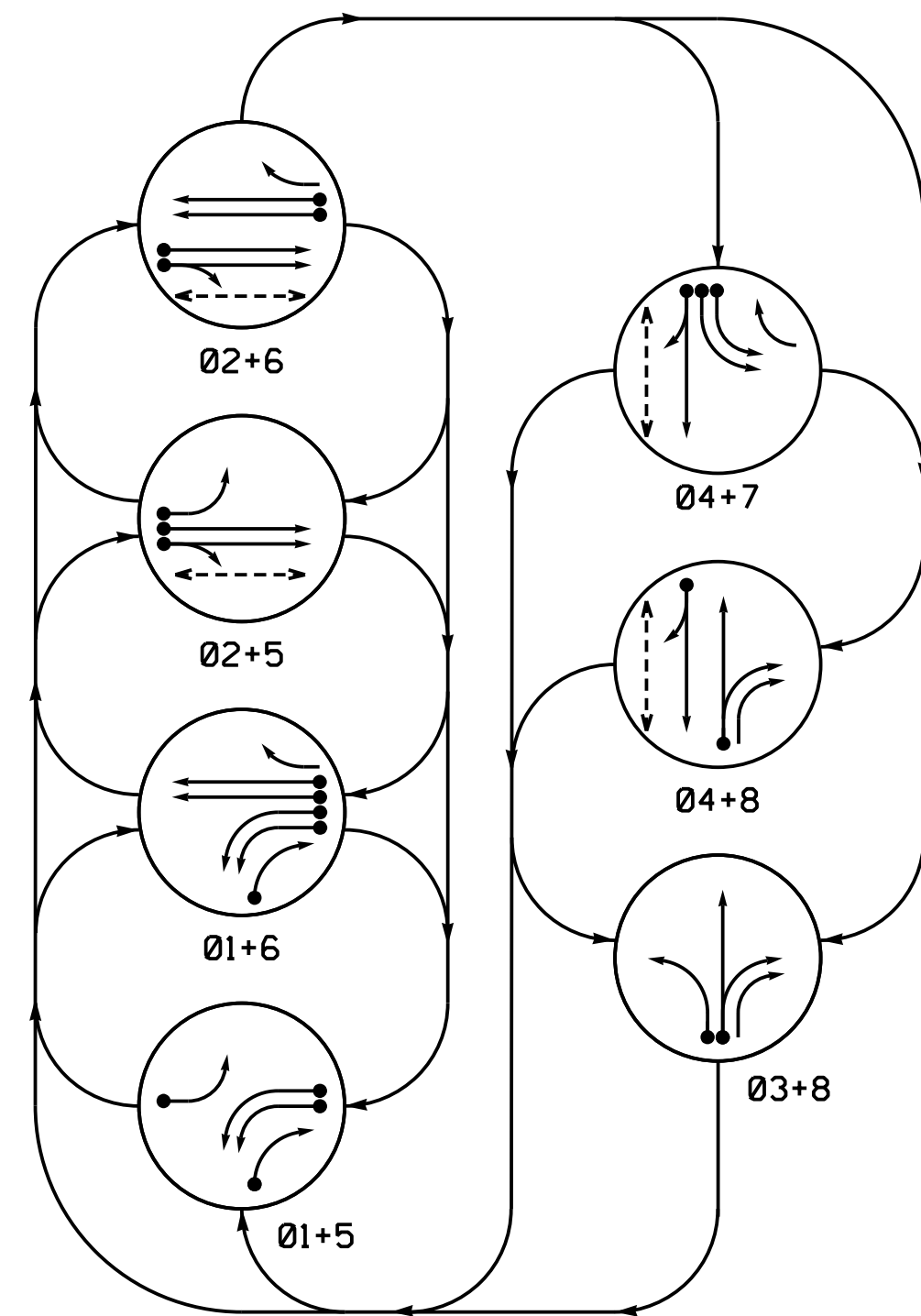


PHASING DIAGRAM



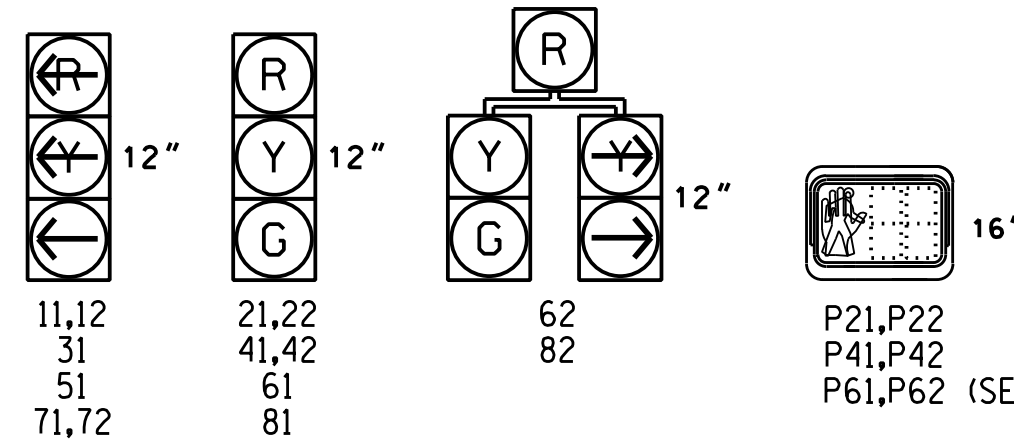
PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←...→ UNSIGNALIZED MOVEMENT
- ←---→ PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+8	04+7	04+8	F
11,12			R	R	R	R	R	R
21,22	R	R	G	G	R	R	R	Y
31	R	R	R	R	R	R	R	R
41,42	R	R	R	R	G	G	R	R
51			R	R	R	R	R	R
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71,72	R	R	R	R	R	R	R	R
81	R	R	R	R	R	G	G	R
82	R	R	R	R	R	G	G	R
P21,P22	DW	DW	W	W	DW	DW	DRK	
