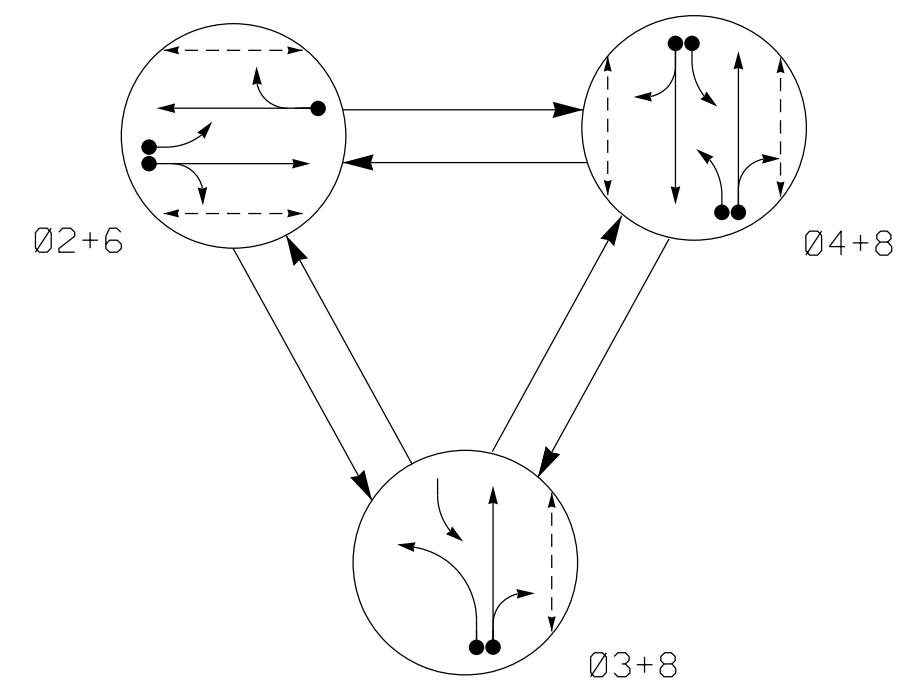


PHASING DIAGRAM

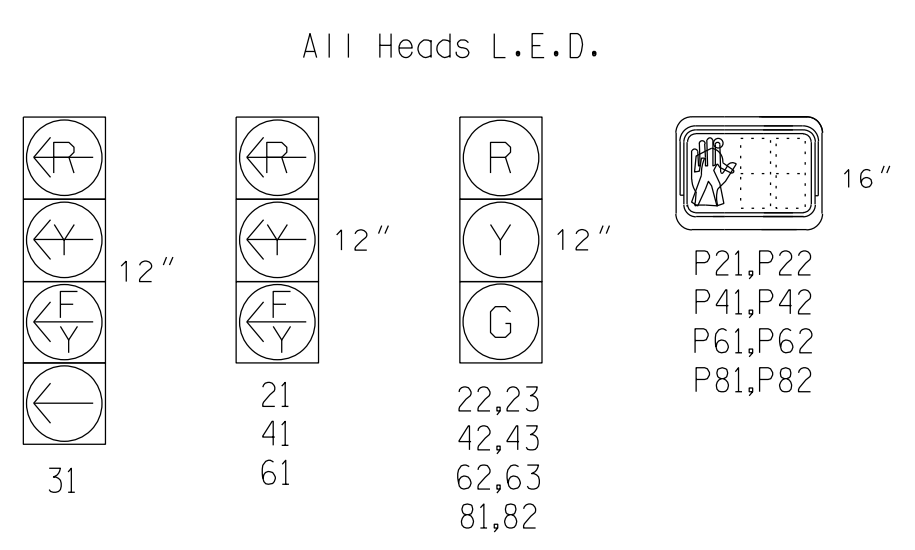


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE			
	02+6	03+8	04+8	FLASH
21	F	R	R	Y
22,23	G	R	R	Y
31	R	F	R	Y
41	R	F	F	R
42,43	R	R	G	R
61	F	R	R	Y
62,63	G	R	R	Y
81,82	R	G	G	R
P21,P22	W	DW	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	W	DW	DW	DRK
P81,P82	DW	W	W	DRK

