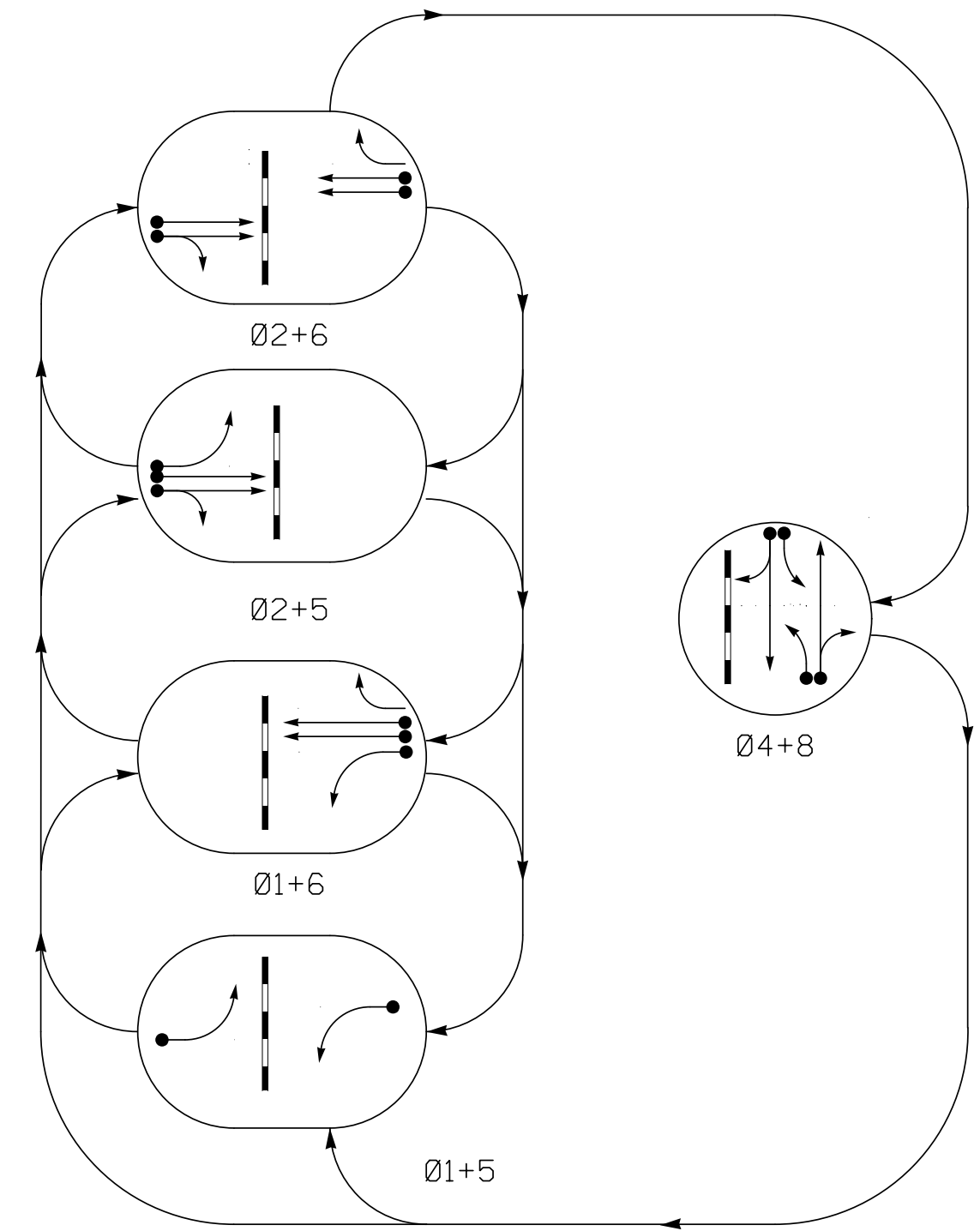
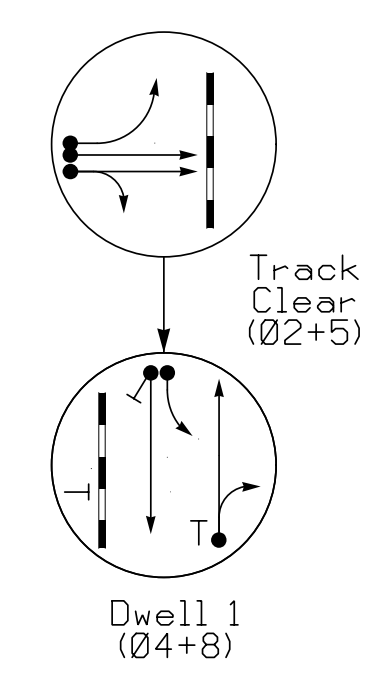


