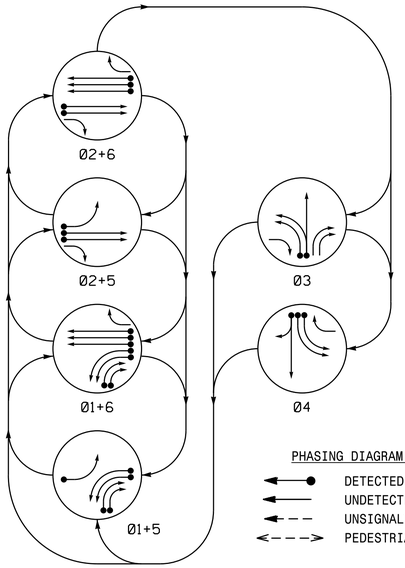
PROJECT REFERENCE NO.	SHEET NO.
U-5806	Sig. 5.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

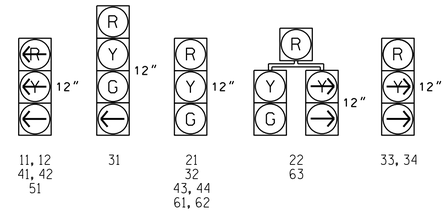
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03	04	FLASH
11, 12	←	←	R	R	R	R	R
21	R	R	G	G	R	R	Y
22	R	R	G	G	R↗	R	Y
31	R	R	R	R	G	R	R
32	R	R	R	R	G	R	R
33, 34	→	→	R	R	→	R	R
41, 42	R	R	R	R	R	←	R
43, 44	R	R	R	R	R	G	R
51	←	R	←	R	R	R	R
61, 62	R	G	R	G	R	R	Y
63	R	G	R	G	R	R↗	Y

SIGNAL FACE I.D.

All Heads L.E.D.



ASC/3 DETECTOR INSTALLATION CHART

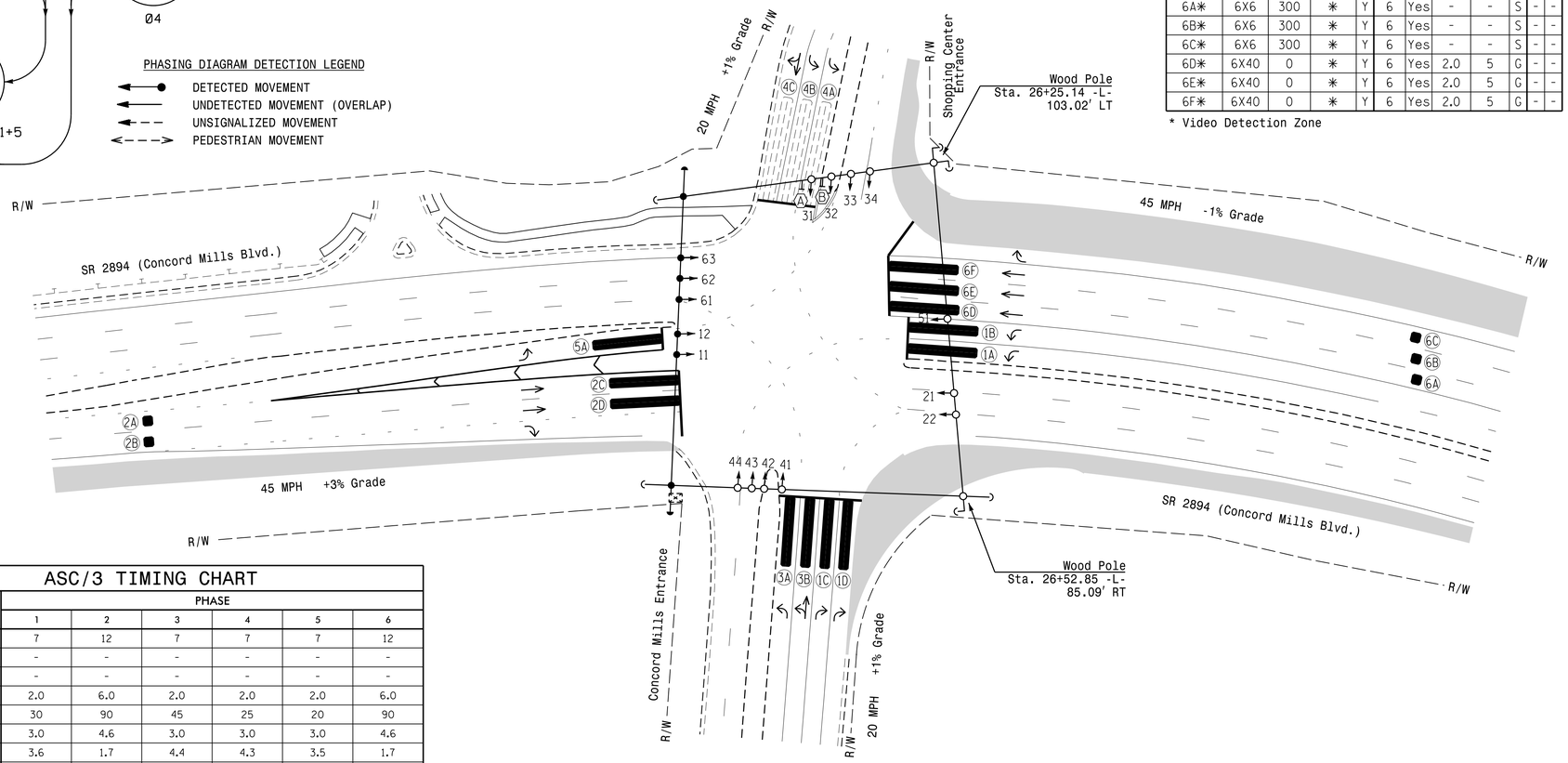
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	TYPE	SYSTEM LOOP	NEW CARD
1A*	6X40	0	*	Y	1	Yes	-	-	S	-	-
1B*	6X40	0	*	Y	1	Yes	-	-	S	-	-
1C*	6X40	0	*	Y	1	Yes	-	15	S	-	-
1D*	6X40	0	*	Y	1	Yes	-	15	S	-	-
2A*	6X6	300	*	Y	2	Yes	-	-	S	-	-
2B*	6X6	300	*	Y	2	Yes	-	-	S	-	-
2C*	6X40	0	*	Y	2	Yes	2.0	5	G	-	-
2D*	6X40	0	*	Y	2	Yes	2.0	5	G	-	-
3A*	6X40	0	*	Y	3	Yes	-	-	S	-	-
3B*	6X40	0	*	Y	3	Yes	-	-	S	-	-
4A	6X60	0	2-4-2	-	4	Yes	-	-	S	-	-
4B	6X60	0	2-4-2	-	4	Yes	-	-	S	-	-
4C	6X60	0	2-4-2	-	4	Yes	-	10	S	-	-
5A*	6X40	0	*	Y	5	Yes	-	-	S	-	-
6A*	6X6	300	*	Y	6	Yes	-	-	S	-	-
6B*	6X6	300	*	Y	6	Yes	-	-	S	-	-
6C*	6X6	300	*	Y	6	Yes	-	-	S	-	-
6D*	6X40	0	*	Y	6	Yes	2.0	5	G	-	-
6E*	6X40	0	*	Y	6	Yes	2.0	5	G	-	-
6F*	6X40	0	*	Y	6	Yes	2.0	5	G	-	-

