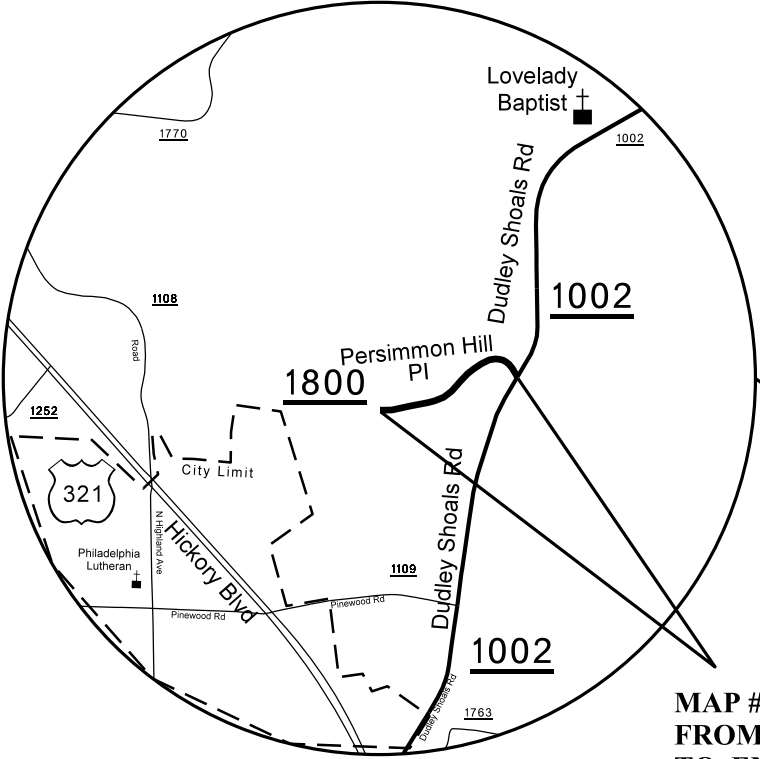


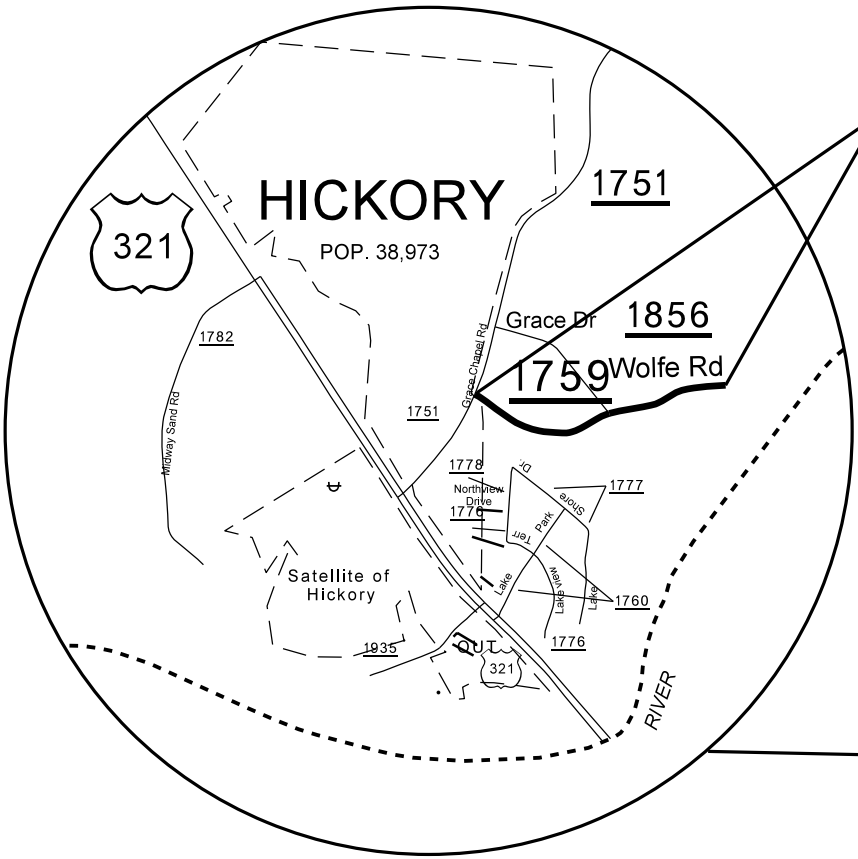
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

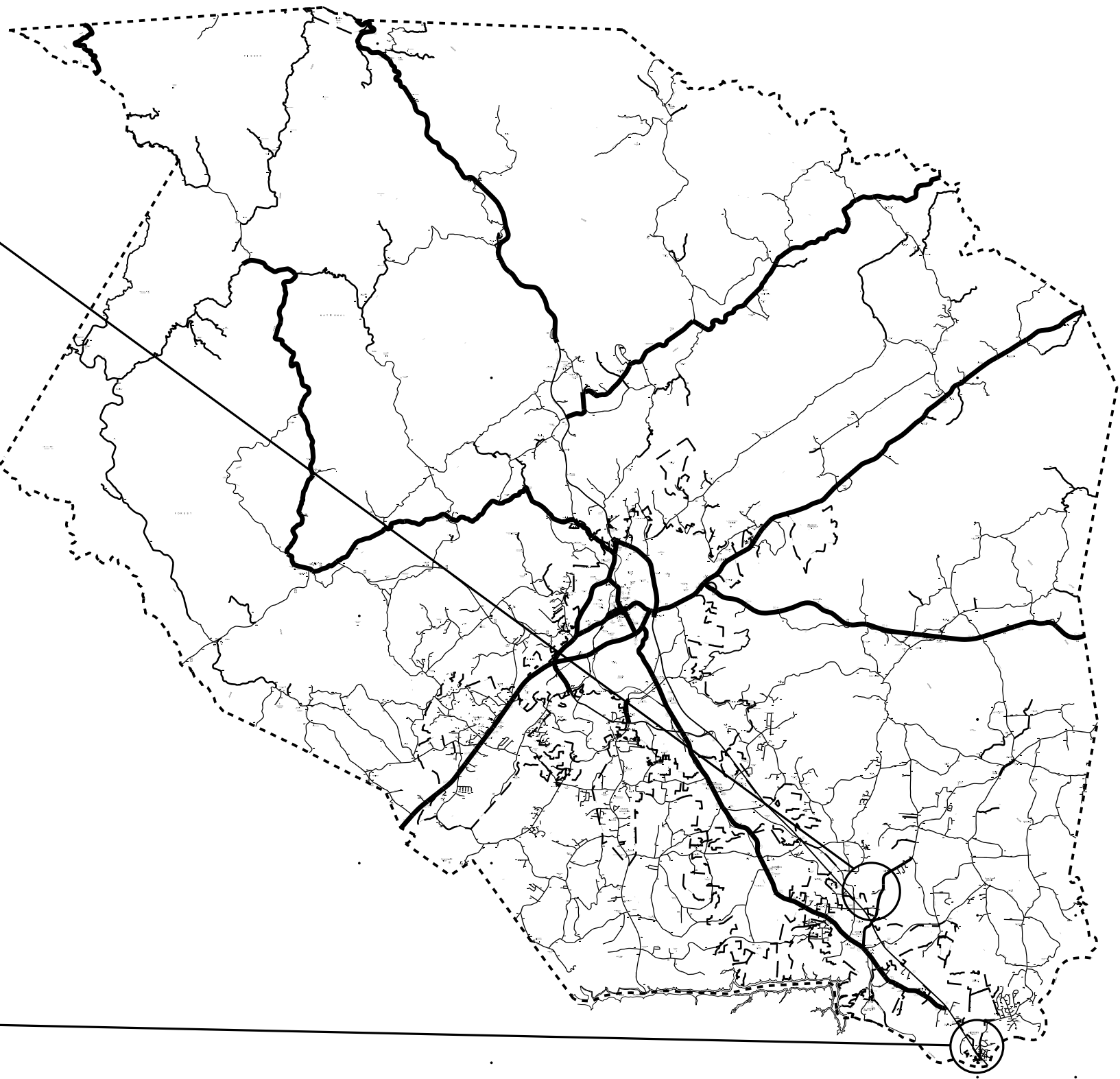
SECONDARY ASPHALT RESURFACING



MAP #10 SR 1800
FROM SR 1002
TO END MAINT



MAP #9 SR 1759
FROM SR 1751
TO END MAINT

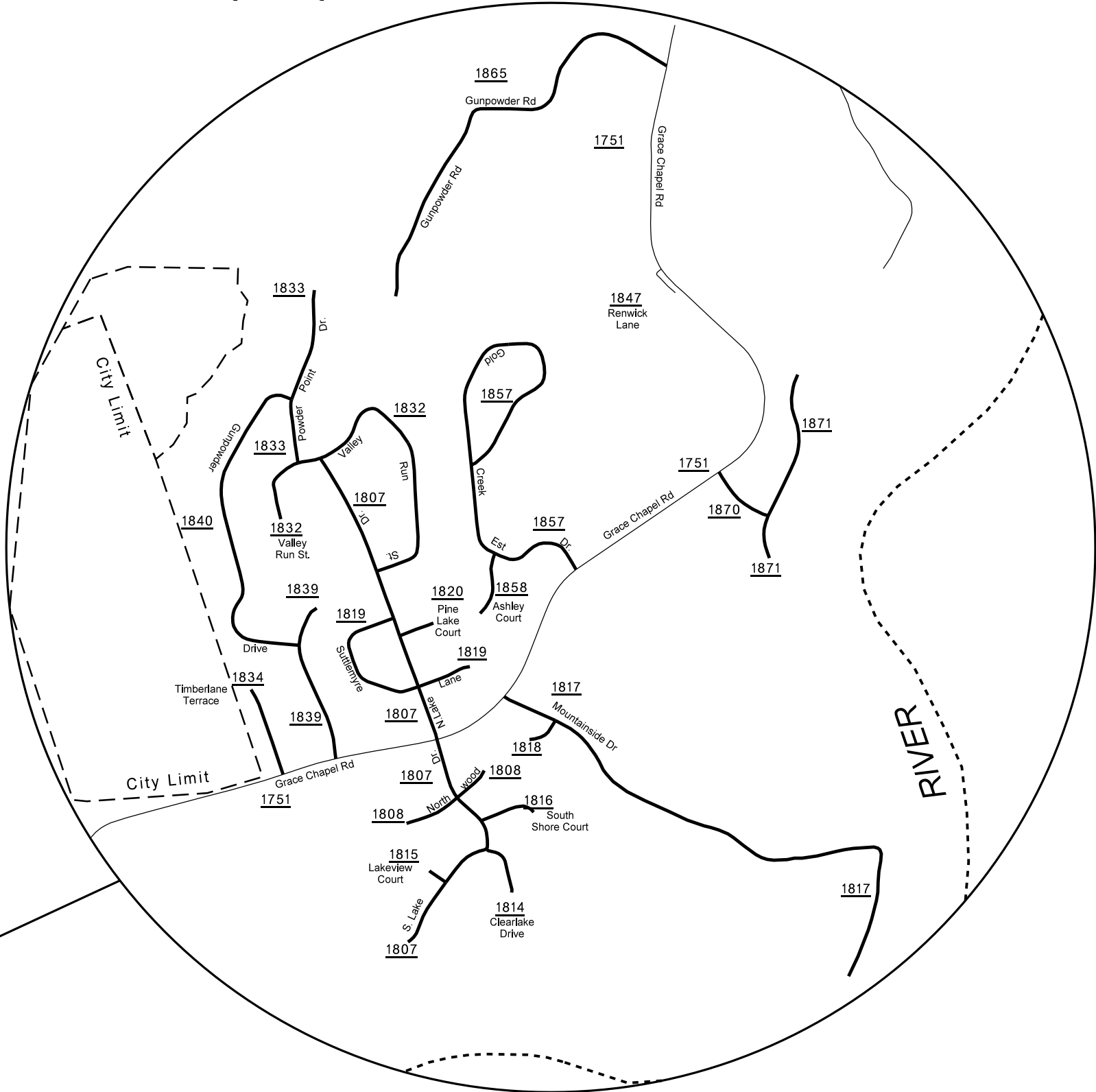
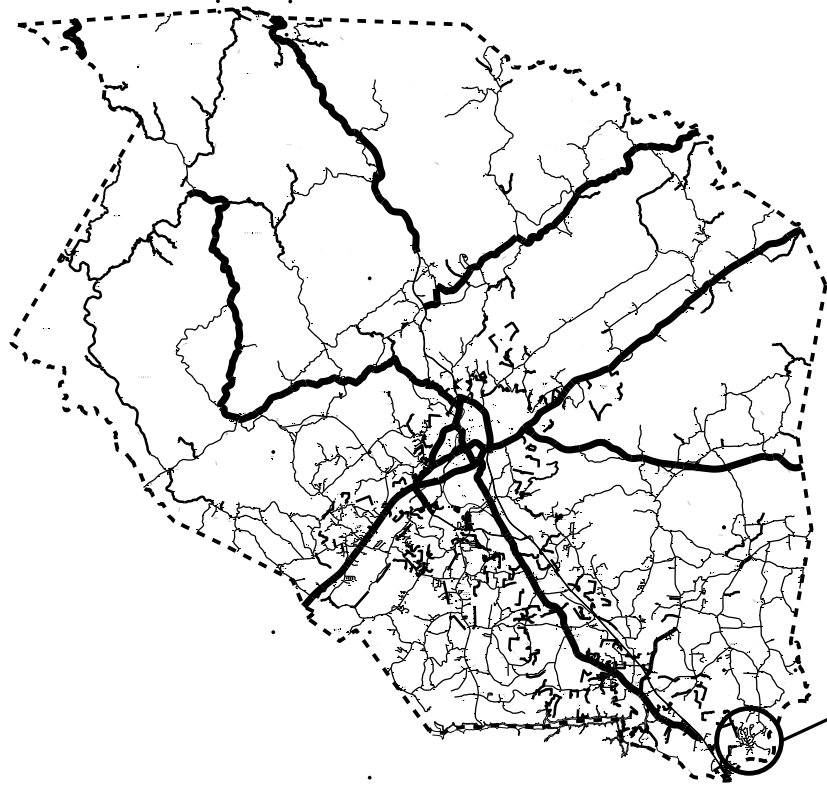


