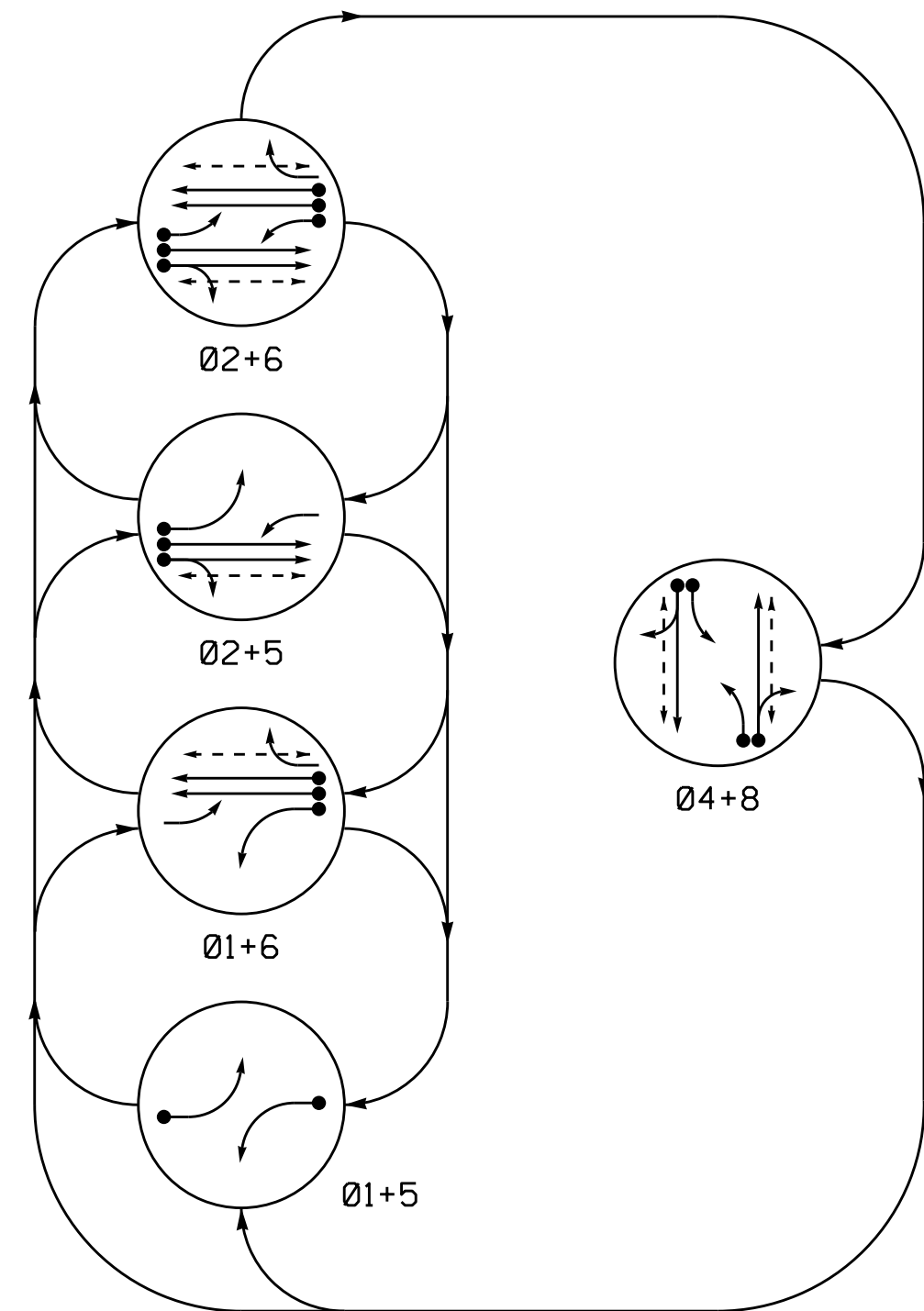
