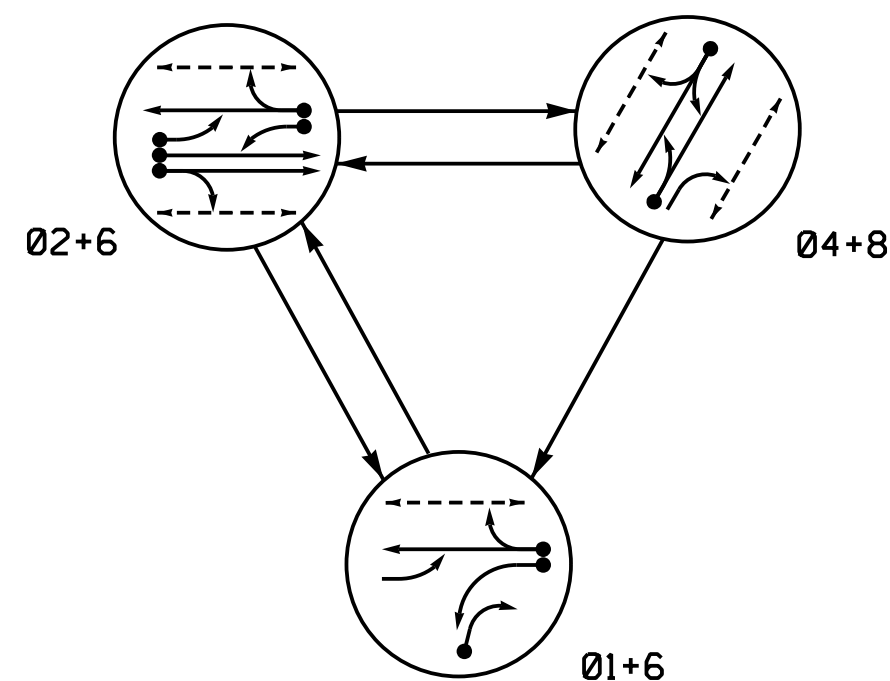


**PHASING DIAGRAM**



**PHASING DIAGRAM DETECTION LEGEND**

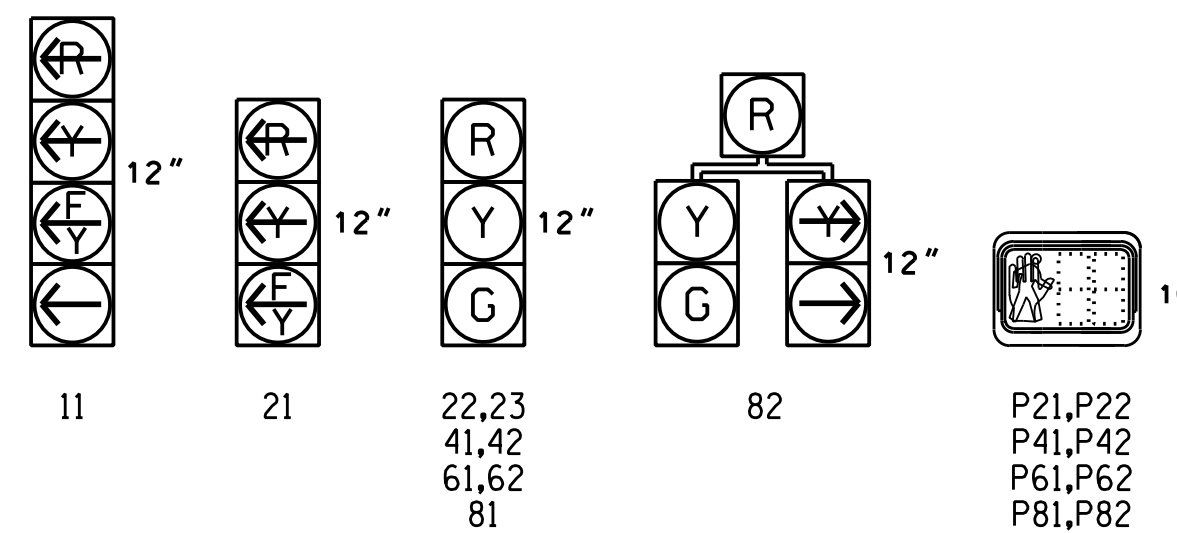
- DETECTED MOVEMENT
- - - - - UNDETECTED MOVEMENT (OVERLAP)
- ..... UNSIGNALIZED MOVEMENT
- ..... PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE			
	01+6	02+6	04+8	FLASH
11	Y	Y	R	Y
21	Y	Y	R	Y
22,23	R	G	R	Y
41,42	R	R	G	R
61,62	G	G	R	Y
81	R	R	G	R
82	R	R	G	R
P21,P22	DW	W	DW	DRK
P41,P42	DW	DW	W	DRK
P61,P62	W	W	DW	DRK
P81,P82	DW	DW	W	DRK

