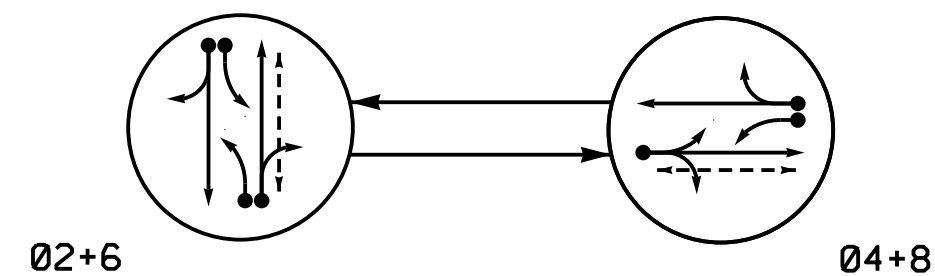


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←→ UNDETECTED MOVEMENT (OVERLAP)
- ←- - - UN SIGNALIZED MOVEMENT
- ←- - - PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+6	04+8	04+8	04+8
21	Y	R	Y	Y
22,23	G	R	Y	Y
41,42	R	G	R	R
61	Y	R	Y	Y
62,63	G	R	Y	Y
81	Y	R	Y	Y
82,83	R	G	R	R
P21,P22	W	DW	DRK	DRK
P41,P42	DW	W	DRK	DRK

DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING						
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	SYSTEM LOOP	NEW CARD
2A	6X6	70	4	X	2	Yes	-	-	-	-	X
2B	6X60	+5	Exist	-	2	Yes	-	3	-	-	X
4A	6X60	+5	Exist	-	4	Yes	-	3	-	-	X
6A	6X6	70	Exist	-	6	Yes	-	-	-	-	X
6B	6X40	+5	Exist	-	6	Yes	-	3	-	-	X
8A	6X60	+5	Exist	-	8	Yes	-	3	-	-	X
8B	6X60	+5	Exist	-	8	Yes	-	3	-	-	X

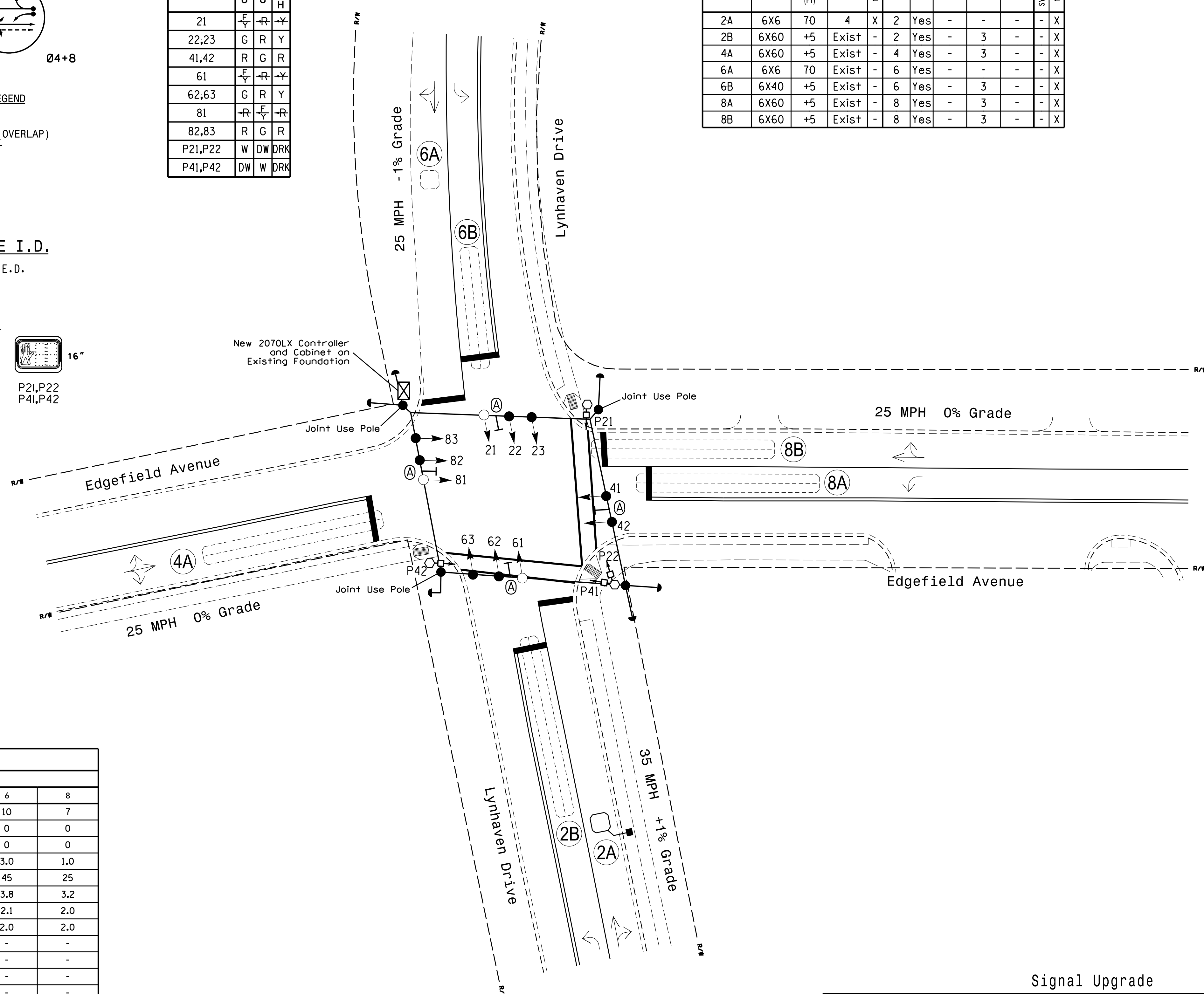
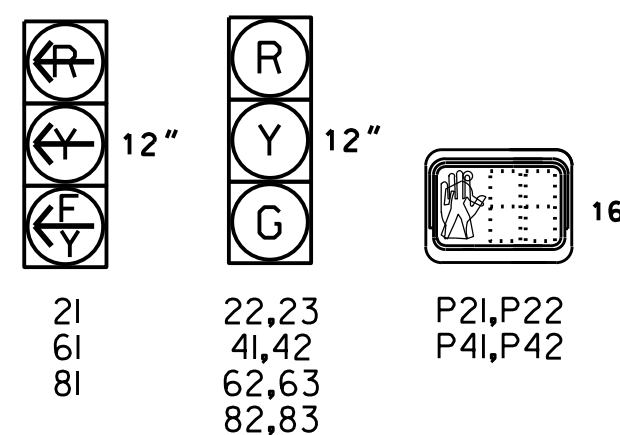
2 Phase Fully Actuated Gastonia Signal System