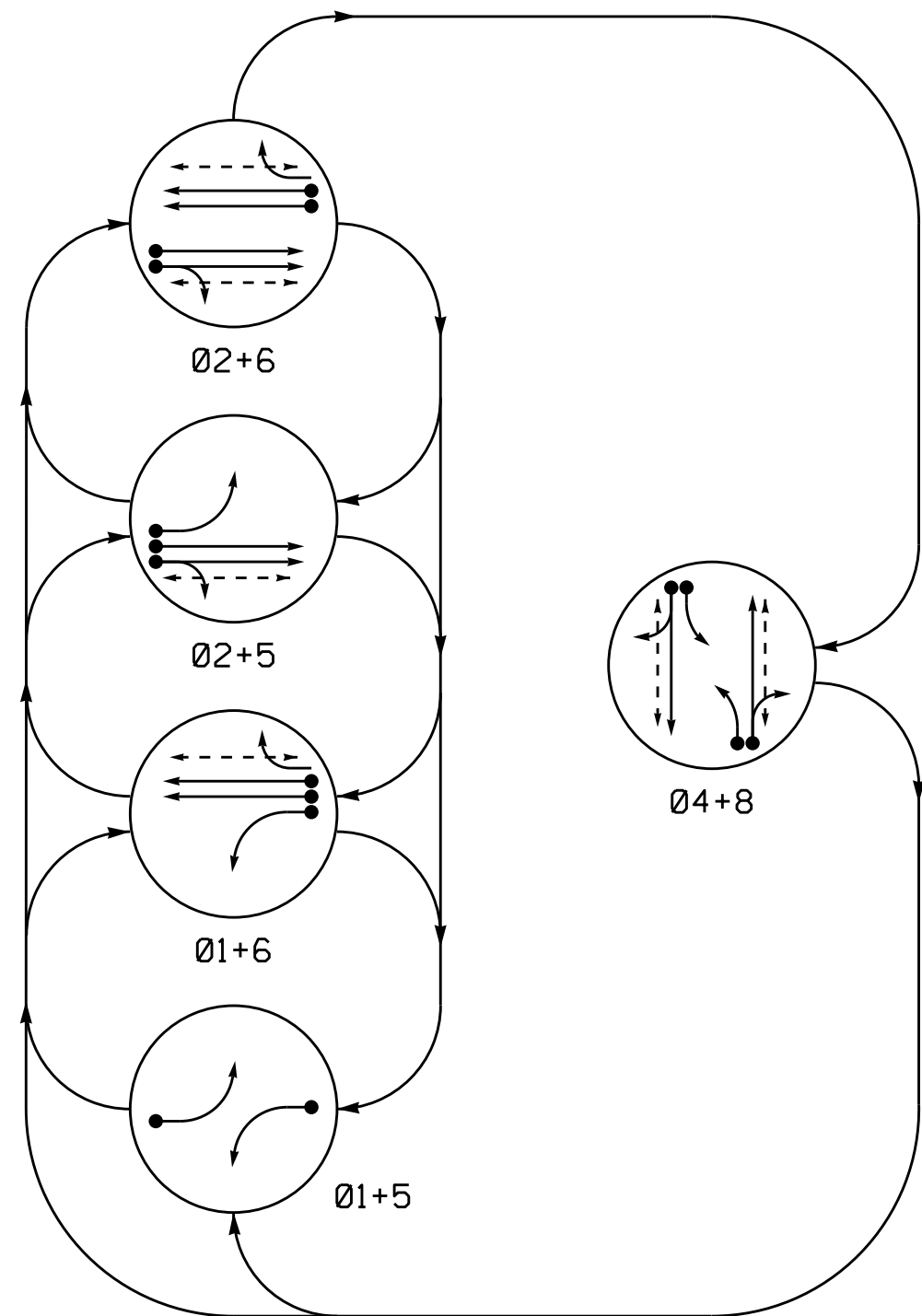


