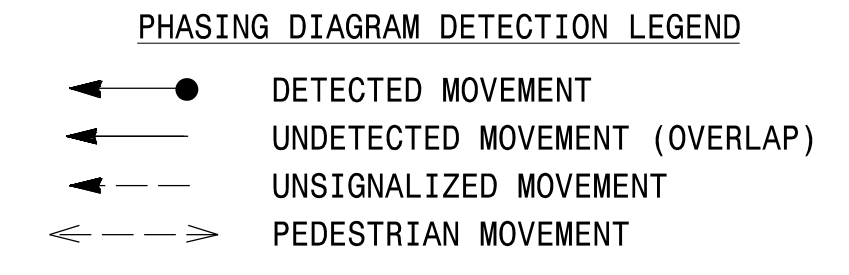
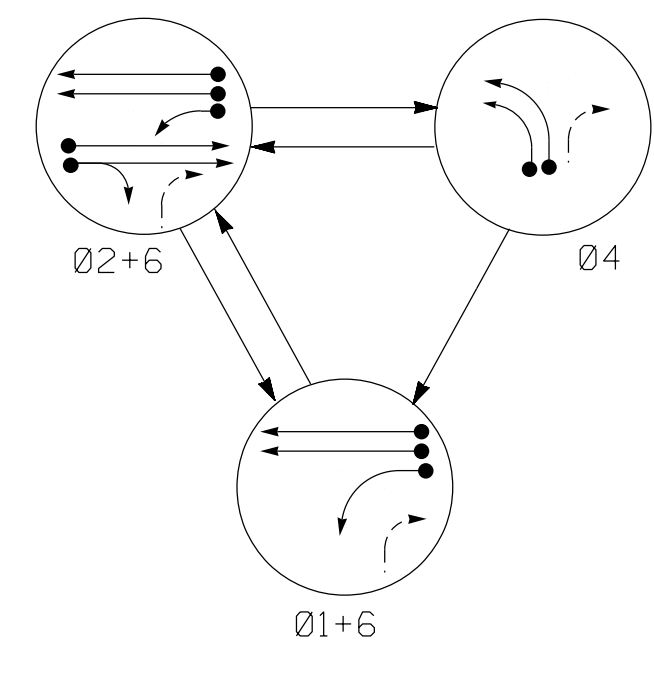


PHASING DIAGRAM



EV PREEMPT PHASES

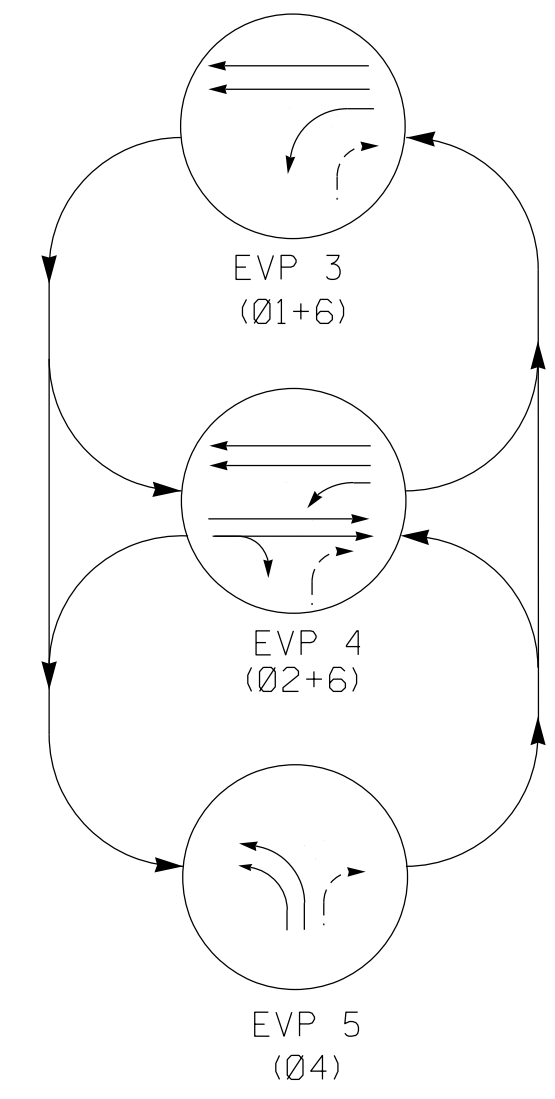
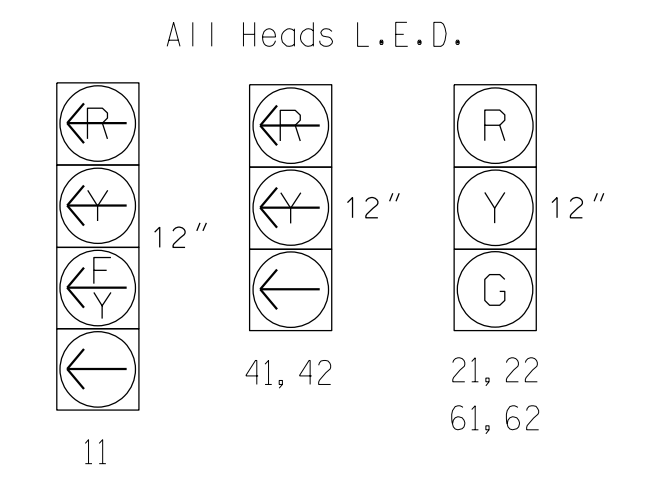


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+6	02+6	04	EVP 3	EVP 4	EVP 5	LEFT	RIGHT
11	←	←	←	←	←	←	←	←
21, 22	R	G	R	R	G	R	Y	
41, 42	←	←	←	←	←	←	←	←
61, 62	G	G	R	G	G	R	Y	

SIGNAL FACE I.D.



