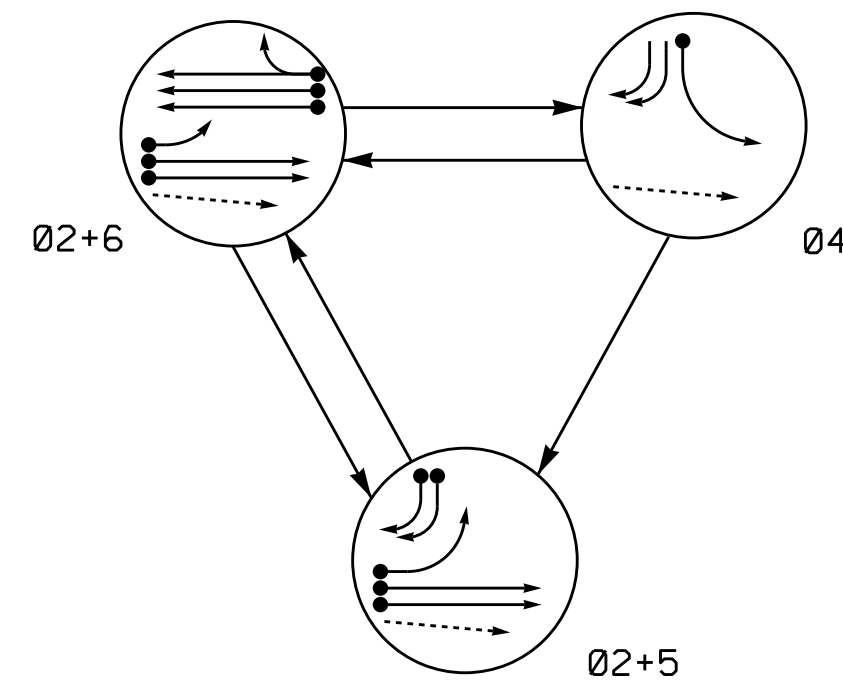


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

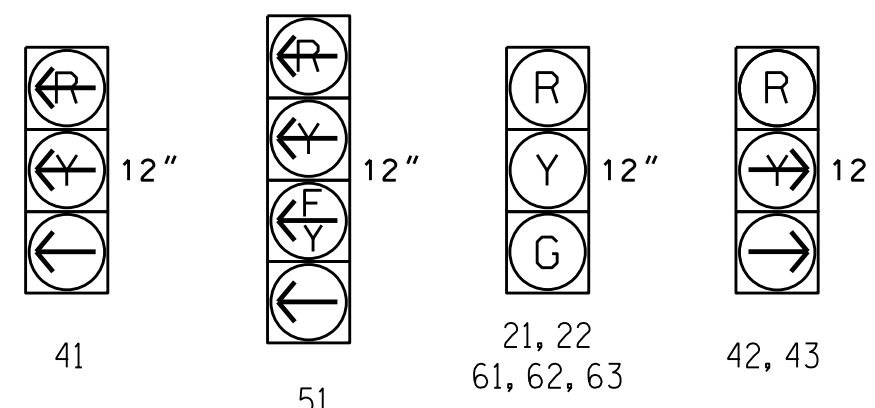
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- - - UNSIGNALIZED MOVEMENT
- ⤴ PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	04	05
21, 22	G	G	R	Y
41	R	R	Y	R
42, 43	Y	Y	R	R
51	Y	Y	R	Y
61, 62, 63	R	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



