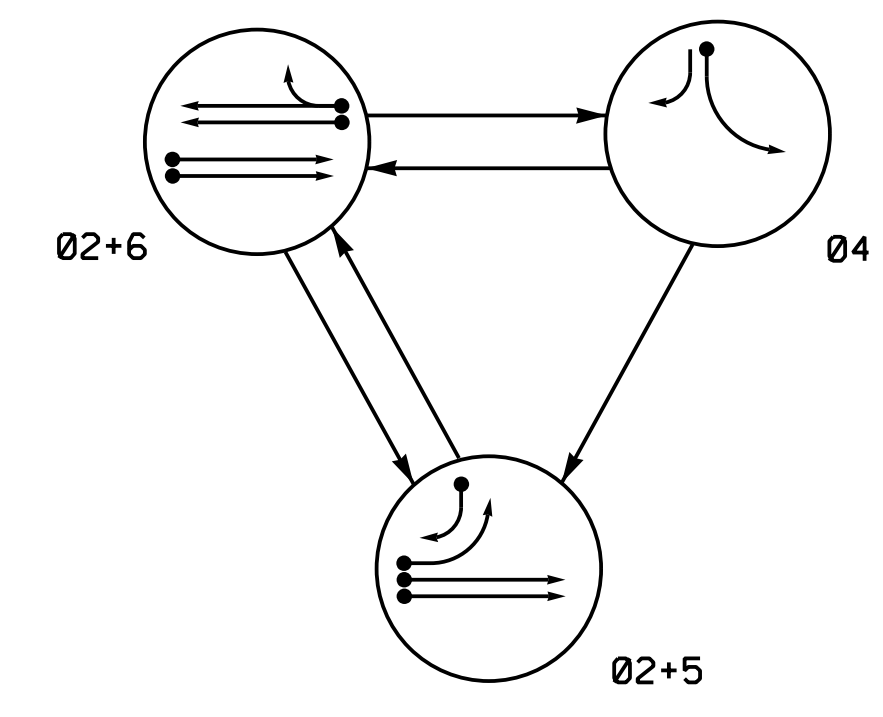


PHASING DIAGRAM

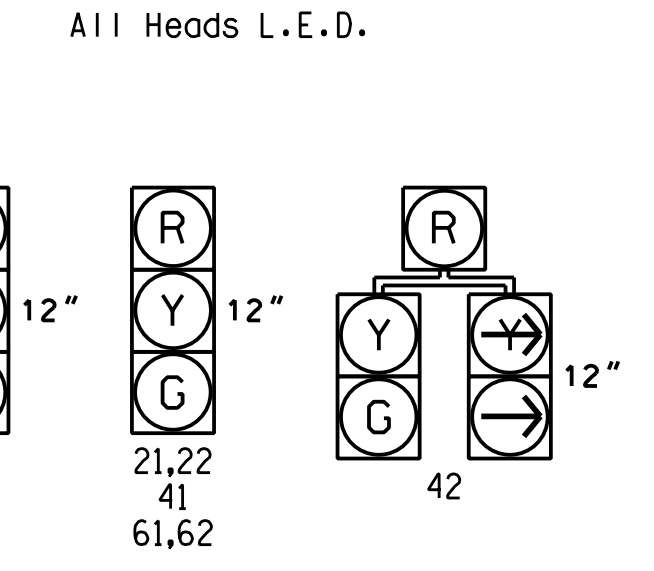


PHASING DIAGRAM DETECTION LEGEND

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

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

SIGNAL FACE I.D.



