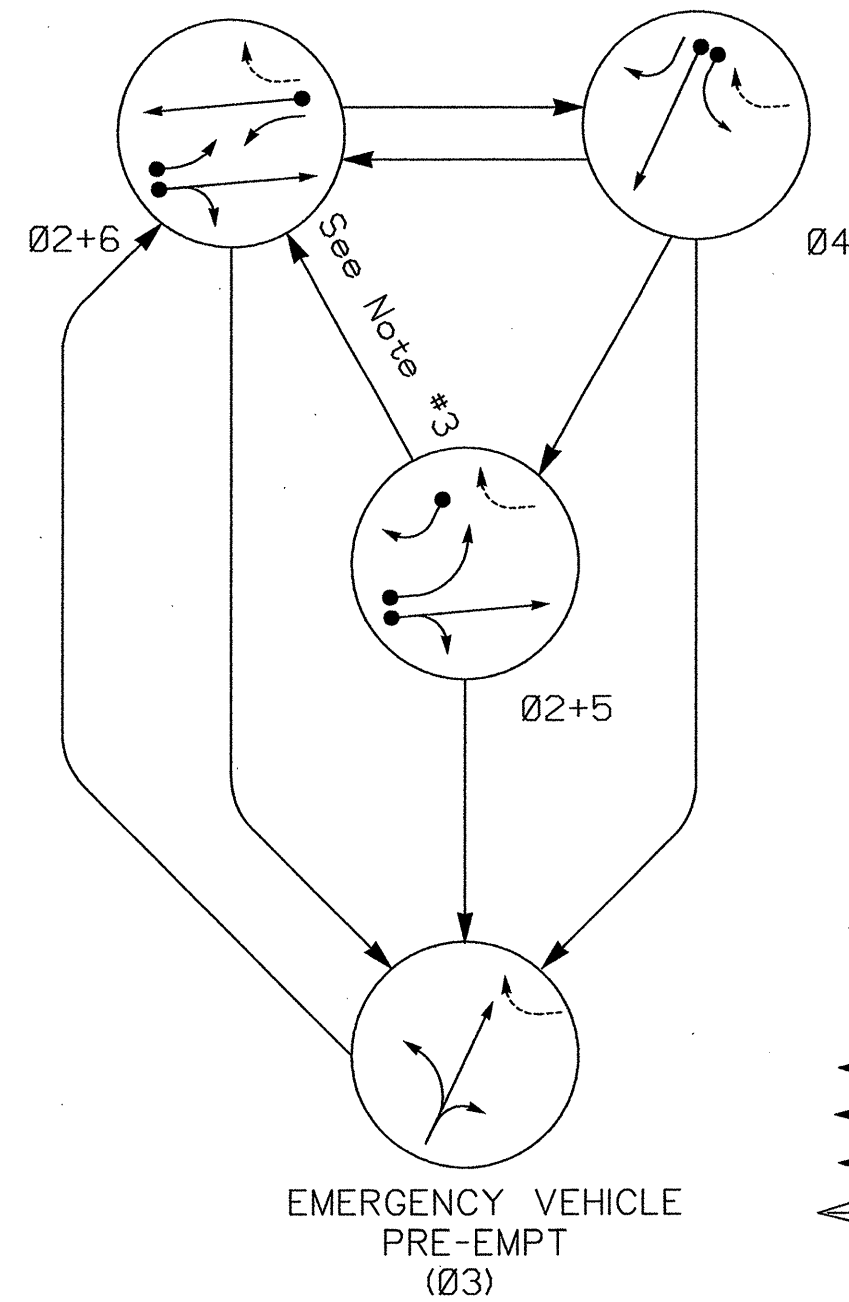
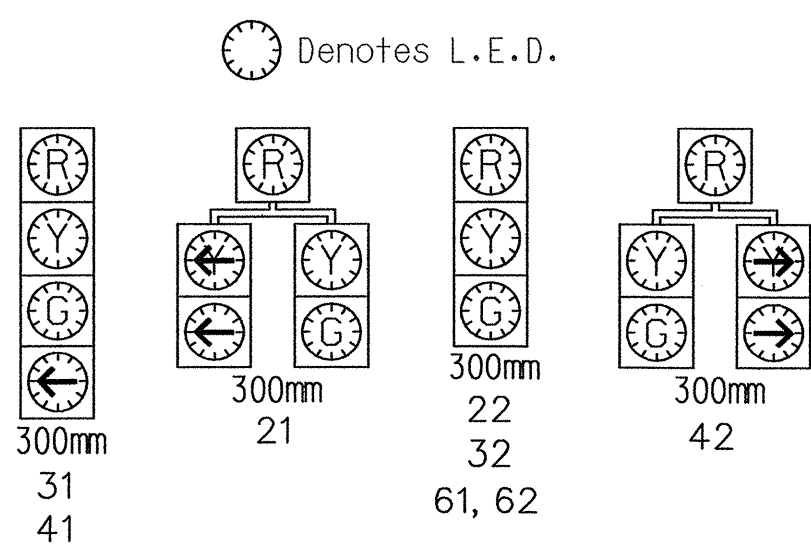


