

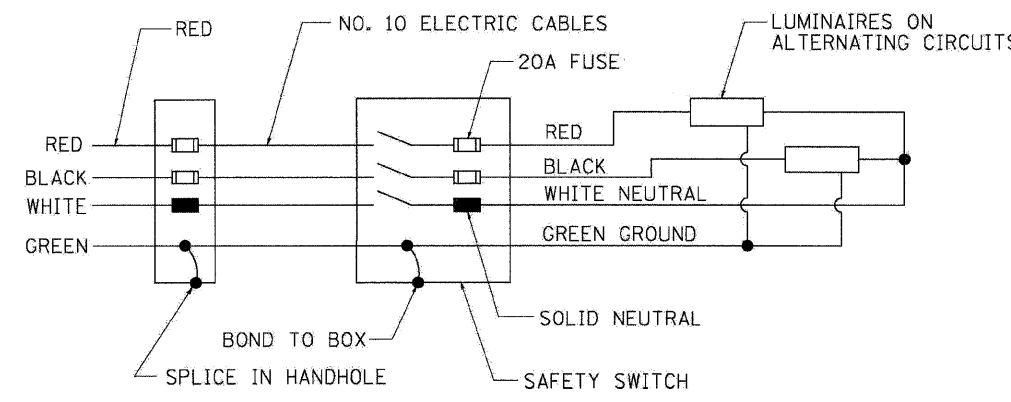
SIGN NUMBER
 DECAL SIZE: 8" (200) W X 9" (230) H
 CHARACTER SIZE: 6" (150) W X 8" (200) H

7' (2 m) ABOVE PAVEMENT

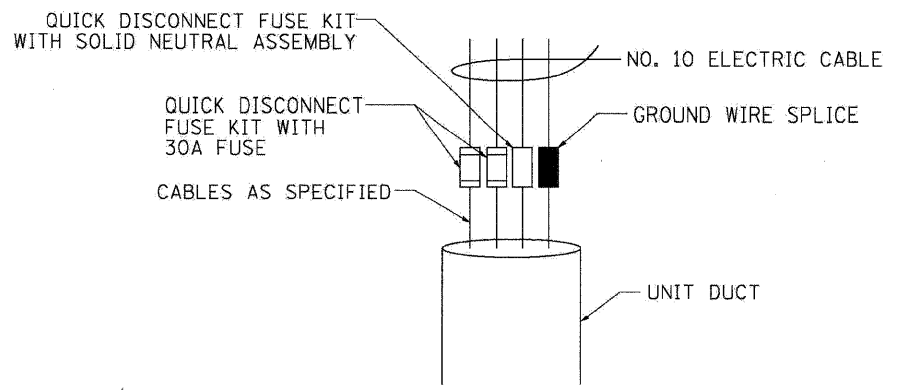
HANDHOLE
 SEE DETAIL "A"

NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE GALVANIZED RIGID METALIC CONDUIT, PVC COATED (GRMC, PVC)
3. THE USE OF LIQUID TIGHT METAL CONDUIT (TYPE LFMC) SHALL BE LIMITED TO LOCATIONS WHERE MOVEMENT IS ANTICIPATED AND SHALL NOT EXCEED 5' (1.5 m) IN LENGTH
4. ALL WORK INDICATED SHALL BE INCLUDED IN THE PAY ITEM FOR ELECTRIC CONNECTION TO SIGN STRUCTURE
5. THE SAFETY SWITCH SHALL BE LOCATED ON THE SIDE OF THE SIGN STRUCTURE WHICH IS CLOSEST TO THE SHOULDER, OR EDGE OF PAVEMENT.



WIRING DIAGRAM



DETAIL A

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME = jma_ewaki	DRAWN - TMB	REVISED -
PLOT DATE = 1/25/2010	CHECKED - JMM	REVISED -
	DATE - 1/25/10	REVISED -

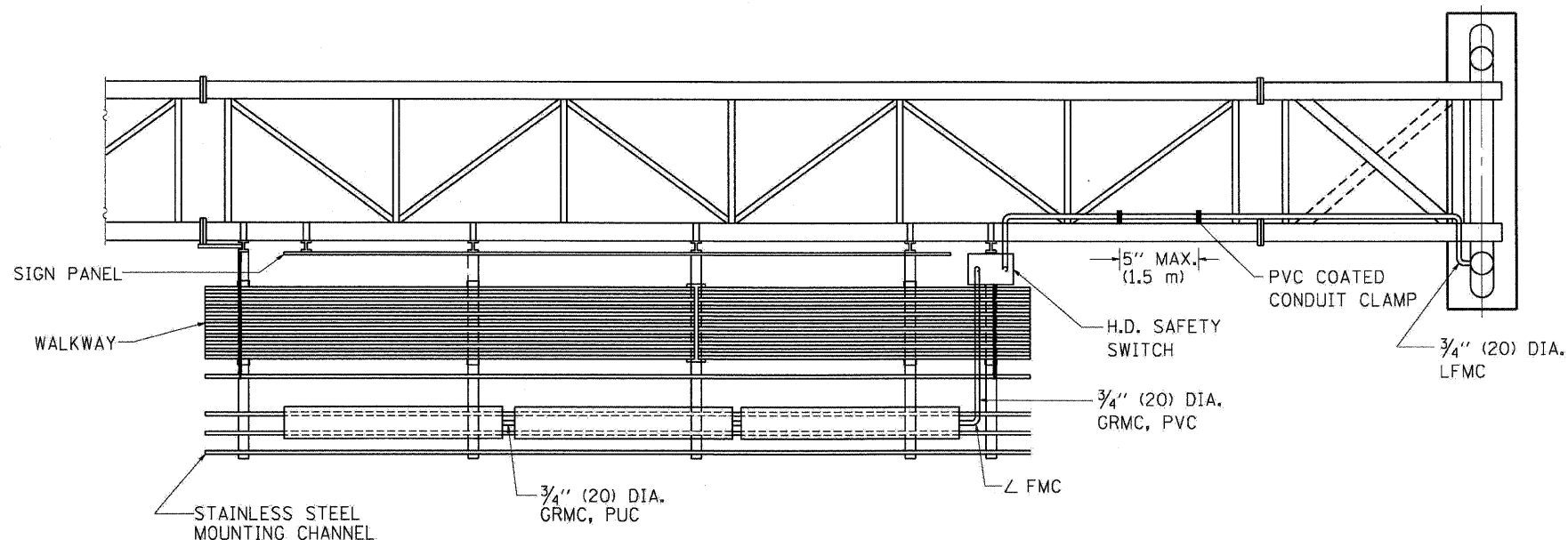
benesch

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

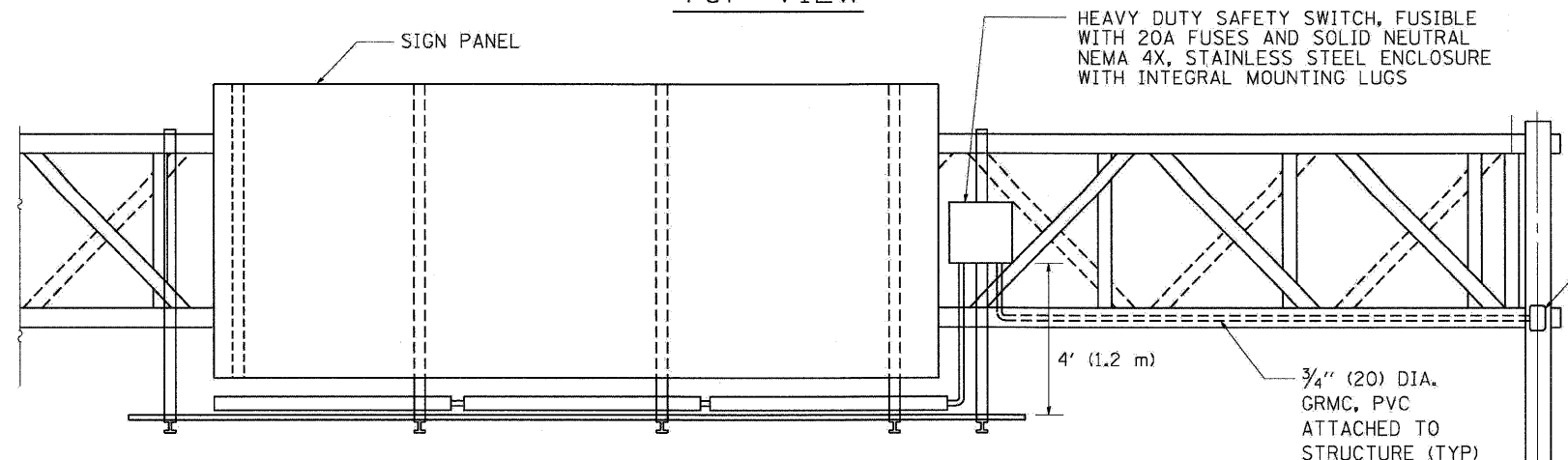
ELECTRIC CONNECTION TO SIGN STRUCTURE SPAN TYPE
 SCALE: N.T.S. SHEET NO. 5 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	201
CONTRACT NO. 60G53				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

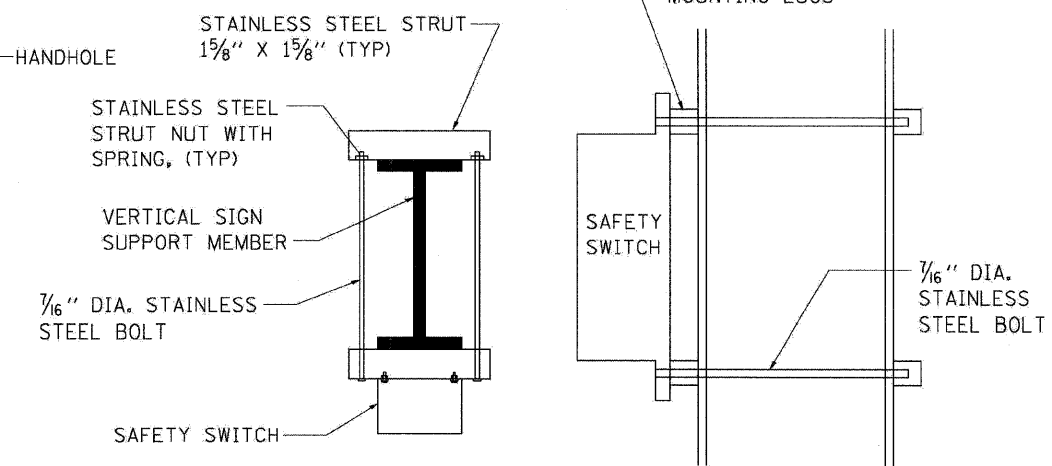
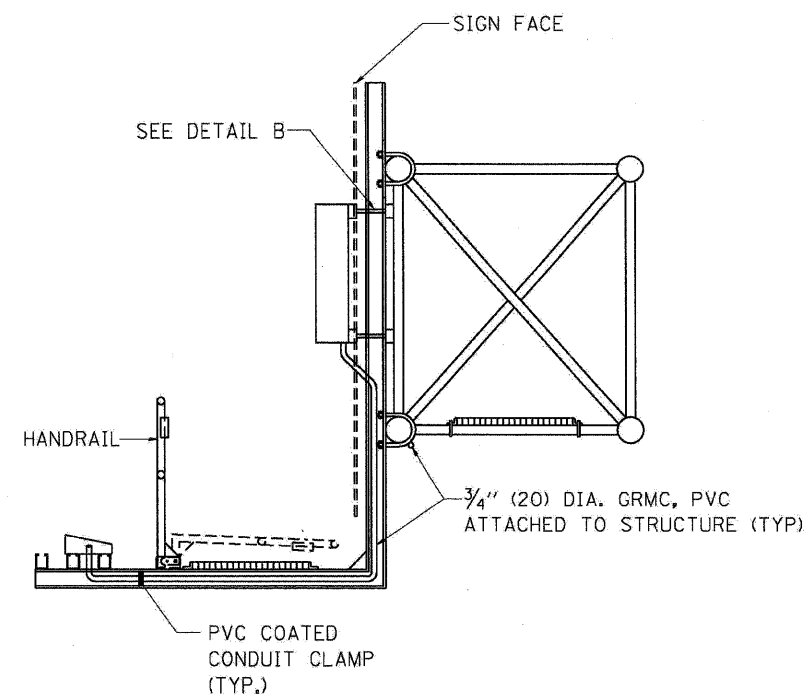
BE-600



TOP VIEW



ELEVATION VIEW



TOP VIEW

SIDE VIEW

DETAIL B

FILE NAME =	DESIGNED - AJP	REVISED -
...\\prp\h.abc.c3.d1.3c-6000.dgn	DRAWN - TMB	REVISED -
USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

benesch

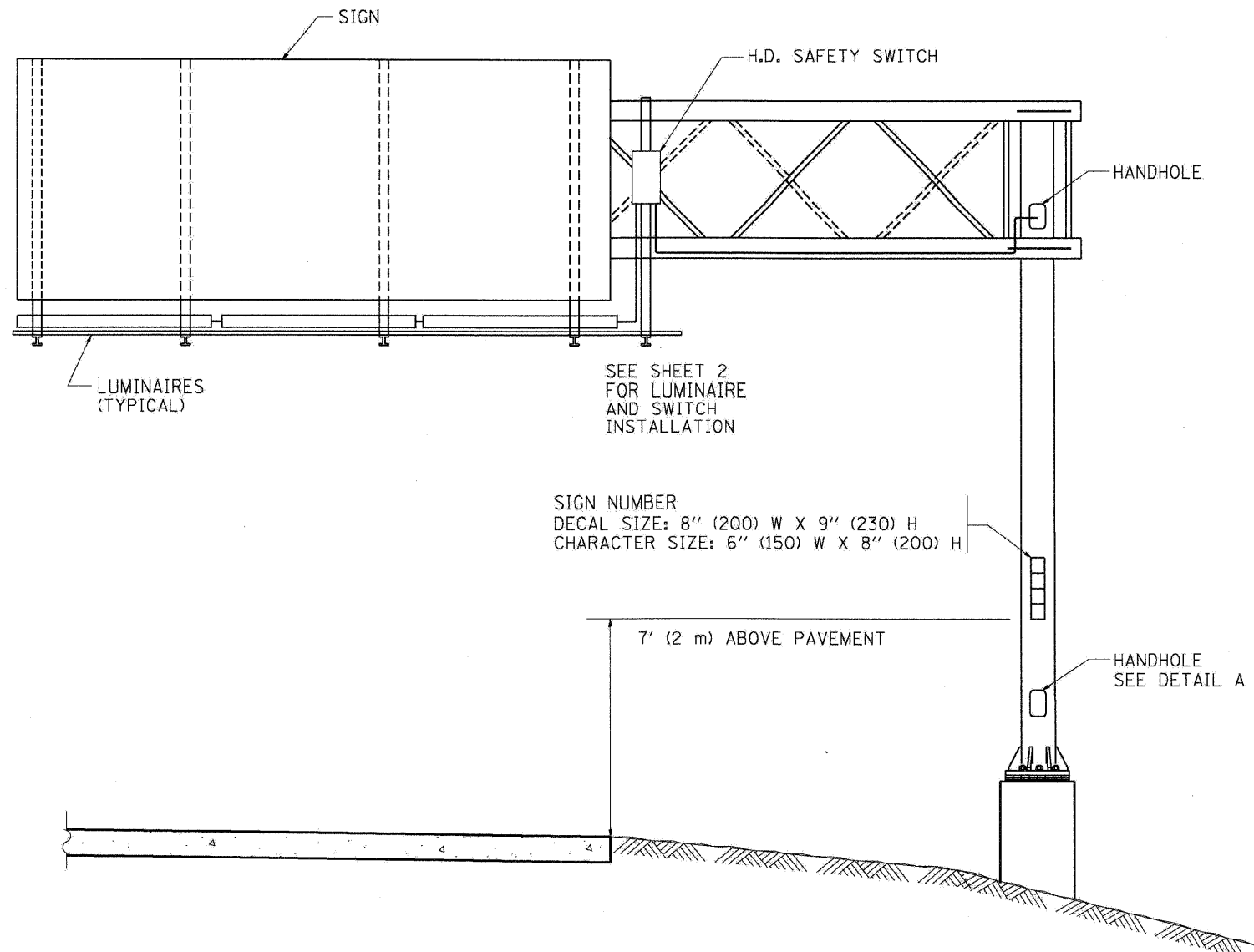
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ELECTRIC CONNECTION TO SIGN STRUCTURE SPAN TYPE

SCALE: N.T.S. SHEET NO. 6 OF 20 SHEETS STA. TO STA.

