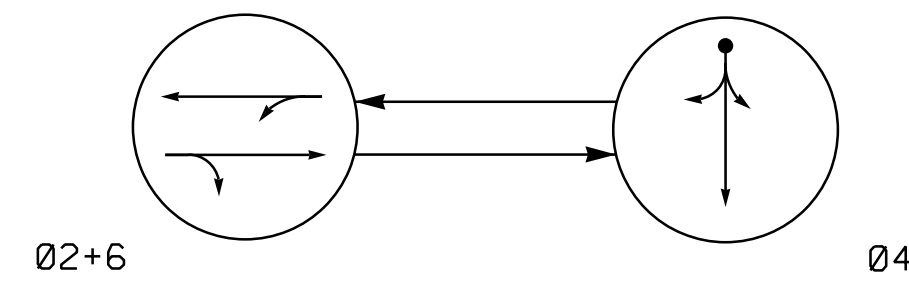


PHASING DIAGRAM



PHASING DIAGRAM DETECTION LEGEND

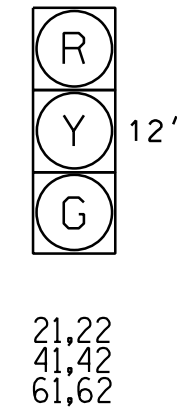
- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←- - -> UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

TABLE OF OPERATION

SIGNAL FACE	PHASE		
	02+6	04	FLASH
21,22	G	R	Y
41,42	R	G	R
61,62	G	R	Y

SIGNAL FACE I.D.

All Heads L.E.D.



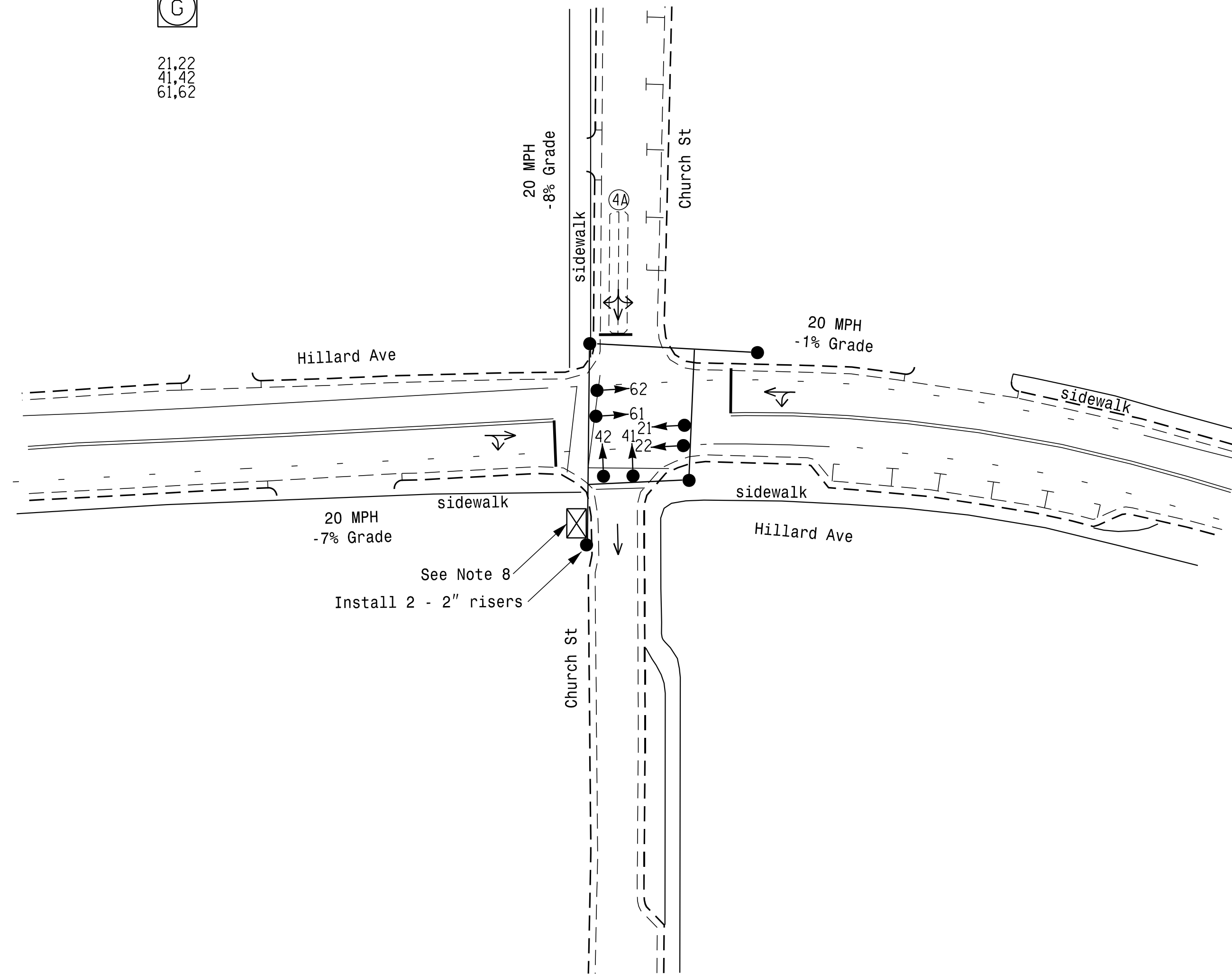
OASIS 2070E LOOP & DETECTOR INSTALLATION CHART

