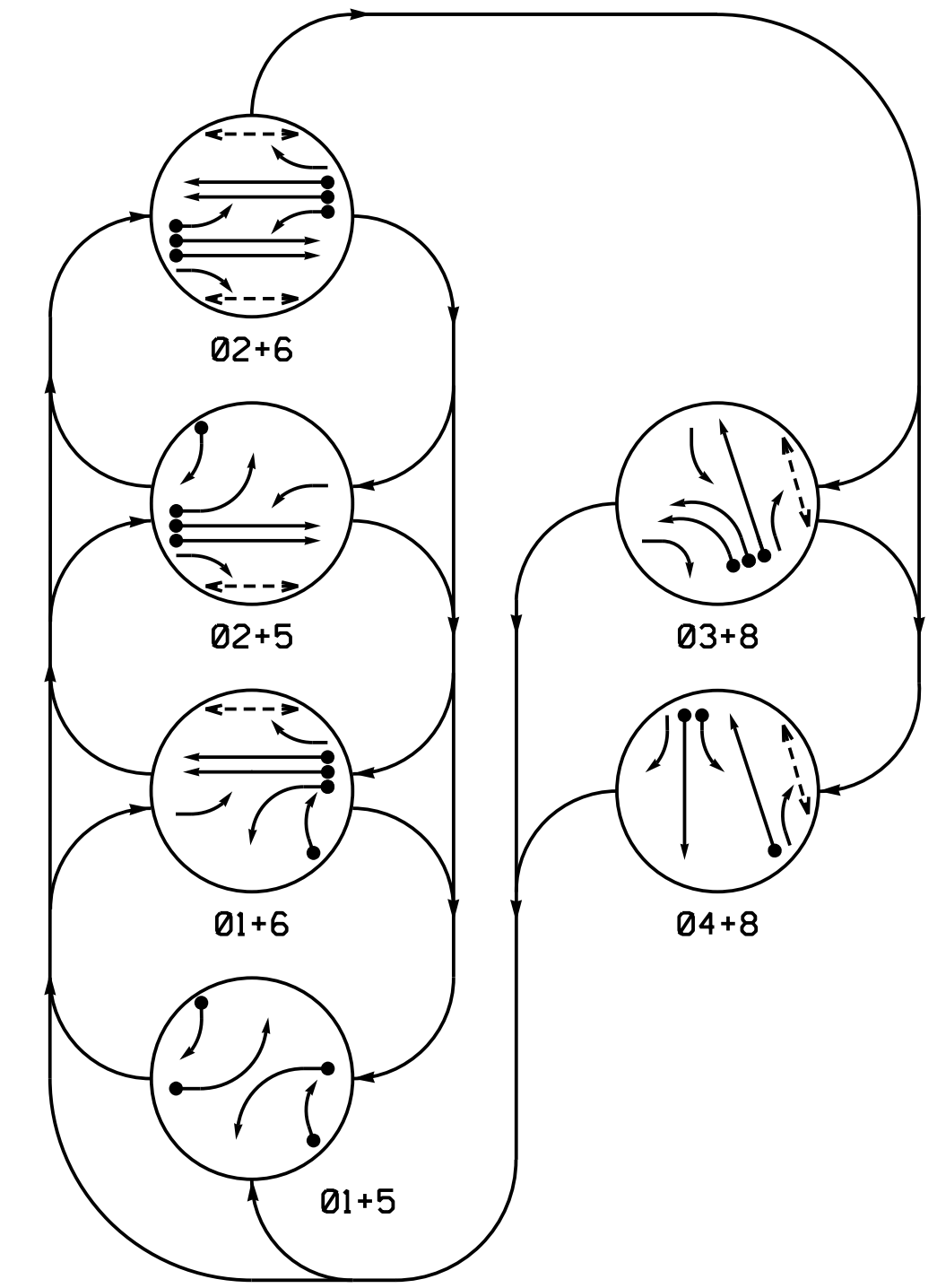


**DEFAULT PHASING DIAGRAM**



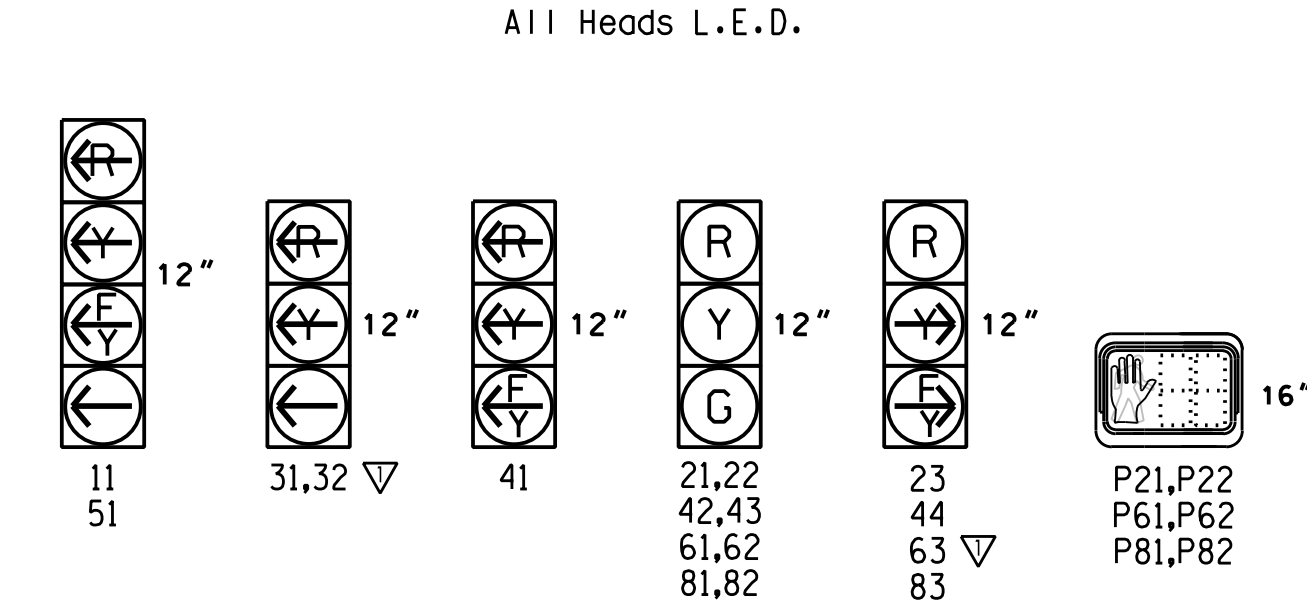
**PHASING DIAGRAM DETECTION LEGEND**

- DETECTED MOVEMENT
- ← UNDETECTED MOVEMENT (OVERLAP)
- ⋯ UNSIGNALIZED MOVEMENT
- ⚡ PEDESTRIAN MOVEMENT

**DEFAULT PHASING TABLE OF OPERATION**

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+8	04+8	FLASH	H
11								
21,22	R	R	G	G	R	R	Y	
23	R	R	F	F	F	R	Y	
31,32	R	R	R	R	F	R	R	
41	R	R	R	R	F	R	R	
42,43	R	R	R	R	R	G	R	
44	F	R	F	R	R	F	R	
51								
61,62	R	G	R	G	R	R	Y	
63	R	F	R	F	R	R	Y	
81,82	R	R	R	R	G	G	R	
83	F	F	R	R	F	F	R	
P21,P22	DW	DW	W	W	DW	DW	DRK	
P61,P62	DW	W	DW	W	DW	DW	DRK	
