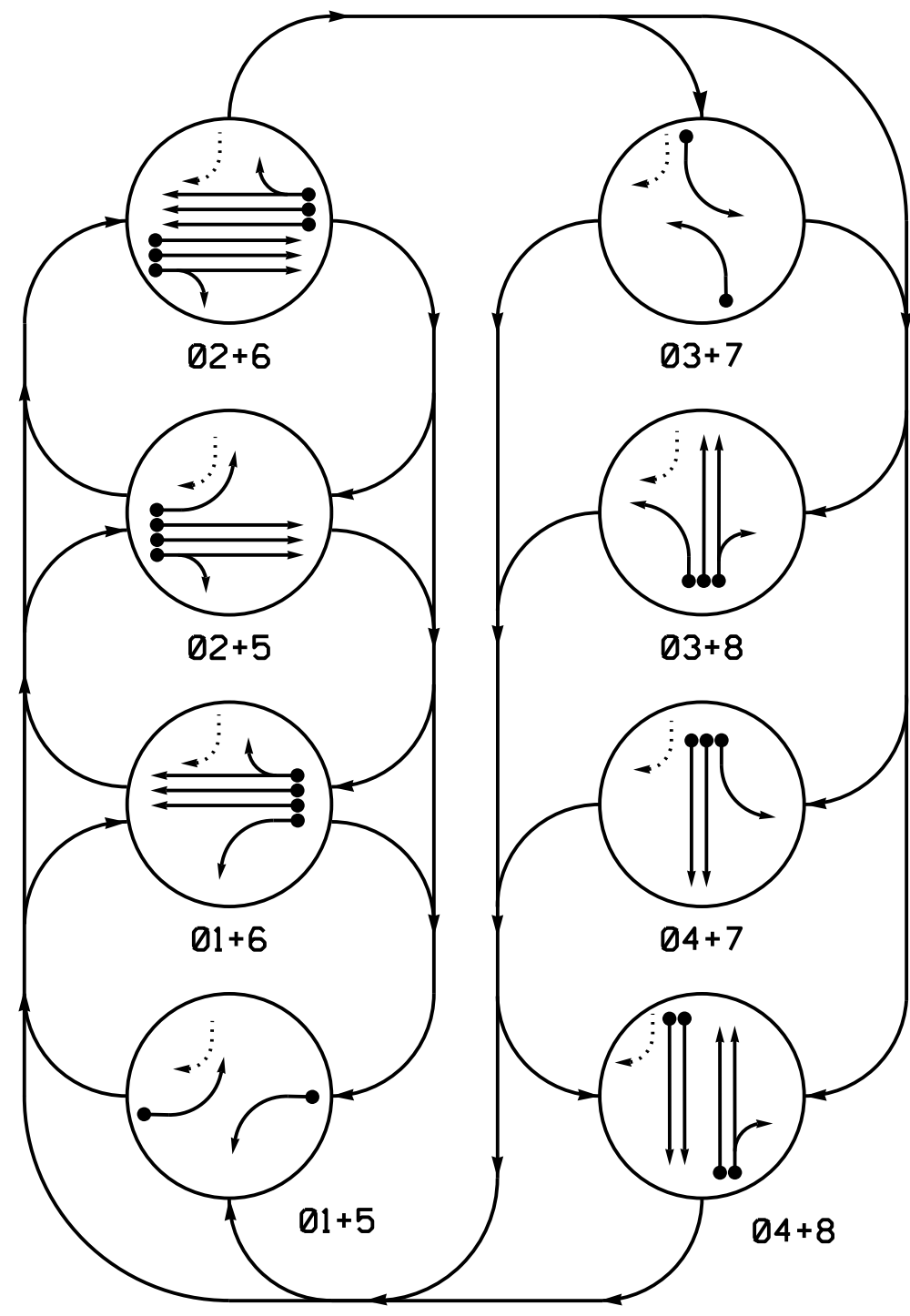
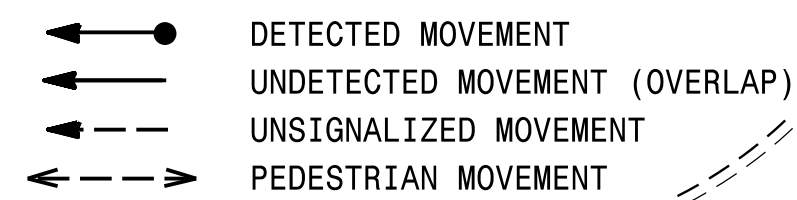


