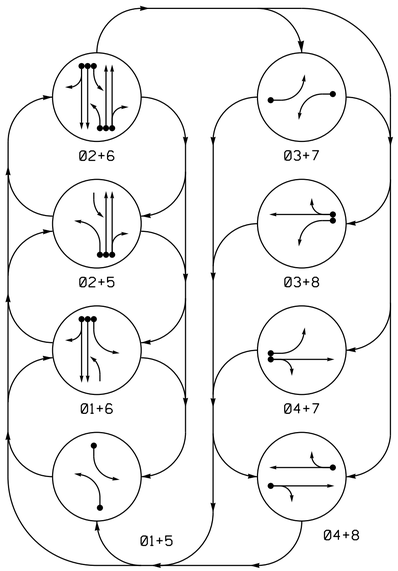
PROJECT REFERENCE NO.	SHEET NO.
U-3440	Sig.9.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

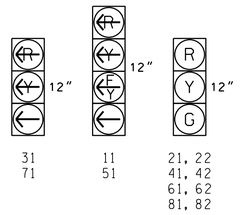
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+05	01+06	02+05	02+06	03+07	03+08	04+07	04+08	FLASH
11	←̶	←̶	F Y	F Y	R̶	R̶	R̶	R̶	Y̶
21, 22	R	R	G	G	R	R	R	R	Y
31	R̶	R̶	R̶	R̶	←̶	←̶	R̶	R̶	R̶
41, 42	R	R	R	R	R	R	G	G	R
51	←̶	F Y	←̶	F Y	R̶	R̶	R̶	R̶	Y̶
61, 62	R	G	R	G	R	R	R	R	Y
71	R̶	R̶	R̶	R̶	←̶	R̶	←̶	R̶	R̶
81, 82	R	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.

