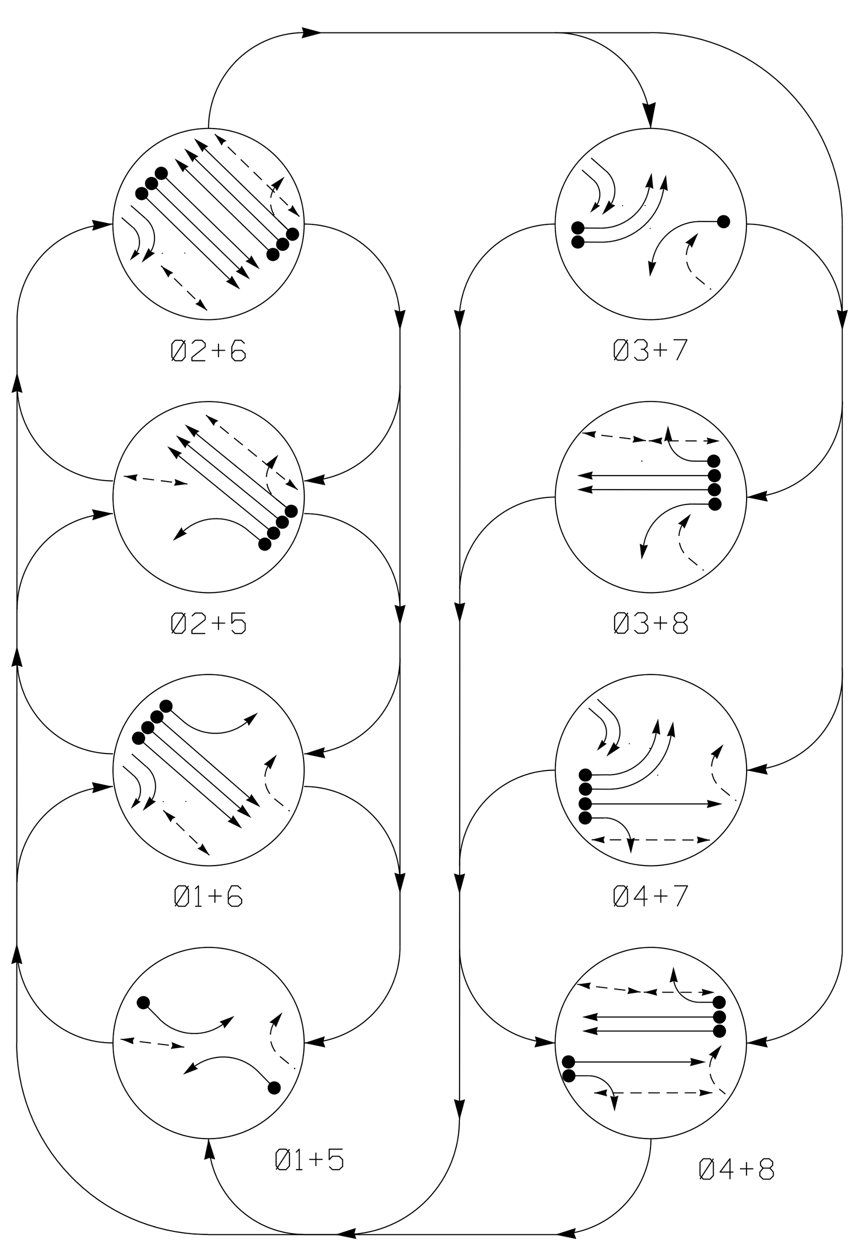
PROJECT REFERENCE NO.	SHEET NO.
W-5514	Sig.5.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.

