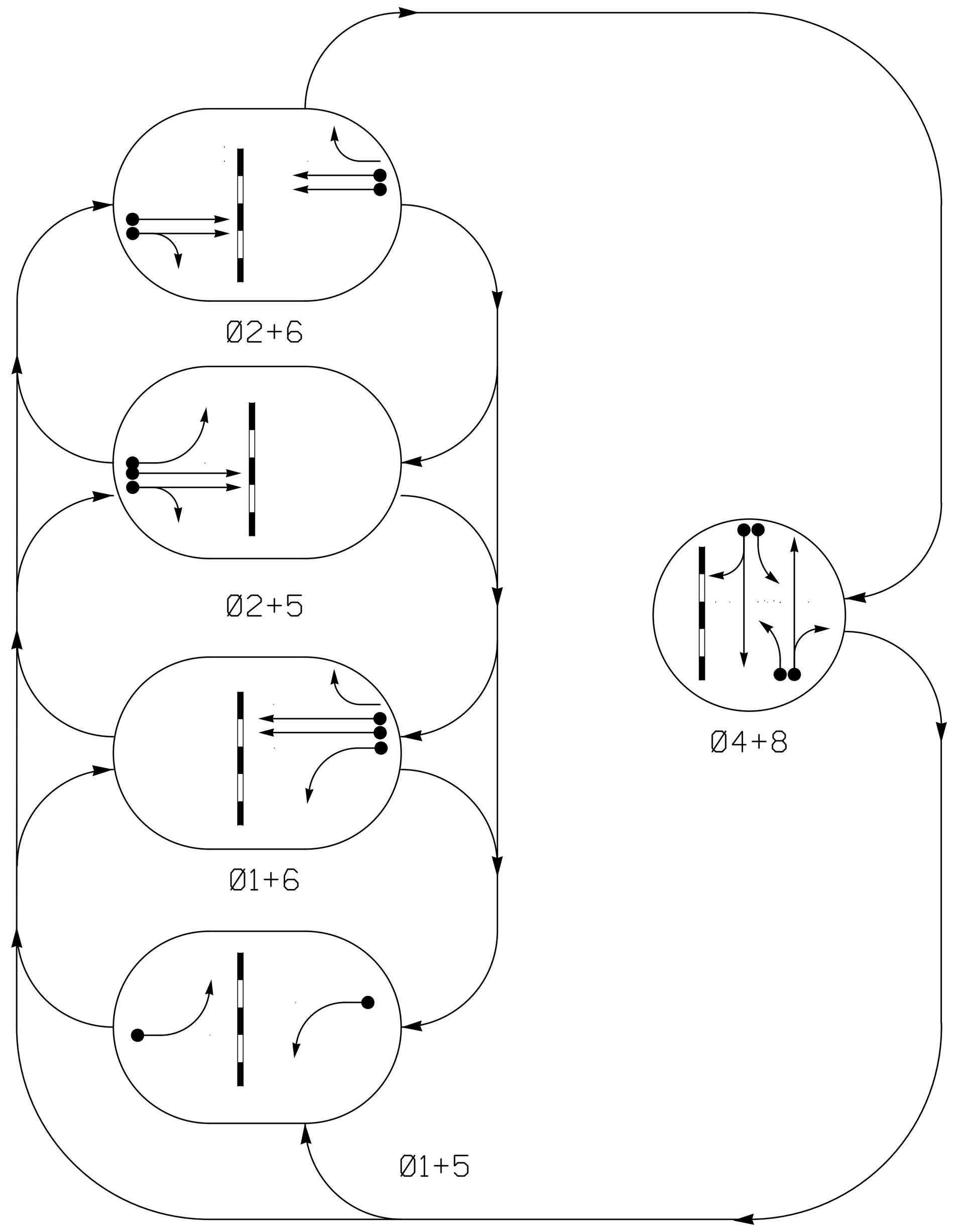
PROJECT REFERENCE NO.	SHEET NO.
U-5724	SIG.1.3

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

PHASING DIAGRAM



RAIL PREEMPT PHASES

(High Priority)

