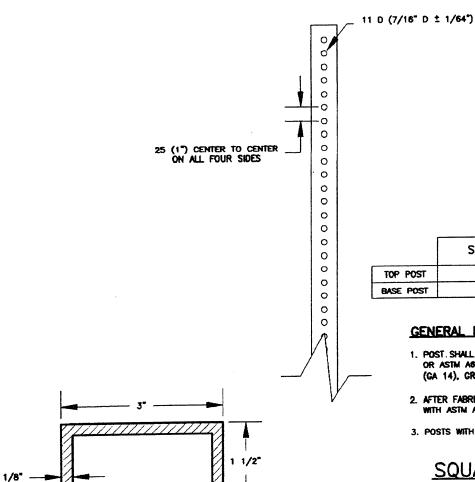


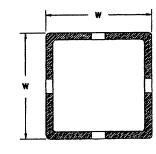
- 1. STEEL POST SHALL CONFORM TO THE REQUIREMENTS OF ASTM A499, GRADE 60 OR MARION STEEL COMPANY GRADE SP-80.
- 2. AFTER FABRICATION, POST SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH AASHTO M111 (ASTM A123).
- 3. THE BASE POST MAY HAVE SLOTTED HOLE 9.5 X 13 FOR THE FIRST AND FIFTH HOLE.

STEEL FLANGED CHANNEL TOP OR BASE POST

NOTE APPLICABLE TO ALL SMALL TRAFFIC SIGNS DRAWINGS:

- 1, ALL DIMENSIONS IN MILLIMETERS UNLESS OTHERWISE SPECIFIED. DIMENSIONS GIVEN IN METERS SHALL BE INDICATED WITH: M DIMENSIONS GIVEN IN INCHES SHALL BE INDICATED WITH: DIMENSIONS GIVEN IN FEET SHALL BE INDICATED WITH:
- 2. SYSTEMS IN ENGLISH UNITS ARE ACCEPTABLE.
- 3. DIAMETER SHALL BE INDICATED WITH "D"
- 4. REFLECTIVE SHEETING USED ON ALL SIGNS SHALL CONFORM TO ASTM D4956, TYPE III. THE BACKING SHALL BE CLASS 1 OR 2.





SQUARE STEEL POST

	SIZE (W)	GAGE	WEIGHT (lbs/ft)	SQUARENESS TOLERANCES
TOP POST	2"	14	1.99 TO 2.20	± .012
BASE POST	2 1/4"	12	2.77 TO 2.80	<u>+</u> .014

GENERAL NOTES

- 1. POST SHALL CONFORM TO THE REQUIREMENTS OF ASTM A570 GRADE 50 OR ASTM A653 STRUCTURAL QUALITY GRADE 50 - MODIFIED TO GRADE 55 (GA 14), GRADE 40 (GA 12).
- 2. AFTER FABRICATION, POST SHALL BE HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM A653 G 90 OR AASHTO M120.
- 3. POSTS WITH DIE-PUNCHED KNOCKOUTS HOLES ARE ACCEPTABLE.

SQUARE STEEL POST TOP AND BASE POST

ALTERNATE STIFFENER

AS MANUFACTURED BY ALLIMINUM EXTRUSION CORPORATION P.O. BOX 1622, CANOVANAS, PUERTO RICO 00729-1622

GENERAL NOTES:

1. STIFFENER SHALL CONFORM TO ASTM 8-209, ALLOY 6063 T-5

NOTE APPLICABLE TO ALL BASE TO TOP POST CONNECTION DETAILS:

1. CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF COUPLINGS BETWEEN THE BASE AND TOP POST MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: COPY OF FHWA LETTER OF ACCEPTANCE THAT THE DEVICE COMPLIES WITH THE NCHRP REPORT 350 REQUIREMENTS, FULL DESCRIPTION AND DRAWINGS OF THE COUPLER INCLUDING DIMENSIONS OF ALL COMPONENTS AND COMPLETE MATERIAL DESCRIPTION OF THE BASE METAL, GALVANIZING, FASTENERS AND OTHER PERTINENT INFORMATION.

EFFECTIVE DATE: JULY 2000

COMMONWEALTH OF PUERTO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORITY

SMALL TRAFFIC SIGNS STEEL FLANGED CHANNEL AND SQUARE STEEL

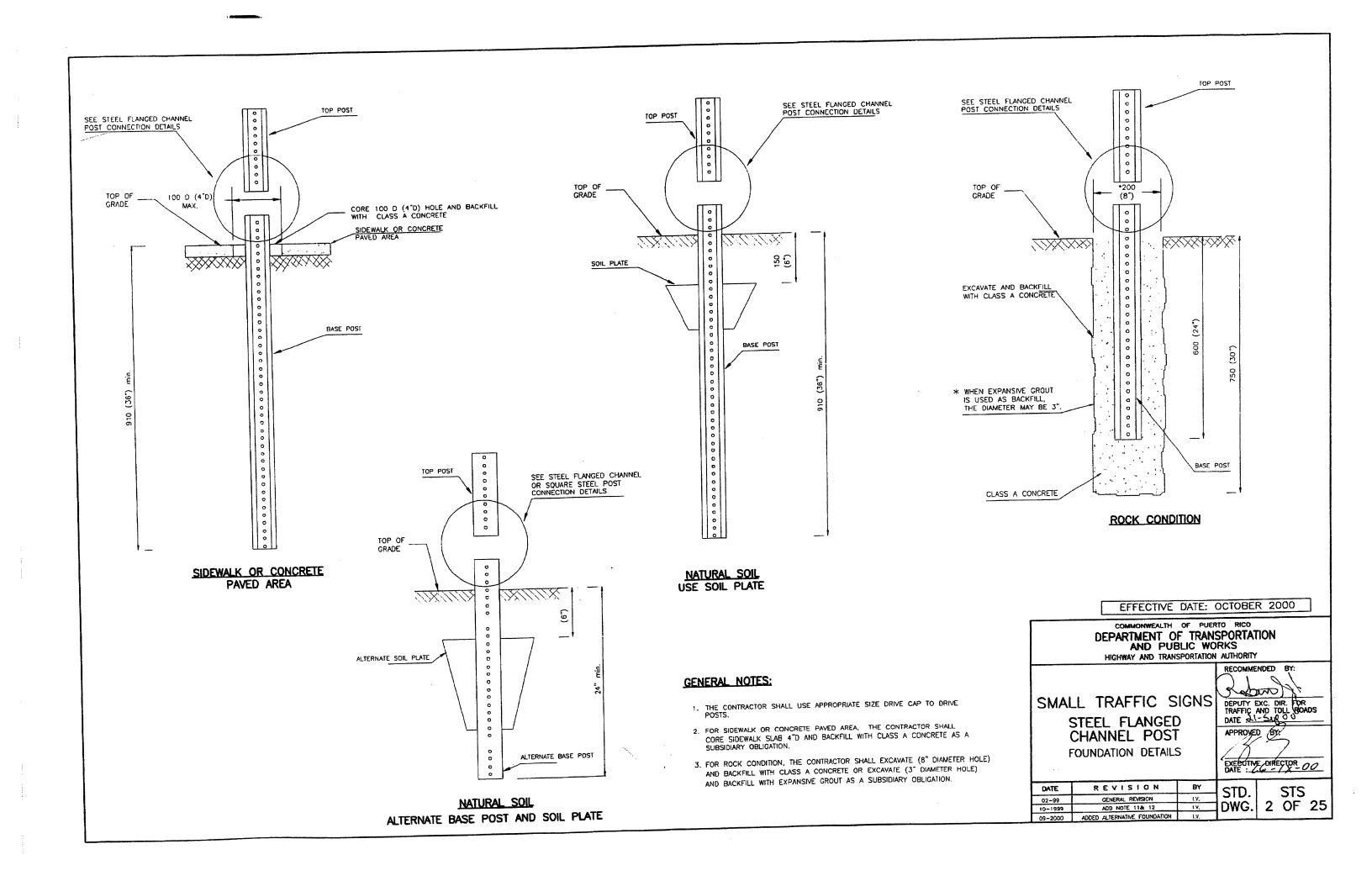
POST DETAILS

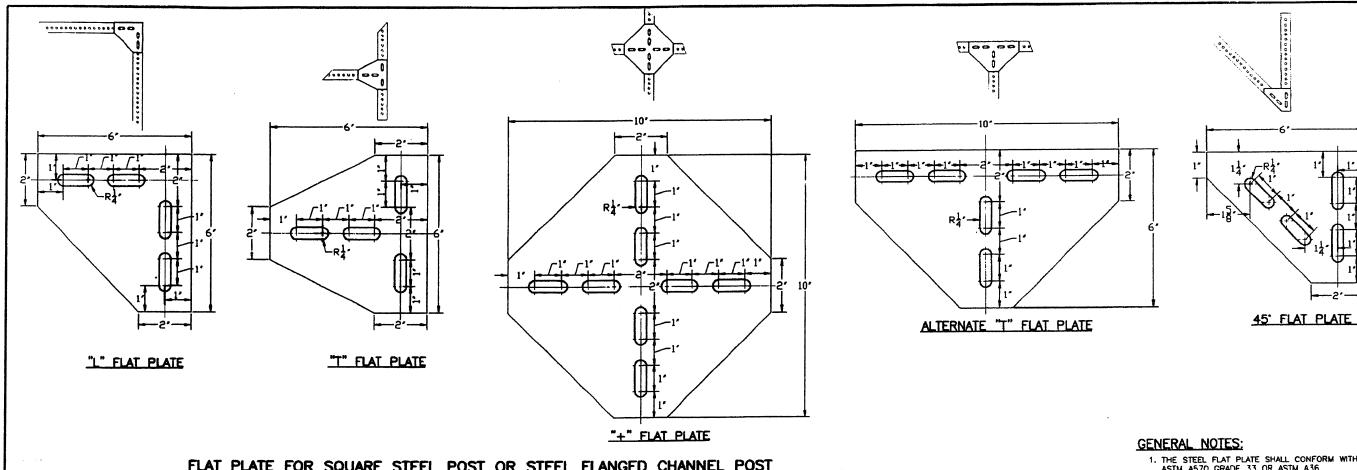
DEPUTY EXC. DIR. FOR TRAFFIC AND TOLL ROADS DATE: 17-1-00 APPROVED BY: EXECUTIVE DIRECTOR DATE : MAY - 19-00

RECOMMENDED BY:

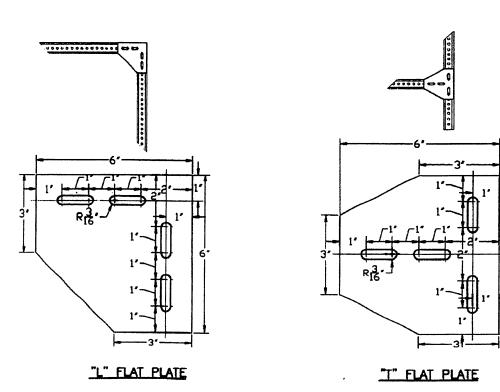
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DATE REVISION STS STD. I.V. 02-1999 GENERAL REVISION, STIFFENER DETAIL OF 25 DWG. **GENERAL REVISION** 05-2000

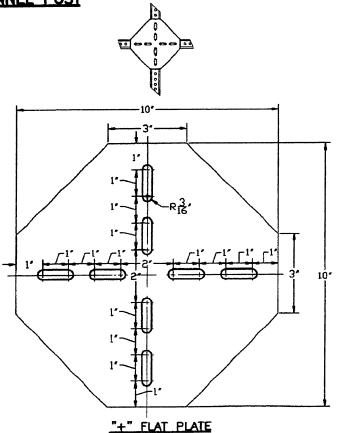




FLAT PLATE FOR SQUARE STEEL POST OR STEEL FLANGED CHANNEL POST



FLAT PLATE FOR STEEL FLANGED CHANNEL POST



- THE STEEL FLAT PLATE SHALL CONFORM WITH THE REQUIREMENTS OF ASTM A570 GRADE 33 OR ASTM A36.
- 2. THE CONTRACTOR MAY USE ALUMINUM FLAT PLATE AS AN ALTERNATE. ALTERNATE FLAT PLATE SHALL CONFORM TO ASTM 8-209, ALLOY 5052 H-32. THE CONTRACTOR SHALL DRILL NECESSARY HOLES TO COMPLETE INSTALLATION AS A SUBSIDIARY OBLIGATION.
- 3. AFTER ALL PUNCHING, DRILLING, STAMPING AND WELDING IS COMPLETE, THE STEEL FLAT PLATE SHALL BE ZINC—COATED BY THE HOT—DIP PROCESS ACCORDING TO AASHTO M111 (ASTM A123).
- 4. ALUMINUM OR STEEL FLAT PLATE THICKNESS SHALL BE 1/8".
- 5. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST AND STIFFENER CONNECTIONS AS A SUBSIDIARY OBLIGATION.
- 6. THE CONTRACTOR SHALL PLACE AT LEAST TWO 5/16" ALUMINUM FLAT HEAD MACHINE SCREWS WITH NUTS AND LOCK WASHER PER EACH POST.

EFFECTIVE DATE: JULY 2000

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORITY

STEEL FLANGED CHANNEL DEPUTY EXC. DER FOR TRAFFIC AND TOLL ROADS DATE: 17-7-00 AND SQUARE STEEL POST "L","T","+" AND"45'" FLAT PLATES

DATE: 174
APPROVED OBY:
7777
19
EXECUTIVE DIRECTOR
DATE : MAY-19-00

RECOMMENDED BY:

DATE	REVISION	87	STD.		STS	
4-1999	NOTES REVISION	1 IV.	• • • •	_	213	
10-1999	ADD ALTERNATE "T" FLAT PLATE	1.7.	DWG.	6	OF	25
03-2000	DELETED NOTE 7	I.V.				

