

DEFAULT PHASING DIAGRAM

ALTERNATE PHASING DIAGRAM

LONG VEHICLE EXTENSION FAILURE PREEMPT PHASES

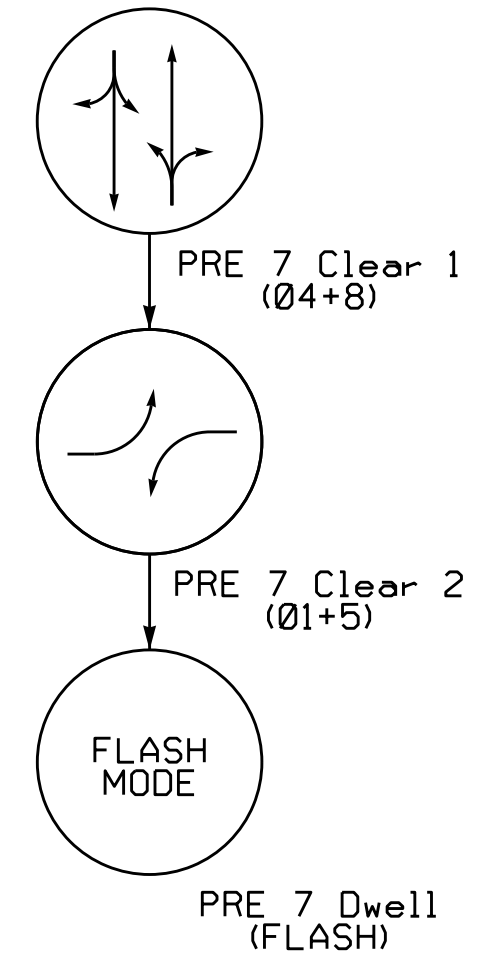
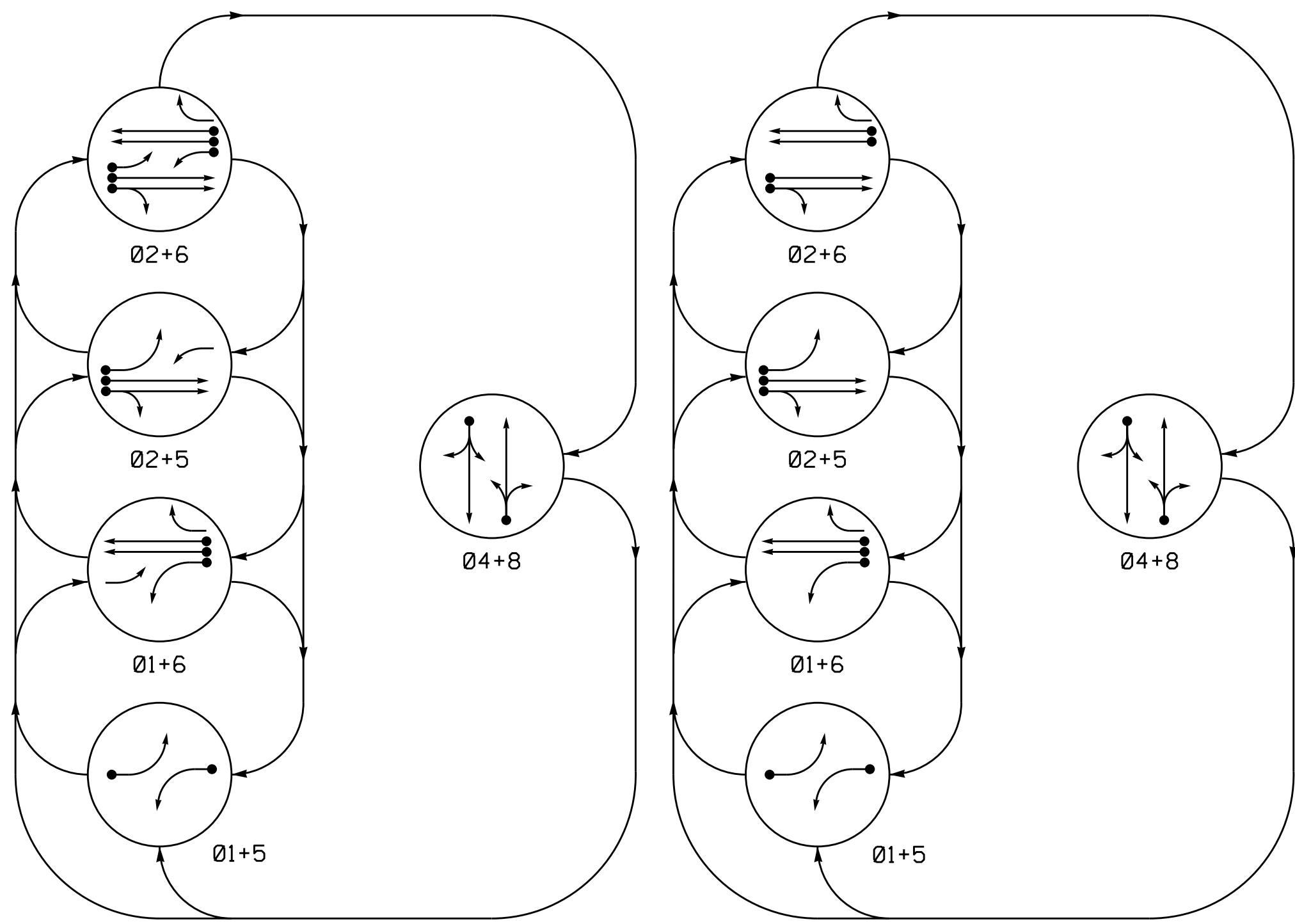
DEFAULT PHASING TABLE OF OPERATION

