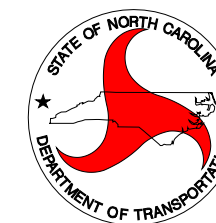


***INDEX OF SHEETS***

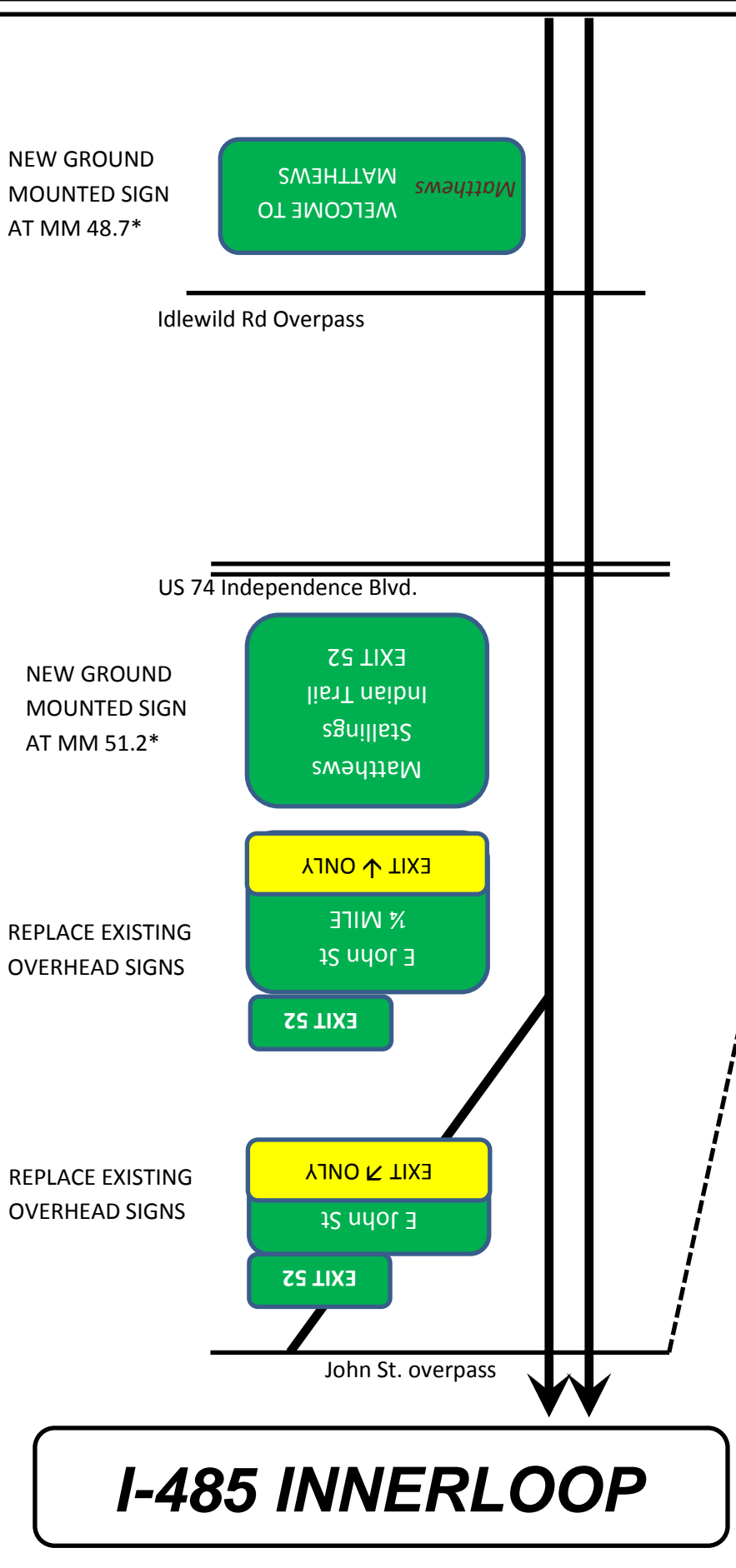
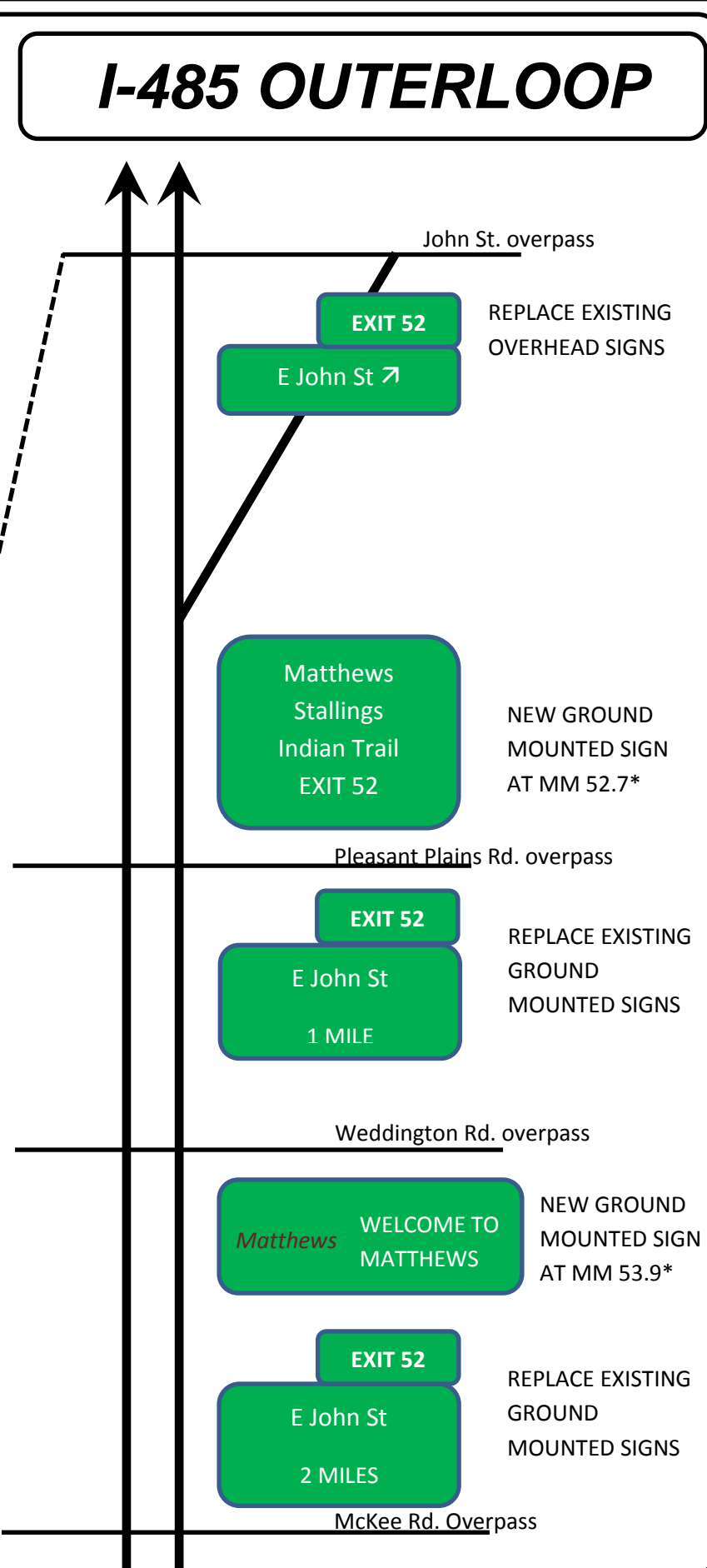
SHEET NO.    TITLE