P81,P82	DW	DW	DW	DW	W	W	DRK	

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

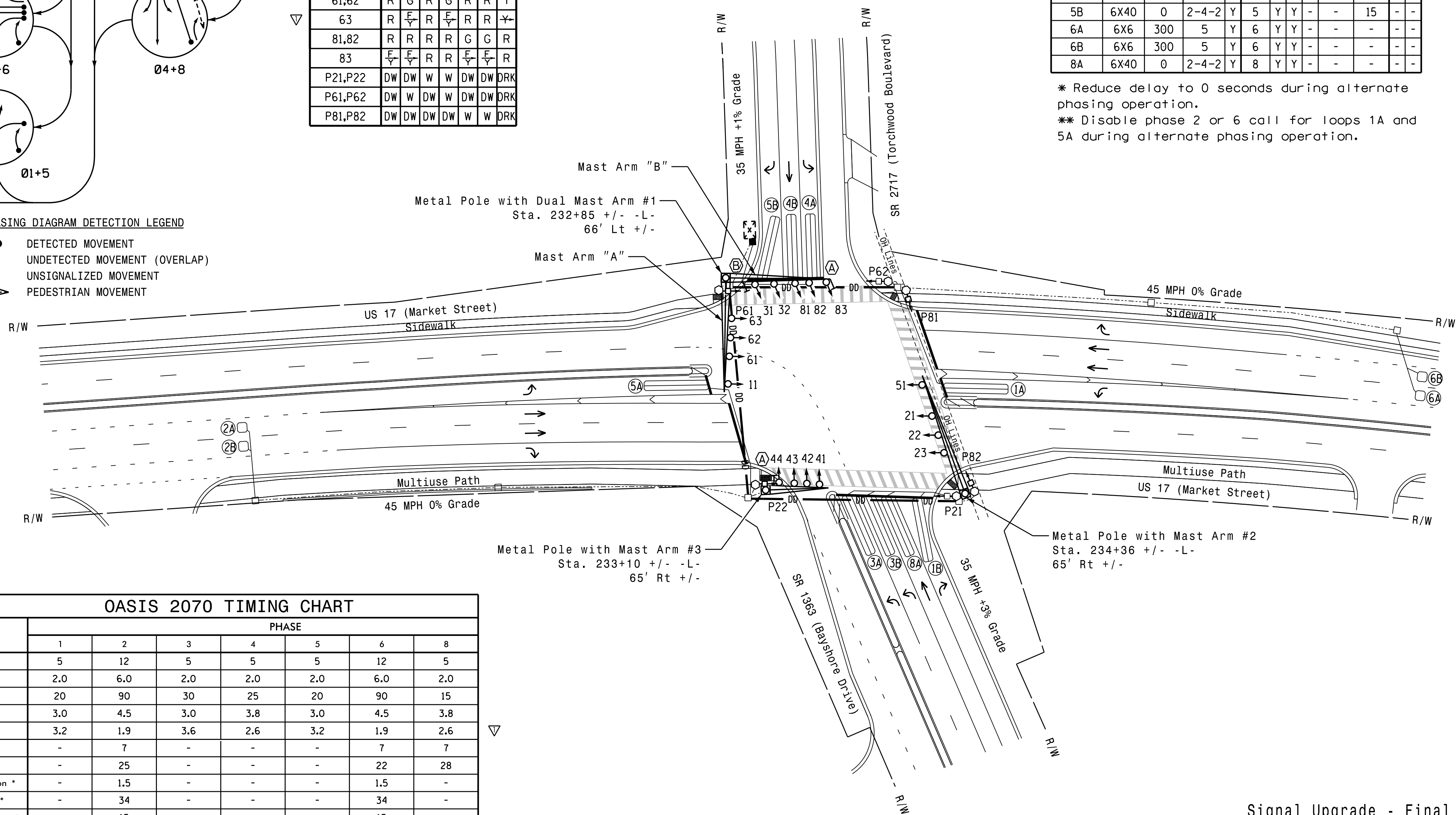
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	STRETCH TIME		
1A	6X40	0	2-4-2	Y	1	Y	Y	-	*10	-
1B	6X40	0	2-4-2	Y	**6	Y	Y	-	-	-
2A	6X6	300	5	Y	2	Y	Y	-	-	-
2B	6X6	300	5	Y	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	Y	3	Y	Y	-	-	-
3B	6X40	0	2-4-2	Y	3	Y	Y	-	-	-
4A	6X40	0	2-4-2	Y	4	Y	Y	-	3	-
4B	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 0 seconds during alternate phasing operation.  
 \*\* Disable phase 2 or 6 call for loops 1A and 5A during alternate phasing operation.