ALTERNATE PHASING TABLE OF OPERATION

5 Phase Fully Actuated W/ Long Vehicle Detection (Isolated)

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 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.



SIGNAL FACE	PHASE									
	01+5	01+6	02+5	02+6	04+8	PRE 7	PRE 7	PRE 7	PRE 7	F
11	-	-	-	-	-	-	-	-	-	-
21, 22, 23	R	R	G	G	R	R	R	Y	Y	Y
41, 42, 43	R	R	R	R	G	G	R	R	R	R
51	-	-	-	-	-	-	-	-	-	-
61, 62, 63	R	G	R	G	R	R	R	Y	Y	Y
81, 82, 83	R	R	R	R	G	G	R	R	R	R

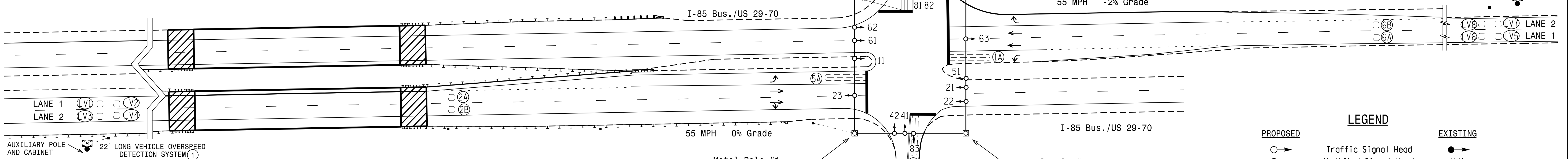
SIGNAL FACE	PHASE									
	01+5	01+6	02+5	02+6	04+8	PRE 7	PRE 7	PRE 7	PRE 7	F
11	-	-	-	-	-	-	-	-	-	-
21, 22, 23	R	R	G	G	R	R	R	Y	Y	Y
41, 42, 43	R	R	R	R	G	G	R	R	R	R
51	-	-	-	-	-	-	-	-	-	-
61, 62, 63	R	G	R	G	R	R	R	Y	Y	Y
81, 82, 83	R	R	R	R	G	G	R	R	R	R

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	PRESENCE				
1A	6X40	0	2-4-2	-	1	Y	Y	-	15	*	-	Y
2A	6X6	400	5	-	2	Y	Y	-	-	-	-	Y
2B	6X6	400	5	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	10	-	-	Y
5A	6X40	0	2-4-2	-	5	Y	Y	-	15	*	-	Y
6A	6X6	420	5	-	6	Y	Y	-	-	-	-	Y
6B	6X6	420	5	-	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	10	-	-	Y

* Disable Delay During Alternate Phasing Operation.
Disable Phase Call For Loop During Alternate Phasing Operation.

