

TIP PROJECT: U-5743

CONTRACT:

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

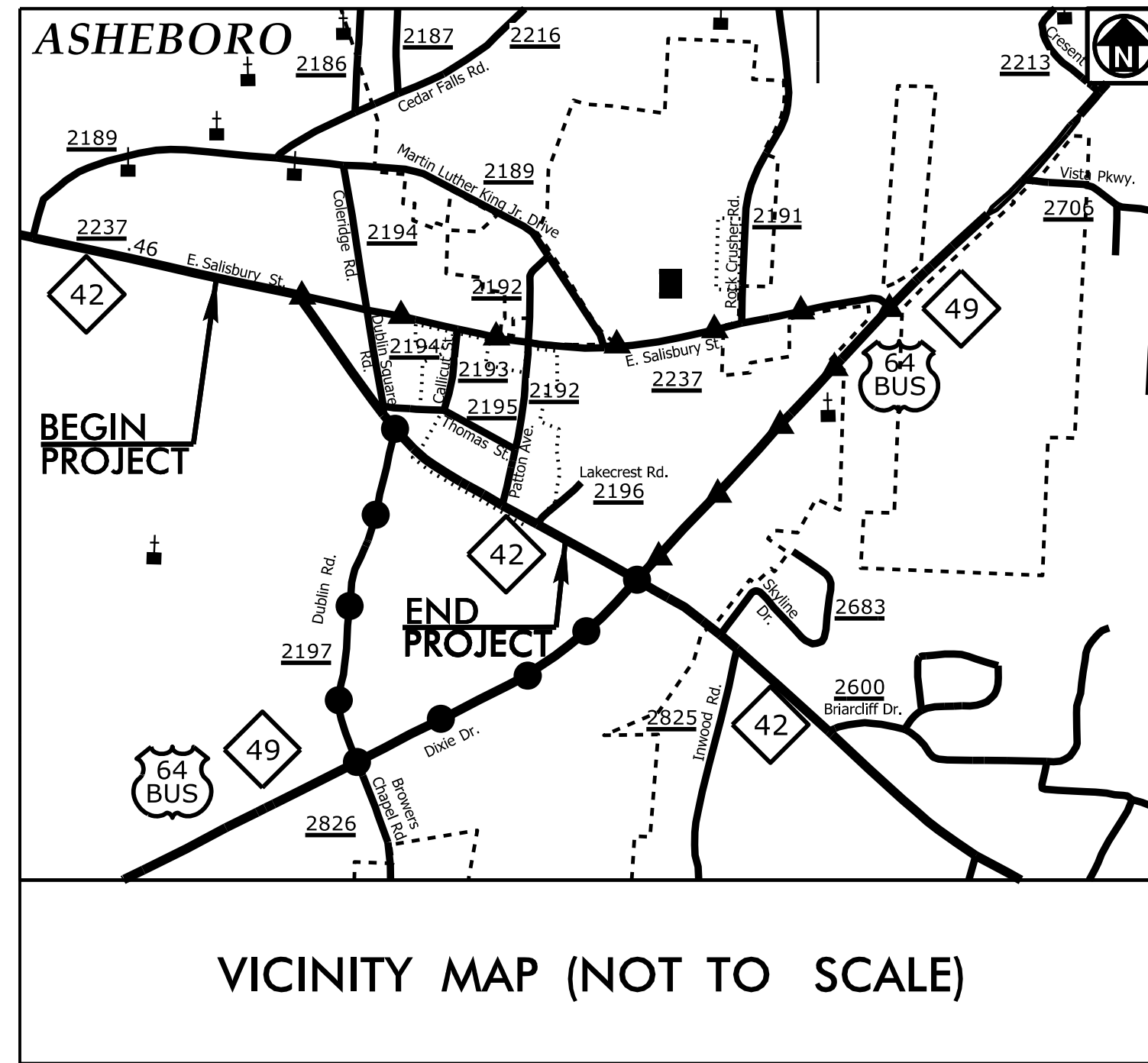
RANDOLPH COUNTY

LOCATION: NC 42 FROM SR 2237 (EAST SALISBURY STREET) TO NORTH OF US 64 BUS / NC 49 (DIXIE DRIVE) IN ASHEBORO

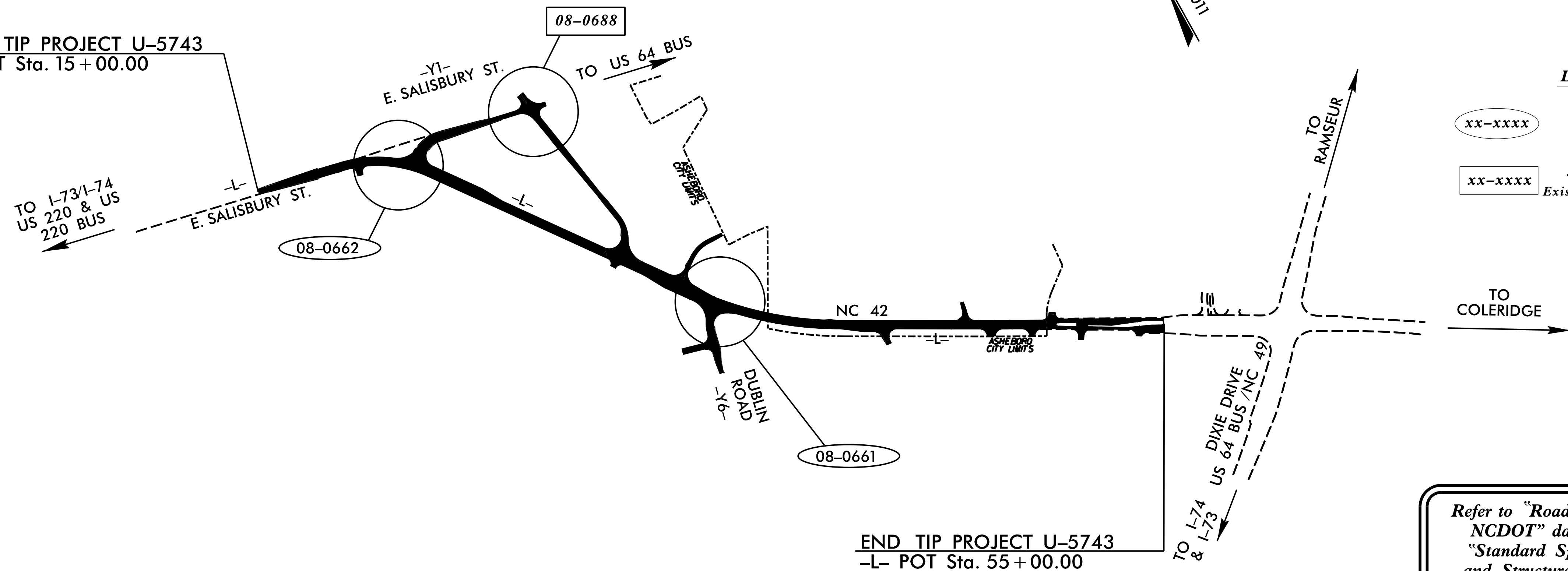
TYPE OF WORK: TRAFFIC SIGNALS AND SIGNAL COMMUNICATION

Project No. U-5743	Sheet No. 1.0
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BEGIN TIP PROJECT U-5743
-L- POT Sta. 15+00.00



LEGEND

- xx-xxxx Signal to be Installed or Upgraded
- xx-xxxx Signal Inventory Number: Existing Flasher To Be Removed

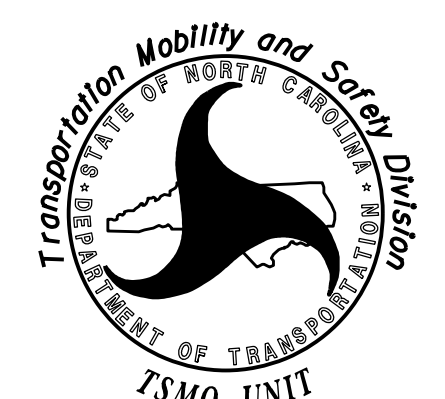
Refer to "Roadway Standard Drawings NCDOT" dated January 2024 and "Standard Specifications for Roads and Structures" dated January 2024.

Sheet #	Reference #	Index of Plans	Location/Description
Sig. 1.0	-----	Title Sheet	NC 42 (E. Salisbury St) at SR 2237 (E. Salisbury St)
Sig. 2.0-4.2	08-0662	Standard Metal Pole Sheets	NC 42 at SR 2197 (Dublin Rd)
Sig. 5.0-5.2	08-0661	Signal Communications Plans	
MIA-M9	-----		
SCP 1 - 7	NA		

**TRANSPORTATION SYSTEMS
MANAGEMENT & OPERATIONS UNIT**
Contacts:

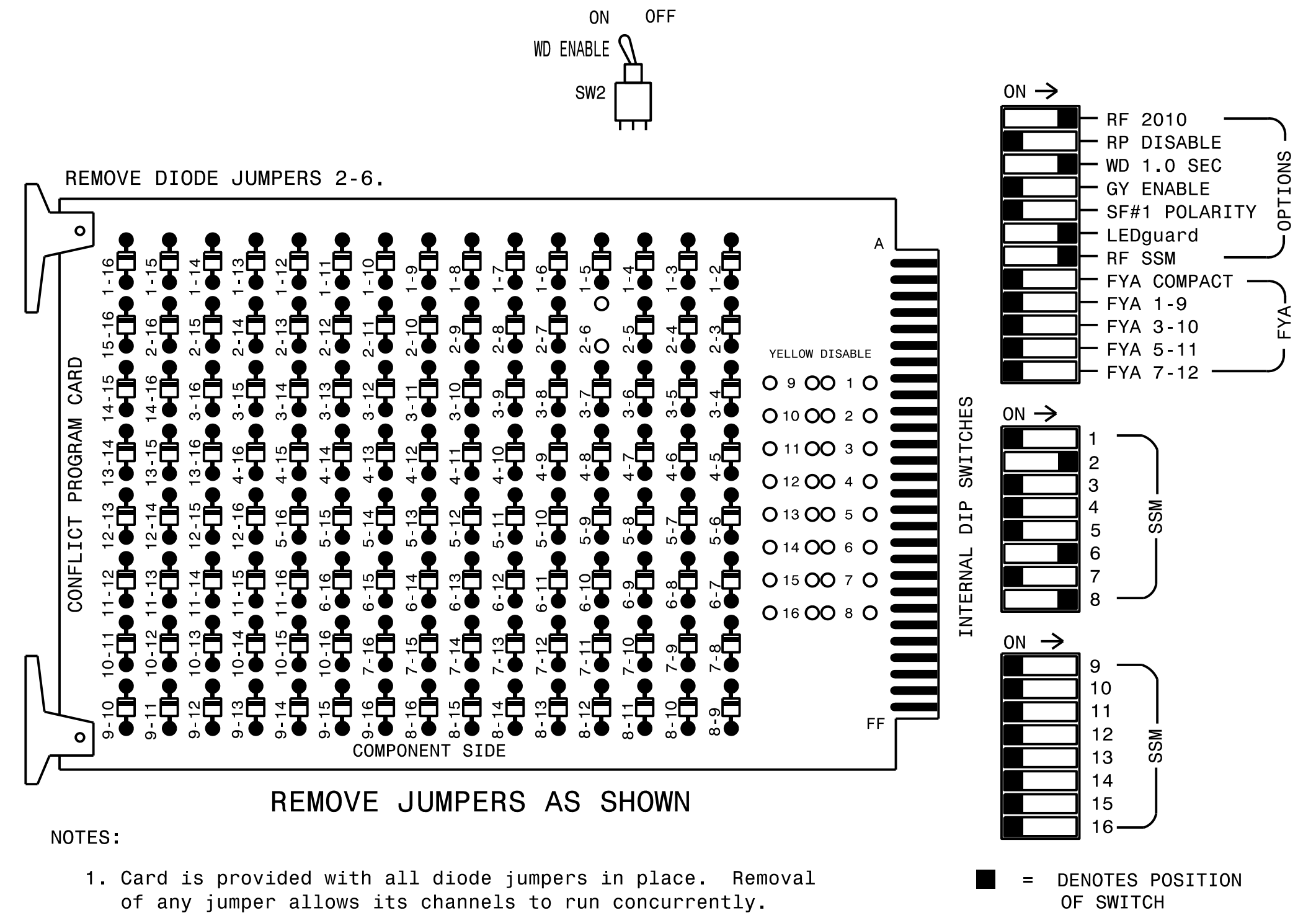
Rob Ziemba, PE - Central Region Signals Engineer
Keith Mims, PE - Signal Equipment Design Engineer
Ryan W. Hough, PE - State ITS Engineer

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



16 CHANNEL CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)



- REMOVE DIODE JUMPERS 2-6.
REMOVE JUMPERS AS SHOWN
- NOTES:
1. Card is provided with all diode jumpers in place. Removal of any jumper allows its channels to run concurrently.
2. Make sure jumpers SEL2-SEL5 are present on the monitor board.

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 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 Salisbury Street Closed Loop System.

EQUIPMENT INFORMATION

CONTROLLER.....EXISTING 2070
 CABINET.....EXISTING 332
 McCAIN/CONTROL TECHNOLOGIES
 (DWG.NO.9500-332-NCDOT)

SOFTWARE.....Q-Free MAXTIME
 CABINET MOUNT.....BASE
 OUTPUT FILE POSITIONS...12
 LOAD SWITCHES USED.....S2,S6 and S8
 PHASES USED.....2,6 and 8
 OVERLAPS.....NOT USED

SIGNAL HEAD HOOK-UP CHART

LOAD SWITCH NO.	S1	S2	S2P	S3	S4	S4P	S5	S6	S6P	S7	S8	S8P		
PHASE	1	2	2 PED	3	4	4 PED	5	6	6 PED	7	8	8 PED		
SIGNAL HEAD NO.	NU	21,22	NU	NU	NU	NU	NU	61,62	NU	NU	81,82	83	22	NU
RED		128						134			107			
YELLOW		129						135						
GREEN		130						136						
RED ARROW											107			
YELLOW ARROW											108	108	108	
GREEN ARROW											109	109	109	

NU = Not Used

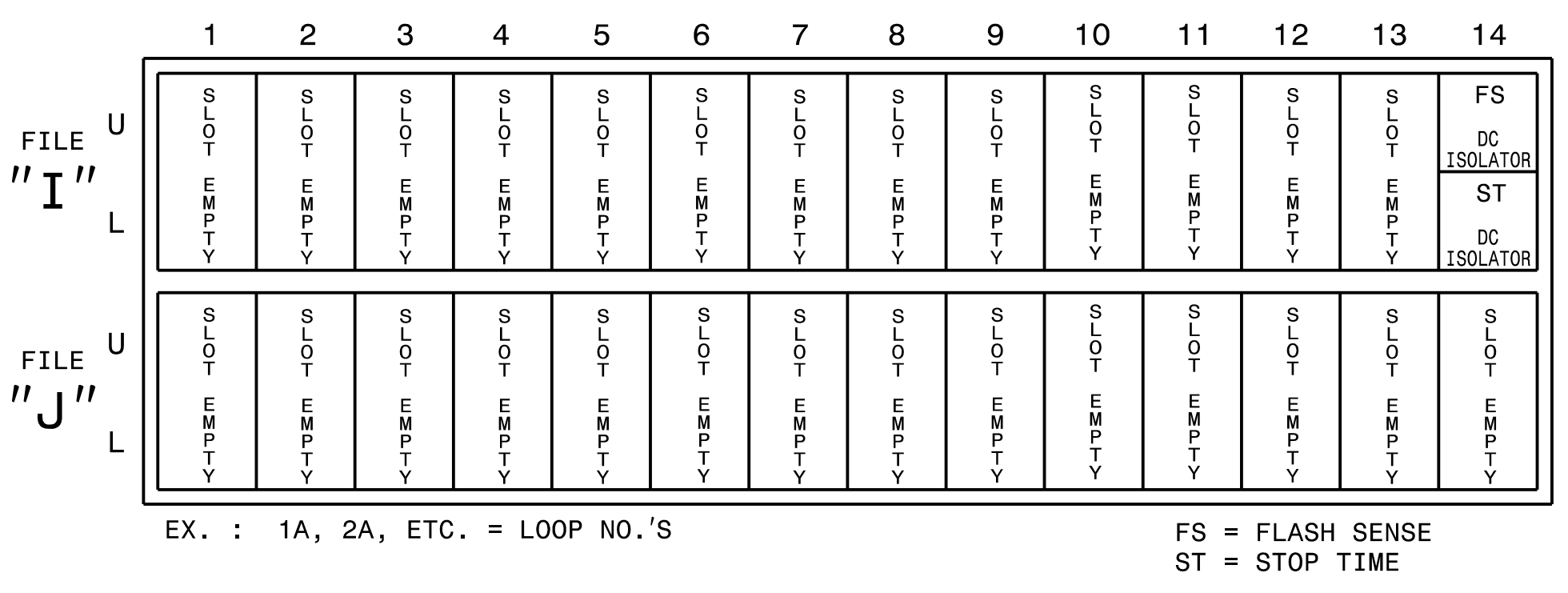
OUTPUT CHANNEL CONFIGURATION

Front Panel
 Main Menu >Controller >More>Channels>Channels Config

Web Interface
 Home >Controller >Advanced IO>Channels>Channels Configuration

INPUT FILE POSITION LAYOUT

(front view)



INPUT FILE CONNECTION & PROGRAMMING CHART

SPECIAL DETECTOR NOTE

Install a video detection system for zones 2A, 6A, 8A and 8B. Perform installation according to manufacturer's recommendations and NCDOT engineer-approved mounting location(s) to accomplish the detection schemes shown on the Signal Design Plans.

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
 Main Menu >Controller >Unit

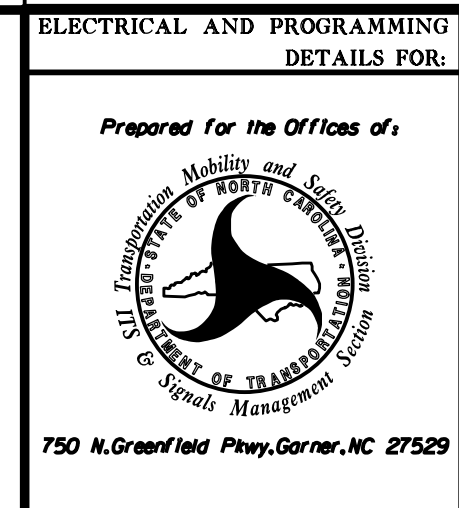
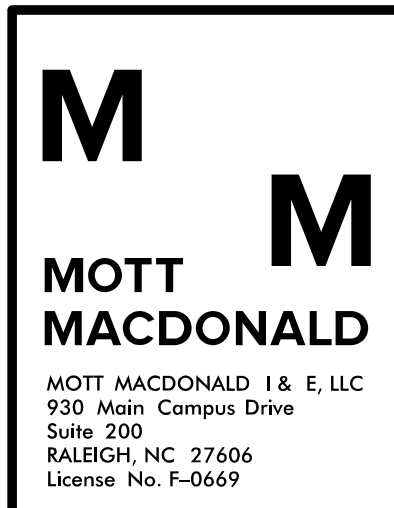
Web Interface
 Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters
 StartUp Clearance Hold: 6

Unit Flash Parameters
 All Red Flash Exit Time: 6

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0662T1
 DESIGNED: February 2026
 SEALED: March 11, 2026
 REVISED: N/A



NC 42 (E. Salisbury St)
 at
 SR 2237 (E. Salisbury St)

Division 8 Randolph County Asheboro

PLAN DATE: February 2026 REVIEWED BY: LD Stouchko

PREPARED BY: S O'Farrell REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

SEAL 034437

LD Stouchko

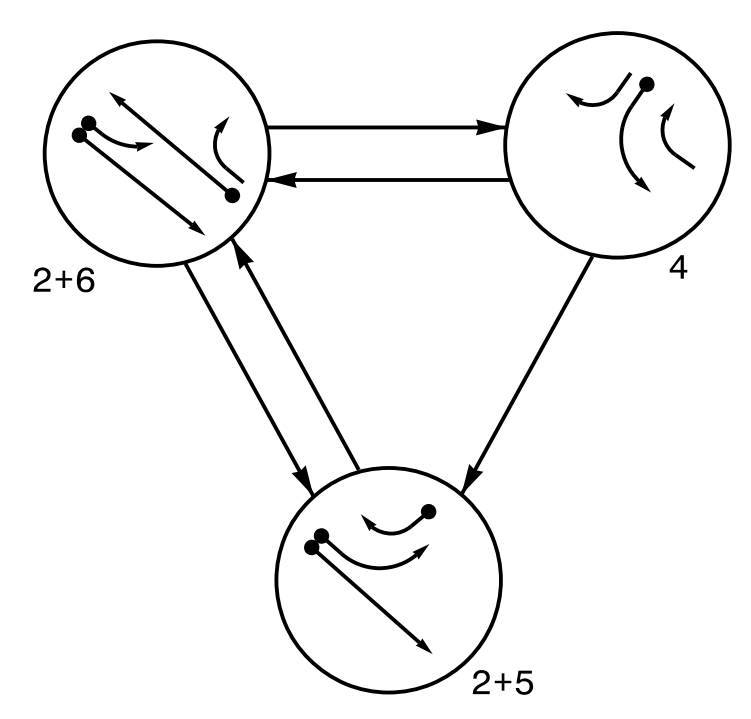
11-Mar-2026

SIGNATURE DATE

SIG. INVENTORY NO. 08-0662T1

Electrical Detail: Sheet 1 of 1

PHASING DIAGRAM

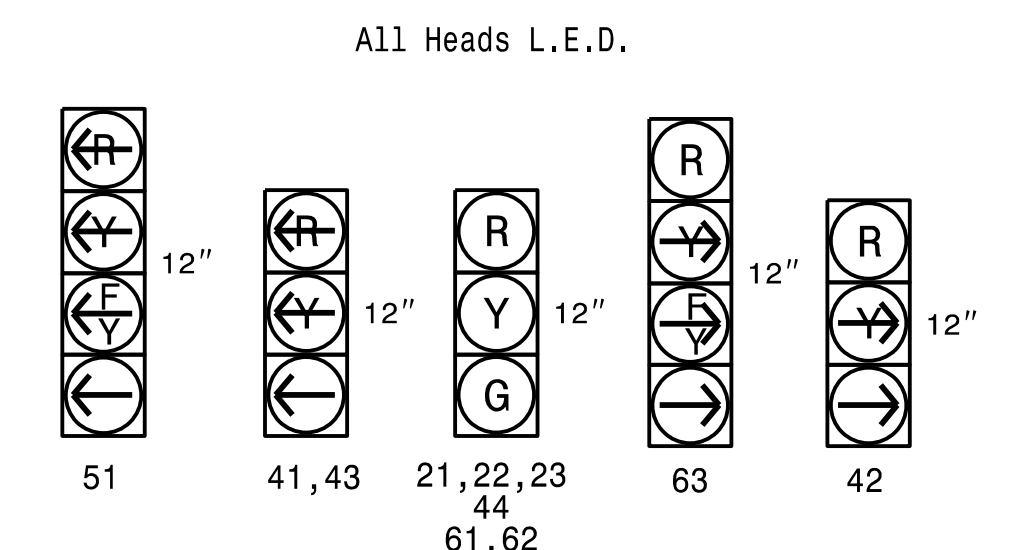


PHASING DIAGRAM DETECTION LEGEND

- ←●→ DETECTED MOVEMENT
- ←○→ UNDETECTED MOVEMENT (OVERLAP)
- ←- - -→ UNSIGNALIZED MOVEMENT
- ←- - -> PEDESTRIAN MOVEMENT

SIGNAL FACE	PHASE			
	2 + 5	2 + 6	4	FLASH
21, 22, 23	G	G	R	R
41, 43	←R	←R	←R	←R
42	←R	←R	←R	←R
44	R	R	G	R
51	←F	←F	←R	←R
61, 62	R	G	R	R
63	R	F	←R	←R

SIGNAL FACE I.D.



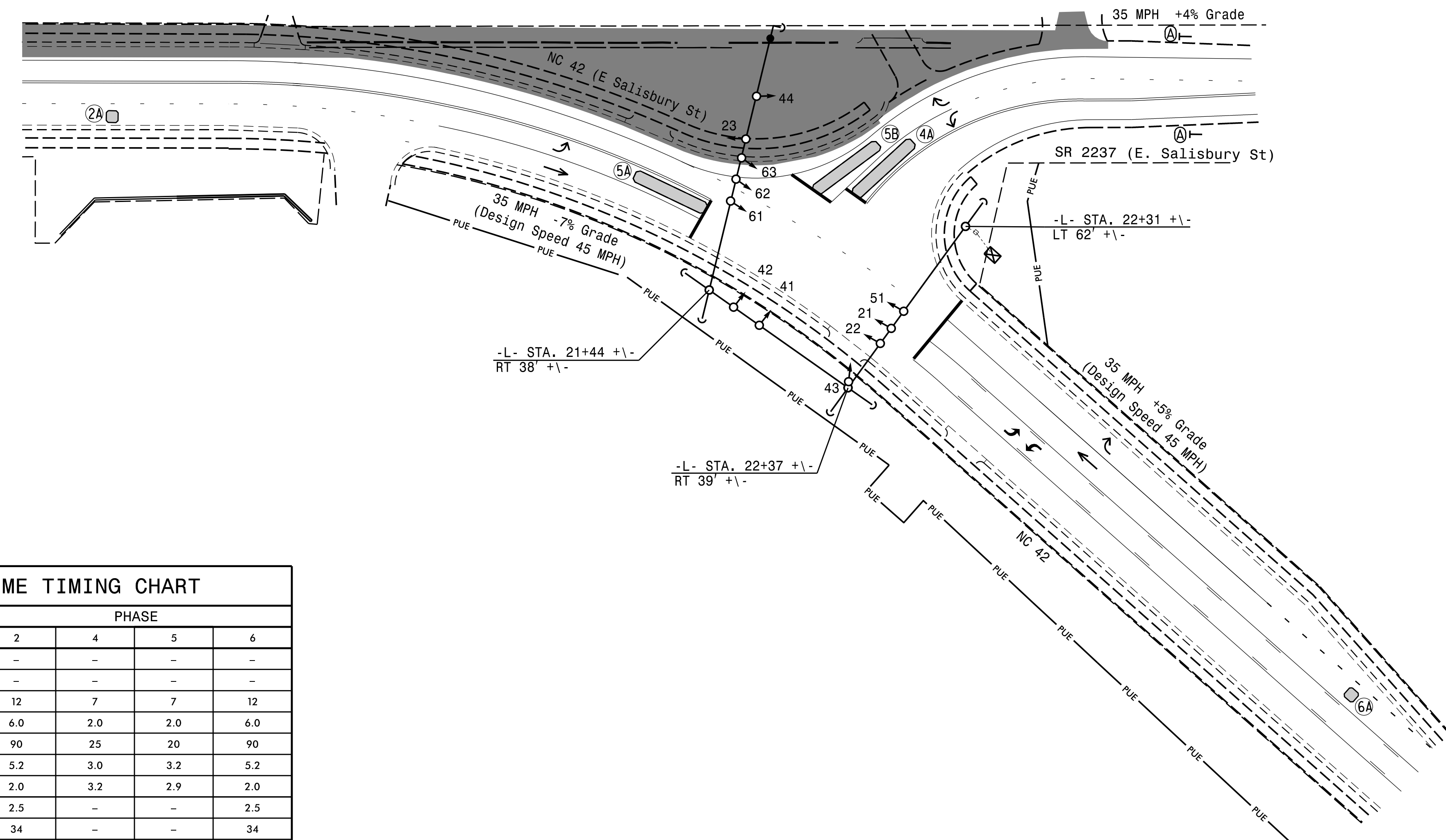
MAXTIME DETECTOR INSTALLATION CHART												
ZONE	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	PROGRAMMING							
					CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN	
2A*	6X6	300	*	*	2	-	-	X	X	X	-	*
4A*	6X40	0	*	*	4	3.0	-	X	-	X	-	*
5A*	6X40	0	*	*	5	15.0	-	X	-	X	-	*
5B*	6X40	0	*	*	2	3.0	-	X	-	X	-	*
6A*	6X6	300	*	*	6	-	-	X	X	X	-	*

* Video Detection

3 Phase Fully Actuated
 NC 42(Salisbury St)-US 220 Bus(Fayetteville St)
 Signal System #: D08-18_Asheboro

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 5 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 uses video detection, install according to 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.



FEATURE	PHASE			
	2	4	5	6
Walk *	-	-	-	-
Ped Clear	-	-	-	-
Min Green *	12	7	7	12
Passage *	6.0	2.0	2.0	6.0
Max I *	90	25	20	90
Yellow Change	5.2	3.0	3.2	5.2
Red Clear	2.0	3.2	2.9	2.0
Added Initial *	2.5	-	-	2.5
Maximum Initial *	34	-	-	34
Time Before Reduction *	15	-	-	15
Time To Reduce *	45	-	-	45
Minimum Gap	3.0	-	-	3.0
Advance Walk	-	-	-	-
Non Lock Detector	-	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.

PROPOSED	EXISTING
	N/A
	N/A
N/A	
N/A	

Signal Upgrade - Temporary Design 2 (TMP Phase 2)

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Prepared for the Offices of:

 TRANSPORTATION MOBILITY AND SAFETY DIVISION
 DEPARTMENT OF TRANSPORTATION
 SIGNAL DESIGN SECTION
 750 N. Greenfield Pkwy, Garner, NC 27529

NC 42 (E. Salisbury St)
 at
 SR 2237 (E. Salisbury St)
 Division 8 Randolph County Asheboro
 PLAN DATE: February 2026 REVIEWED BY: LD Stouchko
 PREPARED BY: S O'Farrell REVIEWED BY:
 REVISIONS INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

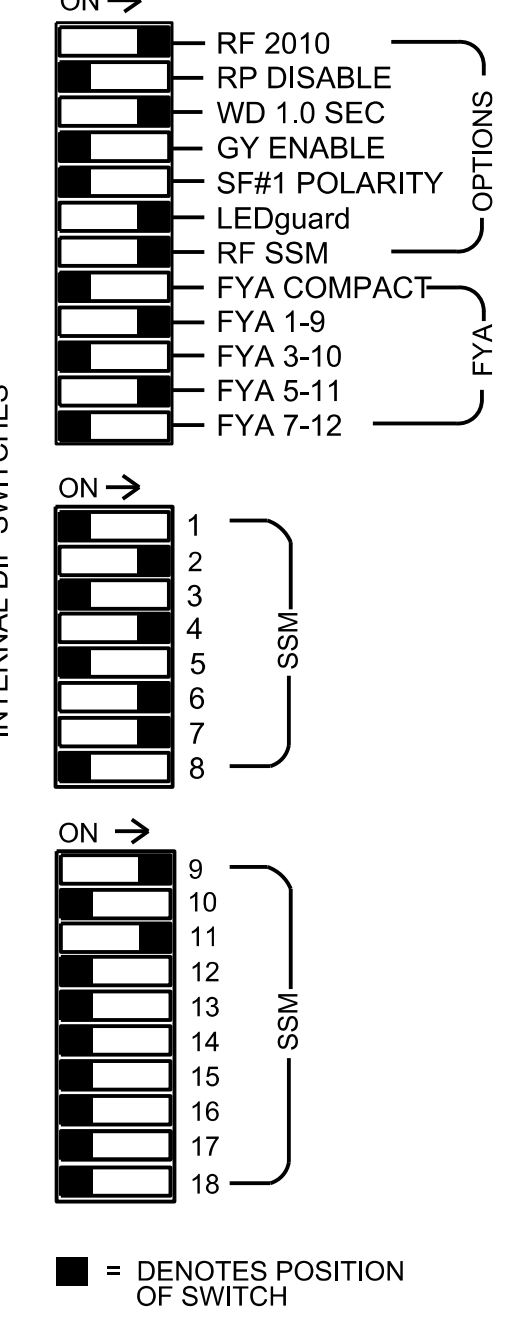
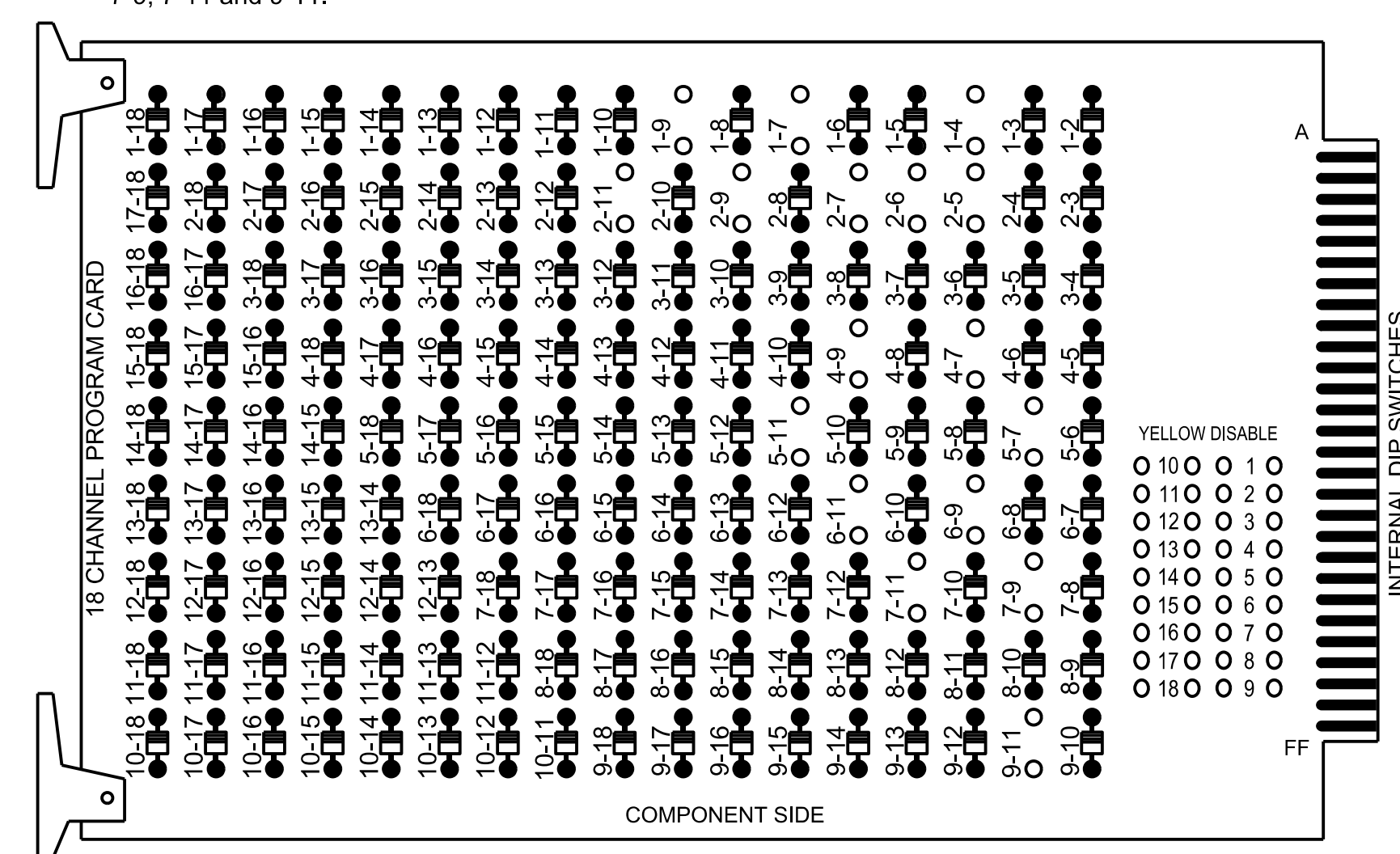
SEAL

 LD Stouchko
 11-Mar-2026
 SIGNATURE DATE
 SIG. INVENTORY NO. 08-066212

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

REMOVE DIODE JUMPERS 1-4, 1-7, 1-9, 2-5, 2-6, 2-7, 2-9, 2-11, 4-7, 4-9, 5-7, 5-11, 6-9, 6-11, 7-9, 7-11 and 9-11.



