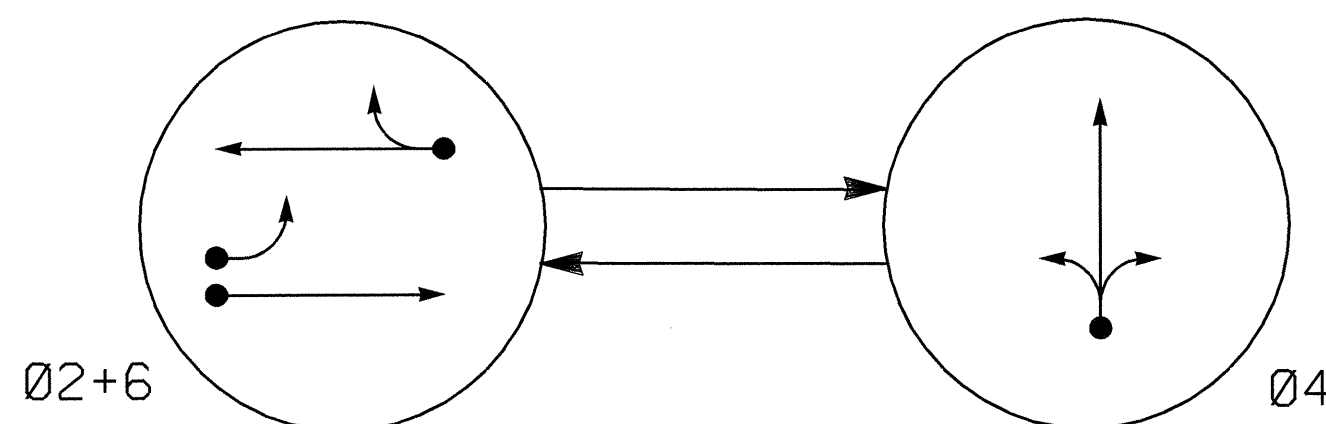


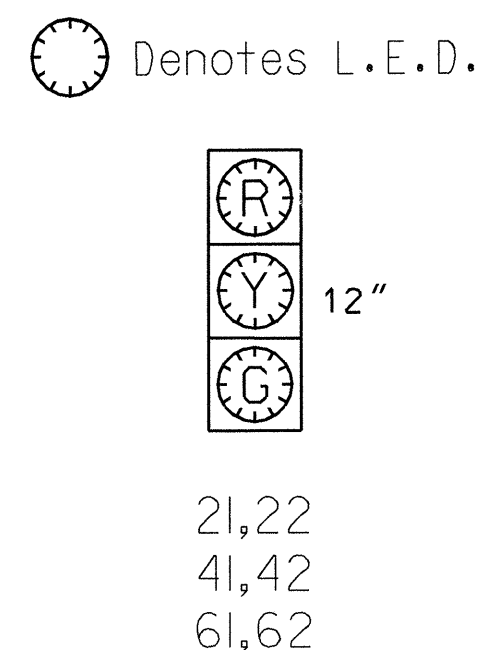
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.



