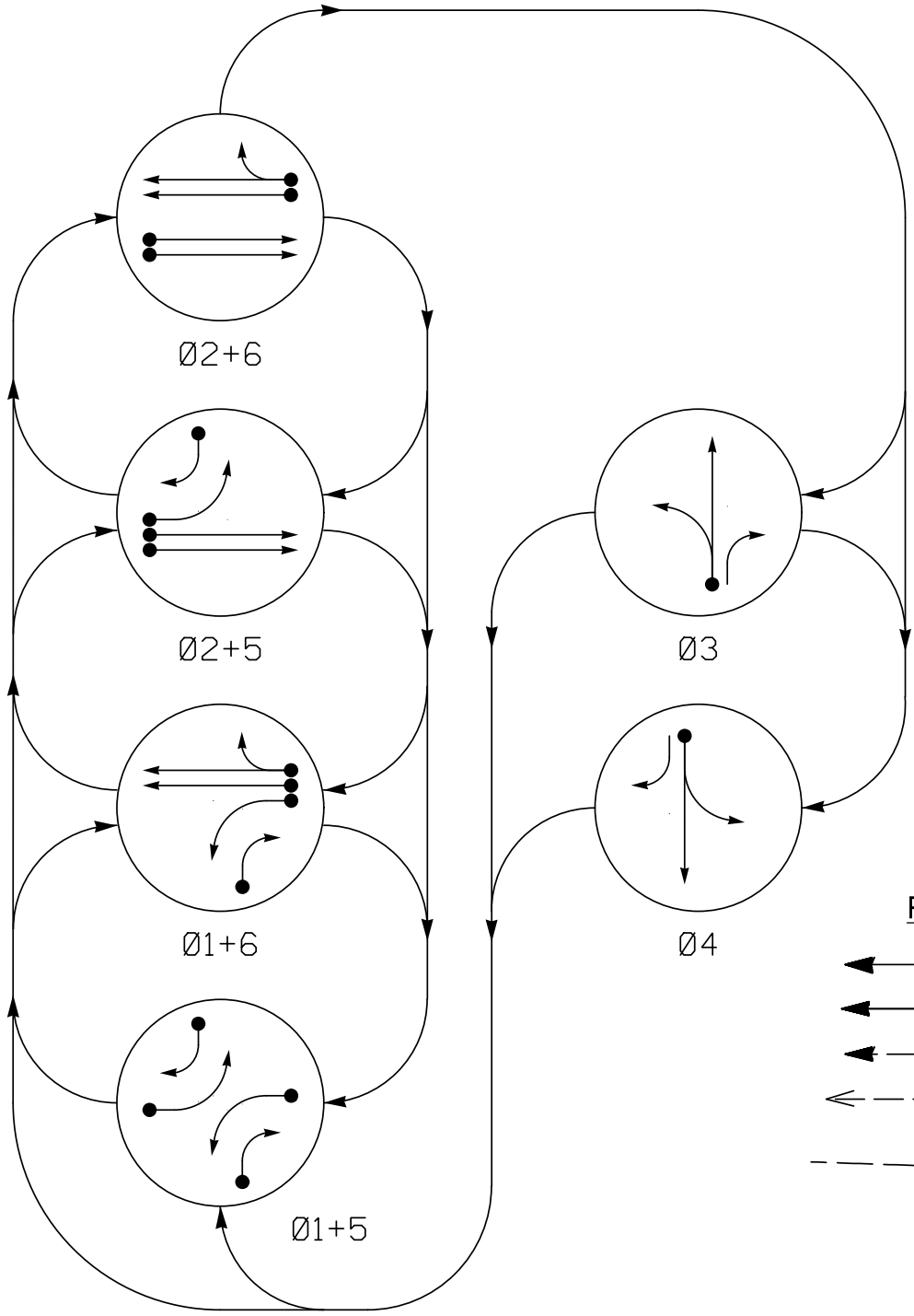


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

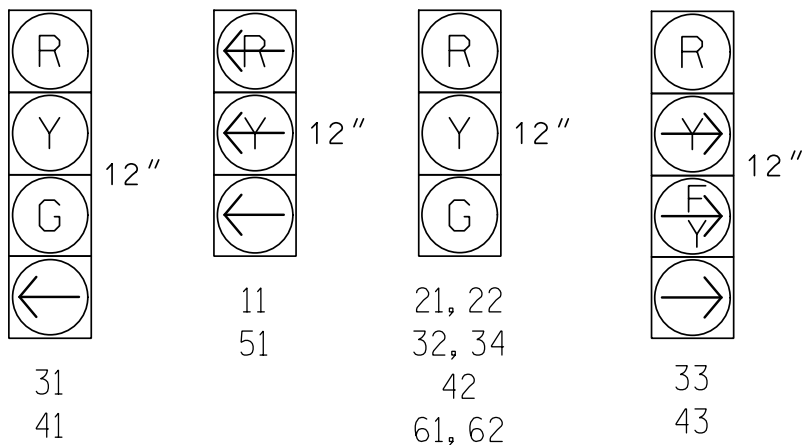
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE					
	Ø 1 + 5	Ø 1 + 6	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4
11	←	←	←	←	←	←
21, 22	R	R	G	G	R	R
31	R	R	R	R	G	R
32, 34	R	R	R	R	G	R
33	→	→	R	R	←	←
41	R	R	R	R	R	G
42	R	R	R	R	R	G
43	→	R	→	R	R	←
51	←	←	←	←	←	←
61, 62	R	G	R	G	R	R