GENERAL NOTES APPLICABLE TO ALL SMALL TRAFFIC SIGNS STANDARD DRAWINGS

- 1. NO SPLICES IN SIGN PLATES SHALL BE PERMITTED WHEN SIGN DIMENSIONS ARE 1200 (4') X 1200 (4') MILLIMETERS OR LESS.
- 2. NO SPLICES IN THE REFLECTIVE SHEETING WILL BE PERMITTED WHEN THE SIGN HEIGHT IS 1200 MILLIMETERS (4') OR LESS. NO REFLECTIVE SHEETING SPLICES WILL BE PERMITTED IN DIAMOND SIGNS WITH DIMENSIONS OF 1200 MILLIMETERS (4') OR LESS. ON SIGNS WITH HEIGHTS IN EXCESS OF 1200 MILLIMETERS (4'), A SINGLE HORIZONTAL SPLICE WILL BE PERMITTED. THE SPLICE UPPER PANEL SHALL OVERLAP 3/8" MAX. THE LOWER PANEL.
- 3. SIGN PLATES SHALL CONFORM TO ASTM B-209, ALLOYS 5052 H-32, 5052 H-36, 5052 H-38, 5086 H-34, 5154 H-36 OR 6061 T-6.
- 4. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.
- 5. THE SIGN BACKGROUND, LEGEND AND BORDER SHALL BE APPLIED BY THE SILK SCREEN PROCESS, BY DIRECT APPLICATION OF CUT OUT CHARACTERS, OR BY THE APPLICATION OF ELECTRONIC CUTTABLE FILM, SERIES 1170, AS MANUFACTURED BY 3M OR ELECTRONIC CUTTABLE TRANSPARENT OVERLAY FILM, SERIES 4800, AS MANUFACTURED BY STIMSONITE. REGARDLESS OF THE METHOD OF FABRICATION, THE BACKGROUND, LEGEND AND BORDER SHALL MEET THE REFLECTIVITY STANDARDS OF ASTM D4956, TYPE III.
- 6. SIGN PLATES THICKNESS SHALL BE AS FOLLOWS:

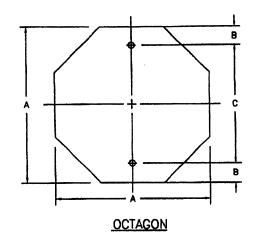
MINIMUM PLATE THICKNESS IN (MM)	PLATE AREA SQF (SQM)
1/16" (1.5)	UP TO 10.8 (UP TO 1.00)
1/8" (3.175)	10.85 TO 53.8 (1.01 TO 5.00)

- 7. THE CONTRACTOR SHALL DRILL ALL ADDITIONAL HOLES, AS A SUBSIDIARY OBLIGATION, AS NECESSARY TO ACCOMMODATE MOUNTING REQUIREMENTS. THE HOLE DIAMETER SHALL NOT EXCEED 1/16" THE BOLT DIAMETER.
- 8. THE CONTRACTOR SHALL USE ON ALL BOLTS WHICH CONTACT THE REFLECTIVE SHEETING, A NYLON, NEOPRENE OR FIBER WASHER BETWEEN THE REFLECTIVE SHEETING SIGN FACE AND THE BOLT HEAD.
- 9. ALL BOLTS IDENTIFIED AS A307 SHALL CONFORM WITH ASTM A307 REQUIREMENTS AND BE PROVIDED WITH CORRESPONDING NUT AND WASHER. BOLTS A307 SHALL BE EITHER GRADE A OR B AND SHALL BE HOT-DIP GALVANIZED. UNLESS OTHERWISE SPECIFIED, BOLT HEAD MAY BE EITHER HEX OR CARRIAGE.
- 10. REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN PANEL. SIGN PANELS FABRICATED WITH REFLECTIVE SHEETING FROM DIFFERENT MANUFACTURERS SHALL NOT BE MIXED WITHIN THE SAME SIGN SUPPORT.

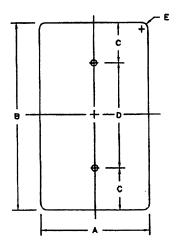
COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED BY:
DEPUTY EXC. DIR. FOR TRAFFIC AND TOLL ROADS
DATE: -1 X - 0 0

DATE REVISION BY
03-2000 ADDED NOTES IV.
DWG. 7 OF 25

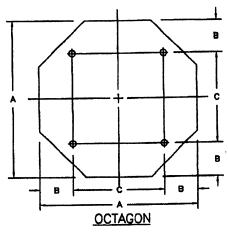


Α	В	С
600	75	450
750	75	600
900	75	750

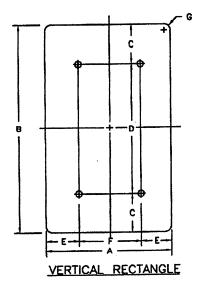


VERTICAL RECTANGLE

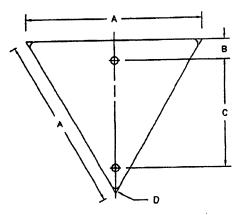
A	В	С	D	E
300	450	35	380	35
450	600	75	450	35
600	750	75	600	35
750	900	75	750	45



IJ	C
225	750
	B 225

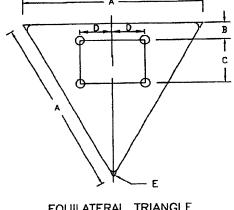


Α	В	C	D	E	F	G
900	1200	150	900	150	600	55
1200	1500	150	1200	225	750	75
1200	1500	150	1200	223	,30	



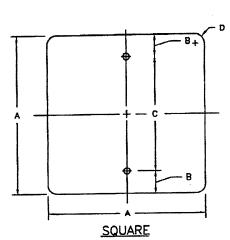
EQUILATERAL TRIANGLE

A	В	C	D
750	75	450	35
900	75	525	50

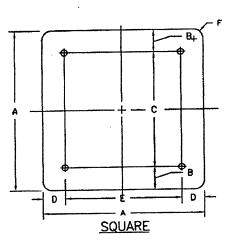


EQUILATERAL TRIANGLE

Α	В	С	D	Ε
1200	75	300	300	75
1500	75	450	375	100



1	Α	В	С	D	
	450	75	300	35	
Ì	600	75	450	35	
	750	75	600	45	



Α	В	C	D	E	F
900	150	600	150	600	5
1200	150	900	225	750	7:

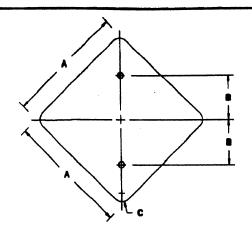
BLANK PLATE STANDARDS

EFFECTIVE DATE : MAY 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

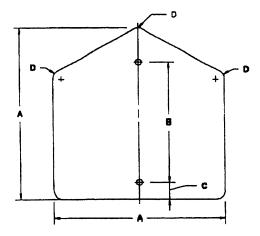
SMALL TRAFFIC SIGNS

REVISION STD. STS DWG. 8 OF 25 DATE



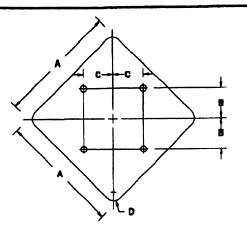
DIAMOND

.V	В	С
600	300	35
750	375	45
900	450	55



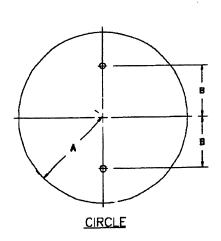
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A	В	С	D
750	. 525	75	45
900	600	75	55

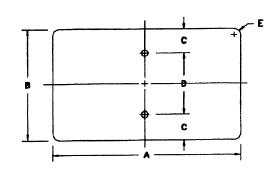


DIAMOND

ļ	A	В	С	D
	1200	375	375	75
	1500	450	450	95

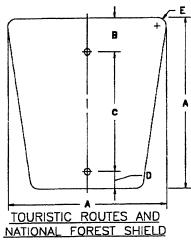


Α	В
375	300
450	375

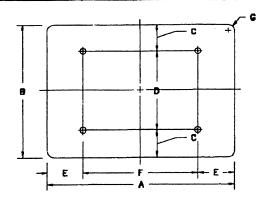


HORIZONTAL RECTANGLE

A	В	С	D	E
525	375	35	305	35
600	300	70	230	35
600	450	75	300	3 5
750	375	70	305	35
750	600	75	450	35
900	300	70	230	35

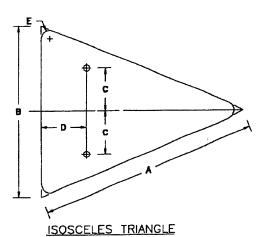


NATIO	NAL	FORE	SI S	HIELD
Α	В	C	D	E
450	50	375	25	50
600	60	500	40	6Ò



HORIZONTAL RECTANGLE

Α	В	С	D	Ε	F	G
900	600	75	450	150	500	35
1200	600	75	450	225	750	45
1200	900	150	600	225	750	55
1500	600	75	450	300	900	3 5
1500	900	300	600	600	900	55



Α	B	С	D	E

1000	750	185	300	45
1200	900	225	375	55

EFFECTIVE DATE: DECEMBER 1999

COMMONWEALTH OF PUERTO MICE
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION, AUTHORITY

SMALL TRAFFIC SIGNS BLANK PLATE STANDARDS

DATE

10-1999

	ATTRON	de Divo
*	STD	STS

REVISION	EY	STD.		STS	
GENERAL REVISION	1.V.			212	2-1
GENERAL REVISION	I.V.	DWG.	BA	OF	25
GENERAL REVISION	I,V.		<u> </u>		

OCTAGONS (STOP)									
INCHES MILLIMETERS									
24 X 24	600 X 600								
30 X 30	750 X 750								
36 X 36	900 X 900								
48 X 48	1200 X 1200								

CIRCLES (RR)

INCHES

30" DIA. 36" DIA.

	TRIANGLES (YIELD)										
	INCHES MILLIMETERS										
30	X	30	X	30	750	X	750	X	750		
36	X	36	X	36	900	X	900	X	900		
48	X	48	X	48	1200	×	1200	X	1200		
60	X	60	X	60	1500	X	1500	×	1500		

RECTANGLES (HORIZONTAL)

1200 X 900

1500 X 600

1500 X 900

MILLIMETERS	INCHES	MILLIMETER
750 DIA.	21 X 15	525 X 375
900 DIA.	24 X 12	600 X 300
	24 X 18	600 X 450
	30 X 15	750 X 37
	30 X 24	750 X 60
	36 X 12	900 X 30
	36 X 24	900 X 60
	48 X 24	1200 X 60

48 X 36

60 X 24

60 X 36

SQUARES AND DIAMONDS											
INC	CH	ES	MILLIMETERS								
18	X	18	450 X 450								
24	Х	24	600 X 600								
30	X	30	750 X 750								
36	X	36	900 X 900								
48	X	48	1200 X 1200								
60	X	60	1500 X 1500								

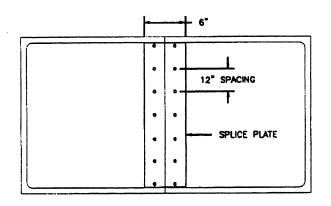
RECTANGLES (VERTICAL)									
IN	СН	ES	MILLIMETERS						
12	X	18	300 X 450						
18	X	24	450 X 600						
24	Χ	30	600 X 750						
30	Χ	36	750 X 900						
36	Χ	48	900 X 1200						
48	Χ	60	1200 X 1500						

	EFFECTIVE	DATE :	MAY	1998
DEPARTME	NT OF TRAN	ISPORTA	TION	
	D PUBLIC WO		′ ~	

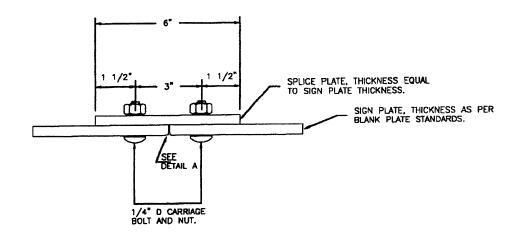
SMALL TRAFFIC SIGNS CONVERSION TABLE METRIC EQUIVALENTS

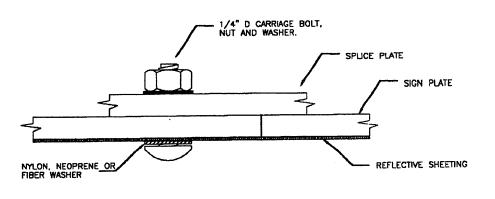
DV. ADM. FHWA-PR DIVISION FINAL PR DIVISION STD. STS.

DWG. 9 OF 25



- NO SPLICES IN SIGN PLATES SHALL BE PERMITTED WHEN SIGN DIMENSIONS ARE 1200 (4') X 1200 (4') OR LESS.
- THE CONTRACTOR SHALL ADJUST THE LENGTH OF CARRIAGE BOLT. THE BOLT SHALL PENETRATE THE ENTIRE THICKNESS OF THE NUT.