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 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 Salisbury Street Closed Loop 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,S5, S7, S8, S10, AUX S1, AUX S4
 Phases Used.....2, 4, 5, 6,
 Overlap "1".....*
 Overlap "2".....NOT USED
 Overlap "3".....*
 Overlap "4".....NOT USED
 Overlap "5".....NOT USED
 Overlap "6".....NOT USED
 Overlap "7".....*
 Overlap "8".....*

*See overlap programming detail on sheet 2

SIGNAL HEAD HOOK-UP CHART

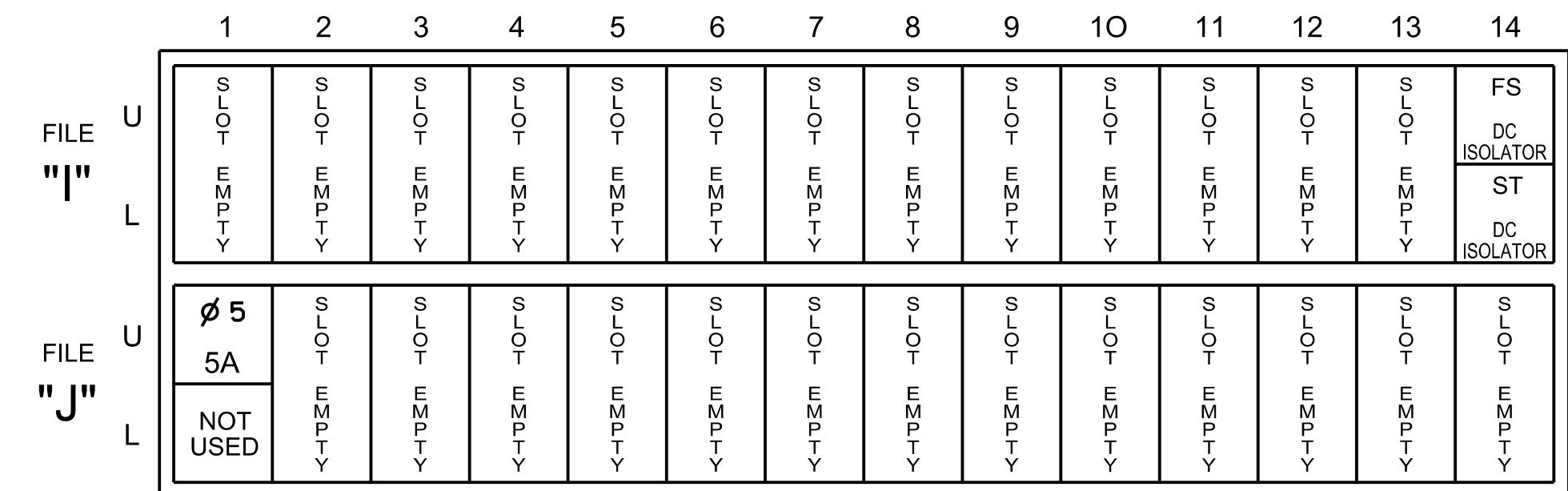
LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	AUX S1	AUX S2	AUX S3	AUX S4	AUX S5	AUX S6
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16	9	10	17	11	12	18
PHASE	OL7	2	2 PED	3	4	4 PED	5	6	6 PED	OL8	8	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	63	21,22,23	NU	NU	41,43	44	NU	51	61,62	NU	42	NU	63	NU	NU	51	NU	NU
RED		128				101			134		122		A121					
YELLOW	*	129				102		*	135									
GREEN		130				103			136									
RED ARROW						101												A114
YELLOW ARROW						102				123			A122					A115
FLASHING YELLOW ARROW													A123					A116
GREEN ARROW	127					103		133		124								
Hand																		
Person																		

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

(front view)



EX.: 1A, 2A, ETC. = LOOP NO.'S

FS = FLASH SENSE
 ST = STOP TIME

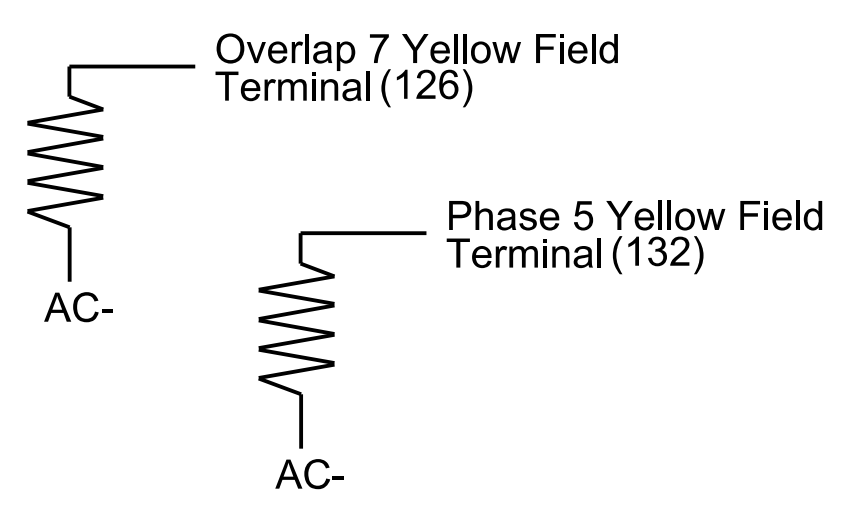
SPECIAL DETECTOR NOTE

- Install a video detection system for zones 2A, 5B, 6A and 4A. Perform installation according to manufacturer's recommendations and NCDOT engineer-approved mounting location(s) to accomplish the detection schemes shown on the Signal Design Plans.
- For Detection Zone 5A, detector card placement is typical for NCDOT installation.

LOAD RESISTOR INSTALLATION DETAIL

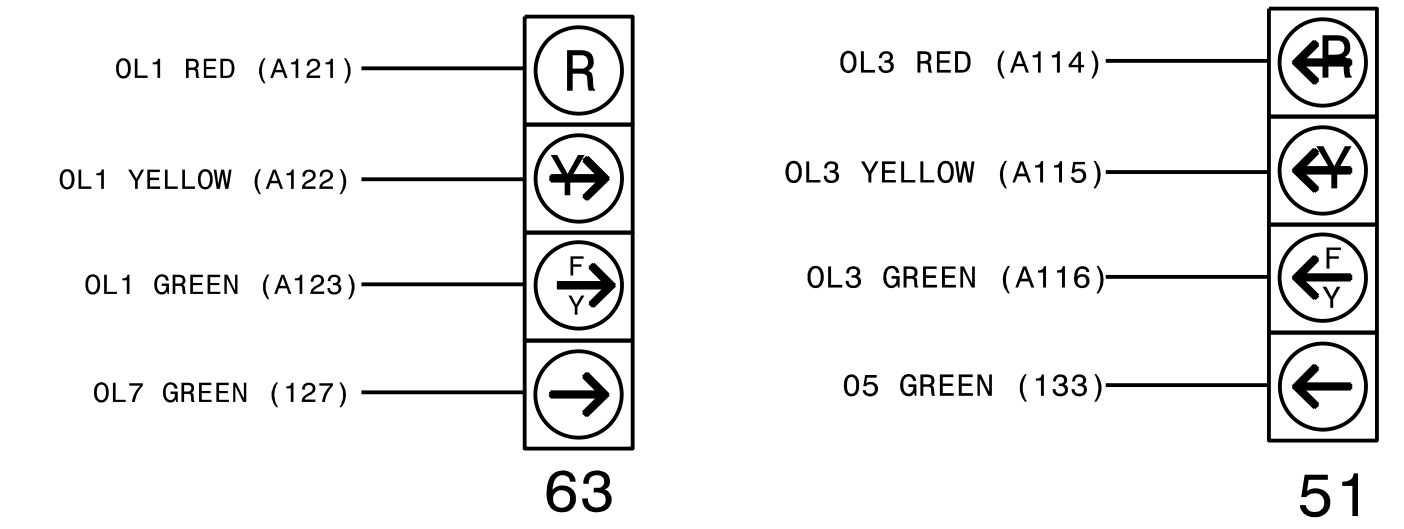
(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



FYA SIGNAL WIRING DETAIL

(wire signal heads as shown)



Electrical Detail - Sheet 1 of 2

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0662T2
 DESIGNED: February 2026
 SEALED: March 11, 2026
 REVISED: N/A

NC 42 (E. Salisbury St)
 at
 SR 2237 (E. Salisbury St)
 Division 8 Randolph County Asheboro
 PLAN DATE: February 2026 REVIEWED BY: LD STOUCHKO
 PREPARED BY: S O'Farrell REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

11-Mar-2026
 SIGNATURE DATE
 SIG. INVENTORY NO. 08-0662T2

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps
Overlap Plan 1

Overlap	1	3	7	8
Type	FYA 4 - Section	FYA 4 - Section	Normal	Normal
Included Phases	6	6	4	4,5
Modifier Phases	4	5	-	-
Modifier Overlaps	-	-	-	-
Min Green	0	0	0	0
Trail Green	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0
FYA Ped Delay	0.0	0.0	0.0	0.0

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters	Unit Flash Parameters
StartUp Clearance Hold 6	All Red Flash Exit Time 6

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration

Channel Configuration

NOTE CONTROL TYPE & SOURCE →

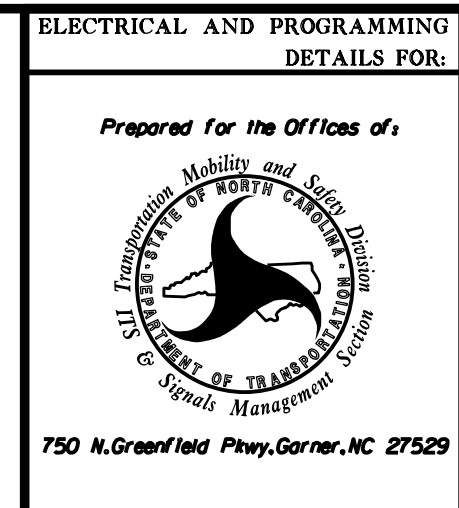
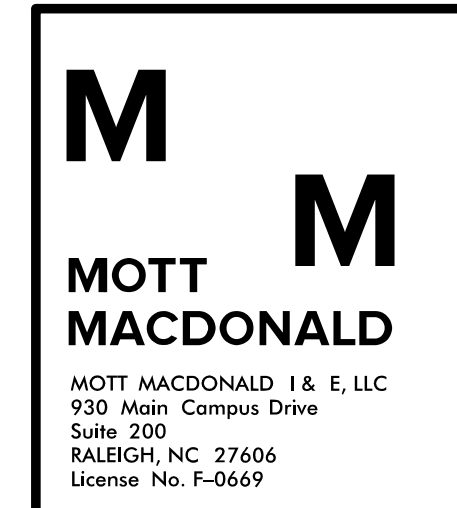
NOTE CONTROL TYPE & SOURCE →

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Overlap	7		X	X	1
2	Phase Vehicle	2		X		2
3	Phase Vehicle	3		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Overlap	8		X		7
8	Phase Vehicle	8		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

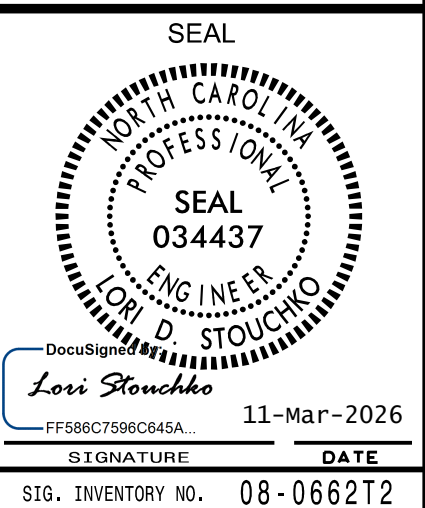
THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0662T2
DESIGNED: February 2026
SEALED: March 11, 2026
REVISED: N/A

Electrical Detail - Sheet 2 of 2

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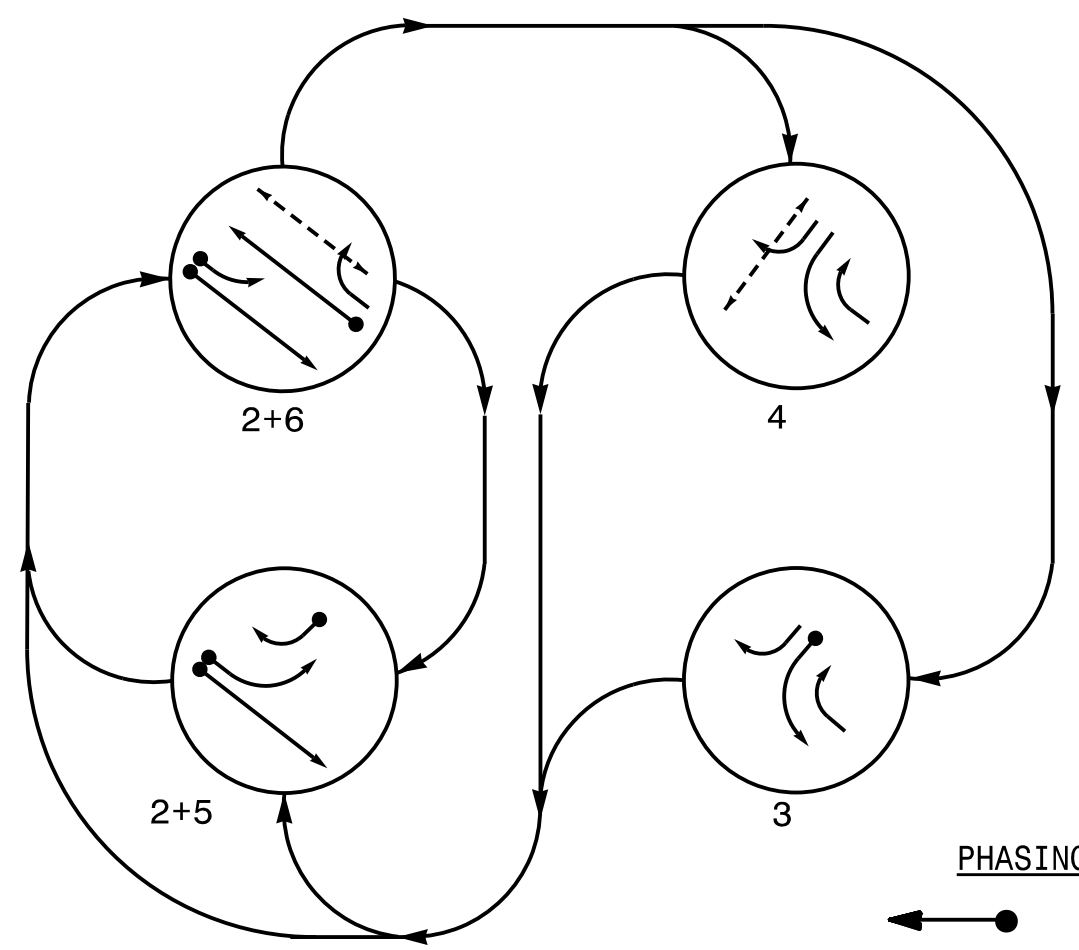


NC 42 (E. Salisbury St) at SR 2237 (E. Salisbury St)	
Division 8	Randolph County
Asheboro	
PLAN DATE: February 2026	REVIEWED BY: LD STOUCHKO
PREPARED BY: S O'Farrell	REVIEWED BY:
REVISIONS	INT. DATE



Signature: *Louis Stouchko*
Date: 11-Mar-2026
Sig. Inventory No. 08-0662T2

PHASING DIAGRAM

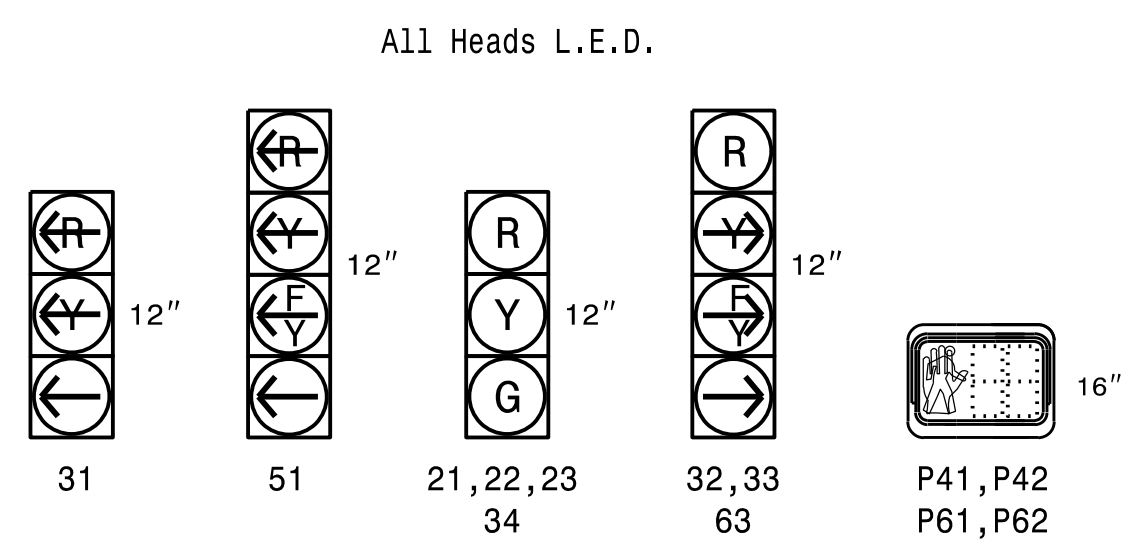


SIGNAL FACE	PHASE				FLASH
	2+5	2+6	4	3	
21, 22, 23	G	G	R	R	R
31	-R	-R	-	-	-R
32, 33	-	R	F	-	R
34	R	R	G	G	R
51	-	F	-R	-R	-R
61, 62	R	G	R	R	R
63	R	F	-	-	R
P41, P42	DW	DW	W	DW	DRK
P61, P62	DW	W	DW	DW	DRK

PHASING DIAGRAM DETECTION LEGEND

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

SIGNAL FACE I.D.

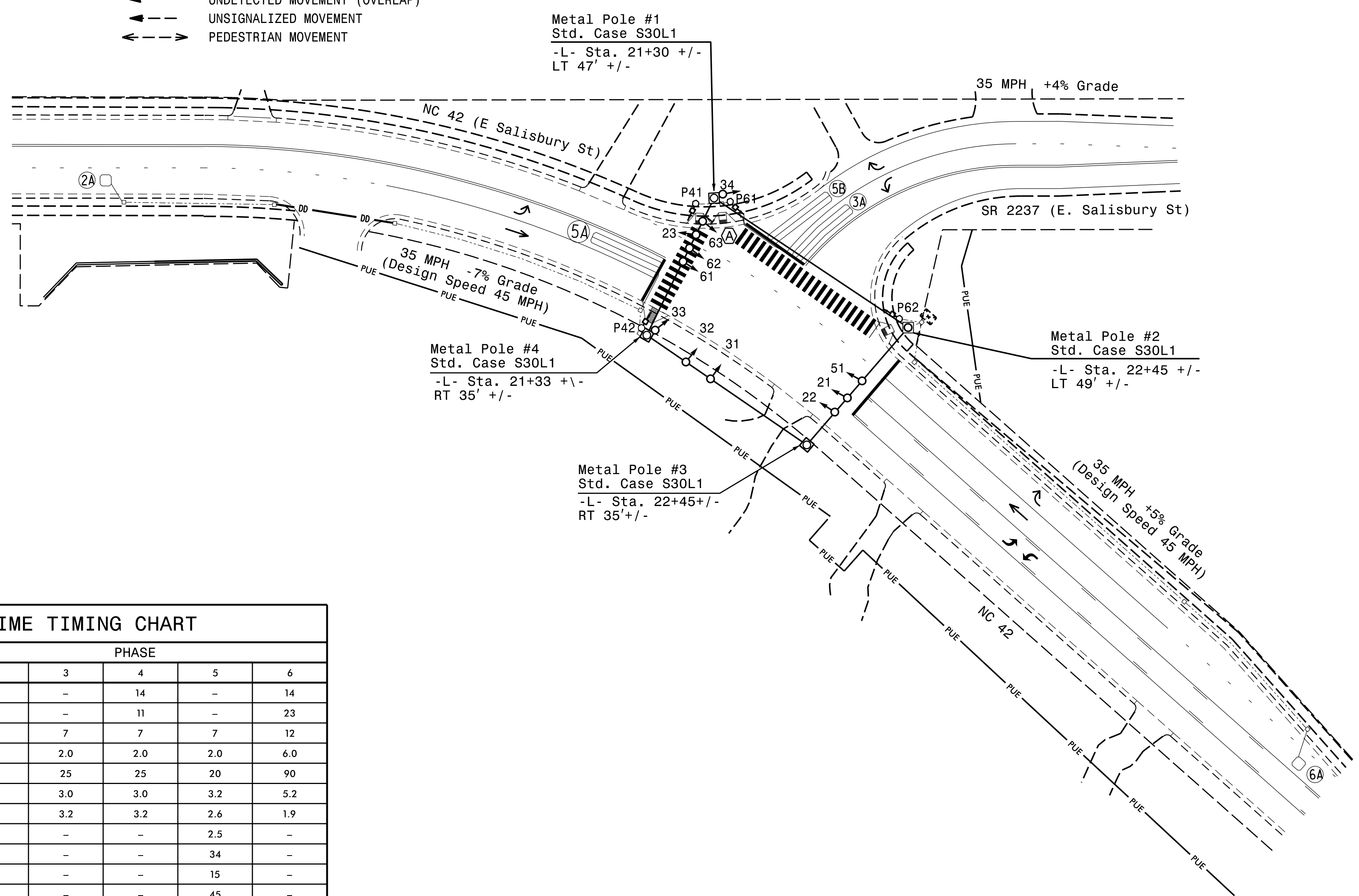


MAXTIME DETECTOR INSTALLATION CHART										
DETECTOR					PROGRAMMING					
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL CALL	NEW CARD
2A	6X6	70	5	X	2	-	-	X	X	X
3A	6X40	0	2-4-2	X	3	3.0	-	X	-	X
5A	6X40	0	2-4-2	X	5	15.0	-	X	-	X
5B	6X40	0	2-4-2	X	2	3.0	-	X	-	X
6A	6X6	70	4	X	6	-	-	X	X	X

4 Phase Fully Actuated
 NC 42(Salisbury St)-US 220 Bus(Fayetteville St)
 Signal System #: D08-18_Asheboro

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.
- Omit Phase 3 during Phase 4 on.
- Phase 5 may be lagged.
- Set all detector units to presence mode.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on phase 4, program FYA heads numbered 32 and 33 to delay for 7 seconds at the start of the phase 4 walk interval. See electrical details for programming.
- To provide a leading pedestrian interval on phase 6, program FYA heads numbered 51 and 63 to delay for 7 seconds at the start of the phase 6 walk interval. See electrical details for programming.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE			
	2	3	4	6
Walk *	-	-	14	14
Ped Clear	-	-	11	23
Min Green *	12	7	7	12
Passage *	6.0	2.0	2.0	6.0
Max I *	90	25	25	90
Yellow Change	5.2	3.0	3.0	5.2
Red Clear	1.9	3.2	3.2	1.9
Added Initial *	2.5	-	-	2.5
Maximum Initial *	34	-	-	34
Time Before Reduction *	15	-	-	15
Time To Reduce *	45	-	-	45
Minimum Gap	3.0	-	-	3.0
Advance Walk	-	-	**	***
Non Lock Detector	-	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 longer than what is shown. Min Green for all other phases should not be lower than 4 seconds.
 ** See note 8.
 *** See note 9.

PROPOSED	EXISTING
	N/A
	N/A

Signal Upgrade - Final Design

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 RALEIGH, NC 27606
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Prepared For the Offices of:

 TRANSPORTATION MOBILITY AND SAFETY DIVISION
 STATE OF NORTH CAROLINA
 SIGNAL DESIGN SECTION
 750 N. Greenfield Pkwy, Garner, NC 27529

NC 42 (E. Salisbury St)
 at
 SR 2237 (E. Salisbury St)
 Division 8 Randolph County Asheboro
 PLAN DATE: February 2026 REVIEWED BY: LD STOUCHKO
 PREPARED BY: S O'Farrell REVIEWED BY:

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

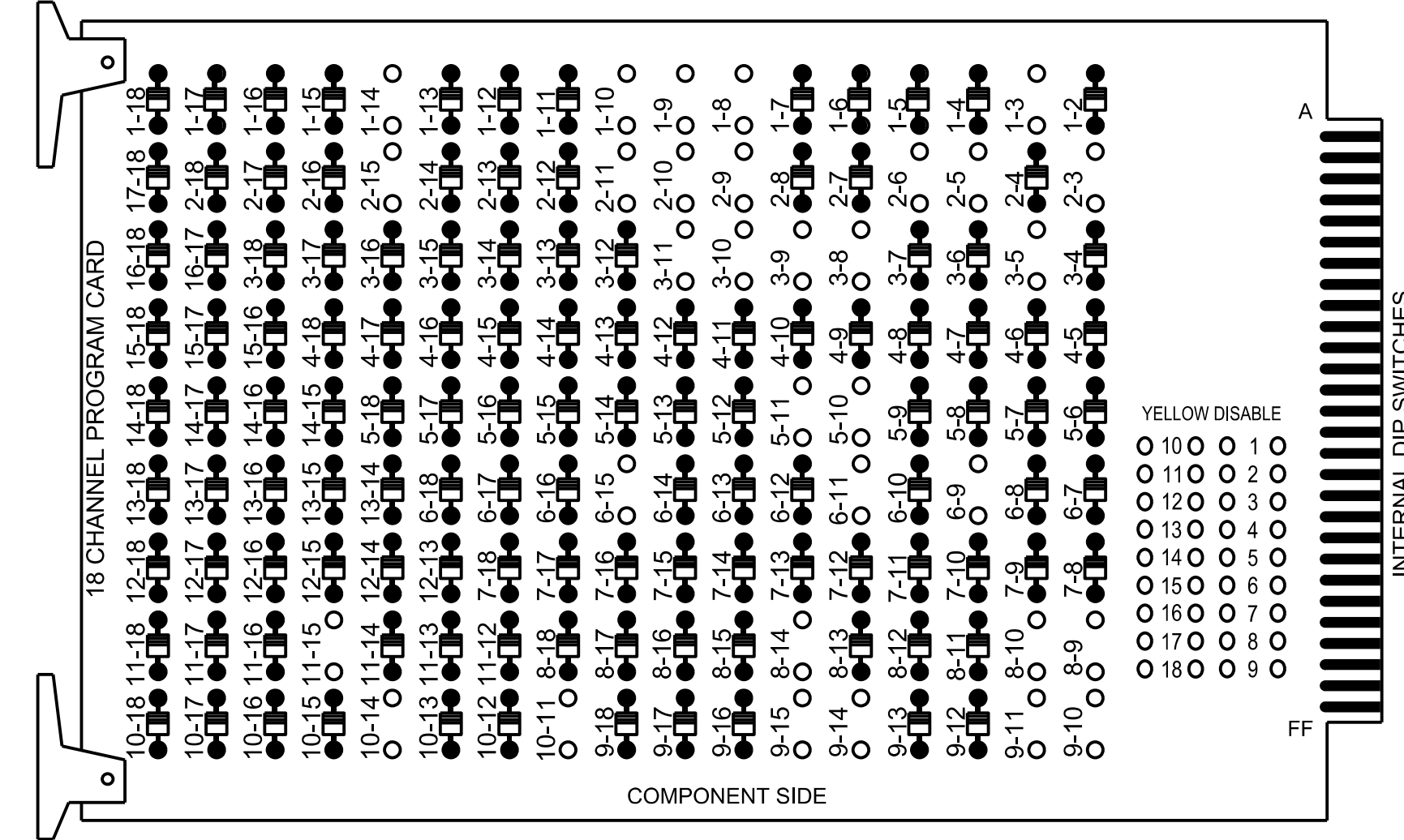
SEAL

 LD Stouchko
 PROFESSIONAL ENGINEER
 License No. 034437
 11-Mar-2026
 SIGNATURE DATE
 SIG. INVENTORY NO. 08-0662

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

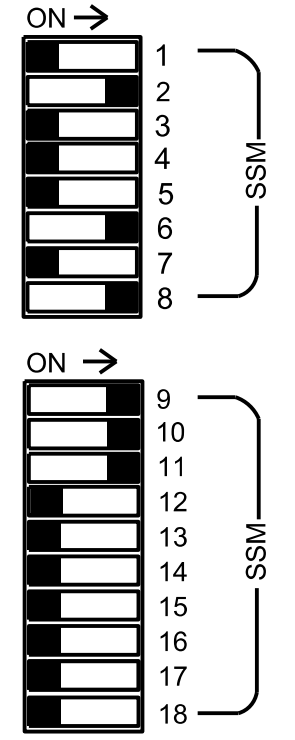
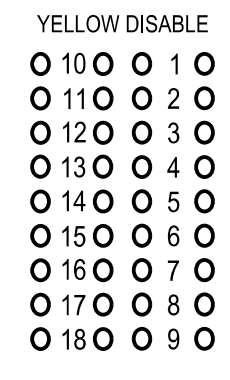
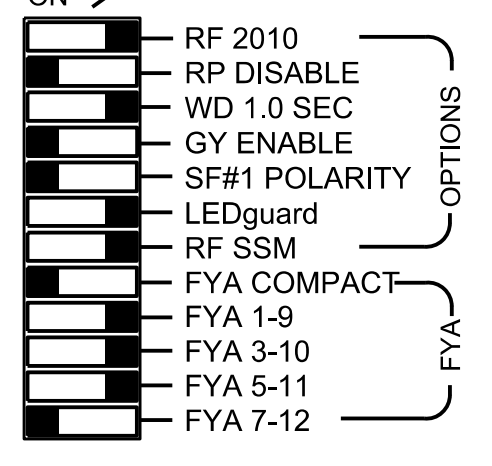
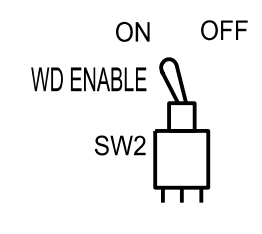
REMOVE DIODE JUMPERS 1-3, 1-8, 1-9, 1-10, 1-14, 2-3, 2-5, 2-6, 2-9, 2-10, 2-11, 2-15, 3-5, 3-8, 3-9, 3-10, 3-11, 5-10, 5-11, 6-9, 6-11, 6-15, 8-9, 8-10, 8-14, 9-10, 9-11, 9-14, 9-15, 10-11, 10-14 and 11-15.