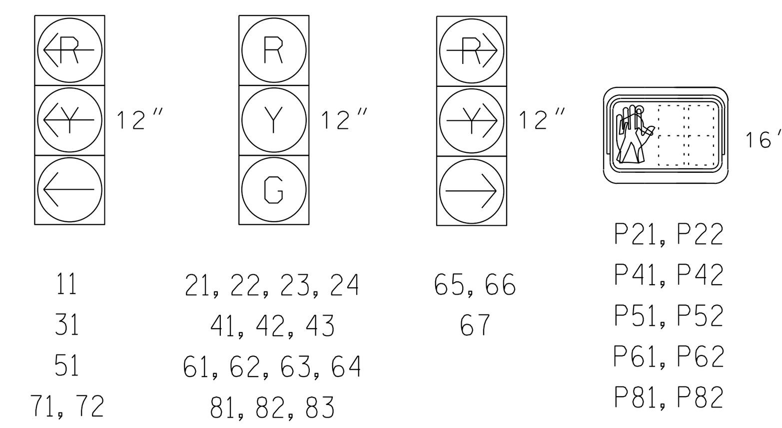


TABLE OF OPERATION

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
21,22,23,24	R	R	G	G	R	R	R	R	Y
31	←R	←R	←R	←R	←	←	←R	←R	←R
41, 42, 43	R	R	R	R	R	R	G	G	R
51	←	←R	←	←R	←R	←R	←R	←R	←R
61,62,63,64	R	G	R	G	R	R	R	R	Y
65, 66, 67	R→	→	R→	→	→	R→	→	R→	Y→
71, 72	←R	←R	←R	←R	←	←R	←	←R	←R
81,82,83	R	R	R	R	R	G	R	G	R
P21, P22	DW	DW	W	W	DW	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	DW	DW	W	W	DRK
P51, P52	W	DW	W	DW	DW	W	DW	W	DRK
P61, P62	DW	W	DW	W	DW	DW	DW	DW	DRK
P81, P82	DW	DW	DW	DW	DW	W	DW	W	DRK

