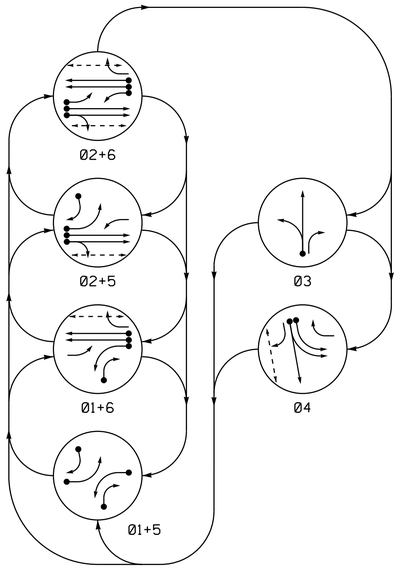
PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig.196.0

DEFAULT PHASING DIAGRAM

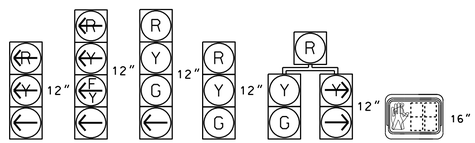


DEFAULT TABLE OF OPERATION

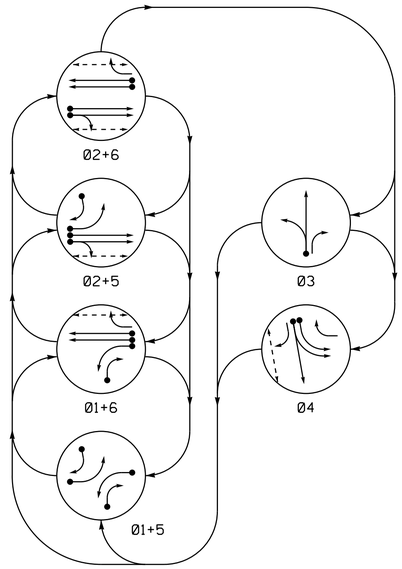
SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11	←	←	F/Y	F/Y	~~R~~	~~R~~	~~Y~~
21, 22	R	R	G	G	R	R	Y
31	R	R	R	R	G/←	R	R
32	R/→	R/↑	R	R	G	R	R
41	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~R~~
42	R	R	R	R	R	G/←	R
43	R/→	R	R/↑	R	R	G	R
51	←	F/Y	←	F/Y	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R/→	Y
P21, P22	DW	DW	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



