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STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

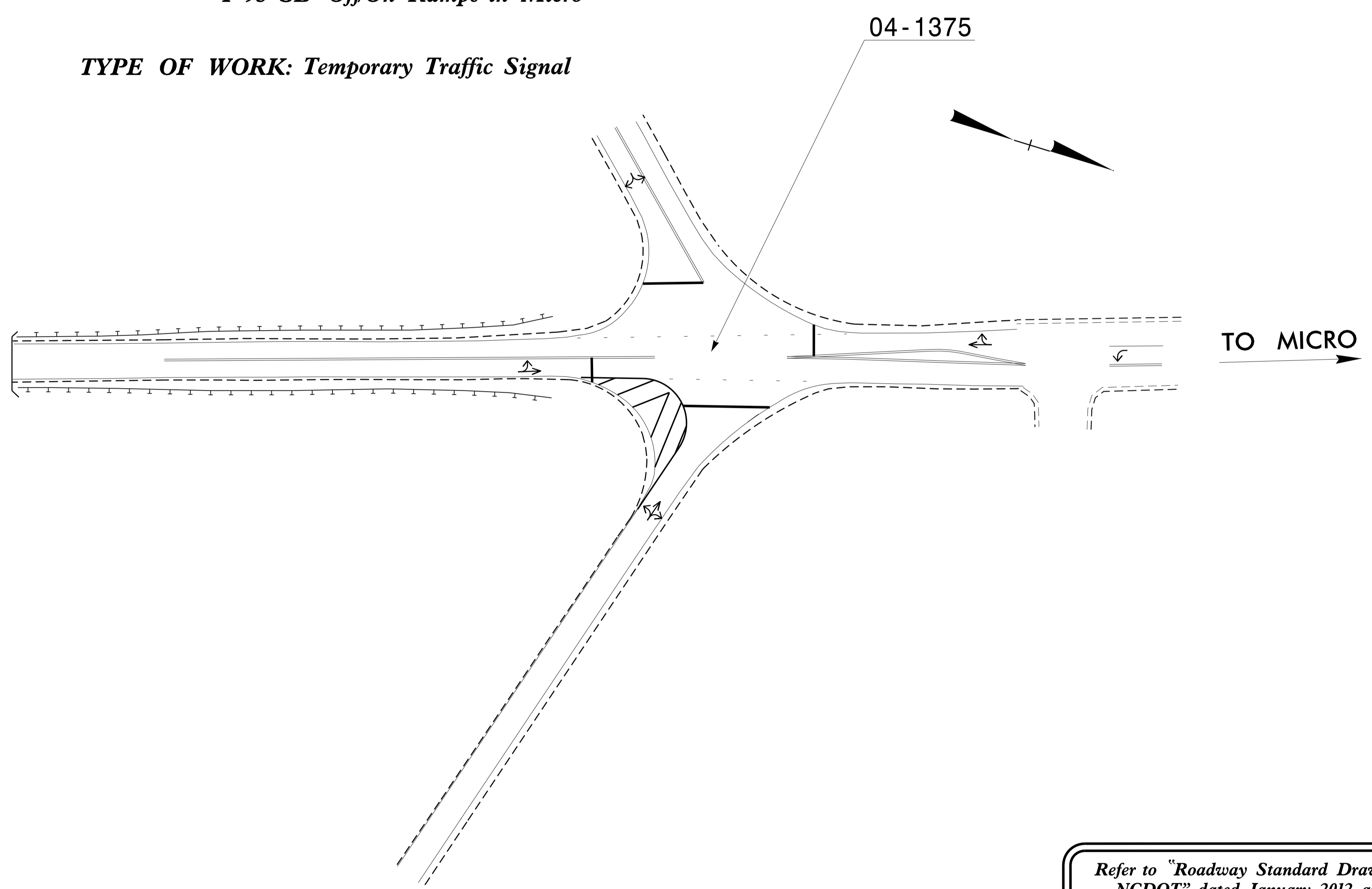
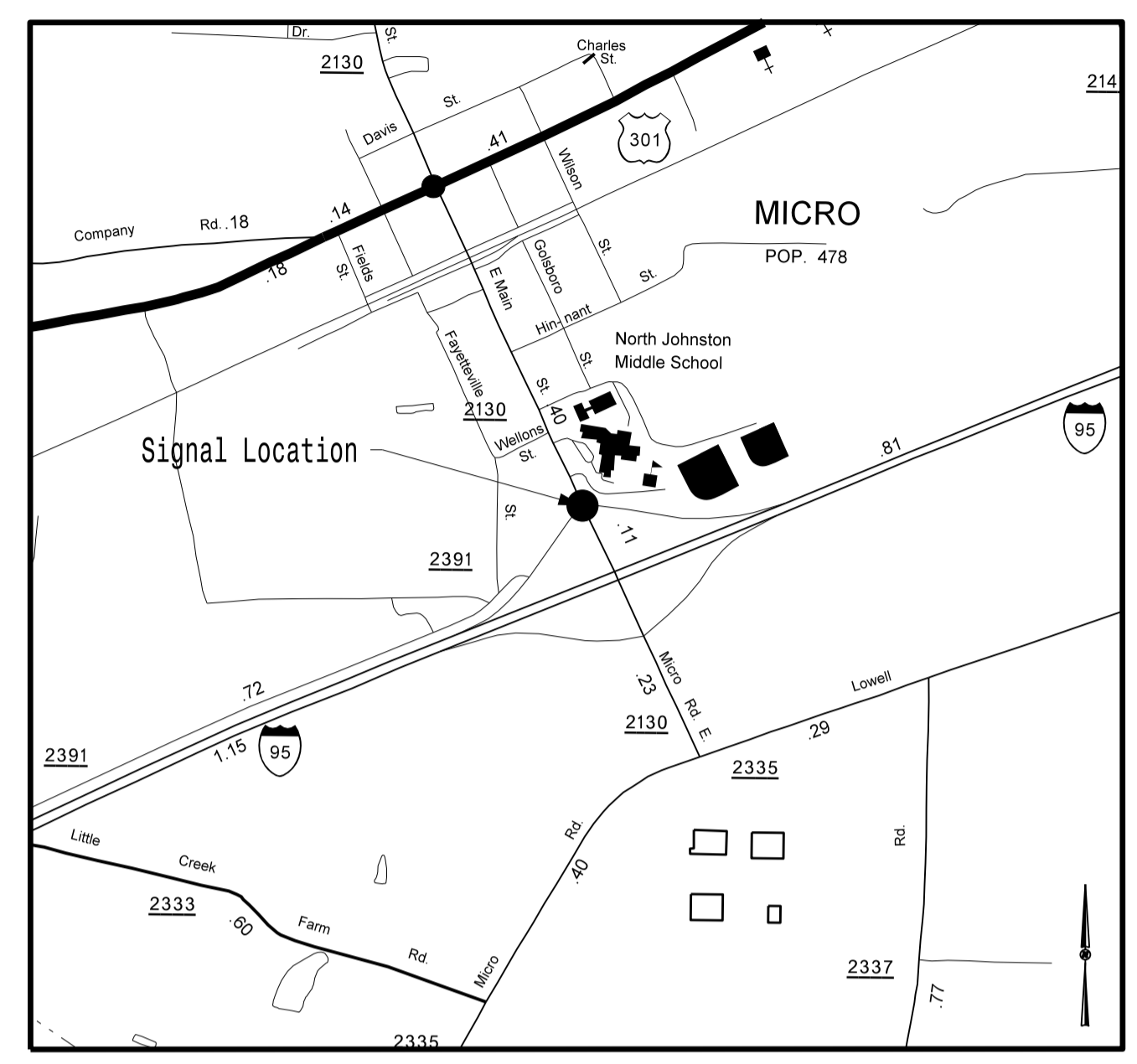
**JOHNSTON COUNTY**

