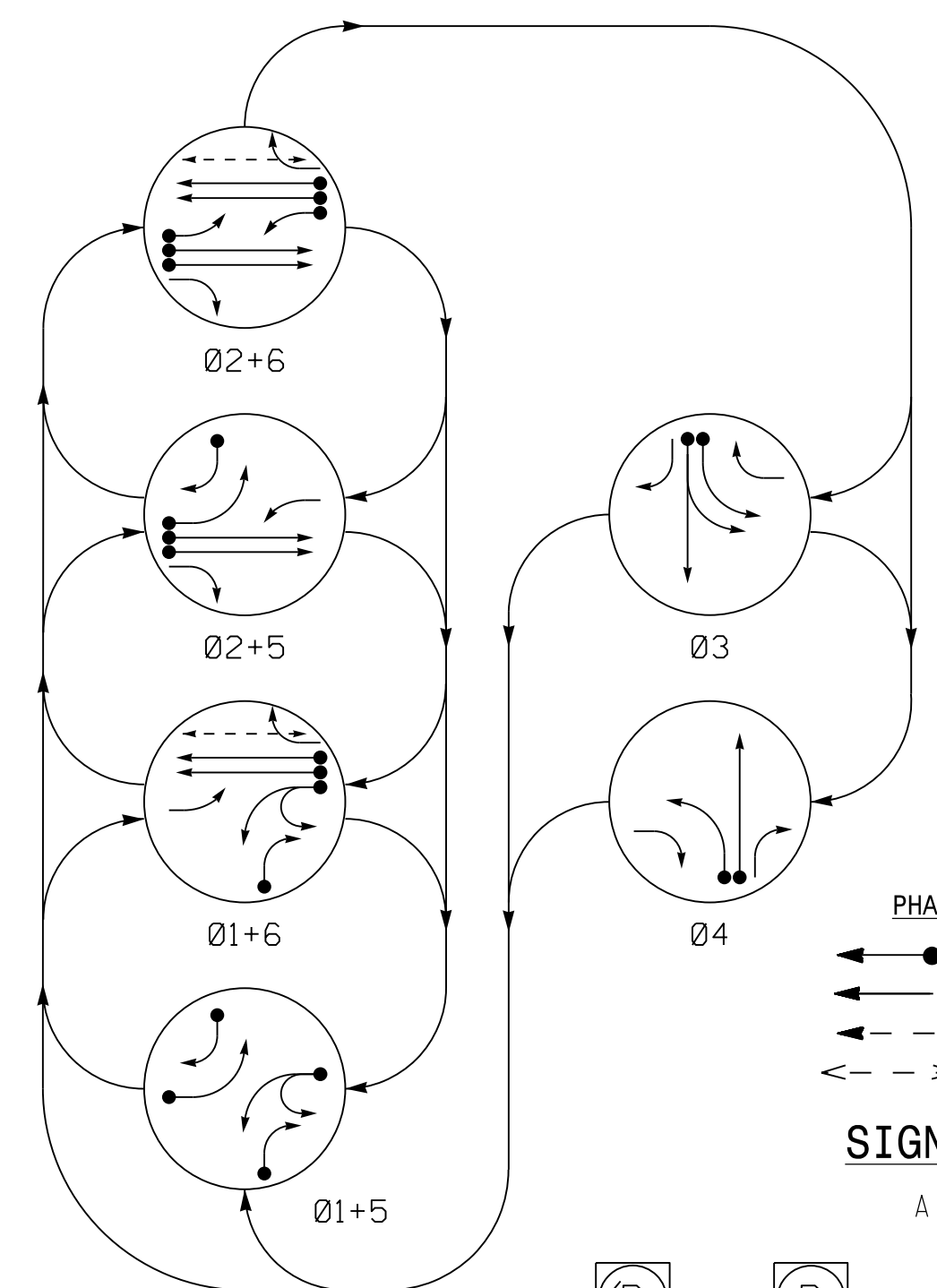


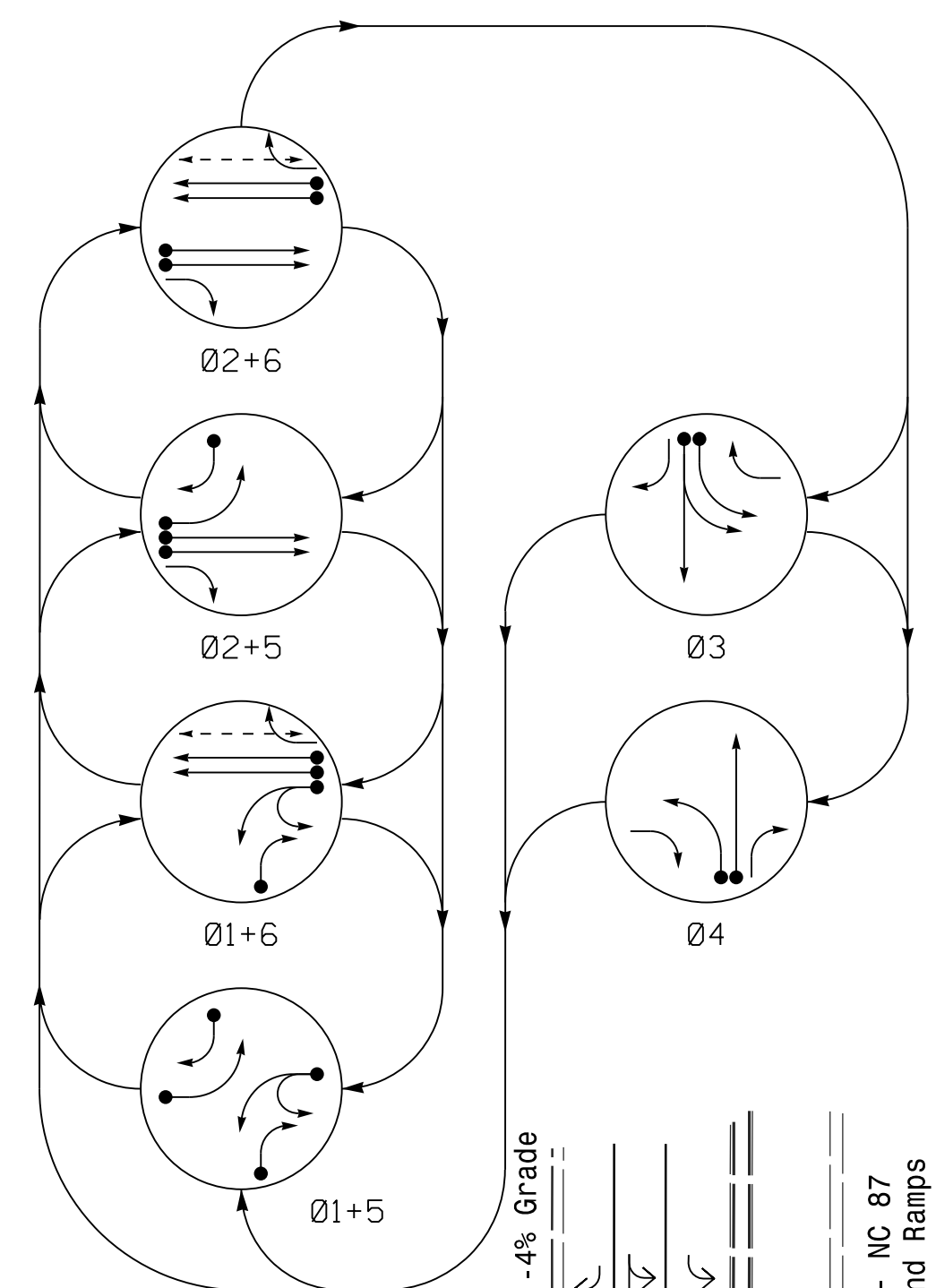
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE						FLASH
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	Y
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	←	←	←	←	←	Y
61,62	R	G	R	G	R	R	Y
63	R	←	←	←	←	←	Y
P61,P62	DW	W	DW	W	DW	DRK	

ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE						FLASH
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	Y
21	R	R	G	G	R	R	Y
22	R	R	G	G	R	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51	←	←	←	←	←	←	Y
61,62	R	G	R	G	R	R	Y
63	R	←	←	←	←	←	Y
P61,P62	DW	W	DW	W	DW	DRK	

