

TIP Project: R-5858

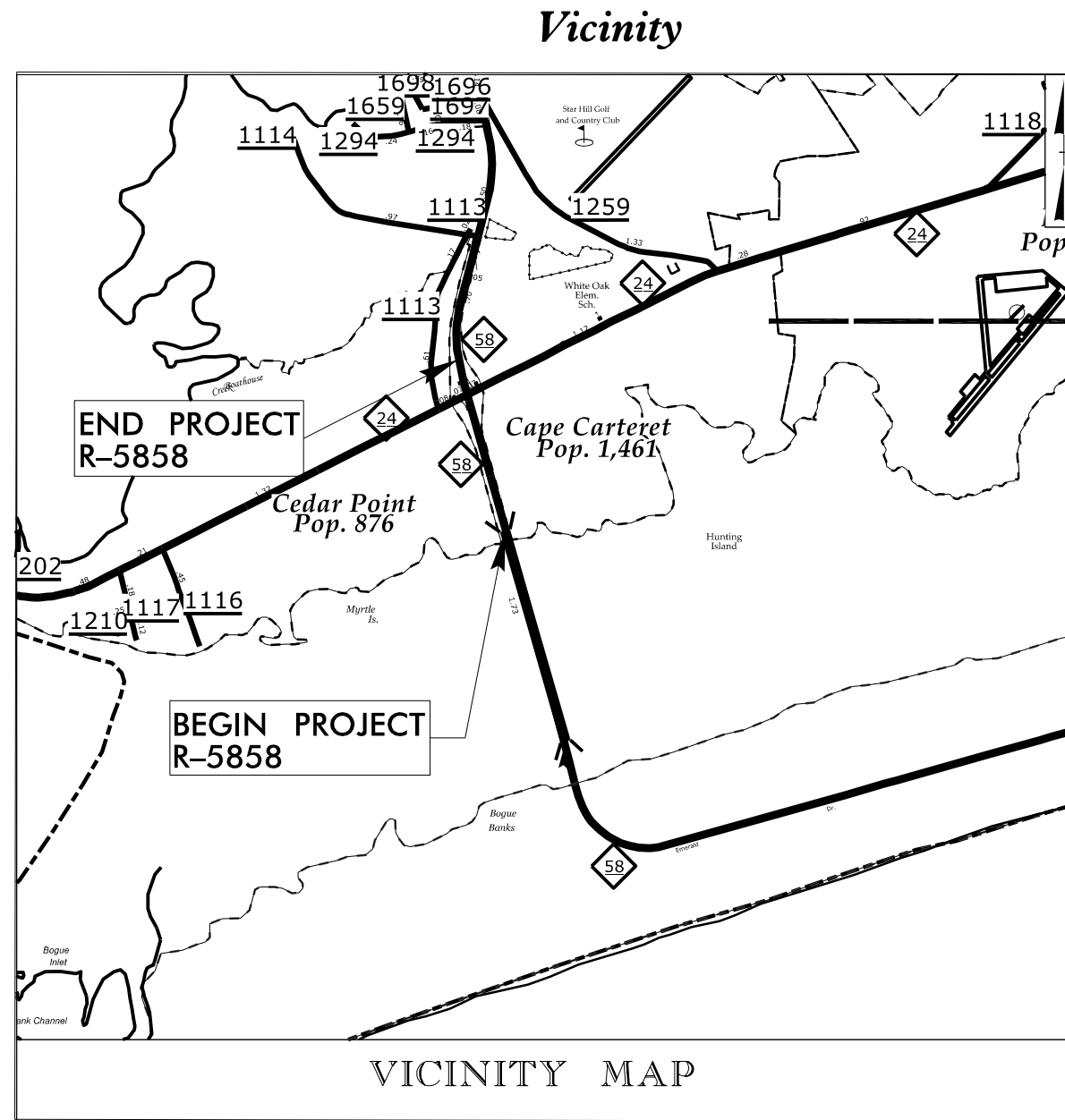
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

Project No. R-5858	Sheet No. Sig. 1.0
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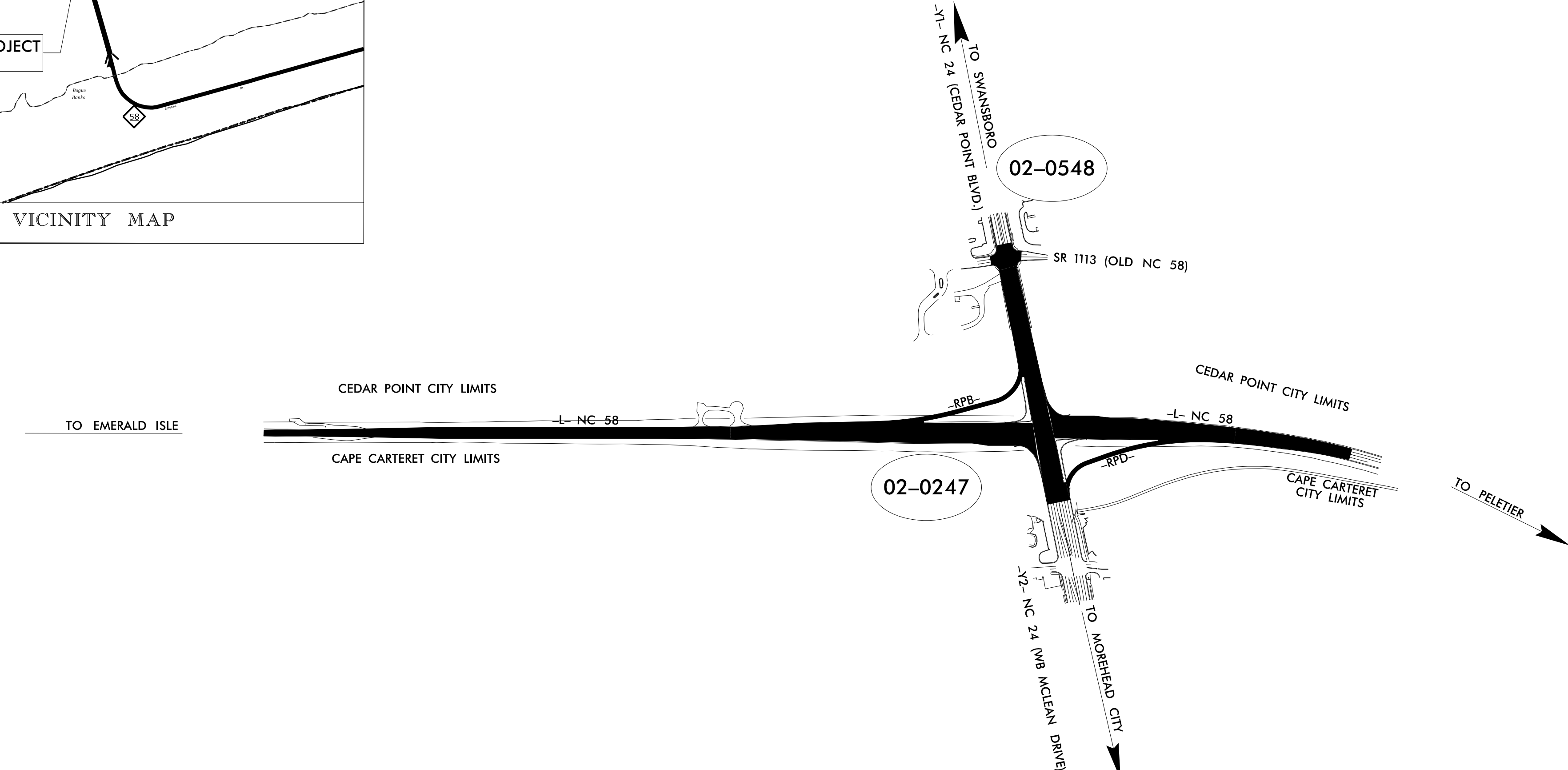
CARTERET COUNTY

**LOCATION: NC 24 CARTERET COUNTY. AT NC 58 INTERSECTION
IN CAPE CARTERET. INTERSECTION IMPROVEMENTS**

TYPE OF WORK: TRAFFIC SIGNALS AND SIGNAL COMMUNICATIONS



VICINITY MAP



02-#### Existing/Upgraded Signal



D. Harland, PE – Signals Project Engineer
J.T. Rowe, Jr. PE – Electrical Engineer
N. Degbotse, EI – Signal Design Engineer

Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

Sheet #	Reference #	Location/Description
Sig. 1.0	-	Title Sheet
Sig. 2.0-Sig. 3.6	02-0247	NC 24 (W.B Mclean Drive) at NC 58
Sig. 4.0-Sig. 4.2	02-0548	NC 24 (Cedar Point Boulevard)
MIA-M9	-	NCDOT 2024 Metal Pole Standard Drawing Sheets
SCP1-SCP2	-	Pre-Let Signal Communication Plans
SCP3-SCP6	-	Post-Let Signal Communication Plans

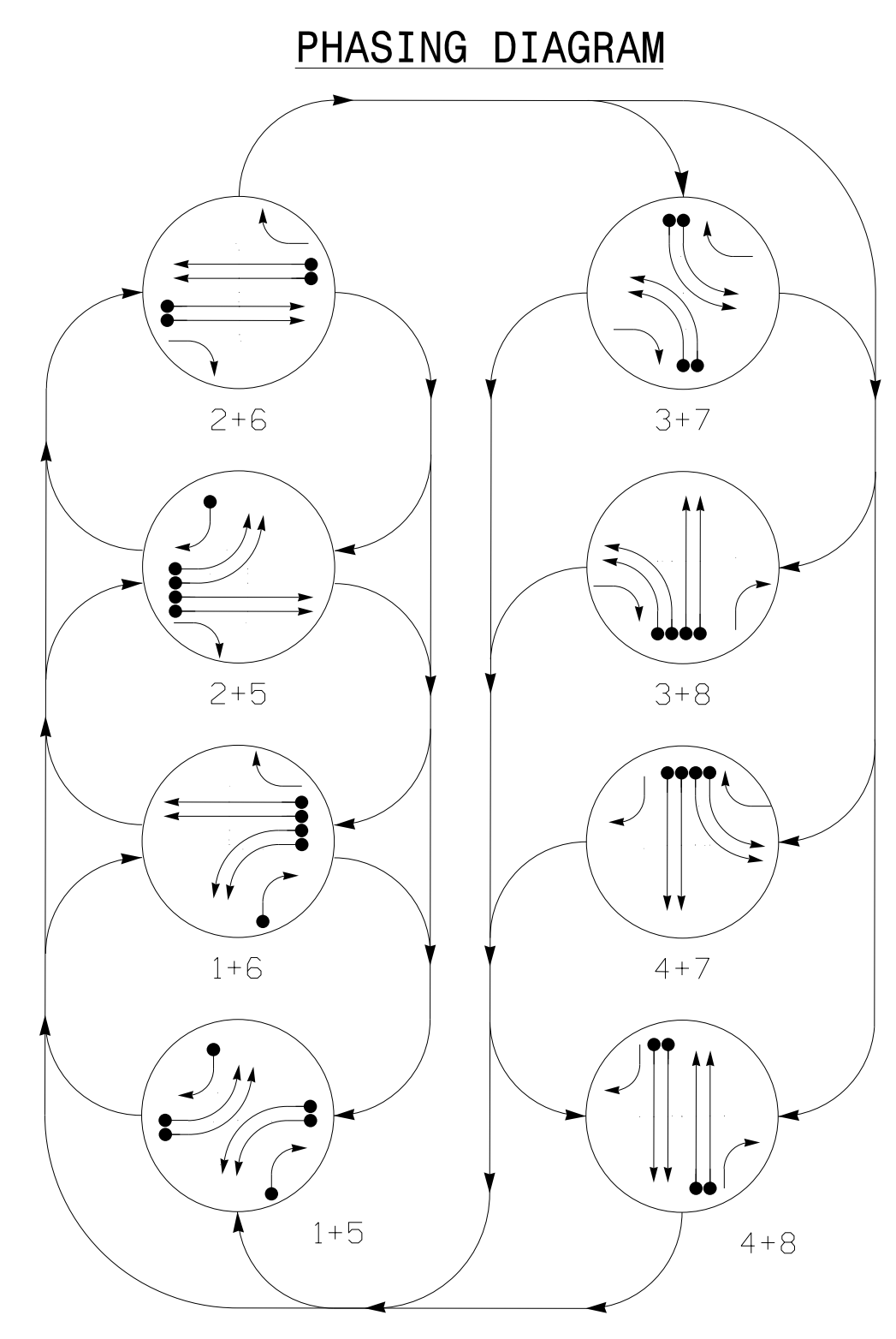
INTELLIGENT TRANSPORTATION AND SIGNALS UNIT
Contacts:
Zachary M. Little, P.E – Eastern Region Signals Engineer
Keith M. Mims, P.E – State Signal Equipment Engineer
Gregg Green – Signal Communications Project Engineer
Heidi Berggren, EI – Signal Communications Design Engineer

Prepared in the Office of:
DIVISION OF HIGHWAYS
TRANSPORTATION MOBILITY AND SAFETY
DIVISION

750 N. Greenfield Parkway, Garner, NC 27529

4/6/2026 5:18:58 PM tsh.dgn

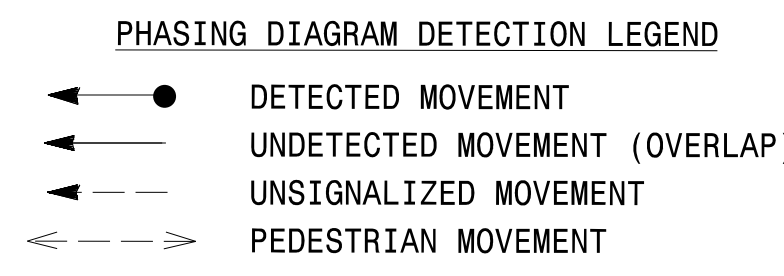
8 Phase Fully Actuated Signal System D02-02_Cape Carteret



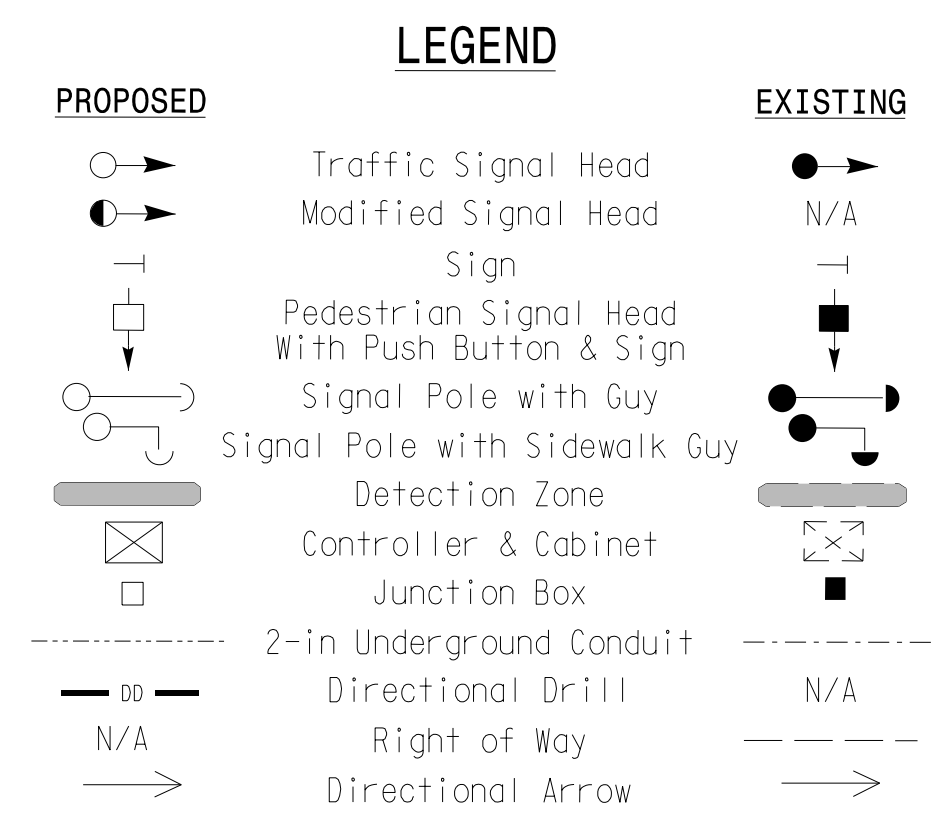
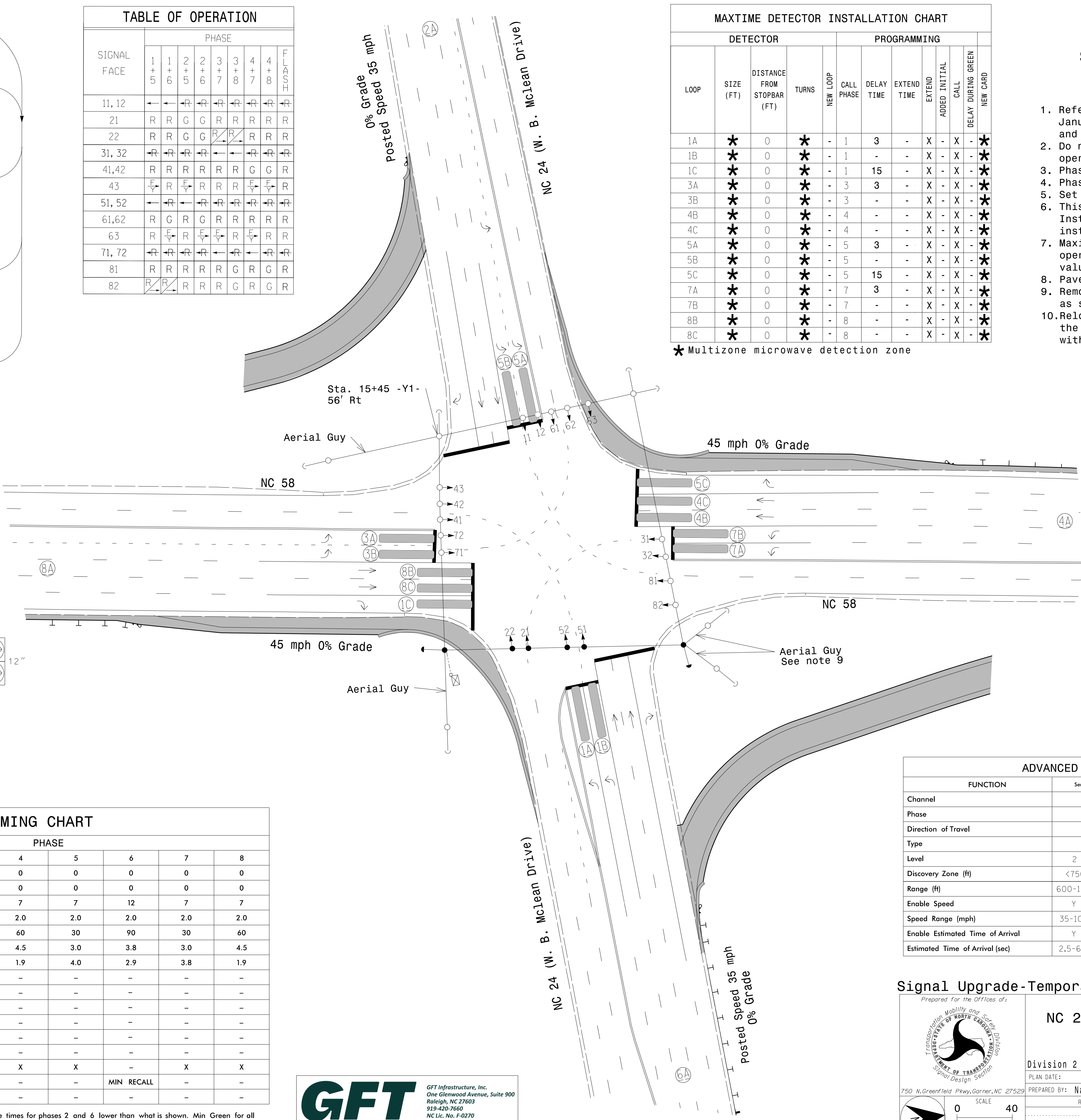
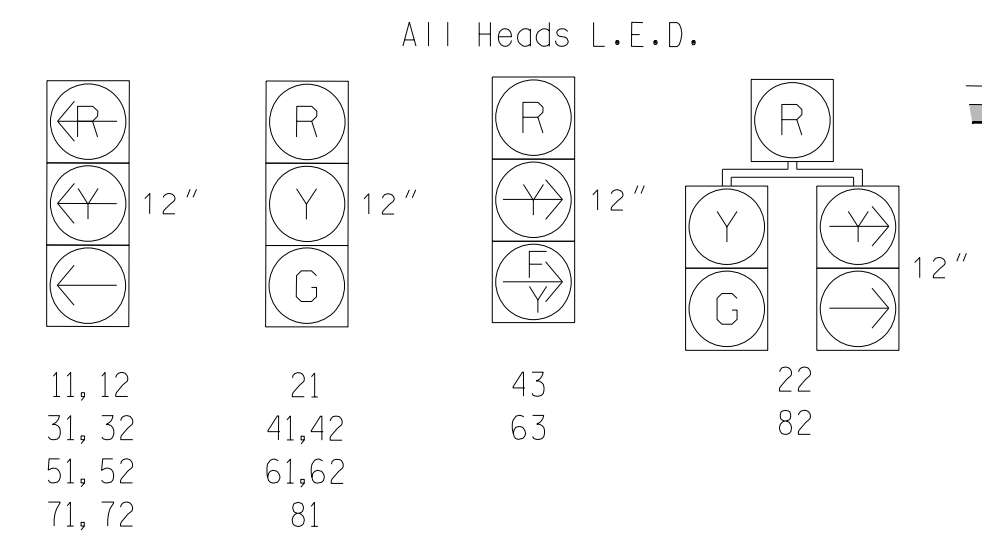
SIGNAL FACE	PHASE							
	1+5	1+6	2+5	2+6	3+7	3+8	4+7	4+8
11, 12	←	←	→	→	←	←	→	→
21	R	R	G	G	R	R	R	R
22	R	R	G	G	R	R	R	R
31, 32	←	←	→	→	←	←	→	→
41, 42	R	R	R	R	R	R	G	G
43	←	←	→	→	←	←	→	→
51, 52	←	←	→	→	←	←	→	→
61, 62	R	G	R	G	R	R	R	R
63	R	←	R	←	R	←	R	←
71, 72	←	←	→	→	←	←	→	→
81	R	R	R	R	R	G	R	G
82	R	R	R	R	R	G	R	G

LOOP	DETECTOR			PROGRAMMING						
	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND ADDED INITIAL	CALL DURING GREEN	NEW CARD
1A	*	0	*	-	1	3	-	X	-	X
1B	*	0	*	-	1	-	-	X	-	X
1C	*	0	*	-	1	15	-	X	-	X
3A	*	0	*	-	3	3	-	X	-	X
3B	*	0	*	-	3	-	-	X	-	X
4B	*	0	*	-	4	-	-	X	-	X
4C	*	0	*	-	4	-	-	X	-	X
5A	*	0	*	-	5	3	-	X	-	X
5B	*	0	*	-	5	-	-	X	-	X
5C	*	0	*	-	5	15	-	X	-	X
7A	*	0	*	-	7	3	-	X	-	X
7B	*	0	*	-	7	-	-	X	-	X
8B	*	0	*	-	8	-	-	X	-	X
8C	*	0	*	-	8	-	-	X	-	X

- NOTES**
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
 - Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
 - Phase 1 and/or phase 5 may be lagged.
 - Phase 3 and/or phase 7 may be lagged.
 - Set all detector units to presence mode.
 - This intersection uses multizone-microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
 - Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
 - Pavement markings are existing.
 - Remove existing downguy and install new aerial guys as shown.
 - Relocate all existing communications equipment to the new signal cabinet and ensure remote connectivity with Division 2 Traffic.



SIGNAL FACE I.D.



FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max I *	30	90	30	60	30	90	30	60
Yellow Change	3.0	3.8	3.0	4.5	3.0	3.8	3.0	4.5
Red Clear	4.3	2.9	3.6	1.9	4.0	2.9	3.8	1.9
Added Initial *	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Advanced Walk	-	-	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-	X	X
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-

FUNCTION	Sensor 1 (2A)	Sensor 2 (3A)	Sensor 3 (4A)	Sensor 4 (8A)
Channel	1	1	1	1
Phase	2	6	4	8
Direction of Travel	EB	WB	SB	NB
Type	PRIORITY	PRIORITY	PRIORITY	PRIORITY
Level	2	QUEUE	2	QUEUE
Discovery Zone (ft)	<750	-	<750	-
Range (ft)	600-100	150-100	600-100	150-100
Enable Speed	Y	Y	Y	Y
Speed Range (mph)	35-100	1-35	35-100	1-35
Enable Estimated Time of Arrival	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5	-

Signal Upgrade-Temporary Design 1

Prepared for the Offices of:

NC 24 (W.B Mclean Drive) at NC 58

Division 2 Carteret County Cape Carteret

PLAN DATE: April 2026 REVIEWED BY: D. Hartland

PREPARED BY: Nadia Degbotse REVIEWED BY:

REVISIONS: INIT. DATE

Signed by: 4/6/2026

SECURITY: 047962

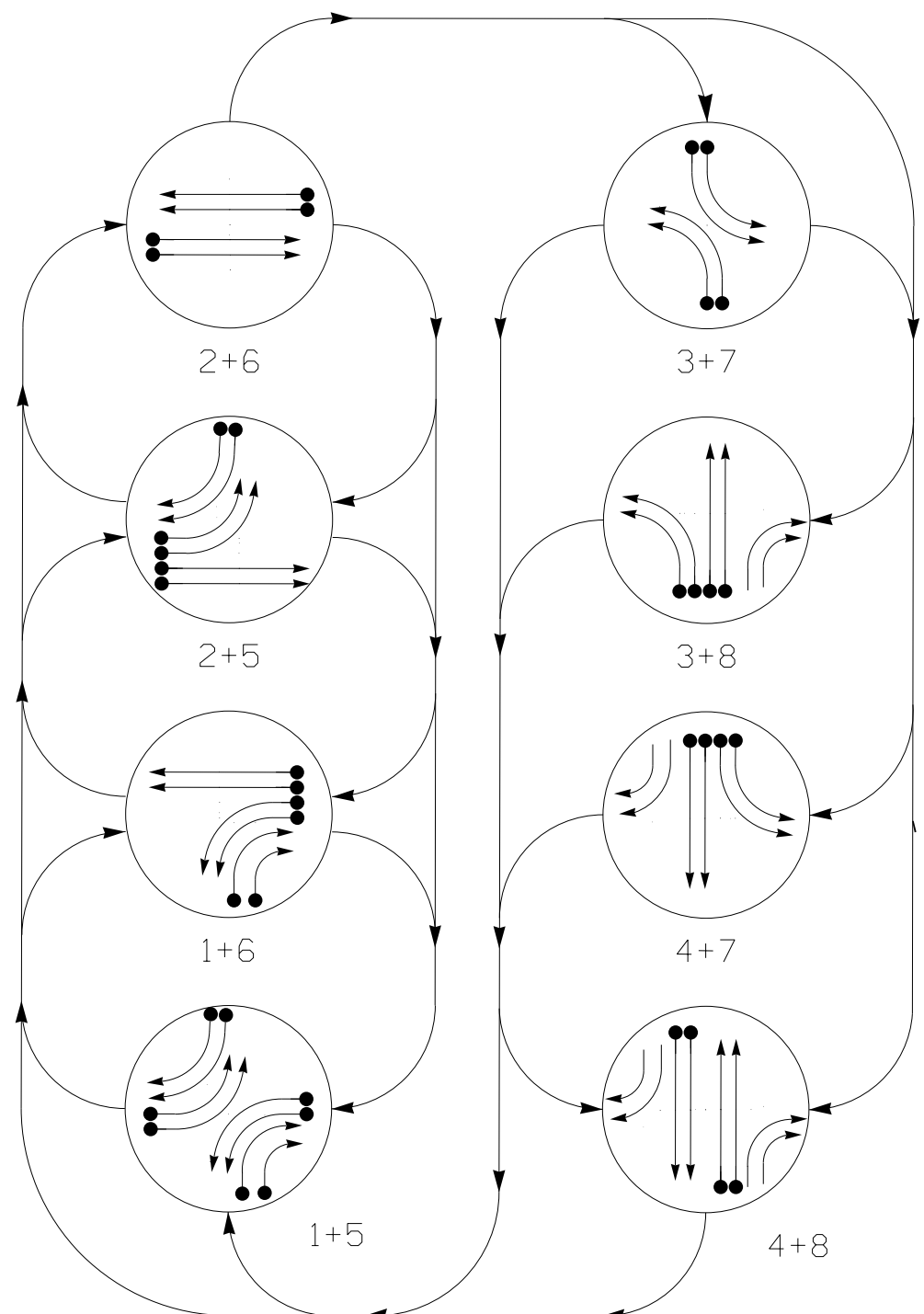
SIG. INVENTORY NO. 02-02471



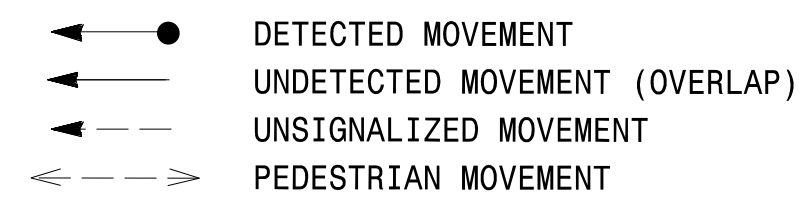
4/6/2026
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* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

PHASING DIAGRAM

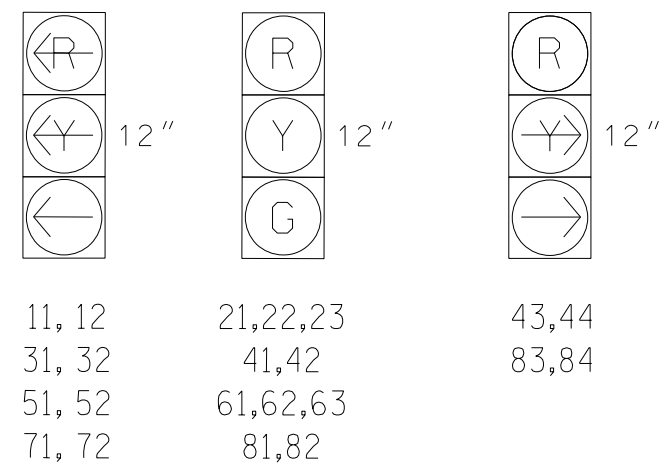


PHASING DIAGRAM DETECTION LEGEND



SIGNAL FACE I.D.

All Heads L.E.D.



SIGNAL FACE	PHASE							
	1+5	1+6	2+5	2+6	3+7	3+8	4+7	4+8
11, 12	←	←	→	→	→	→	→	→
21,22,23	R	R	G	G	R	R	R	R
31, 32	→	→	→	→	←	←	←	←
41,42	R	R	R	R	R	R	G	G
43,44	→	R	→	R	R	→	→	R
51, 52	←	←	→	→	→	→	→	→
61,62,63	R	G	R	G	R	R	R	R
71, 72	→	→	→	→	→	→	→	→
81,82	R	R	R	R	R	G	R	G
83,84	→	→	R	R	→	→	→	R

MAXTIME DETECTOR INSTALLATION CHART

LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	PROGRAMMING								
				NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD	
1A	*	0	*	-	1	3	-	X	-	X	-	*
1B	*	0	*	-	1	-	-	X	-	X	-	*
1C	*	0	*	-	1	15	-	X	-	X	-	*
1D	*	0	*	-	1	15	-	X	-	X	-	*
3A	*	0	*	-	3	3	-	X	-	X	-	*
3B	*	0	*	-	3	-	-	X	-	X	-	*
4B	*	0	*	-	4	-	-	X	-	X	-	*
4C	*	0	*	-	4	-	-	X	-	X	-	*
5A	*	0	*	-	5	3	-	X	-	X	-	*
5B	*	0	*	-	5	-	-	X	-	X	-	*
5C	*	0	*	-	5	15	-	X	-	X	-	*
5D	*	0	*	-	5	15	-	X	-	X	-	*
7A	*	0	*	-	7	3	-	X	-	X	-	*
7B	*	0	*	-	7	-	-	X	-	X	-	*
8B	*	0	*	-	8	-	-	X	-	X	-	*
8C	*	0	*	-	8	-	-	X	-	X	-	*

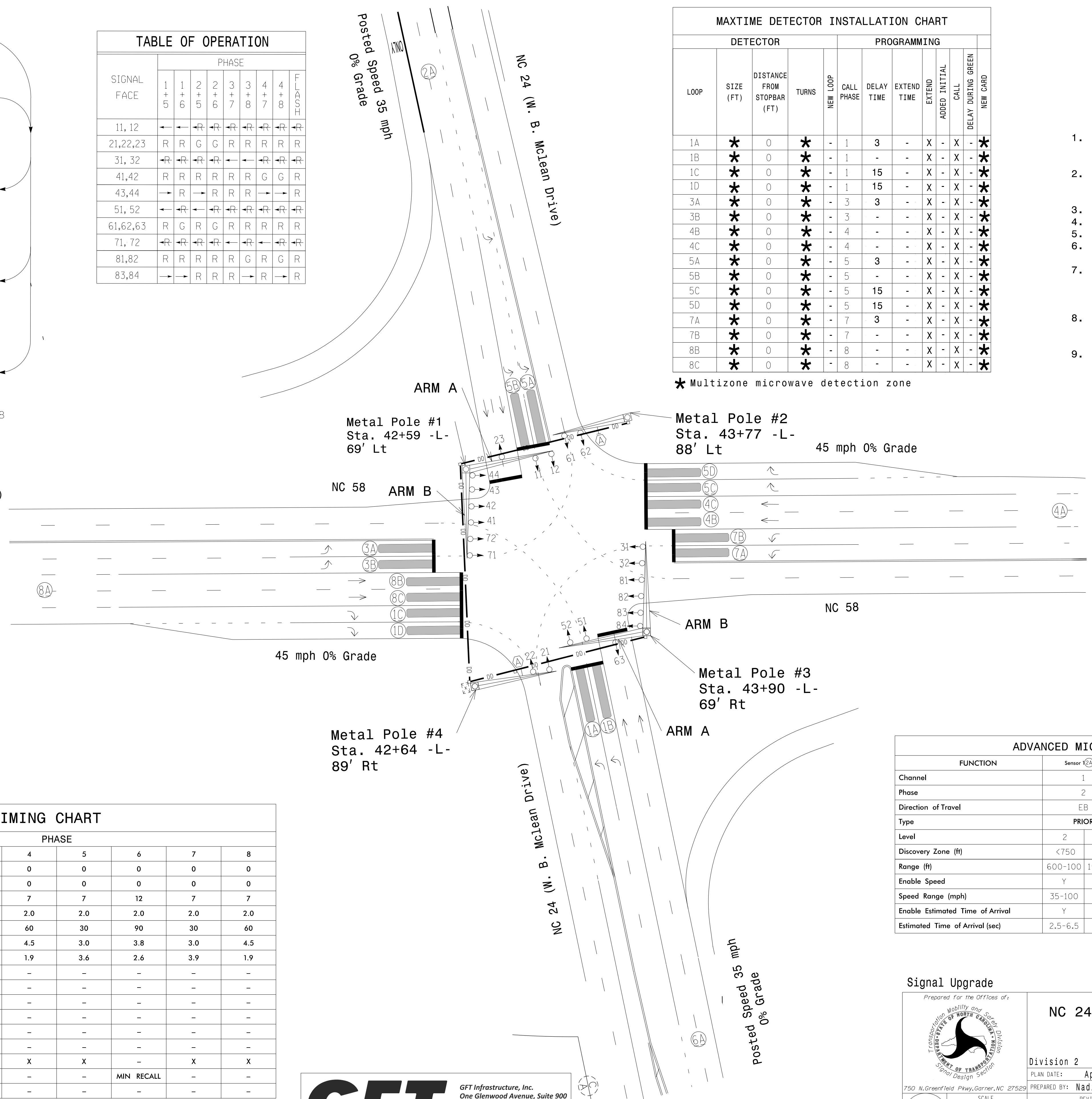
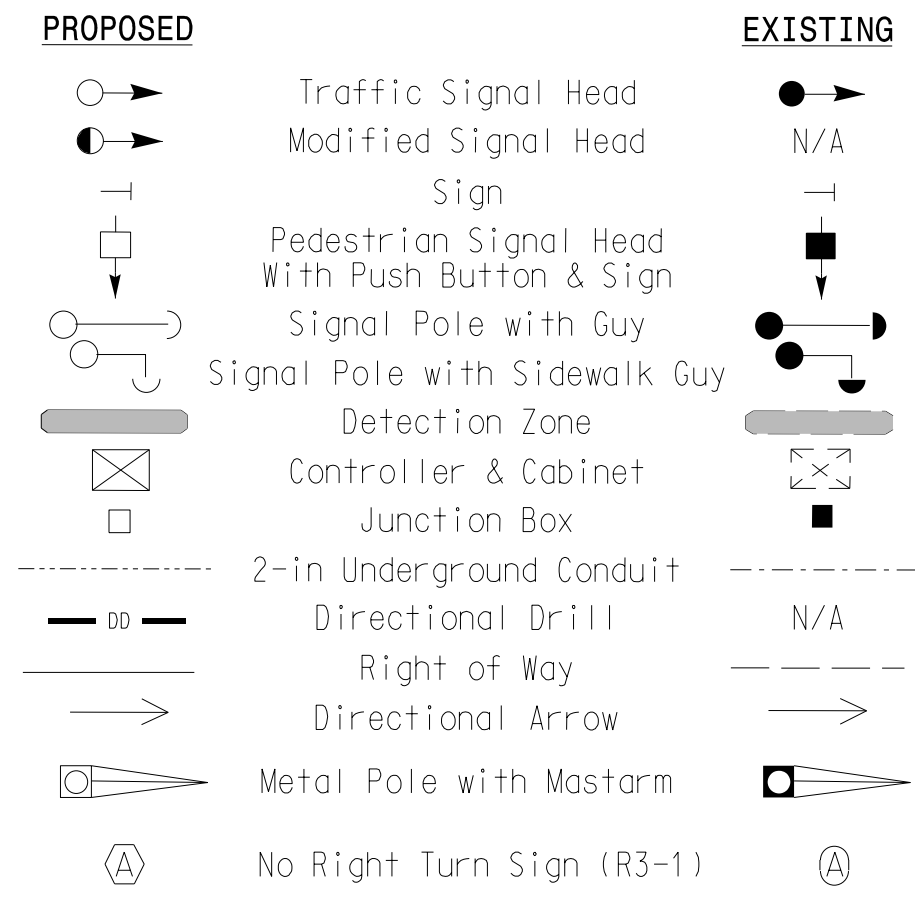
* Multizone microwave detection zone

8 Phase Fully Actuated Signal System D02-02_Cape Carteret

NOTES

1. Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
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. The cabinet should be designed to include an Auxiliary Output file for future use.
7. This intersection uses multizone-microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection.
8. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
9. Refer to Pavement Marking Plans for pavement marking details.

