

PHASING DIAGRAM

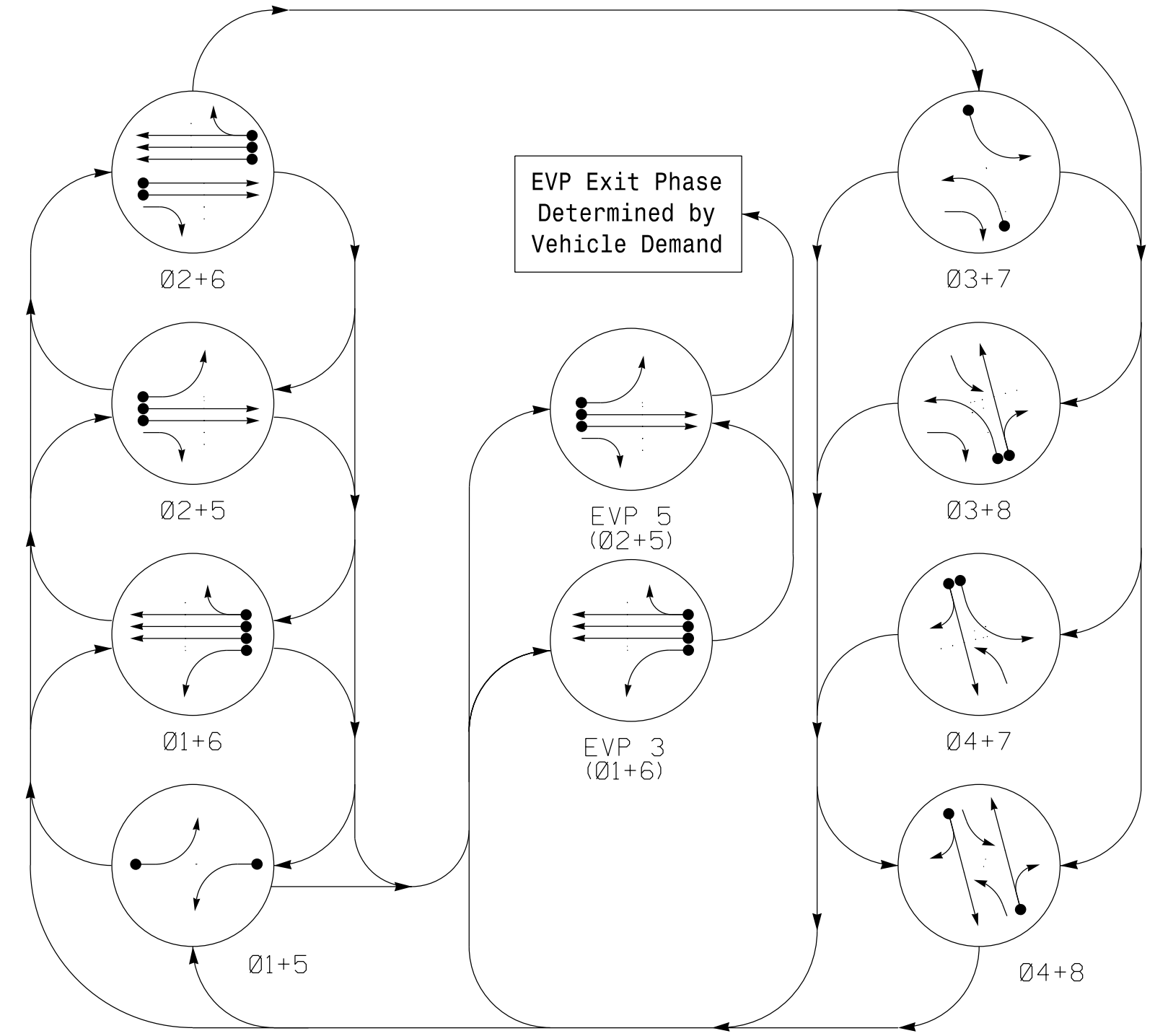
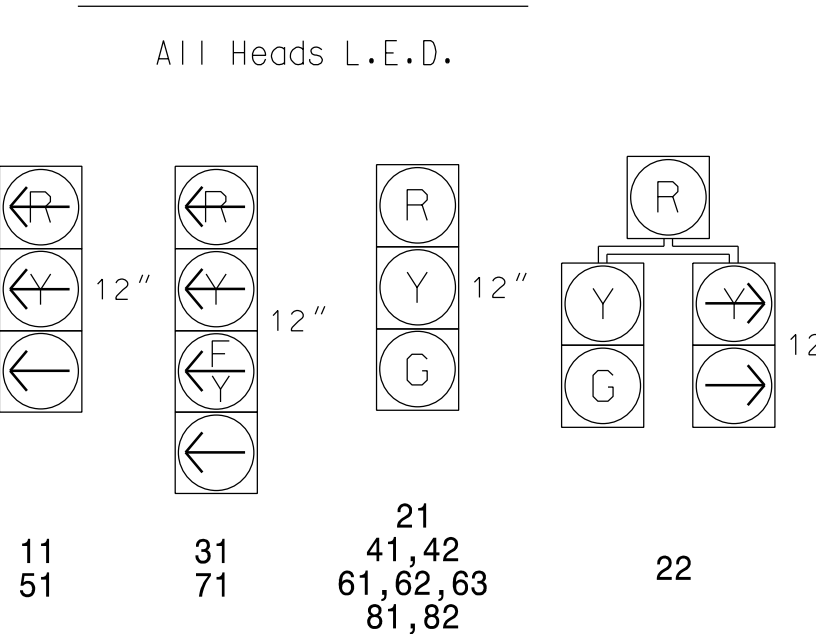


TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	02+5	03+7	04+8	EVP 3	EVP 5	01+6	02+6
11	←	←	←	←	←	←	←	←
21	R	G	G	R	R	R	R	G
22	R	R	G	G	R	R	R	G
31	←	←	←	←	←	←	←	←
41, 42	R	R	R	R	R	R	R	R
51	←	←	←	←	←	←	←	←
61, 62, 63	R	G	R	R	R	R	R	G
71	←	←	←	←	←	←	←	←
81, 82	R	R	R	R	R	R	R	R

SIGNAL FACE I.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY				
1A	6x40	0	2-4-2	Y	1	Y	Y	-	-	-	-	Y
2A/S21	6x6	300	*	Y	2	Y	Y	-	-	-	-	Y
2B/S22	6x6	300	*	Y	2	Y	Y	-	-	-	-	Y
2C	6x40	0	*	Y	2	Y	Y	2	5	-	-	*
2D	6x40	0	*	Y	2	Y	Y	2	5	-	-	*
3A	6x40	0	2-4-2	Y	3	Y	Y	-	-	15	-	Y
4A	6x40	0	2-4-2	Y	4	Y	Y	-	-	-	-	Y
4B	6x6	5	3	Y	4	Y	Y	-	-	15	-	Y
5A	6x40	0	*	Y	5	Y	Y	-	-	-	-	*
6A	6x6	400	6	Y	6	Y	Y	-	1.9	-	-	Y
6B	6x6	400	6	Y	6	Y	Y	-	1.9	-	-	Y
6C	6x6	400	6	Y	6	Y	Y	-	1.9	-	-	Y
7A	6x40	0	2-4-2	Y	7	Y	Y	-	-	15	-	Y
8A	6x40	0	2-4-2	Y	8	Y	Y	-	-	-	-	Y
8B	6x40	0	2-4-2	Y	8	Y	Y	-	-	15	-	Y

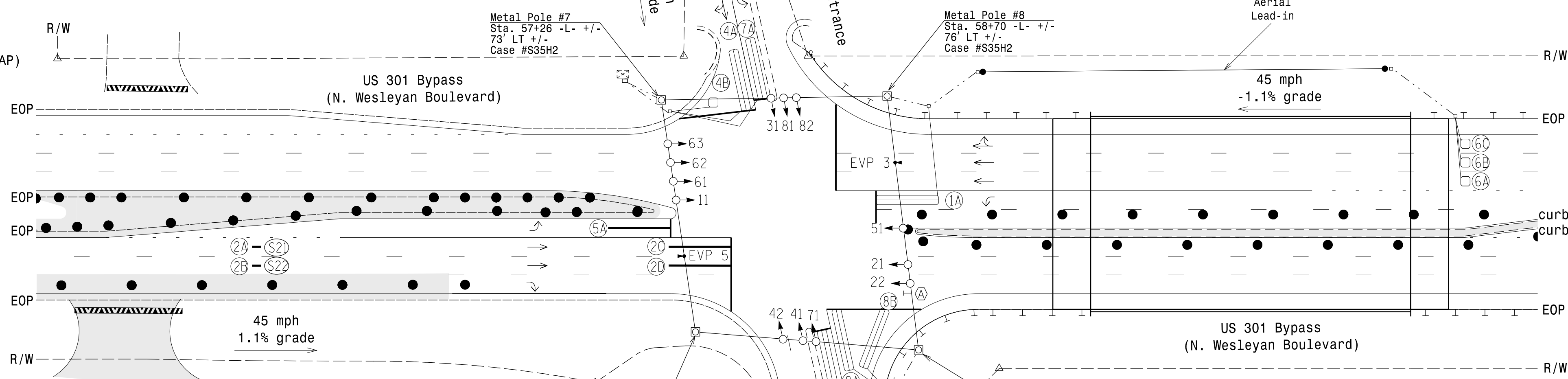
8 Phase W/ EV Preempt Fully Actuated Rocky Mount Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
5. Set all loop emulators and loop detectors to presence mode.
6. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
7. Relocate EVP 3 and EVP 5 detectors onto new spans. Reuse phase selectors. See Project Special Provisions.
8. Maximum times shown in timing charts are for free-run operation only. Coordinated signal timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



