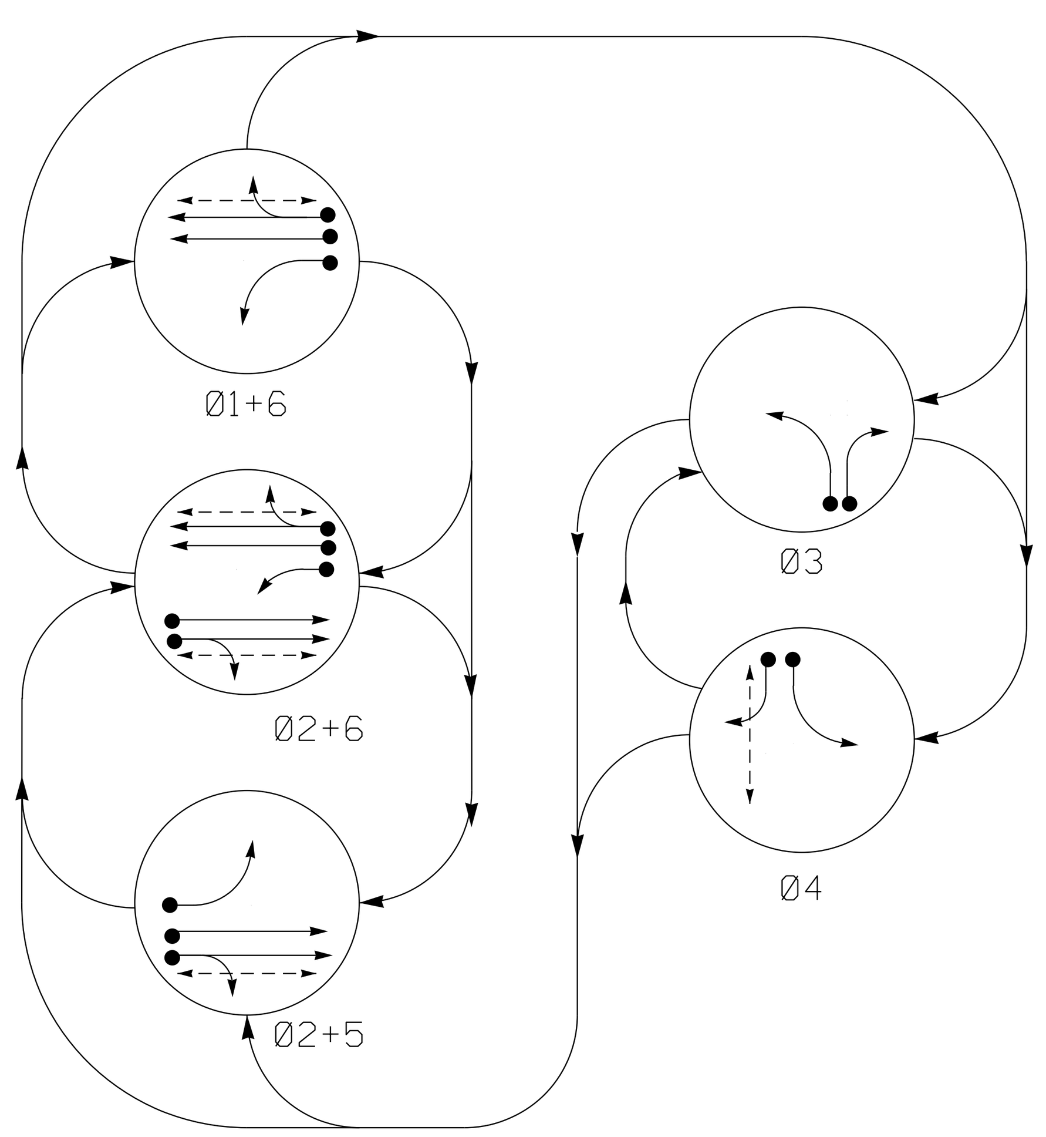
5 Phase Fully Actuated (Elizabeth City Signal System)

