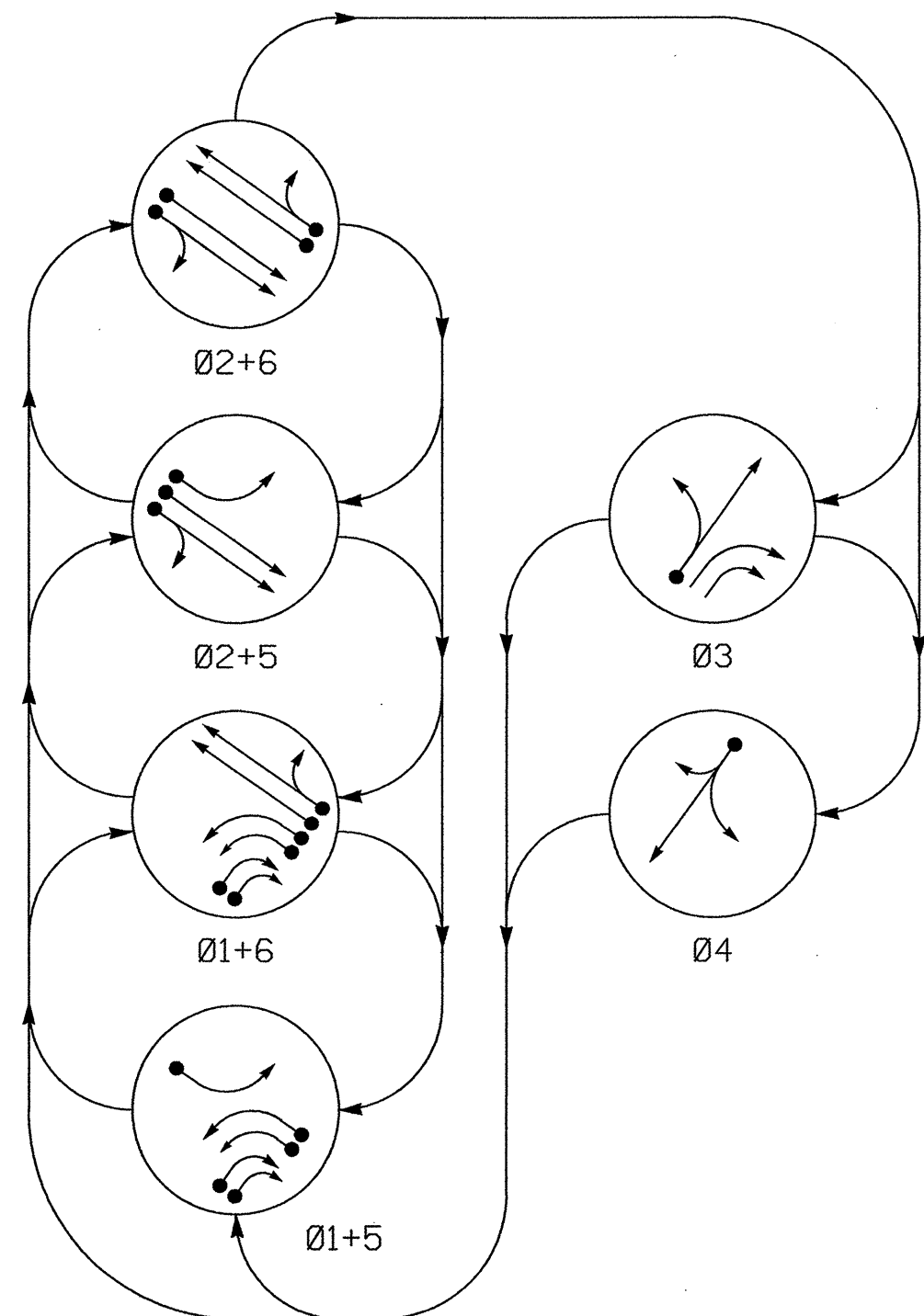


PHASING DIAGRAM

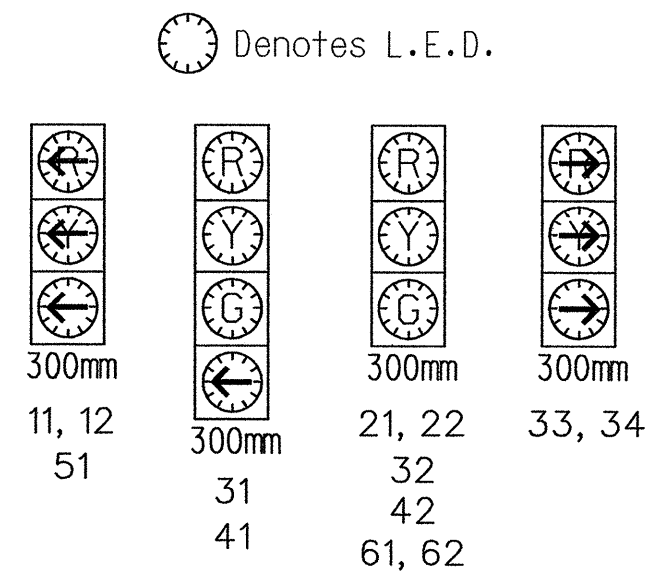


PHASING DIAGRAM DETECTION LEGEND

- 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 3	Ø 4
11, 12	←	←	←	←	←	←
21, 22	R	R	G	G	R	R
31	R	R	R	R	G	R
32	R	R	R	R	G	R
33, 34	→	→	→	→	→	→
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	←	←	←	←
61, 62	R	G	R	G	R	Y

SIGNAL FACE I.D.



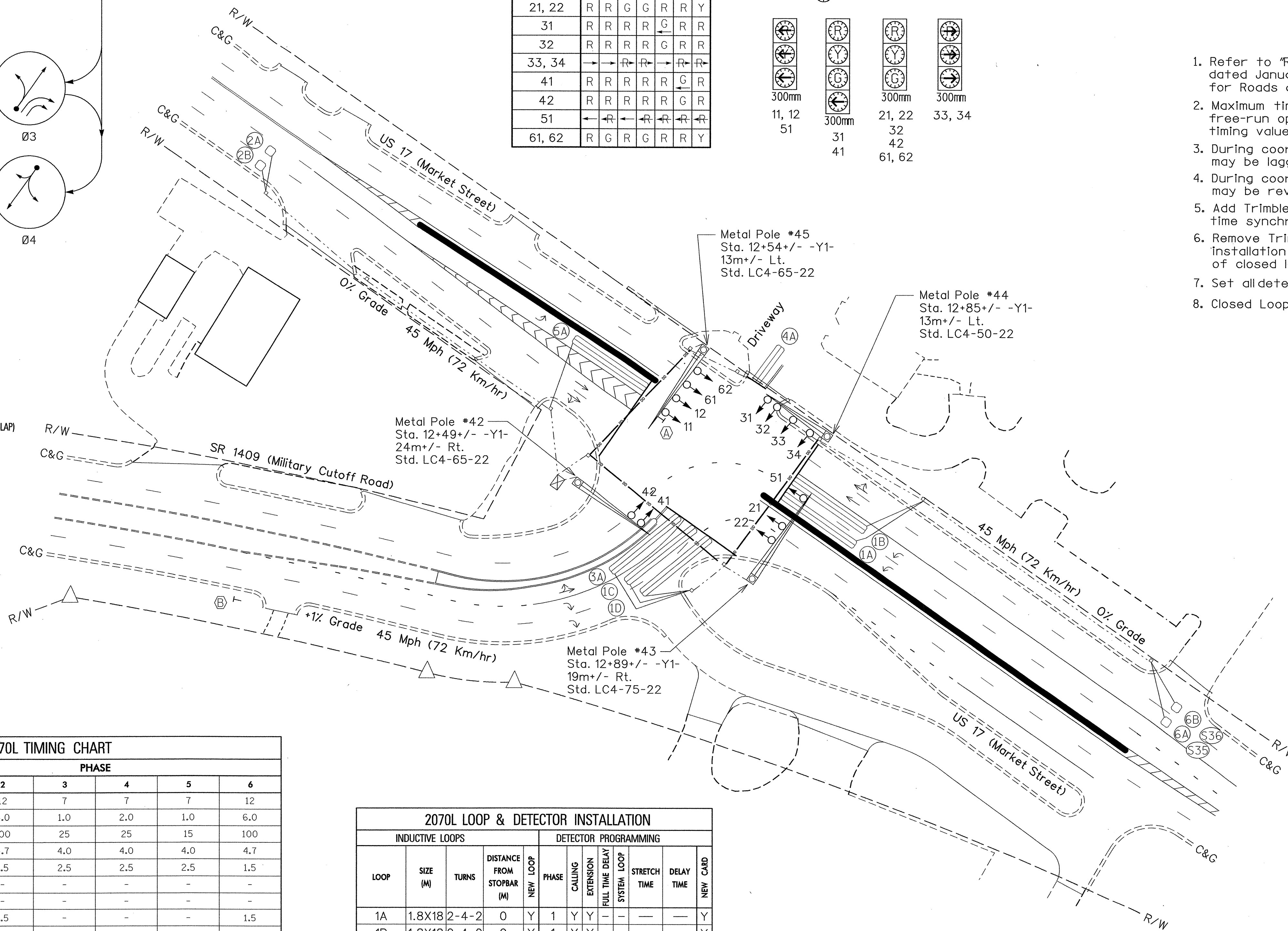
6 Phase
(Fully Actuated)
(Military Cutoff Road Closed Loop System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- 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.
- During coordination, the order of phase 3 and 4 may be reversed.
- Add Trimble Acutime 2000 (RS-232) GPS Unit for time synchronization until fiber optic cable is installed.
- Remove Trimble Acutime 2000 (RS-232) GPS Unit upon installation of fiber optic cable and actuation of closed loop system.
- Set all detector units to presence mode.
- Closed Loop System Data: Controller Asset #0319.

