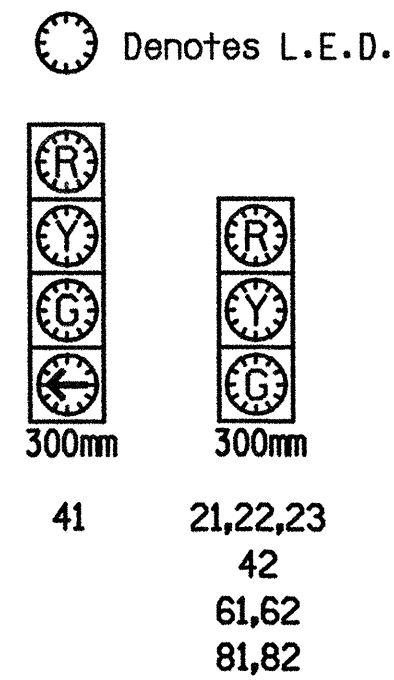


TABLE OF OPERATION

SIGNAL FACE	PHASE				
	Ø2+6	Ø4+8	C	R	F
21,22,23	G	R	R	G	Y
41	R	G	G	R	R
42	R	G	G	R	R
61,62	G	R	R	G	Y
81,82	R	G	R	R	R
SIGN A	OFF	OFF	ON	ON	OFF
SIGN B	OFF	OFF	ON	ON	OFF

SIGNAL FACE I.D.



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

LOOP NO.	SIZE (m)	TURNS	DIST. FROM STOPBAR (m)	NEW EXISTING	NEMA PHASE	NEW EXISTING	DETECTOR UNITS		PLACE CALL DURING PHASE	INHIBIT DELAY DURING GREEN?
							FEATURE	TIME		
2A,2B	1.8x1.8	4	90	X	2	X	EXTEND	1.8 SEC.	ALL	NO
2C	1.8x1.8	4	27	X	2	X	-	- SEC.	ALL	NO
2D	1.8x1.8	4	27	X			-	- SEC.	ALL	NO
2E	1.8x1.8	2-4-2	0	X	2	X	DELAY	3 SEC.	ALL	NO
4A	1.8x1.8	2-4-2	0	X	4	X	DELAY	3 SEC.	ALL	YES
4B	1.8x1.8	2-4-2	0	X	4	X	DELAY	15 SEC.	ALL	YES
6A,6B	1.8x1.8	5	90	X	6	X	EXTEND	1.8 SEC.	ALL	NO
6C,6D	1.8x1.8	4	27	X	6	X	-	- SEC.	ALL	NO
6E	1.8x1.8	2-4-2	0	X	6	X	DELAY	3 SEC.	ALL	NO
8A	1.8x1.8	2-4-2	0	X	8	X	DELAY	3 SEC.	ALL	YES
8B	1.8x1.8	2-4-2	0	X	8	X	DELAY	15 SEC.	ALL	YES
S18	1.8x1.8	4	+40	X	-	X	SYSTEM DETECTOR			
S19	1.8x1.8	4	+40	X	-	X	SYSTEM DETECTOR			