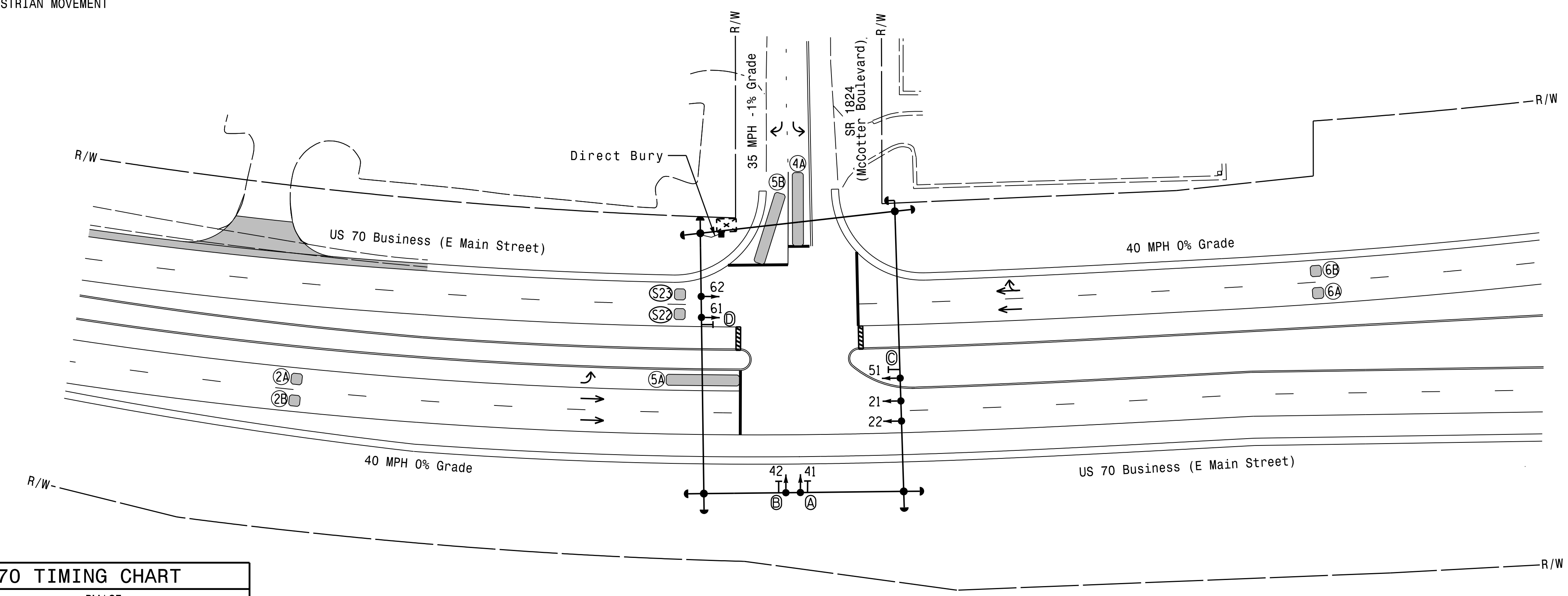
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	250	*	Y	2	Y	Y	-	-	-	-	-
2B	6X6	250	*	Y	2	Y	Y	-	-	-	-	-
4A	6X40	0	*	Y	4	Y	Y	-	-	3	-	-
5A	6X40	0	*	Y	5	Y	Y	-	-	-	-	-
5B	6X40	0	*	Y	5	Y	Y	-	-	15	-	-
6A	6X6	250	*	Y	6	Y	Y	-	-	-	-	-
6B	6X6	250	*	Y	6	Y	Y	-	-	-	-	-
S22	6X6	+100	*	Y	-	-	-	-	-	-	Y	-
S23	6X6	+100	*	Y	-	-	-	-	-	-	Y	-

* Multizone Microwave Detection

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.
- Reposition existing signal heads numbered 21,22,51, and sign 0.
- Set all detector units to presence mode.
- Incorporate Microwave Detection system for vehicle detection.
- Provide the Engineer with the Manufacturer's approved Microwave Detection locations and mounting heights to obtain detection zones as shown.
- 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



LEGEND

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

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	1.2	2.9	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.

Signal Upgrade
Temporary Design 3
Construction Phase 3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

<p>HNTB NORTH CAROLINA, P.C. 343 E. Six Forks Road, Suite 200 Raleigh, North Carolina 27609 NC License No: C-1554 (919) 546-8997</p>	<p>US 70 Business (E Main Street) at SR 1824 (McCotter Boulevard)</p> <p>Division 02 Craven Co. Havelock</p> <p>PLAN DATE: March 2018 REVIEWED BY: A.D. Klinskyk</p> <p>PREPARED BY: A.H. Thornburg REVIEWED BY: N.R. Simmons</p>	<p>SEAL</p> <p>SEAL 031464 NATASHA R. SIMMONS</p>						
	<p>750 N. Greenfield Pkwy, Cary, NC 27529</p> <p>SCALE: 0 40 1"=40'</p>	<p>REVISIONS</p> <table border="1"> <tr> <th>NO.</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table> <p>DocuSigned by: Natasha R. Simmons 12/7/2018</p> <p>SIG. INVENTORY NO. 02-0649T3</p>	NO.	INIT.	DATE			
NO.	INIT.	DATE						