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

SECONDARY ASPHALT RESURFACING

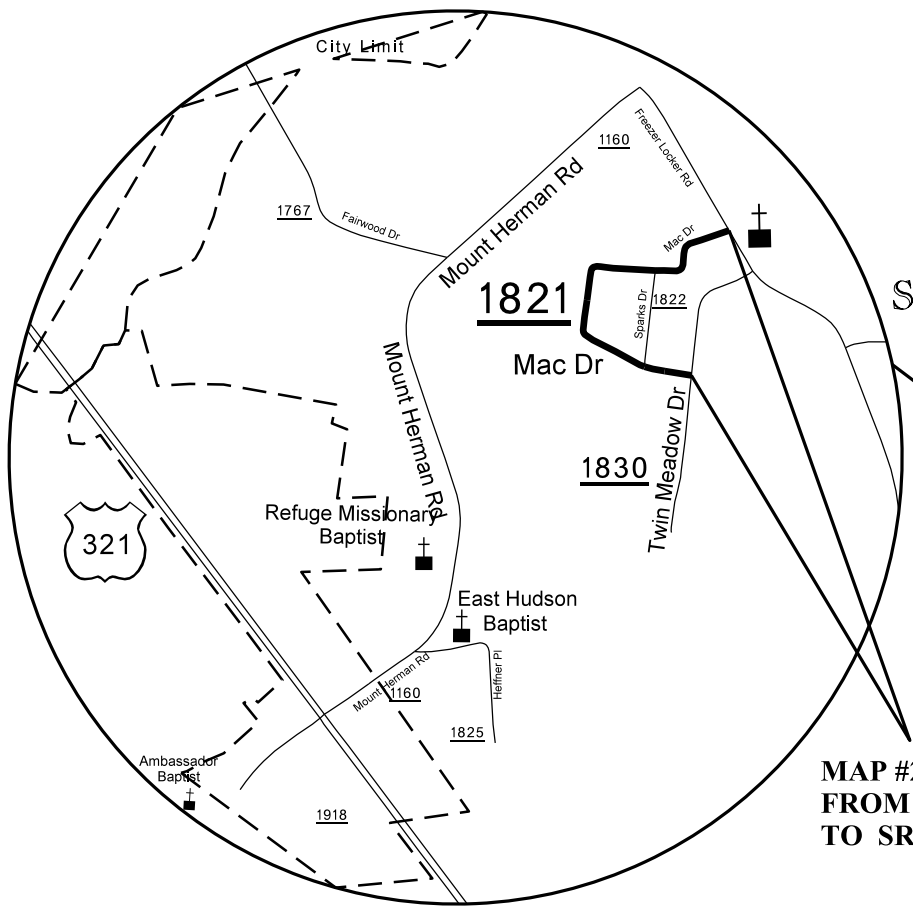
Map #	Route Name	From Description	To Description
11	SR 1807	SR 1832	END MAINT
12	SR 1808	END MAINT	END MAINT
13	SR 1814	SR 1807	END MAINT
14	SR 1815	SR 1807	END MAINT
15	SR 1816	SR 1807	END MAINT
16	SR 1817	SR 1751	END MAINT
17	SR 1818	SR 1817	END MAINT
18	SR 1819	SR 1807	END MAINT
19	SR 1820	SR 1807	END MAINT
22	SR 1832	SR 1807	END MAINT
23	SR 1833	SR 1832	END MAINT
24	SR 1834	SR 1751	END MAINT
25	SR 1839	SR 1751	END MAINT
26	SR 1840	SR 1833	SR 1839
29	SR 1857	SR 1751	SR 1857
33	SR 1865	SR 1751	END MAINT
34	SR 1870	SR 1751	SR 1871
35	SR 1871	END MAINT	END MAINT
37	SR 1858	SR 1857	END MAINT



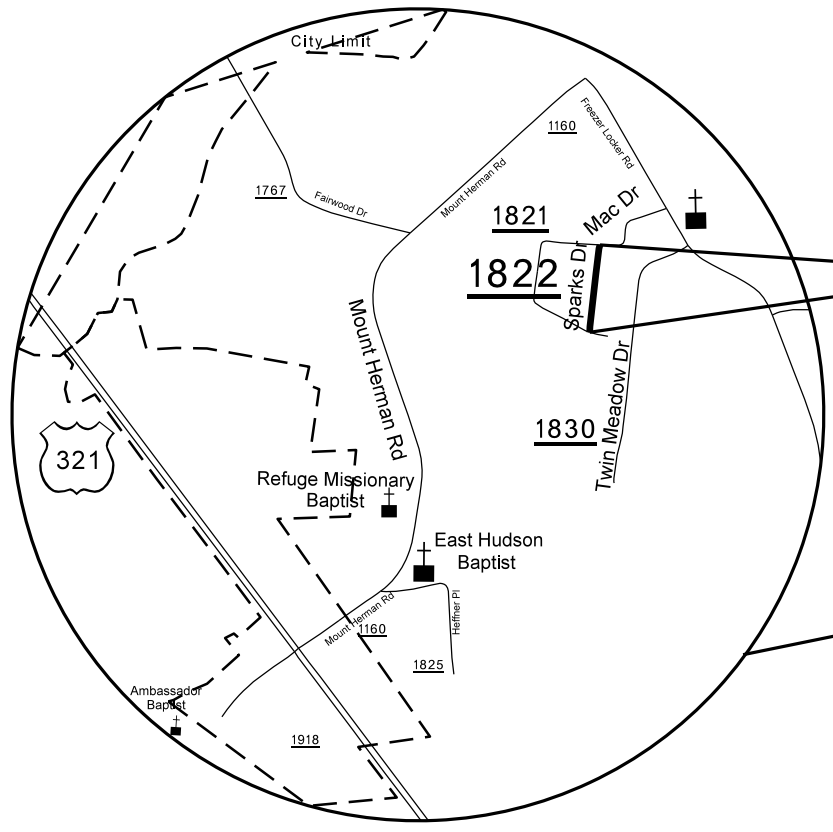
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

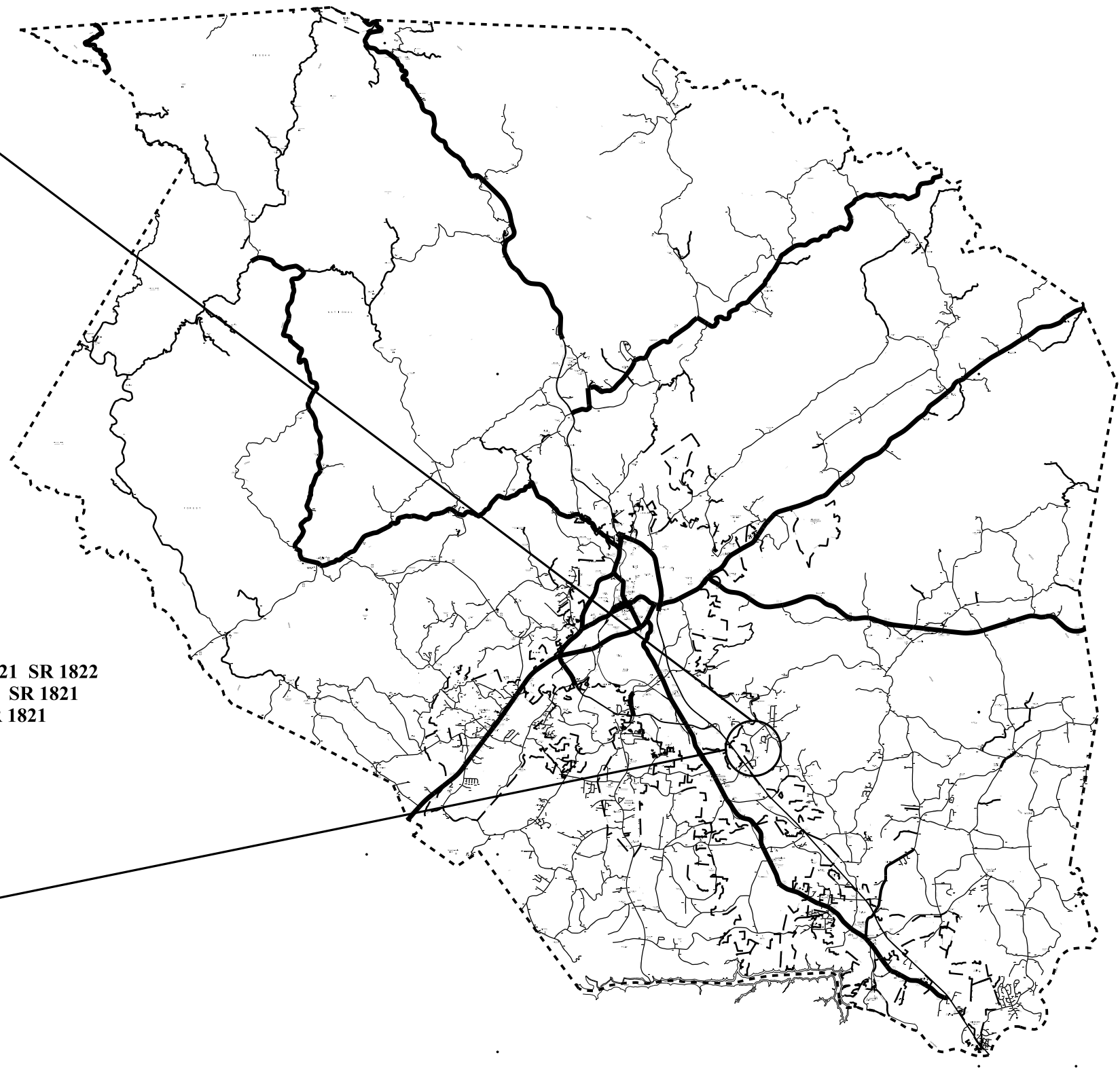
SECONDARY ASPHALT RESURFACING



MAP #20 SR 1821
FROM SR 1715
TO SR 1830



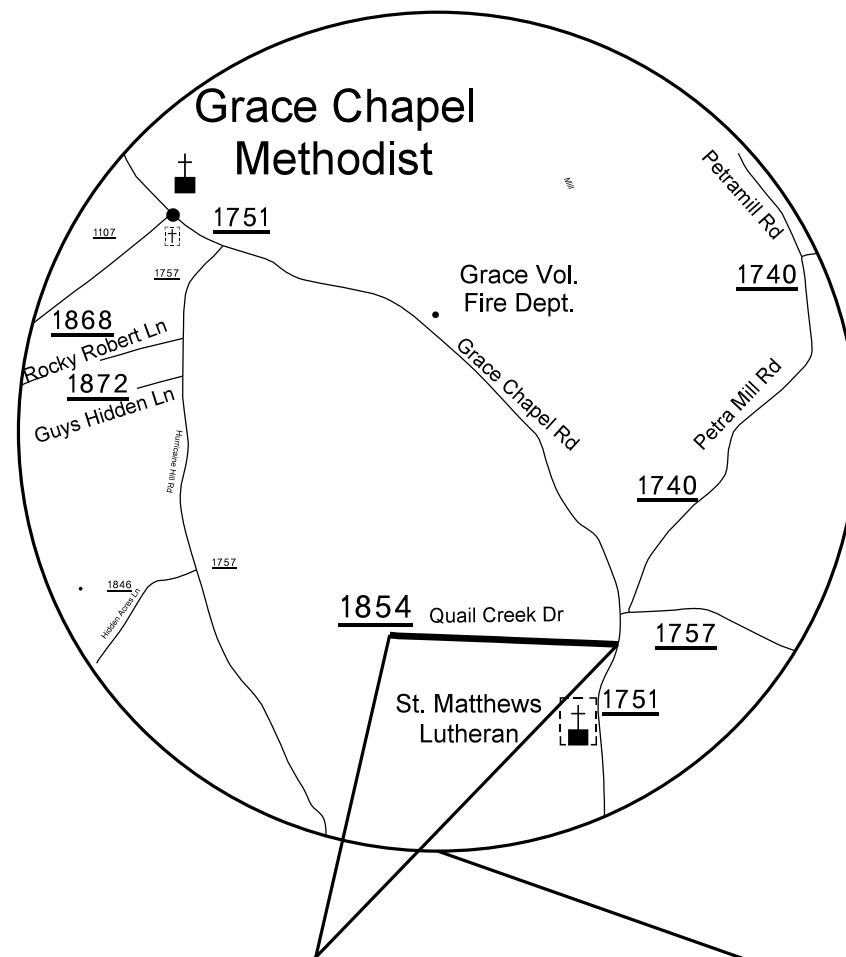
MAP #21 SR 1822
FROM SR 1821
TO SR 1821



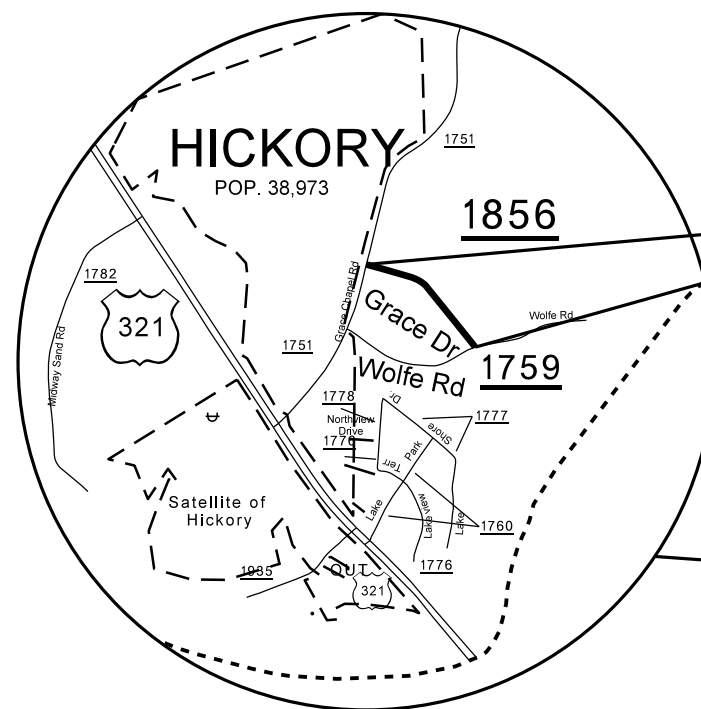
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