PHASING DIAGRAM



SIGNAL FACE	PHASE				
	02+5	02+6	04	03 (03)	04
21	G	G	R	R	Y
22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	G	R	R
42	R	R	G	R	R
61, 62	R	G	R	R	Y

SIGNAL FACE I.D.

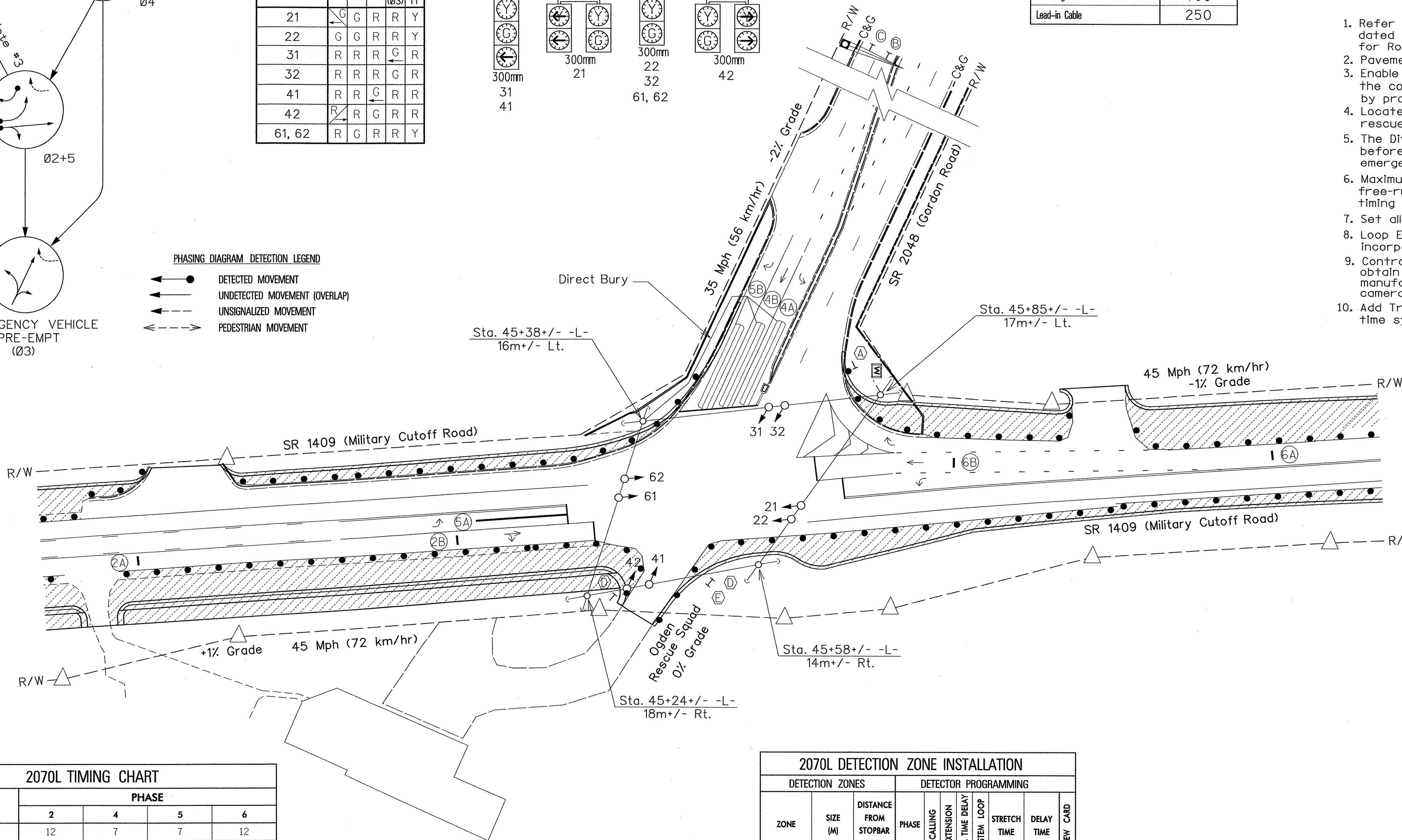


PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	240
Messenger Cable	160
Lead-in Cable	250

