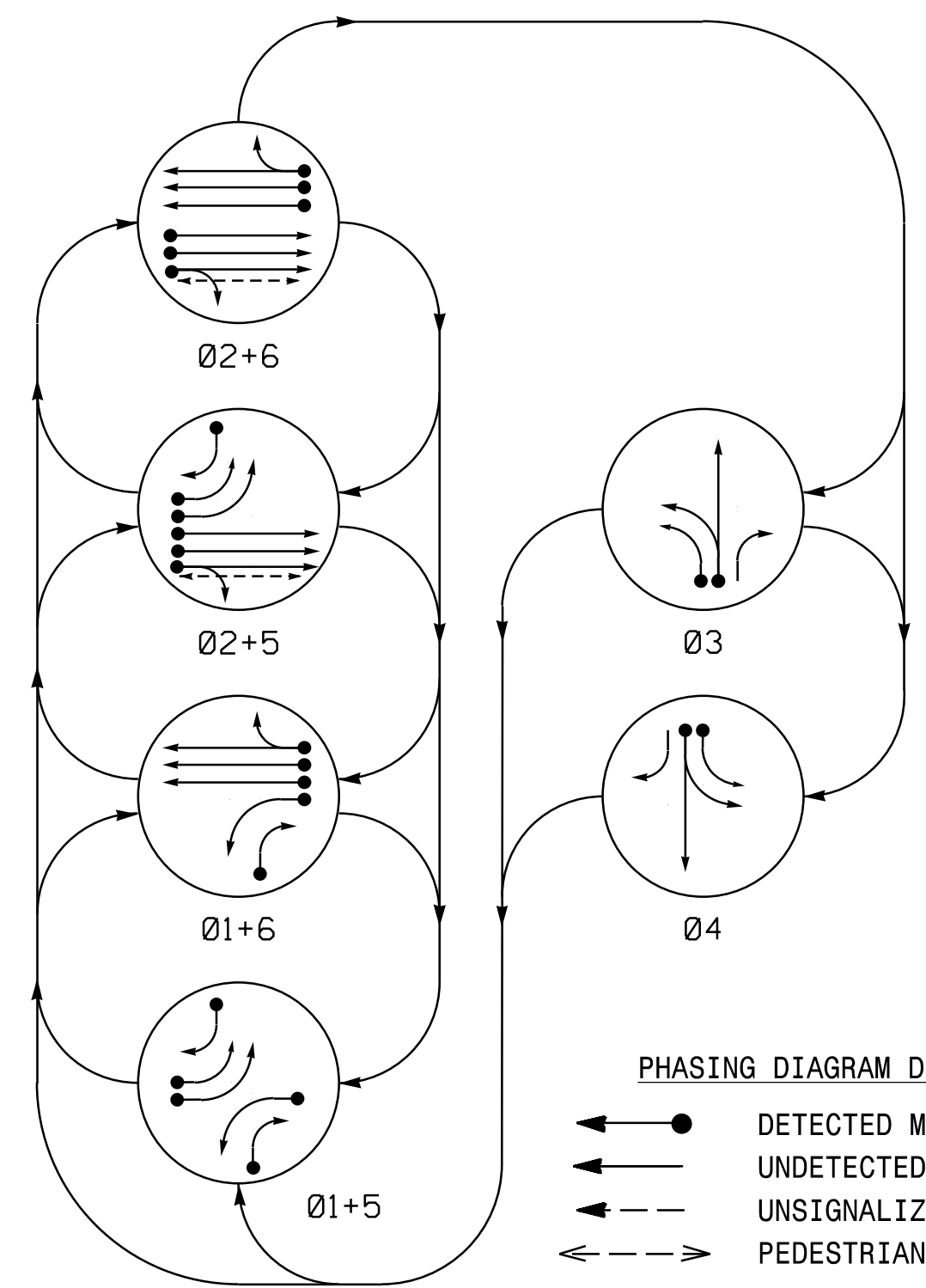


PHASING DIAGRAM

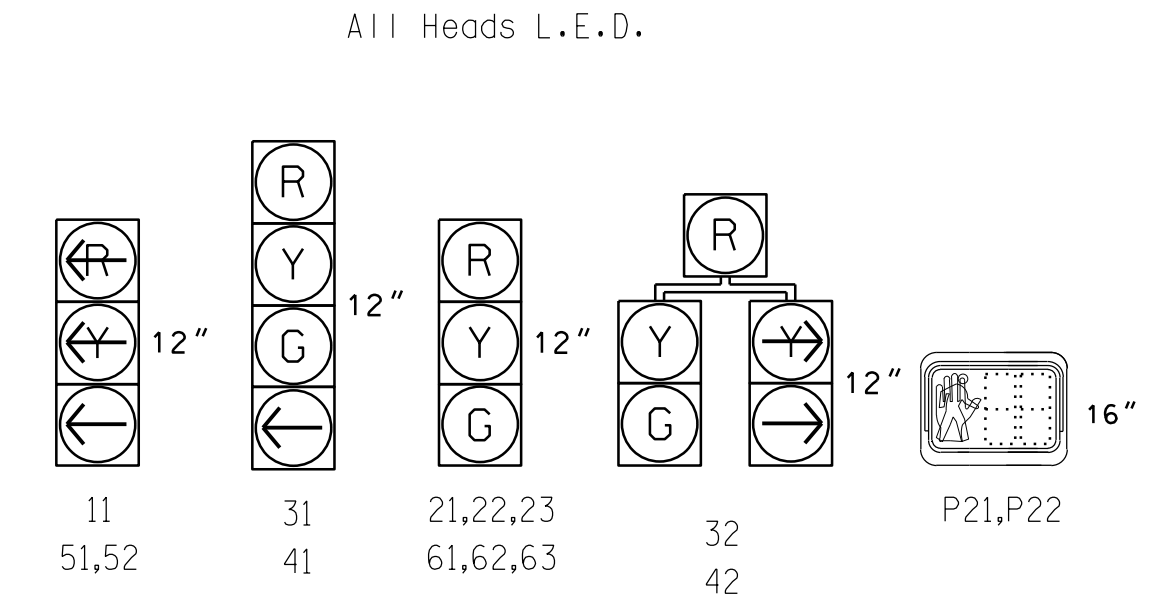


PHASING DIAGRAM DETECTION LEGEND
 ● DETECTED MOVEMENT
 ○ UNDETECTED MOVEMENT (OVERLAP)
 - - UNSIGNALIZED MOVEMENT
 - - PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE						FLASH
	01+5	01+6	02+5	02+6	03	04	
11	←	←	←	←	←	←	Y
21,22,23	R	R	G	G	R	R	Y
31	R	R	R	R	C	R	R
32	R	R	R	R	G	R	R
41	R	R	R	R	R	G	R
42	R	R	R	R	R	G	R
51,52	←	←	←	←	←	←	Y
61,62,63	R	G	R	G	R	R	Y
P21,P22	DW	DW	W	W	DW	DW	DRK

SIGNAL FACE I.D.



