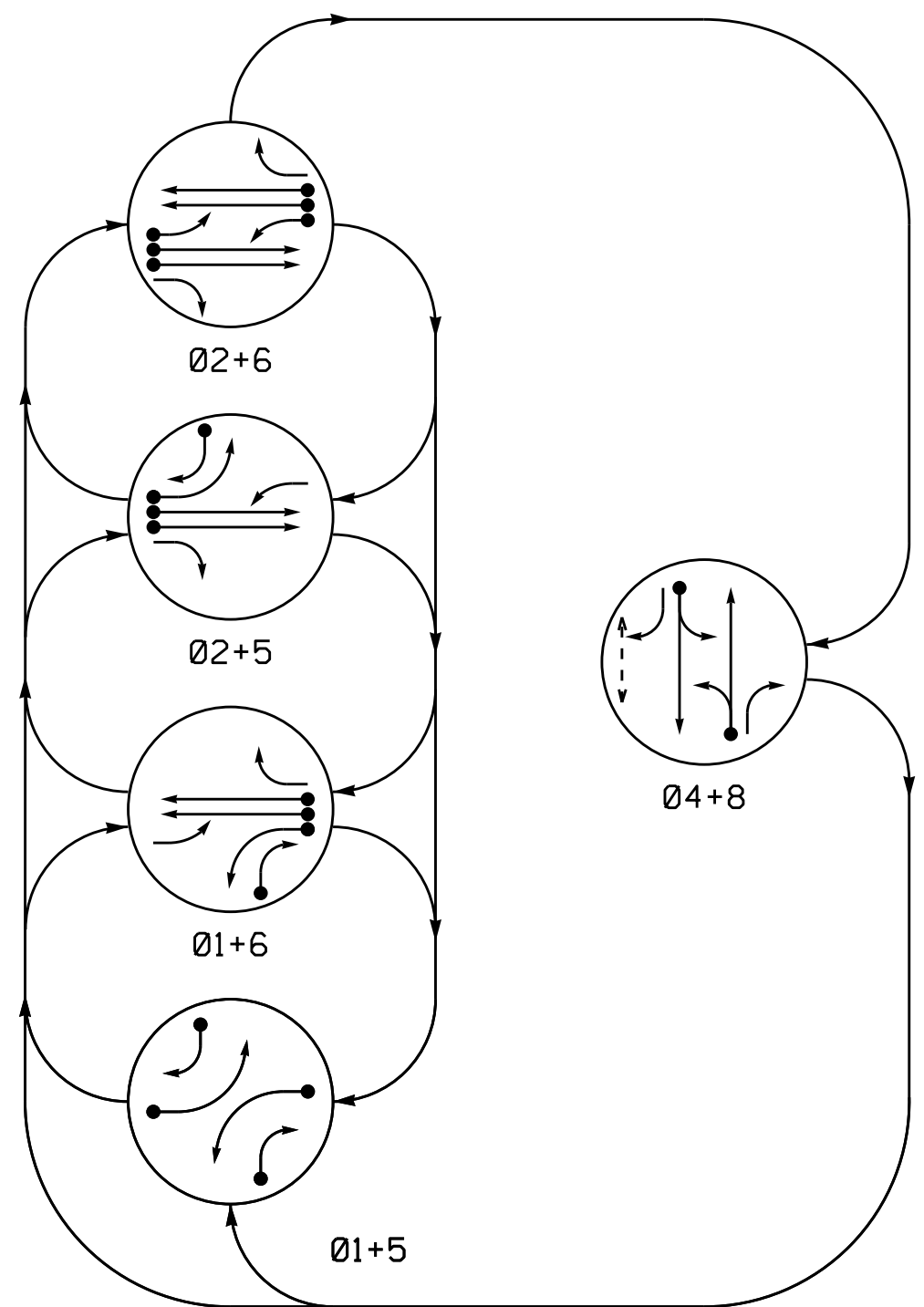
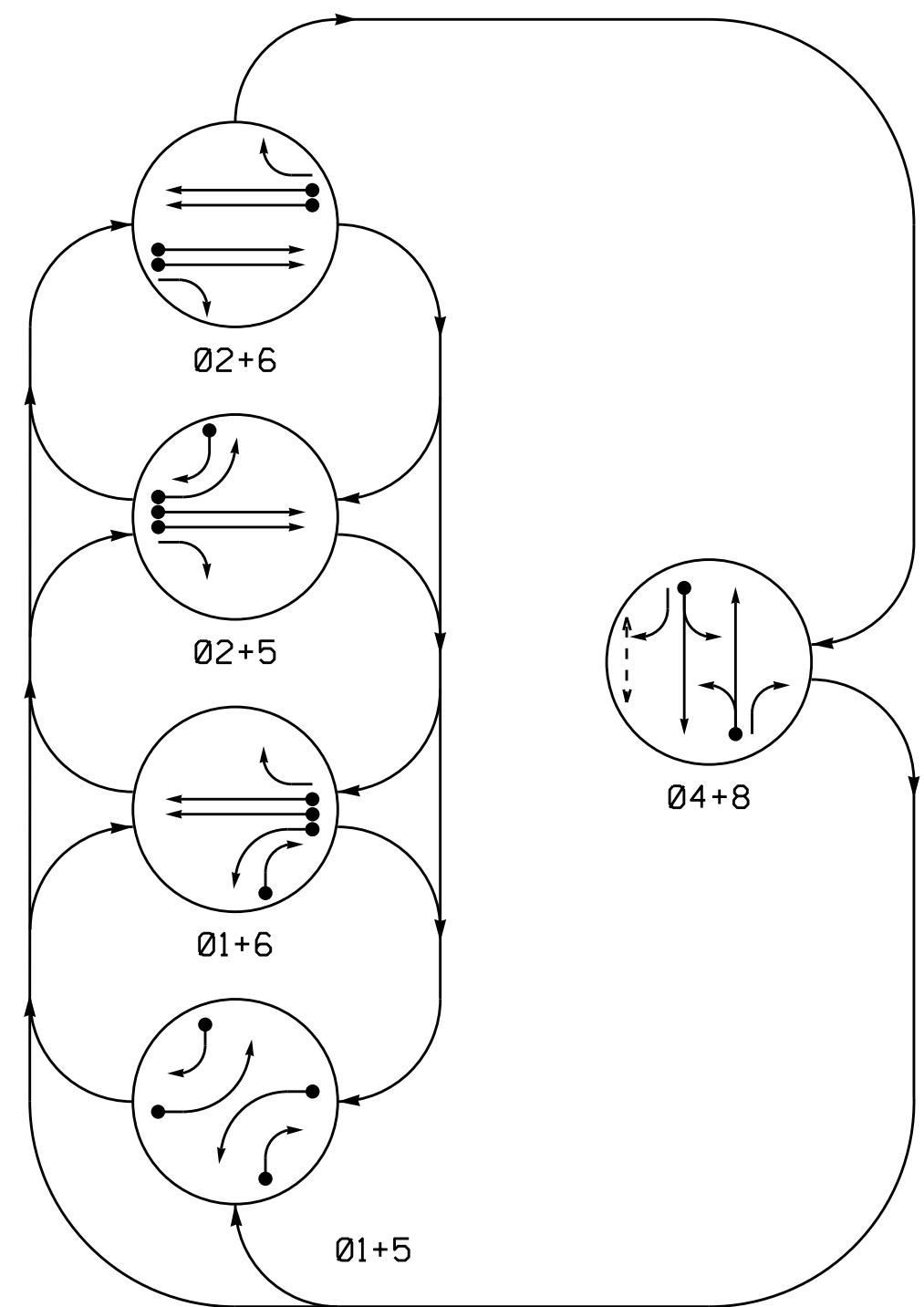


DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	04+8	F
11	Y	Y	Y	Y	Y	Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
43	Y	R	Y	R	Y	R
51	Y	Y	Y	Y	Y	Y
61,62	R	G	R	G	R	Y
81,82	R	R	R	R	G	R
83	Y	Y	R	R	Y	R
P41,P42	DW	DW	DW	DW	W	DRK

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	04+8	F
11	Y	Y	Y	Y	Y	Y
21,22	R	R	G	G	R	Y
41,42	R	R	R	R	G	R
43	Y	R	Y	R	Y	R
51	Y	Y	Y	Y	Y	Y
61,62	R	G	R	G	R	Y
81,82	R	R	R	R	G	R
83	Y	Y	R	R	Y	R
P41,P42	DW	DW	DW	DW	W	DRK

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	*10	-	-
1B	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	-
2A	6X6	300	5	Y	2	Y	Y	-	-	-	-	-
2B	6X6	300	5	Y	2	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	-	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	*10	-	-
5B	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	-
6A	6X6	300	5	Y	6	Y	Y	-	-	-	-	-
6B	6X6	300	5	Y	6	Y	Y	-	-	-	-	-
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	-

* Reduce delay to 3 seconds during alternate phasing operation.
 ** Disable phase 2 or 6 call for loops 1A and 5A during alternate phasing operation.

