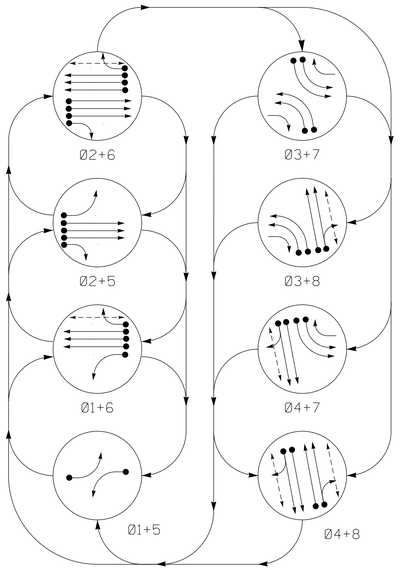
PROJECT REFERENCE NO.	SHEET NO.
W-5514	Sig.6.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

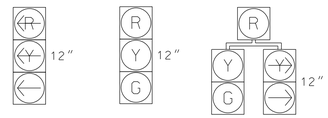
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH
11	←	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
21,22	R	R	G	G	R	R	R	R	Y
23	R	R	G	G	R→	R→	R	R	Y
31,32	~~R~~	~~R~~	~~R~~	~~R~~	←	←	~~R~~	~~R~~	~~R~~
41,42	R	R	R	R	R	R	G	G	R
51	←	~~R~~	←	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~	~~R~~
61,62	R	G	R	G	R	R	R	R	Y
63	R	G	R	G	R→	R	R→	R	Y
71,72	~~R~~	~~R~~	~~R~~	~~R~~	←	~~R~~	←	~~R~~	~~R~~
81,82	R	R	R	R	R	G	R	G	R
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	W	DRK

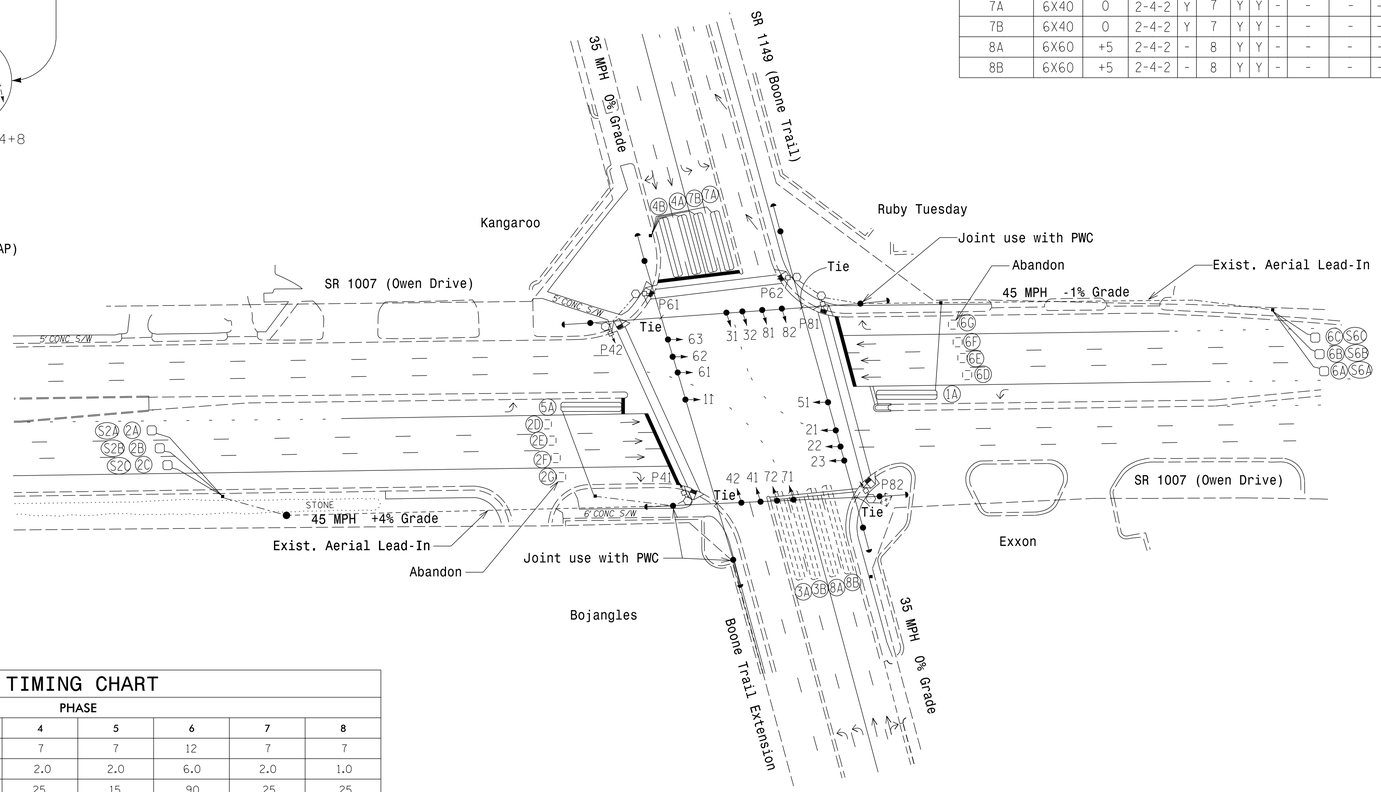
SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	-	-	-
2A/S2A	6X6	300	5	Y	2	Y	Y	-	-	-	Y	-
2B/S2B	6X6	300	5	Y	2	Y	Y	-	-	-	Y	-
2C/S2C	6X6	300	5	Y	2	Y	Y	-	-	-	Y	Y
2D,2E,2F,2G	DISCONNECT & ABANDON											
3A	6X60	+5	2-4-2	-	3	Y	Y	-	-	-	-	-
3B	6X60	+5	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	-
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	-	-	-
6A/S6A	6X6	300	5	Y	6	Y	Y	-	-	-	Y	-
6B/S6B	6X6	300	5	Y	6	Y	Y	-	-	-	Y	-
6C/S6C	6X6	300	5	Y	6	Y	Y	-	-	-	Y	Y
6D,6E,6F,6G	DISCONNECT & ABANDON											
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
7B	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
8A	6X60	+5	2-4-2	-	8	Y	Y	-	-	-	-	-
8B	6X60	+5	2-4-2	-	8	Y	Y	-	-	-	-	-