LEGEND



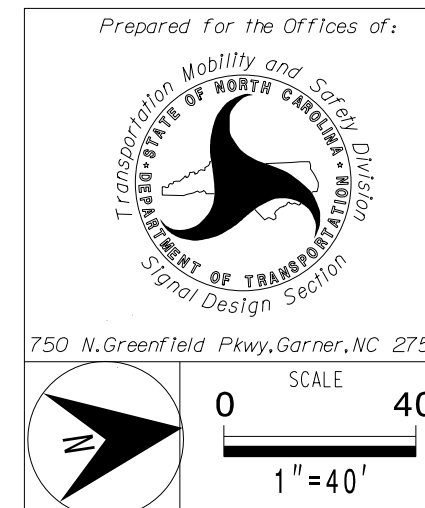
MAXTIME TIMING CHART

FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	0	0	0	0	0	0	0	0
Ped Clear	0	0	0	0	0	0	0	0
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	30	90	30	60	30	90	30	60
Yellow Change	3.0	3.8	3.0	4.5	3.0	3.8	3.0	4.5
Red Clear	3.8	2.6	3.8	1.9	3.6	2.6	3.9	1.9
Added Initial *	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Advanced Walk	-	-	-	-	-	-	-	-
Non Lock Detector	X	-	X	X	X	-	X	X
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	-	-	-	-	-

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

FUNCTION	ADVANCED MICROWAVE EXTENDED RANGE DETECTION							
	Sensor 1 (2A)		Sensor 2 (2A)		Sensor 3 (2A)		Sensor 4 (2A)	
Channel	1	1	1	1	1	1	1	1
Phase	2	6	4	8	2	6	4	8
Direction of Travel	EB	WB	SB	NB	EB	WB	SB	NB
Type	PRIORITY	PRIORITY	PRIORITY	PRIORITY	PRIORITY	PRIORITY	PRIORITY	PRIORITY
Level	2	QUEUE	2	QUEUE	2	QUEUE	2	QUEUE
Discovery Zone (ft)	<750	-	<750	-	<750	-	<750	-
Range (ft)	600-100	150-100	600-100	150-100	600-100	150-100	600-100	150-100
Enable Speed	Y	Y	Y	Y	Y	Y	Y	Y
Speed Range (mph)	35-100	1-35	35-100	1-35	35-100	1-35	35-100	1-35
Enable Estimated Time of Arrival	Y	N	Y	N	Y	N	Y	N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5	-	2.5-6.5	-	2.5-6.5	-

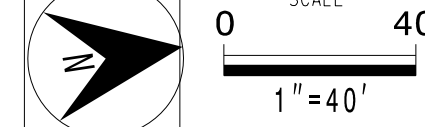
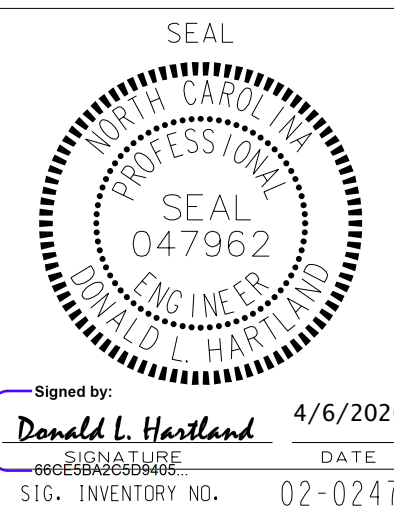
Signal Upgrade



NC 24 (W.B Mclean Drive) at NC 58

Division 2 Carteret County Cape Carteret
 PLAN DATE: April 2026 REVIEWED BY: D. Hartland
 PREPARED BY: Nadia Degbotse REVIEWED BY:

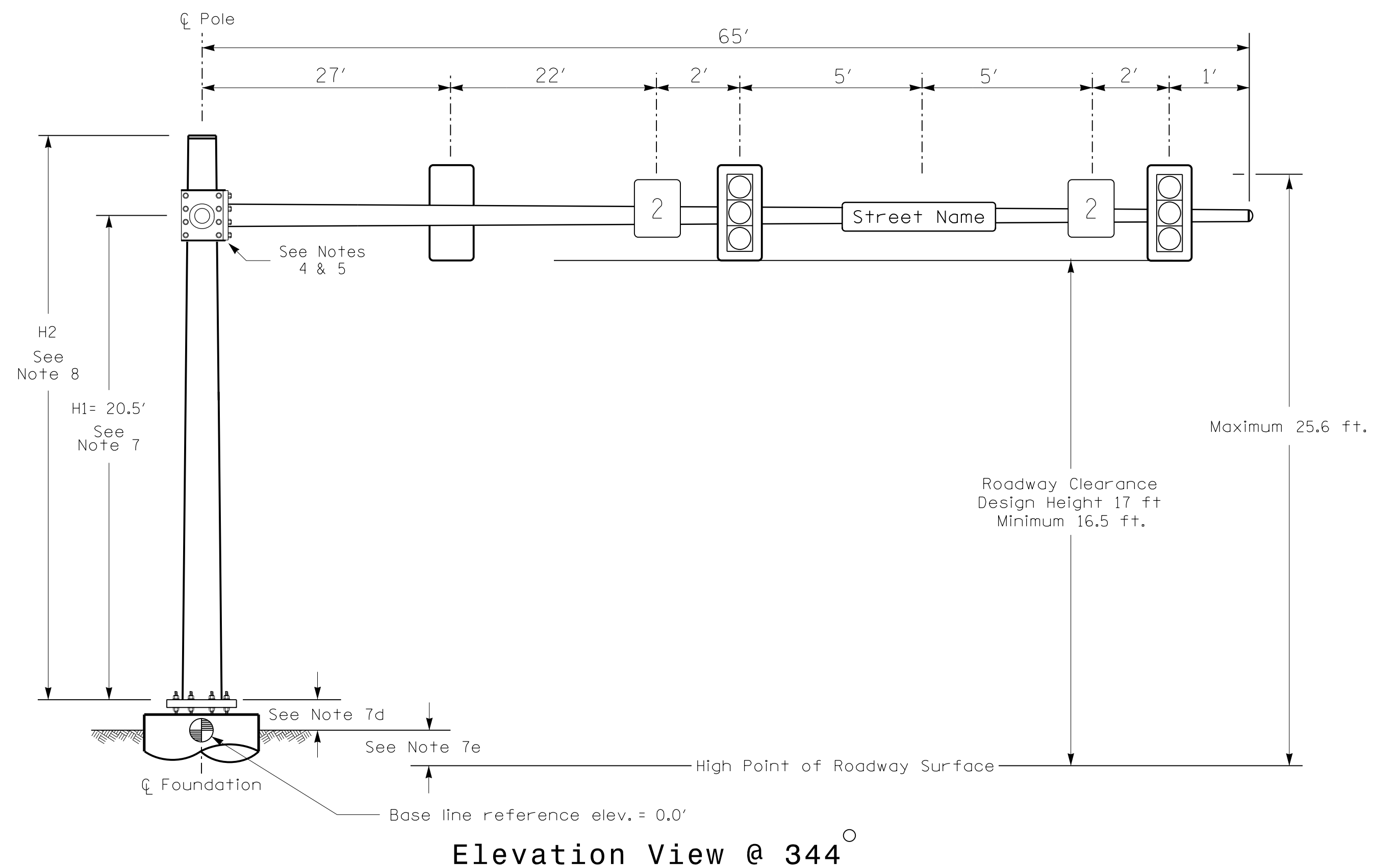
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Signed by: Donald L. Hartland DATE: 4/6/2026
 Signature: [Signature] DATE: [Blank]
 Sig. Inventory No. 02-0247



Design Loading for METAL POLE NO. 1, MAST ARM A

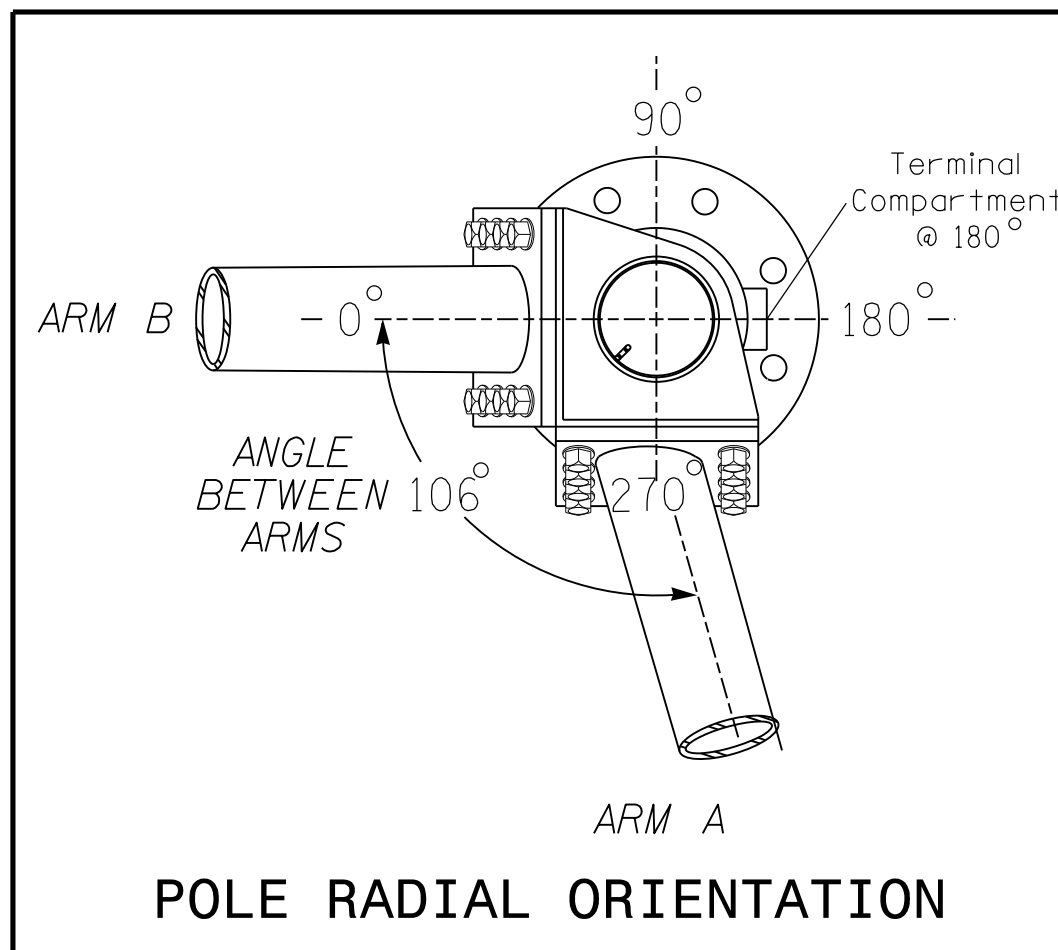


SPECIAL NOTE

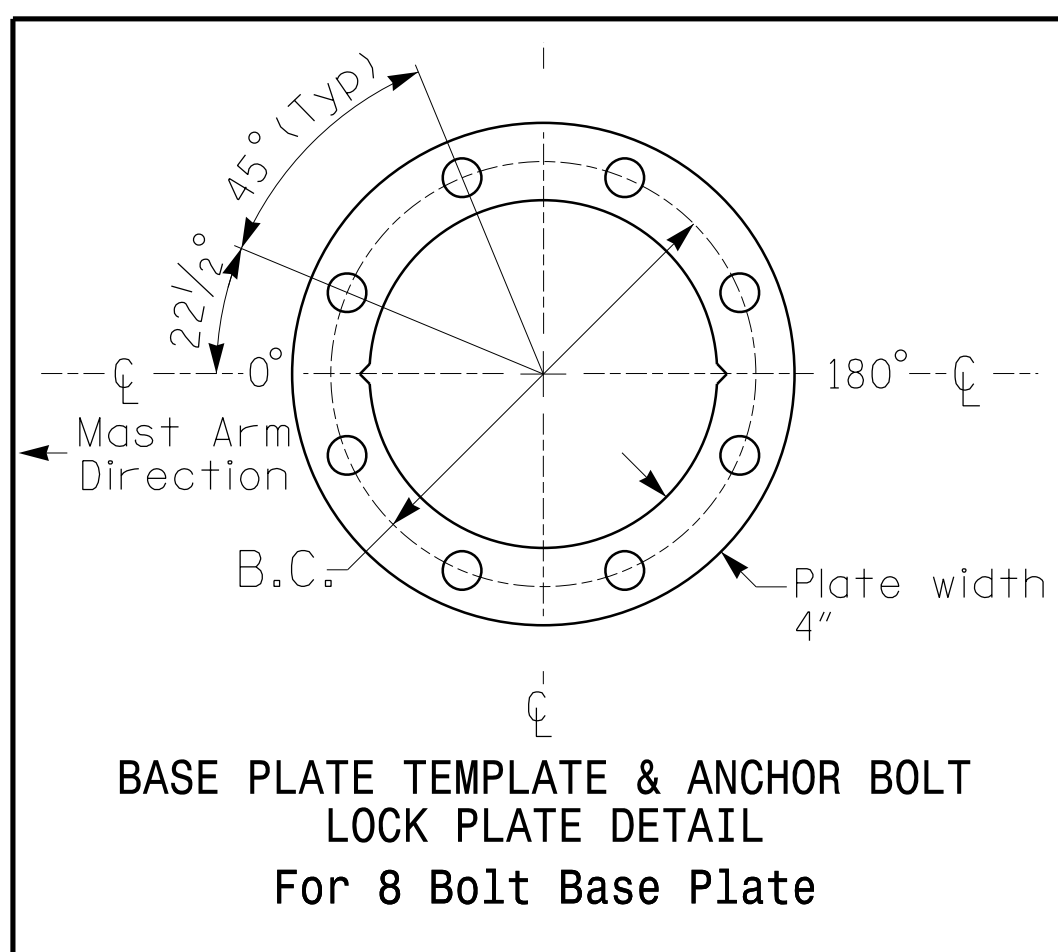
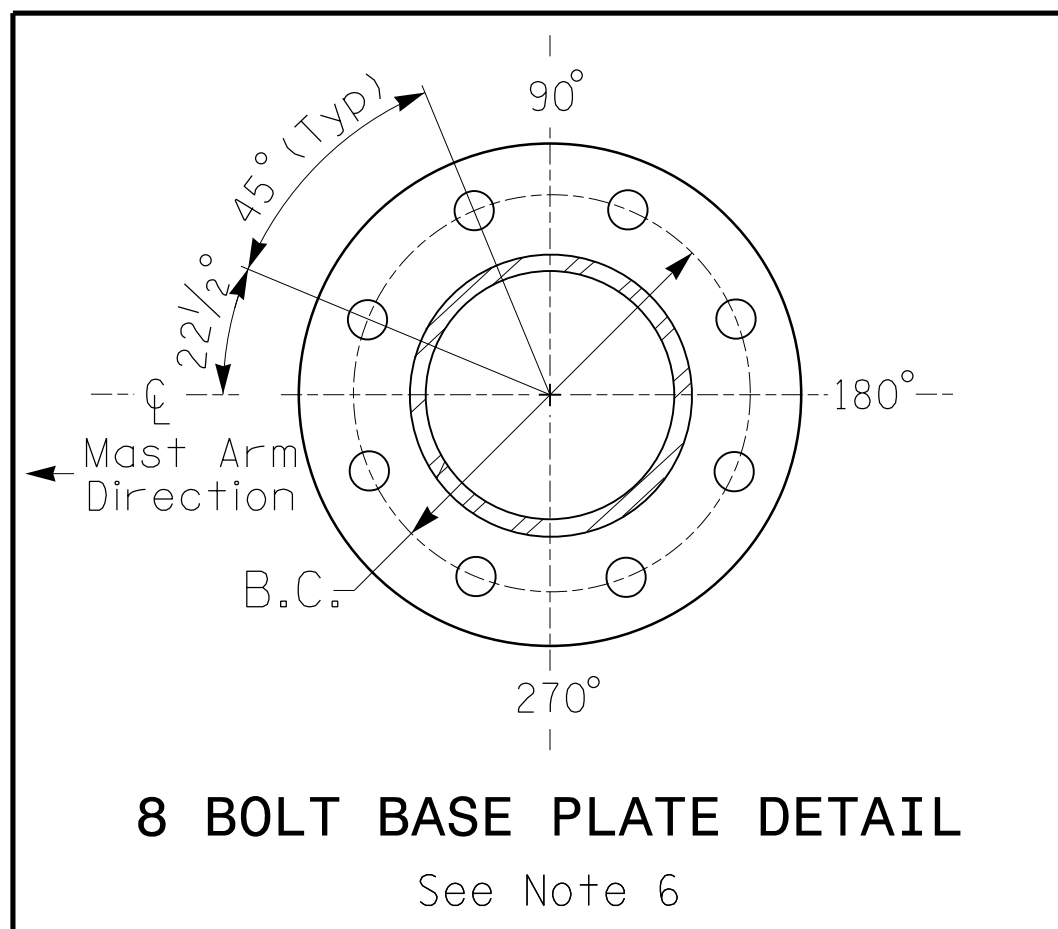
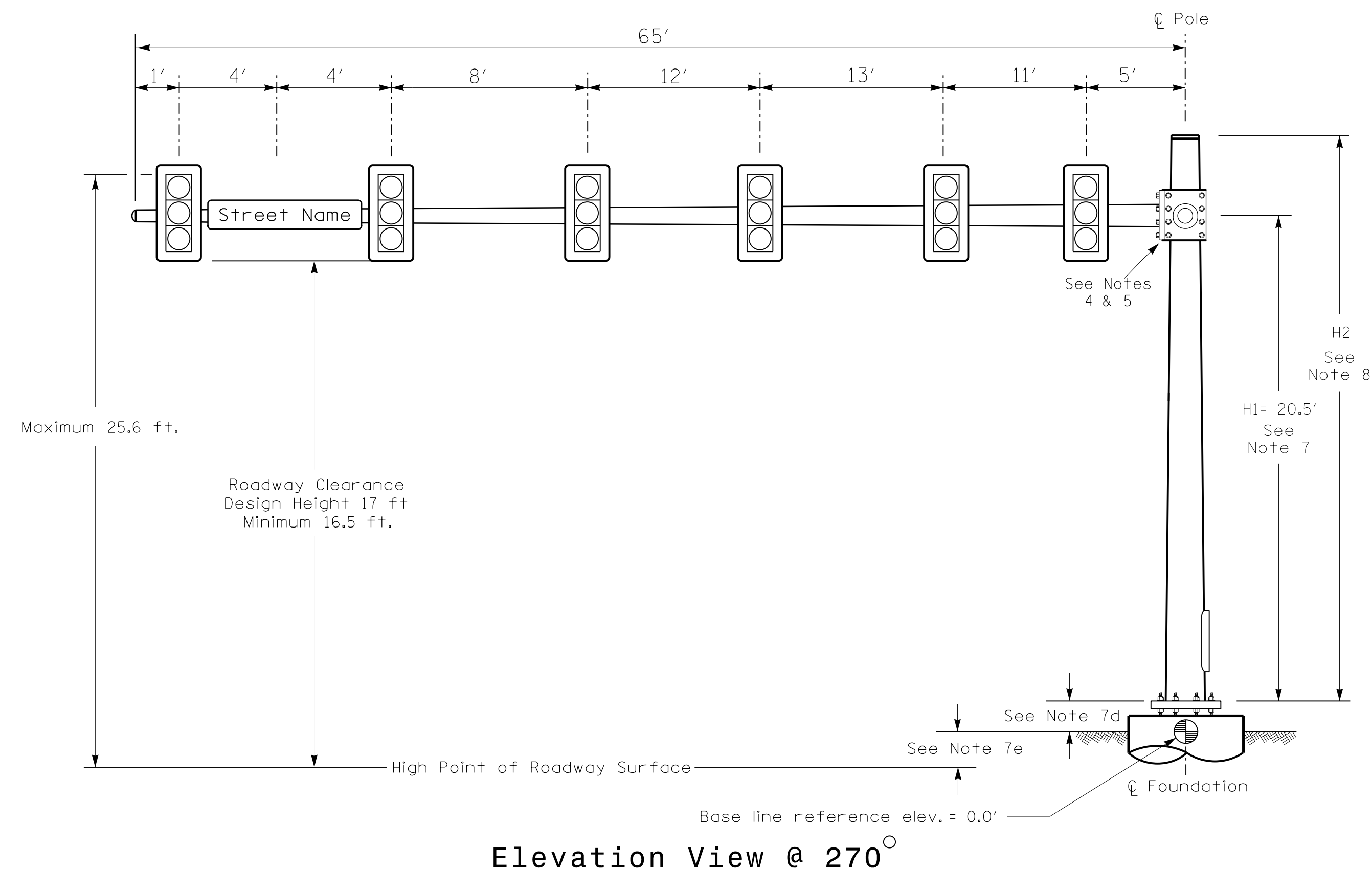
The contractor is responsible for verifying that the mast arm attachment height (HI) will provide the "Design Height" clearance from the roadway before submitting final shop drawings for approval. Verify elevation data below which was obtained by field measurement or from available project survey data.

Elevation Data for Mast Arm Attachment (HI)

Elevation Differences for:	ARM A	ARM B
Baseline reference point at L	0.0 ft.	0.0 ft.
Elevation difference at High point of roadway surface	+0.84 ft.	+1.22 ft.
Elevation difference at Edge of travelway or face of curb	+0.67 ft.	+0.75 ft.



Design Loading for METAL POLE NO. 1, MAST ARM B



MAST ARM LOADING SCHEDULE

LOADING SYMBOL	DESCRIPTION	AREA	SIZE	WEIGHT
[Signal Head Symbol]	RIGID MOUNTED SIGNAL HEAD 12"-4 SECTION-WITH BACKPLATE	11.5 S.F.	25.5" W X 66.0" L	74 LBS
[Signal Head Symbol]	RIGID MOUNTED SIGNAL HEAD 12"-3 SECTION-WITH BACKPLATE	9.3 S.F.	25.5" W X 52.5" L	60 LBS
[Sign Symbol]	SIGN RIGID MOUNTED	7.5 S.F.	30.0" W X 36.0" L	14 LBS
[Street Name Sign Symbol]	STREET NAME SIGN RIGID MOUNTED	16.0 S.F.	24.0" W X 96.0" L	36 LBS

NOTES

DESIGN REFERENCE MATERIAL

- Design the traffic signal structure and foundation in accordance with:
 - The 1st Edition 2015 AASHTO LRFD "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, including all of the latest interim revisions.
 - The 2024 NCDOT "Standard Specifications for Roads and Structures." The latest addenda to the specifications can be found in the traffic signal project special provisions.
 - The 2024 NCDOT Roadway Standard Drawings.
 - The traffic signal project plans and special provisions.
 - The NCDOT "Metal Pole Standards" located at the following NCDOT website: <https://connect.ncdot.gov/resources/safety/Pages/TSMO-Design-Resources.aspx>

DESIGN REQUIREMENTS

- Design the traffic signal structure using the loading conditions shown in the elevation views. These are anticipated worst case "design loads" and may not represent the actual loads that will be applied at the time of the installation. The contractor should refer to the traffic signal plans for the actual loads that will be applied at the time of the installation.
- Design all signal supports using force ratios that do not exceed 0.9.
- The camber design for the mast arm deflection should provide an appearance of a low pitched arch where the tip or the free end of the mast arm does not deflect below horizontal when fully loaded.
- A clamp-type bolted mast arm-to-pole connection may be used instead of the welded ring stiffened box connection shown as long as the connection meets all of the design requirements.
- Design base plate with 8 anchor bolt holes. Provide 2 inch x 60 inch anchor bolts.
- The mast arm attachment height (HI) shown is based on the following design assumptions:
 - Mast arm slope and deflection are not considered in determining the arm attachment height as they are assumed to offset each other.
 - Signal heads are rigidly mounted and vertically centered on the mast arm.
 - The roadway clearance height for design is as shown in the elevation views.
 - The top of the pole base plate is 0.75 feet above the ground elevation.
 - Refer to the Elevation Data Chart for the elevation differences between the proposed foundation ground level and the high point of the roadway.
- The pole manufacturer will determine the total height (H2) of each pole using the greater of the following:
 - Mast arm attachment height (HI) plus 2 feet, or
 - HI plus 1/2 of the total height of the mast arm attachment assembly plus 1 foot.
- If pole location adjustments are required, the contractor must gain approval from the Engineer as this may affect the mast arm lengths and arm attachment heights. The contractor may contact the Signal Design Section Senior Structural Engineer for assistance at (919) 814-5000.
- The contractor is responsible for verifying that the mast arm length shown will allow proper positioning of the signal heads over the roadway.
- The contractor is responsible for providing soil penetration testing data (SPT) to the pole manufacturer so site specific foundations can be designed.

NCDOT Wind Zone 1 (150mph)

	Prepared in the Offices of: NC 24 (W.B Mclean Drive) at NC 58		
	Division 2 Carteret County Cape Carteret PLAN DATE: April 2026 PREPARED BY: Nadia Degbotse SCALE: 0 N/A N/A	REVIEWED BY: D. Hartland REVIEWED BY: [Signature] DATE: 4/6/2026 DATE: [Signature]	

3 Phase Fully Actuated/EV Preempt Signal System D02-02_Cape Carteret

NOTES

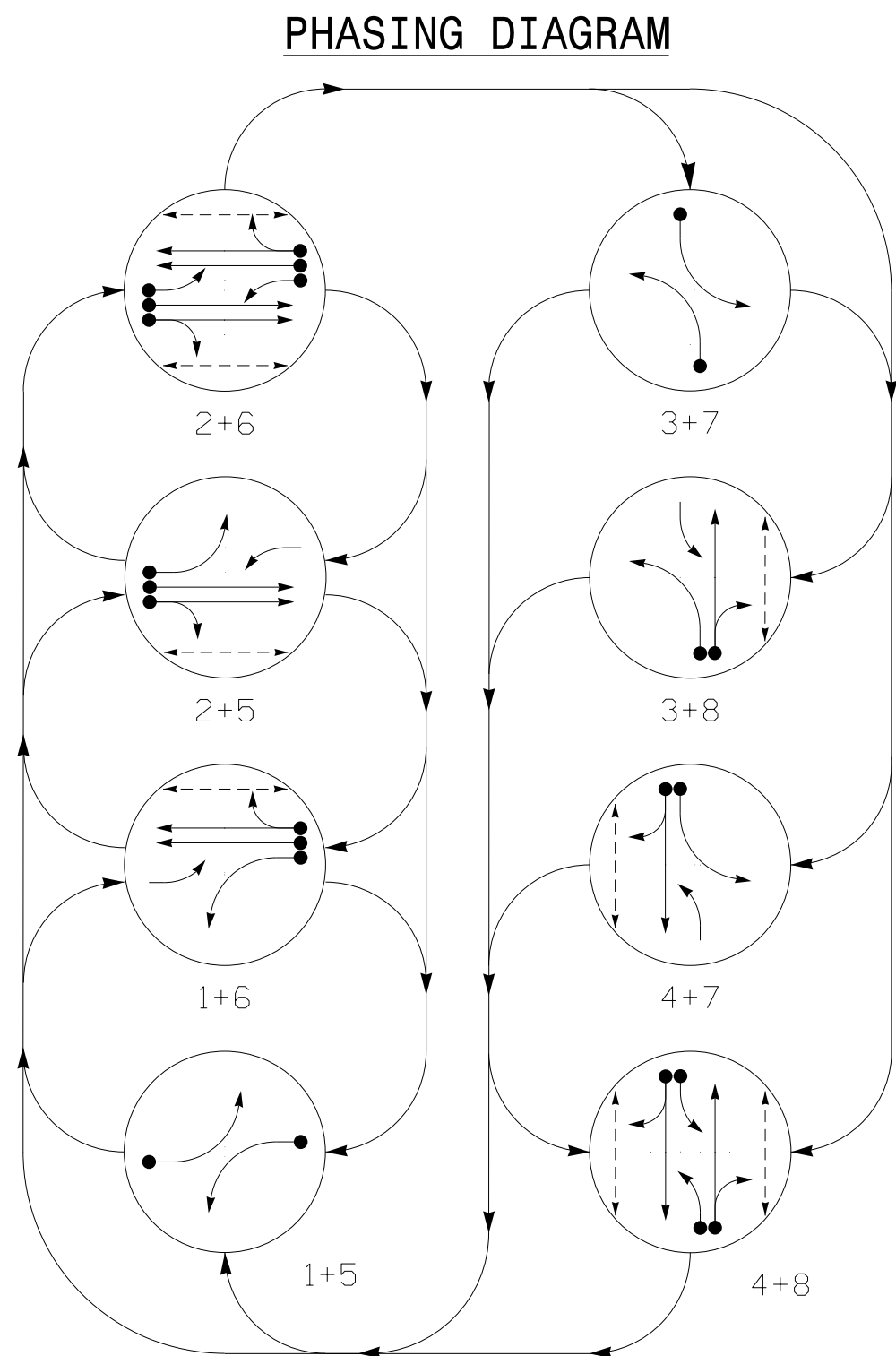
- Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.
- Do not program signal for late night flashing operation unless otherwise directed by the Engineer.
- Phase 1 and/or 5 may be lagged.
- Phase 3 and/or 7 may be lagged.
- Set all detector units to presence mode.
- Locate new cabinet so as not to obstruct sight distance of vehicles turning right on red.
- This intersection features an optical preemption system.
- This intersection uses multizone-microwave detection. Install detectors according to the manufacturer's instructions to achieve the desired detection. Existing detectors will need to be re-aimed to pick up any new zone locations.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.
- See pavement marking plans for stop bar and crosswalk locations.

MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR				PROGRAMMING							
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	*	0	*	-	1	15	-	X	-	X	-
3A	*	0	*	-	3	15	-	X	-	X	-
4A	*	0	*	-	4	10	-	X	-	X	-
5A	*	0	*	-	5	15	-	X	-	X	-
7A	*	0	*	-	7	15	-	X	-	X	-
8A	*	0	*	-	8	10	-	X	-	X	-

* Multizone microwave detection zone.