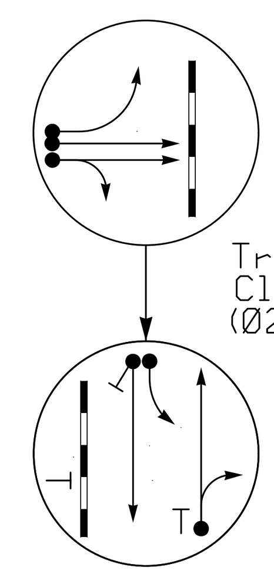


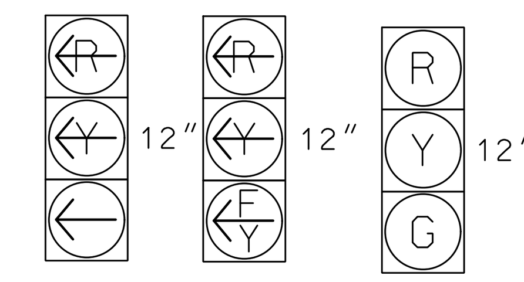
TABLE OF OPERATION

SIGNAL FACE	PHASE Ø1+5	Ø1+6	Ø2+5	Ø2+6	Ø4+8	RR CLEAR	RR DWELL	FLASH
11	←	←	←R	←R	←R	←R	←R	←R
21,22	R	R	G	G	R	G	R	Y
41	←R	←R	←R	←R	←F/Y	←R	←F/Y	←R
42, 43	R	R	R	R	G	R	G	R
51	←	←R	←	←R	←R	←	←R	←R
61, 62	R	G	R	G	R	R	R	R
81	←R	←R	←R	←R	←F/Y	←R	←R	←R
82, 83	R	R	R	R	G	R	G	R
SIGN 'A'	OFF	OFF	OFF	OFF	OFF	OFF	ON	✳

✳ See Note #5

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	SYSTEM LOOP	NEW CARD
1A	6X40	+5	2-4-2	Y	1	Y	Y	-	-	3	-	-
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	-	-	3	-	-
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	-	Y
8B	6X40	+5	2-4-2	Y	8	Y	Y	-	-	-	-	Y

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2018 and "Standard Specifications for Roads and Structures" dated January 2018.
2. This location contains railroad preemption phasing. Do not program signal for late night flashing operation.
3. Phase 1 and/or phase 5 may be lagged.
4. Set all detector units to presence mode.
5. Ensure flashing operation does not alter operation of blankout signs.
6. Program parent phase for Overlap "P" for all phases used in normal operation.
7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
8. Controller Asset #0556.