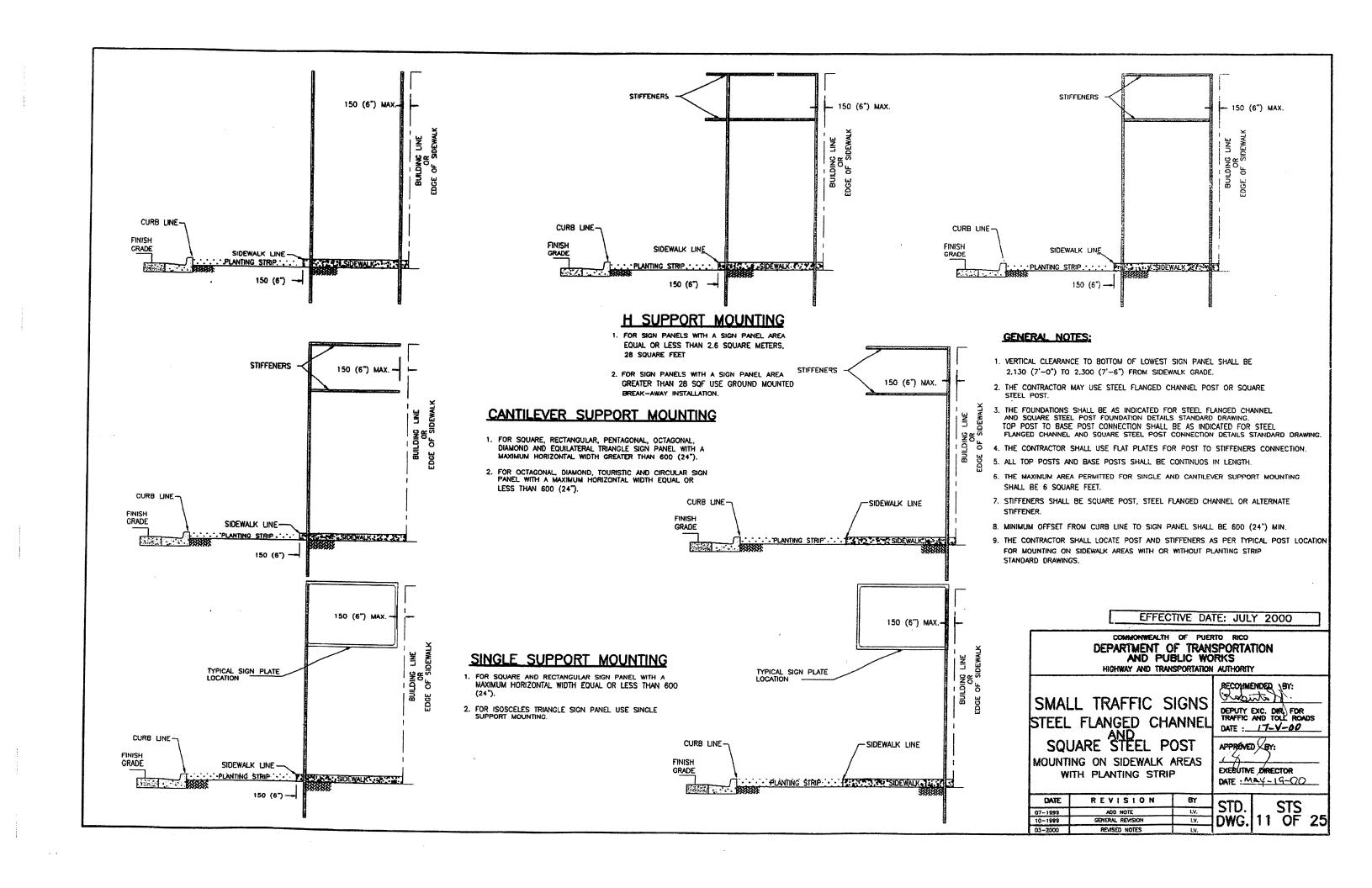


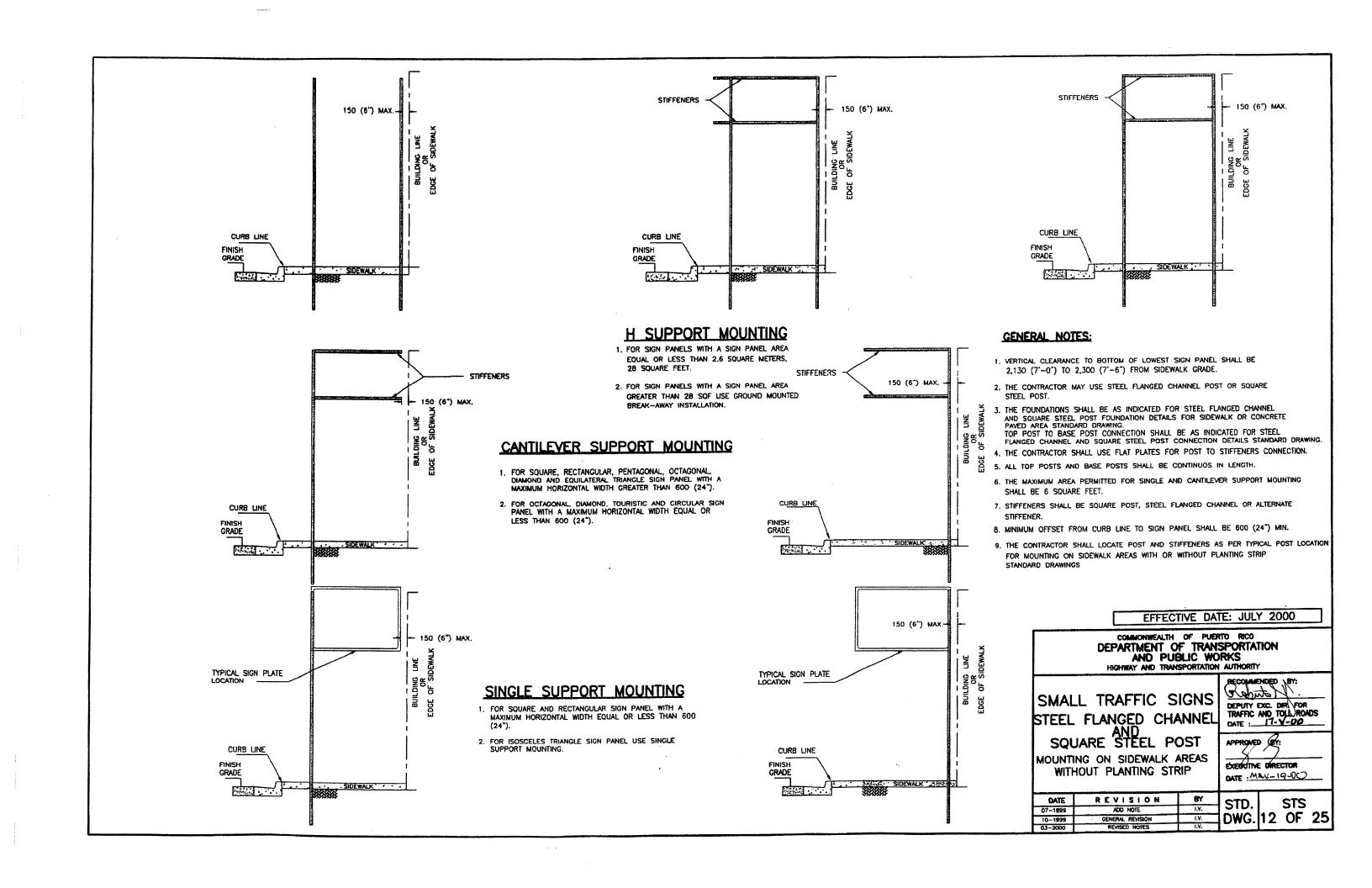


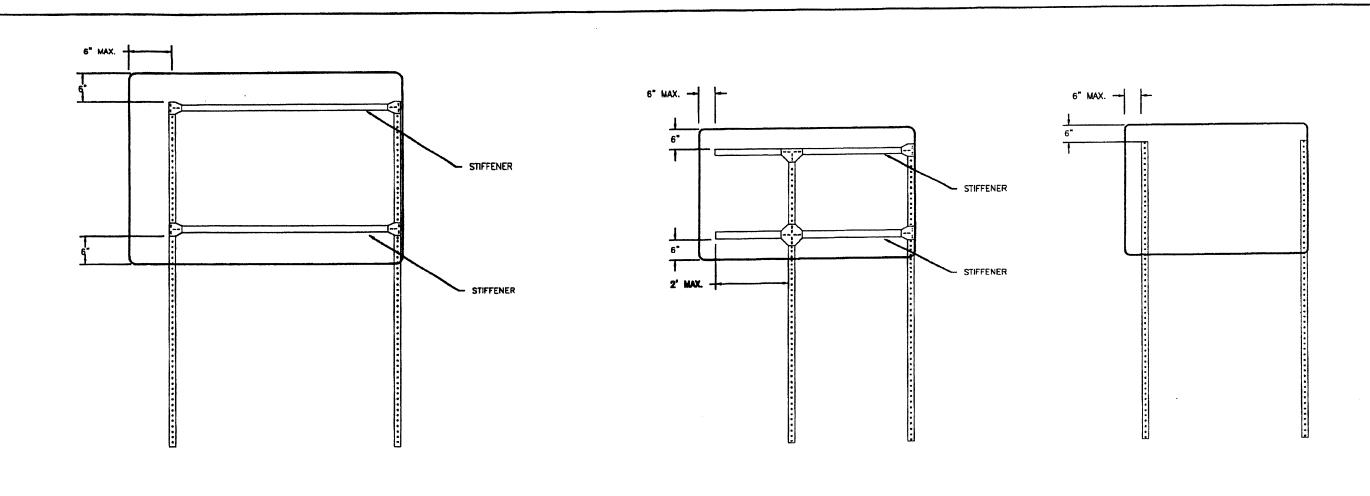
DETAIL A

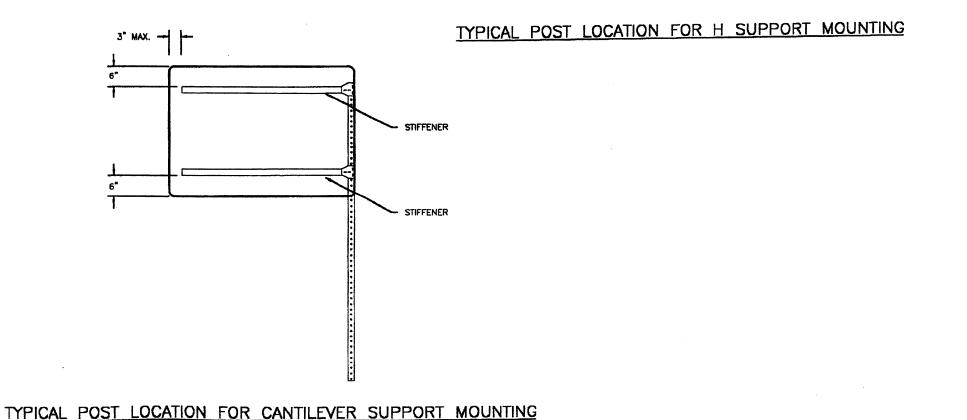
SIGN PLATE SPLICES

EFFECT	IVE DATE: DECEMBE	R 1999	9					
COMMONWEALTH OF PUERTO RICED DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORITY								
1	L TRAFFIC S N PANEL SPLIC		TRAFFIC DATE :S	ENDER BY:				
DATE	REVISION	BY	STD.	STS				
4-1999	DETAIL DELETED	LV.			25			
10-1999	ADD NOTE, DETAIL DELETE	i.V.	DWG.	10 OF	25			

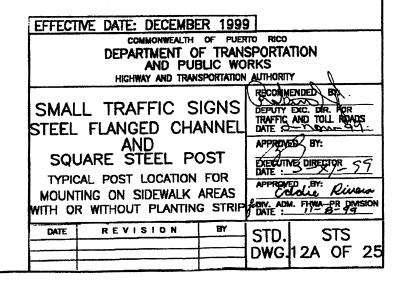


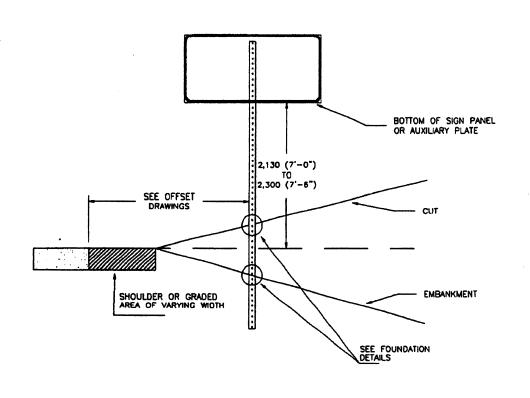


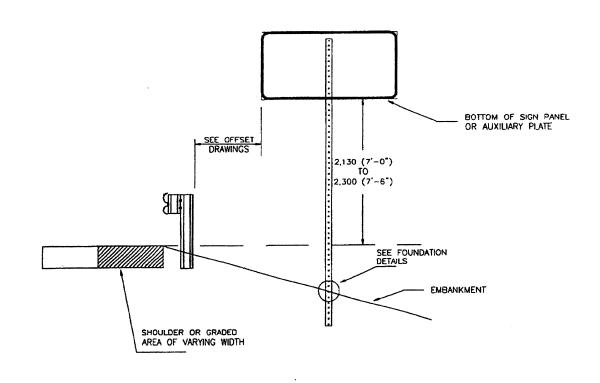




 TO DETERMINE THE APPLICATION FOR CANTILEVER OR SUPPORT MOUNTING SEE MOUNTING ON SIDEWALK AREAS WITH OR WITHOUT PLANTING STRIP STANDARD DRAWINGS.