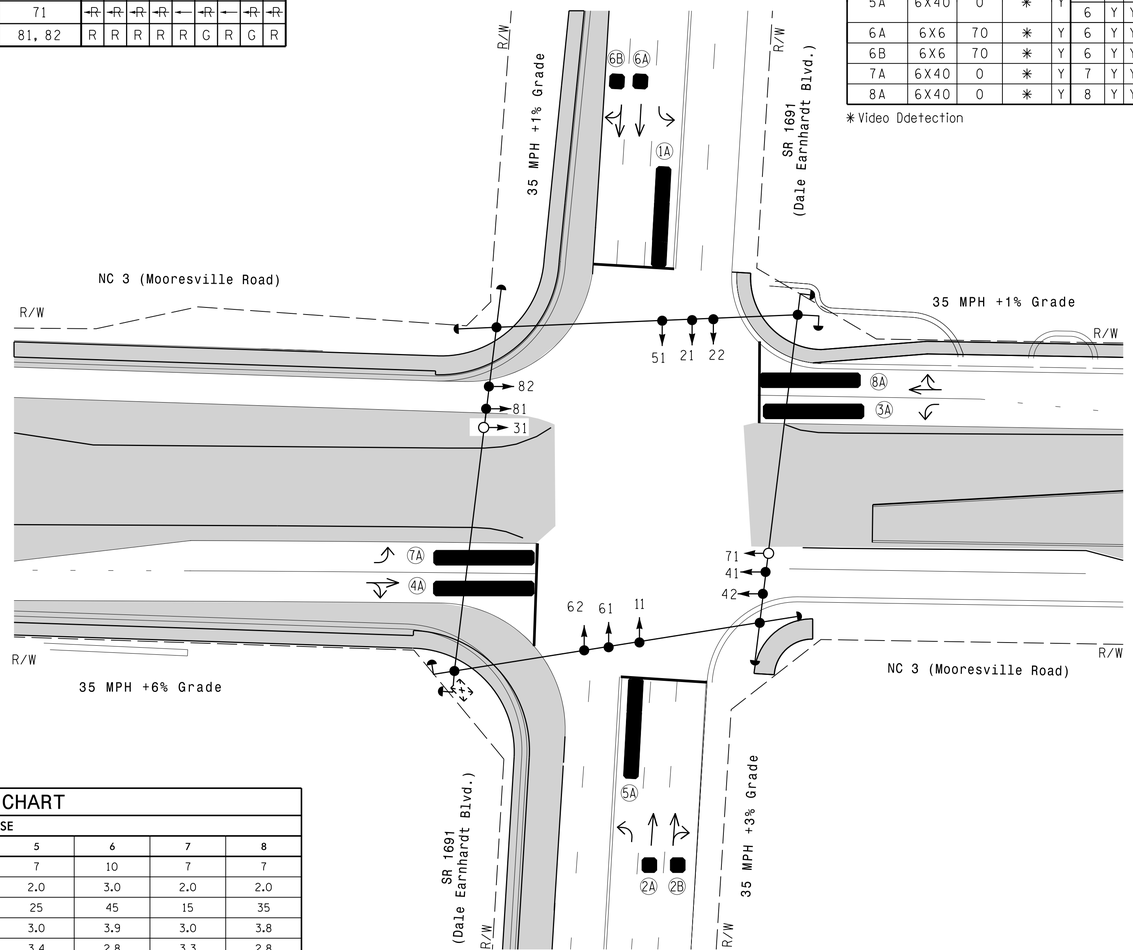
All Heads L.E.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW ZONE	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	✳	Y	1	Y	Y	-	-	15	-	✳
					6	Y	Y	-	-	-	-	✳
2A	6X6	70	✳	Y	2	Y	Y	-	-	-	-	✳
2B	6X6	70	✳	Y	2	Y	Y	-	-	-	-	✳
3A	6X40	0	✳	Y	3	Y	Y	-	-	-	-	✳
4A	6X40	0	✳	Y	4	Y	Y	-	-	10	-	✳
5A	6X40	0	✳	Y	5	Y	Y	-	-	15	-	✳
					6	Y	Y	-	-	-	-	✳
6A	6X6	70	✳	Y	6	Y	Y	-	-	-	-	✳
6B	6X6	70	✳	Y	6	Y	Y	-	-	-	-	✳
7A	6X40	0	✳	Y	7	Y	Y	-	-	-	-	✳
8A	6X40	0	✳	Y	8	Y	Y	-	-	10	-	✳

✳ Video Ddetection



OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Min Green 1 *	7	10	7	7	7	10	7	7
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	2.0	2.0
Max Green 1 *	25	45	15	35	25	45	15	35
Yellow Clearance	3.0	3.9	3.0	3.8	3.0	3.9	3.0	3.8
Red Clearance	3.6	2.8	3.3	2.8	3.4	2.8	3.3	2.8
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 *	-	-	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-	-
Dual Entry	-	-	-	-	-	-	-	-
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.

8 Phase
Fully Actuated
Kannapolis City 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. Reposition existing signal heads numbered 41, 42, 81 & 82.
6. Adjust existing Video detection zones as shown.
7. Set all detector units to presence mode.
8. Incorporate Loop Emulator Detection System for vehicle detection.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Closed loop system data: Controller Asset # 0445.

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	·-·-·
N/A	Right of Way	----
→	Directional Arrow	→
▬	Video Detection Area	▬
▬	Construction Zone	▬

Signal Upgrade Temporary Design-TMP Phase II

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

NC 3 (Mooresville Road)
at
SR 1691 (Dale Earnhardt Blvd.)

Division 10 Cabarrus County Kannapolis

PLAN DATE: April 2016 REVIEWED BY: T. Williams
PREPARED BY: M. Mahbooba REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 024393 ENGINEER TIMOTHY J. WILLIAMS

DocuSigned by: T. J. Williams 6/22/2016
97AD792E8E934CA... DATE

SIG. INVENTORY NO. 10-0445 T2

22-JUN-2016 12:15
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mmahbooba