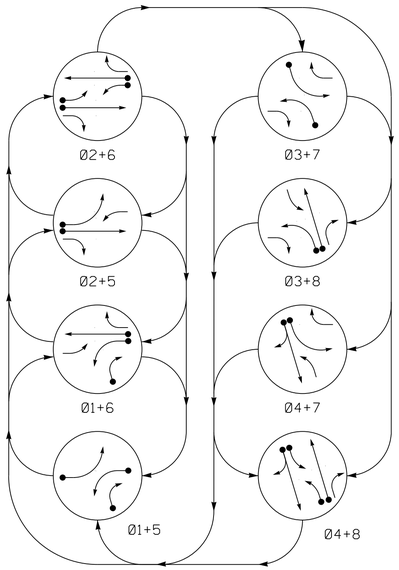
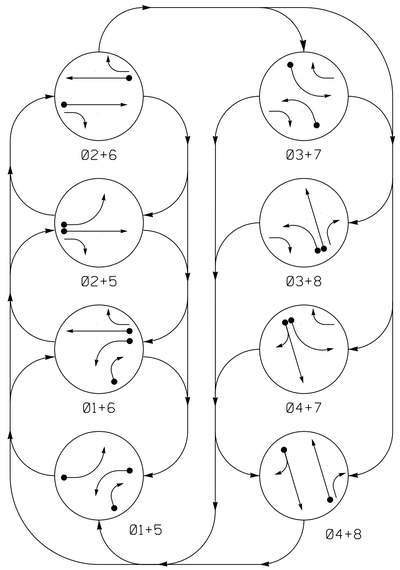
PROJECT REFERENCE NO.	SHEET NO.
R-2577A	Sig. 30.0

DEFAULT PHASING DIAGRAM



ALTERNATE PHASING DIAGRAM

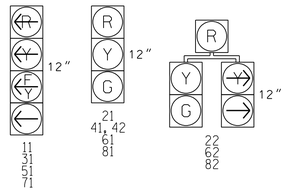


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



DEFAULT PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	FLASH
11	←̶	←̶	F Y	F Y	R̶	R̶	R̶	R̶	Y̶
21	R	R	G	G	R	R	R	R	Y
22	R	R	G	G	R/→	R/→	R	R	Y
31	R̶	R̶	R̶	R̶	←̶	←̶	F Y	F Y	R̶
41,42	R	R	R	R	R	R	G	G	R
51	←̶	F Y	←̶	F Y	R̶	R̶	R̶	R̶	Y̶
61	R	G	R	G	R	R	R	R	Y
62	R	G	R	G	R/→	R	R/→	R	Y
71	R̶	R̶	R̶	R̶	←̶	F Y	←̶	F Y	R̶
81	R	R	R	R	R	G	R	G	R
82	R/→	R/→	R	R	R	G	R	G	R

