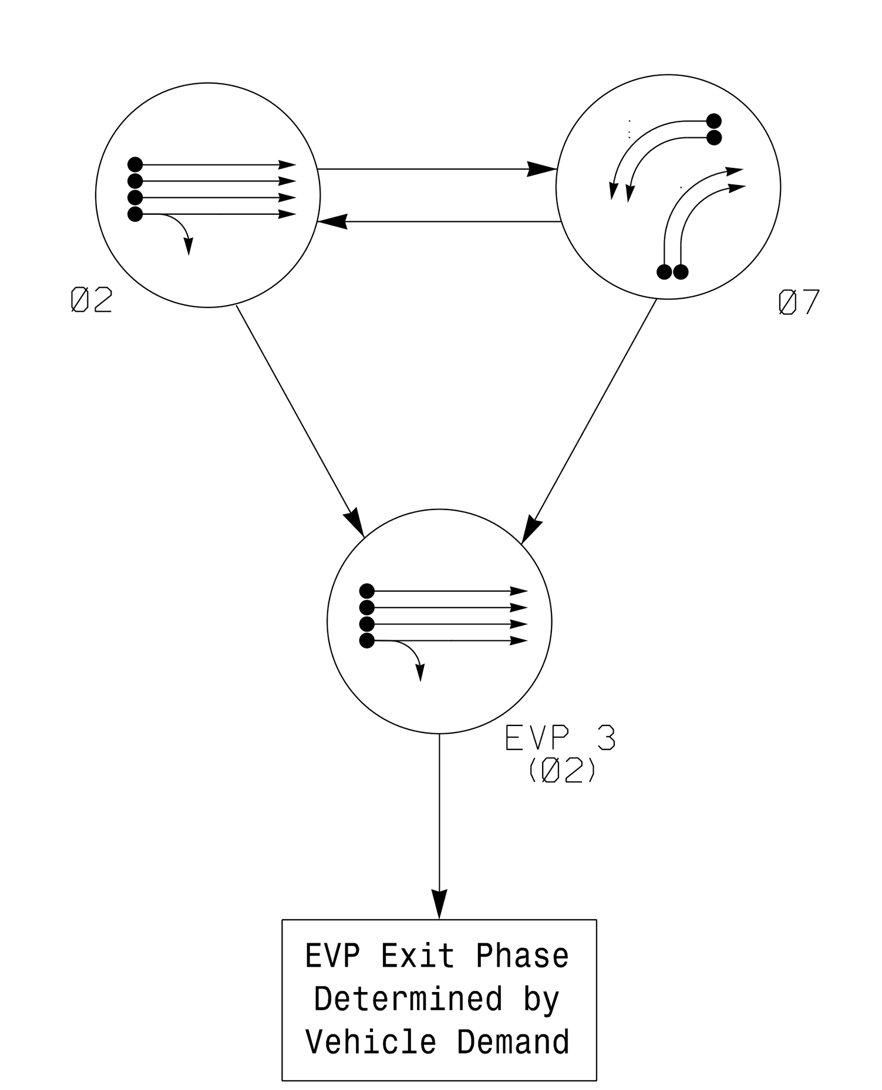
PROJECT REFERENCE NO.	SHEET NO.
U-3330	Sig. 13.2

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

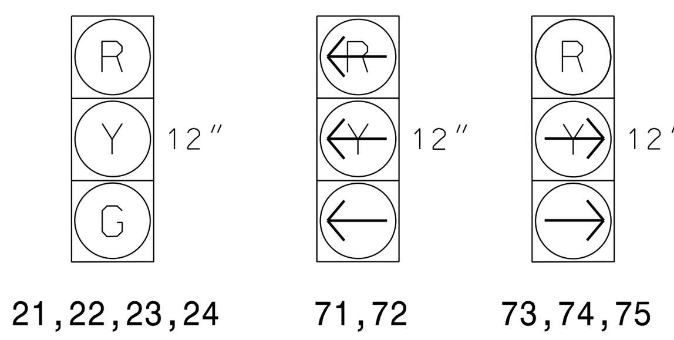
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2	PHASE Ø7	PHASE EVP 3	PHASE FLASH
21, 22, 23, 24	G	R	G	Y
71, 72	←R	←	←R	←R
73, 74, 75	R	→	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