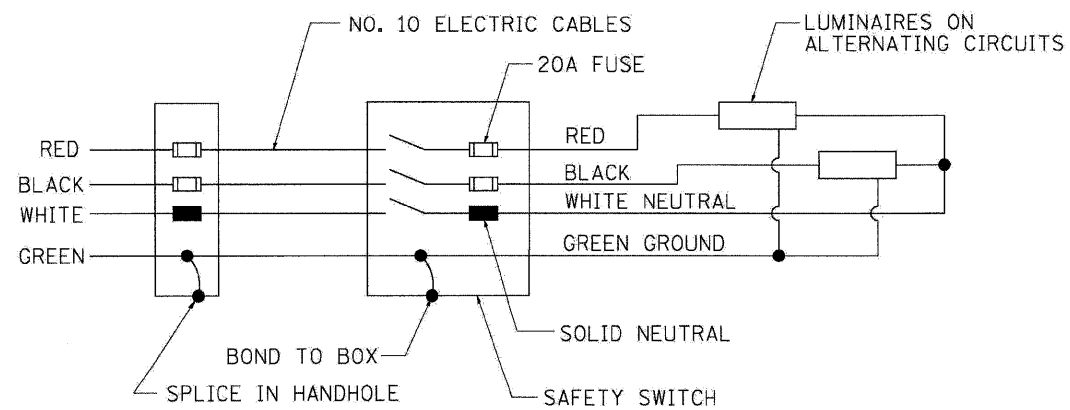
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 313)RS-7	COOK	216	202
CONTRACT NO. 60G53				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

BE-600

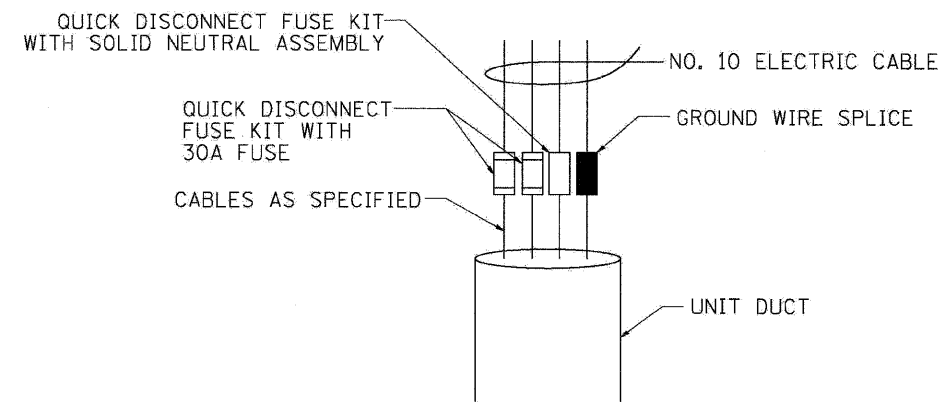


NOTES:

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN
2. ALL CONDUIT ATTACHED TO STRUCTURE SHALL BE GALVANIZED RIGID METALIC CONDUIT, PVC COATED (GRMC, PVC)
3. THE USE OF LIQUID TIGHT METAL CONDUIT (TYPE LFMC) SHALL BE LIMITED TO LOCATIONS WHERE MOVEMENT IS ANTICIPATED AND SHALL NOT EXCEED 5' (1.5M) IN LENGTH
4. ALL WORK INDICATED SHALL BE INCLUDED IN THE PAY ITEM FOR ELECTRIC CONNECTION TO SIGN STRUCTURE
5. THE SAFETY SWITCH SHALL BE LOCATED ON THE SIDE OF THE SIGN STRUCTURE WHICH IS CLOSEST TO THE SHOULDER, OR EDGE OF PAVEMENT.



WIRING DIAGRAM



DETAIL A

BE-601

FILE NAME =	DESIGNED - AJP	REVISED -
...prpln.ABC.C3.D1.BE-601A.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

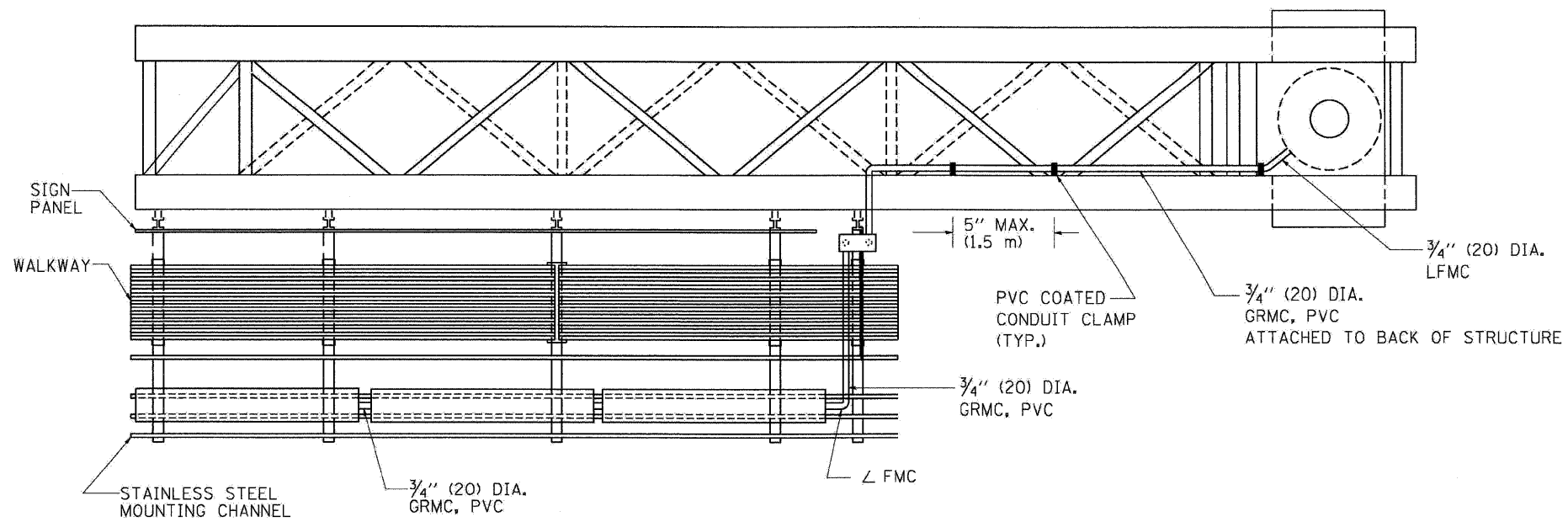
benesch

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

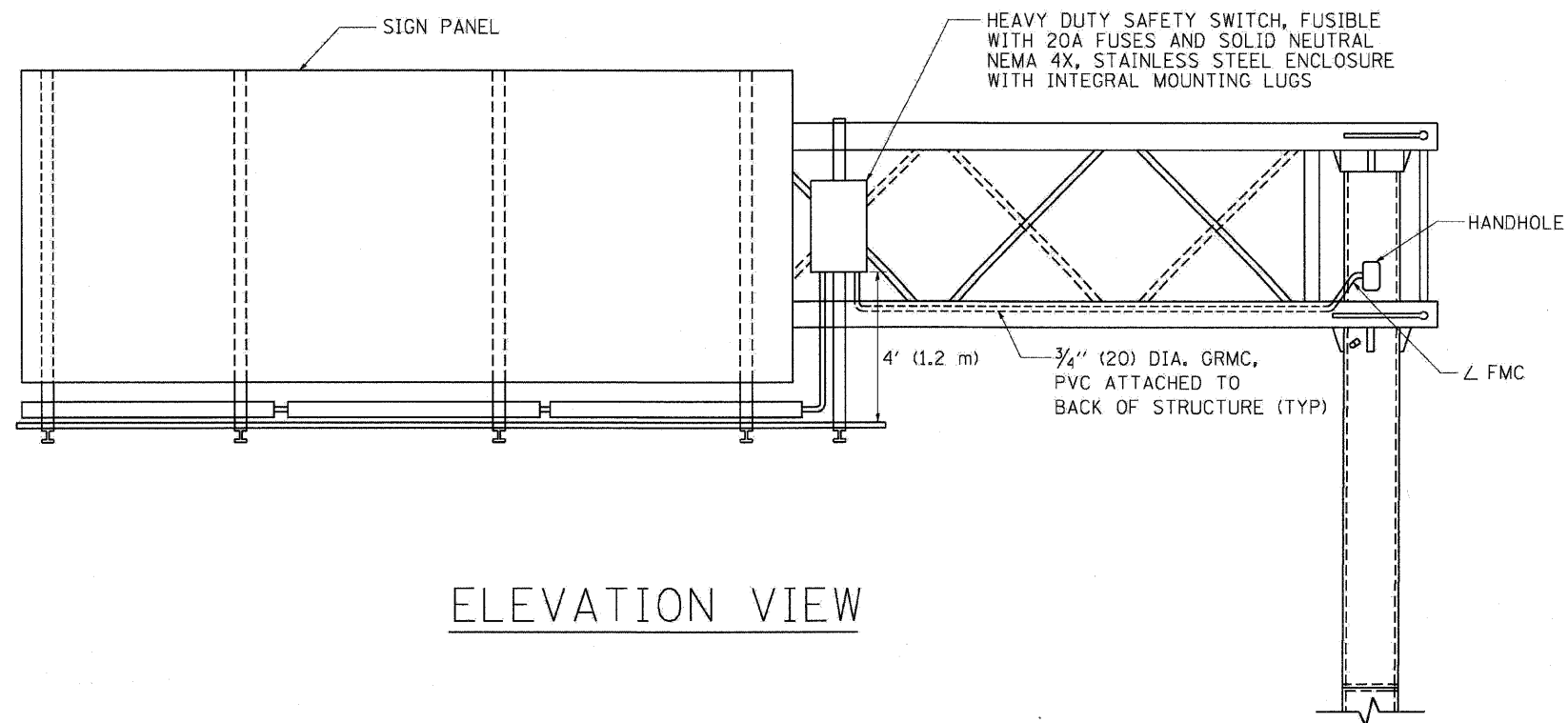
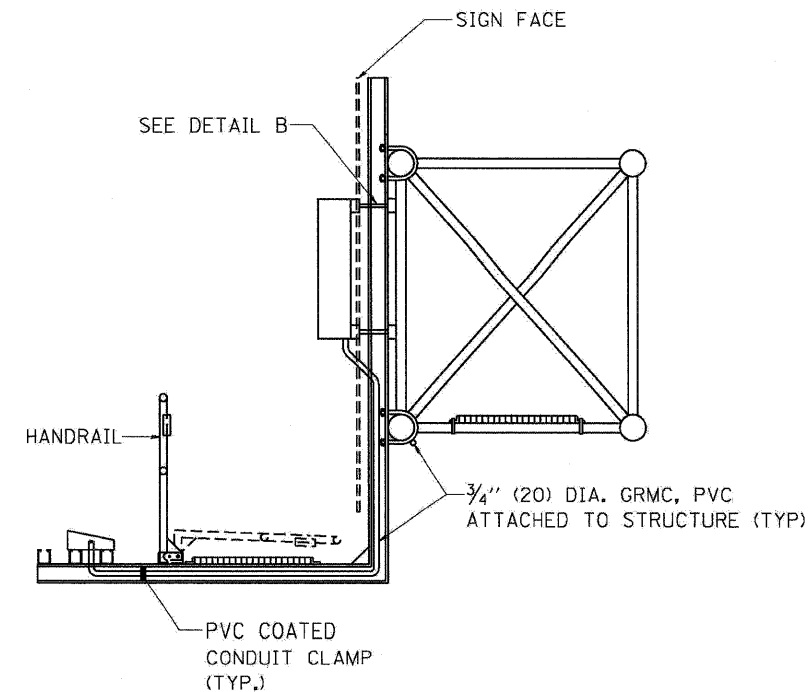
ELECTRIC CONNECTION TO SIGN STRUCTURE CANTILEVER TYPE

SCALE: N.T.S. SHEET NO. 7 OF 20 SHEETS STA. TO STA.

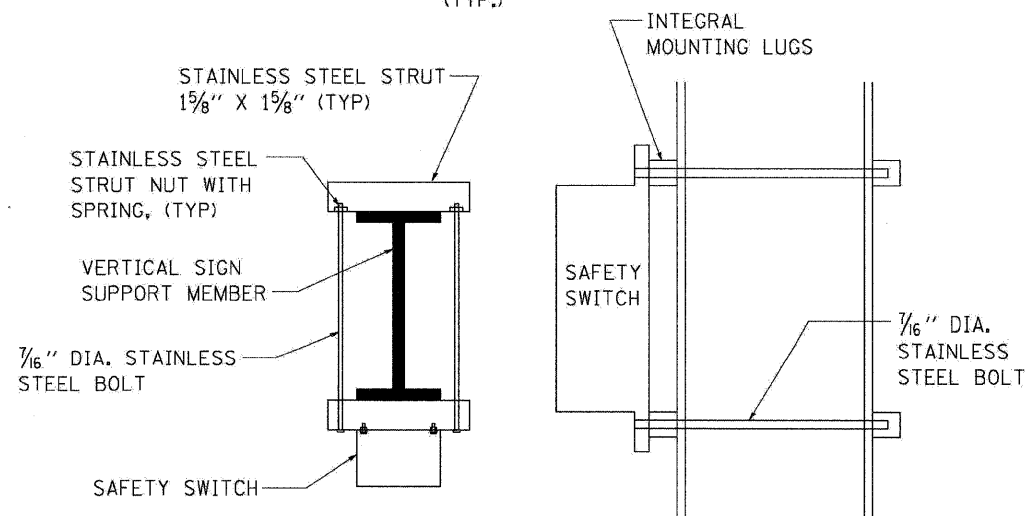
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	203
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G53	



TOP VIEW



ELEVATION VIEW



TOP VIEW

SIDE VIEW

DETAIL B

BE-601

FILE NAME -	DESIGNED - AJP	REVISED -
...\\ppln_abc_c3_01_be-601b.dgn	DRAWN - TMB	REVISED -
USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

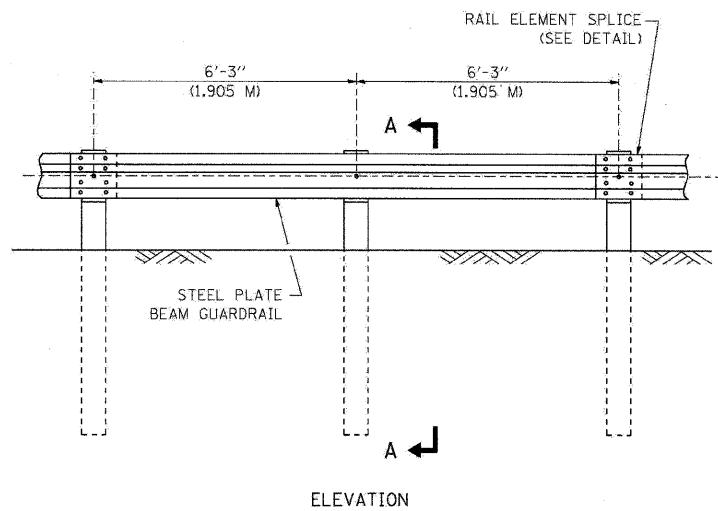
benesch

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

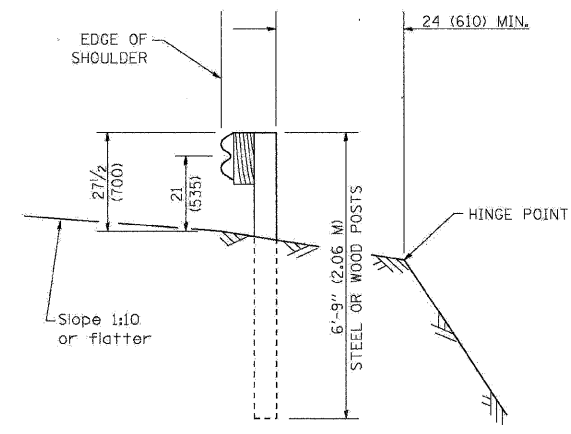
ELECTRIC CONNECTION TO SIGN STRUCTURE CANTILEVER TYPE

SCALE: N.T.S. SHEET NO. 8 OF 20 SHEETS STA. 10 STA.