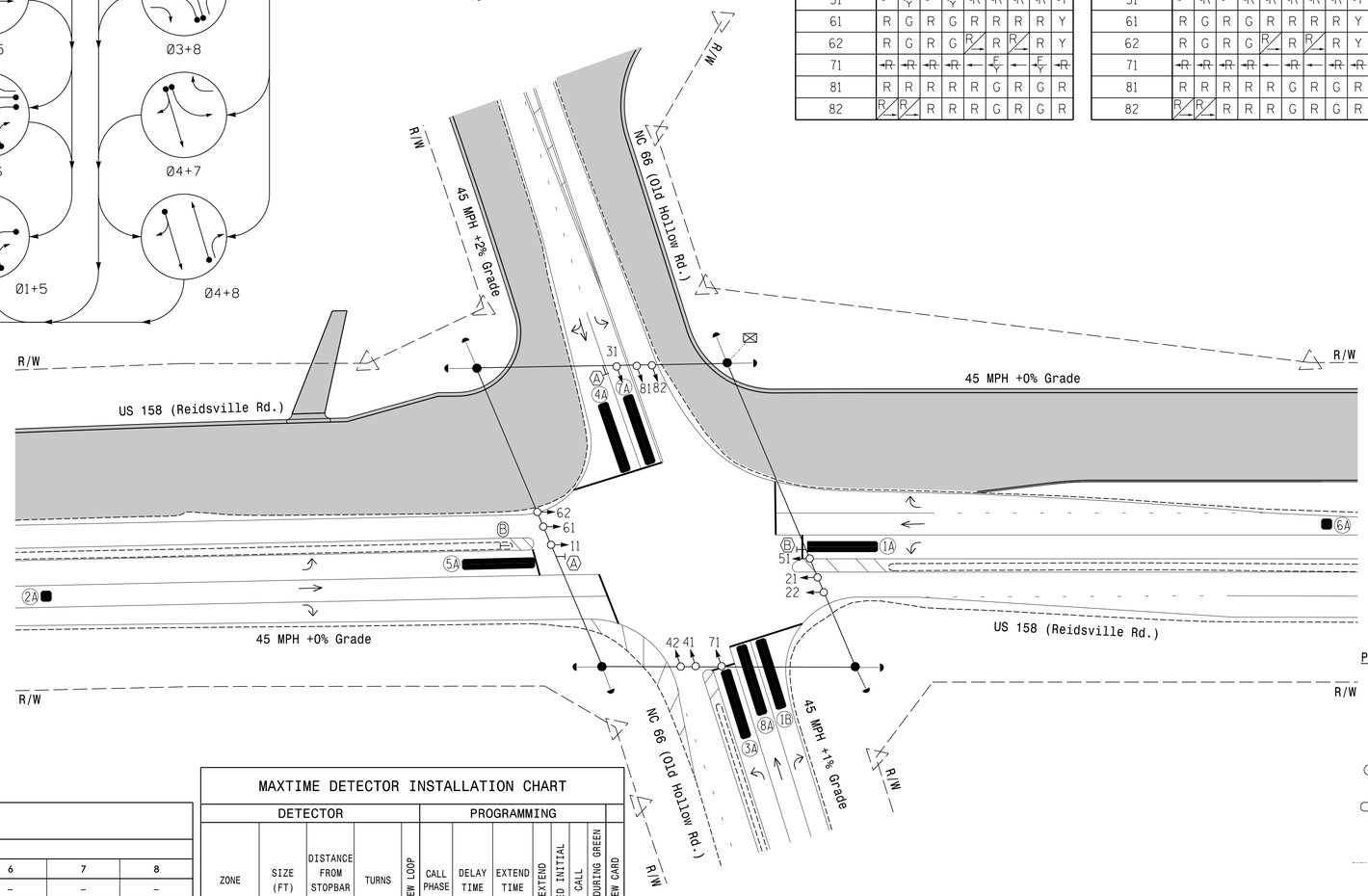
ALTERNATE PHASING TABLE OF OPERATION

SIGNAL FACE	PHASE 01+5	01+6	02+5	02+6	03+8	04+7	04+8	FLASH
11	←̶	←̶	R̶	R̶	R̶	R̶	R̶	Y̶
21	R	R	G	G	R	R	R	Y
22	R	R	G	G	R/→	R/→	R	Y
31	R̶	R̶	R̶	R̶	←̶	←̶	R̶	R̶
41,42	R	R	R	R	R	G	G	R
51	←̶	R̶	←̶	R̶	R̶	R̶	R̶	Y̶
61	R	G	R	G	R	R	R	Y
62	R	G	R	G	R/→	R	R/→	Y
71	R̶	R̶	R̶	R̶	←̶	R̶	R̶	R̶
81	R	R	R	R	G	R	G	R
82	R/→	R/→	R	R	G	R	G	R

8 Phase
Fully Actuated
(Isolated)

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 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
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 intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. The Division Traffic Engineer will determine the hours of use for each phasing plan.



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	▬
Ⓐ	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	Ⓐ
Ⓑ	No U-Turn Sign (R3-4)	Ⓑ

MAXTIME TIMING CHART

FEATURE	PHASE 1	2	3	4	5	6	7	8
Walk *	–	–	–	–	–	–	–	–
Ped Clear *	–	–	–	–	–	–	–	–
Min Green	7	12	7	7	7	12	7	7
Passage *	2.0	6.0	2.0	2.0	2.0	6.0	2.0	2.0
Max 1 *	20	90	20	40	20	90	20	40
Yellow Change	3.0	4.5	3.0	4.4	3.0	4.5	3.0	4.4
Red Clear	2.8	1.7	3.3	1.9	3.1	1.7	2.9	1.9
Added Initial *	–	2.5	–	–	–	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	X	X	–	X	X
Vehicle Recall	–	MIN RECALL	–	–	–	MIN RECALL	–	–
Dual Entry	–	–	–	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.

MAXTIME DETECTOR INSTALLATION CHART

DETECTOR ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
1A ✳	6X40	0	✳	✳	1	15#	-	X	-	X	-	✳
					6@	3	-	X	-	X	X	✳
1B ✳	6X40	0	✳	✳	1	15	-	X	-	X	-	✳
2A ✳	6X6	300	✳	✳	2	-	-	X	X	X	-	✳
3A ✳	6X40	0	✳	✳	3	15#	-	X	-	X	-	✳
					8@	3	-	X	-	X	-	✳
4A ✳	6X40	0	✳	✳	4	10	-	X	-	X	-	✳
5A ✳	6X40	0	✳	✳	5	15#	-	X	-	X	-	✳
					2@	3	-	X	-	X	X	✳
6A ✳	6X6	300	✳	✳	6	-	-	X	X	X	-	✳
7A ✳	6X40	0	✳	✳	7	15##	-	X	-	X	-	✳
					4@	3	-	X	-	X	-	✳
8A ✳	6X40	0	✳	✳	8	-	-	X	-	X	-	✳

\# Disable Delay During Alternate Phasing Operation.
Reduce Delay to 3 Seconds During Alternate Phasing Operation.
@ Disable Phase Call For Zone(s) During Alternate Phasing Operation.
✳ Video Detection Zone

Signal Upgrade - Temporary Design 1 (TMP Phase I)

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SCALE
0 40
1" = 40'

US 158 (Reidsville Rd.)
at
NC 66 (Old Hollow Rd.)
Division 9 Forsyth County Walkertown

PLAN DATE: February 2024 REVIEWED BY: WP Erickson-Jones
PREPARED BY: H Townsend REVIEWED BY:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 056142 ENGINEER PORTER JONES
DocuSigned by: Porter Jones
SIGNATURE 2/12/2024 DATE
SIG. INVENTORY NO. 09-0264TI

2/12/2024
R:\Traffic\Signals\Designs\Signals\#09026471_sig_dsn_XXXXXXXX.dgn
wpjones