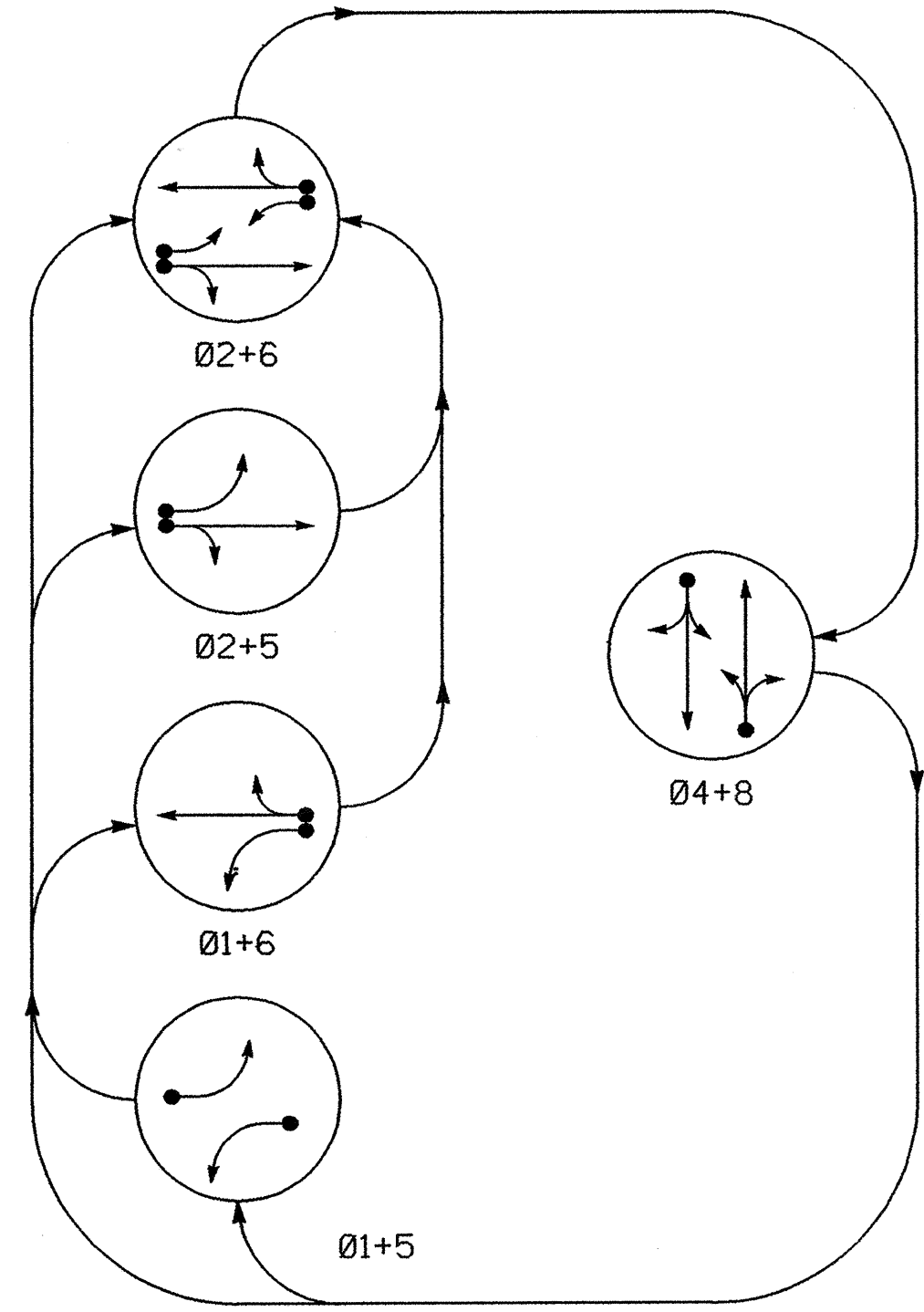
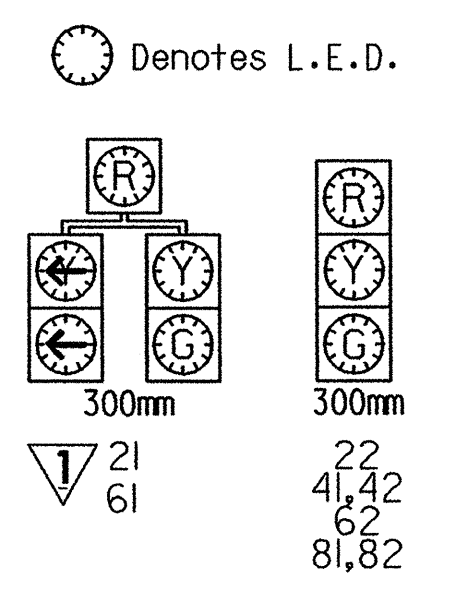


PHASING DIAGRAM

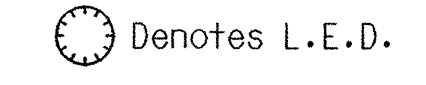


SIGNAL FACE	PHASE					FLASH
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	
21	R	R	G	G	R	Y
22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
61	R	G	R	G	R	Y
62	R	G	R	G	R	Y
81,82	R	R	R	R	G	R

SIGNAL FACE I.D.