P41,P42	DW	DW	DW	DW	W	W	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



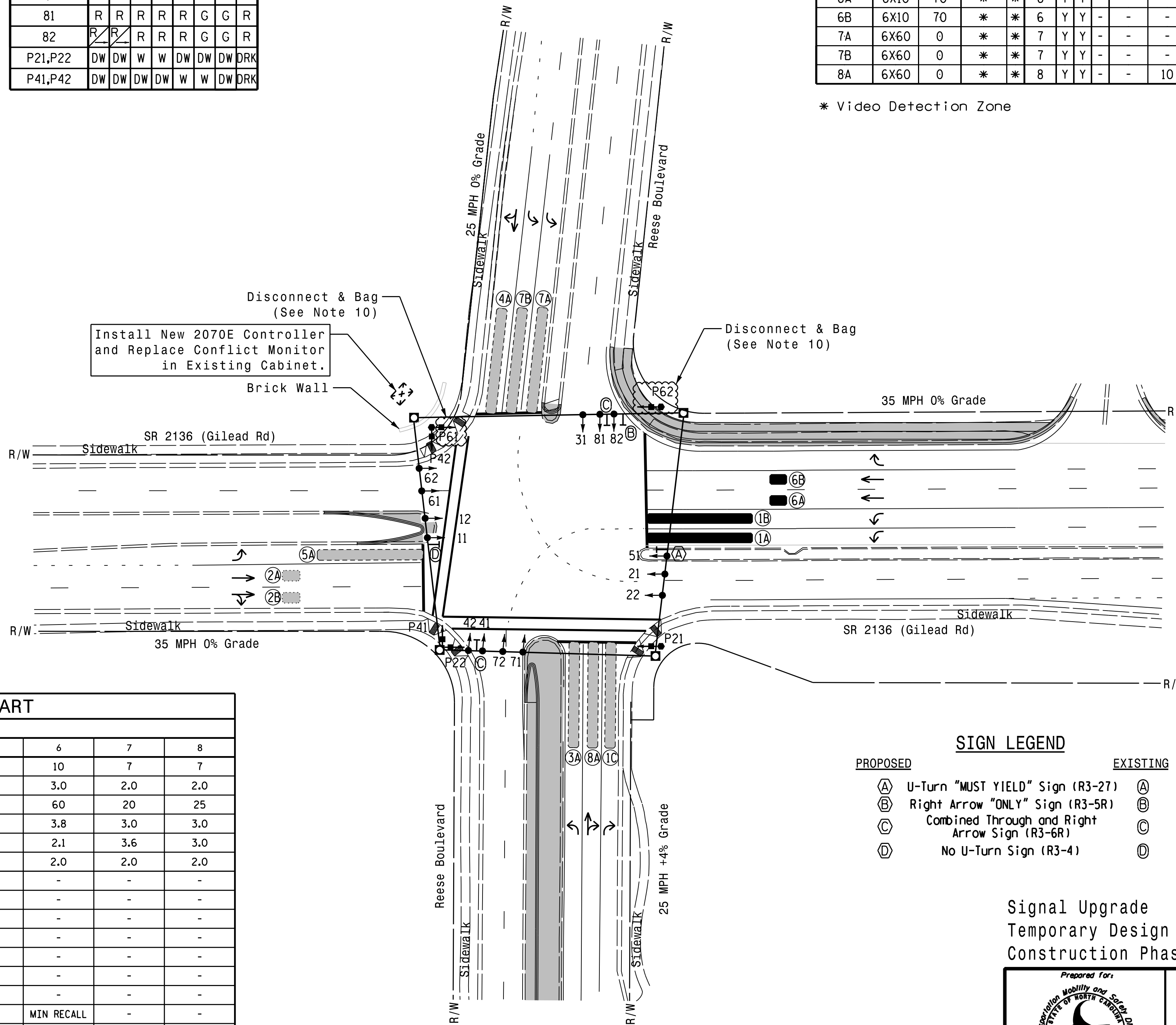
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY			
1A	6X60	0	*	*	1	Y	Y	-	-	-	*
1B	6X60	0	*	*	1	Y	Y	-	-	-	*
1C	6X60	0	*	*	1	Y	Y	-	-	-	*
2A	6X10	70	*	*	2	Y	Y	-	-	15	*
2B	6X10	70	*	*	2	Y	Y	-	-	-	*
3A	6X60	0	*	*	3	Y	Y	-	-	-	*
4A	6X60	0	*	*	4	Y	Y	-	-	10	*
5A	6X60	0	*	*	5	Y	Y	-	-	-	*
6A	6X10	70	*	*	6	Y	Y	-	-	-	*
6B	6X10	70	*	*	6	Y	Y	-	-	-	*
7A	6X60	0	*	*	7	Y	Y	-	-	-	*
7B	6X60	0	*	*	7	Y	Y	-	-	-	*
8A	6X60	0	*	*	8	Y	Y	-	-	10	*