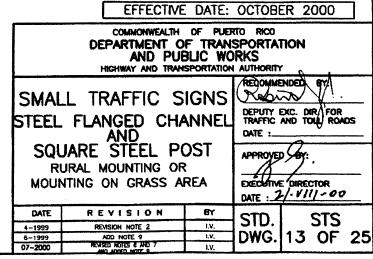


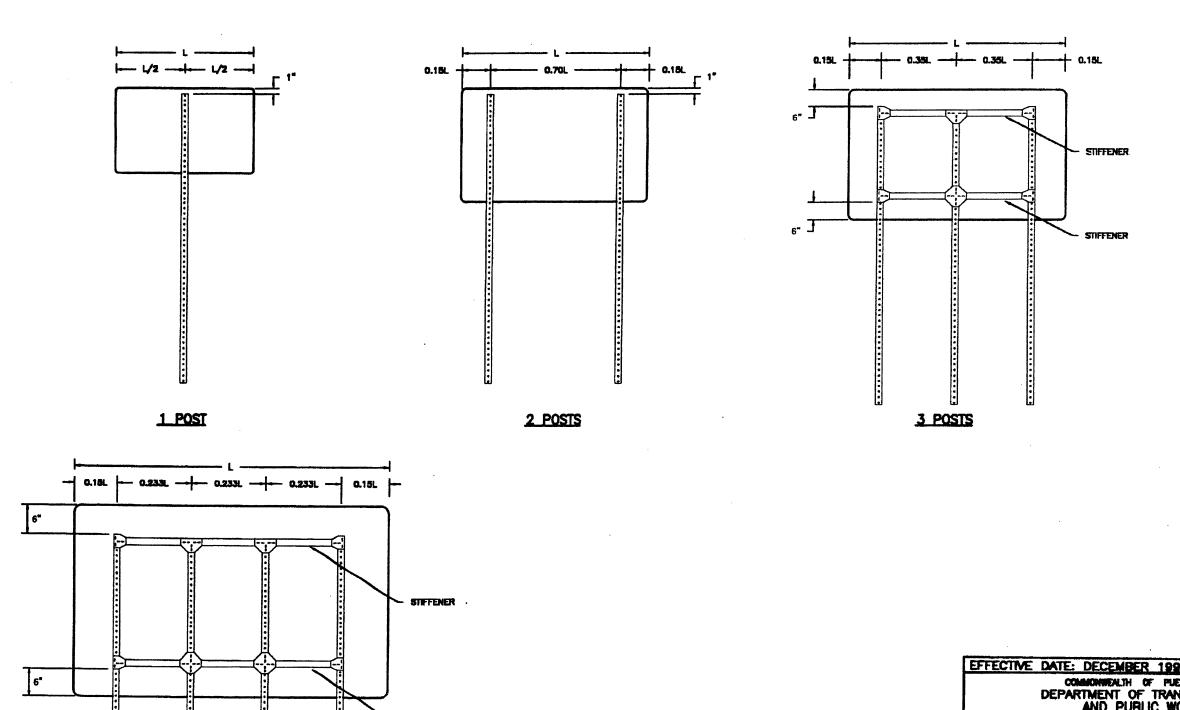


- THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCREASING OR DECREASING THE LENGTH OF POST TO ACHIEVE THE MOUNTING HEIGHT ABOVE FINISH GRADE OF THE NEAREST LANE.
- 2. THE CONTRACTOR MAY USE STEEL FLANGED CHANNEL POST OR SQUARE STEEL POST.
- FOUNDATION SHALL BE AS STEEL FLANGED CHANNEL AND SQUARE STEEL POST FOUNDATION DETAILS STANDARD DRAWINGS.
- 4. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENER CONNECTION.
- 5. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE THE NUMBER OF POSTS BASED UPON THE SIGN PANEL AREA, IN CONFORMANCE WITH THE FOLLOWING TABULATION:

	NUMBER OF POSTS	MAXIMUM SIGN AREA (SQUARE FEET)	MAXIMUM SIGN AREA (SQUARE METER)
	1	4	0.37
	2	16	1.50
	3	25	2.32
1	4	36	3.35

- THE CONTRACTOR SHALL LOCATE POSTS AS PER TYPICAL POST LOCATION STANDARD DRAWING.
- 8. VERTICAL CLEARANCE TO BOTTOM OF LOWEST SIGN PANEL SHALL BE 2,130 (7'-0") TO 2,300 (7'-6") FROM THE FINISH GRADE OF THE NEAREST LANE.





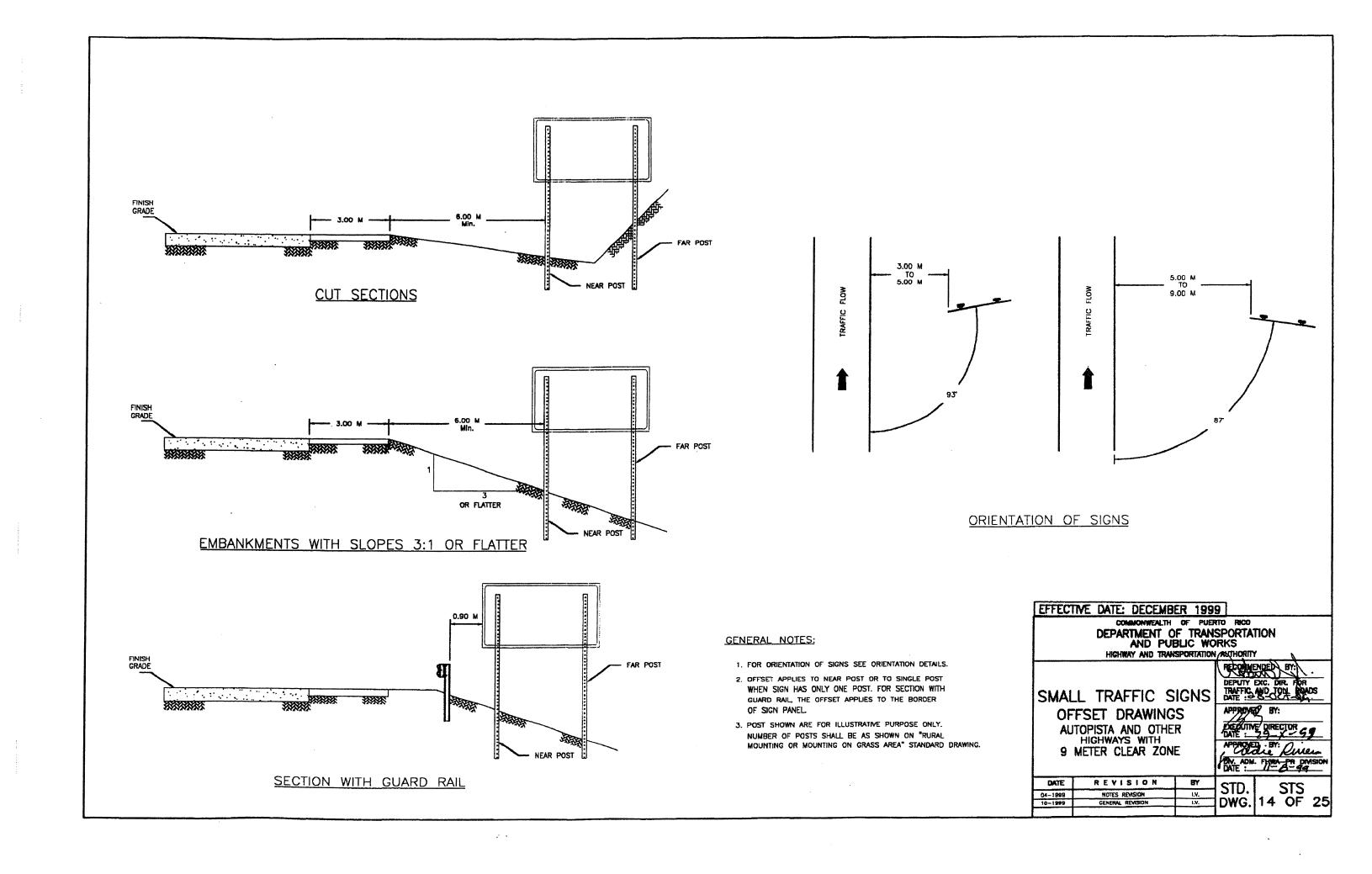
NOTE:

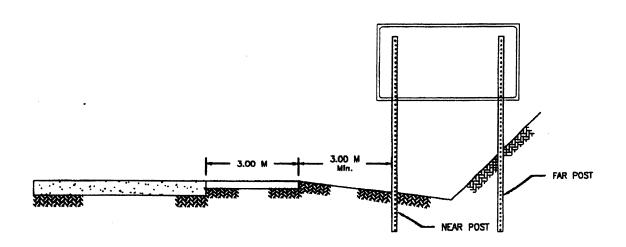
STIFFENER

4 POSTS

- TO DETERMINE THE NUMBER OF POSTS, SEE NOTES ON STEEL FLANGED CHANNEL AND SQUARE STEEL POST, RURAL MOUNTING STANDARD DRAWINGS.
- STIFFENERS SHALL BE SQUARE POST, STEEL FLANGED CHANNEL OR ALTERNATE STIFFENER.
- 3. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION.
- 4. MAXIMUM DEVIATION FROM VERTICAL FOR ANY COMPONENT, IN ANY DIRECTION, SHALL BE 1/8 INCH PER FOOT.
- 5. MAXIMUM DEVIATION FROM HORIZONTAL FOR ANY COMPONENT, IN ANY DIRECTION, SHALL BE 1/8 INCH PER FOOT.

		•		•					
EFFEC	THE DATE: DECEMBE	ER 199	1						
	COMMONWEALTH OF PLEATO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORITY								
	L TRAFFIC S		DATE C	ENDED BY	D9				
SQL	AND JARE STEEL PO	OST	APPROV EXECUTI DATE :_	EN BY: VE DIRECTOR S	9				
	RURAL MOUNTING	1011	DIV. AD	Edu Rin H. FHMA-PR JA	el Asion				
DATE 10-1999	REVISION CENERAL REVISION	BY 1.V.	STD. DWG.	STS 13A OF	25				



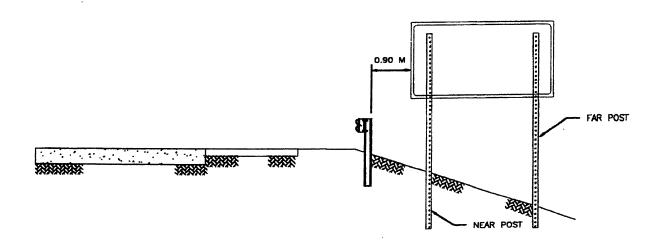


3.00 M Sin. FAR POST

OR FLATTER NEAR POST

CUT SECTIONS

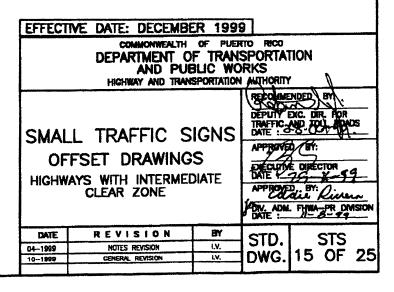
EMBANKMENTS WITH SLOPES 3:1 OR FLATTER

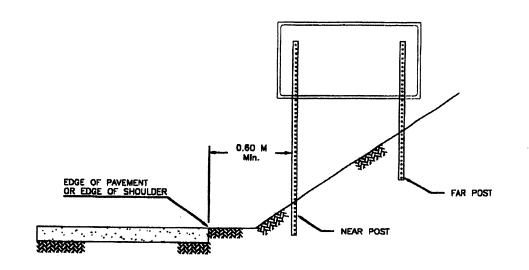


SECTION WITH GUARD RAIL

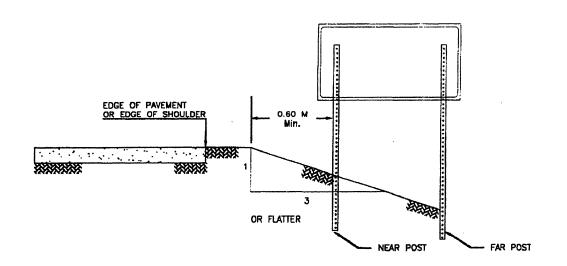
GENERAL NOTES:

- 1. FOR ORIENTATION OF SIGNS SEE ORIENTATION DETAILS.
- OFFSET APPLIES TO NEAR POST OR TO SINGLE POST WHEN SIGN HAS ONLY ONE POST. FOR SECTION WITH GUARD RAIL, THE OFFSET APPLIES TO THE BORDER OF SIGN PANEL.
- 3. POST SHOWN ARE FOR ILLUSTRATIVE PURPOSE ONLY.
 NUMBER OF POSTS SHALL BE AS SHOWN ON "RURAL
 MOUNTING OR MOUNTING ON GRASS AREA" STANDARD DRAWING.





CUT SECTIONS



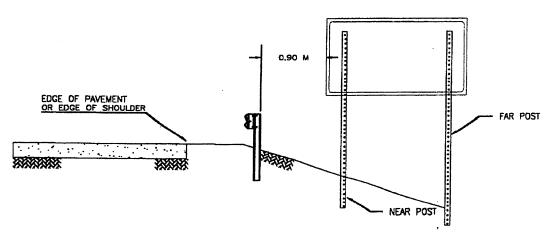
EMBANKMENTS WITH SLOPES 3:1 OR FLATTER

GENERAL NOTES:

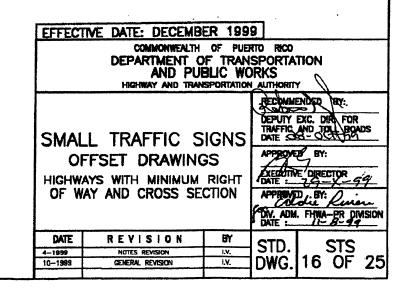
- 1. FOR ORIENTATION OF SIGNS SEE ORIENTATION DETAILS.
- OFFSET APPLIES TO NEAR POST OR TO SINGLE POST WHEN SIGN HAS ONLY ONE POST. FOR SECTION WITH GUARD RAIL, THE OFFSET APPLIES TO THE BORDER OF SIGN PANEL.
- 3. POST SHOWN ARE FOR ILLUSTRATIVE PURPOSE ONLY.

