

6 Phase Fully Actuated (Raleigh Signal System)

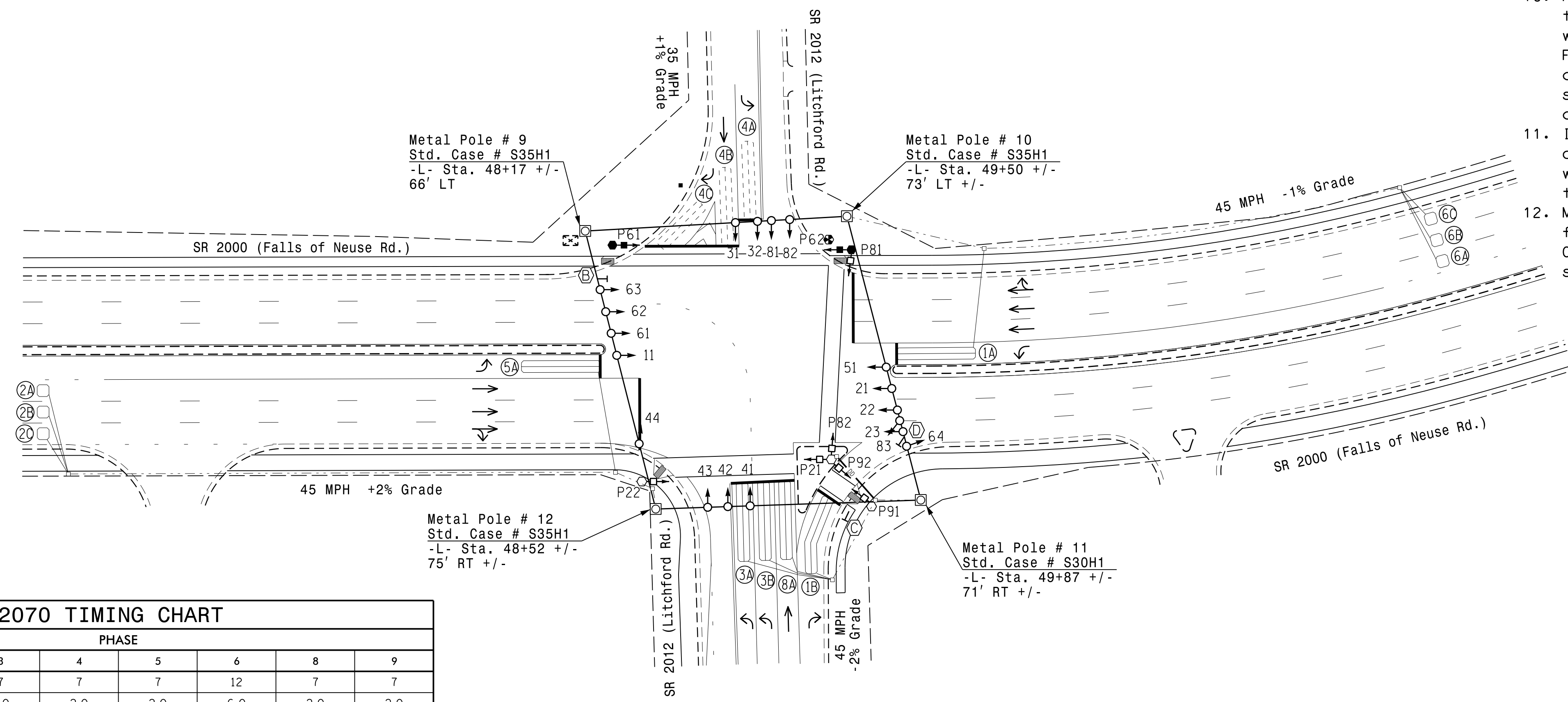
SE-PAC 2070 LOOP & DETECTOR UNIT INSTALLATION CHART

ACCESSIBLE PEDESTRIAN SIGNAL OPERATION			
SIGNAL FACE	VOICE TONES	INTERVAL	SPEECH MESSAGE
P21	X -	Walk	Litchford, Walk sign is on to cross Litchford.
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Litchford.
P22	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Litchford.
P61, P62	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Litchford.
P81	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Falls of Neuse.
P82	- X	Walk	Falls of Neuse, Walk sign is on to cross Falls of Neuse
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Falls of Neuse.
P91	- X	Walk	(Percussive Tone)
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Litchford Ramp.
P92	- X	Walk	Litchford, Walk sign is on to cross Litchford Ramp.
	X -	Flashing Don't Walk / Don't Walk	Wait, Wait to cross Litchford Ramp.

LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	ASSIGNED PHASE	DETECTOR PROGRAMMING													
							TIMING		OPERATION MODE							SYSTEM LOOPS		STATUS		
							DELAY	EXTEND (STRETCH)	VEHICLE	PEDESTRIAN	1 CALL	STOP A	STOP B	PROTECT LEFT	PROTECT THROUGH	AND	SWITCH	NEW	EXISTING	
1A	6X40	2-4-2	0	X	-	1	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
1B	6X40	2-4-2	0	X	-	1	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
2A	6X6	6X6	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
2B	6X6	6X6	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
2C	6X6	6X6	300	X	-	2	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
3A	6X40	2-4-2	0	X	-	3	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
3B	6X40	2-4-2	0	X	-	3	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4A	6X40	2-4-2	0	-	X	4	3 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4B	6X40	2-4-2	0	-	X	4	10 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
4C	6X30	2-4-2	0	-	X	4	15 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
5A	6X40	2-4-2	0	X	-	5	5 SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
6A	6X6	6X6	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
6B	6X6	6X6	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
6C	6X6	6X6	300	X	-	6	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-
8A	6X40	6X6	0	X	-	8	- SEC.	- SEC.	X	-	-	-	-	-	-	-	-	-	X	-

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.
- Phase 3 may be lagged.
- Set all detector units to presence mode.
- Omit phase 9 and sign D with no pedestrian calls.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- This intersection features accessible pedestrian signals utilizing percussive tone walk indications and/or speech messages.
- Phase 9 and phase 2 or 4 pedestrian timing is designed as a 2 stage crossing when crossing the median island. The FDW time shown is only intended to get a pedestrian to/from the island during a single crossing. Install R10-3d signs as appropriate.
- Illuminate sign D at the beginning of the Ped 9 "Walk" interval. This sign will remain illuminated until the end of the Ped 9 Flashing "Don't Walk" interval.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

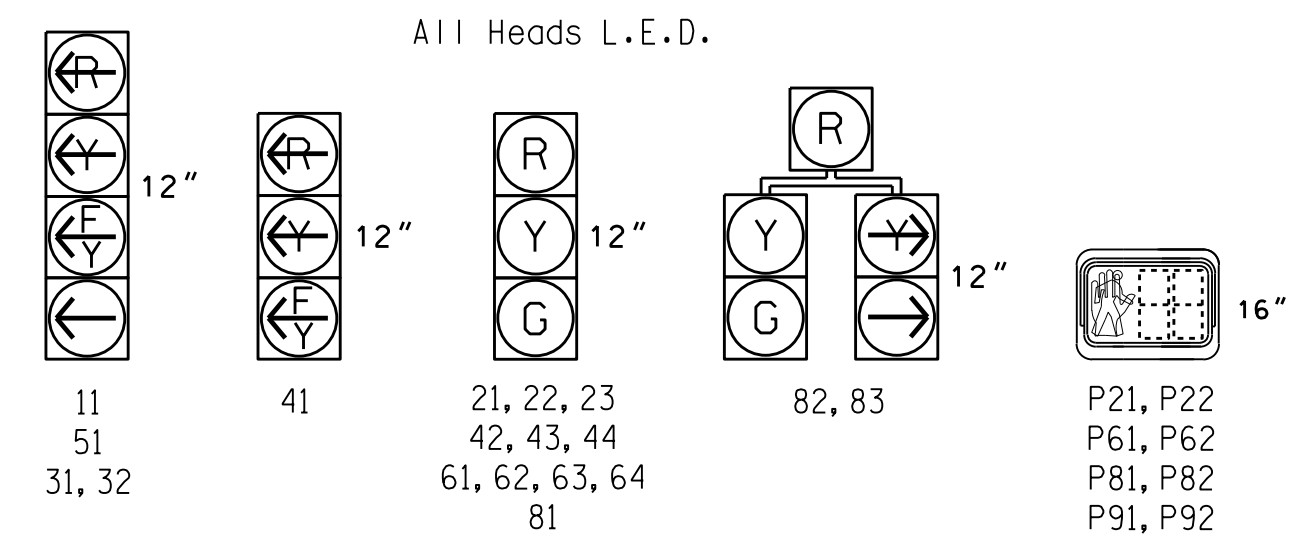


PROPOSED	EXISTING
	N/A
	N/A
	N/A

FEATURE	SE-PAC 2070 TIMING CHART							
	1	2	3	4	5	6	8	9
Min Green *	7	12	7	7	7	12	7	7
Passage Gap *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Maximum Green *	15	90	40	20	20	90	30	10
Yellow Change	3.0	4.6	3.0	4.7	3.0	4.6	4.7	4.6
Red Clear	3.3	2.0	3.3	2.4	3.3	2.0	2.4	2.0
Advance Walk *	-	4	-	-	-	4	4	-
Walk *	-	7	-	-	-	7	7	4
Pedestrian Clear	-	15	-	-	-	25	22	4
Added Initial *	-	1.0	-	-	-	1.0	-	-
Maximum 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	NON-LOCK	LOCK	NON-LOCK	NON-LOCK	NON-LOCK	LOCK	NON-LOCK	NON-LOCK
Dual Entry	-	-	-	ON	-	-	ON	-
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.

SIGNAL FACE I.D.



Signal Upgrade - Final Design (Sheet 1 of 2)

750 N. Greenfield Pkwy, Garner, NC 27529

SR 2000 (Falls of Neuse Rd.)
at
SR 2012 (Litchford Rd.)

Division 5 Wake County Raleigh

PLAN DATE: January 2023 REVIEWED BY: J.A. Lohr

PREPARED BY: J.A. Lohr REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

01/03/2023

SIG. INVENTORY NO. 05-1156

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