**PHASING DIAGRAM**



**RAIL PREEMPT PHASES (High Priority)**



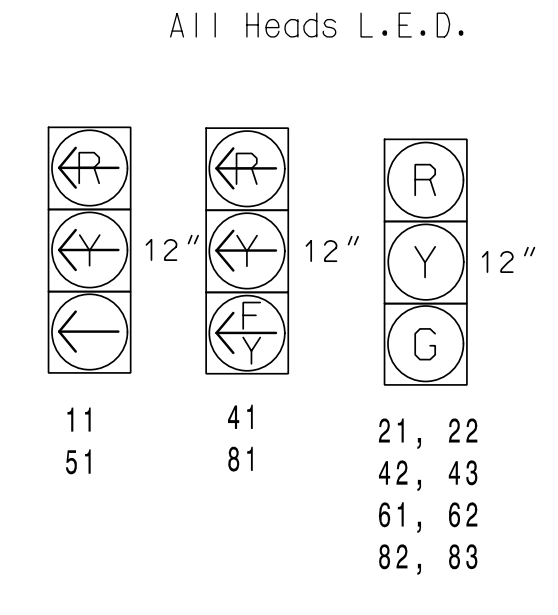
**PHASING DIAGRAM DETECTION LEGEND**  
 ● DETECTED MOVEMENT  
 ○ UNDETECTED MOVEMENT (OVERLAP)  
 - UNSIGNALIZED MOVEMENT  
 - PEDESTRIAN MOVEMENT

**TABLE OF OPERATION**

SIGNAL FACE	PHASE									
	01+5	01+6	02+5	02+6	04+8	RR CLEAR	RR DWELL	RR Dwell 1	RR Dwell 2	RR Dwell 3
11	-	-	-	-	-	-	-	-	-	-
21, 22	R	R	G	G	R	G	R	G	R	Y
41	-	-	-	-	-	-	-	-	-	-
42, 43	R	R	R	R	G	R	G	R	G	R
51	-	-	-	-	-	-	-	-	-	-
61, 62	R	G	R	G	R	R	R	R	R	R
81	-	-	-	-	-	-	-	-	-	-
82, 83	R	R	R	R	G	R	G	R	G	R
SIGN 'A'	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON *

\* See Note #6

**SIGNAL FACE I.D.**



**OASIS 2070 LOOP & DETECTOR INSTALLATION CHART**

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	DETECTOR PROGRAMMING				SYSTEM LOOP	NEW CARD
					PHASE	CALLING	EXTENSION	FULL TIME DELAY		
1A	6X40	+5	2-4-2	Y	1	Y	Y	-	-	-
2A	6X6	70	6	Y	2	Y	Y	-	-	-
2B	6X6	70	6	Y	2	Y	Y	-	-	-
4A	6X40	+5	2-4-2	Y	4	Y	Y	-	-	3
4B	6X40	+5	2-4-2	Y	4	Y	Y	-	-	-
5A	6X40	+5	2-4-2	Y	5	Y	Y	-	-	-
6A	6X6	70	6	Y	6	Y	Y	-	-	-
6B	6X6	70	6	Y	6	Y	Y	-	-	-
8A	6X40	+5	2-4-2	Y	8	Y	Y	-	-	3
8B	6X40	+5	2-4-2	Y	8	Y	Y	-	-	-

