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PROJECT REFERENCE NO.	SHEET NO.
U-4715B	Sig. 247.0

PHASING DIAGRAM

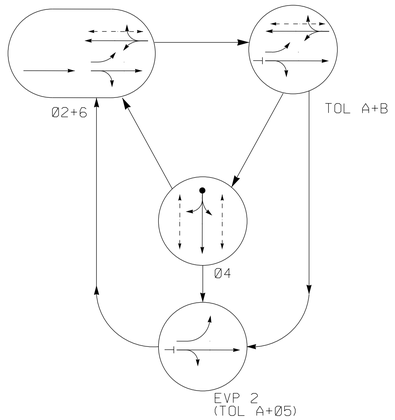


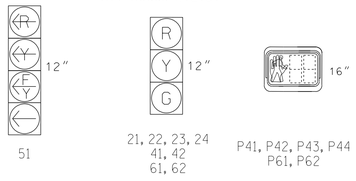
TABLE OF OPERATION

SIGNAL FACE	PHASE Ø2+6	TOL A+TOL B	Ø4	EVP 2	FLASH
21,22	G	R	R	R	Y
23,24	G	G	R	G	Y
41,42	R	R	G	R	R
51	F Y	F Y	R	←	Y
61,62	G	G	R	R	Y
P41,P42, P43,P44	DW	DW	W	DW	DRK
P61,P62	W	W	DW	DW	DRK

W - Walk
DW - Don't Walk
DRK - Dark

SIGNAL FACE I.D.

All Heads L.E.D.



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
4A	6x40	+5	2-4-2	-	4	Y	Y	-	-	-	-	Y