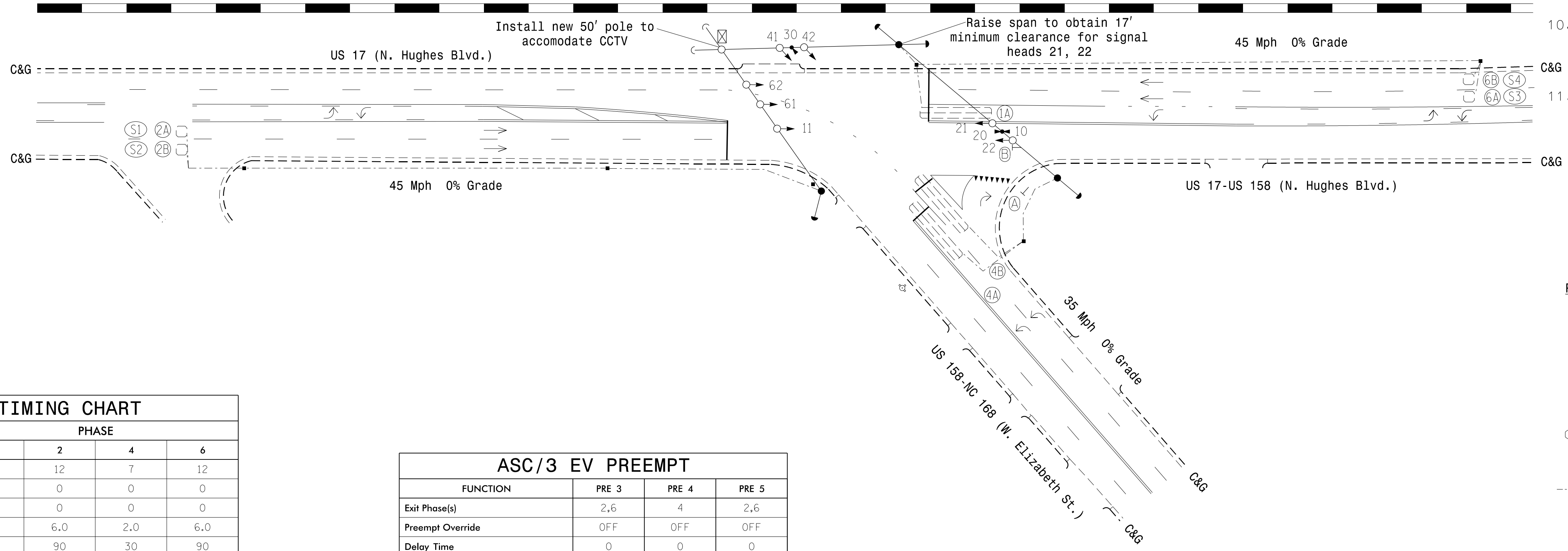
ASC/3 DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	LOOP	NEW CARD
1A	6X40	+5	2-4-2	-	1	Yes	-	15	-	S	-	X
					6	Yes	-	3	-	G	-	X
2A/S1	6X6	300	EXIST	-	2	Yes	-	-	X	N	X	X
2B/S2	6X6	300	EXIST	-	2	Yes	-	-	X	N	X	X
4A	6X40	+5	2-4-2	-	4	Yes	-	3	-	S	-	X
4B	6X40	+5	2-4-2	-	4	Yes	-	-	-	S	-	X
6A/S3	6X6	300	EXIST	-	6	Yes	-	-	X	N	X	X
6B/S4	6X6	300	EXIST	-	6	Yes	-	-	X	N	X	X

3 Phase Fully Actuated w/ EV Preemption (Elizabeth City Signal System)

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.
- Set all detector units to presence mode.
- Phase 1 may be logged.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- Optical detector 10 calls EVP 3: Optical detector 20 calls EVP 4: Optical detector 30 calls EVP 5:
- Install new pole directly adjacent to existing pole and raise signal spans to obtain 17' minimum clearance for signal head heights.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Remove existing "Left Turn Yield on Green" ball sign(s)-(R10-12).