**LOCATION: SR 2130 (Micro Road)/(Main Street) at I-95 SB Off/On Ramps in Micro**

**TYPE OF WORK: Temporary Traffic Signal**

**Project: I-3318BB**

Vicinity



Refer to "Roadway Standard Drawings NCDOT" dated January 2012 and "Standard Specifications for Roads and Structures" dated January 2012.

<b>Index of Plans</b>		
<b>Sheet #</b>	<b>Sig. Inv. No.</b>	<b>Location/Description</b>
Sig. 1.0	-----	Title Sheet
Sig. 2.0-2.2	04-1375	SR 2130 (Micro Road)/(Main Street) at I-95 SB Off/On Ramps
Sig. 2.3	---N/A---	"Temporary Signal" Sign Design

**INTELLIGENT TRANSPORTATION AND SIGNALS UNIT**

Contacts:

Jason P. Galloway, PE - Eastern Region Signals Project Engineer  
John T. Rowe, Jr., PE - Signal Equipment Design Engineer

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

750 N. Greenfield Parkway, Garner, NC 27529

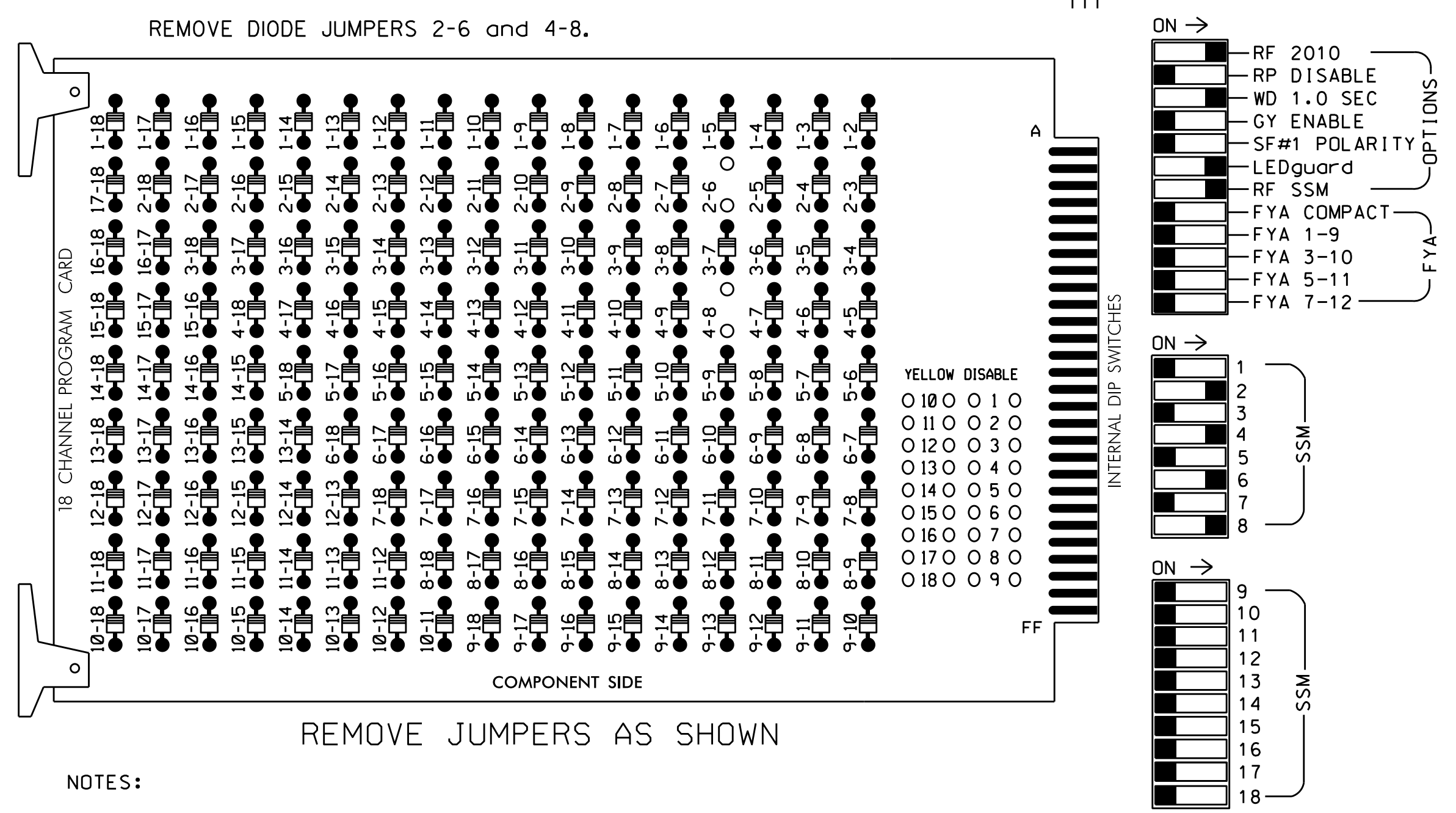
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**EDI MODEL 2018ECL-NC CONFLICT MONITOR PROGRAMMING DETAIL**

(remove jumpers and set switches 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 Red Enable is active at all times during normal operation.
4. Connect serial cable from conflict monitor to comm. port 1 of 2070 controller. Ensure conflict monitor communicates with 2070.