SIGNAL FACE	PHASE									
	1+5	1+6	2+5	2+6	3+7	3+8	4+7	4+8	PRE 3	F T O D L
11	←	←	←	←	←	←	←	←	←	←
21,22	R	R	G	G	R	R	R	R	R	R
31	←	←	←	←	←	←	←	←	←	←
41,42	R	R	R	R	R	R	R	G	G	R
51	←	←	←	←	←	←	←	←	←	←
61,62	R	G	R	G	R	R	R	R	R	R
71	←	←	←	←	←	←	←	←	←	←
81,82	R	R	R	R	R	G	R	G	R	R
P21,P22	DW	DW	W	W	DW	DW	DW	DW	DW	DRK
P41,P42	DW	DW	DW	DW	DW	DW	W	W	DW	DRK
P61,P62	DW	W	DW	W	DW	DW	DW	DW	DW	DRK
P81,P82	DW	DW	DW	DW	W	DW	W	DW	DRK	

W - Walk
DW - Don't Walk
DRK - Dark

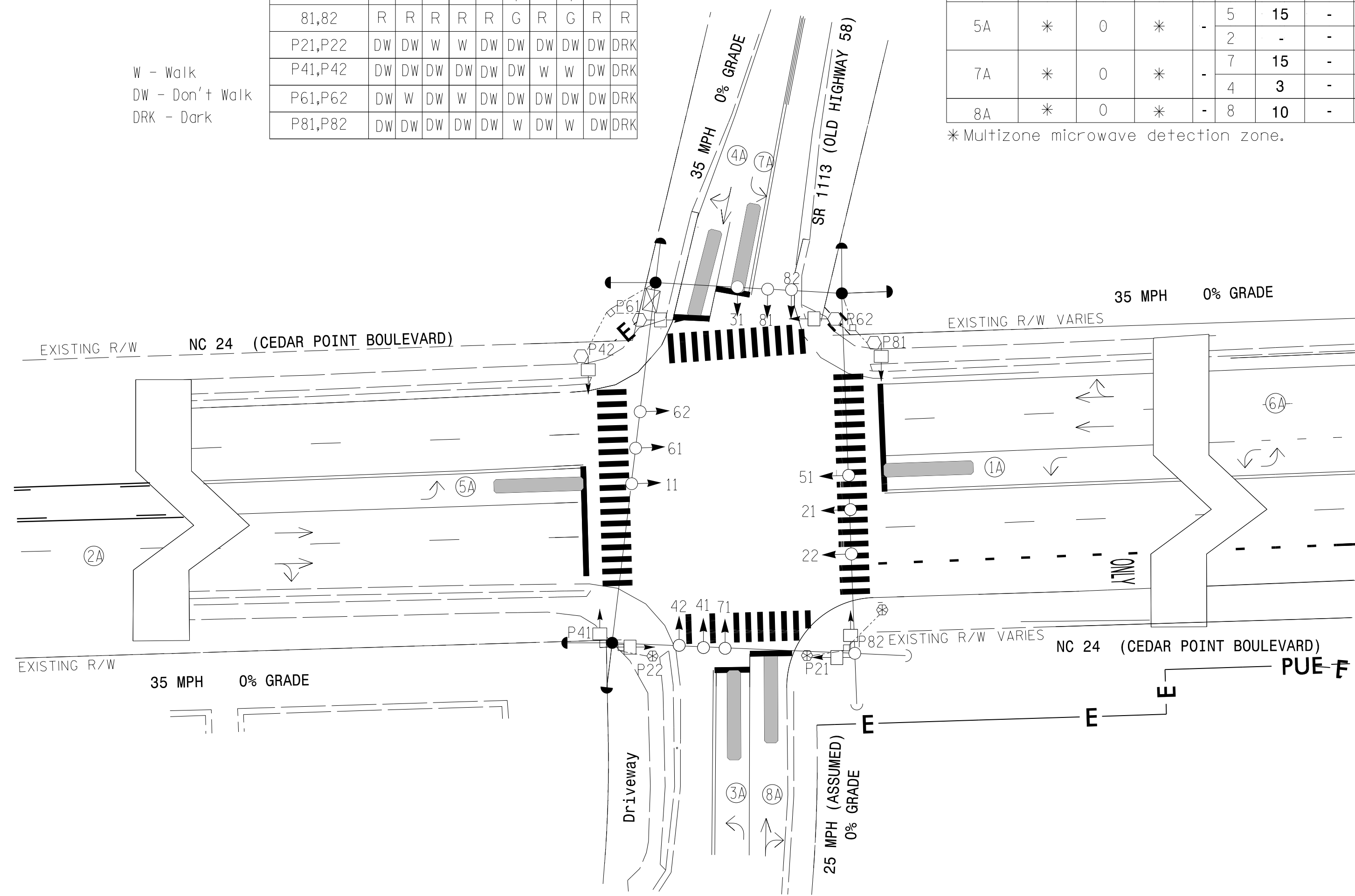
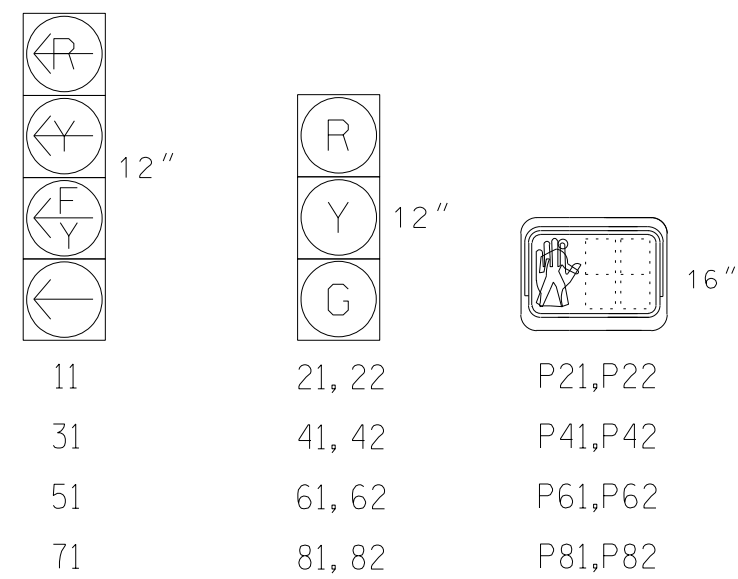


PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

All Heads L.E.D.



FEATURE	PHASE							
	1	2	3	4	5	6	7	8
Walk *	-	14	-	13	-	14	-	13
Ped Clear	-	12	-	18	-	12	-	20
Min Green *	7	12	7	7	7	12	7	7
Passage *	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Max 1 *	15	90	15	15	15	90	15	15
Yellow Change	3.0	3.8	3.0	3.8	3.0	3.8	3.0	3.8
Red Clear	2.8	2.0	2.8	2.8	2.4	2.0	2.8	2.8
Added Initial *	-	-	-	-	-	-	-	-
Maximum Initial *	-	-	-	-	-	-	-	-
Time Before Reduction *	-	-	-	-	-	-	-	-
Time To Reduce *	-	-	-	-	-	-	-	-
Minimum Gap	-	-	-	-	-	-	-	-
Advanced Walk	-	7	-	6	-	7	-	6
Non Lock Detector	X	-	X	X	X	-	X	X
Vehicle Recall	-	MIN RECALL	-	-	-	MIN RECALL	-	-
Dual Entry	-	-	-	X	-	-	-	X

* These values may be field adjusted. Do not adjust Min Green and Passage times for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

MAXTIME EV PREEMPT	
FUNCTION	PRE 3
Type	EMERG VEH
Exit Phases	2,6
Delay	0
Call Extend Time	2.0
Max Presence	120
Enter Min Green	1
Enter Walk	1
Enter Ped Clear	25.5 *
Enter Yellow Change	25.5 *
Enter Red Clear	25.5 *
Track Green	0
Track Yellow Change	25.5 *
Track Red Clear	25.5 *
Dwell Green	7
Exit Min Green	25.5 *
Exit Yellow Change	25.5 *
Exit Red Clear	25.5 *
Exit Type	EXIT PHASES
Ped Clear Through Yellow	Y
Require All Red Entry	-

* Controller uses lesser of time shown and the normal time used for phase.

ADVANCED MICROWAVE EXTENDED RANGE DETECTION			
FUNCTION	Sensor 1 (2A)	Sensor 2 (6A)	
Channel	1	1	
Phase	2	6	
Direction of Travel	EB	WB	
Type	PRIORITY		PRIORITY
Level	2	QUEUE	2 QUEUE
Discovery Zone (ft)	<750	-	<750 -
Range (ft)	600-100	150-100	600-100 150-100
Enable Speed	Y	Y	Y Y
Speed Range (mph)	35-100	1-35	35-100 1-35
Enable Estimated Time of Arrival	Y	N	Y N
Estimated Time of Arrival (sec)	2.5-6.5	-	2.5-6.5 -

PROPOSED	LEGEND	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	
	Detection Zone	
	Controller & Cabinet	
	Junction Box	
	2-in Underground Conduit	
	Directional Drill	N/A
	Construction Easement	N/A
	Easement Permanent Utility	N/A
N/A	Right of Way	
N/A	Directional Arrow	
N/A	Wheelchair Ramp	
	Type I Pushbutton Post	
	Type II Signal Pedestal	

Signal Upgrade

Prepared for the Offices of:

 Department of Transportation
 State of North Carolina
 Signal Design Section

NC 24 (Cedar Point Boulevard) at SR 1113 (Old Highway 58)
 Division 2 Carteret County Cape Carteret
 PLAN DATE: April 2026 REVIEWED BY: D. Hartland
 PREPARED BY: Nadia Degbotse REVIEWED BY:
 REVISIONS INIT. DATE

SEAL

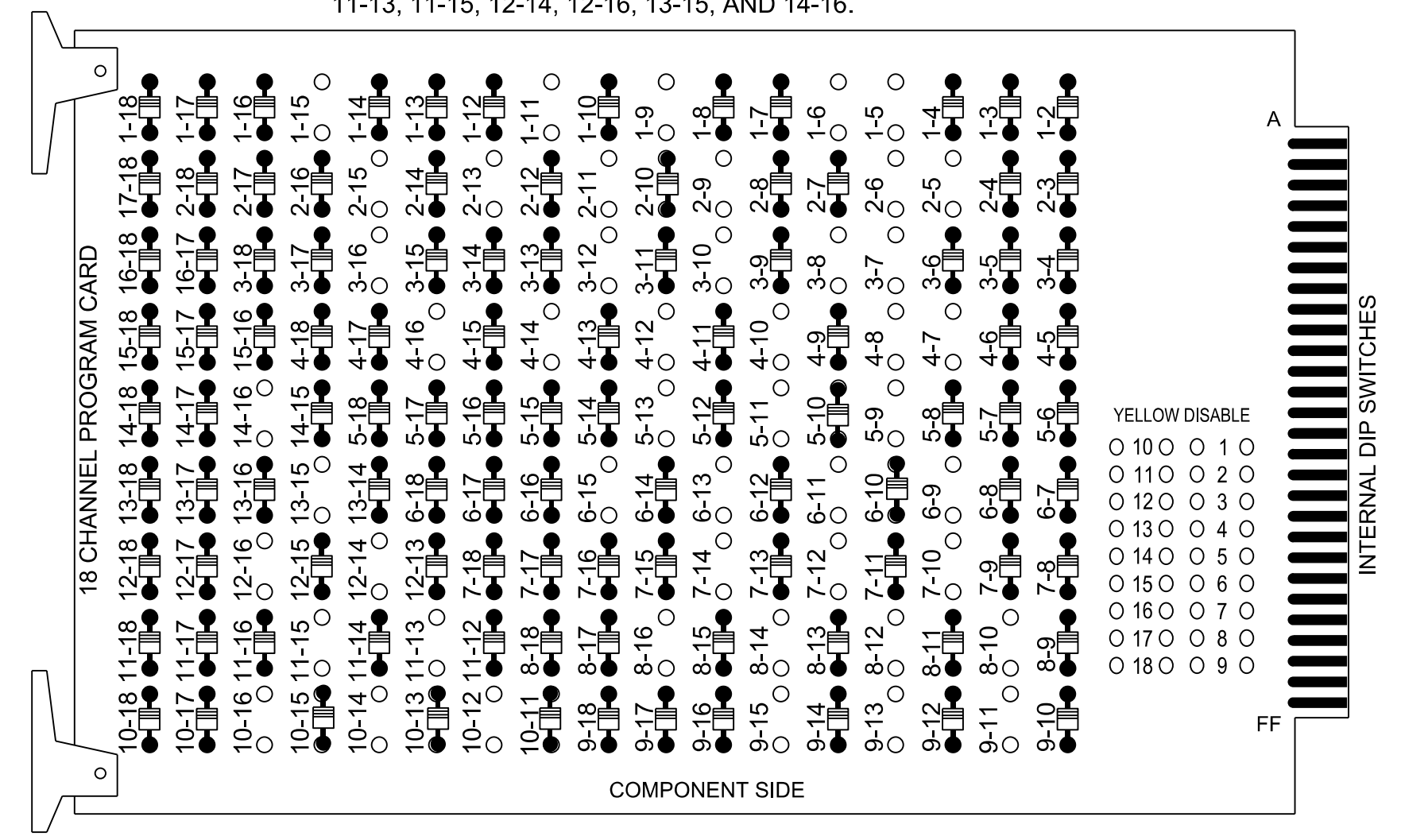
 Donald L. Hartland
 PROFESSIONAL ENGINEER
 STATE OF NORTH CAROLINA
 License No. 047962
 DATE: 4/6/2026
 SIG. INVENTORY NO. 02-0548

GFT
 GFT Infrastructure, Inc.
 One Glenwood Avenue, Suite 900
 Raleigh, NC 27603
 919-420-7660
 NC Lic. No. F-0270

750 N. Greenfield Pkwy, Garner, NC 27529
 SCALE
 0 30
 1"=30'

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)
REMOVE DIODE JUMPERS 1-5, 1-6, 1-9, 1-11, 1-15, 2-5, 2-6, 2-9, 2-11, 2-13, 2-15, 3-7, 3-8, 3-10, 3-12, 3-16, 4-7, 4-8, 4-10, 4-12, 4-14, 4-16, 5-9, 5-11, 5-13, 6-9, 6-11, 6-13, 6-15, 7-10, 7-12, 7-14, 8-10, 8-12, 8-14, 8-16, 9-11, 9-13, 9-15, 10-12, 10-14, 10-16, 11-13, 11-15, 12-14, 12-16, 13-15, AND 14-16.



REMOVE JUMPERS AS SHOWN

- NOTES:
- Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
 - Ensure jumpers SEL2-SEL5 and SEL9 are present on the monitor board.
 - Ensure that the Red Enable is active at all times during normal operation.
 - Integrate monitor with Ethernet network in cabinet.

NOTES

- To prevent "flash-conflict" problems, insert red flash program blocks for all vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the signal plan.
- Program phases 4 and 8 for Dual Entry.
- Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
- If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
- The cabinet and controller are part of the D02-02_Cape Carteret Signal System.

EQUIPMENT INFORMATION

Controller.....2070LX
 Cabinet.....332 w/ Aux
 Software.....Q-Free MAXTIME
 Cabinet Mount.....Base
 Output File Positions.....18 With Aux. Output File
 Load Switches Used.....S1, S2, S3, S4, S5, S6, S7, S8, S9,
 S10, S11, S12, AUX S1, AUX S2,
 AUX S4, AUX S5
 Phases Used.....1, 2, 2 PED, 3, 4, 4 PED, 5, 6, 6 PED,
 7, 8, 8 PED

- Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....*

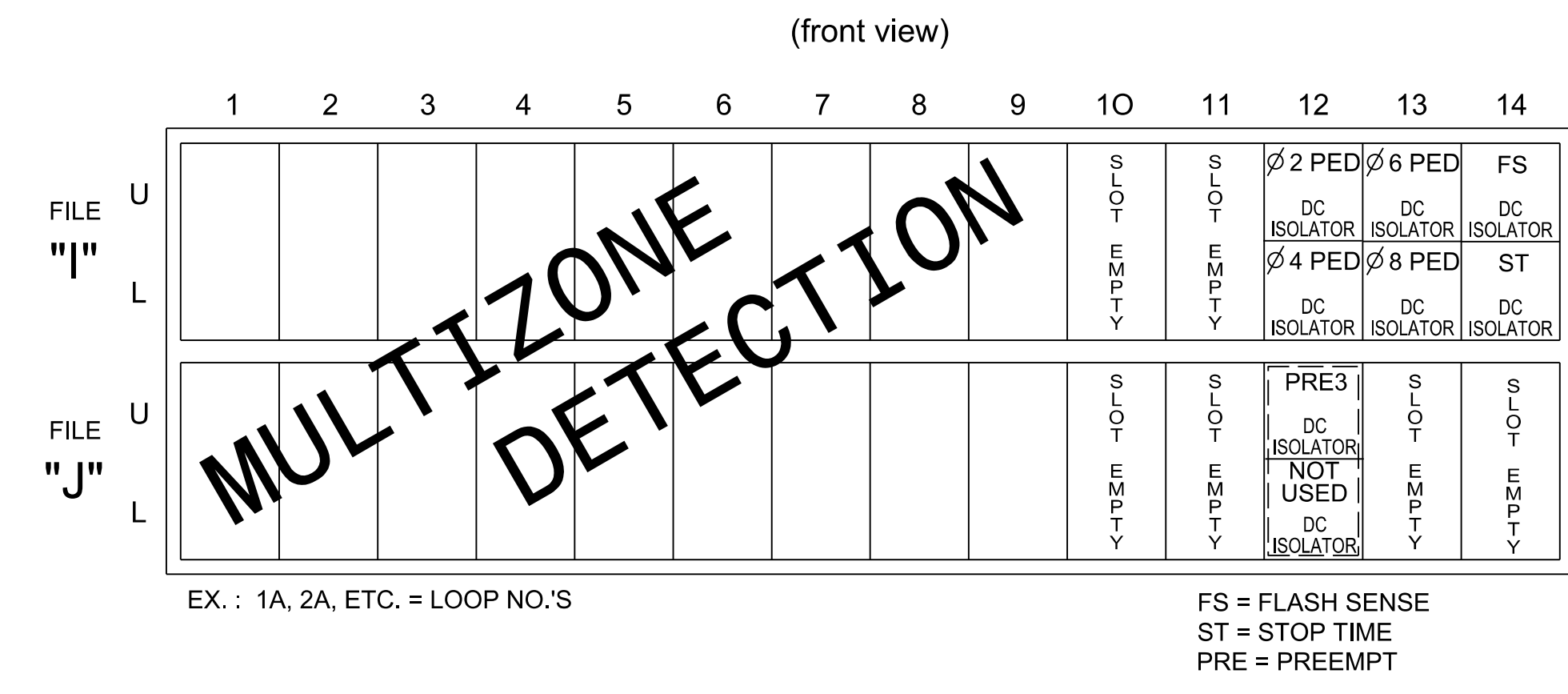
*See overlap programming detail on sheet 2.

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11*	21,22	P21, P22	31*	41,42	P41, P42	51*	61,62	P61, P62	71*	81,82	P81, P82	11*	31*	NU	51*	71*	NU
RED		128			101			134				107						
YELLOW	*	129		*	102		*	135		*	108							
GREEN		130			103			136			109							
RED ARROW													A121	A124		A114	A101	
YELLOW ARROW													A122	A125		A115	A102	
FLASHING YELLOW ARROW													A123	A126		A116	A103	
GREEN ARROW	127			118			133			124								
Hand			113			104			119			110						
Walking			115			106			121			112						

NU = Not Used
 * Denotes install load resistor. See load resistor installation detail this sheet.
 *See pictorial of head wiring in detail this sheet.

INPUT FILE POSITION LAYOUT



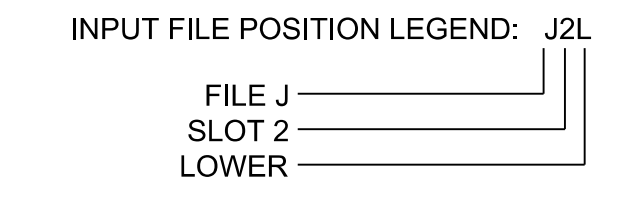
SPECIAL DETECTOR NOTE

Install a multizone microwave detection system for vehicle detection. Perform installation according to manufacturer's directions and NCDOT engineer approved mounting locations to accomplish the detection schemes shown on the Signal Design Plans.

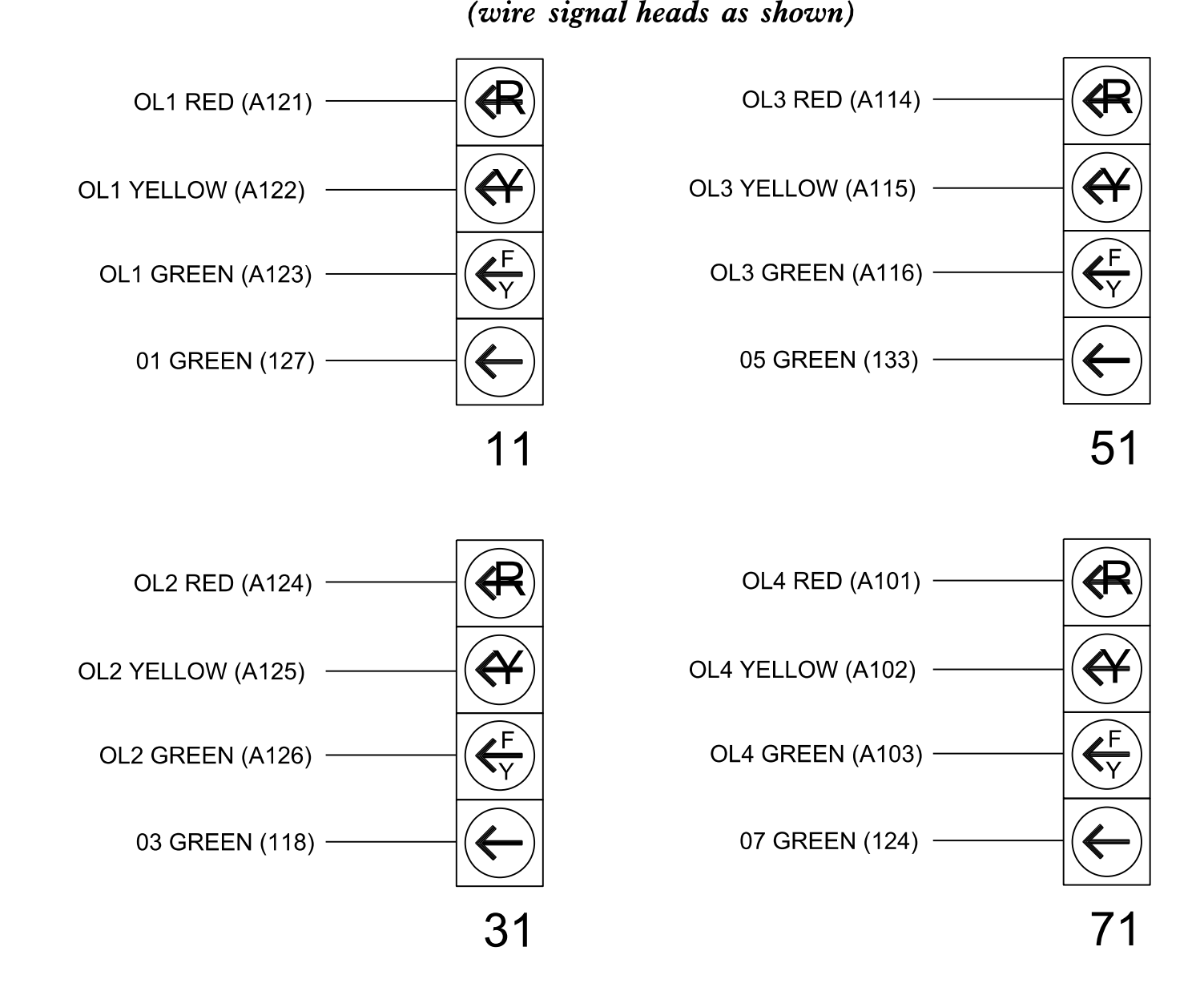
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE
P21,P22	TB8-4,6	I12U	67	33	2	PED 2
P41,P42	TB8-5,6	I12L	69	35	4	PED 4
P61,P62	TB8-7,9	I13U	68	34	6	PED 6
P81,P82	TB8-8,9	I13L	70	36	8	PED 8

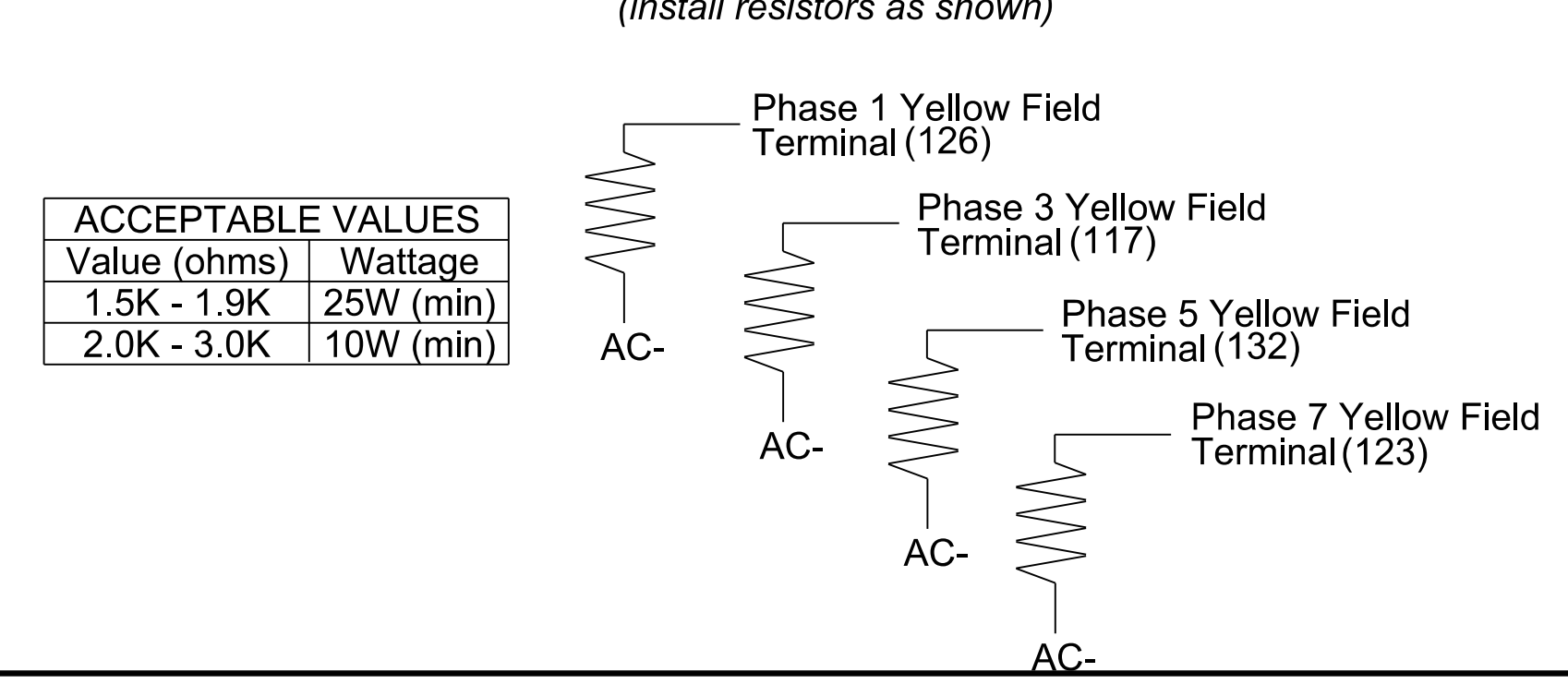
NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 AND I13.



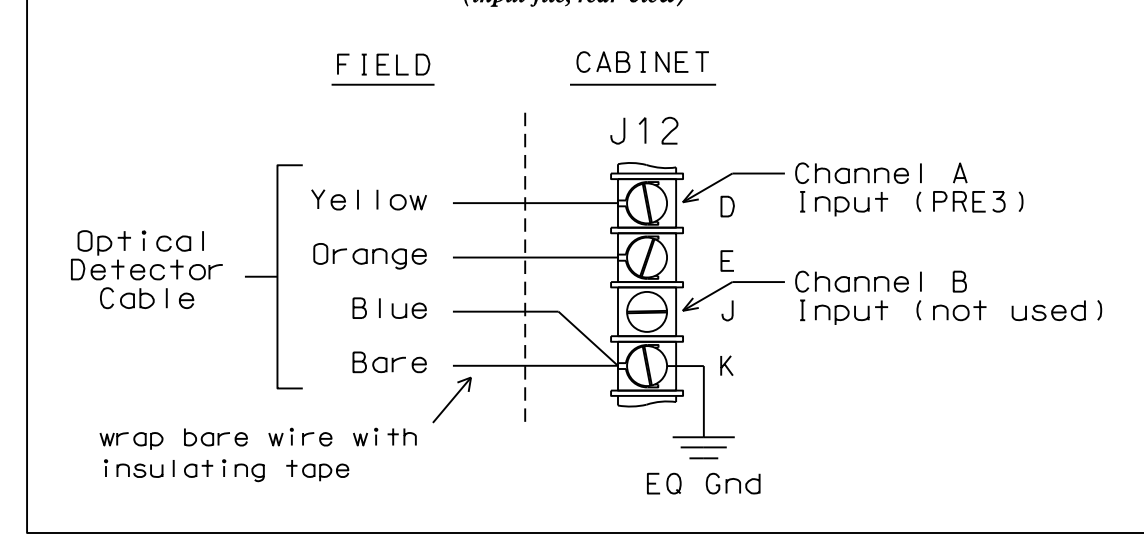
FYA SIGNAL WIRING DETAIL



LOAD RESISTOR INSTALLATION DETAIL



TYPICAL OPTICAL FIELD WIRE DETAIL



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 02-0548
 DESIGNED: April 2026
 SEALED: 04-08-2026
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

Prepared in the Offices of:
 Transportation Mobility and Safety Division
 NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
 Signal Management Section

750 N. Greenfield Pkwy, Garner, NC 27529

NC 24 (Cedar Point Boulevard) at SR 1113 (Old Highway 58)

Division 2
 PLAN DATE: April 2026
 PREPARED BY: JT Rowe

Carteret County
 REVIEWED BY: D. Hartland

Cape Carteret
 REVIEWED BY:

SEAL
 NORTH CAROLINA PROFESSIONAL ENGINEER
 JOHN T. ROWE, JR.
 SEAL 008453

DocuSigned by:
 John T. Rowe, Jr 4/8/2026

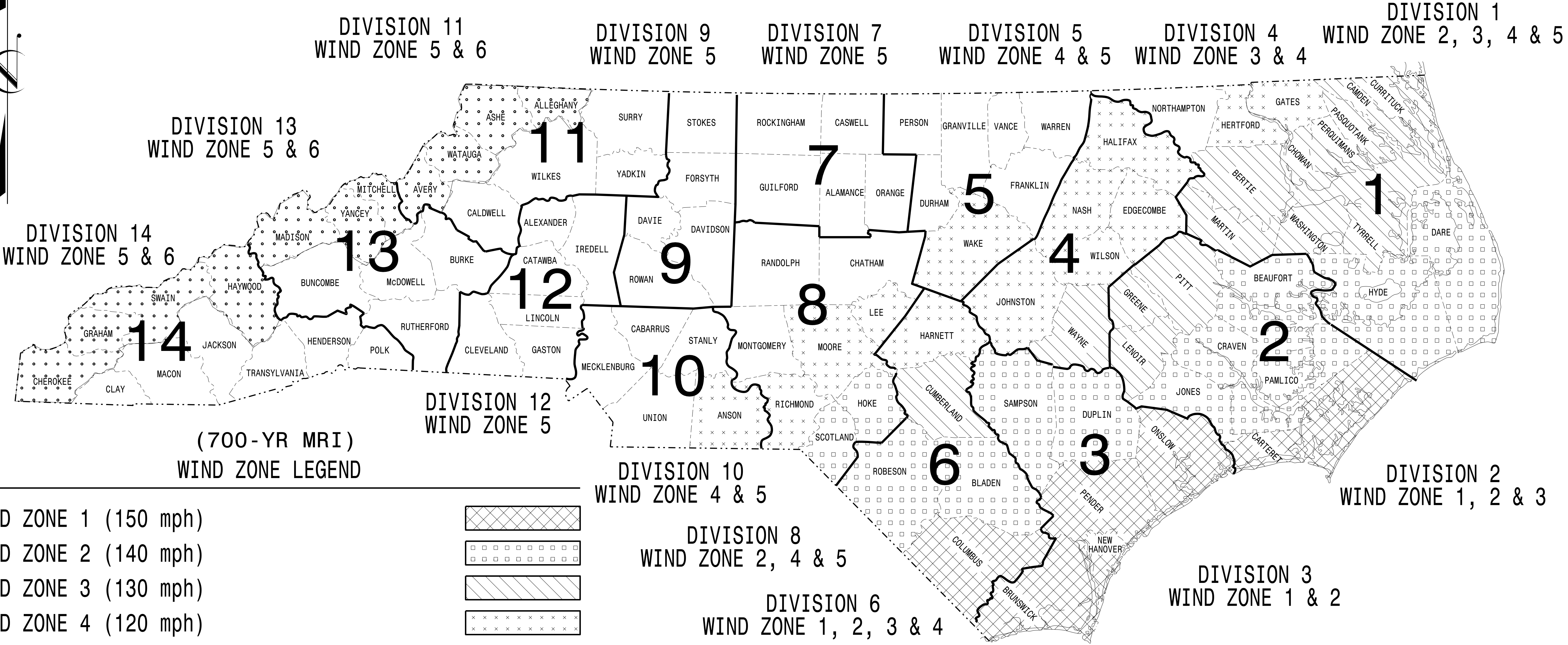
SIGNATURE DATE

SIG. INVENTORY NO. 02-0548



STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STANDARD DRAWINGS FOR ALL METAL POLES (LRFD)



(700-YR MRI)
WIND ZONE LEGEND

WIND ZONE 1 (150 mph)	
WIND ZONE 2 (140 mph)	
WIND ZONE 3 (130 mph)	
WIND ZONE 4 (120 mph)	
WIND ZONE 5 (110 mph)	
WIND ZONE 6 (135 mph) Special Wind Zone	

<https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>

NC DOT METAL POLE STANDARDS

03-001-2023 1P-07
S:\IT\AS\14\15\Sig\Drawings\Drawings\2024\Metal Pole Standard 411 Metal Pole (700-yr MRI).cdm
Kdurigon

Prepared In the Offices of:

750 N. Greenfield Pkwy.
Garner, NC 27529

Designed in conformance
with the latest
2020 Interim to the
1st Edition 2015

**AASHTO
LRFD**

Standard Specifications for
Highway Signs, Luminaires,
and Traffic Signals

DRAWING NUMBER	INDEX OF PLANS DESCRIPTION
Sig. M 1A	Statewide Wind Zone Map (700-yr MRI)
Sig. M 1B	Statewide Wind Zone Map (10-yr MRI)
Sig. M 2	Typical Fabrication Details-All Metal Poles
Sig. M 3	Typical Fabrication Details-Strain Poles
Sig. M 4	Typical Fabrication Details-Mast Arm Poles
Sig. M 5	Typical Fabrication Details-Mast Arm Connection
Sig. M 6	Typical Fabrication Details-Strain Pole Attachments
Sig. M 7	Construction Details-Foundations
Sig. M 8	Standard Strain Pole Foundation-All Soil Conditions
Sig. M 9	Typical Fabrication Details-CCTV Camera Poles

**MOBILITY AND SAFETY DIVISION -
TRANSPORTATION SYSTEMS MANAGEMENT
AND OPERATIONS UNIT**

D.Y. ISHAK - STATE SIGNALS ENGINEER
K. DURIGON, P.E. - ITS AND SIGNALS STRUCTURAL ENGINEER
B. WALKER, P.E. - ITS AND SIGNALS STRUCTURAL ENGINEER