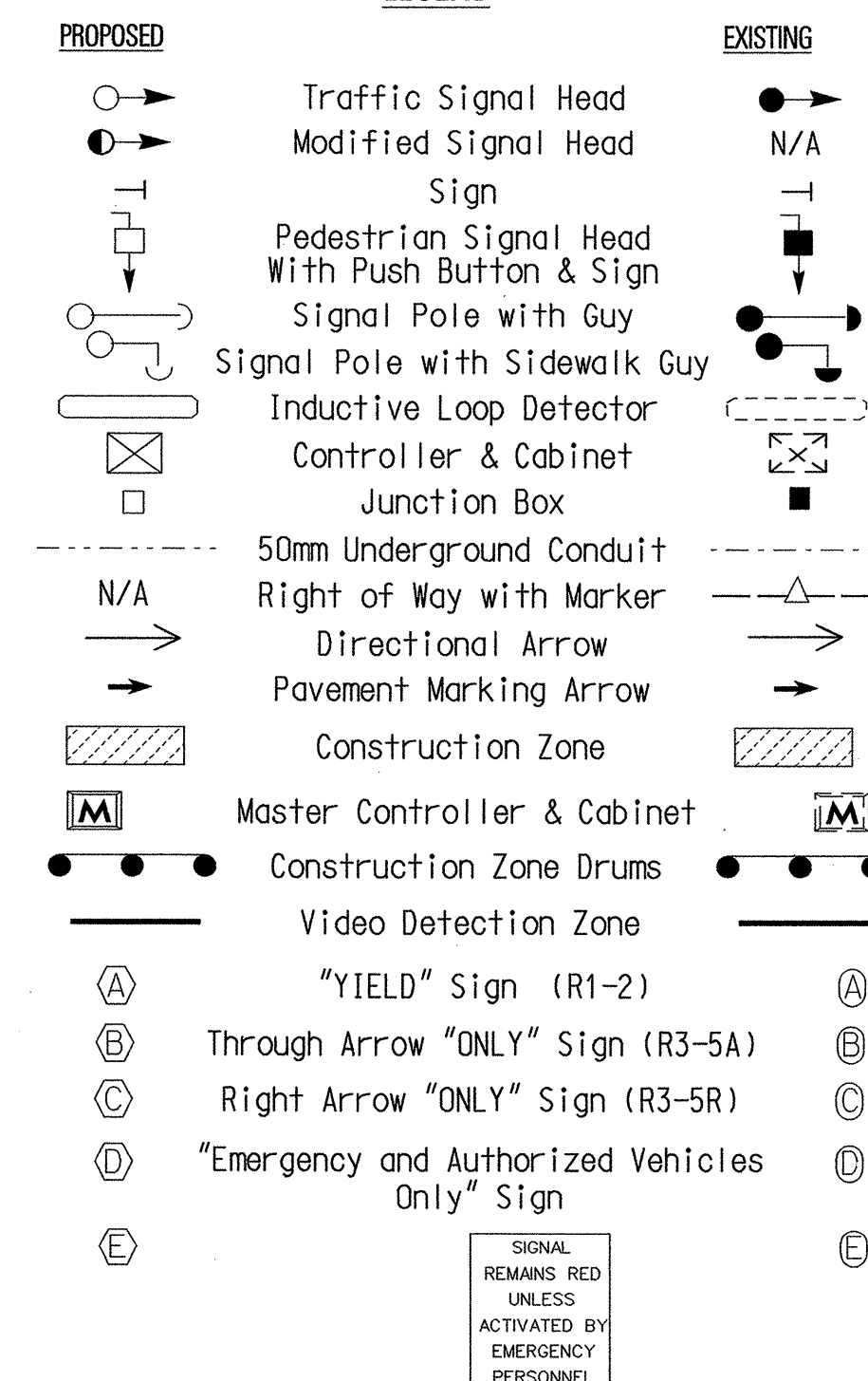
3 Phase  
w/Emergency Pre-empt  
(Fully Actuated)  
(Time - Based Coordination)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- Pavement markings are existing.
- Enable backup protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through all red display.
- Locate emergency vehicle preemption switch in rescue squad building.
- The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell/Min Green time for emergency vehicle preemption timing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signals system timing values shall supersede these values.
- Set all detector units to presence mode.
- Loop Emulation Detection System shall be incorporated for vehicle detection.
- Contractor shall be responsible for having the obtain optimum detection zones as shown. manufacturer provide the Engineer approved camera locations and mounting heights to
- Add Trimble Acutime 2000 (RS-232) GPS Unit for time synchronization.



