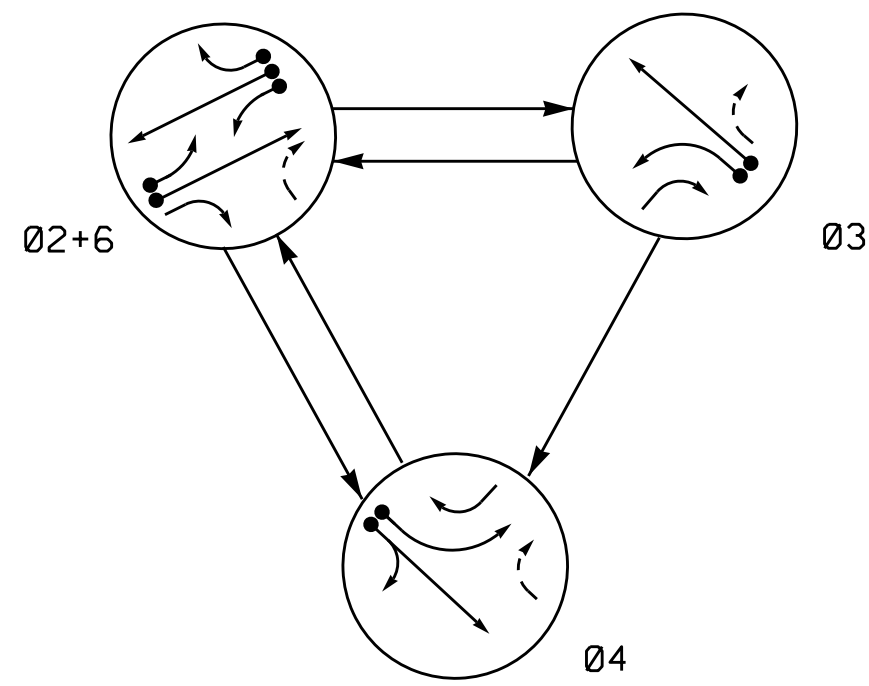


PHASING DIAGRAM



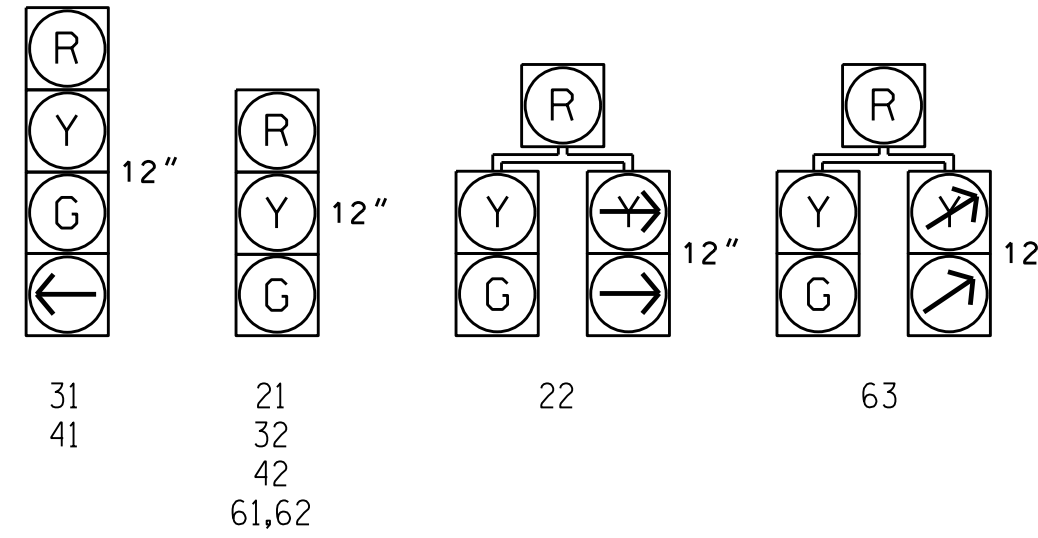
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE			
	02+6	03	04	F
21	G	R	R	Y
22	G	R	R	Y
31	R	G	R	R
32	R	G	R	R
41	R	R	G	R
42	R	R	G	R
61, 62	G	R	R	Y
63	G	R	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.