REMOVE JUMPERS AS SHOWN

NOTES:

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



■ = DENOTES POSITION OF SWITCH

NOTES

1. 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.
2. Program controller to start up in phase 2 Green No Walk and 6 Green No Walk.
3. If this signal will be managed by an ATMS software, enable controller and detector logging for all detectors used at this location.
4. The cabinet and controller are part of the Salisbury Street Closed Loop 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, S4, S6, S7, S8, S9, S11, AUX S1, AUX S2, AUX S4
 Phases Used.....2, 3, 4, 4PED,5, 6, 6PED,
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....NOT USED
 Overlap "5".....NOT USED
 Overlap "6".....NOT USED
 Overlap "7".....*
 Overlap "8".....*
 Overlap "9".....*

*See overlap programming detail on sheet 2

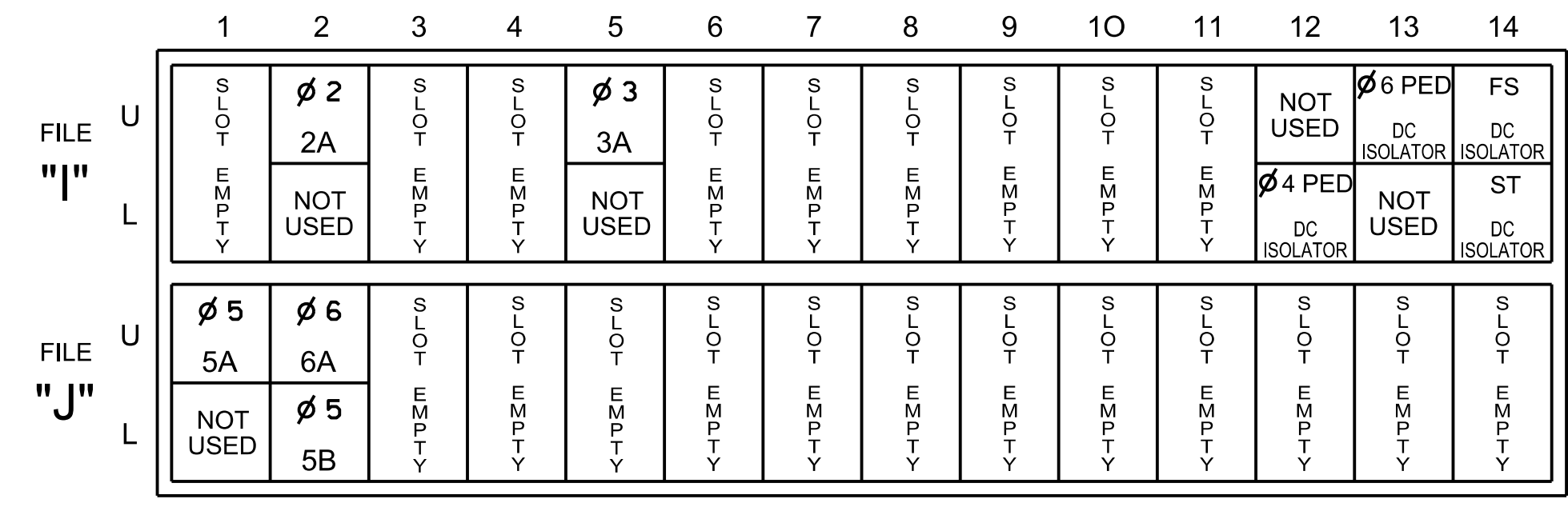
SIGNAL HEAD HOOK-UP CHART

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	OL7	2	2 PED	OL8	4	4 PED	5	6	6 PED	7	OL9	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	63	21,22,23	NU	32,33	NC	P41, P42	51	61,62	P61, P62	NU	31	34	NU	63	32,33	NU	51	NU
RED		128						134			107		A121	A124				
YELLOW	*	129		*			*	135			108							
GREEN		130						136			109							
RED ARROW										107							A114	
YELLOW ARROW										108			A122	A125		A115		
FLASHING YELLOW ARROW													A123	A126		A116		
GREEN ARROW	127			118			133			109								
Hand							104		119									
Walking							106		121									

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

INPUT FILE POSITION LAYOUT

(front view)



EX. : 1A, 2A, ETC. = LOOP NO.'S

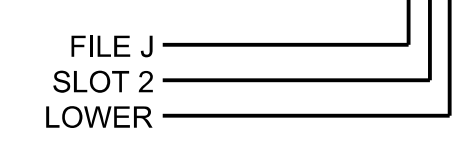
FS = FLASH SENSE
 ST = STOP TIME

INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
2A	TB2-5,6	I2U	39	1	2	2				X	X	
3A	TB4-5,6	I6U	58	20	7	3	3.0		X		X	
5A	TB3-1,2	J1U	55	17	15	5	15.0		X		X	
				-	31	2	3.0		X	X		
5B	TB3-7,8	J2L	44	6	17	5	15.0		X		X	
6A	TB3-5,6	J2U	40	2	16	6			X	X	X	
PED PUSH BUTTONS												
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						
P61,P62	TB8-7,9	I13U	68	34	6	PED 6						

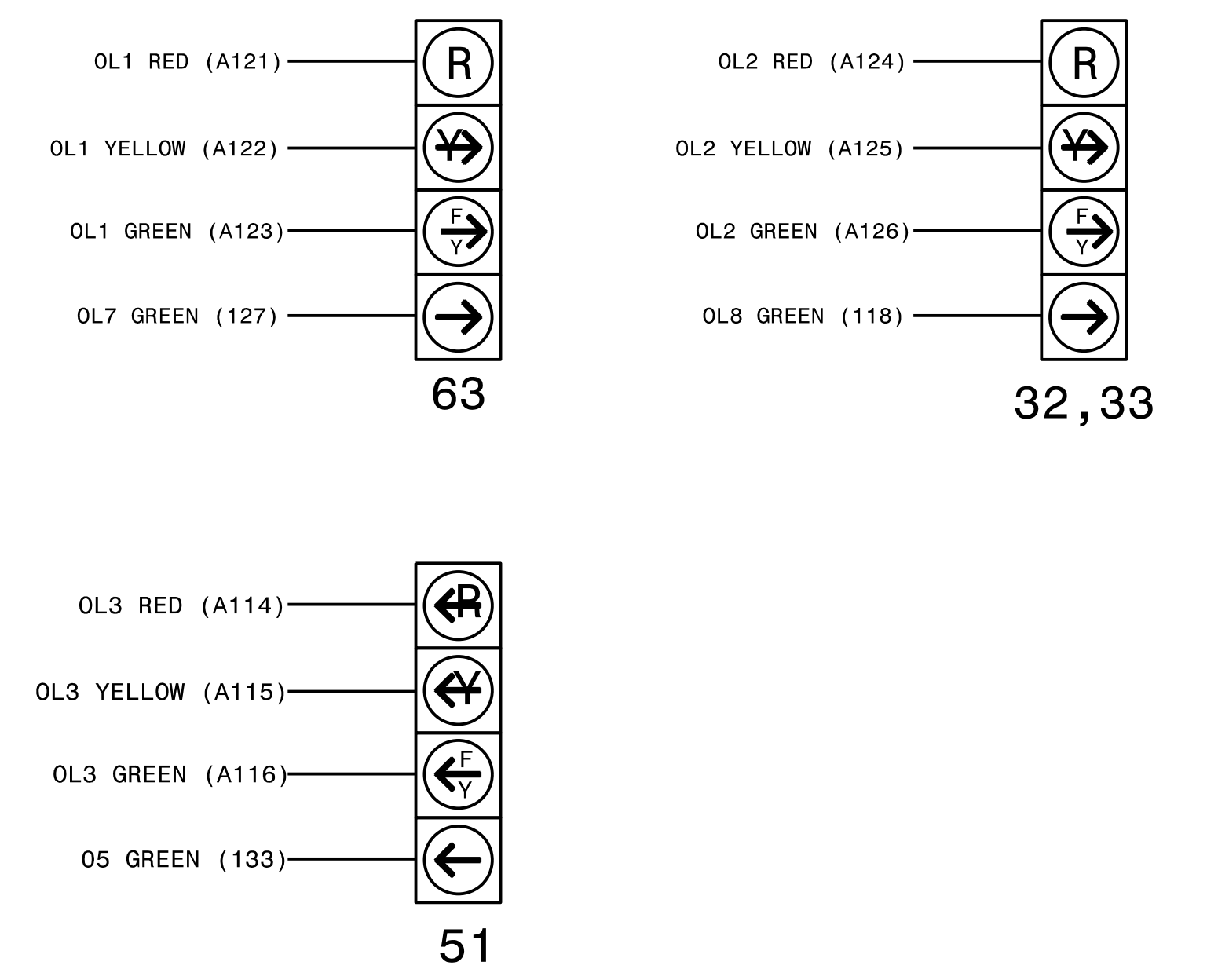
NOTE: INSTALL DC ISOLATORS IN INPUT FILE SLOTS I12 & I13.

INPUT FILE POSITION LEGEND: J2L



FYA SIGNAL WIRING DETAIL

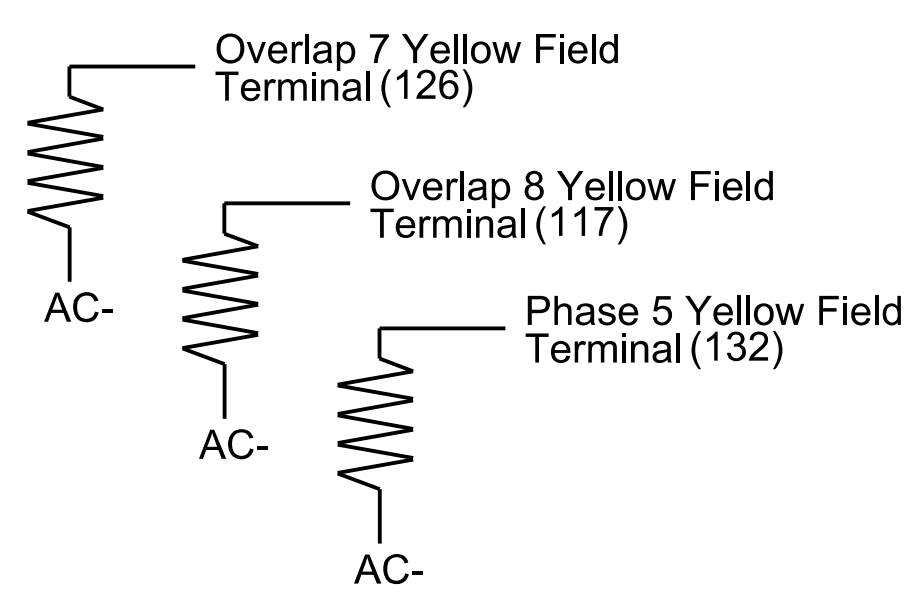
(wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL

(install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0662
 DESIGNED: February 2026
 SEALED: March 11, 2026
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

NC 42 (E. Salisbury St)
 at
 SR 2237 (E. Salisbury St)

Division 8 Randolph County Asheboro

PLAN DATE: February 2026 REVIEWED BY: LD STOUCCHKO

PREPARED BY: S O'Farrell REVIEWED BY:

REVISIONS	INT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

STATE OF NORTH CAROLINA PROFESSIONAL ENGINEER

L. D. STOUCCHKO

11-Mar-2026

SIGNATURE DATE

SIG. INVENTORY NO. 08-0662

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps
Overlap Plan 1

Overlap	1	2	3	7	8	9
Type	FYA 4 - Section	FYA 4 - Section	FYA 4 - Section	Normal	Normal	Normal
Included Phases	6	4	6	3,4	3,5	3,4
Modifier Phases	3,4	3,5	5	-	-	-
Modifier Overlaps	-	-	-	-	-	-
Min Green	0	7	0	0	0	0
Trail Green	0	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0	0.0
FYA Ped Delay	7.0	7.0	7.0	0.0	0.0	0.0

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters	Unit Flash Parameters
StartUp Clearance Hold	All Red Flash Exit Time
6	6

SEQUENCE DETAIL

Front Panel
Main Menu >Controller >Sequence & Phs Config>Sequences

Web Interface
Home >Controller >Sequence

Sequence 1

Ring	Sequence Data
1	2,a,4,3,b
2	5,6,a,b

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration

Channel Configuration

NOTICE CONTROL TYPE & SOURCE →

NOTICE CONTROL TYPE & SOURCE →

NOTICE CONTROL TYPE & SOURCE →

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Overlap	7		X	X	1
2	Phase Vehicle	2		X		2
3	Overlap	8		X	X	3
4	Phase Vehicle	4		X		4
5	Phase Vehicle	5		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Overlap	9		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

LOGIC PROCESSOR PROGRAMMING

Front Panel
Main Menu >Controller >More >User Programs >Definition

Web Interface
Home >Controller >User Programs Configuration >User Programs Definition

Program 1

Statement	Result	Index	Operation	Parameter A	Index	Parameter B	Index	Delay	Ext
1	Phase Phase Omit	3	Result=Latch(A,B)	Phase Green	4	Phase Green	2	0.0	0.0

LOGIC STATEMENT DESCRIPTION

Statement 1 Description: Omit Phase 3 if Phase 4 is present.

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0662
DESIGNED: February 2026
SEALED: March 11, 2026
REVISED: N/A

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

MOTT MACDONALD 1 & E, LLC
930 Main Campus Drive
Suite 200
RALEIGH, NC 27606
License No. F-0669

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

750 N. Greenfield Pkwy, Corner, NC 27529

NC 42 (E. Salisbury St)
at
SR 2237 (E. Salisbury St)

Division 8 Randolph County Asheboro

PLAN DATE: February 2026 REVIEWED BY: LD STOUCHKO

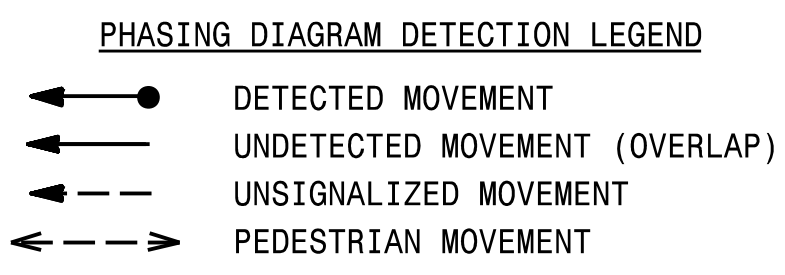
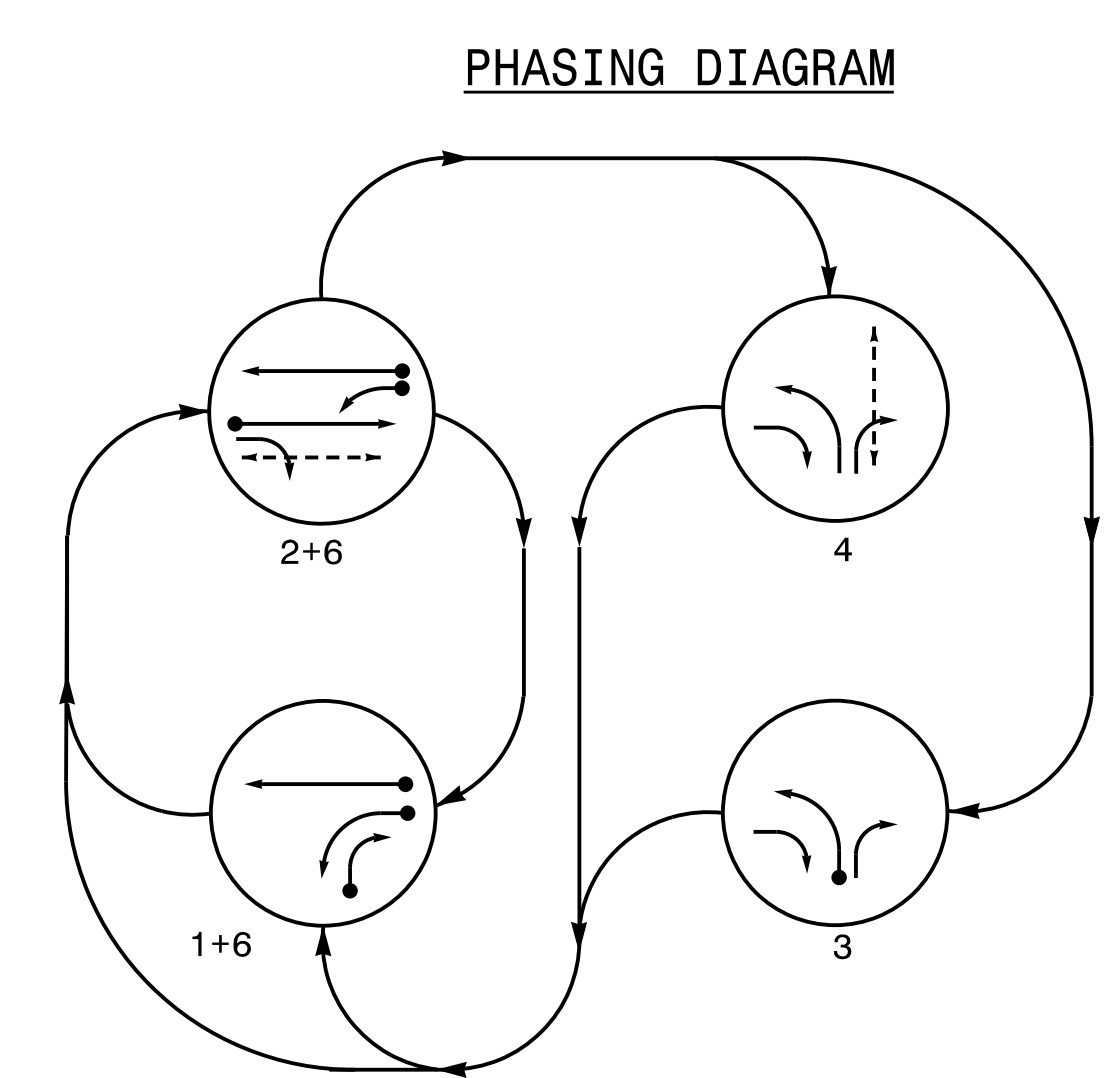
PREPARED BY: S O'Farrell REVIEWED BY:

REVISIONS	INIT.	DATE

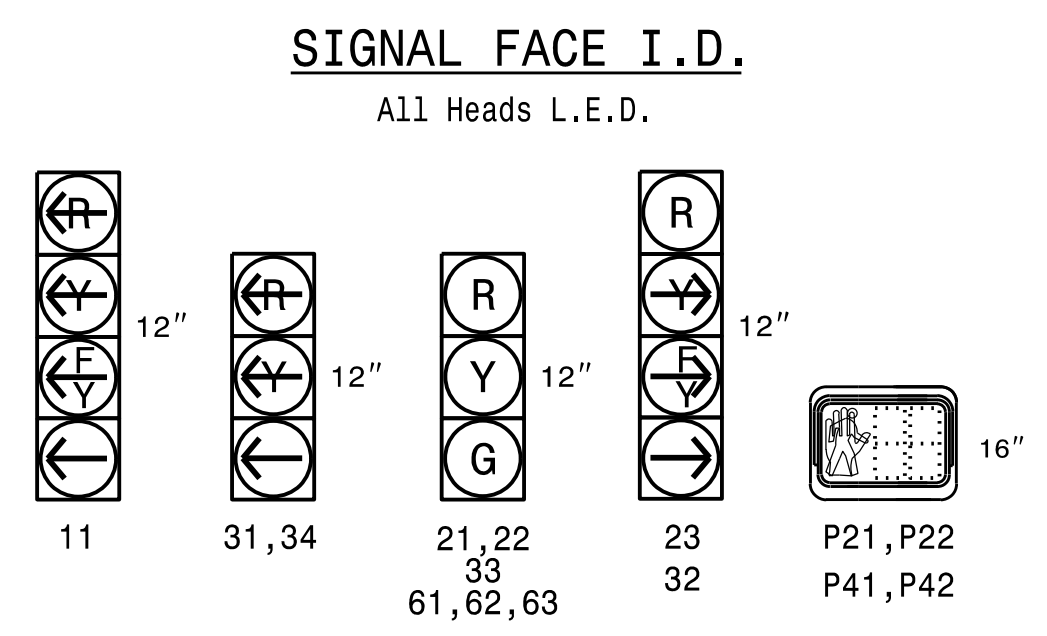
SEAL

LD Stouchko
FF586CT586C645A
11-Mar-2026
SIGNATURE DATE

SIG. INVENTORY NO. 08-0662



SIGNAL FACE	PHASE				
	1+6	2+6	4	3	FLASH
11	Y	R	R	R	R
21,22	R	G	R	R	R
23	R	Y	---	---	R
31,34	---	---	---	---	---
32	---	R	Y	---	R
33	R	R	G	G	R
61,62,63	G	G	R	R	R
P21,P22	DW	W	DW	DW	DRK
P41,P42	DW	DW	W	DW	DRK

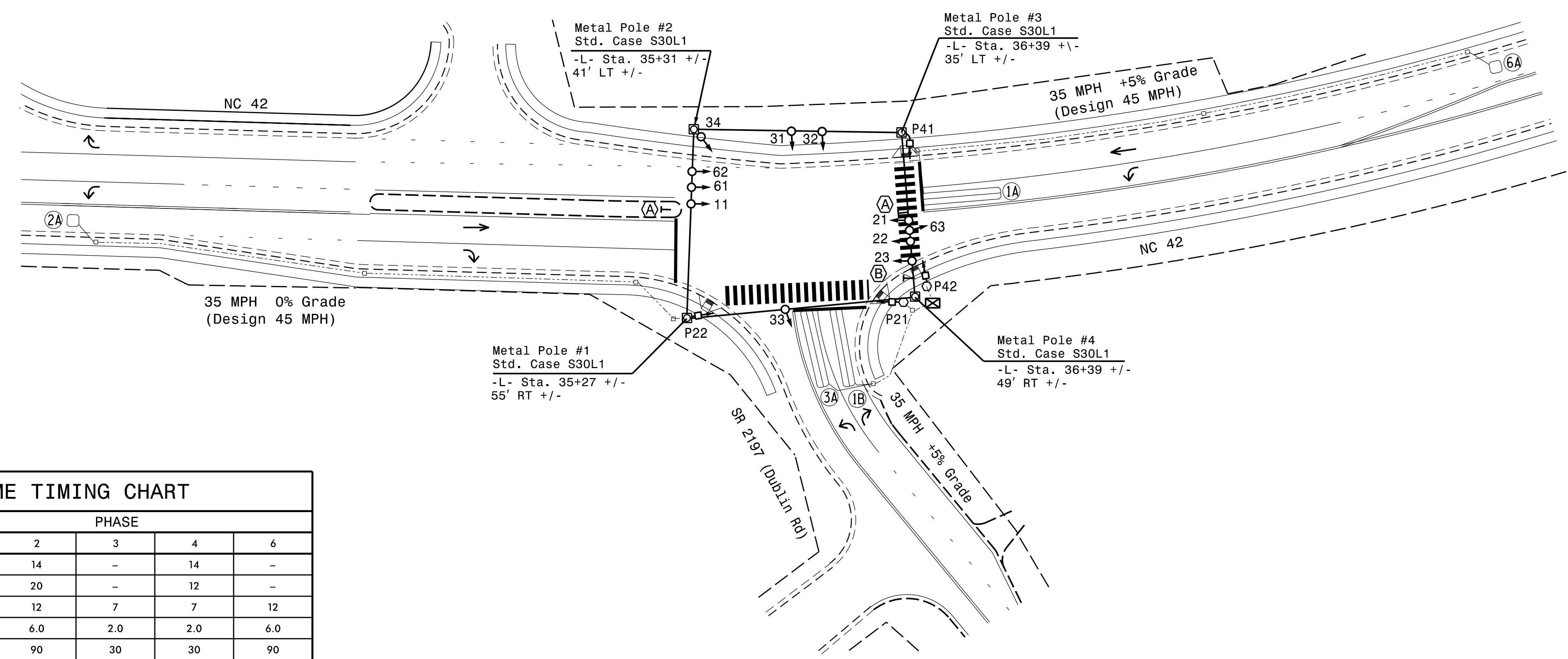


MAXTIME DETECTOR INSTALLATION CHART											
DETECTOR					PROGRAMMING						
LOOP	SIZE (FT)	DISTANCE FROM STOPBAR (FT)	TURNS	NEW LOOP	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	NEW CARD
1A	6X40	0	2-4-2	X	1	15.0	-	X	-	X	X
1B	6X40	0	2-4-2	X	6	3.0	-	X	-	X	X
2A	6X6	300	4	X	2	-	-	X	X	X	X
3A	6X40	0	2-4-2	X	3	3.0	-	X	-	X	X
6A	6X6	300	4	X	6	-	-	X	X	X	X

4 Phase Fully Actuated
NC 42 (Salisbury St) - US 220 Bus (Fayetteville St)
Signal System #: D08-18_Asheboro

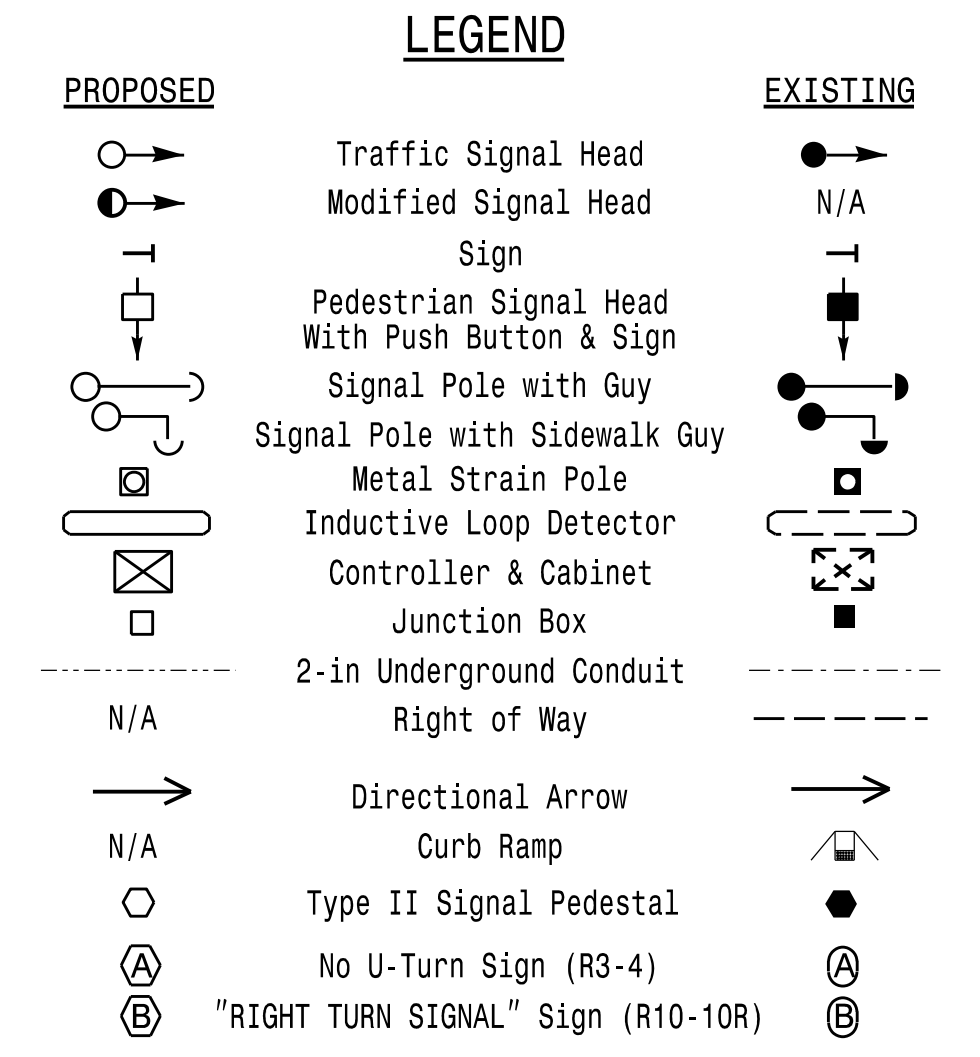
NOTES

- 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.
- Omit Phase 3 during Phase 4 on.
- Phase 1 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.
- Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- Program pedestrian heads to countdown the flashing "Don't Walk" time only.
- To provide a leading pedestrian interval on phase 2, program FYA heads numbered 11 and 23 to delay for 7 seconds at the start of the phase 2 walk interval. See electrical details for programming.
- To provide a leading pedestrian interval on phase 4, program FYA head numbered 32 to delay for 7 seconds at the start of the phase 4 walk interval. See electrical details for programming.
- Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values supersede these values.



FEATURE	PHASE				
	1	2	3	4	6
Walk *	-	14	-	14	-
Ped Clear	-	20	-	12	-
Min Green *	7	12	7	7	12
Passage *	2.0	6.0	2.0	2.0	6.0
Max I *	20	90	30	30	90
Yellow Change	3.0	4.5	3.0	3.0	4.5
Red Clear	2.9	1.8	2.6	2.6	1.8
Added Initial *	-	2.5	-	-	2.5
Maximum Initial *	-	34	-	-	34
Time Before Reduction *	-	15	-	-	15
Time To Reduce *	-	45	-	-	45
Minimum Gap	-	3.0	-	-	3.0
Advance Walk	-	**	-	***	-
Non Lock Detector	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.
** See notes 9.
*** See note 10.



New Installation - Final Design

MOTT MACDONALD
930 Main Campus Drive
Suite 200
RALEIGH, NC 27606
License No. F-0669

NC 42 at SR 2197 (Dublin Rd)

Division 8 Randolph County Asheboro

PLAN DATE: February 2026 PREPARED BY: S O'Farrell REVIEWED BY: LD Stouchko

REVISIONS: _____ INIT: _____ DATE: _____

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

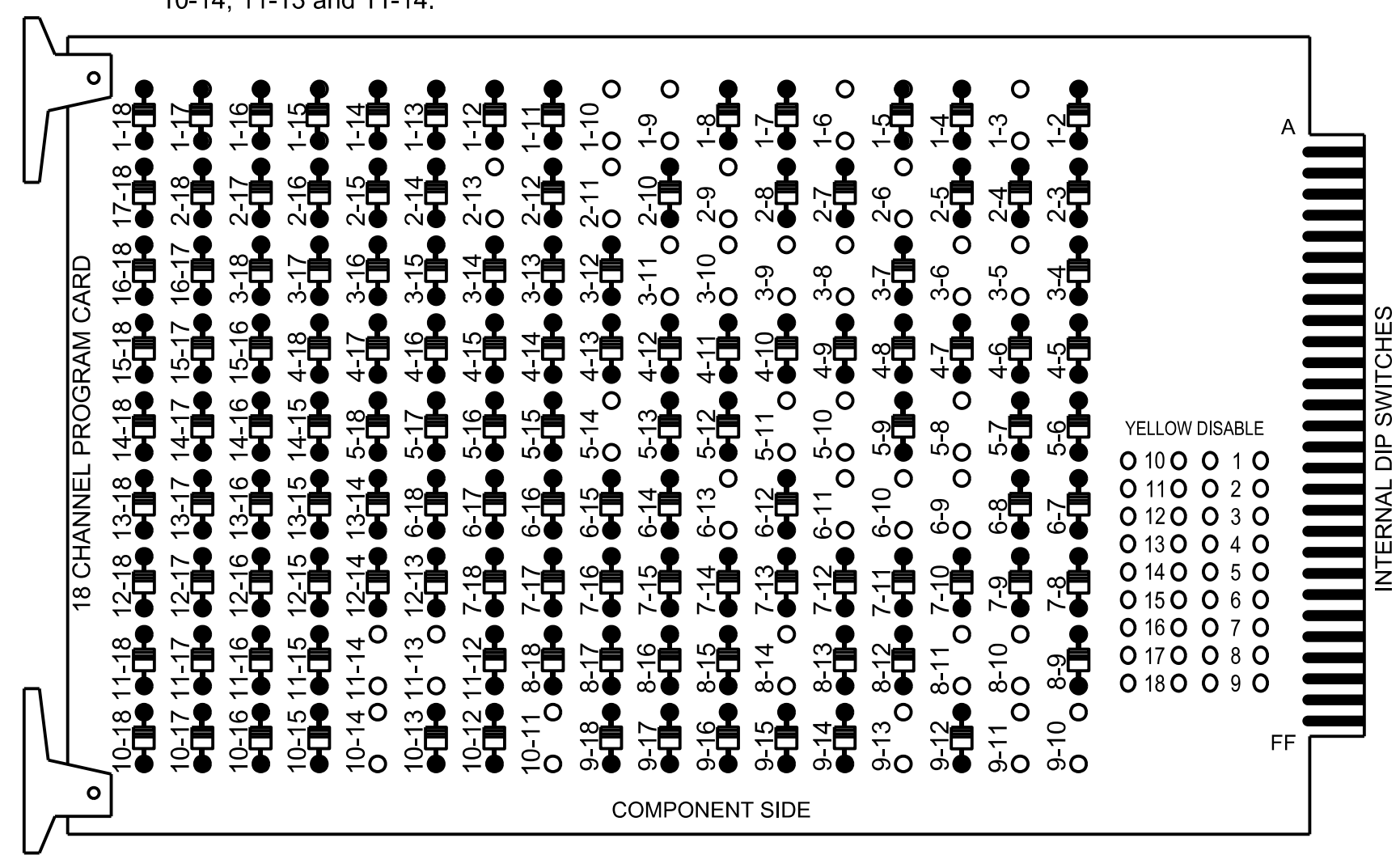
SEAL

LD Stouchko
11-Mar-2026
SIGNATURE DATE
SIG. INVENTORY NO. 08-0661

18 CHANNEL IP CONFLICT MONITOR PROGRAMMING DETAIL

(remove jumpers and set switches as shown)

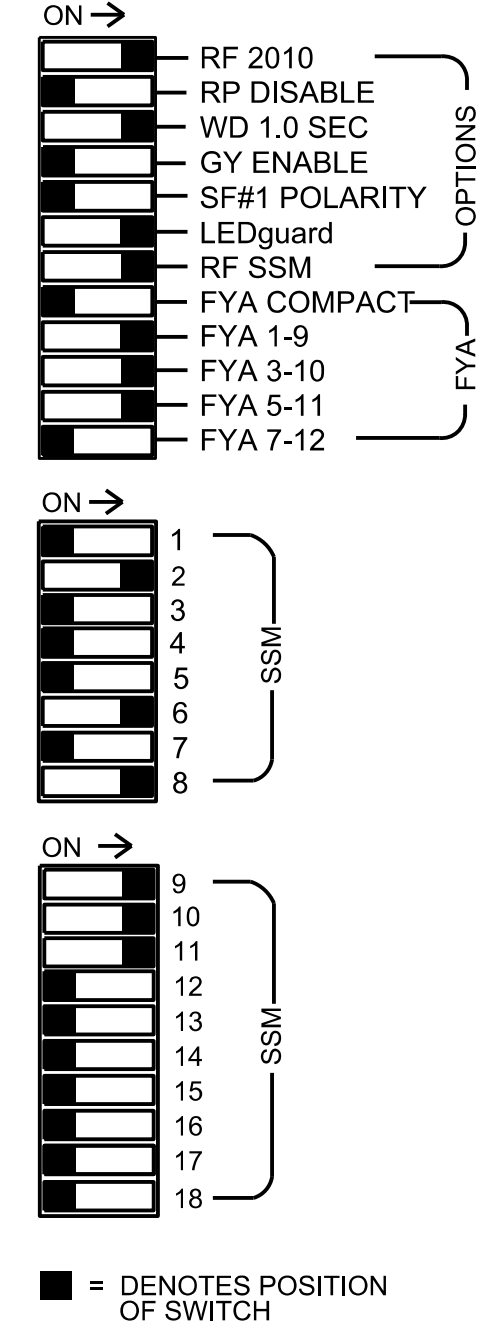
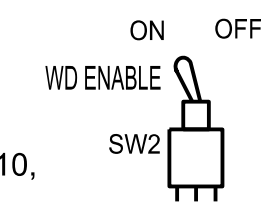
REMOVE DIODE JUMPERS 1-3, 1-6, 1-9, 1-10, 2-6, 2-9, 2-11, 2-13, 3-5, 3-6, 3-8, 3-9, 3-10, 3-11, 5-8, 5-10, 5-11, 5-14, 6-9, 6-10, 6-11, 6-13, 8-10, 8-11, 8-14, 9-10, 9-11, 9-13, 10-11, 10-14, 11-13 and 11-14.