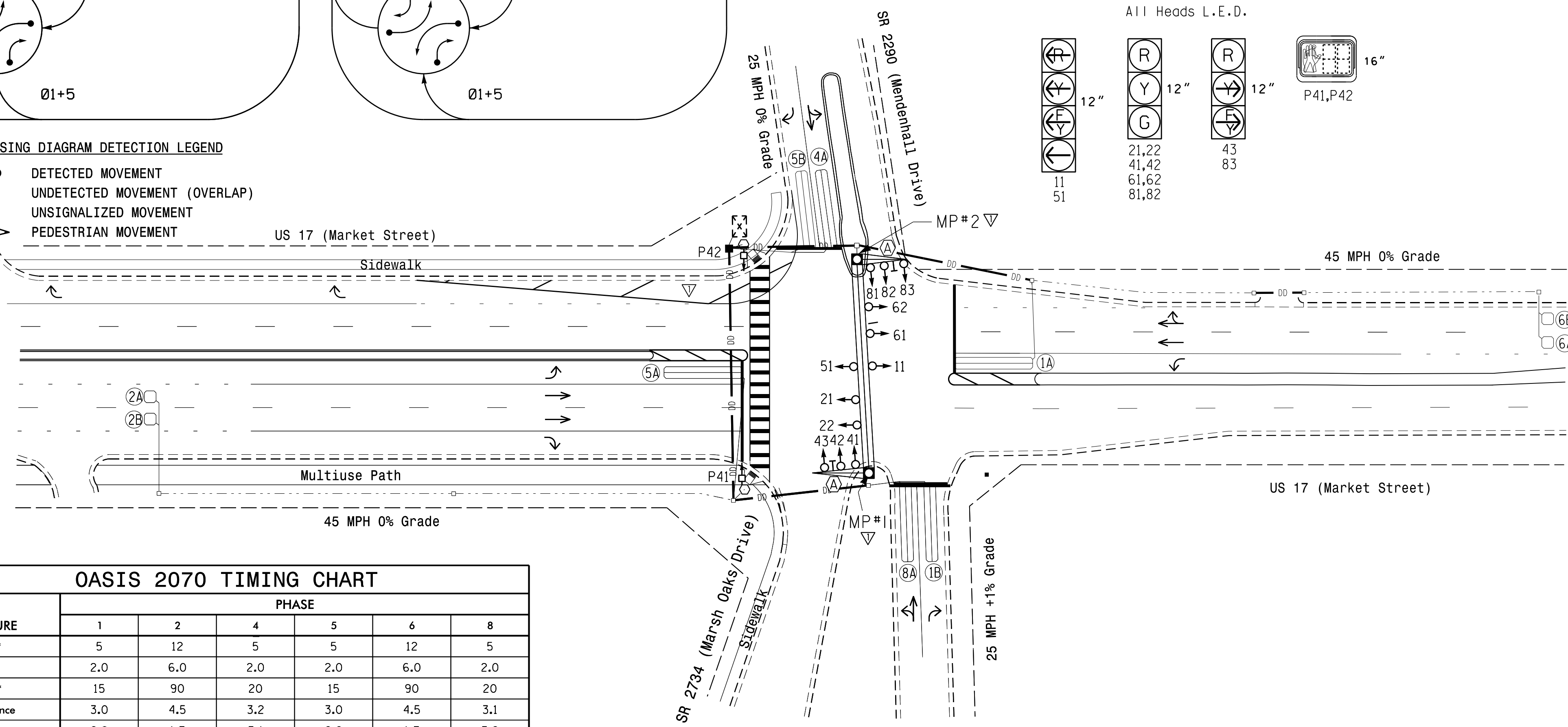
5 Phase Fully Actuated Wilmington Signal System

