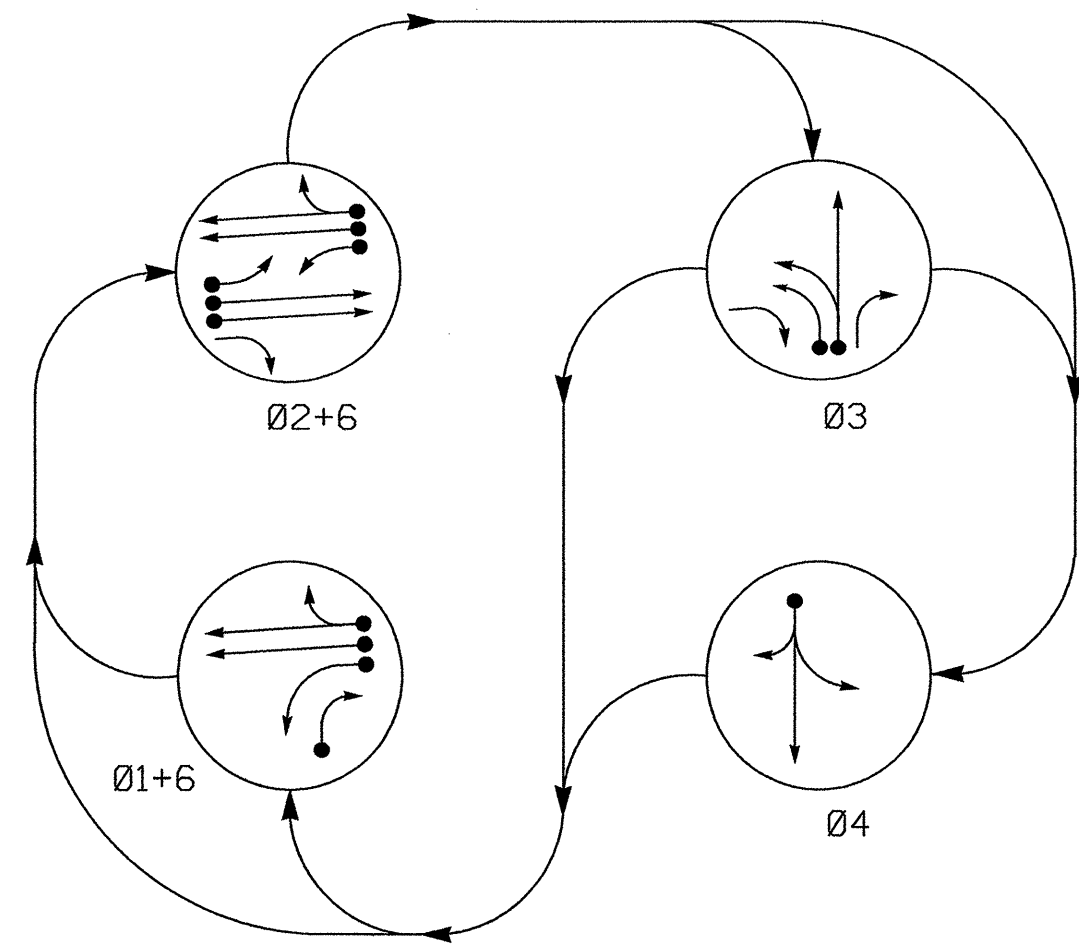


PHASING DIAGRAM



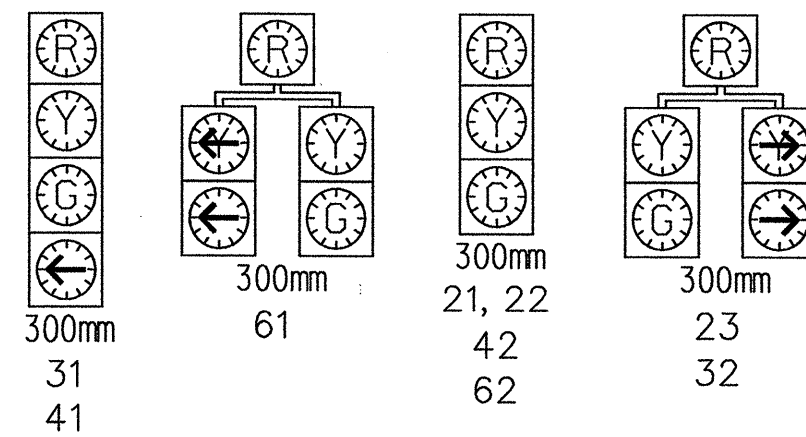
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø 1+6	Ø 2+6	Ø 3	Ø 4	FLASH
21, 22	R	G	R	R	Y
23	R	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
61	G	G	R	R	Y
62	G	G	R	R	Y

SIGNAL FACE I.D.

Denotes L.E.D.