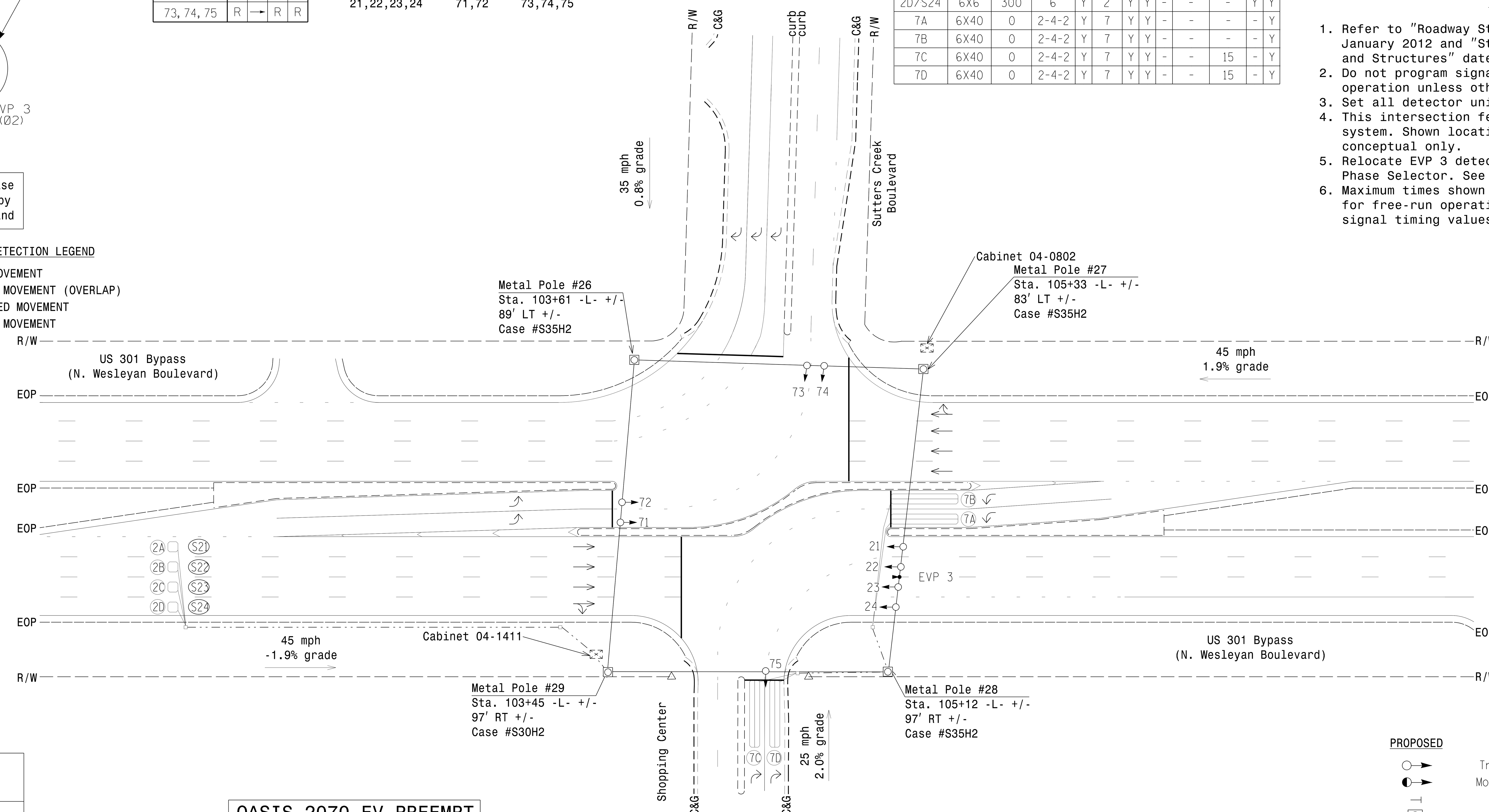
OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

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/S21	6X6	300	6	Y	2	Y	Y	-	-	-	Y	Y
2B/S22	6X6	300	6	Y	2	Y	Y	-	-	-	Y	Y
2C/S23	6X6	300	6	Y	2	Y	Y	-	-	-	Y	Y
2D/S24	6X6	300	6	Y	2	Y	Y	-	-	-	Y	Y
7A	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	Y
7B	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	Y
7C	6X40	0	2-4-2	Y	7	Y	Y	-	-	15	-	Y
7D	6X40	0	2-4-2	Y	7	Y	Y	-	-	15	-	Y

2 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. Set all detector units to presence mode.
4. This intersection features an optical preemption system. Shown locations of optical detectors are conceptual only.
5. Relocate EVP 3 detector onto new span. Reuse existing Phase Selector. See Project Special Provisions.
6. Maximum times shown in timing charts are for free-run operation only. Coordinated signal timing values supercede these values.



LEGEND

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
◻	Metal Strain Pole	◼
⊂⊃	Inductive Loop Detector	⊂ ⊃
☒	Controller & Cabinet	☒
□	Junction Box	■
- - - -	2-in Underground Conduit	- - - -
N/A	Right of Way	— — —
→	Directional Arrow	→
○◁	Emergency Vehicle Detector	●◀

OASIS 2070E TIMING CHART

FEATURE	PHASE 2	PHASE 7
Min Green 1 *	12	7
Extension 1 *	6.0	2.0
Max Green 1 *	90	30
Yellow Clearance	4.7	3.0
Red Clearance	1.0	3.8
Red Revert	2.0	2.0
Walk 1 *	-	-
Don't Walk 1	-	-
Seconds Per Actuation *	1.5	-
Max Variable Initial *	34	-
Time Before Reduction *	15	-
Time To Reduce *	30	-
Minimum Gap	3.0	-
Recall Mode	MIN RECALL	-
Vehicle Call Memory	YELLOW	-
Dual Entry	-	-
Simultaneous Gap	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.

OASIS 2070 EV PREEMPT

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

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

30-JAN-2017 17:58
O:\Transportation\Traffic\Curr\100052135 U-3330 Signals\02_Signals\Design\04-1411.dgn
ENCA5386 AT LUS29032

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

Signal Upgrade - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division – Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

NB US 301 Byp (N. Wesleyan Blvd) at Sutters Creek Blvd

Division 04 Nash County Rocky Mount

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

SCALE 0 40
1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

Melissa B. Toth 1/30/2017
SIGNATURE DATE

SIG. INVENTORY NO. 04-1411