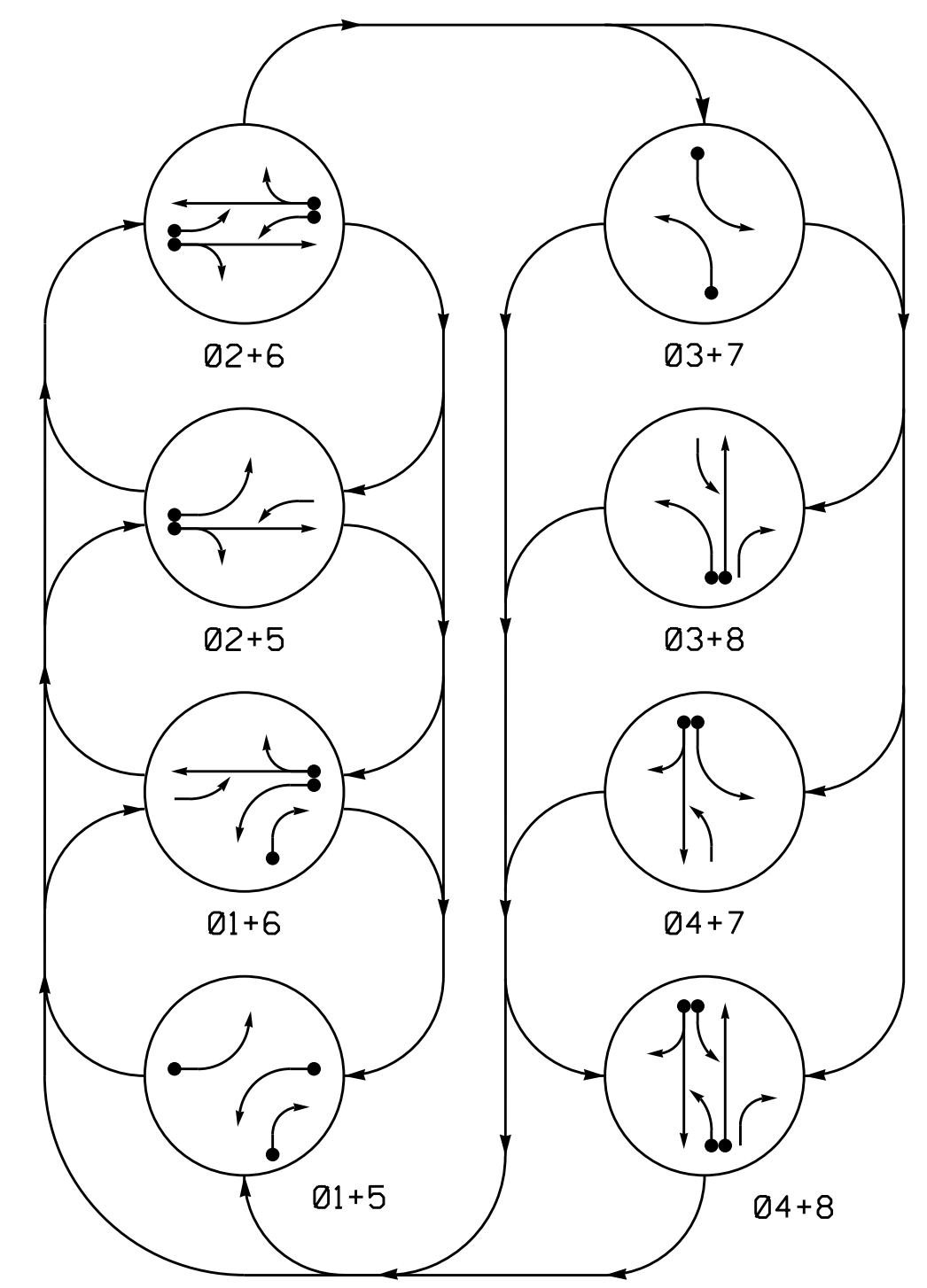


PHASING DIAGRAM



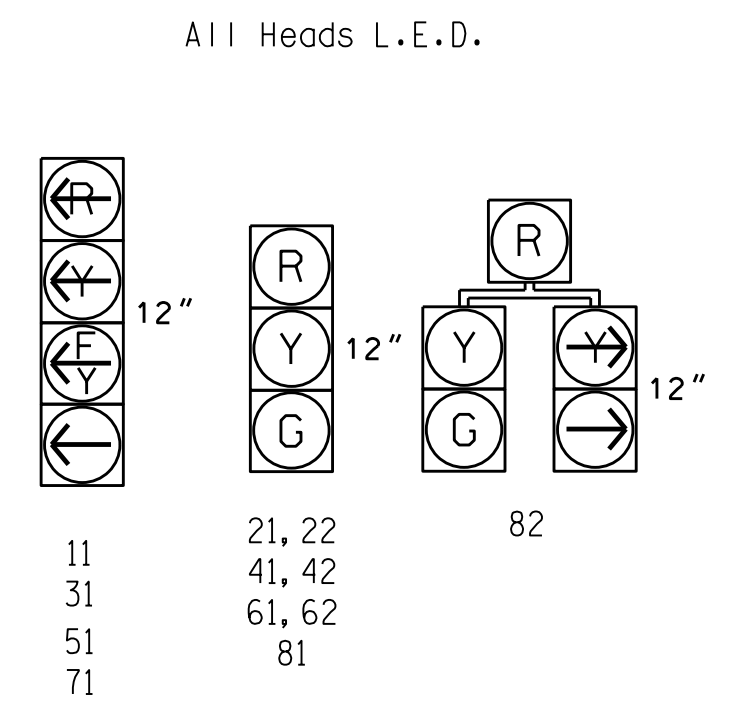
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8
11	—	—	F	F	R	R	R	Y
21, 22	R	R	G	G	R	R	R	Y
31	R	R	R	R	—	—	—	—
41, 42	R	R	R	R	R	R	G	R
51	—	F	F	F	R	R	R	Y
61, 62	R	G	R	G	R	R	R	Y
71	R	R	R	R	—	—	—	—
81	R	R	R	R	R	G	R	G
82	R	R	R	R	R	G	R	G

SIGNAL FACE I.D.



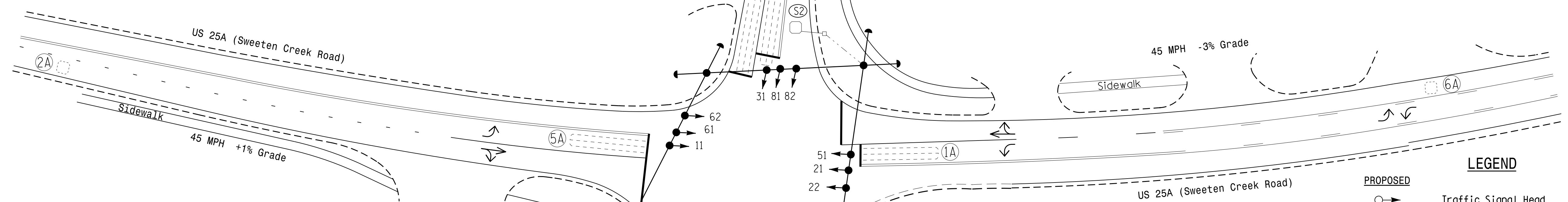
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY			STRETCH TIME
1A	6X40	0	2-4-2	-	1	Y	Y	-	15	-	Y
1B	6X40	+10	2-4-2	-	1	Y	Y	-	15	-	Y
2A	6X6	300	4	-	2	Y	Y	-	-	-	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	15	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	10	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	15	-	Y
6A	6X6	300	4	-	6	Y	Y	-	-	-	Y
7A	6X40	+5	2-4-2	-	7	Y	Y	-	15	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	-	Y
S1	6X6	+110	3	Y	-	-	-	-	-	-	Y
S2	6X6	+110	3	Y	-	-	-	-	-	-	Y

8 Phase Fully Actuated Asheville Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. Pavement markings are existing.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max Green 1 *	20	90	20	35	20	90	20	35
Yellow Clearance	3.0	4.8	3.0	4.6	3.0	4.8	3.0	4.6
Red Clearance	2.8	1.3	2.4	1.2	2.4	1.3	2.3	1.2
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	-	-	2.5	-	-
Max Variable Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduction *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	ON	-	-	-	ON
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.

LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → 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	⊥ Junction Box
⊥ Junction Box	⊥ Junction Box
⊥ 2-in Underground Conduit	⊥ Right of Way
→ Directional Arrow	→ Directional Arrow

Install new base-mounted cabinet on existing foundation.

Signal Upgrade

Prepared in the Offices of:

 750 N. Greenfield Pkwy, Garner, NC 27529

US 25A (Sweeten Creek Road) at SR 3116 (Mills Gap Road)

Division 13 Buncombe County Asheville
 PLAN DATE: February 2016 REVIEWED BY: T. Williams
 PREPARED BY: M. Mahbooba REVIEWED BY:

REVISIONS: _____ INIT. DATE: _____

SCALE: 0 30
1"=30'

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 024393
 T. J. WILLIAMS
 9/7/2016
 SIG. INVENTORY NO. 13-0286

07-2529-2016_08-16
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