PHASING DIAGRAM



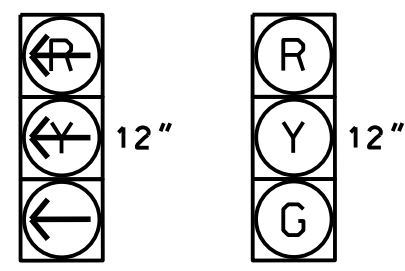
PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE	PHASE								FLASH
	01+5	01+6	02+5	02+6	03+7	03+8	04+7	04+8	
11	-	-	R	R	R	R	R	R	-
21,22,23	R	R	G	G	R	R	R	R	Y
31	R	R	R	R	-	-	R	R	R
41,42	R	R	R	R	R	R	G	G	R
51	-	R	-	R	R	R	R	R	R
61,62,63	R	G	R	G	R	R	R	R	Y
71	R	R	R	R	-	-	R	R	R
81,82	R	R	R	R	R	G	R	G	R

SIGNAL FACE I.D.

All Heads L.E.D.



11 21,22,23
31 41,42
51 61,62,63
71 81,82

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	0	Exist	-	1	Yes	-	-	-	S	-	X
2A/S19	6X6	405	Exist	-	2	Yes	-	-	X	N	X	X
2B/S20	6X6	405	Exist	-	2	Yes	-	-	X	N	X	X
2C/S21	6X6	405	Exist	-	2	Yes	-	-	X	N	X	X
3A	6X60	+5	Exist	-	3	Yes	-	-	-	S	-	X
4A/S27	6X6	300	Exist	-	4	No	3.1	-	-	N	X	X
4B/S28	6X6	300	Exist	-	4	No	3.1	-	-	N	X	X
4C	6X60	+5	Exist	-	4	Yes	-	-	-	S	-	X
4D	6X60	+5	Exist	-	4	Yes	-	3	-	S	-	X
5A	6X60	0	Exist	-	5	Yes	-	-	-	S	-	X
6A/S22	6X6	405	Exist	-	6	Yes	-	-	X	N	X	X
6B/S23	6X6	405	Exist	-	6	Yes	-	-	X	N	X	X
6C/S24	6X6	405	Exist	-	6	Yes	-	-	X	N	X	X
7A	6X60	+5	Exist	-	7	Yes	-	3	-	S	-	X
8A/S25	6X6	300	6	-	8	No	3.1	-	-	N	X	X
8B/S26	6X6	300	6	-	8	No	3.1	-	-	N	X	X
8C	6X60	+5	Exist	-	8	Yes	-	-	-	S	-	X
8D	6X60	+5	Exist	-	8	Yes	-	10	-	S	-	X
8E	6X20	0	2-4-2	-	8	Yes	-	10	-	S	-	X
S50	6X6	+180	6	-	-	No	-	-	-	N	X	X
S51	6X6	+180	6	-	-	No	-	-	-	N	X	X
S52	6X6	+200	6	-	-	No	-	-	-	N	X	X
S53	6X6	+200	6	-	-	No	-	-	-	N	X	X
S54	6X6	+200	6	-	-	No	-	-	-	N	X	X