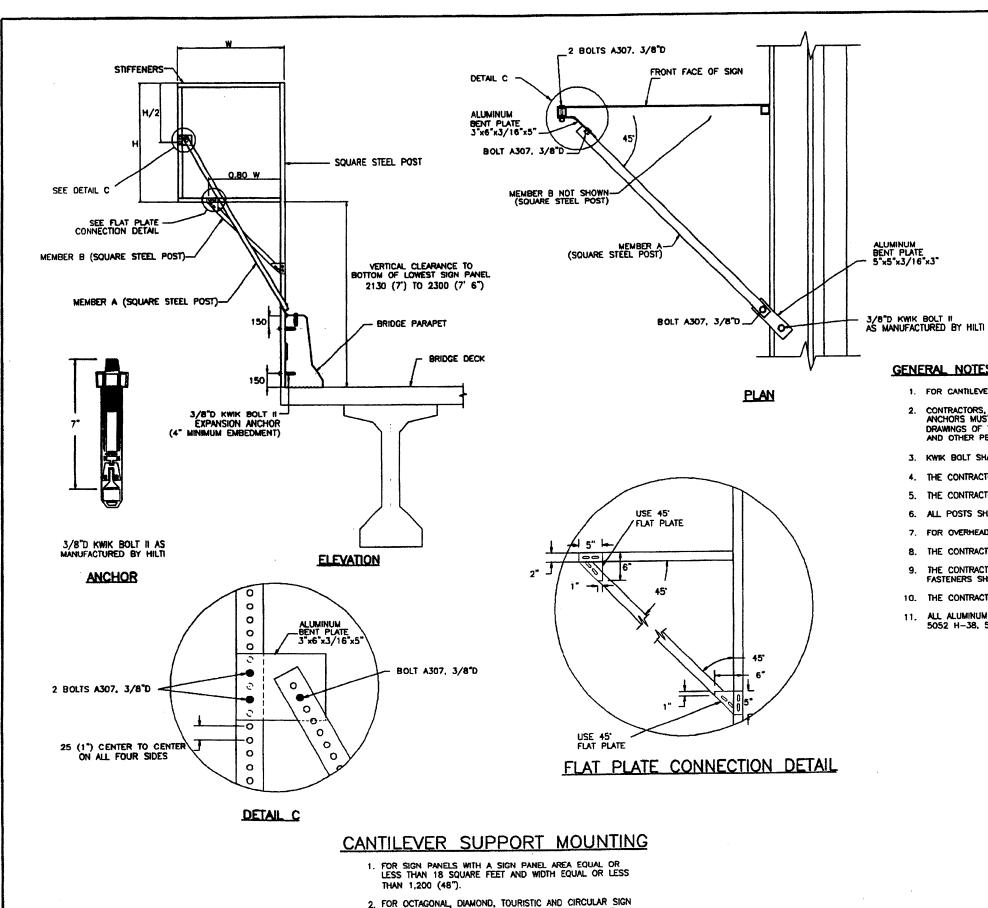
 NUMBER OF POSTS SHALL BE AS SHOWN ON "RURAL

 MOUNTING OR MOUNTING ON GRASS AREA" STANDARD DRAWING.



SECTION WITH GUARD RAIL





PANEL WITH A MAXIMUM HORIZONTAL WIDTH EQUAL OR

LESS THAN 600 (24").

150] BRIDGE PARAPET 3/8"D KWIK BOLT II AS 900 MANUFACTURED BY HILTI 150 FRONT FACE OF SIGN

OVERHEAD MOUNTING

USE ONE STEEL FLANGED CHANNEL POST OR ONE SQUARE STEEL POST FOR SIGNS W12-2 600 (2') X 600 (2'), 750 (2'-6") X 750 2'-6"), AND 900 (3') X 900 (3').

USE TWO STEEL FLANGED CHANNEL POST OR TWO SQUARE STEEL POST FOR SIGNS W12-2 1200 (4') X 1200 (4') AND 1500 (5') X 1500 (5') OR GREATER. OR ANY OTHER SIGNS INDICATED IN THE CONSTRUCTION PLANS.

GENERAL NOTES:

- 1. FOR CANTILEVER SUPPORT MOUNTING ONLY SQUARE STEEL POST SHALL BE USED.
- CONTRACTORS, SUBCONTRACTORS OR SUPPLIERS WHO WISH TO INCLUDE THEIR PRODUCTS INTO THE APPROVED LISTING OF ANCHORS MUST SUBMIT THE FOLLOWING INFORMATION FOR CONSIDERATION BY THE AUTHORITY: FULL DESCRIPTION AND DRAWINGS OF THE ANCHOR INCLUDING DIMENSION OF ALL COMPONENTS AND COMPLETE MATERIAL DESCRIPTION, GALVANIZING AND OTHER PERTINENT INFORMATION.
- 3. KWIK BOLT SHALL BE ZINC PLATED IN ACCORDANCE WITH ASTM B633, TYPE III FE/ZN 5.
- 4. THE CONTRACTOR SHALL FOLLOW HILTI INSTRUCTIONS FOR 3/8" KWIK BOLT II INSTALLATION.
- 5. THE CONTRACTOR SHALL USE FLAT PLATES FOR POST TO STIFFENERS CONNECTION AS A SUBSIDIARY OBLIGATION.
- 6. ALL POSTS SHALL BE CONTINUOS IN LENGTH.
- 7. FOR OVERHEAD MOUNTING, THE SIGN SHALL BE INSTALLED WITHOUT REDUCTION IN THE EXISTING BRIDGE CLEARANCE.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE TO ADJUST THE LENGTH OF STIFFENERS ACCORDING TO THE PANEL SHAPE.
- THE CONTRACTOR SHALL USE THREE VANDAL RESISTANT FASTENERS TO ATTACH THE SIGN PANEL TO EACH STIFFENER. THE FASTENERS SHALL BE LOCATED ONE IN EACH EXTREME AND ONE IN THE CENTER OF STIFFENER.
- 10. THE CONTRACTOR SHALL ADJUST THE LENGTH OF BOLT TO PENETRATE THE ENTIRE THICKNESS OF THE NUT.
- 11. ALL ALUMINUM BENT PLATES SHALL CONFORM TO ASTM B-209, ALLOYS 5052 H-32, 5052 H-36, 5052 H-38, 5086 H-34, 5154 H-36 OR 6061 T-6.

EFFECTIVE DATE: JULY 2000

COMMONWEALTH OF PUERTO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORITY

SMALL TRAFFIC SIGNS BRIDGE MOUNTING DETAIL

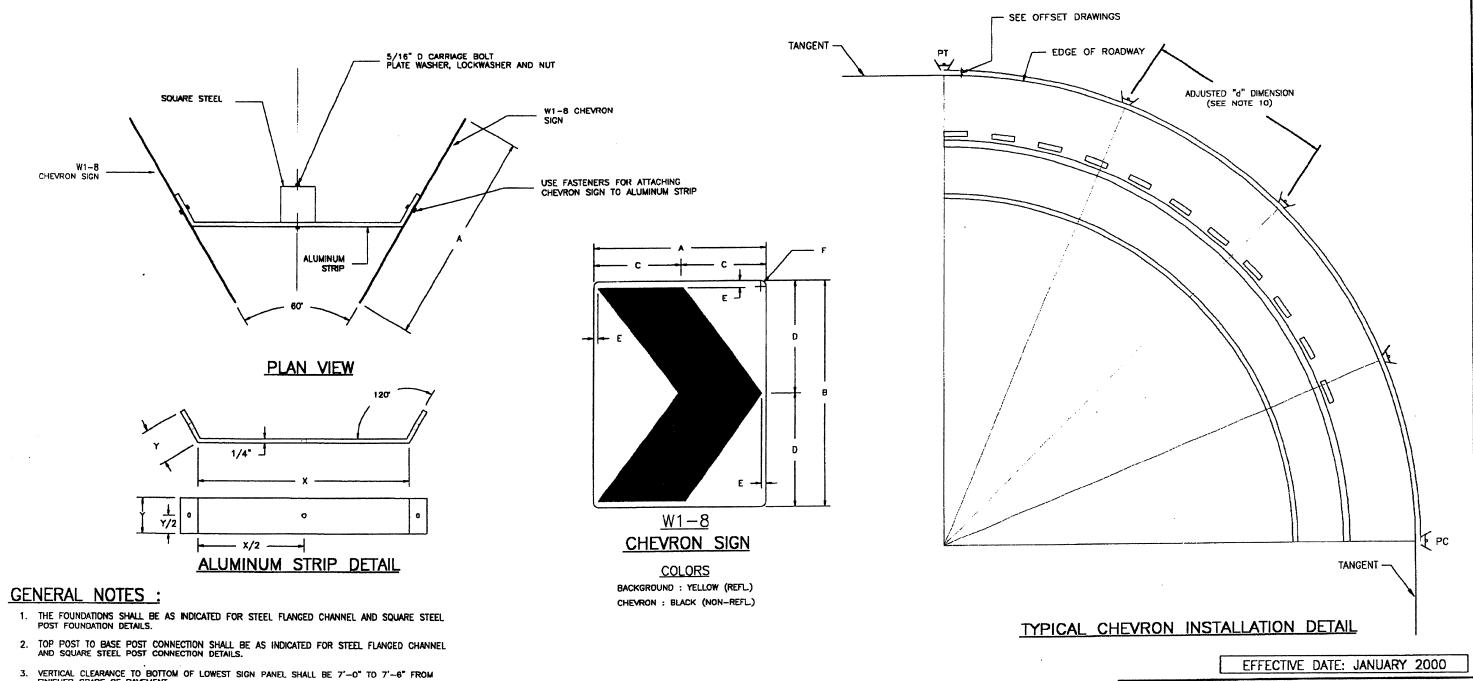
APPROVED BY: EXECUTIVE DIRECTOR DATE : MAY-19-00

RECOMMENDED & BY: Mandale DEPUTY EXC. DIR. FOR TRAFFIC AND TOLL ROADS

DATE : 17-4-00

REVISION DATE 4-1999 03-2000

STD. 17 OF DWG.

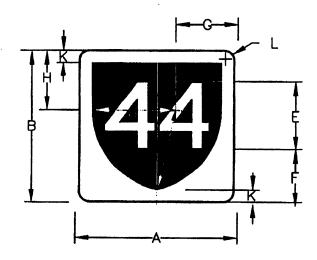


- 3. VERTICAL CLEARANCE TO BOTTOM OF LOWEST SIGN PANEL SHALL BE 7'-0" TO 7'-6" FROM FINISHED GRADE OF PAVEMENT.
- 4. ALL VERTICAL POSTS SHALL BE CONTINUOS IN LENGTH.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCREASING OR DECREASING THE LENGTH OF POST TO ACHIEVE THE MOUNTING HEIGHT ABOVE PAVEMENT EDGE.
- 6. MAXIMUM DEVIATION FROM VERTICAL, FOR ANY COMPONENT, IN ANY DIRECTION SHALL BE 1/8" IN A FOOT.
- 7. MAXIMUM DEVIATION FROM HORIZONTAL, FOR ANY COMPONENT SHALL BE 1/8" IN A FOOT.
- 8. FASTENERS SHALL BE AS PER STS 5 OF 25.
- 9. ALUMINUM STRIP AND SIGN PLATES SHALL CONFORM TO ASTM B-209, ALLOYS 5052 H-32 H-36, 5052 H-38, 5086 H-34, 5154 H-36 OR 6061 T-6.
- 10. THE CONTRACTOR SHALL LOCATE THE FIRST AND LAST CHEVRON SIGN AT THE TANGENT AND CURVE (PC AND PT). USING THE LENGTH OF CURVE MEASURED ALONG THE OUTSIDE OF THE CURVE, THE CONTRACTOR SHALL STABLISH THE NUMBER OF CHEVRON REEDED USING THE MAXIMUM SPACING INDICATED IN THE TABLE. THE CONTRACTOR SHALL LOCATE ALL CHEVRON SIGNS AT EQUAL SPACING ALONG THE OUTSIDE OF THE CURVE USING THE TABULATED SPACING VALUE OR LESS.
- 11. THE CONTRACTOR SHALL USE TWO ALUMINUM STRIP PER CHEVRON MOUNTING.