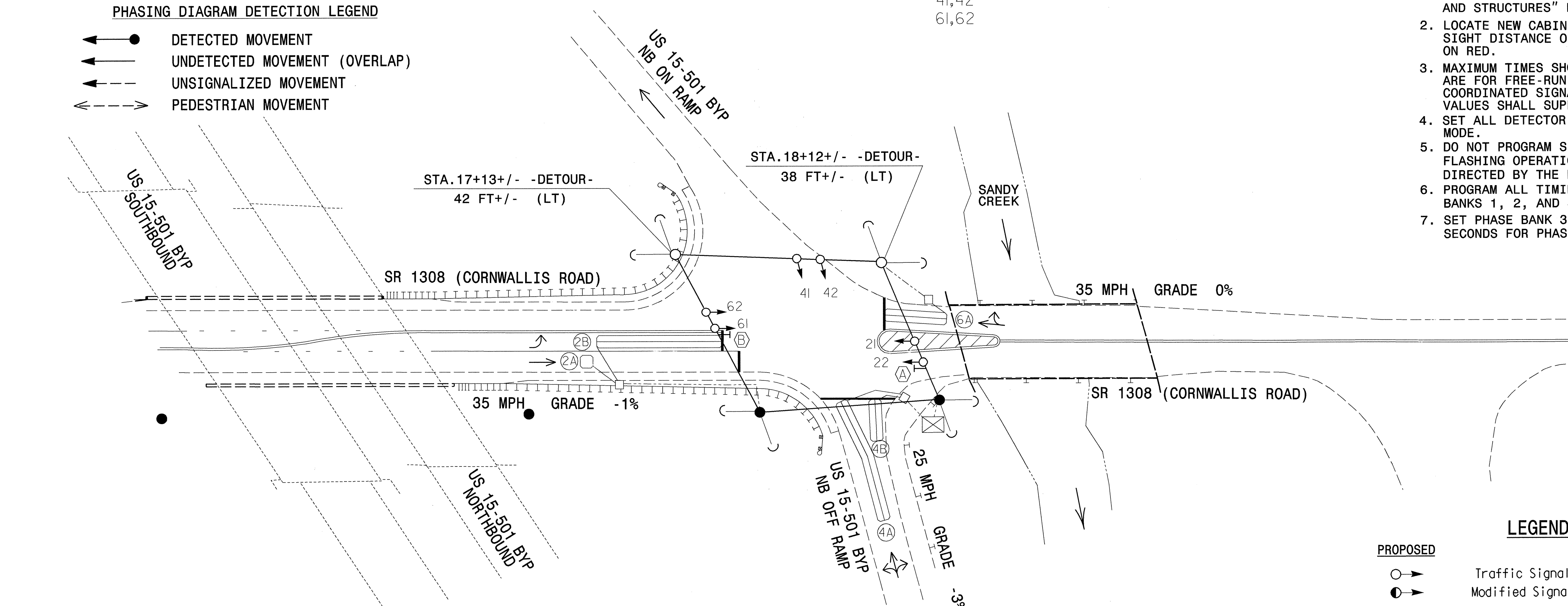
PLAN QUANTITIES

Pay Item	Feet
Signal Cable	450
Messenger Cable	350
Lead-in Cable	435

2 Phase Fully Actuated (Durham Signal System)

NOTES

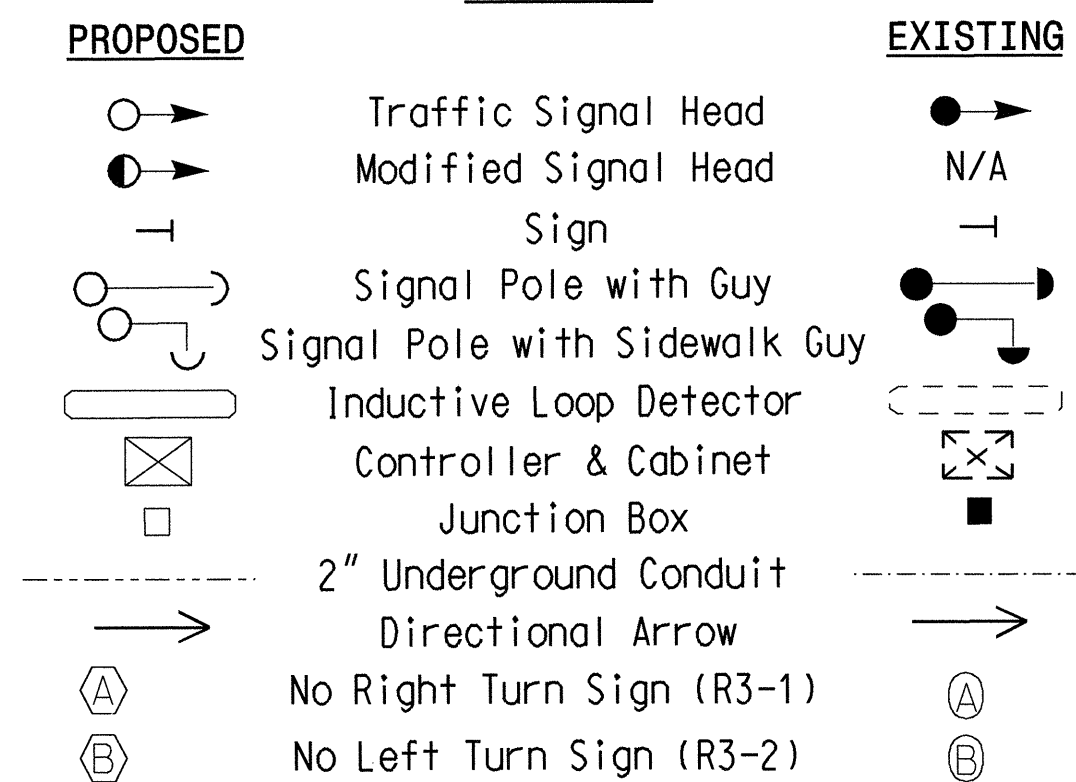
- REFER TO "ROADWAY STANDARD DRAWINGS NCDOT", DATED JANUARY 2002 AND "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2002.
- LOCATE NEW CABINET SO AS NOT TO OBSTRUCT SIGHT DISTANCE OF VEHICLES TURNING RIGHT ON RED.
- MAXIMUM TIMES SHOWN IN TIMING CHART ARE FOR FREE-RUN OPERATIONS ONLY. COORDINATED SIGNAL SYSTEM TIMING VALUES SHALL SUPERSEDE THESE VALUES.
- SET ALL DETECTOR UNITS TO PRESENCE MODE.
- DO NOT PROGRAM SIGNAL FOR LATE NIGHT FLASHING OPERATION UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- PROGRAM ALL TIMING INFORMATION INTO PHASE BANKS 1, 2, AND 3 UNLESS OTHERWISE NOTED.
- SET PHASE BANK 3 MAXIMUM LIMIT TO 250 SECONDS FOR PHASES USED.



