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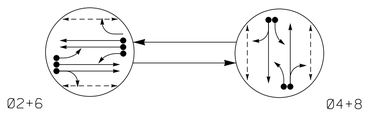
PROJECT REFERENCE NO.	SHEET NO.
I-5878	SIG-2.0

PHASING DIAGRAM

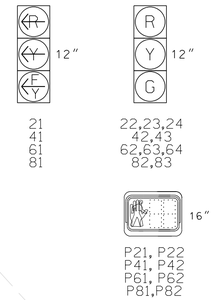


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
2A	6X6	70	4	X	2	Yes	-	-	-	N	-	X
2B	6X6	70	4	X	2	Yes	-	-	-	N	-	X
2C	6X40	0	2-4-2	X	2	Yes	-	3	-	N	-	X
4A	6X40	0	2-4-2	X	4	Yes	-	3	-	N	-	X
4B	6X40	0	2-4-2	X	4	Yes	-	10	-	N	-	X
6A	6X6	70	4	X	6	Yes	-	-	-	N	-	X
6B	6X6	70	4	X	6	Yes	-	-	-	N	-	X
6C	6X40	0	2-4-2	X	6	Yes	-	3	-	N	-	X
8A	6X40	0	2-4-2	X	8	Yes	-	3	-	N	-	X
8B	6X40	0	2-4-2	X	8	Yes	-	10	-	N	-	X

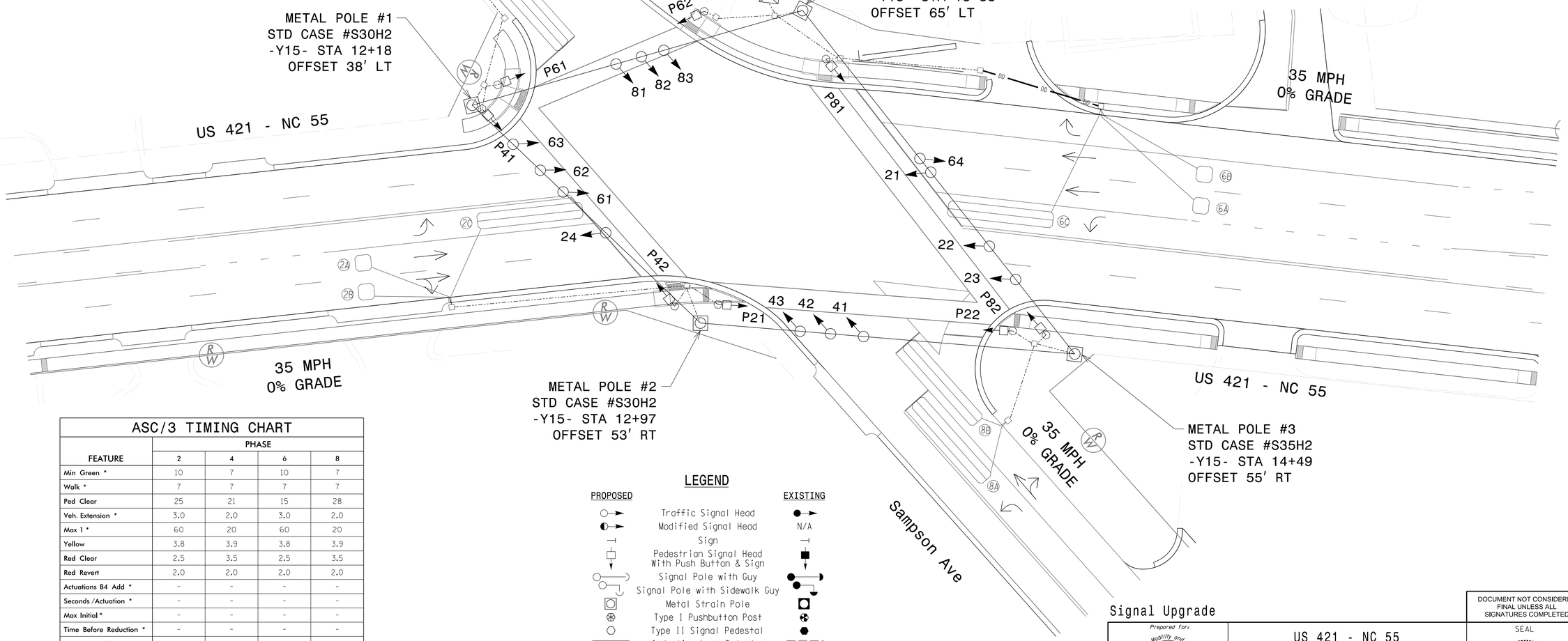
TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	PHASE Ø4+8	PHASE FLASH
21	~~F Y~~	~~R~~	~~Y~~
22,23,24	G	R	Y
41	~~R~~	~~F Y~~	~~R~~
42,43	R	G	R
61	~~F Y~~	~~R~~	~~Y~~
62,63,64	G	R	Y
81	~~R~~	~~F Y~~	~~R~~
82,83	R	G	R
P21,P22	W	DW	DRK
P41,P42	DW	W	DRK
P61,P62	W	DW	DRK
P81,P82	DW	W	DRK

2 Phase
Fully Actuated
Signal System #D06-02 Dunn
US 421-NC 55 (Dunn)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "DON'T WALK" time only.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values superseded these values.



ASC/3 TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green *	10	7	10	7
Walk *	7	7	7	7
Ped Clear	25	21	15	28
Veh. Extension *	3.0	2.0	3.0	2.0
Max 1 *	60	20	60	20
Yellow	3.8	3.9	3.8	3.9
Red Clear	2.5	3.5	2.5	3.5
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	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Type I Pushbutton Post	
	Type II Signal Pedestal	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
	Directional Arrow	
N/A	Wheelchair Ramp	

Signal Upgrade

Prepared for: Transportation Mobility and Safety Division, Signal Design Section, Department of Transportation, State of North Carolina

750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 20 — 1" = 20'

US 421 - NC 55
at
Sampson Ave

Division 6 Harnett County Dunn

PLAN DATE: March 2021 REVIEWED BY: A Donald
PREPARED BY: K M Cory REVIEWED BY:

REVISIONS	INIT.	DATE

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SEAL
NORTH CAROLINA PROFESSIONAL SEAL 038970 ENGINEER KELLY M. CORY

DocuSigned by: Kelly M Cory 4/26/2021
ENGINEER'S SIGNATURE DATE

SIG. INVENTORY NO. 06-0215

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