TABLE 1

V (MPH)		DIMENSIONS (inches)								PACING
	Α	В	C	D	E	F	Χ	Y	ft	М
V ≤ 35	12	18	6	9	1/2	1 1/2	15	2	65	20
35 < V ≤ 40	24	30	12	15	7/8	1 1/2	27	4	95	30
40 < V ≤ 50	30	36	15	18	1	1 7/8	33	6	165	50
V > 50	36	48	18	24	1 1/8	2 1/4	39	8	165	50

EFFECTIVE DATE: JANUARY 2000								
COMMONWEALTH OF PUERTO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION ADRIGORITY ()								
CHE	L TRAFFIC S EVRON MOUNTII ETAIL FOR TWO VAY ROADWAYS	NG	TRAFFIC DATE :	EXC. DIR. FOR	ion			
DATE 12-1999	REVISION GENERAL REVISION	EY I.V.	STD. DWG.	STS 18 OF 2	25			



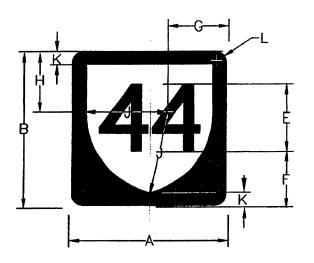
M1-6A

COLORS

SHIELD - BLUE (REFL)
BACKGROUND AND NUMERALS - WHITE (REFL)

	·						·			
SIGN		DIMENSIONS (INCHES)								
31014	Α	В	E	F	G	Н	J	K	L	
1 DIGIT	24	24	12 D	7.12	9.27	9.57	12.5	2	1.5	
2 DIGITS	24	24	10 D	8.58	9.27	9.57	12.5	2	1.5	
3 DIGITS	24	24	8 C	9.88	9.27	9.57	12.5	2	1.5	
1 DIGIT	36	36	18 D	10.68	13.9	14.3	18.75	3	2.25	
2 DIGITS	36	36	15 D	12.87	13.9	14.3	18.75	3	2.25	
3 DIGITS	36	36	12 C	14.82	13.9	14.3	18.75	3	2.25	
1 DIGIT	48	48	24 D	14.24	18.54	19,14	25	4	3	
2 DIGITS	48	48	20 D	17.16	18.54	19.14	25	4	3	
3 DIGITS	48	48	16 C	19.76	18.54	19.14	25	4	3	

OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTER LINE



M1-6B

COLORS

SHIELD — WHITE (REFL) BACKGROUND AND NUMERALS — BLACK (NON-REFL)

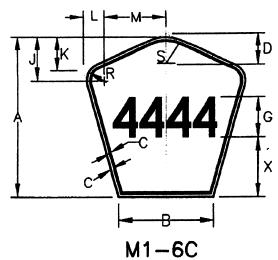
CICNI				DIMEN	SION	S (IN	CHES))	
SIGN	Α	В	Ε	F	G	Н	J	K	L
1 DIGIT	24	24	12 D	7.12	9.27	9.57	12.5	.2	1.5
2 DIGITS	24	24	10 D	8.58	9.27	9.57	12.5	2	1.5
3 DIGITS	24	24	8 C	9.88	9.27	9.57	12.5	2	1.5
1 DIGIT	36	36	18 D	10.68	13.9	14.3	18.75	3	2.25
2 DIGITS	36	36	15 D	12.87	13.9	14.3	18.75	3	2.25
3 DIGITS	36	36	12 C	14.82	13.9	14.3	18.75	3	2.25
1 DIGIT	48	48	24 D	14.24	18.54	19.14	25	4	3
2 DIGITS	48	48	20 D	17.16	18.54	19.14	25	4	3
3 DIGITS	48	48	16 C	19.76	18.54	19.14	25	4	3

OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTER LINE

EFFECTIVE DATE: DECEMBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED
ASST. EXC. DIA. FOR TRAFFIC
DIA. FOR TRAFFIC
APPROAGE BY:
APPRO

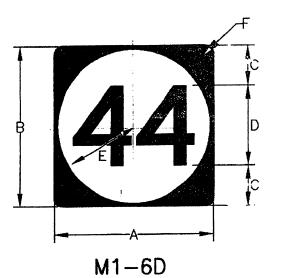


COLORS

NUMERALS AND BORDER - YELLOW (REFL.)
RACKGROUND - BILLE (REFL.)

	BACKGROUND BLUE (REFL.)												
CICN					DIMEN	ISION:	S (IN	CHES))				
SIGN	Α	В	С	D	G	X	J	K	L	М	R	S	
1 DIGIT	24.00	14.19	0.38	5.00	14 D	5.00	6.63	5.13	3.13	9.31	2.69	5.00	
2 DIGITS	24.00	14.19	0.38	5.00	10 D	8.00	6.63	5.13	3.13	9.31	2.69	5.00	
3 DIGITS	24.00	14.19	0.38	5.00	10 B	8.00	6.63	5.13	3.13	9.31	2.69	5.00	
4 DIGITS	24.00	14.19	0.38	5.00	8 B	9.00	6.63	5.13	3.13	9.31	2.69	5.00	
1 DIGIT	36.00	21.29	0.57	7.50	21 D	7.50	9.95	7.70	4.70	13.97	4.04	7.50	
2 DIGITS	36.00	21.29	0.57	7.50	15 D	12.00	9.95	7.70	4.70	13.97	4.04	7.50	
3 DIGITS	36.00	21.29	0.57	7.50	15 B	12.00	9.95	7.70	4.70	13.97	4.04	7.50	
4 DIGITS	36.00	21.29	0.57	7.50	12 B	13.50	9.95	7.70	4.70	13.97	4.04	7.50	
1 DIGIT	48.00	28.38	0.76	10.00	28 D	10.00	13.26	10.26	6.26	18.62	5.38	10.00	
2 DIGITS	48.00	28.38	0.76	10.00	20 D	16.00	13.26	10.26	6.26	18.62	5.38	10.00	
3 DIGITS	48.00	28.38	0.76	10.00	20 B	16.00	13.26	10.26	6.26	18.62	5.38	10.00	
4 DIGITS	48.00	28.38	0.76	10.00	16 B	18.00	13.26	10.26	6.26	18.62	5.38	10.00	

OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTER LINE



COLORS

LEGEND - BLACK (NON REFL.)

RACKGROUND - WHITE (REFL.)

BACKGROUND - WHITE (REFL.)											
[DIMEN	SIONS	S (INC	HES)							
Α	В	C	D	·E	F						
24	24	6	12 D	11	1.25						
24	24	6	12 D	11	1.25						
24	24	8	8 D	11	1.25						
24	24	9	6 D	11	1.25						
36	36	9	18 D	16.25	2.25						
36	36	9	18 D	16.25	2.25						
36	36	12	12 D	16.25	2.25						
36	36	13.5	9 D	16.25	2.25						
48	48	12	24 D	22	3						
48	48	12	24 D	22	3						
48	48	16	16 D	22	3						
48	48	18	12 D	22	3						
	A 24 24 24 24 36 36 36 36 48 48 48	DIMEN A B 24 24 24 24 24 24 24 24 36 36 36 36 36 36 48 48 48 48	DIMENSIONS A B C 24 24 6 24 24 6 24 24 8 24 24 8 24 24 9 36 36 9 36 36 9 36 36 12 36 36 12 48 48 12 48 48 12	DIMENSIONS (INC A B C D 24 24 6 12 D 24 24 6 12 D 24 24 8 8 D 24 24 9 6 D 36 36 9 18 D 36 36 9 18 D 36 36 12 12 D 36 36 13.5 9 D 48 48 12 24 D 48 48 16 16 D	DIMENSIONS (INCHES) A B C D E 24 24 6 12 D 11 24 24 6 12 D 11 24 24 8 8 D 11 24 24 9 6 D 11 36 36 9 18 D 16.25 36 36 9 18 D 16.25 36 36 12 12 D 16.25 36 36 13.5 9 D 16.25 48 48 12 24 D 22 48 48 16 16 D 22						

OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTER LINE

EFFECTIVE DATE: DECEMBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

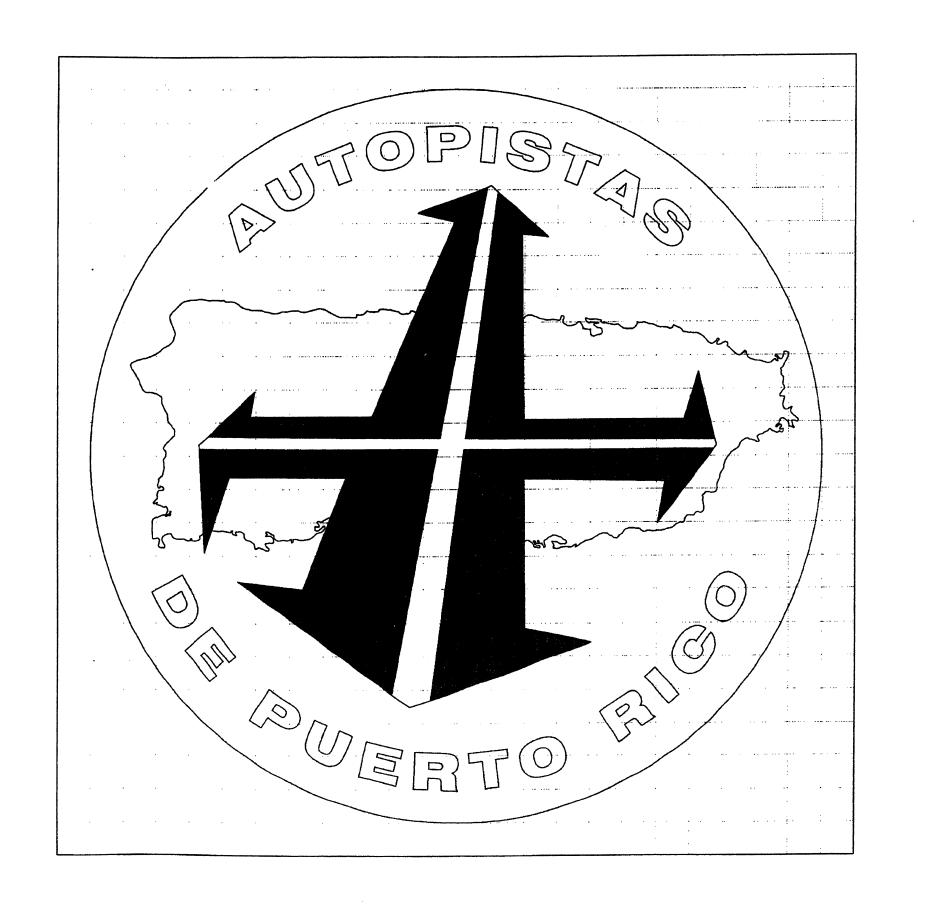
REPORTMENDED BY:

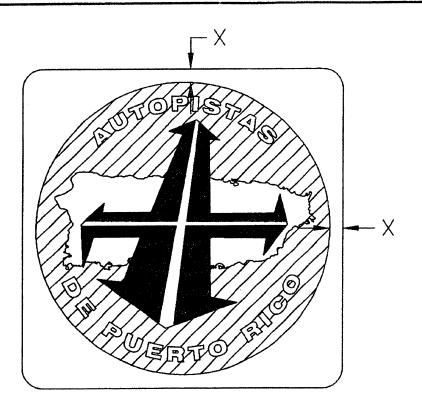
APPROVED BY:

SECRETARY 4/51 = //949

APPROVED BY:

SE





M1 - 6E

WHITE (REFL.)

BLUE (REFL.)

SIGN 24" X 24" 1" 36" X 36" 1.50" 48" X 48"

YELLOW (REFL.)

NOTE:

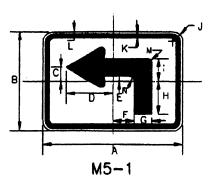
1. FOR SIGN PLATE DETAILS SEE BLANK PLATE STANDARD DRAWINGS.

SMALL TRAFFIC SIGNS ROUTE MARKERS TOLLWAYS ROUTE MARKER

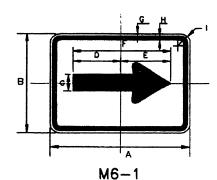
EFFECTIVE DATE: DECEMBER 1998

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

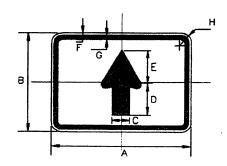
DATE REVISION STD. STS DWG19B OF 25



	DIMENSIONS (INCHES)													
4	В	O	D	Ε	F	G	Н		J	K	L	М	N	
21.00	15.00	2.06	7.13	0.75	3.19	2.63	5.06	3.38	1.50	0.63	0.38	0.56	0.75	
31.50	22.50	3.09	10.69	1.13	4.78	3.94	7.59	5.06	2.25	0.94	0.56	0.84	1.13	
42.00	30.00	4.12	14.25	1.50	6.38	5.25	10.13	6.75	3.00	1.25	0.75	1.13	1.50	

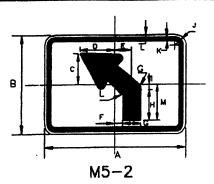


		DIN	MENSI	ONS ((INCHI	ES)		
Α	В	С	D	Ε	F	G	Н	1
21.00	15.00	2.63	7.13	7.50	14.63	0.38	0.63	1.50
31.50	22.50	3.94	10.69	11.25	21.94	0.56	0.94	2.25
42.00	30.00	5.25	14.25	15.00	29.25	0.75	1.25	3.00

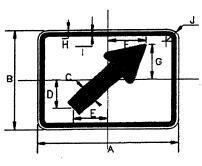


M6 - 3

	DIMENSIONS (INCHES)											
Α	В	С	D	E	F	G	Н					
21.00	15.00	2.63	4.88	4.88	0.38	0.63	1.50					
31.50	22.50	3.94	7.31	7.32	0.56	0.94	2.25					
42.00	30.00	5.25	9.75	9.76	0.75	1.25	3.00					



	DIMENSIONS (INCHES)													
A	В	С	D	E	F	G	Н		J	K	L	M		
21.00	15.00	4.75	4.50	2.44	1.13	0.38	4.69	0.75	1.50	0.63	0.38	5.44		
31.50	22.50	7.13	6.75	3.66	1.69	0.56	7.03	1.13	2.25	0.94	0.56	8.16		
42.00	30.00	9.50	9.00	4.88	2.25	0.75	9.38	1.50	3.00	1.25	0.75	10.88		



M6 - 2

	DIMENSIONS (INCHES)													
Α	В	С	D	Ε	F	G	Τ		J					
21.00	15.00	2.63	4.31	5.06	5.63	5.06	0.38	0.63	1.50					
31.50	22.50	3.94	6.47	7.59	8.45	7.59	0.56	0.94	2.25					
42.00	30.00	5.25	8.63	10.12	11.26	10.13	0.75	1.25	3.00					

NOTES:

- 1. THE AUXILIARY PLATES SHALL CONFORM TO THE COLOR SCHEME OF THE ROUTE MARKER TO WHICH THEY APPLY AS FOLLOWS:
 FOR M1-6A, USE LEGEND: WHITE (REFL.), BACKGROUND: BLUE (REFL.)
 FOR M1-6B, USE LEGEND: BLACK (NON-REFL.), BACKGROUND: WHITE (REFL.)
 FOR M1-6C, USE LEGEND: NUMERALS AND BORDER YELLOW (REFL.), BACKGROUND: BLUE (REFL.)
 FOR M1-6D, USE LEGEND: BLACK (NON-REFL.), BACKGROUND: WHITE (REFL.)
- 2. FOR 24"x 24" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 21"x15" AUXILIARY PLATES. FOR 36"x 36" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 31.50"x22.50" AUXILIARY PLATES. FOR 48"x 48" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 42"x30" AUXILIARY PLATES.
- 3. USE MIRROR IMAGE OF DRAWING FOR ARROWS POINTING LEFT.
- 4. THE CONTRACTOR IS RESPONSIBLE TO DIFFERENTIATE BETWEEN SIGNS WITH ARROWS POINTING RIGHT OR LEFT AS A SUBSIDIARY OBLIGATION.

