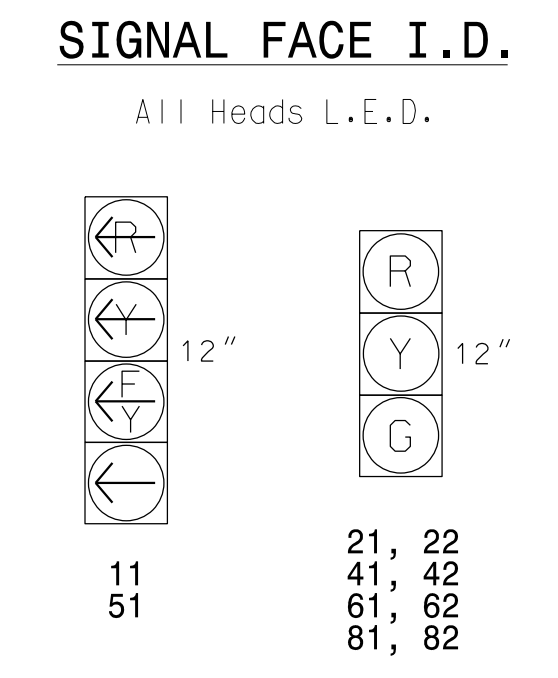
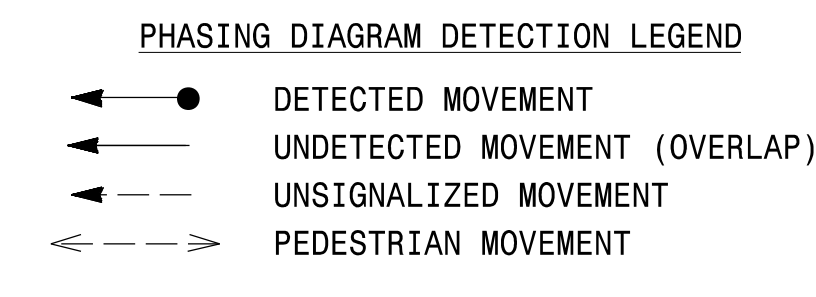


SIGNAL FACE	PHASE					
	Ø 1 + 6	Ø 2 + 6	Ø 4 + 8	EVP 3	EVP 5	F L S H
11	F	F	R	R	F	F
21, 22	R	G	R	R	G	Y
41, 42	R	R	G	R	R	R
51	F	F	R	F	F	F
61, 62	G	G	R	G	R	Y
81, 82	R	R	G	R	R	R



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	+5	2-4-2	-	1	Yes	-	15	-	S	-	X
2A/S1	6X6	300	EXIST	-	2	Yes	-	-	X	N	X	X
2B/S2	6X6	300	EXIST	-	2	Yes	-	-	X	N	X	X
2C	6X40	0	2-4-2	X	2	Yes	-	3	-	G	-	X
4A	6X20	+5	*	-	4	Yes	-	5	-	S	-	X
6A/S3	6X6	300	EXIST	-	6	Yes	-	-	X	N	X	X
6B/S4	6X6	300	EXIST	-	6	Yes	-	-	X	N	X	X
8A	6X30	0	*	-	8	Yes	-	5	-	S	-	X
8B	6X20	+5	*	-	8	Yes	-	15	-	S	-	X

