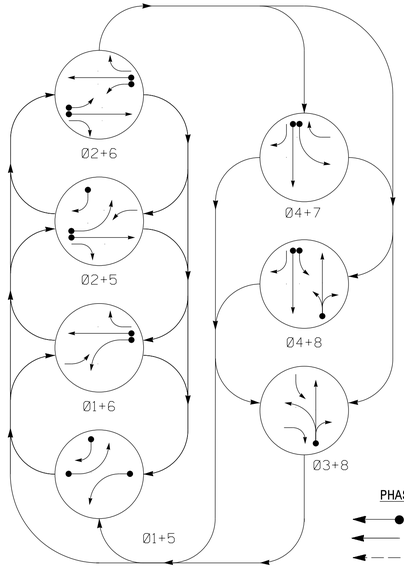
PROJECT REFERENCE NO.	SHEET NO.
U-2581BA	Sig.3.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

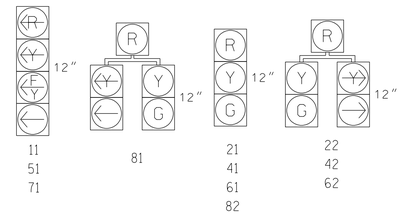
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+7	04+8	03+8	FLASH
11	←	←	F.Y.	F.Y.	R	R	R	Y
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R→	Y
41	R	R	R	R	G	G	R	R
42	R→	R	R→	R	G	G	R	R
51	←	F.Y.	←	F.Y.	R	R	R	Y
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R→	R	R	Y
71	R	R	R	R	←	F.Y.	F.Y.	R
81	R	R	R	R	R	G	G→	R
82	R	R	R	R	R	G	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

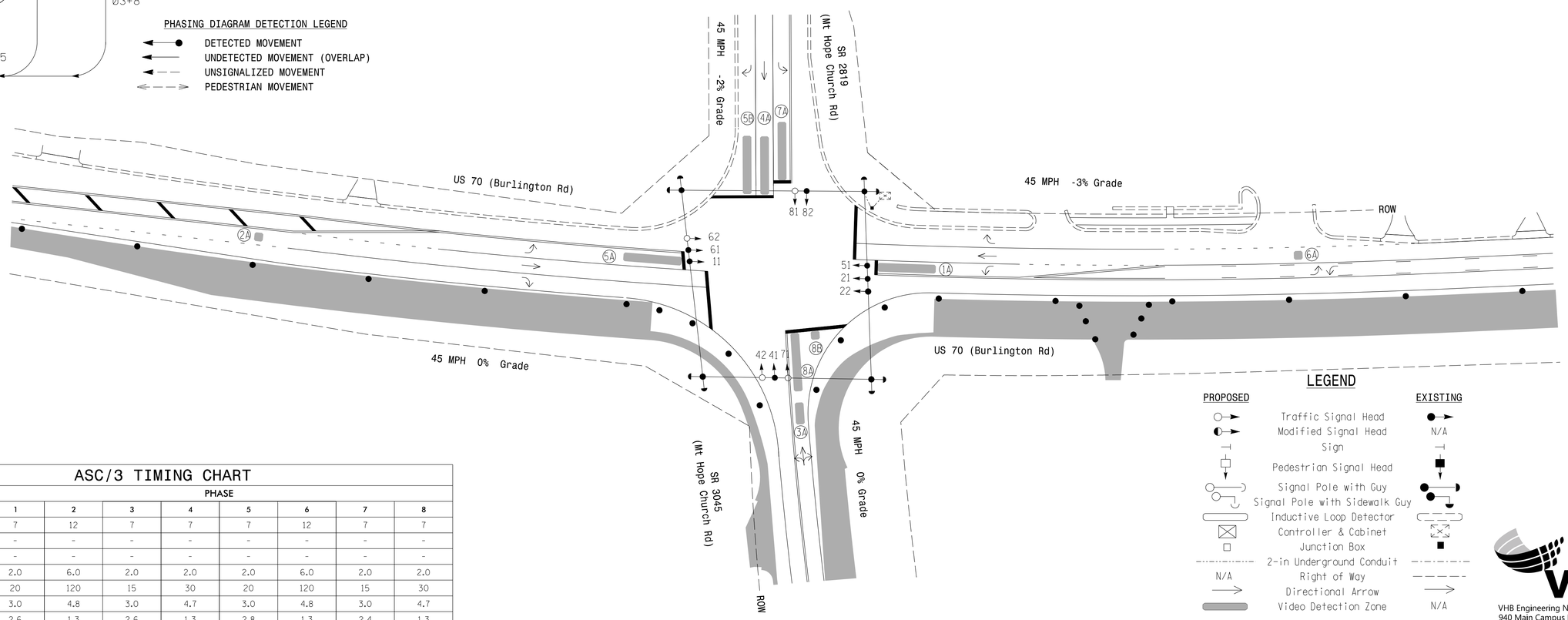
DETECTOR ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A✳	6X40	0	✳	✳	1	Yes	-	15	-	S	-	-
					6	Yes	-	3	-	G	-	-
2A✳	6X6	300	✳	✳	2	Yes	-	-	X	N	-	-
3A✳	6X15	0	✳	✳	3	Yes	-	5	-	S	-	-
4A✳	6X40	0	✳	✳	4	Yes	-	-	-	S	-	-
5A✳	6X40	0	✳	✳	5	Yes	-	15	-	S	-	-
					2	Yes	-	3	-	G	-	-
5B✳	6X40	0	✳	✳	5	Yes	-	15	-	S	-	-
6A✳	6X6	300	✳	✳	6	Yes	-	-	X	N	-	-
7A✳	6X40	0	✳	✳	7	Yes	-	15	-	S	-	-
					4	Yes	-	3	-	S	-	-
8A✳	6X40	0	✳	✳	8	Yes	-	5	-	S	-	-
8B✳	6X6	0	✳	✳	8	Yes	-	15	-	S	-	-

✳ Video Detection Zone

7 Phase Fully Actuated (Isolated)

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. Omit phase 7 during phase 8 on.
5. Phase 3 and phase 7 shall not operate simultaneously.
6. Set all detector units to presence mode.
7. Reposition all existing signal heads.
8. Incorporate Video Detection system for vehicle detection.
9. Provide the Engineer with the Manufacturer's approved Video Detection locations and mounting heights to obtain detection zones as shown.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
	Video Detection Zone	N/A
	Construction Zone	N/A
	Construction Zone Drum	N/A

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	4.8	3.0	4.7	3.0	4.8	3.0	4.7
Red Clear	2.6	1.3	2.6	1.3	2.8	1.3	2.4	1.3
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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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade-Temporary Design 2 (TMP Phase II)

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
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

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 033108 ENGINEER JIANXIN MA

DocuSigned by: Jianxin Ma 9/9/2019
SIGNATURE DATE

SIG. INVENTORY NO. 07-0204T2

38656.04