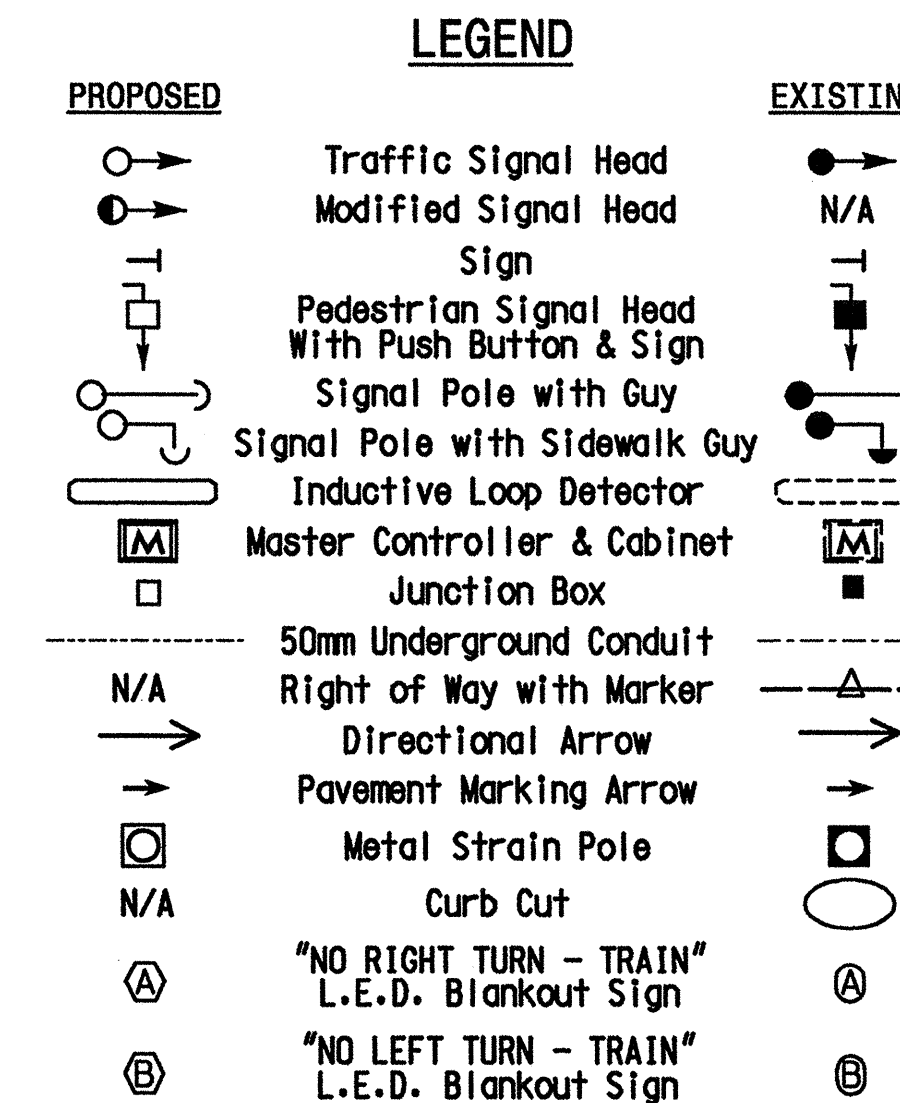
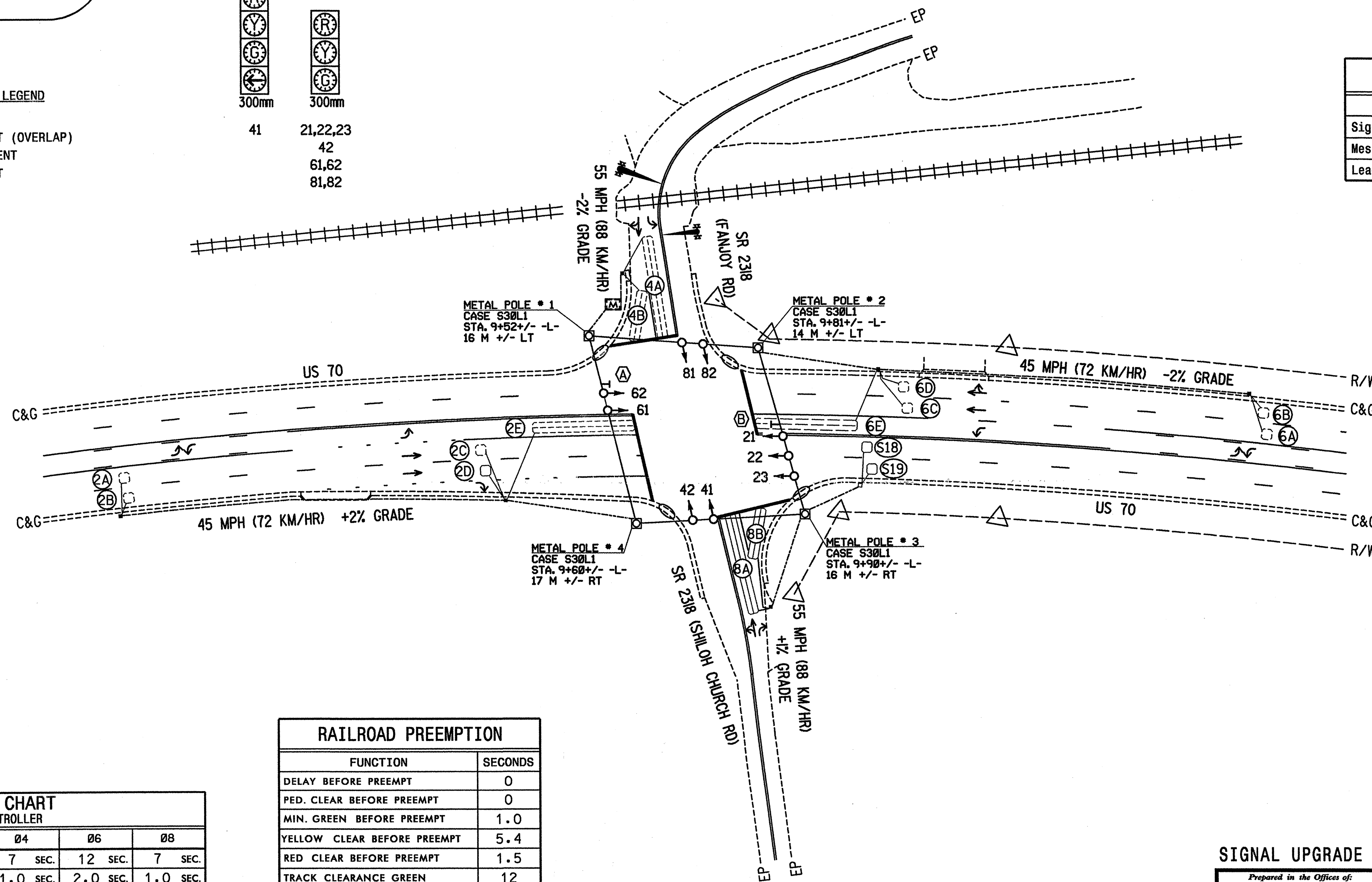
2 PHASE ACTUATED WITH RR PREEMPTION (CLOSED LOOP SYSTEM)