LOOP & DETECTOR INSTALLATION CHART  
ASC/3-2070EN2 CONTROLLER w/ TS-2 CABINET

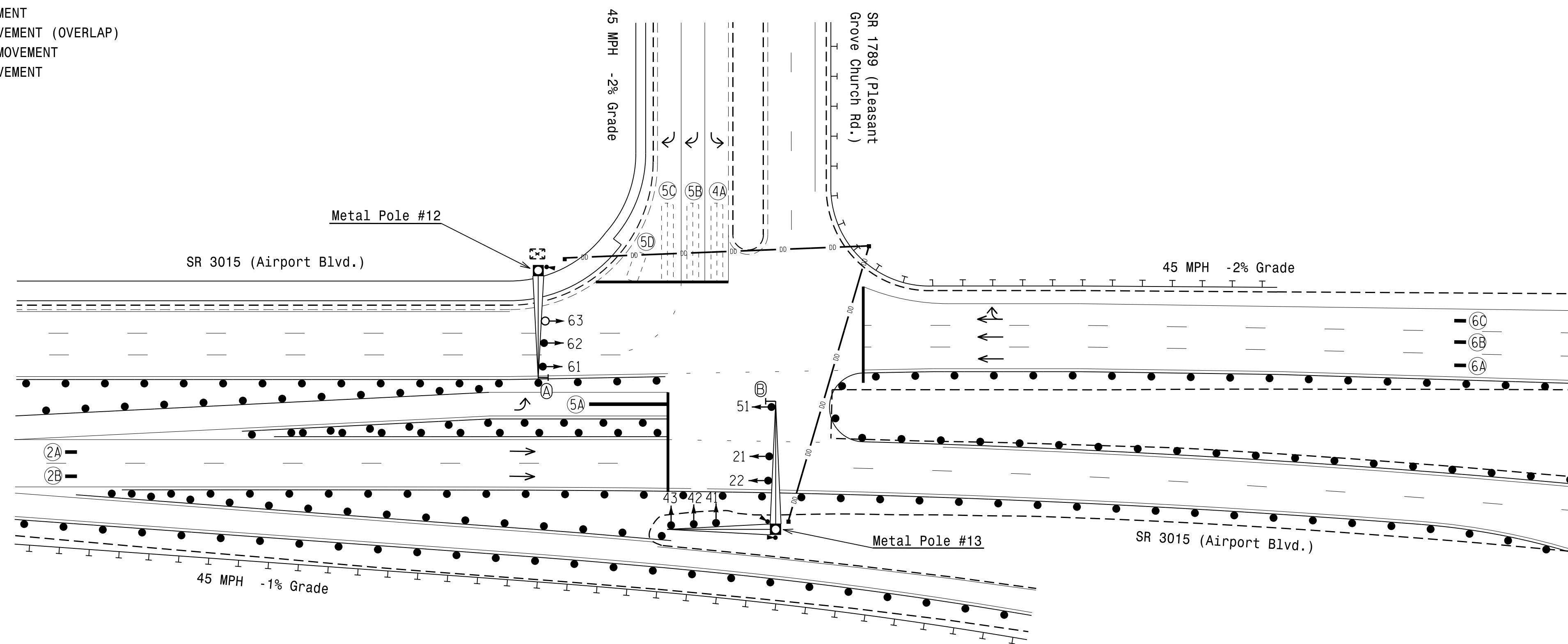
LOOP/ZONE NO.	SIZE (ft)	DIST. FROM STOPBAR (ft)	TURNS	NEW EXISTING	NEMA PHASE	NEW EXISTING	TIMING		ADDED INITIAL	DET. TYPE
							FEATURE	TIME		
2A*	6X6	300	*	* -	2 -	X -	-	-	X	N
2B*	6X6	300	*	* -	2 -	X -	-	-	X	N
4A	6X40	0	2-4-2	- X	4 -	X -	-	-	-	S
5A*	6X40	0	*	- *	5 -	X -	DELAY	15	-	S
5B	6X40	0	2-4-2	- X	5 -	X -	DELAY	15	-	S
5C	6X40	0	2-4-2	- X	5 -	X -	DELAY	15	-	S
5D	6X15	0	3	- X	5 -	X -	DELAY	15	-	S
6A*	6X6	300	*	* -	6 -	X -	-	-	X	N
6B*	6X6	300	*	* -	6 -	X -	-	-	X	N
6C*	6X6	300	*	* -	6 X	-	-	-	X	N

\* Video detection zone.

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.
- Phase 5 may be lagged.
- Reposition existing signal heads numbered 61 and 62.
- Set all detector units to presence mode.
- Pavement markings are existing.
- 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.
- This intersection features a video detection system. Shown locations of detectors are conceptual only. Refer to the manufacturer's guidelines for optimal detector placement.



LEGEND

- | PROPOSED   | EXISTING   |
|--|--|
| ○ → Traffic Signal Head                            | ● → Traffic Signal Head                            |
| ○ → Modified Signal Head                           | N/A  |
| □ → 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                                   |
| □ → 2-in Underground Conduit                       | □ → 2-in Underground Conduit                       |
| N/A → Right of Way                                 | N/A → Right of Way                                 |
| → → Directional Arrow                              | → → Directional Arrow                              |
| ○ → Metal Pole with Mastarm                        | ○ → Metal Pole with Mastarm                        |
| N/A → Guardrail                                    | N/A → Guardrail                                    |
| ○ → Directional Drill                              | N/A  |
| ○ → Out of Pavement Detector                       | ○ → Out of Pavement Detector                       |
| — ○ — → Video Detection Area                       | — ○ — → Video Detection Area                       |
| — ○ — → Construction Zone Drums                    | — ○ — → Construction Zone Drums                    |
| ○ → No U-Turn Sign (R3-4)                          | ○ → No U-Turn Sign (R3-4)                          |
| ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)     | ○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)     |

TIMING CHART ASC/3-2070EN2 CONTROLLER				
PHASE	02	04	05	06
MINIMUM GREEN *	12 SEC.	7 SEC.	7 SEC.	12 SEC.
VEHICLE EXT. *	6.0 SEC.	2.0 SEC.	2.0 SEC.	6.0 SEC.
YELLOW CHANGE INT.	4.7 SEC.	3.0 SEC.	3.0 SEC.	4.7 SEC.
RED CLEARANCE	1.8 SEC.	3.3 SEC.	2.8 SEC.	1.8 SEC.
MAX. 1 *	120 SEC.	30 SEC.	15 SEC.	120 SEC.
RECALL POSITION	MIN. RECALL	NONE	NONE	MIN. RECALL
LOCK DET.	ON	OFF	OFF	ON
WALK *	- SEC.	- SEC.	- SEC.	- SEC.
PED. CLEAR	- SEC.	- SEC.	- SEC.	- SEC.
VOLUME DENSITY	ON	OFF	OFF	ON
ACTUATION B4 ADD *	- VEH.	- VEH.	- VEH.	- VEH.
SEC. PER ACTUATION *	1.5 SEC.	- SEC.	- SEC.	1.0 SEC.
MAX. INITIAL *	34 SEC.	- SEC.	- SEC.	34 SEC.
TIME B4 REDUCTION *	15 SEC.	- SEC.	- SEC.	15 SEC.
TIME TO REDUCE *	30 SEC.	- SEC.	- SEC.	30 SEC.
MINIMUM GAP	3.0 SEC.	- SEC.	- SEC.	3.0 SEC.
DUAL ENTRY	OFF	OFF	OFF	OFF
SIMULTANEOUS GAP	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.

Signal Upgrade  
Temporary Design 3 (TMP Phase III, Steps A and B)

	SR 3015 (Airport Blvd.) at SR 1789 (Pleasant Grove Church Rd.) Division 5 Wake County Morrisville		DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
	PLAN DATE: March 2019 PREPARED BY: J.A. Lohr	REVIEWED BY: REVIEWED BY:	