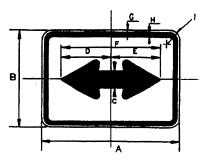
EFFECTIVE DATE: JULY 2000

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

SMALL TRAFFIC SIGNS ROUTE MARKERS AUXILIARY PLATES

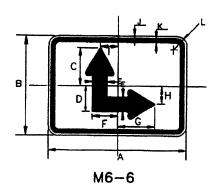
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
SNS	DEPUTY E TRAFFIC DATE : 10	NOER BY: DOC. DIR. NOR NND TOLL NOADS
CPIC	APPROVE EXECUTIVE DATE	DIRECTOR
	APPROVE	Ø:
	DATE :-	mpy >5/w
BY	STD.	STS
1.V.	310.	313

DATE | R E V I S I O N | BY | STD. | STS | 12-1999 | GENERAL REVISION | I.V. | DWG. | 20 OF 25

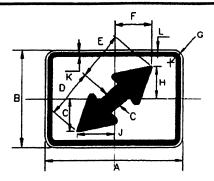


M6-4

	DIMENSIONS (INCHES)												
Α	A B C D E F G H I												
21.00	15.00	2.63	7.50	7.50	15.00	0.38	0.63	1.50					
31.50	31.50 22.50 3.94 11.25 11.25 22.50 0.56 0.95 2.25												
42.00	42.00 30.00 5.25 15.00 15.00 30.00 0.75 1.26 3.00												

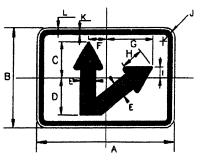


				DIM	ENSIC	NS (INCHE	ES)			
Α	В	С	D	E	F	G	Н	Ť	J	K	L
21.00	15.00	5.75	3.88	2.25	3.88	5.75	2.75	2.75	0.38	0.63	1.50
31.50	22.50	8.63	5.81	3.38	5.81	8.63	4.13	4.13	0.56	0.94	2.25
42.00	30.00	11.50	7.75	4.50	7.75	11.50	5.50	5.50	0.75	1.25	3.00



M6-5

	DIMENSIONS (INCHES)												
Α	В	С	D	E	F	G	Н	J	K	L			
21.00	15.00	2.25	7.88	7.88	5.88	1.50	5.25	5.88	0.63	0.38			
31.50	22.50	3.38	11.81	11.81	8.81	2.25	7.88	8.81	0.94	0.56			
42.00	30.00	4.50	15.75	15.76	11.75	3.00	10.50	11.75	1.25	0.75			



M6 - 7

	DIMENSIONS (INCHES)											
Α	В	С	О	E	F	G	Н		J	K	L	
21.00	15.00	5.75	5.50	2.25	3.88	6.75	4.50	2.13	1.50	0.63	0.38	
31.50	22.50	8.63	8.25	3.38	5.81	10.13	6.75	3.19	2.25	0.94	0.56	
42.00	30.00	11.50	11.00	4.50	7.75	13.50	9.00	4.25	3.00	1.25	0.75	

NOTES:

- 1. THE AUXILIARY PLATES SHALL CONFORM TO THE COLOR SCHEME OF
 THE ROUTE MARKER TO WHICH THEY APPLY AS FOLLOWS:
 FOR M1-6A, USE LEGEND: WHITE (REFL), BACKGROUND: BLUE (REFL)
 FOR M1-6B, USE LEGEND: BLACK (NON-REFL), BACKGROUND: WHITE (REFL)
 FOR M1-6C, USE LEGEND: NUMERALS AND BORDER YELLOW (REFL), BACKGROUND: BLUE (REFL)
 FOR M1-6D, USE LEGEND: BLACK (NON-REFL), BACKGROUND: WHITE (REFL)
- 2. FOR 24"x 24" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 21"x15" AUXILIARY PLATES. FOR 36"x 36" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 31.50"x22.50" AUXILIARY PLATES. FOR 48"x 48" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 42"x30" AUXILIARY PLATES.
- . 3. USE MIRROR IMAGE OF DRAWING FOR ARROWS POINTING LEFT.
- 4. THE CONTRACTOR IS RESPONSIBLE TO DIFFERENTIATE BETWEEN SIGNS WITH ARROWS POINTING RIGHT OR LEFT AS A SUBSIDIARY OBLIGATION.

EFFECTIVE DATE: JULY 2000

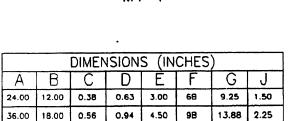
COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

SMALL TRAFFIC SIGNS ROUTE MARKERS AUXILIARY PLATES

	RECOMMENDED BY
	DEPUTY EXC. DIR. FOR TRAFFIC AND TOLL ROADS
S	DATE : 19-10-00
	APPROVED ARY:
	EXECUTIVE DIRECTOR
ļ	APPROVED SEX:
	SECONO >C/00

DATE	REVISION	BY	CTD		TC:
12-1999	GENERAL REVISION	I.V.	STD.		212
05-2000	GENERAL REVISION	i.V.	DWG.	120A	OF
		1	1		•

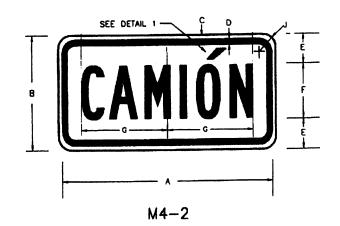




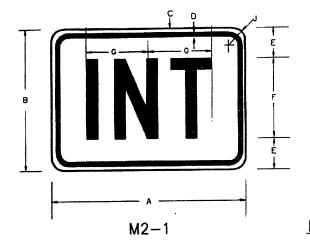
1.25 6.00 128

18.50 3.00

48.00 24.00 0.75



DIMENSIONS (INCHES)									
A B C D E F G									
24.00	12.00	0.38	0.63	3.50	58	8.13	1.50		
36.00	18.00	0.56	0.94	5.00	88	12.20	2.25		
48.00	24.00	0.75	1.25	7.00	108	16.26	3.00		



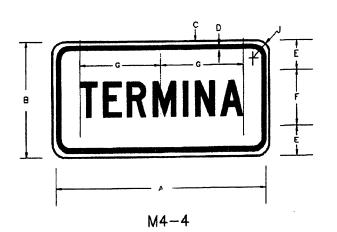
	DIMENSIONS (INCHES)								
Α	В	С	D	E	F	G	J		
21.00	15.00	0.38	0.63	3.50	80	7.45	1.50		
31.50	22.50	0.56	0.94	5.25	120	11.17	2.25		
42.00	30.00	0.75	1.25	7.00	16D	14.89	3.00		

NOTE:

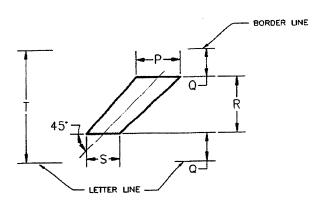
- 1. THE AUXILIARY PLATES SHALL CONFORM TO THE COLOR SCHEME OF THE ROUTE MARKER TO WHICH THEY APPLY AS FOLLOWS: FOR M1-6A, USE LEGEND: WHITE (REFL), BACKGROUND: BLUE (REFL) FOR M1-6B, USE LEGEND: BLACK (NON-REFL), BACKGROUND: WHITE (REFL) FOR M1-6C, USE LEGEND: YELLOW (REFL), BACKGROUND: BLUE (REFL) FOR M1-6D, USE LEGEND AND BORDER: BLACK (NON-REFL), BACKGROUND: WHITE (REFL)
- 2. FOR 24"x 24" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 24"x 12" (OR 21"x 15", M2-1) AUXILIARY MARKERS. FOR 36"x 36" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 36"x 18" (OR 31:50"x22:5". M2-1) AUXILIARY MARKERS. FOR 48"x 48" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 48"x 24" (OR 42"x30", M2-1) AUXILIARY MARKERS.



	DIMENSIONS (INCHES)										
A B C D E F G J											
24.00	12.00	0.38	0.63	3.00	6C	9.47	1.50				
36.00	18.00	0.57	0.95	4.50	9C	14.21	2.25				
48.00	24.00	0.76	1.26	6.00	120	18.94	3.00				



DIMENSIONS (INCHES)										
A	В	С	D	E	F	G	J			
24.00	12.00	0.38	0.63	4.00	4C	9.28	1.50			
36.00	18.00	0.56	0.94	6.00	6C	13.92	2.25			
48.00	24.00	0.75	1.25	8.00	8C	18.56	3.00			



DETAIL 1

FOR M4-1									
HEIGHT & PQRST									
0.75	0.62	1.25	0.56	2.49					
1.13	0.75	1.50	0.84	3.00					
1.50	1.00	2.00	1.12	4.00					
	0.75 1.13	P Q 0.75 0.62 1.13 0.75	P Q R 0.75 0.62 1.25 1.13 0.75 1.50	P Q R S 0.75 0.62 1.25 0.56 1.13 0.75 1.50 0.84					

	FOR M4-2									
HEIGHT & PQRST										
58	0.62	0.62	1.25	0.46	2.49					
88	1.00	0.87	1.75	0.75	3.50					
108	1.25	1.25	2.50	0.94	5.00					

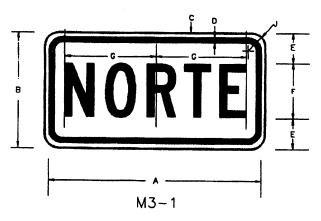
EFFECTIVE DATE: JULY 2000

SMALL TRAFFIC SIGNS ROUTE MARKERS AUXILIARY MARKERS

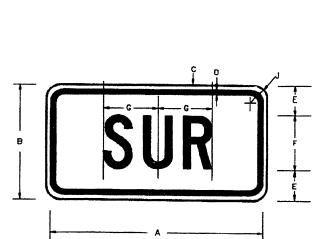
	/4/	
	EXECUTIV	E PRECTOR
	APPROVE	DY_BY:
	SECRETA	Men 25/W
	UAIL :ZA	1141/11
BY	070	OTO

APPROVED LEY:

DATE	REVISION	BY	STD.		STS	- 1
2-1999	GENERAL REVISION	I.V.		A 4	2.5	05
5-2000	GENERAL REVISION	ł.V.	DWG.	ZI	OF	23
				<u> </u>		

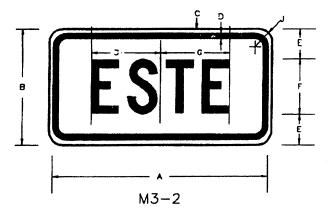


DIMENSIONS (INCHES)									
Α	В	С	D	E	F	G	J		
24.00	12.00	0.38	0.63	3.00	6B	8.17	1.50		
36.00	18.00	0.56	0.94	4.50	9B	12.26	2.25		
48.00	24.00	0.75	1.25	6.00	12B	16.34	3.00		

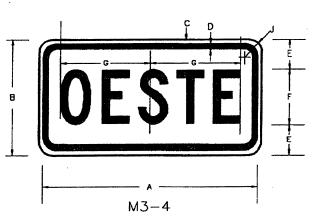


DIMENSIONS (INCHES)								
Α	В	С	D	E	F	G	J	
24.00	12.00	0.38	0.63	3.00	6D	7.46	1.50	
36.00	18.00	0.56	0.94	4.50	9D	11:18	2.25	
48.00	24.00	0.75	1.25	6.00	120	14,91	3.00	

M3 - 3



DIMENSIONS (INCHES)								
Α	В	С	D	Ε	F	G	J	
24.00	12.00	0.38	0.63	3.00	6C	7.66	1.50	
36.00	18.00	0.56	0.94	4.50	9C	11.48	2.25	
48.00	24.00	0.75	1.25	6.00	12C	15.31	3.00	



DIMENSIONS (INCHES)								
Α	В	С	D	E	F	G	J	
24.00	12.00	0.38	0.63	3.00	6B	7.92	1.50	
36.00	18.00	0.56	0.94	4.50	98	11.87	2.25	
48.00	24.00	0.75	1.25	6.00	12B	15.83	3.00	

NOTE:

- 1. THE AUXILIARY PLATES SHALL CONFORM TO THE COLOR SCHEME OF THE ROUTE MARKER TO WHICH THEY APPLY AS FOLLOWS: FOR M1-6A, USE LEGEND: WHITE (REFL), BACKGROUND: BLUE (REFL) FOR M1-6B, USE LEGEND: BLACK (NON-REFL), BACKGROUND: WHITE (REFL) FOR M1-6C, USE LEGEND: YELLOW (REFL), BACKGROUND: BLUE (REFL) FOR M1-6D, USE LEGEND AND BORDER: BLACK (NON-REFL), BACKGROUND: WHITE (REFL)
- 2. FOR 24"x 24" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 24"x 12" (OR 21"x 15", M2-1) AUXILIARY MARKERS.
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 FOR 48"x 48" M1-6A, M1-6B, M1-6C, M1-6D, OR M1-6E USE 48"x 24" (OR 42"x30", M2-1) AUXILIARY MARKERS.