* Video Detection Zone

7 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 and/or 5 may be lagged.
- The order of phase 3 and phase 7 may be reversed.
- 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.
- Incorporate Video Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Video Detection locations and mounting heights to obtain detection zones as shown.
- Bag existing pedestrian signal heads numbered P61 and P62.
- 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 #1753



FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	4	5	7	10	7
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	30	60	15	25	15	60	20	25
Yellow Clearance	3.0	3.8	3.0	3.2	3.0	3.8	3.0	3.0
Red Clearance	3.3	2.3	3.3	3.1	3.3	2.1	3.6	3.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	-	-	-	-
Don't Walk 1	-	33	-	31	-	-	-	-
Seconds 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	-	-	-	-	-	-	-	-
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.

PROPOSED	EXISTING
(A) U-Turn "MUST YIELD" Sign (R3-27)	(A)
(B) Right Arrow "ONLY" Sign (R3-SR)	(B)
(C) Combined Through and Right Arrow Sign (R3-6R)	(C)
(D) No U-Turn Sign (R3-4)	(D)

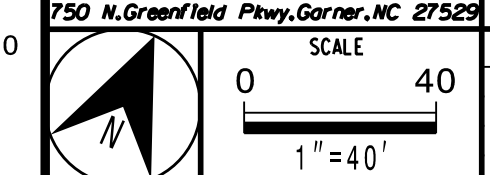
PROPOSED	EXISTING
○ Traffic Signal Head	●
□ Pedestrian Signal Head With Push Button & Sign	■
⊠ Controller & Cabinet	⊠
□ Junction Box	■
N/A Right of Way	—
→ Directional Arrow	→
▬ Video Detection Zone	▬
— Directional Drill	N/A
○ Metal Strain Pole	○
○ Type II Signal Pedestal	○
▬ Wheelchair Ramp	▬
▬ Construction Zone	N/A

Signal Upgrade
Temporary Design 1
Construction Phase I

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

	SR 2136 (Gilead Road) at Reese Boulevard		
	Division 10 Mecklenburg Co. Huntersville PLAN DATE: December 2017 REVIEWED BY: A.D. Klinskiesik PREPARED BY: A.H. Thornsburg REVIEWED BY: N.R. Simmons	REVISIONS INIT. DATE _____ _____	

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DocuSigned by:
Natalia R. Simmons
4/23/2018
DATE
SIGNATURE
DATE
SIG. INVENTORY NO. 10-1753 T1