1	OVERVIEW AND INDEX OF SHEETS
2	MATTHEWS, STALLINGS, INDIAN TRAIL SIGN
3	WELCOME TO MATTHEWS SIGN
4	TOWN OF MATTHEWS LOGO
5	NEW GROUND MOUNTED SIGN "S" DIMENSIONS
6	EXIT 52 PANEL
7	E John St ↗ PANEL
8	E John St EXIT ↗ ONLY PANEL
9	E John St ¼ MILE EXIT ↓ ONLY PANEL
10	E John St 2 MILES
11	E John St 1 MILE

\*Traffic Services Personnel will verify sign locations prior to new installations



**Division 10**  
**Bid Opening:**  
**October 16, 2013**



←  
TO  
CHARLOTTE

NEW GROUND MOUNTED SIGN AT MM 48.7\*

WELCOME TO MATTHEWS

Idlewild Rd Overpass

US 74 Independence Blvd.

NEW GROUND MOUNTED SIGN AT MM 51.2\*

MATTHEWS STALLINGS INDIAN TRAIL EXIT 52

REPLACE EXISTING OVERHEAD SIGNS

EXIT 52 ONLY  
E John St 1/4 MILE

REPLACE EXISTING OVERHEAD SIGNS

EXIT 52 ONLY  
E John St

John St. overpass

***I-485 INNERLOOP***

***I-485 OUTERLOOP***

John St. overpass

EXIT 52  
E John St ↗

REPLACE EXISTING OVERHEAD SIGNS

MATTHEWS STALLINGS INDIAN TRAIL EXIT 52

NEW GROUND MOUNTED SIGN AT MM 52.7\*

Pleasant Plains Rd. overpass

EXIT 52  
E John St  
1 MILE

REPLACE EXISTING GROUND MOUNTED SIGNS

Weddington Rd. overpass

MATTHEWS WELCOME TO MATTHEWS

NEW GROUND MOUNTED SIGN AT MM 53.9\*

EXIT 52  
E John St  
2 MILES

REPLACE EXISTING GROUND MOUNTED SIGNS

McKee Rd. Overpass

# ROADWAY STANDARD DRAWINGS

- 901.10 TYPE 'A' SIGNS – WELDED STUD CONSTRUCTION
- 901.20 TYPE 'B' SIGNS – WELDED STUD CONSTRUCTION
- 901.50 ARROWS AND SHIELDS
- 901.60 RIVET SPACING FOR OVERLAYED SIGNS
- 901.70 SIGN STRINGERS AND SUPPORT SPACING
- 901.80 SIGN MOUNTING DETAILS – TYPE 'A' AND 'B' SIGNS
- 903.10 GROUND MOUNTED SIGN SUPPORTS
- 904.10 ORIENTATION OF GROUND MOUNTED SIGNS
- 904.20 SECONDARY SIGN MOUNTING
- 904.50 MOUNTING OF TYPE 'D', 'E' AND 'F' SIGNS ON 'U' CHANNEL POSTS
- 1101.02 TEMPORARY LANE CLOSURES
- 1101.03 TEMPORARY LANE CLOSURES
- 1101.04 TEMPORARY SHOULDER CLOSURES
- 1101.11 TRAFFIC CONTROL DESIGN TABLES
- 1110.02 PORTABLE WORK ZONE SIGNS
- 1115.01 FLASHING ARROW BOARDS
- 1130.01 DRUM
- 1130.01 CONES
- 1160.01 TRUCK MOUNTED ATTENUATOR – DELINEATION
- 1180.01 SKINNY DRUM

## **GENERAL NOTES**

SHEET NO  
2A

CHANGES MAY BE REQUIRED WHEN THE PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY STANDARD DRAWINGS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE PROJECT EXCEPT WHEN OTHERWISE NOTED OR DIRECTED BY THE ENGINEER.

- 1) ALL SIGNS SHALL BE FURNISHED BY THE CONTRACTOR
- 2) WHEN NOT STATIONED OR DIMENSIONED, ALL SIGNS SHALL BE FIELD VERIFIED BY THE ENGINEER
- 3) WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL
- 4) THE BACKGROUND SHEETING FOR TYPES E AND F SIGNS SHALL BE REFLECTIVE
- 5) DO NOT BEGIN FABRICATION FOR TYPES A AND B SIGNS MOUNTED ON OVERHEAD STRUCTURES OR STEEL SUPPORTS UNTIL "S" DIMENSIONS HAVE BEEN FIELD VERIFIED.
- 6) WHEN PERSONNEL AND/OR EQUIPMENT ARE WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.
- 7) NOTIFY THE ENGINEER (WHO WILL ALSO NOTIFY PUBLIC INFORMATION AND TMC) 7 DAYS PRIOR OF ANY CLOSURE.
- 8) PROVIDE SIGNING AND DEVICES TO INSTALL SHOULDER OR LANE CLOSURES. ENSURE ALL TEMPORARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN
- 9) WORK LIGHTING FOR NIGHT OPERATIONS SHALL BE PLACED AND DIRECTED SO AS NOT TO OBSTRUCT MOTORIST'S VISION
- 10) CONTRACTOR SHALL COORDINATE OPERATIONS WITH ADJOINING CONTRACTORS AND MAINTENANCE CREWS TO PROVIDE SEAMLESS TRANSITIONS BETWEEN WORKZONES.

SIGN NUMBER: SP12316

BACKG COLOR: Green

DESIGN BY: MT

CHECKED BY:

DATE: Oct 11, 2012

TYPE: A

COPY COLOR: White

PROJECT ID:

DIV: 10

QUANTITY: 2

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 12'-6"

HEIGHT: 8'-6"

TOTAL AREA: 106.3 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 2"

RADII: 12"

MAT'L: 0.125" (3.2 mm) ALUMINUM

NO. Z BARS: 3

LENGTH: 142.0

USE NOTES:

- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
- Background shall be Grade C reflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter																				Series/Size
																				Text Length
		M	a	t	t	h	e	w	s											EM 2000
25.7	15.7	12.8	9.8	11.2	12.9	11.4	16	8.8	25.7											98.6
		S	t	a	l	l	i	n	g	s										EM 2000
27.1	13.6	10	14.1	8	8	8	12.9	12.6	8.8	27.1										95.9
		I	n	d	i	a	n	T	r	a	i	l								EM 2000
13.9	7.2	12.9	14.1	6.8	14.1	8.8	12	13	8.6	14.1	8	2.7	13.9							122.3
		E	X	I	T		5	2												E 2000
46.2	7.1	8.6	2.8	6	12	11.4	9.7	46.2												57.6

SIGN NUMBER: 101,102  
 TYPE: B  
 QUANTITY: 2

BACKG COLOR: Green  
 COPY COLOR: White

SYMBOL	X	Y	WID	HT
36in x 36in	7.8	9	36	36

SIGN WIDTH: 11'-0"  
 HEIGHT: 4'-6"  
 TOTAL AREA: 49.5 Sq.Ft.

