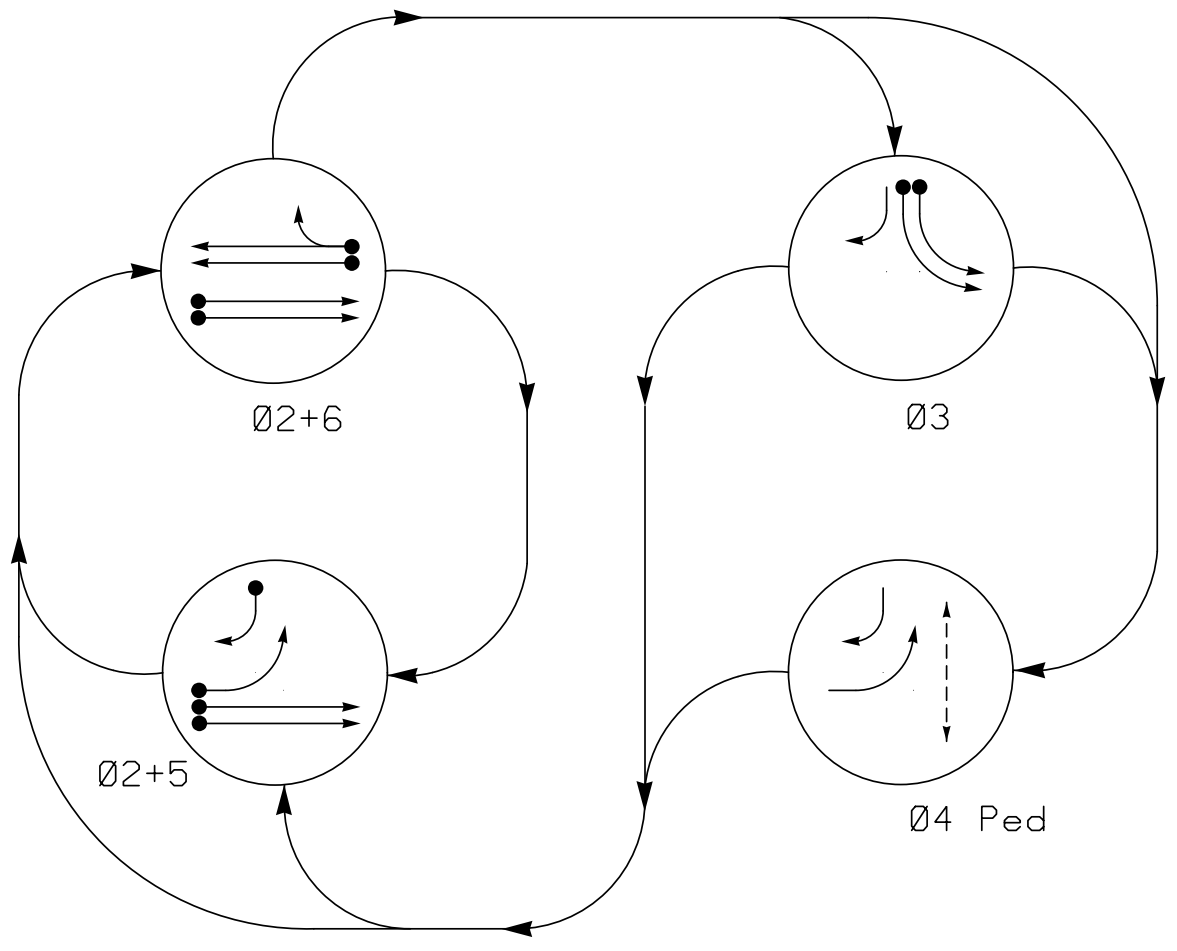


PHASING DIAGRAM



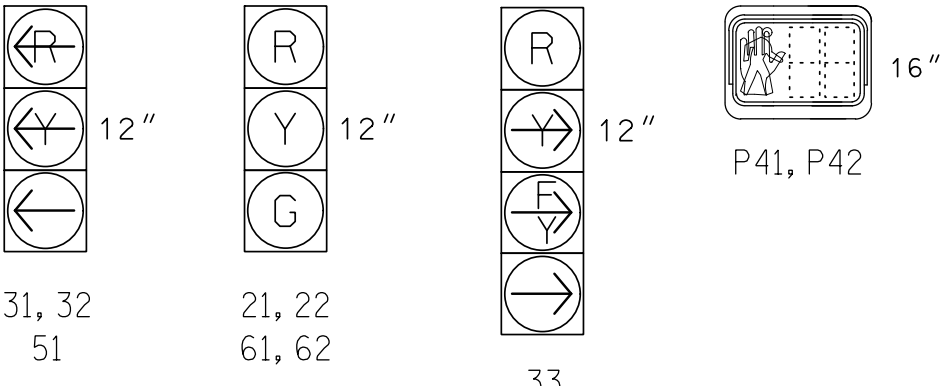
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE				
	Ø 2 + 5	Ø 2 + 6	Ø 3	Ø 4 PED	FLASH
21, 22	G	G	R	R	R
31, 32	←R	←R	←R	←R	←R
33	→	R	F	→	R
51	←R	←R	←R	←R	←R
61, 62	R	G	R	R	R
P41, P42	DW	DW	DW	W	DRK

SIGNAL FACE I.D.

All Heads L.E.D.



MAXTIME DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	URNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL CALL	NEW CARD
3A	6X40	0	*	*	3	3	-	X	-	*
3B	6X40	0	*	*	3	-	-	X	-	*
5A	6X40	0	*	*	5	3	-	X	-	*
5B	6X40	0	*	*	5	15	-	X	-	*

* Multi-zone Microwave Detection Zone

RADAR DETECTION SYSTEM

FUNCTION	SENSOR 1 - 2A	SENSOR 2 - 6A
Channel	1	2
Phase	2	6
Direction of Travel	EB	WB
Detection Zone (ft)	500 - 100	500 - 100
Enable Speed	Y	Y
Speed Range (mph)	35 - 100	35 - 100
Enable Estimated Time of Arrival	Y	Y
Estimated Time of Arrival (sec)	2.5 - 6.5	2.5 - 6.5

4 Phase
Fully Actuated
Signal System #D06-17 Lumberton
US 301 and SR 1997 (Fayetteville Road)

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.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- This intersection uses video detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

- Bag and disconnect existing pedestrian signal heads numbered P31 and P62.

LEGEND

PROPOSED	EXISTING
○➡ Traffic Signal Head	●➡ N/A
●➡ Modified Signal Head	■➡ N/A
□ Pedestrian Signal Head	■➡ N/A
□ Signal Pole with Guy Sign	●➡ N/A
□ Metal Strain Pole	□ N/A