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Ensure flashing operation does not alter operation of blank out signs.
4. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
5. Program phase 4 and phase 8 for dual entry.
6. Set all detector units to presence mode.
7. Closed loop system data: Intersection Number 2. Local telemetry address number 2. Channel number 1.

PLAN QUANTITIES

Pay Item	Meters
Signal Cable	200
Messenger Cable	125
Lead-in Cable	900



TIMING CHART
NEMA CONTROLLER

PHASE	Ø2	Ø4	Ø6	Ø8
MINIMUM GREEN	12 SEC.	7 SEC.	12 SEC.	7 SEC.
PASSAGE/GAP	2.0 SEC.	1.0 SEC.	2.0 SEC.	1.0 SEC.
YELLOW CHANGE INT.	4.7 SEC.	5.4 SEC.	4.7 SEC.	5.4 SEC.
RED CLEARANCE	1.5 SEC.	1.5 SEC.	1.5 SEC.	1.5 SEC.
MAX. 1	60 SEC.	30 SEC.	60 SEC.	30 SEC.
RECALL POSITION	MIN. RECALL	NONE	MIN. RECALL	NONE
VEH. CALL MEMORY	LOCK	NONLOCK	LOCK	NONLOCK

RAILROAD PREEMPTION

FUNCTION	SECONDS
DELAY BEFORE PREEMPT	0
PED. CLEAR BEFORE PREEMPT	0
MIN. GREEN BEFORE PREEMPT	1.0
YELLOW CLEAR BEFORE PREEMPT	5.4
RED CLEAR BEFORE PREEMPT	1.5
TRACK CLEARANCE GREEN	12
TRACK CLEARANCE YELLOW	5.4
TRACK CLEARANCE RED	1.5
PREEMPT DWELL MIN. GREEN	12
YELLOW CLR AFTER PREEMPT	4.7
RED CLEAR AFTER PREEMPT	1.5

SIGNAL UPGRADE - FINAL

Prepared in the Offices of:

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 SEAL 12740
 SIGNATURE
 SIG. INVENTORY NO. 12-1137

US 70 AT SR 2318 (SHILOH CHURCH/FANJOY ROAD)
 DIVISION 12 IREDELL COUNTY E. OF STATESVILLE
 PLAN DATE: AUGUST 2002 REVIEWED BY: K. NILAN
 PREPARED BY: X. FAN REVIEWED BY:
 REVISIONS INIT. DATE
 SCALE 1:500

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