ALTERNATE PHASING DIAGRAM

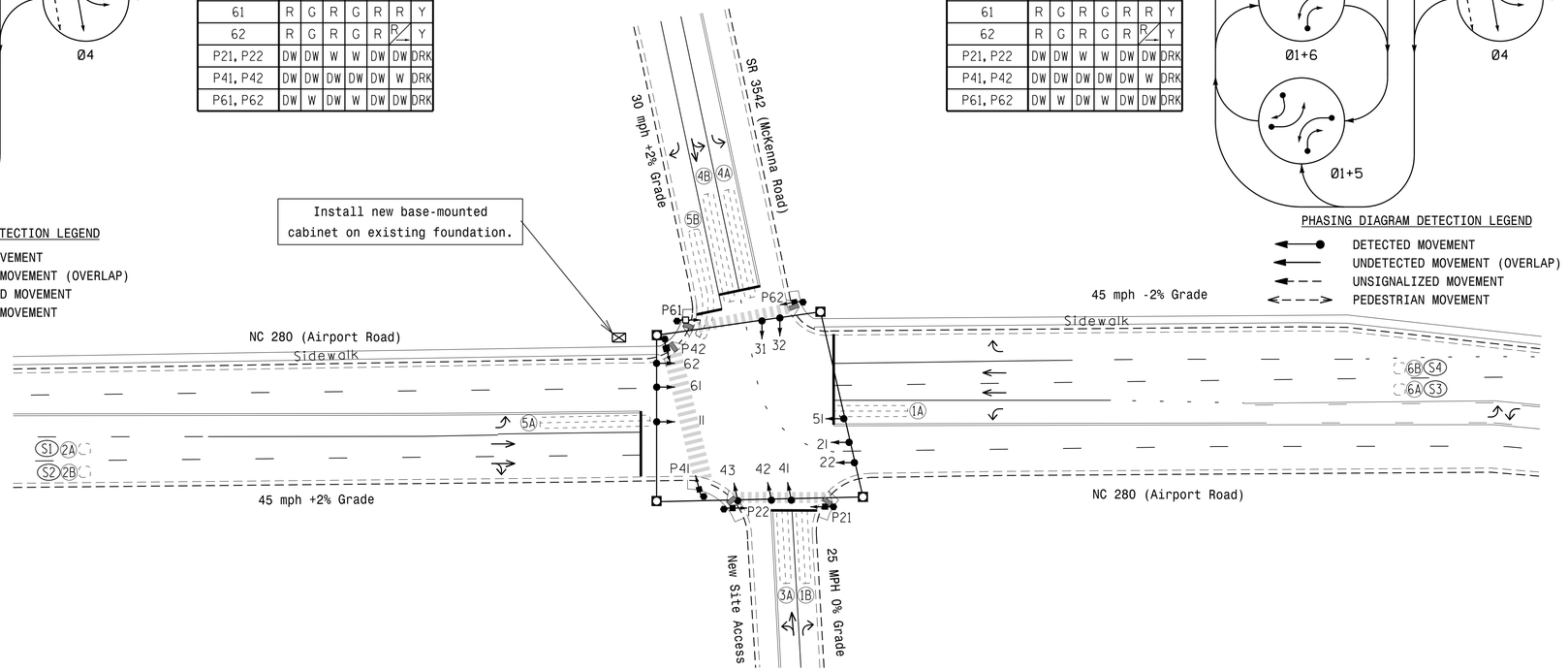


ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~Y~~
21, 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~~	~~←~~	~~R~~
42	R	R	R	R	G/←	R	R
43	R/→	R	R/↑	R	R	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~Y~~
61	R	G	R	G	R	R	Y
62	R	G	R	G	R	R/→	Y
P21, P22	DW	DW	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DRK

PHASING DIAGRAM DETECTION LEGEND

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



PHASING DIAGRAM DETECTION LEGEND

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

6 Phase
Fully Actuated
W/ Alternate Phasing Operation
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 phase 4 may be reversed.
5. Set all detector units to presence mode.
6. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
7. Locate new cabinet so as not to obstruct sight distance of vehicle turning right on red.
8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
9. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
10. Pavement markings are existing.
11. The Division Traffic Engineer will determine the hours of use for each phasing plan.
12. 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
Min Green 1 *	7	12	7	7	7	12
Extension 1	2.0	6.0	2.0	1.0	1.0	6.0
Max Green 1 *	20	90	20	20	20	90
Yellow Clearance	3.0	4.7	3.2	3.4	3.0	4.7
Red Clearance	1.9	1.8	2.9	2.9	3.1	1.8
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	-	7
Don't Walk 1	-	9	-	17	-	12
Seconds Per Actuation *	-	1.5	-	-	-	1.5
Max Variable Initial *	-	34	-	-	-	34
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	30	-	-	-	30
Minimum Gap	-	3.0	-	-	-	3.0
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.

OASIS 2070 LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS: LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING: PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
IA	6X40	0	2-4-2	-	1	Y	Y	-	-	15**	-	Y
					6*	Y	Y	Y	-	3	-	Y
IB	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	Y
2A/S1	6X6	300	EXIST	-	2	Y	Y	-	-	-	Y	Y
2B/S2	6X6	300	EXIST	-	2	Y	Y	-	-	-	Y	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	3	-	Y
4A	6X60	+5	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	6X60	+5	2-4-2	-	4	Y	Y	-	-	-	-	Y
5A	6X60	+5	2-4-2	-	5	Y	Y	-	-	15**	-	Y
					2*	Y	Y	Y	-	3	-	-
5B	6X60	+15	2-4-2	-	5	Y	Y	-	-	15	-	Y
6A/S3	6X6	300	EXIST	-	6	Y	Y	-	-	-	Y	Y
6B/S4	6X6	300	EXIST	-	6	Y	Y	-	-	-	Y	Y

* Disable phase call during Alternate phasing operation.
** Reduce delay time to 3 Second during Alternate phasing operation.

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
T	Sign	T
⊓	Pedestrian Signal Head With Push Button & Sign	■
○	Signal Pole with Guy	●
○	Signal Pole with Sidewalk Guy	■
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	⛶
□	Junction Box	■
----	2-in Underground Conduit	----
N/A	Right of Way	— — —
→	Directional Arrow	→
→	Pavement Marking Arrow	→
◎	Metal Strain Pole	◘
⬡	Type II Signal Pedestal	⬢
	Curb Ramp	

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

NC 280 (Airport Road) at SR 3542 (McKenna Road) / New Site Access

Division 13 Buncombe County Fletcher

PLAN DATE: November 2016 REVIEWED BY: T. Williams

PREPARED BY: M. Mahbooba REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 024393 ENGINEER TIMOTHY J. WILLIAMS

DocuSigned by: J. O. Williams 11/14/2016
97AD7926EBE934CA DATE

SIG. INVENTORY NO. 13-1185

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tjwilliams