BORDER TYPE: FLUSH  
 RECESS: 0"  
 WIDTH: 1.5"  
 RADII: 6"

MAT'L: 0.125" (3.2 mm) ALUMINUM

NO. Z BARS: 2  
 LENGTH: 124.0

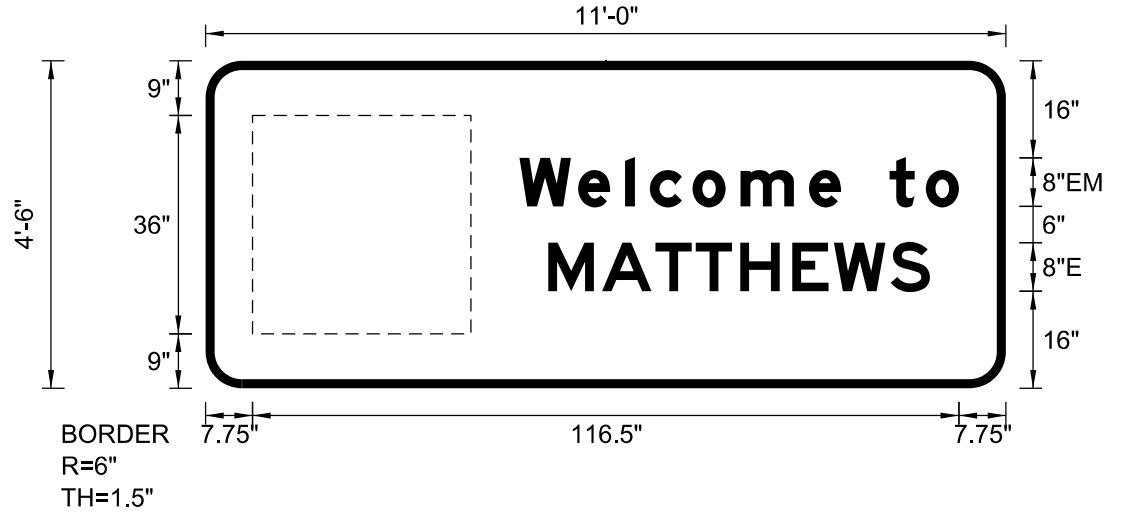
USE NOTES: 1,2

1. Legend and border(except those that are colored black) shall be direct applied Grade B sheeting.
2. Background shall be Grade A, B, or C reflective sheeting.

DESIGN BY: W. Johnson  
 PROJECT ID: Matthews

CHECKED BY:  
 DIV: 10

DATE: Jun 10, 2013



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter													Series/Size
													Text Length
	W	e	l	c	o	m	e		t	o			EM 2000
51.8	9.7	7.8	4.1	7	7.9	11.3	5.3	8	6	5.4	7.8		72.5
	M	A	T	T	H	E	W	S					E 2000
56.5	8.9	8.8	6.6	7.4	8.6	6.9	9.4	6.5	12.5				63

Town of

Matthews<sup>TM</sup>

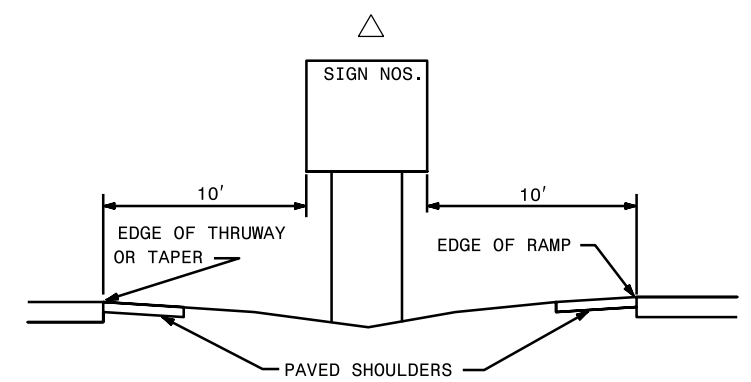
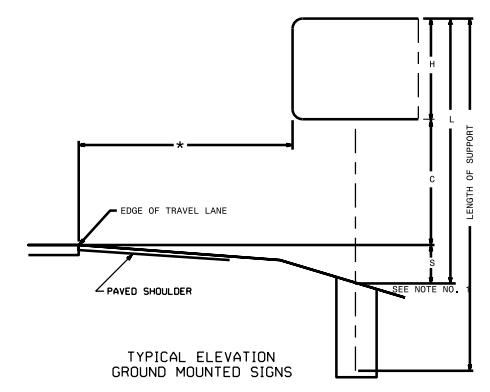
North Carolina