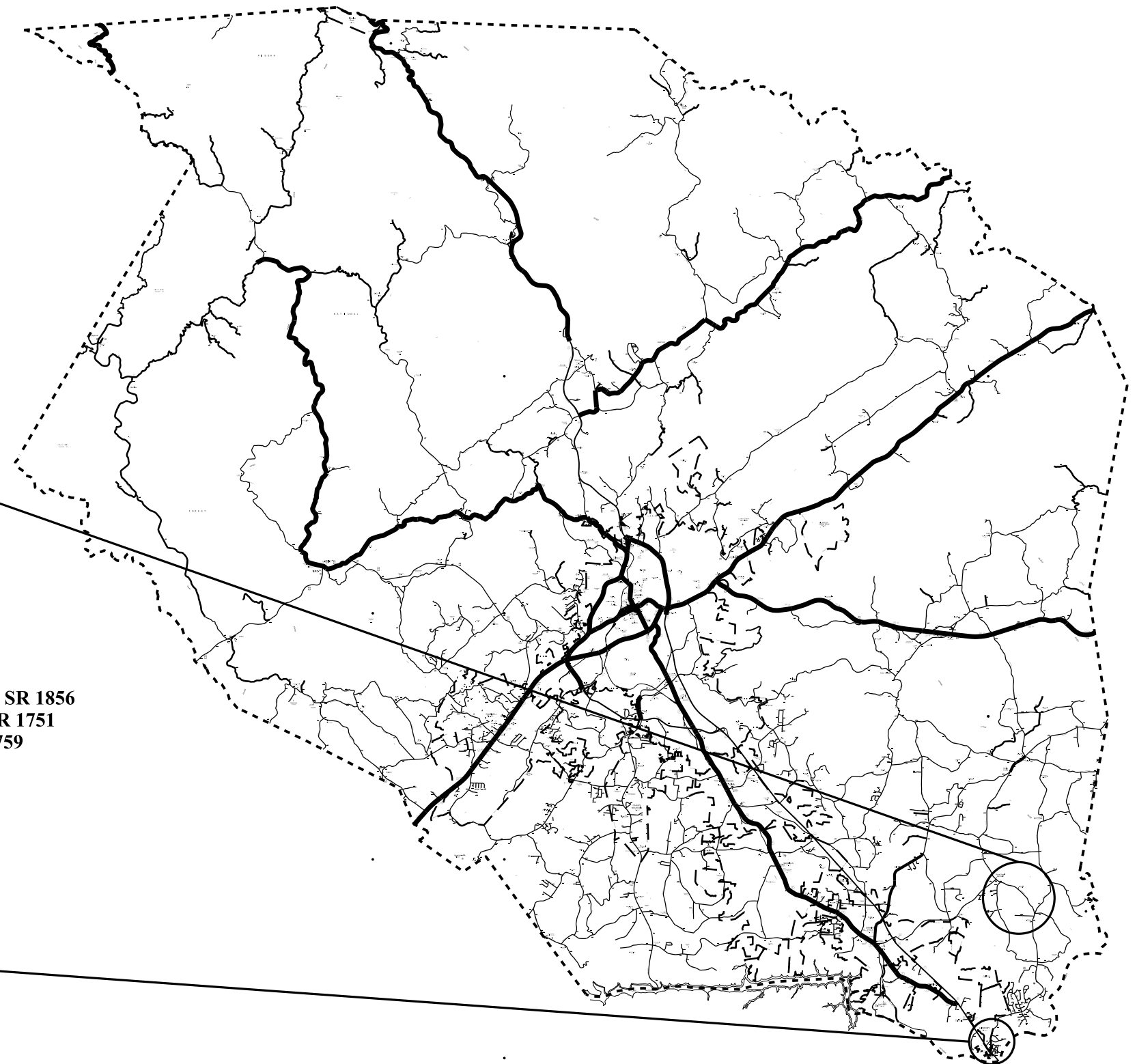
SECONDARY ASPHALT RESURFACING



**MAP #27 SR 1854
FROM SR 1751
TO END MAINT**



**MAP #28 SR 1856
FROM SR 1751
TO SR 1759**

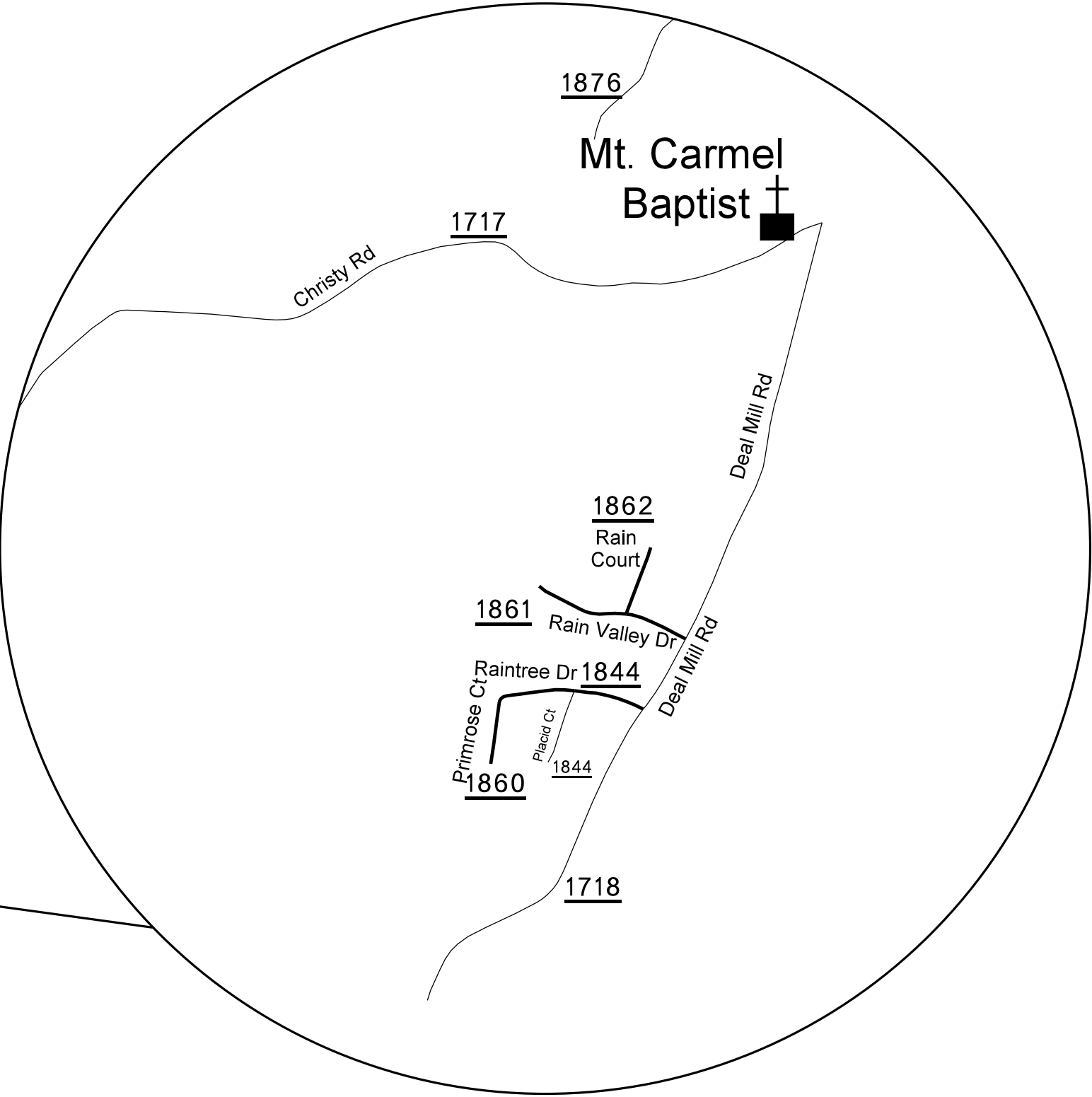
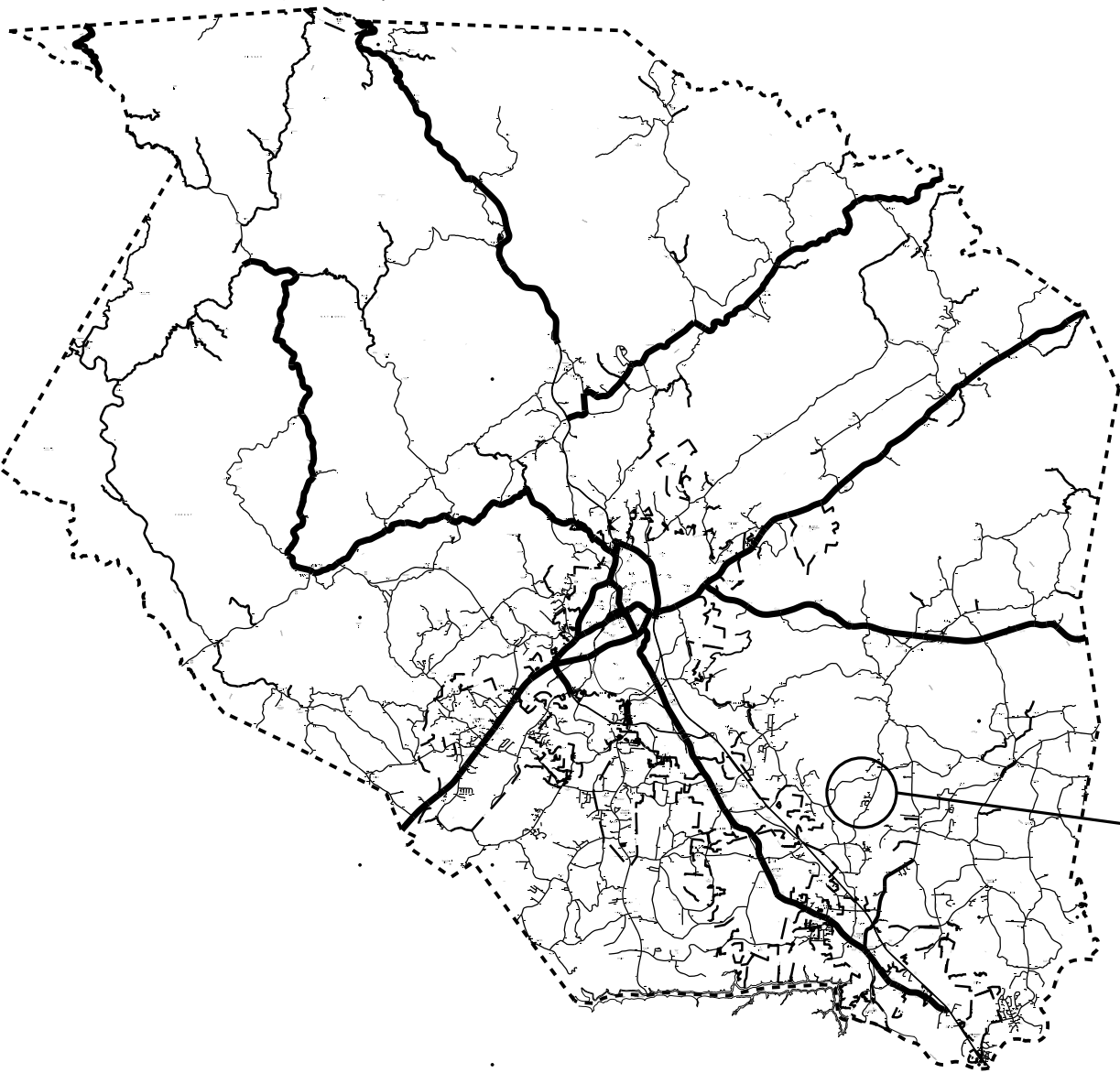


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CALDWELL COUNTY

SECONDARY ASPHALT RESURFACING

Map #	Route Name	From Description	To Description
30	SR 1860	SR 1844	END MAINT
31	SR 1861	SR 1718	END MAINT
32	SR 1862	SR 1861	CUL-DE-SAC