PHASING DIAGRAM DETECTION LEGEND

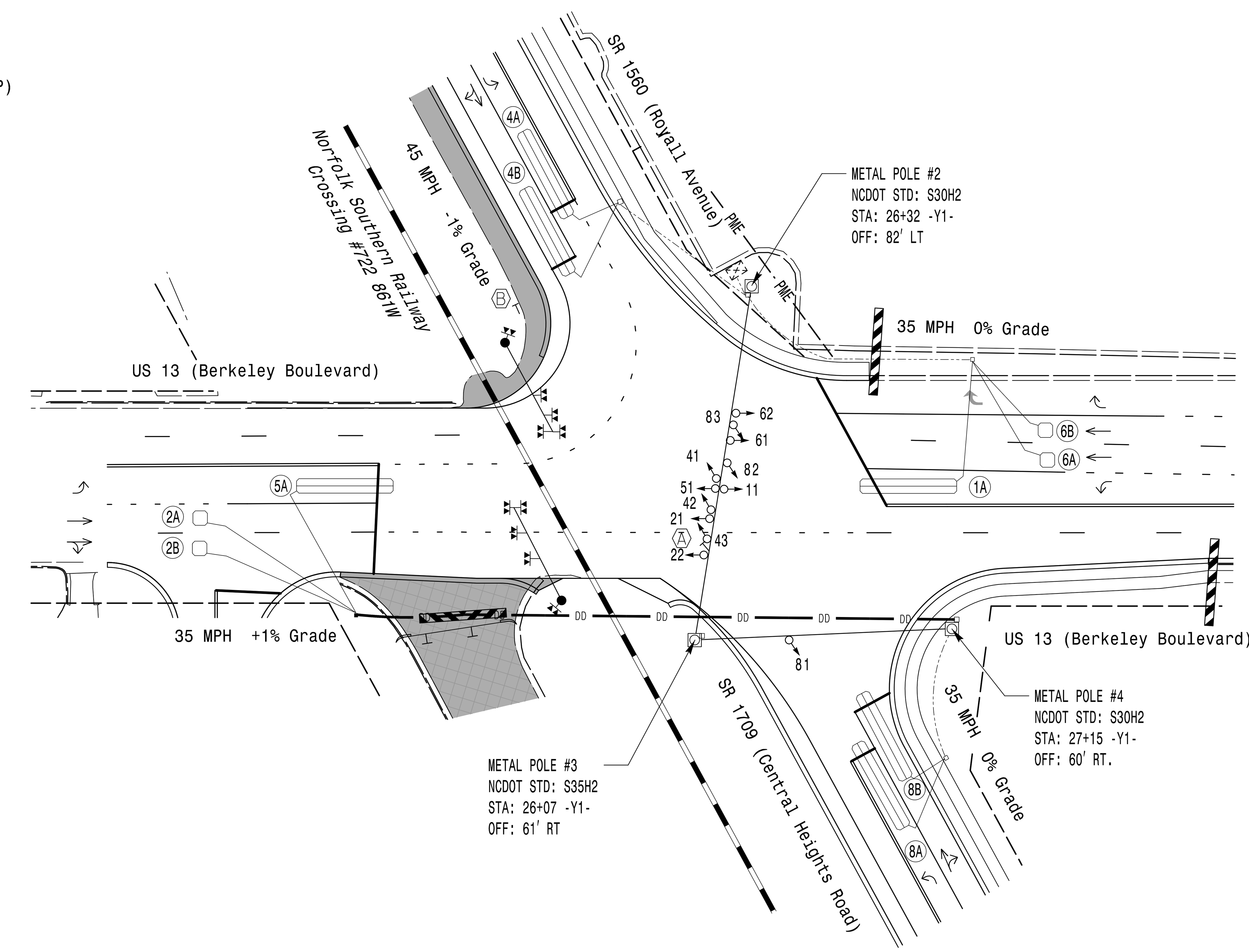
- DETECTED MOVEMENT
- UNDETECTED MOVEMENT (OVERLAP)
- UNSIGNALIZED MOVEMENT
- PEDESTRIAN MOVEMENT

2070 RAIL PREEMPTION

Interval 1 – Track Clearance Green	17
Interval 1 – Track Clearance Yellow	3.8
Interval 1 – Track Clearance Red	4.2
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	2.3	3.3	4.1	4.2	2.7	4.1
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	N/A
	Sign	
	Pedestrian Signal Head With Push Button & Sign	
	Signal Pole with Guy	
	Signal Pole with Sidewalk Guy	
	Metal Strain Pole	
	Inductive Loop Detector	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
DD	Directional Drill	N/A
N/A	Right of Way	
PME	Permanent Easement	PME
	Directional Arrow	
N/A	Guardrail	
N/A	Railroad Tracks	
N/A	Railroad Gate and Flasher	
N/A	Railroad Cantilever	
	Construction Zone Drums	
	Construction Zone	
	Construction Barricade	
(A)	"NO RIGHT TURN - TRAIN" LED Blankout Sign	(A)
(B)	"NO TURN ON RED" Sign (R10-11)	(B)

Signal Upgrade - Temporary Design 2
TMP Phase 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED IN THE OFFICE OF:
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750 N.Greenfield Pkwy,Garner,NC 27529

SCALE 0 40 1"=40'

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:

REVISIONS	INIT.	DATE

SEAL
NORTH CAROLINA PROFESSIONAL SEAL 032607 ENGINEER STACIE L. PHILLIPS
DocuSigned by: 0C87A56ED9D8437
SIGNATURE 6/30/2020 DATE

SIG. INVENTORY NO. 04-0556T2