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.



■ = DENOTES POSITION OF SWITCH

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 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 Salisbury Street Closed Loop 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, S6, S7, S8, S11, AUX S1, AUX S2, AUX S4
 Phases Used.....1, 2, 2PED, 3, 4, 4PED, 6
 Overlap "1".....*
 Overlap "2".....*
 Overlap "3".....*
 Overlap "4".....NOT USED
 Overlap "5".....NOT USED
 Overlap "6".....NOT USED
 Overlap "7".....*
 Overlap "8".....*
 Overlap "9".....*

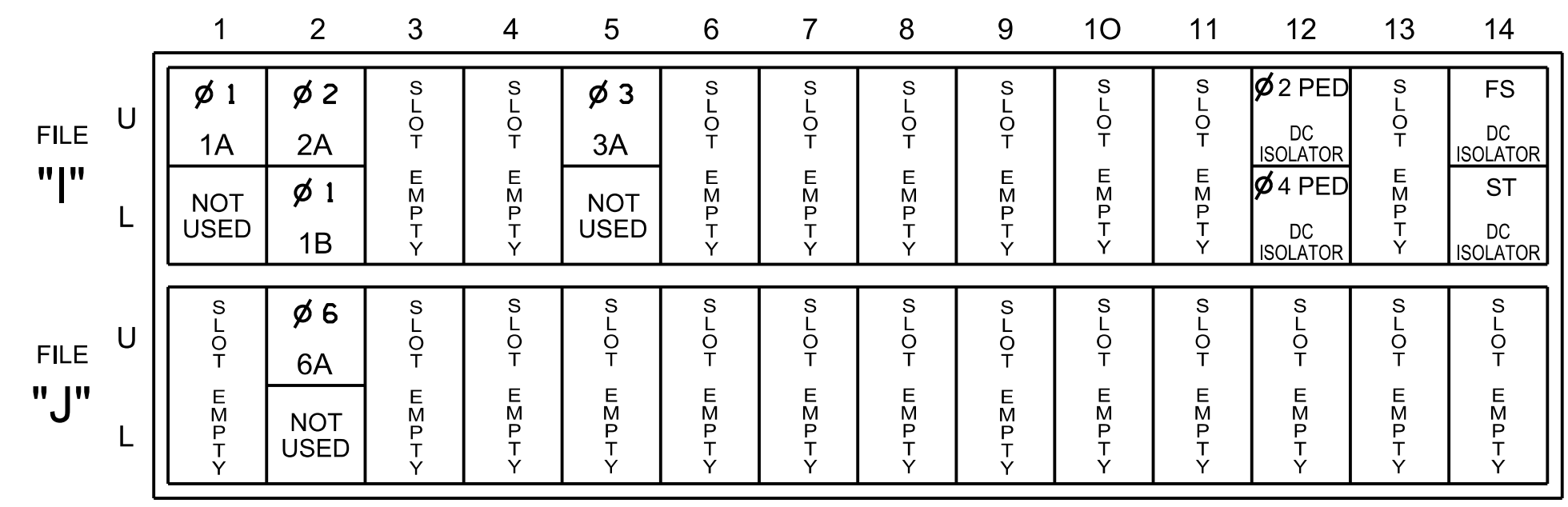
*See overlap programming detail on sheet 2

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	OL7	4	4 PED	OL8	6	6 PED	7	OL9	8 PED	OL1	OL2	SPARE	OL3	OL4	SPARE
SIGNAL HEAD NO.	11	21,22	P21 P22	32	NC	P41 P42	23	61,62 63	NU	NU	31,34	33	11	32	NU	23	NU	NU
RED	128							134			107			A124		A114		
YELLOW	*	129		*			*	135		108								
GREEN		130						136		109								
RED ARROW										107			A121					
YELLOW ARROW										108			A122	A125		A115		
FLASHING YELLOW ARROW													A123	A126		A116		
GREEN ARROW	127			118			133			109								
Hand				113			104											
Walking				115			106											

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

INPUT FILE POSITION LAYOUT (front view)

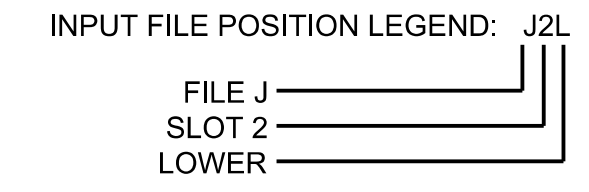


EX. : 1A, 2A, ETC. = LOOP NO.'S
 FS = FLASH SENSE
 ST = STOP TIME

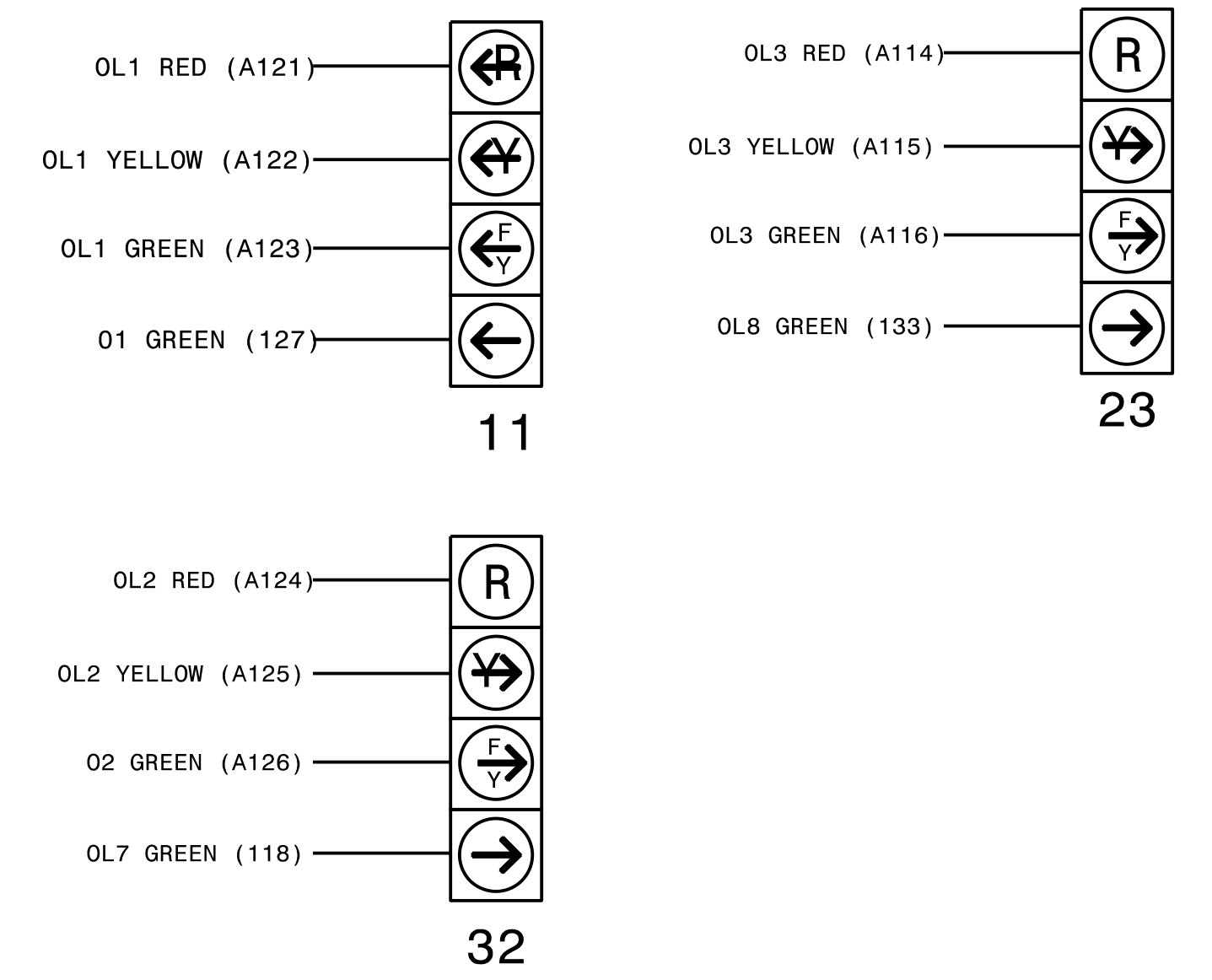
INPUT FILE CONNECTION & PROGRAMMING CHART

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT POINT	DETECTOR NO.	CALL PHASE	DELAY TIME	EXTEND TIME	EXTEND	ADDED INITIAL	CALL	DELAY DURING GREEN
1A	TB2-1,2	I1U	56	18	1	1	15.0		X		X	
1B	TB2-7,8	I2L	43	5	3	1	15.0		X		X	
2A	TB2-5,6	I2U	39	1	2	2			X	X	X	
3A	TB4-5,6	I5U	58	20	7	3	3.0		X	X	X	
6A	TB3-5,6	J2U	40	2	16	6			X	X	X	
PED PUSH BUTTONS												
P21,P22	TB8-4,6	I12U	67	33	2	PED 2						
P41,P42	TB8-5,6	I12L	69	35	4	PED 4						

NOTE: INSTALL DC ISOLATOR IN INPUT FILE SLOT I12.

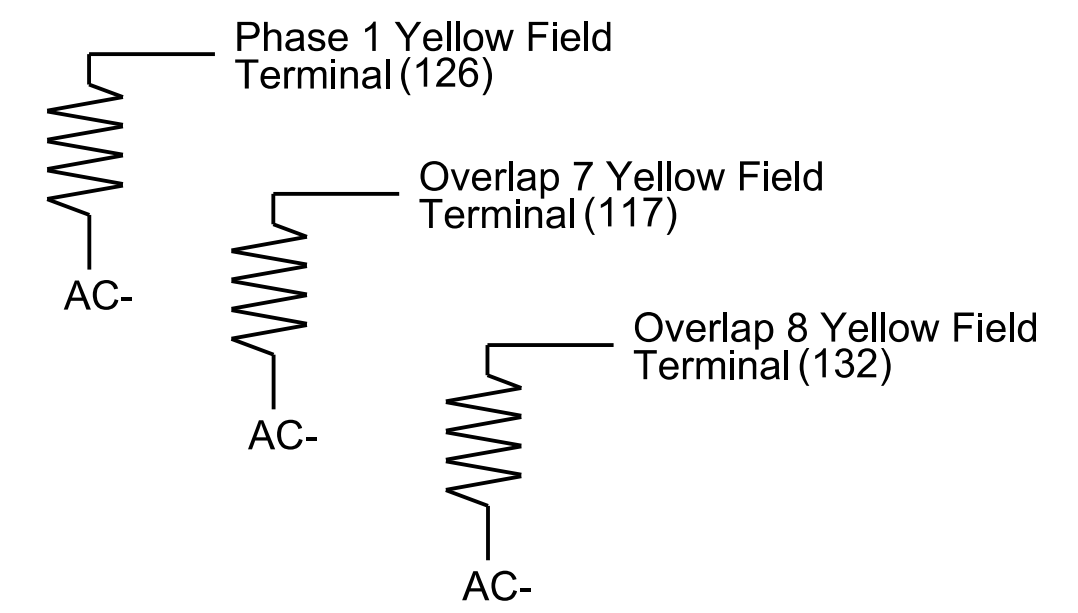


FYA SIGNAL WIRING DETAIL (wire signal heads as shown)



LOAD RESISTOR INSTALLATION DETAIL (install resistors as shown)

ACCEPTABLE VALUES	
Value (ohms)	Wattage
1.5K - 1.9K	25W (min)
2.0K - 3.0K	10W (min)



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0661
 DESIGNED: February 2026
 SEALED: March 11, 2026
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:

Prepared for the Offices of:

750 N. Greenfield Pkwy, Corner, NC 27529

NC 42 at SR 2197 (Dublin Rd)

Division 8 Randolph County Asheboro

PLAN DATE: February 2026 REVIEWED BY: LD STOUCHKO

PREPARED BY: S O'Farrell REVIEWED BY:

REVISIONS	INT.	DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEAL

Loni Stouchko
 FF586CT586C45A
 11-Mar-2026

SIGNATURE DATE

SIG. INVENTORY NO. 08-0661

OVERLAP PROGRAMMING

Front Panel
Main Menu >Controller >Overlap >Overlap Parameters/Overlap Timings

Web Interface
Home >Controller >Overlap Configuration >Overlaps
Overlap Plan 1

Overlap	1	2	3	7	8	9
Type	FYA 4 - Section	FYA 4 - Section	FYA 4 - Section	Normal	Normal	Normal
Included Phases	2	4	2	1,3	3,4	3,4
Modifier Phases	1	1,3	3,4	-	-	-
Modifier Overlaps	-	-	-	-	-	-
Min Green	0	7	0	0	0	0
Trail Green	0	0	0	0	0	0
Trail Yellow	0.0	0.0	0.0	0.0	0.0	0.0
Trail Red	0.0	0.0	0.0	0.0	0.0	0.0
FYA Ped Delay	7.0	7.0	7.0	0.0	0.0	0.0

LOGIC PROCESSOR PROGRAMMING

Front Panel
Main Menu >Controller >More >User Programs >Definition

Web Interface
Home >Controller >User Programs Configuration >User Programs Definition

Program 1

Statement	Result	Index	Operation	Parameter A	Index	Parameter B	Index	Delay	Ext
1	Phase Phase Omit	3	Result=Lach(A,B)	Phase Green	4	Phase Green	6	0.0	0.0

LOGIC STATEMENT DESCRIPTION

Statement 1 Description: Omit Phase 3 if Phase 4 is present.

OUTPUT CHANNEL CONFIGURATION

Front Panel
Main Menu >Controller >More>Channels>Channels Config

Web Interface
Home >Controller >Advanced IO>Channels>Channels Configuration

Channel Configuration

NOTICE CONTROL TYPE & SOURCE →
NOTICE CONTROL TYPE & SOURCE →
NOTICE CONTROL TYPE & SOURCE →

Channel	Control Type	Control Source	Flash Yellow	Flash Red	Flash Alt	MMU Channel
1	Vehicle Phase	1		X	X	1
2	Phase Vehicle	2		X		2
3	Overlap	7		X	X	3
4	Phase Vehicle	4		X		4
5	Overlap	8		X		5
6	Phase Vehicle	6		X	X	6
7	Phase Vehicle	7		X		7
8	Overlap	9		X	X	8
9	Overlap	1		X	X	9
10	Overlap	2		X	X	10
11	Overlap	3		X		11
12	Overlap	4		X		12
13	Phase Ped	2				13
14	Phase Ped	4				14
15	Phase Ped	6				15
16	Phase Ped	8				16
17	Overlap	5		X	X	17
18	Overlap	6		X		18

COUNTDOWN PEDESTRIAN SIGNAL OPERATION

Countdown Ped Signals are required to display timing only during Ped Clearance Interval. Consult Ped Signal Module user's manual for instructions on selecting this feature.

SEQUENCE DETAIL

Front Panel
Main Menu >Controller >Sequence & Phs Config>Sequences

Web Interface
Home >Controller >Sequence

Sequence 1

Ring	Sequence Data
1	1,2,a,4,3,b
2	6,a,b

FLASHER CIRCUIT MODIFICATION DETAIL

IN ORDER TO INSURE THAT SIGNALS FLASH CONCURRENTLY ON THE SAME APPROACH, MAKE THE FOLLOWING FLASHER CIRCUIT CHANGES:

- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-4 AND TERMINATE ON T2-2.
- ON REAR OF PDA - REMOVE WIRE FROM TERM. T2-5 AND TERMINATE ON T2-3.
- REMOVE FLASHER UNIT 2.

THE CHANGES LISTED ABOVE TIES ALL PHASES AND OVERLAPS TO FLASHER UNIT 1.

MAXTIME STARTUP AND SOFTWARE FLASH PROGRAMMING DETAIL

Front Panel
Main Menu >Controller >Unit

Web Interface
Home >Controller >Unit

Modify parameters as shown below and save changes.

Start Up Parameters

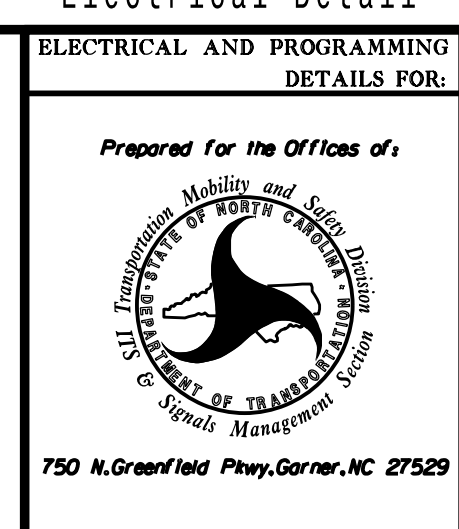
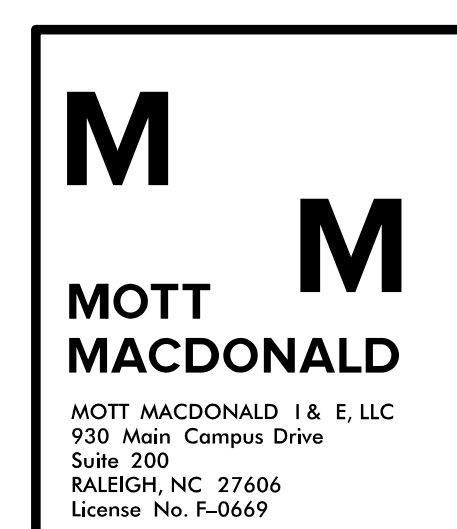
StartUp Clearance Hold	6
------------------------	---

Unit Flash Parameters

All Red Flash Exit Time	6
-------------------------	---

Electrical Detail - Sheet 2 of 2

THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 08-0661
DESIGNED: February 2026
SEALED: March 11, 2026
REVISED: N/A



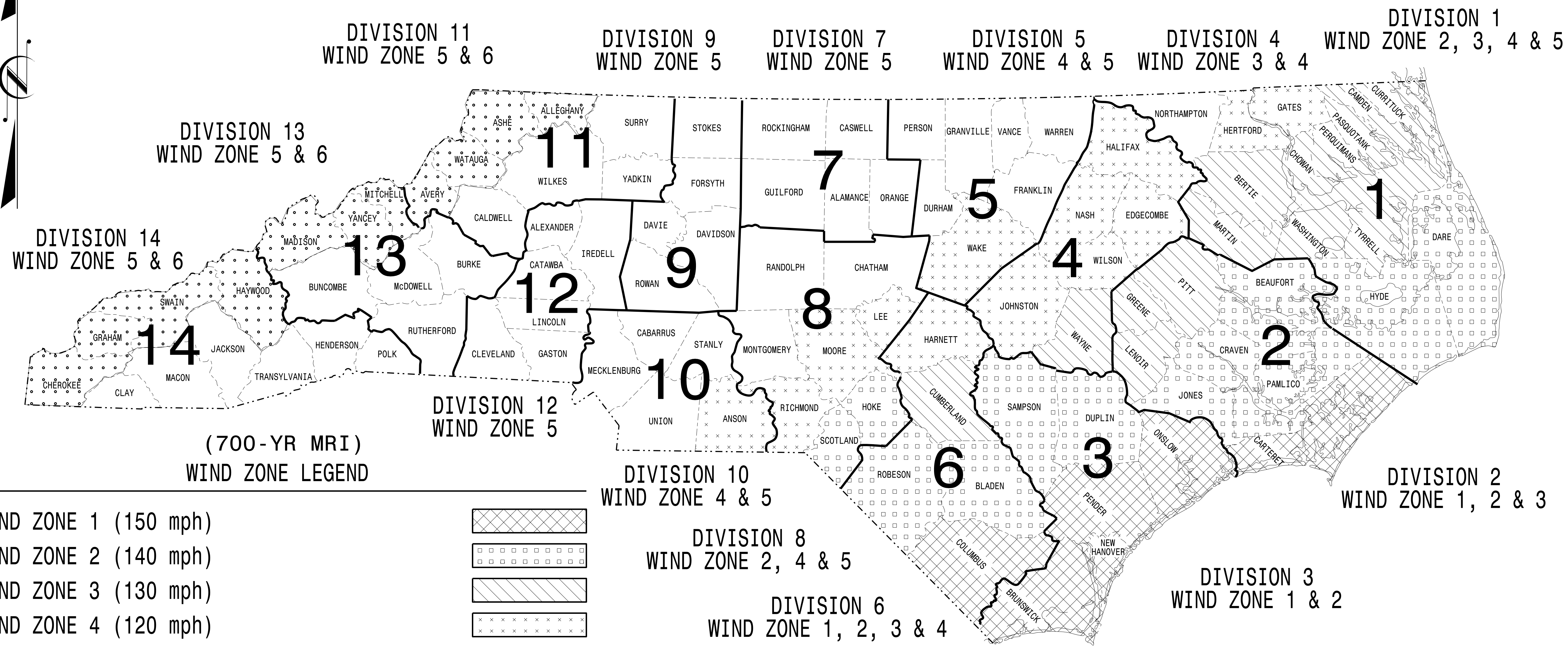
NC 42 at SR 2197 (Dublin Rd)	
Division 8 Randolph County	Asheboro
PLAN DATE: February 2026	REVIEWED BY: LD STOUCHKO
PREPARED BY: S O'Farrell	REVIEWED BY:
REVISIONS	INIT. DATE

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

11-Mar-2026
SIGNATURE DATE
SIG. INVENTORY NO. 08-0661

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

STANDARD DRAWINGS FOR ALL METAL POLES (LRFD)



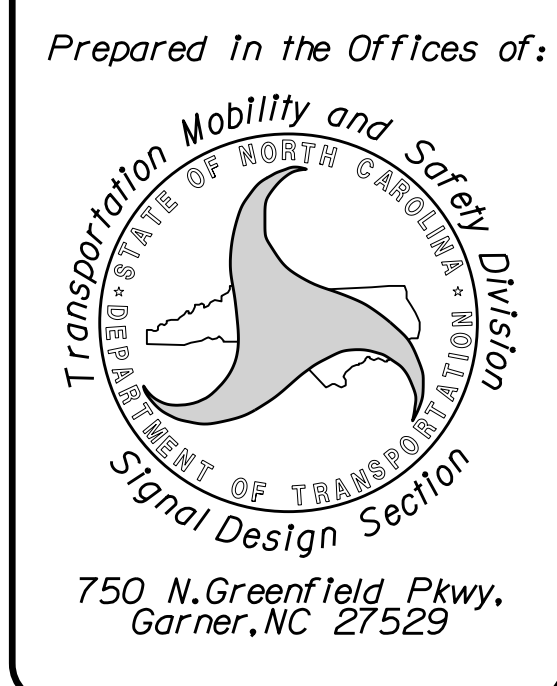
(700-YR MRI)
WIND ZONE LEGEND

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\11\115\Sig\Drawings\Drawings\2024\Metal Pole Standards\2024 Sig-M1A Standard.dwg
Signal Design Section
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

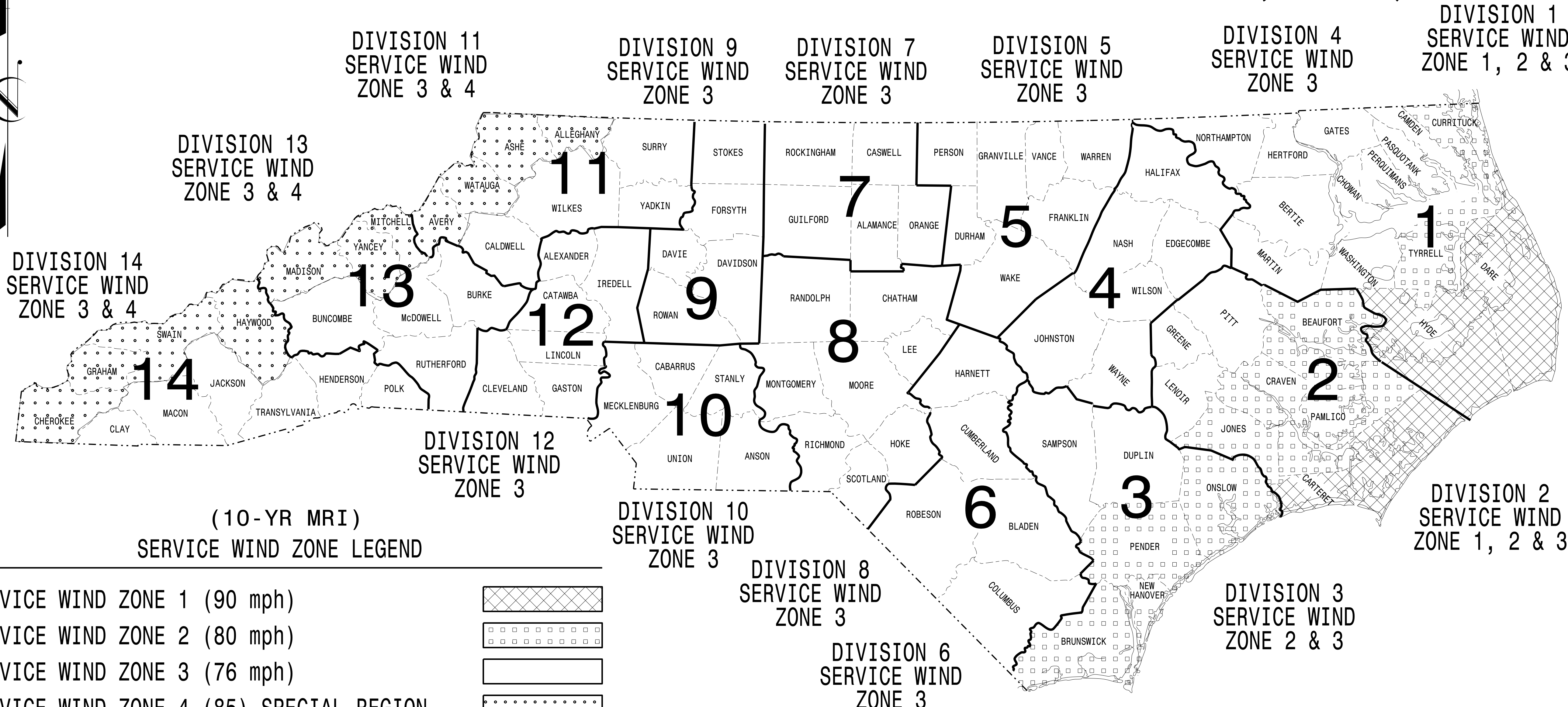
SEAL

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:\IT\AS\11\15\Sig\Drawings\Drawings\2024\Metal Pole (10-yr MRI).vdgn

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)
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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

NC DOT 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

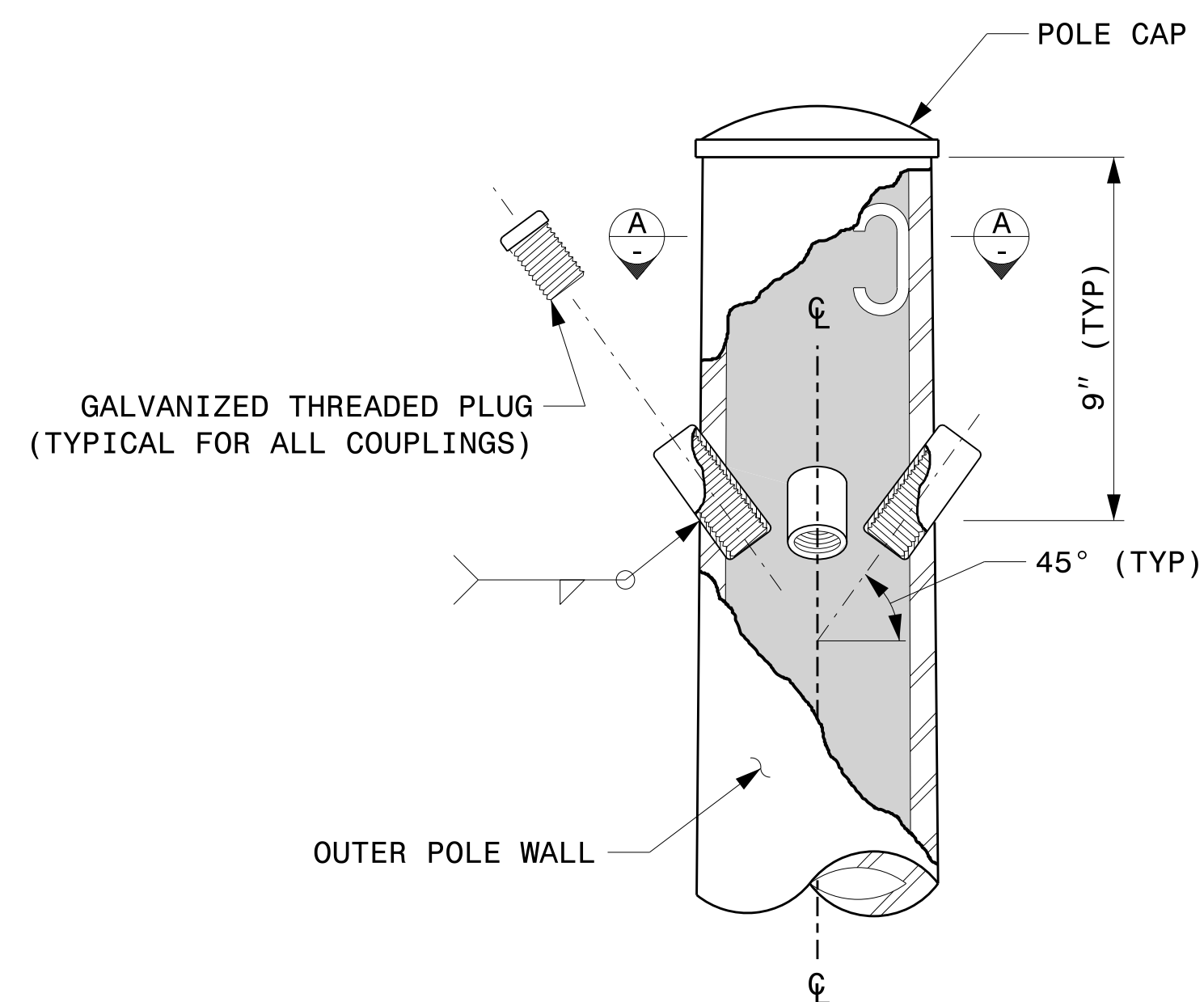
SEAL

DocuSigned by:
Kevin Durigon
4B23DC78B3784DA

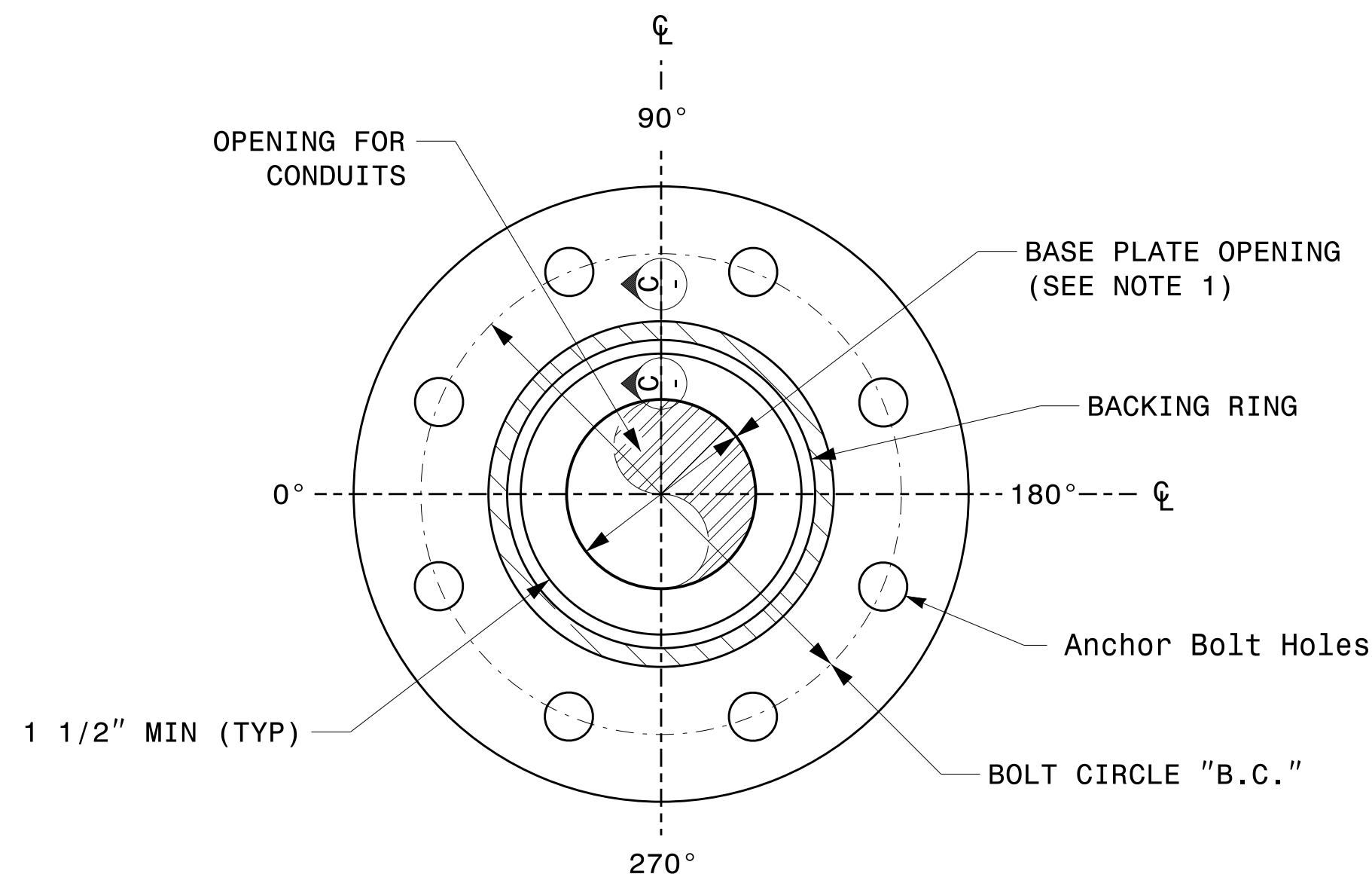
09/21/2023
DATE

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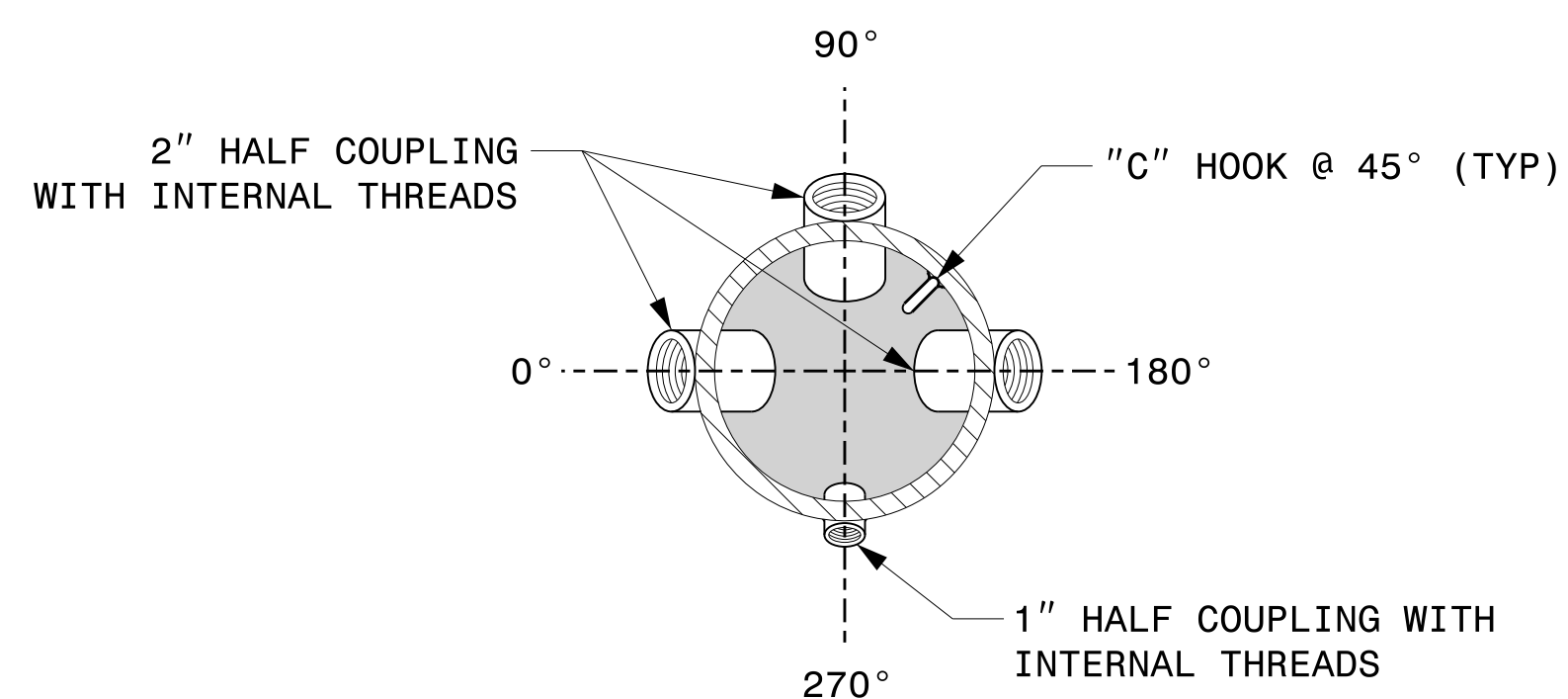
1. OPENING IN POLE BASE PLATE SHALL BE EQUAL TO POLE BASE INSIDE DIAMETER MINUS $3\frac{1}{2}$ " BUT SHALL NOT BE LESS THAN $8\frac{1}{2}$ ".