ASC/3 TIMING CHART

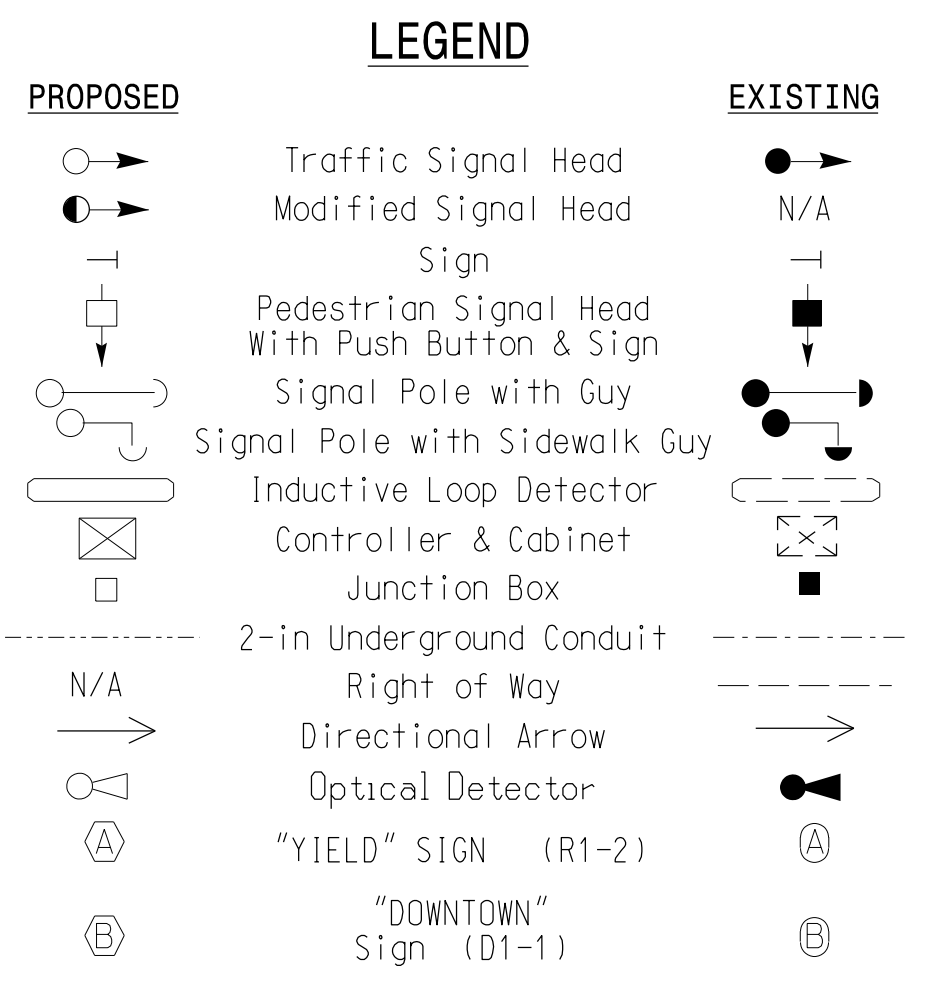
FEATURE	PHASE			
	1	2	4	6
Min Green *	7	12	7	12
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	2.0	6.0	2.0	6.0
Max 1 *	30	90	30	90
Yellow	3.0	4.5	3.0	4.5
Red Clear	1.8	1.8	3.6	1.8
Actuations B4 Add *	-	0	-	0
Seconds /Actuation *	-	1.5	-	1.5
Max Initial *	-	34	-	34
Time Before Reduction *	-	15	-	15
Time To Reduce *	-	30	-	30
Minimum Gap	-	3.0	-	3.0
Locking Detector	-	X	-	X
Recall Position	-	VEH RECALL	-	VEH RECALL
Dual Entry	-	-	-	-
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.

ASC/3 EV PREEMPT

FUNCTION	PRE 3	PRE 4	PRE 5
Exit Phase(s)	2,6	4	2,6
Preempt Override	OFF	OFF	OFF
Delay Time	0	0	0
Ped Clear Through Yellow	N	N	N
Terminate Phases	N	N	N
Entrance Walk	255*	255*	255*
Entrance Ped Clear	255*	255*	255*
Entrance Min Green	1	1	1
Entrance Yellow Change	25.5*	25.5*	25.5*
Entrance Red Clear	25.5*	25.5*	25.5*
Minimum Dwell Time	12	12	7
Preempt Input Extension Time	2	2	2
Preempt Max Time	120	120	120
Exit Yellow Change	25.5*	25.5*	25.5*
Exit Red Clear	25.5*	25.5*	25.5*

* Allows normal phase times to be used.



Signal Upgrade

Prepared For the Offices of:

US 17-US 158 (N. Hughes Blvd.) at US 158-NC 168 (W. Elizabeth St.)

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

SCALE: 0 40' 1"=40'

DRMP, Inc. 8000 Regency Parkway, Suite 175 Cary, NC 27518 NC License No. C-2215 (919) 650-1038

Seal of the State of North Carolina Professional Engineer License No. 022516 Lisa M. Moon

DocuSigned by: Lisa M. Moon 8/22/2018

SIG. INVENTORY NO. 01-0020

22-AUG-2018 08:29 R:\05942\5\0001\5\0001\0001\0001-0020.dgn DWI:TB AT CAR-DWH:TE-LTW