TIP NO.	SHEET NO.
R-XXXX	SIGN-2
APPROVED: _____	
DATE: _____	
SEAL	

SIGN NO.	SIGN TYPE	SIGN SIZE (in. w x h)	ROADWAY STATION	NO. OF SECTIONS	BEAM SECTION	SUPPORT TYPE	ATTACH METHOD	MOUNTING METHOD	HORIZ. CLR. (ft.)	SNS HT (ft.)	MTG HT (ft.)	EMBED- S	LENGTH (ft.)			TOTAL S	TOTAL L	TOTAL S	TOTAL L	TOTAL LENGTH (ft.)	DIAMETER (ft.)	DEPTH (ft.)	WEIGHTS (lbs.)	WEIGHTS (lbs.)	FTGS. (c.y.)	FTGS. (c.y.)	SEE NOTE 2 (mm/dd/yy)	
													LEFT	CENTER	RIGHT													
101	A	132 X54	485 IL MM 48	2	S4x7.7	BA	N/A	N/A	30.00	4.50	7.00	4	2.15	13.65	17.65	0.00	0.00	0.00	1.12	12.62	16.62	1	4.5	304.49	0.00	0.00	0.26	5/30/2013
102	A	132 X54	485 OL MM 53	2	S4x7.7	BA	N/A	N/A	30.00	4.50	7.00	4.5	2.50	14.00	18.50	0.00	0.00	0.00	0.82	12.32	16.82	1	5	312.57	0.00	0.00	0.29	5/30/2013
SP12316	A	150 X102	485 OL X52	2	W6x16	BA	N/A	N/A	30.00	8.50	7.00	5	3.24	18.74	23.74	0.00	0.00	0.00	2.39	17.89	22.89	1.5	5.5	878.46	0.00	0.72	0.00	5/30/2013
SP12316	A	150 X102	485 IL X52	2	W6x16	BA	N/A	N/A	30.00	8.50	7.00	5	4.67	20.17	25.17	0.00	0.00	0.00	6.20	21.70	26.70	1.5	5.5	962.30	0.00	0.72	0.00	5/30/2013

TOTAL TOTAL TOTAL TOTAL  
2457.82 0.00 1.44 0.55  
USE: 2458 0 2 1

- NOTES
- DIMENSION "S" REPRESENTS AN INCREASE (+), OR A DECREASE (-) IN POLE LENGTH, RELATIVE TO THE ELEVATION OF THE EDGE OF PAVEMENT.
  - FIELD VERIFICATIONS SHALL BE REQUIRED FOR ALL SUPPORTS, SEE (\*) ARTICLE 903-3. FABRICATORS SHALL BE AISC CERTIFIED IN CATEGORY 1, SEE (\*) ARTICLE 1072-1. (\*) = N.C.D.O.T. STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES
  - PLAN LOCATIONS FOR EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION AND, THEREFORE MAY NOT BE PRECISELY ACCURATE. THEREFORE, IT IS INCUMBENT UPON THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF UTILITIES BEFORE BEGINNING WORK IN A LOCATION.



SHEET 5

**TYPE "A" AND TYPE "B" GROUND MOUNTED SIGNS**

C:\Users\wjohnson\Documents\Welcome to Matthews Support Char.t.dgn  
1612  
wjohnson  
1/24/13

SIGN NUMBER: SP12310  
 TYPE: B  
 QUANTITY: 3  
 SIGN WIDTH: 8'-6"  
 HEIGHT: 2'-6"  
 TOTAL AREA: 21.3 Sq.Ft.

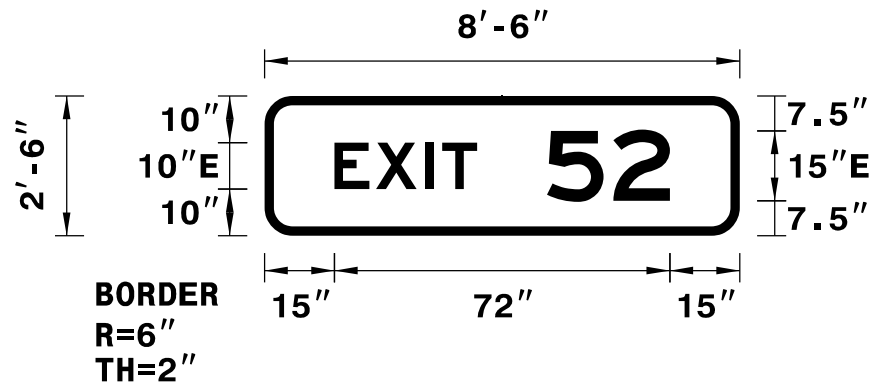
BACKG COLOR: Green  
 COPY COLOR: White

SYMBOL	X	Y	WID	HT

MAT'L: 0.125" (3.2 mm) ALUMINUM

BORDER TYPE: FLUSH  
 RECESS: 0"  
 WIDTH: 2"  
 RADII: 6"  
 NO. Z BARS: 2  
 LENGTH: 94.0

DESIGN BY: MT                      CHECKED BY:  
 PROJECT ID:                      DIV: 10                      DATE: Oct 11, 2012