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

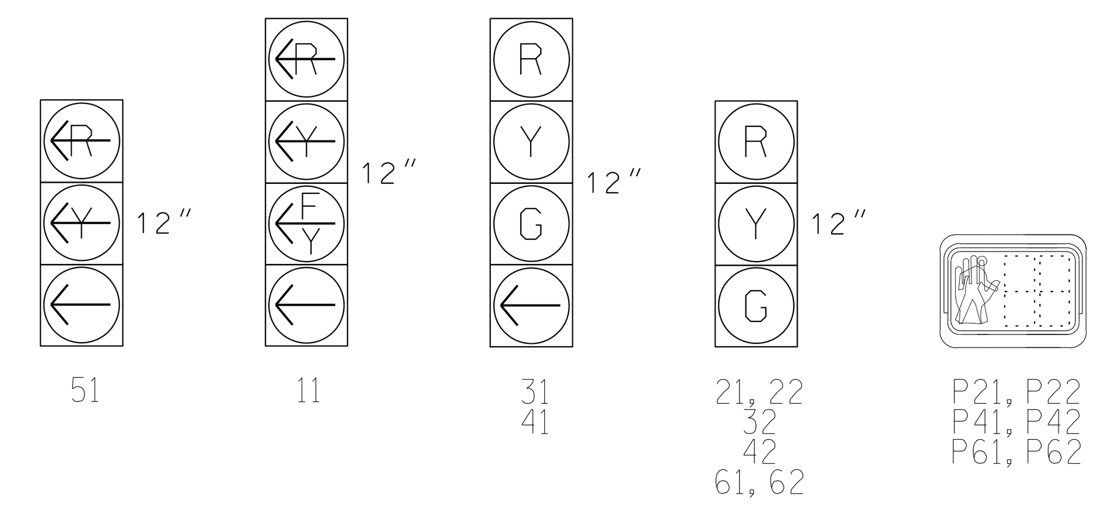
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+5	Ø2+6	Ø1+6	Ø3	Ø4	FLASH
11	←R	←F/Y	←	←R	←R	←Y
21, 22	G	G	R	R	R	Y
31	R	R	R	G/←	R	R
32	R	R	R	G	R	R
41	R	R	R	R	G/←	R
42	R	R	R	R	G	R
51	←	←R	←R	←R	←R	←R
61, 62	R	G	G	R	R	Y
P21, P22	W	W	DW	DW	DW	DRK
P41, P42	DW	DW	DW	DW	W	DRK
P61, P62	DW	W	W	DW	DW	DRK

SIGNAL FACE I.D.

All Heads L.E.D.