**SIGNAL FACE I.D.**

All Heads L.E.D.



**OASIS 2070E LOOP & DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY		
1A	6X60	0	EXIST	-	1	Y	Y	-	15	-
1B	6X60	+5	EXIST	-	1	Y	Y	-	15	-
2A	6X6	70	3	-	2	Y	Y	-	-	-
2B	6X6	70	3	-	2	Y	Y	-	-	-
2C	6X40	0	2-4-2	Y	2	Y	Y	-	-	Y
4A	6X60	0	EXIST	-	4	Y	Y	-	5	-
6A	6X6	70	EXIST	-	6	Y	Y	-	-	-
8A	6X60	+10	EXIST	-	8	Y	Y	-	3	-
S39*	6X6	+200	3	-	-	-	-	-	-	Y
S40*	6X6	+200	EXIST	-	-	-	-	-	-	Y
S41*	6X6	+200	3	-	-	-	-	-	-	Y

\*Could not field verify.

**3 Phase Fully Actuated Gilead Road Closed Loop 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 may be lagged.
- Set all detector units to presence mode.
- 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.
- Pavement Markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #1752.

**LEGEND**

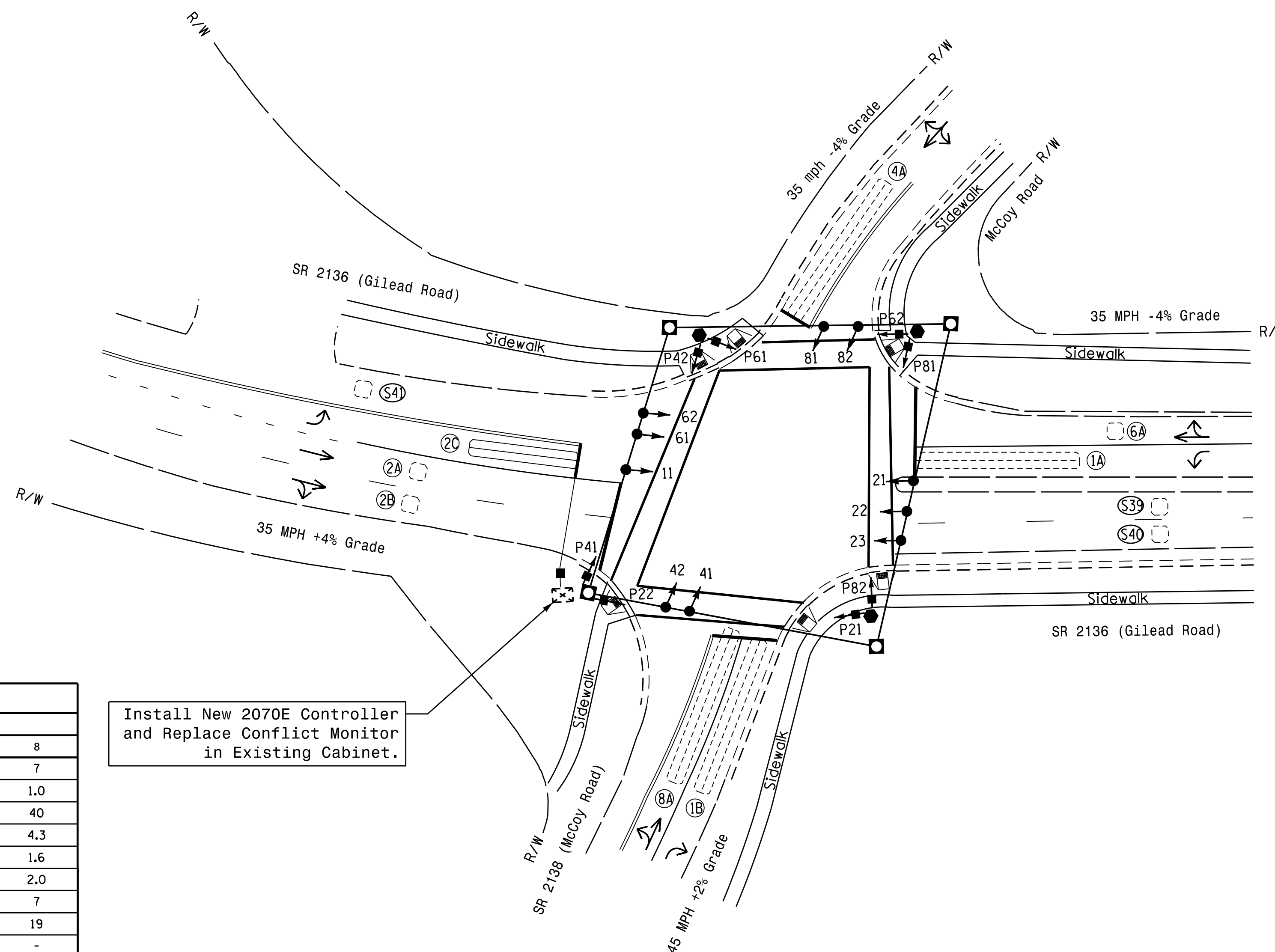
- |  |  |
|--|--|
| <b>PROPOSED</b>                                    | <b>EXISTING</b>                                    |
| ○ → Traffic Signal Head                            | ● → Traffic Signal Head                            |
| ○ → Modified Signal Head                           | N/A  |
| ○ → Sign   | ○ → Sign   |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → Pedestrian Signal Head With Push Button & Sign |
| ○ → Signal Pole with Guy                           | ○ → Signal Pole with Guy                           |
| ○ → Signal Pole with Sidewalk Guy                  | ○ → Signal Pole with Sidewalk Guy                  |
| ⊠ → Inductive Loop Detector                        | ⊠ → Inductive Loop Detector                        |
| □ → Controller & Cabinet                           | □ → Controller & Cabinet                           |
