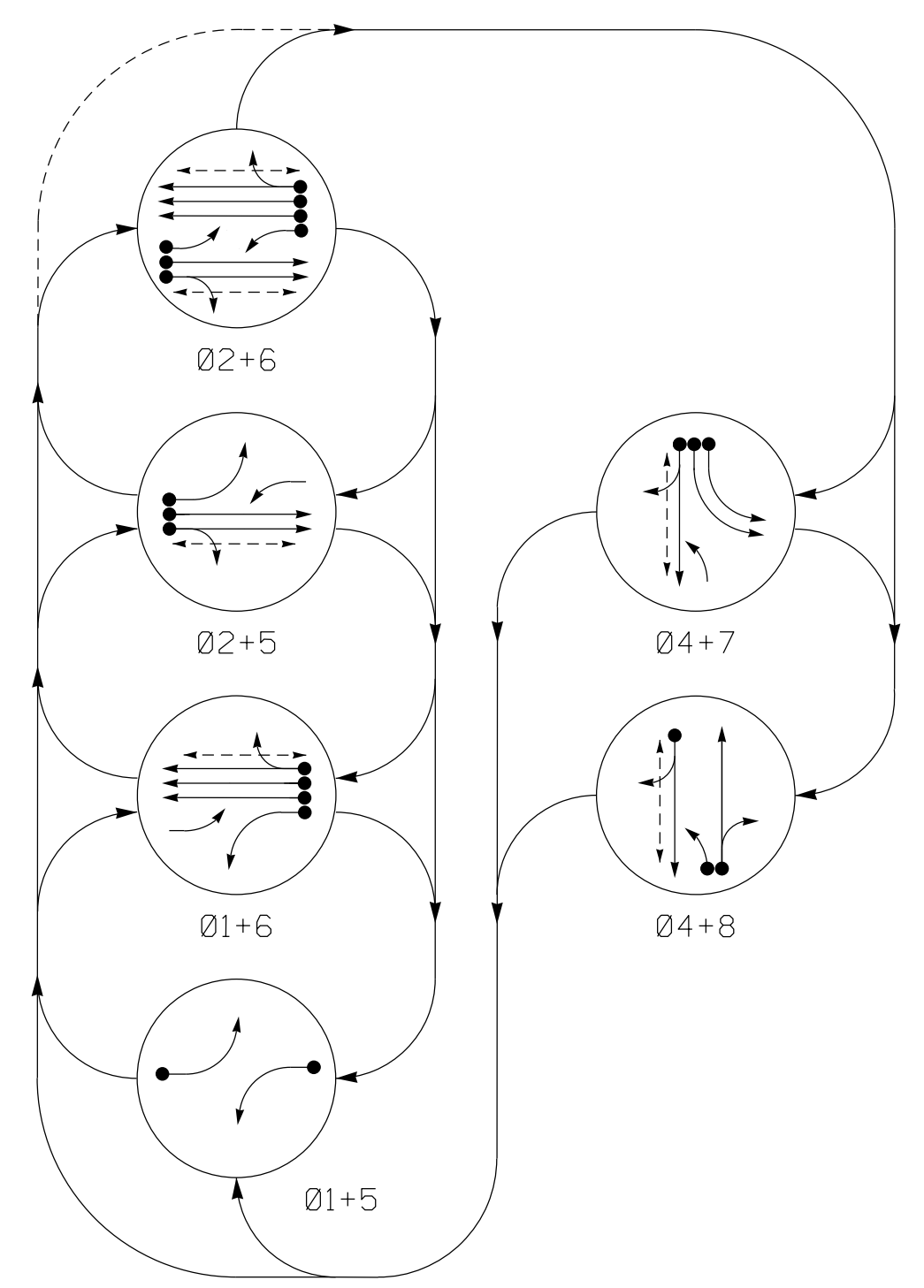


PHASING DIAGRAM



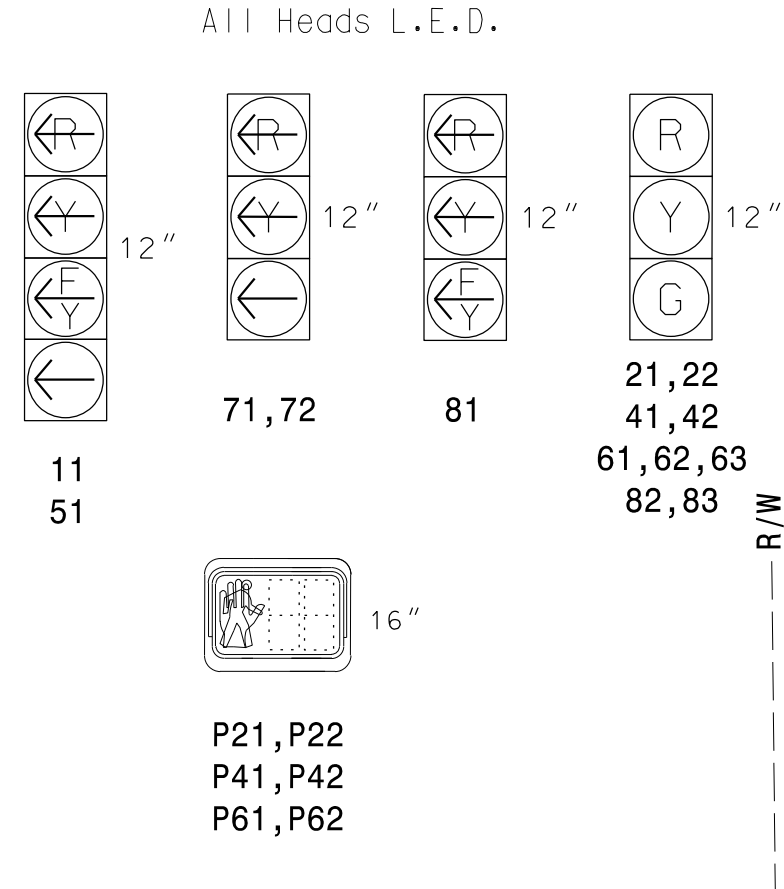
PHASING DIAGRAM DETECTION LEGEND

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

TABLE OF OPERATION

SIGNAL FACE	PHASE							
	Ø 1+5	Ø 1+6	Ø 2+5	Ø 2+6	Ø 4+7	Ø 4+8	Ø 1+5	Ø 1+6
11	←	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	Y	Y
41,42	R	R	R	G	G	R		
51	←	←	←	←	←	←	←	←
61,62,63	R	G	R	G	R	R	Y	Y
71,72	←	←	←	←	←	←	←	←
81	←	←	←	←	←	←	←	←
82,83	R	R	R	R	G	R		
P21,P22	DW	DW	W	W	DW	DW	DRK	DRK
P41,P42	DW	DW	DW	W	W	W	DRK	DRK
P61,P62	DW	W	DW	W	DW	DW	DRK	DRK

SIGNAL FACE I.D.