* Video Detection Zone

6 Phase
Fully Actuated
Concord Mills Blvd. CLS

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. Install new 2070E Controller in existing cabinet.
4. Phase 1 and/or phase 5 may be lagged.
5. The order of phase 3 and phase 4 may be reversed.
6. Set all detector units to presence mode.
7. 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.
8. Pavement markings are existing.
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 #: 1732



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	
	Construction Zone	
	Video Detection Zone	
Ⓐ	Left Arrow "ONLY" Sign (R3-5L)	Ⓐ
Ⓑ	Combined Through and Left Arrow Sign (R3-6L)	Ⓑ

ASC/3 TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6
Min Green *	7	12	7	7	7	12
Walk *	-	-	-	-	-	-
Ped Clear	-	-	-	-	-	-
Veh. Extension *	2.0	6.0	2.0	2.0	2.0	6.0
Max 1 *	30	90	45	25	20	90
Yellow	3.0	4.6	3.0	3.0	3.0	4.6
Red Clear	3.6	1.7	4.4	4.3	3.5	1.7
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0
Actuations B4 Add *	-	-	-	-	-	-
Seconds /Actuation *	-	-	-	-	-	-
Max Initial *	-	-	-	-	-	-
Time Before Reduction *	-	15	-	-	-	15
Time To Reduce *	-	45	-	-	-	45
Minimum Gap	-	3.0	-	-	-	3.0
Locking Detector	-	X	-	-	-	X
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL
Dual Entry	-	-	-	-	-	-
Simultaneous Gap	X	X	X	X	X	X

* 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.

Signal Upgrade - Temporary Design 1 - Phase I

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SR 2894 (Concord Mills Blvd.)
at
Concord Mills Entrance/
Shopping Center Entrance

Division 10 Cabarrus County Concord

PLAN DATE: July 2017 REVIEWED BY: T.J. Williams
PREPARED BY: R.N. Zinser REVIEWED BY:

SCALE 0 40 1"=40'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 043914 ENGINEER RICHARD N. ZINSER

DocuSigned by: R.N. Zinser F13B8973472248F... 9/25/2017 DATE

SIG. INVENTORY NO. 10-1732 T1

25-SEP-2017 10:04
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rnzinser