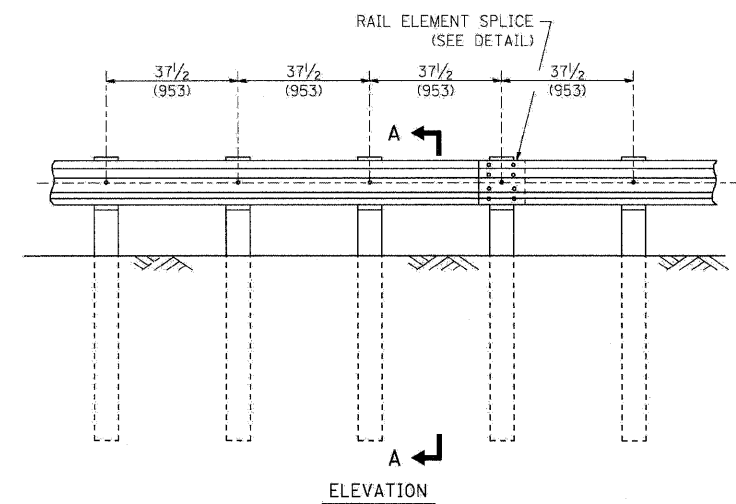
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	204
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60053	



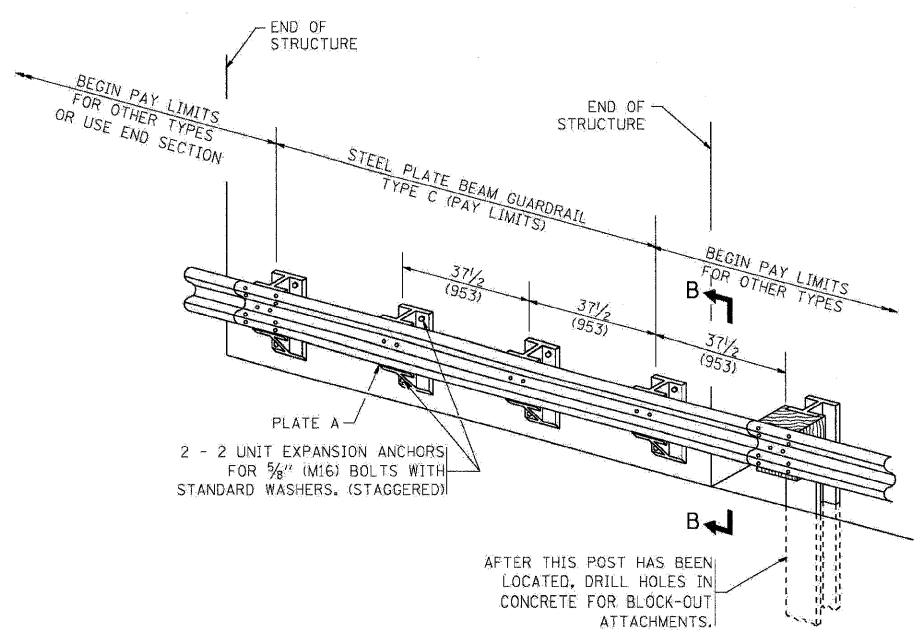
TYPE A
6'-3" (1.905 M) TYPICAL POST SPACING



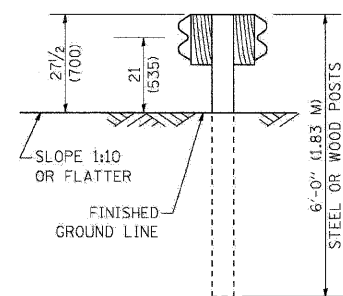
SECTION A-A



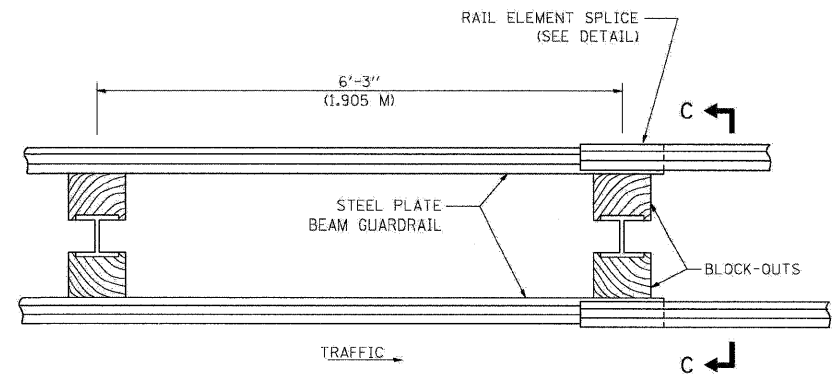
TYPE A
37 1/2 (953) CLOSED POST SPACING



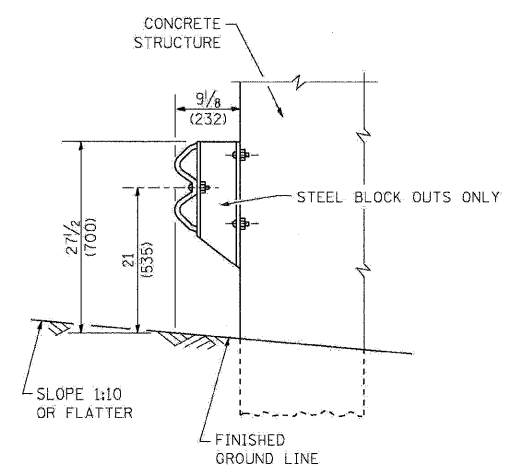
TYPE C
37 1/2 (953) BLOCK-OUT SPACING



SECTION C-C



TYPE D
DOUBLE STEEL PLATE BEAM GUARDRAIL
6'-3" (1.905 M) TYPICAL POST SPACING



SECTION B-B

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

THE EXISTING STEEL POSTS MAY BE DRILLED TO MATCH THE BOLT PATTERN SHOWN HEREIN FOR THE WOOD BLOCK-OUT, OR A NEW STEEL POST SHALL BE PROVIDED.

THIS DETAIL IS APPLICABLE TO THE GUARDRAIL SYSTEM USED PRIOR TO JANUARY 1, 2007. FOR DETAILS ON THE MIDWEST GUARDRAIL SYSTEM, SEE STANDARD 630001.

BM-21

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME = jmajewski	DRAWN - TMB	REVISED -
PLOT DATE = 1/25/2010	CHECKED - JMM	REVISED -
	DATE - 1/25/10	REVISED -

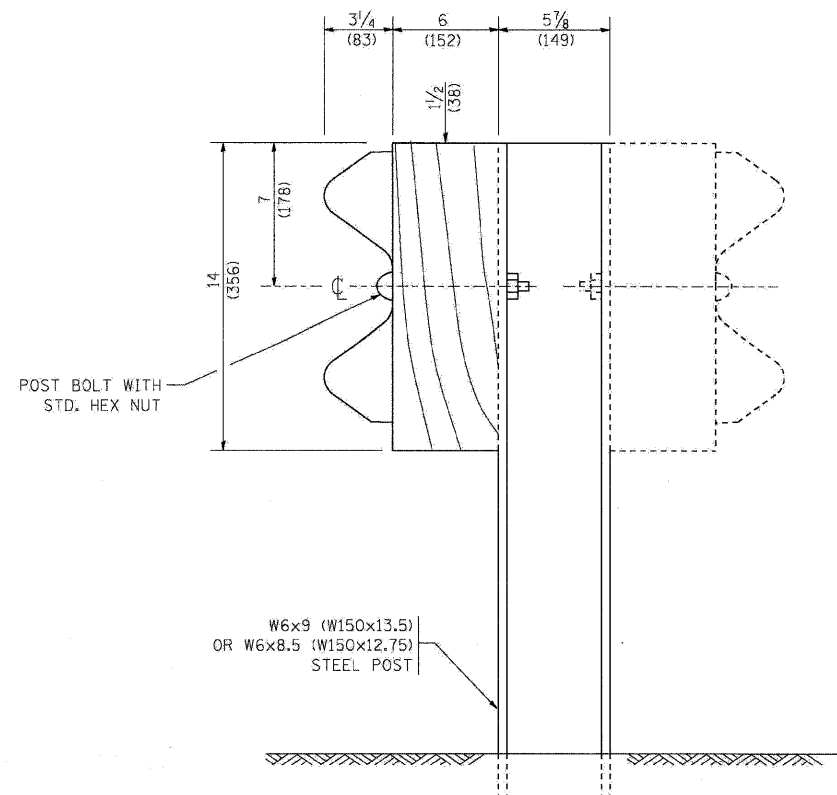
benesch

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

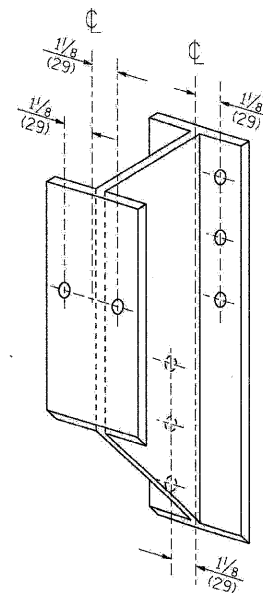
REMOVE AND REERECT GUARDRAIL

SCALE: N.T.S. SHEET NO. 9 OF 20 SHEETS STA. TO STA.

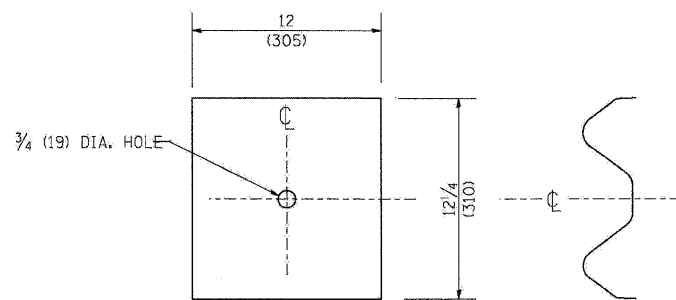
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	205
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60C53	



STEEL POST CONSTRUCTION



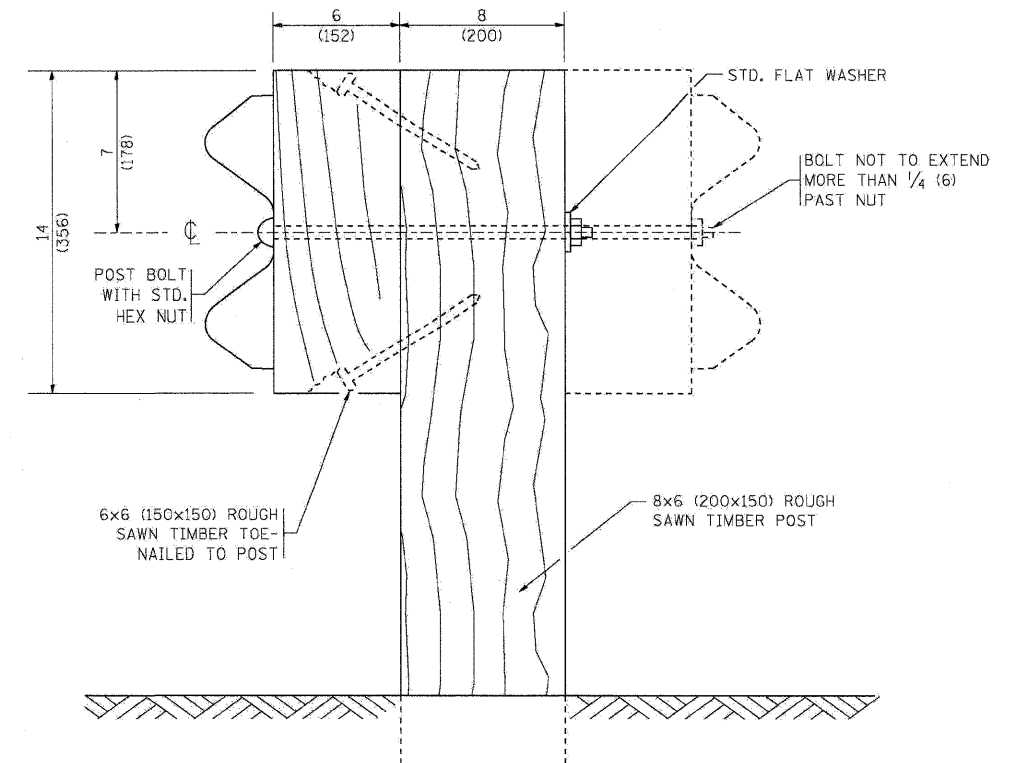
STEEL BLOCK-OUT DETAIL



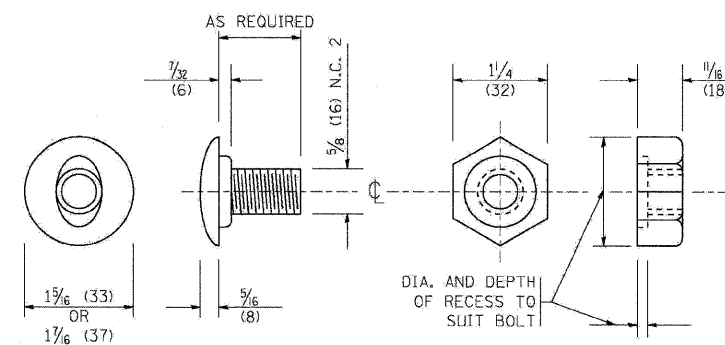
NOTE:

PLATE A SHALL BE PLACED BETWEEN RAIL ELEMENT AND BLOCK-OUT AT NON-SPLICE MOUNTING POINTS ONLY WHEN STEEL BLOCK-OUTS ARE USED.