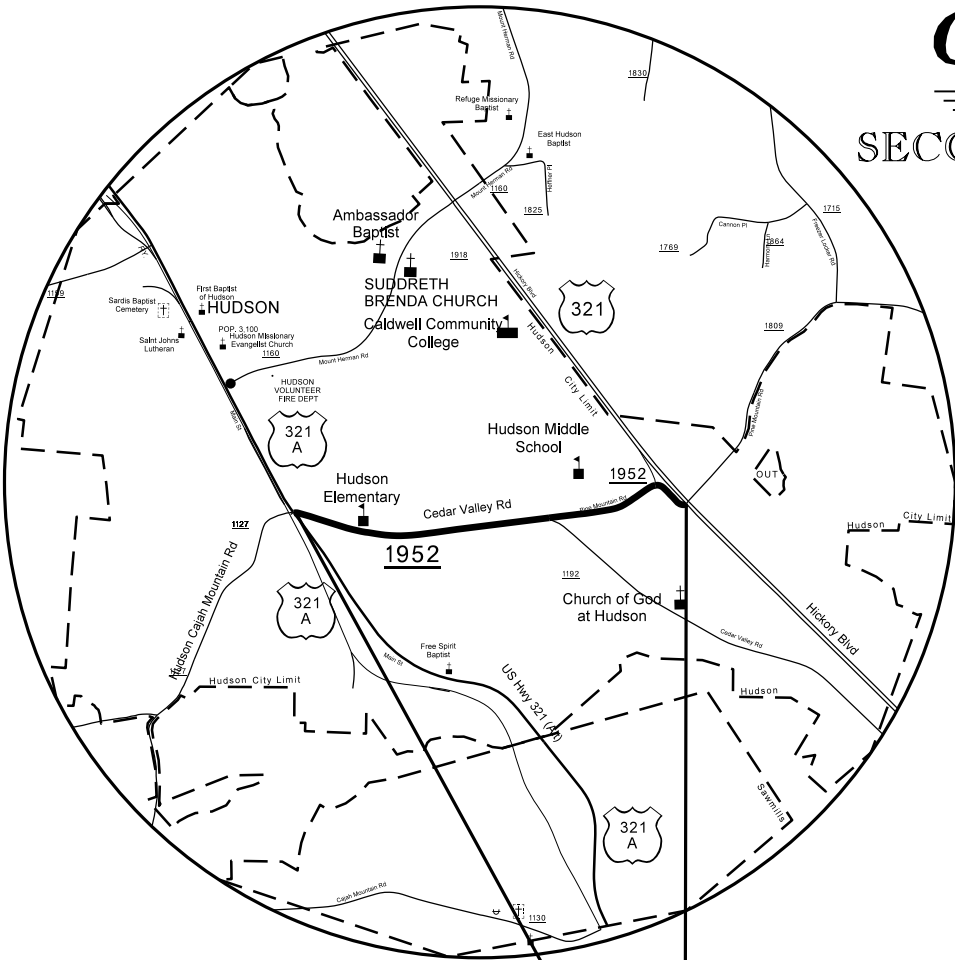


STATE OF NORTH CAROLINA

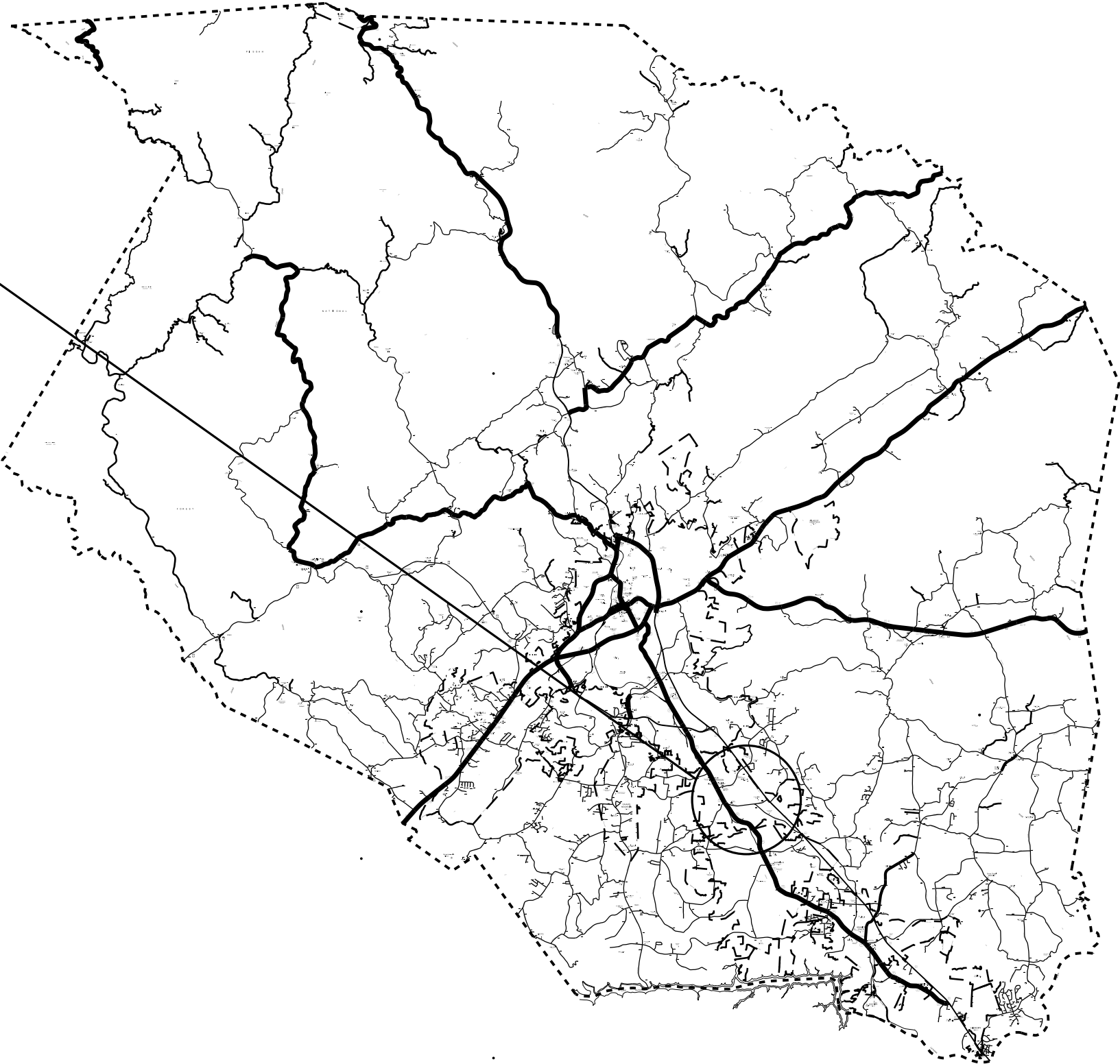
DIVISION OF HIGHWAYS

CALDWELL COUNTY

SECONDARY ASPHALT RESURFACING



MAP #36 SR 1952
FROM US 321
TO US 321 ALT



PHASING DIAGRAM

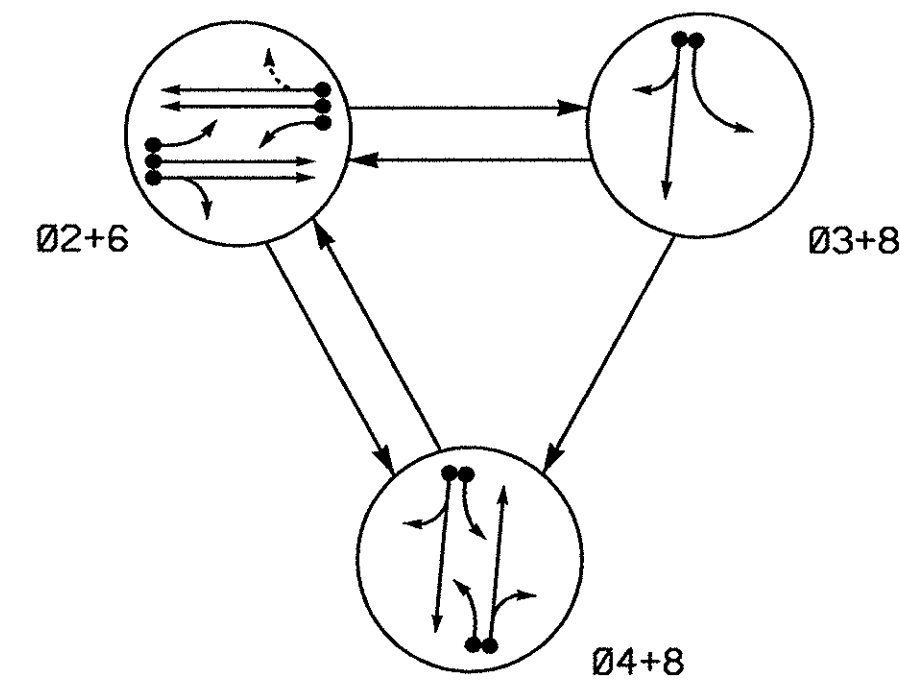
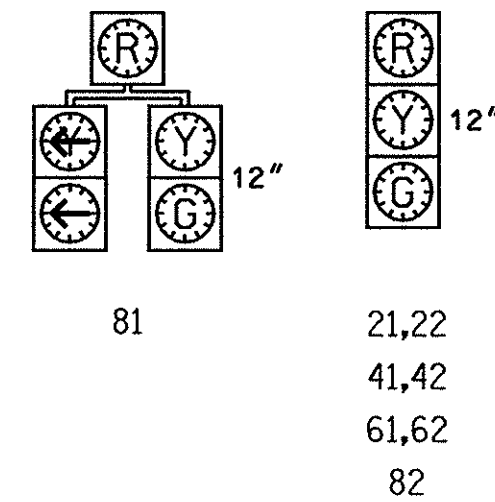


TABLE OF OPERATION				
SIGNAL FACE	PHASE			
	0 2 + 6	0 3 + 8	0 4 + 8	F L O O T
21,22	G	R	R	Y
41,42	R	R	G	R
61,62	G	R	R	Y
81	R	G	G	R
82	R	G	G	R

SIGNAL FACE I.D.

 Denotes L.E.D.



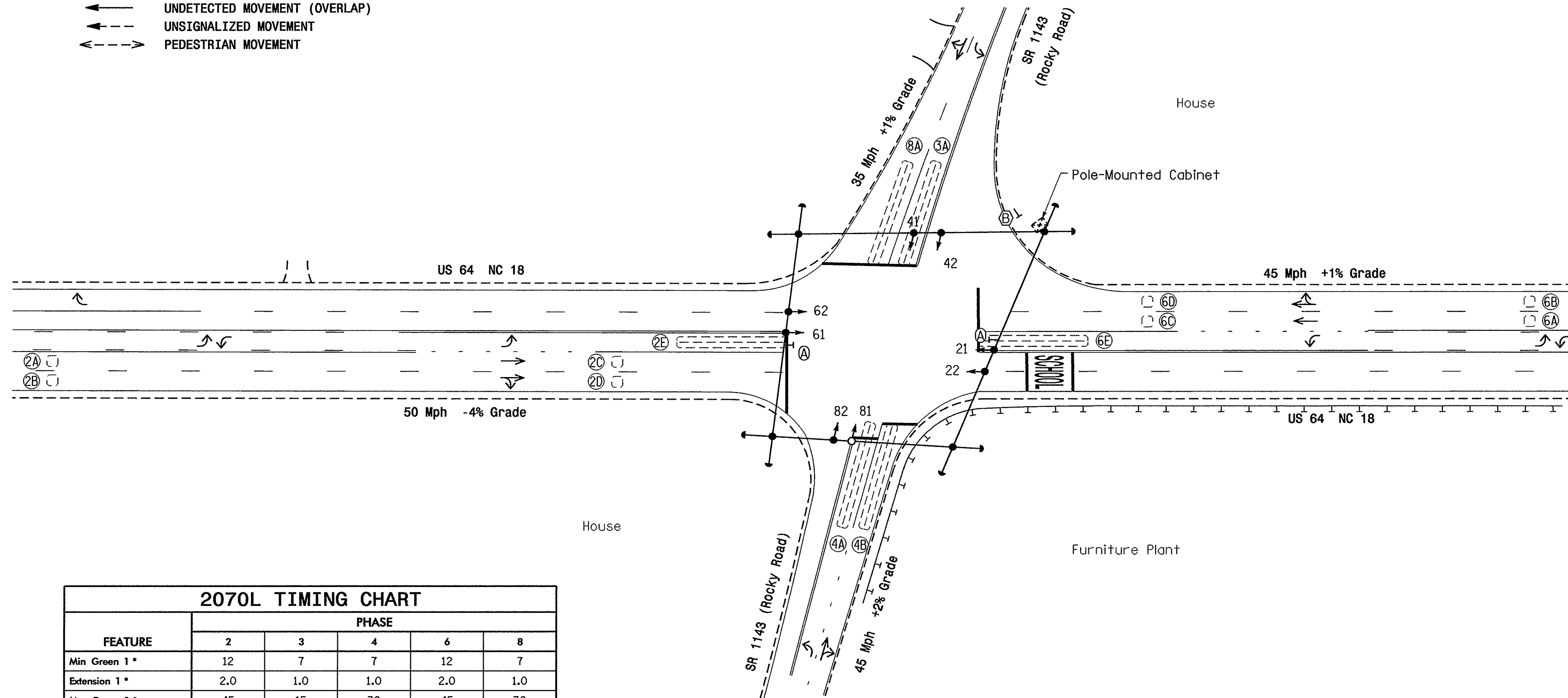
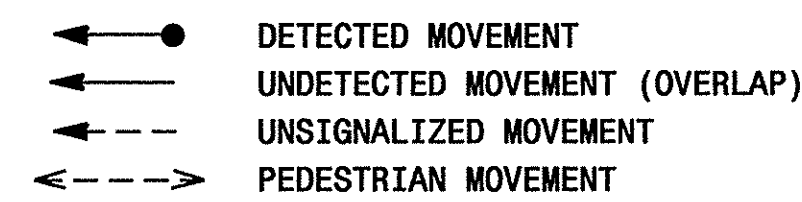
2070L LOOP & DETECTOR INSTALLATION												
INDUCTIVE LOOPS						DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	DELAY FULL TIME	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A,2B	6X6	400	Ex1st	-	2	Y	Y	-	2.7	-	-	-
2C,2D	6X6	90	Ex1st	-	2	Y	Y	-	-	-	-	-
2E	6X60	0	Ex1st	-	2	Y	Y	-	-	-	-	-
3A	6X60	0	Ex1st	-	3	Y	Y	-	-	15	-	Y
					8	Y	Y	-	-	3	-	-
4A	6X60	0	Ex1st	-	4	Y	Y	-	-	3	-	-
4B	6X60	0	Ex1st	-	4	Y	Y	-	-	10	-	-
6A,6B	6X6	300	Ex1st	-	6	Y	Y	-	1.6	-	-	-
6C,6D	6X6	90	Ex1st	-	6	Y	Y	-	-	-	-	-
6E	6X60	0	Ex1st	-	6	Y	Y	-	-	-	-	-
8A	6X60	0	Ex1st	-	8	Y	Y	-	-	10	-	-

3 Phase
Fully Actuated
Isolated

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Omit phase 3 during phase 4 on.
4. Set all detector units to presence mode.
5. In the event of loop replacement, refer to the current Signals and Geometrics Design Manual and submit a Plan of Record to the Signals and Geometrics Section.
6. Pavement markings are existing.

PHASING DIAGRAM DETECTION LEGEND

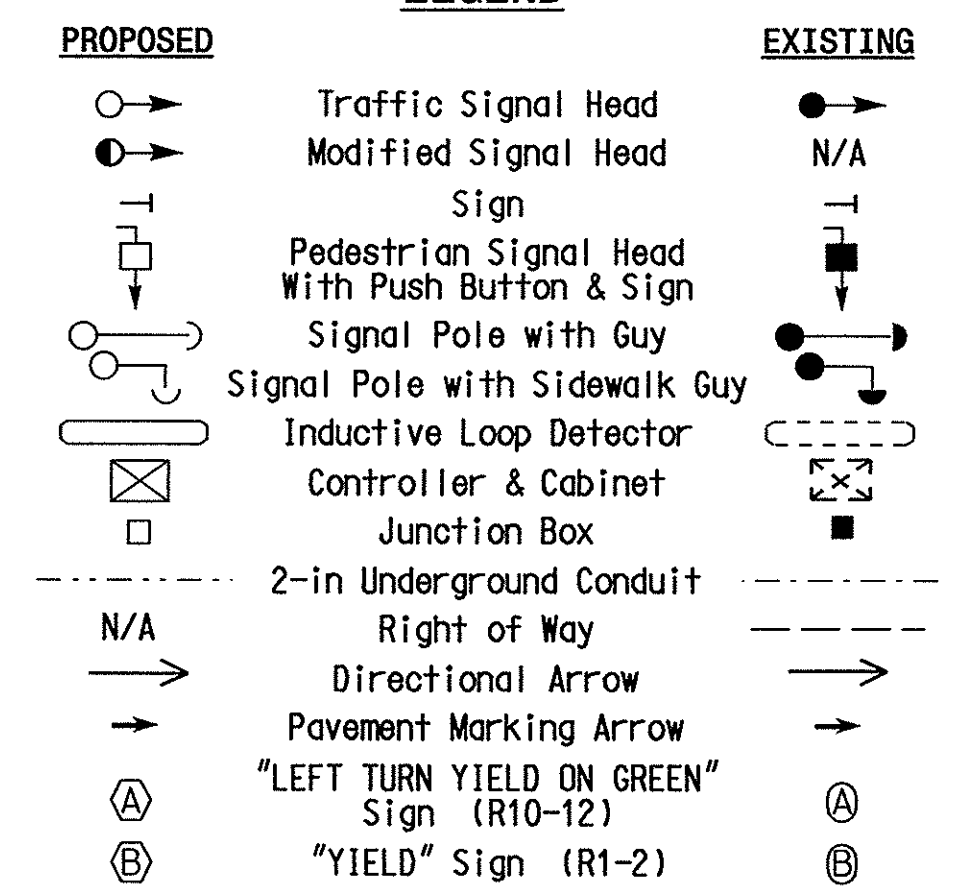


2070L TIMING CHART

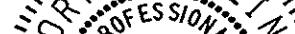
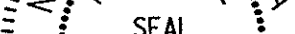
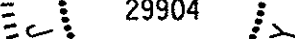
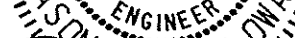
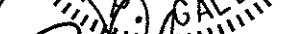
2070L TIMING CHART					
FEATURE	PHASE				
	2	3	4	6	8
Min Green 1 *	12	7	7	12	7
Extension 1 *	2.0	1.0	1.0	2.0	1.0
Max Green 1 *	45	15	30	45	30
Yellow Clearance	5.2	3.0	4.3	4.4	3.8
Red Clearance	1.2	1.9	1.3	1.4	1.5
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	ON
Simultaneous Gap	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.

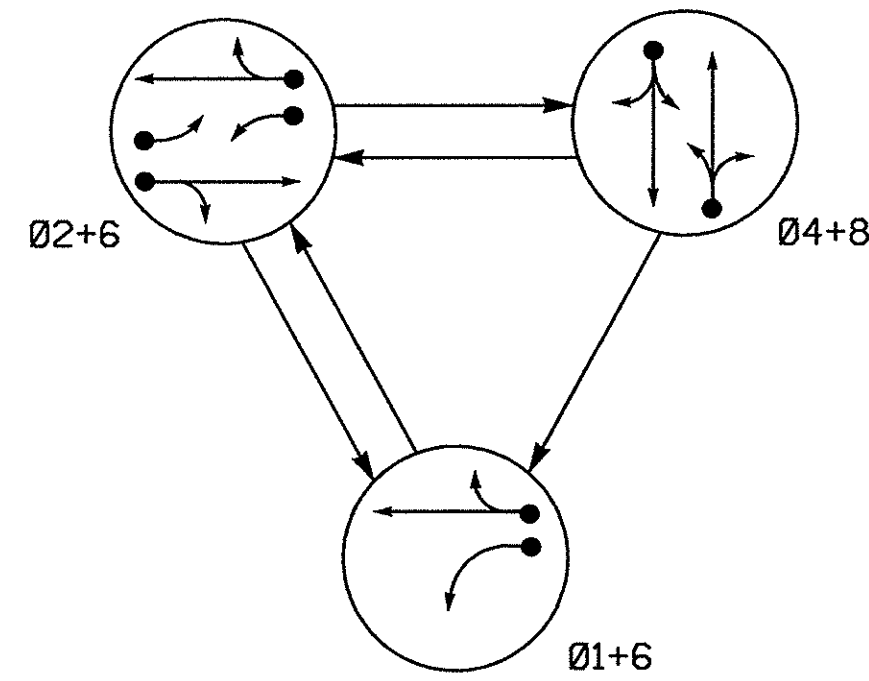
LEGEND



Signal Upgrade

Prepared in the Offices of:  Public Engineering and Survey Commission UNIVERSITY OF NORTH CAROLINA STATE OF NORTH CAROLINA SCHOOL OF TRANSPORTATION SURVEYING AND GEODESIC SECTION 750 N. Greenfield Pheny, Garner, NC 27529	US 64 NC 18 At SR 1143 (Rocky Road)	SEAL 																																	
Division 11 Caldwell County Gamewell																																			
PLAN DATE: June 2007		REVIEWED BY:																																	
PREPARED BY: JPG		REVIEWED BY:																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;">REVISIONS</th> <th style="width: 20%;">INIT.</th> <th style="width: 20%;">DATE</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			REVISIONS	INIT.	DATE																														
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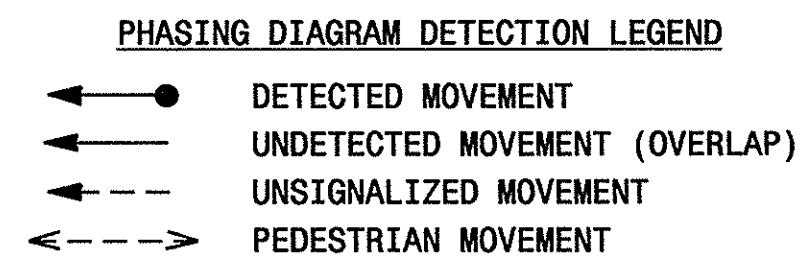
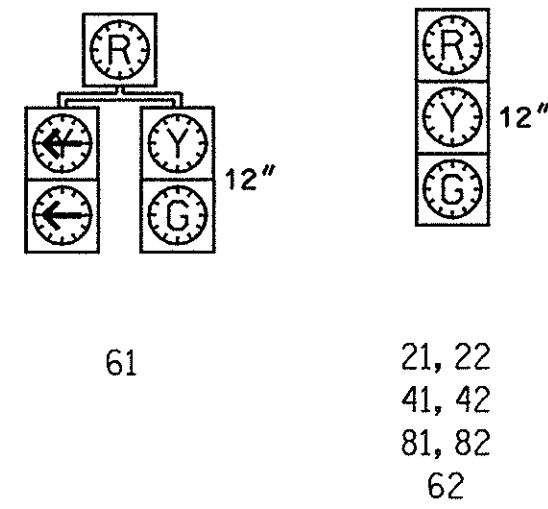
PHASING DIAGRAM



SIGNAL FACE	PHASE			
	Ø 1 + 6	Ø 2 + 6	Ø 4 + 8	Ø 1 + 6
21,22	R	G	R	Y
41,42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y
81,82	R	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.