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size  
Text Length

	E	X	I	T	5	2																	Series/Size Text Length
15	8.9	10.7	3.5	7.5	15	14.3	12.2	15															E 2000 72

SIGN NUMBER: SP12311

TYPE: A

QUANTITY: 1

SIGN WIDTH: 16'-0"

HEIGHT: 3'-6"

TOTAL AREA: 56.0 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 2"

RADII: 6"

NO. Z BARS: 2

LENGTH: 184.0

BACKG COLOR: Green

COPY COLOR: White

SYMBOL	X	Y	WID	HT
AR_Type B	155.9	10.9	21.8	24.8

MAT'L: 0.125" (3.2 mm) ALUMINUM

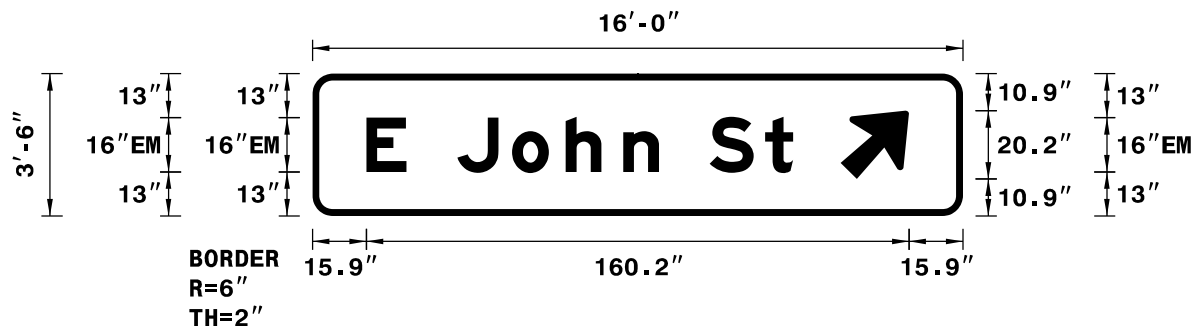
DESIGN BY: MT

PROJECT ID:

CHECKED BY:

DIV: 10

DATE: Oct 11, 2012



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter

Series/Size  
Text Length

	E	J	o	h	n	S	t																EM 2000 126
	15.9	11.8	15	16.2	15.8	17	10.6	15	16.3	8.3	50.1												



SIGN NUMBER: SP12312

BACKG COLOR: Green

DESIGN BY: MT

CHECKED BY:

DATE: Oct 11, 2012

TYPE: A

COPY COLOR: White

PROJECT ID:

DIV: 10

QUANTITY: 1

SYMBOL	X	Y	WID	HT
AR_Type A	78	6.6	20	31.5

SIGN WIDTH: 16'-0"

HEIGHT: 6'-0"

TOTAL AREA: 96.0 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 2"

RADII: 9"

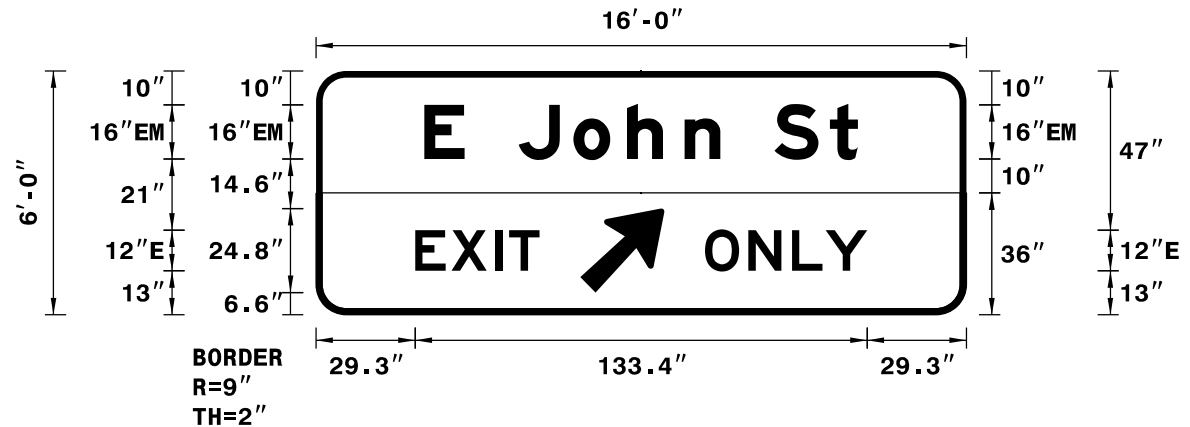
MAT'L: 0.125" (3.2 mm) ALUMINUM

NO. Z BARS: 2

LENGTH: 184.0

USE NOTES:

- Legend and border(except those that are colored black) shall be direct applied Grade A sheeting.
- Background shall be Grade C reflective sheeting.
- A, B, and C type arrows shall be on 0.032" (0.8mm) aluminum and demountable.
- Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is: 184" X 32"



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter												Series/Size
												Text Length
	E	J	o	h	n	S	t					EM 2000
32	11.8	16	16.2	15.8	17	10.6	16	16.3	8.3	32		128
	E	X	I	T								E 2000
29.3	10.7	12.8	4.2	9	126							36.7
	O	N	L	Y								E 2000
114.8	12.8	12.8	10	12.2	29.3							47.9

SIGN NUMBER: SP12313

BACKG COLOR: Green

TYPE: A

COPY COLOR: White

QUANTITY: 1

SYMBOL	X	Y	WID	HT
ARNDOWN	66.4	8.7	30	20.6

SIGN WIDTH: 14'-6"

HEIGHT: 8'-0"

TOTAL AREA: 116.0 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 2"

RADII: 12"

MAT'L: 0.125" (3.2 mm) ALUMINUM

NO. Z BARS: 3

LENGTH: 166.0

USE NOTES:

- Legend and border(except those that are colored black) shall be direct applied Grade A sheeting.
- Background shall be Grade C reflective sheeting.
- A, B, and C type arrows shall be on 0.032" (0.8mm) aluminum and demountable.
- Bottom panel shall be yellow Grade C sheeting. Legend shall be direct applied black non-reflective sheeting. Yellow panel is: 166" X 32"

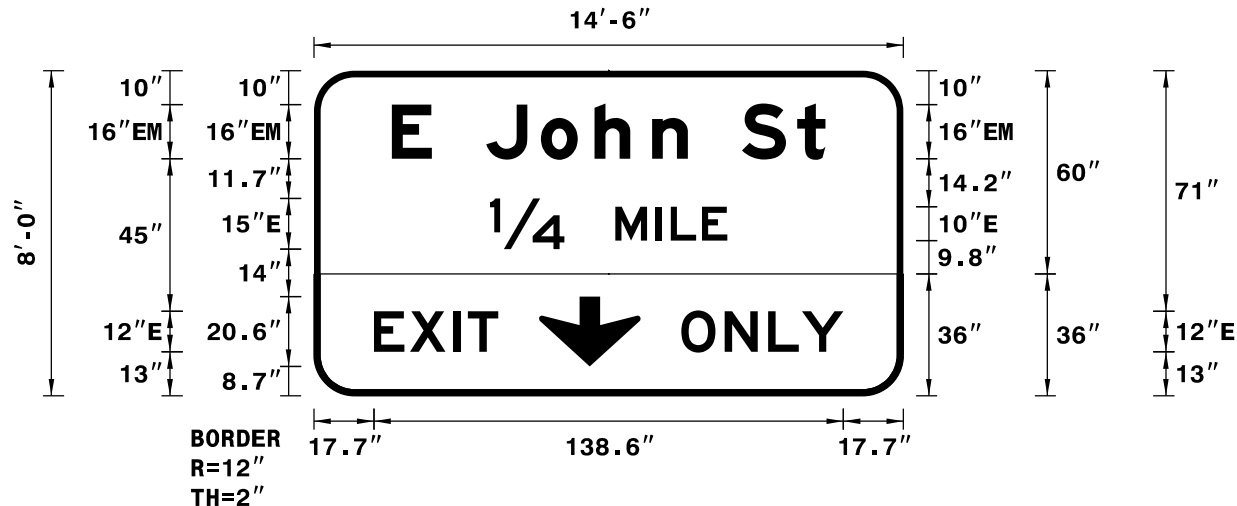
DESIGN BY: MT

CHECKED BY:

DATE: Oct 11, 2012

PROJECT ID:

DIV: 10



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter												Series/Size
												Text Length
	E	J	o	h	n	S	t					EM 2000
23	11.8	16	16.2	15.8	17	10.6	16	16.3	8.3	23		128
	1/4	M	I	L	E							E 2000
52	22	15	12	4.4	9.2	7.5	52					70.1
	E	X	I	T								E 2000
17.7	10.7	12.8	4.2	9	119.6							36.7
	O	N	L	Y								E 2000
108.4	12.8	12.8	10	12.2	17.7							47.9

SIGN NUMBER: SP12314

BACKG COLOR: Green

DESIGN BY: MT

CHECKED BY:

DATE: Oct 11, 2012

TYPE: A

COPY COLOR: White

PROJECT ID:

DIV: 10

QUANTITY: 1

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 13'-6"

HEIGHT: 5'-6"

TOTAL AREA: 74.3 Sq.Ft.

