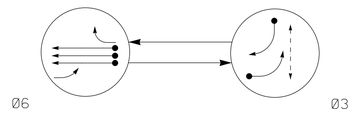
DocuSign Envelope ID: A646C5D3-0702-4FF3-8581-DF754F2EBA24

PROJECT REFERENCE NO.	SHEET NO.
U-4751	Sig. 11.0

DEFAULT PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

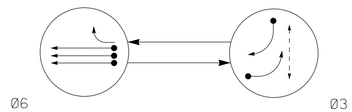
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

DEFAULT TABLE OF OPERATION

SIGNAL FACE	PHASE Ø3	PHASE Ø6	FLASH
31	←	F Y	←
32, 33	→	R	R
61, 62, 63	R	G	Y
P31, P32	W	DW	DRK

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

ALTERNATE PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

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

ALTERNATE TABLE OF OPERATION

SIGNAL FACE	PHASE Ø3	PHASE Ø6	FLASH
31	←	R	←
32, 33	→	R	R
61, 62, 63	R	G	Y
P31, P32	W	DW	DRK

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

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
3A	6x40	0	2-4-2	Y	3	Y	Y	-	-	✳15	-	Y
3B	6x40	0	2-4-2	Y	3	Y	Y	-	-	15	-	Y
6A	6x6	300	5	Y	6	Y	Y	-	-	-	-	Y
6B	6x6	300	5	Y	6	Y	Y	-	-	-	-	Y
6C	6x6	300	5	Y	6	Y	Y	-	-	-	-	Y

✳ Disable delay during Alternate Phasing Operation

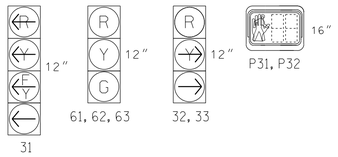
2 Phase
Fully Actuated
Wilmington Signal System

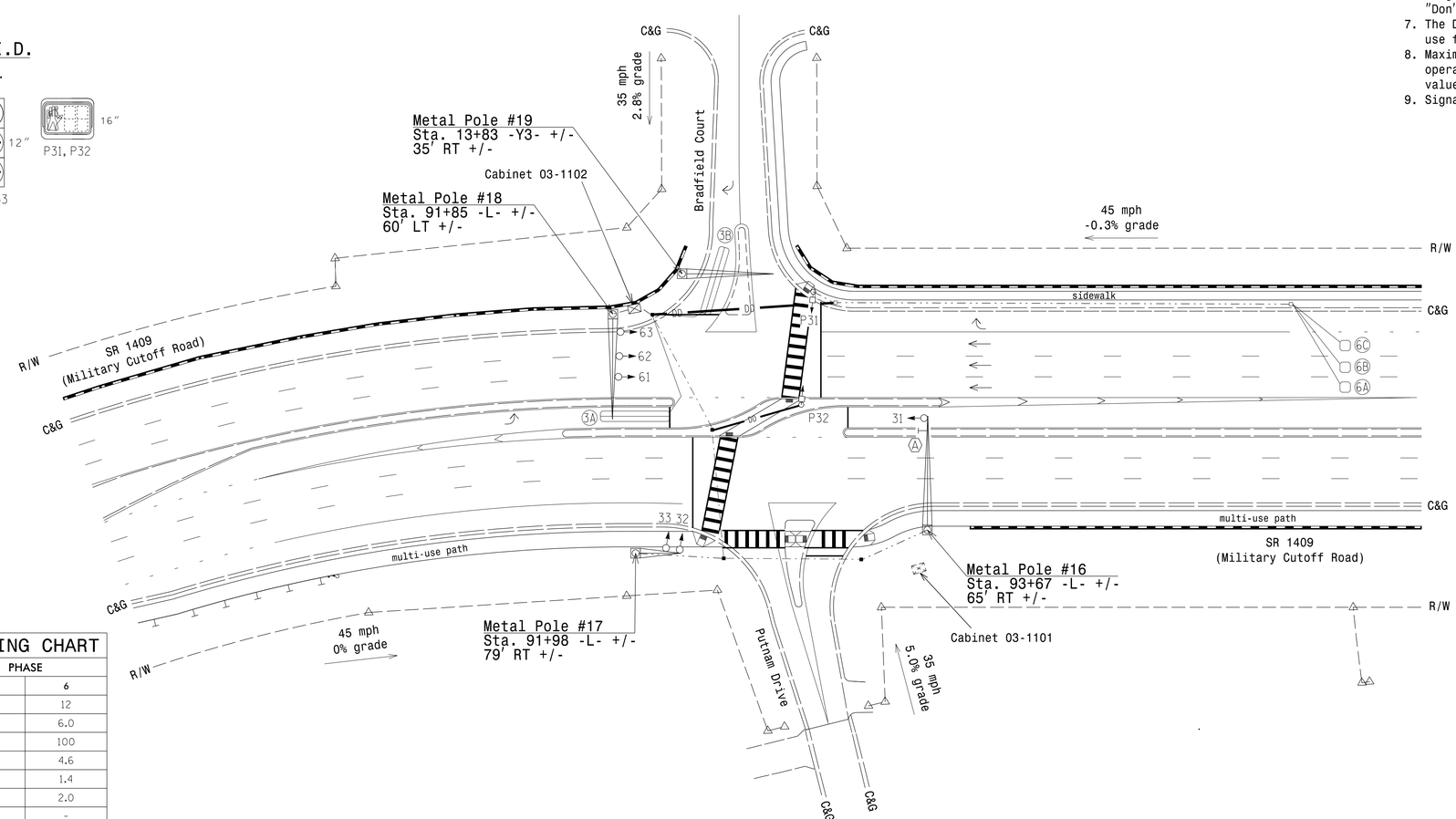
NOTES

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. Set all detector units to presence mode.
4. Locate new cabinet so as not to obstruct sign distance of vehicle turning right on red.
5. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
6. Program pedestrian heads to countdown the flashing "Don't Walk" time only.
7. The Division Traffic Engineer will determine the hours of use for each phasing plan.
8. Maximum times shown in timing charts are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Signal System data: Controller Asset #1102

SIGNAL FACE I.D.

All Heads L.E.D.





LEGEND

PROPOSED		EXISTING
	Traffic Signal Head	
	Modified Signal Head	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Type II Signal Pedestal	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
	Directional Arrow	
	Metal Pole with Mastarm	
A	"U-TURN YIELD TO RIGHT TURN" Sign (R10-16)	A
N/A	Guardrail	
N/A	Concrete Barrier	
N/A	Noise Wall	

OASIS 2070E TIMING CHART

FEATURE	PHASE 3	PHASE 6
Min Green 1 *	5	12
Extension 1 *	2.0	6.0
Max Green 1 *	30	100
Yellow Clearance	3.0	4.6
Red Clearance	3.3	1.4
Red Revert	2.0	2.0
Walk 1 *	4	-
Don't Walk 1	15	-
Seconds Per Actuation *	-	1.5
Max Variable Initial *	-	34
Time Before Reduction *	-	15
Time To Reduce *	-	30
Minimum Gap	-	3.0
Recall Mode	-	MIN RECALL
Vehicle Call Memory	-	YELLOW
Dual Entry	-	-
Simultaneous Gap	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.

New Installation - Final Design

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared for the Offices of:
Transportation Mobility and Safety Division
Signal Design Section
750 N.Greenfield Pkwy.Garner,NC 27529

Southbound SR 1409
(Military Cutoff Road)
at
Bradfield Court

Division 03 New Hanover County Wilmington

PLAN DATE:	April 2017	REVIEWED BY:	MB Toth
PREPARED BY:	LD Stouchko	REVIEWED BY:	

SCALE 1"=40' (0 40)

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 025892 ENGINEER MELISSA B. TOTH

Melissa B. Toth 6/6/2017
SIGNATURE DATE

SIG. INVENTORY NO. 03-1102

ATKINS 1616 EAST MILLBROOK ROAD, SUITE 160 RALEIGH, NORTH CAROLINA 27609 (919) 876-6888 NCBEES #F-0326

06-JUN-2017 13:49
D:\Transportation\Traffic\Curr\100053597 - U-4751 Military Cutoff\02-Signals\Design\03-1102.dgn
ericd3186 AT USZ29321