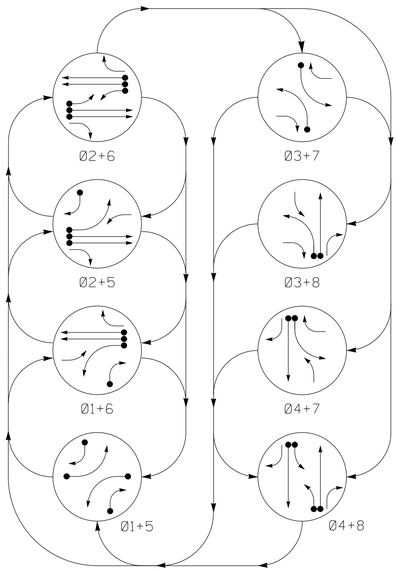
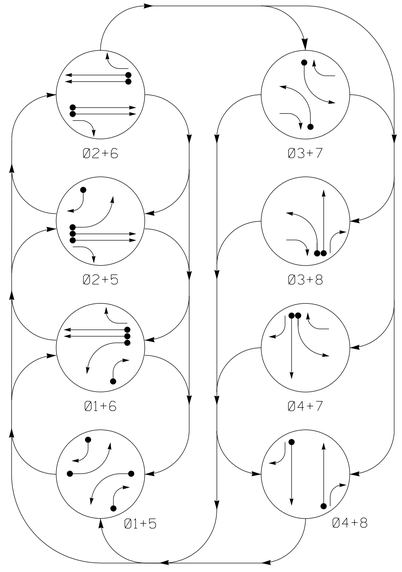
PROJECT REFERENCE NO.	SHEET NO.
U-2581BA	Sig.4.0

8 Phase Fully Actuated (Isolated)

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+05	01+06	02+05	02+06	03+07	03+08	04+07	04+08	FLASH
11	←	←	F Y	F Y	R	R	R	R	Y
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R →	R ↘	R	R	Y
31	R	R	R	R	←	←	F Y	F Y	R
41	R	R	R	R	R	R	G	G	R
42	R ↘	R	R ↘	R	R	R	G	G	R
51	←	F Y	←	F Y	R	R	R	R	Y
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R ↘	R	R ↘	R	Y
71	R	R	R	R	←	F Y	←	F Y	R
81	R	R	R	R	R	G	R	G	R
82	R ↘	R ↘	R	R	R	G	R	G	R

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+05	01+06	02+05	02+06	03+07	03+08	04+07	04+08	FLASH
11	←	←	R	R	R	R	R	R	Y
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R ↘	R ↘	R	R	Y
31	R	R	R	R	←	←	R	R	R
41	R	R	R	R	R	R	G	G	R
42	R ↘	R	R ↘	R	R	R	G	G	R
51	←	R	←	R	R	R	R	R	Y
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R ↘	R	R ↘	R	Y
71	R	R	R	R	←	R	←	R	R
81	R	R	R	R	R	G	R	G	R
82	R ↘	R ↘	R	R	R	G	R	G	R

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
1A	6X40	0	2-4-2	X	1	Yes	-	15*	-	S	-	X
					6#	Yes	-	3	-	G	-	X
1B	6X40	0	2-4-2	X	1	Yes	-	15	-	S	-	X
2A	6X6	300	6	X	2	Yes	-	-	X	N	-	X
2B	6X6	300	6	X	2	Yes	-	-	X	N	-	X
3A	6X40	0	2-4-2	X	3	Yes	-	15*	-	S	-	X
					8#	Yes	-	3	-	S	-	X
4A	6X40	0	2-4-2	X	4	Yes	-	-	-	S	-	X
5A	6X40	0	2-4-2	X	5	Yes	-	15*	-	S	-	X
					2#	Yes	-	3	-	G	-	X
5B	6X40	0	2-4-2	X	5	Yes	-	15	-	S	-	X
6A	6X6	300	4	X	6	Yes	-	-	X	N	-	X
6B	6X6	300	4	X	6	Yes	-	-	X	N	-	X
7A	6X40	0	2-4-2	X	7	Yes	-	15*	-	S	-	X
					4#	Yes	-	3	-	S	-	X
8A	6X40	0	2-4-2	X	8	Yes	-	-	-	S	-	X