PLAN QUANTITIES

Pay Item	Meters
Signal Cable	420
Messenger Cable	0
Lead-in Cable	900



LEGEND

- | PROPOSED | EXISTING |
|--|----------|
| ○ → Traffic Signal Head | ● → N/A |
| ○ → Modified Signal Head | ○ → N/A |
| ○ → Sign | ○ → N/A |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → N/A |
| ○ → Signal Pole with Guy | ○ → N/A |
| ○ → Signal Pole with Sidewalk Guy | ○ → N/A |
| ○ → Inductive Loop Detector | ○ → N/A |
| ○ → Controller & Cabinet | ○ → N/A |
| ○ → Junction Box | ○ → N/A |
| ○ → 50mm Underground Conduit | ○ → N/A |
| ○ → Right of Way with Marker | ○ → N/A |
| ○ → Directional Arrow | ○ → N/A |
| ○ → Pavement Marking Arrow | ○ → N/A |
| ○ → Metal Pole with Mastarm | ○ → N/A |
| ○ → Directional Drill | ○ → N/A |
| ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | ○ → N/A |
| ○ → Signal Ahead Sign (W3-3) | ○ → N/A |

2070L TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1 *	1.0	6.0	1.0	2.0	1.0	6.0
Max Green 1 *	15	100	25	25	15	100
Yellow Clearance	4.0	4.7	4.0	4.0	4.0	4.7
Red Clearance	2.5	1.5	2.5	2.5	2.5	1.5
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	-	-	-	-	-	-
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 LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	-	Y
1B	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	-	Y
1C	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	10	Y
1D	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	15	Y
2A	1.8X1.8	5	90	Y	2	Y	Y	-	-	-	Y
2B	1.8X1.8	5	90	Y	2	Y	Y	-	-	-	Y
3A	1.8X18	2-4-2	0	Y	3	Y	Y	-	-	-	Y
4A	1.8X9	2-4-2	0	Y	4	Y	Y	-	-	10	Y
5A	1.8X18	2-4-2	0	Y	5	Y	Y	-	-	-	Y
6A-S35	1.8X1.8	5	90	Y	6	Y	Y	-	-	-	Y
6B-S36	1.8X1.8	5	90	Y	6	Y	Y	-	-	-	Y

New Installation

Prepared for:

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**US 17 (Market Street)
at
SR 1409 (Military Cutoff Road)**

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

 SIGNATURE: _____ DATE: 12/11/03
 SIG. INVENTORY NO. 03-0319