OASIS 2070E TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	12	7	7	7	12	7	7
Extension 1 *	2.0	6.0	2.0	2.0	2.0	7.0	2.0	2.0
Max Green 1 *	30	60	15	30	15	60	15	30
Yellow Clearance	3.0	4.4	3.0	3.7	3.0	4.7	3.0	3.7
Red Clearance	2.9	1.2	3.3	2.6	3.3	1.0	3.3	2.6
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	1.5	-	-
Max Variable Initial *	-	-	-	-	-	44	-	-
Time Before Reduction *	-	15	-	-	-	15	-	-
Time To Reduce *	-	30	-	-	-	30	-	-
Minimum Gap	-	3.0	-	-	-	3.0	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	-	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	ON	-	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	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.

2070 EV PREEMPT

FUNCTION	PRE 3	PRE 5
Interval 1 - Dwell Green	255	255
Interval 1 - Dwell Yellow	0.0*	0.0*
Interval 1 - Dwell Red	0.0*	0.0*
Interval 5 - Exit Green	0	0
Interval 5 - Yellow	0.0	0.0
Interval 5 - Red	0.0	0.0
Exit Phase(s)	-	-
Priority	MED	MED
Delay Time	0.0	0.0
Min Green Before Pre	1	1
Ped Clear Before Pre	0	0
Yellow Clear Before Pre	0.0*	0.0*
Red Clear Before Pre	0.0*	0.0*
Dwell Min Time	12	12
Enable Backup Protection	N	N
Ped Clear Through Yellow	N	N
Omit Overlaps	-	-
Preempt Extend**	5	5

* Time defaults to time used for phase during normal operation
** Program Timing on Optical Detection Unit

LEGEND

- | PROPOSED | EXISTING |
|--|------------------------|
| ○ Traffic Signal Head | ● N/A |
| ○ Modified Signal Head | ○ N/A |
| ⊥ Sign | ⊥ N/A |
| ⊥ Pedestrian Signal Head With Push Button & Sign | ⊥ N/A |
| ⊠ Metal Strain Pole | ⊠ N/A |
| ⊠ Inductive Loop Detector | ⊠ N/A |
| ⊠ Controller & Cabinet | ⊠ N/A |
| ⊠ Junction Box | ⊠ N/A |
| --- 2-in Underground Conduit | --- N/A |
| N/A Right of Way | N/A N/A |
| → Directional Arrow | → N/A |
| ⊠ Emergency Vehicle Detector | ⊠ N/A |
| N/A Guardrail | N/A N/A |
| Video Detection Area | Video Detection Area |
| ⊠ Right Arrow "ONLY" Sign (R3-5R) | ⊠ N/A |
| Construction Zone | Construction Zone |
| Construction Barricade | Construction Barricade |

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Signal Upgrade - Temporary Design 5 (Area 2 TMP Phase IV)

Prepared for the Offices of:
 TRANSPORTATION MOBILITY AND SAFETY DIVISION
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Design Section

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 1"=50'

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 SEAL 025892
 MELISSA B. TOTH

US 301 Byp (N. Wesleyan Blvd) at Lawrence Circle / Tarrytown Mall Entrance
 Division 04 Nash County Rocky Mount

PLAN DATE: November 2016 REVIEWED BY: MB Toth
 PREPARED BY: AM Encarnacion REVIEWED BY:

REVISIONS: INIT. DATE

Downloaded by: Melissa B. Toth 1/30/2017
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 SIG. INVENTORY NO. 04-016915