### PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP)

UNSIGNALIZED MOVEMENT PEDESTRIAN MOVEMENT

TABLE OF OPERATION

	Р	Е	
SIGNAL FACE	Ø 2 + 6	Ø 4 + 8	FLASH
21	<del>-</del> F	<del>▼R</del>	<b>←</b>
22,23	G	R	Υ
42,43	R	G	R
62,63	G	R	Y

# SIGNAL FACE I.D.

22,23

42,43

62,63

Sta. 36 + 01 + / - - LALT -

48' +/- Rt.

31<del>\*</del>

NC 55 (S. Alston Avenue)

35 Mph -1% Grade

P61,P62 W DW DRK

All Heads L.E.D. \*See Note 9 P61,P62

81,82<del>\*</del>

# 2033 SOFTWARE w/ 2070 CONTROLLER LOOP & DETECTOR UNIT INSTALLATION CHART

						DETECTOR PROGRAMMING															
	INDUCT	DUCTIVE LOOPS					SPS	STATUS													
			DIST. FROM		(1)		CARRY		1	2 Z	3	4	5 <b>Z</b>	6	7	8 ш	LOOPS		ଠ		
LOOP NO.	SIZE (ft)	TURNS	STOPBAR (ft)	NEW	EXISTING	NEMA PHASE			Ι) <b>⊢Ι</b> ΔΥ			FULL TIME DELAY	PEDESTRIAN CALL	RESERVED	COUNT	EXTENSION	TYPE 3	CALLING	ALTERNATE	SYSTEM	NEW
2A	6×6	*	70	*	-	2	-	SEC.	-	SEC.	-	-	ı	_	X	_	X	_	_	-	*
2B	6×40	*	0	*	-	2	-	SEC.	-	SEC.	_	-	-	-	Χ	-	Χ	_	_	-	*
4 A	6×40	*	0	*	-	4	3	SEC.	_	SEC.	_	_	-	-	Χ	-	Χ	_	-	-	*
4B	6×40	*	0	*	-	4	15	SEC.	_	SEC.	_	-	-	-	Χ	-	Χ	_	_	-	*
6 A	6×6	*	70	*	-	6	-	SEC.	_	SEC.	_	_	-	-	Χ	-	Χ	_	-	-	*
PEDESTR	ZIAN DE	TECTIO	N	•	•		•	•											•		•
P61,P62	N/A	N/A	N/A	-	Χ	6	-	SEC.	_	SEC.	_	Χ	-	-	_	-	_	-	_	-	Х

\* Video Detection Zone

## 2 Phase Fully Actuated (Durham Signal System)

## **NOTES**

- 1. Refer to "Road Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012.
- 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. Program all timing information into phase banks 1,2, and 3 unless otherwise noted.
- 5. Set phase bank 3 maximum limit to 250 seconds for phases used.
- 6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 7. Program pedestrian heads to countdown the flashing "Don't Walk" time.
- 8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

Traffic Signal Head

Modified Signal Head

Sign Pedestrian Signal Head With Push Button & Sign Signal Pole with Guy

Signal Pole with Sidewalk Guy Inductive Loop Detector

Controller & Cabinet

Junction Box

Right of Way Directional Arrow

B Right Arrow "Only" Sign (R3-5R)

No Right Turn Sign (R3-1)

No Left Turn Sign (R3-2)

Work Area Drums

Barricades

Direct Bury

Video Detector

Video Detection Area

Left Arrow "ONLY" Sign (R3-5L) (A)

**EXISTING** 

**-**

N/A

N/A

N/A

N/A

N/A

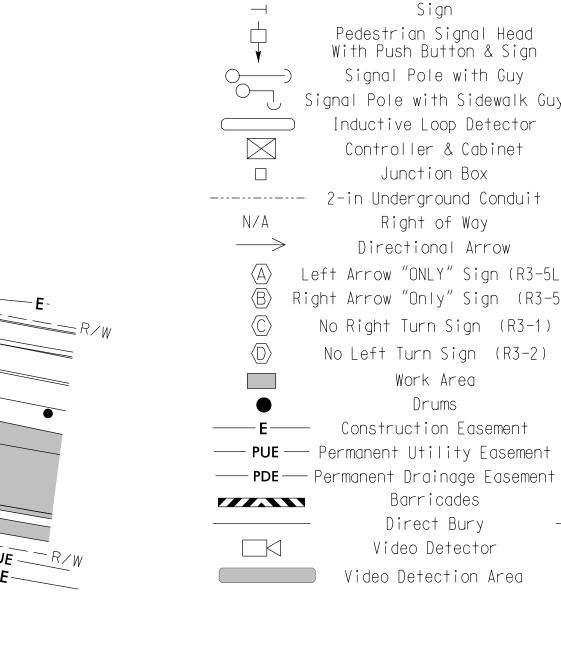
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- 9. Disconnect and bag signal heads #31, #81 and #82 during this phase of construction.
- 10. Contractor shall adjust video detection zones as required

**PROPOSED** 

 $\bigcirc$ 

N/A



TIMING CHART 2033 SOFTWARE w/2070 CONTROLLER 0L3 1 () **SEC**. 7 **SEC**. 10 **SEC**. O SEC. 2.0 **SEC**. 3.0 **SEC**. 3.9 **SEC**. 3.0 SEC. | 3.9 SEC. | 3.9 SEC. YELLOW CHANGE INT. 2.4 **SEC**. 2.4 **SEC**. 2.4 **SEC**. 35 **SEC**. 50 **SEC**. 50 **SEC**. VEH. RECALL VEH. RECALL VEHICLE CALL MEMORY YELLOW LOCK NONE YELLOW LOCK OFF OFF SEC. SEC. 4 **SEC**. FLASHING DON'T WALK 1 () **SEC**. SEC. SEC. - SEC. MIN PED CLEARANCE SEC. — SEC. SEC. SEC. — SEC. ALTERNATE EXTENSION  $-\quad {\rm SEC}.$ - SEC. SEC. SEC. SEC. SEC. 3 **.** 0 **SEC**. 2 **.** 0 **SEC**. 3 **.** 0 **SEC**.

MINIMUM INITIAL \*

RED CLEARANCE

MAXIMUM LIMIT

RECALL POSITION

DOUBLE ENTRY

TYPE 3 LIMIT

ADD PER VEHICLE \*

MAXIMUM INITIAL

REDUCE 0.1 SEC EVERY \*

MAXIMUM GAP\*

MINIMUM GAP

WALK \*

\* 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.

2 **.** O **SEC**.

SEC.

3 **.** ○ **SEC**.

Sta. 36+78+/- -LALT- NC 55 (N. Alston Avenue)

E. Main St Division 5 Durham County Durham PLAN DATE: September 2014 REVIEWED BY: J Hochanadel 750 N.Greenfield Pkwy, Garner, NC 27529 PREPARED BY: R Drayton REVIEWED BY:

(South/North Alston Avenue)

Signal Upgrade - Temporary Design 3 (TMP Phase 2, Steps 1-6)

NC 55

INIT. DATE

MyPAL DATE SIG. INVENTORY NO. 05-1030T3

Raleigh, NC 27605 Tel:919-789-9977

35 Mph +3% Grade

43 42

1025 Wade Avenue