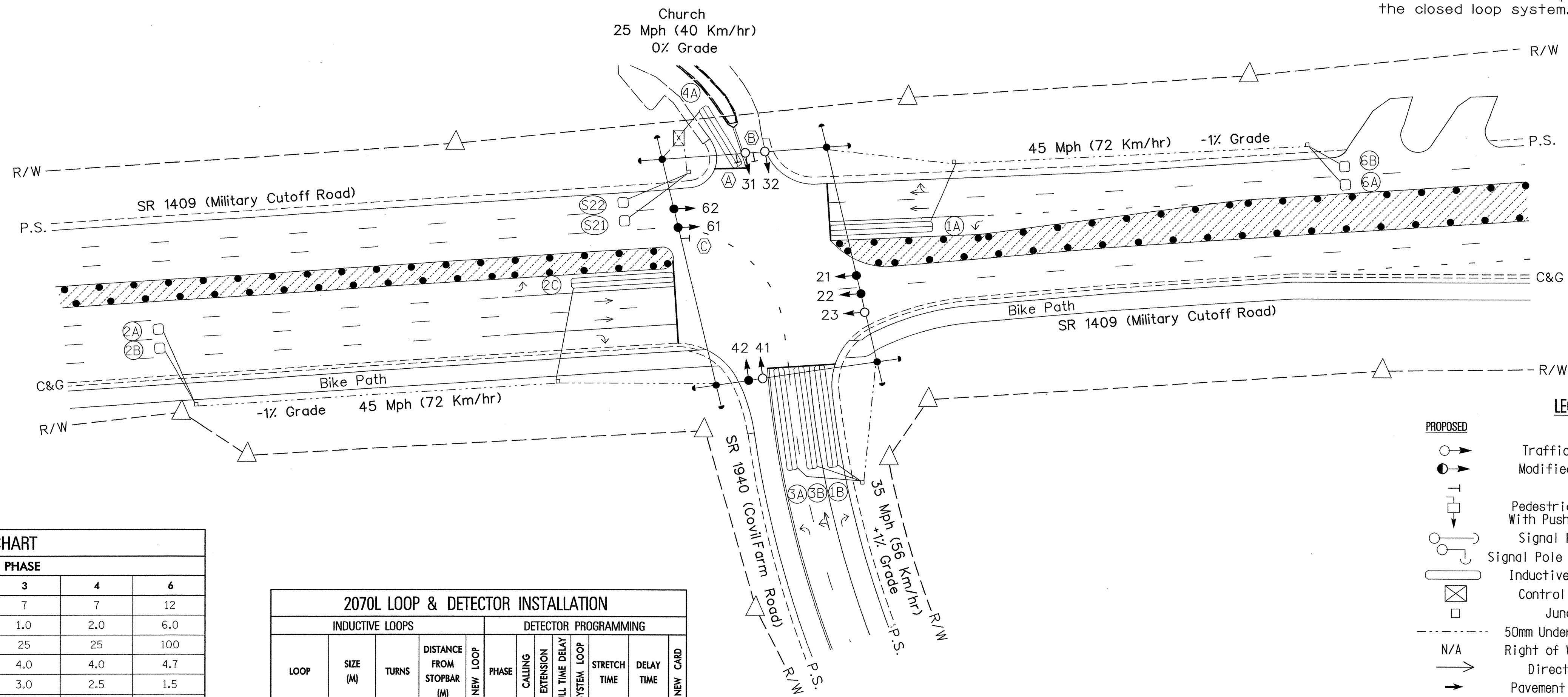


Pay Item	Meters
Signal Cable	180
Messenger Cable	0
Lead-in Cable	1010

4 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 21, 22, 61, and 62.
- Omit phase 1 during phase 2 on.
- Program controller to clear from phase 2+6 to phase 1+6 by progressing through phase 4 (See Electrical Details).
- Maximum times shown in timing chart are for free-run operation only. Coordinated signalsystem timing values shall supersede these values.
- During coordination, the order of phase 3 and 4 may be reversed.
- Set all detector units to presence mode.
- Remove Trimble Acutime 2000 (RS-232) GPS Unit upon installation of fiber optic cable and activation of the closed loop system.



FEATURE	2070L TIMING CHART				
	1	2	3	4	6
Min Green 1 *	7	12	7	7	12
Extension 1 *	1.0	6.0	1.0	2.0	6.0
Max Green 1 *	15	100	25	25	100
Yellow Clearance	4.0	4.7	4.0	4.0	4.7
Red Clearance	2.0	1.5	3.0	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

* 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													
LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	NEW LOOP	PHASE	DETECTOR PROGRAMMING							NEW CARD
						CALLING	EXTENSION	FULL TIME DELAY	LOOP SYSTEM	STRETCH TIME	DELAY TIME		
1A	1.8x18	2-4-2	0	Y	1	Y	Y	-	-	-	15	Y	
1B	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	
2C	1.8x18	2-4-2	0	Y	2	Y	Y	-	-	-	3	Y	