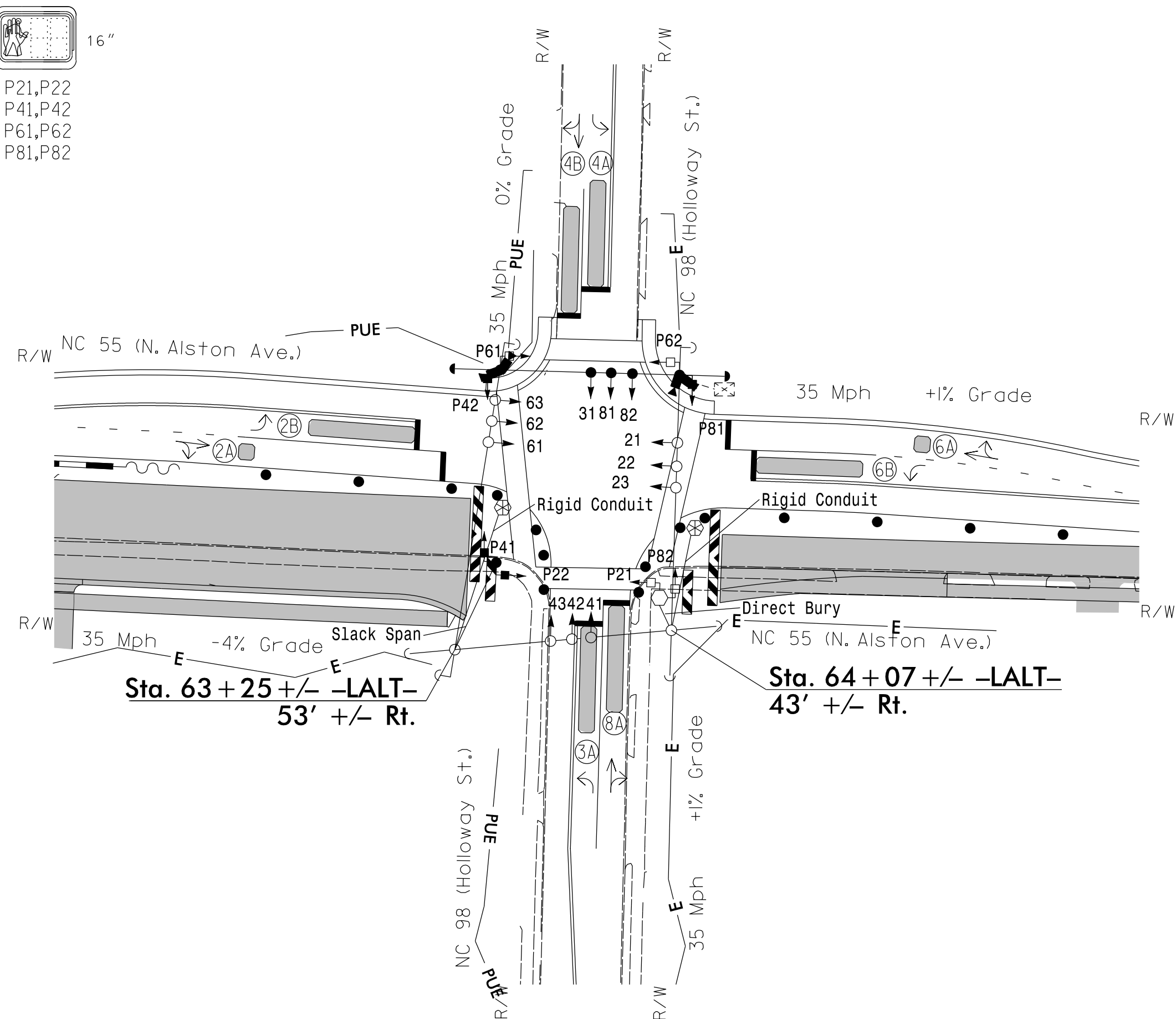
SIGNAL FACE I.D.