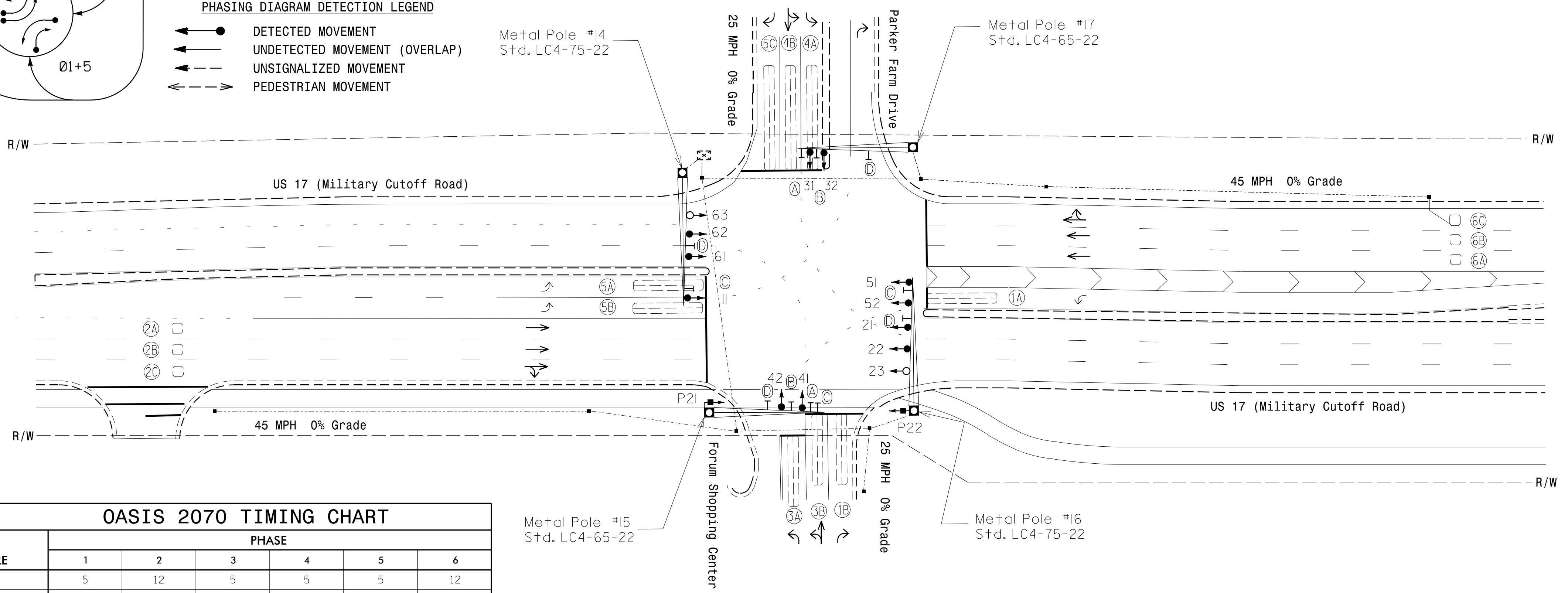
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	DETECTOR PROGRAMMING								
				NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	-	-	-
1B	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	-
2A	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	-
2B	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	-
2C	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	3	-	-
3B	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	-
4A	6X60	0	2-4-2	-	4	Y	Y	-	-	-	-	-
4B	6X60	0	2-4-2	-	4	Y	Y	-	-	-	-	-
5A	6X40	0	2-4-2	-	5	Y	Y	-	-	-	-	-
5B	6X40	0	2-4-2	-	5	Y	Y	-	-	-	-	-
5C	6X60	0	2-4-2	-	5	Y	Y	-	-	15	-	-
6A	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	-
6B	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	-
6C	6X6	300	EXIST	Y	6	Y	Y	-	-	-	-	Y

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 phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Reposition existing signal heads numbered 21, 22, 61 and 62.
- 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Signal system data:
Controller Asset #: 0895.
- Reposition existing sign 'D' on Metal Pole #14.



OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	5	12	5	5	5	12
Extension 1 *	2.0	6.0	2.0	2.0	2.0	6.0
Max Green 1 *	15	100	20	30	15	100
Yellow Clearance	3.0	4.5	3.2	3.2	3.0	4.5
Red Clearance	3.5	1.4	3.3	3.3	3.5	1.6
Walk 1 *	-	7	-	-	-	-
Don't Walk 1	-	20	-	-	-	-
Seconds Per Actuation *	-	1.2	-	-	-	1.2
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.

LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
○ → Inductive Loop Detector	○ → N/A
○ → Controller & Cabinet	○ → N/A
○ → Junction Box	○ → N/A
○ → 2-in Underground Conduit	○ → N/A
○ → Right of Way	○ → N/A
○ → Directional Arrow	○ → N/A
○ → Metal Pole with Mastarm	○ → N/A
○ → Left Arrow "ONLY" Sign (R3-5L)	○ → N/A
○ → Combined Through and Left Arrow Sign (R3-6L)	○ → N/A
○ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	○ → N/A
○ → Street Name Sign	○ → N/A

Signal Upgrade

RKA
RAMEY KEMP ASSOCIATES
8808 Farringdon Place Raleigh, North Carolina 27609
Phone: 919-872-8115 | www.rameykemp.com | NC License No. C-0910

US 17 (Military Cutoff Road) at Forum Shopping Center/ Parker Farm Drive

Division 3 New Hanover County Wilmington

PLAN DATE: November 2021 REVIEWED BY: WJ Hamilton

PREPARED BY: A. Andrews RKA PROJ. NO: 19258 (040)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
WILLIAM J. HAMILTON
32396

William J. Hamilton 11/08/2021
DATE

SIG. INVENTORY NO. 03-0895

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0" = 40'

1" = 40'