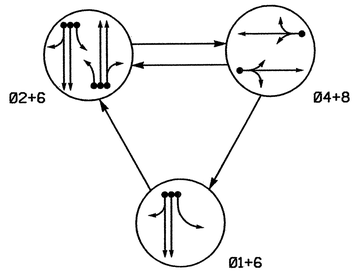
PROJECT REFERENCE NO.	SHEET NO.
B-4110	Sig. 2

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

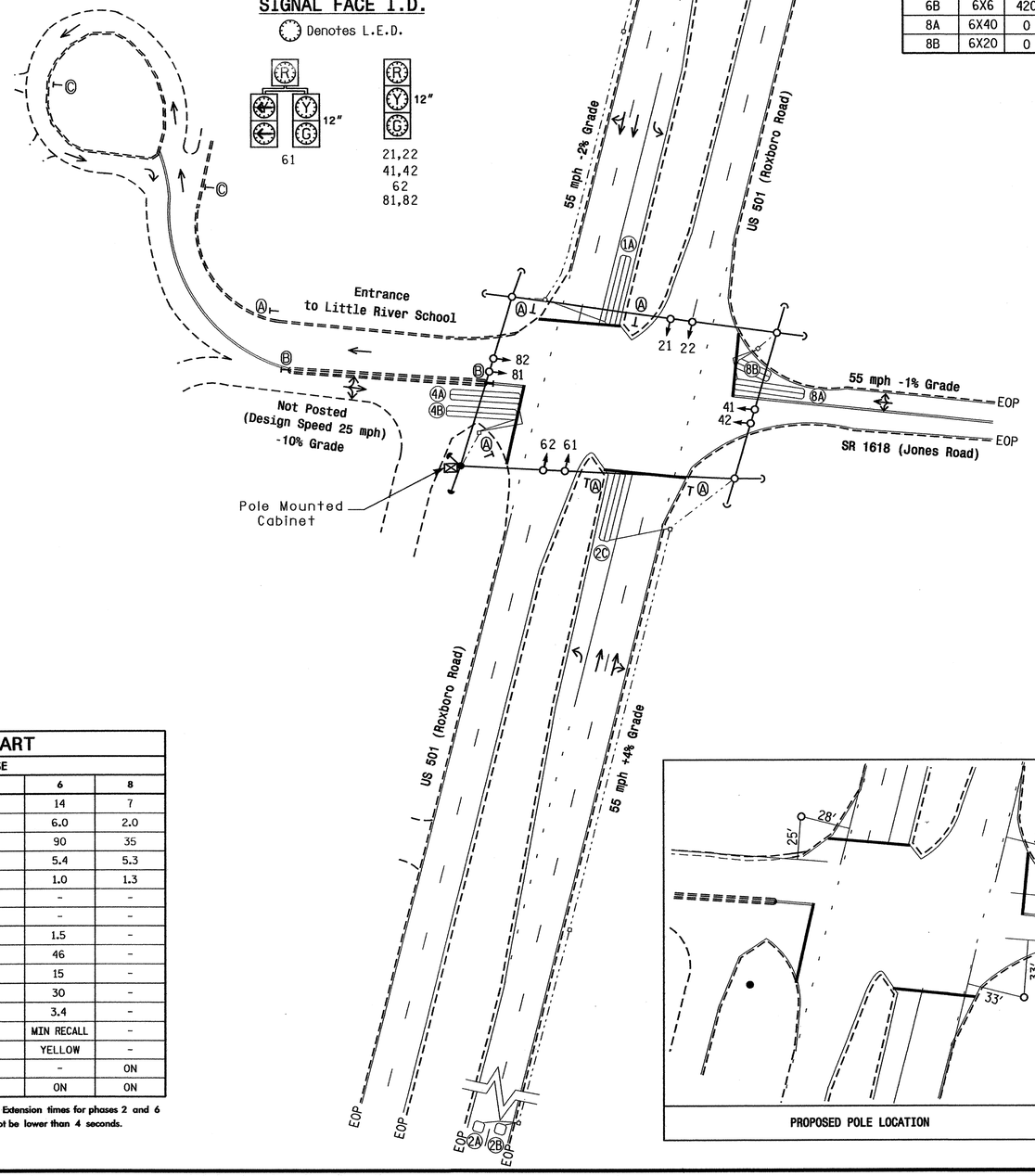
SIGNAL FACE	PHASE Ø1+6	PHASE Ø2+6	PHASE Ø4+8	PHASE FLASH
21,22	R	G	R	Y
41,42	R	R	G	R
61	G	G	R	Y
62	G	G	R	Y
81,82	R	R	G	R

SIGNAL FACE I.D.