**NOTES**

1. To prevent "flash-conflict" problems, insert red flash program blocks for all unused vehicle load switches in the output file. The installer shall verify that signal heads flash in accordance with the Signal Plans.
2. Program phases 4 and 8 for Dual Entry.
3. Enable Simultaneous Gap-Out for all phases.
4. Program phases 2 and 6 for Start Up In Green.
5. Program phases 2 and 6 for Yellow Flash.

**SIGNAL HEAD HOOK-UP CHART**

LOAD SWITCH NO.	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12
CMU CHANNEL NO.	1	2	13	3	4	14	5	6	15	7	8	16
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	41,42	NU	NU	61,62	NU	NU	81,82	NU
RED		128			101			134			107	
YELLOW		129			102			135			108	
GREEN		130			103			136			109	
RED ARROW												
YELLOW ARROW												
GREEN ARROW												

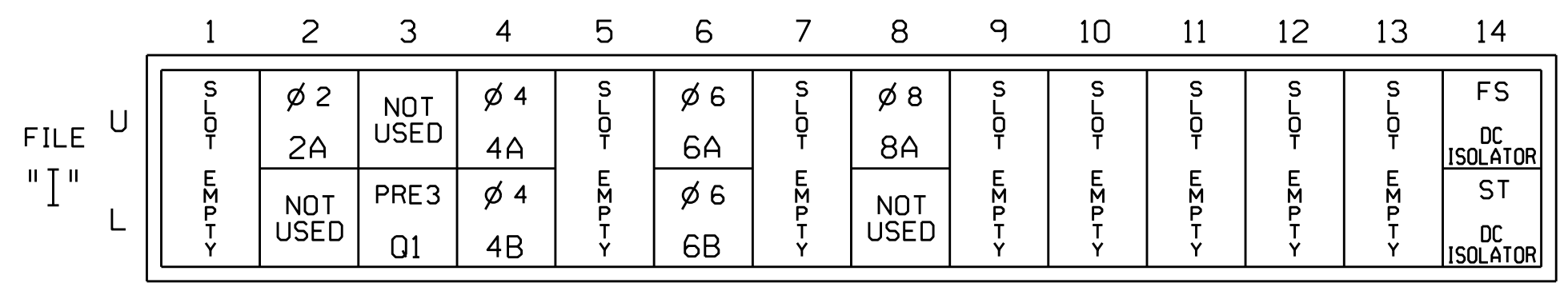
NU = Not Used

**EQUIPMENT INFORMATION**

CONTROLLER.....2070L  
 CABINET.....336  
 SOFTWARE.....ECONOLITE OASIS  
 CABINET MOUNT.....POLE  
 OUTPUT FILE POSITIONS...12  
 LOAD SWITCHES USED.....S2,S5,S8,S11  
 PHASES USED.....2,4,6,8  
 OVERLAPS.....NONE

**INPUT FILE POSITION LAYOUT**

(front view)



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

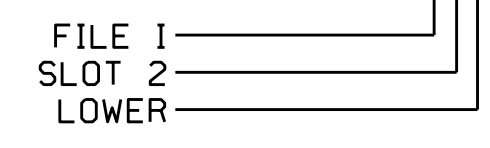
FS = FLASH SENSE  
 ST = STOP TIME

**INPUT FILE CONNECTION & PROGRAMMING CHART**

LOOP NO.	LOOP TERMINAL	INPUT FILE POS.	PIN NO.	INPUT ASSIGNMENT NO.	DETECTOR NO.	NEMA PHASE	CALL	EXTEND	FULL TIME DELAY	STRETCH TIME	DELAY TIME
2A	TB21-3,4	I2U	39	1	2	2	Y	Y			
* 01	TB23-5,6	I3L	49	11	24	PRE3	Y	Y			
4A	TB21-7,8	I4U	41	3	4	4	Y	Y			3
4B	TB23-7,8	I4L	45	7	14	4	Y	Y			10
6A	TB21-11,12	I6U	40	2	6	6	Y	Y		1.6	
6B	TB23-11,12	I6L	44	6	16	6	Y	Y			
8A	TB22-1,2	I8U	42	4	8	8	Y	Y			

\* See Vehicle Detector Programming Detail on sheet 2.