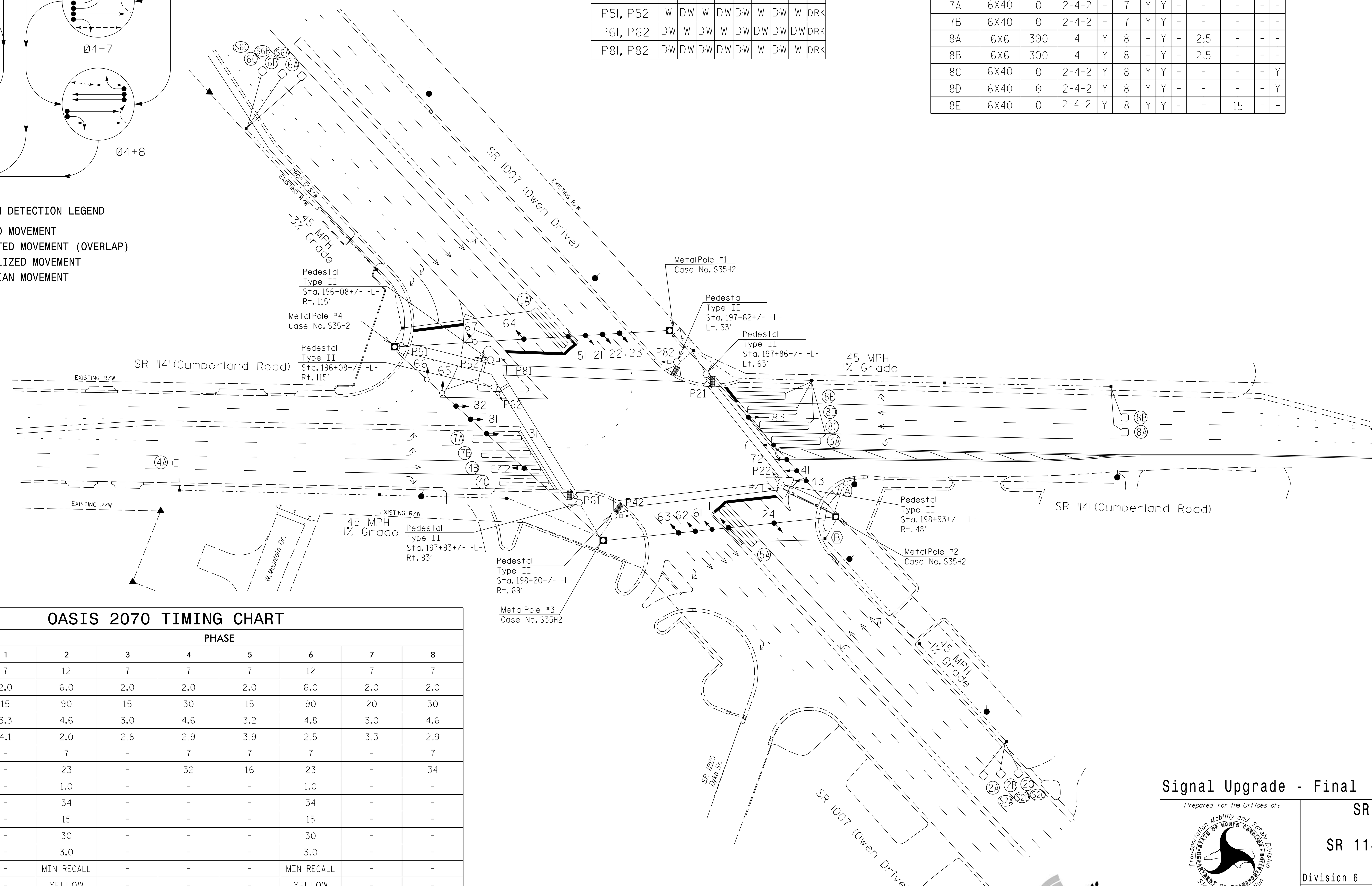
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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	-
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	-	-	-
4A	6X6	300	6	-	4	-	Y	-	2.5	-	-	-
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4C	6X40	0	2-4-2	-	4	Y	Y	-	-	15	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	3	-	-
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	-
7A	6X40	0	2-4-2	-	7	Y	Y	-	-	-	-	-
7B	6X40	0	2-4-2	-	7	Y	Y	-	-	-	-	-
8A	6X6	300	4	Y	8	-	Y	-	2.5	-	-	-
8B	6X6	300	4	Y	8	-	Y	-	2.5	-	-	-
8C	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8D	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8E	6X40	0	2-4-2	Y	8	Y	Y	-	-	15	-	-

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. Reposition existing signal heads numbered 11, 21, 22, 23, 24, 31, 51, 61, 62, 63, 64, 81, 82 and 83.
6. Set all detector units to presence mode.
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 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. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
12. Closed loop system data: Controller Asset# 0212.



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 *	15	90	15	30	15	90	20	30
Yellow Clearance	3.3	4.6	3.0	4.6	3.2	4.8	3.0	4.6
Red Clearance	4.1	2.0	2.8	2.9	3.9	2.5	3.3	2.9
Walk 1 *	-	7	-	7	7	7	-	7
Don't Walk 1	-	23	-	32	16	23	-	34
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.

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	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
N/A	Wheel Chair Ramp	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Type II Pedestal	
PB	Pedestrian Pushbutton on Type I Pedestal	N/A
	Stop Bar	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	"YIELD TO PEDESTRIANS" Sign (R1-5)	Ⓑ

Signal Upgrade - Final

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

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy, Garner, NC 27529

SCALE 0 50 1"=50'

SR 1007 (Owen Drive)
at
SR 1141 (Cumberland Road)

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

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 19713
DONALD J. DARITY
2015.04.27
11:40:08 -04'00'

SIG. INVENTORY NO. 06-0212

$$$$$SYSTIME$$$$$
$$$$$$$$$$$$$$DGN$$$$$$$$$$$$$$$$
$$$$USERNAME$$$$