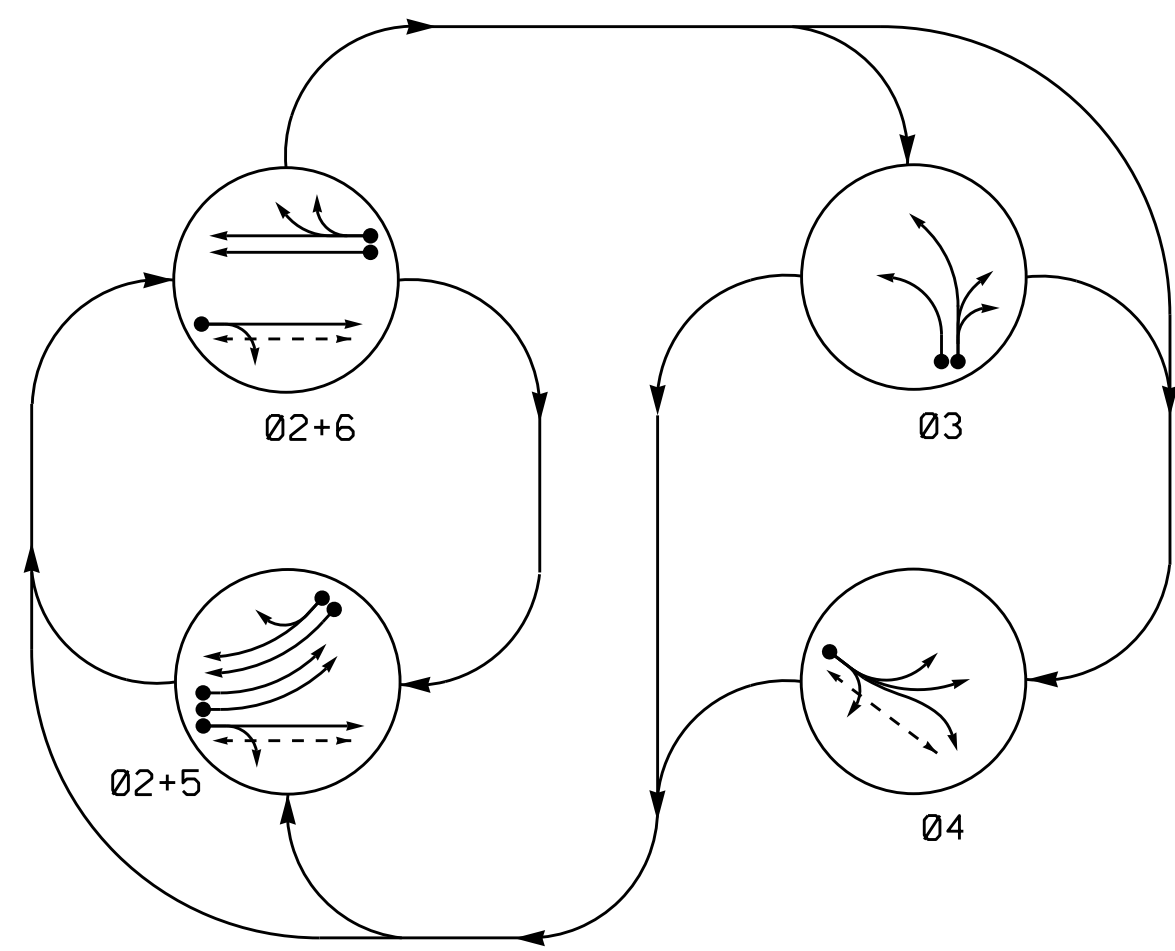
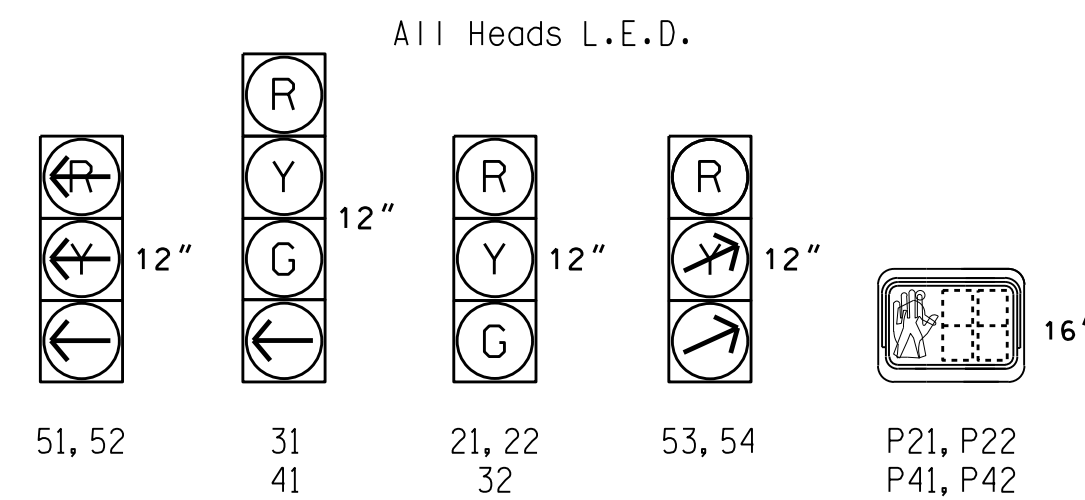