PLATE A



WOOD POST CONSTRUCTION



POST OR SPLICE BOLT & NUT

BM-21

FILE NAME =	DESIGNED - AJP	REVISED -
...prp1n.ABC.C3.01.BM-21R.dgn	DRAWN - TMB	REVISED -
USER NAME = jma_jwsk1	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2012	DATE - 1/25/10	REVISED -

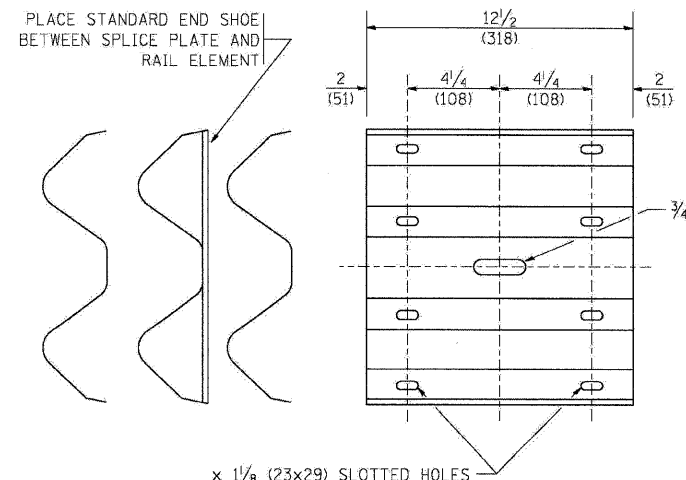
benesch

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVE AND REERECT GUARDRAIL

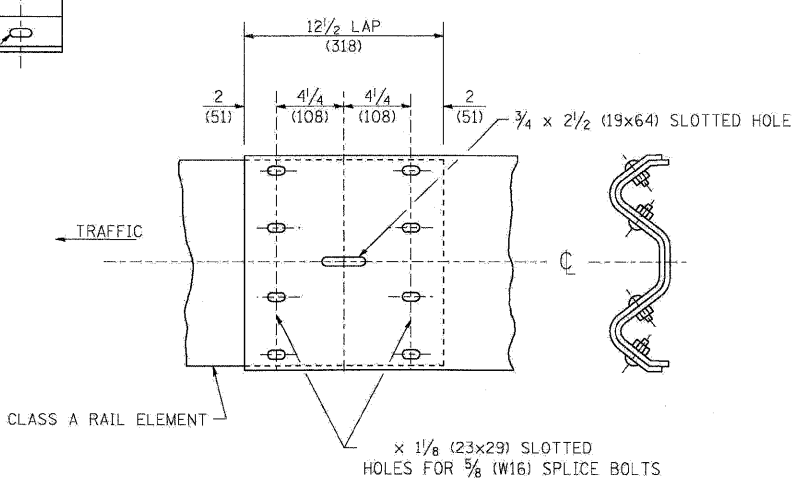
SCALE: N.T.S. SHEET NO. 10 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 313)RS-7	COOK	216	206
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60053	

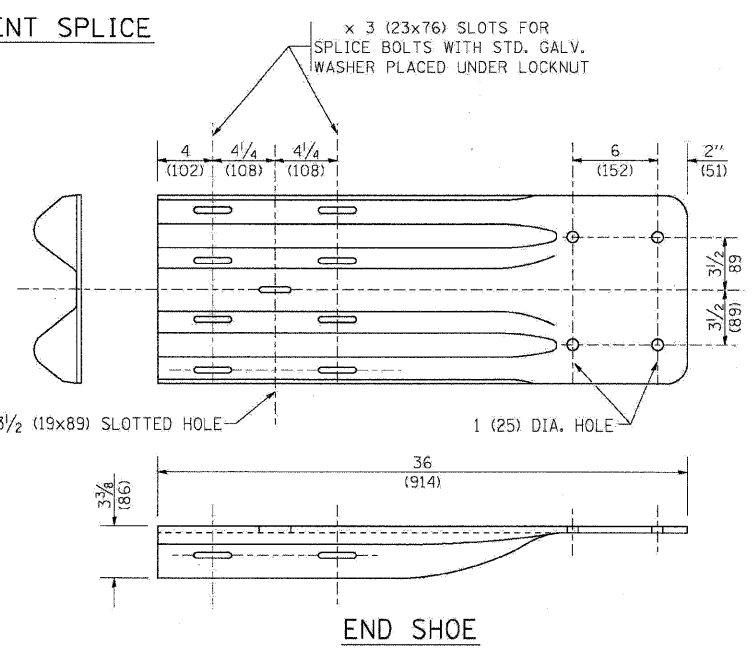
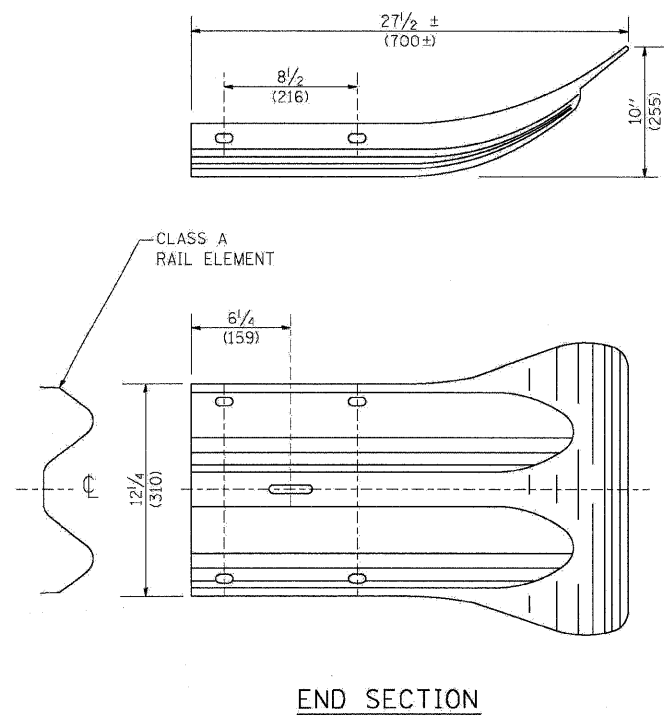


x 1/8 (23x29) SLOTTED HOLES

SPLICE PLATE



RAIL ELEMENT SPLICE

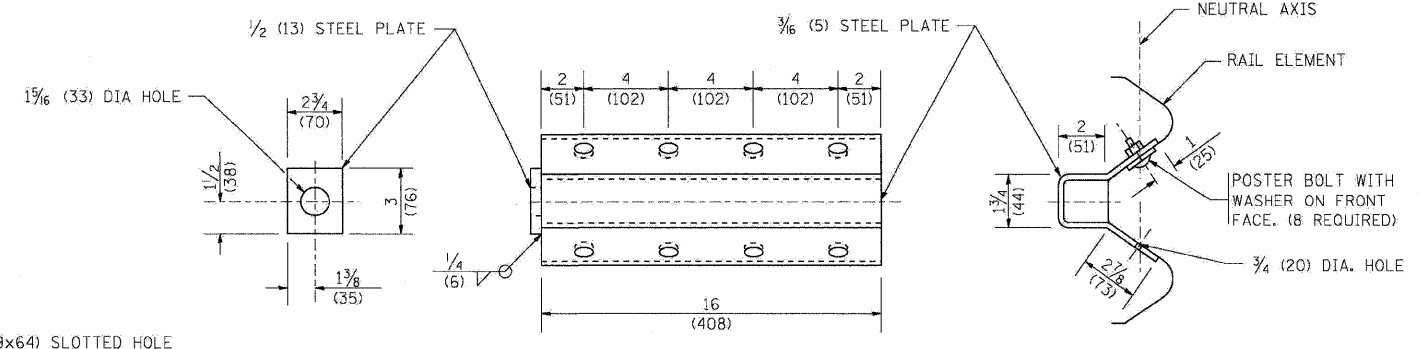


NOTE:

WHEN END SHOE IS ATTACHED TO A BRIDGE PARAPET WHICH HAS AN EXPANSION JOINT, THE BOLTS SHALL BE PROVIDED WITH A LOCKNUT OR DOUBLE NUT AND SHALL BE TIGHTENED ONLY TO A POINT THAT WILL ALLOW GUARDRAIL MOVEMENT.

THE STANDARD END SHOE SHALL BE ATTACHED TO THE CONCRETE WITH PRE-DRILLED OR SELF-DRILLING ANCHOR BOLTS. THE ANCHOR CONE SHALL BE SET FLUSH WITH THE SURFACE OF THE CONCRETE.

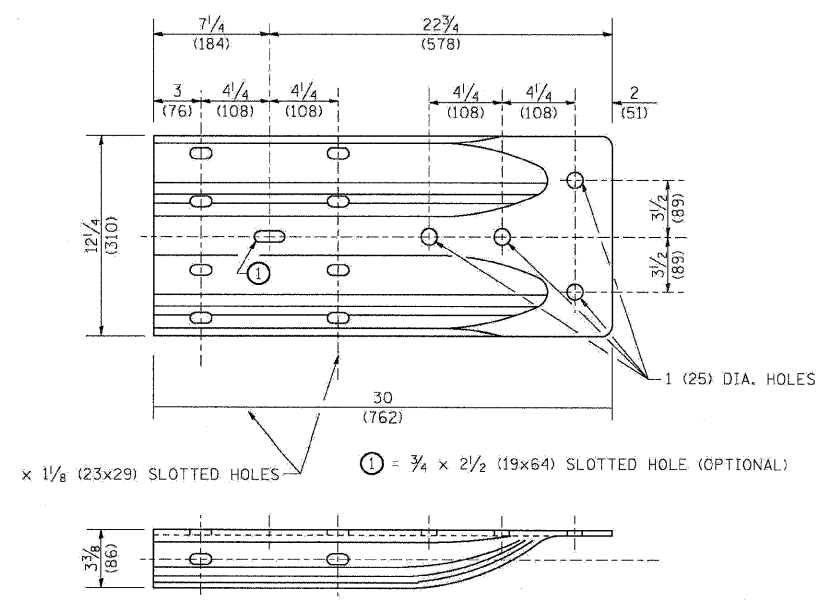
EXTERNALLY THREADED STUDS PROTRUDING FROM THE SURFACE OF THE CONCRETE WILL NOT BE PERMITTED.



NOTE:

ANCHOR PLATE T SHALL BE USED TO ATTACH CABLE ASSEMBLY TO GUARDRAIL WHEN REQUIRED ON TRAFFIC BARRIER TERMINALS.

ANCHORE PLATE T DETAILS



ALTERNATE END SHOE

FILE NAME =	DESIGNED - AJP	REVISED -
...prepIn_ABC_C3_01_BM-21C.dgn	DRAWN - TMB	REVISED -
USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

benesch

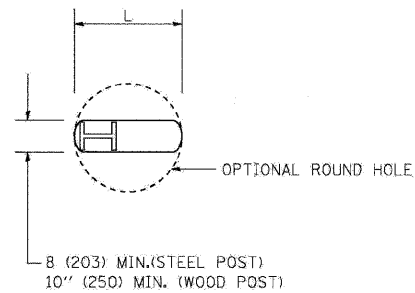
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVE AND REERECT GUARDRAIL

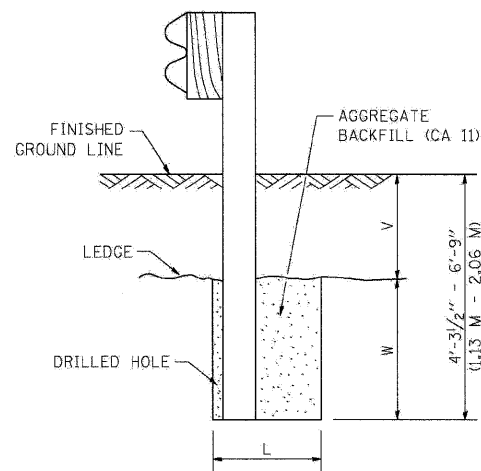
SCALE: N.T.S. SHEET NO. 11 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	207
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G53	

BM-21



PLAN

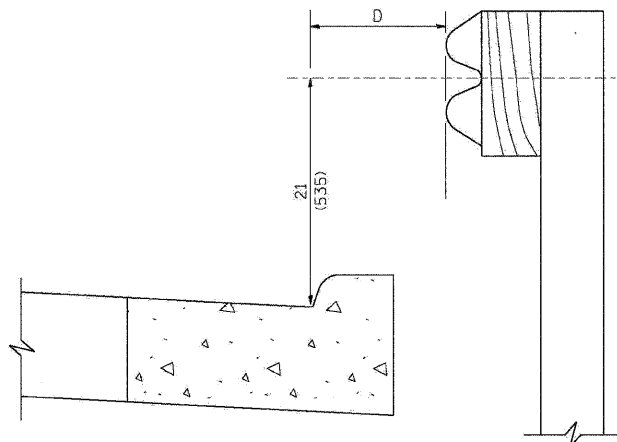


NOTE:

LEDGE LINE IS TOP OF ROCK LEDGE OR HARD SLAG FILL.

ELEVATION

FOOTING FOR POST WHEN IMPERVIOUS MATERIAL IS ENCOUNTERED

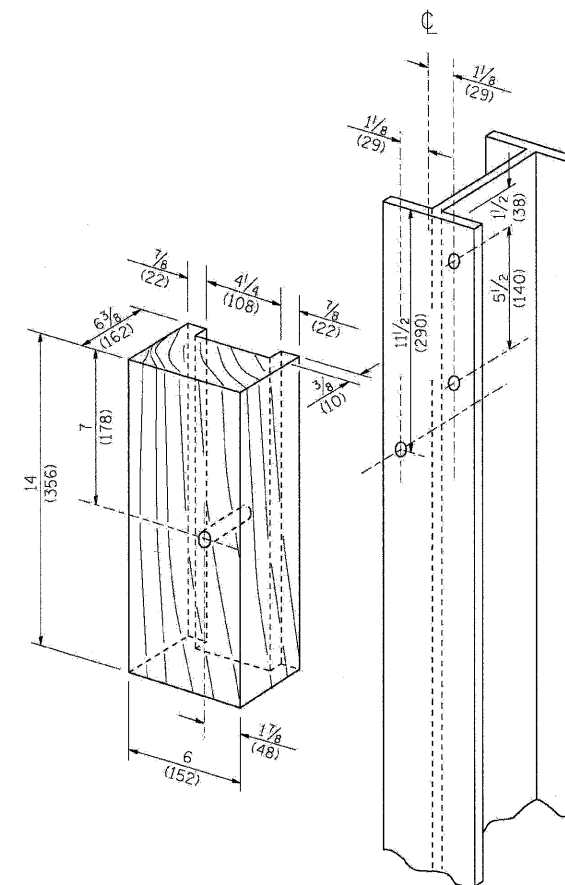


NOTE:

IF IT IS NECESSARY FOR D TO BE MORE THAN 12 (300) AND LESS THAN 10'-0" (3.0 M) TYPE M-2 (M-5) CURB AND GUTTER (STD. 606001) SHALL BE USED IN FRONT OF AND IN ADVANCE OF THE GUARDRAIL.

