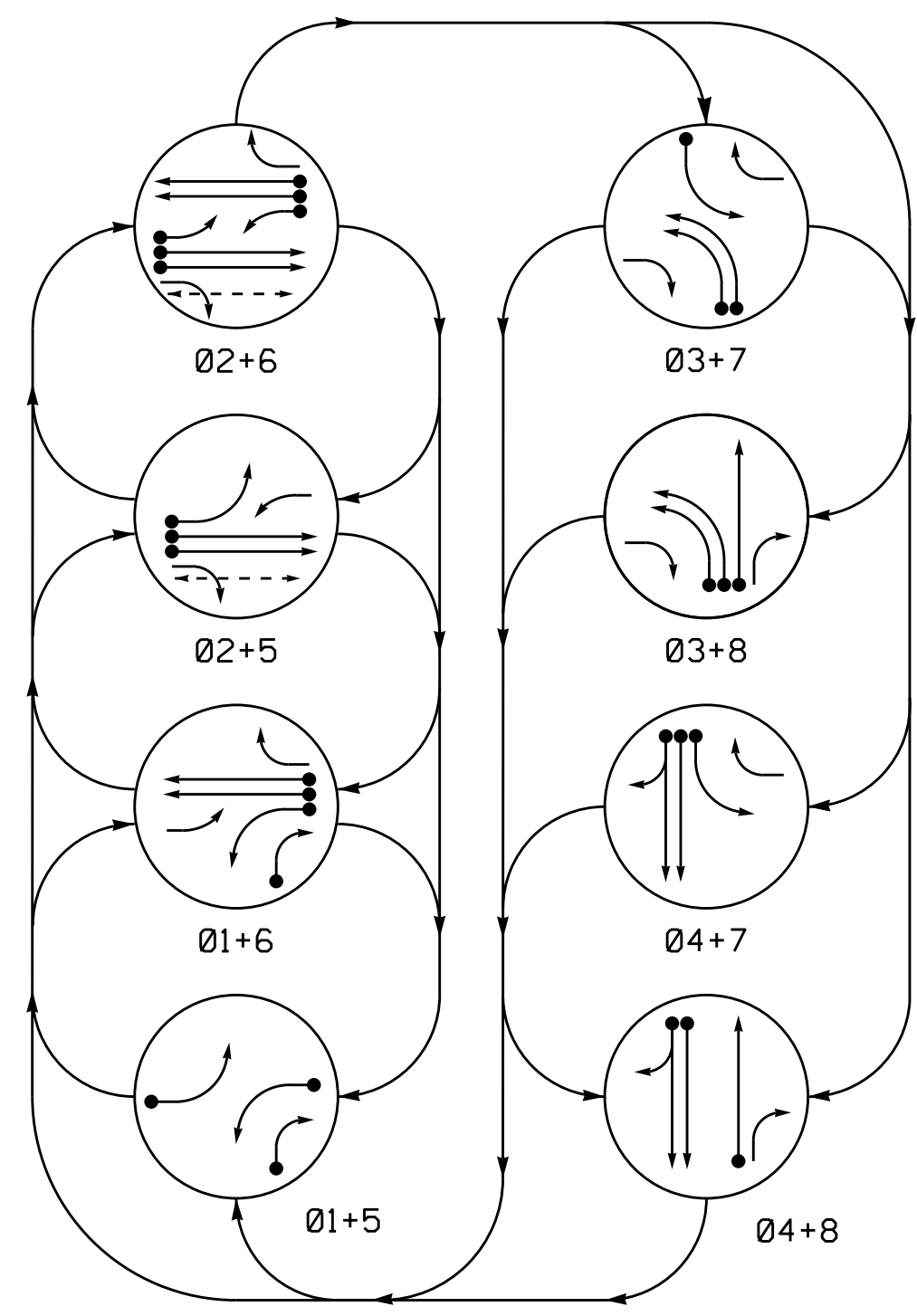


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

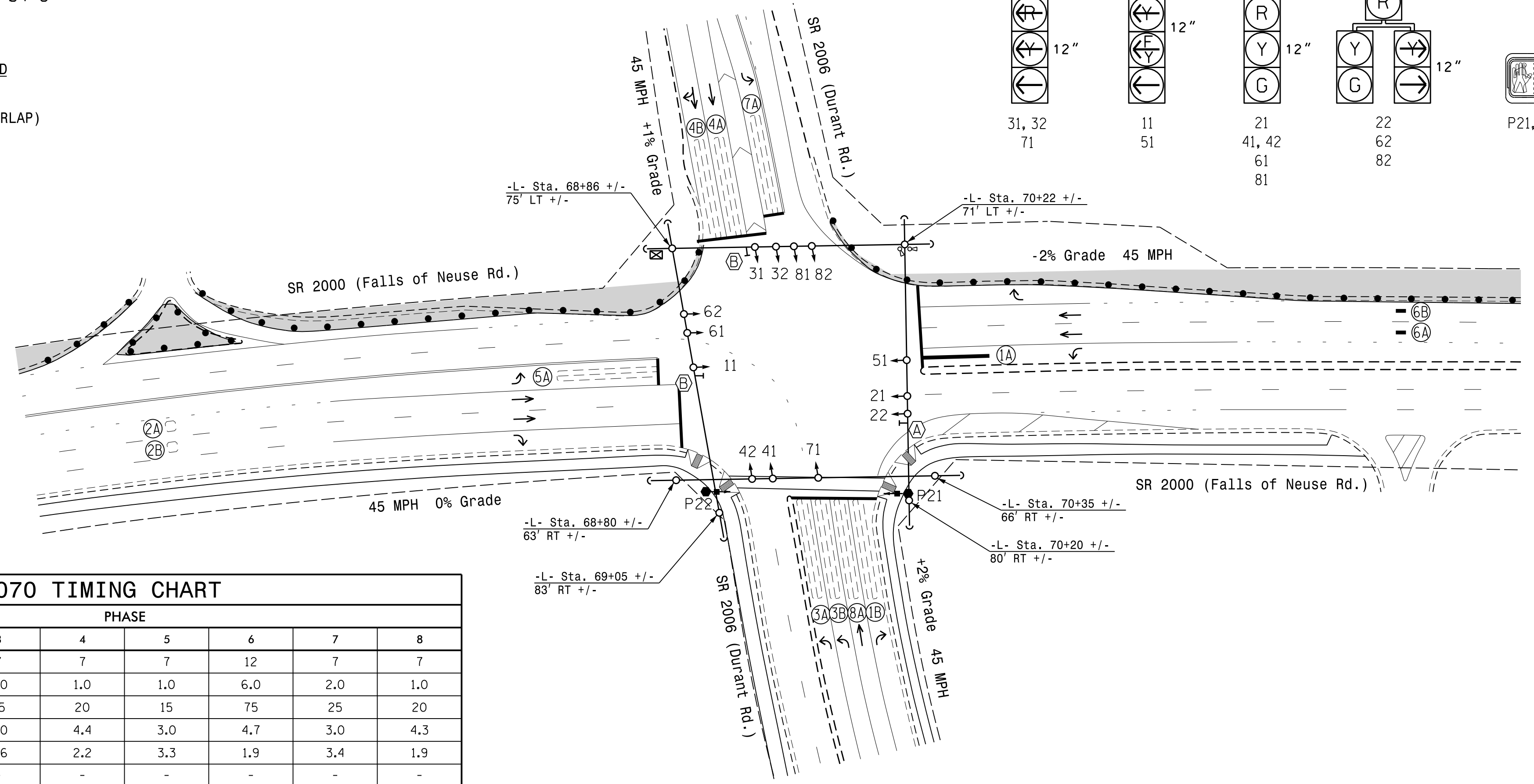
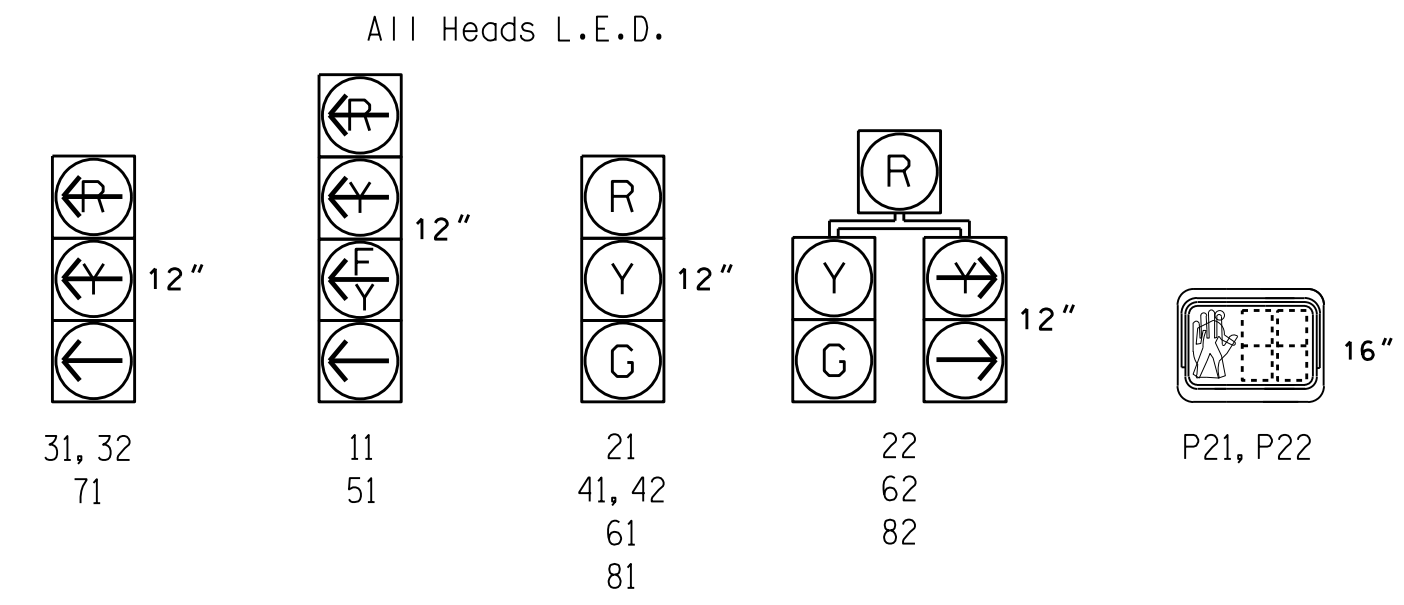
SIGNAL FACE	PHASE								FLASH
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	
11	---	---	F	F	---	---	---	---	---
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R	R	R	R	Y
31, 32	---	---	---	---	---	---	---	---	---
41, 42	R	R	R	R	R	R	G	G	R
51	---	---	F	F	---	---	---	---	---
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R	R	R	R	Y
71	---	---	---	---	---	---	---	---	---
81	R	R	R	R	R	G	R	G	R
82	R	R	R	R	R	G	R	G	R
P21, P22	DW	DW	W	W	DW	DW	DW	DRK	