PHASE	Ø2	Ø4	Ø6
MINIMUM INITIAL	10 SEC.	7 SEC.	10 SEC.
VEHICLE EXTENSION	4.0 SEC.	1.0 SEC.	4.0 SEC.
YELLOW CHANGE INT.	4.0 SEC.	4.0 SEC.	4.0 SEC.
RED CLEARANCE	1.5 SEC.	2.0 SEC.	1.5 SEC.
MAXIMUM LIMIT	35 SEC.	20 SEC.	35 SEC.
RECALL POSITION	VEH RECALL	NONE	VEH RECALL
VEHICLE CALL MEMORY	YELLOW LOCK	NONE	YELLOW LOCK
DOUBLE ENTRY	OFF	OFF	OFF
WALK	- SEC.	- SEC.	- SEC.
FLASHING DON'T WALK	- SEC.	- SEC.	- SEC.
TYPE 3 LIMIT	- SEC.	- SEC.	- SEC.
ALTERNATE EXTENSION	- SEC.	- SEC.	- SEC.
ADD PER VEHICLE	- SEC.	- SEC.	- SEC.
MAXIMUM INITIAL	- SEC.	- SEC.	- SEC.
MAXIMUM GAP	4.0 SEC.	1.0 SEC.	4.0 SEC.
REDUCE 0.1 SEC EVERY	- SEC.	- SEC.	- SEC.
MINIMUM GAP	4.0 SEC.	1.0 SEC.	4.0 SEC.

DETECTOR ZONES				CONTROLLER PROGRAMMING															
ZONE NO.	SIZE (FT)	DIST. FROM STOPBAR (FT)	NEW EXISTING	NEMA PHASE	TIMING		ATTRIBUTES								DETECTION ZONES		STATUS		
					DELAY	CARRY (STRETCH)	1	2	3	4	5	6	7	8	NEW	EXISTING			
2A	6X6	70	X	Ø2	- SEC.	- SEC.													X
2B	6X60	0	X	Ø2	- SEC.	- SEC.							X	X					X
4A	6X60	0	X	Ø4	5 SEC.	- SEC.							X	X					X
4B	6X20	0	X	Ø4	10 SEC.	- SEC.							X	X					X
6A	6X30	0	X	Ø6	- SEC.	- SEC.							X	X					X

LEGEND



NEW INSTALLATION

<p><b>PLANS PREPARED BY :</b>  <b>RUMMEL KLEPPER &amp; KAHL, LLP</b>  <i>consulting engineers</i>                  5800 FARINGDON PLACE SUITE 105                  RALEIGH, NORTH CAROLINA 27609-3960</p> <p><b>FOR</b>  <b>DIVISION OF HIGHWAYS</b></p>	<p>Prepared for the Offices of:                    122 N. McDowell St., Raleigh, NC 27603</p>	<p><b>US 15-501 BYP NB RAMP</b>  <b>AT</b>  <b>SR 1308 (CORNWALLIS ROAD)</b></p>		<p>SEAL  </p>
		<p>DIVISION 05 DURHAM COUNTY DURHAM NC</p> <p>PLAN DATE: 08-15-04 REVIEWED BY: D.W. MORTON</p> <p>PREPARED BY: C.B. HOLDEN PROJECT NO. 302-079-SIG6</p>		