**5 PHASE W/ RR PREEMPTION FULLY ACTUATED (GOLDSBORO SIGNAL SYSTEM)**

**NOTES**

- Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
- This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
- Phase 1 and/or phase 5 may be lagged.
- Reposition existing signal heads numbered 11, 21, 22, 41, 42, 43, 51, 61 and 62.
- Set all detector units to presence mode.
- Ensure flashing operation does not alter operation of blackout signs.
- Program parent phase for Overlap "P" for all phases used in normal operation.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- Controller Asset #0556.

**2070 RAIL PREEMPTION**

Interval 1 - Track Clearance Green	17
Interval 1 - Track Clearance Yellow	3.8
Interval 1 - Track Clearance Red	4.4
Interval 2 - Dwell Green	255
Interval 2 - Dwell Yellow	0.0*
Interval 2 - Dwell Red	0.0*
Interval 5 - Exit Green	1
Interval 5 - Yellow	0.0
Interval 5 - Red	0.0
Exist Phase(S)	2+6
Priority	High
Delay Time	0
Min Green Before Pre	1
Ped Clear Before Pre	0.0
Yellow Clear Before Pre	4.6
Red Clear Before Pre	4.2
Dwell Min Time	7
Ped Clear Through Yellow	N
Omit Overlaps	B,P

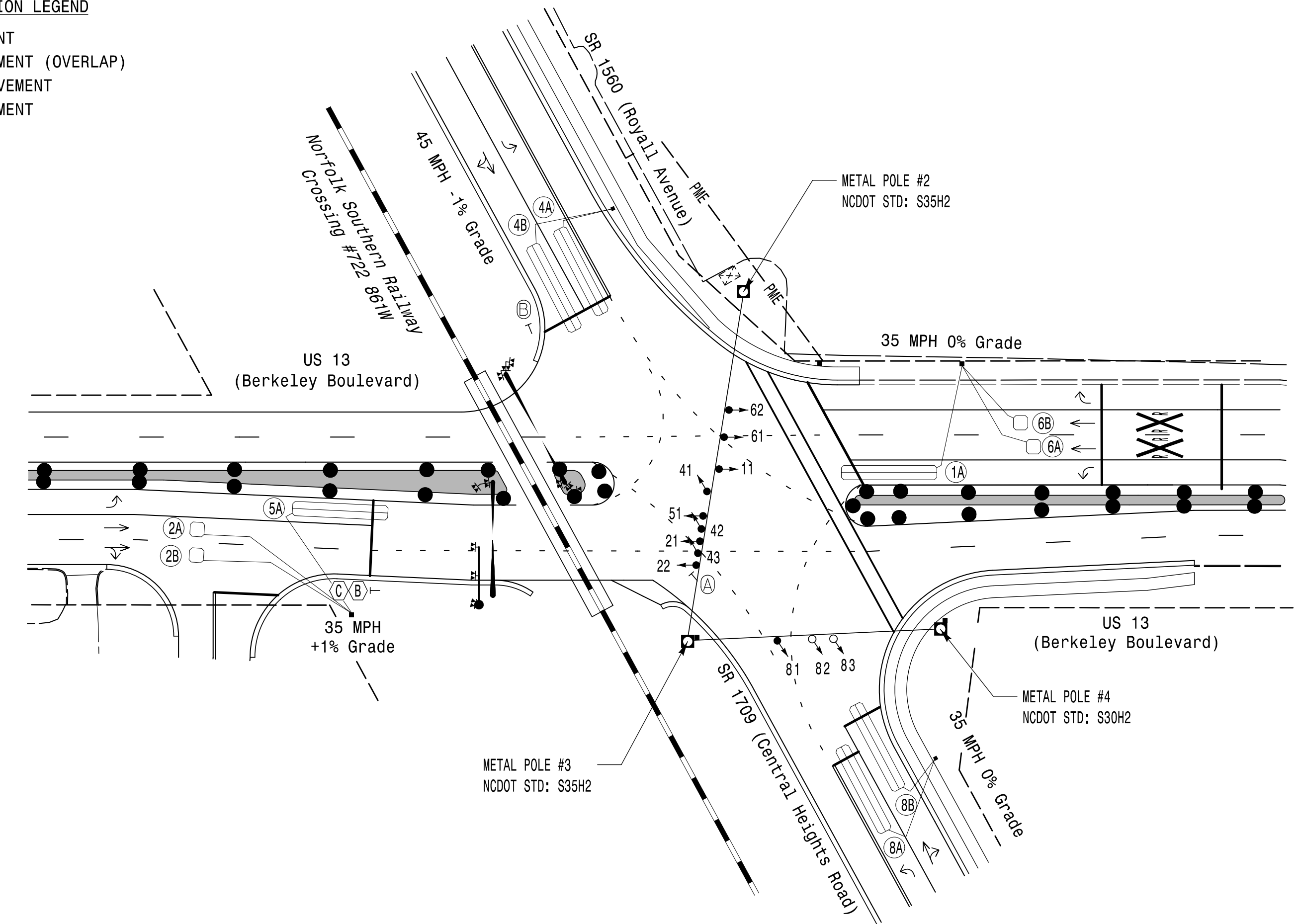
\* Time defaults to time used for phase during normal operation.

