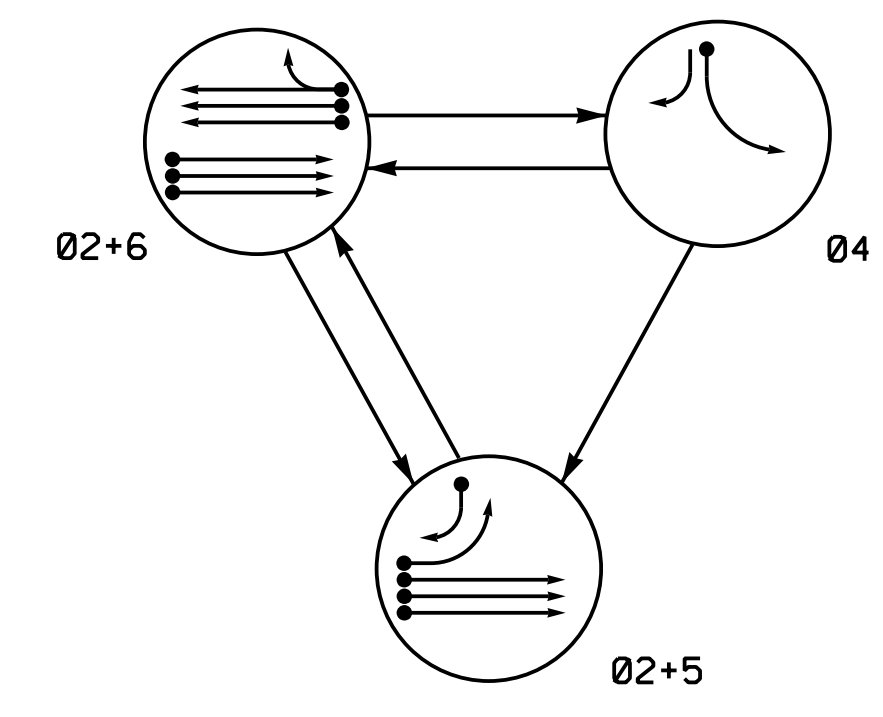


PHASING DIAGRAM



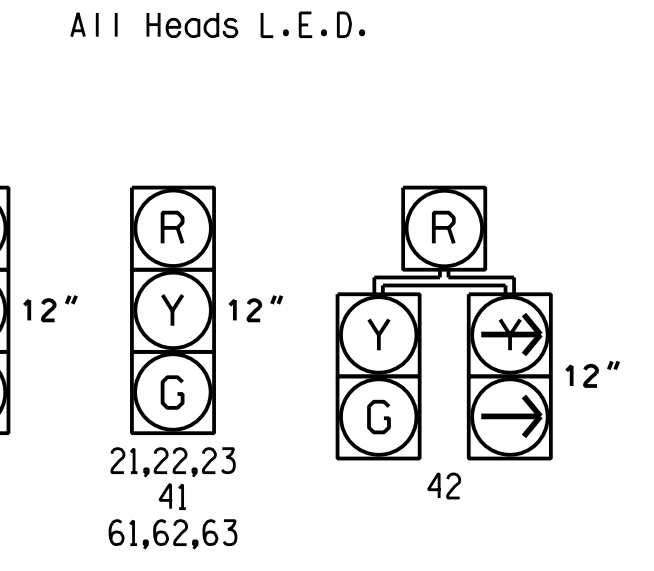
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02+5	02+6	04	FLASH
21,22,23	G	G	R	Y
41	R	R	G	R
42	R	R	G	R
51	-	-R	-R	-R
61,62,63	R	G	R	Y

SIGNAL FACE I.D.