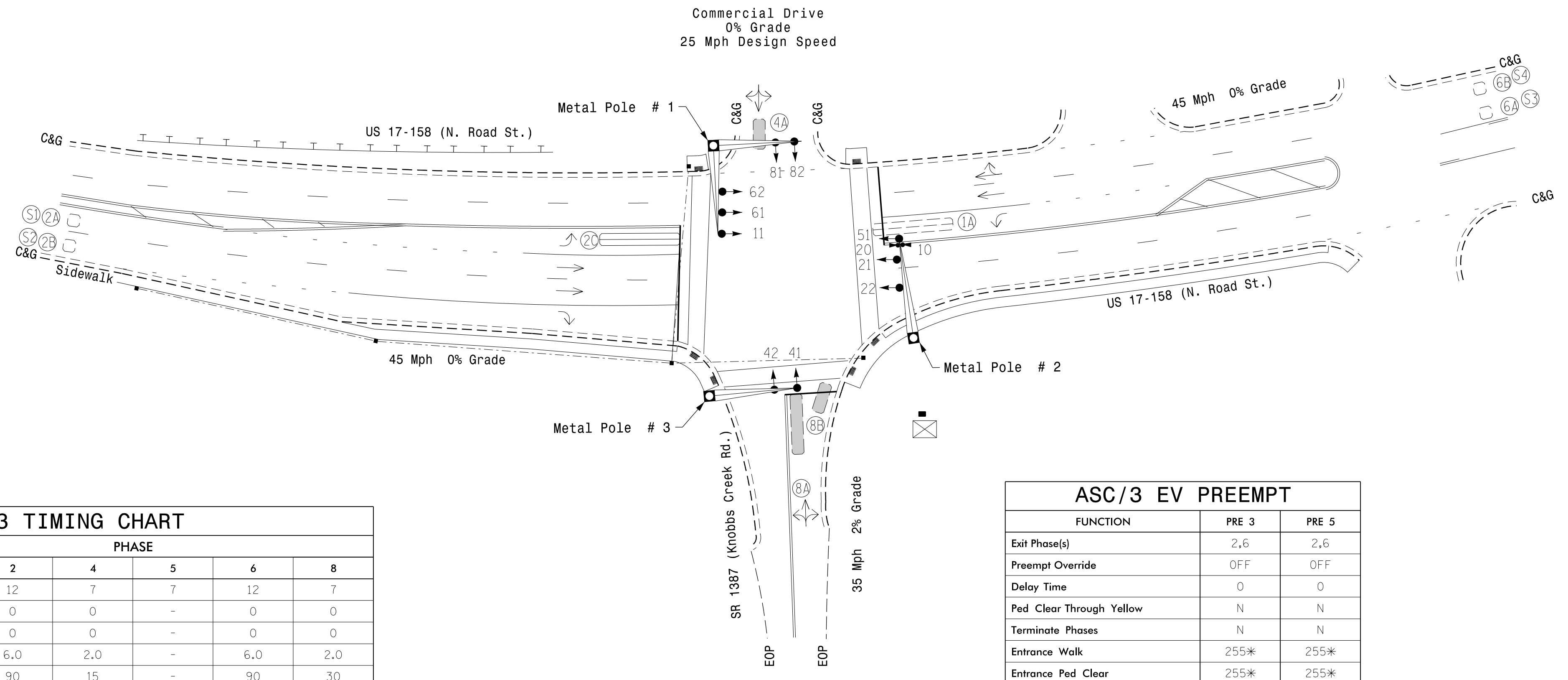
* Wireless Detection Zone



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.
- Phase 1 may be lagged.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
- Relocate existing optical detection equipment from existing cabinet to new cabinet.
- Optical detector 10 calls EVP3; Optical detector 20 calls EVP5.
- Relocate existing wireless detection from existing cabinet to new cabinet.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

