PROJECT REFERENCE NO.	SHEET NO.
U-6038	Sig. 12.0

PHASING DIAGRAM

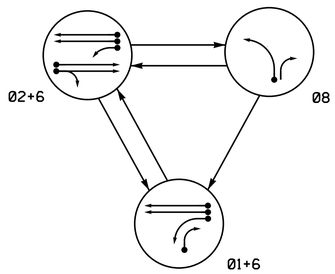


TABLE OF OPERATION

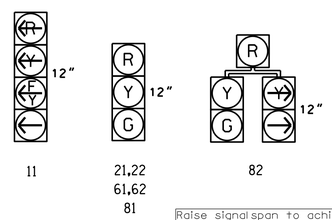
SIGNAL FACE	PHASE 01+6	PHASE 02+6	PHASE 08	FLASH
11	—	F Y	~~R~~	~~Y~~
21,22	R	G	R	Y
61,62	G	G	R	Y
81	R	R	G	R
82	R/—	R	G	R

ASC/3 DETECTOR INSTALLATION CHART

DETECTOR					PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PHASE	CALLING	EXTEND TIME	DELAY TIME	USE ADDED INITIAL	TYPE	SYSTEM LOOP	NEW CARD
1A	6X60	+5	Exist	-	1	Yes	-	15	-	S	-	X
					6	Yes	-	3	-	G	-	X
1B	6X60	0	Exist	-	1	Yes	-	15	-	S	-	X
2A/S45	6X6	355	Exist	-	2	Yes	-	-	X	N	X	X
2B/S46	6X6	355	Exist	-	2	Yes	-	-	X	N	X	X
6A/S43	6X6	355	Exist	-	6	Yes	-	-	X	N	X	X
6B/S44	6X6	355	Exist	-	6	Yes	-	-	X	N	X	X
8A	6X60	0	Exist	-	8	Yes	-	3	-	S	-	X

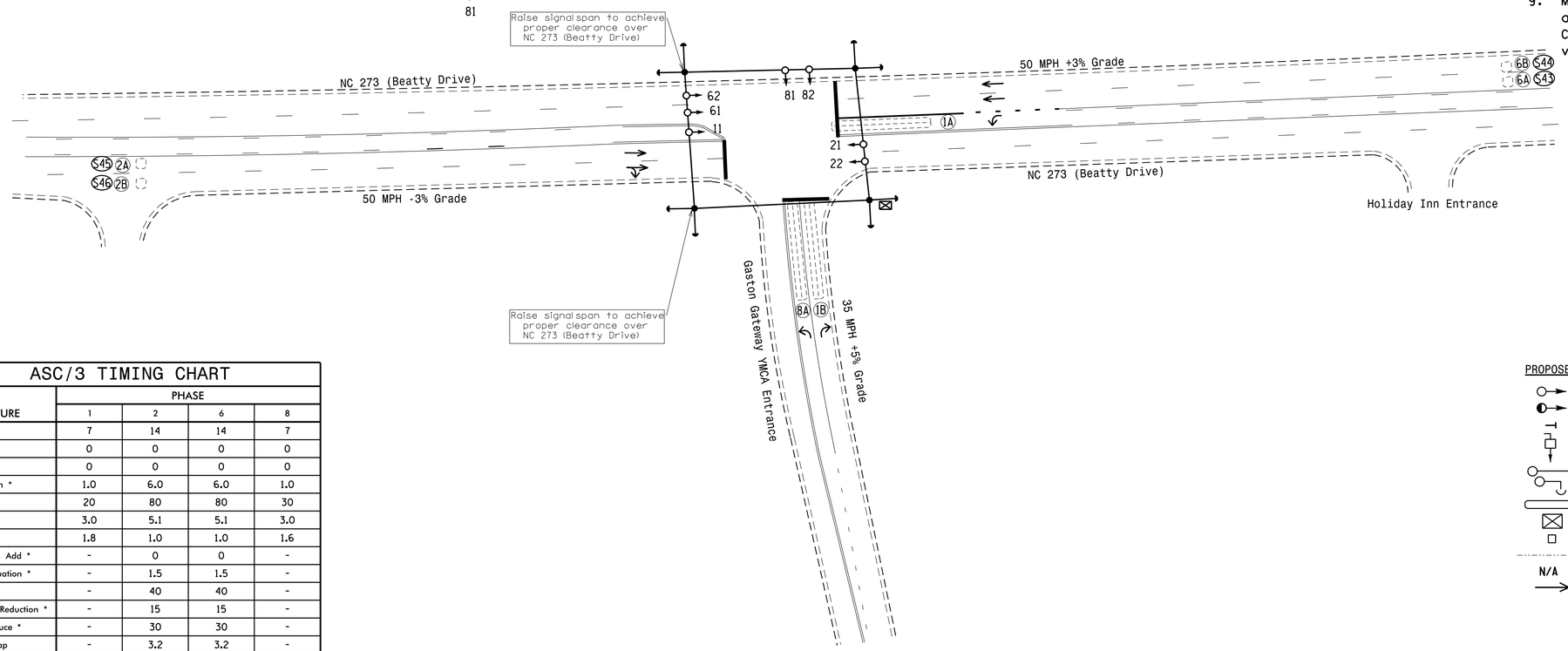
SIGNAL FACE I.D.

All Heads L.E.D.



PHASING DIAGRAM DETECTION LEGEND

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



ASC/3 TIMING CHART

FEATURE	PHASE 1	PHASE 2	PHASE 6	PHASE 8
Min Green *	7	14	14	7
Walk *	0	0	0	0
Ped Clear	0	0	0	0
Veh. Extension *	1.0	6.0	6.0	1.0
Max 1 *	20	80	80	30
Yellow	3.0	5.1	5.1	3.0
Red Clear	1.8	1.0	1.0	1.6
Actuations B4 Add *	-	0	0	-
Seconds /Actuation *	-	1.5	1.5	-
Max Initial *	-	40	40	-
Time Before Reduction *	-	15	15	-
Time To Reduce *	-	30	30	-
Minimum Gap	-	3.2	3.2	-
Locking Detector	-	X	X	-
Recall Position	-	VEH. RECALL	VEH. RECALL	-
Dual Entry	-	-	-	-
Simultaneous Gap	X	X	X	X

* 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.

3 Phase
Fully Actuated
Belmont Signal System

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 may be lagged.
4. Install backplates for signal heads numbered 11, 21, 22, 61, 62, 81 and 82.
5. Set all detector units to presence mode.
6. 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.
7. Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
8. Pavement markings are existing.
9. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.

LEGEND

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

Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of:
SUMMIT DESIGN AND ENGINEERING SERVICES
NC FIRM LICENSE No: P-0339
504 Meadowlands Drive
Hillsborough, NC 27278
(919) 732-3883
(919) 732-6676 (FAX)

Prepared For: Transportation Mobility and Safety Division, Signal Design Section
750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

NC 273 (Beatty Drive)
at
Gaston Gateway YMCA Entrance

Division 12 Gaston County Belmont

PLAN DATE:	December 2018	REVIEWED BY:	E. Sirgany
PREPARED BY:	M. Parker	REVIEWED BY:	

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 018174 ENGINEER EDWARD W. SIRGANY

DocuSigned by: Edward W Sirgany 190F9C86A6984E9... 2/7/2019 DATE

SIG. INVENTORY NO. 12-1688

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