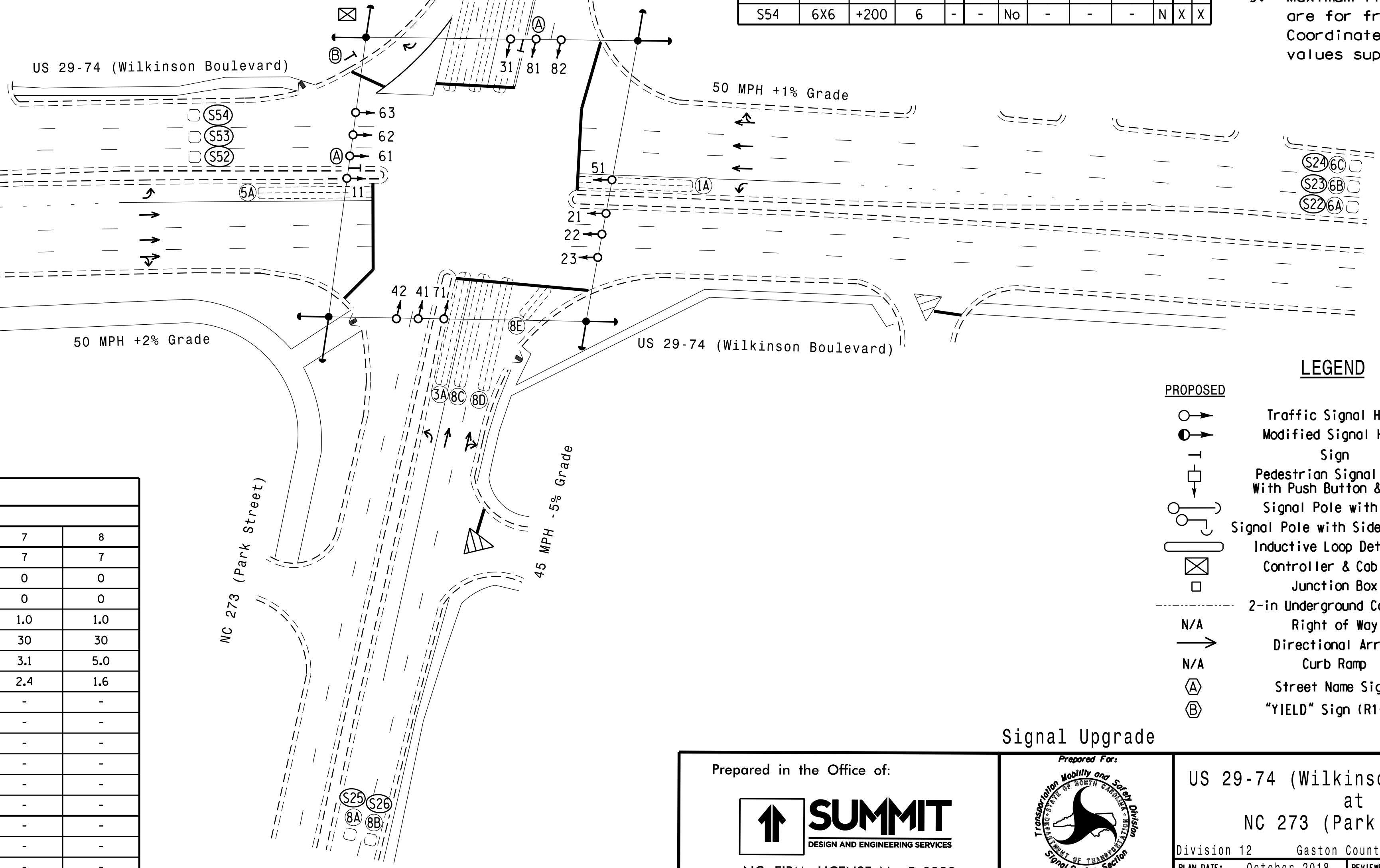
8 Phase Fully Actuated Belmont Signal System