| □ → Junction Box                                   | □ → Junction Box                                   |
| --- 2-in Underground Conduit                       | --- 2-in Underground Conduit                       |
| N/A → Right of Way                                 | → → Right of Way                                   |
| → → Directional Arrow                              | → → Directional Arrow                              |
| ○ → Metal Strain Pole                              | ○ → Metal Strain Pole                              |
| ○ → Type II Signal Pedestal                        | ○ → Type II Signal Pedestal                        |
| N/A → Wheelchair Ramp                              | → → Wheelchair Ramp                                |

**OASIS 2070E TIMING CHART**

FEATURE	PHASE				
	1	2	4	6	8
Min Green 1 *	7	10	7	10	7
Extension 1 *	1.0	3.0	1.0	3.0	1.0
Max Green 1 *	30	60	40	60	40
Yellow Clearance	3.0	4.1	4.1	4.1	4.3
Red Clearance	3.1	2.5	2.2	2.5	1.6
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	7	7	7
Don't Walk 1	-	16	22	12	19
Second Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	YELLOW	-
Dual Entry	-	-	ON	-	ON
Simultaneous Gap	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.

Install New 2070E Controller and Replace Conflict Monitor in Existing Cabinet.



**Signal Upgrade**

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

	SR 2136 (Gilead Road) at SR 2138 (McCoy Road)		
	Division 10 Mecklenburg Co., Huntersville PLAN DATE: December 2017 PREPARED BY: J.T. Thibault	REVIEWED BY: A.D. Klinksiek REVIEWED BY: N.R. Simmons	
HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997	SCALE 0 30 1"=30'	REVISIONS INIT. DATE	DocuSigned by: Natasha R. Simmons DATE: 4/23/2018 SIGNATURE DATE SIG. INVENTORY NO. 10-1752