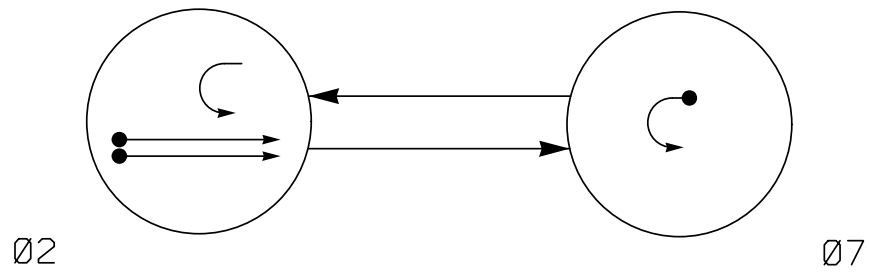


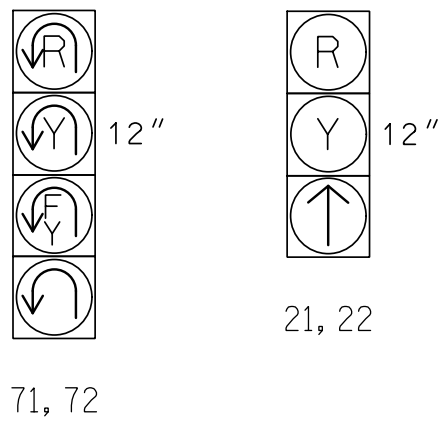
DEFAULT PHASING DIAGRAM



DEFAULT PHASING TABLE OF OPERATION			
SIGNAL FACE	PHASE		
	Ø 2	Ø 7	FLASH
21, 22	↑	R	Y
71, 72	↶	↷	Y

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 INITIAL	ADDED INITIAL	CALL
2A	6X6	420	5	X	2	-	-	X	X	X
2B	6X6	420	5	X	2	-	-	X	X	X
7A	6X40	0	2-4-2	X	7	*15.0	-	X	-	X

\* Disable Delay during Alternate Phasing operation.

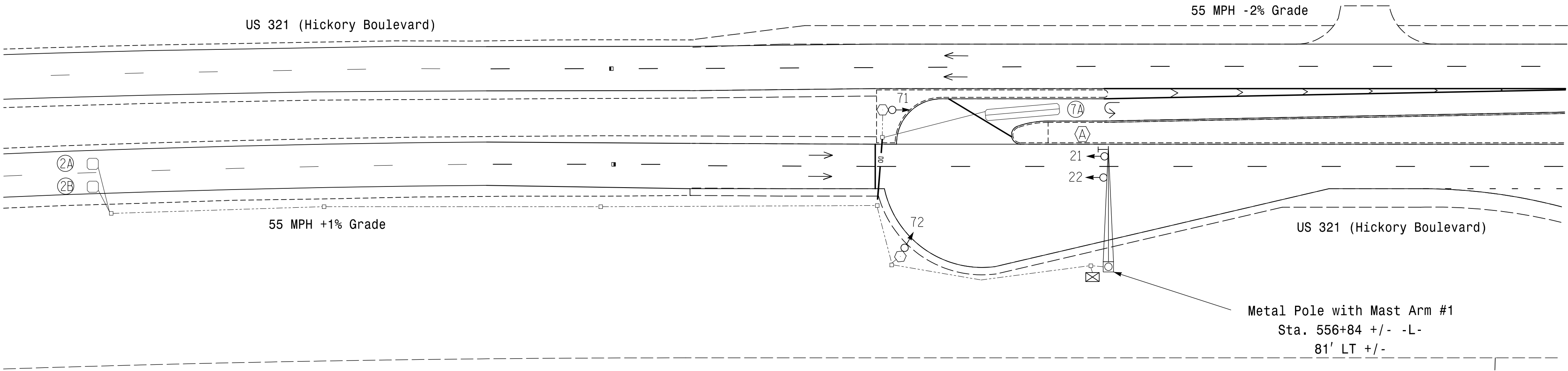
2 Phase  
Fully Actuated with Alternate Phasing Operation  
US 321 Closed Loop System

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.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The Division Traffic Engineer will determine the hours of use for each phasing plan.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Pedestal mounted signal heads shall be mounted a minimum of 8' above the high point of the roadway surface elevation.
- Refer to Roadway and/or Pavement Marking plans for stop bar locations.

PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←---→ UNDETECTED MOVEMENT (OVERLAP)
- ←---→ UNSIGNALIZED MOVEMENT
- ←---→ PEDESTRIAN MOVEMENT



MAXTIME TIMING CHART

FEATURE	PHASE	
	2	7
Walk *	-	-
Ped Clear *	-	-
Min Green	14	7
Passage *	6.0	2.0
Max I *	90	20
Yellow Change	5.1	3.0
Red Clear	1.0	4.4
Added Initial *	1.5	-
Maximum Initial *	46	-
Time Before Reduction *	15	-
Time To Reduce *	30	-
Minimum Gap	3.4	-
Advance Walk	-	-
Non Lock Detector	-	X
Vehicle Recall	MIN RECALL	-
Dual Entry	-	-

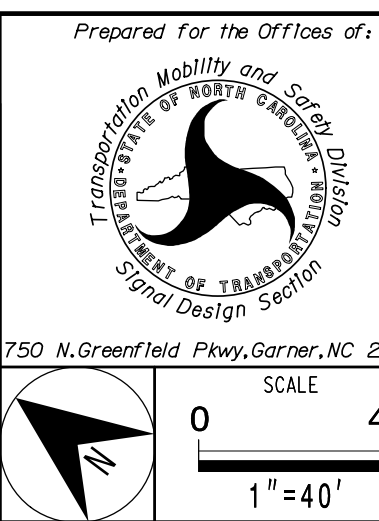
\* These values may be field adjusted. Do not adjust Min Green and Extension times for phase 2 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

LEGEND

- | PROPOSED |                               | EXISTING |
|----------|-------------------------------|----------|
| ○→       | Traffic Signal Head           | ●→       |
| ●→       | Modified Signal Head          | N/A      |
| ↓        | Sign                          | ↓        |
| ↓        | Pedestrian Signal Head        | ↓        |
| ○→       | 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             | →        |
| ⊠        | Metal Pole with Mastarm       | ⊠        |
| ---      | Directional Drill             | N/A      |
| ○        | Type II Signal Pedestal       | ●        |
| ⊠        | No Left Turn Sign (R3-2)      | ⊠        |

New Installation

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



US 321 (Hickory Boulevard) SB at U-Turn North of SR 1108 (Mission Road)/ SR 1108 (Lower Cedar Valley Road)			
Division 11 Caldwell County Hudson			
PLAN DATE:	Sept 2023	REVIEWED BY:	D.J. Darity
PREPARED BY:	J.T. Grimm	REVIEWED BY:	T.M. Woody
REVISIONS	INIT.	DATE	

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED

SEAL  
NORTH CAROLINA  
PROFESSIONAL  
ENGINEER  
DONALD J. DARITY  
11453

DocuSigned by:  
Donald J. Darity 10/18/2023  
DATE  
SIG. INVENTORY NO. 11-1453