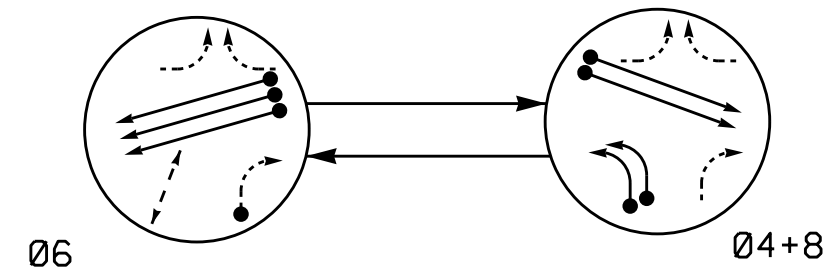


PHASING DIAGRAM



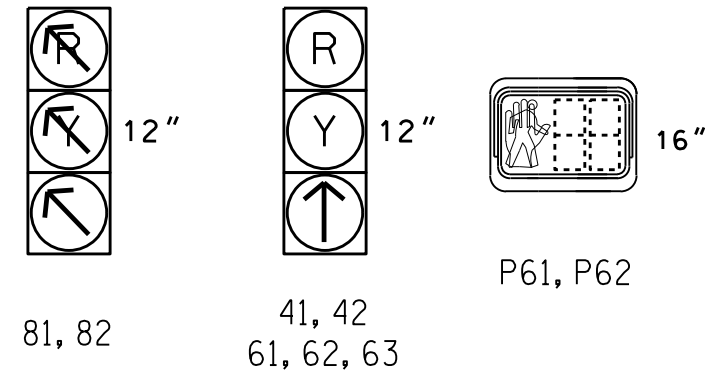
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE			
	Ø6	Ø4+8	Ø4+8	Ø6
41, 42	R	↑	R	R
61, 62, 63	↑	R	R	R
81, 82	R	↘	R	R
P61, P62	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