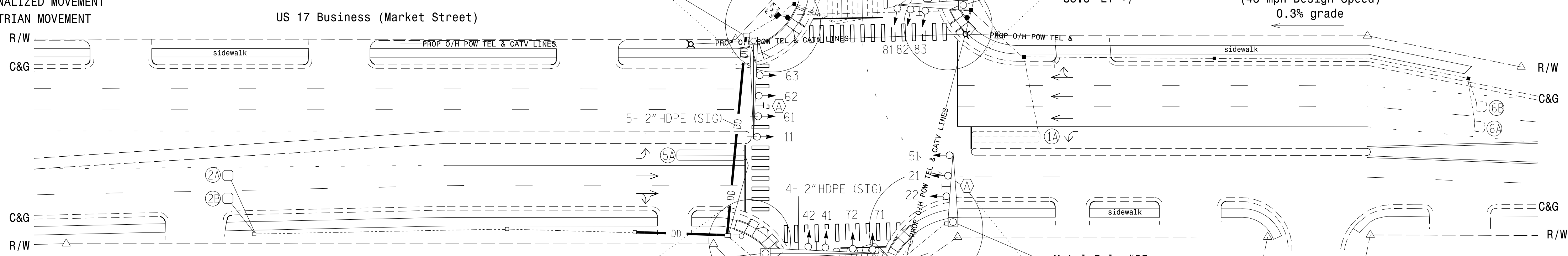
OASIS 2070 LOOP & DETECTOR INSTALLATION

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				STRETCH TIME	DELAY TIME	LOOP SYSTEM	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY				
1A	6X40	0	2-4-2	-	1	Y	Y	-	-	15	-	-
2A	6X6	300	5	Y	2	Y	Y	-	-	3	-	-
2B	6X6	300	5	Y	2	Y	Y	-	-	-	-	-
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	-	-	-
5A	6X40	0	2-4-2	Y	5	Y	Y	-	-	15	-	-
6A	6X6	300	5	-	6	Y	Y	-	-	-	-	-
6B	6X6	300	5	-	6	Y	Y	-	-	-	-	-
7A	6X40	0	2-4-2	-	7	Y	Y	-	-	-	-	-
7B	6X40	0	2-4-2	Y	7	Y	Y	-	-	-	-	-
8A	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	-
8B	6X40	0	2-4-2	Y	8	Y	Y	-	-	-	-	-

6 Phase Fully Actuated (Wilmington Signal System)

NOTES

- Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Disable backup protect for phase 8.
- Phase 1 and/or phase 5 may be lagged.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pedestrian Pushbutton and sign shall be mounted parallel with associated crosswalk.
- When pushbuttons are mounted on metal pole or pedestrian pedestal, the pole or pedestal shall be installed as close as possible to the back of curb at accessible ramps to minimize reach range.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Signal system data: Controller Asset #1081.



OASIS 2070 TIMING CHART

FEATURE	PHASE							
	1	2	4	5	6	7	8	
Min Green 1 *	7	12	7	7	12	7	7	
Extension 1 *	2.0	6.0	2.0	2.0	6.0	2.0	2.0	
Max Green 1 *	15	100	40	15	100	35	40	
Yellow Clearance	3.0	4.6	3.8	3.0	4.6	3.0	3.8	
Red Clearance	3.3	2.0	2.4	3.6	2.0	3.3	2.4	
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Walk 1 *	-	7	7	-	7	-	-	
Don't Walk 1	-	18	24	-	22	-	-	
Seconds Per Actuation *	-	1.5	-	-	1.5	-	-	
Max Variable Initial *	-	34	-	-	34	-	-	
Time Before Reduction *	-	15	-	-	15	-	-	
Time To Reduce *	-	30	-	-	30	-	-	
Minimum Gap	-	3.2	-	-	3.2	-	-	
Recall Mode	-	SOFT RECALL	-	-	SOFT RECALL	-	-	
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-	-	
Dual Entry	-	-	ON	-	-	-	ON	
Simultaneous Gap	ON	ON	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.

LEGEND

- | | | | |
|-----------------|------------------------|-------------------------------|--------------------------------|
| PROPOSED | — ss — Sewer Line | EXISTING | — ss — Traffic Signal Head |
| N/A | — g — UG Gas Line | — g — Sign | — g — Pedestrian Signal Head |
| N/A | — d — Drainage Pipe | — d — Push Button & Sign | — d — Metal Pole with Mastarm |
| N/A | — t — Telephone Line | — t — Type II Signal Pedestal | — t — Inductive Loop Detector |
| N/A | — r — Right of Way | — r — Controller & Cabinet | — r — Junction Box |
| (A) | — A — Street Name Sign | — A — Oversize Junction Box | — A — 2-in Underground Conduit |
| | | — — Directional Drill | — — Directional Arrow |

Signal Upgrade - Final Design - (TMP Phase IV & Final)

Prepared for the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

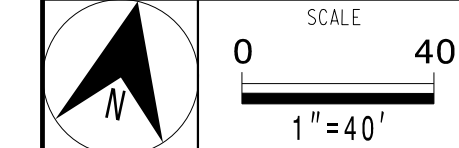
US 17 Business (Market Street)
at
Wilmington Avenue /
Wilmington Avenue Extension
Division 03 New Hanover County Wilmington

PLAN DATE: June 2014 REVIEWED BY: LM Moon
PREPARED BY: AM Encarnacion REVIEWED BY: MB Toth

REVISIONS: _____ INIT. DATE

SEAL
NORTH CAROLINA
PROFESSIONAL
ENGINEER
SEAL
025892
MELISSA B. TOTH

Drawn by: Melissa B. Toth 12/19/2014
DATE
SIC. INVENTORY NO. 03-1081



13-JUL-2015 10:19 01:17 P:\projects\101101\101101.dgn 01:17 P:\projects\101101\101101.dgn 01:17 P:\projects\101101\101101.dgn 01:17 P:\projects\101101\101101.dgn 01:17 P:\projects\101101\101101.dgn