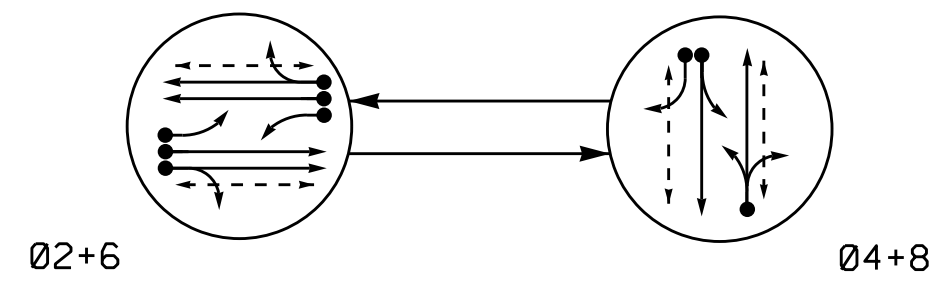


2 Phase Fully Actuated Asheville Signal System

PHASING DIAGRAM



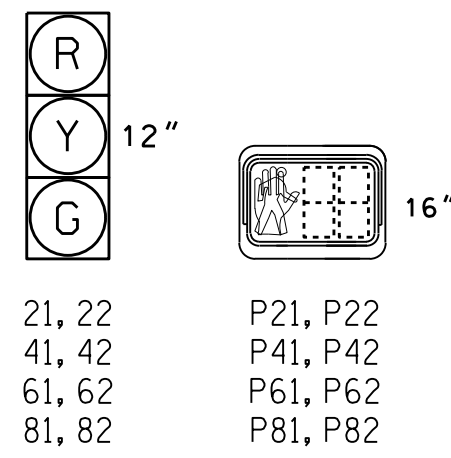
PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE	PHASE		
	Ø2+6	Ø4+8	FLASH
21, 22	G	R	Y
41, 42	R	G	R
61, 62	G	R	Y
81, 82	R	G	R
P21, P22	W	DW	DRK
P41, P42	DW	W	DRK
P61, P62	W	DW	DRK
P81, P82	DW	W	DRK

SIGNAL FACE I.D.

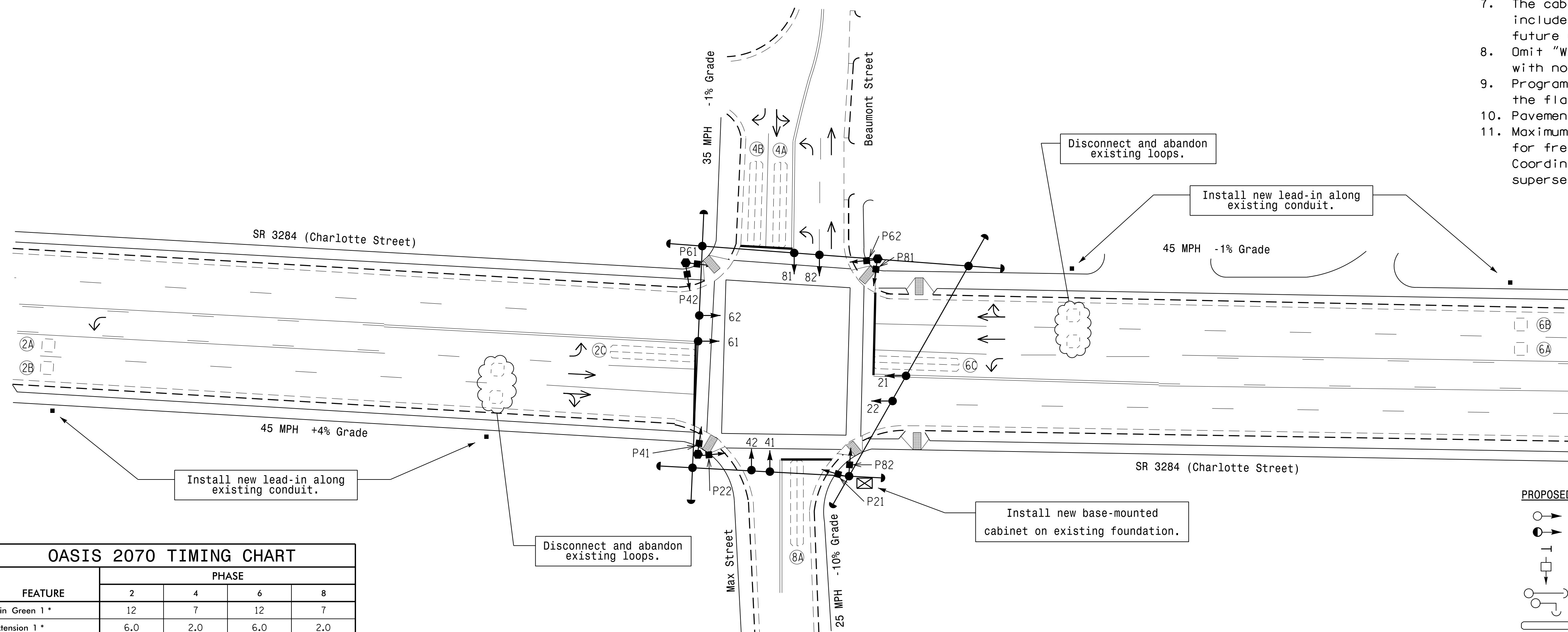
All Heads L.E.D.



