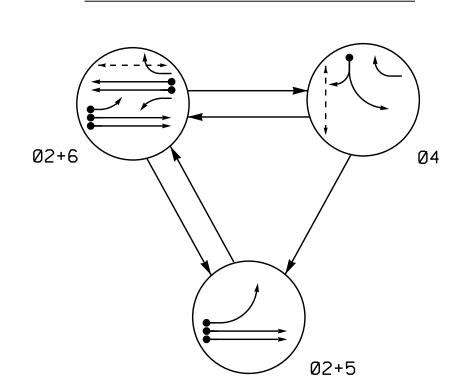


DEFAULT PHASING DIAGRAM



DEFAULT	PH	ASI	NG	
TABLE OF	0PI	ERA	TIO	N
			PH	4SE
SIGNAL FACE	Ø2+5	Ø2+6	Ø 4	FLASH
21, 22	G	G	R	Υ
41. 42	R	R	G	R
51	↓	╙╠	#	+
61	R	G	R	Y
62	R	G	R/	Υ
P41. P42	DW	DW	W	DR
P61. P62	DW	W	DW	DR
	TABLE OF SIGNAL FACE 21, 22 41, 42 51 61 62 P41, P42	TABLE OF OPI SIGNAL FACE 21. 22 G 41. 42 R 51 61 R 62 R P41. P42 DW	TABLE OF OPERA SIGNAL FACE Ø 2 4 5 6 21, 22 G G 41, 42 R R 51 ← ₹ 61 R G 62 R G P41, P42 DW DW	SIGNAL FACE 21. 22

ALTERNATE PHASING								
TABLE OF OPERATION								
		PHASE						
SIGNAL FACE	0 0 2 2 0 + + 4 5 6		Ø 1 0 + 1 4	Ø 1 2	FLASH			
21, 22	G	G	R	G	R	Υ		
41. 42	R	R	G	R	G	R		
51	↓	ı↓	#	- F	₩	- Y		
61	R	G	R	G	R	Υ		
62	R	G	R/	G	R/	Υ		
P41, P42	DW	DW	W	DW	W	DRK		
P61, P62	DW	W	DW	W	DW	DRK		

02+6

010+14

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

<--> PEDESTRIAN MOVEMENT

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

3 Phase Fully Actuated ALTERNATE PHASING DIAGRAM W/ 5 Phase Alternate Operation Asheville Signal System

NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- 2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- 3. Omit phase 5 during phase 14 on.

4. Reposition existing signal head # 22.

- 5. Program controller to clear from phase 10+14 to phase 2+5 by progressing through phase 12 (See Electrical Details).
- 6. Enable Backup Protect for phase 2 to allow the controller to clear from phase 2+6 to phase 2+5 by progressing through an all red display.
- 7. Set all detector units to presence mode.
- 8. 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.
- 9. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 10. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 11. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- 12. Pavement markings are existing.

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- 13. The Division Traffic Engineer will determine the hours of use for each phasing plan.
- 14. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

Traffic Signal Head

Modified Signal Head

Sign Pedestrian Signal Head

With Push Button & Sign

Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector Controller & Cabinet

Junction Box 2-in Underground Conduit Right of Way Directional Arrow Wheelchair Ramp Pedestrian Signal Pedestal

PHASING DIAGRAM DETECTION LEGEND

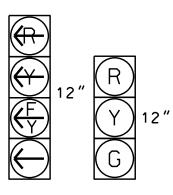
DETECTED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