LEGEND



FEATURE	PHASE			
	2	4	5	6
Min Green 1 *	12	7	7	12
Extension 1 *	2.0	1.0	1.0	2.0
Max Green 1 *	45	25	15	45
Yellow Clearance	4.7	4.0	4.0	4.7
Red Clearance	2.0	2.0	3.0	2.0
Red Revert	5.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
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.

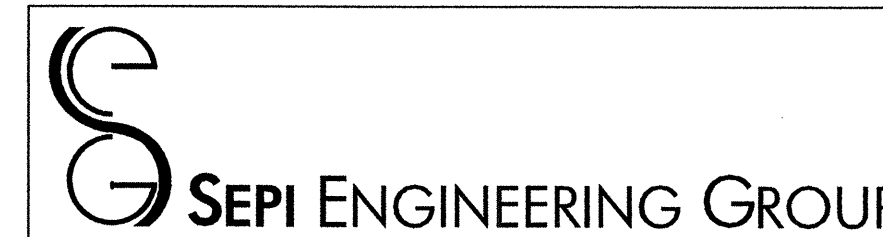
2070 EV PREEMPTION

Interval 1 - Dwell Green	255
Interval 1 - Dwell Yellow	4.0
Interval 1 - Dwell Red	2.0
Interval 5 - Exit Green	1
Interval 5 - Exit Yellow	0.0
Interval 5 - Exit Red	0.0
Delay Time	*
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	4.7
Red Clear Before Pre	3.0
Dwell Min Time	*
Enable Backup Protection	N
Ped Clear Through Yellow	N

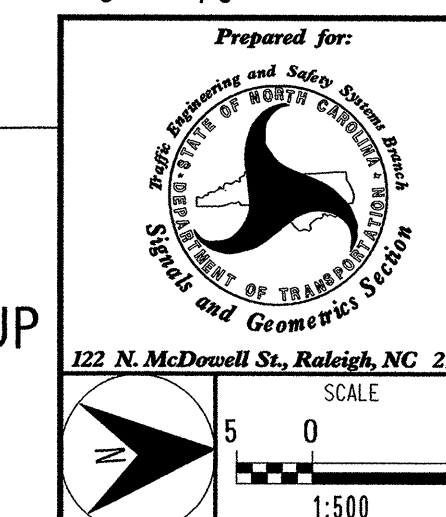
\* See Note #5

2070L DETECTION ZONE INSTALLATION										
DETECTION ZONES			DETECTOR PROGRAMMING							
ZONE	SIZE (M)	DISTANCE FROM STOPBAR (M)	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
2A	1.8X1.8	90	2	Y	Y	-	-	1.8	-	-
2B	1.8X1.8	27	2	Y	Y	-	-	-	-	-
4A	1.8X1.8	0	4	Y	Y	-	-	-	-	Y
4B	1.8X1.8	0	4	Y	Y	-	-	-	-	Y
5A	1.8X1.8	0	5	Y	Y	-	-	-	15	-
5B	1.8X1.8	0	5	Y	Y	-	-	-	3	-
6A	1.8X1.8	90	6	Y	Y	-	-	1.8	-	-
6B	1.8X1.8	27	6	Y	Y	-	-	-	-	-

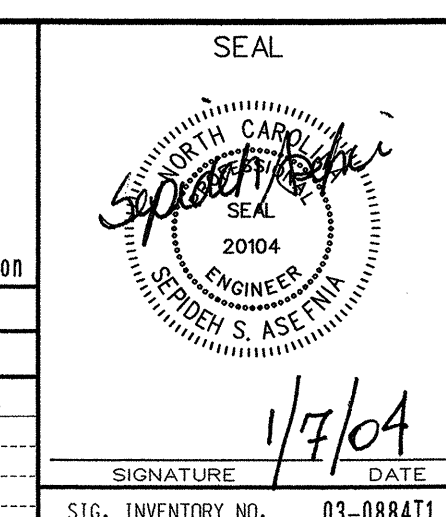
Signal Upgrade Temporary Design 1 Construction Phase I



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SR 1409 (Military Cutoff Road) at SR 2048 (Gordon Road) and (Ogden Rescue Squad)	
Division 3	Wilmington
PREPARED BY: H. M. Surti	REVIEWED BY: L. M. Eddins
PREPARED BY: H. M. Surti	REVIEWED BY: S. S. Asefina
REVISIONS	INIT. DATE



1/7/04  
SIGNATURE DATE  
SIG. INVENTORY NO. 03-088411