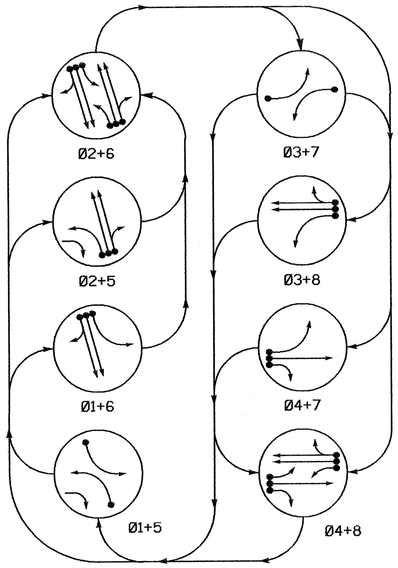
PROJECT REFERENCE NO.	SHEET NO.
B-3685	Sig.5

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

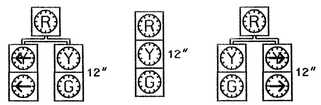
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø4+7	Ø4+8	FLASH
21	R/G	R	R/G	G	R	R	R	R	Y
22	R	R	G	G	R	R	R	R	Y
41	R	R	R	R	R/G	R	R/G	G	R
42	R/G	R	R/G	R	R	R	G	G	R
61	R/G	G	R	G	R	R	R	R	Y
62	R	G	R	G	R	R	R	R	Y
81	R	R	R	R	R/G	R	R/G	G	R
82	R	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.



