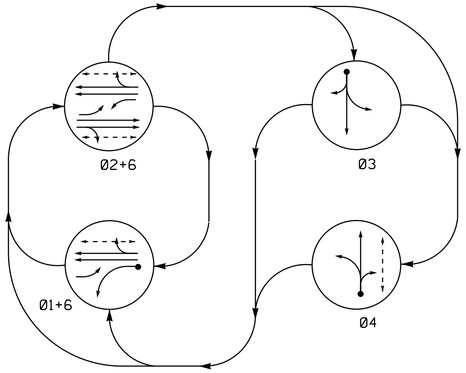
PROJECT REFERENCE NO.	SHEET NO.
U-4715 B	Sig. 38.0

PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

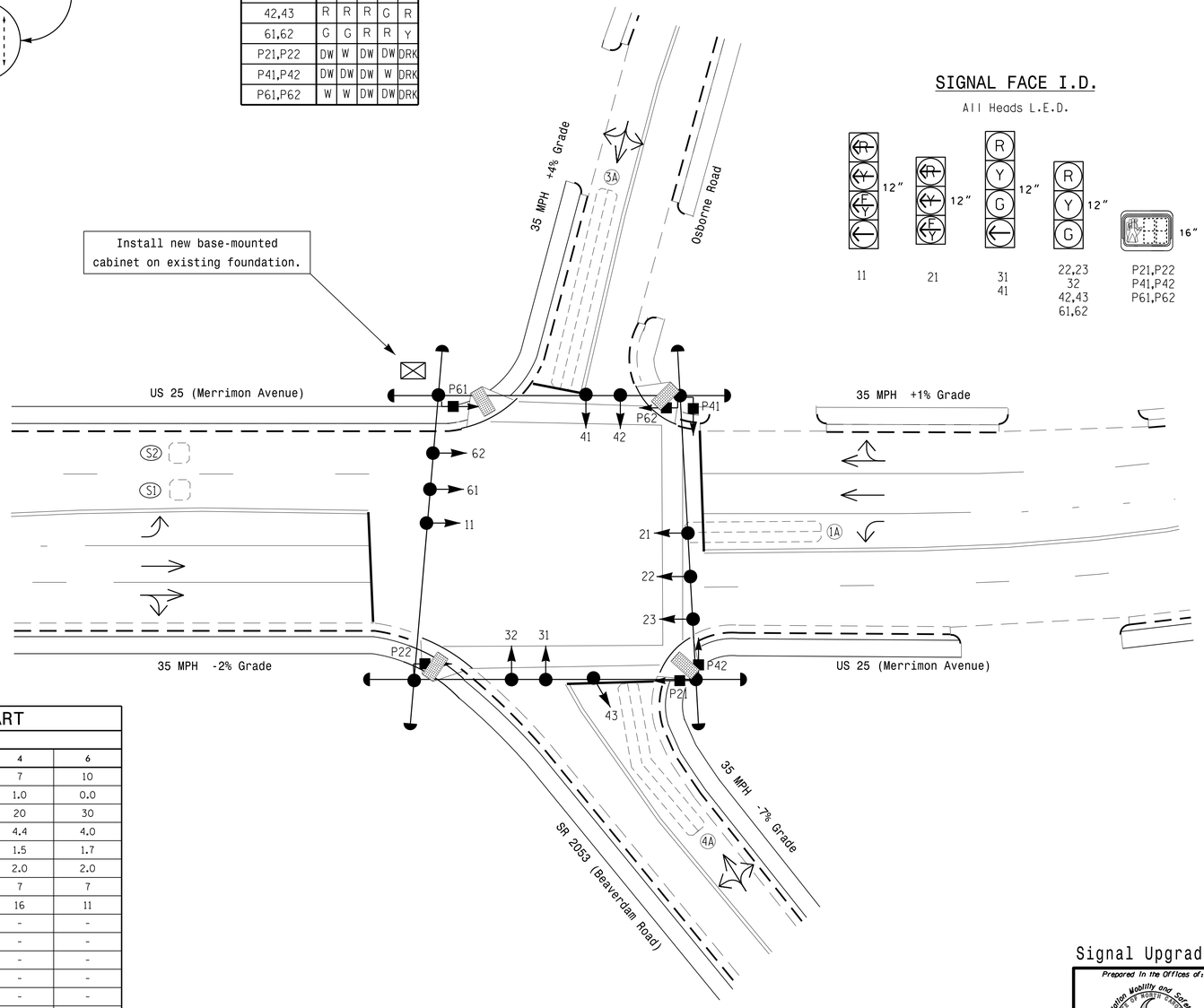
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 03	PHASE 04	FLASH
11	←	F.Y.	~~R~~	~~R~~	~~Y~~
21	F.Y.	F.Y.	~~R~~	~~R~~	~~Y~~
22,23	R	G	R	R	Y
31	R	R	G ←	R	R
32	R	R	G	R	R
41	R	R	R	G ←	R
42,43	R	R	R	G	R
61,62	G	G	R	R	Y
P21,P22	DW	W	DW	DW	DRK
P41,P42	DW	DW	DW	W	DRK
P61,P62	W	W	DW	DW	DRK

OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

INDUCTIVE LOOPS					DETECTOR PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6x40	+5	2-4-2	-	1	Y	Y	-	-	15	-	Y
3A	6x60	0	2-4-2	-	3	Y	Y	-	-	5	-	Y
4A	6x60	0	2-4-2	-	4	Y	Y	-	-	5	-	Y
S1	6x6	+150	EXIST	-	-	-	-	-	-	-	Y	Y
S2	6x6	+150	EXIST	-	-	-	-	-	-	-	Y	Y



SIGNAL FACE I.D.

All Heads L.E.D.

11 | 21 | 31 41 | 22,23 32 42,43 61,62 | P21,P22 P41,P42 P61,P62

OASIS 2070 TIMING CHART

FEATURE	PHASE 1	2	3	4	6
Min Green 1 *	7	10	7	7	10
Extension 1 *	2.0	0.0	1.0	1.0	0.0
Max Green 1 *	20	30	20	20	30
Yellow Clearance	3.0	4.0	3.6	4.4	4.0
Red Clearance	2.1	1.7	1.7	1.5	1.7
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	7	-	7	7
Don't Walk 1	-	15	-	16	11
Seconds Per Actuation *	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-
Time To Reduce *	-	-	-	-	-
Minimum Gap	-	-	-	-	-
Recall Mode	-	MAX RECALL	-	-	MAX RECALL
Vehicle Call Memory	-	N/A	-	-	N/A
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.

4 Phase
Semi-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. Phase 1 may be lagged.
4. The order of phase 3 and phase 4 may be reversed.
5. Set all detector units to presence mode.
6. 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.
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

PROPOSED		EXISTING
○→	Traffic Signal Head	●→
◐→	Modified Signal Head	N/A
⊣	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	----------
N/A	Right of Way	----------
→	Directional Arrow	→
N/A	Curb Ramp	

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared In the Offices of:
Transportation Mobility and Safety Division
Traffic Engineering Branch
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

US 25 (Merrimon Avenue)
at
SR 2053 (Beaverdam Road)/
Osborne Road

Division 13 Buncombe County Asheville

PLAN DATE: December 2015 REVIEWED BY: P.L. Alexander
PREPARED BY: R.N. Zinser REVIEWED BY:

SCALE 1"=20' (0 20)

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 043914 ENGINEER RICHARD N. ZINSER
DocuSigned by: Richard N. Zinser F15B8973472246F
8/4/2016
DATE
SIG. INVENTORY NO. 13-0230

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