**THIS SIGNAL IS DESIGNED FOR SIMULTANEOUS PREEMPTION**

**OASIS 2070 TIMING CHART**

FEATURE	PHASE					
	1	2	4	5	6	8
Min Green 1 *	7	10	7	7	10	7
Extension 1 *	2.0	3.0	2.0	2.0	3.0	2.0
Max Green 1 *	25	60	30	25	60	30
Yellow Clearance	3.0	3.8	4.6	3.0	3.8	4.6
Red Clearance	2.4	3.3	4.2	4.4	2.7	4.2
Walk 1 *	-	-	-	-	-	-
Don't Walk 1	-	-	-	-	-	-
Seconds Per Actuation *	-	-	-	-	-	-
Max Variable Initial *	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-
Recall Mode	-	MIN RECALL	-	-	MIN RECALL	-
Vehicle Call Memory	-	YELLOW	-	-	YELLOW	-
Dual Entry	-	-	ON	-	-	ON
Simultaneous Gap	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	EXISTING
○ → Traffic Signal Head	● → Modified Signal Head
○ → Pedestrian Signal Head With Push Button & Sign	○ → Type II Signal Pedestal
○ → Metal Strain Pole	○ → Inductive Loop Detector
○ → Controller & Cabinet	○ → Junction Box
○ → 2-in Underground Conduit	○ → Directional Drill
○ → Right of Way	○ → Permanent Easement
○ → Directional Arrow	○ → Guardrail
○ → Railroad Tracks	○ → Railroad Gate and Flasher
○ → Railroad Cantilever	○ → Construction Zone Drums
○ → Construction Zone	○ → Construction Barricade
○ → "NO RIGHT TURN - TRAIN" LED Blankout Sign	○ → "NO TURN ON RED" Sign (R10-11)
○ → "STOP HERE ON RED" Sign (R10-6)	

**Signal Upgrade - Temporary Design 3 TMP Phase 3**

Prepared For:  
  
 PLANS PREPARED IN THE OFFICE OF:  
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**US 13 (BERKELEY BOULEVARD) AT SR 1560 (ROYALL AVENUE) AND SR 1709 (CENTRAL HEIGHTS ROAD)**

DIVISION 4 WAYNE COUNTY GOLDSBORO

PLAN DATE: DECEMBER 2018 REVIEWED BY: SL PHILLIPS

PREPARED BY: SP PENNINGTON REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

6/30/2020

SIG. INVENTORY NO. 04-055613