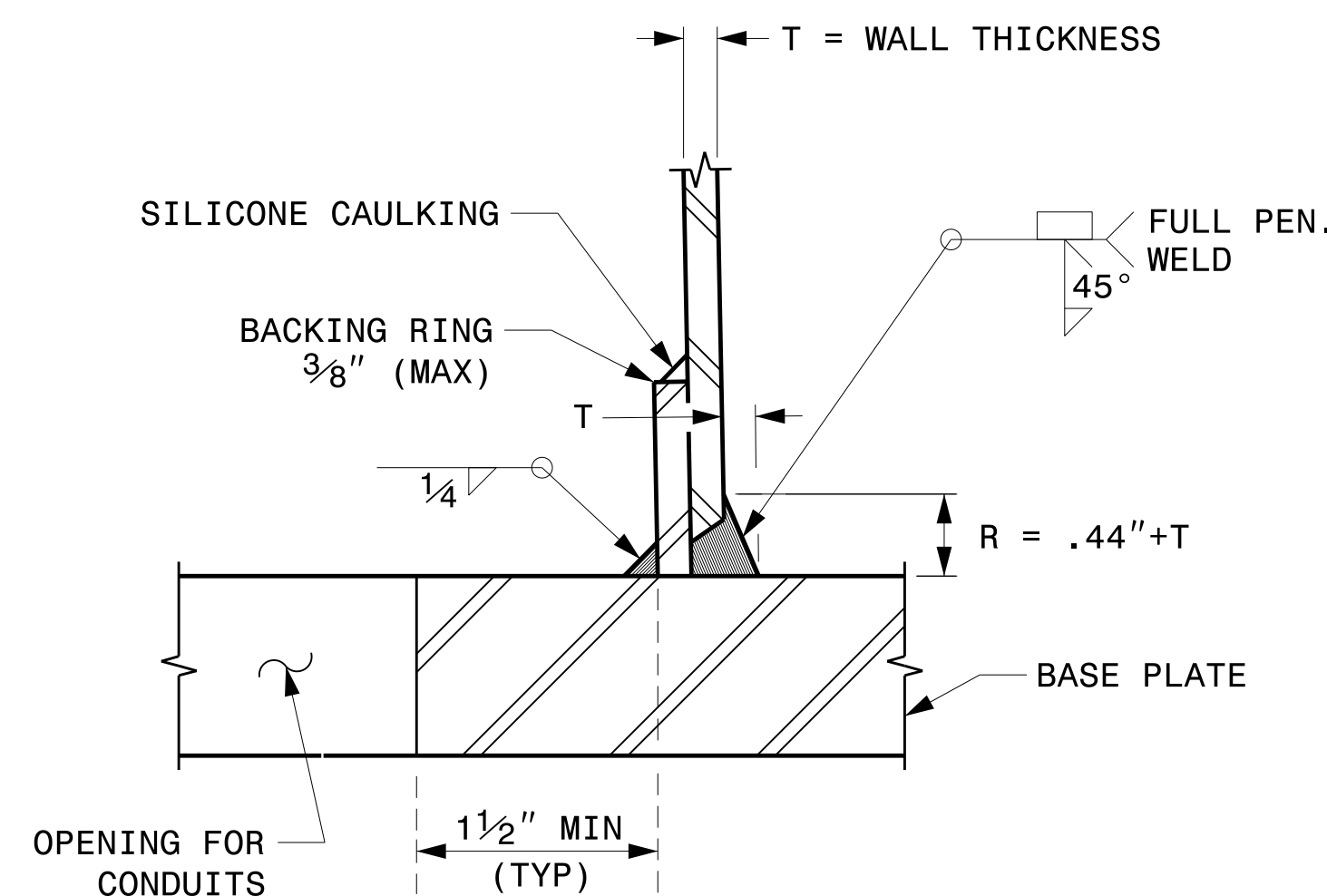
CABLE ENTRANCES AT TOP OF POLE



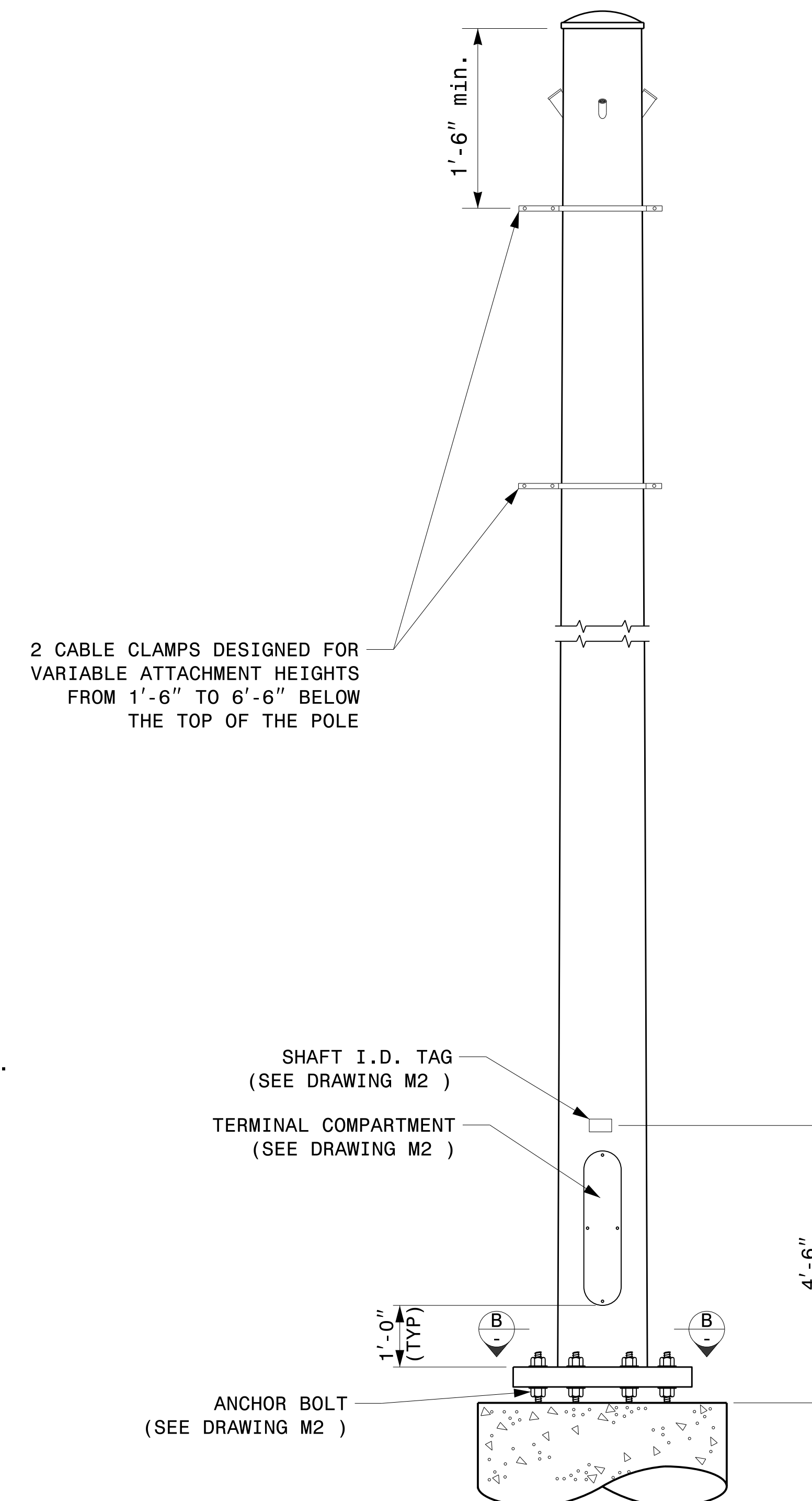
SECTION B-B
POLE BASE PLATE DETAILS
(8 AND 12 BOLT PATTERN)



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

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

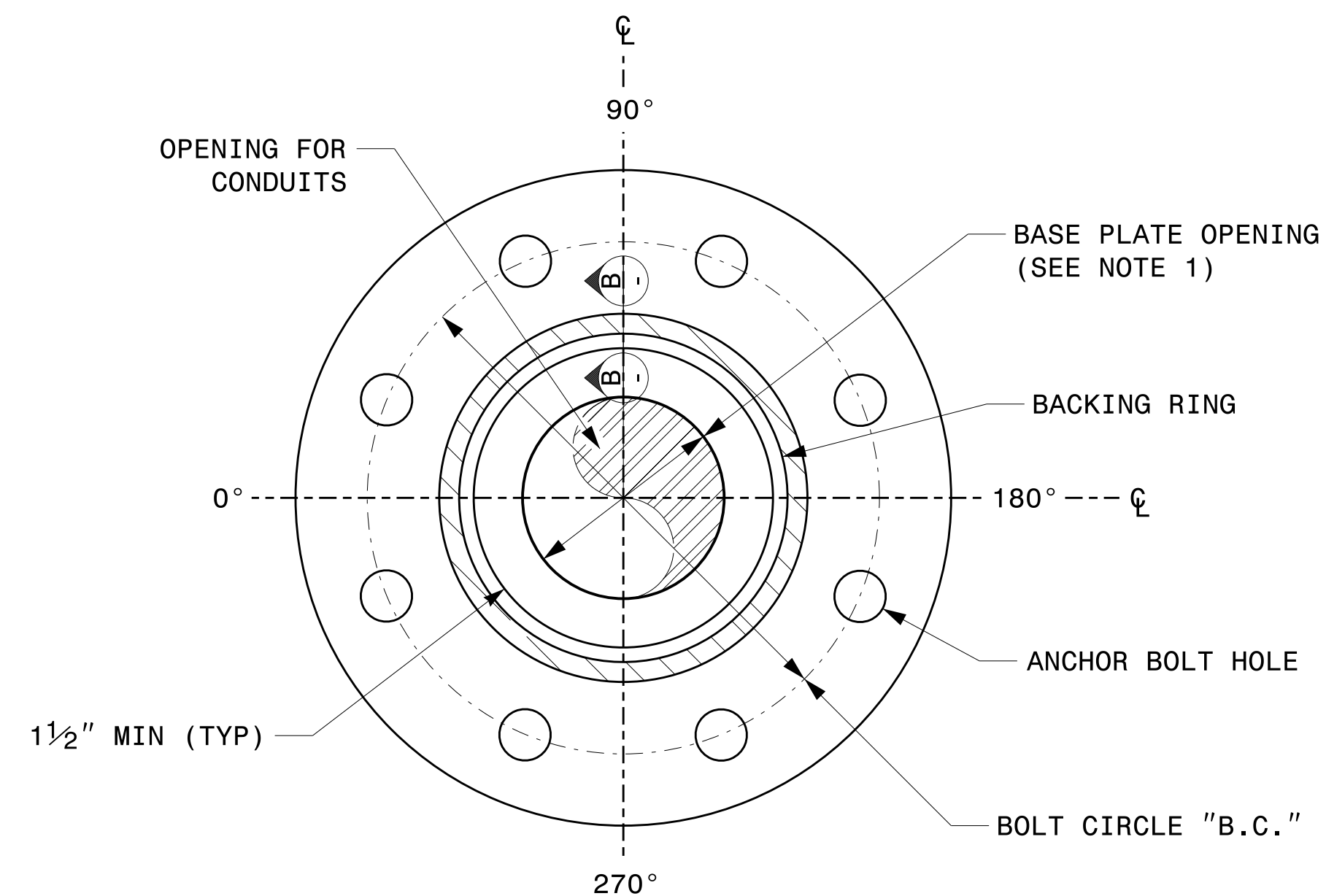
09/23/2023
DATE

08-dt-2023-10-31
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Kedar Durigon

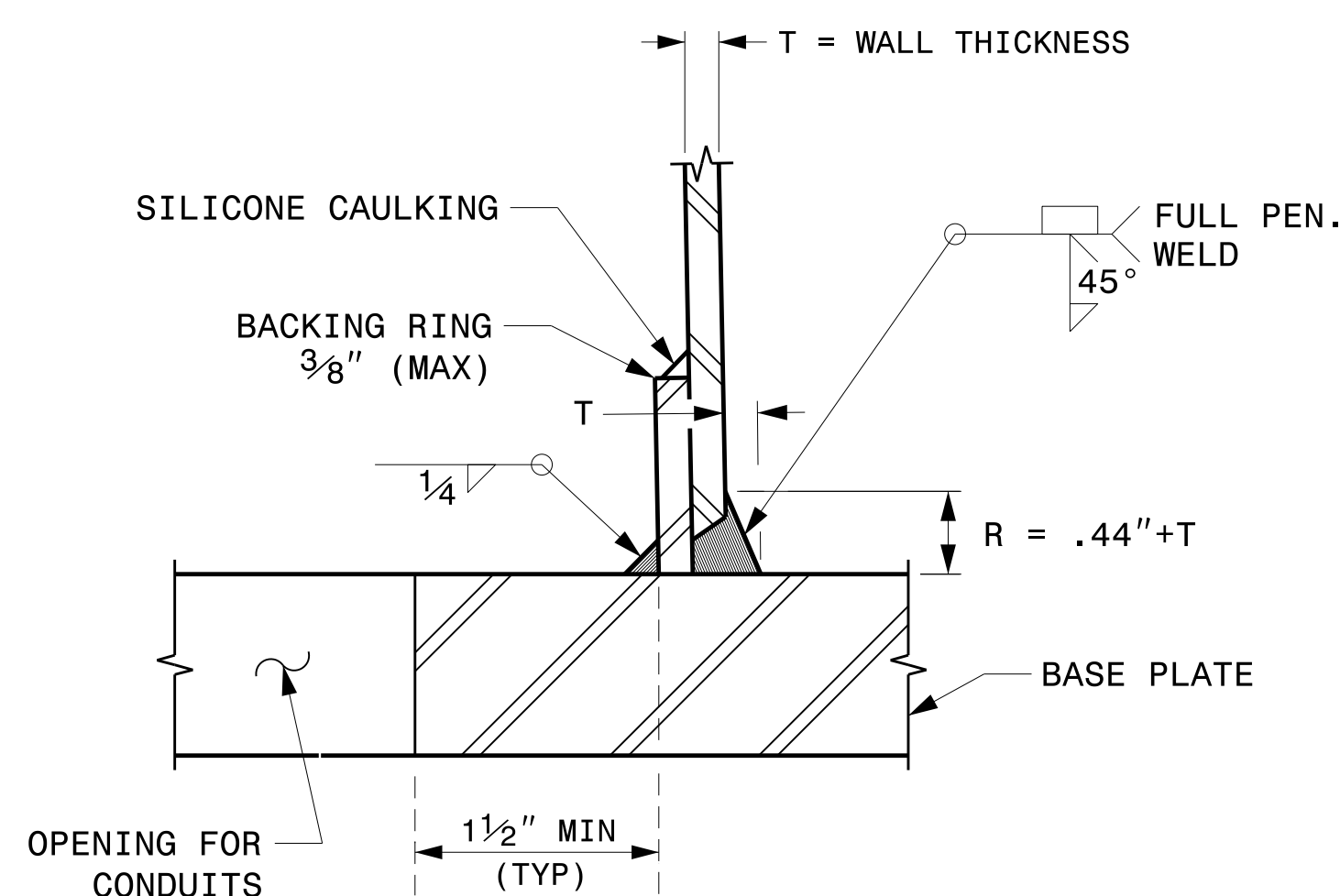
Fabrication Details – Strain Poles

NOTE:

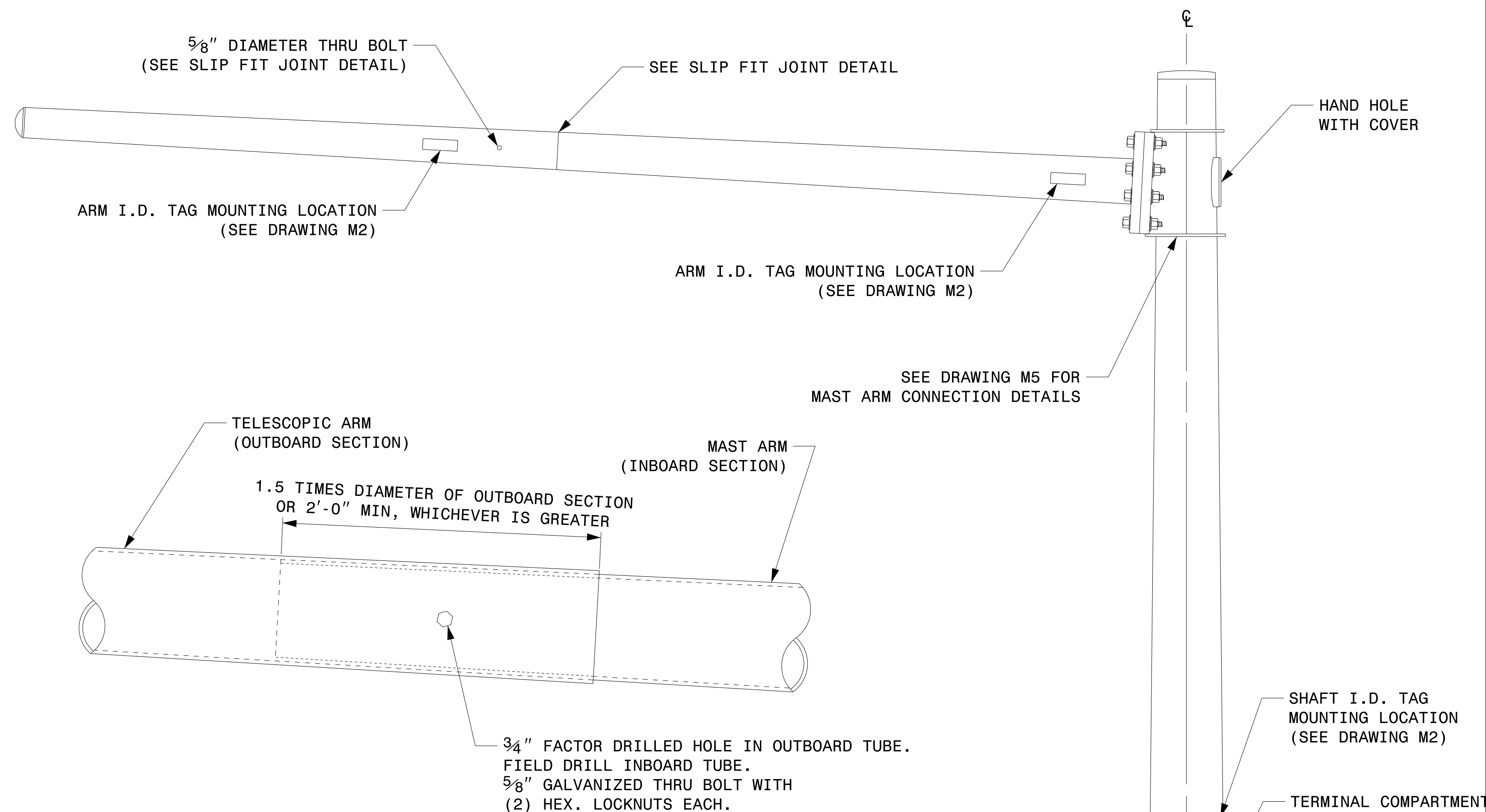
1. OPENING IN POLE BASE PLATE SHALL BE EQUAL TO POLE BASE INSIDE DIAMETER MINUS $3\frac{1}{2}$ " BUT SHALL NOT BE LESS THAN $8\frac{1}{2}$ ".



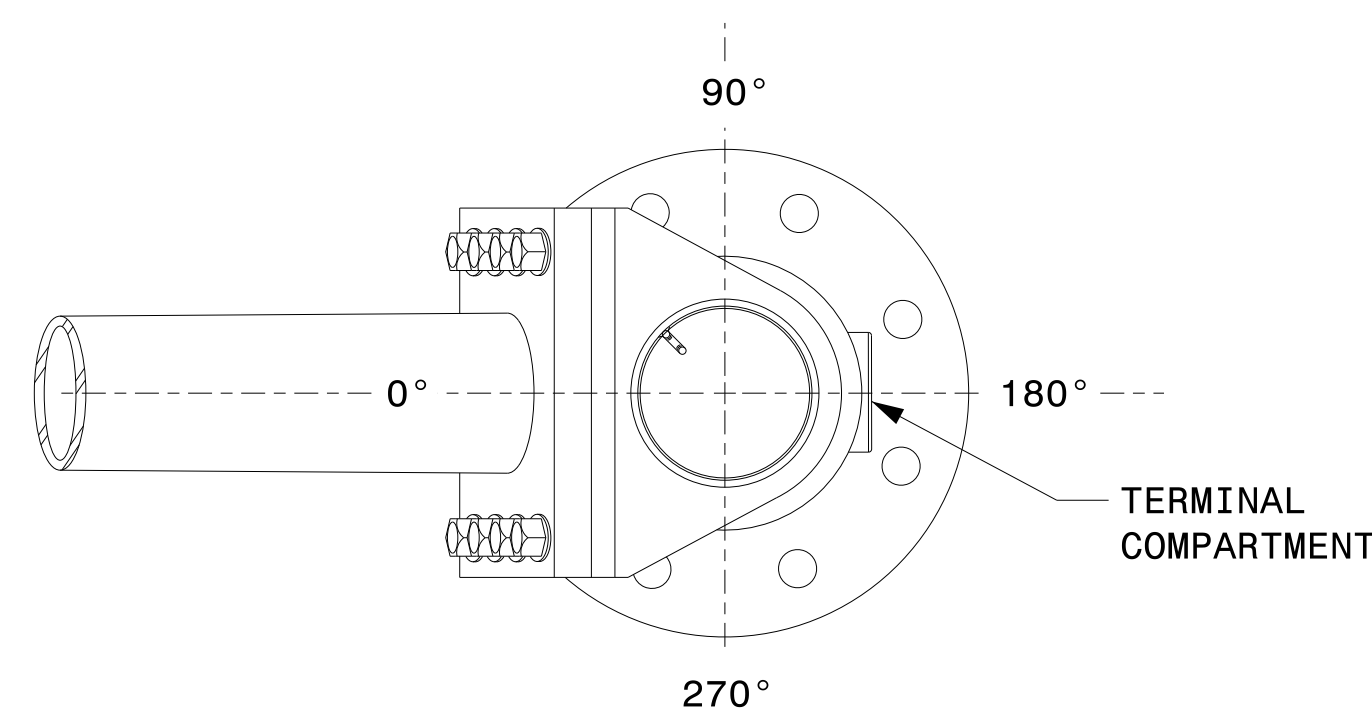
SECTION A-A
POLE BASE PLATE DETAILS



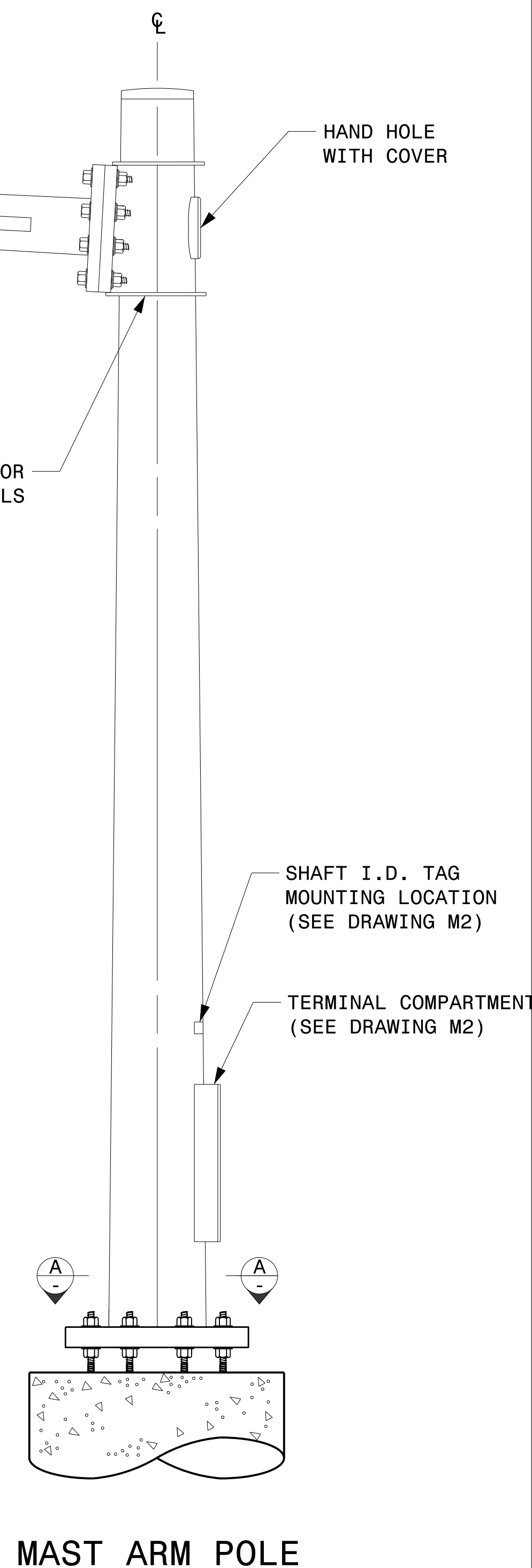
SECTION B-B
(POLE ATTACHMENT TO BASE PLATE)
FULL-PENETRATION
GROOVE WELD DETAIL



SLIP FIT JOINT DETAIL FOR MAST ARM



MAST ARM RADIAL ORIENTATION



MAST ARM POLE

Fabrication Details – Mast Arm Poles

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

03-dwt-2023-10-31E
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Kedar Durigon

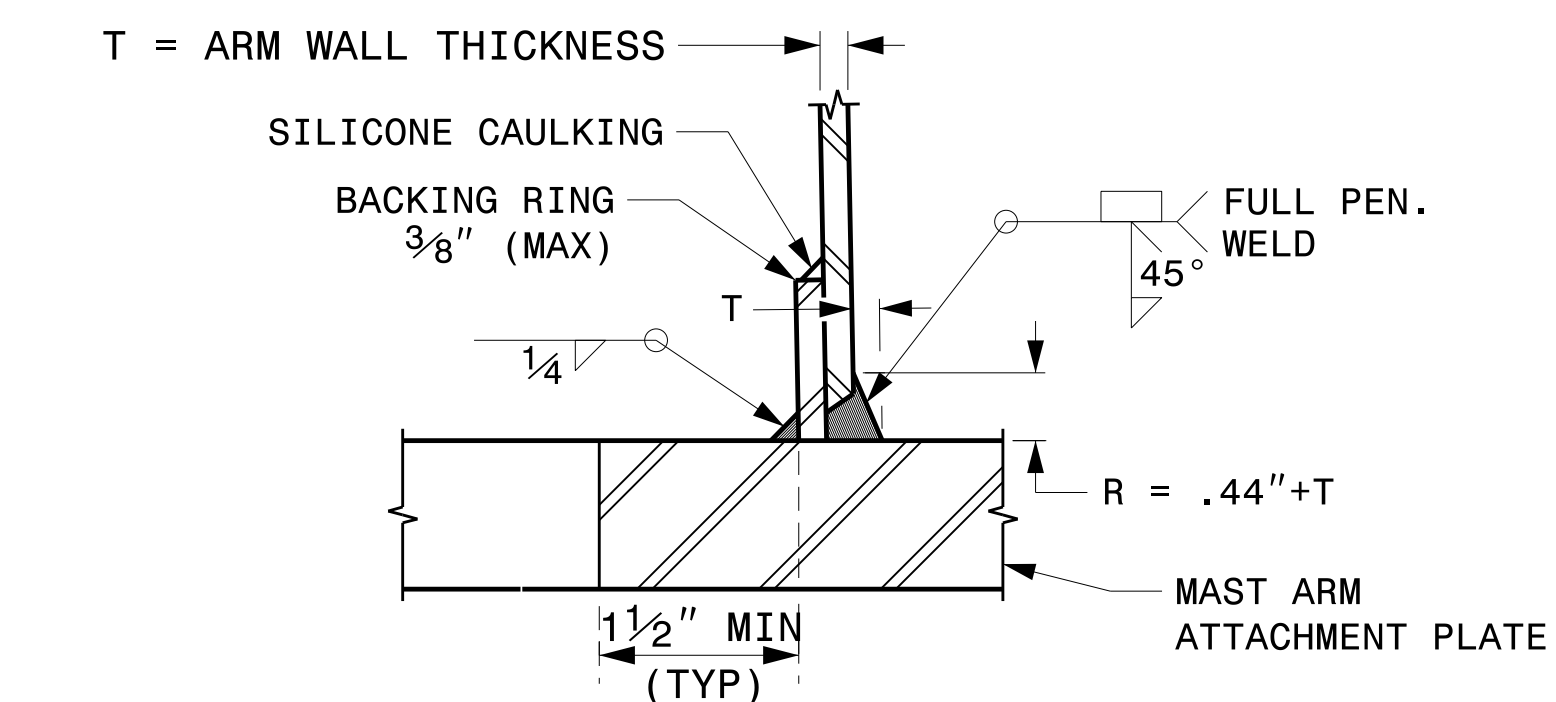
WELDED RING STIFFENED MAST ARM CONNECTION

PROJECT I.D. NO.