3A	1.8x18	2-4-2	0	Y	3	Y	Y	-	-	-	3	Y	
3B	1.8x18	2-4-2	0	Y	3	Y	Y	-	-	-	-	Y	
4A	1.8x12	2-4-2	0	Y	4	Y	Y	-	-	-	10	Y	
6A	1.8x1.8	5	90	Y	6	Y	Y	-	-	-	-	Y	
6B	1.8x1.8	5	90	Y	6	Y	Y	-	-	-	-	Y	
S21	1.8x1.8	5	+35	Y	-	-	-	-	-	-	-	Y	
S22	1.8x1.8	5	+35	Y	-	-	-	-	-	-	-	Y	

PROPOSED		EXISTING	
○	Traffic Signal Head	●	N/A
○	Modified Signal Head	○	N/A
T	Sign	T	N/A
T	Pedestrian Signal Head With Push Button & Sign	T	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
N/A	Right of Way with Marker	---	N/A
→	Directional Arrow	→	N/A
→	Pavement Marking Arrow	→	N/A
▨	Construction Zone	▨	N/A
●	Construction Zone Drums	●	N/A
(A)	Left Arrow "ONLY" Sign (R3-5L)	(A)	N/A
(B)	Combined Through and Left Arrow Sign (R3-6L)	(B)	N/A
(C)	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	(C)	N/A

Signal Upgrade Temporary Design 2 Construction Phase II

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<p>Prepared for: North Carolina Department of Transportation Sealed and Guaranteed Section</p>	<p>SR 1409 (Military Cutoff Road) at SR 1940 (Covil Farm Road) and Church</p> <p>Division 3 New Hanover County Wilmington</p> <p>PLAN DATE: Sept. 2003 REVIEWED BY: L. M. Eddins</p> <p>PREPARED BY: H. M. Surti REVIEWED BY: S. S. Asefina</p>	<p>SEAL</p> <p>2014 ENGINEER S. S. ASEFINIA</p> <p>12/11/03 DATE</p> <p>SIG. INVENTORY NO. 03-0882T2</p>
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