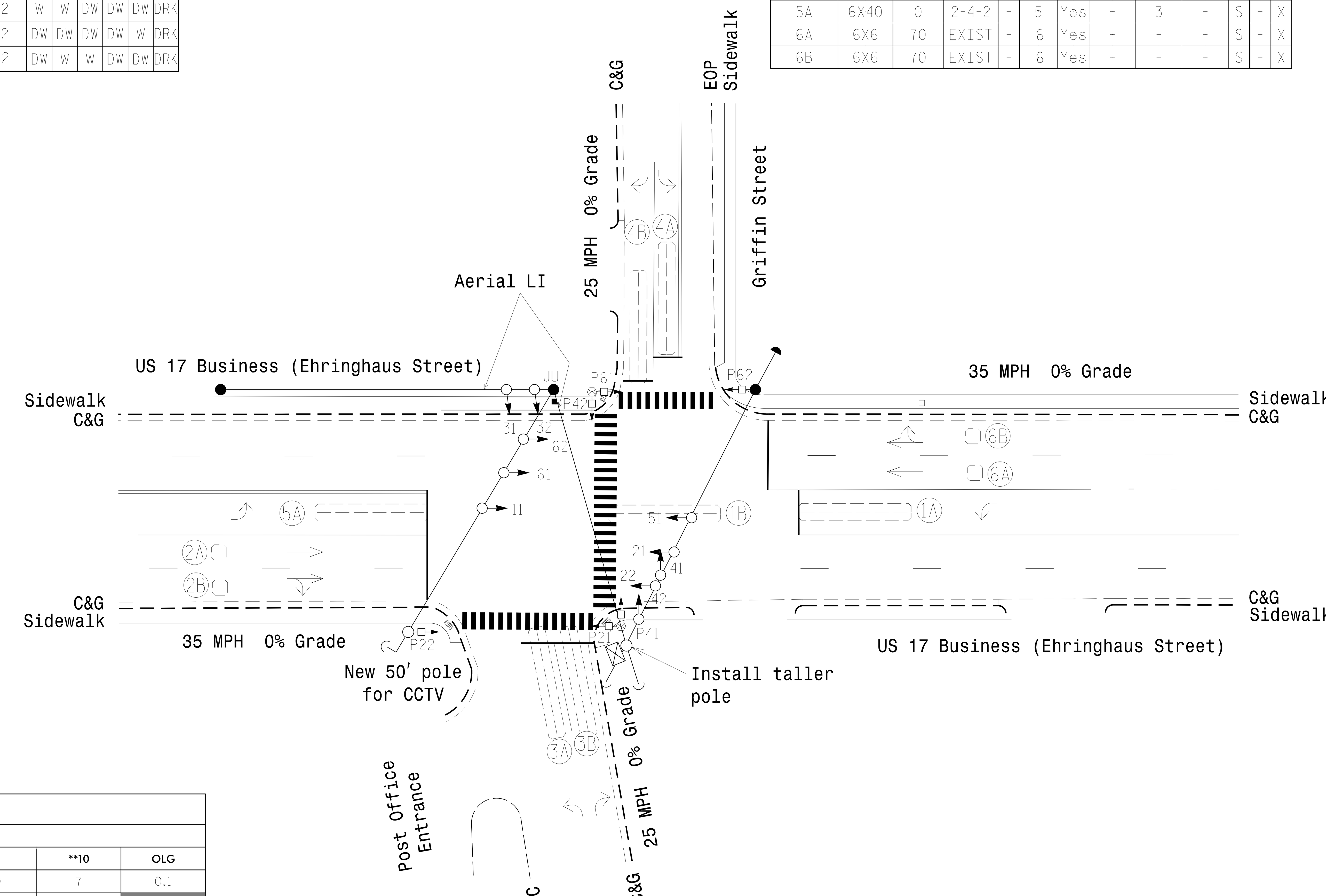


ASC/3 DETECTOR INSTALLATION CHART

DETECTOR LOOP	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	2-4-2	-	1	Yes	-	15	-	S	-	X
				-	6	Yes	-	-	-	S	-	X
1B	6X40	+67	2-4-2	-	1	Yes	-	5	-	G	-	X
2A	6X6	70	EXIST	-	2	Yes	-	-	-	S	-	X
2B	6X6	70	EXIST	-	2	Yes	-	-	-	S	-	X
3A	6X40	+5	2-4-2	-	3/10	Yes	-	3	-	S	-	X
3B	6X40	+5	2-4-2	-	3/10	Yes	-	10	-	S	-	X
4A	6X40	0	2-4-2	-	4	Yes	-	3	-	S	-	X
4B	6X40	+3	2-4-2	-	4	Yes	-	10	-	S	-	X
5A	6X40	0	2-4-2	-	5	Yes	-	3	-	S	-	X
6A	6X6	70	EXIST	-	6	Yes	-	-	-	S	-	X
6B	6X6	70	EXIST	-	6	Yes	-	-	-	S	-	X

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. Enable Backup Prevent to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
4. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Pedestrian pedestals are conceptual and shown for reference only. See sheets P1-P3 for pushbutton location details.
9. Pavement markings are existing except where noted on plan.
10. Repaint stopbars for approaches 2 and 6. Repaint double yellow line and lane line for phase 4 approach as shown on plan.
11. Install new poles directly adjacent to existing poles and raise signal spans to obtain 17' minimum clearance.
12. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type I Pushbutton Post	
	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	
N/A	Truncated Dome	