SIGNAL FACE I.D.



PHASING DIAGRAM DETECTION LEGEND

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

2070L LOOP & DETECTOR INSTALLATION

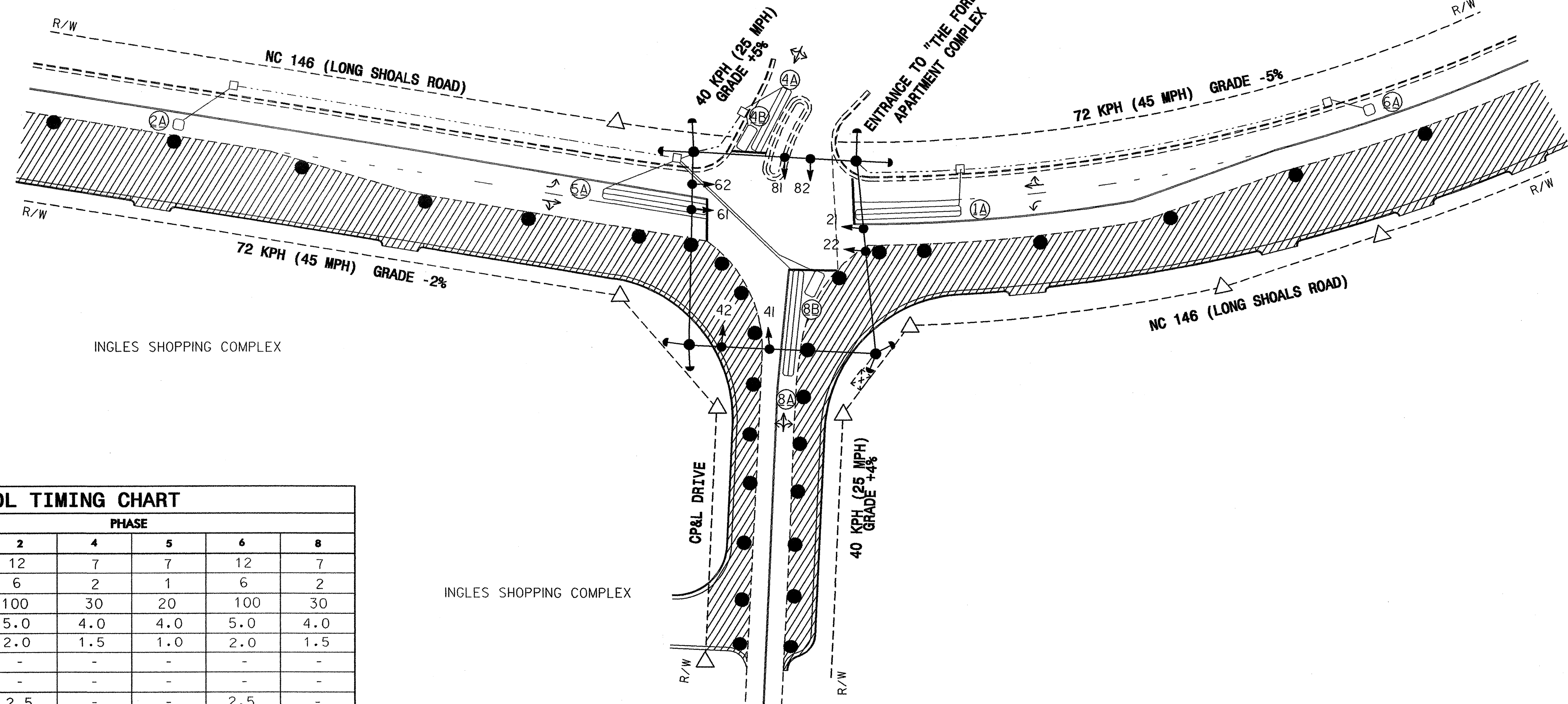
LOOP	SIZE (M)	TURNS	DISTANCE FROM STOPBAR (M)	NEW LOOP	DETECTOR PROGRAMMING						
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME
1A	1.8X18	2-4-2	0	Y	1	Y	Y	-	-	15	Y
					6	Y	Y	-	-	3	Y
2A	1.8X1.8	5	90	Y	2	Y	Y	-	-	-	Y
4A	1.8X12	2-4-2	0	Y	4	Y	Y	-	-	3	Y
4B	1.8X4.5	4	0	Y	4	Y	Y	-	-	10	Y
5A	1.8X18	2-4-2	0	Y	2	Y	Y	-	-	3	Y
					5	Y	Y	-	-	15	Y
6A	1.8X1.8	4	90	Y	6	Y	Y	-	-	-	Y
8A	1.8X18	2-4-2	0	Y	8	Y	Y	-	-	3	Y
8B	1.8X4.5	4	0	Y	8	Y	Y	-	-	10	Y