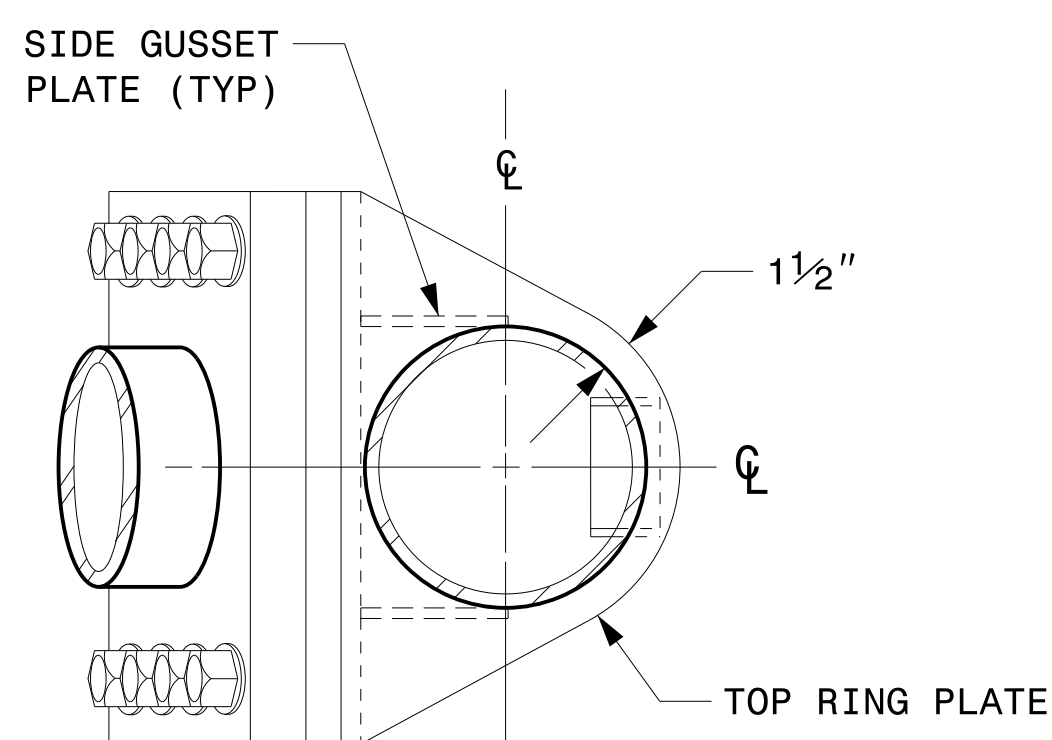
SHEET NO.

U-5743

Sig.M5



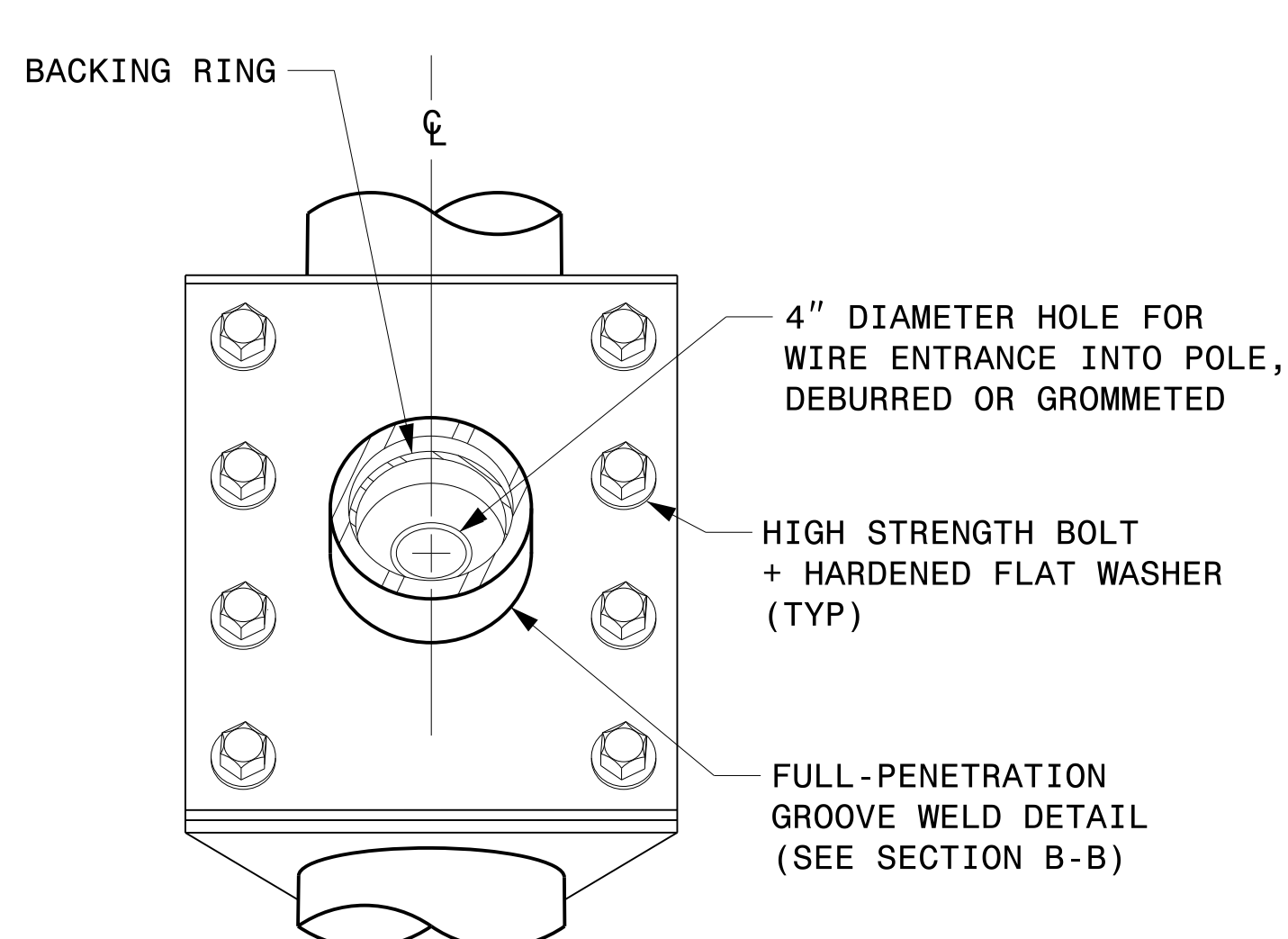
**SECTION B-B
FULL-PENETRATION GROOVE WELD DETAIL**



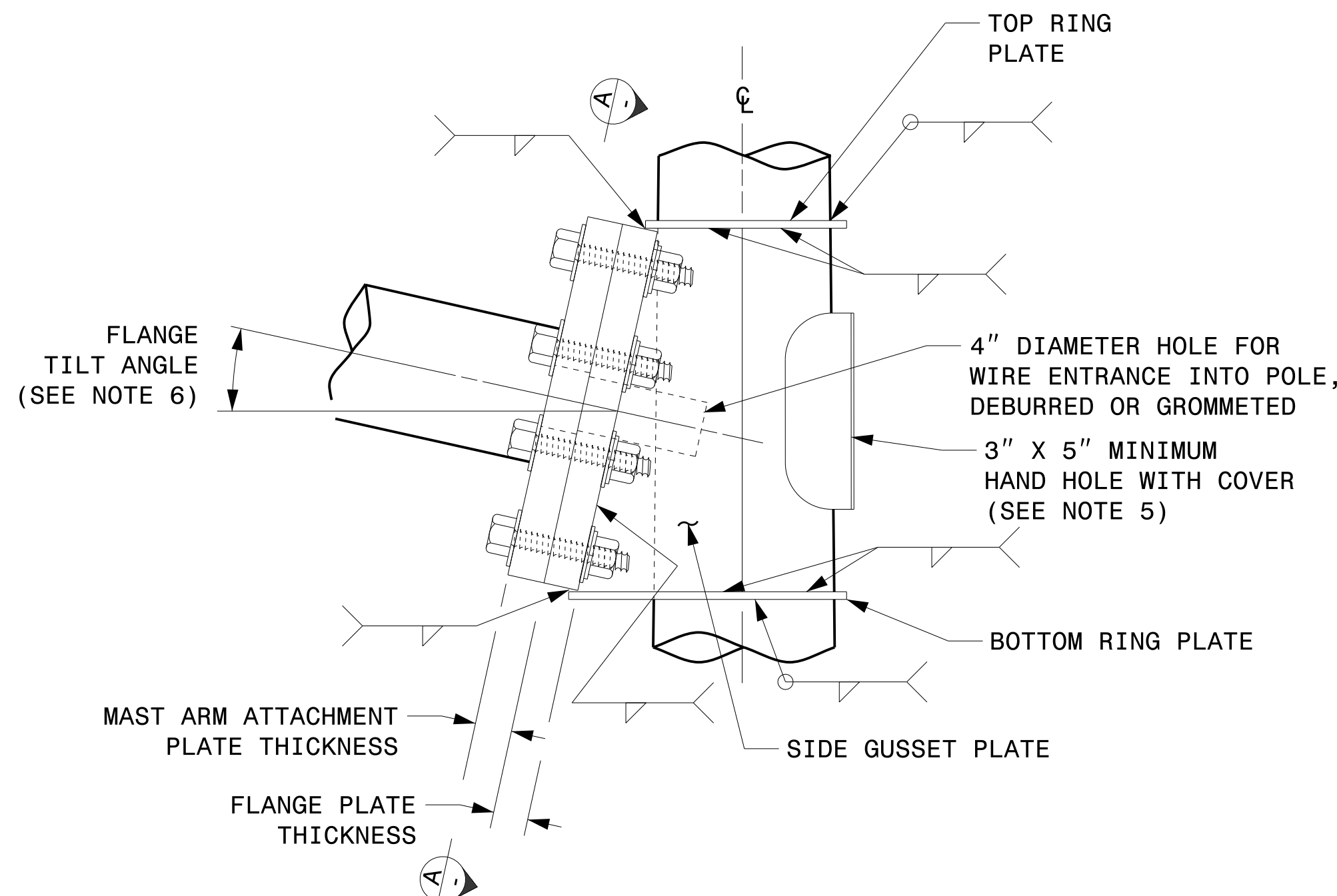
PLAN VIEW

NOTES:

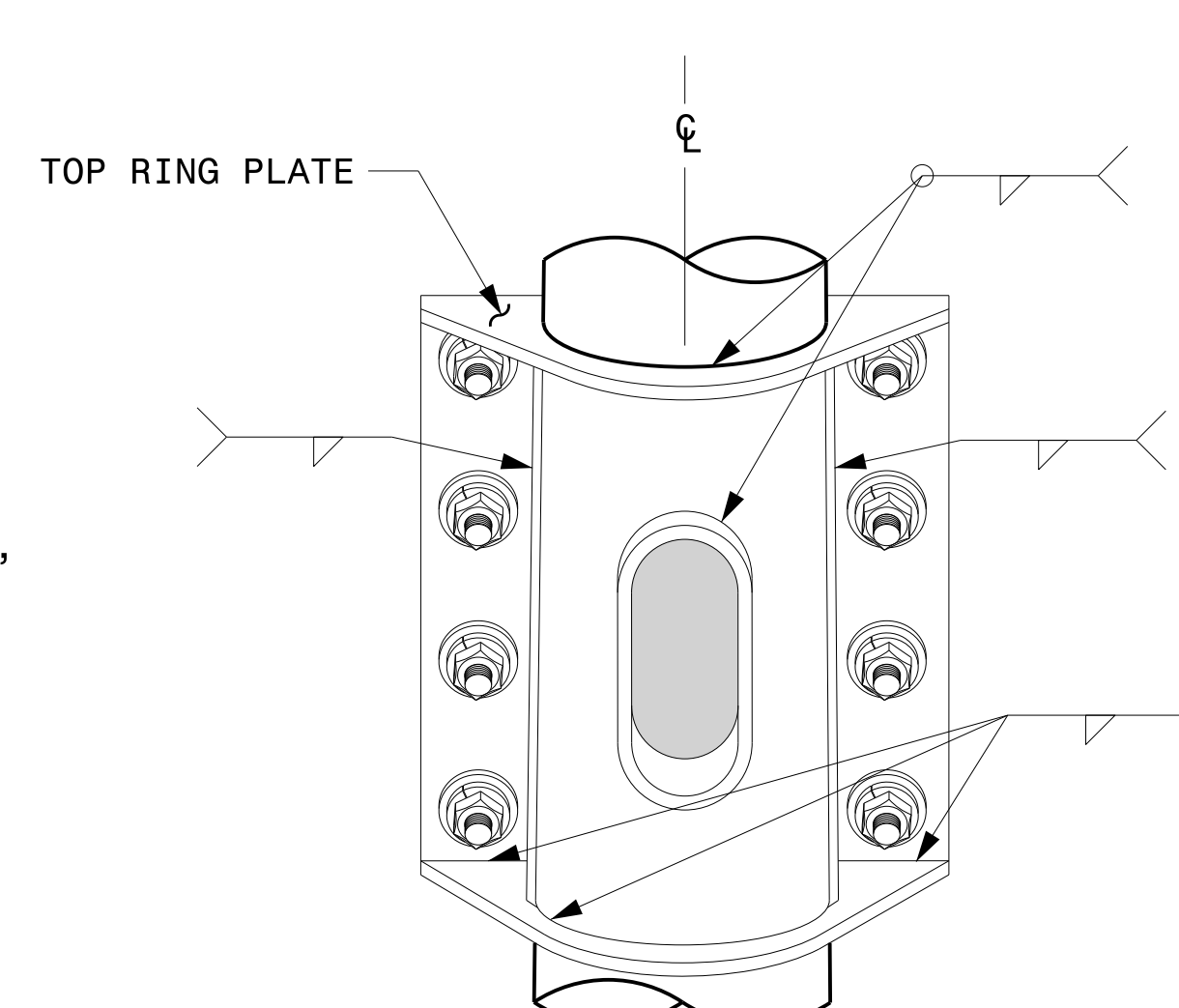
1. PROVIDE A PERMANENT MEANS OF IDENTIFICATION ABOVE THE MAST ARM TO INDICATE PROPER ATTACHMENT ORIENTATION OF THE MAST ARM.
2. DESIGNER WILL DETERMINE THE SIZE OF ALL STRUCTURAL COMPONENTS, PLATES, FASTENERS, AND WELDS SHOWN UNLESS THEY ARE ALREADY SPECIFIED.
3. FABRICATOR IS RESPONSIBLE FOR PROVIDING 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.



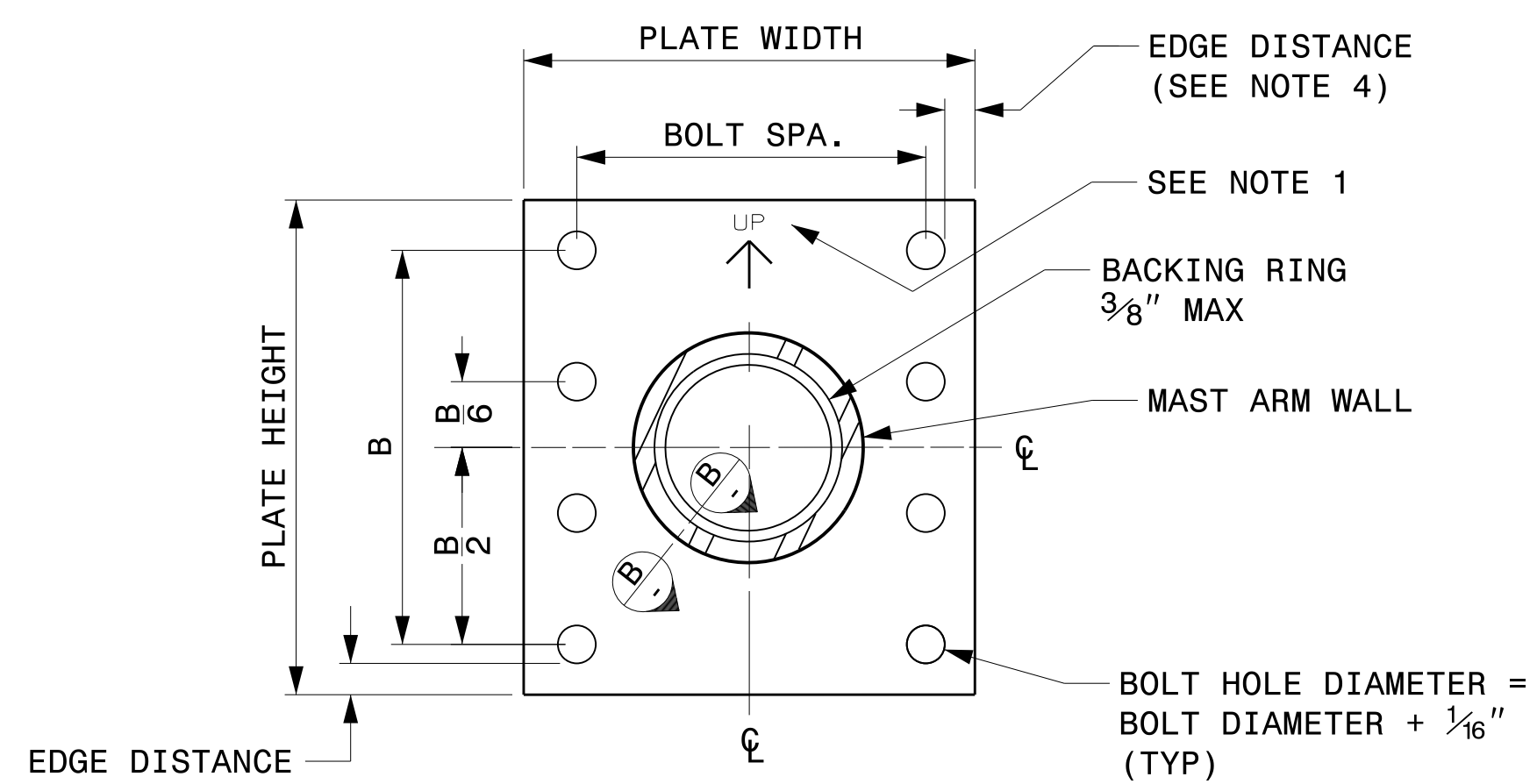
FRONT ELEVATION VIEW



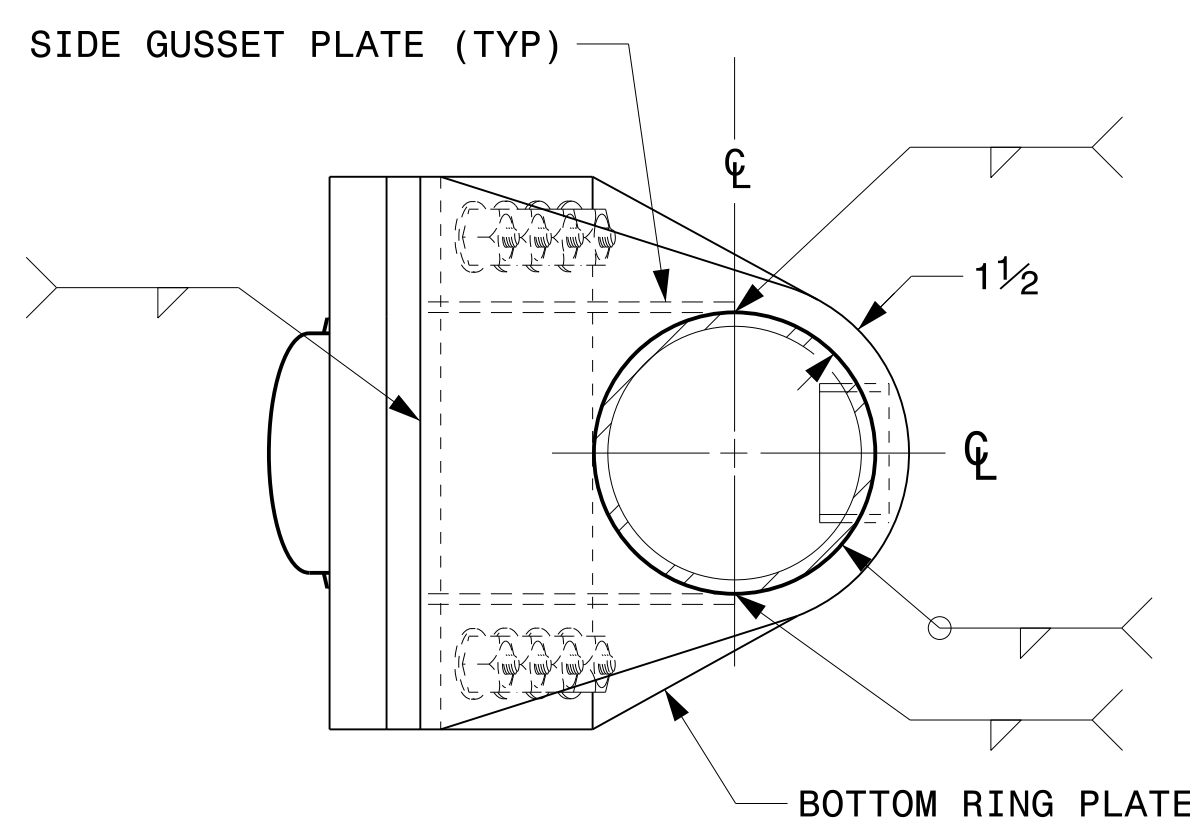
SIDE ELEVATION VIEW



BACK ELEVATION VIEW



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



BOTTOM VIEW

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

SCALE: NA
NONE

<p>Typical Fabrication Details For Mast Arm Connection To Pole</p>	
<p>PLAN DATE: SEPTEMBER 2023</p>	<p>DESIGNED BY: C.F. ANDREWS</p>
<p>PREPARED BY: K.C. DURIGON</p>	<p>REVIEWED BY: D.C. SARKAR</p>
<p>REVISIONS</p>	<p>INIT. DATE</p>

SEAL

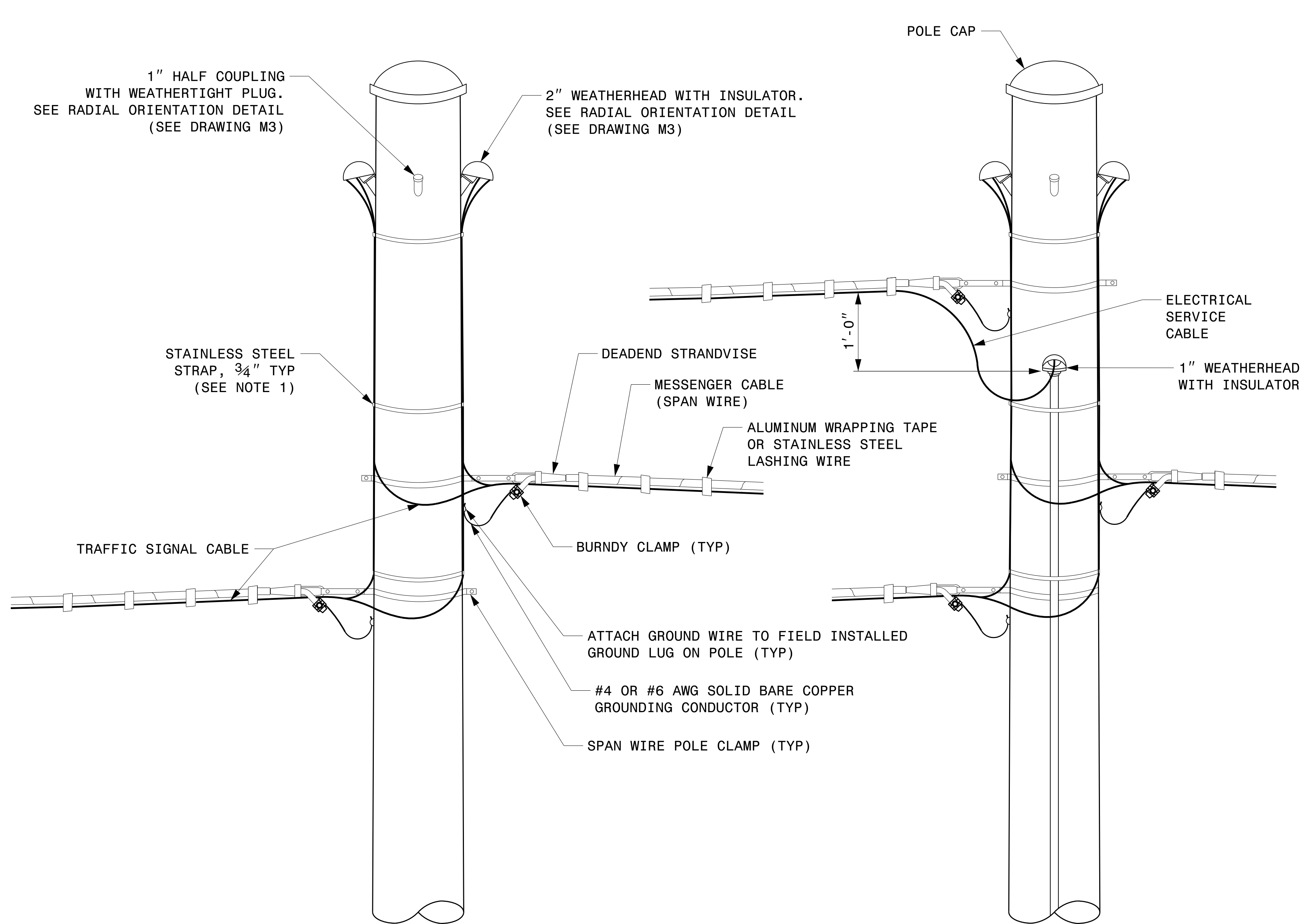
DocuSigned by:
Kevin Durigon
SIGNATURE

4B23DC79B3784DA

09/21/2023
DATE

03-dt-2023-10-30
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Kedar Tagon

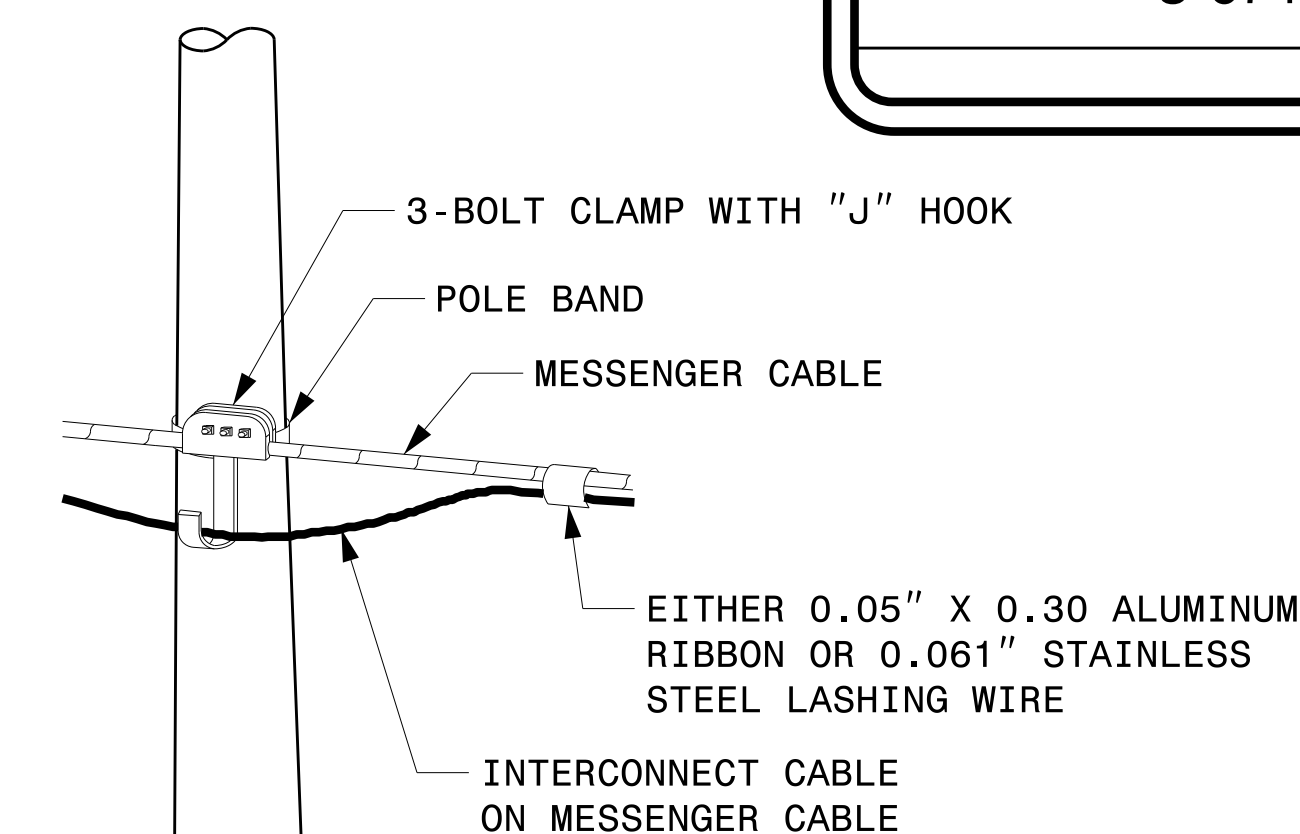
Fabrication Details – Mast Arm Connection



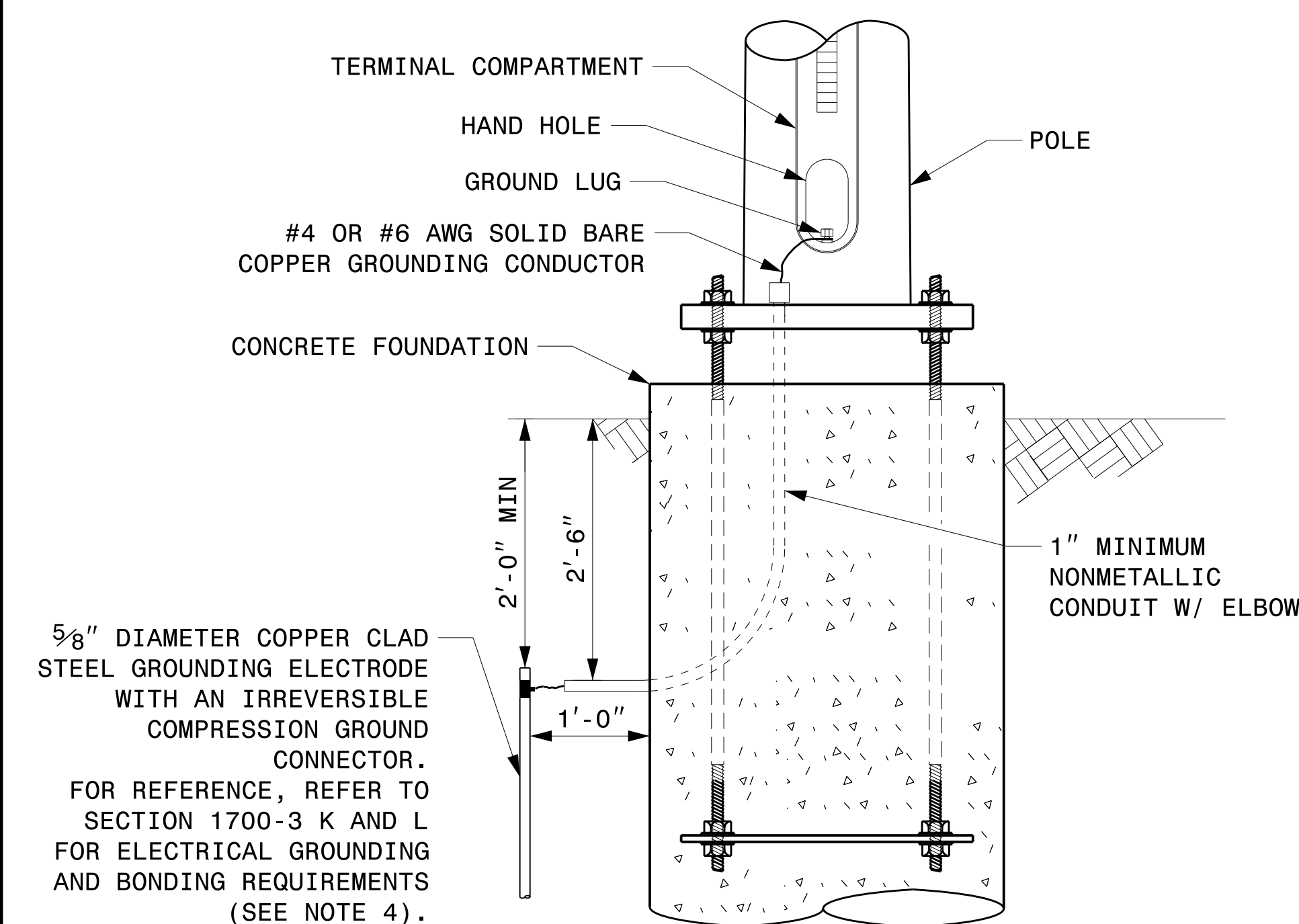
STRAIN POLE ATTACHMENTS

NOTES:

1. 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".
2. PROVIDE MINIMUM TWO SPAN WIRE POLE CLAMPS PER POLE.
3. IT IS PROHIBITED TO ATTACH TWO SPAN WIRES AT ONE POLE CLAMP.
4. 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

Prepared in the Offices of:

750 N. Greenfield Pkwy, Garner, NC 27529

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

DocuSigned by:

Kevin Durigon

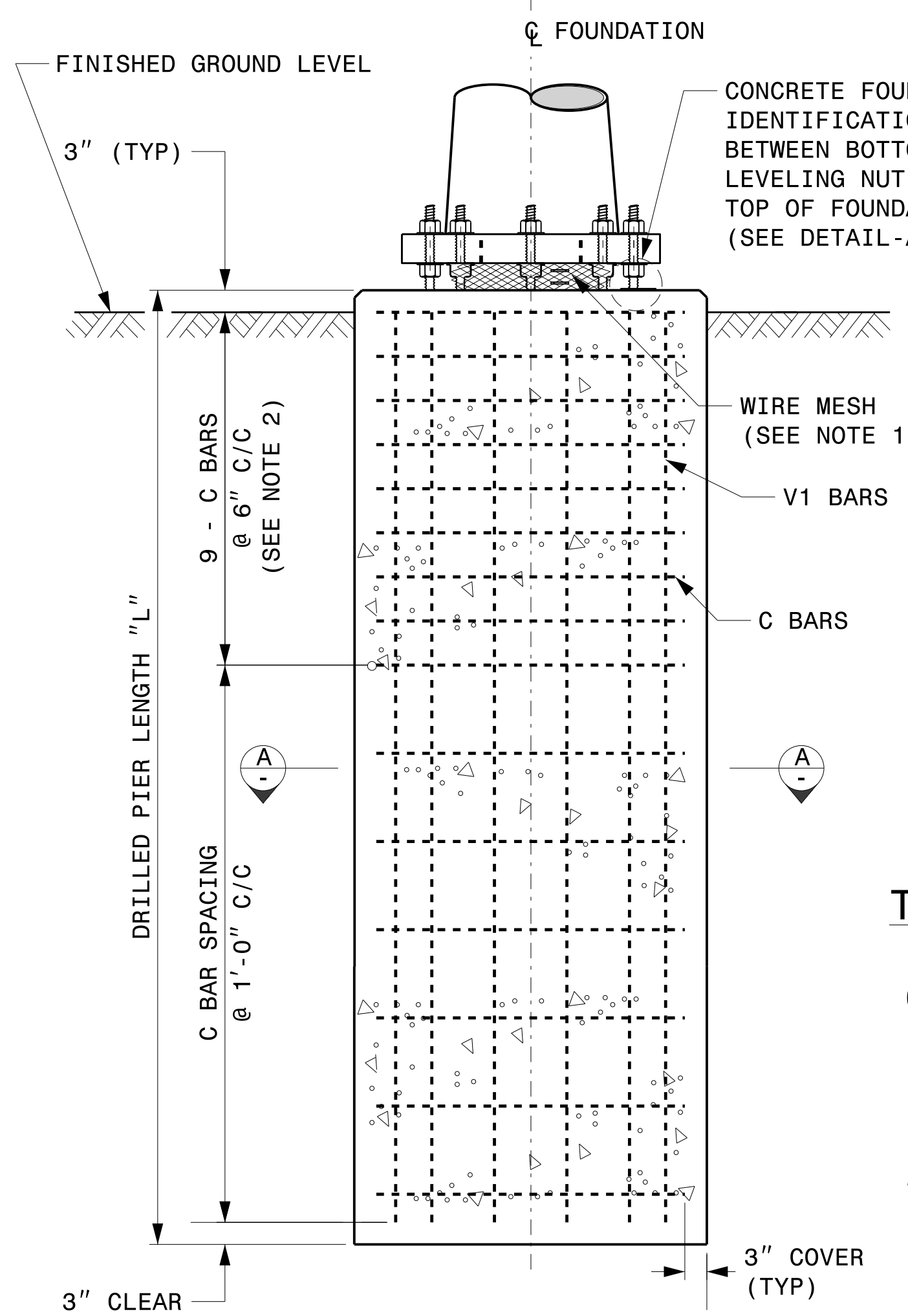
4B23DC79B3784DA

09/21/2023

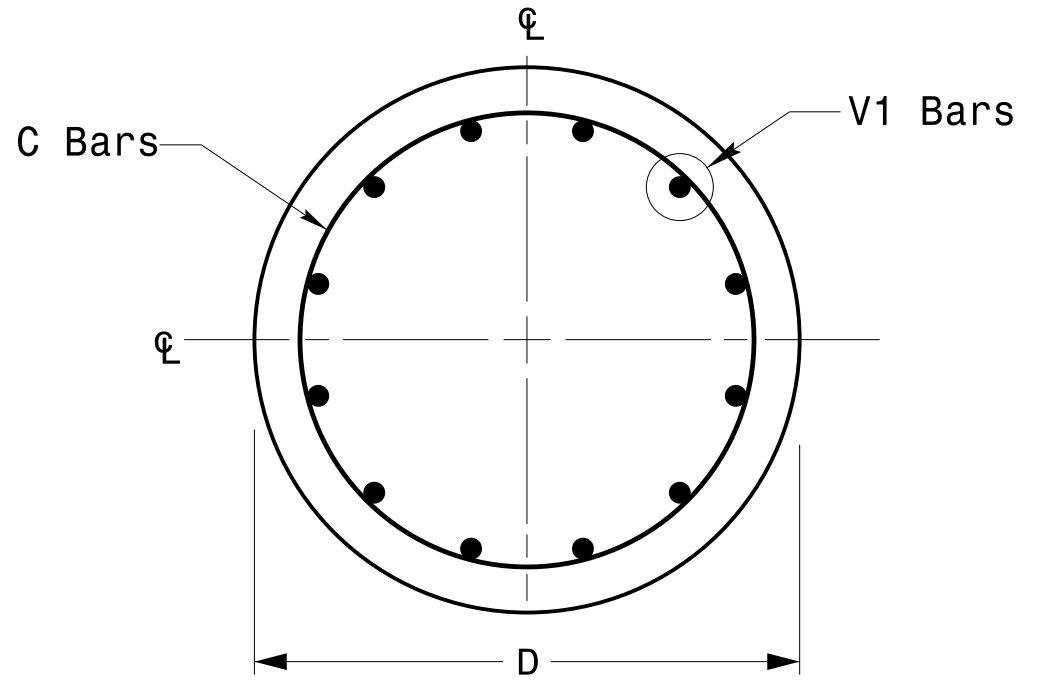
DATE

03-dpt-2023-10-11
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Kedar Tigon

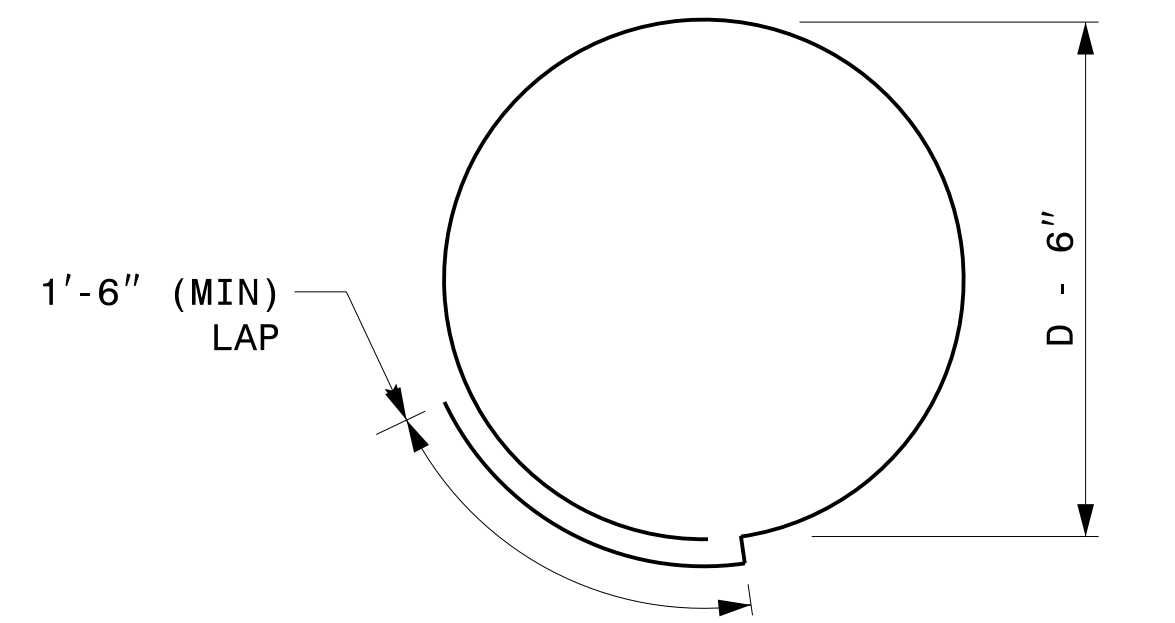
Fabrication Details – Strain Pole Attachments



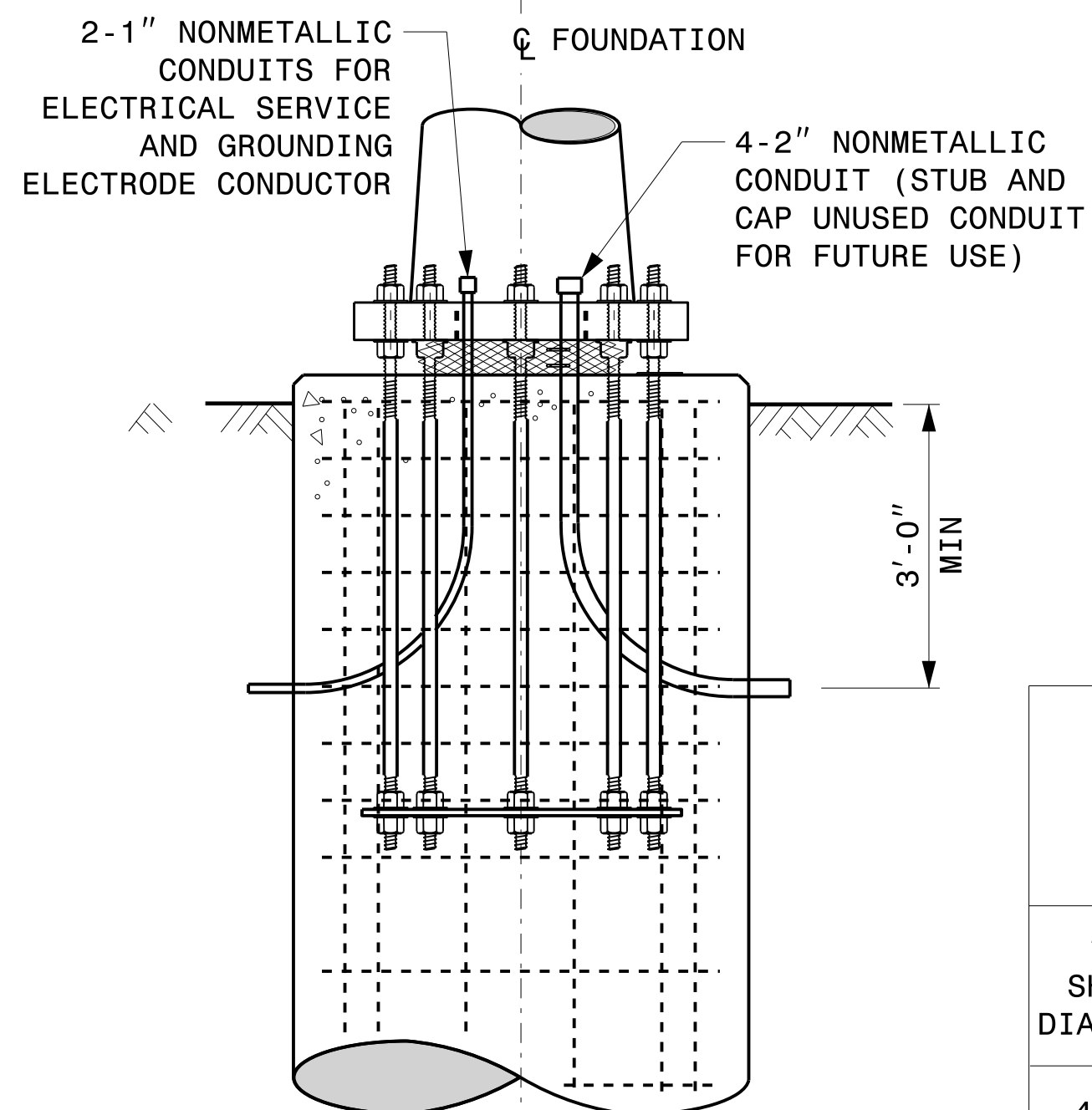
CONCRETE SHAFT ELEVATION



SECTION A-A



TYPICAL "C" BAR DETAIL



TYPICAL FOUNDATION CONDUIT DETAILS

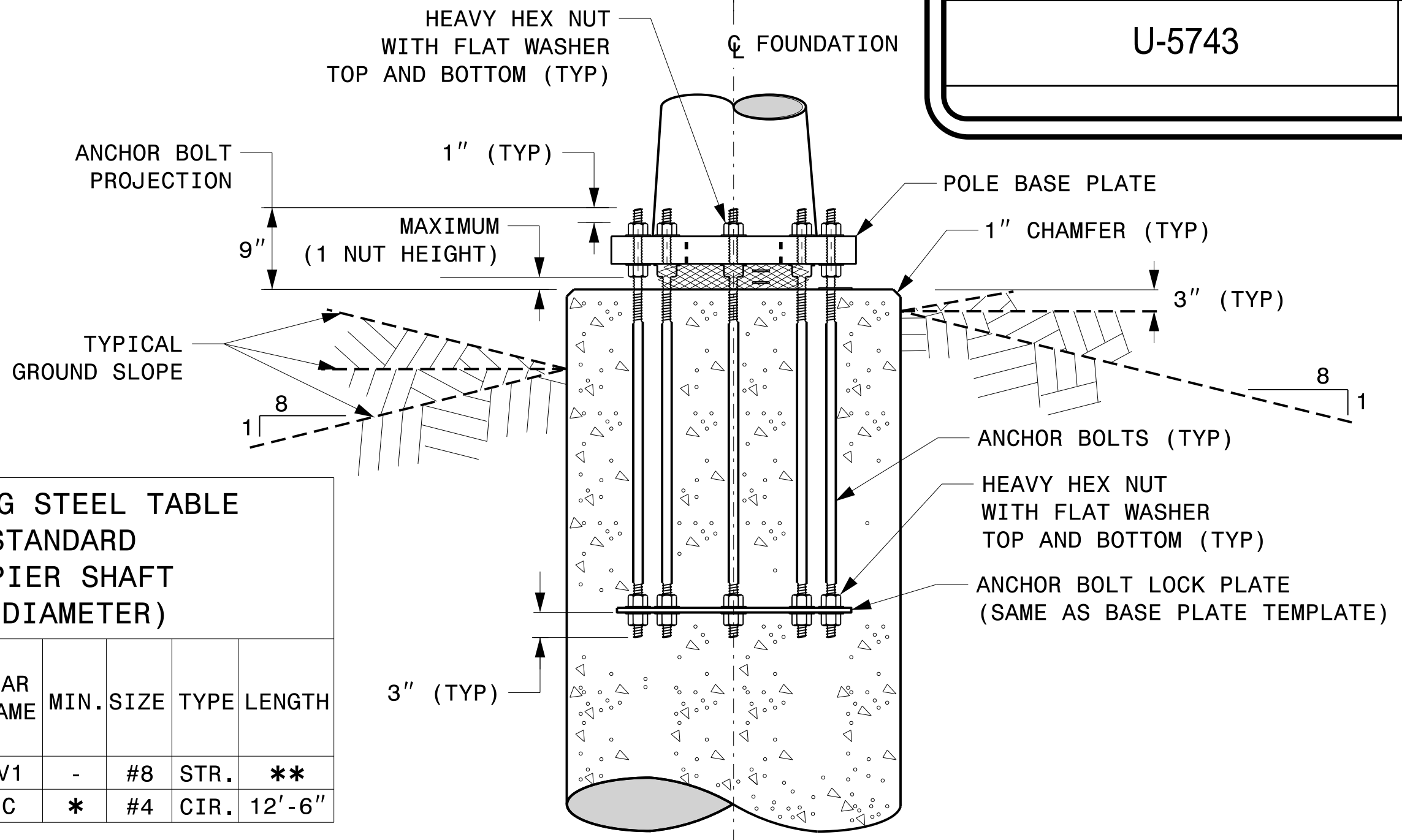
GENERAL NOTES:

- 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 IN 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)

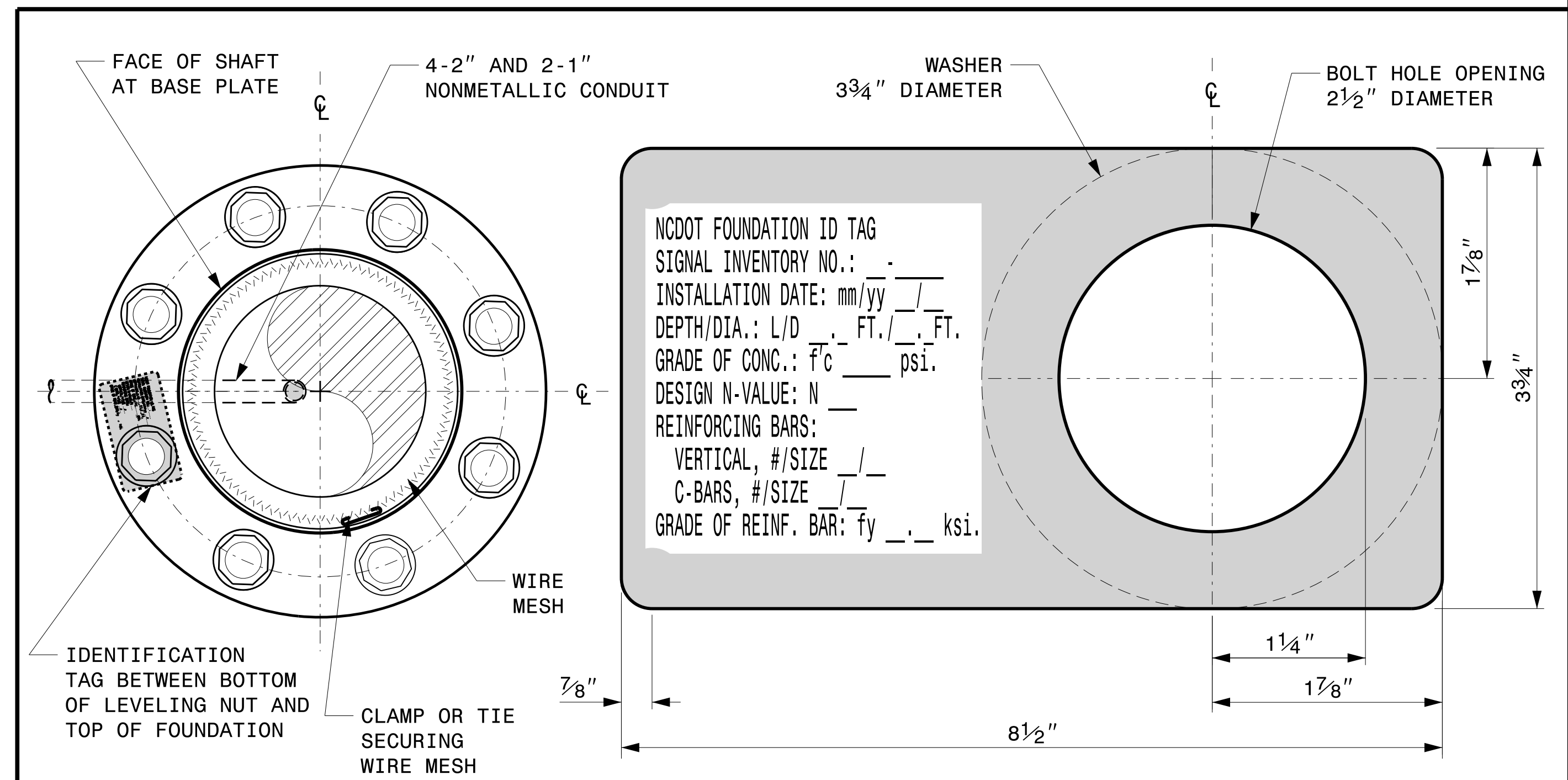
"D" SHAFT DIAMETER	CONCRETE VOLUME (CU. YDS)	BAR NAME	MIN. SIZE	TYPE	LENGTH
4'-0"	.465 X L	V1	#8	STR.	**
		C	#4	CIR.	12'-6"

* 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
4B23DC78B3784DA

09/23/2023 DATE

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

Construction Details - Foundations

SOIL CONDITION

PROJECT I.D. NO.

SHEET NO.

U-5743

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.

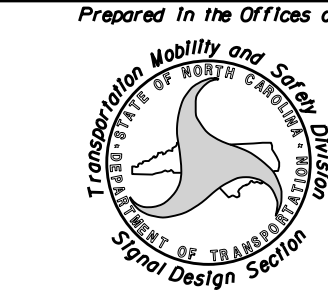
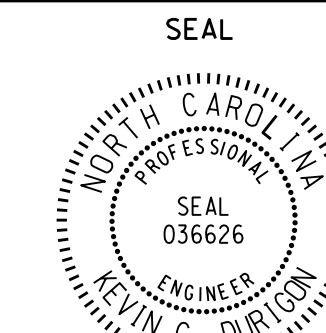

FOUNDATION SELECTION:

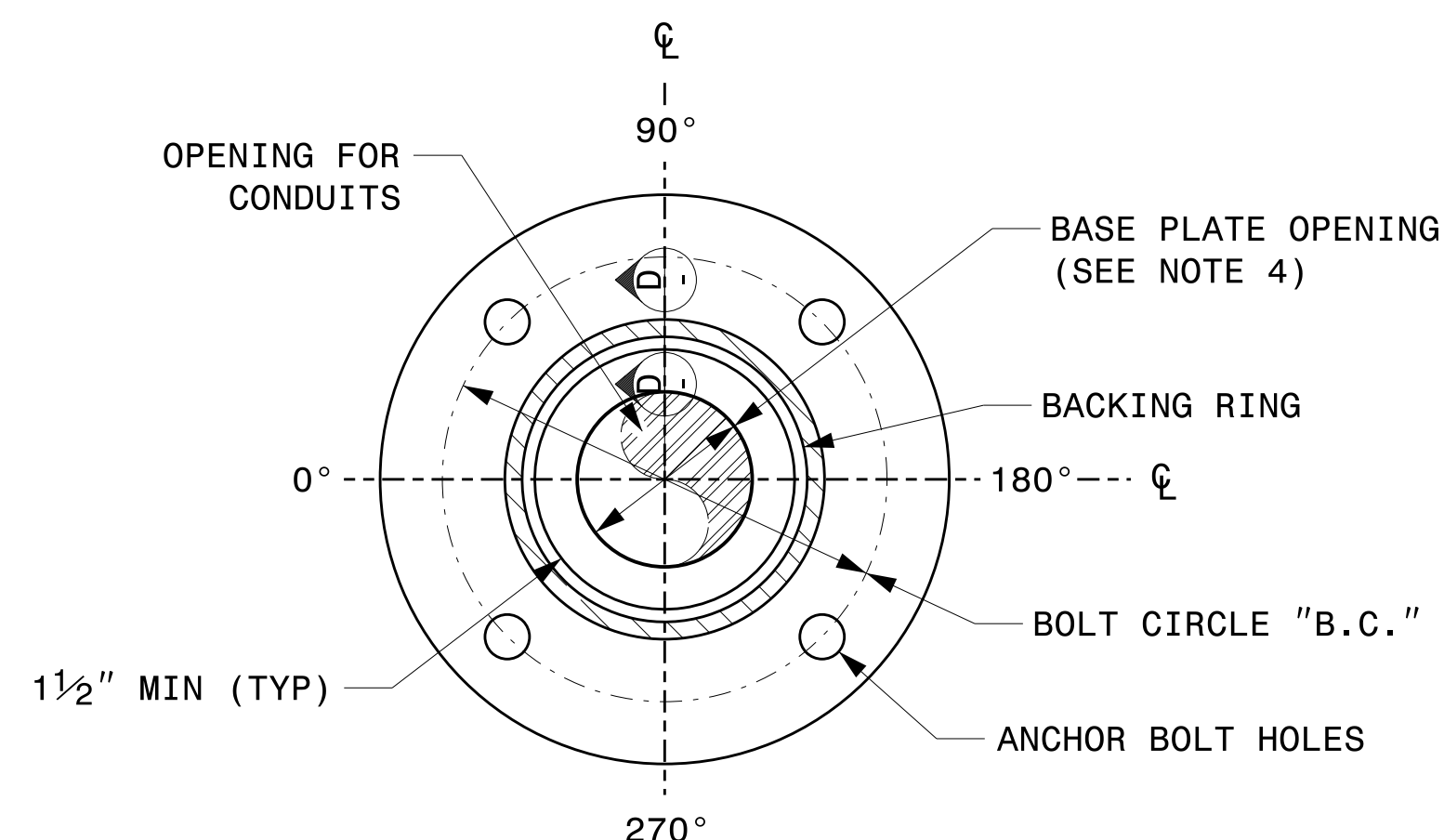
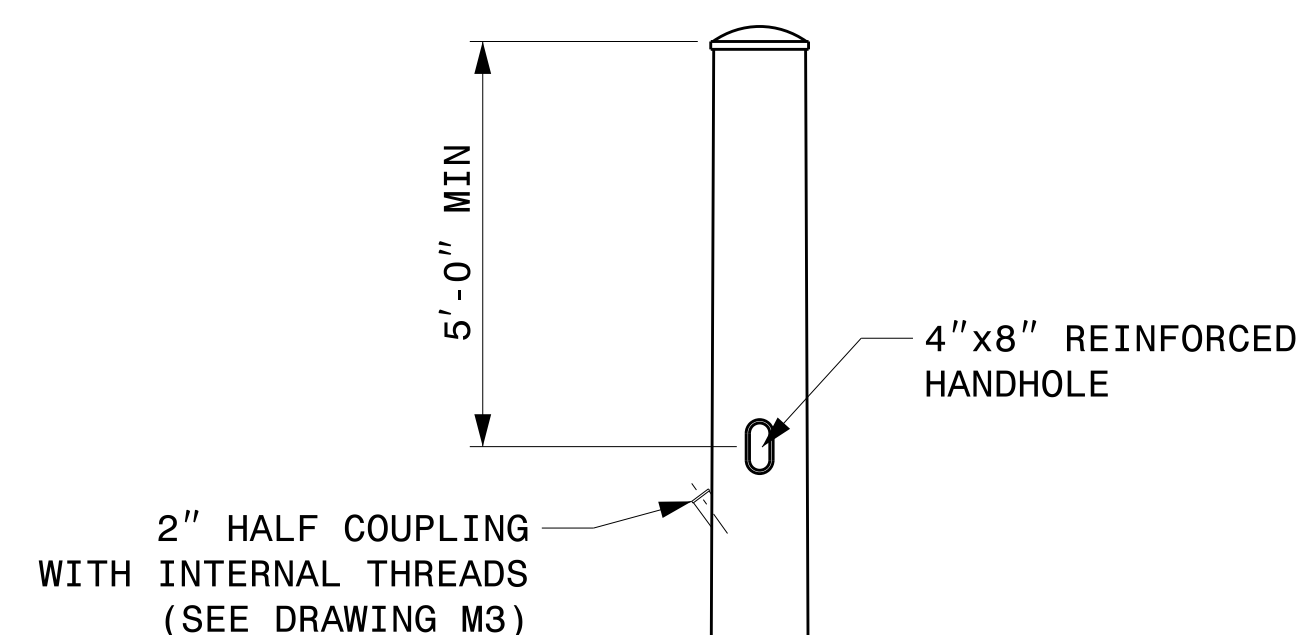
1. PERFORM A STANDARD PENETRATION TEST AT EACH PROPOSED FOUNDATION SITE TO DETERMINE "N" VALUE.
2. SELECT THE APPROPRIATE WIND ZONE FROM M1 DRAWING.
3. SELECT THE SOIL TYPE (CLAY OR SAND) THAT BEST DESCRIBES THE SOIL CHARACTERISTICS.
4. GET THE APPROPRIATE STANDARD POLE CASE NUMBER FROM THE PLANS OR 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

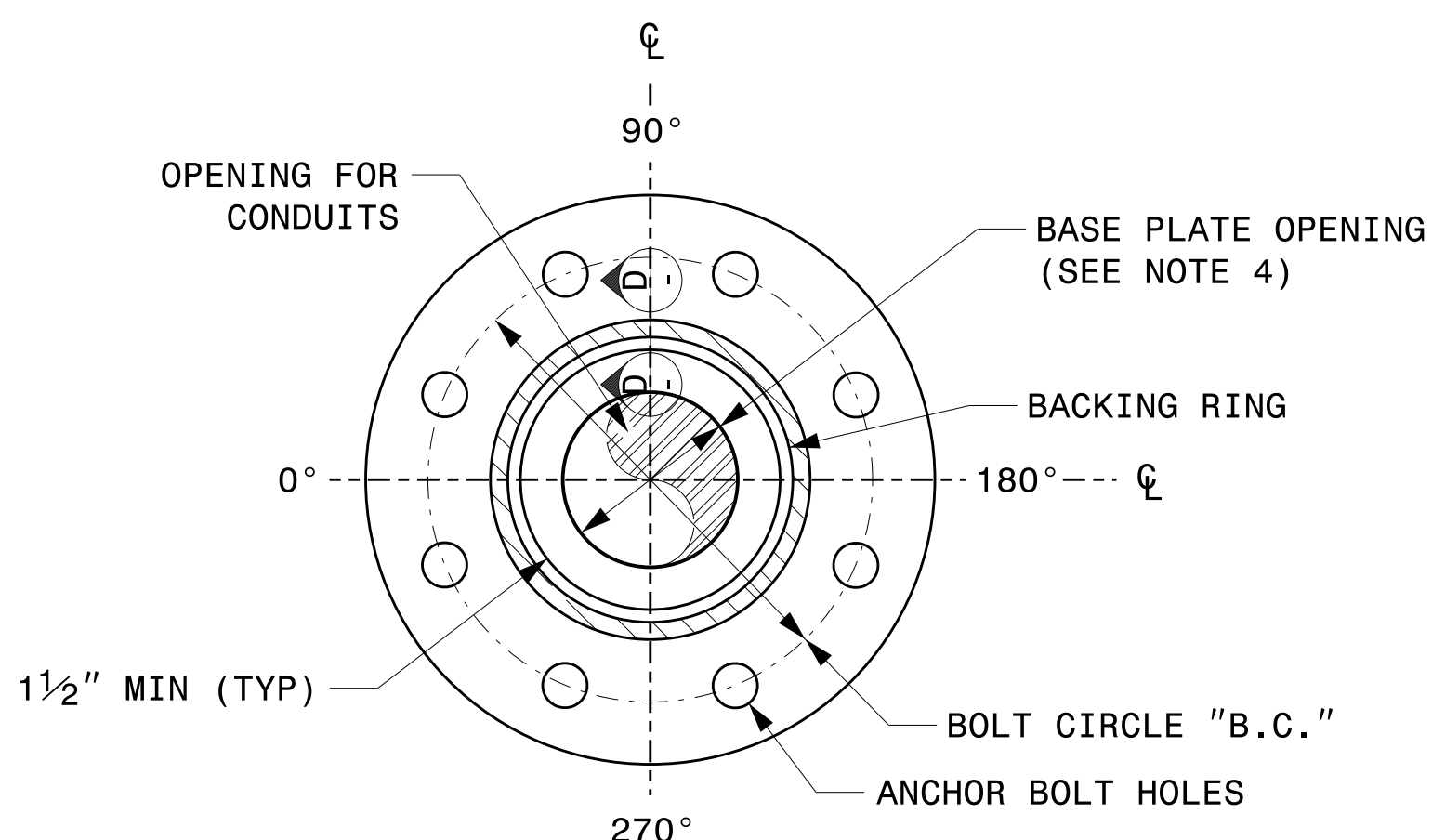
08-dt-2023-10-16
S:\SSS\415\SIGNAL\Signal Design Section\Structures\Drawings\2024 Merol Pole Str. Drawings for LRF\0204_Sig.M8 Str. Strain Pole Found.-Saturated Soil Condition.dgn
Kedar Tigon

Standard Strain Pole Foundation – All Soil Conditions

 Prepared in the Offices of: 750 N. Greenfield Pkwy, Garner, NC 27529	Standard Strain Pole Foundation for All Soil Conditions	SEAL 
SCALE: NONE	PLAN DATE: SEPTEMBER 2023 DESIGNED BY: K.C. DURIGON PREPARED BY: K.C. DURIGON REVIEWED BY: D.C. SARKAR	DocuSigned by: 
	REVISIONS: INIT. DATE	09/21/2023 DATE