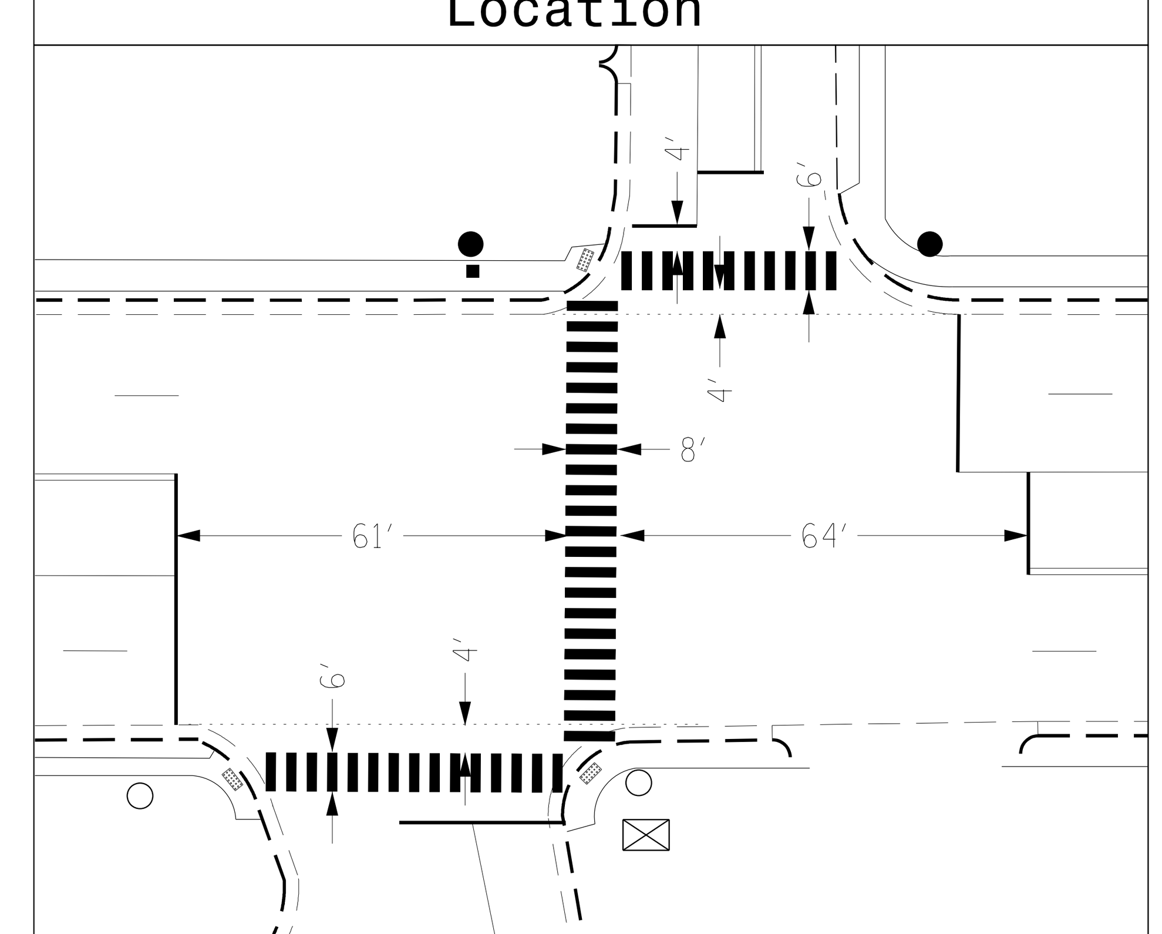
ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	**10	OLG
Min Green *	7	10	7	7	7	10	7	0.1
Delayed Green *	-	-	-	7	-	-	-	
Walk *	-	7	-	7	-	7	-	
Ped Clear	-	11	-	18	-	8	-	
Veh. Extension *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	
Max 1 *	15	60	25	20	15	60	25	
Yellow	3.0	3.8	3.0	3.0	3.0	3.8	3.0	3.0
Red Clear	3.4	2.6	2.4	2.3	3.3	2.6	2.4	2.4
Red Revert	2.0	2.0	2.0	2.0	2.0	5.0	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	-	-	-	-	-	-	-	
Simultaneous Gap	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.

** Phase used for timing purposes only.

Proposed Stopbar & Crosswalk Location



Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of: Transportation Mobility and Safety Division, Signal Design Section

750 N.Greenfield Pkwy,Garner,NC 27529

Plans Prepared By: DRMP

DRMP, Inc. 8000 Regency Parkway, Suite 175 Cary, NC 27518 NC License No. C-2213 (919) 650-1038

SCALE 0 30 1"=30'

US 17 Bus. (Ehringhaus Street) at Griffin Street/ Post Office Entrance

Division 1 Pasquotank County Elizabeth City

PLAN DATE:	March 2018	REVIEWED BY:	AJ Davis
PREPARED BY:	JA Le	REVIEWED BY:	LM Moon

REVISIONS	INIT.	DATE

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 022516 LISA M. MOON

DocuSigned by: Lisa M. Moon 8/21/2018

DATE

SIG. INVENTORY NO. 01-0519