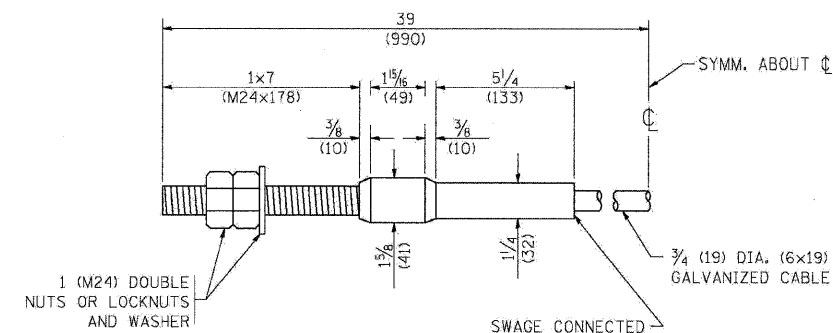
GUARDRAIL PLACED BEHIND CURB

(D = 0 DESIRABLE TO 12 (300) MAXIMUM)



WOOD BLOCK-OUT AND STEEL POST DETAILS

V	W	L	
		STEEL POST	WOOD POST
0 - 18 (0 - 460)	24 (610)	21 (530)	23 (580)
>18 - 41.5 (> 460 - 825)	12 (305)	8 (203)	10 (250)
>41.5 - 53.5 (> 825 - 1.13 M)	12 - 0 (350 - 0)	8 (203)	10 (250)



CABLE ASSEMBLY

(40,000 LBS (18,100 KG) MIN. BREAKING STRENGTH)
TIGHTEN TO TAUT TENSION

FILE NAME =	DESIGNED - AJP	REVISED -
...\\probn-abc.c3.dl.bm-21.c.dgn	DRAWN - TMB	REVISED -
USER NAME = jmojewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

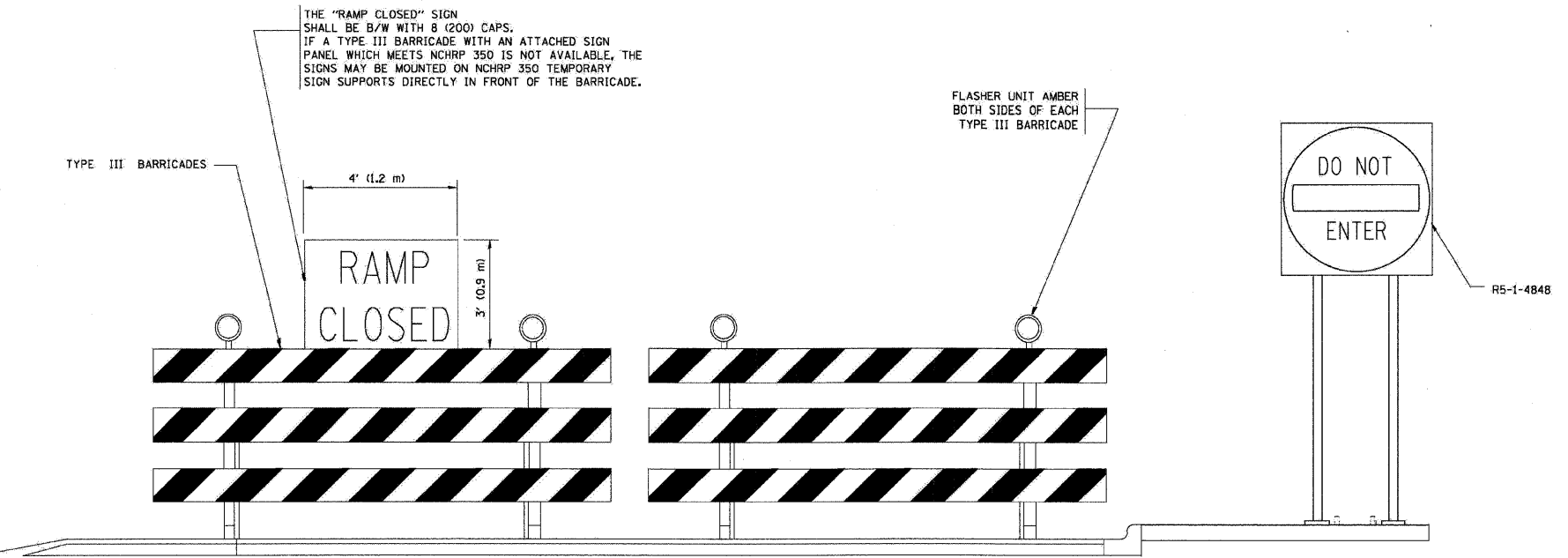
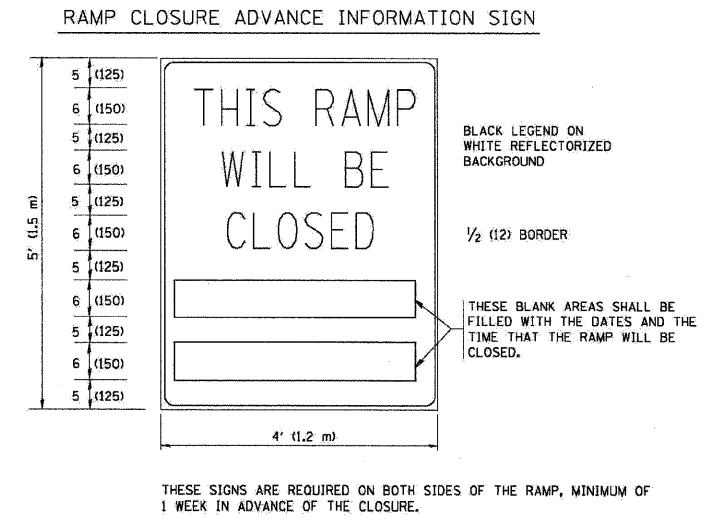
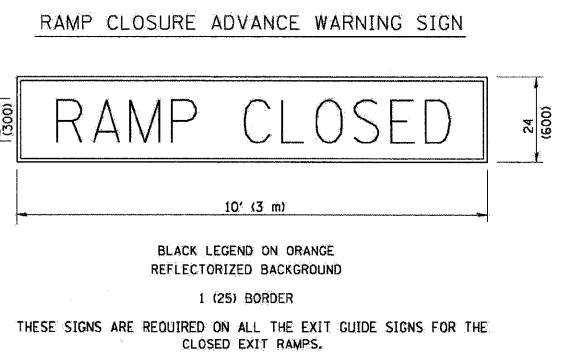
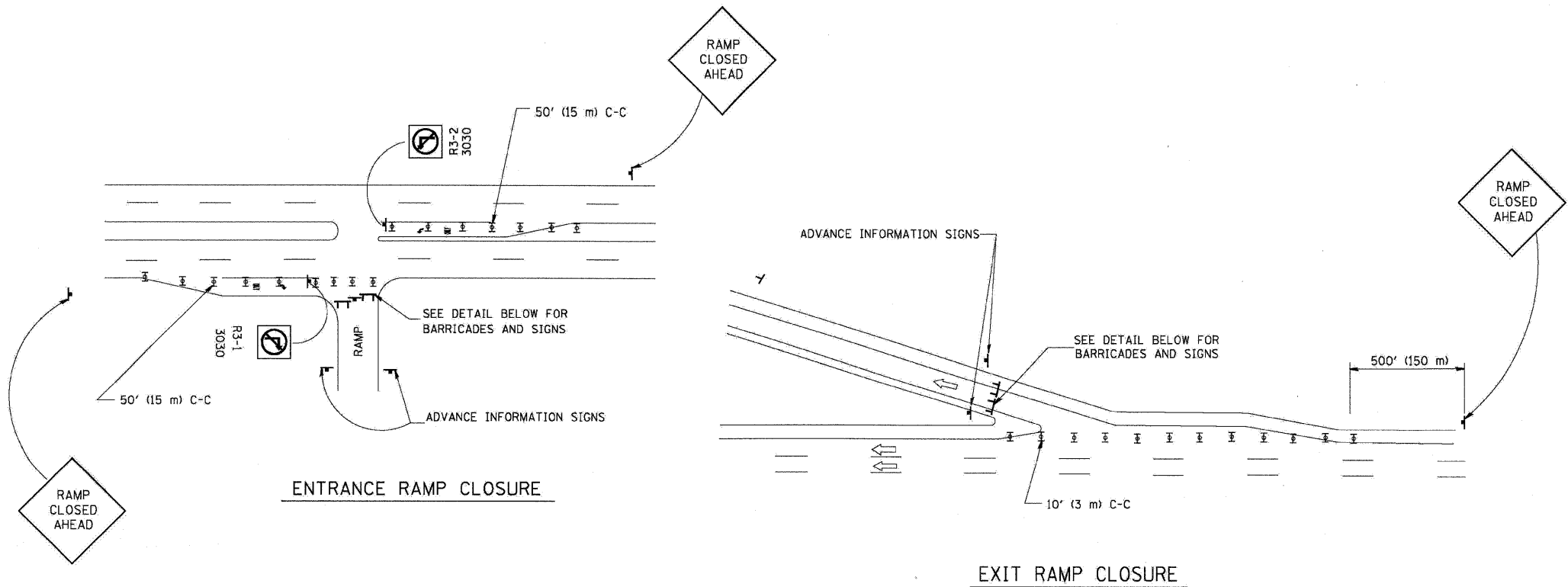
benesch

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVE AND REERECT GUARDRAIL

SCALE: N.T.S. SHEET NO. 12 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	208
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G53	



THE "RAMP CLOSED" SIGN SHALL BE B/W WITH 8 (200) CAPS. IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.

DETAIL FOR REQUIRED BARRICADES & SIGNS

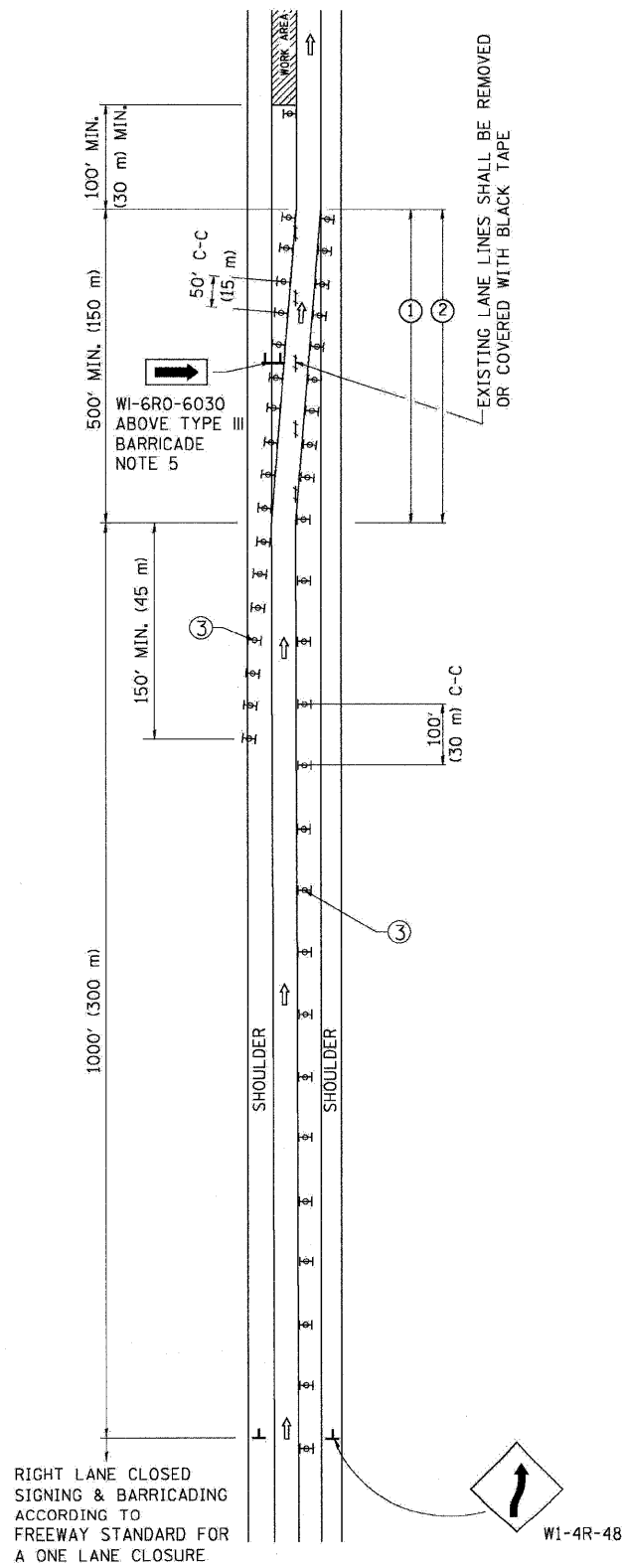
- SYMBOLS**
- ▬ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
 - ⊞ TYPE III BARRICADE WITH FLASHING LIGHT

- GENERAL NOTES:**
1. CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II BARRICADES DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (700) HIGH.
 2. STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
 3. A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES.
 4. ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED.
 5. THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).
 6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
 7. THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED TWENTY FOUR (24) HOURS IN LENGTH.

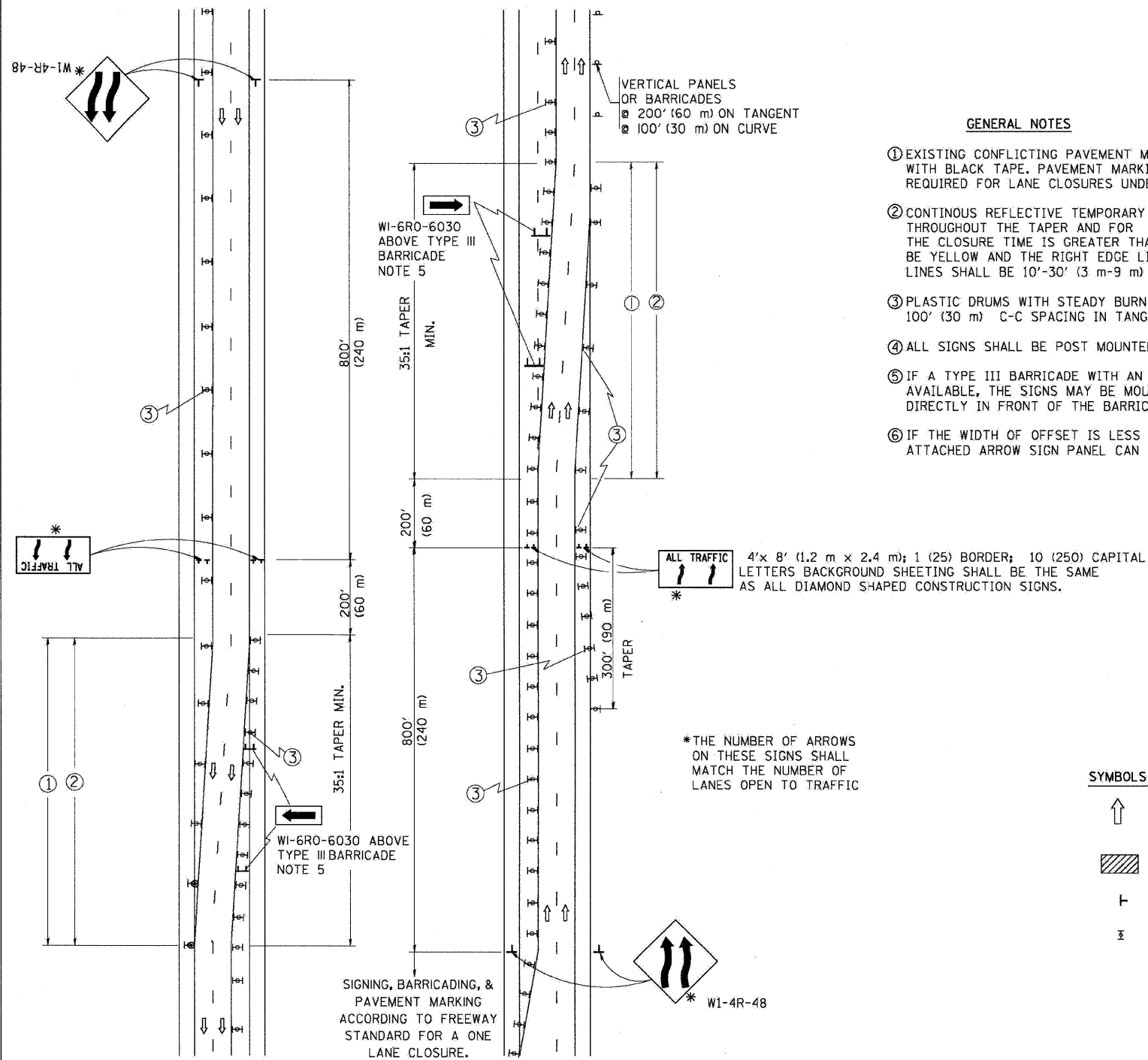
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	DESIGNED - AJP	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ENTRANCE AND EXIT RAMP CLOSURE DETAILS		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME = jmajewski	DRAWN - TMB	REVISED -			290	(2727, ETC., 3131)RS-7	COOK	216	209		
PLT DATE = 1/25/2010	CHECKED - JMM	REVISED -			SCALE: N.T.S. SHEET NO. 13 OF 20 SHEETS STA. TO STA.		CONTRACT NO. 60053		FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	
	DATE - 1/25/10	REVISED -									

