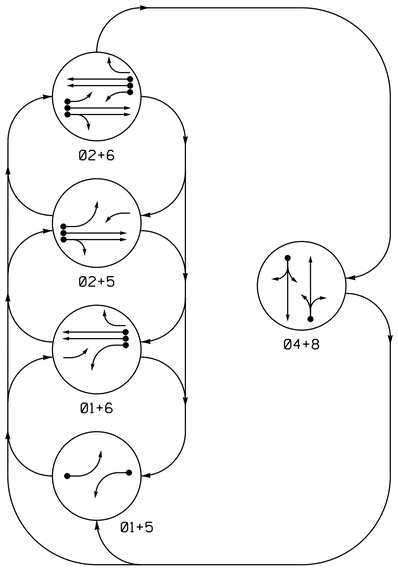
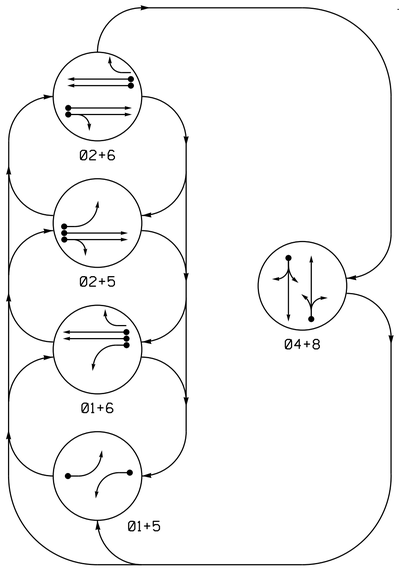
PROJECT REFERENCE NO.	SHEET NO.
B-5351	Sig. 2.0

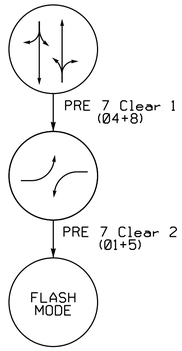
DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM



LONG VEHICLE EXTENSION FAILURE PREEMPT PHASES

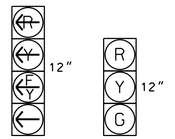


DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	CLEAR 1	CLEAR 2	DWELL	FLASH
11	~~←~~	~~←~~	~~F Y~~	~~F Y~~	~~R~~	~~R~~	~~←~~	~~Y~~	~~Y~~
21, 22, 23	R	R	G	G	R	R	R	Y	Y
41, 42, 43	R	R	R	R	G	G	R	R	R
51	~~←~~	~~F Y~~	~~←~~	~~F Y~~	~~R~~	~~R~~	~~←~~	~~Y~~	~~Y~~
61, 62, 63	R	G	R	G	R	R	R	Y	Y
81, 82, 83	R	R	R	R	G	G	R	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



11
51

21, 22, 23
41, 42, 43
61, 62, 63
81, 82, 83

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
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	15 *	-	Y
					6#	Y	Y	Y	-	3	-	Y
2A	6X6	420	5	-	2	Y	Y	-	-	-	-	Y
2B	6X6	420	5	-	2	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	Y
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	15 *	-	Y
					2#	Y	Y	Y	-	3	-	Y
6A	6X6	420	5	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	420	5	Y	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.

ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	04+8	CLEAR 1	CLEAR 2	DWELL	FLASH
11	~~←~~	~~←~~	~~R~~	~~R~~	~~R~~	~~R~~	~~←~~	~~Y~~	~~Y~~
21, 22, 23	R	R	G	G	R	R	R	Y	Y
41, 42, 43	R	R	R	R	G	G	R	R	R
51	~~←~~	~~R~~	~~←~~	~~R~~	~~R~~	~~R~~	~~←~~	~~Y~~	~~Y~~
61, 62, 63	R	G	R	G	R	R	R	Y	Y
81, 82, 83	R	R	R	R	G	G	R	R	R

