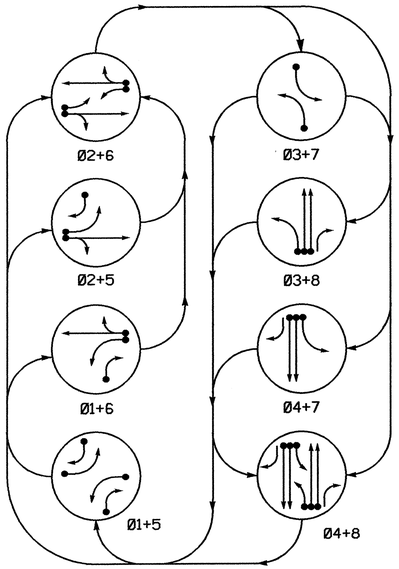
PROJECT REFERENCE NO.	SHEET NO.
U-0620	SIG.24

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATIONS

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R	R	R	R	Y
41	R	R	R	R	R	R	G	G	R
42	R	R	R	R	R	R	G	G	R
43	R	R	R	R	R	R	G	G	R
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R	R	R	R	Y
81	R	R	R	R	R	G	R	G	R
82, 84	R	R	R	R	R	G	R	G	R
83	R	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.

PLAN QUANTITIES

Pay Item	Feet
Signal Cable	640
Messenger Cable	0
Lead-in Cable	850

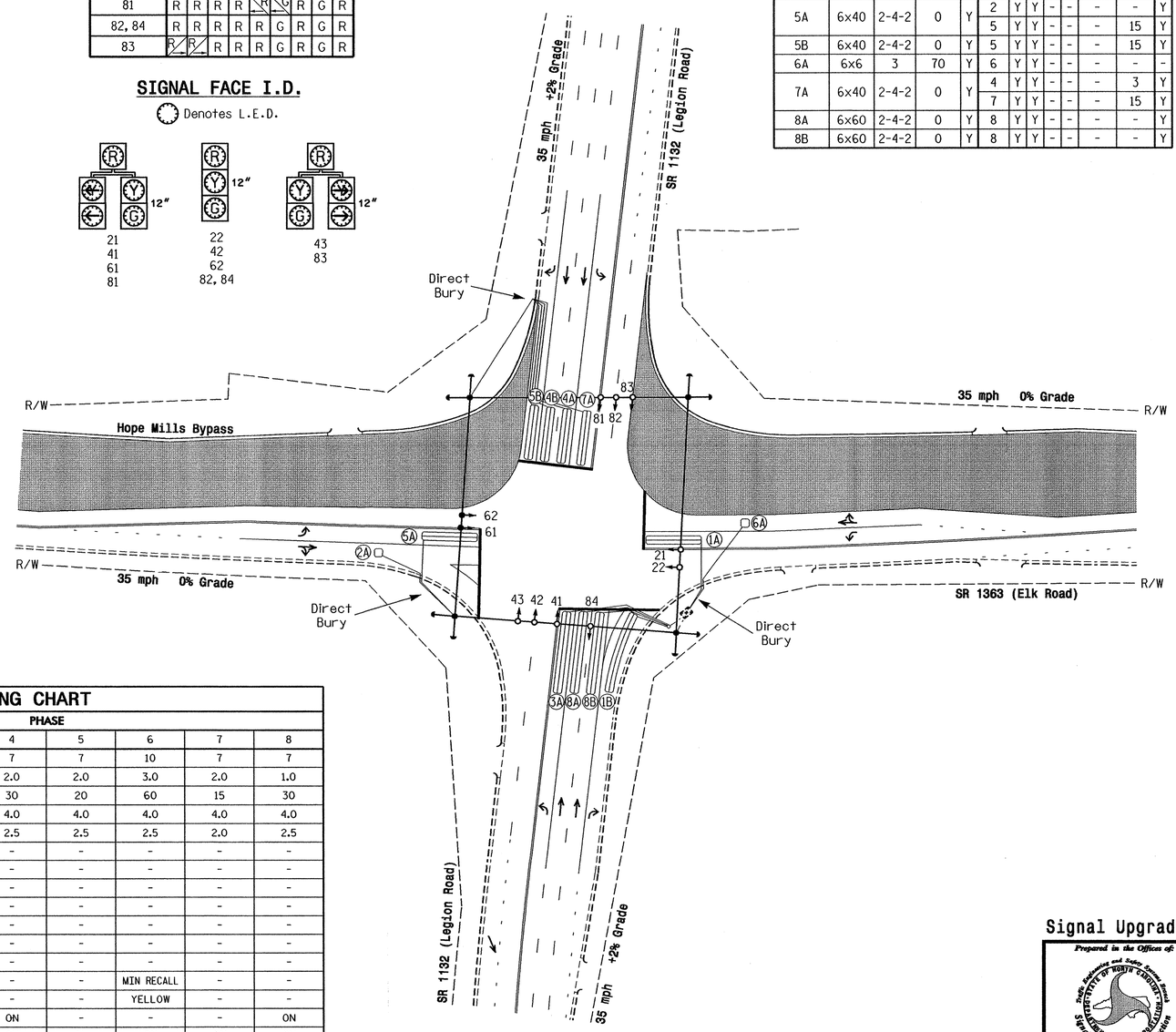
2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW CARD
1A	6x40	2-4-2	0	Y	6	Y	Y	-	-	-	-	-
					1	Y	Y	-	-	1	15	-
1B	6x60	2-4-2	0	Y	1	Y	Y	-	-	-	15	-
2A	6x6	3	70	Y	2	Y	Y	-	-	-	-	-
3A	6x60	2-4-2	0	Y	8	Y	Y	-	-	-	3	Y
					3	Y	Y	-	-	-	15	Y
4A	6x40	2-4-2	0	Y	4	Y	Y	-	-	-	-	-
4B	6x40	2-4-2	0	Y	4	Y	Y	-	-	-	-	Y
5A	6x40	2-4-2	0	Y	2	Y	Y	-	-	-	-	Y
					5	Y	Y	-	-	-	15	Y
5B	6x40	2-4-2	0	Y	5	Y	Y	-	-	-	15	Y
6A	6x6	3	70	Y	6	Y	Y	-	-	-	-	-
7A	6x40	2-4-2	0	Y	4	Y	Y	-	-	-	3	Y
					7	Y	Y	-	-	-	15	Y
8A	6x60	2-4-2	0	Y	8	Y	Y	-	-	-	-	Y
8B	6x60	2-4-2	0	Y	8	Y	Y	-	-	-	-	Y