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART

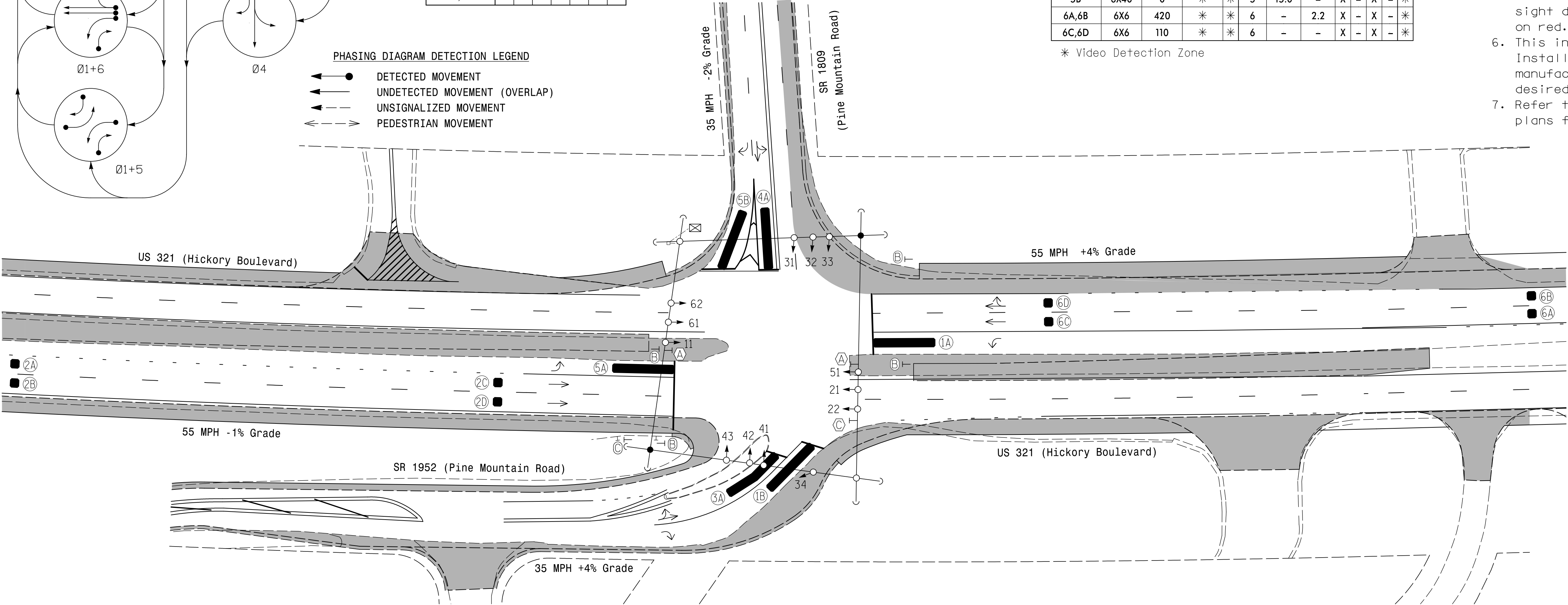
DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	*	*	1	-	-	X	-	X	*
1B	6X40	0	*	*	1	15.0	-	X	-	X	*
2A,2B	6X6	420	*	*	2	-	2.2	X	-	X	*
2C,2D	6X6	110	*	*	2	-	-	X	-	X	*
3A	6X40	0	*	*	3	-	-	X	-	X	*
4A	6X40	0	*	*	4	3.0	-	X	-	X	*
5A	6X40	0	*	*	5	-	-	X	-	X	*
5B	6X40	0	*	*	5	15.0	-	X	-	X	*
6A,6B	6X6	420	*	*	6	-	2.2	X	-	X	*
6C,6D	6X6	110	*	*	6	-	-	X	-	X	*

* Video Detection Zone

6 Phase Fully Actuated (Isolated)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Set all detector units to presence mode.
- Phase 1 and/or phase 5 may be lagged.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Refer to Roadway and/or Pavement Marking plans for stop bar locations.



MAXTIME TIMING CHART

FEATURE	PHASE					
	1	2	3	4	5	6
Walk *	-	-	-	-	-	-
Ped Clear *	-	-	-	-	-	-
Min Green	7	14	7	7	7	14
Passage *	2.0	2.0	2.0	2.0	2.0	2.0
Max I *	25	90	30	30	20	90
Yellow Change	3.0	5.3	3.6	4.0	3.0	4.8
Red Clear	3.2	1.3	2.8	2.0	3.3	1.4
Added Initial *	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Advance Walk	-	-	-	-	-	-
Non Lock Detector	X	-	X	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.

LEGEND

- | PROPOSED | EXISTING |
|--------------------------------|----------|
| Traffic Signal Head | N/A |
| Modified Signal Head Sign | N/A |
| Pedestrian Signal Head | N/A |
| Signal Pole with Guy | N/A |
| Signal Pole with Sidewalk Guy | N/A |
| Inductive Loop Detector | N/A |
| Control & Cabinet | N/A |
| Junction Box | N/A |
| 2-in Underground Conduit | N/A |
| Right of Way | N/A |
| Directional Arrow | N/A |
| Video Detection Area | N/A |
| Construction Zone | N/A |
| (A) No U-Turn Sign (R3-4) | (A) |
| (B) "DO NOT ENTER" Sign (R5-1) | (B) |
| (C) No Right Turn Sign (R3-1) | (C) |

Signal Upgrade Temporary Design 1 - TMP Phase I

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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 321 (Hickory Boulevard)
at
SR 1809/1952 (Pine Mountain Rd)
Division 11 Caldwell County Hudson
PLAN DATE: June 2024 REVIEWED BY: D.J. Darity
PREPARED BY: R.L. Aristondo REVIEWED BY: T.M. Woody
REVISIONS
INIT. DATE
DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 040329
T.M. WOODY
5/29/2026
DATE
SIC. INVENTORY NO. II-080811