□ Inductive Loop Detector	□ N/A
□ Controller & Cabinet	□ N/A
□ Junction Box	□ N/A
--- 2-in Underground Conduit	--- N/A
--- Directional Drill	--- N/A
--- Right of Way	--- N/A
➡ Directional Arrow	➡ N/A
○ Type II Signal Pedestal	● N/A
N/A Curb Ramp	N/A
Construction Zone	Construction Zone
Pedestrian Barricade	Pedestrian Barricade
Portable Barrier	Portable Barrier
Microwave Detection Zone	Microwave Detection Zone

MAXTIME TIMING CHART					
FEATURE	PHASE				
	2	3	4 (PED)	5	6
Walk *	-	-	7	-	-
Ped Clear *	-	-	21	-	-
Min Green	12	7	7	7	12
Passage *	2.0	2.0	-	2.0	2.0
Max 1 *	90	30	31	20	90
Yellow Change	4.6	3.0	3.0	3.0	4.6
Red Clear	1.6	3.4	1.0	2.3	1.6
Added Initial *	-	-	-	-	-
Maximum Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Advance Walk	-	-	-	-	-
Non Lock Detector	-	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.

Signal Upgrade
Temporary Design 1 - TMP Phase I

stv
STV Engineers, Inc.
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(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
SCALE
0 40
1"=40'

SR 1997 (Fayetteville Road)
at
SR 1984 (Linkhaw Road)
Division 6 Robeson County Lumberton
PLAN DATE: Feb 2025 REVIEWED BY: H.M. Surti
PREPARED BY: R.L. Aristondo REVIEWED BY: T.M. Woody
REVISIONS
INIT. DATE

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
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PROFESSIONAL
ENGINEER
Trent M. Moody
040329
DocuSigned by
Trent M. Moody
03/19/2025
DATE
SIC. INVENTORY NO. 06-053771