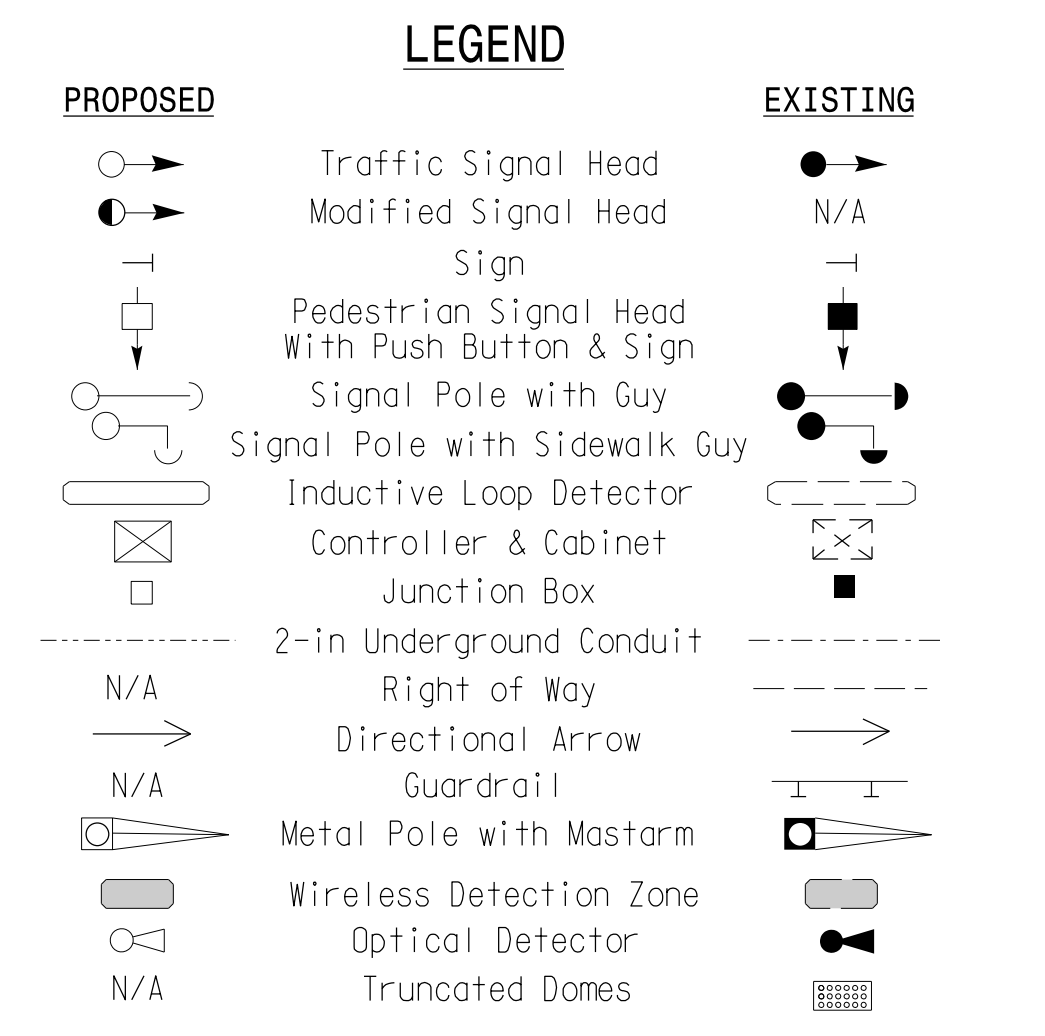


ASC/3 TIMING CHART						
FEATURE	PHASE					
	1	2	4	5	6	8
Min Green *	7	12	7	7	12	7
Walk *	0	0	0	-	0	0
Ped Clear	0	0	0	-	0	0
Veh. Extension *	2.0	6.0	2.0	-	6.0	2.0
Max 1 *	20	90	15	-	90	30
Yellow	3.0	4.5	3.2	3.0	4.5	3.7
Red Clear	2.6	1.6	2.6	2.3	1.6	2.6
Actuations B4 Add *	-	0	-	-	0	-
Seconds / Actuation *	-	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	-	-	X	-	-	X
Simultaneous Gap	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.

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

* Allows normal phase times to be used.



Signal Upgrade

Prepared for the Offices of:

US 17-158 (N. Road Street) at SR 1387 (Knobbs Creek Road)/ Commercial Drive

Division 1 Pasquotank County Elizabeth City

PLAN DATE: March 2018 REVIEWED BY: AJ Davis

PREPARED BY: JA Le REVIEWED BY: LJ Moon

REVISIONS: INIT. DATE

Seal: NORTH CAROLINA PROFESSIONAL ENGINEER LISA M. MOON SEAL 022516

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

SIG. INVENTORY NO. 01-0404

Plans Prepared By:

DRMP, Inc.
8000 Regency Parkway, Suite 175
Cary, NC 27519
NC License No. C-2213 (919) 650-1038

21-AUG-2018 17:26
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