2033 SOFTWARE w/ 2070 CONTROLLER LOOP & DETECTOR UNIT INSTALLATION CHART																	
INDUCTIVE LOOPS					DETECTOR PROGRAMMING												
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	TIMING		ATTRIBUTES										
					DELAY	CARRY (STRETCH)	1	2	3	4	5	6	7	8	STATUS		
2A	6x6	*	70	*	-	2	- SEC.	- SEC.	-	-	-	-	X	-	-	-	*
2B	6x40	*	0	*	-	2	- SEC.	- SEC.	-	-	-	-	X	-	-	-	*
3A	6x40	*	0	*	-	3	15 SEC.	- SEC.	-	-	-	-	X	-	-	-	*
4A	6x40	*	0	*	-	4	3 SEC.	- SEC.	-	-	-	-	X	-	-	-	*
4B	6x40	*	0	*	-	4	10 SEC.	- SEC.	-	-	-	-	X	-	-	-	*
6A	6x6	*	70	*	-	6	- SEC.	- SEC.	-	-	-	-	X	-	-	-	*
6B	6x40	*	0	*	-	6	- SEC.	- SEC.	-	-	-	-	X	-	-	-	*
8A	6x40	*	0	*	-	8	10 SEC.	- SEC.	-	-	-	-	X	-	-	-	*

PEDESTRIAN DETECTION																
FACE	SIZE	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	NEMA PHASE	DELAY	CARRY (STRETCH)	1	2	3	4	5	6	7	8	STATUS
P21,P22	N/A	N/A	N/A	-	X	2	- SEC.	- SEC.	-	X	-	-	-	-	-	X
P41,P42	N/A	N/A	N/A	-	X	4	- SEC.	- SEC.	-	X	-	-	-	-	-	X
P61,P62	N/A	N/A	N/A	X	-	6	- SEC.	- SEC.	-	X	-	-	-	-	-	X
P81,P82	N/A	N/A	N/A	-	X	8	- SEC.	- SEC.	-	X	-	-	-	-	-	X

* Video Detection Zone



3 Phase Fully Actuated (Durham Signal System)

NOTES

- Refer to "Road Standard Drawings NCDOT" dated January 2012, "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 3 may be lagged.
- Set all detector units to presence mode.
- 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
- Contractor shall adjust video detection zones as required.

LEGEND

- | PROPOSED | EXISTING |
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TIMING CHART								
2033 SOFTWARE w/2070 CONTROLLER								
PHASE	02	03	04	06	08	OL1	OL3	OL4
MINIMUM INITIAL *	10 SEC.	7 SEC.	7 SEC.	10 SEC.	7 SEC.	0 SEC.	0 SEC.	0 SEC.
VEHICLE EXTENSION *	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.			
YELLOW CHANGE INT.	4.1 SEC.	3.8 SEC.	3.8 SEC.	4.1 SEC.	3.8 SEC.	4.1 SEC.	4.1 SEC.	3.8 SEC.
RED CLEARANCE	2.3 SEC.	3.1 SEC.	2.3 SEC.	2.3 SEC.	2.3 SEC.	2.3 SEC.	2.3 SEC.	2.3 SEC.
MAXIMUM LIMIT *	50 SEC.	15 SEC.	35 SEC.	50 SEC.	35 SEC.			
RECALL POSITION	VEH. RECALL	NONE	NONE	VEH. RECALL	NONE			
VEHICLE CALL MEMORY	YELLOW LOCK	NONE	NONE	YELLOW LOCK	NONE			
DOUBLE ENTRY	OFF	OFF	ON	OFF	ON			
WALK *	4 SEC.	- SEC.	4 SEC.	4 SEC.	4 SEC.			
FLASHING DON'T WALK	9 SEC.	- SEC.	10 SEC.	8 SEC.	11 SEC.			
TYPE 3 LIMIT	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.			
ALTERNATE EXTENSION	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.			
ADD PER VEHICLE *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.			
MAXIMUM INITIAL *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.			
MAXIMUM GAP*	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.			
REDUCE 0.1 SEC EVERY *	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.			
MINIMUM GAP	3.0 SEC.	2.0 SEC.	2.0 SEC.	3.0 SEC.	2.0 SEC.			

* 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 - Temporary Design 2 (TMP Phase 1, Steps 11-21)

1025 Wade Avenue
Raleigh, NC 27605
Tel: 919-789-9977
Fax: 919-789-9591
License #: C-2197

NC 55 (North Alston Avenue) at
US 70 - NC 98 (Holloway Street)
Division 5 Durham County Durham
PLAN DATE: September 2014 REVIEWED BY: J Hochanadel
PREPARED BY: C Lawson REVIEWED BY:

REVISIONS	INIT.	DATE

DocuSigned by:
Gregory P. Hochanadel
4/02/15
50781028686488
SIG. INVENTORY NO. 05-1027T2

3/20/2015 G:\IT\anp\p101\on\TR13-017-03 U-3308 Signals with Video\05-1027T2.dgn