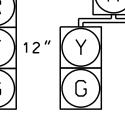
UNSIGNALIZED MOVEMENT

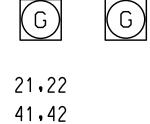
<−−> PEDESTRIAN MOVEMENT

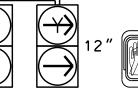


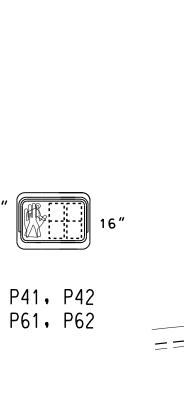


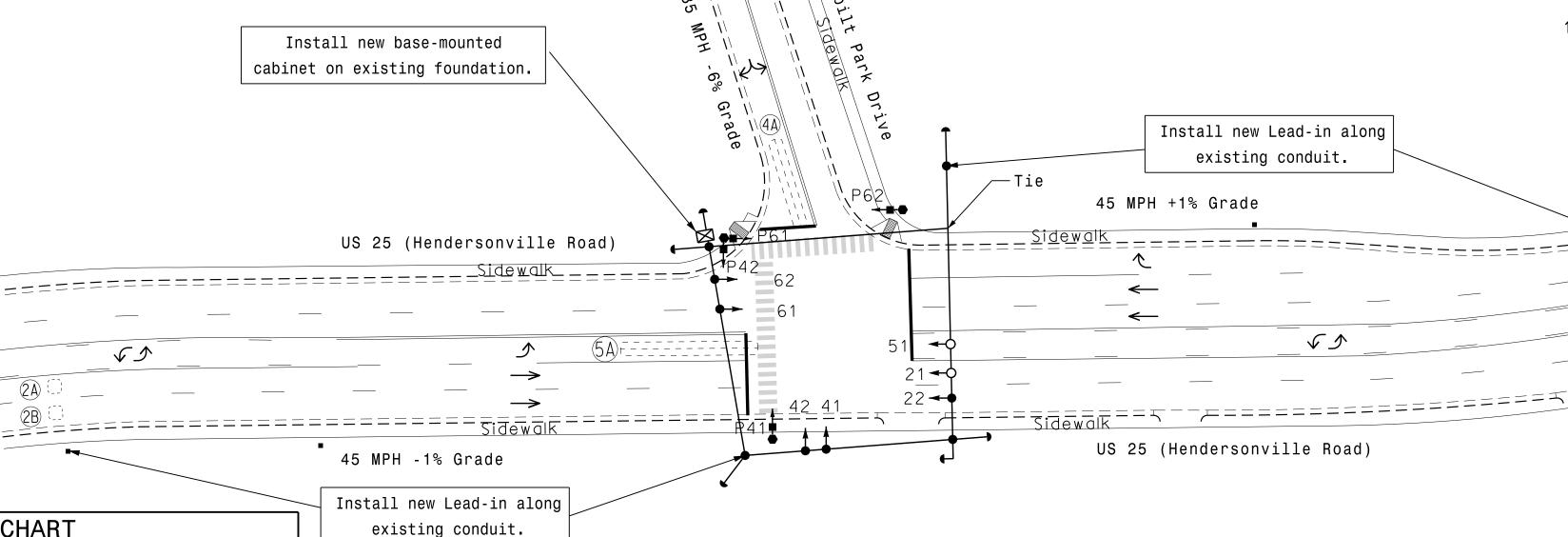
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OASIS 2070 TIMING CHART										
	PHASE									
FEATURE	2	4	5	6	10	12	14			
Min Green 1 *	12	7	7	12	12	7	12			
Extension 1 *	6.0	2.0	2.0	6.0	6.0	2.0	6.0			
Max Green 1 *	90	25	15	90	90	25	90			
Yellow Clearance	4.6	3.1	3.0	4.6	4.6	3.1	4.6			
Red Clearance	1.1	2.6	2.1	1.1	1.1	2.6	1.1			
Red Revert	5.0	2.0	2.0	2.0	2.0	2.0	2.0			
Walk 1 *	-	4	-	4	-	4	4			
Don't Walk 1	-	22	-	15	-	22	15			
Seconds Per Actuation *	1.5	-	-	1.5	1.5	-	1.5			
Max Variable Initial *	34	-	-	34	34	-	34			
Time Before Reduction *	15	-	-	15	15	-	15			
Time To Reduce *	30	-	-	30	30	-	30			
Minimum Gap	3.0	-	-	3.0	3.0	-	3.0			
Recall Mode	MIN RECALL	-	-	MIN RECALL	-	-	-			
Vehicle Call Memory	YELLOW	-	-	YELLOW	YELLOW	-	YELLOW			
Dual Entry	-	-	-	-	ON	-	ON			
Simultaneous Gap	ON	ON	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.

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART												
INDUCTIVE LOOPS				DETE	ECT	OR	PI	ROGRAN	MMING			
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
2A	6X6	300	EXIST	-	2/10	Υ	Υ	-	-	-	1	Υ
2B	6X6	300	EXIST	-	2/10	Υ	Υ	-	-	-	1	Υ
4A	6X40	0	2-4-2	-	4/12	Υ	Υ	-	-	5	ı	Υ
5 ۸	5A 6X60 +5 2-4-2 -	2.4.2		5	Υ	Υ	-	-	15	ı	Υ	
SA			2/10	Υ	Υ	Υ	_	3	1	Υ		
6A	6X6	300	EXIST	ı	6/14	Υ	Υ	-			-	Υ
6B	6X6	300	EXIST	-	6/14	Υ	Υ	_	-	-	-	Υ

Signal Upgrade

1"=40'

US 25 (Hendersonville Road) Vanderbilt Park Drive

Division 13 Buncombe County Asheville PLAN DATE: Fabruary 2016 REVIEWED BY: T. Williams 750 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: M. Mahbooba REVIEWED BY: REVISIONS

INIT. DATE J. J. Williams 11/7/2016 SIG. INVENTORY NO. 13-0741

DOCUMENT NOT CONSIDERED

FINAL UNLESS ALL SIGNATURES COMPLETED

024393

<u>EXISTING</u>