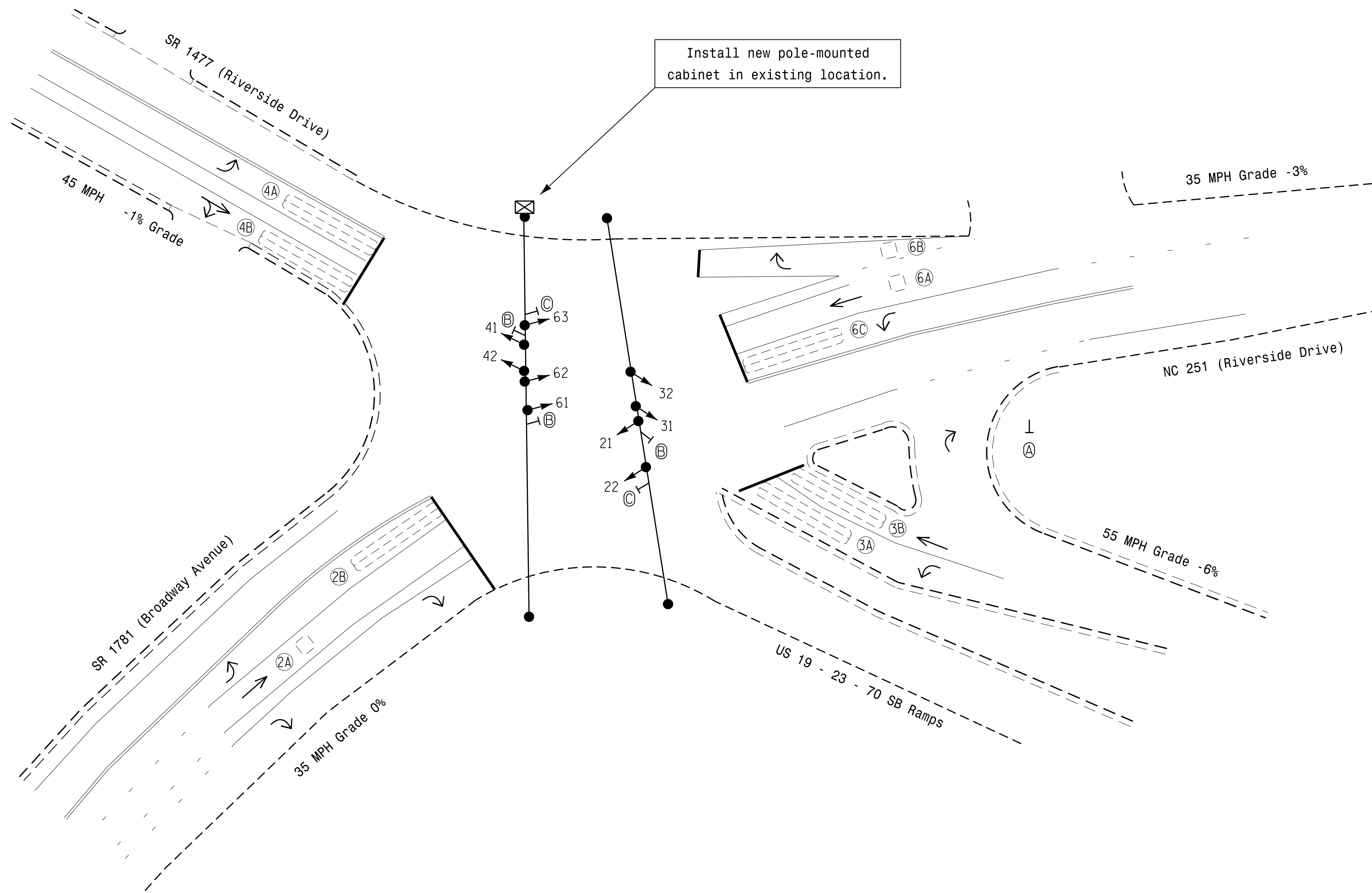


LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING					SYSTEM LOOP	NEW CARD	
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME			DELAY TIME
2A	6X6	70	5	-	2	Y	Y	-	-	-	-	Y
2B	6X40	0	2-4-2	-	2	Y	Y	-	-	-	-	Y
3A	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
3B	6X40	0	2-4-2	-	3	Y	Y	-	-	-	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-	3	Y
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	10	-	Y
6A, 6B	6X6	70	5	-	6	Y	Y	-	-	-	-	Y
6C	6X40	0	2-4-2	-	6	Y	Y	-	-	-	-	Y

3 Phase Fully Actuated Asheville Signal System

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE			
	2	3	4	6
Min Green 1 *	10	7	7	10
Extension 1 *	3.0	2.0	2.0	3.0
Max Green 1 *	45	30	30	45
Yellow Clearance	4.1	5.9	4.6	4.1
Red Clearance	2.4	1.5	2.3	2.4
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-
Don't Walk 1	-	-	-	-
Seconds Per Actuation *	-	-	-	-
Max Variable Initial *	-	-	-	-
Time Before Reduction *	-	-	-	-
Time To Reduce *	-	-	-	-
Minimum Gap	-	-	-	-
Recall Mode	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	YELLOW	-	-	YELLOW
Dual Entry	-	-	-	-
Simultaneous Gap	ON	ON	ON	ON

* 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 Traffic Signal Head | ●→ | EXISTING Traffic Signal Head |
| ○→ | PROPOSED Modified Signal Head | N/A | EXISTING Modified Signal Head |
| ⊥ | PROPOSED Sign | ⊥ | EXISTING Sign |