BORDER TYPE: FLUSH

RECESS: 0"

WIDTH: 2"

RADII: 9"

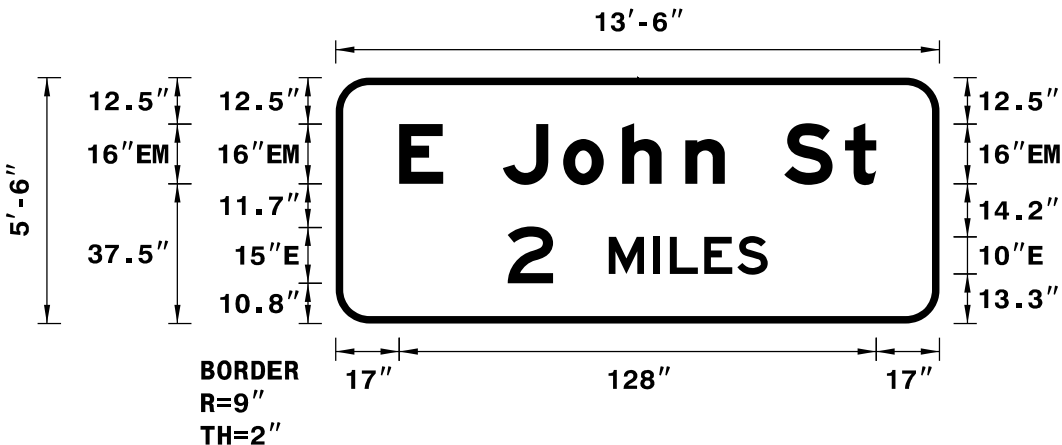
MAT'L: 0.125" (3.2 mm) ALUMINUM

NO. Z BARS: 2

LENGTH: 154.0

USE NOTES: 1,2

- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
- Background shall be Grade C reflective sheeting.



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size	
	E	J	o	h	n	S	t					Text Length
17	11.8	16	16.2	15.8	17	10.6	16	16.3	8.3	17		EM 2000 128
46.1	12.2	15	12	4.4	9.2	8.9	8.1	46.1				E 2000 69.8

SIGN NUMBER: SP12315  
 TYPE: A  
 QUANTITY: 1

BACKG COLOR: Green  
 COPY COLOR: White

SYMBOL	X	Y	WID	HT

SIGN WIDTH: 13'-6"  
 HEIGHT: 5'-6"  
 TOTAL AREA: 74.3 Sq.Ft.

BORDER TYPE: FLUSH  
 RECESS: 0"  
 WIDTH: 2"  
 RADII: 9"

NO. Z BARS: 2  
 LENGTH: 154.0

MAT'L: 0.125" (3.2 mm) ALUMINUM

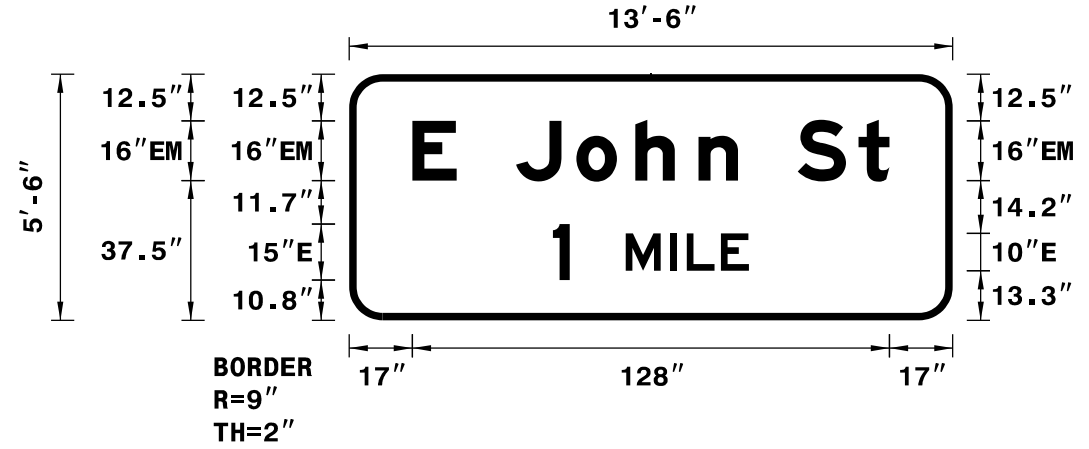
USE NOTES:

- Legend and border(except those that are colored black) shall be direct applied Grade C sheeting.
- Background shall be Grade C reflective sheeting.

DESIGN BY: MT  
 PROJECT ID:

CHECKED BY:  
 DIV: 10

DATE: Oct 11, 2012



Spacing Factor is 1 unless specified otherwise

LETTER POSITIONS

Letter spacings are to start of next letter											Series/Size	
											Text Length	
	E	J	o	h	n	S	t					EM 2000
17	11.8	16	16.2	15.8	17	10.6	16	16.3	8.3	17		128
	1	M	I	L	E							E 2000
54.7	4.5	15	12	4.4	9.2	7.5	54.7					52.6