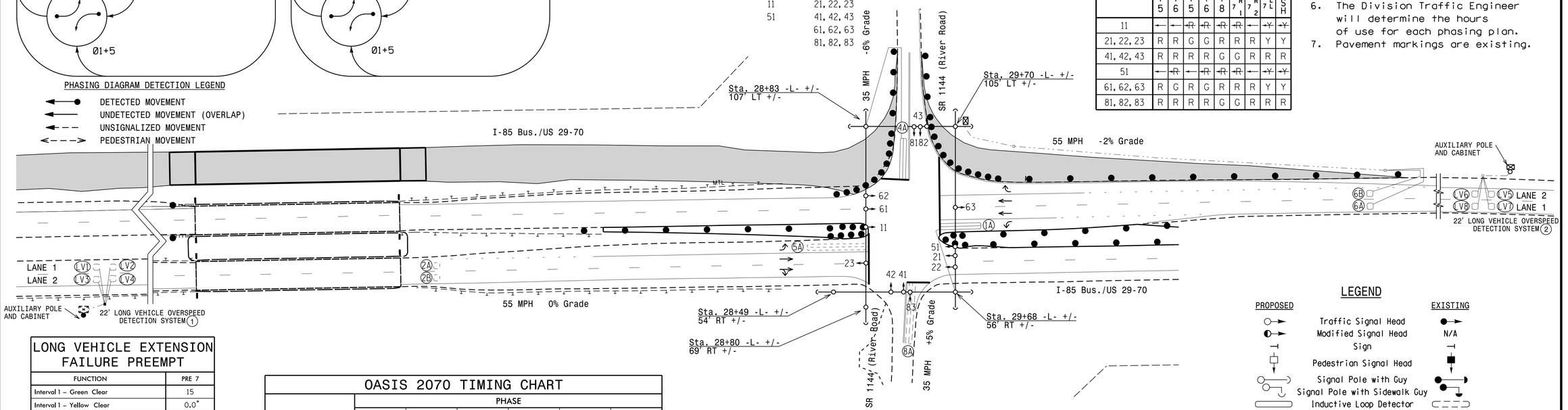
5 Phase
Fully Actuated
W/ Long Vehicle Detection
(Isolated)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
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. Set all detector units to presence mode.
5. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
6. The Division Traffic Engineer will determine the hours of use for each phasing plan.
7. Pavement markings are existing.

PHASING DIAGRAM DETECTION LEGEND

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



LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
	Directional Arrow	
N/A	Guardrail	
	Construction Zone Drums	
	Construction Zone	

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	-

* Time defaults to time used for phase during normal operation

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 & DETECTION INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR UNITS							
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW EXISTING	SYSTEM NUMBER	LANE NO.	NO. OF LANES IN DETECTION ZONE	CHANNEL	NEMA PHASE	TIMING FEATURE	TIMING TIME	PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?
LV1	6X6	4	1015	X	① NORTHBOUND APPROACH	1	1	1	2*	NONE	- SEC.	ALL	NO
LV2	6X6	4	999	X		1		2		NONE	- SEC.	ALL	NO
LV3	6X6	4	1015	X		2	2	1	2*	NONE	- SEC.	ALL	NO
LV4	6X6	4	999	X		2		2		NONE	- SEC.	ALL	NO
LV5	6X6	4	1015	X	② SOUTHBOUND APPROACH	1	1	1	6*	NONE	- SEC.	ALL	NO
LV6	6X6	4	999	X		1		2		NONE	- SEC.	ALL	NO
LV7	6X6	4	1015	X		2	2	1	6*	NONE	- SEC.	ALL	NO
LV8	6X6	4	999	X		2		2		NONE	- SEC.	ALL	NO
LVODS THRESHOLD SPEED (MPH)		55							2 / 6				
LVODS EXTEND TIME		12 SEC.							2 / 6				

*Phase hold output to controller

Signal Upgrade
Temporary Design 1 (TMP Phase I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
Transportation Mobility and Safety Division
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

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

Division 7 Guilford County Jamestown

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

SCALE 0 50 1"=50'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 026486 ENGINEER ROBERT J. ZIEMBA

DocuSigned by: Robert J. Ziemba 2/7/2018
SIGNATURE DATE

SIG. INVENTORY NO. 07-1191T1

07-FEB-2018 17:49
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