PHASING DIAGRAM



SIGNAL FACE	PHASE				
	02+5	02+6	03	04	FLASH
21, 22	G	G	R	R	Y
31	R	R	G	R	R
32	R	R	G	R	R
41	R	R	R	G	R
42	R	R	R	G	R
51, 52	←	←	←	←	←
53, 54	←	R	R	R	R
61, 62	R	G	R	R	Y
P21, P22	W	W	DW	DW	DRK
P41, P42	DW	DW	DW	W	DRK

SIGNAL FACE I.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		
2A	6X6	70	4	-	2	Y	Y	-	-	-	Y
3A	6X60	0	2-4-2	-	3	Y	Y	-	-	3	Y
3B	6X60	0	2-4-2	-	3	Y	Y	-	-	-	Y
4A	6X60	0	2-4-2	-	4	Y	Y	-	-	-	Y
4B	6X6	+5	EXIST	-	4	Y	Y	-	-	15	Y
5A	6X60	0	2-4-2	-	5	Y	Y	-	-	-	Y
5B	6X60	0	2-4-2	-	5	Y	Y	-	-	-	Y
5C	6X60	0	2-4-2	-	5	Y	Y	-	-	-	Y
5D	6X60	0	2-4-2	-	5	Y	Y	-	-	-	Y
6A	6X6	70	5	-	6	Y	Y	-	-	-	Y
6B	6X6	70	5	-	6	Y	Y	-	-	-	Y
S1	6X6	+290	EXIST	-	-	-	-	-	-	-	Y
S2	6X6	+290	EXIST	-	-	-	-	-	-	-	Y
S3	6X6	+280	EXIST	-	-	-	-	-	-	-	Y
S4	6X6	+280	EXIST	-	-	-	-	-	-	-	Y