8 Phase
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. Reposition existing signal heads.
3. Omit phase 1 during phase 2 on.
4. Omit phase 3 during phase 4 on.
5. Omit phase 5 during phase 6 on.
6. Omit phase 7 during phase 8 on.
7. Program controller to clear from phase 2+6 to phase 1 and/or phase 5 by progressing through phase 4+8 (see Electrical Details).
8. Set all detector units to presence mode.



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	
M	Master Controller & Cabinet	M
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Pavement Marking Arrow	
	Construction Area	

2070L TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	7	7	10	7	7
Extension 1 *	1.0	3.0	1.0	2.0	2.0	3.0	2.0	1.0
Max Green 1 *	20	60	15	30	20	60	15	30
Yellow Clearance	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Red Clearance	2.5	2.5	2.0	2.5	2.5	2.5	2.0	2.5
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	-	-	-	ON	-	-	-	ON
Simultaneous Gap	ON	ON	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.

Signal Upgrade: Phase III Temporary Design 2

Prepared in the Offices of: Traffic Engineering and Safety Systems Branch, Signals and Geometrics Section, Traffic Engineering Division, Department of Transportation, 1122 N. McDowell St., Raleigh, NC 27603

SCALE 0 50 1"=50'

Hope Mills Bypass/
SR 1363 (Elk Road)
at
SR 1132 (Legion Road)

Division 6 Cumberland County Hope Mills

PLAN DATE: September 2003 REVIEWED BY: L.A. Elliott
PREPARED BY: P.J. Porter REVIEWED BY: STF/JPG

REVISIONS	INIT.	DATE

SEAL: NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY J. WILLIAMS

SIGNATURE Timothy J. Williams DATE 10/22/03

SIG. INVENTORY NO. 06-0455T2

21-OCT-2003 16:17
N:\Traffic\Traffic Ops\Workgroups\TIP Projects\U-0620\060455_2003xxxx.sig
U-0620 (Dwg)