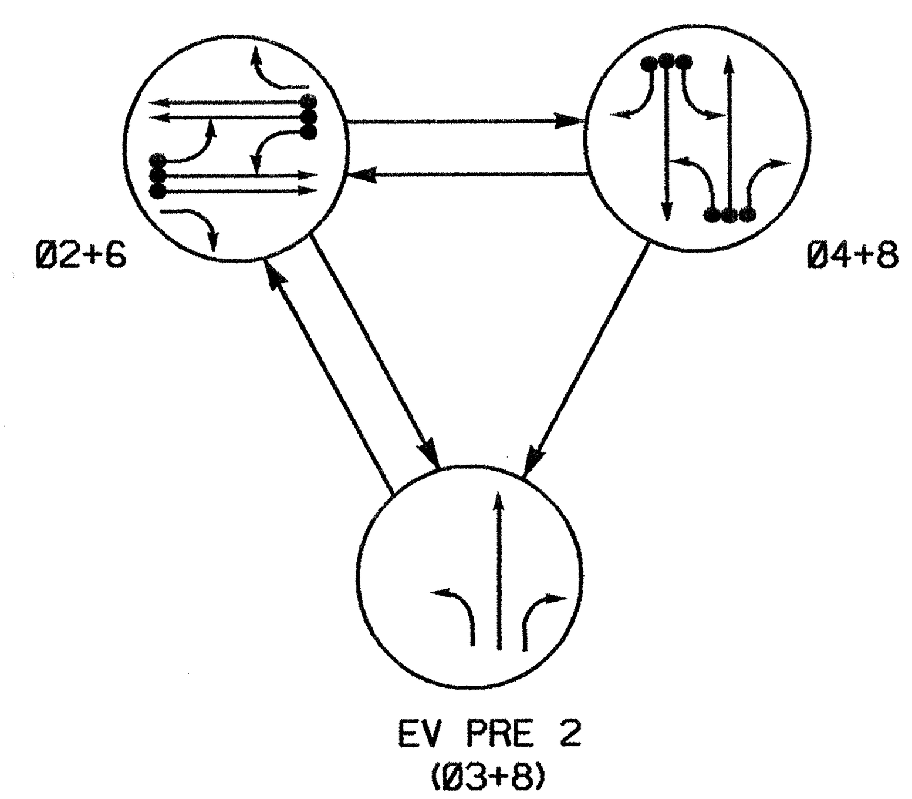
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

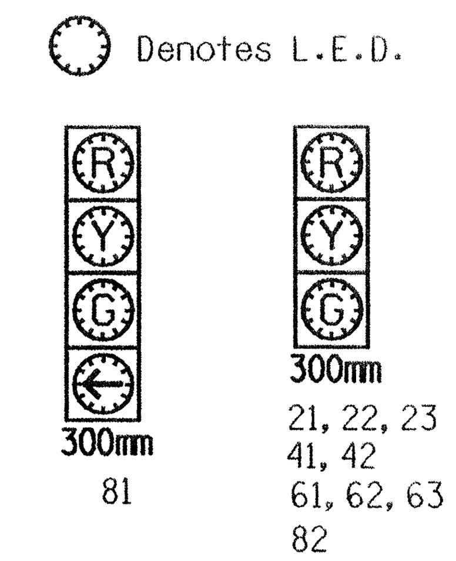
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	Ø4+8	EV PRE 2	FLASH
21, 22, 23	G	R	R	Y
41, 42	R	G	R	R
61, 62, 63	G	R	R	Y
81	R	G	G	R
82	R	G	G	R

SIGNAL FACE I.D.

Denotes L.E.D.



2070 EV PREEMPTION

FUNCTION	PRE 2
Interval 1 – Dwell Green	255
Interval 1 – Dwell Yellow	0.0*
Interval 1 – Dwell Red	0.0*
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0*
Interval 5 – Red	0.0*
Delay Time	**
Min Green Before Pre	7
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	**
Enable Backup Protection	Y
Ped Clear Through Yellow	NA

* Time defaults to time used for phase during normal operation.
** See note 5.

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
2A	1.8X1.8	4	75	Y	2	Y	Y	–	–	—	–	Y
2B	1.8X1.8	4	75	Y	2	Y	Y	–	–	—	–	Y
2C	1.8X18	2-4-2	0	Y	2	Y	Y	Y	–	–	3	Y
2D	1.8X12	2-4-2	0	Y	2	Y	Y	Y	–	2	5	Y
2E	1.8X12	2-4-2	0	Y	2	Y	Y	Y	–	2	5	Y
4A	1.8X18	2-4-2	0	Y	4	Y	Y	–	–	—	3	Y
4B	1.8X18	2-4-2	0	Y	4	Y	Y	–	–	—	–	Y
4C	1.8X18	2-4-2	0	Y	4	Y	Y	–	–	—	15	Y
6A	1.8X1.8	4	75	Y	6	Y	Y	–	–	—	–	Y
6B	1.8X1.8	4	75	Y	6	Y	Y	–	–	—	–	Y
6C	1.8X18	2-4-2	0	Y	6	Y	Y	Y	–	–	3	Y
6D	1.8X12	2-4-2	0	Y	6	Y	Y	Y	–	2	5	Y
6E	1.8X12	2-4-2	0	Y	6	Y	Y	Y	–	2	5	Y
8A	1.8X18	2-4-2	0	Y	8	Y	Y	–	–	—	3	Y
8B	1.8X18	2-4-2	0	Y	8	Y	Y	–	–	—	–	Y
8C	1.8X18	2-4-2	0	Y	8	Y	Y	–	–	—	15	Y