Denotes L.E.D.

61

21,22
41,42
62
81,82



2070L 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	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	6	Y	2	Y	Y	-	-	-	-	Y
2B	6X6	420	6	Y	2	Y	Y	-	-	-	-	Y
2C	6X40	0	2-4-2	Y	2	Y	Y	Y	-	3	-	Y
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	10	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	15	-	Y
6A	6X6	420	6	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	420	6	Y	6	Y	Y	-	-	-	-	Y
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	10	-	Y
8B	6X20	0	2-4-2	Y	8	Y	Y	-	-	15	-	Y

PLAN QUANTITIES

Pay Item	Feet
Signal Cable	650
Messenger Cable	500
Lead-in Cable	1990

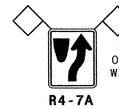
3-Phase
Fully Actuated
(Isolated)

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. Omit phase 1 during phase 2 on.
4. Program controller to clear from phase 2+6 to phase 1+6 by progressing through phase 4+8 (see Electrical Details).
5. Set all detector units to presence mode.
6. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
7. This plan is based on proposed changes to the entrance and exit pattern of the Little River School driveway. Contact the Signals & Geometrics section if the field conditions do not match the configuation.

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	→
→	Pavement Marking Arrow	→
Ⓐ	"DO NOT ENTER" Sign (R5-1)	Ⓐ
Ⓑ	Keep Right Sign (R4-7A) With Orange Warning Flags	Ⓑ



R4-7A

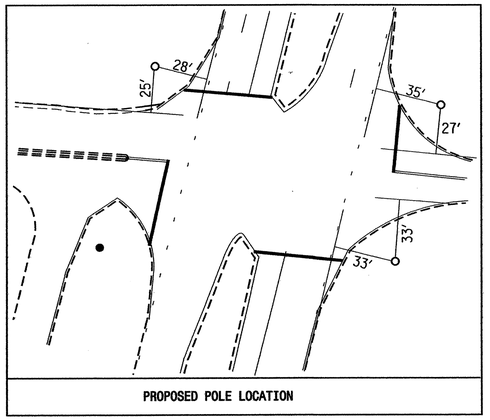
Ⓒ	One Way Sign (R6-2)	Ⓒ

R6-2

2070L TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 4	PHASE 6	PHASE 8
Min Green 1 *	7	14	7	14	7
Extension 1 *	2.0	6.0	2.0	6.0	2.0
Max Green 1 *	35	90	35	90	35
Yellow Clearance	3.0	4.8	3.8	5.4	5.3
Red Clearance	2.4	1.0	2.9	1.0	1.3
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	1.5	-	1.5	-
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.



PROPOSED POLE LOCATION

New Temporary Signal- To Be Removed

Prepared in the Offices of:
Traffic Engineering and Safety Systems Branch
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Traffic Signal Design and Geometrics Section
122 N. McDowell St., Raleigh, NC 27603

SCALE 0 40 1"=40'

US 501 (Roxboro Road) at SR 1618 (Jones Road)/ Entrance to Little River School

Division 5 Durham County near Durham

PLAN DATE: November 2005 REVIEWED BY: I.O.Umozurike

PREPARED BY: Luhr REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 24393 ENGINEER
TIMOTHY J. WILLIAMS

T.J.Williams 12/22/05
SIGNATURE DATE

SIG. INVENTORY NO. 05-1214

2:-DEC-2005 08:19
s:#ts signals#workgroups#tip projects#b-4110#signo#051214_sig_dsn_20051idd.dgn
bwynn