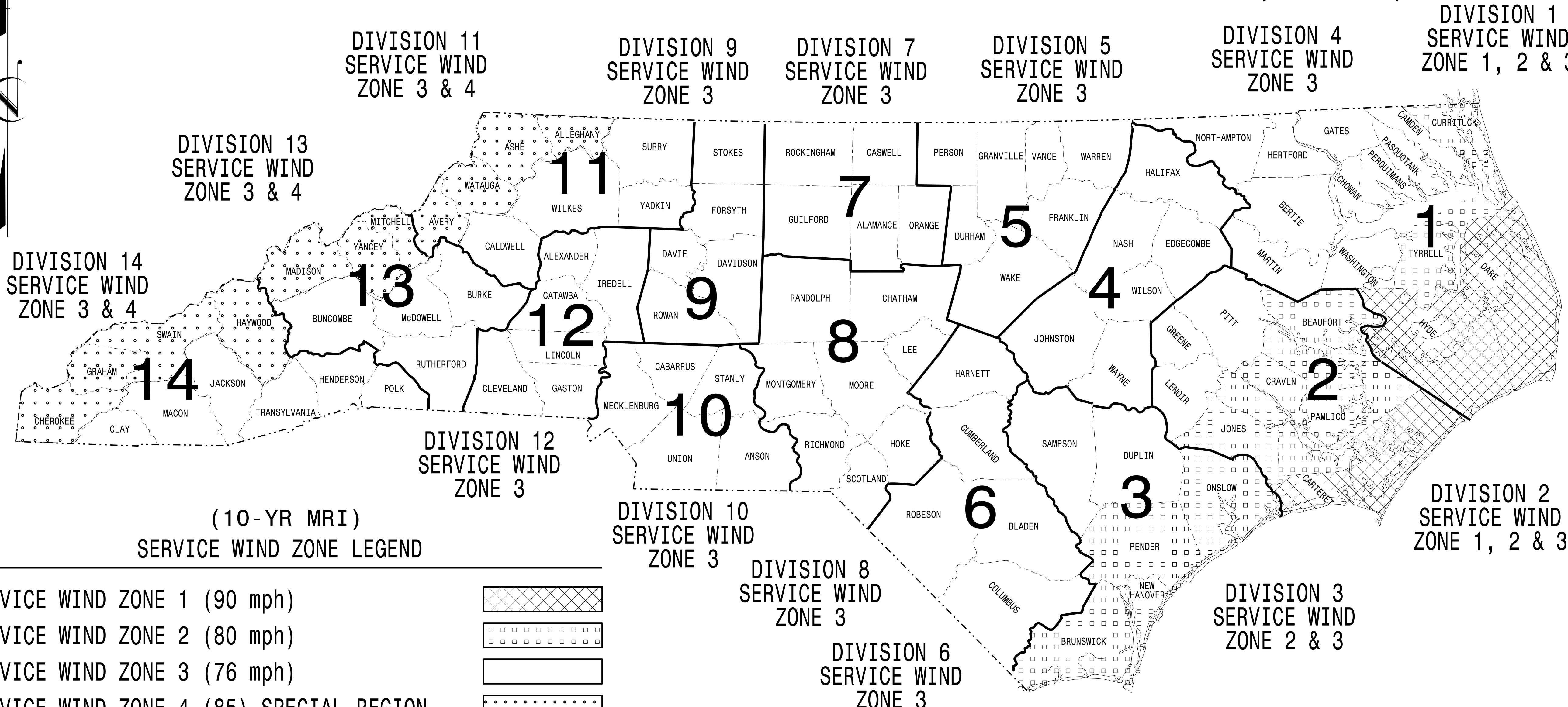
SEAL

DocuSigned by:
Kevin Durigon
SIGNATURE
4B23DC79B3764DA

09/21/2023
DATE

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STANDARD DRAWINGS FOR ALL METAL POLES (LRFD)



(10-YR MRI)
SERVICE WIND ZONE LEGEND

SERVICE WIND ZONE 1 (90 mph)	
SERVICE WIND ZONE 2 (80 mph)	
SERVICE WIND ZONE 3 (76 mph)	
SERVICE WIND ZONE 4 (85) SPECIAL REGION	

<https://connect.ncdot.gov/resources/safety/Pages/ITS-Design-Resources.aspx>

NC DOT METAL POLE STANDARDS

03-OCT-2023 10:51 S:\M1\AS1\115\Sig\Drawings\Drawings\2024_Metal_Pole_Standards\11-Metal_Pole_Standards.dwg

Prepared in the Offices of:

750 N. Greenfield Pkwy.
Garner, NC 27529

Designed in conformance with the latest 2020 Interim to the 1st Edition 2015

AASHTO LRFD

Standard Specifications for Highway Signs, Luminaires, and Traffic Signals

DRAWING NUMBER	INDEX OF PLANS DESCRIPTION
Sig. M 1A	Statewide Wind Zone Map (700-yr MRI)
Sig. M 1B	Statewide Wind Zone Map (10-yr MRI)
Sig. M 2	Typical Fabrication Details-All Metal Poles
Sig. M 3	Typical Fabrication Details-Strain Poles
Sig. M 4	Typical Fabrication Details-Mast Arm Poles
Sig. M 5	Typical Fabrication Details-Mast Arm Connection
Sig. M 6	Typical Fabrication Details-Strain Pole Attachments
Sig. M 7	Construction Details-Foundations
Sig. M 8	Standard Strain Pole Foundation-All Soil Conditions
Sig. M 9	Typical Fabrication Details-CCTV Camera Poles

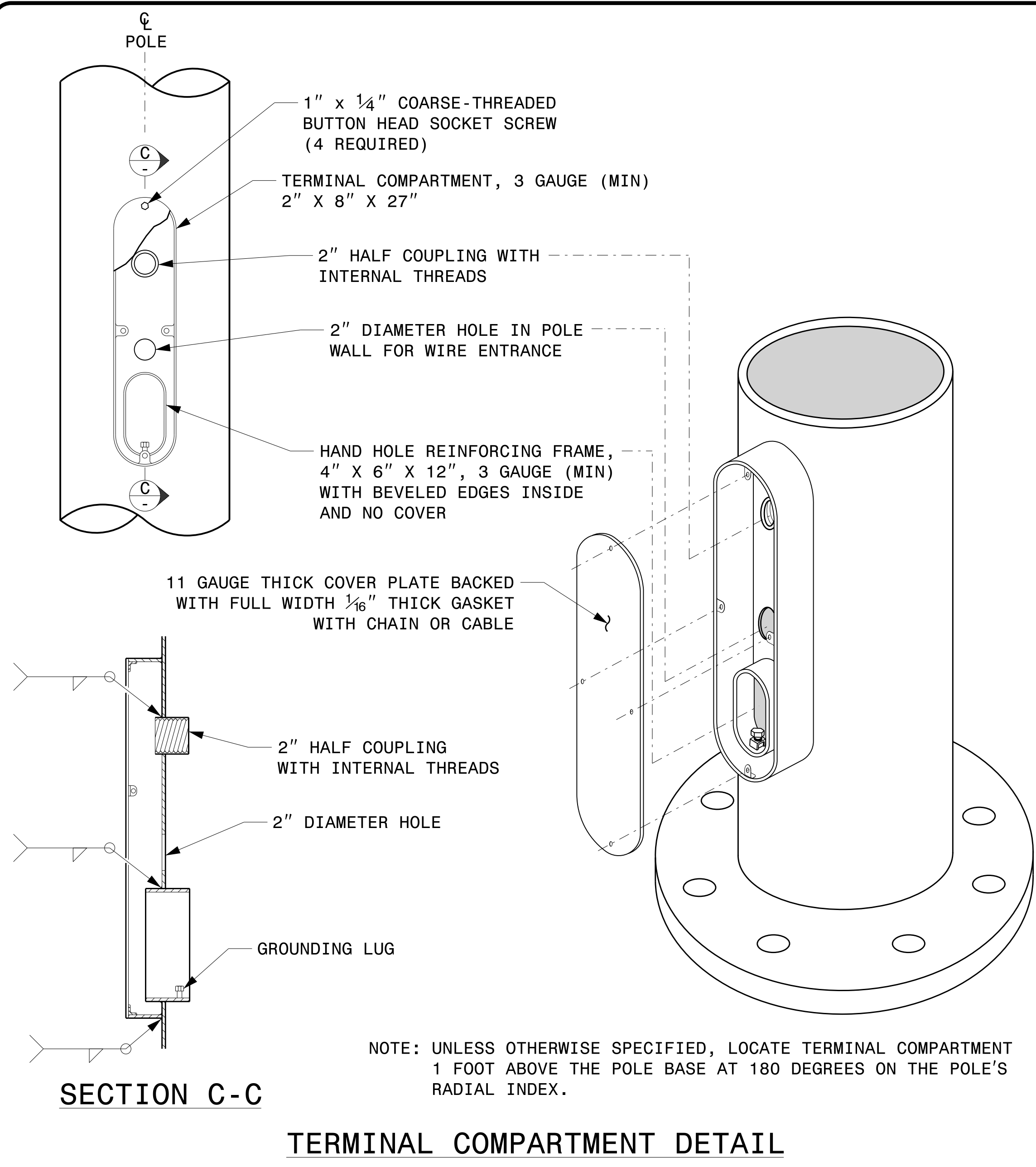
NCDOT CONTACTS:
MOBILITY AND SAFETY DIVISION -
TRANSPORTATION SYSTEMS MANAGEMENT
AND OPERATIONS UNIT

D.Y. ISHAK - STATE SIGNALS ENGINEER
K. DURIGON, P.E. - ITS AND SIGNALS STRUCTURAL ENGINEER
B. WALKER, P.E. - ITS AND SIGNALS STRUCTURAL ENGINEER

SEAL

DocuSigned by:
Kevin Durigon
SIGNATURE
4B23DC78B3784DA

09/21/2023
DATE



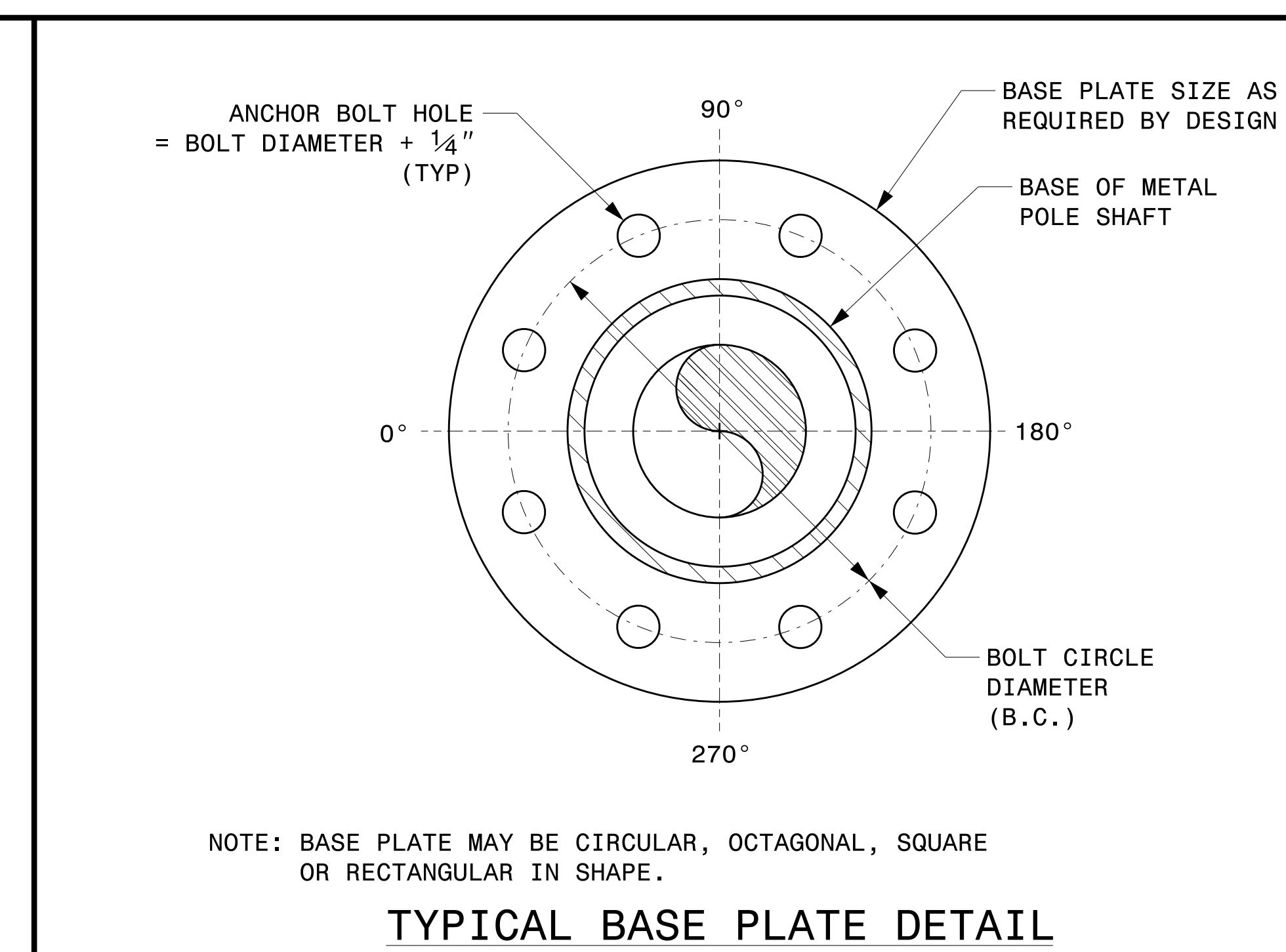
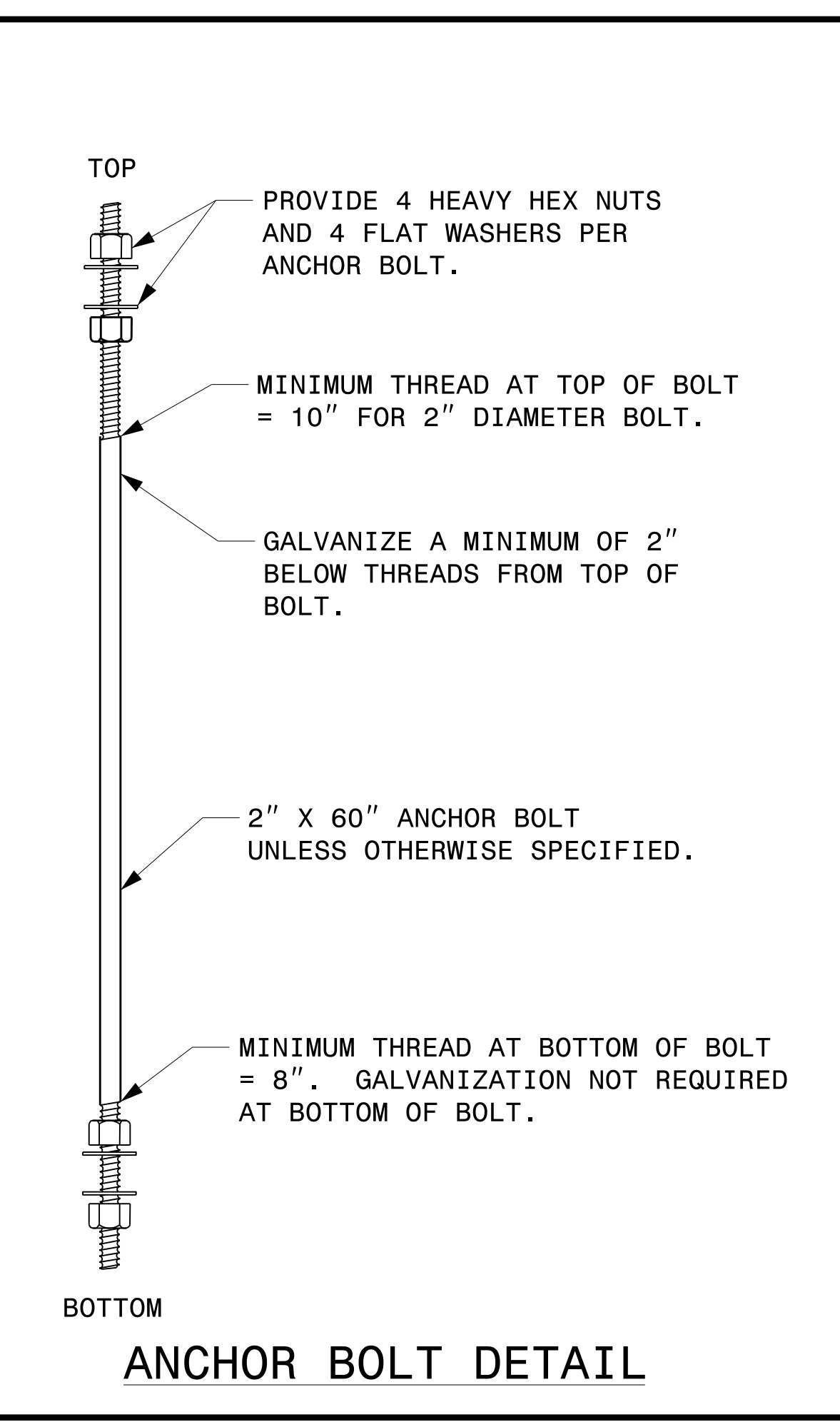
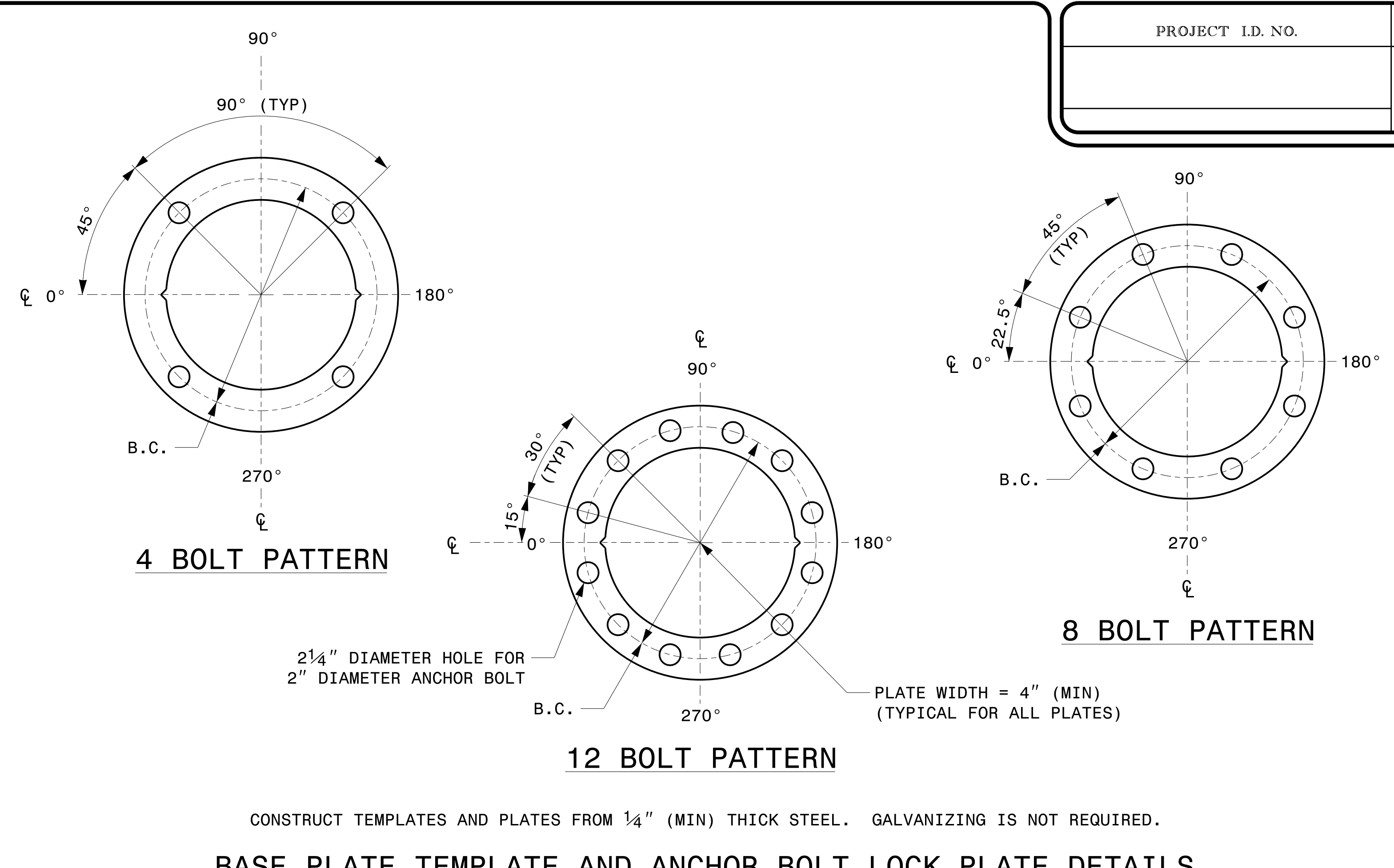
IDENTIFICATION TAG DETAILS

MFG _____ MFG. DATE: MM/YY	MFG _____ MFG. DATE: MM/YY
SHAFT D/T/L/Y _____	SECTION D/T/L/Y _____
ARM-A D/T/L/Y _____	NCDOT SIG. INV. NO. _____
ARM-B D/T/L/Y _____	NCDOT POLE NO. _____
A.B. DIA./B.C./L/Y _____	ARM I.D. TAG (PROVIDE ON EACH SECTION OF A MULTI-SECTION MAST ARM)
NCDOT SIG. INV. NO. _____	
NCDOT POLE NO. _____	

SHAFT I.D. TAG
(PROVIDE ON SHAFT OF STRAIN POLES
AND MAST ARM POLE SHAFT)

NOTES:

- D = DIAMETER, T = THICKNESS, L = LENGTH, Y = YIELD STRENGTH
- A.B. = ANCHOR BOLT
- B.C. = BOLT CIRCLE OF ANCHOR BOLTS
- IF STANDARD DESIGN, INCLUDE CASE NUMBER IN ADDITION TO POLE NUMBER ON "NCDOT POLE NO." LINE.
- SIGNAL INV. NUMBER AND POLE I.D. NUMBER. SEE DRAWING M3 AND M4 FOR MOUNTING POSITIONS OF I.D. TAGS.



Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Fabrication Details For All Metal Poles

PLAN DATE: SEPTEMBER 2023 DESIGNED BY: C.F. ANDREWS
 PREPARED BY: K.C. DURIGON REVIEWED BY: D.C. SARKAR

REVISIONS	INIT.	DATE

SCALE: 0 NA NONE

SEAL: KEVIN C. DURIGON, ENGINEER, 036626

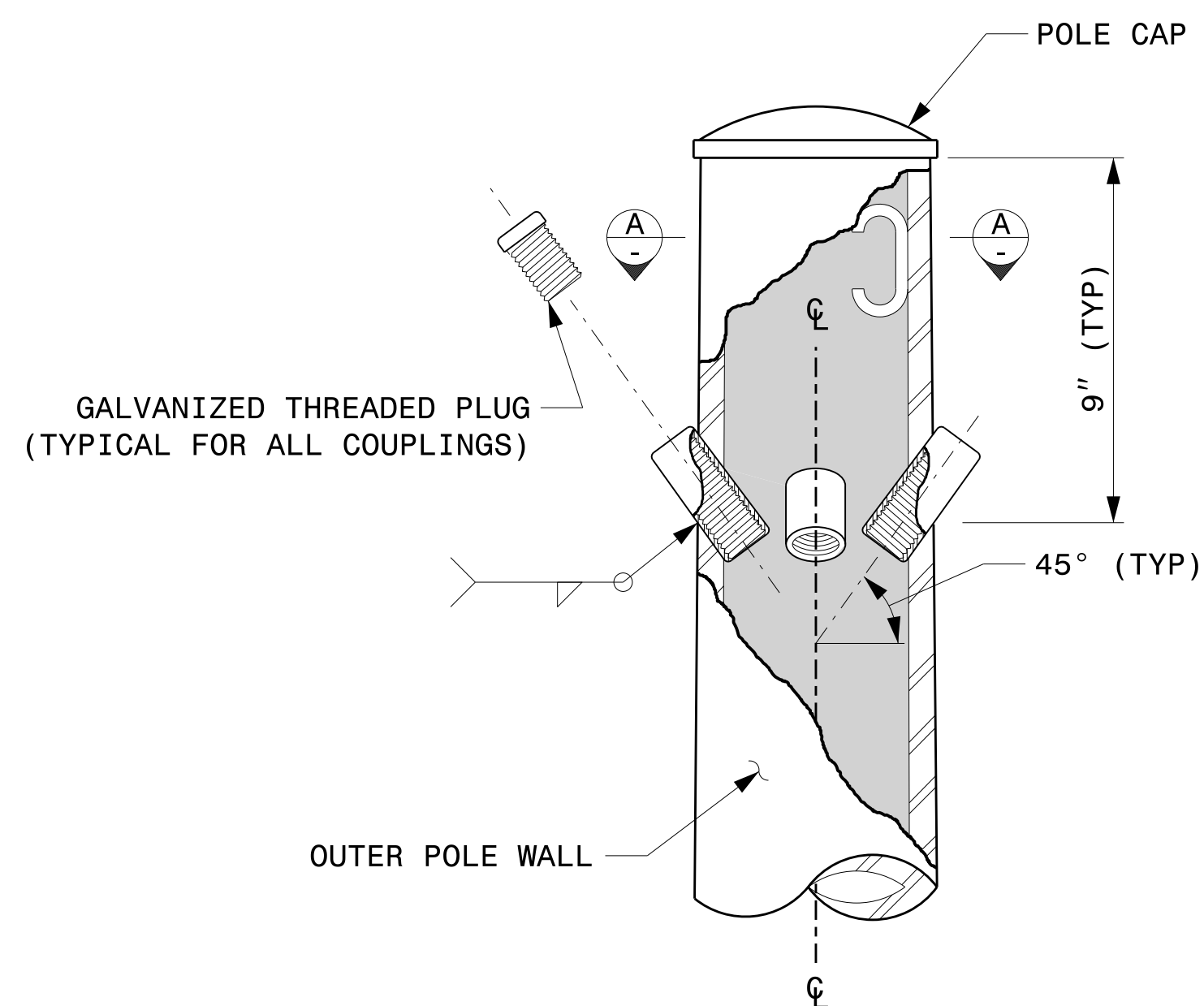
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Fabrication Details – All Metal Poles

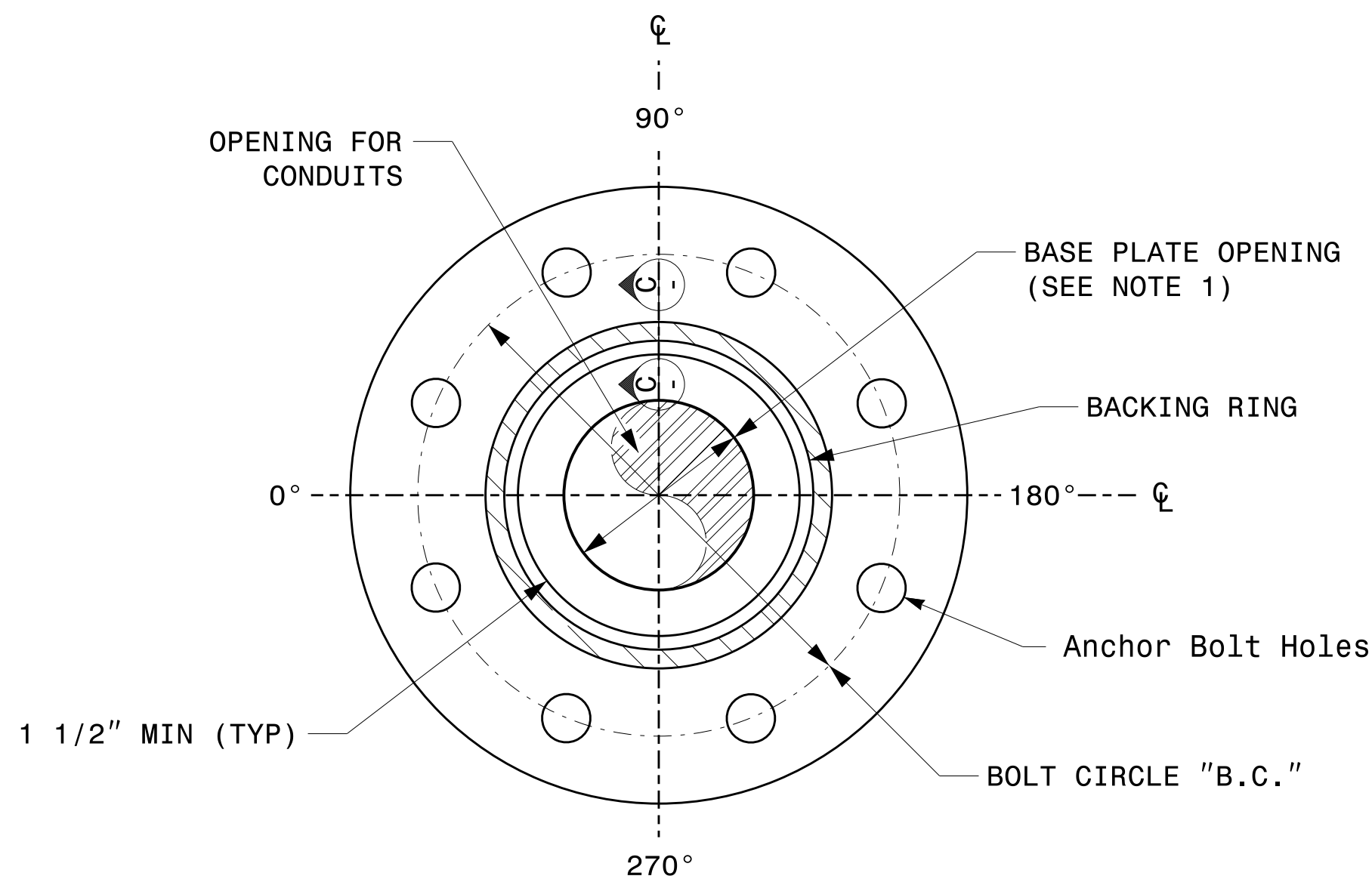
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NOTE:

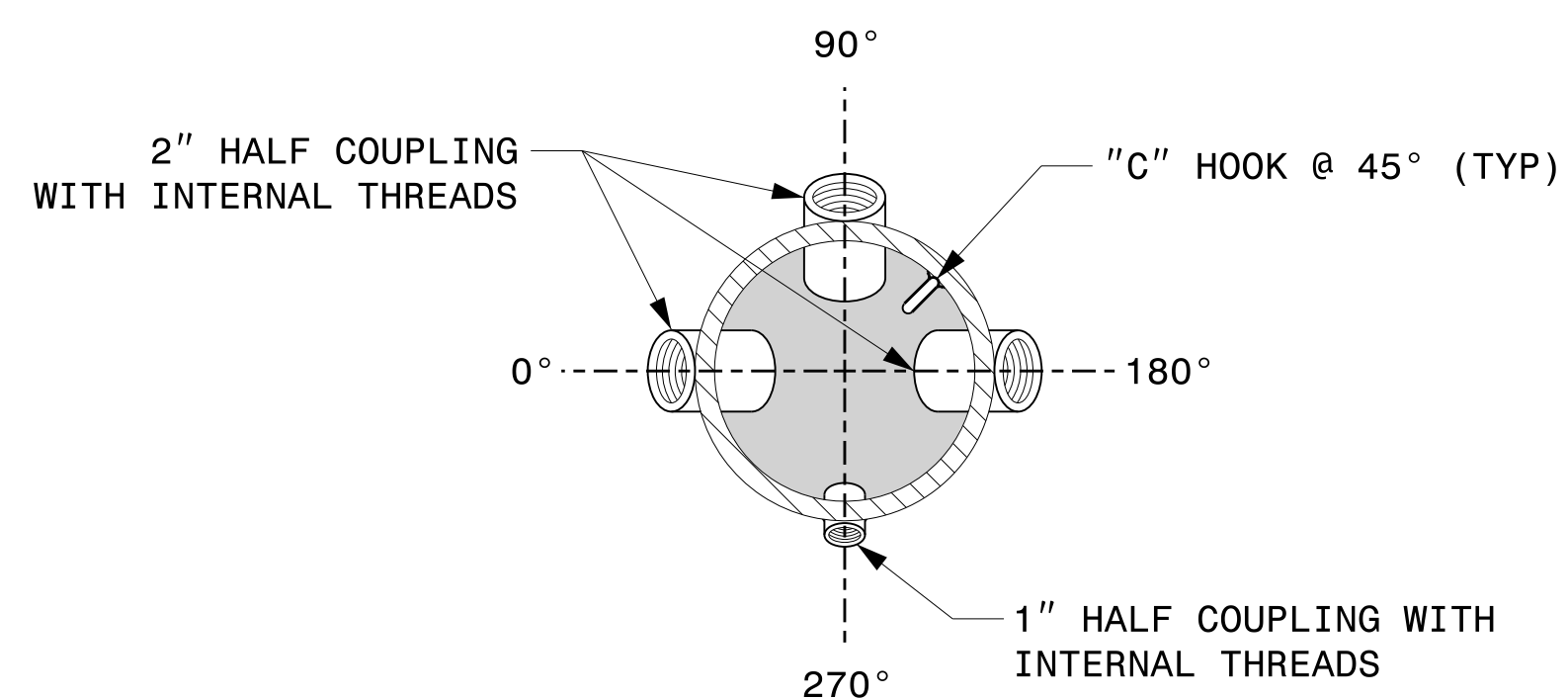
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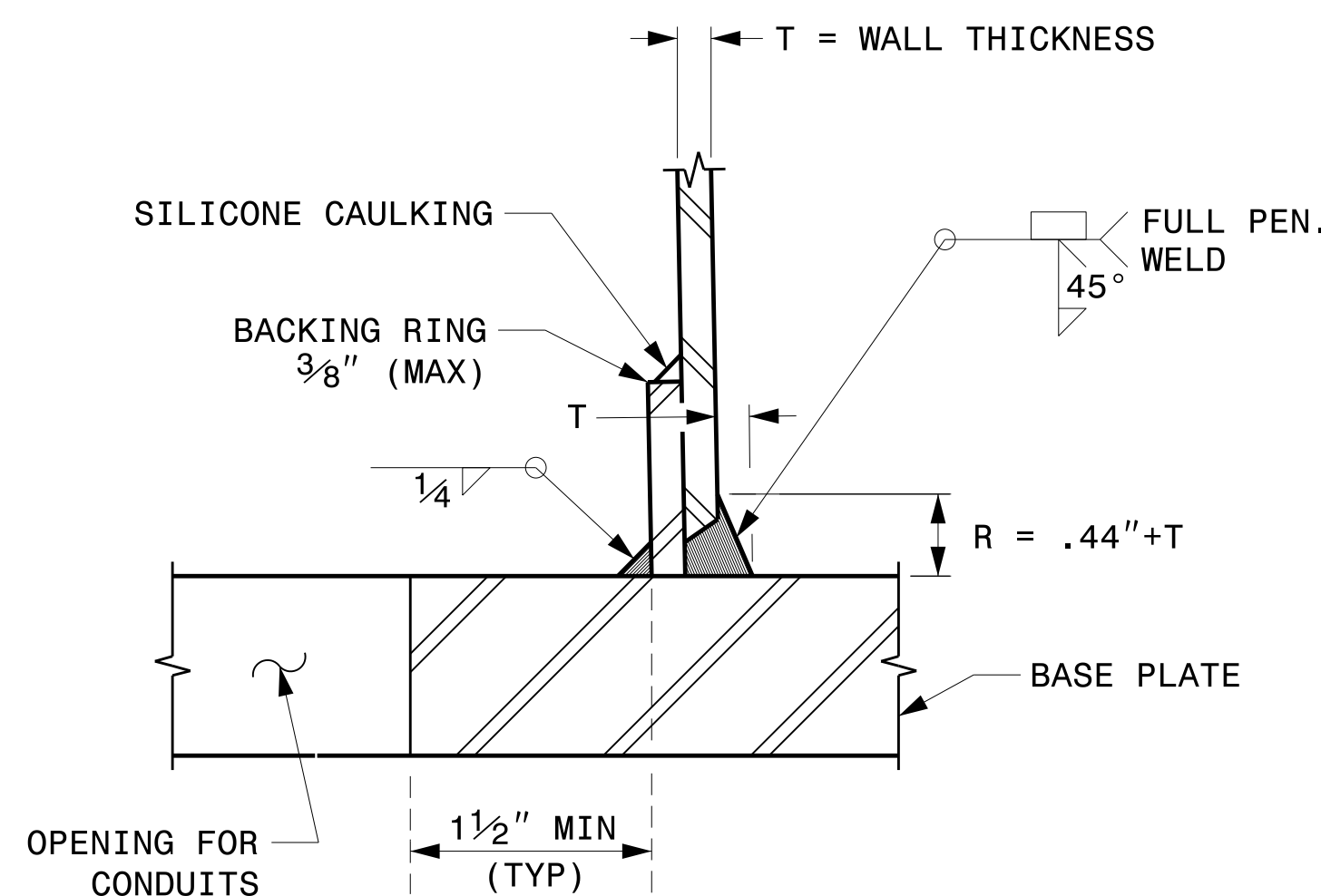
CABLE ENTRANCES AT TOP OF POLE