LOOP & DETECTOR UNIT INSTALLATION CHART
SE-PAC 2070 CONTROLLER WITH 170 CABINET

LOOP / ZONE NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	DETECTOR PROGRAMMING															
						ASSIGNED PHASE	TIMING		OPERATION MODE							SWITCH	SYSTEM LOOPS	STATUS			
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROTECT LEFT THROUGH	PROTECT RIGHT THROUGH				AND		
1A*	6X40	*	0	X	-	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
1B	6X60	2-4-2	0	-	X	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
2A	6X6	EXIST	300	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
2B	6X6	EXIST	300	-	X	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
3A	6X60	2-4-2	0	-	X	3	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
3B	6X60	2-4-2	0	-	X	3	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
4A	6X60	2-4-2	0	-	X	4	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
4B	6X60	2-4-2	0	-	X	4	10 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
5A	6X60	2-4-2	0	-	X	5	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
6A*	6X6	*	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
6B*	6X6	*	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
7A	6X60	2-4-2	0	-	X	7	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-
8A	6X60	2-4-2	0	-	X	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	-	X	-

* Video detection zone.

SIGNAL FACE I.D.



SE-PAC 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Passage Gap *	1.0	6.0	2.0	1.0	1.0	6.0	2.0	1.0
Maximum Green *	15	75	25	20	15	75	25	20
Yellow Change	3.0	4.7	3.0	4.4	3.0	4.7	3.0	4.3
Red Clear	3.5	1.9	3.6	2.2	3.3	1.9	3.4	1.9
Walk *	-	4	-	-	-	-	-	-
Pedestrian Clear	-	21	-	-	-	-	-	-
Added Initial *	-	1.5	-	-	-	1.5	-	-
Maximum Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	ON	ON	ON	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.

8 Phase Fully Actuated (Raleigh 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 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- 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 Traffic Signal Head | | EXISTING Traffic Signal Head |
| | PROPOSED Modified Signal Head | | EXISTING Modified Signal Head |
| | PROPOSED Pedestrian Signal Head | | EXISTING Pedestrian Signal Head |
| | PROPOSED Signal Pole with Guy | | EXISTING Signal Pole with Guy |
| | PROPOSED Signal Pole with Sidewalk Guy | | EXISTING Signal Pole with Sidewalk Guy |
| | PROPOSED Inductive Loop Detector | | EXISTING Inductive Loop Detector |
| | PROPOSED Controller & Cabinet | | EXISTING Controller & Cabinet |
| | PROPOSED Junction Box | | EXISTING Junction Box |
| | PROPOSED 2-in Underground Conduit | | EXISTING 2-in Underground Conduit |
| | PROPOSED Right of Way | | EXISTING Right of Way |
| | PROPOSED Directional Arrow | | EXISTING Directional Arrow |
| | PROPOSED Out of Pavement Detector | | EXISTING Out of Pavement Detector |
| | PROPOSED Video Detection Area | | EXISTING Video Detection Area |
| | PROPOSED Construction Zone Drums | | EXISTING Construction Zone Drums |
| | PROPOSED Construction Zone | | EXISTING Construction Zone |
| | PROPOSED Type II Signal Pedestal | | EXISTING Type II Signal Pedestal |
| | PROPOSED Right Arrow "ONLY" Sign (R3-5R) | | EXISTING Right Arrow "ONLY" Sign (R3-5R) |
| | PROPOSED "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) | | EXISTING "U-TURN YIELD TO RIGHT TURN" Sign (R10-16) |

Signal Upgrade - Temporary Design 1 (TMP Phase I)

750 N. Greenfield Pkwy, Garner, NC 27529

SR 2000 (Falls of Neuse Rd.) at SR 2006 (Durant Rd.)

Division 5 Wake County Raleigh

PLAN DATE: July 2019 REVIEWED BY: J.A. Lohr

PREPARED BY: J.A. Lohr REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

8/28/2019

SIG. INVENTORY NO. 05-1176T1

28-AUG-2019 12:48 1176T1.dwg 1:50 1176T1.dwg