| ⊥ | PROPOSED Pedestrian Signal Head With Push Button & Sign | ⊥ | EXISTING Pedestrian Signal Head With Push Button & Sign |
| ⊥ | PROPOSED Signal Pole with Guy | ⊥ | EXISTING Signal Pole with Guy |
| ⊥ | PROPOSED Signal Pole with Sidewalk Guy | ⊥ | EXISTING Signal Pole with Sidewalk Guy |
| ⊠ | PROPOSED Inductive Loop Detector | ⊠ | EXISTING Inductive Loop Detector |
| ⊠ | PROPOSED Controller & Cabinet | ⊠ | EXISTING Controller & Cabinet |
| ⊠ | PROPOSED Junction Box | ⊠ | EXISTING Junction Box |
| ⊠ | PROPOSED 2-in Underground Conduit | ⊠ | EXISTING 2-in Underground Conduit |
| N/A | PROPOSED Right of Way | --- | EXISTING Right of Way |
| → | PROPOSED Directional Arrow | → | EXISTING Directional Arrow |
| (A) | PROPOSED "YIELD" Sign (R1-2) | (A) | EXISTING "YIELD" Sign (R1-2) |
| (B) | PROPOSED Left Arrow "ONLY" Sign (R3-5L) | (B) | EXISTING Left Arrow "ONLY" Sign (R3-5L) |
| (C) | PROPOSED Right Arrow "ONLY" Sign (R3-5R) | (C) | EXISTING Right Arrow "ONLY" Sign (R3-5R) |

Signal Upgrade

NC 251 (Riverside Drive) /
SR 1781 (Broadway Avenue) /
at SR 1477 (Riverside Drive) /
US 19-23-70 SB Ramps

Division 13 Buncombe County Asheville

PLAN DATE: April 2016 REVIEWED BY: P.L. Alexander

PREPARED BY: R.N. Zinser REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Richard N. Zinser 8/9/2016

SIG. INVENTORY NO. 13-0278

09-AUG-2016 11:55
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