**INPUT FILE POSITION LEGEND: I2L**



THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 04-1375  
 DESIGNED: March 2015  
 SEALED: 5/5/2015  
 REVISED: N/A

Electrical Detail - Sheet 1 of 2

Electrical and Programming Details for: SR 2130 (Micro Road)/(Main Street) at I-95 SB Off/On Ramps

Division 4 Johnston County DE Micro

PLAN DATE: April 2015 REVIEWED BY: [Signature]

PREPARED BY: S. Armstrong REVIEWED BY: [Signature]

REVISIONS: [Table with columns for REVISIONS, INIT., DATE]

DocuSigned by: John T. Rowe, Jr. 5/6/2015

750 N. Greenfield Pkwy, Garner, NC 27529

SIG. INVENTORY NO. 04-1375

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### QUEUE PREEMPTION PROGRAMMING DETAIL

(program controller as shown below)

FROM MAIN MENU PRESS 'A' (PREEMPTION), THEN '1' (STANDARD PREEMPTIONS), PRESS 'NEXT' UNTIL PREEMPTION #3 IS REACHED.

PREEMPTION #3	SETTINGS (NEXT:1-10)									
INTERVAL/TIMING	CLEAR/DWELL PHASES									
GRN YEL RED	1	2	3	4	5	6	7	8	9	10
1 255 0.0 0.0										
2 0 0.0 0.0										
3 0 0.0 0.0										
4 0 0.0 0.0										
5 1 0.0 0.0	X	X								

EXIT CALLS	OPTIONS
PRIORITY (Y/N TO SELECT) .....	MED
DELAY TIMER (0-255 SEC) .....	0.0
MIN GREEN BEFORE PRE (0= DEFAULT).....	1
PED CLEAR BEFORE PRE (0= DEFAULT).....	0
YELLOW CLEAR BEFORE PRE (0= DEFAULT).....	0.0
RED CLEAR BEFORE PRE (0= DEFAULT).....	0.0
DWELL MIN TIMER (0-255 SEC) .....	54
DWELL MAX TIMER (0=OFF,1-255MIN) .....	0
DWELL HOLD-OVER TIMER (0-255) .....	0
LATCH CALL? .....	N
LINK TO NEXT PREEMPT? .....	N
ENABLE BACKUP PROTECTION? .....	Y
HOLD CLEAR 1 PHASES DURING DELAY? .....	N
FAST GREEN FLASH DWELL PHASES? .....	N
PED CLEARANCE THROUGH YELLOW? .....	N
INHIBIT OVERLAP GREEN EXTENSION? .....	N
SERVICE DURING SOFTWARE FLASH? .....	N
REST IN RED DURING DWELL INTERVAL? .....	N
FLASH DWELL INTERVAL? .....	N
ALLOW PEDS IN DWELL INTERVAL? .....	N
RE-TIME DWELL INTERVAL? .....	N
OVERLAPS: .....	ABCDEFGHIJKLMNPO
DWELL INT FLASH YELLOW	
OMIT OVERLAPS:	

### VEHICLE DETECTOR #24 SETTINGS FOR QUEUE PREEMPT

(program controller as shown below)

FROM MAIN MENU PRESS '7' (DETECTORS), THEN '1' (VEHICLE DETECTOR ASSIGNMENTS), PRESS '+' UNTIL DETECTOR #24 IS REACHED.