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	STRETCH TIME			
1A	6X40	0	2-4-2	Y	1 #6	Y	Y	-	★15	-	Y
1B	6X30	0	2-4-2	Y	1	Y	Y	-	3	-	Y
2A	6X6	300	5	Y	2	Y	Y	-	-	-	Y
2B	6X6	300	5	Y	2	Y	Y	-	-	-	Y
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	-	Y
3B	6X40	0	2-4-2	Y	3	Y	Y	-	-	-	Y
4A	6X30	0	2-4-2	Y	4	Y	Y	-	3	-	Y
4B	6X30	0	2-4-2	Y	4	Y	Y	-	-	-	Y
5A	6X40	0	2-4-2	Y	5 #2	Y	Y	Y	★15	-	Y
5B	6X40	0	2-4-2	Y	5	Y	Y	-	15	-	Y
6A	6X6	300	5	Y	6	Y	Y	-	-	-	Y
6B	6X6	300	5	Y	6	Y	Y	-	-	-	Y
S7	6X6	+220	3	Y	-	-	-	-	-	-	Y
S8	6X6	+220	3	Y	-	-	-	-	-	-	Y

★ Disable delay during Alternate Phasing Operation.
Disable Phase(s) calling during Alternate Phasing Operation.

6 Phase Fully Actuated (Signal System #: 10823) (Centrac)

NOTES

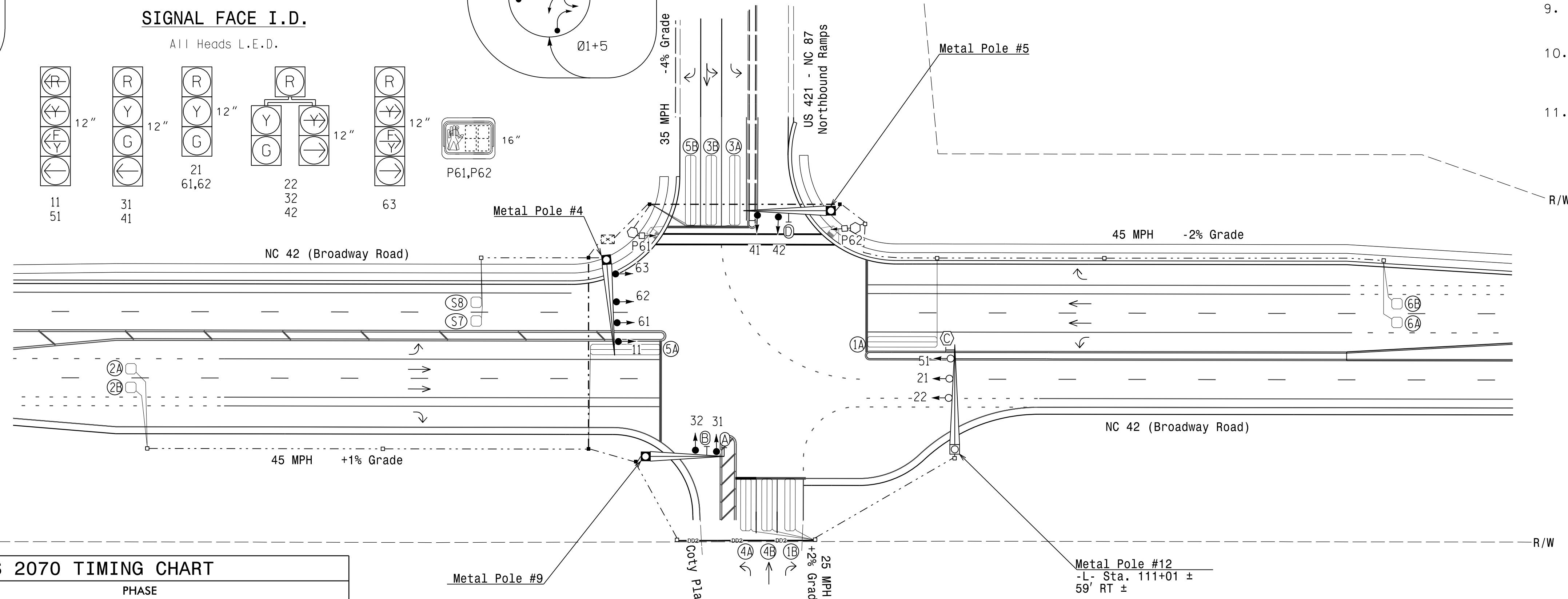
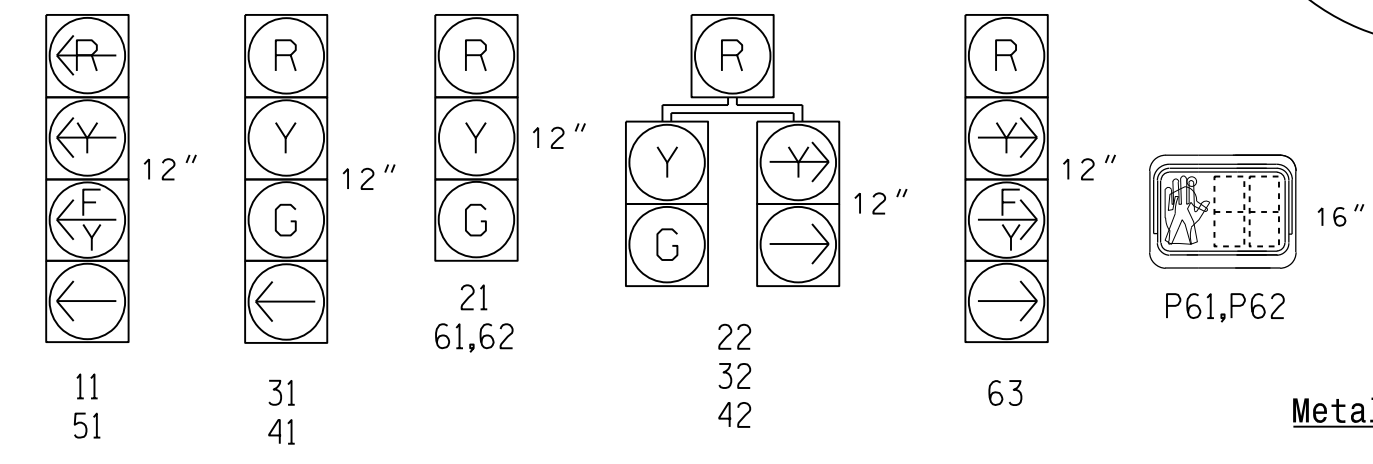
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Reposition existing signal heads numbered #61,62, & 63.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only. The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed Loop System Data: Controller Asset #: 1065