NOTES

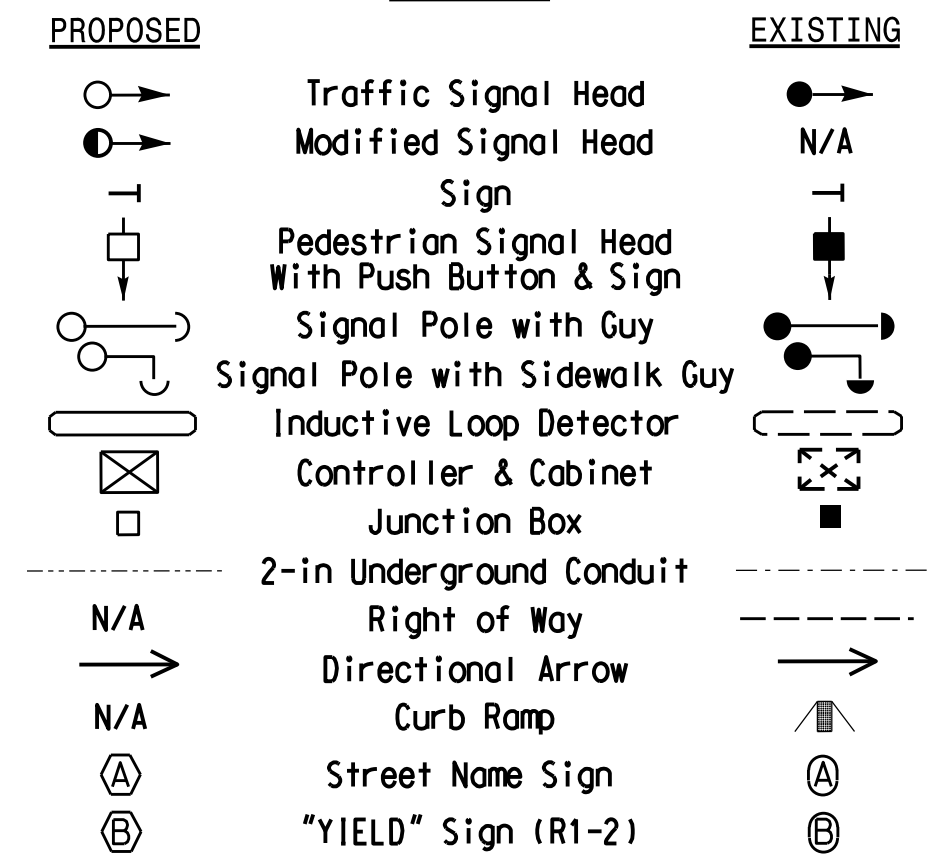
1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
3. Phase 1 and/or phase 5 may be lagged.
4. Phase 3 and/or phase 7 may be lagged.
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.

ASC/3 TIMING CHART								
FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Min Green *	7	14	7	7	7	14	7	7
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Veh. Extension *	1.0	6.0	1.0	1.0	1.0	6.0	1.0	1.0
Max 1 *	40	120	35	30	30	120	30	30
Yellow	3.0	4.6	3.1	5.0	3.0	4.7	3.1	5.0
Red Clear	3.2	1.2	2.4	1.6	3.2	1.2	2.4	1.6
Actuations B4 Add *	-	0	-	-	-	0	-	-
Seconds /Actuation *	-	1.5	-	-	-	1.5	-	-
Max Initial *	-	44	-	-	-	44	-	-
Time Before Reduction *	-	25	-	-	-	25	-	-
Time To Reduce *	-	60	-	-	-	60	-	-
Minimum Gap	-	3.4	-	-	-	3.4	-	-
Locking Detector	-	X	-	-	-	X	-	-
Recall Position	-	VEH. RECALL	-	-	-	VEH. RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-
Simultaneous Gap	X	X	X	X	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.



LEGEND



Signal Upgrade

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Office of: NC FIRM LICENSE No: P-0339 504 Meadowlands Drive Hillsborough, NC 27278 (919) 732-3883 (919) 732-6676 (FAX)		US 29-74 (Wilkinson Boulevard) at NC 273 (Park Street)		SEAL NORTH CAROLINA PROFESSIONAL ENGINEER EDWARD W. SIRGANY License No. 018174
		Division 12 Gaston County Belmont PLAN DATE: October 2018 REVIEWED BY: E. Sirgany PREPARED BY: J. Smith REVIEWED BY:	REVISIONS INIT. DATE	