VEHICLE DETECTOR #24 SETTINGS (+,1-64)	SETTING:	(Y/N)
ENABLE DETECTOR.....	Y	
ENABLE LOGGING.....	N	
ENABLE DIAGNOSTICS.....	N	
SPEED TRAP.....	N	
CALL DETECTOR.....	N	
EXTENSION DETECTOR.....	N	
MODE 2 STOP BAR.....	N	
SWITCHING DETECTOR.....	N	
DUPLICATING DETECTOR.....	N	
ENABLE FULL TIME DELAY.....	N	
IF FAILED, SET MIN RECALL?.....	N	
IF FAILED, SET MAX1 RECALL?.....	N	
IF FAILED, SET MAX2 RECALL?.....	N	
PHASE#	12345678910111213141516	
PHASES ASSIGNED ;		
SWITCH/DUPLICATE:		
LOOP SIZE (0-255 FT).....	6	
SPEED TRAP DISTANCE (0-255 FT).....	0	
STOP BAR TIME (0-255 SEC).....	0	
STRETCH (0-25.5 SEC).....	0.0	
DELAY (0-255 SEC).....	0	
MAX CALLS/MIN (0-255).....	255	
MIN CALLS/DIAGNOSTIC PERIOD (0-255).....	0	
MAX OCCUPANCY (0-100%).....	100	
EXTENSION DISABLE TIME (0-255 SEC).....	0	
QUEUE MAX OCCUPANCY TIME (0-255).....	5	
QUEUE GAP RESET TIME (0-25.5).....	0.1	
PREEMPTION INDEX FOR QUEUE (0-10).....	3	

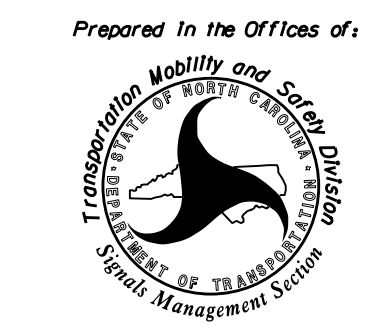
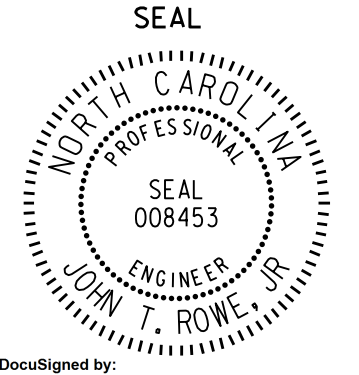
← CLEAR DEFAULT PHASE

← ENTER DATA

END OF PROGRAMMING


THIS ELECTRICAL DETAIL IS FOR THE SIGNAL DESIGN: 04-1375  
 DESIGNED: March 2015  
 SEALED: 5/5/2015  
 REVISED: N/A

Electrical Detail - Sheet 2 of 2

ELECTRICAL AND PROGRAMMING DETAILS FOR:  Prepared In the Offices of:  750 N. Greenfield Pkwy, Garner, NC 27529	<b>SR 2130</b> <b>(Micro Road)/(Main Street)</b> <b>at</b> <b>I-95 SB Off/On Ramps</b>		SEAL  SEAL 008453 JOHN T. ROWE, JR. ENGINEER
	Division 4 PLAN DATE: April 2015 PREPARED BY: S. Armstrong	Johnston County Division 4 REVIEWED BY: JTR REVIEWED BY:	
REVISIONS			INIT. DATE
SIG. INVENTORY NO. 04-1375			DATE

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 sarmstrong

TIP NO. I-3318BB	SHEET NO. SIG. 2.3
APPROVED: <i>Ayman Alqudwah</i>	
DATE: 5/7/2015	
SEAL	