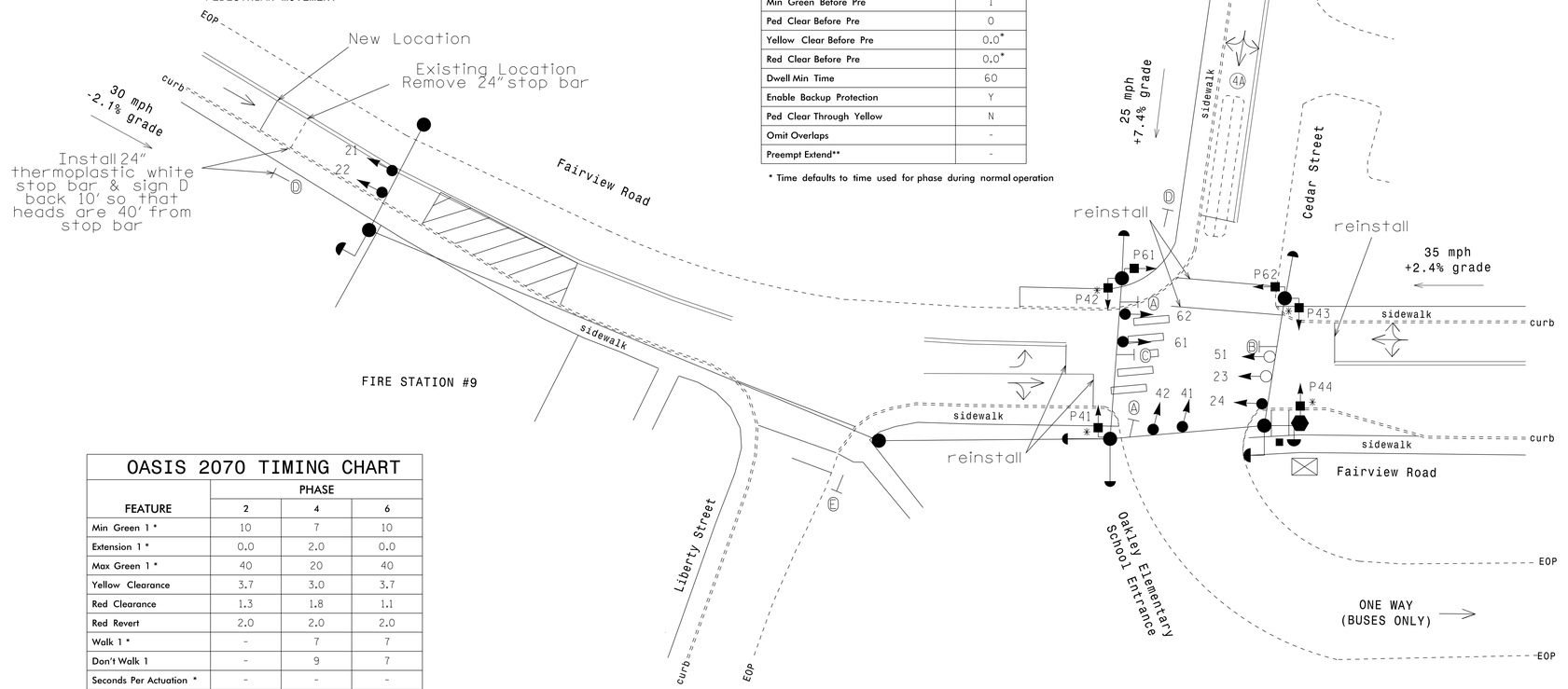
OASIS 2070 EV PREEMPT

FUNCTION	PRE 2
Interval 1 – Dwell Green	255
Interval 1 – Dwell Yellow	3.0
Interval 1 – Dwell Red	1.8
Interval 5 – Exit Green	1
Interval 5 – Yellow	0.0
Interval 5 – Red	0.0
Exit Phase(s)	-
Priority	MED
Delay Time	0.0
Min Green Before Pre	1
Ped Clear Before Pre	0
Yellow Clear Before Pre	0.0*
Red Clear Before Pre	0.0*
Dwell Min Time	60
Enable Backup Protection	Y
Ped Clear Through Yellow	N
Omit Overlaps	-
Preempt Extend**	-

* Time defaults to time used for phase during normal operation

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT
UNDETECTED MOVEMENT (OVERLAP)
UNSIGNALIZED MOVEMENT
PEDESTRIAN MOVEMENT



OASIS 2070 TIMING CHART

FEATURE	PHASE 2	4	6
Min Green 1 *	10	7	10
Extension 1 *	0.0	2.0	0.0
Max Green 1 *	40	20	40
Yellow Clearance	3.7	3.0	3.7
Red Clearance	1.3	1.8	1.1
Red Revert	2.0	2.0	2.0
Walk 1 *	-	7	7
Don't Walk 1	-	9	7
Seconds Per Actuation *	-	-	-
Max Variable Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Recall Mode	MAX	-	MAX/PED
Vehicle Call Memory	-	-	-
Dual Entry	-	-	-
Simultaneous Gap	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.

2 Phase with Push Button EVP
Semi-Actuated w/ Timed Overlaps
(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. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
4. The emergency vehicle preemption push button is located in the adjacent fire station.
5. Preemption timings shown are based on existing timing. Timings may be adjusted by City Traffic Engineer.
7. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
8. Omit "WALK" and flashing "Don't Walk" with no pedestrian calls on phase 4.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
10. Omit phase 5 during normal operation.

LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head	
	Ped Pushbutton & Sign	
	Pedestrian Signal Pedestal	
	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	
A	"NO TURN ON RED" Sign (R10-11)	A
B	GREEN ARROW ONLY FOR EMERGENCY SIGNAL	B
C	ONCOMING TRAFFIC HAS EXTENDED GREEN	C
D	"STOP HERE ON RED" Sign (R10-6a)	D
E	"STOP" Sign (R1-1)	E

Signal Upgrade

Prepared For the Offices of:
CITY OF ASHEVILLE NORTH CAROLINA

Fairview Road
at
Cedar Street/Oakley Elementary/
Firestation #9

Division 13 Buncombe County Asheville

PLAN DATE: September 2016 REVIEWED BY: MB Toth
PREPARED BY: AM Encarnacion REVIEWED BY:

SCALE 0 20 1"=20'

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

Documented by: Melissa B. Toth 12/16/2016
DOCUMENTATION DATE

SIG. INVENTORY NO. COA-12

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 310
RALEIGH, NORTH CAROLINA 27609
(919) 876-6888 NCBEES #F-0326

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