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	LOOP SYSTEM	NEW CARD
2A	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
2B	6X6	300	EXIST	-	2	Y	Y	-	-	-	-	Y
2C	6X40	0	2-4-2	-	2	Y	Y	Y	-	3	-	Y
4A	6X40	0	2-4-2	-	4	Y	Y	-	-	3	-	Y
4B	6X40	0	2-4-2	-	4	Y	Y	-	-	15	-	Y
6A	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	Y
6B	6X6	300	EXIST	-	6	Y	Y	-	-	-	-	Y
6C	6X40	0	2-4-2	-	6	Y	Y	Y	-	3	-	Y
8A	6X40	0	2-4-2	-	8	Y	Y	-	-	5	-	Y

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.
- Disconnect and abandon existing loops as shown.
- Renumber existing loops 2E and 6E, to 2C and 6C, respectively.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- The cabinet should be designed to include an Auxiliary Output file for future use.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



OASIS 2070 TIMING CHART

FEATURE	PHASE			
	2	4	6	8
Min Green 1 *	12	7	12	7
Extension 1 *	6.0	2.0	6.0	2.0
Max Green 1 *	90	25	90	25
Yellow Clearance	4.6	3.9	4.6	3.9
Red Clearance	1.2	2.4	1.2	2.4
Red Revert	2.0	2.0	2.0	2.0
Walk 1 *	7	7	7	7
Don't Walk 1	15	19	15	19
Seconds Per Actuation *	1.5	-	1.5	-
Max Variable Initial *	34	-	34	-
Time Before Reduction *	15	-	15	-
Time To Reduce *	30	-	30	-
Minimum Gap	3.0	-	3.0	-
Recall Mode	MIN RECALL	-	MIN RECALL	-
Vehicle Call Memory	YELLOW	-	YELLOW	-
Dual Entry	-	ON	-	ON
Simultaneous Gap	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 | EXISTING |
|--|-----------------------------------|
| ○ → Traffic Signal Head | ● → Traffic Signal Head |
| ○ → Modified Signal Head | N/A |
| ○ → Sign | N/A |
| ○ → Pedestrian Signal Head With Push Button & Sign | ○ → Pedestrian Signal Head |
| ○ → Signal Pole with Guy | ○ → Signal Pole with Guy |
| ○ → Signal Pole with Sidewalk Guy | ○ → Signal Pole with Sidewalk Guy |
| □ → Inductive Loop Detector | □ → Inductive Loop Detector |
| □ → Controller & Cabinet | □ → Controller & Cabinet |
| □ → Junction Box | □ → Junction Box |
| - - - 2-in Underground Conduit | - - - 2-in Underground Conduit |
| N/A → Right of Way | - - - Right of Way |
| → Directional Arrow | → Directional Arrow |
| ○ Type II Signal Pedestal | ○ Type II Signal Pedestal |
| N/A → Curb Ramp | → Curb Ramp |

Signal Upgrade

SR 3284 (Charlotte St.) at Beaumont St./Max St.

Division 13 Buncombe County Asheville

PLAN DATE: June 2016 REVIEWED BY: P.L. Alexander

PREPARED BY: R.N. Zinser REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

PROFESSIONAL ENGINEER

RICHARD N. ZINSER

043914

9/2/2016

SIG. INVENTORY NO. 13-1041

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 R.N. Zinser