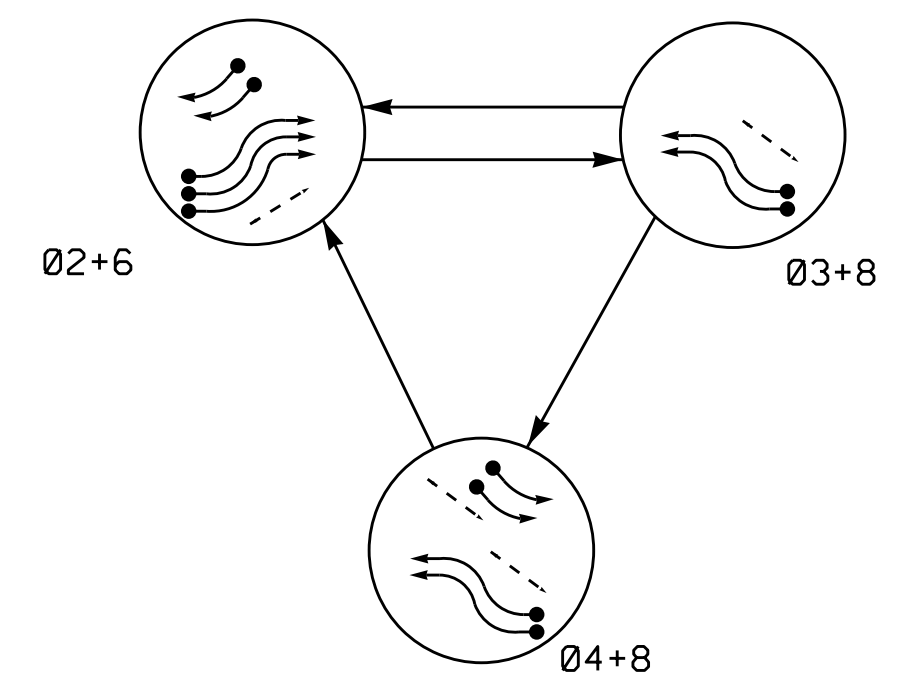


3 Phase Fully Actuated Asheville Signal System

PHASING DIAGRAM

Program all phases for "Red Rest".



PHASING DIAGRAM DETECTION LEGEND

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

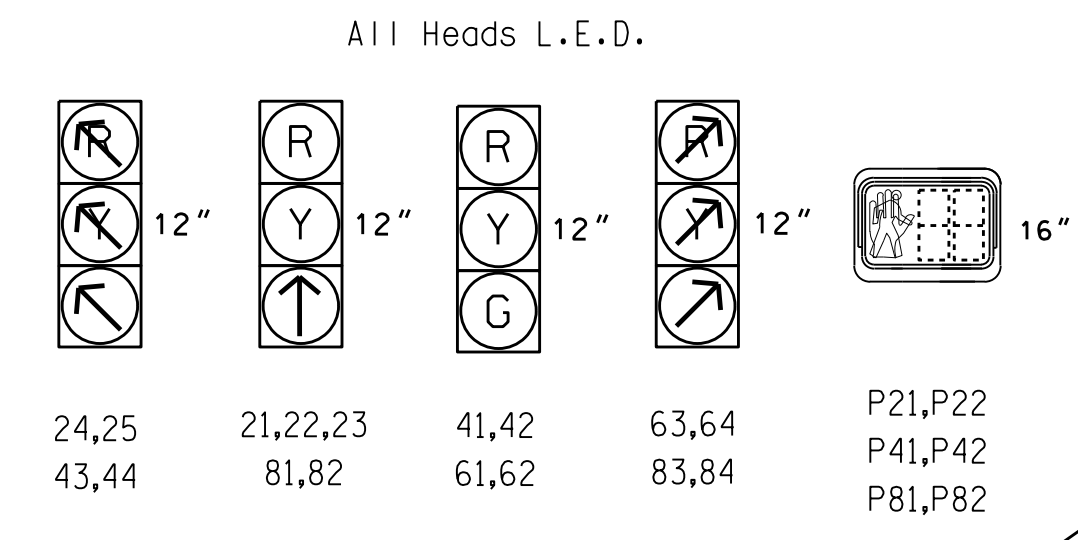
TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+6	03+8	04+8	FLASH
21,22,23	R	R	R	R
24,25	W	W	W	W
41,42	R	R	G	R
43,44	W	W	W	W
61,62	G	R	R	R
63,64	W	W	W	W
81,82	R	↑	↑	R
83,84	W	W	W	W
P21,P22	W	DW	DW	DRK
P41,P42	DW	DW	W	DRK
P81,P82	DW	W	W	DRK