EFFECTIVE DATE: FEBRUARY 2000

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

RECOMMENDED BY:
DEPUT EXC. DR. FOR TRANSPORTATION AUTHORITY

APPROVED BY:
SECRETARY 26/201/55

APPROVED BY:
SECRETARY 26/201/55

APPROVED BY:
SECRETARY 26/201/55

APPROVED BY:
SECRETARY 26/201/55

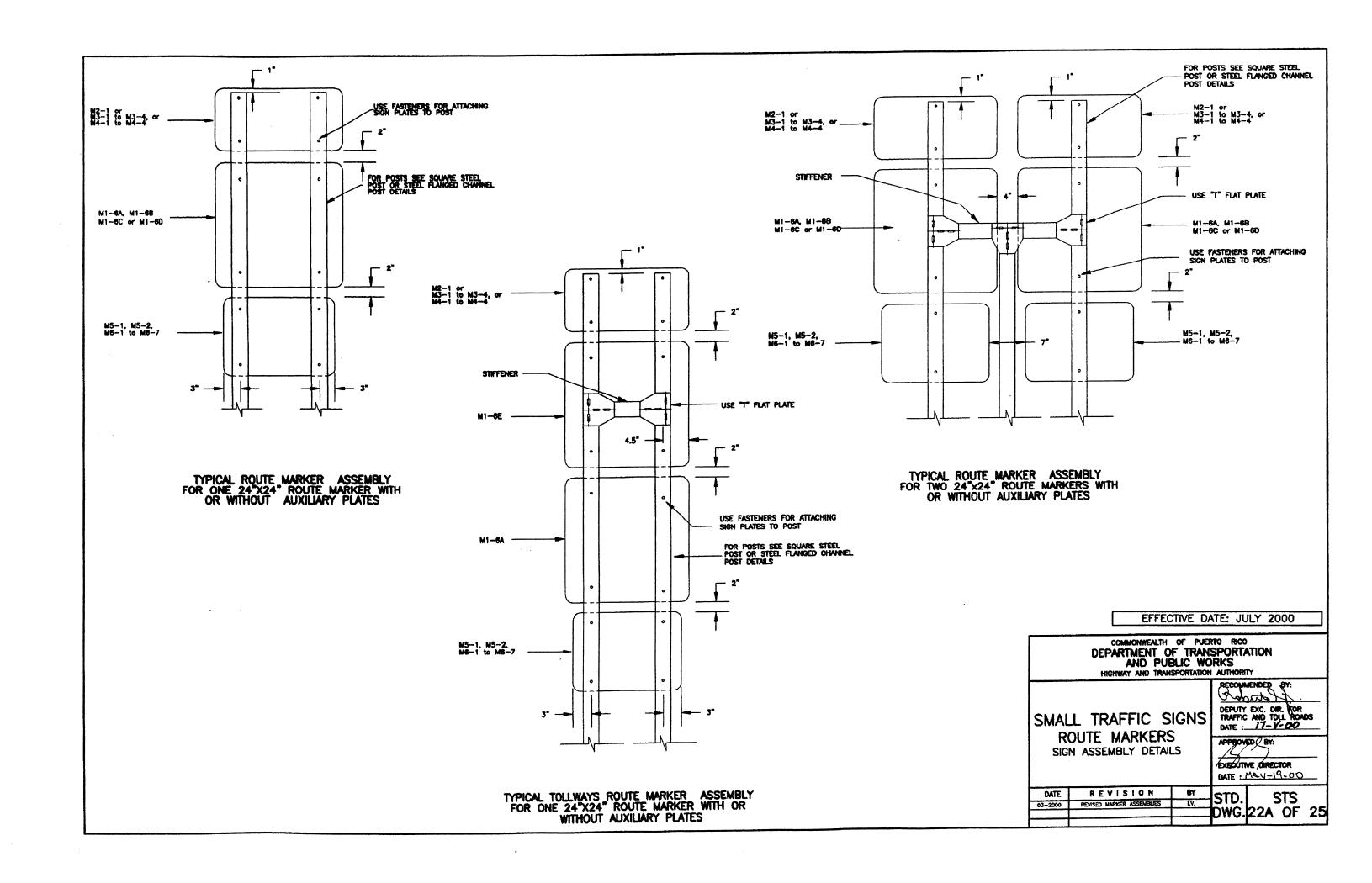
APPROVED BY:
DN. ADM. FHWA-PR DIVISION
DATE R E V I S I O N BY
12-1999 GENERAL REVISION IV.

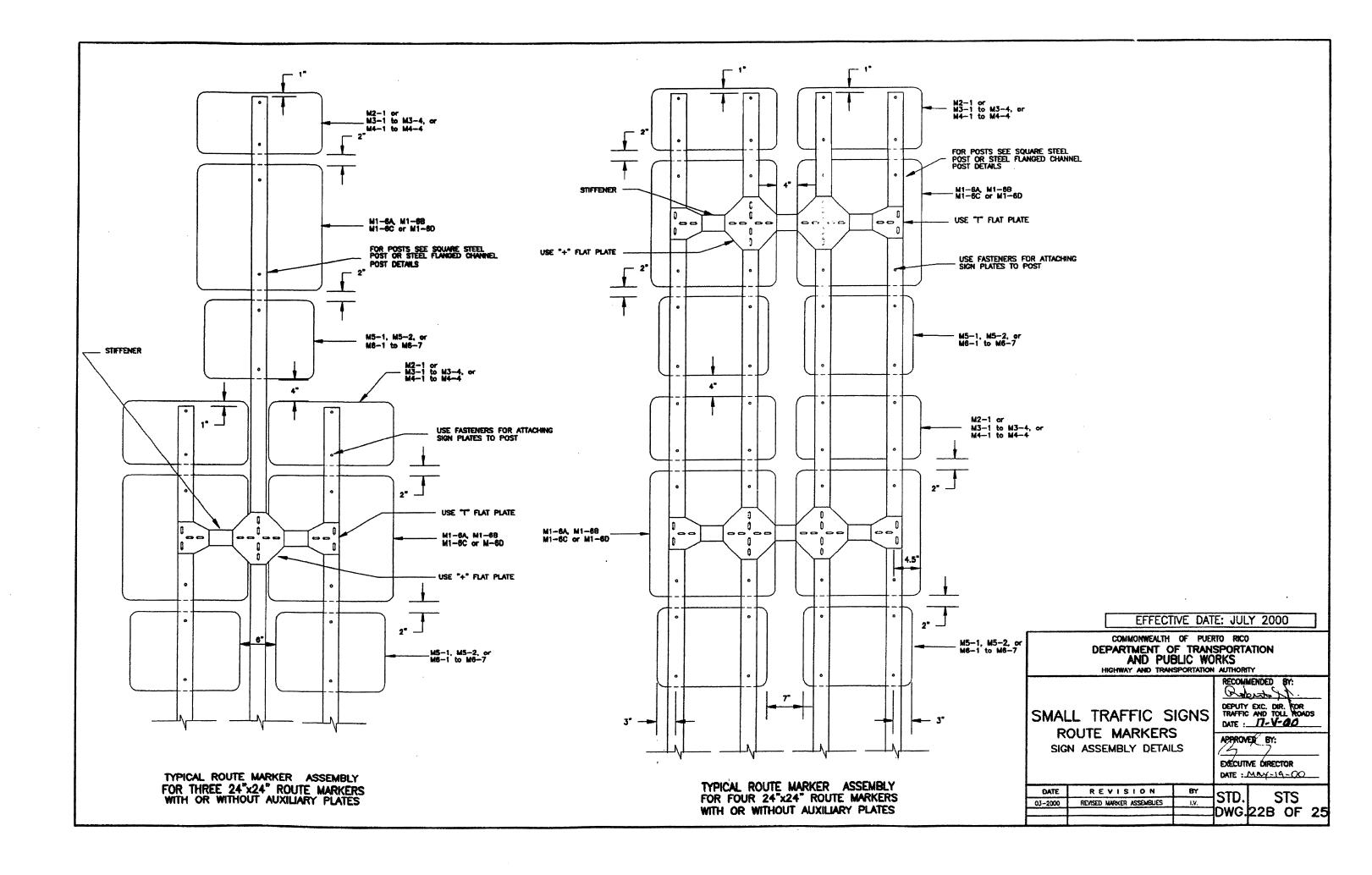
DWG. 21A OF 25

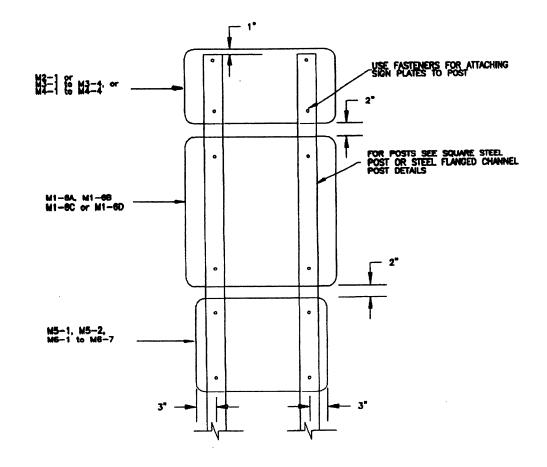
ADDITIONAL GENERAL NOTES APPLICABLE TO ALL ROUTE MARKERS SIGN ASSEMBLIES DETAILS:

- 1. THE FOUNDATIONS SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST FOUNDATION DETAILS.
- 2. TOP POST TO BASE POST CONNECTION SHALL BE AS INDICATED FOR STEEL FLANGED CHANNEL AND SQUARE STEEL POST CONNECTION DETAILS.
- 3. VERTICAL CLEARANCE OF SIGN PANEL SHALL BE 7'-0" TO 7'-6" FROM THE LOWEST SIGN PANEL TO THE GRADE OF THE NEAREST LANE EDGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCREASING OR DECREASING THE LENGTH OF POST TO ACHIEVE THE MOUNTING HEIGHT ABOVE PAVEMENT EDGE.
- 4. ALL TOP POSTS AND BASE POSTS SHALL BE CONTINUOS IN LENGTH.
- 5. MAXIMUM DEVIATION FROM VERTICAL, FOR ANY COMPONENT, IN ANY DIRECTION SHALL BE 1/8" IN A FOOT.
- 6. MAXIMUM DEVIATION FROM HORIZONTAL, FOR ANY COMPONENT SHALL BE 1/8" IN A FOOT.
- 7. THE CONTRACTOR SHALL DRILL ADDITIONAL HOLES IN THE SIGN PLATE AS A SUBSIDIARY OBLIGATION.
- 8. BOLT TOP POST TO FLAT PLATE ("+" OR "T") WITH 5/16" ALUMINUM FLAT HEAD MACHINE SCREWS WITH NUTS AND LOCK WASHER.
- 9. WHEN ROUTE MARKER ASSEMBLIES INCLUDE TOLLWAYS ROUTE MARKER, THE CONTRACTOR SHALL INCLUDE SIGN M1-6E AND REARRANGE MOUNTING DETAILS AS A SUBSIDIARY OBLIGATION.
- 10. FOR TOLLWAY ROUTE MARKERS ASSEMBLIES 36"X36" OR 48"X48" AND FOR ROUTE MARKER ASSEMBLIES OF THREE OR FOUR 36"X36" AND ALL 48"X48" SEE GROUND MOUNTED BREAK-AWAY SIGNS STANDARD DRAWINGS.
- 11. SIGN PLATES SHALL BE ATTACHED TO POSTS OR STIFFENERS BY MEANS OF THE APPROVED FASTENERS INCLUDED IN THE STS DRAWINGS. STIFFENERS SHALL BE SQUARE STEEL POST, STEEL FLANGED CHANNEL POST OR ALTERNATE STIFFENER AS PER SMALL TRAFFIC SIGNS STANDARD DRAWINGS.

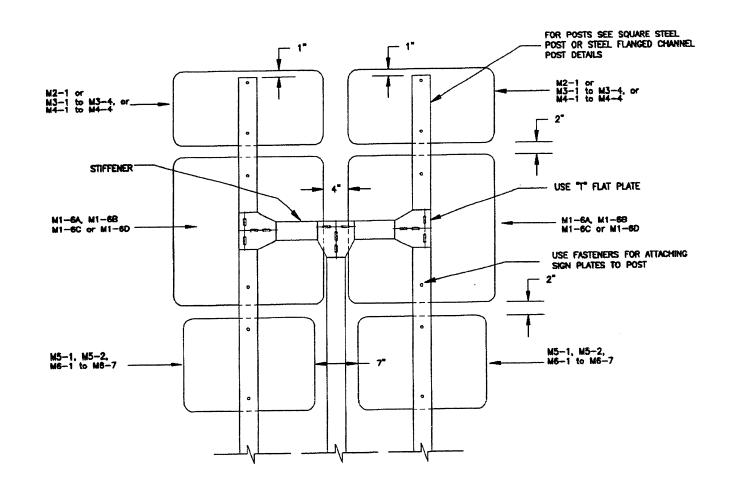
EFFECTIVE DATE: JULY 2000 COMMONWEALTH OF PUERTO RICO DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS HIGHWAY AND TRANSPORTATION AUTHORIT RECOMMENDED , BY: DEPUTY EXC. DIR FOR TRAFFIC AND TOLL ROADS DATE: 17- V- 00 SMALL TRAFFIC SIGNS ROUTE MARKERS APPROVED BY: SIGN ASSEMBLY DETAILS EXECUTIVE DIRECTOR DATE : MAY-19-00 REVISION STD. STS REVISED NOTES DWG. 22 OF 25







TYPICAL ROUTE MARKER ASSEMBLY
FOR ONE 36"X36" ROUTE MARKER WITH
OR WITHOUT AUXILIARY PLATES



TYPICAL ROUTE MARKER ASSEMBLY FOR TWO 36"x36" ROUTE MARKERS WITH OR WITHOUT AUXILIARY PLATES

COMMONWEALTH OF PUERTO RICO
DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
HIGHWAY AND TRANSPORTATION AUTHORITY

SMALL TRAFFIC SIGNS
ROUTE MARKERS
SIGN ASSEMBLY DETAILS

DEPUTY EXC. DR. FOR
TRAFFIC AND TOLL ROADS
DATE: 17-7-00

APPROVED BY:
EXCEPTIVE DIRECTOR
DATE: MARKER
DATE: MARKER DATE: MARKER ASSEMBLES

OJ-2000 REVISED MARKER ASSEMBLES

DWG. 22C OF 25

EFFECTIVE DATE: JULY 2000