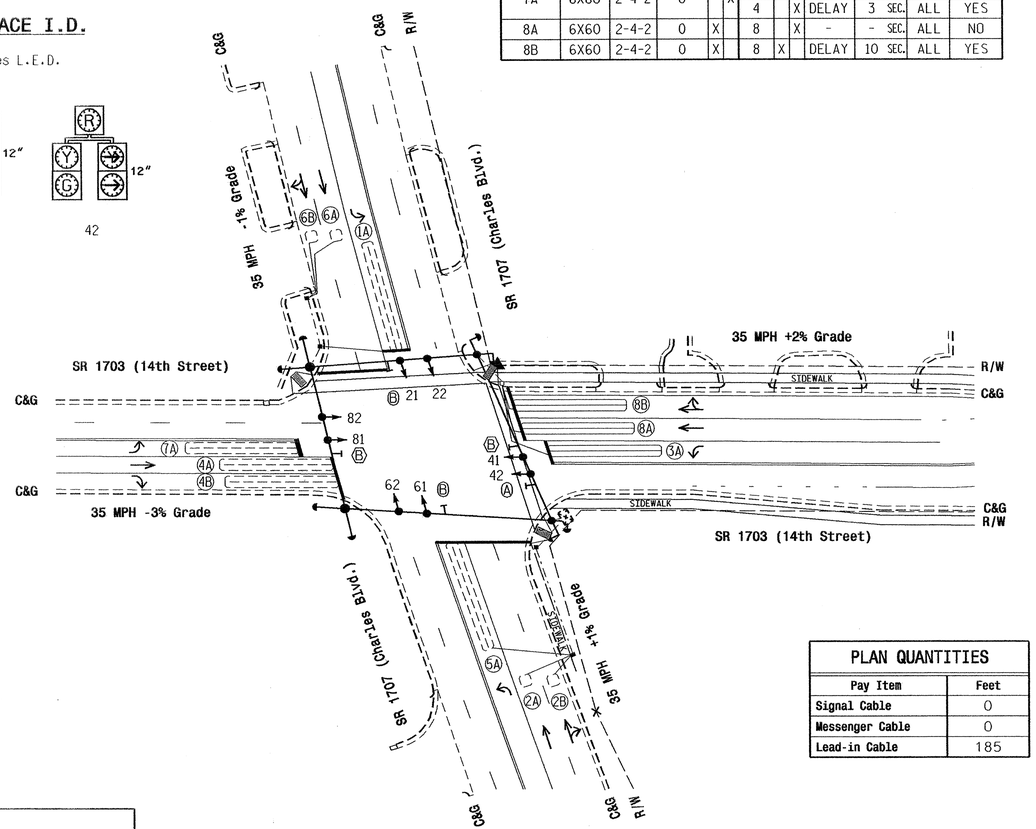
21
41
61
81

22
62
82

42

LOOP & DETECTOR UNIT INSTALLATION CHART
NEMA CONTROLLER WITH TS-2 CABINET

INDUCTIVE LOOPS					DETECTOR UNITS					
LOOP NO.	SIZE (ft)	TURNS	DIST. FROM STOPBAR (ft)	NEW	EXISTING	NEMA PHASE	NEW	EXISTING	TIMING FEATURE	TIMING TIME	PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN
1A	6X60	2-4-2	0		X	1		X	DELAY	15 SEC.	ALL	YES
						6		X	-	- SEC.	ALL	NO
2A	6X6	4	70		X	2		X	-	- SEC.	ALL	NO
2B	6X6	4	70		X	2		X	-	- SEC.	ALL	NO
3A	6X60	2-4-2	0	X		3		X	DELAY	15 SEC.	ALL	YES
						8		X	DELAY	3 SEC.	ALL	YES
4A	6X60	2-4-2	0		X	4		X	-	- SEC.	ALL	NO
4B	6X60	2-4-2	0		X	4		X	DELAY	15 SEC.	ALL	YES
5A	6X60	2-4-2	0		X	5		X	DELAY	15 SEC.	ALL	YES
						2		X	-	- SEC.	ALL	NO
6A	6X6	4	70		X	6		X	-	- SEC.	ALL	NO
6B	6X6	4	70		X	6		X	-	- SEC.	ALL	NO
7A	6X60	2-4-2	0		X	7		X	DELAY	15 SEC.	ALL	YES
						4		X	DELAY	3 SEC.	ALL	YES
8A	6X60	2-4-2	0	X		8		X	-	- SEC.	ALL	NO
8B	6X60	2-4-2	0	X		8	X		DELAY	10 SEC.	ALL	YES



PLAN QUANTITIES

Pay Item	Feet
Signal Cable	0
Messenger Cable	0
Lead-in Cable	185

TIMING CHART
NEMA CONTROLLER

PHASE	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8
MINIMUM GREEN	7 SEC.	10 SEC.	7 SEC.	7 SEC.	7 SEC.	10 SEC.	7 SEC.	7 SEC.
PASSAGE/GAP	1.0 SEC.	3.0 SEC.	1.0 SEC.	1.0 SEC.	1.0 SEC.	3.0 SEC.	1.0 SEC.	1.0 SEC.
YELLOW CHANGE INT.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.	4.0 SEC.
RED CLEARANCE	2.5 SEC.	2.5 SEC.	2.0 SEC.	2.0 SEC.	2.5 SEC.	2.5 SEC.	2.0 SEC.	2.0 SEC.
MAX. 1	20 SEC.	50 SEC.	20 SEC.	50 SEC.	20 SEC.	50 SEC.	20 SEC.	50 SEC.
RECALL POSITION	NONE	MIN. RECALL	NONE	NONE	NONE	MIN. RECALL	NONE	NONE
VEHI. CALL MEMORY	NONLOCK	LOCK	NONLOCK	NONLOCK	NONLOCK	LOCK	NONLOCK	NONLOCK
WALK	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
FLASHING DON'T WALK	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.	- SEC.
VOLUME DENSITY	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

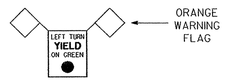
8 Phase
Fully Actuated
(Greenville City System)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Reposition existing signal heads numbered 81 and 82.
4. Omit phase 1 during phase 2 on.
5. Omit phase 5 during phase 6 on.
6. Omit phase 3 during phase 4 on.
7. Omit phase 7 during phase 8 on.
8. Program controller to clear from phase 2+6 to phase 1 and/or 5 by progressing through phase 4+8 (see Electrical Details).
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
10. Thirty days after implementation of the revised signal operation, signs B and/or orange flags may be removed at the discretion of the Regional Traffic Engineer.
11. Set all detector units to presence mode.
12. Intersection Zone Number: 3
    System Address Number: 86

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 with Marker	
	Directional Arrow	
	Pavement Marking Arrow	
N/A	Wheelchair Ramp	
(A)	Right Arrow "ONLY" Sign (R3-5R)	(A)
(B)	"LEFT TURN YIELD ON GREEN" Sign With Flags (R10-12)	(B)



Signal Upgrade- Final Design

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
NCDEPARTMENT OF TRANSPORTATION
Signals and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

SCALE 0 40 1"=40'

SR 1707 (Charles Blvd.) at SR 1703 (14th Street)

Division 2 | Pitt County | Greenville

PLAN DATE: August 2004 | REVIEWED BY:

PREPARED BY: R N Mouberry | REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER TIMOTHY J. WILLIAMS

SIGNATURE 8/26/04 DATE

SIG. INVENTORY NO. 02-0019

26-AUG-2004 10:50
W:\Projects-Unit\workgroups\TIP Projects\B-3685\20019_20040822.dgn
rnmouberry