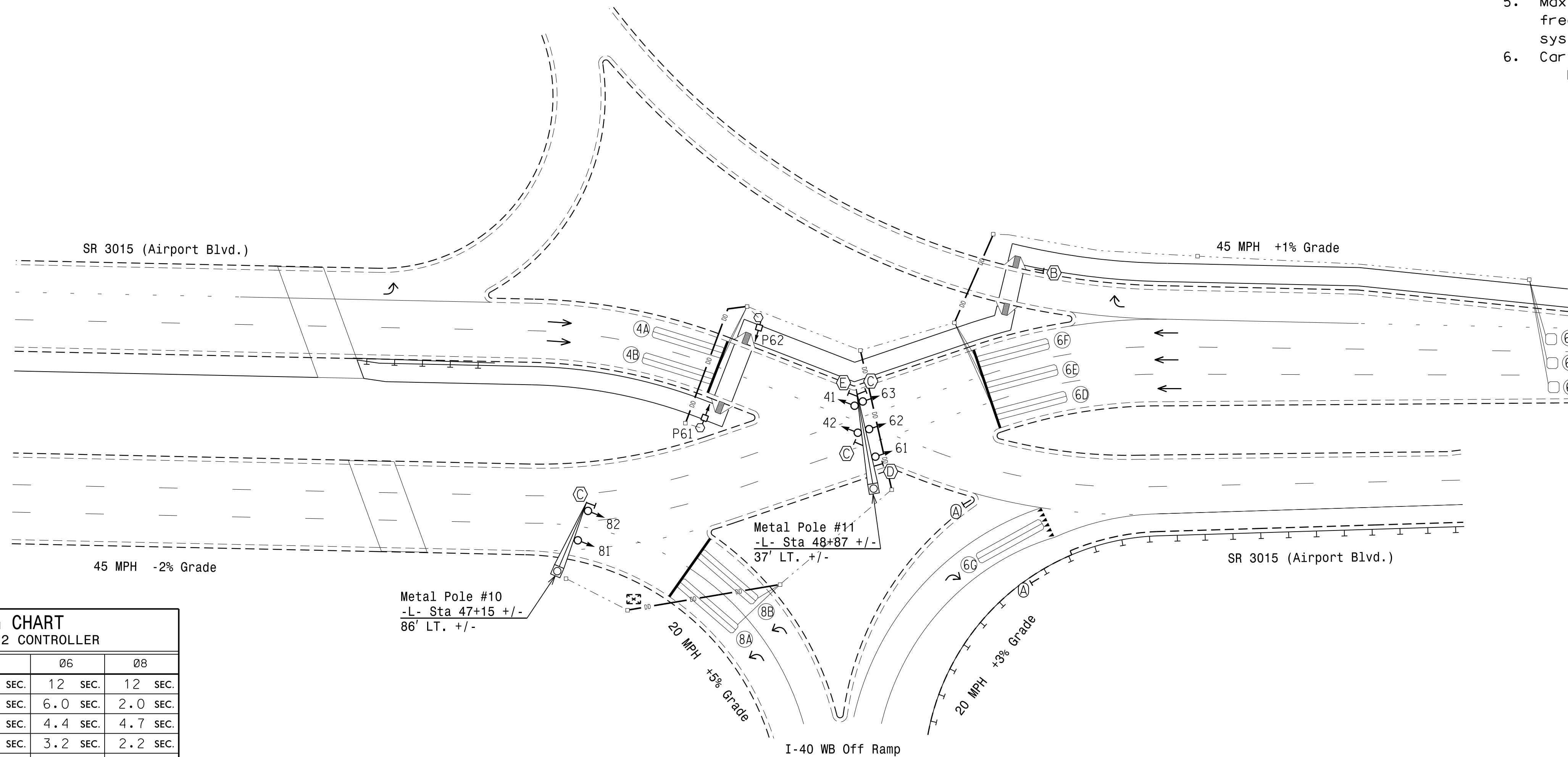


LOOP & DETECTOR INSTALLATION CHART											
ASC/3-2070EN2 CONTROLLER w/ TS-2 CABINET											
LOOP NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	NEW EXISTING	DETECTOR UNITS				
							FEATURE	TIME	ADDED INITIAL	DET. TYPE	
4A	6X40	0	2-4-2	X	-	4	-	X	-	-	S
4B	6X40	0	2-4-2	X	-	4	-	X	-	-	S
6A	6X6	0	5	X	-	6	X	-	-	X	N
6B	6X6	0	5	X	-	6	X	-	-	X	N
6C	6X6	0	5	X	-	6	X	-	-	X	N
6D	6X40	0	2-4-2	X	-	6	-	X	-	-	S
6E	6X40	0	2-4-2	X	-	6	-	X	-	-	S
6F	6X40	0	2-4-2	X	-	6	-	X	-	-	S
6G	6X40	0	2-4-2	X	-	6	-	X	DELAY	20	S
8A	6X40	0	2-4-2	X	-	8	-	X	-	-	S
8B	6X40	0	2-4-2	X	-	8	-	X	-	-	S

3 Phase Fully Actuated (Cary Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Program controller to start up in all red.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Cary signal system data:
Fiber channel #: 26.



TIMING CHART			
ASC/3-2070EN2 CONTROLLER			
PHASE	Ø4	Ø6	Ø8
MINIMUM GREEN *	12 SEC.	12 SEC.	12 SEC.
VEHICLE EXT. *	2.0 SEC.	6.0 SEC.	2.0 SEC.
YELLOW CHANGE INT.	4.7 SEC.	4.4 SEC.	4.7 SEC.
RED CLEARANCE	2.2 SEC.	3.2 SEC.	2.2 SEC.
MAX. 1 *	60 SEC.	60 SEC.	60 SEC.
MAX. 2 *	- SEC.	- SEC.	- SEC.
RECALL POSITION	NONE	SOFT RECALL	NONE
LOCK DET.	OFF	OFF	OFF
WALK *	- SEC.	7 SEC.	- SEC.
PED. CLEAR	- SEC.	5 SEC.	- SEC.
VOLUME DENSITY	OFF	ON	OFF
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	- SEC.	- SEC.	- SEC.
MAX. INITIAL *	- SEC.	- SEC.	- SEC.
TIME B4 REDUCTION *	- SEC.	15 SEC.	- SEC.
TIME TO REDUCE *	- SEC.	50 SEC.	- SEC.
MINIMUM GAP	- SEC.	3.0 SEC.	- SEC.
DUAL ENTRY	ON	OFF	ON
SIMULTANEOUS GAP	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 | ● → N/A |
| ● → Modified Signal Head | — Sign |
| ⊥ Pedestrian Signal Head | ⊥ Signal Pole with Guy |
| ⊥ With Push Button & Sign | ⊥ Signal Pole with Sidewalk Guy |
| ⊥ Signal Pole with Guy | ⊥ Inductive Loop Detector |
| ⊥ Signal Pole with Sidewalk Guy | ⊥ Controller & Cabinet |
| ⊥ Inductive Loop Detector | ⊥ Junction Box |
| ⊥ Controller & Cabinet | ⊥ 2-in Underground Conduit |
| ⊥ Junction Box | ⊥ Right of Way |
| ⊥ 2-in Underground Conduit | → Directional Arrow |
| ⊥ Right of Way | → Directional Drill |
| → Directional Arrow | → N/A |
| → Directional Drill | → Curb Ramp |
| → Curb Ramp | → Guardrail |
| → Guardrail | ⊥ Metal Pole with Mastarm |
| ⊥ Metal Pole with Mastarm | ⊥ "YIELD" Sign (R1-2) |
| ⊥ "YIELD" Sign (R1-2) | ⊥ Pedestrian Crossing Sign (W11-2) |
| ⊥ Pedestrian Crossing Sign (W11-2) | ⊥ with Diagonal Arrow Plaque (W16-7pL) |
| ⊥ with Diagonal Arrow Plaque (W16-7pL) | ⊥ No Right Turn Sign (R3-1) |
| ⊥ No Right Turn Sign (R3-1) | ⊥ No U-Turn / No Left Turn Sign (R3-18) |
| ⊥ No U-Turn / No Left Turn Sign (R3-18) | ⊥ No Left Turn Sign (R3-2) |
| ⊥ No Left Turn Sign (R3-2) | ⊥ |

Signal Upgrade - Final Design

<p>Prepared in the Offices of: TRANSPORTATION MOBILITY AND SAFETY DIVISION STATE OF NORTH CAROLINA SIGNAL DESIGN SECTION</p> <p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>SR 3015 (Airport Boulevard) at I-40 WB Ramps</p>		<p>SEAL</p> <p>ROBERT J. ZIEMBA ENGINEER</p>			
	<p>Division 5 Wake County Morrisville</p> <p>PLAN DATE: March 2018 REVIEWED BY:</p> <p>PREPARED BY: J.A. Lohr REVIEWED BY:</p>	<p>REVISIONS</p> <table border="1"> <tr><th>INIT.</th><th>DATE</th></tr> <tr><td> </td><td> </td></tr> </table>		INIT.	DATE	
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