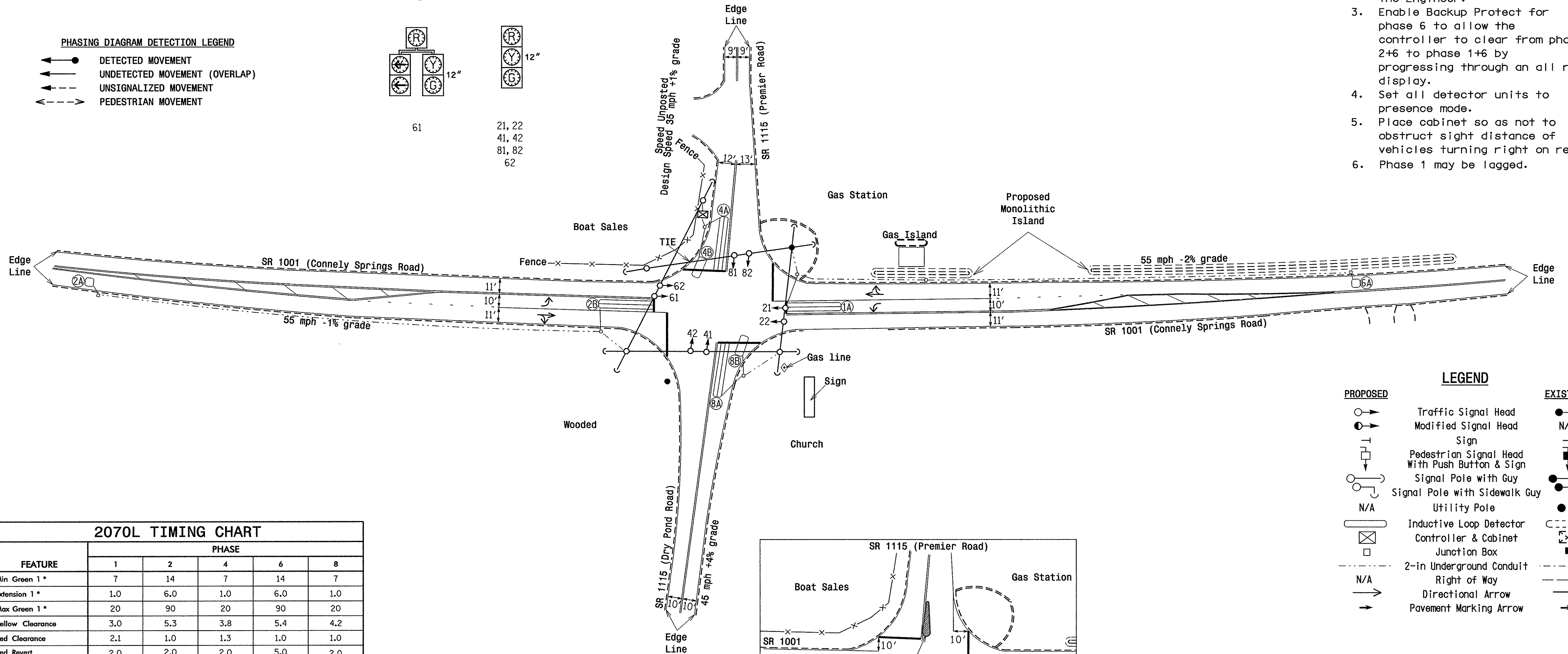


2070L LOOP & DETECTOR INSTALLATION									
INDUCTIVE LOOPS					DETECTOR PROGRAMMING				
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALING	EXTENSION	FULL TIME DELAY	STRETCH TIME
1A	6X40	0	2-4-2	Y	1	Y	Y	15	Y
2A	6X6	420	6	Y	2	Y	Y	3	Y
2B	6X40	0	2-4-2	Y	2	Y	Y	3	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	3	Y
4B	6X15	+5	3	Y	4	Y	Y	15	Y
6A	6X6	420	6	Y	6	Y	Y	3	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	3	Y
8B	6X15	+5	3	Y	8	Y	Y	15	Y

3 Phase Fully Actuated Isolated

NOTES

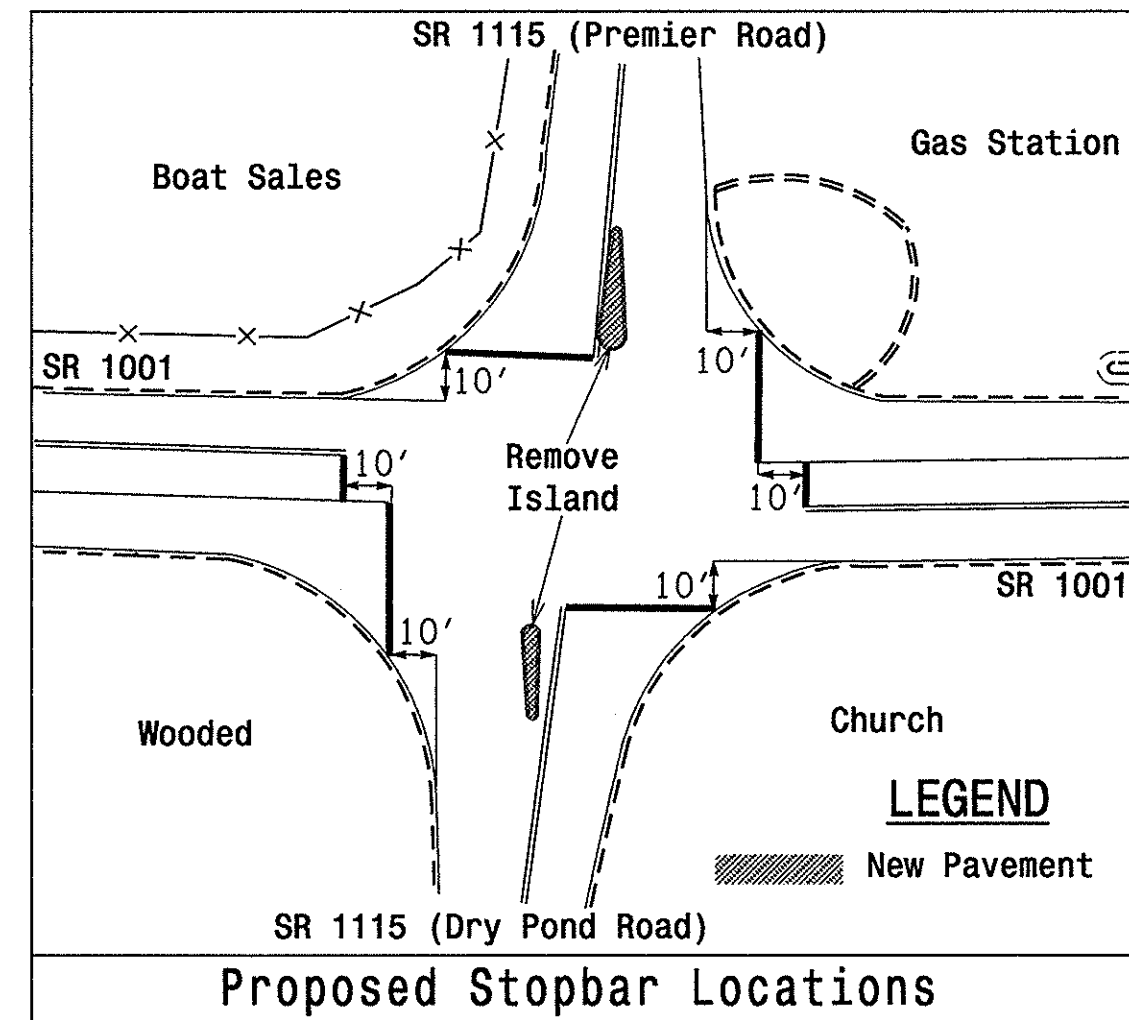
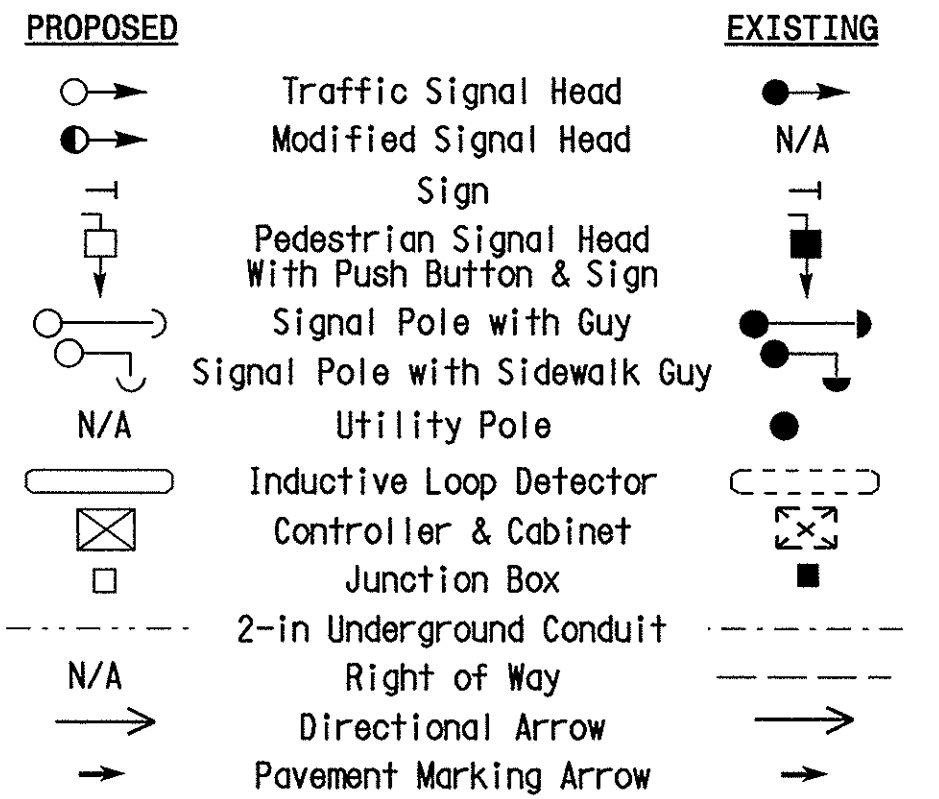
- Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Enable Backup Protect for phase 6 to allow the controller to clear from phase 2+6 to phase 1+6 by progressing through an all red display.
- Set all detector units to presence mode.
- Place cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Phase 1 may be lagged.



2070L TIMING CHART					
FEATURE	PHASE				
	1	2	4	6	8
Min Green 1 *	7	14	7	14	7
Extension 1 *	1.0	6.0	1.0	6.0	1.0
Max Green 1 *	20	90	20	90	20
Yellow Clearance	3.0	5.3	3.8	5.4	4.2
Red Clearance	2.1	1.0	1.3	1.0	1.0
Red Revert	2.0	2.0	2.0	5.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	2.5	-	2.5	-
Max Variable Initial *	-	46	-	46	-
Time Before Reduction *	-	15	-	15	-
Time To Reduce *	-	30	-	30	-
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

* 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.

LEGEND



This plan supersedes plan sealed on 4/5/07

New Installation Corr. File Number 11-06-202

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SR 1001 (Connely Springs Road) at SR 1115 (Dry Pond/Premier Road)

Division 11 Caldwell County Cajah Mountain

PLAN DATE: March 2007 REVIEWED BY: M MAHBOOBA

PREPARED BY: EM MINSHEW REVIEWED BY:

REVISIONS	INIT.	DATE

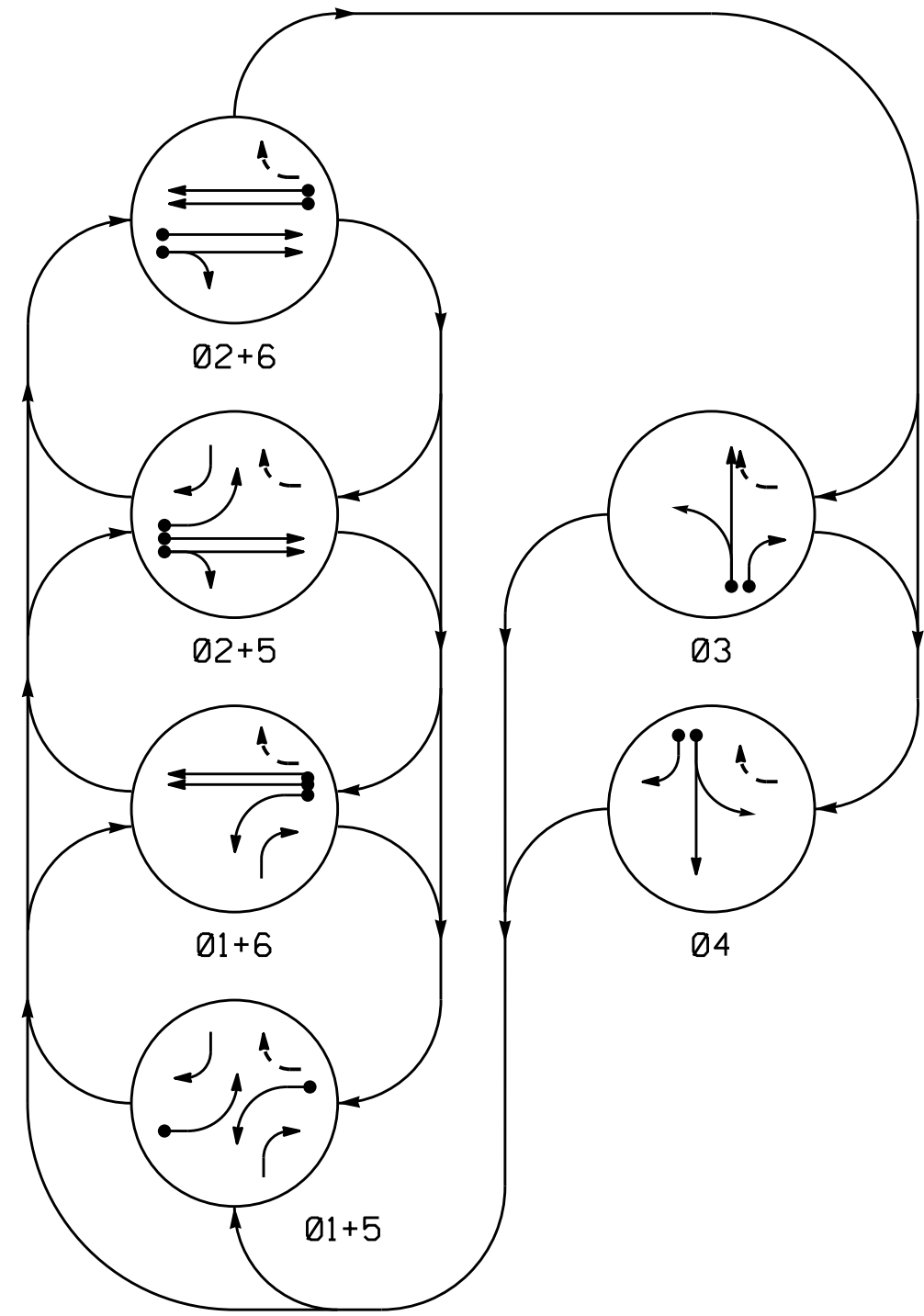
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SEAL 29904