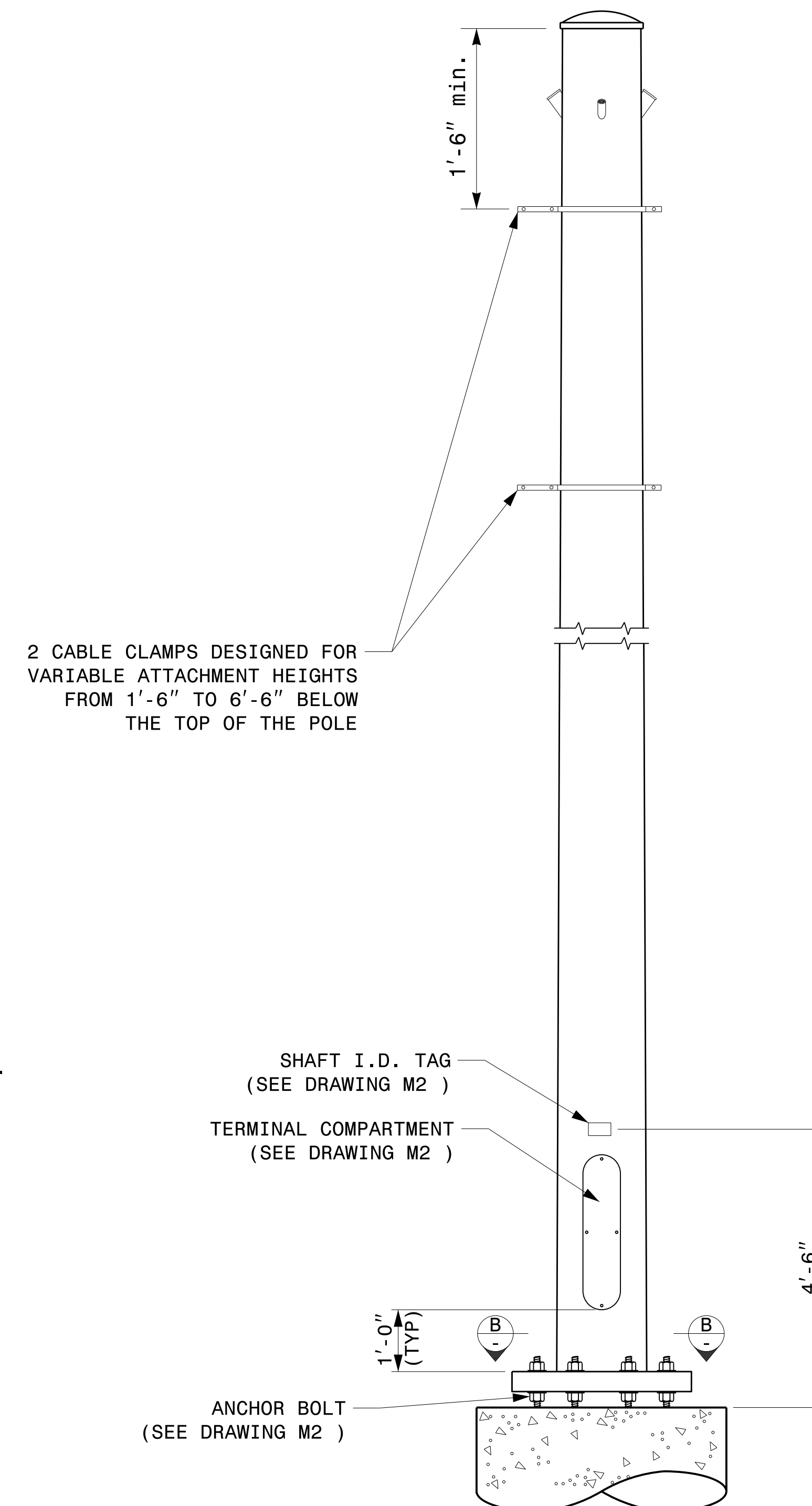
SECTION B-B
POLE BASE PLATE DETAILS
(8 AND 12 BOLT PATTERN)



SECTION A-A
RADIAL ORIENTATION OF FACTORY INSTALLED
ACCESSORIES AT TOP OF POLE



SECTION C-C
(POLE ATTACHMENT TO BASE PLATE)
FULL-PENETRATION
GROOVE WELD DETAIL



MONOTUBE STRAIN POLE

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: 0 NA NONE

Typical Fabrication Details For Strain Poles	
PLAN DATE: SEPTEMBER 2023	DESIGNED BY: K.C. DURIGON
PREPARED BY: K.C. DURIGON	REVIEWED BY: D.C. SARKAR
REVISIONS	INIT. DATE

SEAL

DocuSigned by:
Kevin Durigon
SIGNATURE

09/23/2023
DATE

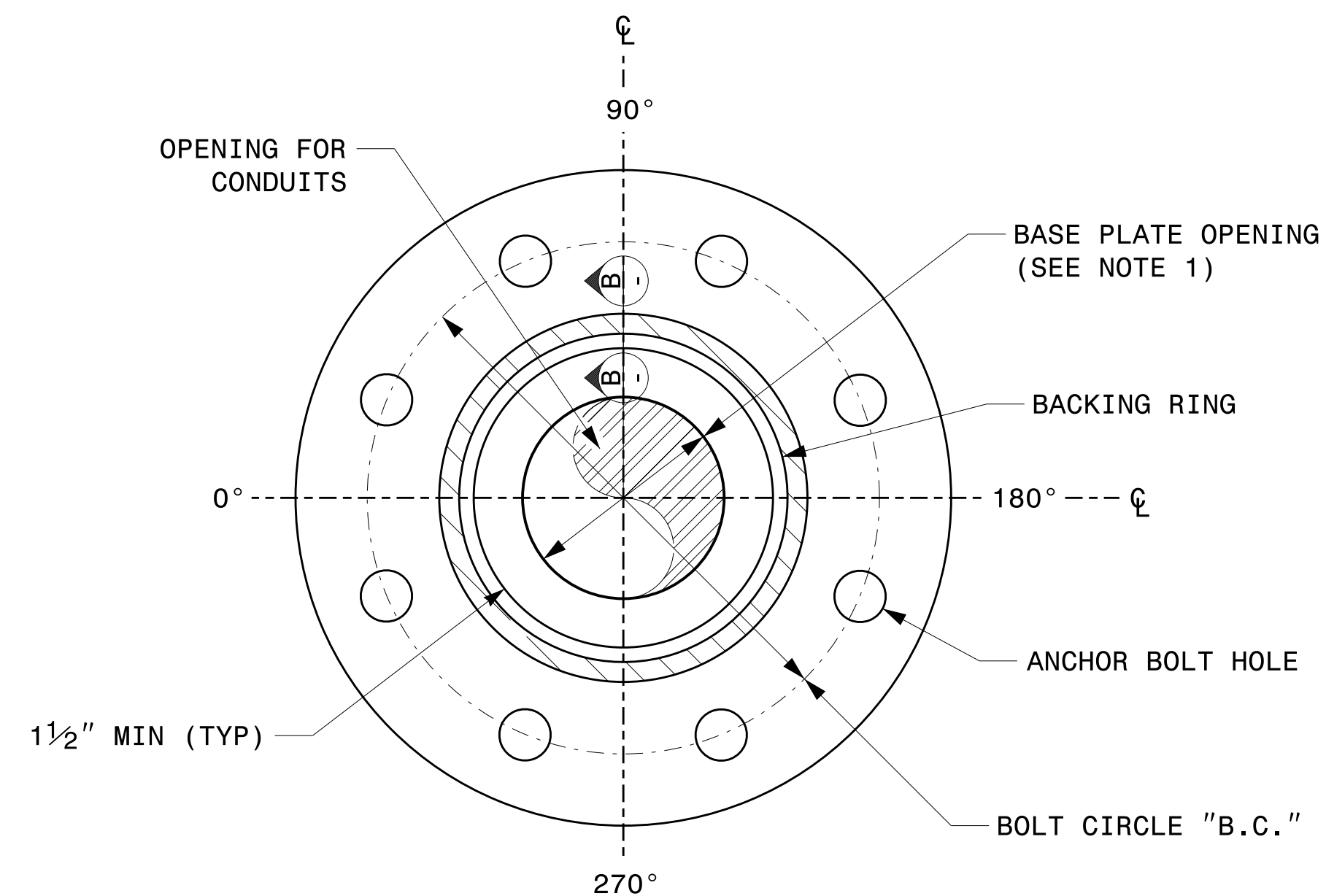
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Kedar Durigon

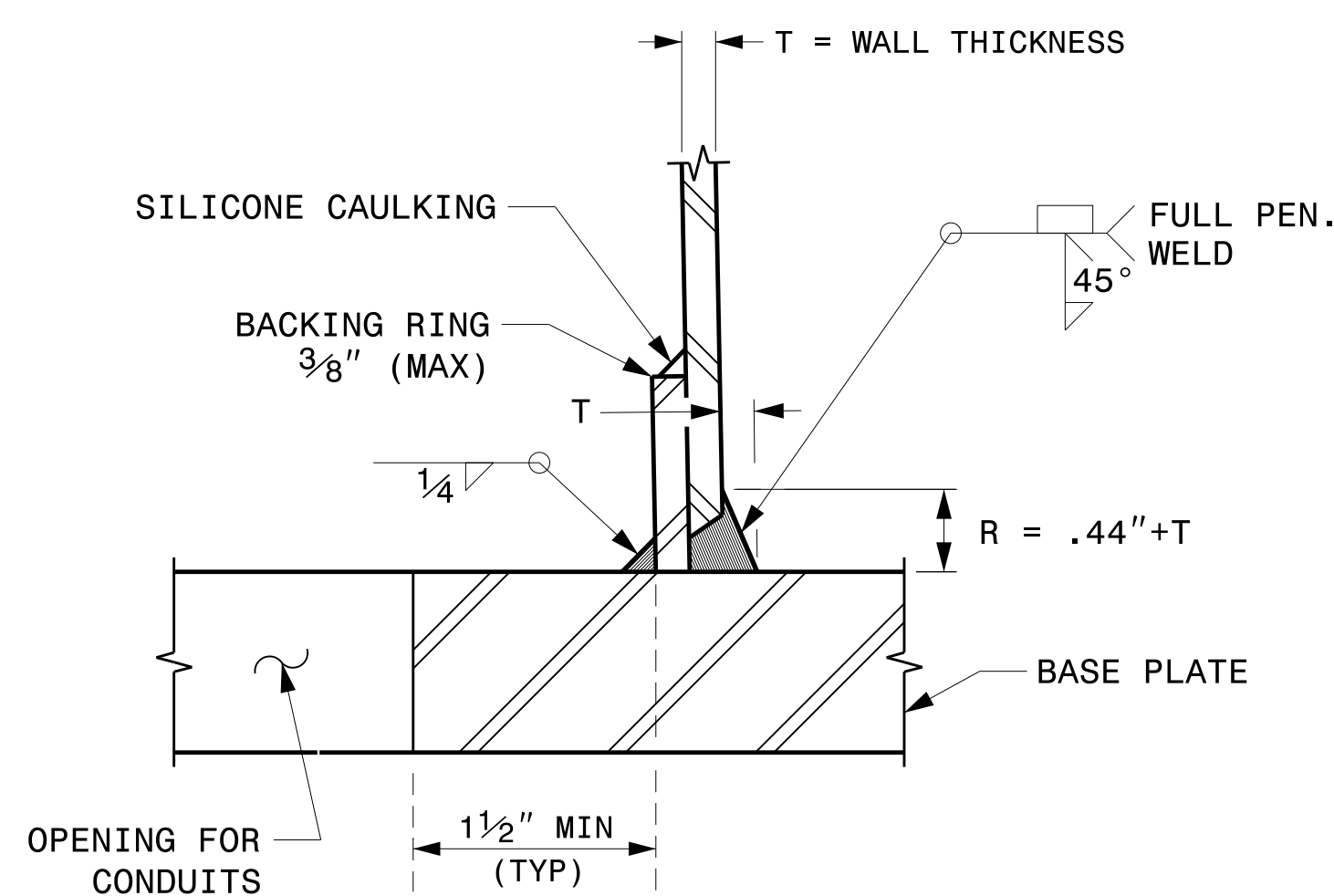
Fabrication Details – Strain Poles

NOTE:

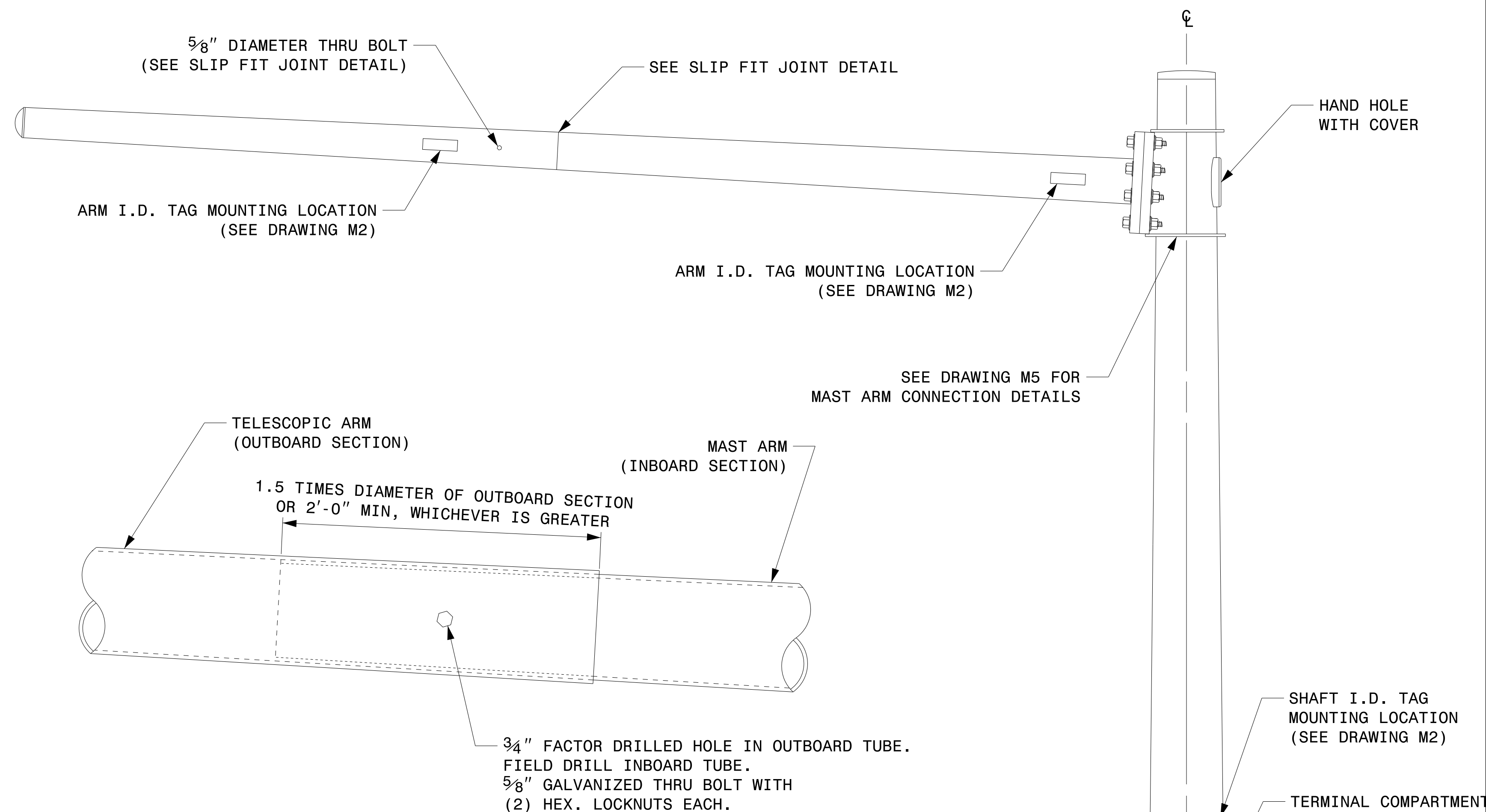
1. OPENING IN POLE BASE PLATE SHALL BE EQUAL TO POLE BASE INSIDE DIAMETER MINUS $3\frac{1}{2}$ " BUT SHALL NOT BE LESS THAN $8\frac{1}{2}$ ".



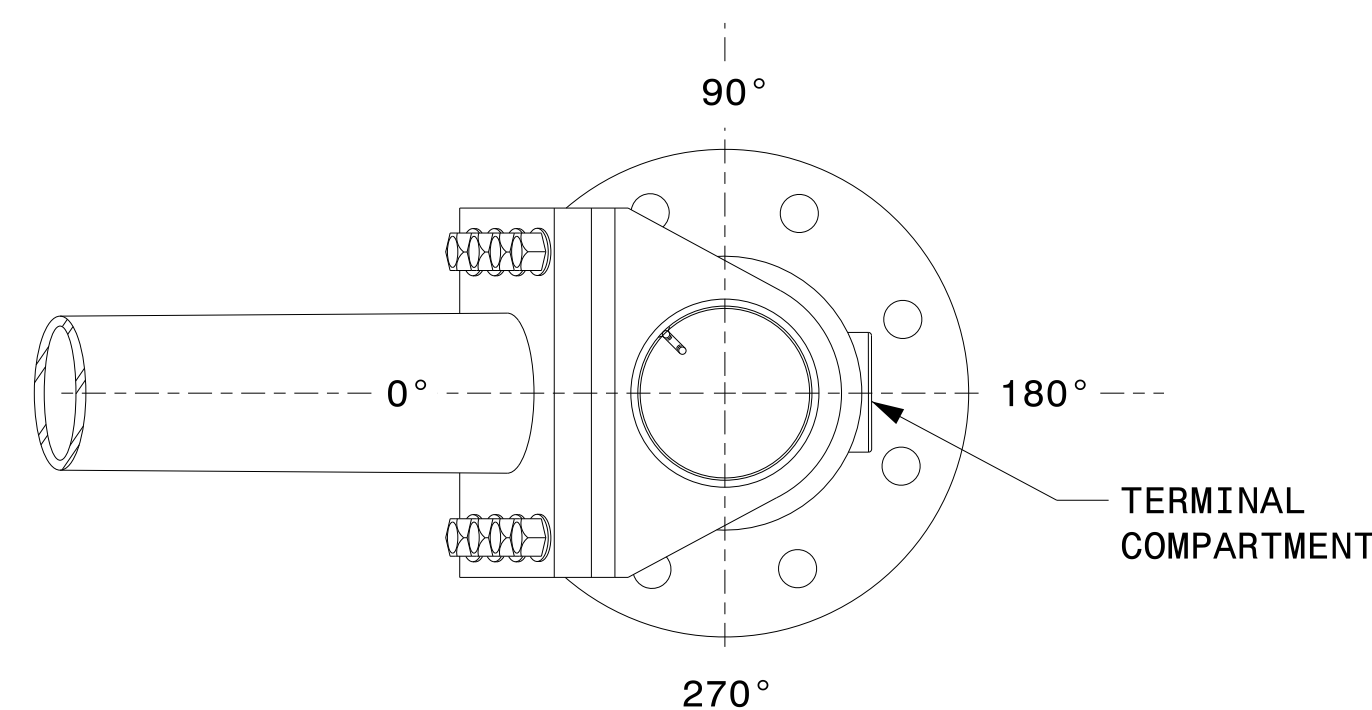
SECTION A-A
POLE BASE PLATE DETAILS



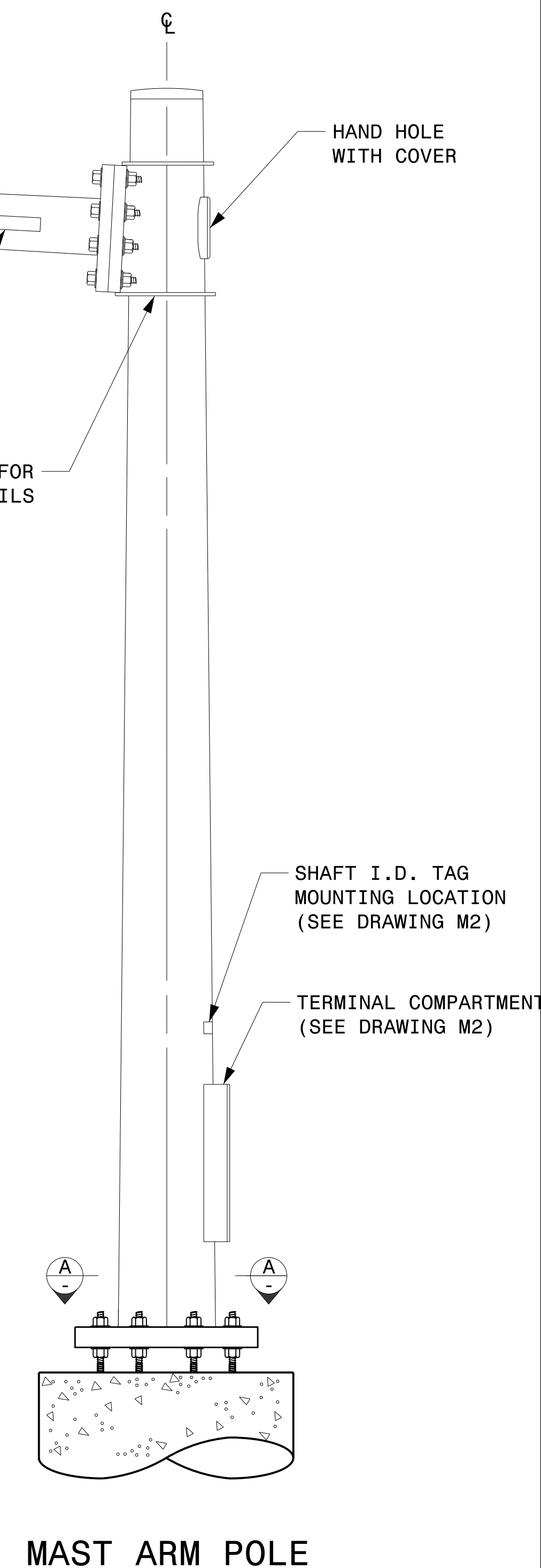
SECTION B-B
(POLE ATTACHMENT TO BASE PLATE)
FULL-PENETRATION
GROOVE WELD DETAIL



SLIP FIT JOINT DETAIL FOR MAST ARM



MAST ARM RADIAL ORIENTATION



MAST ARM POLE

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: NA
NONE

Typical Fabrication Details For Mast Arm Poles			
PLAN DATE:	SEPTEMBER 2023	DESIGNED BY:	K.C. DURIGON
PREPARED BY:	K.C. DURIGON	REVIEWED BY:	D.C. SARKAR
REVISIONS	INIT.	DATE	

SEAL

DocuSigned by:
Kevin Durigon
SIGNATURE

09/21/2023
DATE

09-drt-2023-10-31E
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Kedar Durigon

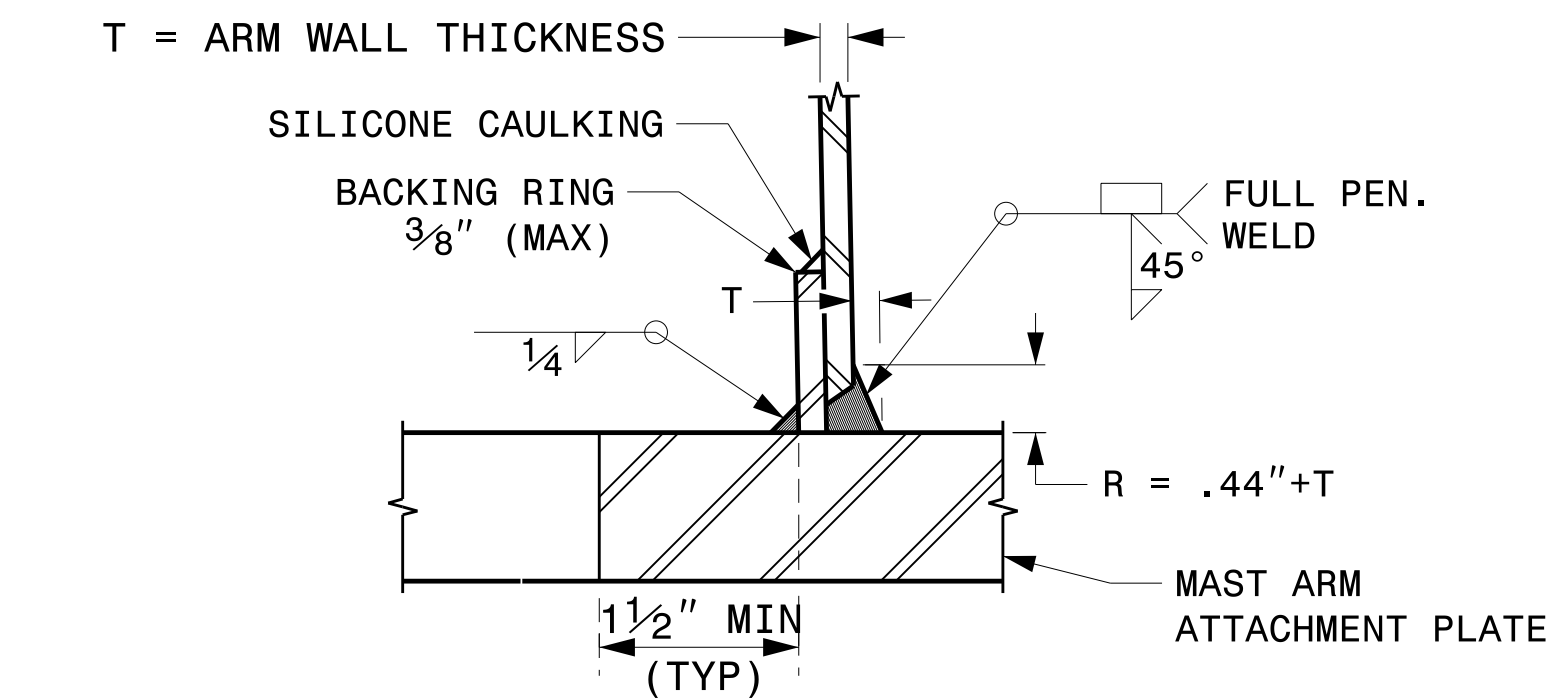
Fabrication Details – Mast Arm Poles

WELDED RING STIFFENED MAST ARM CONNECTION

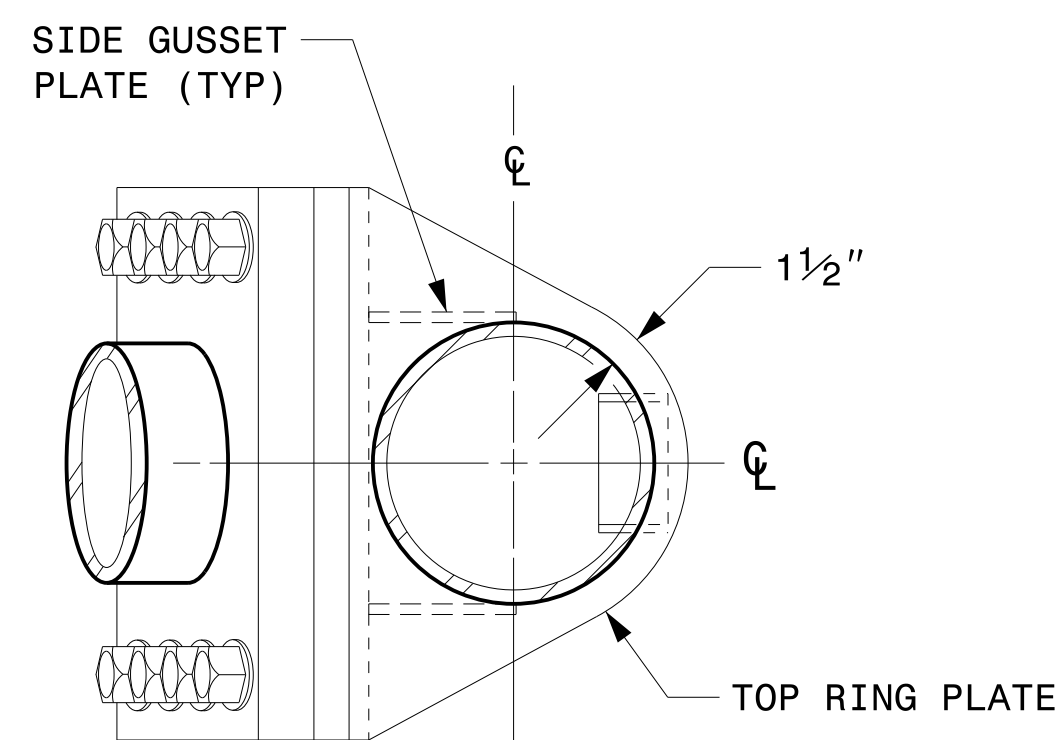
PROJECT I.D. NO.

SHEET NO.

Sig.M5



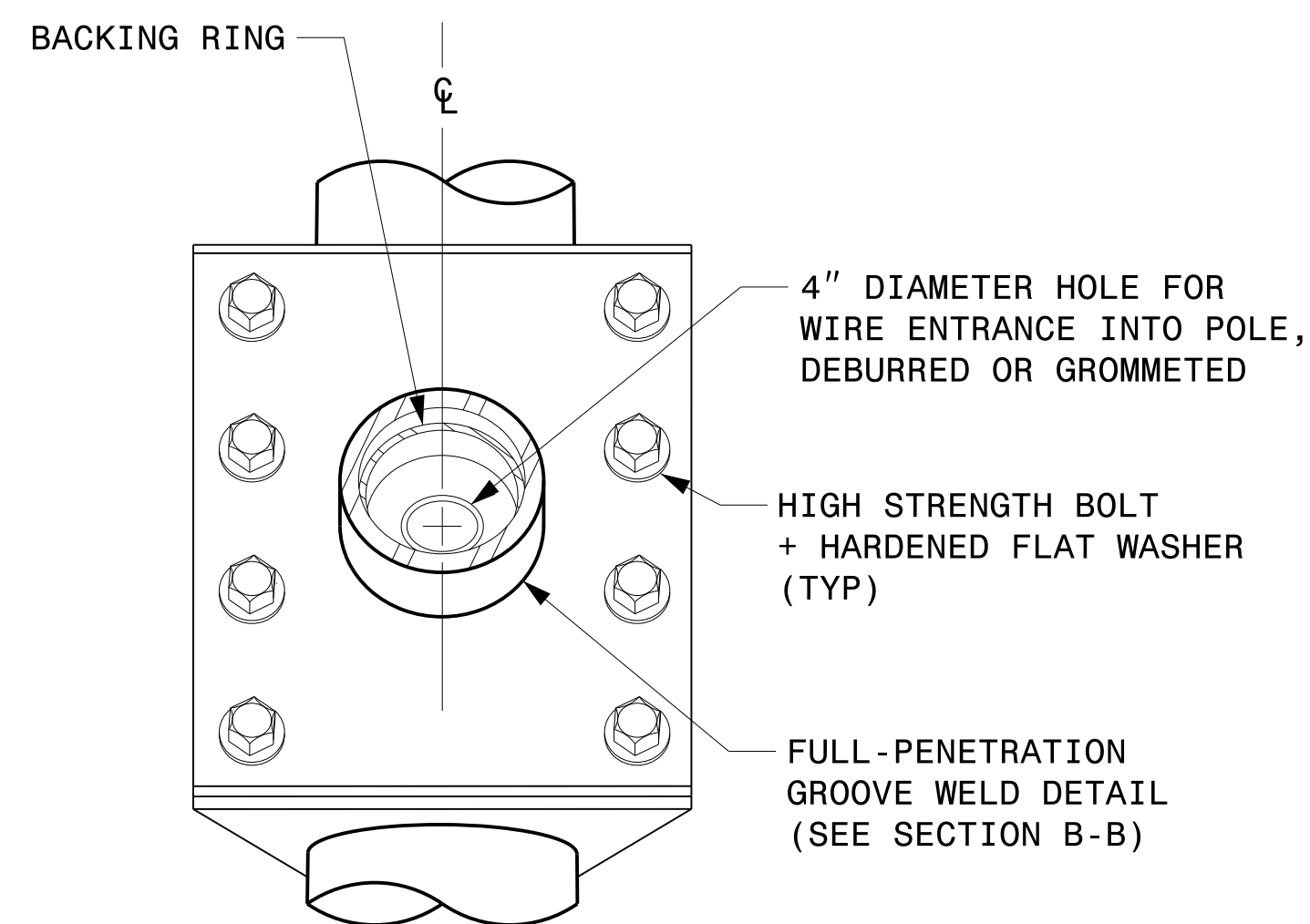
**SECTION B-B
FULL-PENETRATION GROOVE WELD DETAIL**



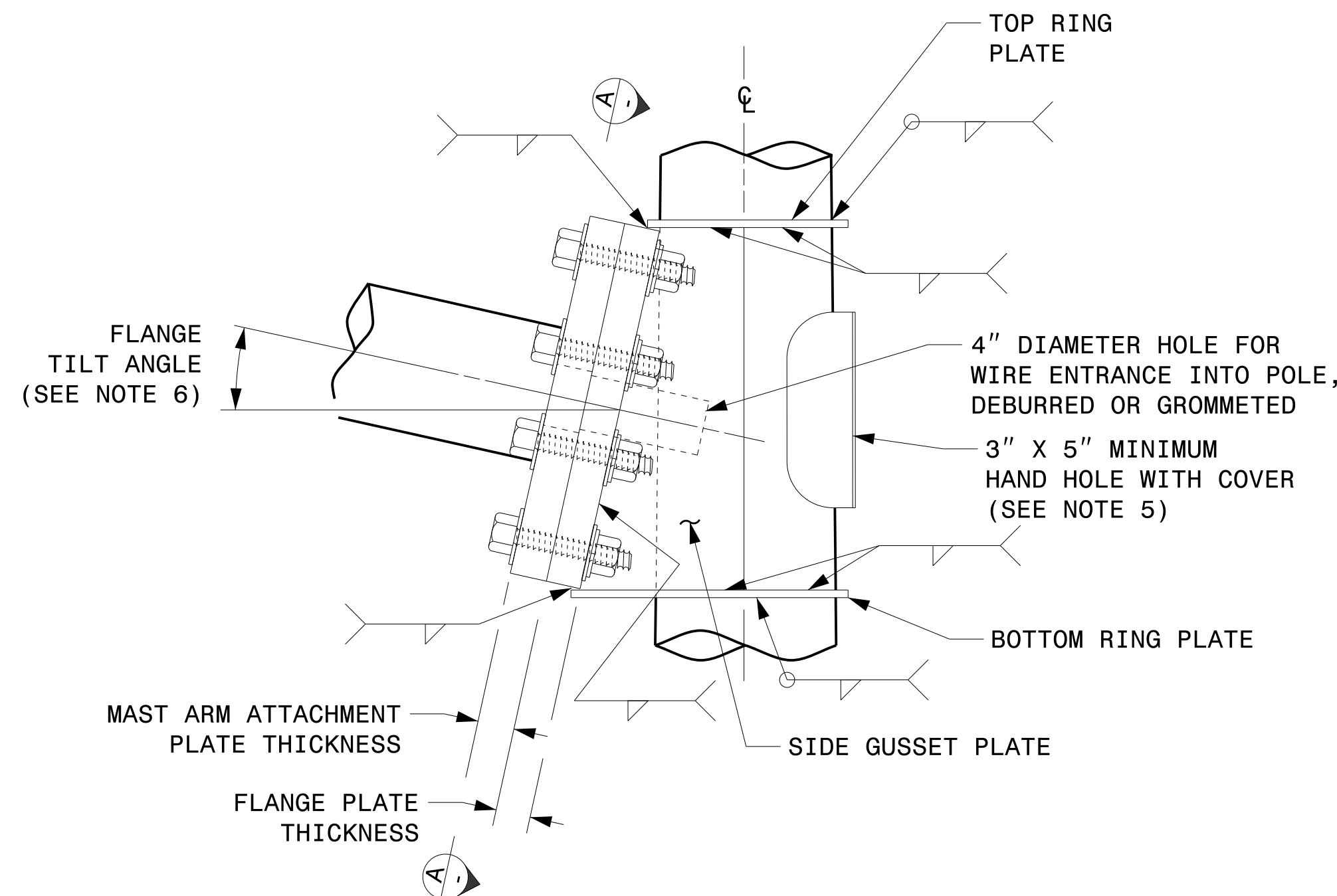
PLAN VIEW

NOTES:

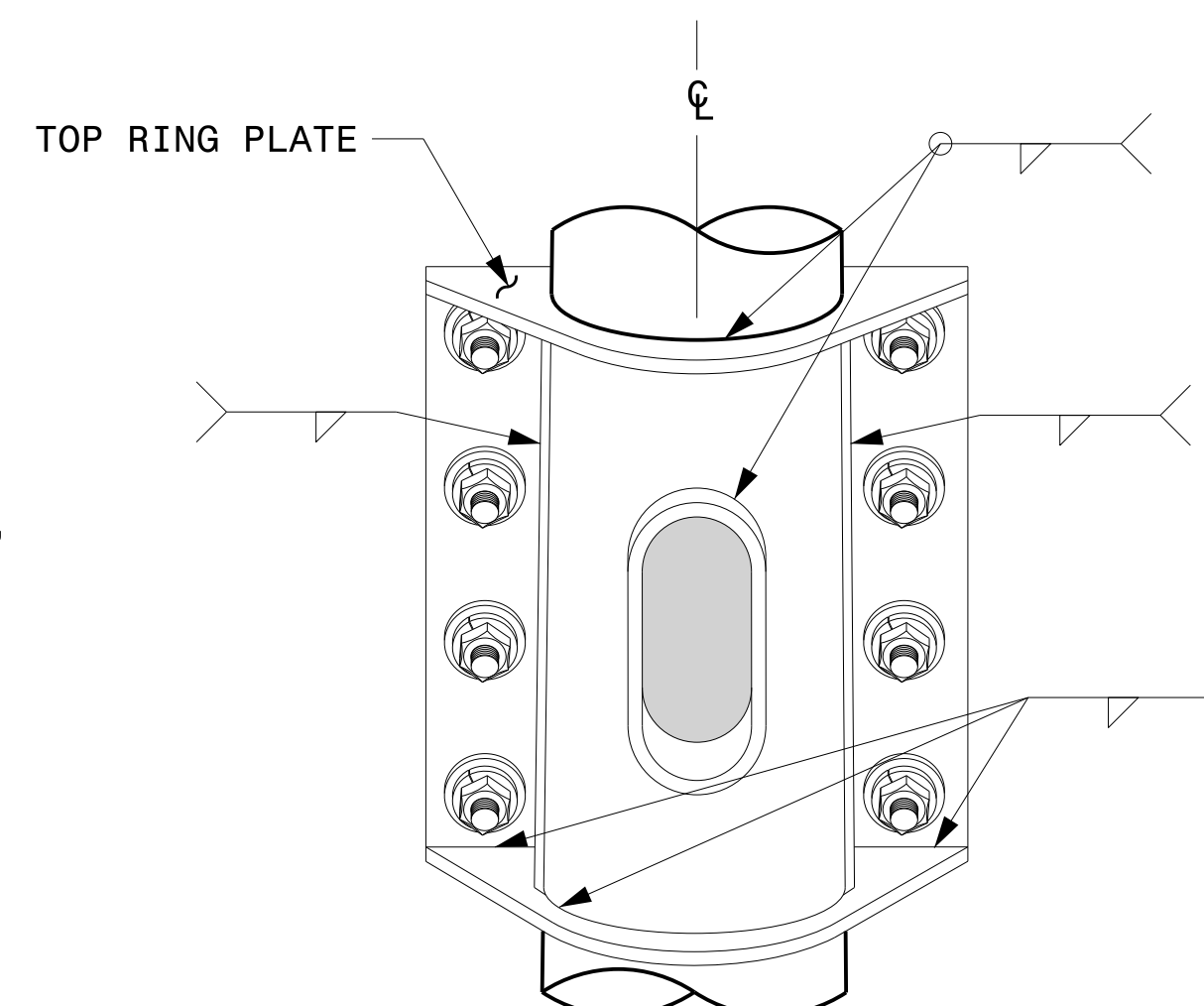
1. PROVIDE A PERMANENT MEANS OF IDENTIFICATION ABOVE THE MAST ARM TO INDICATE PROPER ATTACHMENT ORIENTATION OF THE MAST ARM.
2. DESIGNER WILL DETERMINE THE SIZE OF ALL STRUCTURAL COMPONENTS, PLATES, FASTENERS, AND WELDS SHOWN UNLESS THEY ARE ALREADY SPECIFIED.
3. FABRICATOR IS RESPONSIBLE FOR PROVIDING APPROPRIATE HOLES AT DRAINAGE POINTS TO DRAIN GALVANIZING MATERIALS.
4. FOR MINIMUM EDGE DISTANCE AND NOMINAL BOLT HOLE SIZE, FOLLOW THE LATEST AISC STEEL CONSTRUCTION MANUAL.
5. PROVIDE UPPER HANDHOLE AS NECESSARY WHEN SHAFT EXTENSIONS ARE REQUIRED FOR LUMINAIRE ARMS OR CAMERA. FOR POLES WITHOUT LUMINAIRES/CAMERA, WIRING CAN BE DONE THROUGH THE TOP OF POLE.
6. ALLOWABLE RANGE OF FLANGE TILT ANGLE WILL VARY FROM 0° TO AS REQUIRED.



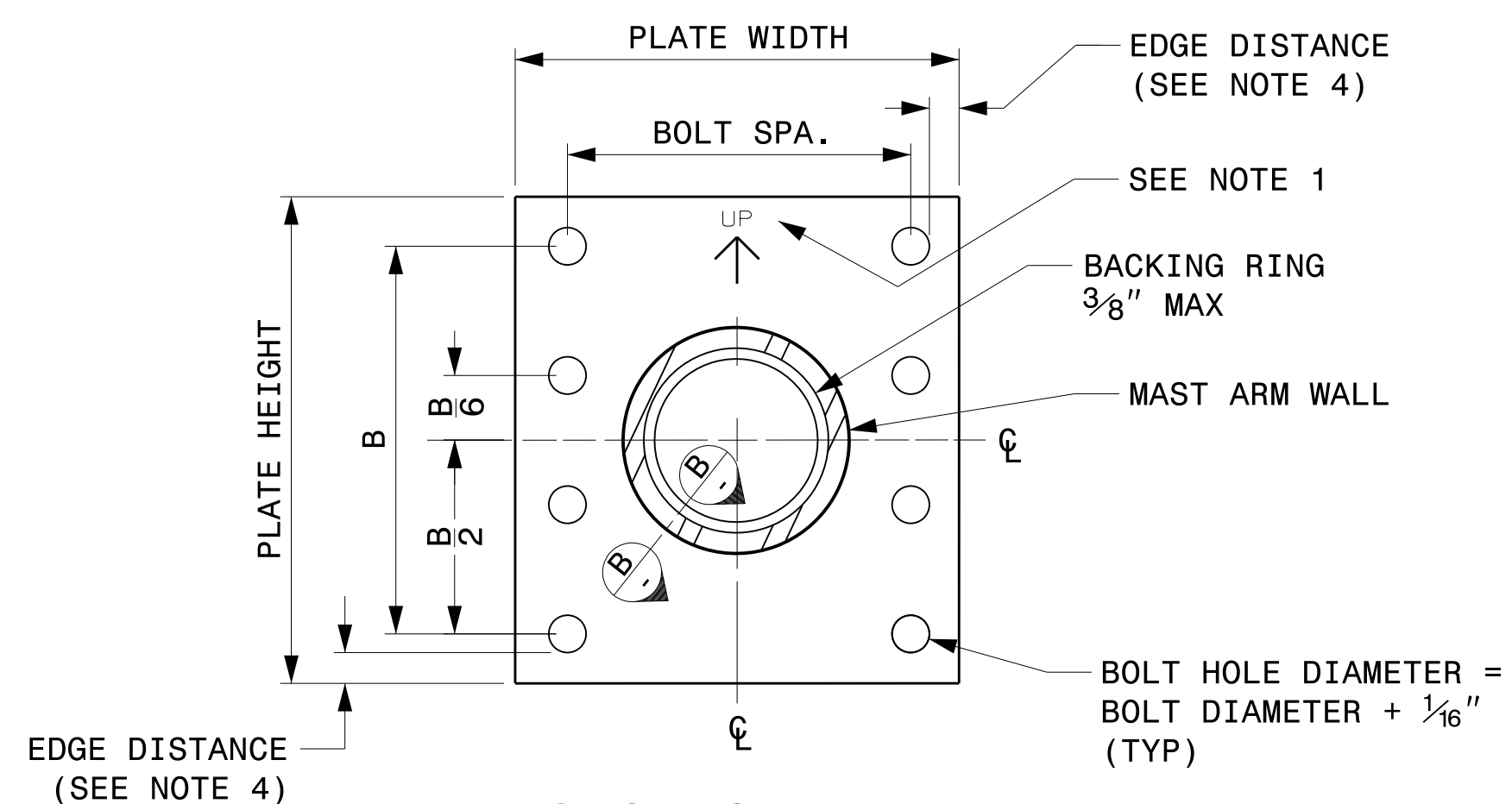
FRONT ELEVATION VIEW



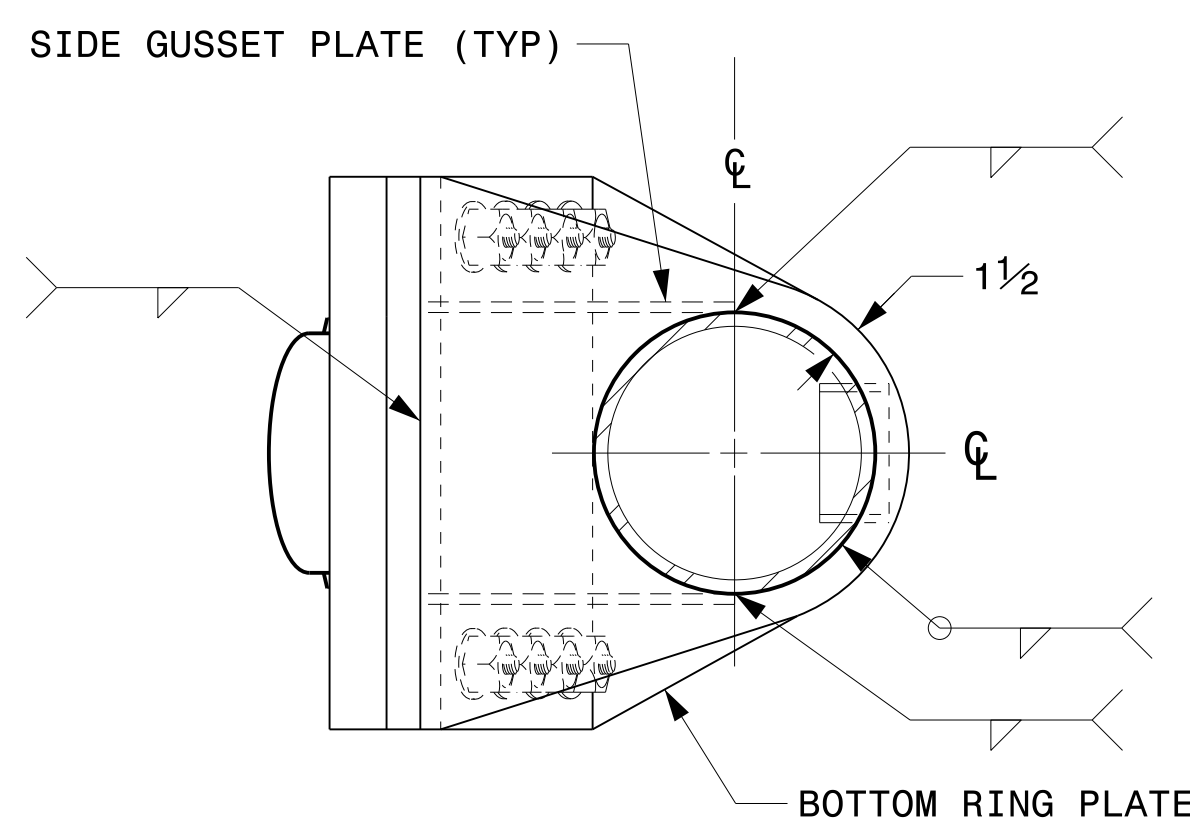
SIDE ELEVATION VIEW



BACK ELEVATION VIEW



**SECTION A-A
MAST ARM ATTACHMENT PLATE**



BOTTOM VIEW

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Fabrication Details For Mast Arm Connection To Pole	
PLAN DATE: SEPTEMBER 2023	DESIGNED BY: C.F. ANDREWS
PREPARED BY: K.C. DURIGON	REVIEWED BY: D.C. SARKAR
SCALE: NA	NONE
REVISIONS	INIT. DATE

SEAL

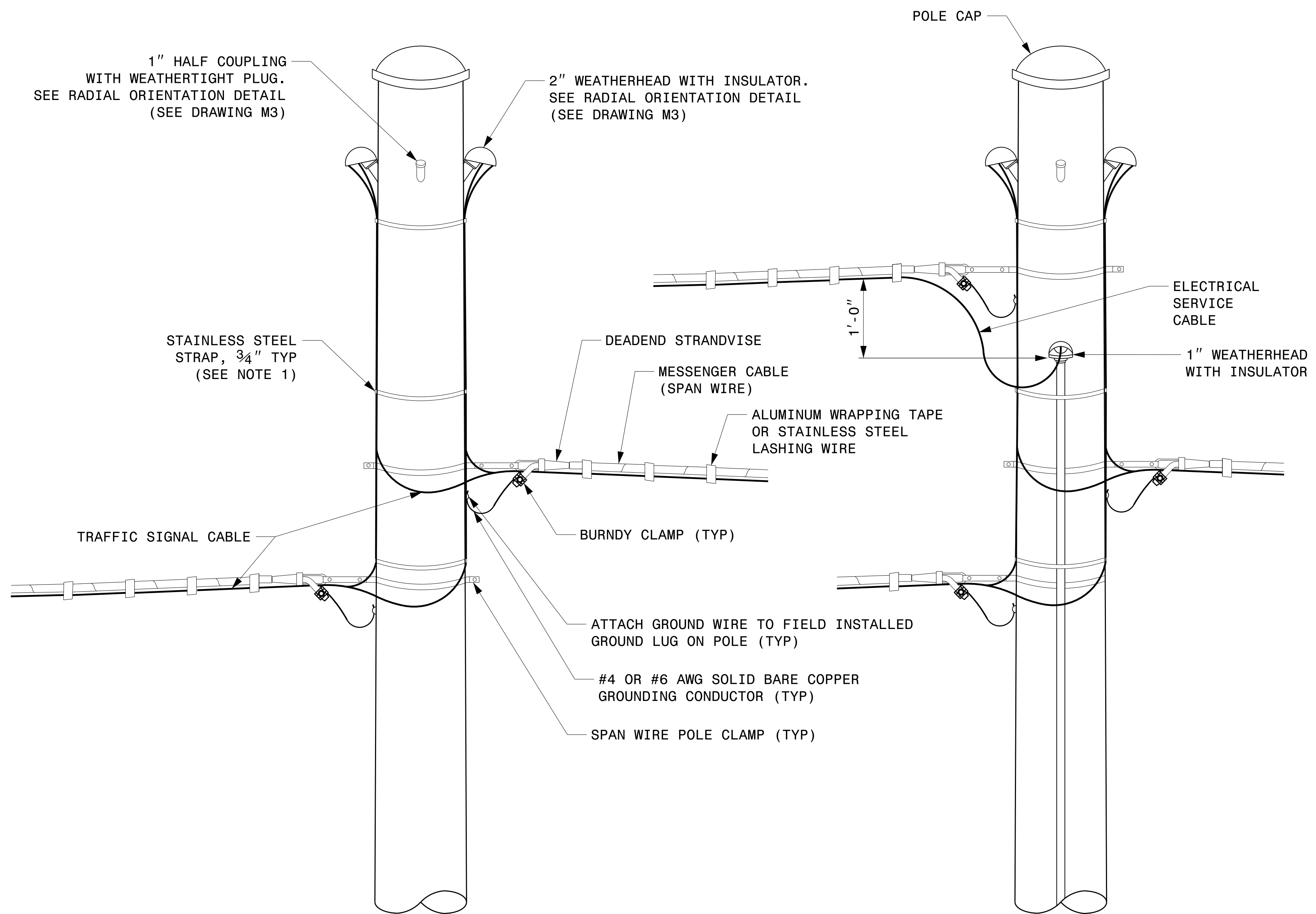
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Kevin Durigon
SIGNATURE

4B23DC79B3784DA

09/21/2023
DATE

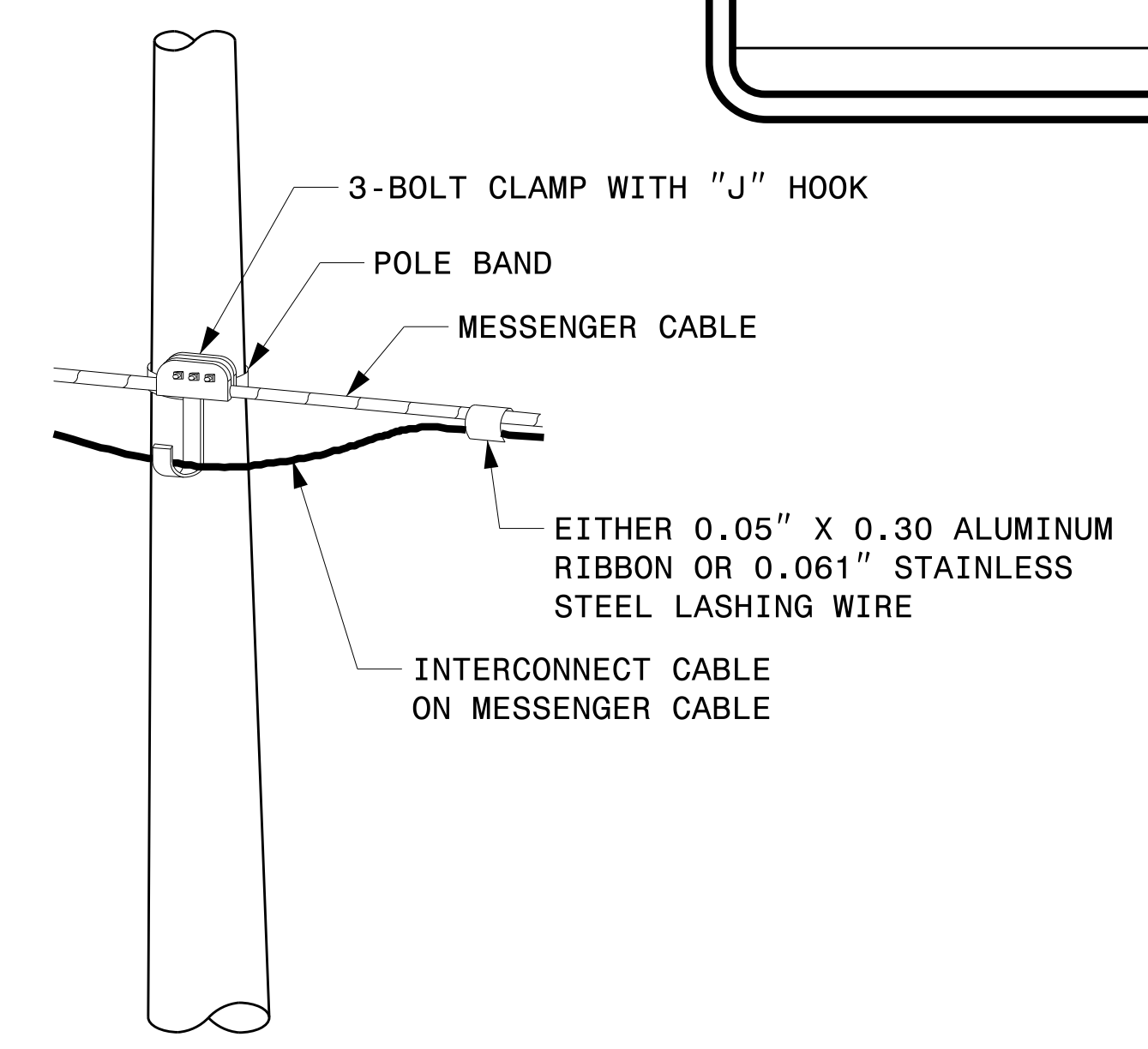
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Kedar Tagon

Fabrication Details – Mast Arm Connection

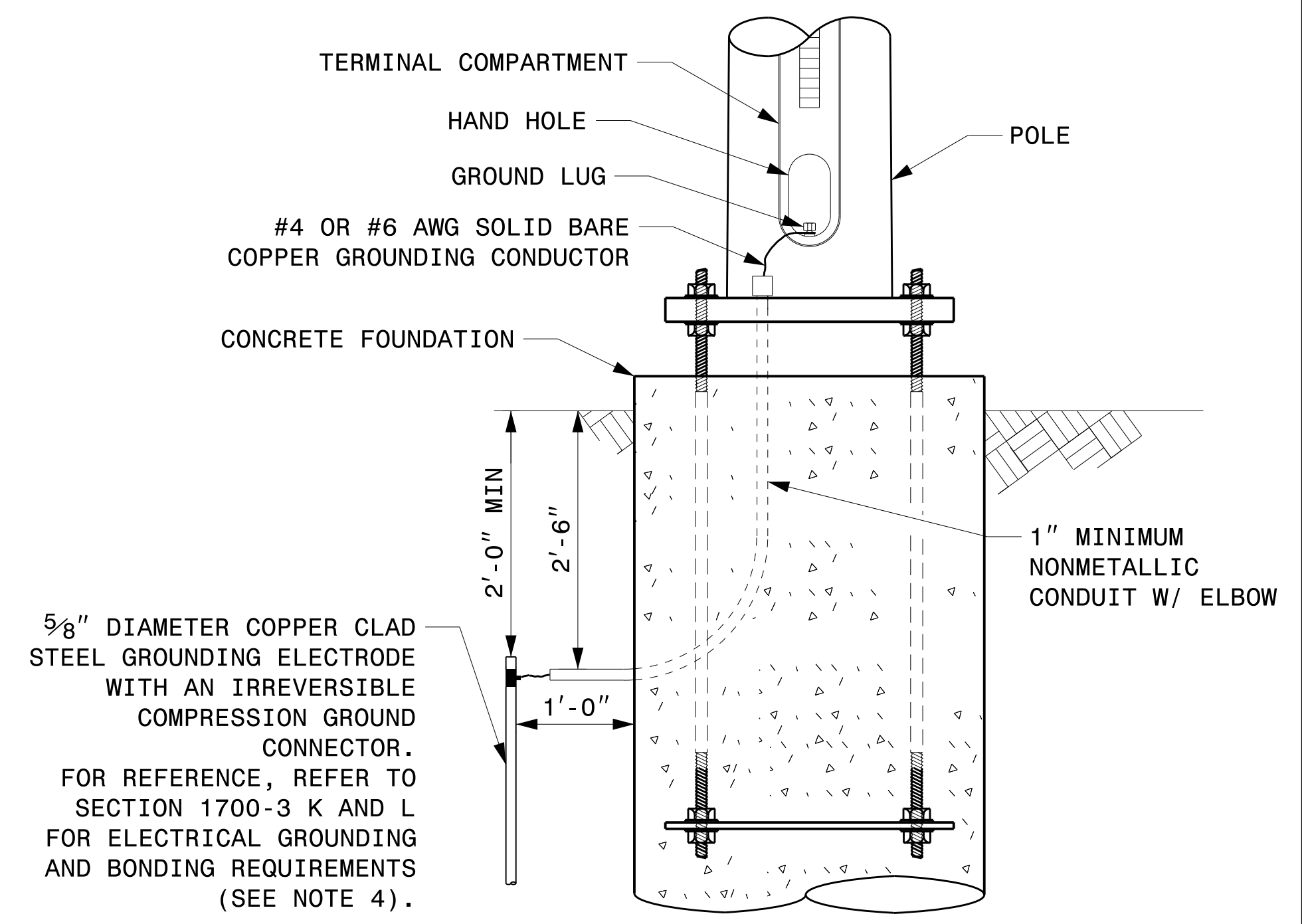


STRAIN POLE ATTACHMENTS

- NOTES:
- STRAP ALL SIGNAL CABLES TO THE SIDE OF THE POLE WITH 3/4" STAINLESS STEEL STRAPS WHEN THE DISTANCE BETWEEN SPAN WIRE ATTACHMENT CLAMP AND WEATHERHEADS EXCEEDS 3'-0".
 - PROVIDE MINIMUM TWO SPAN WIRE POLE CLAMPS PER POLE.
 - IT IS PROHIBITED TO ATTACH TWO SPAN WIRES AT ONE POLE CLAMP.
 - FOR GENERAL REQUIREMENTS, REFER TO NCDOT STANDARD SPECIFICATIONS FOR ROADWAY AND STRUCTURES, JANUARY 2024.



ATTACHMENT OF CABLE TO INTERMEDIATE METAL POLE

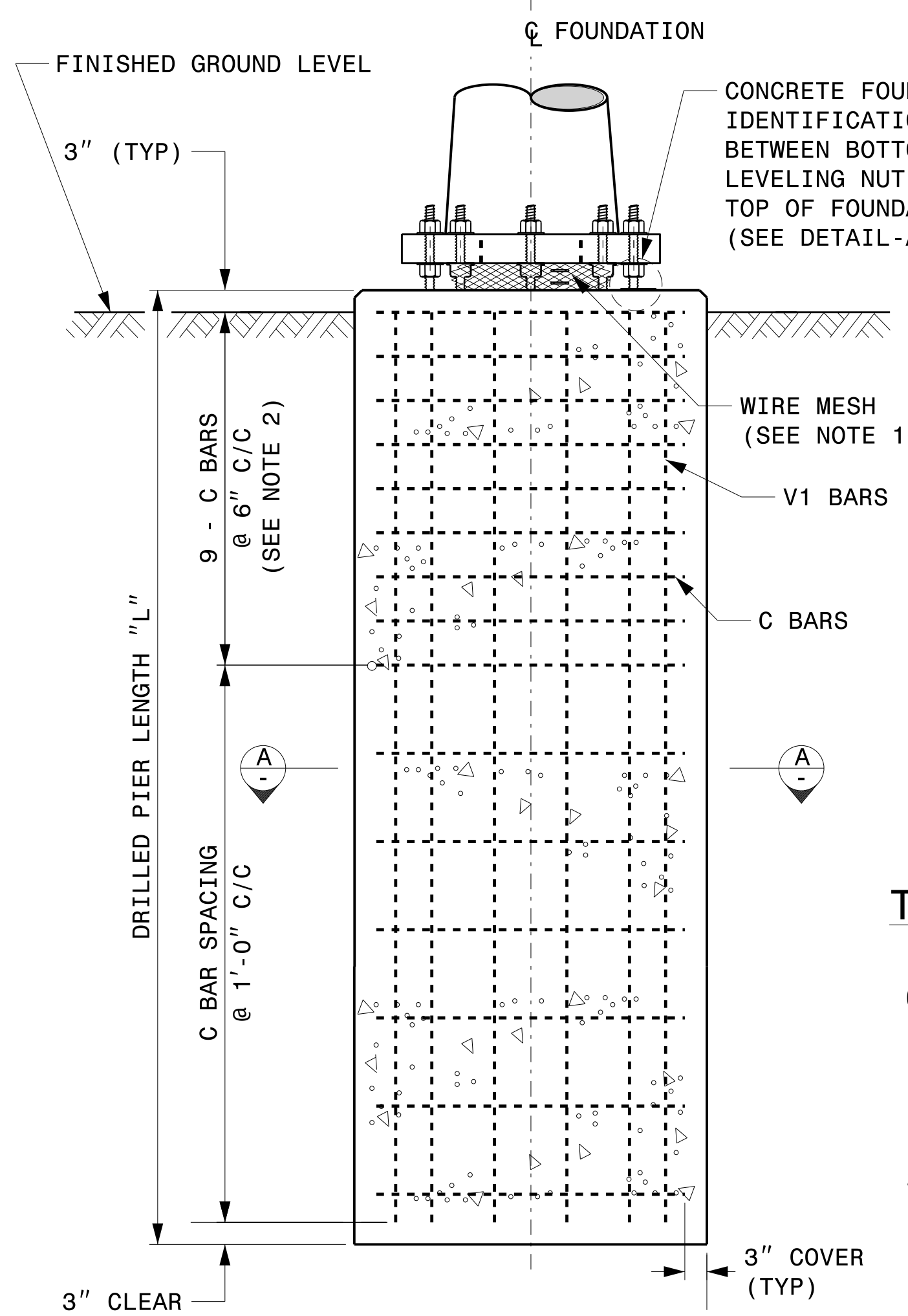


METAL POLE GROUNDING DETAIL FOR STRAIN POLE AND MAST ARM

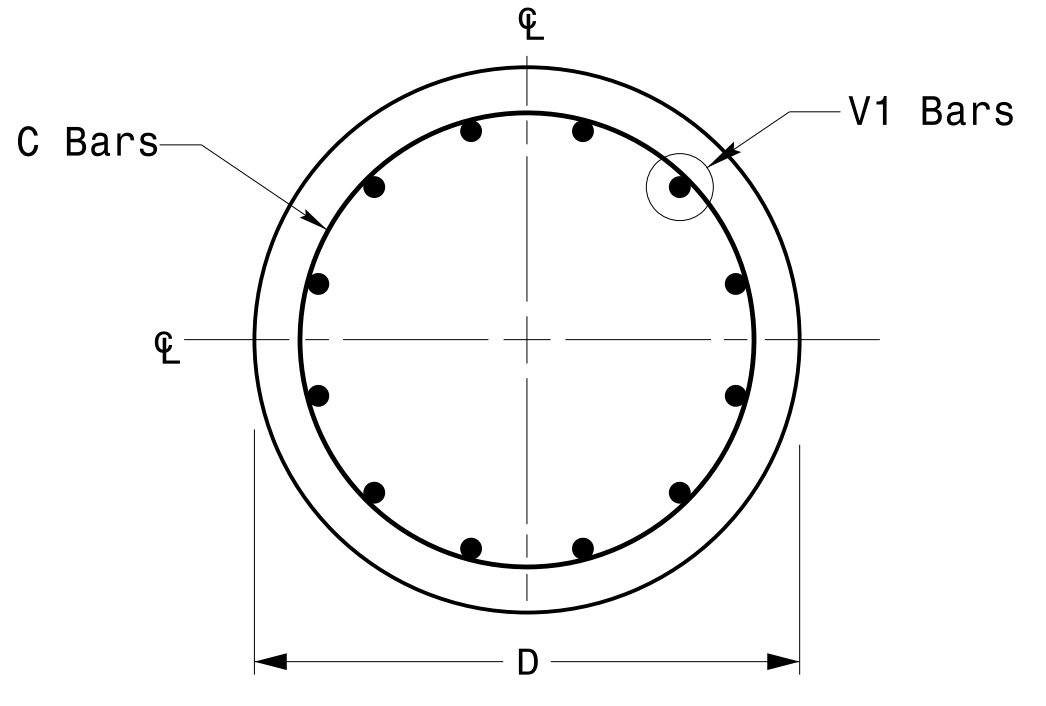
08-dpt-2023-10-41
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Kedar Tigon

<p>750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>Typical Fabrication Details For Strain Pole Attachments</p>		<p>SEAL</p> <p>DocuSigned by: Kevin Durigon 4B23DC79B3784DA</p>					
	<p>PLAN DATE: SEPTEMBER 2023 DESIGNED BY: C.F. ANDREWS</p> <p>PREPARED BY: K.C. DURIGON REVIEWED BY: D.C. SARKAR</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE		
REVISIONS	INIT.	DATE						

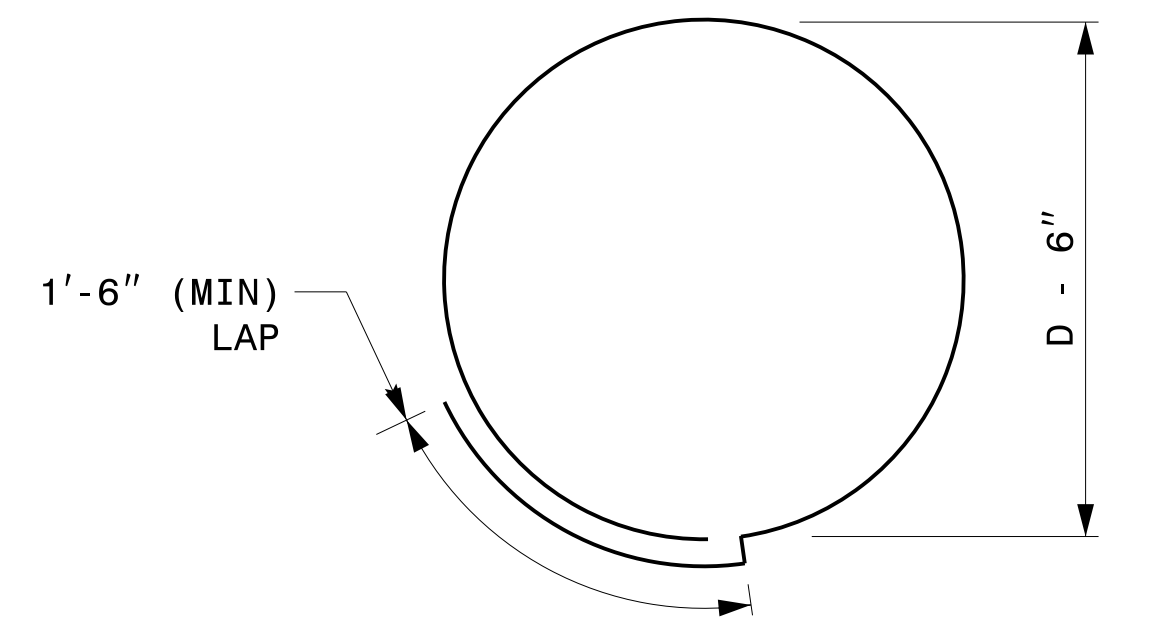
Fabrication Details – Strain Pole Attachments