SINGLE LANE WEAVE



MULTI-LANE WEAVE



GENERAL NOTES

- ① EXISTING CONFLICTING PAVEMENT MARKING LINES SHALL BE REMOVED OR COVERED WITH BLACK TAPE. PAVEMENT MARKING REMOVAL OR BLACK TAPE SHALL NOT BE REQUIRED FOR LANE CLOSURES UNDER 24 HOURS IN DURATION.
- ② CONTINUOUS REFLECTIVE TEMPORARY PAVEMENT MARKING TAPE SHALL BE PLACED THROUGHOUT THE TAPER AND FOR 300' (90 m) ALONG SIDE THE WORK AREA WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS, THE LEFT EDGE LINE SHALL BE YELLOW AND THE RIGHT EDGE LINE SHALL BE WHITE. FOR MULTI-LANE WEAVE LANE LINES SHALL BE 10'-30' (3 m-9 m) SKIP DASH, WHITE.
- ③ PLASTIC DRUMS WITH STEADY BURN LIGHTS AT 50' (15 m) C-C SPACING IN TAPERS AND 100' (30 m) C-C SPACING IN TANGENTS.
- ④ ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
- ⑤ IF A TYPE III BARRICADE WITH AN ATTACHED SIGN PANEL WHICH MEETS NCHRP 350 IS NOT AVAILABLE, THE SIGNS MAY BE MOUNTED ON NCHRP 350 TEMPORARY SIGN SUPPORTS DIRECTLY IN FRONT OF THE BARRICADE.
- ⑥ IF THE WIDTH OF OFFSET IS LESS THAN 6' THEN THE TYPE III BARRICADE WITH ATTACHED ARROW SIGN PANEL CAN BE ELIMINATED IN THE TAPER AREAS.

SYMBOLS

- ↑ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- ⊥ SIGN ON PORTABLE OR PERMANENT SUPPORT
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURNING LIGHT

*THE NUMBER OF ARROWS ON THESE SIGNS SHALL MATCH THE NUMBER OF LANES OPEN TO TRAFFIC

TC-09

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	DESIGNED - AJP	REVISED -
...prp\in\ABC\C3\01\TC-9.dgn	DRAWN - TMB	REVISED -
USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

benesch

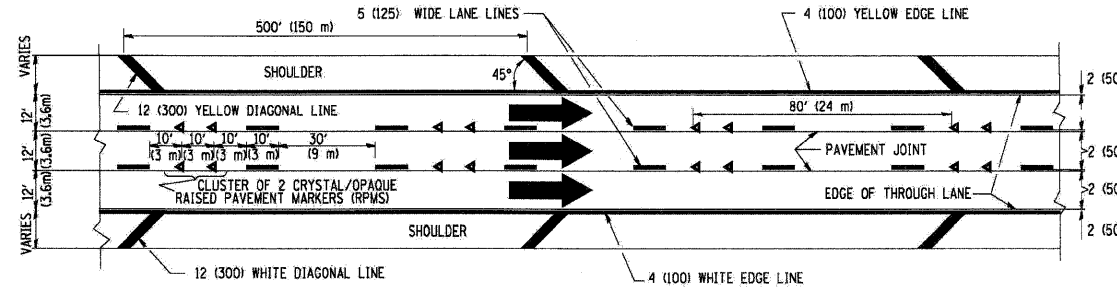
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

FREEWAY SINGLE & MULTI-LANE WEAVE

SCALE: N.T.S. SHEET NO. 14 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	210
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 60G53	

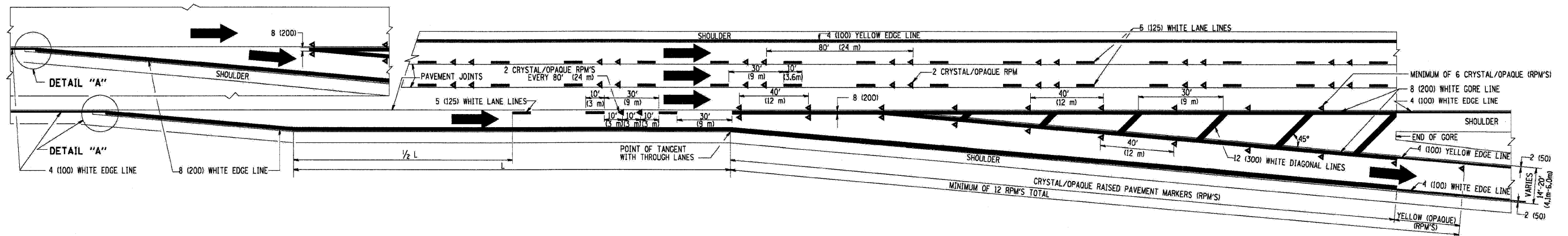
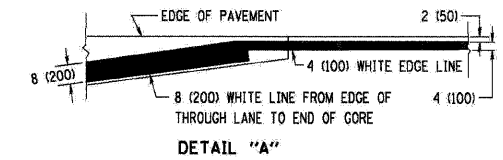
THE DIAGONAL LINES SHALL BE SPACED AT 40' (12 m) C-C ACROSS ALL STRUCTURES WHICH ARE 500' (150 m) OR LESS IN LENGTH
 THE DIAGONAL LINES ARE NOT REQUIRED ON SHOULDERS WHICH ARE 6' (1.8 m) OR LESS IN WIDTH



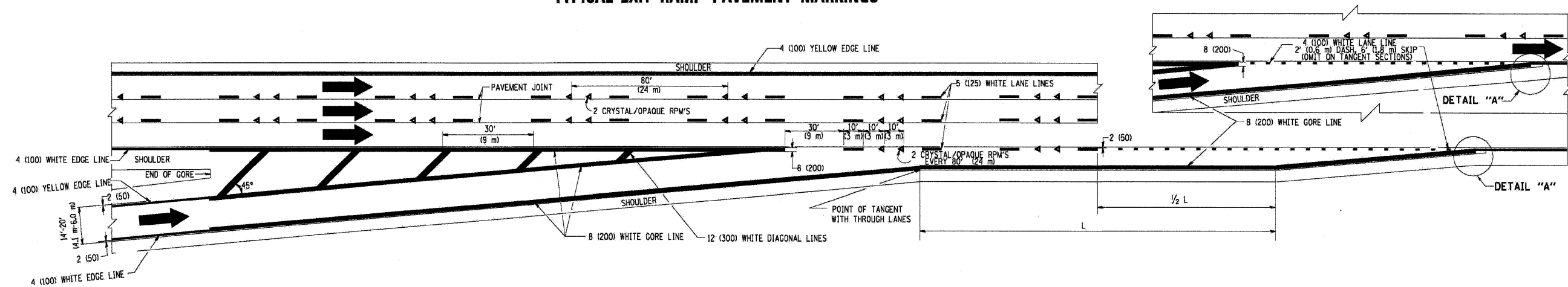
TYPICAL EDGE LINES & LANE LINES

NOTES:

1. THERMO PLASTIC PAVEMENT MARKING LINE SHALL BE USED FOR THE EDGE LINES, GORE LINES, AND DIAGONAL LINES ON BITUMINOUS PAVEMENT ONLY.
2. PREFORMED PLASTIC TYPE B PAVEMENT MARKING LINE SHALL BE USED FOR ALL LANE LINES ON BITUMINOUS PAVEMENT
3. POLYUREA PAVEMENT MARKING SHALL BE USED FOR ALL MARKINGS ON PCC

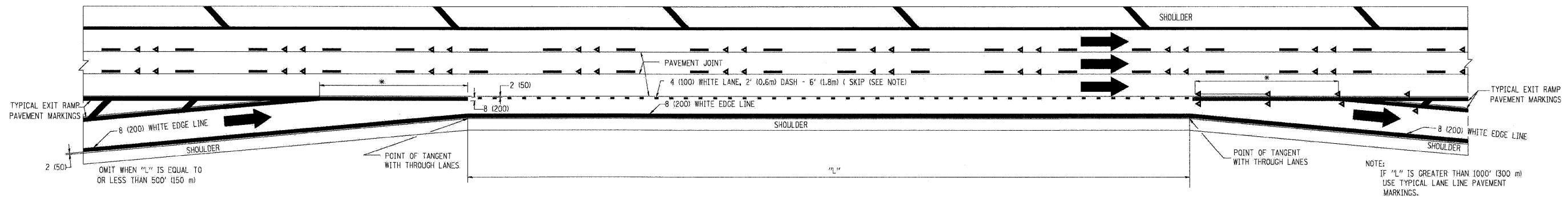


TYPICAL EXIT RAMP PAVEMENT MARKINGS

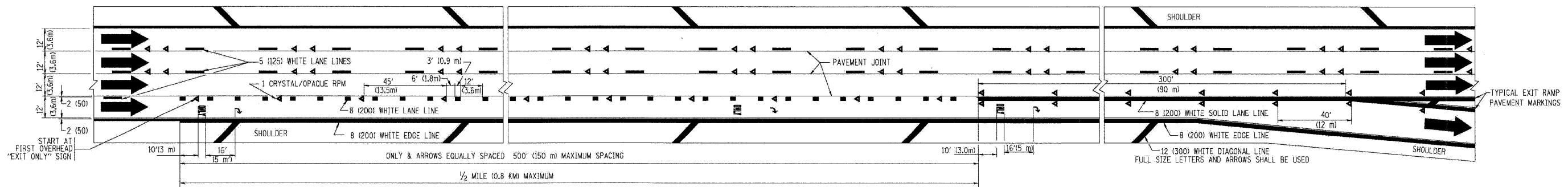


TYPICAL ENTRANCE RAMP PAVEMENT MARKINGS

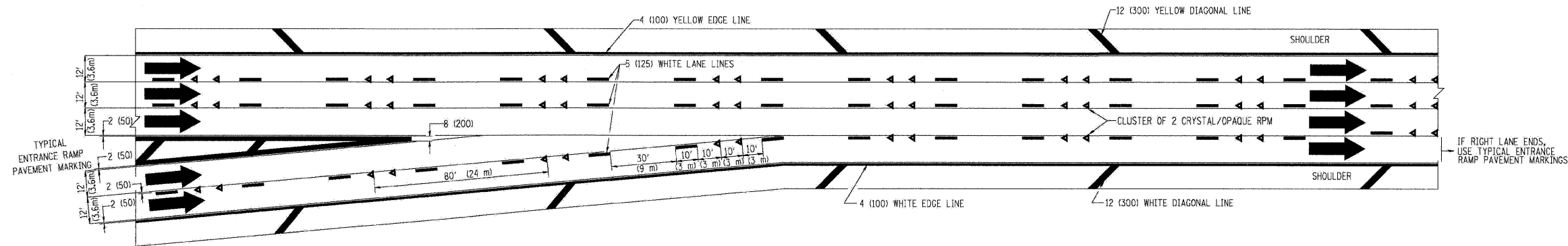
FILE NAME =	DESIGNED - AJP	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MULTI-LANE FREEWAY PAVEMENT MARKING			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
USER NAME =	DRAWN - TMB	REVISED -			290	(2727, ETC., 313)RS-7	COOK	216	211				
CHECKED - JMM	DATE - 1/25/10	REVISED -			SCALE: N.T.S.		SHEET NO. 15 OF 20 SHEETS		STA. TO STA.		CONTRACT NO. 60C53		
PLOT DATE = 1/25/2012					FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT						



TYPICAL ENTRANCE/EXIT RAMP COMBINATION PAVEMENT MARKINGS



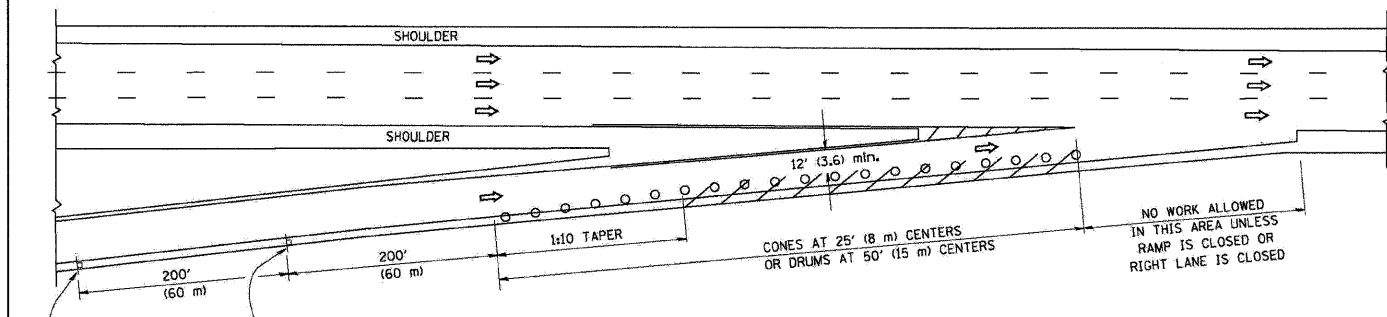
TYPICAL EXIT ONLY LANE PAVEMENT MARKINGS



