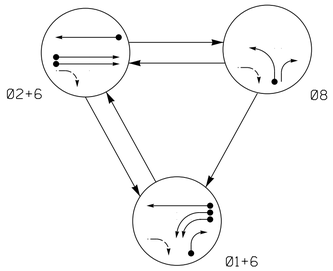
PROJECT REFERENCE NO.	SHEET NO.
R-2577A	Sig. 11.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

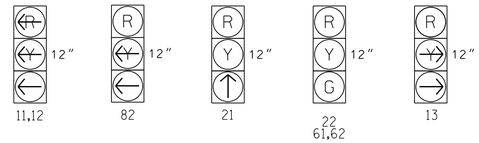
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+6	PHASE Ø2+6	PHASE Ø8	FLASH
11,12	←	~~R~~	~~R~~	~~R~~
13	→	R	→	R
21	R	↑	R	Y
22	R	G	R	Y
61,62	G	G	R	Y
82	R	R	←	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

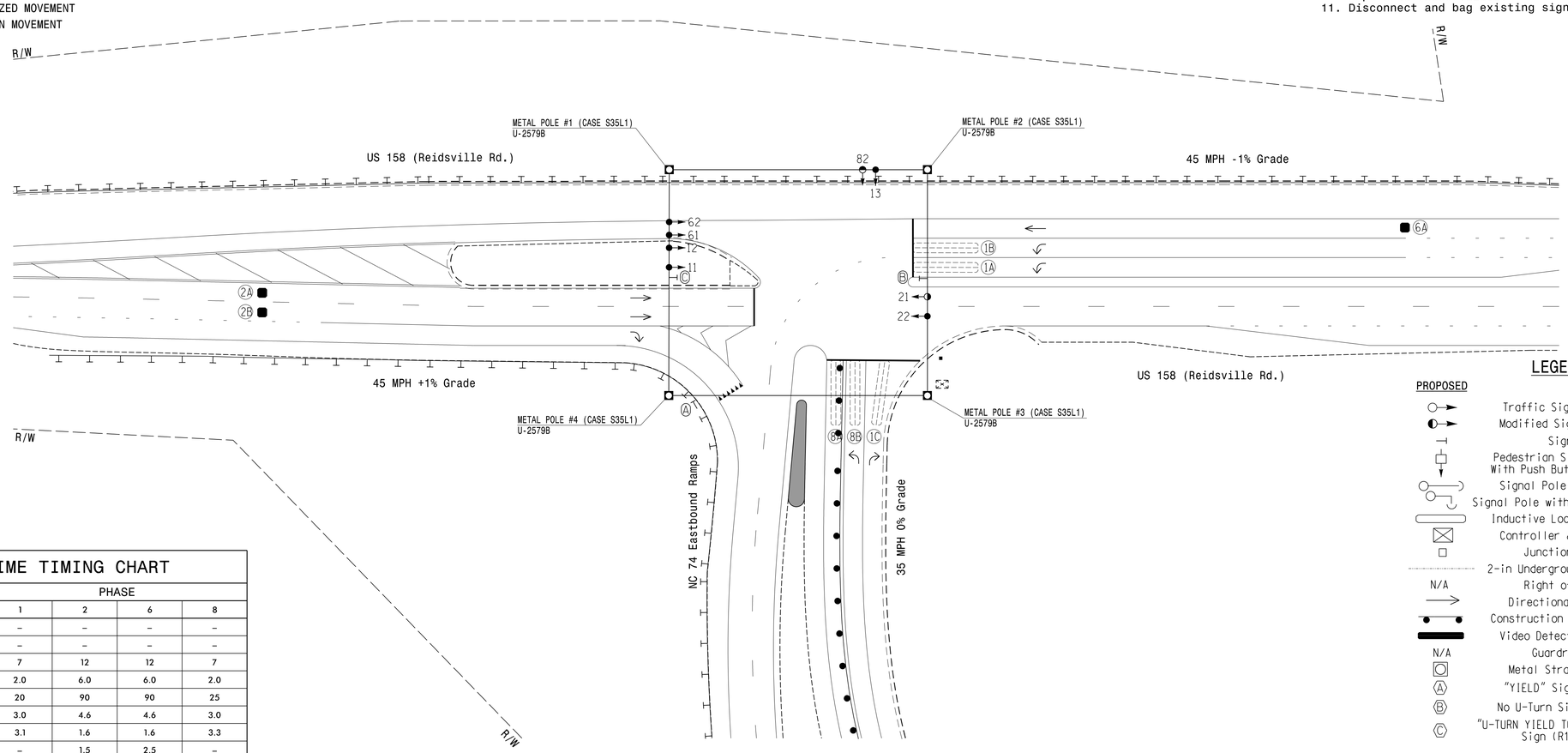
DETECTOR					PROGRAMMING							
LOOP/ ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A	6X40	0	2-4-2	-	1	-	-	X	-	X	-	-
1B	6X40	0	2-4-2	-	1	-	-	X	-	X	-	-
1C	6X40	0	2-4-2	-	1	15	-	X	-	X	-	-
2A ✳	6X6	300	✳	✳	2	-	-	X	X	X	-	✳
2B ✳	6X6	300	✳	✳	2	-	-	X	X	X	-	✳
6A ✳	6X6	300	✳	✳	6	-	-	X	X	X	-	✳
8A	6X40	0	2-4-2	-	DISCONNECT							
8B	6X40	0	2-4-2	-	8	-	-	X	-	X	-	-

✳ Video Detection Zone

3 Phase
Fully Actuated
(US 158 Signal System)
Signal System #: D09-11_Winston-Salem

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Disconnect existing loop 8A.
5. Reposition existing signal heads numbered 61, 62, and 82.
6. Modify existing signal heads numbered 21 and 82.
7. Set all detector units to presence mode.
8. This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
9. Install new 2070LX Controller and conflict monitor in existing signal cabinet.
10. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
11. Disconnect and bag existing signal head 81.



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 Drums	
	Video Detection Zone	
N/A	Guardrail	
	Metal Strain Pole	
Ⓐ	"YIELD" Sign (R1-2)	Ⓐ
Ⓑ	No U-Turn Sign (R3-4)	Ⓑ
Ⓒ	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	Ⓒ

MAXTIME TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 6	PHASE 8
Walk *	–	–	–	–
Ped Clear *	–	–	–	–
Min Green	7	12	12	7
Passage *	2.0	6.0	6.0	2.0
Max 1 *	20	90	90	25
Yellow Change	3.0	4.6	4.6	3.0
Red Clear	3.1	1.6	1.6	3.3
Added Initial *	–	1.5	2.5	–
Maximum Initial *	–	34	34	–
Time Before Reduction *	–	15	15	–
Time To Reduce *	–	30	30	–
Minimum Gap	–	3.0	3.0	–
Advance Walk	–	–	–	–
Non Lock Detector	X	–	–	X
Vehicle Recall	–	MIN RECALL	MIN RECALL	–
Dual Entry	–	–	–	–

* 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 (TMP Phase I Step 2)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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Prepared for the Offices of:
Transportation Mobility and Safety Division
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 1" = 40' (0 – 40)

US 158 (Reidsville Rd.) at NC 74 Eastbound Ramps

Division 9 Forsyth County Winston-Salem

PLAN DATE: February 2024 REVIEWED BY: DT Sears
PREPARED BY: WP Erickson-Jones REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 056142 ENGINEER PORTER JONES
DocuSigned by: Porter Jones DOBE13E3A9E0498... 2/12/2024
SIGNATURE DATE
SIG. INVENTORY NO. 09-0510TI

2/12/2024
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wpjones