

3 Phase Fully Actuated 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 4 during phase 2 on.
- 4. Program controller to clear from phase 2+6 to phase 4 by progressing through phase 3 (see Electrical Details).
- 5. Reposition existing signal heads numbered 22 & 62.
- 6. Set all detector units to presence mode.
- 7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- 8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls. 9. Program pedestrian heads to
- countdown the flashing "Don't Walk" time only. 10. Pavement markings are existing.
- 11. Maximum times shown in timing chart are for free-run
- operation only. Coordinated signal system timing values supersede these values.

LEGEND

<u>PROPOSED</u>		EXISTING
\bigcirc	Traffic Signal Head	
O	Modified Signal Head	N/A
_	Sign	\dashv
\downarrow	Pedestrian Signal Head	•
\bigcirc	Signal Pole with Guy	•
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	$\subset = = = = = = = = = = = = = = = = = = =$
	Controller & Cabinet	K×7 L \sqr
	Junction Box	
	2-in Underground Conduit	
N/A	Right of Way	
\longrightarrow	Directional Arrow	\longrightarrow
N/A	Guardrail	1 1
	Metal Strain Pole	
$\overline{\bigcirc}$	Pedestrian Signal Pedestal	•

Detection Zone

Wood Pole w/Side Mounted Microwave Detector

Signal Upgrade US 19 - 23 Business / SR 3548 (Haywood Road)

I - 240 Ramps / Hanover Street

Division 13 Buncombe County Asheville REVIEWED BY: T. J. Williams '50 N.Greenfield Pkwy.Garner.NC 27529 PREPARED BY: C Pierce REVIEWED BY:

REVISIONS INIT. DATE

024393

SIG. INVENTORY NO.

13-0218

DOCUMENT NOT CONSIDERED

FINAL UNLESS ALL

SIGNATURES COMPLETED

<u> </u>	PHASING	DIAGRAM
	=	/-

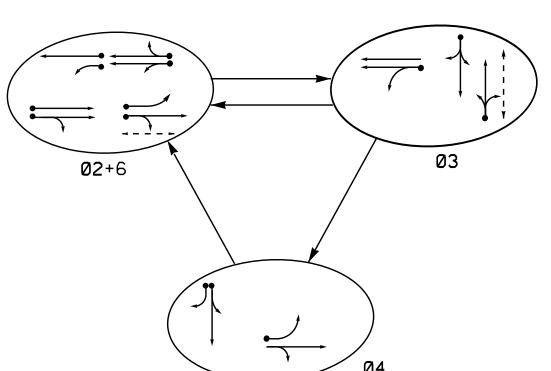
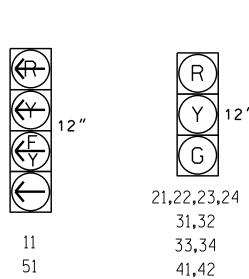


TABLE OF OPERATION PHASE SIGNAL FACE 21,22 23,24 31, 32 33, 34 41, 42 51 61,62 63,64 P21, P22 P31**,** P32



SIGNAL FACE I.D.

All Heads L.E.D.

61,62,63,64

P21**,**P22 P31**,**P32

S5 | 6×6 | +130 | 5

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS

 $2A/S1 \mid 6 \times 6 \mid 70 \mid EXISTING \mid -$

2C* EXISTING 70 EXISTING -

6×60 +5

6×60 0

6×60 0

6×60 0

6×6 70

6B/S4 6×6 70 EXISTING

6×30 0

6C* EXISTING 70 EXISTING

* Microwave Detection Zone

SIZE (FT)

2B/S2 6×6 70

LOOP

2D

6A/S3

DISTANCE

FROM

STOPBAR

EXISTING

2-4-2

2-4-2

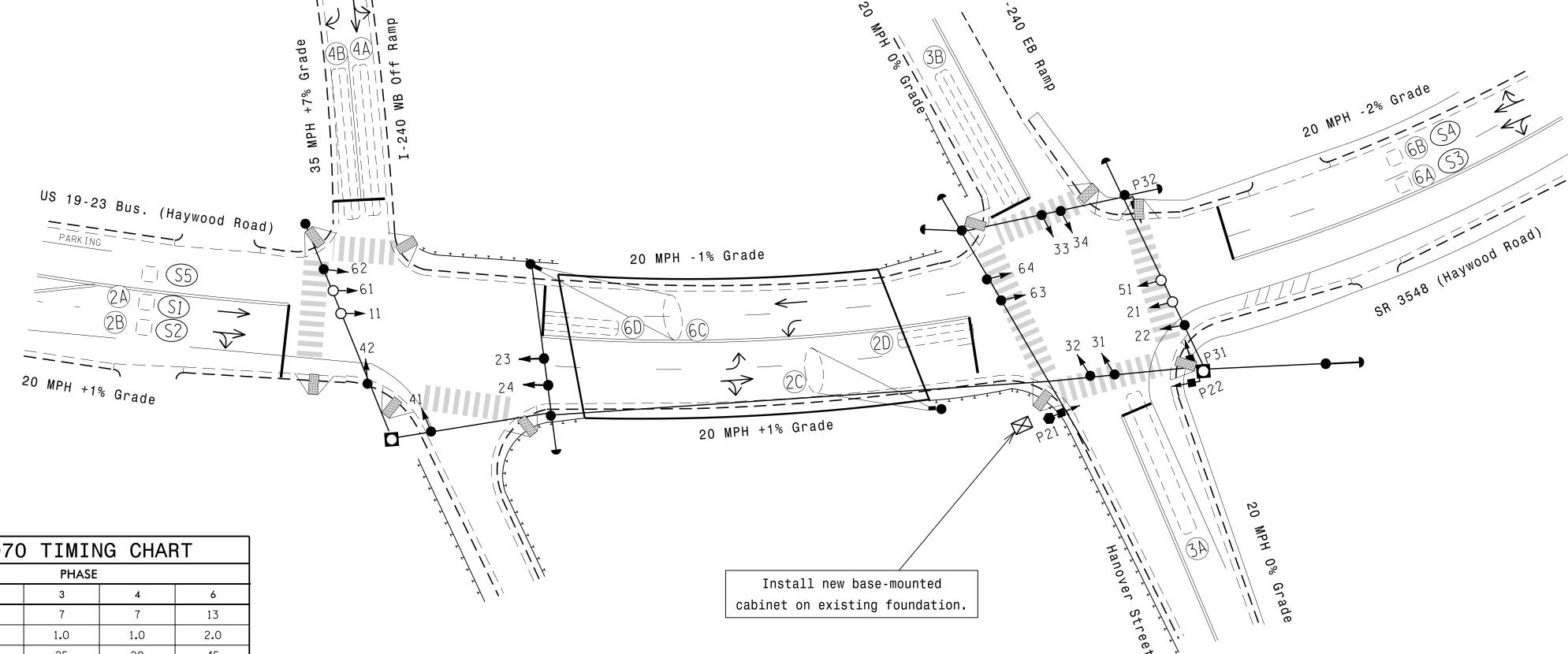
2-4-2

EXISTING

DETECTOR PROGRAMMING

PHASING DIAGRAM DETECTION LEGEND

- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- <−−> PEDESTRIAN MOVEMENT



OASIS 2070 TIMING CHART **FEATURE** Min Green 1 * 2.0 Extension 1 * 25 45 45 20 Max Green 1 * 3.0 3.0 3.0 Yellow Clearance 3.0 3.1 2.8 3.1 3.1 Red Clearance Red Revert 2.0 2.0 2.0 2.0 Walk 1 * 12 13 Don't Walk 1 Seconds Per Actuation Max Variable Initial * Time Before Reduction Time To Reduce * Minimum Gap MIN RECALL MIN RECALI Recall Mode YELLOW YELLOW Vehicle Call Memory 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

ON

ON

Simultaneous Gap