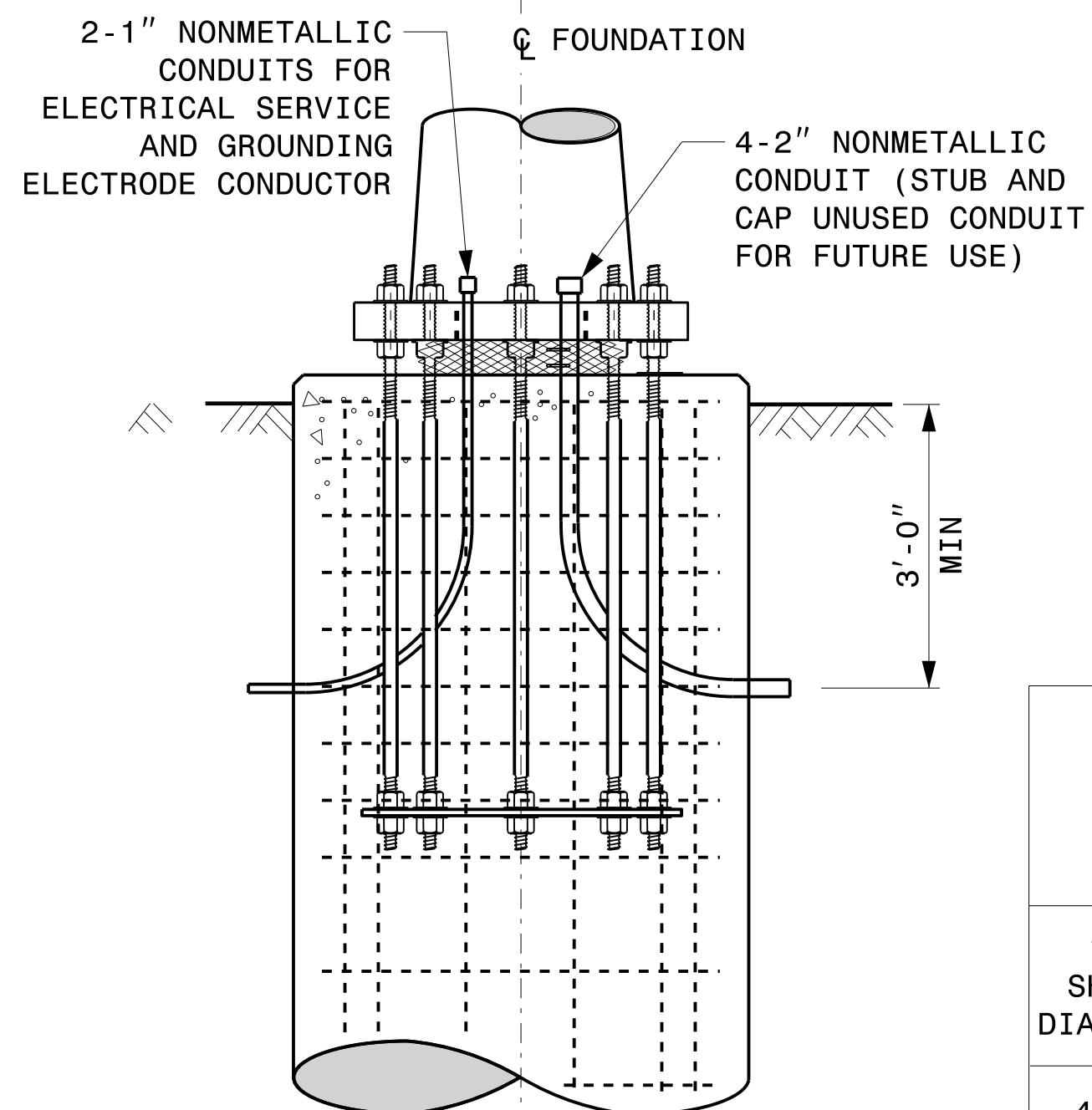
CONCRETE SHAFT ELEVATION



SECTION A-A



TYPICAL "C" BAR DETAIL



TYPICAL FOUNDATION CONDUIT DETAILS

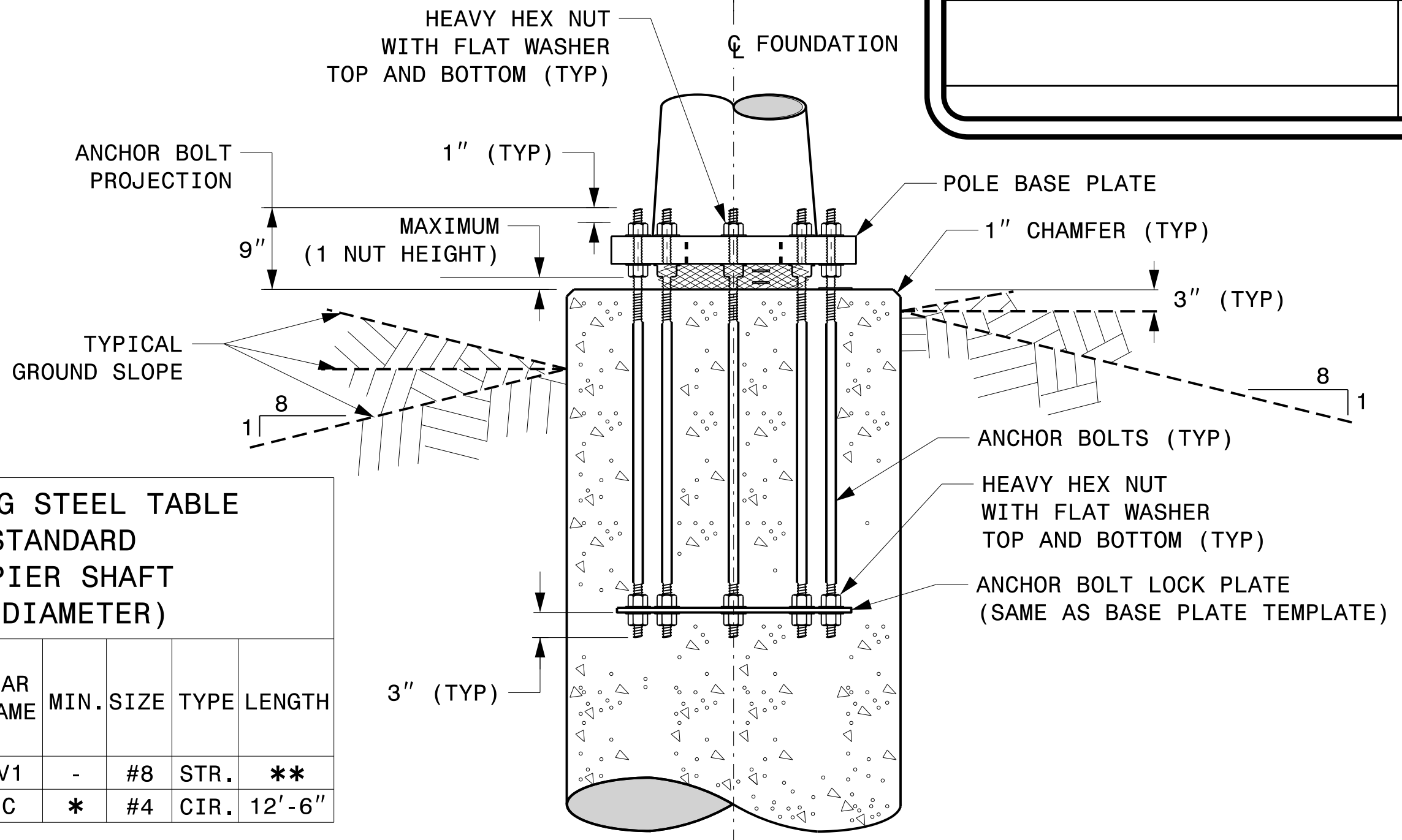
GENERAL NOTES:

- IF ACTUAL SUBSURFACE CONDITIONS DIFFER SIGNIFICANTLY FROM BORING DATA, CONTACT THE ENGINEER BEFORE EXCAVATING OR PLACING CONCRETE.
- CIRCULAR TIE REINFORCING RINGS MAY BE VERTICALLY ADJUSTED BY +/-3" AT A DEPTH BETWEEN 2'-0" AND 3'-0" TO FACILITATE THE INSTALLATION OF ELECTRICAL CONDUIT ENTERING INTO THE CAGE.
- FOR STANDARD FOUNDATIONS, SEE SHEET SIG. M8 FOR DETAILS. VERTICAL REINFORCING BARS (V1) MAY BE HORIZONTALLY ADJUSTED BY +/-3" TO FACILITATE THE INSTALLATION OF ELECTRICAL CONDUIT ENTERING INTO THE CAGE.
- PROVIDE 2" TO 5" FOUNDATION PROJECTION ABOVE GROUND LEVEL, DEPENDING ON THE GROUND SLOPE.
- UNLESS OTHERWISE SHOWN, FOUNDATION DESIGNS ARE BASED ON NON-SLOPING LEVEL GROUND SURFACES WITH SLOPE RATIOS OF 8:1 (H:V) OR FLATTER. IF ACTUAL GROUND LINE SLOPES ARE STEEPER, CONTACT THE ENGINEER BEFORE EXCAVATING OR PLACING CONCRETE.
- CONSTRUCT FOUNDATIONS IN ACCORDANCE WITH NCDOT STANDARD PROVISIONS SP09 R005- FOUNDATIONS AND ANCHOR ROD ASSEMBLIES FOR METAL POLES. ALL APPLICABLE 2024 NCDOT STANDARD SPECIFICATIONS ARE REFERENCED IN THIS PROVISION. REFER TO THE NCDOT RESOURCES/SPECIFICATIONS PAGE LOCATED ON THE CONNECT NCDOT WEBSITE.
[https://connect.ncdot.gov/resources/Specifications and Special Provisions.aspx](https://connect.ncdot.gov/resources/Specifications%20and%20Special%20Provisions.aspx)
- USE AIR ENTRAINED AA CONCRETE MIX WITH A COMPRESSION STRENGTH OF $f'c=4500$ psi (MIN) AFTER 28 DAYS.
- USE ASTM A615 GRADE 60 DEFORMED BARS FOR ALL REINFORCING STEEL. MAINTAIN AT LEAST 3" COVER ON ALL REINFORCEMENT.
- LOCATE IDENTIFICATION TAG ON TOP OF THE FOUNDATION, DIRECTLY ABOVE THE CONDUIT'S ENTRY POINT.
- PROVIDE TWO LAYERS OF 4 MESH GALVANIZED WELDED 23 GAUGE (0.025) 6" WIDE AROUND PIPES UNDER THE BASE PLATE AND SECURE IT WITH TIES IF NECESSARY.
- PREFERRED LOCATION FOR THE I.D. TAG IS AS SHOWN IN DETAIL-A: DIRECTLY ABOVE THE CONDUIT ENTERING THE FOUNDATION.

REINFORCING STEEL TABLE FOR STANDARD DRILL PIER SHAFT (4'-0" DIAMETER)

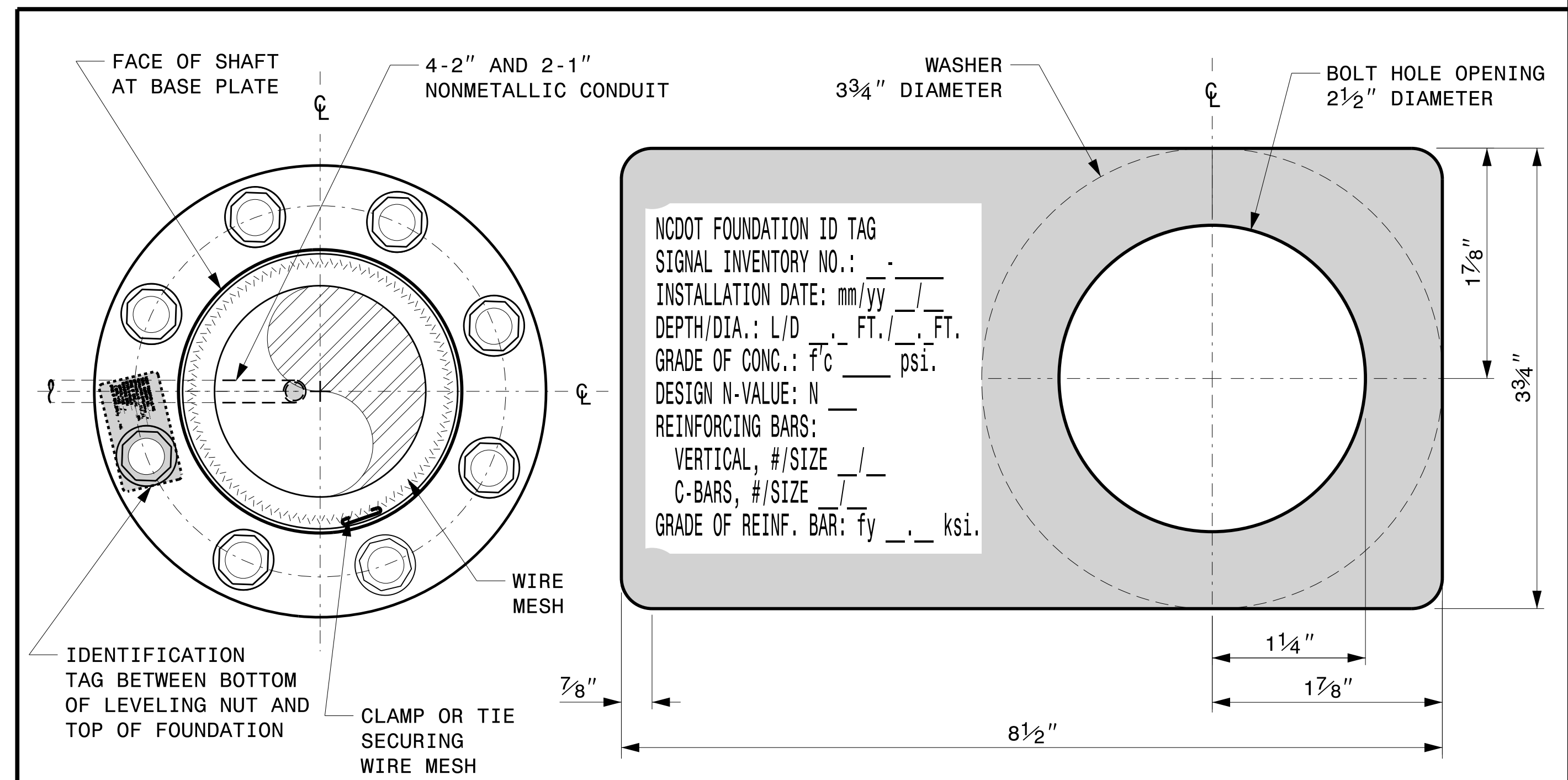
"D" SHAFT DIAMETER	CONCRETE VOLUME (CU. YDS)	BAR NAME	MIN. SIZE	TYPE	LENGTH
4'-0"	.465 X L	V1	#8	STR.	**
		C	#4	CIR.	12'-6"

* SEE NOTE 2
** SEE NOTE 3



TYPICAL FOUNDATION ANCHOR BOLT DETAILS

(REINFORCING CAGE NOT SHOWN FOR CLARITY)



CONCRETE FOUNDATION IDENTIFICATION TAG DETAILS

D = DIAMETER
L = LENGTH / DEPTH
mm = MONTH
yy = YEAR

DETAIL-A

Prepared In the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: NA
NONE

Construction Details For Foundations

PLAN DATE: SEPTEMBER 2023 DESIGNED BY: K.C. DURIGON
PREPARED BY: K.C. DURIGON REVIEWED BY: D.C. SARKAR

REVISIONS	INIT.	DATE

SEAL

DocuSigned by:
Kevin Durigon
4B23DC78F8784DA

09/21/2023 DATE

03-dt-2023-10-4f S:\SS\0415\Sig.M7.Stu. Construction Details-Strain Poles.dgn Kedar Tigon

Construction Details - Foundations

SOIL CONDITION

PROJECT I.D. NO.

SHEET NO.

Sig.M8

STANDARD STRAIN POLES						STANDARD FOUNDATIONS 48" Diameter Drilled Pier Length (L) – Feet							Reinforcement			
Case No.	Pole Height (Ft.)	Base Plate BC (In.)	Reactions at the Pole Base			Clay				Sand			Longitudinal		Stirrups	
			Axial (kip)	Shear (kip)	Moment (ft-kip)	Medium N-Value 4-8	Stiff N-Value 9-15	Very Stiff N-Value 16-30	Hard N-Value >30	Loose N-Value 4-10	Medium N-Value 11-30	Dense N-Value >30	Bar Size (#)	Quantity (ea.)	Bar Size (#)	Spacing (in.)
S26L1	26	22	2	9	210	19.5	12.5	9	6.5	15.5	14.5	13	8	12	4	12
S26L2	26	23	2	10	240	19.5	12	9	6.5	15.5	14.5	13	8	12	4	12
S26L3	26	25	2	11	260	20.5	12	10	8	16	15	13	8	12	4	12
S30L1	30	22	2	9	230	19	11	9	7	15.5	14	12.5	8	12	4	12
S30L2	30	23	2	10	270	20	12	10	8	16	14.5	13	8	12	4	12
S30L3	30	25	2	11	290	21	12	10	8	17	15	13.5	8	12	4	12
S30H1	30	25	3	13	355	23	13	11	9	18	16.5	14.5	8	12	4	12
S30H2	30	29	3	15	405	25	14	11	9	19	17.5	15.5	8	14	4	12
S30H3	30	29	3	16	430	26	15	12	9	20	18	16	8	14	4	6
S35L1	35	22	3	8	260	19.5	12	10	8	15.5	14.5	13	8	12	4	12
S35L2	35	23	3	10	300	21	12	10	8	16.5	15	13.5	8	12	4	12
S35L3	35	25	3	10	320	21.5	13	10	8	17	15.5	14	8	12	4	12
S35H1	35	25	3	12	390	23.5	14	11	9	18	17	15	8	14	4	12
S35H2	35	29	4	14	460	26	15	12	9	20	18	16	8	14	4	6
S35H3	35	29	4	16	495	28.5	15	13.5	10	21.5	19	17	8	14	4	6

GENERAL NOTES:

1. VALUES SHOWN IN THE "REACTIONS AT THE POLE BASE" COLUMN REPRESENT THE MINIMUM ACCEPTABLE CAPACITY ALLOWED FOR DESIGN USING A COMBINED FORCE RATIO (CFR) OF 1.00.
2. USE CHAIRS AND SPACERS TO MAINTAIN PROPER CLEARANCE.
3. FOR FOUNDATION, ALWAYS USE AIR-ENTRAINED CONCRETE MIX.

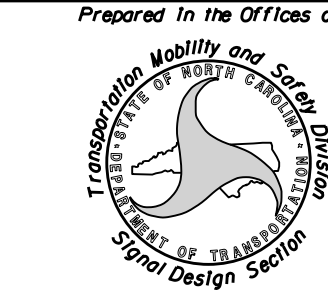
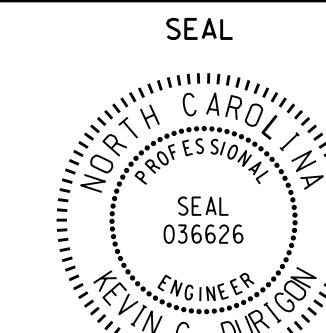
FOUNDATION SELECTION:

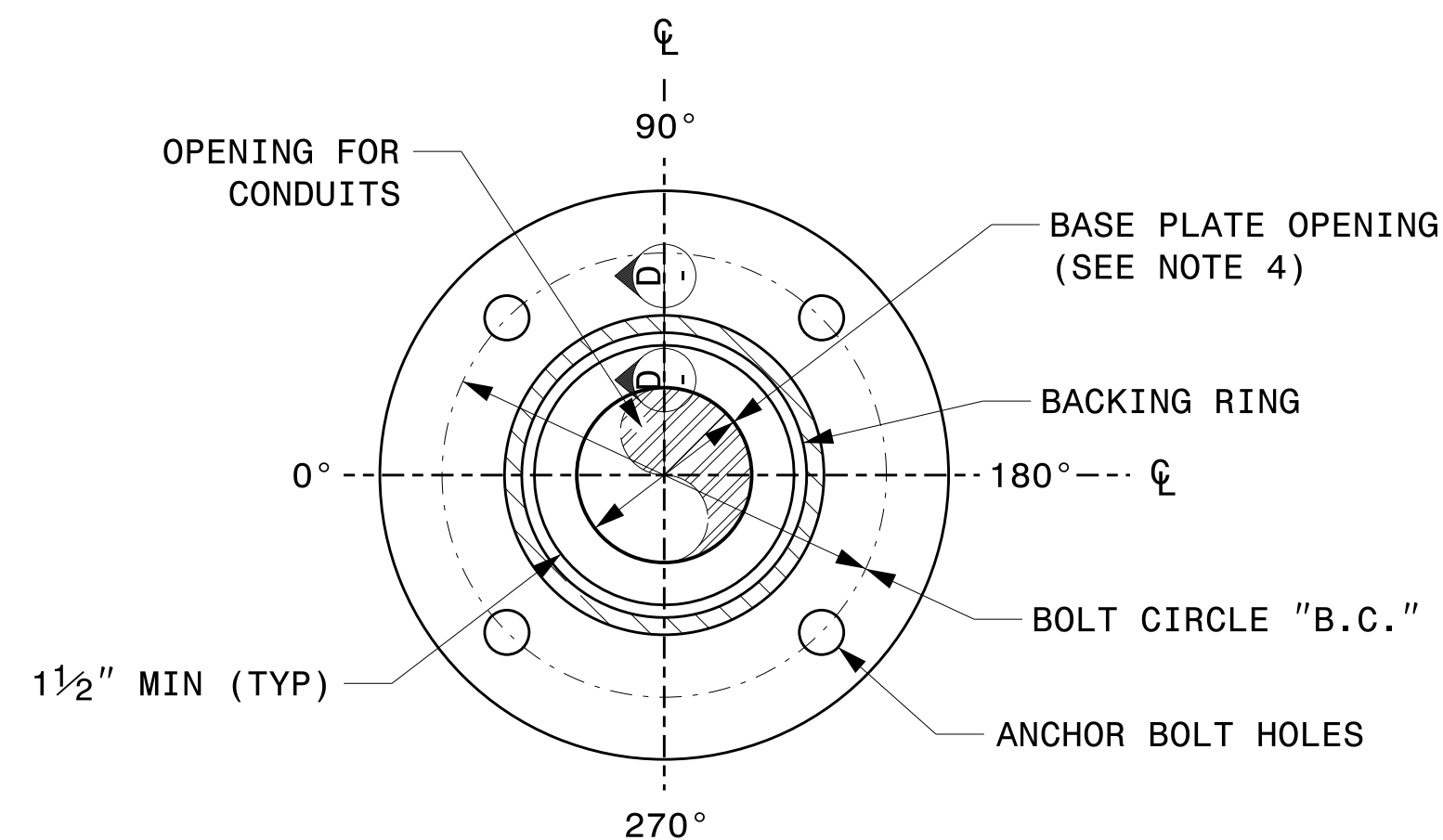
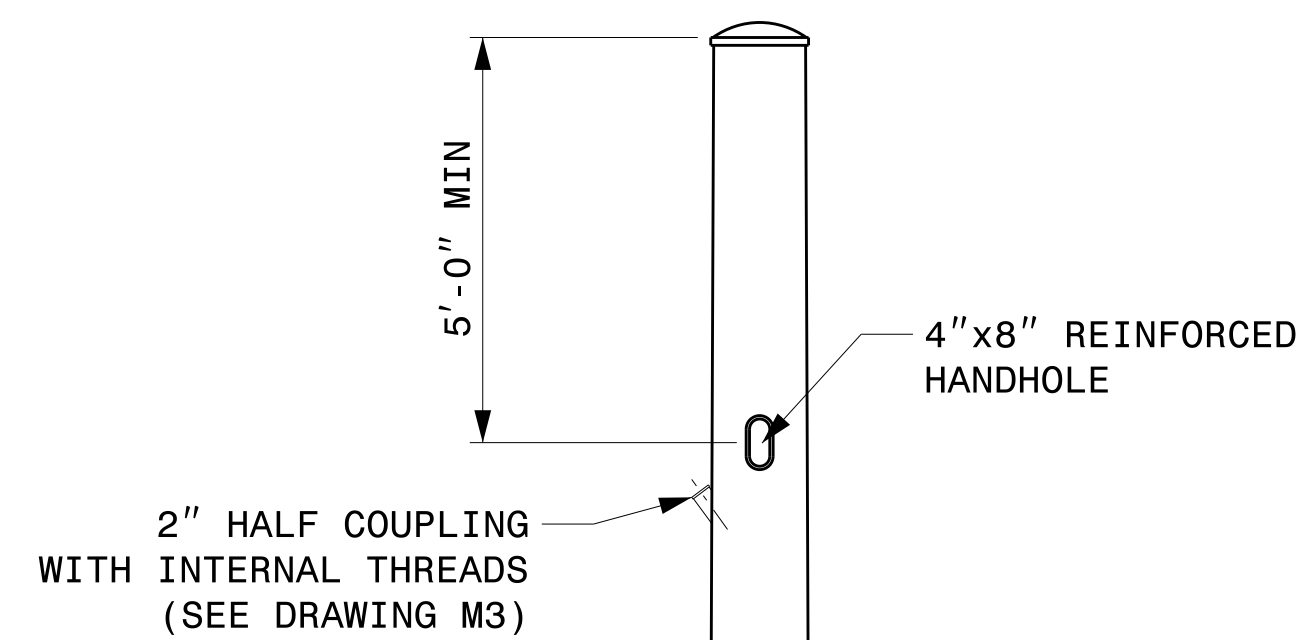
1. PERFORM A STANDARD PENETRATION TEST AT EACH PROPOSED FOUNDATION SITE TO DETERMINE "N" VALUE.
2. SELECT THE APPROPRIATE WIND ZONE FROM M1 DRAWING.
3. SELECT THE SOIL TYPE (CLAY OR SAND) THAT BEST DESCRIBES THE SOIL CHARACTERISTICS.
4. GET THE APPROPRIATE STANDARD POLE CASE NUMBER FROM THE PLANS OR FROM THE ENGINEER.
5. SELECT THE APPROPRIATE COLUMN UNDER "STANDARD FOUNDATIONS" BASED ON SOIL TYPE AND "N" VALUE. SELECT THE APPROPRIATE ROW BASED ON THE POLE LOAD CASE.
6. THE FOUNDATION DEPTH IS THE VALUE SHOWN IN THE "STANDARD FOUNDATIONS" CATEGORY WHERE THE COLUMN AND THE ROW INTERSECT.
7. USE CONSTRUCTION PROCEDURES AND DESIGN METHODS PRESCRIBED BY FHWA-NHI-10-016 MANUAL FOR DRILLED SHAFTS.

48" DIAMETER FOUNDATION CONCRETE VOLUME (CUBIC YARDS) = (0.465) x DRILLED PIER LENGTH

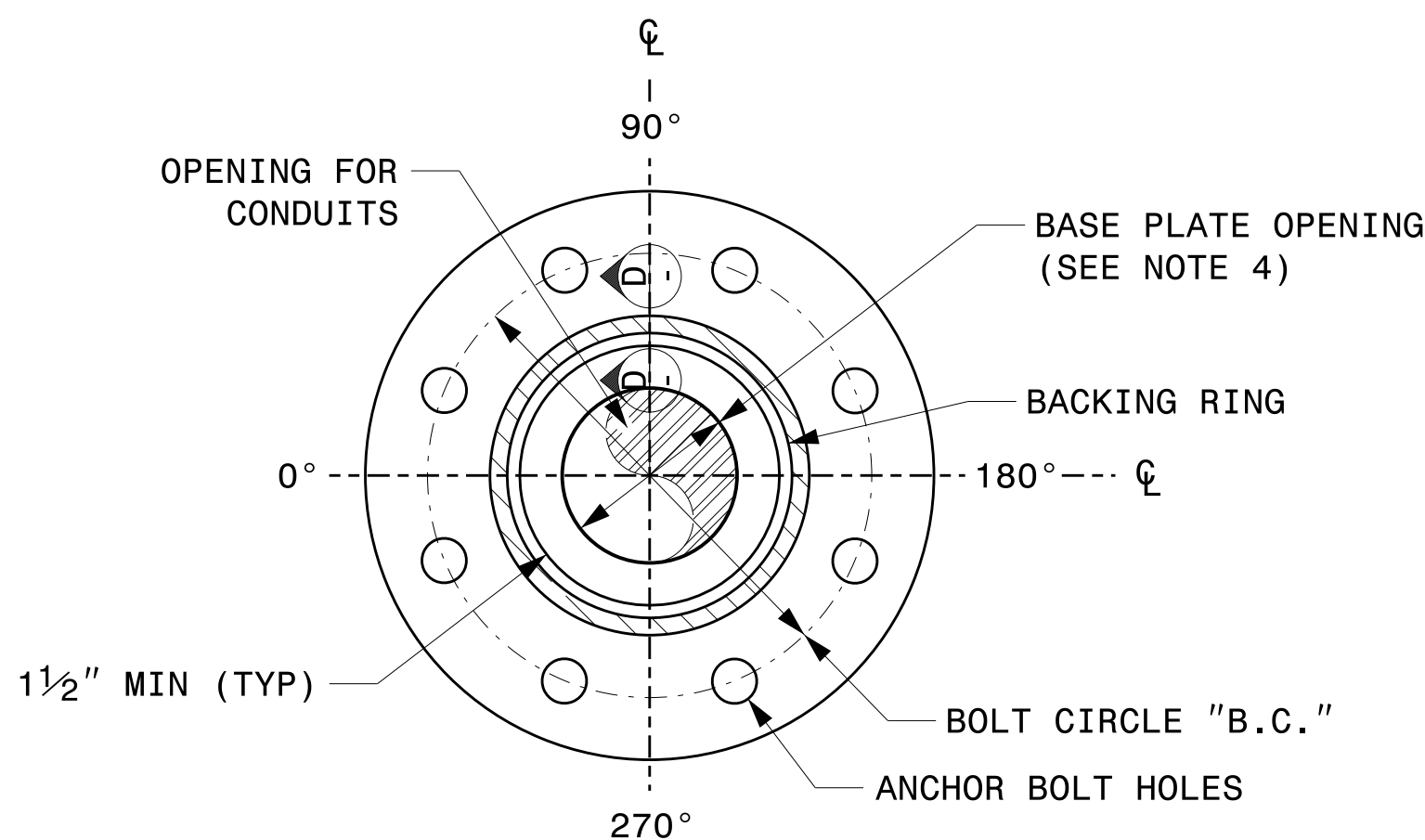
Standard Strain Pole Foundation – All Soil Conditions

09-21-2023 10:46 S:\ISSUES\Signal Design Section\Structures\Drawings\2024 Merol Pole Std Drawings for LRF\0204 Sig.M8 Str. Strain Pole Found.-Saturated Soil Condition.dgn Kedar Tigon

 <p style="font-size: 8px;">750 N. Greenfield Pkwy, Garner, NC 27529</p>	<p>Standard Strain Pole Foundation for All Soil Conditions</p> <p>PLAN DATE: SEPTEMBER 2023 DESIGNED BY: K.C. DURIGON</p> <p>PREPARED BY: K.C. DURIGON REVIEWED BY: D.C. SARKAR</p>	<p>SEAL</p> 									
<p>SCALE</p> <p>0 NA</p> <p>NONE</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: 8px;"> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>	REVISIONS	INIT.	DATE							<p>DocuSigned by:</p> <p><i>Kevin Durigon</i></p> <p>4B23DC79B3784DA</p> <p style="font-size: 8px;">09/21/2023 DATE</p>
REVISIONS	INIT.	DATE									