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					FLASH
	01+5	01+6	02+5	02+6	04+8	
11	←	←	←	←	←	Y
21, 22	R	R	G	G	R	Y
41	←	←	←	←	←	Y
42, 43	R	R	R	R	G	R
51	←	←	←	←	←	Y
61, 62	R	G	R	G	R	Y
81	←	←	←	←	←	Y
82, 83	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	W	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	FULL TIME DELAY	STRETCH TIME			DELAY TIME
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	★15	-	Y
2A	6X6	70	3	Y	#6	Y	Y	-	-	-	-	Y
2B	6X6	70	3	Y	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	3	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	★15	-	Y
6A	6X6	70	3	Y	#2	Y	Y	-	-	-	-	Y
6B	6X6	70	3	Y	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	3	-	Y
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	10	-	Y
S1	6X6	+220	3	Y	-	-	-	-	-	-	-	Y
S2	6X6	+220	3	Y	-	-	-	-	-	-	-	Y

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

5 Phase Fully Actuated (US 421 - NC 87 (Sanford Byp) CLS) Signal System #: D08-23_Sanford

NOTES

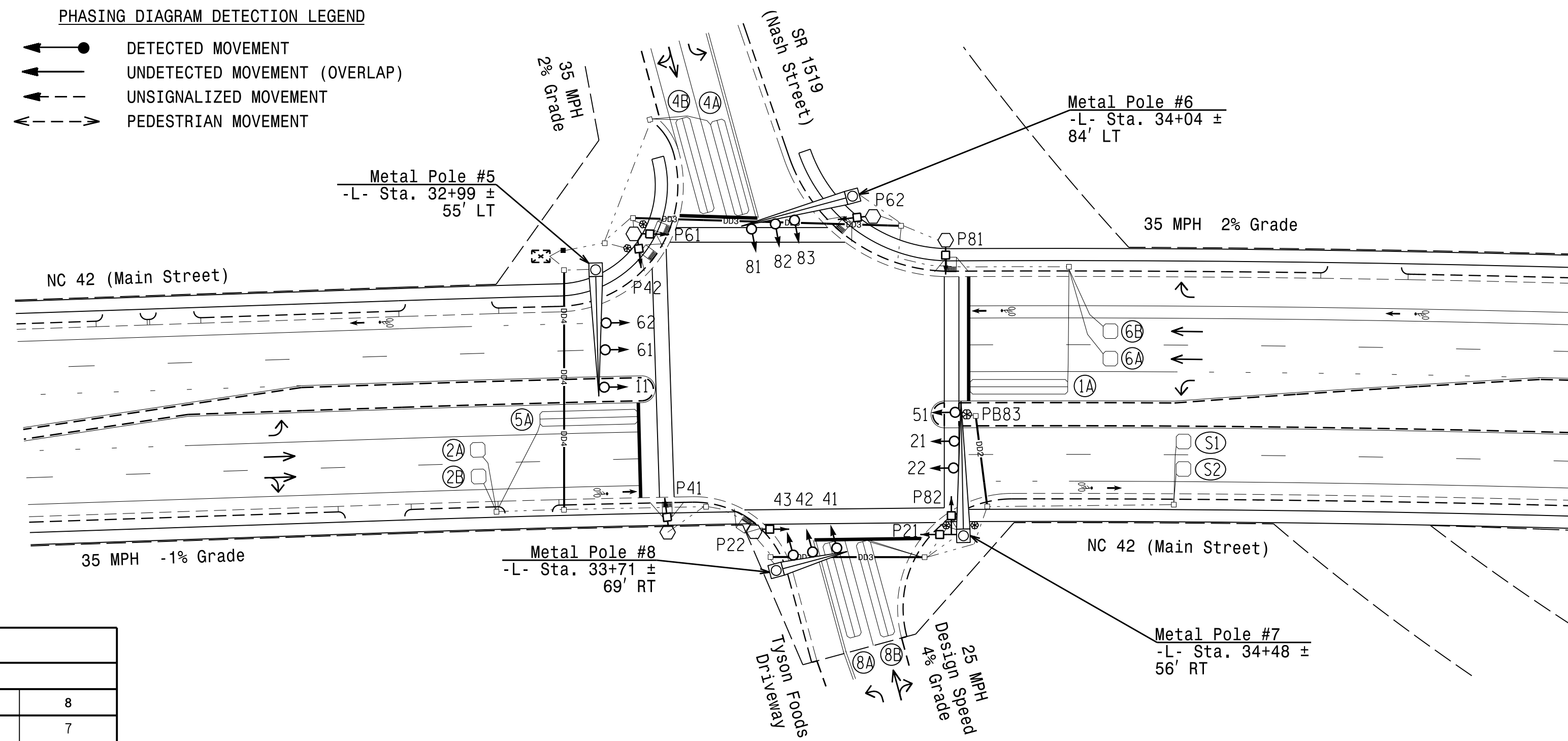
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units 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 #: 0236.
- All signal heads shall be black in color with black visors.
- All metal poles and pedestals shall be black in color as specified in the project special provisions.

DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					FLASH
	01+5	01+6	02+5	02+6	04+8	
11	←	←	←	←	←	Y
21, 22	R	R	G	G	R	Y
41	←	←	←	←	←	Y
42, 43	R	R	R	R	G	R
51	←	←	←	←	←	Y
61, 62	R	G	R	G	R	Y
81	←	←	←	←	←	Y
82, 83	R	R	R	R	G	R
P21, P22	DW	DW	W	W	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DRK
P81, P82	DW	DW	DW	W	DRK	

PHASING DIAGRAM DETECTION LEGEND

- ← ● DETECTED MOVEMENT
- ← ○ UNDETECTED MOVEMENT (OVERLAP)
- ← - - UNSIGNALIZED MOVEMENT
- ← - - PEDESTRIAN MOVEMENT



LEGEND

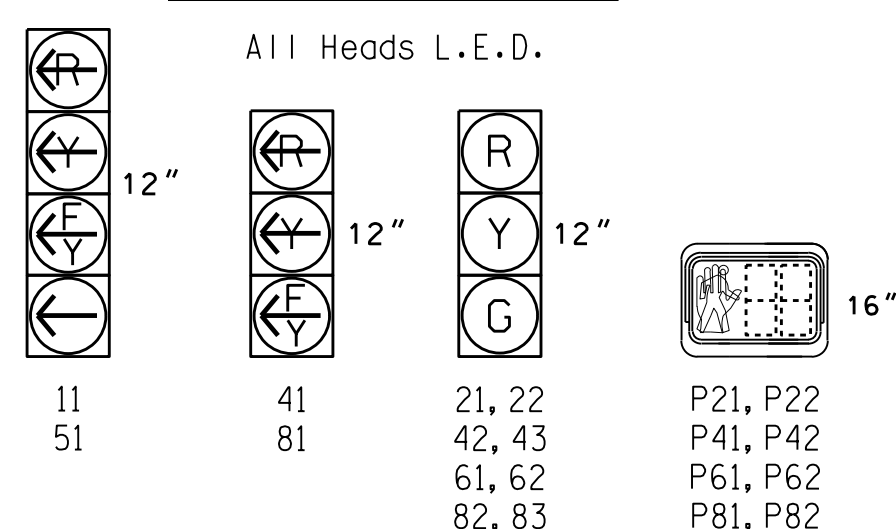
- | PROPOSED | EXISTING |
|-----------------------------------|----------|
| ○ → Traffic Signal Head | ● → N/A |
| ○ → Modified Signal Head | ○ → N/A |
| ○ → Pedestrian Signal Head | ○ → N/A |
| ○ → Signal Pole with Guy | ○ → N/A |
| ○ → Signal Pole with Sidewalk Guy | ○ → N/A |
| ○ → Inductive Loop Detector | ○ → N/A |
| ○ → Controller & Cabinet | ○ → N/A |
| ○ → Junction Box | ○ → N/A |
| ○ → 2-in Underground Conduit | ○ → N/A |
| ○ → Right of Way | ○ → N/A |
| ○ → Directional Arrow | ○ → N/A |
| ○ → Directional Drill | ○ → N/A |
| ○ → Curb Ramp | ○ → N/A |
| ○ → Type I Pushbutton Post | ○ → N/A |
| ○ → Type II Signal Pedestal | ○ → N/A |

OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1*	7	10	7	7	10	7
Extension 1	2.0	3.0	2.0	2.0	3.0	2.0
Max Green 1*	25	60	35	25	60	35
Yellow Clearance	3.0	3.9	3.7	3.0	3.9	3.7
Red Clearance	3.1	2.5	3.3	3.2	2.5	3.3
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1*	-	7	7	-	7	7
Don't Walk 1	-	19	25	-	16	25
Dynamic Max 3	-	-	55	-	-	55
Dynamic Max Adjust	-	-	10	-	-	10
Time Before Reduction*	-	-	-	-	-	-
Time To Reduce*	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
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.

SIGNAL FACE I.D.



Signal Upgrade - Final Design

Prepared in the Offices of:

 NC 42 (Main Street) at SR 1519 (Nash Street) / Tyson Foods Driveway
 Division 8 Lee County Sanford
 PLAN DATE: March 2022 REVIEWED BY:
 PREPARED BY: J.A. Lohr REVIEWED BY:
 SCALE: 0 40 1"=40'
 DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
 SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER ROBERT J. LITTE
 SEAL: 026486
 DATE: 04/19/2022
 SIG. INVENTORY NO. 08-0236