Sign Number: SP15063 Type: D Span-Wire Quantity:	Design By: DME Project ID: I-3318BB	Checked By: AIA Location: SR 2130 (Micro Rd.)	Date: Apr 16, 2015 Division: 04	N. C. DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS TRANSPORTATION MOBILITY AND SAFETY SIGNING AND DELINEATION
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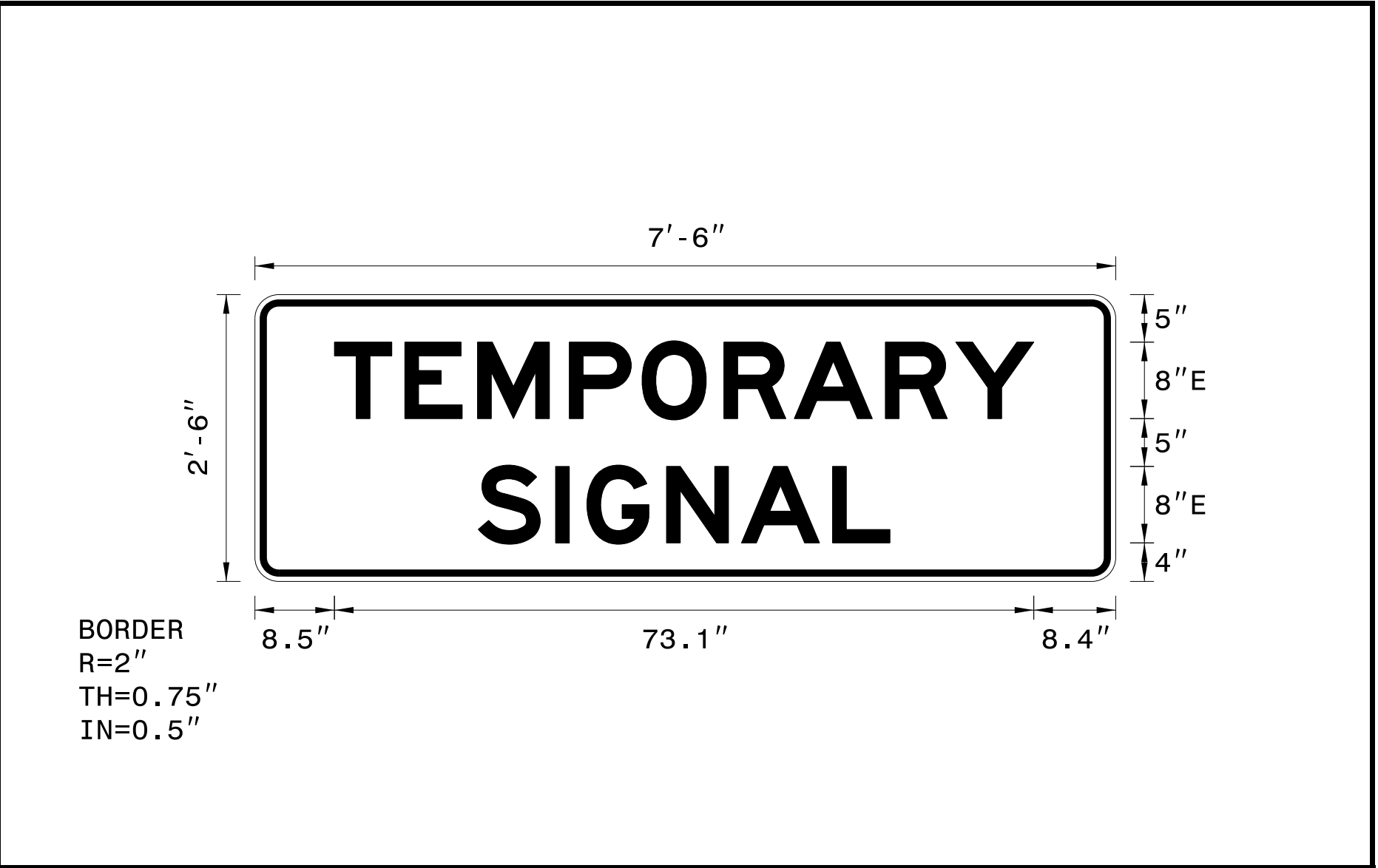
  

Sign Width: 7'-6" Height: 2'-6" Total Area: 18.8 Sq.Ft.	Background Color: Fluorescent Orange Legend & Border Color: Black
Border Type: Recessed Recess: 0.5" Width: 0.75" Radii: 2"	Backing Material: 0.125 in. Aluminum 0.079 in. Composite

NOTES:

- Legend and border shall be direct applied non-reflective sheeting.
- Background shall be Grade B reflective sheeting.

Letter spacings are to start of next letter													Series/Size
	T	E	M	P	O	R	A	R	Y				Text Length
	8.5	7.4	7.6	9.6	7.6	8.6	7.4	9.5	7.4	8.2	8.4		E 2000
													73.1
													E 2000
	23.5	8.1	3.3	8.3	7.8	9.5	6	23.5					43

Spacing Factor is 1 unless specified otherwise

07-MAY-2015 08:55  
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 Gallaway

SPECIAL SIGN DESIGN