LOOP	INDUCTIVE LOOPS				DETECTOR PROGRAMMING							
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTENSION	FULL TIME DELAY	STRETCH TIME	DELAY TIME	SYSTEM LOOP	NEW CARD
4A	EXIST	0	EXIST	-	4	Y	Y	-	-	5	-	Y

2 Phase Semi-Actuated (Asheville 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.
- Set all detector units to presence mode.
- In the event of loop replacement, refer to the current ITS and Signals Design Manual and submit a Plan of Record to the Signal Design Section.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- Pavement markings are existing.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- Locate new cabinet on new foundation next to existing cabinet location.
- Existing Yellow change interval for phase 2 may be decreased by 0.2 seconds per week until the required value is reached.



OASIS 2070E 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	3.2	3.3	3.0
Red Clearance	1.2	1.6	1.6
Red Revert	2.0	2.0	2.0
Walk 1 *	-	-	-
Don't Walk 1	-	-	-
Seconds Per Actuation *	-	-	-
Max Variable Initial *	-	-	-
Time Before Reduction *	-	-	-
Time To Reduce *	-	-	-
Minimum Gap	-	-	-
Recall Mode	MAX RECALL	-	MAX RECALL
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.

LEGEND

- |  |   |  |                              |
|--|---|--|------------------------------|
|  | PROPOSED Traffic Signal Head                            |  | EXISTING Traffic Signal Head |
|  | PROPOSED Modified Signal Head                           |  | EXISTING N/A                 |
|  | PROPOSED Sign   |  | EXISTING N/A                 |
|  | PROPOSED Pedestrian Signal Head With Push Button & Sign |  | EXISTING N/A                 |
|  | PROPOSED Signal Pole with Guy                           |  | EXISTING N/A                 |
|  | PROPOSED Signal Pole with Sidewalk Guy                  |  | EXISTING N/A                 |
|  | PROPOSED Inductive Loop Detector                        |  | EXISTING N/A                 |
|  | PROPOSED Controller & Cabinet                           |  | EXISTING N/A                 |
|  | PROPOSED Junction Box                                   |  | EXISTING N/A                 |
|  | PROPOSED 2-in Underground Conduit                       |  | EXISTING N/A                 |
|  | PROPOSED Right of Way                                   |  | EXISTING N/A                 |
|  | PROPOSED Directional Arrow                              |  | EXISTING N/A                 |
|  | PROPOSED Metal Pole with Mastarm                        |  | EXISTING N/A                 |

Signal Upgrade

161 S. Charlotte St, Asheville, NC 28802

Hillard Ave at Church St

Division 13 Buncombe County Asheville

PLAN DATE: MAY 2016 REVIEWED BY: SMH

PREPARED BY: BGR REVIEWED BY: JBV

12/13/2016

CONSULTING ENGINEERS • SURVEYORS  
FIRM LICENSE No. C-1154  
12 BROAD STREET  
ASHEVILLE, NORTH CAROLINA 28801  
(828) 254-2201  
FAX (828) 254-4562

SCALE 1"=30'

REVISIONS

NO.	DATE	INIT.	DATE

3:41:34 PM  
 R:\4715B\02 Asheville\110 Signal System\DWG\COA-0302\COA-302-sig.dgn  
 D:\Process