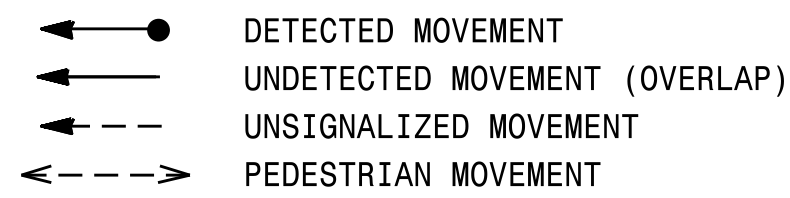
ENGINEER JASON P. GALLOWAY

SIG. INVENTORY NO. 17-0096

PHASING DIAGRAM



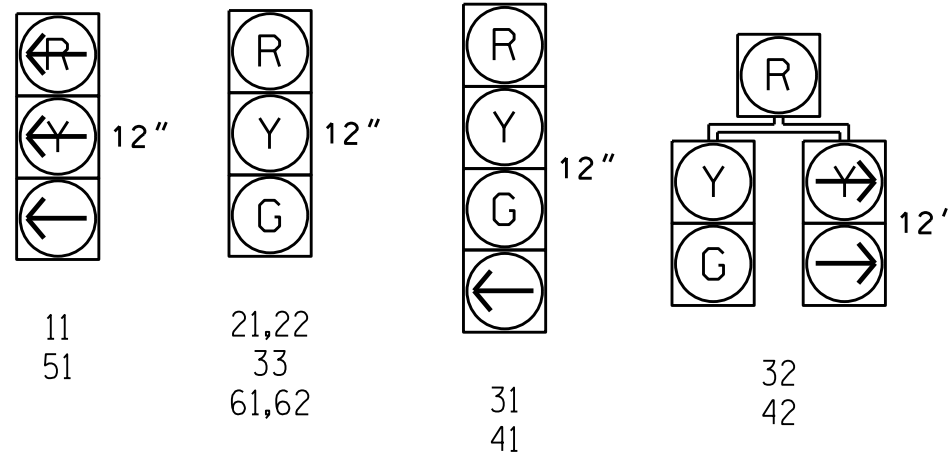
PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE	PHASE					
	01+5	01+6	02+5	02+6	03	04
11	←	←	→	→	→	→
21, 22	R	R	G	G	R	Y
31	R	R	R	R	G	R
32	R	R	R	R	G	R
33	R	R	R	R	G	R
41	R	R	R	R	G	R
42	R	R	R	R	G	R
51	←	←	→	→	→	→
61, 62	R	G	R	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



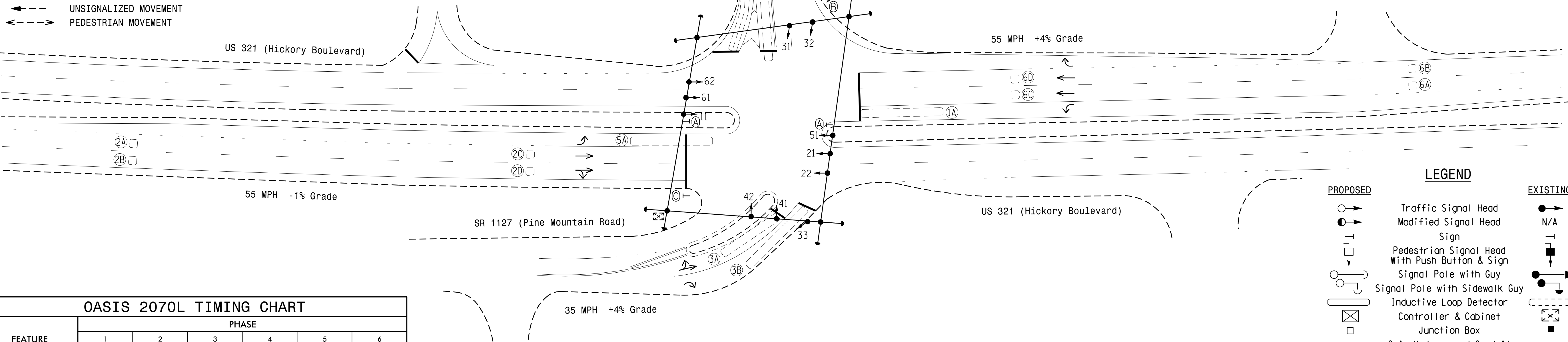
OASIS 2070L LOOP & DETECTOR INSTALLATION CHART													
INDUCTIVE LOOPS							DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	SWITCH	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SWITCHING DETECTION	STRETCH TIME	DELAY TIME
1A	6X60	0	EXISTING	-	1	-	Y	Y	-	-	-	-	-
2A,2B	6X6	400	EXISTING	-	2	-	Y	Y	-	-	-	2.0	-
2C,2D	6X6	110	EXISTING	-	2	-	Y	Y	-	-	-	-	-
3A	6X50	0	EXISTING	-	3	-	Y	Y	-	-	-	-	-
3B*	6X60	0	EXISTING	-	1	3	Y	Y	-	Y	-	20	-
4A	6X60	+8	EXISTING	-	4	-	Y	Y	-	-	-	-	-
4B	6X60	0	EXISTING	-	5	-	Y	Y	-	-	-	20	-
5A	6X60	+20	EXISTING	-	5	-	Y	Y	-	-	-	-	-
6A,6B	6X6	400	EXISTING	-	6	-	Y	Y	-	-	-	2.0	-
6C,6D	6X6	110	EXISTING	-	6	-	Y	Y	-	-	-	-	-

*See Note 7

6 Phase
Fully Actuated
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- 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.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Pavement markings are existing.
- Program detector to cross-switch from calling phase 1 to calling phase 3 during phase 3 green only.



OASIS 2070L TIMING CHART						
FEATURE	PHASE					
	1	2	3	4	5	6
Min Green 1 *	7	20	7	7	7	20
Extension 1 *	1.0	2.0	2.0	2.0	1.0	2.0
Max Green 1 *	25	75	25	20	20	75
Yellow Clearance	4.5	5.2	4.5	4.5	4.5	5.2
Red Clearance	2.0	1.6	1.8	1.7	2.0	1.6
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

* 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.

Plan of Record

PREPARED BY: C.L. Sweeney DATE: August 2014

REVIEWED BY: Z.M. Little DATE: August 2014

SIGNATURE: [Signature] DATE: 8/15/2014

COMMENTS

Removed sign "D."

This plan of record reflects existing field conditions as submitted by field personnel. This plan may have been modified from its original state.

LEGEND	
PROPOSED	EXISTING

Plan of Record

Prepared In the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
STATE OF NORTH CAROLINA
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

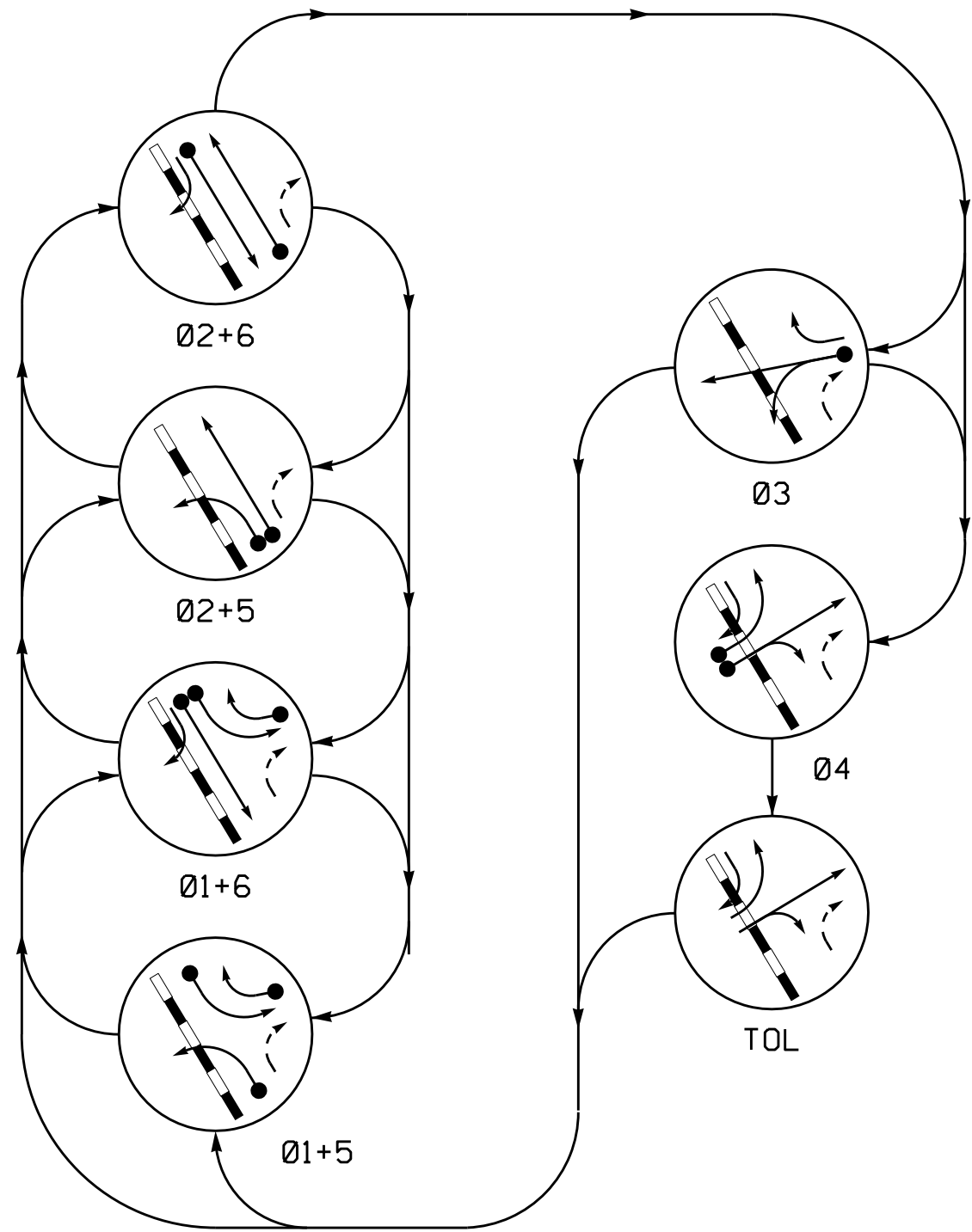
US 321 (Hickory Blvd)
at
SR 1127-1809(Pine Mountain Rd)

Division 11 Caldwell County Hudson
PLAN DATE: February 1999 REVIEWED BY:
PREPARED BY: LM Eddins REVIEWED BY:
REVISIONS
INIT. DATE

Not a certified document.
This document originally
Issued and sealed by
Kenneth E. Miam,
PE no.9007
on 3/2/99.
This document shall not be
considered a certified
document.

SIG. INVENTORY NO. 11-0808

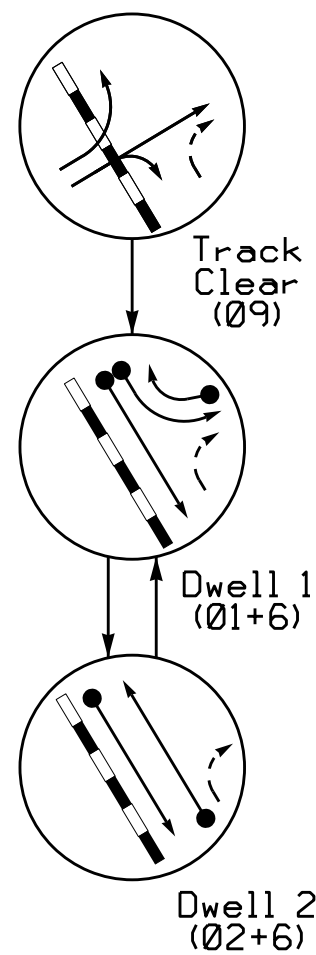
PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

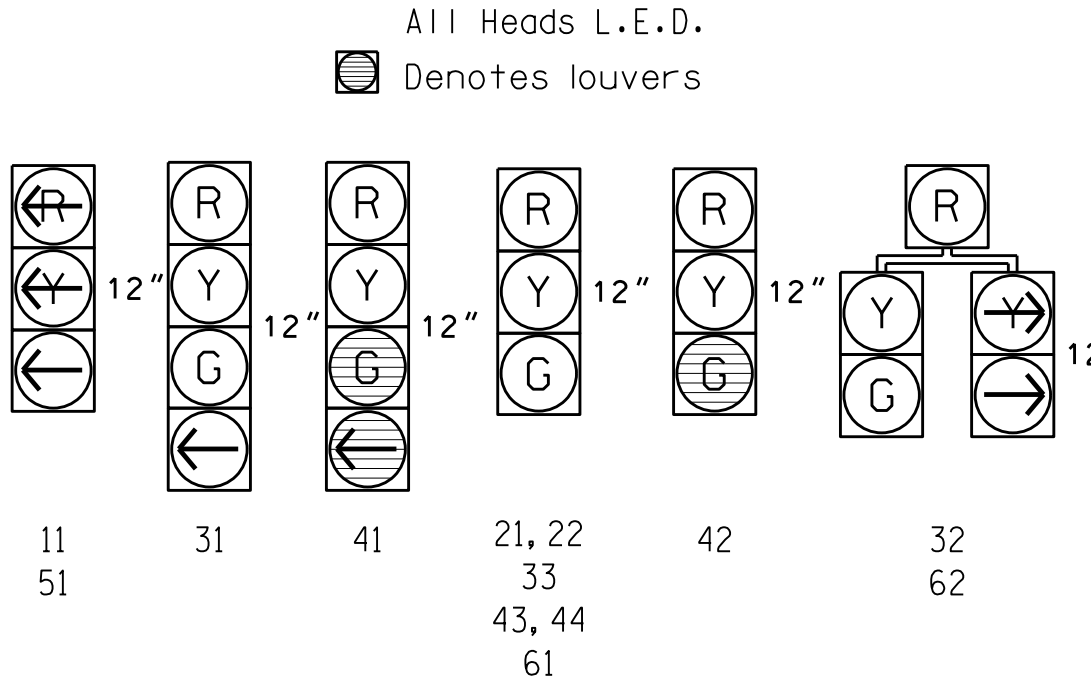
RAIL PREEMPT PHASES
(High Priority)



SIGNAL FACE	PHASE												
	01+5	01+6	02+5	02+6	03	04	TOL	R09	R01	R02	R03	R04	R05
11	←	←	←	←	←	←	←	←	←	←	←	←	←
21, 22	R	R	G	G	R	R	R	R	R	G	Y		
31	R	R	R	R	G	R	R	R	R	R	R		
32	R	R	R	R	G	R	R	R	R	R	R		
33	R	R	R	R	G	R	R	R	R	R	R		
41	R	R	R	R	R	G	G	G	R	R	R		
42	R	R	R	R	R	G	G	G	R	R	R		
43, 44	R	R	R	R	R	G	R	R	R	R	R		
51	←	←	←	←	←	←	←	←	←	←	←		
61	R	G	R	G	R	G	R	R	R	G	G	Y	
62	R	G	R	G	R	G	R	R	R	G	G	Y	
Sign A	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON	ON	ON	ON	**	

** SEE NOTE 7

SIGNAL FACE I.D.