NOTES

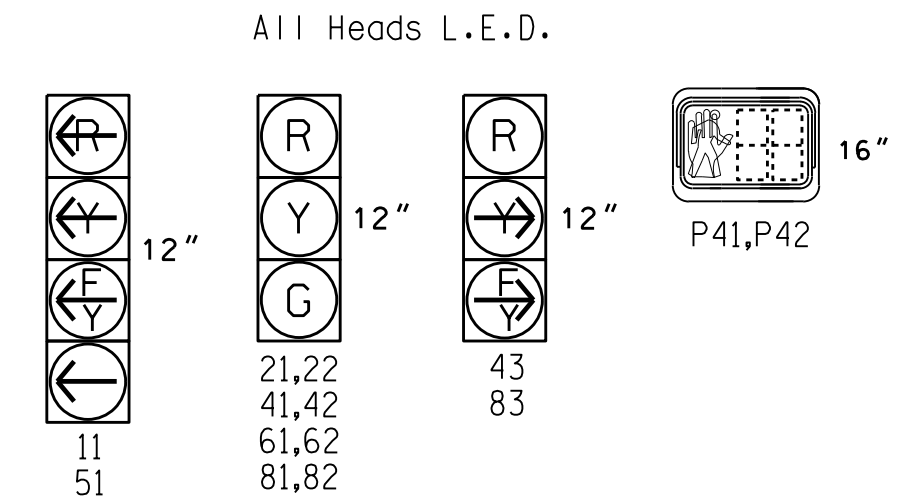
- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or 5 may be lagged.
- Set all detector units to 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.
- All pedestrian pushbuttons shall be located in the field by the Division Traffic Engineer before installation.
- 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.
- Signal system data: Controller Asset #1027
- Do not install street name signs or backplates on the mastarms containing heads numbered 41,42,43,81,82, and 83.

PHASING DIAGRAM DETECTION LEGEND

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



SIGNAL FACE I.D.



OASIS 2070 TIMING CHART

FEATURE	PHASE						
	1	2	4	5	6	8	
Min Green 1 *	5	12	5	5	12	5	
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0	
Max Green 1 *	15	90	20	15	90	20	
Yellow Clearance	3.0	4.5	3.2	3.0	4.5	3.1	
Red Clearance	2.8	1.7	3.1	2.9	1.7	3.2	
Walk 1 *	-	-	4	-	-	-	
Don't Walk 1	-	-	28	-	-	-	
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	-	-	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.

LEGEND

PROPOSED	EXISTING
Traffic Signal Head Sign	Traffic Signal Head Sign
Pedestrian Signal Head With Push Button & Sign	Pedestrian Signal Head With Push Button & Sign
Inductive Loop Detector	Inductive Loop Detector
Controller & Cabinet Junction Box	Controller & Cabinet Junction Box
2-in Underground Conduit	2-in Underground Conduit
N/A Right of Way	N/A Right of Way
Directional Arrow	Directional Arrow
Directional Drill	Directional Drill
Type II Signal Pedestal	Type II Signal Pedestal
Wheelchair Ramp	Wheelchair Ramp
Metal Pole with Mastarm "RIGHT TURN MUST YIELD TO U-TURN" Sign	Metal Pole with Mastarm "RIGHT TURN MUST YIELD TO U-TURN" Sign

Signal Upgrade - Final Design

REVISION SEAL

Professional Engineer Seal for Gregory M. Little, No. 030530, State of North Carolina.

Prepared For: Transportation Mobility and Safety Division, State of North Carolina, Signal Design Section.

750 N. Greenfield Pkwy, Garner, NC 27529

US 17 (Market Street) at SR 2734 (Marsh Oaks Drive) / SR 2290 (Mendenhall Drive)

Division 03 New Hanover Co. Wilmington

PLAN DATE: February 2018 REVIEWED BY: A.D. Klincksiek

PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

Revised to show Monotube Design and revised pavement marking on Market St. - jrs

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Not a certified document as to the Original Document but Only as to the Revisions - This document originally issued and sealed by Natasha M. Rodevick, 031464 on 8/1/18. This document is only certified as to the revisions.

SIGNATURE DATE

SIG. INVENTORY NO. 03-1027



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