5 Phase Actuated (Isolated)

NOTES

- REFER TO "ROADWAY STANDARD DRAWINGS NCDOT", DATED JANUARY 2002 AND "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2002.
- REPOSITION EXISTING SIGNAL HEADS NUMBERED 21, 22, 41, 42, 61 & 62.
- OMIT PHASE 1 DURING PHASE 2 ON.
- OMIT PHASE 5 DURING PHASE 6 ON.
- PROGRAM CONTROLLER TO CLEAR FROM PHASE 2+6 TO PHASE 1 AND/OR 5 BY PROGRESSING THROUGH PHASE 4+8 (SEE ELECTRICAL DETAILS).
- SET ALL DETECTOR UNITS TO PRESENCE MODE.

THE FOREST APARTMENT COMPLEX



PLAN QUANTITIES	
Pay Item	Meters
Signal Cable	---
Messenger Cable	---
Lead-in Cable	605

LEGEND

- | | |
|--|--|
| PROPOSED | EXISTING |
| ○ Traffic Signal Head | ● Traffic Signal Head |
| ○ Modified Signal Head | N/A |
| ○ Sign | ○ Sign |
| ○ Pedestrian Signal Head With Push Button & Sign | ○ Pedestrian Signal Head With Push Button & Sign |
| ○ Signal Pole with Guy | ○ Signal Pole with Guy |
| ○ Signal Pole with Sidewalk Guy | ○ Signal Pole with Sidewalk Guy |
| □ Inductive Loop Detector | □ Inductive Loop Detector |
| □ Controller & Cabinet | □ Controller & Cabinet |
| □ Junction Box | □ Junction Box |
| ○ 50mm Underground Conduit | ○ 50mm Underground Conduit |
| ○ Right of Way with Marker | ○ Right of Way with Marker |
| ○ Directional Arrow | ○ Directional Arrow |
| ▨ Construction Zone | N/A |
| ● Construction Barrels | N/A |

2070L TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1*	7	12	7	7	12	7
Extension 1*	1	6	2	1	6	2
Max Green 1*	20	100	30	20	100	30
Yellow Clearance	4.0	5.0	4.0	4.0	5.0	4.0
Red Clearance	1.5	2.0	1.5	1.0	2.0	1.5
Walk 1*	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation*	-	2.5	-	-	2.5	-
Max Variable Initial*	-	34	-	-	34	-
Time Before Reduction*	-	20	-	-	20	-
Time To Reduce*	-	60	-	-	60	-
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	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.

REVISION SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 24393
TIMOTHY J. WILLIAMS
12/6/04

PLANS PREPARED BY:
RUMMEL KLEPPER & KAHL, LLP
consulting engineers
5800 FARINGDON PLACE SUITE 105
RALEIGH, NORTH CAROLINA 27609-3960
FOR
DIVISION OF HIGHWAYS

Prepared for the Office of:
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
SOUTH AND GREENWAY DIVISION
122 N. McDowell St., Raleigh, NC 27603

TEMPORARY SIGNAL 2 - PHASE II - TCP 18
NC 146 (LONG SHOALS ROAD) AT CP&L DRIVE/ ENTRANCE TO "THE FOREST" APARTMENT COMPLEX
DIVISION 13 BUNCOMBE COUNTY ASHEVILLE
PLAN DATE: 02-06-04 REVIEWED BY: D. NORTON
PREPARED BY: C.B. HOLDEN RUM&K PROJECT NO. 302-079-SIG1
REVISIONS: REVISOR: J.W. DATE: 12/6/04
REVISOR: J.W. DATE: 12/6/04
REVISOR: J.W. DATE: 12/6/04
REVISOR: J.W. DATE: 12/6/04
REVISOR: J.W. DATE: 12/6/04

Not a certified document as to the Original Document but Only as to the Revisions - This document originally Issued and sealed by Donald W. Morton 19798 on 2-26-04. This document is only certified as to the revisions.