OASIS 2070 RR PREEMPT	
FUNCTION	PRE 1
Interval 1 - Track Clearance Green	10
Interval 1 - Track Clearance Yellow	3.1
Interval 1 - Track Clearance Red	2.2
Interval 2 - Dwell Green	255
Interval 2 - Dwell Yellow	0.0*
Interval 2 - Dwell Red	0.0*
Interval 5 - Exit Green	1
Interval 5 - Yellow	0.0
Interval 5 - Red	0.0
Exit Phase(s)	2,6
Priority	High
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	7
Enable Backup Protection	N
Ped Clear Through Yellow	N
Inhibit Overlap Green Extension	Y
Omit Overlaps	-

* Time defaults to time used for phase during normal operation

This signal is designed using simultaneous preemption.

6 Phase
Fully Actuated
With RR Preemption
Isolated

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
- Phase 1 and/or phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Pavement markings are existing.
- Ensure flashing operation does not alter operation of blankout signs.
- Tether signal heads numbered 41 and 42.

LEGEND

PROPOSED	EXISTING
	N/A
N/A	
N/A	
	N/A

OASIS 2070 TIMING CHART							
FEATURE	PHASE						TOL
	1	2	3	4	5	6	
Min Green 1 *	7	12	7	7	7	10	4
Extension 1 *	2.0	3.0	2.0	2.0	2.0	3.0	-
Max Green 1 *	25	45	30	35	20	45	-
Yellow Clearance	3.0	4.6	3.9	3.1	3.0	4.6	3.1
Red Clearance	3.3	2.1	2.0	2.2	3.1	2.1	2.2
Red Revert	2.0	2.0	2.0	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	-	-	-	-	-
Time To Reduce *	-	30	-	-	-	-	-
Minimum Gap	-	3.0	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	-	YELLOW	-
Dual Entry	-	-	-	-	-	-	-
Simultaneous Gap	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.

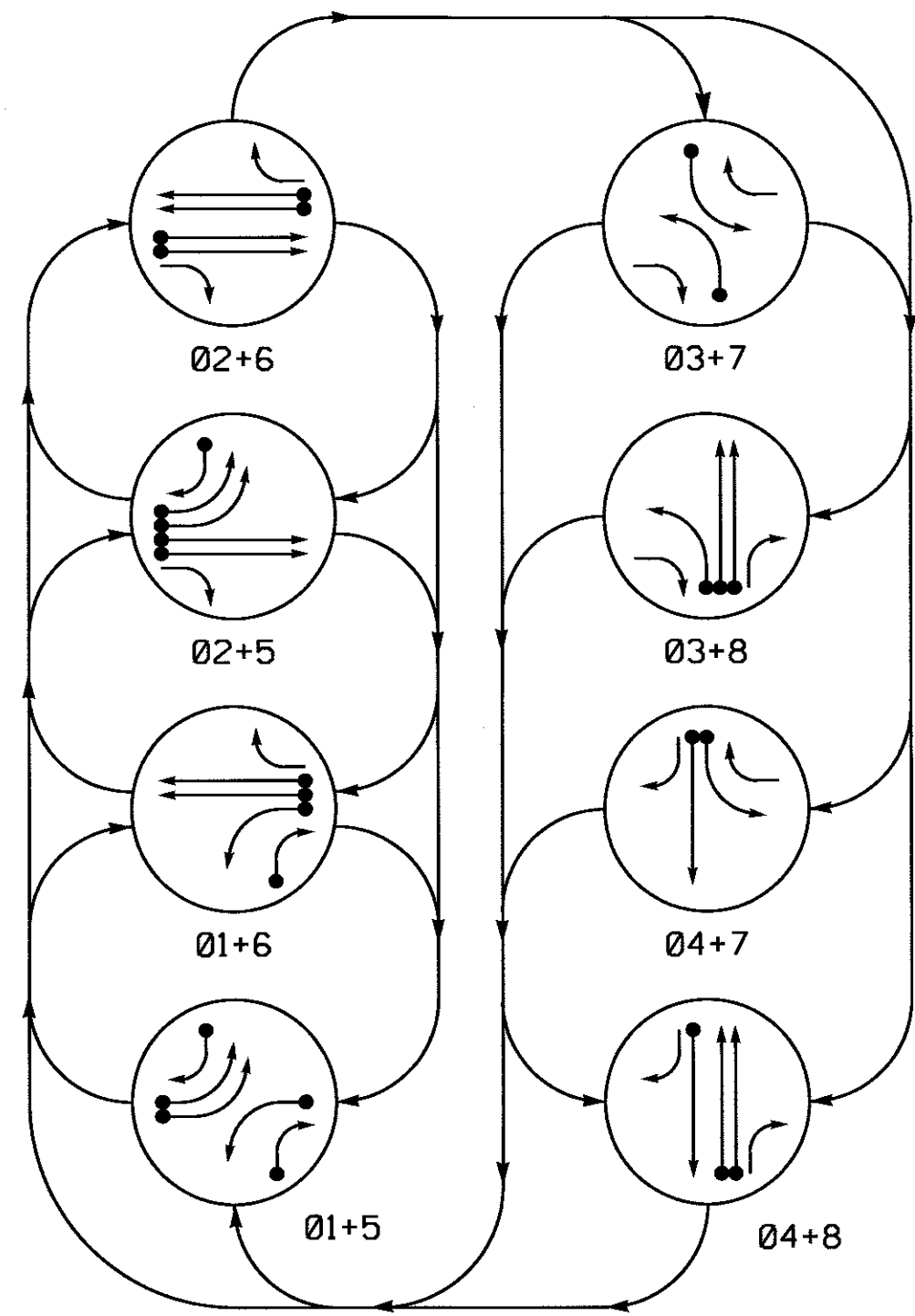
OASIS 2070 LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS				DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	3
1B	6X40	+5	2-4-2	-	1	Y	Y	-	-	15
2A	6X6	300	5	Y	2	Y	Y	-	-	-
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	3
4A	6X20	+5	3	-	4	Y	Y	-	-	3
4B	6X35	+5	2-4-2	-	4	Y	Y	-	-	10
4C,4D	6X15	32/45	3	-	4	Y	Y	-	-	-
4E	6X15	+5	3	-	4	Y	Y	-	-	10
4F	6X15	+5	3	-	4	Y	Y	-	-	10
5A	6X30	0	2-4-2	-	5	Y	Y	-	-	3
6A	6X6	70	3	-	6	Y	Y	-	-	-

Signal Upgrade

 750 N. Greenfield Pkwy, Garner, NC 27529	US 321A (Main Street) At SR 1127 (Cedar Valley Avenue/ Cajah Avenue)		Hudson
	Division 11		
PLAN DATE: January 2016	PREPARED BY: C. Pierce	REVIEWED BY:	
REVISIONS	INIT.	DATE	
Seal of Engineer Zachary M. Little Professional Engineer 030530 2/10/2016			SIG. INVENTORY NO. 11-0838

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

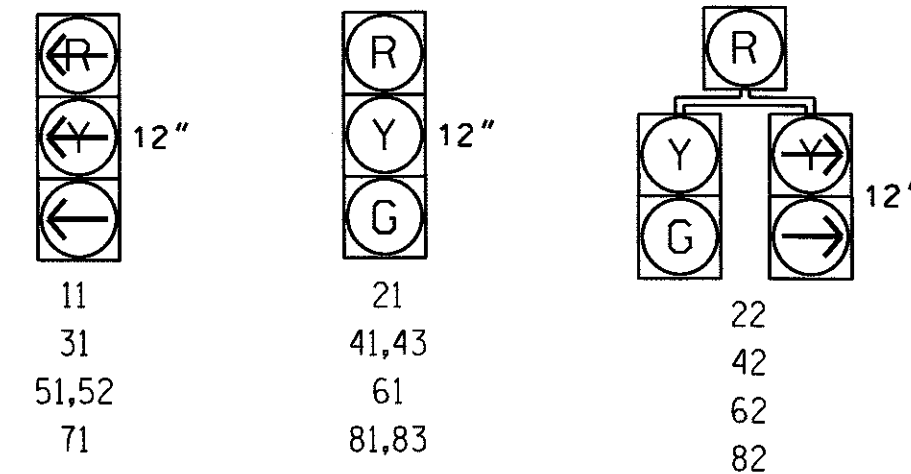
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8
11								
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R	R	R	Y
31	R	R	R	R				
41,43	R	R	R	R	R	G	G	R
42	R	R	R	R	R	G	G	R
51,52								
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R	R	R	Y
71	R	R	R	R				
81,83	R	R	R	R	G	R	G	R
82	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070L LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
LOOP	SIZE (m)	DISTANCE FROM STOPBAR (m)	URNS	NEW LOOP	PHASE	CALLING	EXTENSION	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X60	0	2-4-2	-	1	Y	Y	-	-	-	-
1B	6X60	0	2-4-2	-	1	Y	Y	-	15	-	-
2A,2B	6X6	420	5	-	2	Y	Y	-	-	-	-
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	-	-
4A	6X60	0	2-4-2	-	4	Y	Y	-	-	-	-
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	-	-
5B	6X60	0	2-4-2	-	5	Y	Y	-	-	-	-
5C	6X60	0	2-4-2	-	5	Y	Y	-	15	-	-
6A,6B	6X6	420	5	-	6	Y	Y	-	-	-	-
7A	6X60	0	2-4-2	-	7	Y	Y	-	-	-	-
8A	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-
8B	6X60	0	2-4-2	-	8	Y	Y	-	-	-	-

8-PHASE FULLY ACTUATED ISOLATED

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Phase 3 and/or phase 7 may be lagged.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Pavement markings are existing.

OASIS 2070L TIMING CHART								
FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green 1 *	7	14	7	7	7	14	7	7
Extension 1 *	1.0	6.0	1.0	1.0	1.0	6.0	1.0	1.0
Max Green 1 *	20	110	20	45	20	110	20	45
Yellow Clearance	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Red Clearance	2.0	2.0	2.0	2.7	2.0	2.0	2.7	2.7
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 *	-	40	-	-	-	40	-	-
Minimum Gap	-	3.4	-	-	-	3.4	-	-
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.

Plan of Record

PREPARED BY: N. BURNS DATE: October 2010
REVIEWED BY: M. Mahbooba DATE: November 2010
SIGNATURE: PL Alexander DATE: 11/24/10
COMMENTS
Replaced NEMA cabinet with 2070 cabinet.

This plan of record reflects existing field conditions as submitted by field personnel. This plan may have been modified from its original state.

LEGEND

- PROPOSED: Traffic Signal Head, Modified Signal Head Sign, Pedestrian Signal Head With Push Button & Sign, Signal Pole with Guy, Signal Pole with Sidewalk Guy, Inductive Loop Detector, Controller & Cabinet, Junction Box, 50mm Underground Conduit, Right of Way, Directional Arrow.
- EXISTING: N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A.

Plan of Record

REVISION SEAL

Prepared in the Office of:

SR 1933 (Southwest Boulevard) AT SR 1001 (Connelly Springs Road)

DIVISION 11 CALDWELL COUNTY LENOIR

PLAN DATE: MARCH 1998 REVIEWED BY: N.B. SHAPIRO

PREPARED BY: R. J. ZIEMBA REVIEWED BY: A. L. GRANDY

REVISIONS: Adjust minimum gap time and seconds per actuation for Volume Density.

INIT. DATE

1"=40'

Not a certified document. This document originally issued and sealed by Gene G. Murr, JR., PE, 14543 on 9/29/98. This document shall not be considered a certified document.

SIG. INVENTORY NO. 11-0999

PHASING DIAGRAM

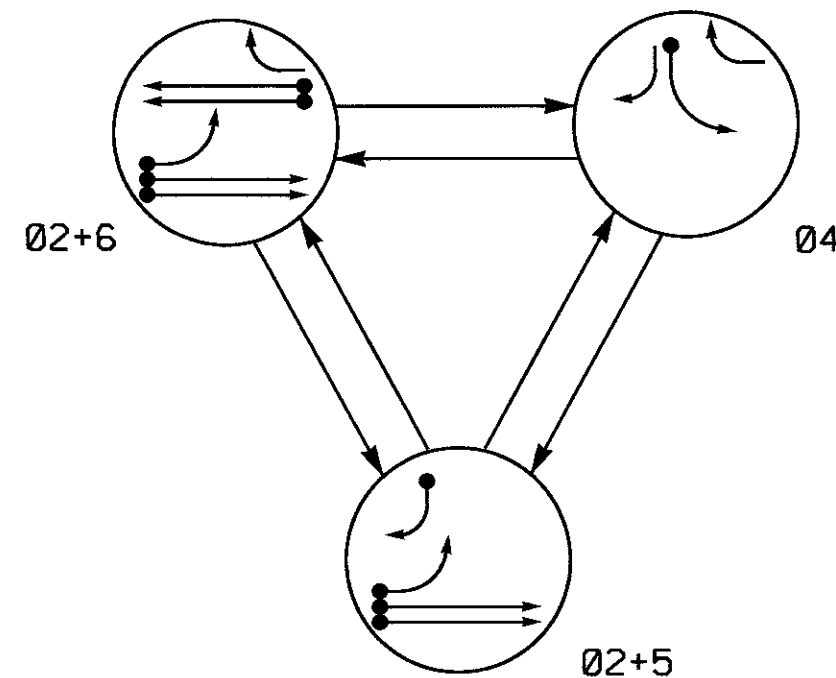


TABLE OF OPERATION

SIGNAL FACE	PHASE			
	02 + 5	02 + 6	04	F L S H
21	G	R	Y	
22	G	R	Y	
41	R	G	R	
42	R	G	R	
61	R	G	R	
62	R	G	R	

OASIS 2070L 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,2B	6X6	355	EXIST	-	2	Y	Y	-	2.0	-	-	-
2C,2D	6X6	100	EXIST	-	2	Y	Y	-	-	-	-	-
4A	6X60	0	EXIST	-	4	Y	Y	-	-	3	-	-
5A	6X60	0	EXIST	-	5	Y	Y	-	-	15	-	-
				-	2	Y	Y	Y	-	3	-	-
5B	6X60	0	EXIST	-	5	Y	Y	-	-	15	-	-
6A,6B	6X6	355	EXIST	-	6	Y	Y	-	2.0	-	-	-
6C,6D	6X6	100	EXIST	-	6	Y	Y	-	-	-	-	-

3-PHASE
FULLY ACTUATED
(ISOLATED)