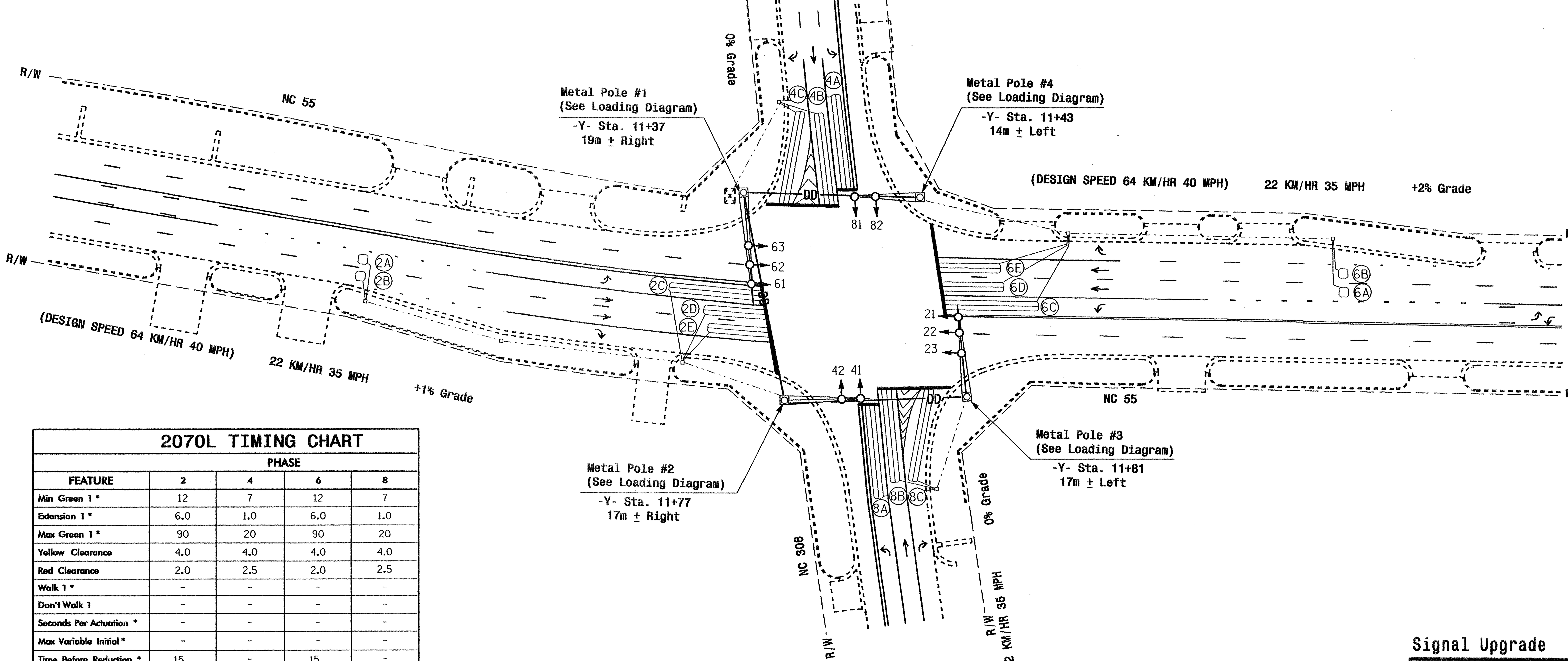
METRIC

PROJECT REFERENCE NO.	SHEET NO.
R-2539C	Sig.5

**2 Phase W/Fire Preemption
Fully-Actuated
(Isolated)**

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate emergency vehicle preemption switch in the fire station.
5. The Division Traffic Engineer will determine the Delay before Preempt and Preempt Dwell Min Green time for the emergency vehicle preemption timing.



PLAN QUANTITIES

Pay Item	Meters
Signal Cable	225
Messenger Cable	0
Lead-in Cable	465

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	50mm Underground Conduit	
N/A	Right of Way with Marker	
	Directional Arrow	
	Pavement Marking Arrow	
	Metal Pole with Mastarm	
— DD —	Directional Drill 2-50mm Conduit	N/A

2070L TIMING CHART

FEATURE	PHASE 2	4	6	8
Min Green 1 *	12	7	12	7
Extension 1 *	6.0	1.0	6.0	1.0
Max Green 1 *	90	20	90	20
Yellow Clearance	4.0	4.0	4.0	4.0
Red Clearance	2.0	2.5	2.0	2.5
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
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

* 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.

Signal Upgrade   Final Design

Prepared in the Offices of:
122 N. McDowell St., Raleigh, NC 27603

SCALE 5 0 10
1:500

**NC 55
at
NC 306**

Division 02   Pamlico County   in Grantsboro

PLAN DATE: July 2004	REVIEWED BY:
PREPARED BY: C.E. Pierce	REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY J. WILLIAMS

SIGNATURE 8/25/04 DATE

SIG. INVENTORY NO. 02-0312

25-AUG-2004 15:24
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