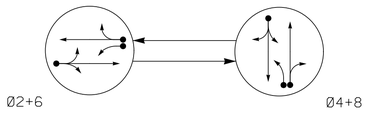
PROJECT REFERENCE NO.	SHEET NO.
36249.4359	SIG. 1.0

2 PHASE
FULLY ACTUATED
SR 1163 (KELLY RD.) CLS
SIGNAL SYSTEM: D05-46_Apex

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

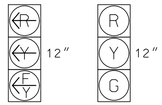
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	PHASE Ø4+8	PHASE FLASH
21,22	G	R	Y
41,42	R	G	R
61	~~F Y~~	~~R~~	~~Y~~
62,63	G	R	Y
81	~~R~~	~~F Y~~	~~R~~
82,83	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



61
81

21,22
41,42
62,63
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
2A	6X6	300	6	Y	2	-	Y	-	-	-	-	Y
2B	6X40	+5	2-4-2	Y	2	Y	Y	Y	2.0	5	-	Y
4A	6X6	300	6	Y	4	-	Y	-	-	-	-	Y
4B	6X40	+5	2-4-2	Y	4	Y	Y	Y	2.0	5	-	Y
6A	6X6	300	6	Y	6	Y	Y	-	-	-	-	Y
6B	6X40	+5	2-4-2	Y	6	Y	Y	Y	-	3	-	Y
8A	6X6	300	6	Y	8	-	Y	-	-	-	-	Y
8B	6X40	+5	2-4-2	Y	8	Y	Y	Y	2.0	5	-	Y
8C	6X40	0	2-4-2	Y	8	Y	Y	Y	2.0	5	-	Y

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018, and all applicable sections of the latest version of the generic Project Special Provisions. The PSP can be accessed at the following website: https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx
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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
6. Closed loop system data:
   Controller asset: #1522

LEGEND

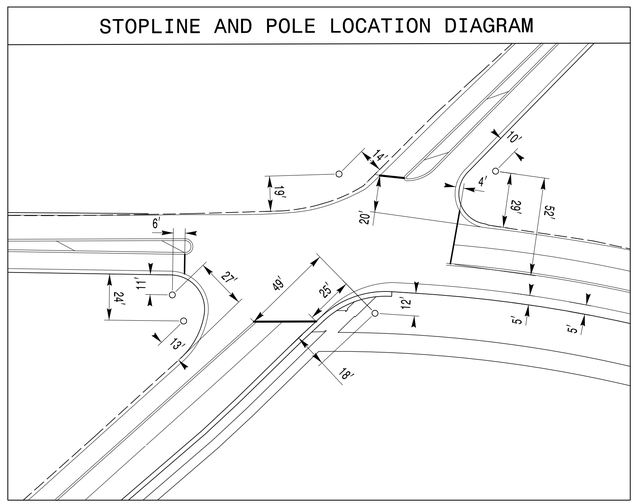
PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	Sign	⊣
□↓	Pedestrian Signal Head With Push Button & Sign	■↓
○	Signal Pole with Guy	●
○	Signal Pole with Sidewalk Guy	●
▭	Inductive Loop Detector	▭
⊠	Controller & Cabinet	■
□	Junction Box	■
·····	2-in Underground Conduit	·····
— PME —	Permanent Maintenance Easement	— PME —
N/A	Right of Way	
→	Directional Arrow	→
Ⓐ	Street Name Sign (D3-1)	Ⓐ

OASIS 2070 TIMING CHART

FEATURE	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green 1 *	12	7	12	7
Extension 1 *	6.0	6.0	6.0	6.0
Max Green 1 *	45	35	45	35
Yellow Clearance	4.9	4.9	4.9	4.9
Red Clearance	1.8	1.3	1.8	1.3
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	2.5	-
Max Variable Initial *	-	-	34	-
Time Before Reduction *	15	0	15	0
Time To Reduce *	30	15	30	15
Minimum Gap	3.0	3.0	3.0	3.0
Recall Mode	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	-	-	-	-
Dual Entry	-	ON	-	ON
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.

STOPLINE AND POLE LOCATION DIAGRAM



This plan supersedes the plan signed and sealed on 6/14/2021

PLANS PREPARED IN THE OFFICE OF:
Kimley»Horn
NC License #F-0102
421 Fayetteville Street, Suite 600
Raleigh, NC 27601
(919) 677-2000

NC Dept of Transportation
Division of Highways
Final Drawing Date: 11/2/2021
DocuSigned by: Chang Baek
SIGNATURE
ITS & Signals Unit

New Installation

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SR 1600 (Green Level Church Road/Kelly Road) at SR 1601 (Jenks Road)
Division 5 Wake County Apex

PLAN DATE:	August 2021	REVIEWED BY:	SP Pennington
PREPARED BY:	CF Davis	REVIEWED BY:	KP Baumann

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 044434 ENGINEER KEVIN P. BAUMANN
DocuSigned by: 11/1/2021
ENGINEER'S SEAL AND SIGNATURE DATE
SIG. INVENTORY NO. 05-1522