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

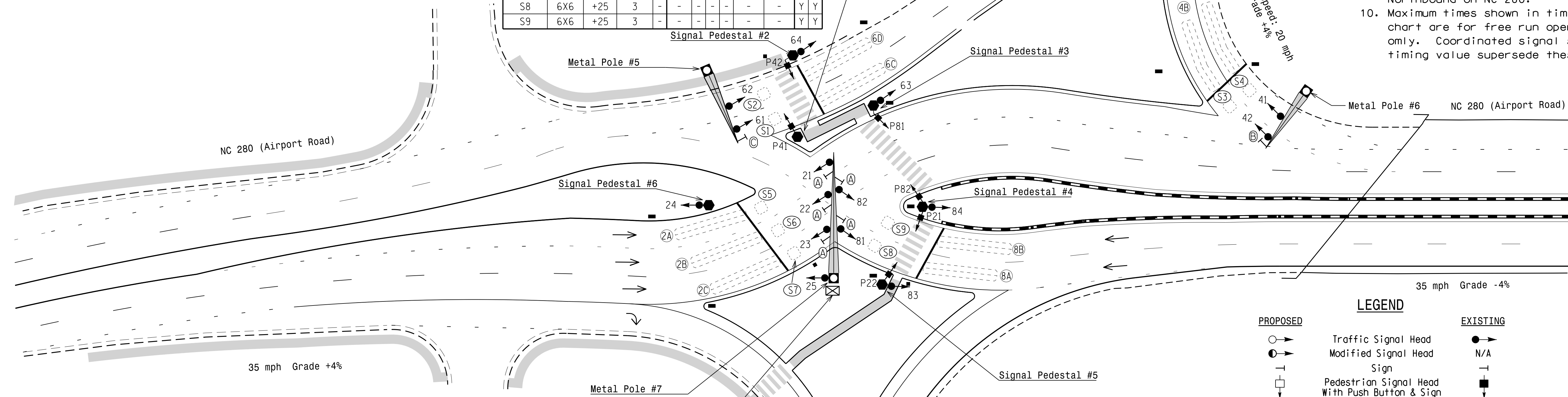
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X40	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
2B	6X40	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
2C	6X40	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	3/4	Y	Y	-	-	-	-	Y
4B	6X40	0	2-4-2	-	3/4	Y	Y	-	-	-	-	Y
6A	6X6	300	5	-	6	-	Y	-	2.4	-	-	Y
6B	6X6	300	5	-	6	-	Y	-	2.4	-	-	Y
6C	6X40	0	2-4-2	-	6	Y	Y	-	-	-	-	Y
6D	6X40	0	2-4-2	-	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
8B	6X40	0	2-4-2	-	8	Y	Y	-	-	-	-	Y
S1	6X6	+20	3	-	-	-	-	-	-	-	-	Y
S2	6X6	+20	3	-	-	-	-	-	-	-	-	Y
S3	6X6	+8	4	-	-	-	-	-	-	-	-	Y
S4	6X6	+8	4	-	-	-	-	-	-	-	-	Y
S5	6X6	+6	3	-	-	-	-	-	-	-	-	Y
S6	6X6	+6	3	-	-	-	-	-	-	-	-	Y
S7	6X6	+6	3	-	-	-	-	-	-	-	-	Y
S8	6X6	+25	3	-	-	-	-	-	-	-	-	Y
S9	6X6	+25	3	-	-	-	-	-	-	-	-	Y

SIGNAL FACE I.D.



NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation.
3. Set all detector units to presence mode.
4. The cabinet should be designed to include an Auxiliary Output file for future use.
5. Program all phases for "Red Rest".
6. Omit phase 4 during phase 2+6 on.
7. Program controller to clear from phase 2+6 to phase 4 by progressing through phase 3.
8. Omit phase 3 during phase 4 on.
9. Phase 3 provides red clearance time for vehicles traveling Northbound on NC 280.
10. Maximum times shown in timing chart are for free run operation only. Coordinated signal system timing value supersede these value.



OASIS 2070 TIMING CHART

FEATURE	PHASE				
	2	3 (DUMMY)	4	6	8
Min Green 1 *	10	1	10	10	10
Extension 1 *	2.0	0.0	2.0	2.0	2.0
Max Green 1 *	60	1	60	60	60
Yellow Clearance	3.6	3.0	3.0	4.7	4.1
Red Clearance	2.1	1.6	4.1	1.0	3.0
Red Revert	5.0	5.0	5.0	5.0	5.0
Walk 1 *	7	-	7	-	7
Don't Walk 1	7	-	7	-	11
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	-	-	-	-	-
Vehicle Call Memory	-	-	-	-	-
Dual Entry	ON	ON	ON	ON	ON
Simultaneous Gap	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.

LEGEND

- | PROPOSED   | EXISTING   |
|--|--|
| ○ → Traffic Signal Head                            | ● → Traffic Signal Head                            |
| ○ → Modified Signal Head                           | N/A  |
| ○ → Pedestrian Signal Head                         | ○ → Pedestrian Signal Head                         |
| ○ → 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                                   |
| ○ → Over-sized Junction Box                        | ○ → Over-sized Junction Box                        |
| ○ → 2-in Underground Conduit                       | ○ → 2-in Underground Conduit                       |
| N/A → Right of Way                                 | N/A → Right of Way                                 |
| ○ → Directional Arrow                              | ○ → Directional Arrow                              |
| ○ → Signal Pedestal                                | ○ → Signal Pedestal                                |
| ○ → Metal Pole with Mastarm                        | ○ → Metal Pole with Mastarm                        |
| ○ → Through Arrow "ONLY" Sign (R3-5A)              | ○ → Through Arrow "ONLY" Sign (R3-5A)              |
| ○ → No Right Turn Sign (R3-1)                      | ○ → No Right Turn Sign (R3-1)                      |
| ○ → No Left Turn Sign (R3-2)                       | ○ → No Left Turn Sign (R3-2)                       |

Install new base-mounted cabinet on existing foundation.

Signal Upgrade

750 N. Greenfield Pkwy, Garner, NC 27529

**NC 280 (Airport Road) at I-26 Eastbound Ramps**

Division 13 Buncombe County Fletcher

PLAN DATE: June 2016 REVIEWED BY: T.J. Williams

PREPARED BY: M. Mahbooba REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

11/7/2016

SIG. INVENTORY NO. 13-0814

SCALE 0 30 1"=30'

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