PHASING DIAGRAM DETECTION LEGEND
 ← ● DETECTED MOVEMENT
 ← ○ UNDETECTED MOVEMENT (OVERLAP)
 ← ○ UNSIGNALIZED MOVEMENT
 ← ○ PEDESTRIAN MOVEMENT



LONG VEHICLE EXTENSION FAILURE PREEMPT

FUNCTION	PRE 7
Interval 1 - Green Clear	15
Interval 1 - Yellow Clear	0.0*
Interval 1 - Red Clear	0.0*
Interval 2 - Green Clear	10
Interval 2 - Yellow Clear	0.0*
Interval 2 - Red Clear	0.0*
Interval 3 - Dwell Green	255
Interval 3 - Dwell Yellow	0.0*
Interval 3 - Dwell Red	0.0*
Interval 4 - Exit Green	1
Interval 4 - Yellow	0.0
Interval 4 - Red	0.0
Exit Phase(s)	2+6
Priority	-
Delay Time	0
Min Green Before Pre	14
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	14
Flash Dwell Interval?	Y
Enable Backup Protection	N
Ped Clear Through Yellow	N
Omit Overlaps	-

OASIS 2070 TIMING CHART

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1*	7	14	7	7	14	7
Extension 1*	2.0	6.0	3.0	2.0	6.0	3.0
Max Green 1*	20	120	25	25	120	25
Yellow Clearance	3.0	5.4	4.3	3.0	5.4	3.6
Red Clearance	2.3	1.0	1.9	2.8	1.0	2.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Walk 1*	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation*	-	1.5	-	-	1.5	-
Max Variable Initial*	-	46	-	-	46	-
Time Before Reduction*	-	20	-	-	20	-
Time To Reduce*	-	50	-	-	50	-
Minimum Gap	-	3.4	-	-	3.4	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	ON	ON	ON	ON	ON	ON

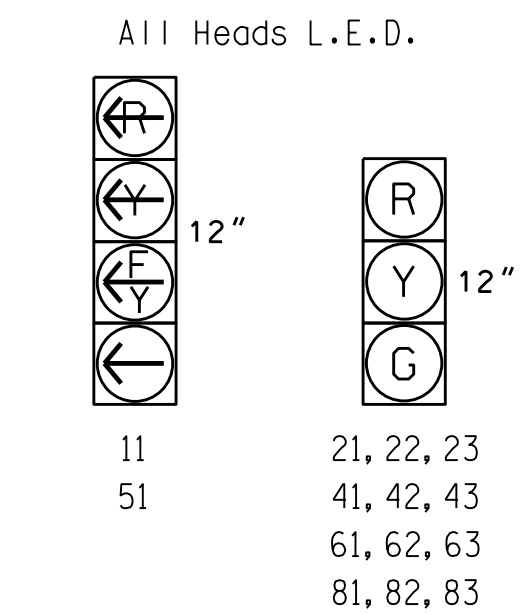
* These values may be field adjusted. Do not adjust Min Green and Extension times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

LONG VEHICLE OVERSPEED DETECTION SYSTEM LOOP & DETECTOR INSTALLATION CHART

LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	LANE NO.	CHANNEL	NEMA PHASE	TIMING		PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?
									FEATURE	TIME		
LV1	6X6	4	1015	X	1	1	1	2*	NONE	- SEC.	ALL	NO
LV2	6X6	4	999	X	1	1	2	2*	NONE	- SEC.	ALL	NO
LV3	6X6	4	1015	X	2	2	2	2*	NONE	- SEC.	ALL	NO
LV4	6X6	4	999	X	2	2	2	2*	NONE	- SEC.	ALL	NO
LV5	6X6	4	1015	X	1	1	1	6*	NONE	- SEC.	ALL	NO
LV6	6X6	4	999	X	1	1	2	6*	NONE	- SEC.	ALL	NO
LV7	6X6	4	1015	X	2	2	1	6*	NONE	- SEC.	ALL	NO
LV8	6X6	4	999	X	2	2	2	6*	NONE	- SEC.	ALL	NO
LVDS THRESHOLD SPEED (MPH)	55								2	6		
LVDS EXTEND TIME	12 sec.								2	6		

*Phase hold output to controller

SIGNAL FACE I.D.



LEGEND

PROPOSED	EXISTING
Traffic Signal Head	Traffic Signal Head
Modified Signal Head Sign	N/A
Pedestrian Signal Head	Pedestrian Signal Head
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
Right of Way	Right of Way
Directional Arrow	Directional Arrow
Metal Strain Pole	Metal Strain Pole

Signal Upgrade - Final Design

I-85 Bus. /US 29-70 at SR 1144 (River Road)

Division 7 Guilford County Jamestown

PLAN DATE: January 2018 REVIEWED BY: I. O. Umozurike

REVISIONS: [Table with columns for REVISIONS, INIT., DATE]

2/7/2018

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