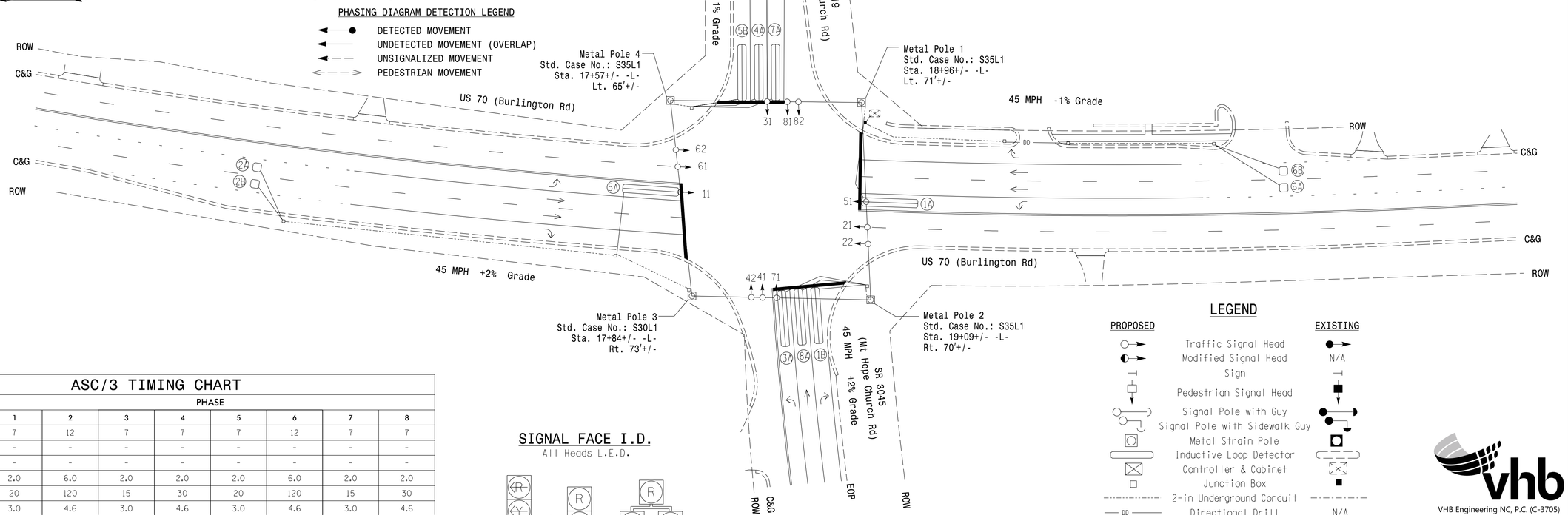
* Reduce delay to 3 seconds during Alternate Phasing Operation.
\# Disable phase call for loop(s) during Alternate Phasing Operation.

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. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all detector units to presence mode.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.

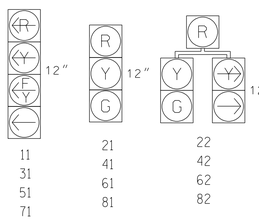
PHASING DIAGRAM DETECTION LEGEND

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



SIGNAL FACE I.D.

All Heads L.E.D.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
	Directional Arrow	

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green *	7	12	7	7	7	12	7	7
Walk *	-	-	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	120	15	30	20	120	15	30
Yellow	3.0	4.6	3.0	4.6	3.0	4.6	3.0	4.6
Red Clear	2.8	1.8	2.9	1.7	3.1	1.8	3.1	1.7
Actuations B4 Add *	-	-	-	-	-	-	-	-
Seconds /Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	34	-	-	-	34	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	60	-	-	-	60	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH RECALL	-	-	-	VEH RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X
Simultaneous Gap	X	X	X	X	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.

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Signal Upgrade-Final Design

Prepared for the Offices of:
Transportation Mobility and Safety Division
NCDEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

US 70 (Burlington Rd) at SR 3045/2819 (Mt Hope Church Rd)

Division 7 Guilford County Greensboro

PLAN DATE: September 2019 REVIEWED BY: M. Stygles
PREPARED BY: J. Ma REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 033108 ENGINEER JIANXIN MA

DocuSigned by: Jianxin Ma 827E1955D81444C... SIGNATURE
10/16/2019 DATE

SIG. INVENTORY NO. 07-0204

38656.04