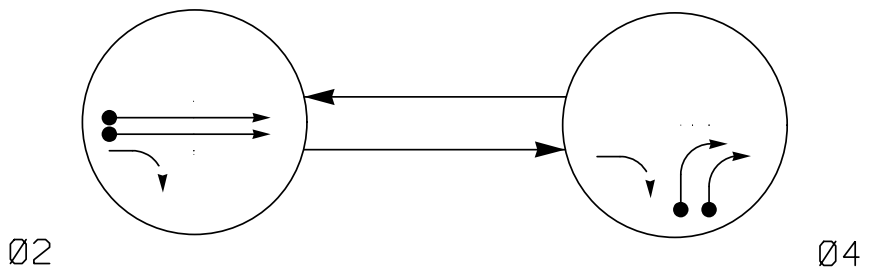


PHASING DIAGRAM



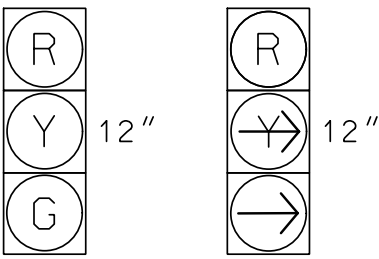
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE		
	Ø 6	Ø 8	FLASH
21, 22	G	R	Y
41, 42, 43	R	→	R

SIGNAL FACE I.D.

All Heads L.E.D.



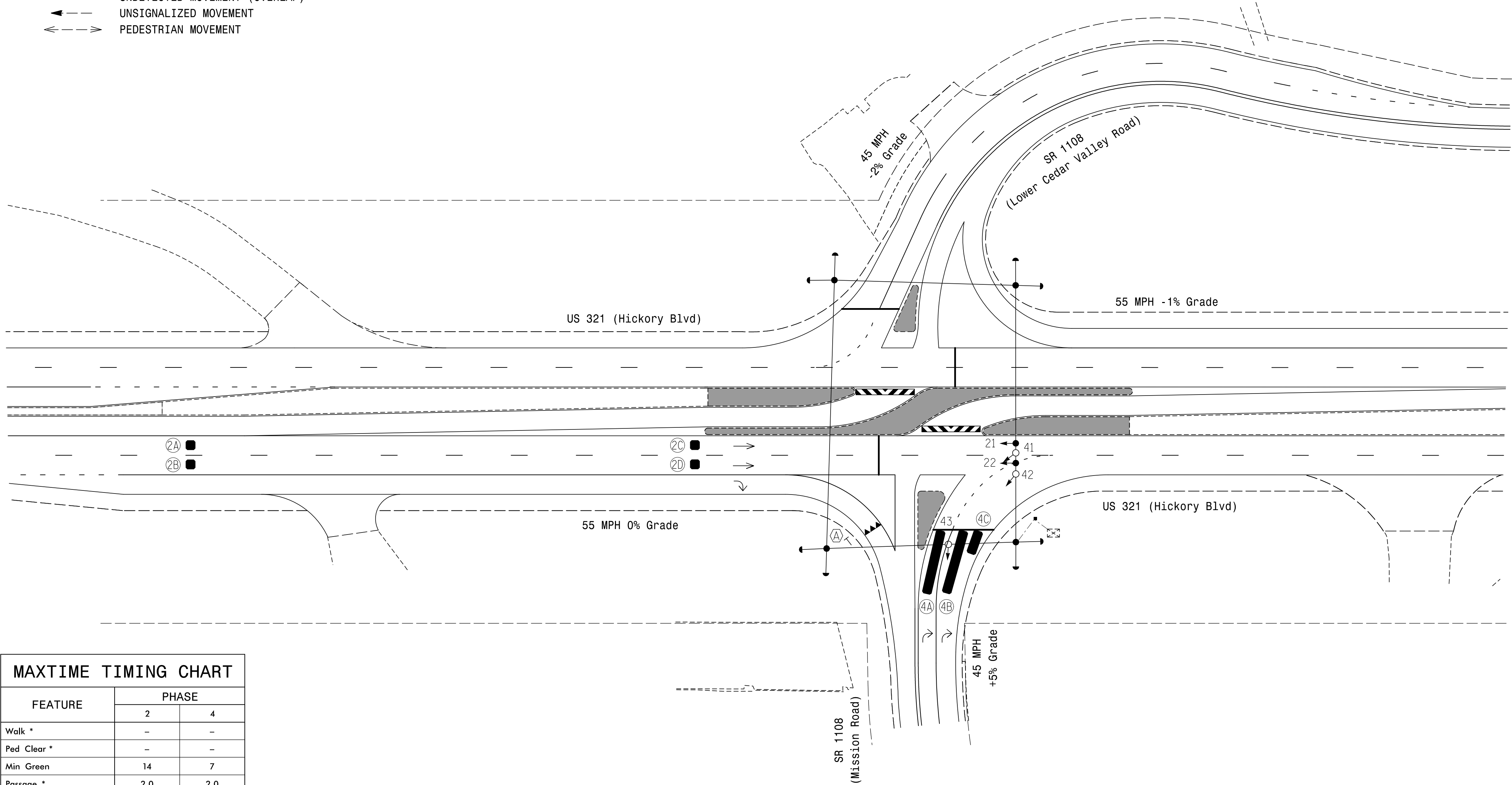
MAXTIME DETECTOR INSTALLATION CHART												
DETECTOR						PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	NEW CARD
2A,2B	6X6	420	*	*	2	-	2.2	X	-	X	-	*
2C,2D	6X6	110	*	*	2	-	-	X	-	X	-	*
4A	6X40	0	*	*	4	15.0	-	X	-	X	-	*
4B	6X40	0	*	*	4	15.0	-	X	-	X	-	*
4C	6X30	0	*	*	4	15.0	-	X	-	X	-	*

* Video Detection Zone

2 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.
- 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	
	2	4
Walk *	-	-
Ped Clear *	-	-
Min Green	14	7
Passage *	2.0	2.0
Max 1 *	90	20
Yellow Change	5.2	3.0
Red Clear	1.4	3.1
Added Initial *	-	-
Maximum Initial *	-	-
Time Before Reduction *	-	-
Time To Reduce *	-	-
Minimum Gap	-	-
Advance Walk	-	-
Non Lock Detector	-	X
Vehicle Recall	MIN RECALL	-
Dual Entry	-	-

* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 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	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
	Controller & Cabinet	N/A
	Junction Box	N/A
	2-in Underground Conduit	N/A
	Right of Way	N/A
	Directional Arrow	N/A
	Video Detection Zone	N/A
	Construction Zone	N/A
	Type III Barricade	N/A
	"YIELD" Sign R1-2	N/A

Signal Upgrade
Temporary Design - TMP Phase III

stv
STV Engineers, Inc.
900 West Trade St., Suite 715
Charlotte, NC 28202
(704) 372-1885
NC License Number F-0991

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

US 321 (Hickory Boulevard) NB
at
SR 1108 (Mission Road)/
SR 1108 (Lower Cedar Valley Rd)
Division 11 Caldwell County Hudson
PLAN DATE: Sept 2023 REVIEWED BY: D.J. Darity
PREPARED BY: R. Leon REVIEWED BY: T.M. Woody
REVISIONS: INIT. DATE
10/18/2023

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 1913
DONALD J. DARTY
DocuSigned by: Donald J. Darity
10/18/2023
SIGNATURE DATE
SIG. INVENTORY NO. 11-14521