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	12	7	7	7	12
Extension 1	2.0	6.0	2.0	2.0	2.0	6.0
Max Green 1 *	20	90	30	25	20	90
Yellow Clearance	3.0	4.7	4.1	3.1	3.0	4.7
Red Clearance	3.3	1.7	2.3	3.4	2.8	1.7
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	7
Don't Walk 1	-	-	-	-	-	24
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.2	-	-	-	3.2
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	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.

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
○ 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
○ Right of Way	○ Right of Way
○ Directional Arrow	○ Directional Arrow
○ Metal Pole with Mastarm	○ Metal Pole with Mastarm
○ Directional Drill	○ Directional Drill
○ Type II Signal Pedestal	○ Type II Signal Pedestal
○ Left Arrow "ONLY" Sign (R3-5L)	○ Left Arrow "ONLY" Sign (R3-5L)
○ Combined Thru and Left Arrow Sign (R3-6L)	○ Combined Thru and Left Arrow Sign (R3-6L)
○ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	○ "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)
○ "RIGHT TURN YIELD TO U-TURN" Sign	○ "RIGHT TURN YIELD TO U-TURN" Sign

Signal Upgrade - Final Design

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Prepared for the Offices of:
750 N. Greenfield Pkwy, Garner, NC 27526
SCALE: 0 40
1" = 40'

NC 42 (Broadway Road) at US 421/NC 87 Northbound Ramps/ Coty Plant Entrance
Division 8 Lee County Sanford
PLAN DATE: NOVEMBER 2019 REVIEWED BY: D Harris
PREPARED BY: R M Muncey REVIEWED BY: B L Watson

REGINA M. MUNCEY
Professional Engineer
SEAL 43239
DATE: 11/5/2019
SIG. INVENTORY NO. 08-1065

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED