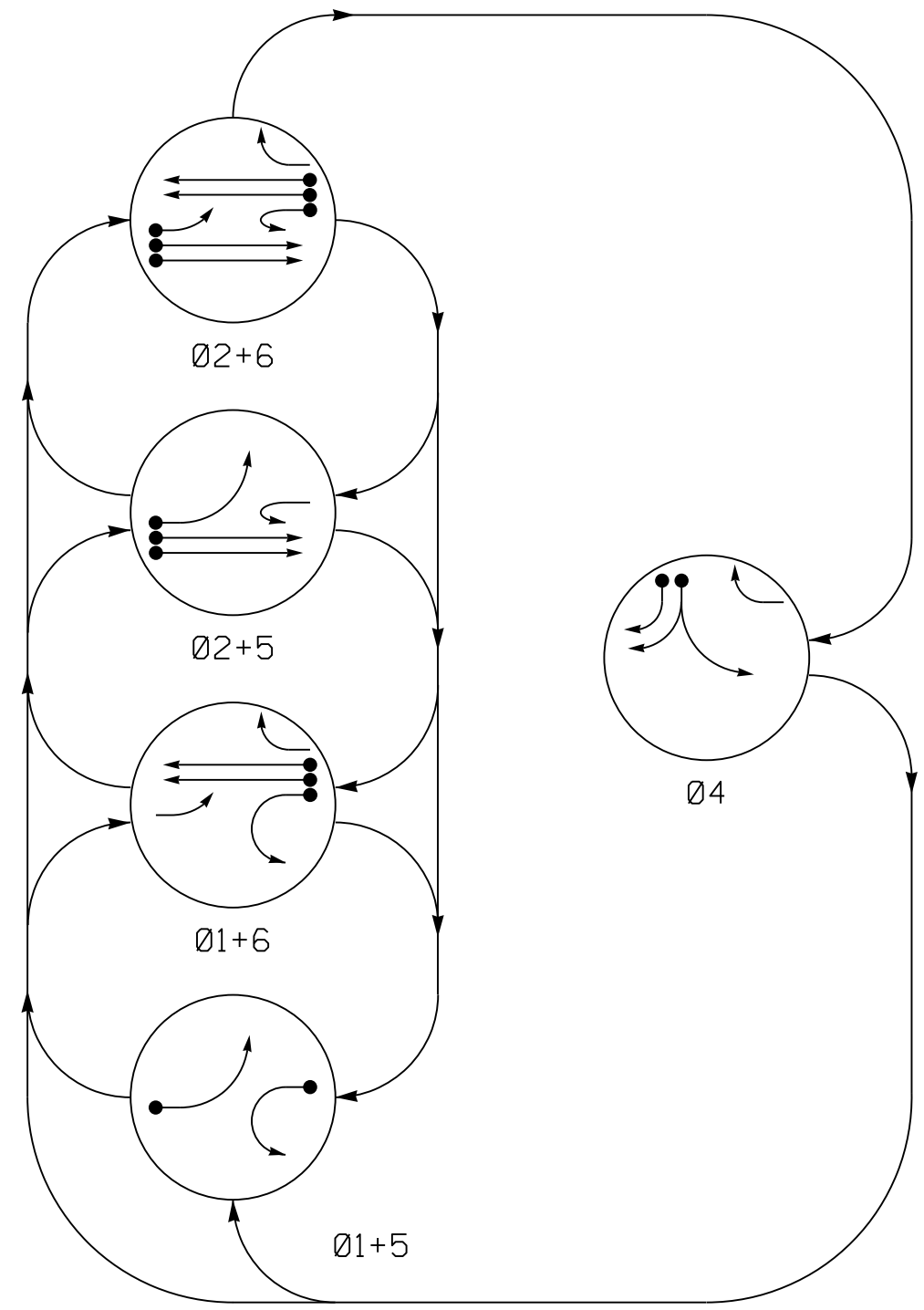


PHASING DIAGRAM



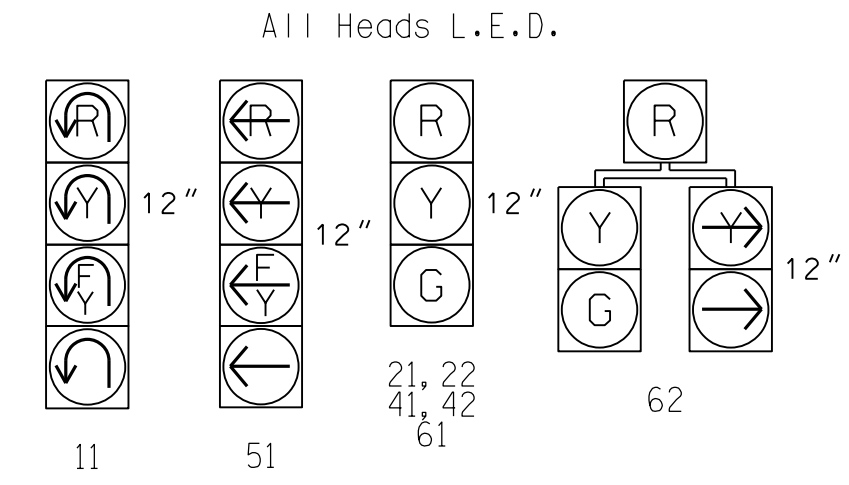
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE					L	T
	01+5	01+6	02+5	02+6	04		
11	←	←	←	←	←	Y	
21, 22	R	R	G	G	R	Y	
41, 42	R	R	R	R	G	R	
51	←	←	←	←	←	Y	
61	R	G	R	G	R	Y	
62	R	G	R	G	R	Y	

SIGNAL FACE I.D.



OASIS 2070 LOOP & DETECTOR INSTALLATION CHART

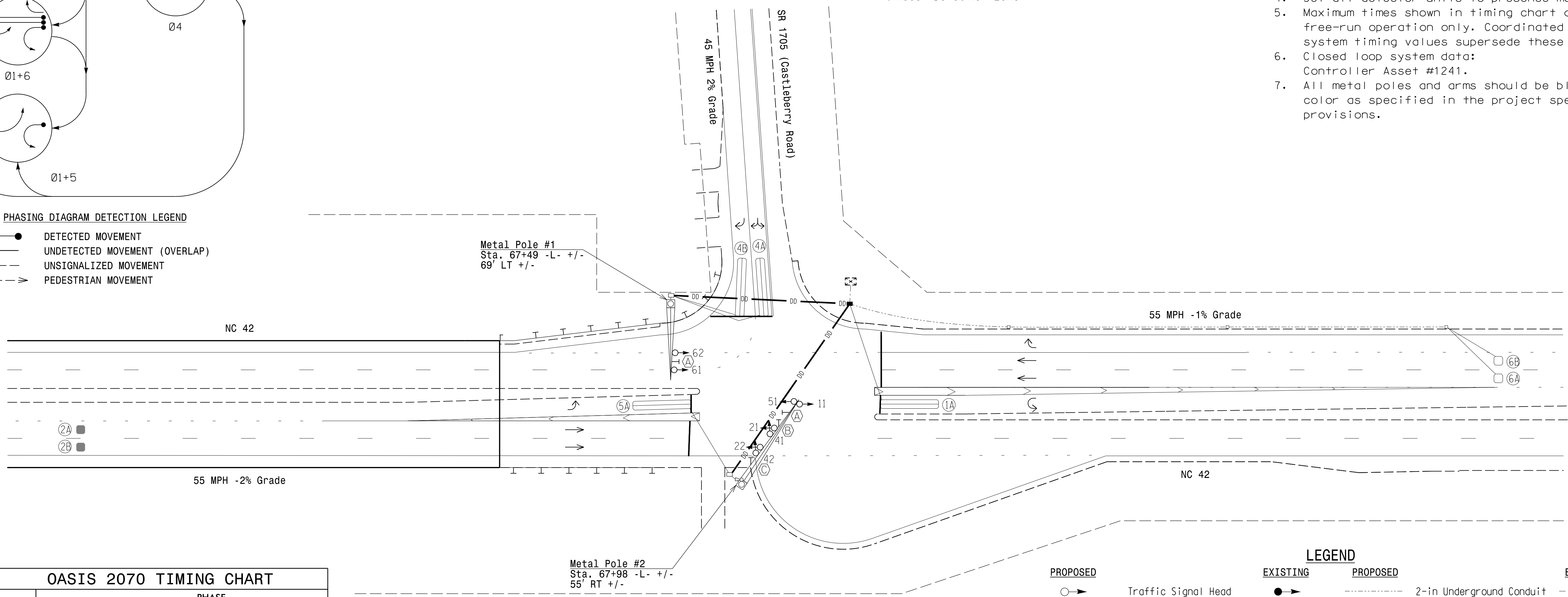
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING							
					PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
1A	6X40	0	2-4-2	Y	1	Y	Y	-	-	15	-	Y
2A	6X6	420	*	Y	2	Y	Y	-	-	-	-	*
2B	6X6	420	*	Y	2	Y	Y	-	-	-	-	*
4A	6X40	0	2-4-2	Y	4	Y	Y	-	-	3	-	Y
4B	6X40	0	2-4-2	Y	4	Y	Y	-	-	15	-	Y
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	Y
6A	6X6	420	5	Y	6	Y	Y	-	-	-	-	Y
6B	6X6	420	5	Y	6	Y	Y	-	-	-	-	Y