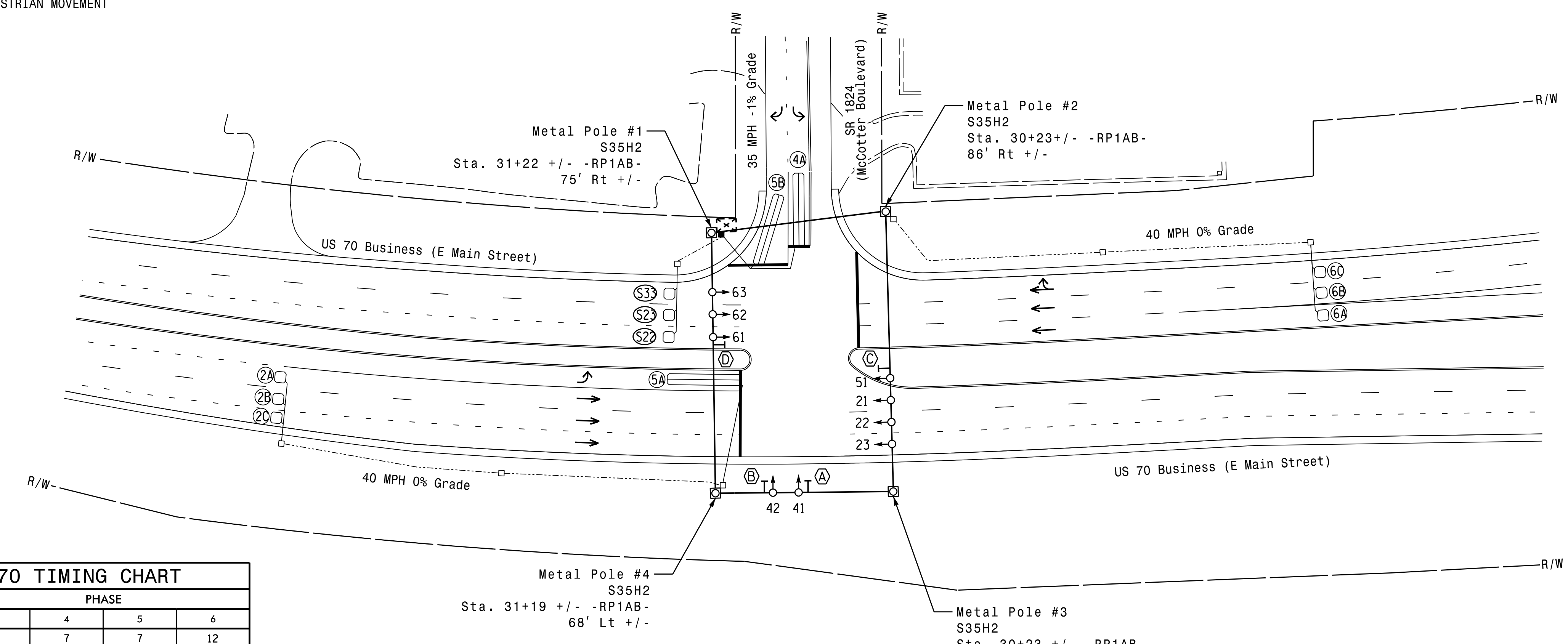
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME			DELAY TIME
2A	6X6	250	5	Y	2	Y	Y	-	-	-	-	Y
2B	6X6	250	5	Y	2	Y	Y	-	-	-	-	Y
2C	6X6	250	5	Y	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	3	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	-	-	Y
5B	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	Y
6A	6X6	250	5	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	250	5	Y	6	Y	Y	-	-	-	-	Y
6C	6X6	250	5	Y	6	Y	Y	-	-	-	-	Y
S22	6X6	+100	3	Y	-	-	-	-	-	-	-	Y
S23	6X6	+100	3	Y	-	-	-	-	-	-	-	Y
S33	6X6	+100	3	Y	-	-	-	-	-	-	-	Y

3 Phase Fully Actuated Havelock US 70 Business CLS

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 5 may be lagged.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset #0649



OASIS 2070 TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Min Green 1 *	12	7	7	12
Extension 1 *	6.0	2.0	2.0	6.0
Max Green 1 *	90	20	15	90
Yellow Clearance	4.2	3.0	3.0	4.2
Red Clearance	1.0	2.6	2.6	1.2
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	1.5	-	-	1.5
Max Variable Initial *	29	-	-	29
Time Before Reduction *	15	-	-	15
Time To Reduce *	45	-	-	45
Minimum Gap	3.0	-	-	3.0
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* 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.

LEGEND

PROPOSED	EXISTING
○ → Traffic Signal Head	● → N/A
○ → Modified Signal Head	○ → N/A
○ → Pedestrian Signal Head With Push Button & Sign	○ → N/A
○ → Signal Pole with Guy	○ → N/A
○ → Signal Pole with Sidewalk Guy	○ → N/A
□ → Inductive Loop Detector	□ → N/A
□ → Controller & Cabinet	□ → N/A
□ → Junction Box	□ → N/A
□ → 2-in Underground Conduit	□ → N/A
N/A → Directional Arrow	→ → N/A
○ → Metal Strain Pole	○ → N/A
Ⓐ → Left Arrow "ONLY" Sign (R3-5L)	Ⓐ → N/A
Ⓑ → Right Arrow "ONLY" Sign (R3-5R)	Ⓑ → N/A
Ⓒ → "U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	Ⓒ → N/A
Ⓓ → No U-turn Sign (R3-4)	Ⓓ → N/A

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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US 70 Business (E Main Street) at SR 1824 (McCotter Boulevard)

Division 02 Craven Co. Havelock

PLAN DATE: March 2018 REVIEWED BY: A.D. Klinsky

PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons

SEAL

DocuSigned by:
Natasha R. Simmons
DATE: 12/7/2018
SIG. INVENTORY NO. 02-0649