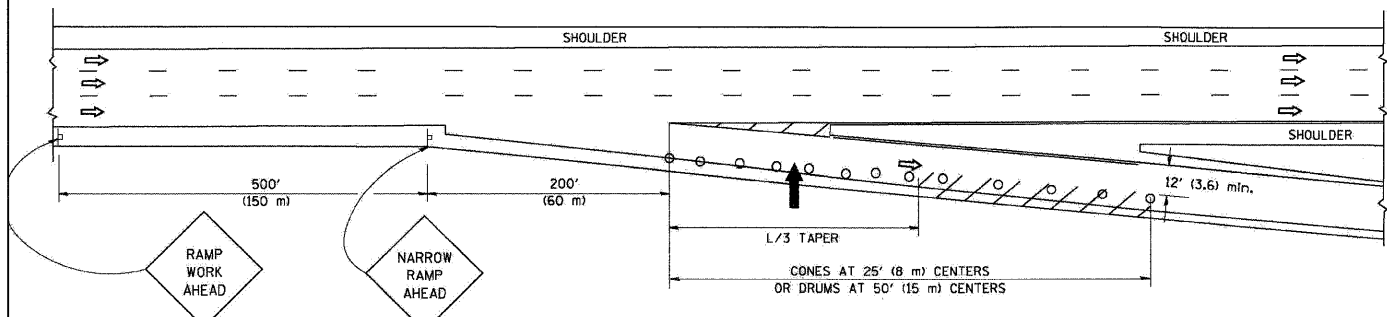
TYPICAL TWO LANE ENTRANCE RAMP PAVEMENT MARKINGS

FILE NAME =	DESIGNED - AJP	REVISED -	benesch	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MULTI-LANE FREEWAY PAVEMENT MARKING			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
USER NAME = jma_ewaki	DRAWN - TMB	REVISED -			290	(2727, ETC., 313)RS-7	COOK	216	212			
PLOT DATE = 1/25/2010	CHECKED - JMM	REVISED -			SCALE: N.T.S. SHEET NO. 16 OF 20 SHEETS STA. TO STA.			CONTRACT NO. 60C53				
	DATE - 1/25/10	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							

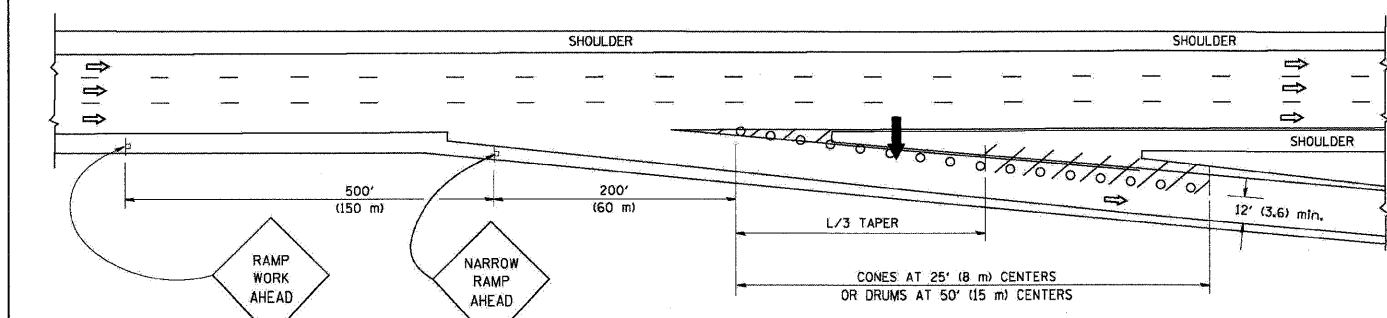
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

- ARROWBOARD
- WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

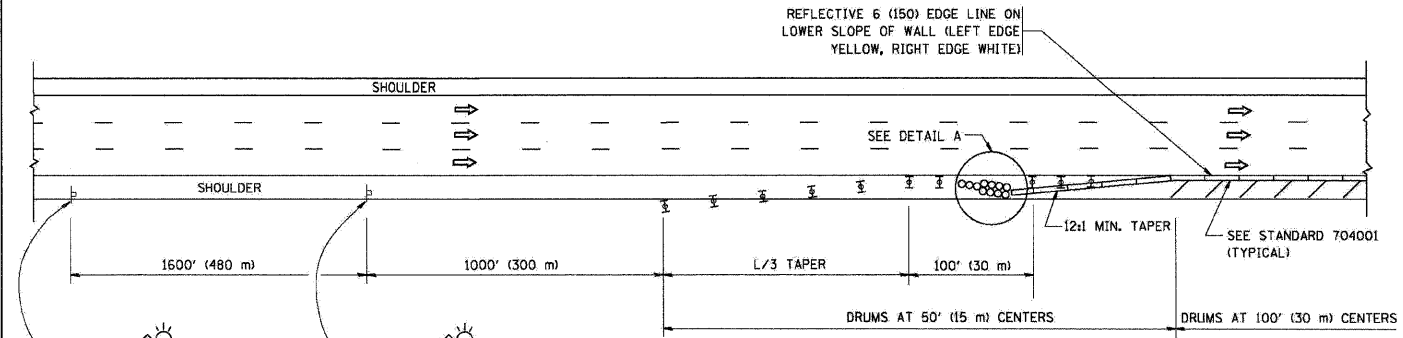
GENERAL NOTES

1. THE "L" DISTANCE EQUALS:

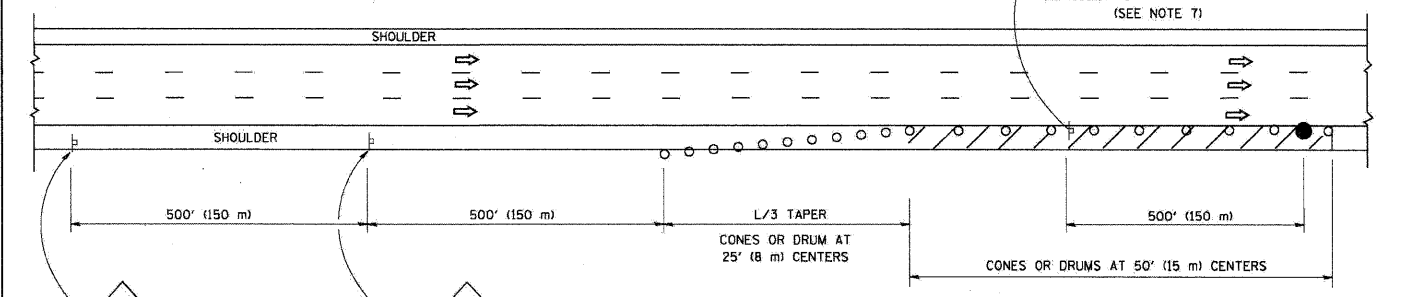
SPEED LIMIT		FORMULAS
45 mph (80 km/h)	METRIC	ENGLISH
OR GREATER:	$L=0.65(W)(S)$	$L=(W)(S)$

W = WIDTH OF OFFSET IN FEET (METERS)
S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS



PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

ARRAY DESIGN PER MANUFACTURER TO BE NCHRP 350 COMPLIANT FOR POSTED SPEED.

DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME = jmojewski	DRAWN - TMB	REVISED -
PLOT DATE = 1/25/2012	CHECKED - JMM	REVISED -
	DATE - 1/25/10	REVISED -

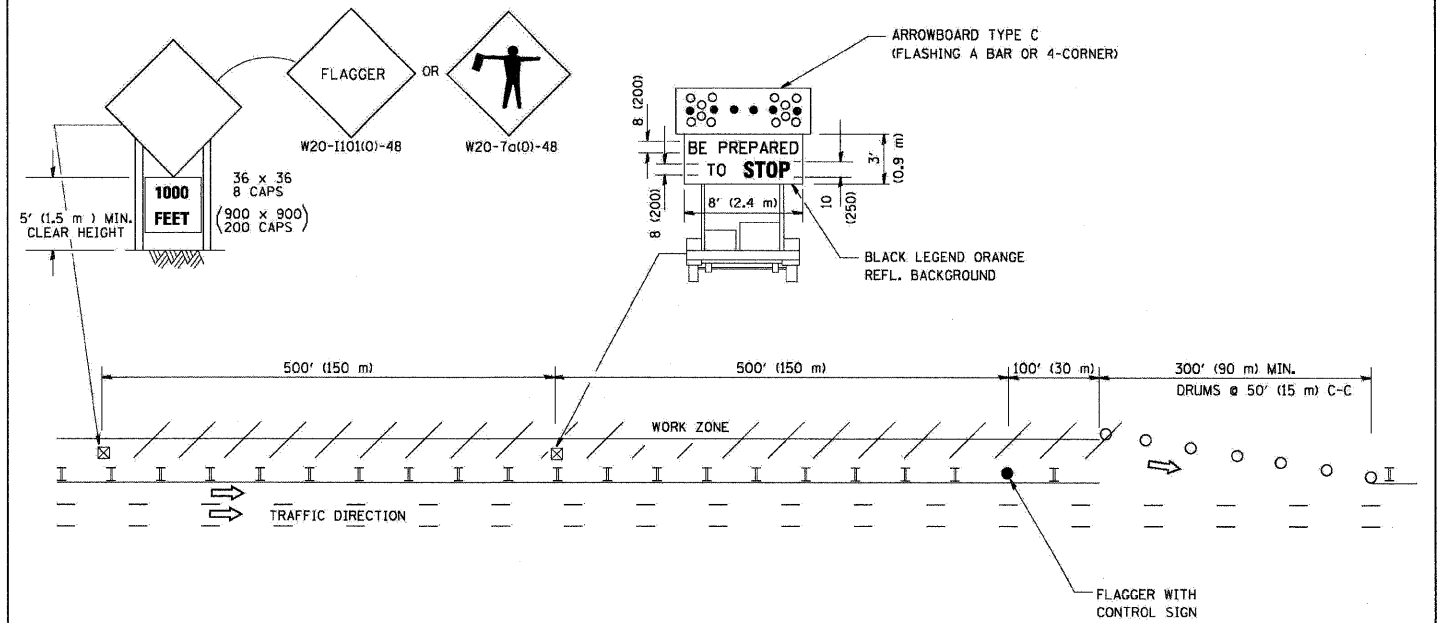
benesch

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

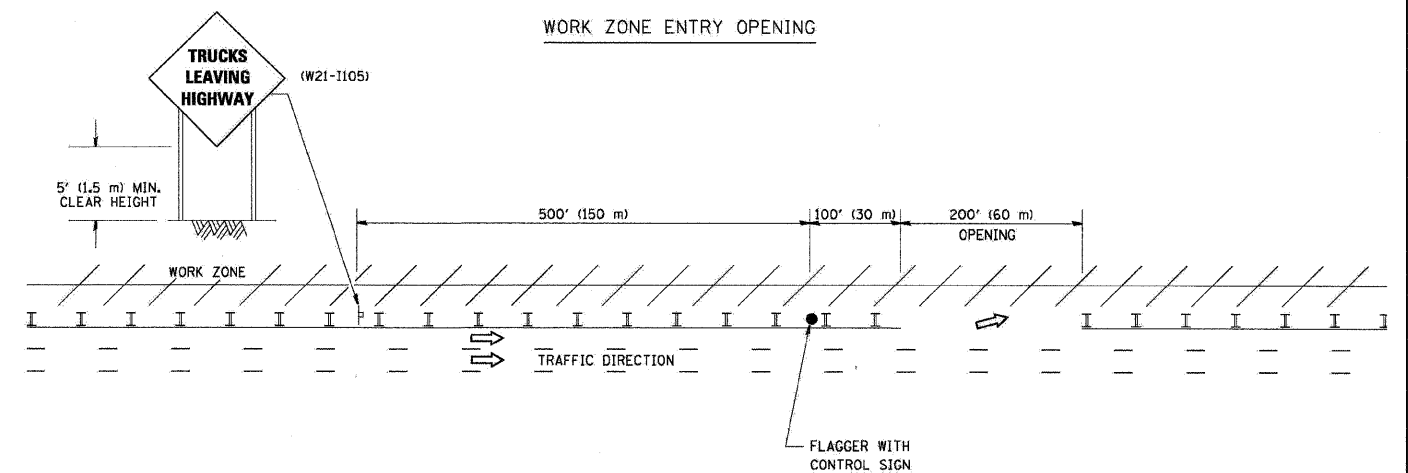
SCALE: N.T.S.		SHEET NO. 17 OF 20 SHEETS		STA. TO STA.		TRAFFIC CONTROL FOR SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						290	(2727, ETC., 313)RS-7	COOK	216	213		
						CONTRACT NO. 60G53		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SIGNING FOR FLAGGING OPERATIONS AT WORK ZONE OPENINGS

WORK ZONE EXIT OPENING



WORK ZONE ENTRY OPENING



NOTES:

1. The Arrowboard, the Flagger Ahead trailer mounted sign, and the Trucks Leaving Highway sign shall be removed or turned away from traffic and the exit and entry openings shall be closed when the flagging operation ceases.
2. Work Zone Exit Openings should be a minimum of one half mile apart.
3. Exiting the work zone at any place other than at a Work Zone Exit Opening will be prohibited.
4. All vehicles shall enter the work zone at entry openings, using their turn signals to warn motorists

TC-18

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	DESIGNED - AJP	REVISED -
...\\ppp1n-abc_c9_d1-TC-18.dgn	DRAWN - TMB	REVISED -
USER NAME = jmajewski	CHECKED - JMM	REVISED -
PLCT DATE = 1/25/2010	DATE - 1/25/10	REVISED -

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SIGNING FOR FLAGGING OPERATIONS AT
WORK ZONE OPENINGS**

SCALE: N.T.S. SHEET NO. 18 OF 20 SHEETS STA. TO STA.

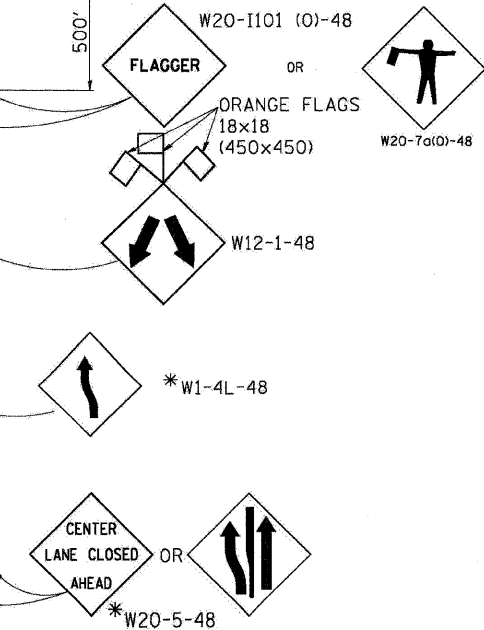
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	214
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 60G53		

CENTER LANE CLOSURE

TYPE I CHECK BARRICADES AT 100' (30 m) CENTERS

DRUMS AT 50' (15 m) CENTERS

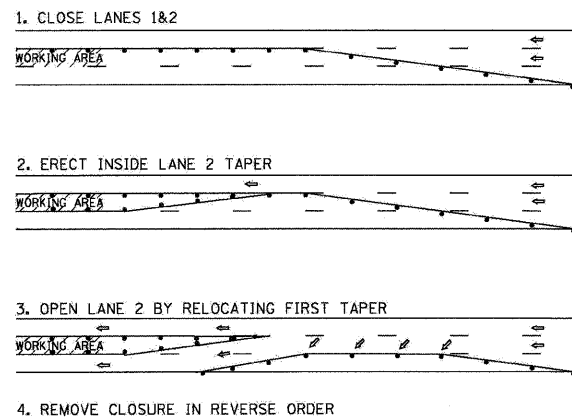
300' MIN. (90 m)
35:1 (MIN.) TAPER
500' (150 m) MIN.