NOTES

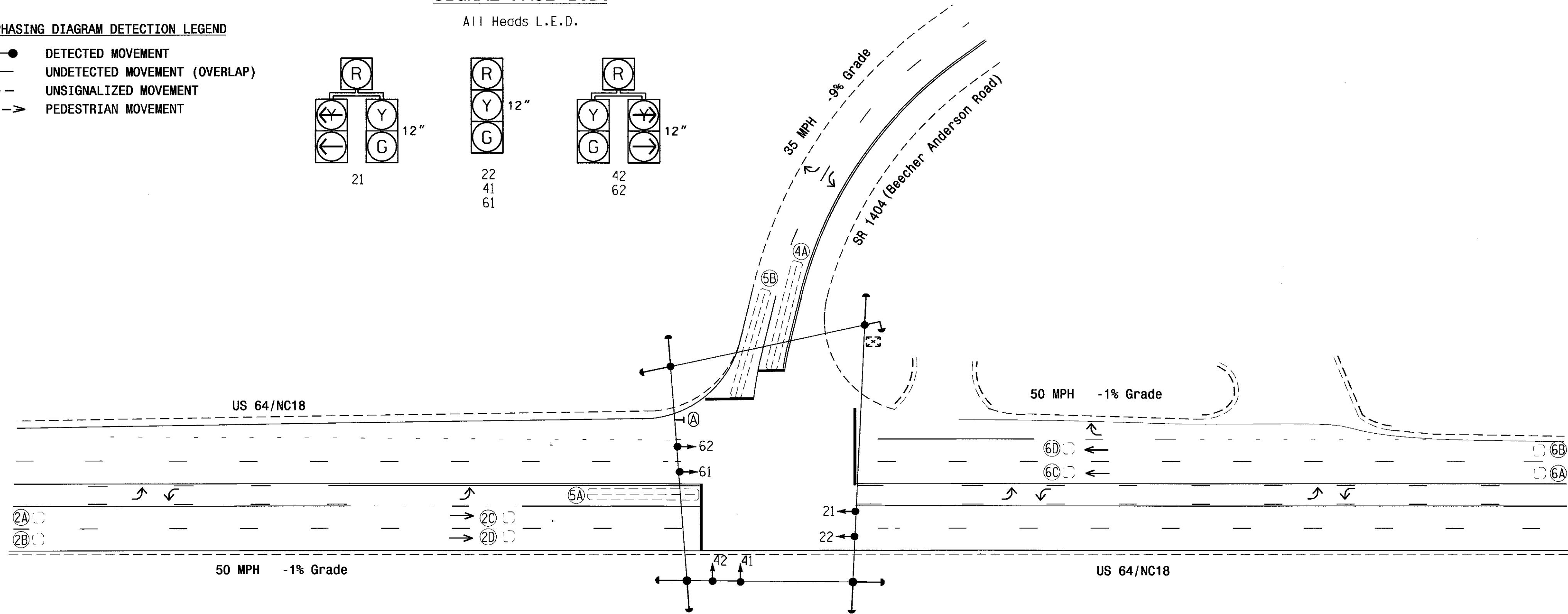
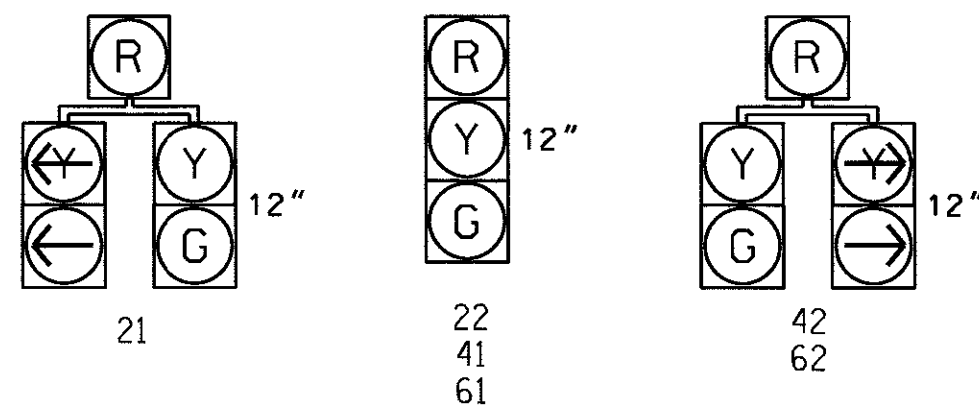
1. Refer to "Roadway Standard Drawings NCDOT" dated July 2006 and "Standard Specifications for Roads and Structures" dated July 2006.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Pavement markings are existing.

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



OASIS 2070L TIMING CHART

FEATURE	PHASE			
	2	4	5	6
Min Green 1 *	14	7	7	14
Extension 1 *	2.0	1.0	1.0	2.0
Max Green 1 *	45	25	20	45
Yellow Clearance	4.9	3.3	3.0	4.9
Red Clearance	1.0	2.9	2.3	1.1
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	SOFT RECALL	-	-	SOFT RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
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.

LEGEND

- PROPOSED: Traffic Signal Head, Modified Signal Head, 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, Right of Way, Directional Arrow, Right Arrow "ONLY" Sign (R3-5R).
- EXISTING: N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A, N/A.

Signal Upgrade

US 64 / NC 18
at
SR 1404 (Beecher Anderson Road)

Division 11 Caldwell County Lenoir

PLAN DATE: May 2013 REVIEWED BY: M.K. MAHBOOBA

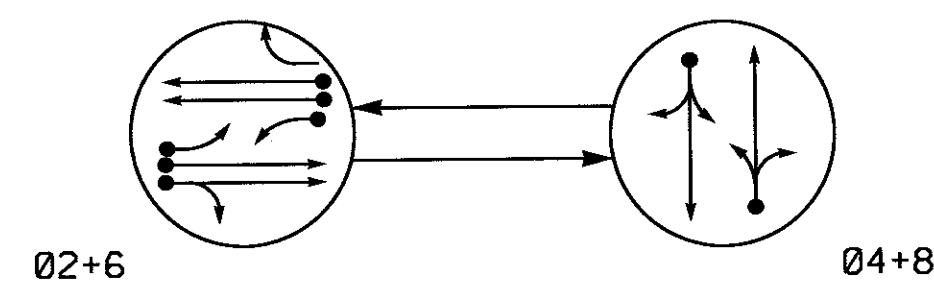
PREPARED BY: B.E. WYNN REVIEWED BY: A.L. GRANDY

REVISIONS: INIT. DATE

SCALE: 0 40
1"=40'

SEAL
30530
ENGINEER
A.L. GRANDY
DATE: 6/3/15
SIGNATURE: [Signature]
INVENTORY NO. 11-1014

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

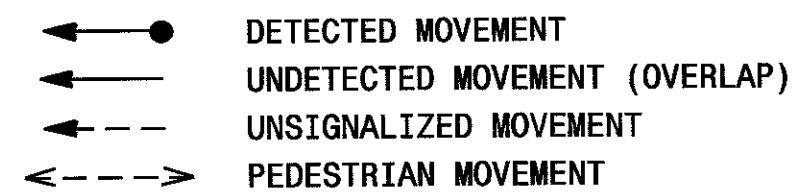
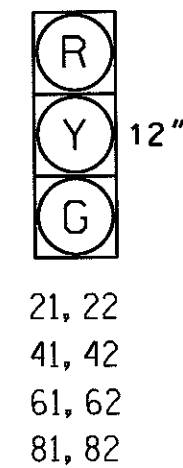


TABLE OF OPERATION	
1	2
3	4
5	6
7	8
9	10
11	12
13	14
15	16
17	18
19	20
21	22
23	24
25	26
27	28
29	30
31	32
33	34
35	36
37	38
39	40
41	42
43	44
45	46
47	48
49	50
51	52
53	54
55	56
57	58
59	60
61	62
63	64
65	66
67	68
69	70
71	72
73	74
75	76
77	78
79	80
81	82
83	84
85	86
87	88
89	90
91	92
93	94
95	96
97	98
99	100

SIGNAL FACE	PHASE		
	0 2 + 6	0 4 + 8	F L A S H
21, 22	G	R	Y
41, 42	R	G	R
61, 62	G	R	Y
81, 82	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



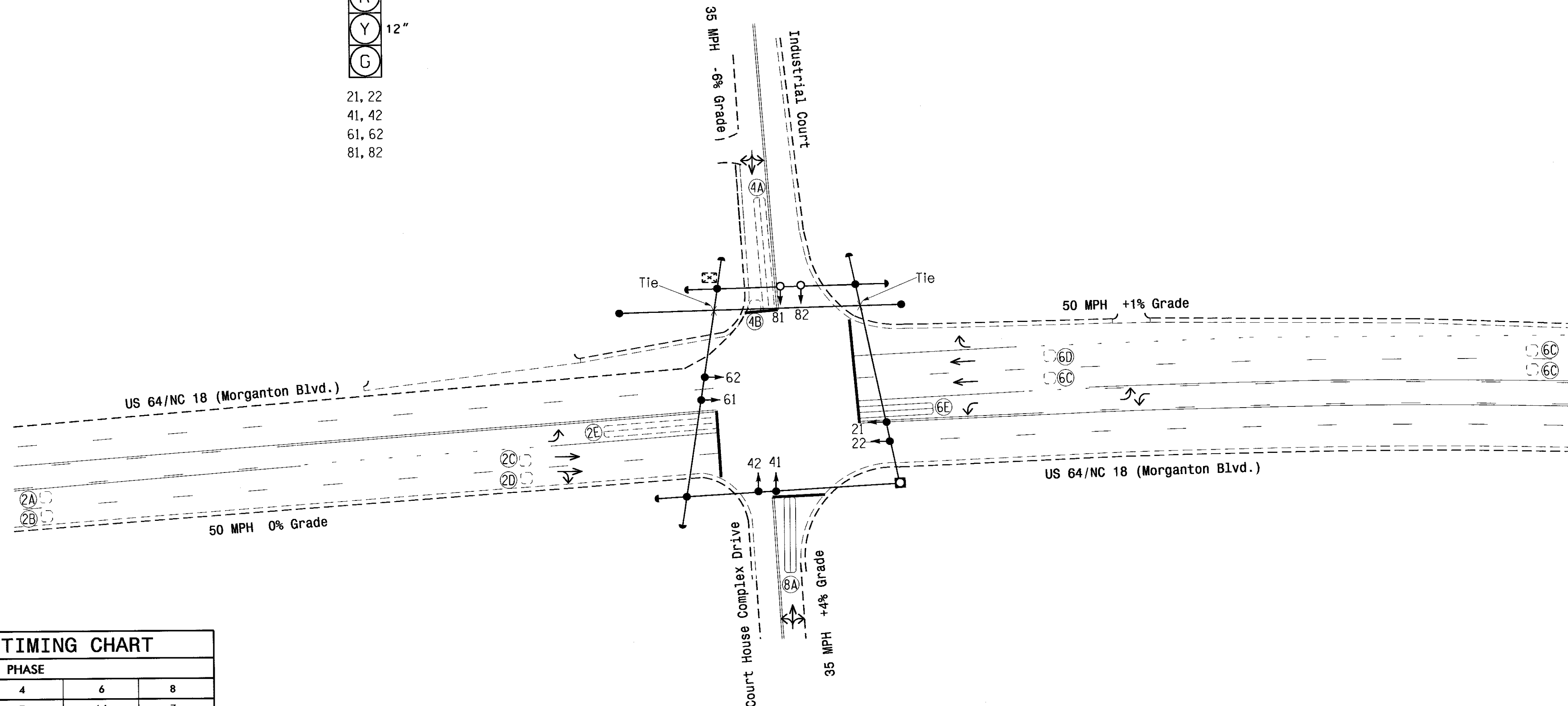
OASIS 2070L LOOP & DETECTOR INSTALLATION

INDUCTIVE LOOPS					DETECTOR PROGRAMMING							
LOOP	SIZE (FT)	TURNS	DISTANCE FROM STOPBAR (FT)	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	SYSTEM LOOP	STRETCH TIME	DELAY TIME	NEW PHASE
2A, 2B	6X6	5	355	-	2	Y	Y	-	-	2.0	-	-
2C, 2D	6X6	4	100	-	2	Y	Y	-	-	-	-	-
2E	6X60	2-4-2	0	-	2	Y	Y	-	-	-	-	-
4A	6X60	2-4-2	0	-	4	Y	Y	-	-	-	10	-
4B	6X6	3	0	-	4	Y	Y	-	-	-	15	-
6A, 6B	6X6	5	355	-	6	Y	Y	-	-	2.0	-	-
6C, 6D	6X6	4	100	-	6	Y	Y	-	-	-	-	-
6E	6X40	2-4-2	0	Y	6	Y	Y	-	-	-	-	-
8A	6X40	2-4-2	0	Y	8	Y	Y	-	-	-	10	-

2 Phase
Fully Actuated
(Lenoir US 64-US 321-NC 18)
(Closed Loop 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. In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
5. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
6. Closed loop system data: Controller Asset # 1365.

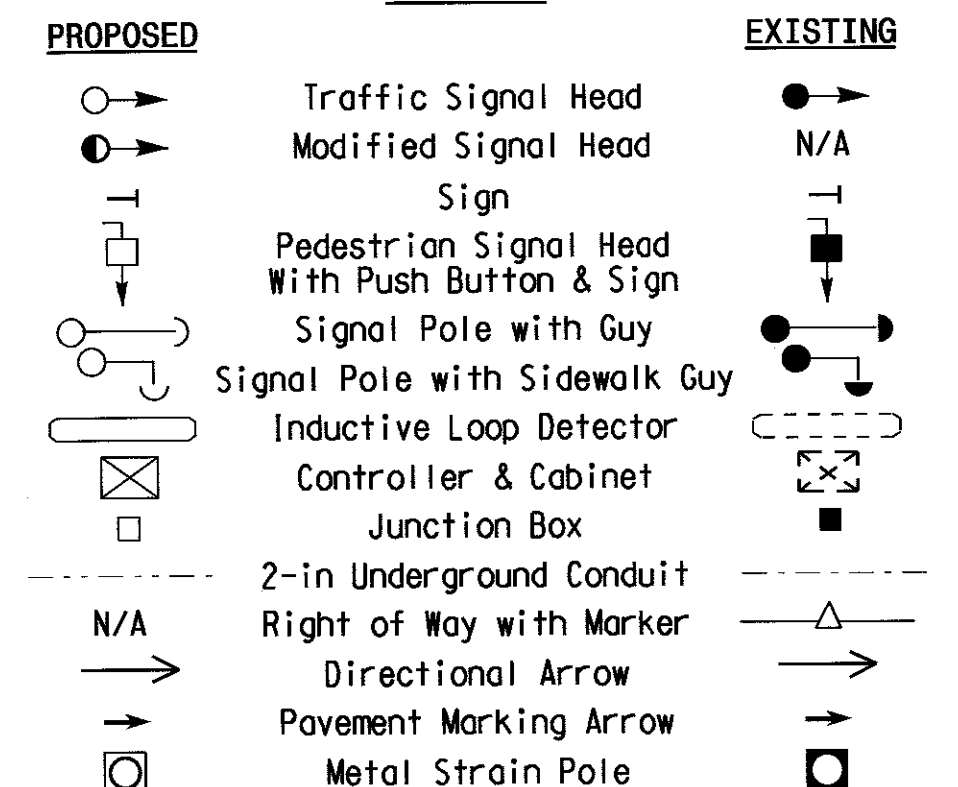


OASIS 2070L TIMING CHART

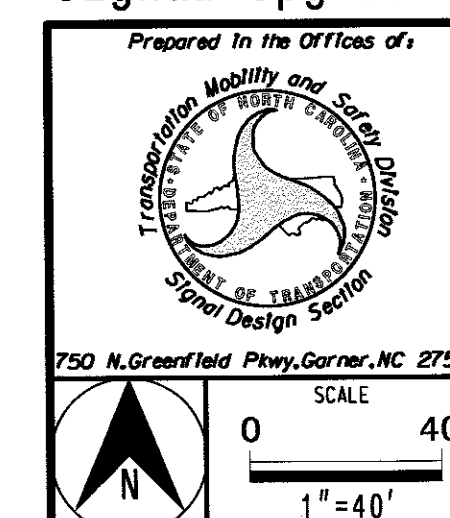
FEATURE	PHASE			
	2	4	6	8
Min Green 1 *	14	7	14	7
Extension 1 *	2.0	1.0	2.0	2.0
Max Green 1 *	45	25	45	25
Yellow Clearance	4.8	4.2	4.7	3.6
Red Clearance	1.0	1.7	1.0	1.7
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduction *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	YELLOW	-	YELLOW	-
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.

LEGEND



Signal Upgrade



US 64-NC 18 (Morganton Blvd.)
at
Industrial Court

Division 11 Caldwell County Lenoir

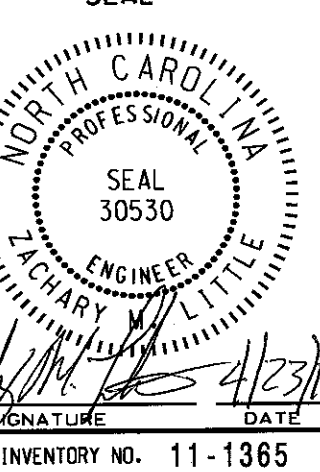
PLAN DATE:	April 2014	REVIEWED BY:
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529	PREPARED BY: C. Pierce	REVIEWED BY:		
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	REVISIONS	INIT.	DATE
D			

[illegible]

REAL



SIG. INVENTORY NO. 11-1365