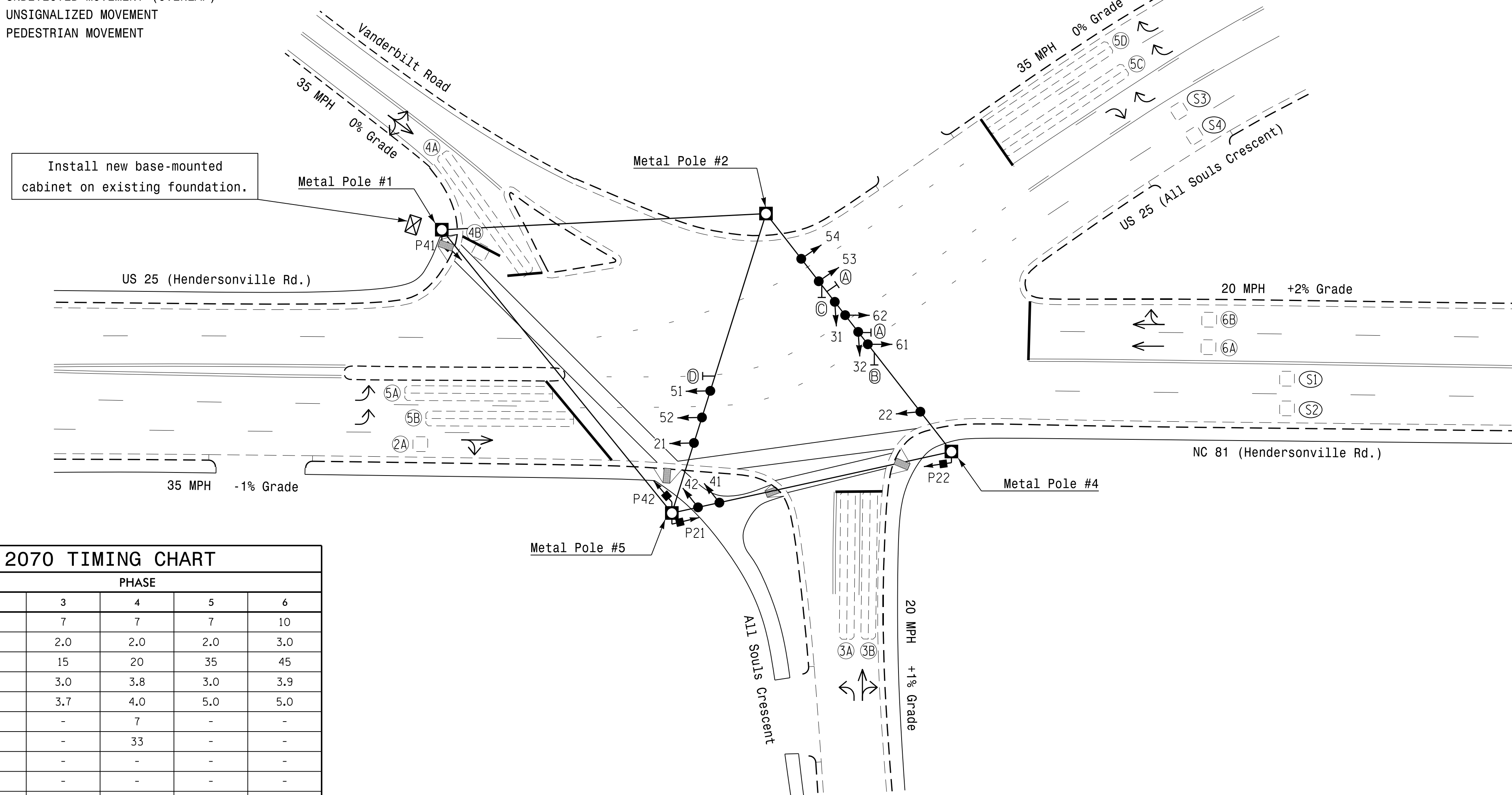
4 Phase Fully Actuated Asheville Signal System

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.
- Phase 5 may be lagged.
- The order of phase 3 and phase 4 may be reversed.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- 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.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

PHASING DIAGRAM DETECTION LEGEND

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



FEATURE	PHASE				
	2	3	4	5	6
Min Green 1 *	10	7	7	7	10
Extension 1 *	3.0	2.0	2.0	2.0	3.0
Max Green 1 *	45	15	20	35	45
Yellow Clearance	3.9	3.0	3.8	3.0	3.9
Red Clearance	5.0	3.7	4.0	5.0	5.0
Walk 1 *	7	-	7	-	-
Don't Walk 1	11	-	33	-	-
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	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 | | EXISTING Modified Signal Head |
| | PROPOSED Pedestrian Signal Head | | EXISTING Pedestrian Signal Head |
| | 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 |
| | PROPOSED Right of Way | | EXISTING Right of Way |
| | PROPOSED Directional Arrow | | EXISTING Directional Arrow |
| | PROPOSED Metal Strain Pole | | EXISTING Metal Strain Pole |
| | PROPOSED Curb Ramp | | EXISTING Curb Ramp |
| | PROPOSED No Left Turn Sign (R3-2) | | EXISTING No Left Turn Sign (R3-2) |
| | PROPOSED "NO TURN ON RED" Sign (R10-11) | | EXISTING "NO TURN ON RED" Sign (R10-11) |
| | PROPOSED Left Arrow "ONLY" Sign (R3-5L) | | EXISTING Left Arrow "ONLY" Sign (R3-5L) |
| | PROPOSED NO TURN ON TO Vanderbilt | | EXISTING NO TURN ON TO Vanderbilt |

Signal Upgrade

	US 25/NC 81 (Hendersonville Rd.) at US 25 (All Souls Crescent)/All Souls Crescent/Vanderbilt Road		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER 024393 TIMOTHY J. WILLIAMS
	Division 13 Buncombe County Asheville PLAN DATE: January 2016 PREPARED BY: R.N. Zinser REVISIONS: _____ INIT. DATE: _____	REVIEWED BY: T. J. Williams REVIEWED BY: _____ INIT. DATE: _____	

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