SIGNING & BARRICADING ACCORDING TO FREEWAY STANDARD FOR A ONE LANE CLOSURE

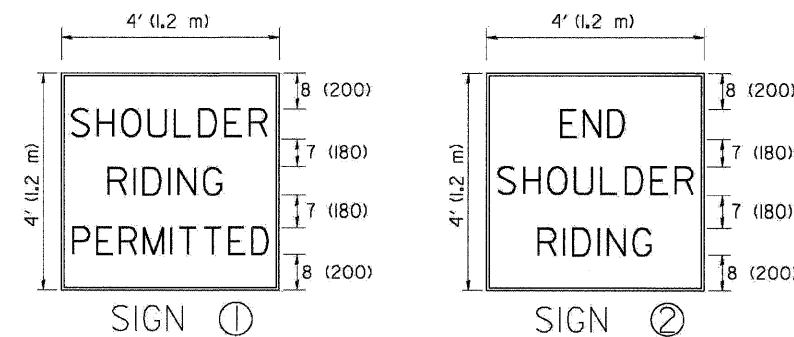
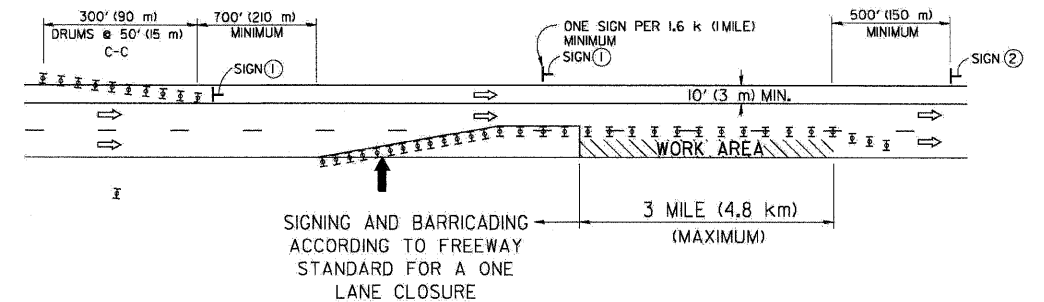
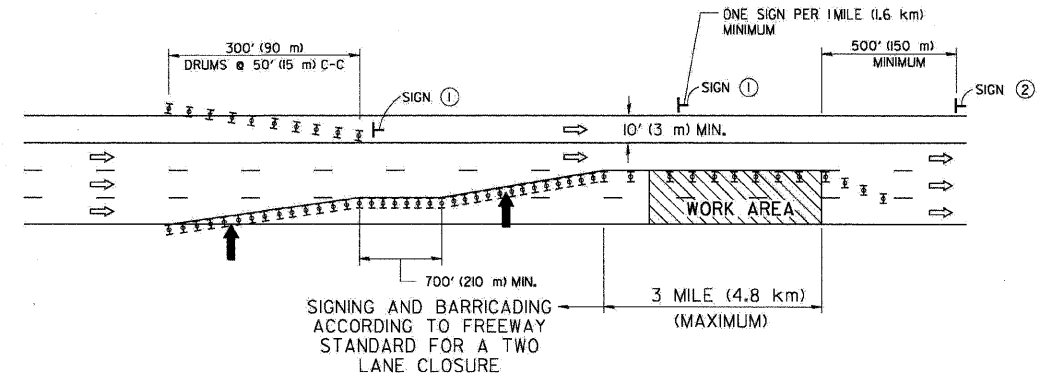
1. DAY OPERATIONS: CONES SHALL BE USED AT 25' (8 m) CENTERS ON TAPERS AND AT 50' (15 m) CENTERS ON TANGENTS.
2. NIGHT OPERATIONS: DRUMS WITH STEADY BURN LIGHTS SHALL BE USED AT 50' (15 m) CENTERS ON ALL TAPERS AND TANGENTS IN ADVANCE OF WORK AREA.
3. CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.

INSTALLATION SEQUENCE



SHOULDER LANE

NOTE: CLOSURE SHALL BE USED ONLY FOR OPERATIONS LASTING 72 HOURS OR LESS.



6 (150) SERIES 1" C LEGEND
BLACK LEGEND
WHITE REFLECT, BACKGROUND
(25) BORDER

SYMBOLS

- ↑ DIRECTION OF TRAFFIC
- ➔ ARROWBOARD
- ▨ WORK AREA
- ◇ SIGN WITH 18x18 (450x450) ORANGE FLAGS ATTACHED *
- ⊢ SIGN ON PORTABLE OR PERMANENT SUPPORT *
- ⊥ TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH MONO-DIRECTIONAL STEADY BURN LIGHT

TC-25

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

* ALL SIGNS SHALL BE MOUNTED AT A MINIMUM HEIGHT OF 5' (1.5 m).

FILE NAME =	DESIGNED - AJP	REVISED -
USER NAME =	DRAWN - TMB	REVISED -
PLOT DATE = 1/25/2012	CHECKED - JMM	REVISED -
	DATE - 1/25/10	REVISED -

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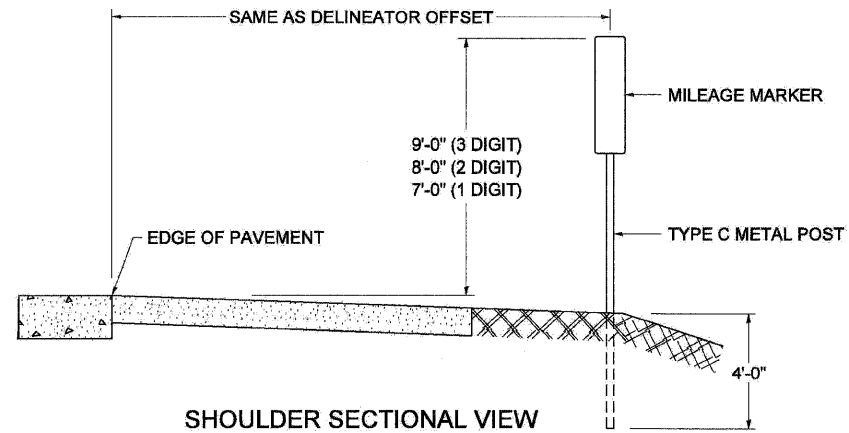
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TRAFFIC CONTROL DETAILS FOR FREEWAY
CENTER LANE CLOSURE SHOULDER LANE**

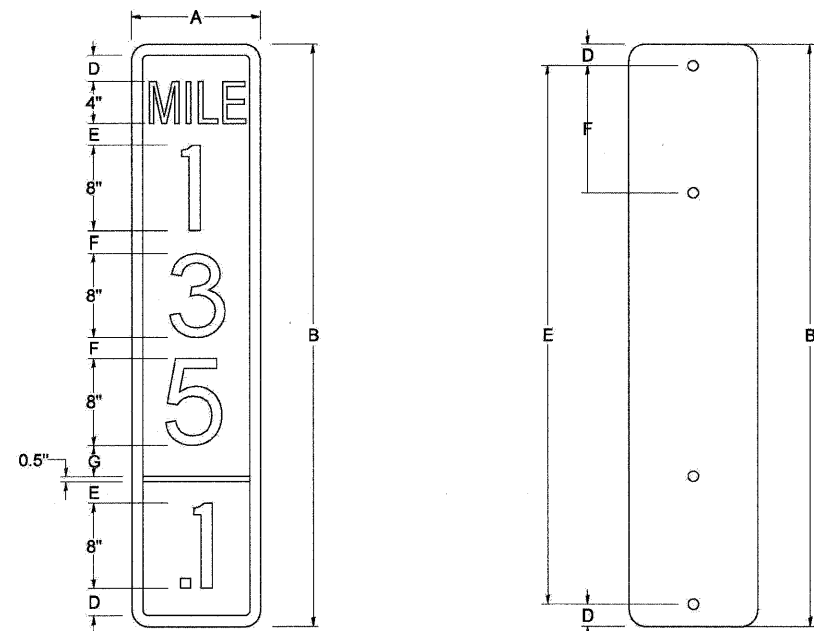
SCALE: N.T.S. SHEET NO. 19 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 3131)RS-7	COOK	216	215
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 60G53	

STANDARD DESIGN FOR MILE POST



SHOULDER SECTIONAL VIEW

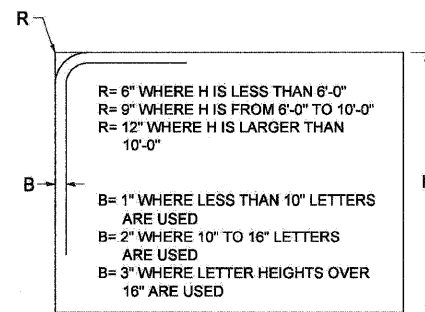


SIGN SIZE	DIMENSIONS							DIGIT
	A	B	C	D	E	F	G	
12 x 24	12.0	24.0	1.5	1.5	1.5	N/A	1.5	1
12 x 36	12.0	36.0	1.5	2.0	2.0	2.0	1.5	2
12 x 48	12.0	48.0	1.5	2.5	2.0	2.0	2.5	3

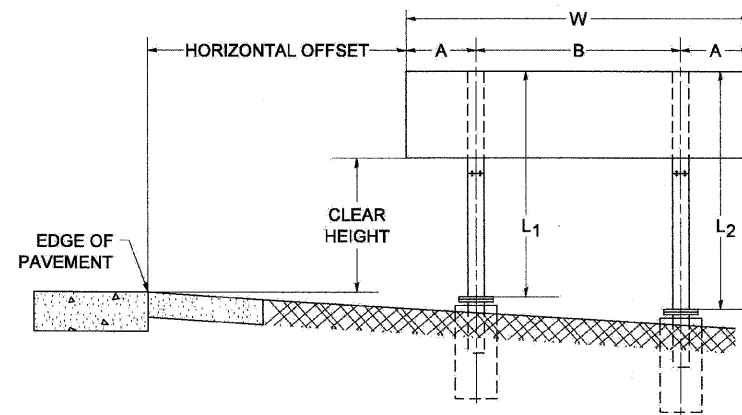
BLANK	A	B	C	D	E	F
B9-1224	12.0	24.0	1.5	2.0	20.0	N/A
B9-1236	12.0	36.0	1.5	2.0	32.0	12.0
B9-1248	12.0	48.0	1.5	2.0	44.0	12.0

SIGN SIZE	SERIES					BORDER	BLANK STD.
	LINES						
	1	2	3	4	5		
12 x 24	4C	8D	4C	N/A	N/A	0.5	B9-1224
12 x 36	4C	8D	8D	4C	N/A	0.5	B9-1236
12 x 48	4C	8D	8D	8D	4C	0.5	B9-1248

BORDER AND RADIUS LAYOUT



MAJOR GUIDE SIGN LAYOUT

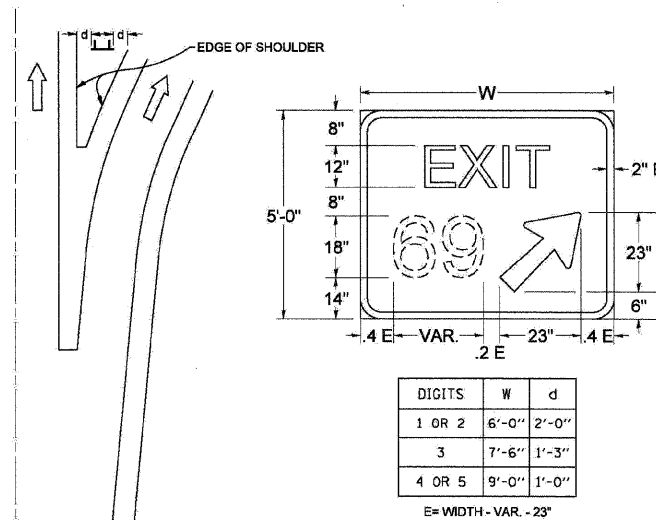


NUMBER OF STEEL SUPPORTS	A	B
2	.2 W	.6 W
3	.15 W	.35 W
4	.125 W	.25 W
5	.1 W	.2 W

"L1 IS THE LENGTH OF SUPPORT, NOT INCLUDING THE STUB PROJECTION, CLOSEST TO THE EDGE OF THE PAVEMENT."

"A" IS THE DISTANCE FROM THE SIGN EDGE TO THE CENTERLINE OF THE NEAREST SUPPORT. "B" IS THE DISTANCE BETWEEN CENTERLINES OF SUPPORTS."

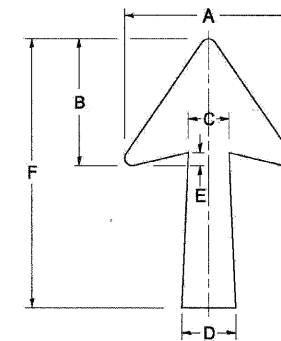
GORE SIGNS



DIGITS	W	d
1 OR 2	6'-0"	2'-0"
3	7'-6"	1'-3"
4 OR 5	9'-0"	1'-0"

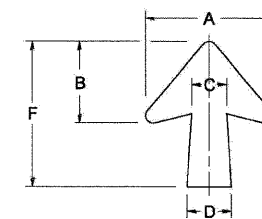
E= WIDTH - VAR. - 23"

STANDARD ARROWS FOR INTERSTATE GUIDE SIGNS



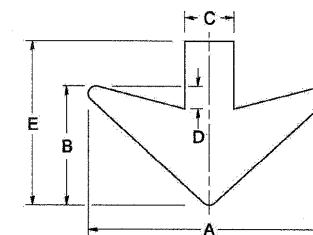
ARROW SYMBOL	A	B	C	D	E	F	R
24 1/4 x 15 1/8	15 1/8	11 1/8	3 3/4	5	1 1/2	24 1/4	9 1/8
29 1/4 x 18 1/4	18 1/4	14	4 1/2	6	1 1/2	29 1/4	3 1/4
35 5/8 x 22 1/4	22 1/4	17	5 3/8	7 1/8	1 3/4	35 5/8	1
18 1/4 x 11 1/4	11 1/4	8 3/4	3 1/8	3 3/8		18 1/4	

NOTE: D & F ARE RECOMMENDED DIMENSIONS. TAPER SHOULD BE HELD CONSTANT FOR LONGER OR SHORTER SHAFT LENGTHS



ARROW SYMBOL	A	B	C	D	E	F	R
17 1/4 x 14 1/4	14 1/4	9 3/8	3 3/8	4 1/2	1 1/2	17 1/4	3 1/4
20 1/4 x 17 1/4	17 1/4	11 3/4	4 3/8	5 3/8	1 1/2	20 1/4	
25 x 21 1/8	21 1/8	14 1/4	5	6 3/4	1 3/4	25	1
9 3/8 x 8 3/8	8 3/8	5 3/8	2 3/8	2 3/8		9 3/8	1/2

DOWN ARROWS



ARROW SYMBOL	A	B	C	D	E	R
16 1/2 x 24	24	12	5	1 1/2	16 1/2	3 1/4
22 x 32	32	16	6 1/2	3	22	1

FILE NAME =	DESIGNED - AJP	REVISED -
...pripin_ABC_C3.D1.TC-27.dgn	DRAWN - TMB	REVISED -
USER NAME = tblank	CHECKED - JMM	REVISED -
PLOT DATE = 1/25/2018	DATE - 1/25/10	REVISED -

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**MILE POST MARKERS - GORE SIGNS -
MAJOR GUIDE SIGN LAYOUT - ARROWS**

SCALE: N.T.S. SHEET NO. 20 OF 20 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
290	(2727, ETC., 313)RS-7	COOK	216	216
CONTRACT NO. 60G53			ILLINOIS FED. AID PROJECT	