*Radar Detection Zone

5 Phase Fully Actuated NC 42 (East of Clayton)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018, "Standard Specifications for Roads and Structures" dated January 2018.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Closed loop system data: Controller Asset #1241.
- All metal poles and arms should be black in color as specified in the project special provisions.



OASIS 2070 TIMING CHART

FEATURE	PHASE				
	1	2	4	5	6
Min Green 1 *	7	14	7	7	14
Extension 1 *	2.0	6.0	2.0	2.0	6.0
Max Green 1 *	25	90	45	25	90
Yellow Clearance	3.0	5.3	3.1	3.2	5.3
Red Clearance	1.8	1.3	2.2	2.2	1.3
Red Revert	2.0	2.0	2.0	2.0	2.0
Walk 1 *	-	-	-	-	-
Don't Walk 1	-	-	-	-	-
Seconds Per Actuation *	-	1.8	-	-	1.8
Max Variable Initial *	-	46	-	-	46
Time Before Reduction *	-	15	-	-	15
Time To Reduce *	-	30	-	-	30
Minimum Gap	-	3.4	-	-	3.4
Recall Mode	-	MIN RECALL	-	-	MIN RECALL
Vehicle Call Memory	-	YELLOW	-	-	YELLOW
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.

PROPOSED		EXISTING	
	Traffic Signal Head		2-in Underground Conduit
	Metal Pole with Mastarm Sign		Directional Drill
	Inductive Loop Detector		Right of Way
	Radar Loop Detector		Directional Arrow
	Video Detector		Street Name Sign (D3-1)
	Controller & Cabinet Junction Box		Combined Left and Right Arrow Sign
	Oversized Junction Box		Right Arrow "ONLY" Sign (R3-5R)
			N/A

New Installation - Final Design

Prepared by
URS
URS Corporation - North Carolina
1600 Perimeter Park Drive
Morrisville, North Carolina 27560
TELEPHONE (919) 461-1100 FAX (919) 461-1415
NC LICENSE # C-2243

Prepared for the Offices of:
TRANSPORTATION MOBILITY AND SAFETY DIVISION
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
STATE OF NORTH CAROLINA
Signal Design Section
750 N. Greenfield Pkwy, Garner, NC 27529

NC 42 at SR 1705 (Castleberry Road)
Division 4 Johnston County Clayton
PLAN DATE: January 2018 REVIEWED BY: C. L. Kalencik
PREPARED BY: S. W. COX REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED
SEAL 040715
ENGINEER
COURTNEY L. KALENICK
5/25/2018
SIG. INVENTORY NO. 04-1241

5/25/2018 L:\MORT\BVI\118\0081\4R3825B\Traffic\cals\gnal\040715\sig.dgn