**6 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.
- Phase 3 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 #0369



**OASIS 2070 TIMING CHART**

FEATURE	PHASE							
	1	2	3	4	5	6	8	
Min Green 1*	5	12	5	5	5	12	5	
Extension 1*	2.0	6.0	2.0	2.0	2.0	6.0	2.0	
Max Green 1*	20	90	30	25	20	90	15	
Yellow Clearance	3.0	4.5	3.0	3.8	3.0	4.5	3.8	
Red Clearance	3.2	1.9	3.6	2.6	3.2	1.9	2.6	
Walk 1*	-	7	-	-	-	7	7	
Don't Walk 1	-	25	-	-	-	22	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	
Simultaneous Gap	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 Traffic Signal Head		EXISTING Traffic Signal Head
	PROPOSED Pedestrian Signal Head With Push Button & Sign		EXISTING Pedestrian Signal Head With Push Button & Sign
	PROPOSED Inductive Loop Detector		EXISTING Inductive Loop Detector
	PROPOSED Controller & Cabinet		EXISTING Controller & Cabinet
	PROPOSED Junction Box		EXISTING Junction Box
	PROPOSED 2-in Underground Conduit		EXISTING 2-in Underground Conduit
	PROPOSED Right of Way		EXISTING Right of Way
	PROPOSED Directional Arrow		EXISTING Directional Arrow
	PROPOSED Directional Drill		EXISTING Directional Drill
	PROPOSED Type II Signal Pedestal		EXISTING Type II Signal Pedestal
	PROPOSED Wheelchair Ramp		EXISTING Wheelchair Ramp
	PROPOSED "RIGHT TURN MUST YIELD TO U-TURN" Sign		EXISTING "RIGHT TURN MUST YIELD TO U-TURN" Sign
	PROPOSED "NO U-TURN" Sign (R3-4)		EXISTING "NO U-TURN" Sign (R3-4)

Signal Upgrade - Final Design  
 Sheet 1 of 2

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**

<p>HNTB NORTH CAROLINA, P.C.                  343 E. Six Forks Road, Suite 200                  Raleigh, North Carolina 27609                  NC License No: C-1554                  (919) 546-8997</p>	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 1363 (Bayshore Drive) / SR 2717 (Torchwood Boulevard) Division 03 New Hanover Co. Wilmington PLAN DATE: February 2018 REVIEWED BY: A.D. Klinsky PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons	SEAL  NATASHA R. SIMMONS ENGINEER SEAL 031464
	SCALE 0 40 1"=40'	REVISIONS 1. Added turn lane and changed heads for phase 3. Shifted Loop 5A stop bar. 2. Added head 63.	DocuSigned by: Natasha R. Simmons SIGNATURE DATE 11/4/2020 SIG. INVENTORY NO. 03-0369