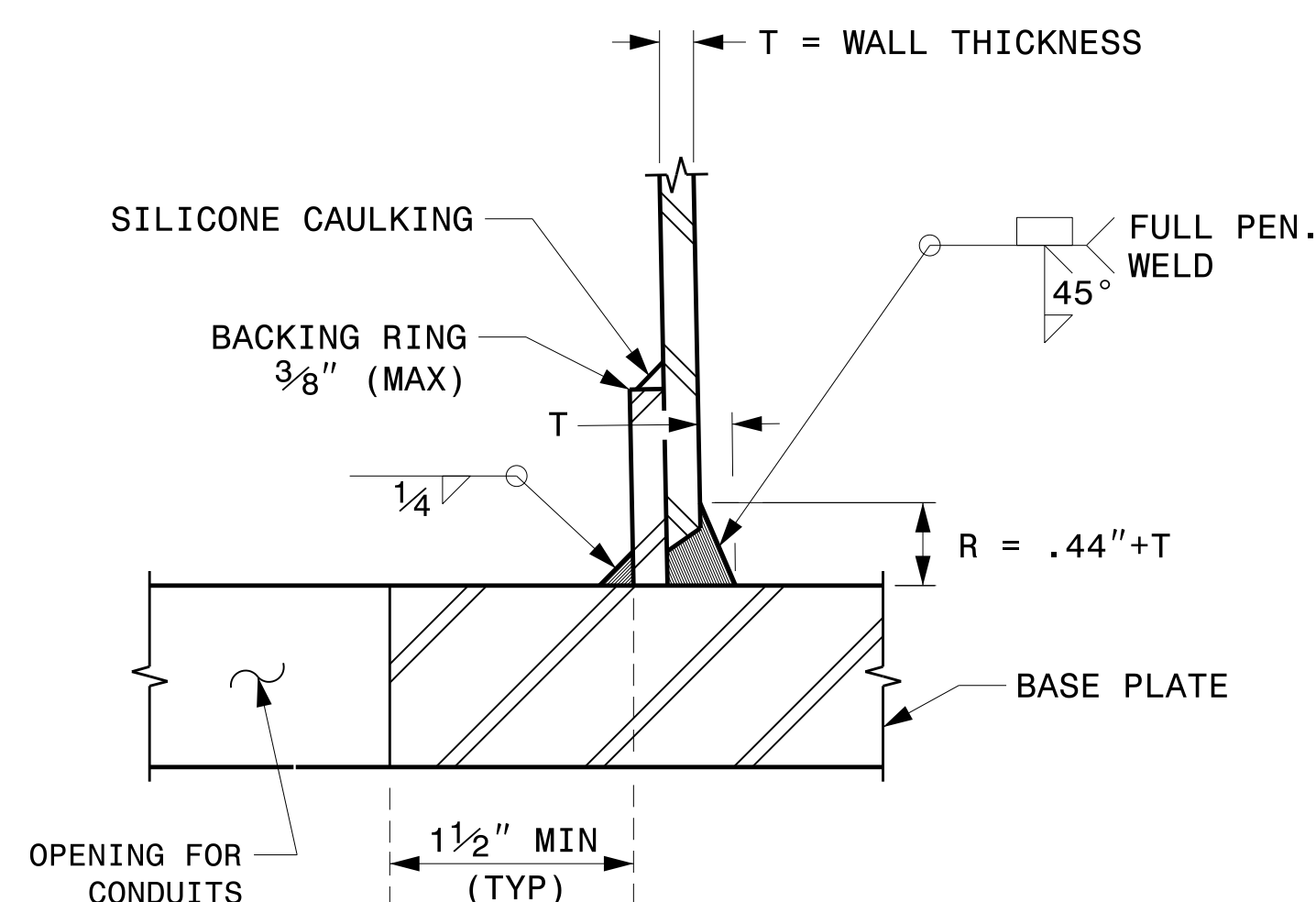
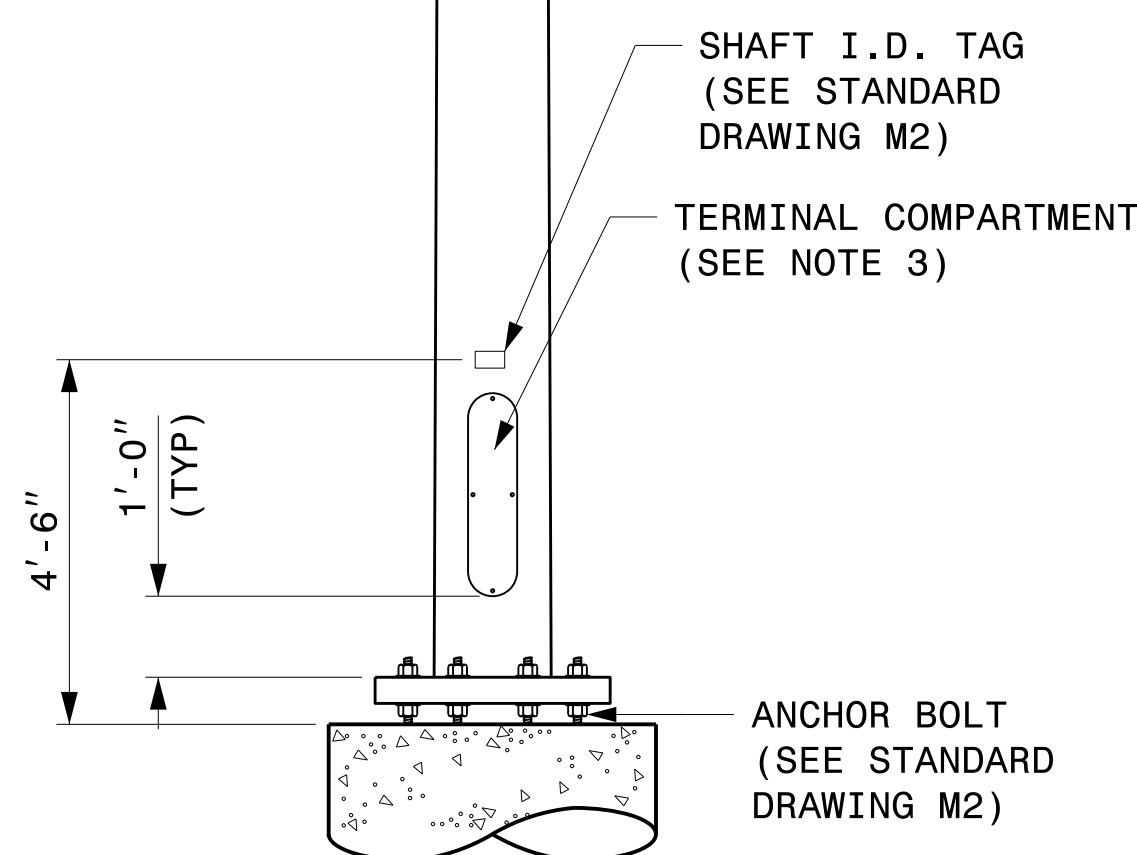


4 BOLT PATTERN FOR POLES UP TO 40'



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-2023-10-15-1
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:

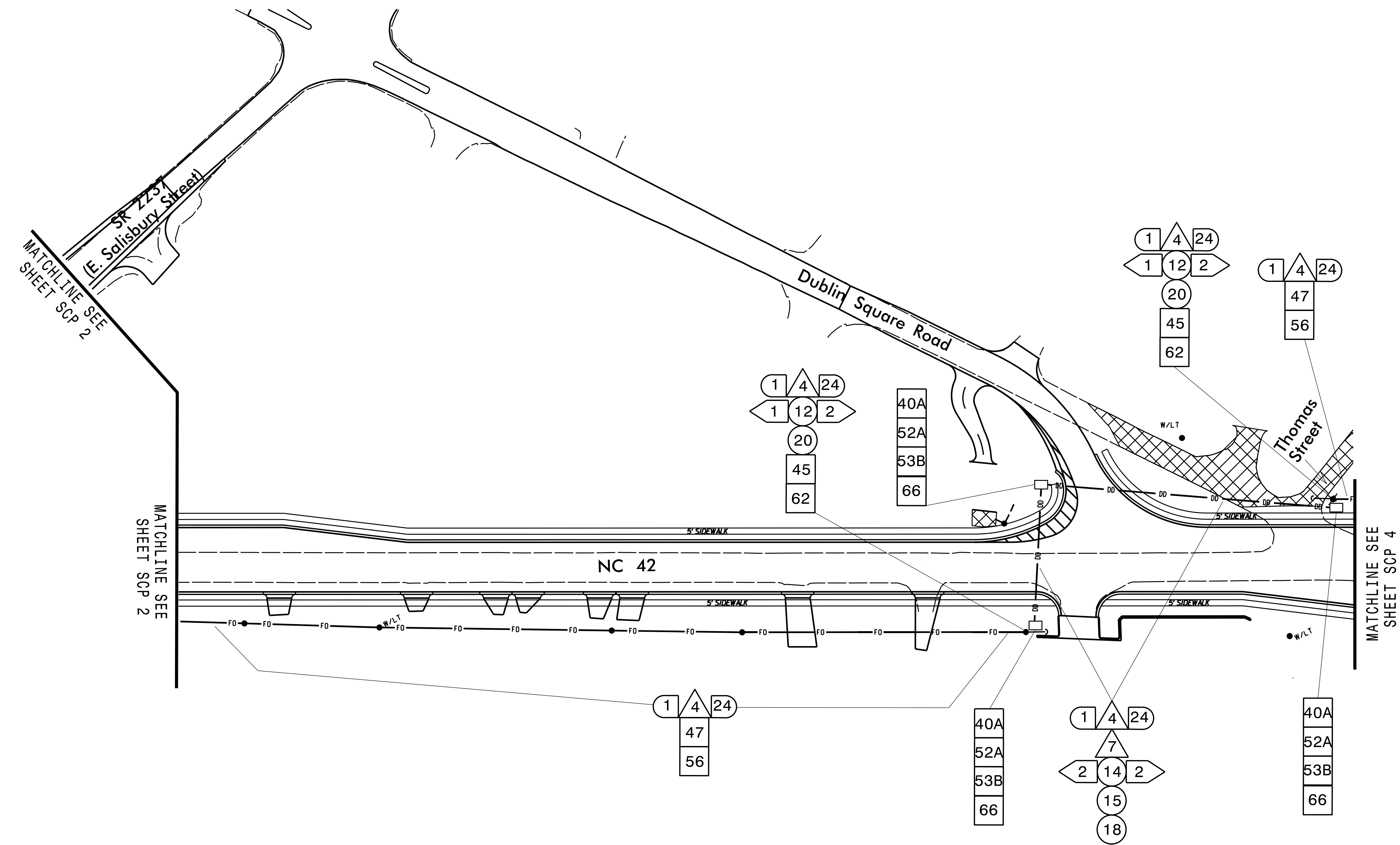
750 N. Greenfield Pkwy, Garner, NC 27529

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

09/23/2023
DATE



ALL NCDOT CABLE ATTACHMENTS ARE TO BE 40 INCHES BELOW NEUTRAL, FRONT SIDE (FS) OF POLE, UNLESS OTHERWISE NOTED. MAINTAIN ATTACHMENT HEIGHTS ABOVE ROADWAYS AND DRIVEWAYS AND NON VEHICLE TRAVEL AREAS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL SAFETY CODE.

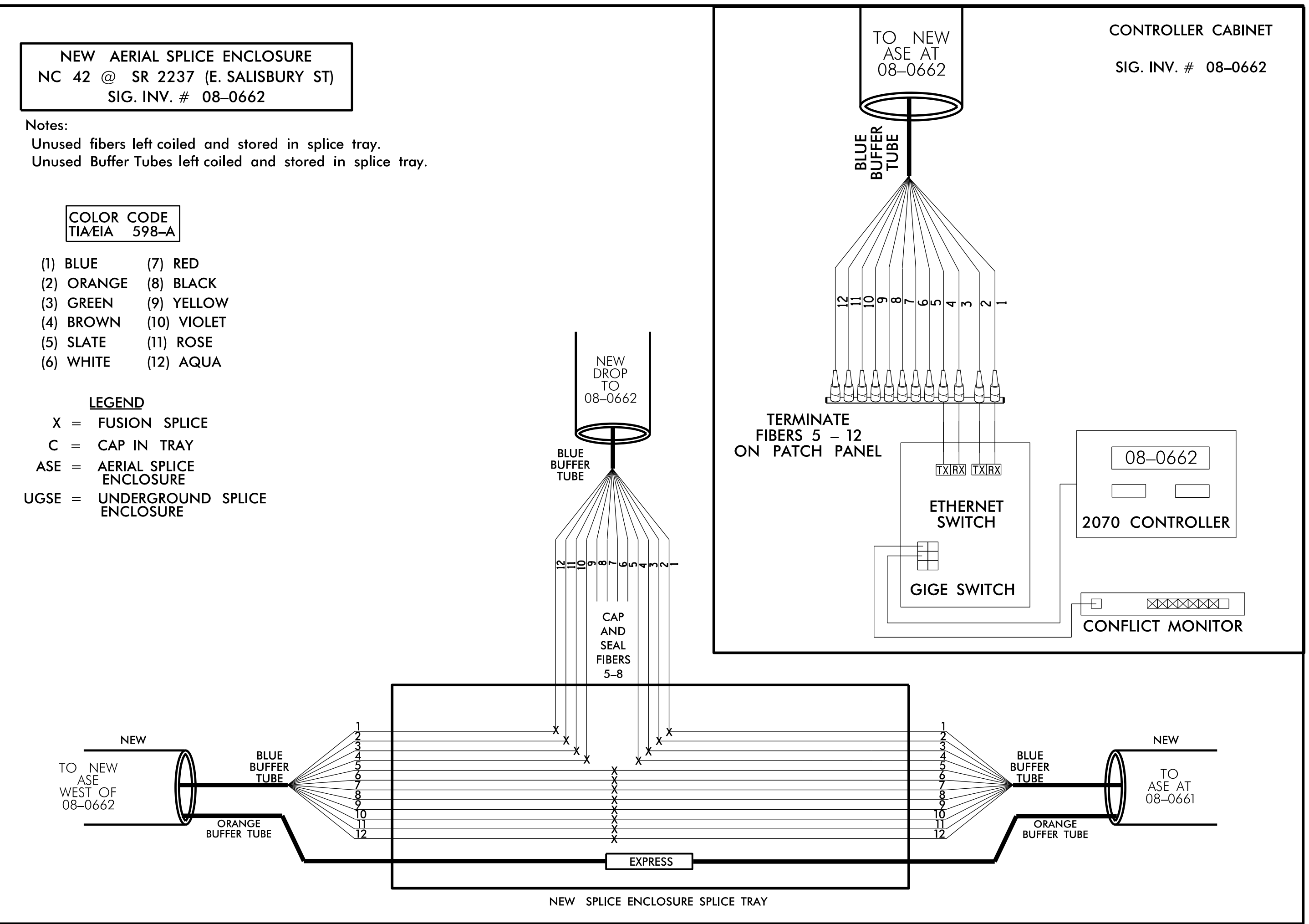
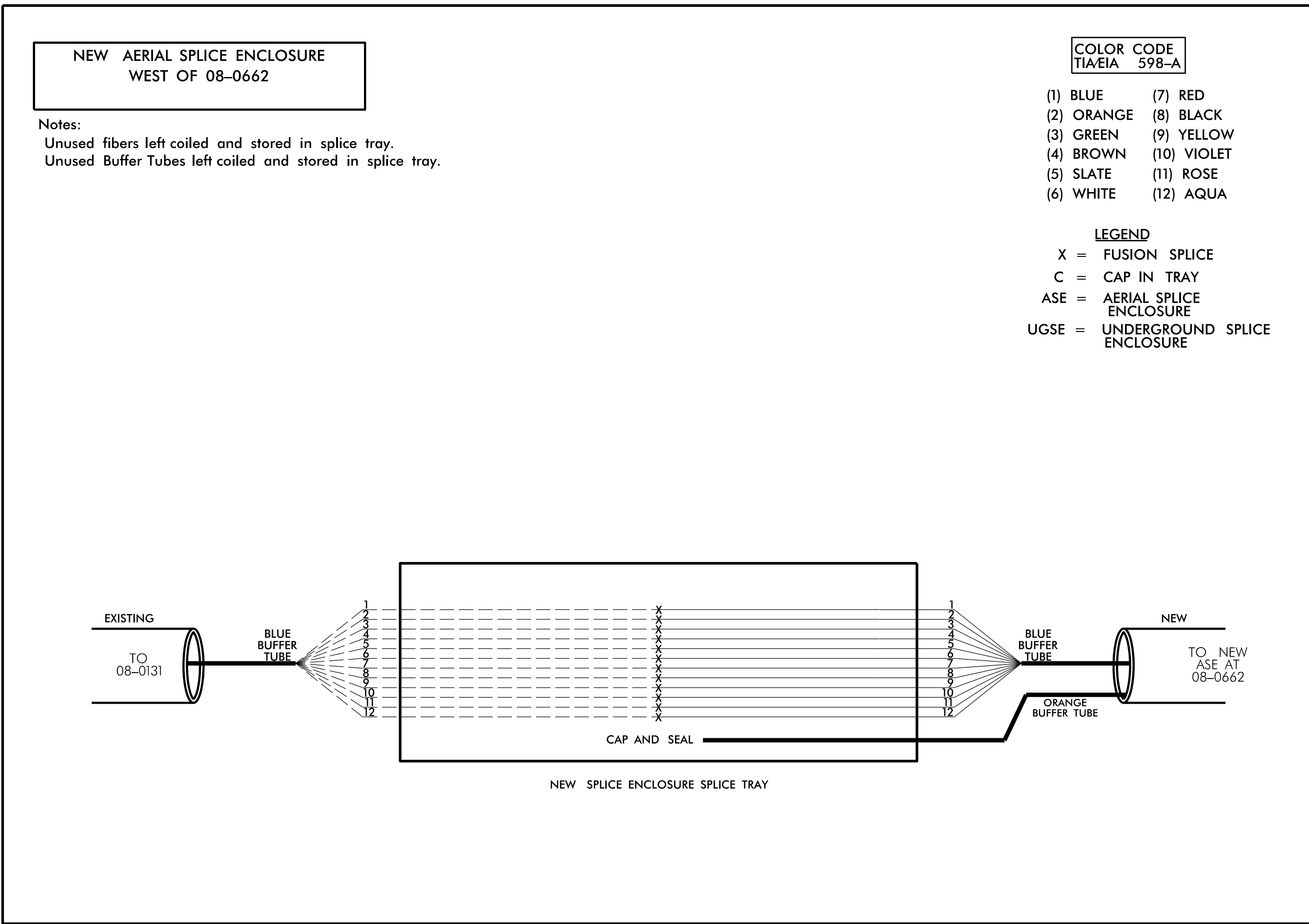
- 1) NOTIFY THE DIVISION TRAFFIC ENGINEER, AT (910) 947-3930, FIVE (5) DAYS PRIOR TO BEGINNING WORK ON SIGNAL SYSTEM COMMUNICATIONS CABLE. NOTIFY THE DIVISION TRAFFIC ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. ALL WORK IS NOT COMPLETE UNTIL THE SIGNAL 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.

TYING INTO 08-0145 WITH SYSTEM DESIGNATION: D08-12_ASHEBORO

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

<p>MOTT MACDONALD 930 Main Campus Drive Suite 200 Raleigh, NC 27606 PH: (919) 552-2253 www.mottmac.com License No. F-0669</p>	<p>Prepared For the Offices of: STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION OPERATION SYSTEMS</p>	<p>COMMUNICATIONS CABLE AND CONDUIT ROUTING PLANS</p>									
		<p>Division 08 Randolph Co. Asheboro</p> <p>PLAN DATE: March 2026 REVIEWED BY: S. O'Farrell</p> <p>PREPARED BY: IN Avery REVIEWED BY: L. D. Stouchko</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> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>		REVISIONS	INIT.	DATE				
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 *****USERNAME*****



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- 4) INCLUDE ON THE COVER OF EACH SPLICE TRAY THE FOLLOWING:
REFERENCE SECTION 1731 "FIBER OPTIC SPLICE ENCLOSURE"
 - 1) SPLICE LOCATION
 - 2) DATE
 - 3) COMPANY NAME
 - 4) NAME OF INDIVIDUAL PERFORMING THE SPLICING

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.

TYING INTO 08-0145 WITH SYSTEM DESIGNATION: D08-12_ASHEBORO

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UNLESS ALL SIGNATURES COMPLETED**

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PLAN DATE: March 2026	REVIEWED BY: S. O'Farrell														
PREPARED BY: IN Avery	REVIEWED BY: L. D. Stouchko														
NO.	DESCRIPTION	INIT.	DATE												

NEW AERIAL SPlice ENCLOSURE
NC 42 @ SR 2197 (DUBLIN RD.)
SIG. INV. # 08-0661

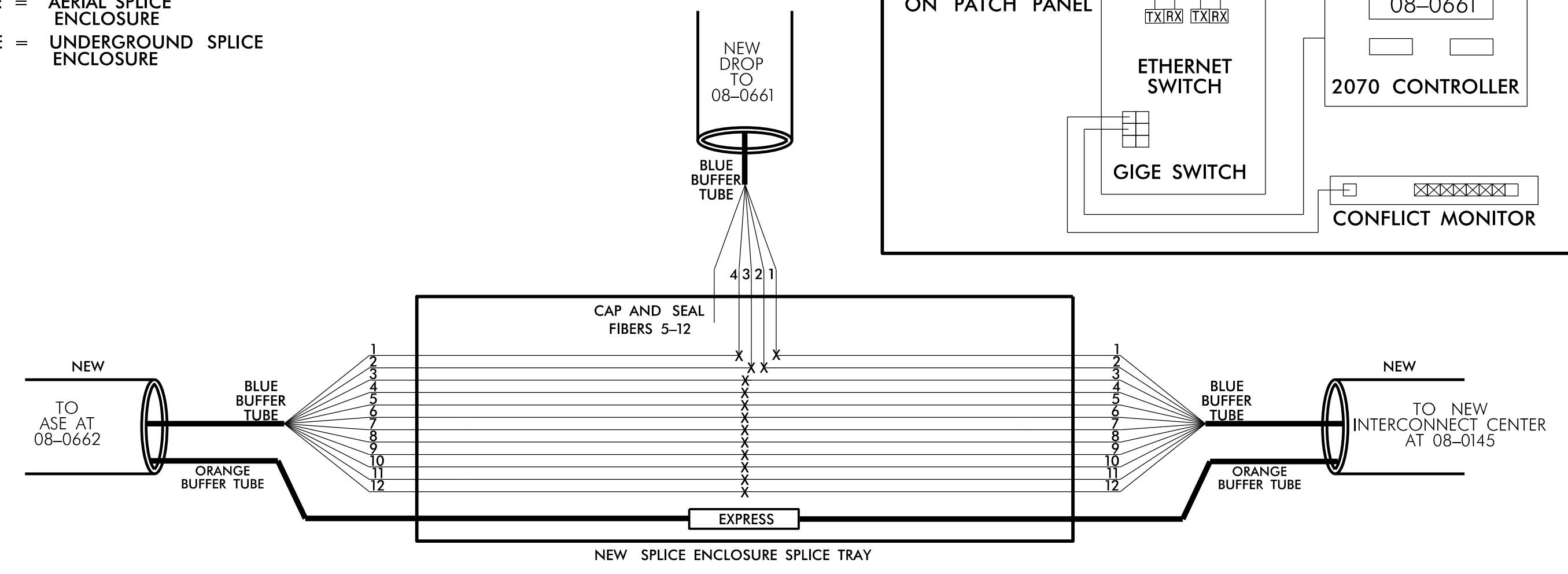
Notes:
Unused fibers left coiled and stored in splice tray.
Unused Buffer Tubes left coiled and stored in splice tray.

COLOR CODE
TIA/EIA 598-A

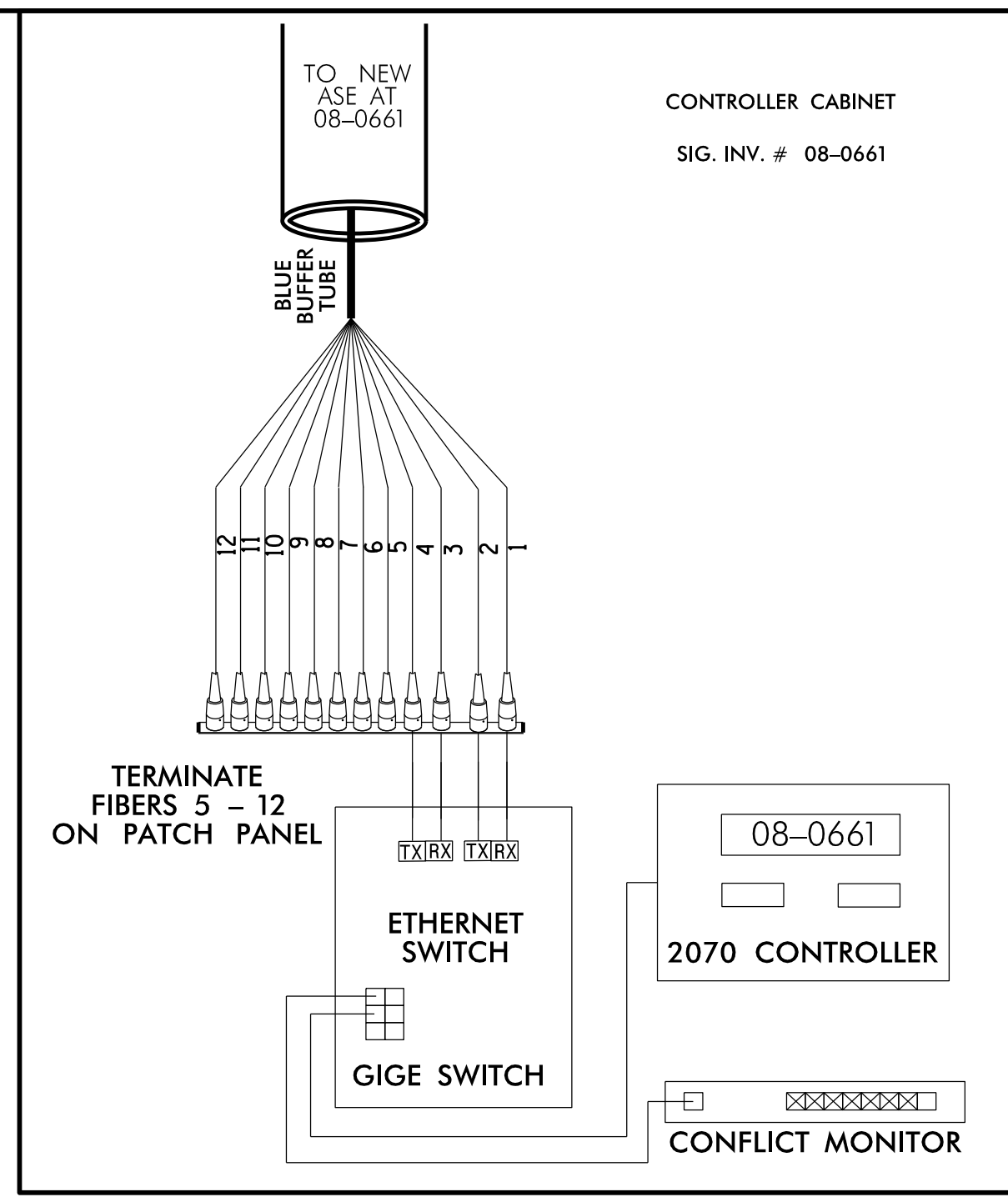
- (1) BLUE (7) RED
- (2) ORANGE (8) BLACK
- (3) GREEN (9) YELLOW
- (4) BROWN (10) VIOLET
- (5) SLATE (11) ROSE
- (6) WHITE (12) AQUA

LEGEND

- X = FUSION SPlice
- C = CAP IN TRAY
- ASE = AERIAL SPlice ENCLOSURE
- UGSE = UNDERGROUND SPlice ENCLOSURE



CONTROLLER CABINET
SIG. INV. # 08-0661



INTERSECTION LOCATION
NC 42 @ US 64 (E. DIXIE DRIVE)
SIG. INV. # 08-0145

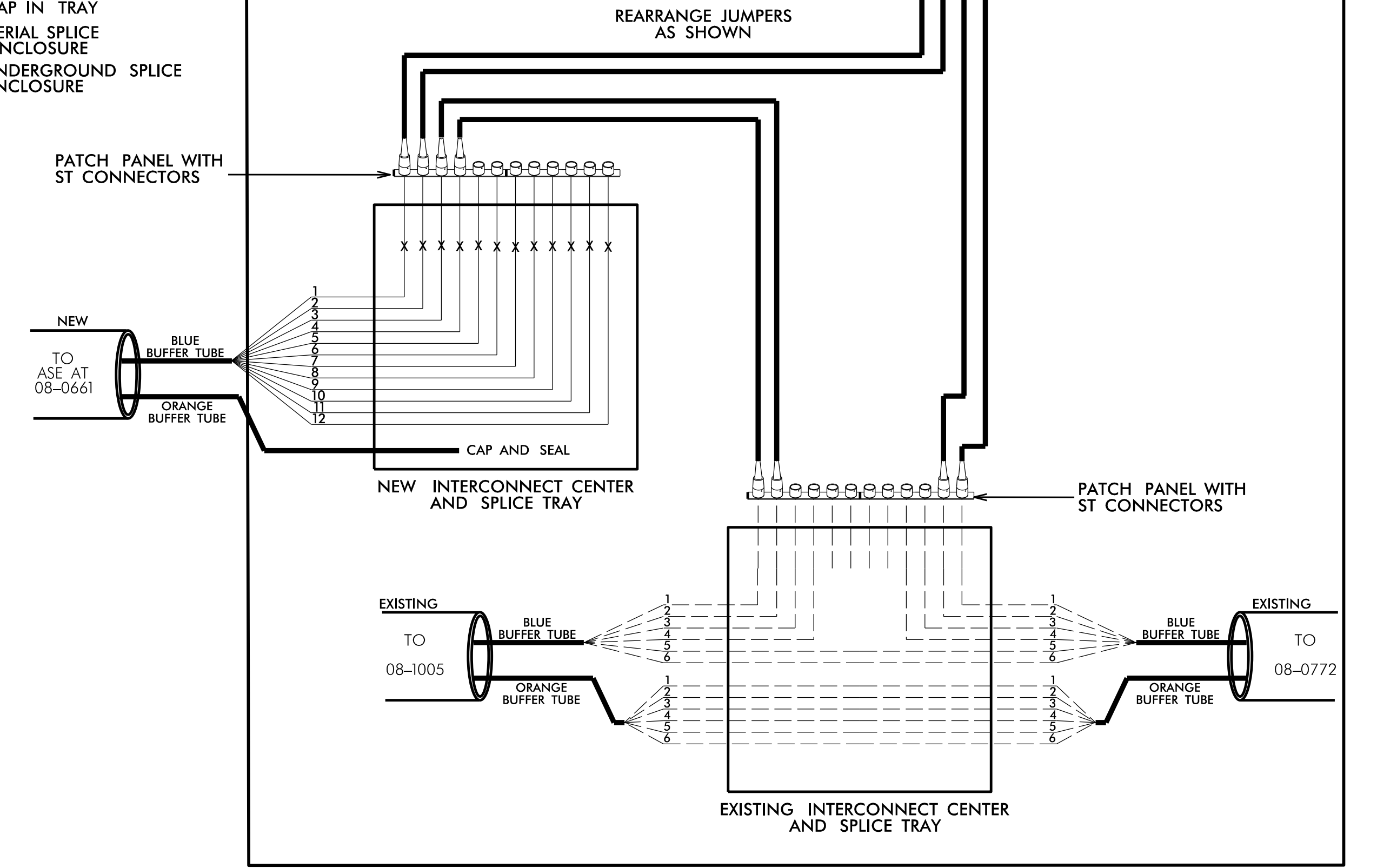
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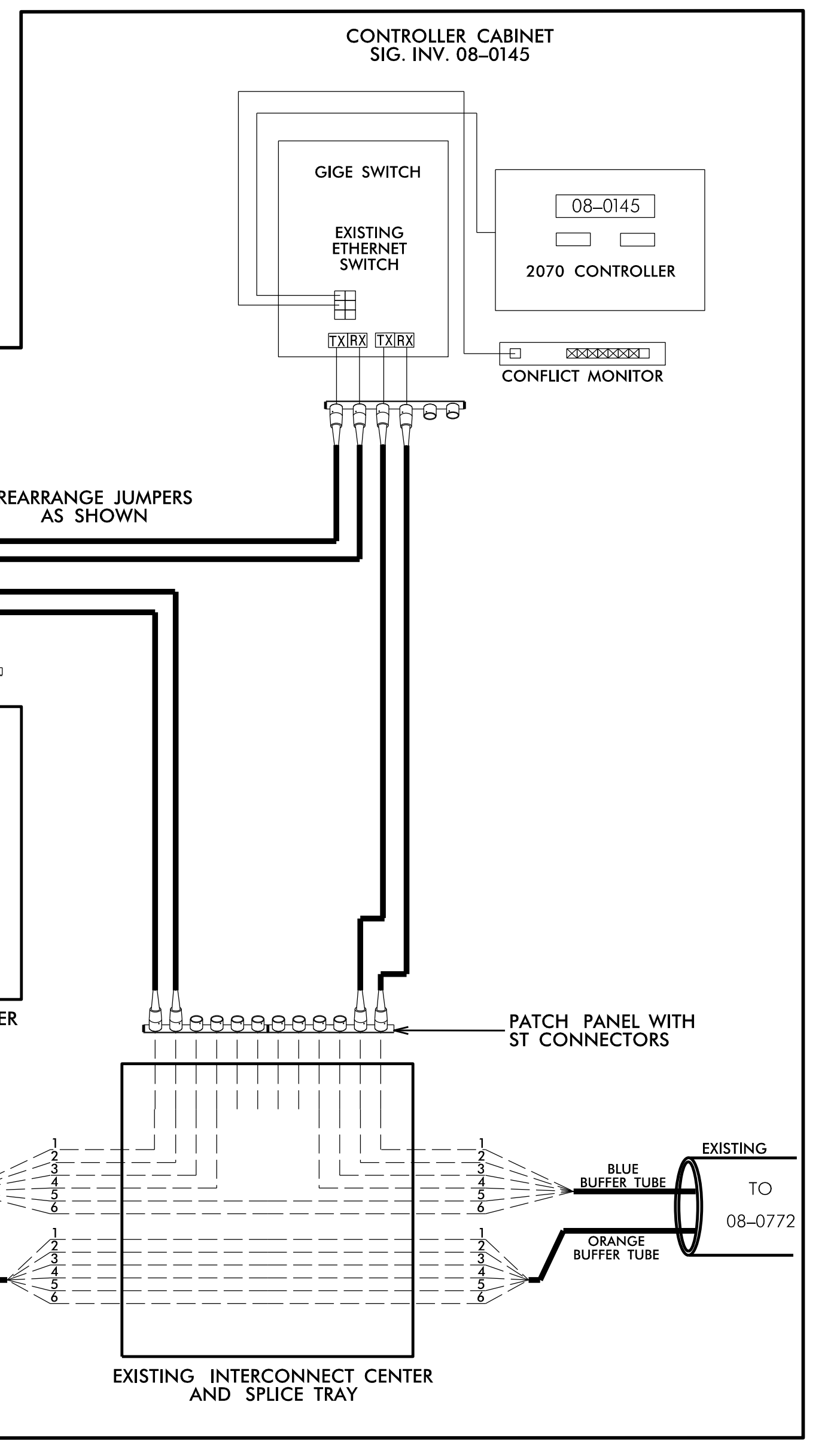
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CONTROLLER CABINET
SIG. INV. 08-0145



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SEE "NOTE #2".

TYING INTO 08-0145 WITH SYSTEM DESIGNATION: D08-12_ASHEBORO

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Prepared for the Offices of:
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Department of Transportation
250 N. Greenfield Pkwy., Garner, NC 27529

REVISIONS		INIT.	DATE

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PROFESSIONAL
ENGINEER
SEAL
034437
L. D. STOUCHKO
DATE
11-Mar-2026

SPLICE PLANS

Division 08 Randolph Co. Asheboro
PLAN DATE: March 2026 REVIEWED BY: S. O'Farrell
PREPARED BY: IN Avery REVIEWED BY: L. D. Stouchko

SCALE
0 NA
NONE