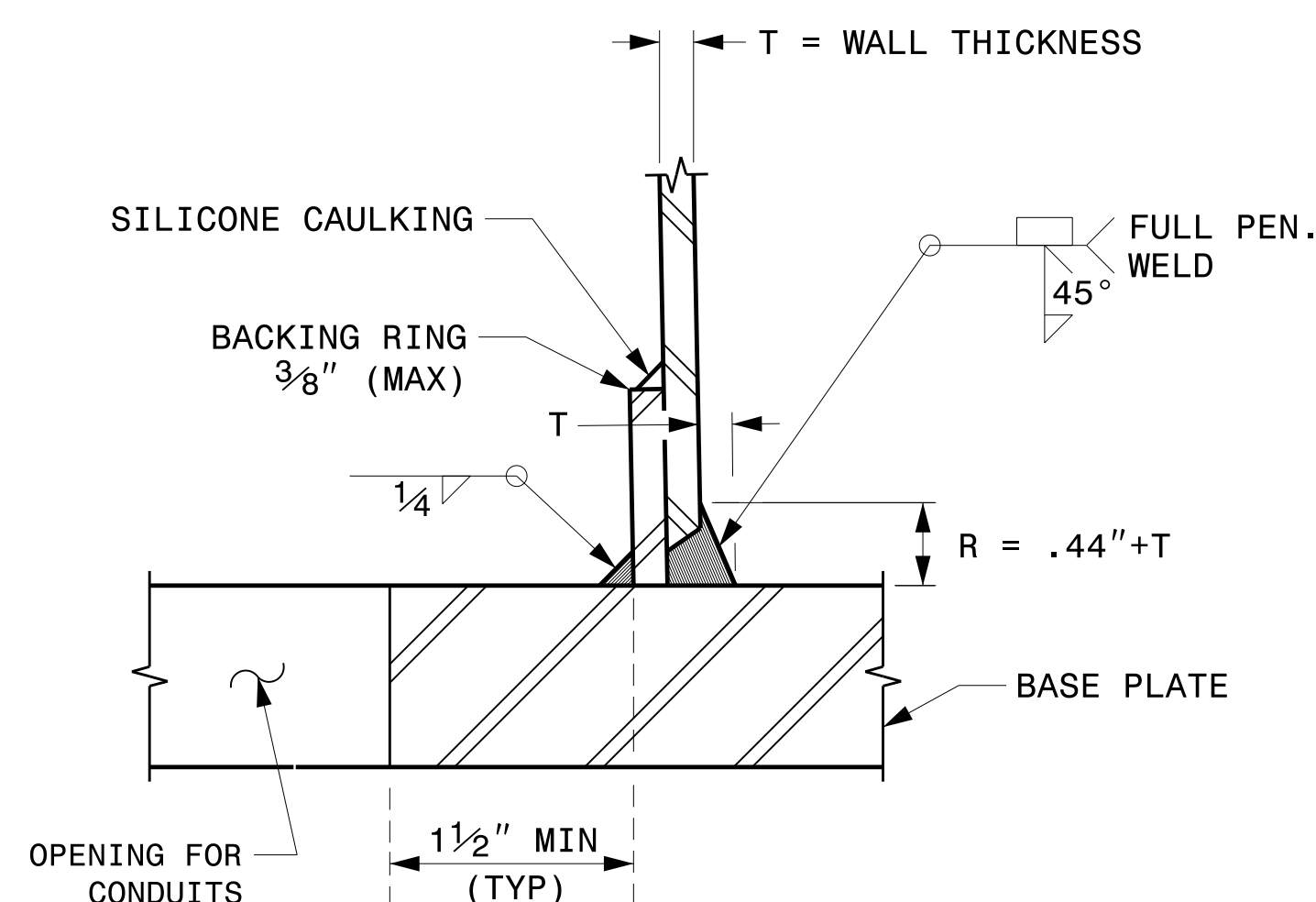


4 BOLT PATTERN FOR POLES UP TO 40'

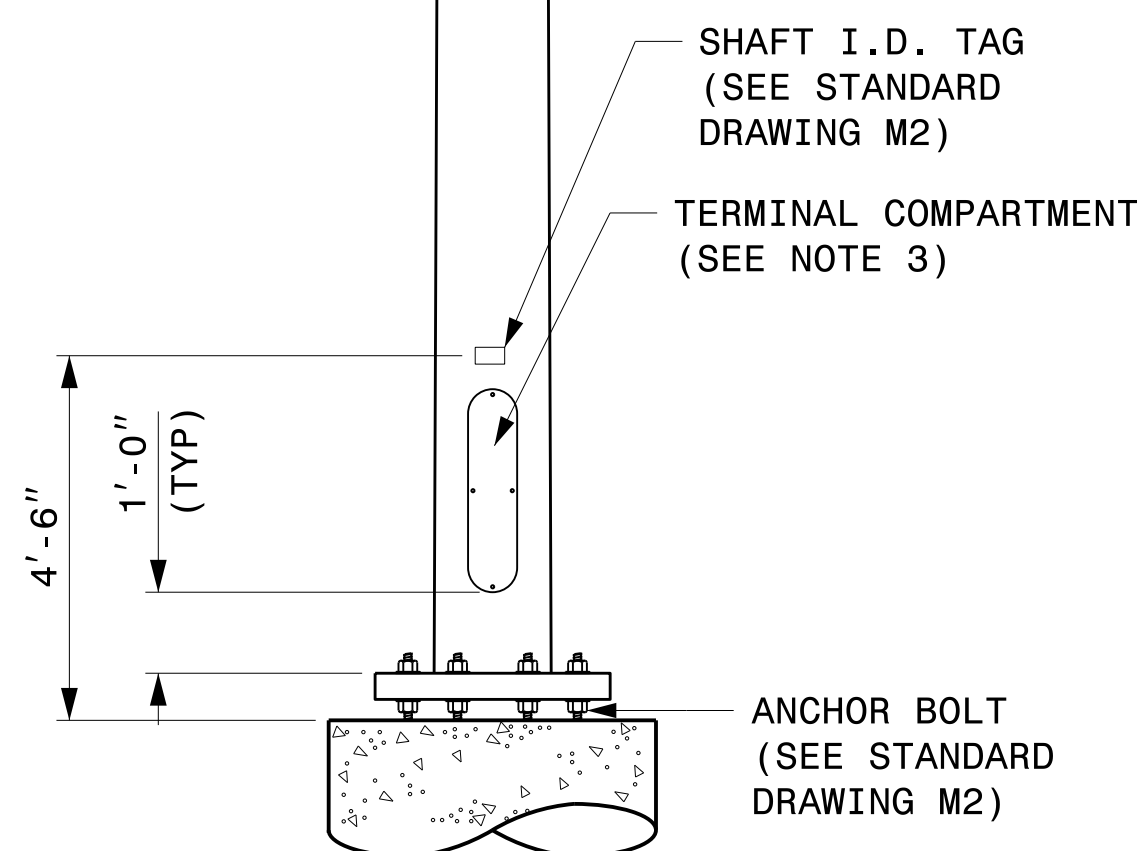


8 BOLT PATTERN FOR POLES TALLER THAN 40'

BASE PLATE DETAILS



SECTION D-D
(POLE ATTACHMENT TO BASE PLATE)
FULL-PENETRATION GROOVE WELD DETAIL



CCTV CAMERA POLE
(NOT TO SCALE)

NOTES:

1. THIS DRAWING PROVIDES BASIC DETAILS FOR CCTV POLES. PROJECT REQUIREMENTS MAY REQUIRE SPECIAL FACTORY PREPS THAT ARE NOT SHOWN ON THESE DETAILS.
2. DETAILS FOR INTERNAL CAMERA LOWERING SYSTEMS ARE NOT SHOWN.
3. POLE MOUNTED CABINETS MAY REQUIRE MODIFICATIONS TO THE LOWER HANDHOLE OPENING TO MOUNT CABINETS. 4" X 8" REINFORCED HANDHOLES ARE ACCEPTABLE OPTIONS, AND MAY BE PREFERRED.
4. OPENING IN POLE BASE SHALL BE EQUAL TO POLE BASE INSIDE DIAMETER MINUS 3 1/2" BUT SHALL NOT BE LESS THAN 8 1/2".
5. USE COMPACT SECTION CRITERIA D/T RATIO PER AASHTO LTS-LRFD 1ST EDITION SECTION 5.7.2.

02-dct-2023-10-151
S:\ISSUES\415 Signal\Signal Design\Structures\Drawings\2024 Merit Pole Std Drawings for LRF02024 Sig.M9 Fabrication Details - CCTV Poles.dgn
Kedar Tigon

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

Typical Fabrication Details For CCTV Poles	
PLAN DATE: SEPTEMBER 2023	DESIGNED BY: K.C. DURIGON
PREPARED BY: K.C. DURIGON	REVIEWED BY: C.F. ANDREWS
REVISIONS	INIT. DATE

SEAL

DocuSigned by:
Kevin Durigon
4B23DC79B3784DA

09/21/2023
DATE

Fabrication Details – CCTV Camera Poles

- 1 INSTALL COAX CABLE
- 2 INSTALL ETHERNET CABLE
- 3 EXISTING ETHERNET (OR COAX) CABLE
- 4 INSTALL SMFO CABLE
- 5 EXISTING SMFO CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 INSTALL NEW ETHERNET EDGE SWITCH
- 27 INSTALL NEW FIBER OPTIC TRANSCEIVER
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPLICE ENCLOSURE
- 30 INSTALL AERIAL SPLICE ENCLOSURE
- 31 MODIFY EXISTING INTERCONNECT CENTER /SPLICE ENCLOSURE
- 32 INSTALL POLE MOUNTED SPLICE CABINET
- 33 INSTALL BASE MOUNTED SPLICE CABINET

- 34 INSTALL CABINET FOUNDATION
- 35 INSTALL CCTV CAMERA POLE MOUNTED CABINET
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40A INSTALL OVERSIZED JUNCTION BOX
- 40B INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL WOOD POLE
- 43 REMOVE EXISTING WOOD POLE
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48A REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 48B REMOVE EXISTING COMMUNICATIONS CABLE
- 49 BACK PULL EXISTING COMMUNICATIONS CABLE
- 50 INSTALL CELL MODEM AND ANTENNA
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF NEW FIBER OPTIC CABLE
- 52A INSTALL DELINEATOR MARKER
- 52B INSTALL JUNCTION BOX MARKER
- 53A STORE 20 FEET OF COMMUNICATIONS CABLE
- 53B STORE 50 FEET OF EACH COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE
- 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE
- 56 LASH CABLE(S) TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 59 INSTALL NEW EQUIPMENT CABINET DISCONNECT
- 60 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS
- 61 BOND RISER AND MESSENGER CABLE TO POLE GROUND
- 62 BOND RISER TO POLE GROUND
- 63 BOND MESSENGER CABLE TO POLE GROUND
- 64 INSTALL HEAT SHRINK TUBING RETROFIT KIT
- 65 INSTALL MOLDABLE DUCT SEAL
- 67 SLACK SPAN

LEGEND

	NEW FIBER OPTIC COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE TO BE REMOVED
	NEW AERIAL GUY ASSEMBLY
	NEW CONDUIT
	EXISTING CONDUIT
	NEW DIRECTIONAL DRILLED CONDUIT

NEW		EXISTING
	OVERSIZED JUNCTION BOX	
	WOOD POLE	
	AERIAL SPLICE ENCLOSURE	
	UNDERGROUND SPLICE ENCLOSURE	
	METAL POLE	
	CCTV ASSEMBLY	
	STANDARD GUY ASSEMBLY	
	SIDEWALK GUY ASSEMBLY	
	CABLE STORAGE RACKS (SNOW SHOES)	
	SIGNAL EQUIPMENT CABINET	
	SPLICE CABINET	
	FLAT PANEL ANTENNA (SINGLE)	
	YAGI ANTENNA (DOUBLE) FOR REPEATER OPERATION	
	YAGI ANTENNA (SINGLE)	
	OMNI ANTENNA	
	SIGNAL POLE	
	SIGNAL INVENTORY NUMBER	

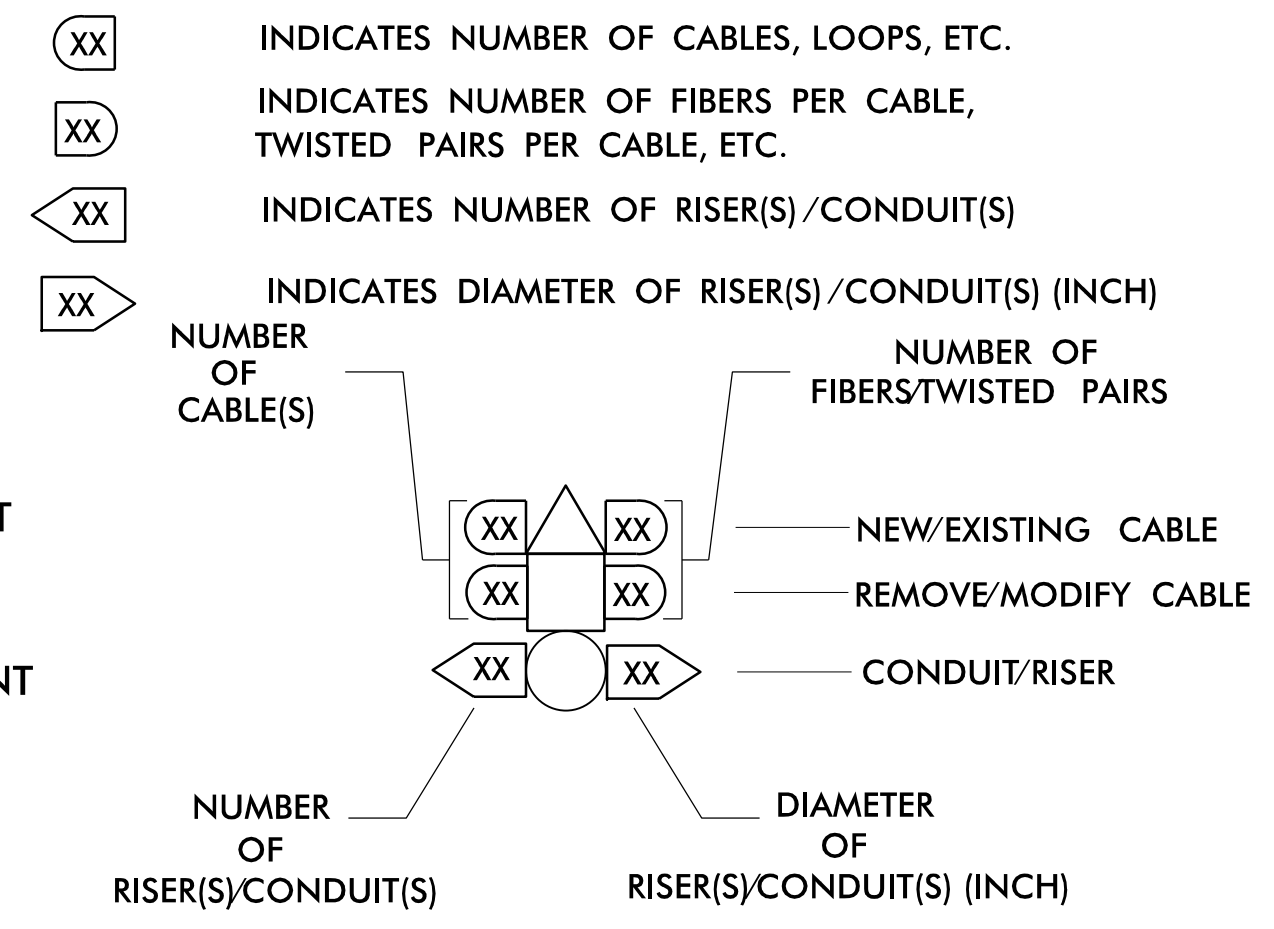
ATTACHMENT POINT:

'SS' DISTANCE ABOVE (IN)/ATTACHMENT POINT REFERENCE POINT

REFERENCE POINT DISTANCE BELOW (IN)/ATTACHMENT POINT

"SS" REFERENCE LOCATION
 FS = FRONT SIDE OF POLE
 BS = BACK SIDE OF POLE

CONSTRUCTION NOTE SYMBOLOGY KEY



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



	PRE-LET PLANS SIGNAL SYSTEM D02-02_CAPE CARTERET CONSTRUCTION NOTES	
	Division 2 Carteret County Cape Carteret PLAN DATE: April 2026 REVIEWED BY: D. Hartland PREPARED BY: Nadia Degbotse	REVISIONS: _____ INIT. DATE _____ _____ INIT. DATE _____ _____ INIT. DATE _____
Signed by: <u>Donald L. Hartland</u> 4/6/2026 _____ DATE _____ _____ SIGNATURE _____		SIG. INVENTORY NO. _____

- 1 INSTALL COAX CABLE
- 2 INSTALL ETHERNET CABLE
- 3 EXISTING ETHERNET (OR COAX) CABLE
- 4 INSTALL SMFO CABLE
- 5 EXISTING SMFO CABLE
- 6 INSTALL FIBER OPTIC DROP CABLE
- 7 INSTALL TRACER WIRE
- 8 TRENCH
- 9 INSTALL PVC CONDUIT
- 10 INSTALL RIGID, GALVANIZED STEEL CONDUIT
- 11 INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
- 12 INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
- 13 INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
- 14 INSTALL POLYETHYLENE CONDUIT
- 15 DIRECTIONAL DRILL CONDUIT
- 16 BORE AND JACK CONDUIT
- 17 INSTALL CABLE(S) IN EXISTING CONDUIT
- 18 INSTALL CABLE(S) IN NEW CONDUIT
- 19 INSTALL CABLE(S) IN EXISTING RISER
- 20 INSTALL CABLE(S) IN NEW RISER
- 21 INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS
- 22 INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 23 INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB-OUTS WHEN AVAILABLE)
- 24 INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
- 25 INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
- 26 INSTALL NEW ETHERNET EDGE SWITCH
- 27 INSTALL NEW FIBER OPTIC TRANSCEIVER
- 28 INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPlice CABLE IN CABINET
- 29 INSTALL UNDERGROUND SPlice ENCLOSURE
- 30 INSTALL AERIAL SPlice ENCLOSURE
- 31 MODIFY EXISTING INTERCONNECT CENTER /SPlice ENCLOSURE
- 32 INSTALL POLE MOUNTED SPlice CABINET
- 33 INSTALL BASE MOUNTED SPlice CABINET

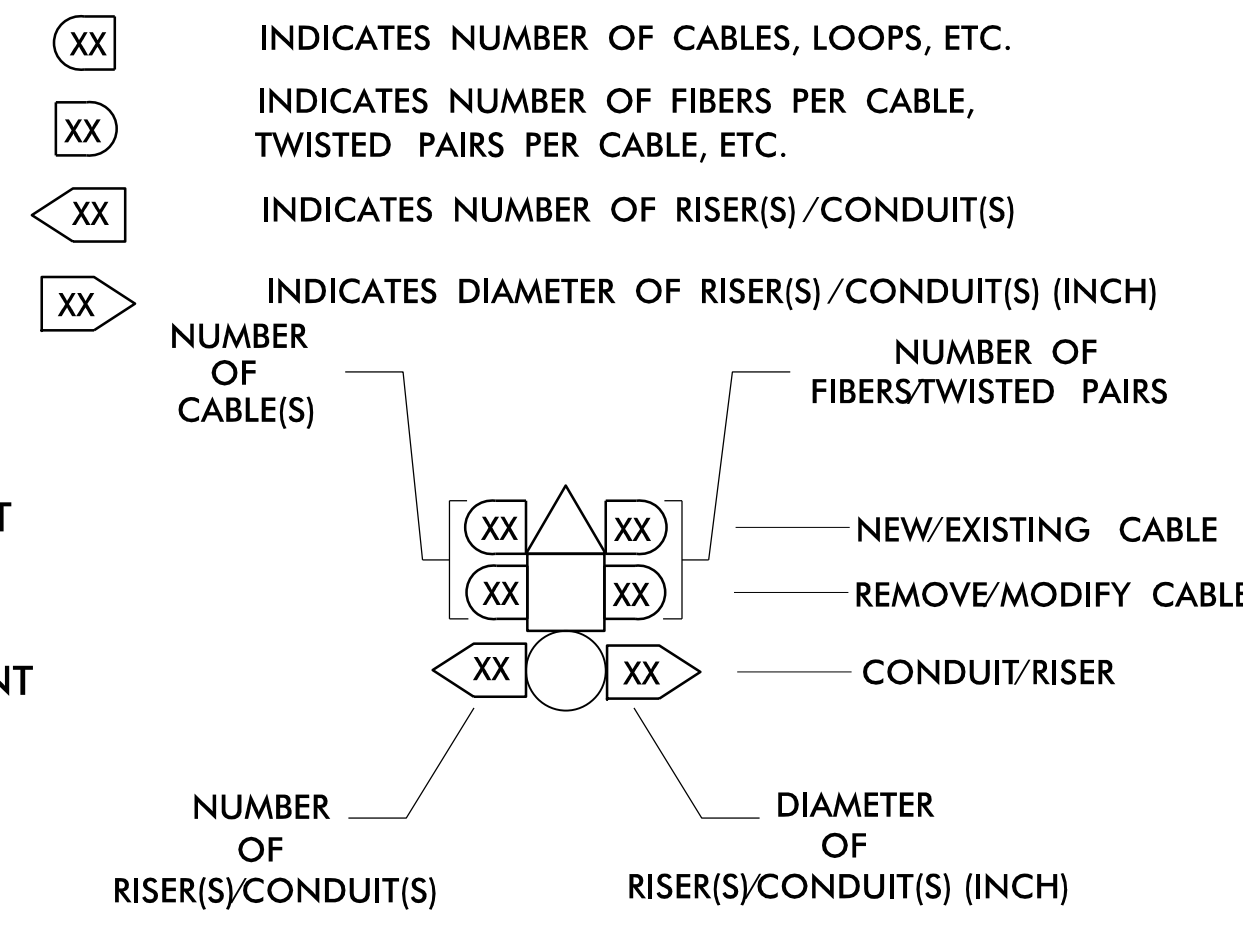
- 34 INSTALL CABINET FOUNDATION
- 35 INSTALL CCTV CAMERA POLE MOUNTED CABINET
- 36 INSTALL CCTV CAMERA ASSEMBLY
- 37 INSTALL CCTV CAMERA WOOD POLE
- 38 INSTALL CCTV CAMERA METAL POLE AND FOUNDATION
- 39 INSTALL JUNCTION BOX
- 40A INSTALL OVERSIZED JUNCTION BOX
- 40B INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")
- 41 REMOVE EXISTING JUNCTION BOX
- 42 INSTALL WOOD POLE
- 43 REMOVE EXISTING WOOD POLE
- 44 INSTALL AERIAL GUY ASSEMBLY
- 45 INSTALL STANDARD GUY ASSEMBLY
- 46 INSTALL SIDEWALK GUY ASSEMBLY
- 47 INSTALL MESSENGER CABLE
- 48A REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE
- 48B REMOVE EXISTING COMMUNICATIONS CABLE
- 49 BACK PULL EXISTING COMMUNICATIONS CABLE
- 50 INSTALL CELL MODEM AND ANTENNA
- 51 INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF NEW FIBER OPTIC CABLE
- 52A INSTALL DELINEATOR MARKER
- 52B INSTALL JUNCTION BOX MARKER
- 53A STORE 20 FEET OF COMMUNICATIONS CABLE
- 53B STORE 50 FEET OF EACH COMMUNICATIONS CABLE
- 54 LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE
- 55 LASH CABLE(S) TO EXISTING MESSENGER CABLE
- 56 LASH CABLE(S) TO NEW MESSENGER CABLE
- 57 MODIFY EXISTING ELECTRICAL SERVICE
- 58 INSTALL NEW ELECTRICAL SERVICE
- 59 INSTALL NEW EQUIPMENT CABINET DISCONNECT
- 60 BOND TRACER WIRE TO EQUIPMENT GROUND BUS
DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS
- 61 BOND RISER AND MESSENGER CABLE TO POLE GROUND
- 62 BOND RISER TO POLE GROUND
- 63 BOND MESSENGER CABLE TO POLE GROUND
- 64 INSTALL HEAT SHRINK TUBING RETROFIT KIT
- 65 INSTALL MOLDABLE DUCT SEAL
- 67 SLACK SPAN

LEGEND

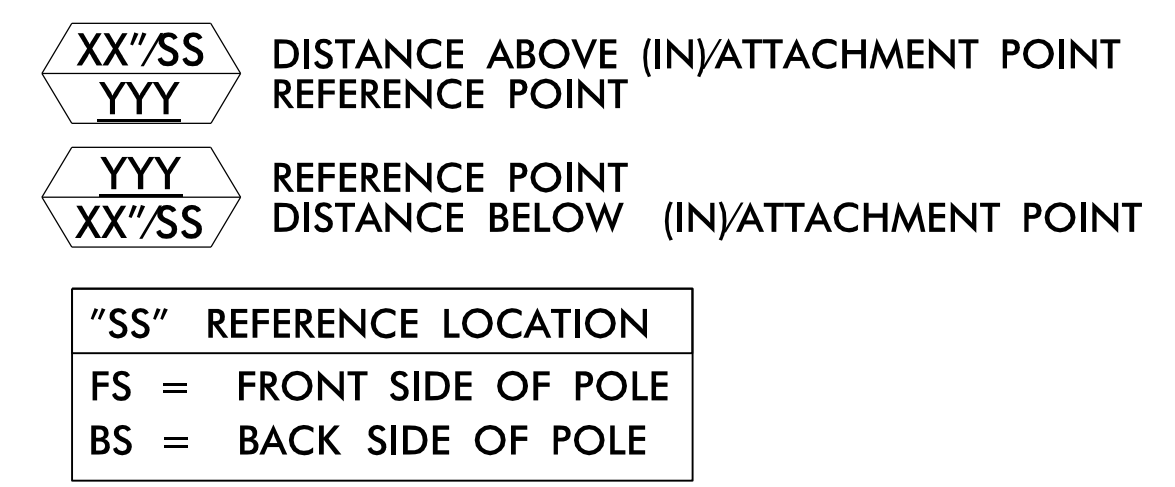
	NEW FIBER OPTIC COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE
	EXISTING COMMUNICATIONS CABLE TO BE REMOVED
	NEW AERIAL GUY ASSEMBLY
	NEW CONDUIT
	EXISTING CONDUIT
	NEW DIRECTIONAL DRILLED CONDUIT

NEW	EXISTING

CONSTRUCTION NOTE SYMBOLOGY KEY



ATTACHMENT POINT:



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Prepared in the Offices of: **POST-LET PLANS**

SIGNAL SYSTEM D02-02_CAPE CARTERET

CONSTRUCTION NOTES

Division 2 Carteret County Cape Carteret

PLAN DATE: April 2026 REVIEWED BY: D. Hartland

PREPARED BY: Nadia Degbotse

SEAL: DONALD L. HARTLAND, PROFESSIONAL ENGINEER, 047962

Signed by: Donald L. Hartland 4/6/2026

NOTES

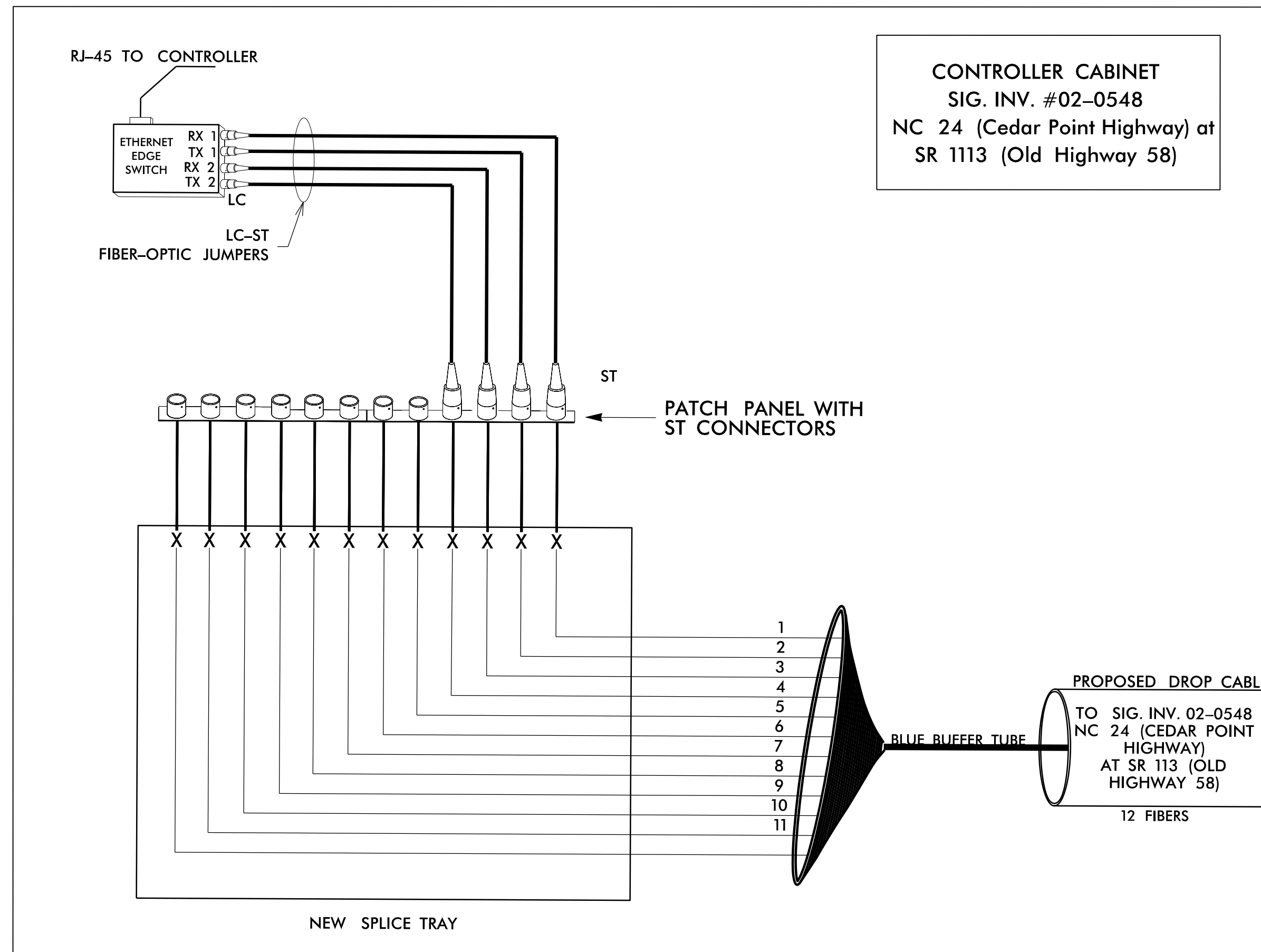
- 1) FIVE DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE DIVISION 2 DEPUTY DIVISION TRAFFIC ENGINEER AT (252) 439-2833 TO PROGRAM THE NEW FIELD ETHERNET SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO: THE PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION. NOTIFY THE DIVISION 2 DEPUTY TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. WORK IS NOT COMPLETE UNTIL THE SIGNAL SYSTEM IS BACK UP AND OPERATIONAL.
- 2) CONTRACTOR TO RECORD EXISTING SPLICE ARRANGEMENT FOR COMPARISON TO THE SUPPLIED SPLICE DETAILS. IF DISCREPANCIES EXIST, CONTACT THE ENGINEER TO DETERMINE HOW TO PROCEED WITH RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE SUPPLIED SPLICE DETAILS.
- 3) ETHERNET SWITCH TERMINATION CONFIGURATIONS ARE GENERIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND ENSURING PROPER TERMINATIONS.
- 4) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING: REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
 - a) SPLICE LOCATION
 - b) DATE
 - c) COMPANY NAME
 - d) NAME OF INDIVIDUAL PERFORMING THE SPLICING
- 5) PRIOR TO INSTALLING THE COVER ON THE SPLICE TRAY TAKE A DIGITAL PHOTOGRAPH SHOWING THE SPLICE TRAY AND INFORMATION SHOWN ABOVE (1-4) AND SUBMIT PHOTOGRAPH ALONG WITH OTDR TEST RESULTS.
- 6) UNUSED FIBERS LEFT COILED AND STORED IN SPLICE TRAY
- 7) UNUSED BUFFER TUBES LEFT COILED AND STORED IN SPLICE ENCLOSURE

LEGEND

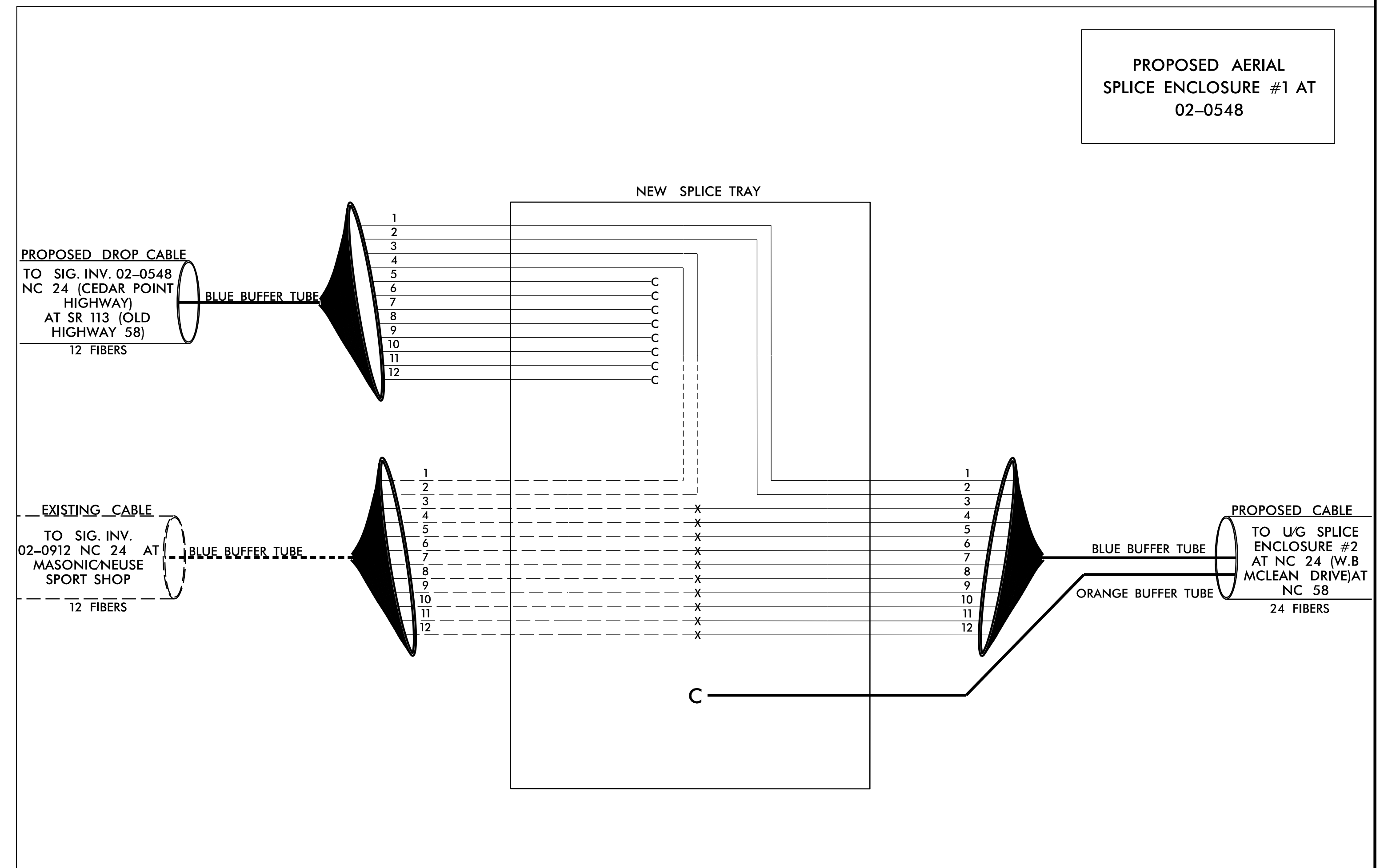
COLOR CODE TIA/EIA 598-A	
(1) BLUE	(7) RED
(2) ORANGE	(8) BLACK
(3) GREEN	(9) YELLOW
(4) BROWN	(10) VIOLET
(5) SLATE	(11) ROSE
(6) WHITE	(12) AQUA

X = FUSION SPLICE INDIVIDUAL FIBER
C = CAP AND SEAL

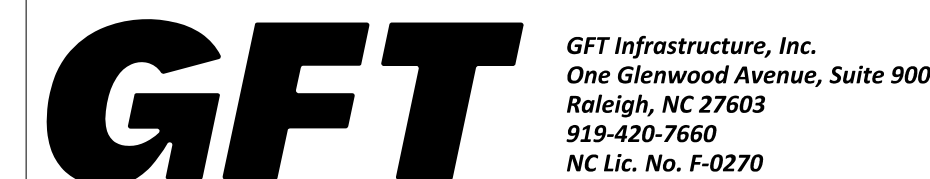
EXPRESS = EXPRESS ENTIRE BUFFER TUBE /FIBERS THROUGH WITHOUT CUTTING
BUFFER SPLICE = SPLICE ALL FIBERS IN BUFFER TUBE COLOR TO COLOR



SEE SHEET SCP-2



PLANS DATE: APRIL 2026
 PREPARED BY: NADIA DEGBTSE
 REVIEWED BY: D. HARTLAND
 SCALE: N/A



	<p>POST LET PLANS SIGNAL SYSTEM D02-02_Cape Carteret SPLICE DETAILS</p>						
	<p>Division 2 Carteret County Cape Carteret</p> <p>PLAN DATE: April 2026 REVIEWED BY: D. Hartland</p> <p>PREPARED BY: Nadia Degbotse REVIEWED BY:</p>						
<p>SCALE: N/A</p>	<table border="1"> <thead> <tr> <th>REVISIONS</th> <th>INIT.</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	REVISIONS	INIT.	DATE			
REVISIONS	INIT.	DATE					
<p>Signed by: <i>Donald L. Hartland</i> DATE: 4/6/2026</p>	<p>SEAL</p>						