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	1.0	2.0	2.0	6.0	2.0	1.0
Max Green 1 *	15	90	25	25	15	90	25	25
Yellow Clearance	3.0	4.2	3.0	3.8	3.0	4.6	3.0	3.8
Red Clearance	3.3	2.0	3.9	2.8	3.6	2.2	3.9	2.9
Walk 1 *	-	-	-	7	-	7	-	7
Don't Walk 1	-	-	-	31	-	22	-	31
Seconds Per Actuation *	-	1.0	-	-	-	1.0	-	-
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	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.

** Timing to be determined by the City of Fayetteville

8 Phase Fully Actuated Fayetteville 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. Abandon existing loops 2D, 2E, 2F, 2G, 6D, 6E, 6F, and 6G.
7. 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.
8. Pedestrian pedestals are conceptual and are shown for reference only. See sheets P1-P3 for pushbutton location details.
9. Omit "Walk" and flashing "Don't Walk" with no pedestrian calls.
10. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
11. Pavement markings are existing except as shown.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
13. Closed loop system data: Controller Asset # 0270.

LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
▯↓	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	→
⬡	Type II Pedestal	⬢
PB ⊛	Pedestrian Pushbutton on Type I Pedestal	N/A
▬	Stopbar	▬

Signal Upgrade

vhb
4000 WestChase Boulevard, Suite 530
Raleigh, NC 27607
NC License No. C-3705

Prepared for the Offices of:

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION — Transportation Mobility and Safety Division — Signal Design Section

750 N.Greenfield Pkwy,Garner,NC 27529

SR 1007 (Owen Drive) at SR 1149 (Boone Trail/ Boone Trail Extension

Division 6 Cumberland County Fayetteville

PLAN DATE:	April 2015	REVIEWED BY:	J.L. Lewis
PREPARED BY:	D.J. Darity	VHB PROJECT NO.:	38286.03

REVISIONS	INIT.	DATE

SCALE 0 50 1"=50'

SEAL — NORTH CAROLINA PROFESSIONAL SEAL 19713 ENGINEER DONALD J. DARITY

2015.04.27 11:50:20 -04'00'

SIG. INVENTORY NO. 06-0270

$$$$SYSTIME$$$$
$$$$USERNAME$$$$