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.
- Renumber existing signal heads numbered 21, 22, 61, 62, 81 and 82 as 22, 23, 62, 63, 82 and 83 respectively.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 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 unless otherwise noted.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- All cabinets and base extenders shall be black in color. See Project Special Provisions for details.
- City system data:
Controller Asset #0001.

SIGNAL FACE I.D.

All Heads L.E.D.



TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green *	10	7	10	7
Walk *	4	4	0	0
Ped Clear	10	10	0	0
Veh. Extension *	3.0	1.0	3.0	1.0
Max 1 *	45	25	45	25
Yellow	3.8	3.2	3.8	3.2
Red Clear	2.1	2.0	2.1	2.0
Red Revert	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-
Seconds /Actuation *	-	-	-	-
Max Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Locking Detector	X	-	X	-
Recall Position	VEH. RECALL	-	VEH. RECALL	-
Dual Entry	-	X	-	X
Simultaneous Gap	X	X	X	X

* 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 | → Sign |
| ↓ Pedestrian Signal Head | ↓ Sign |
| □ Signal Pole with Guy | □ Signal Pole with Sidewalk Guy |
| ○ Type II Signal Pedestal | ○ Type II Signal Pedestal |
| ⊠ 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 |
| N/A Curb Ramp | ▲ Curb Ramp |
| ⊙ Street Name Sign | ⊙ Street Name Sign |

Signal Upgrade

Prepared in the Office of: **SUMMIT** DESIGN AND ENGINEERING SERVICES
 NC FIRM LICENSE No: P-0339
 320 Executive Court Hillsborough, NC 27278
 (919) 732-3883 (919) 732-6676 (FAX)

Prepared For: Lynhaven Drive at Edgefield Avenue
 Division 12 Gaston County Gastonia
 PLAN DATE: April 2021 REVIEWED BY: E. Sirgany
 PREPARED BY: J. Smith REVIEWED BY:

SCALE: 1"=20'

REVISIONS: _____ INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER Edward W. Sirgany 1/21/2022