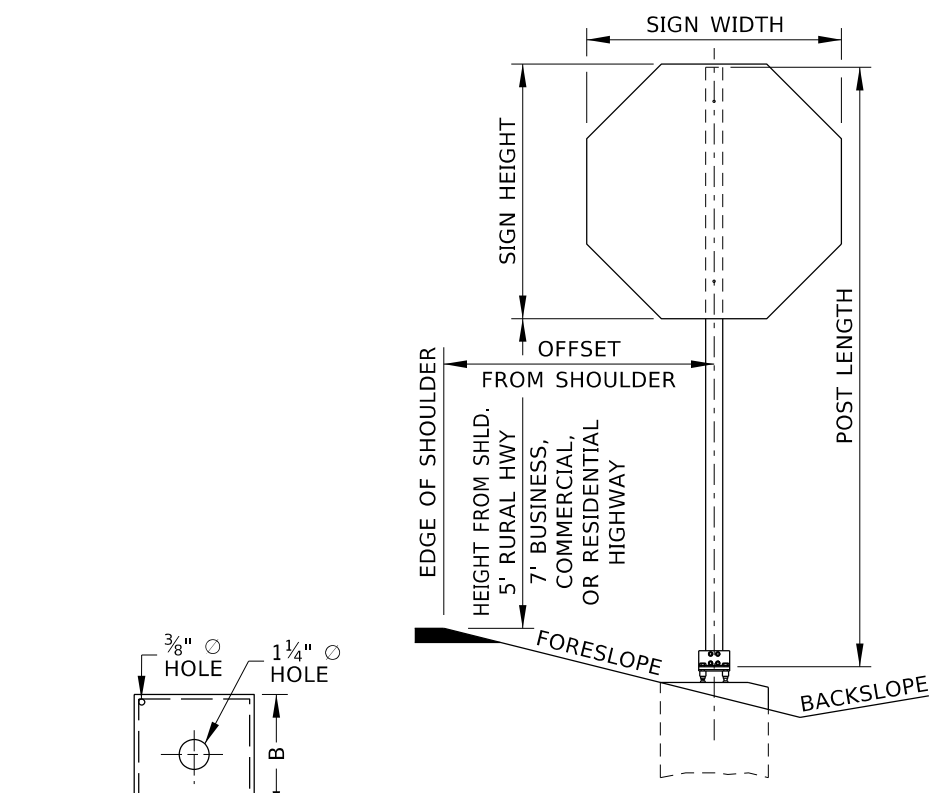
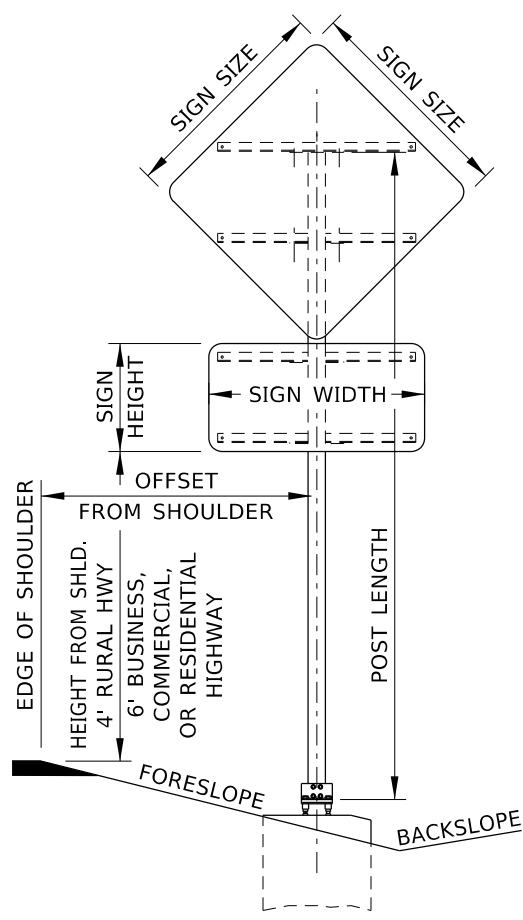
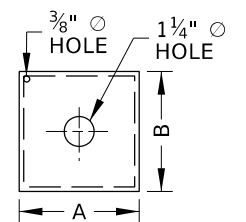


TYPE B - STEEL TUBE POST
SEE NOTE NOS. 10 & 11



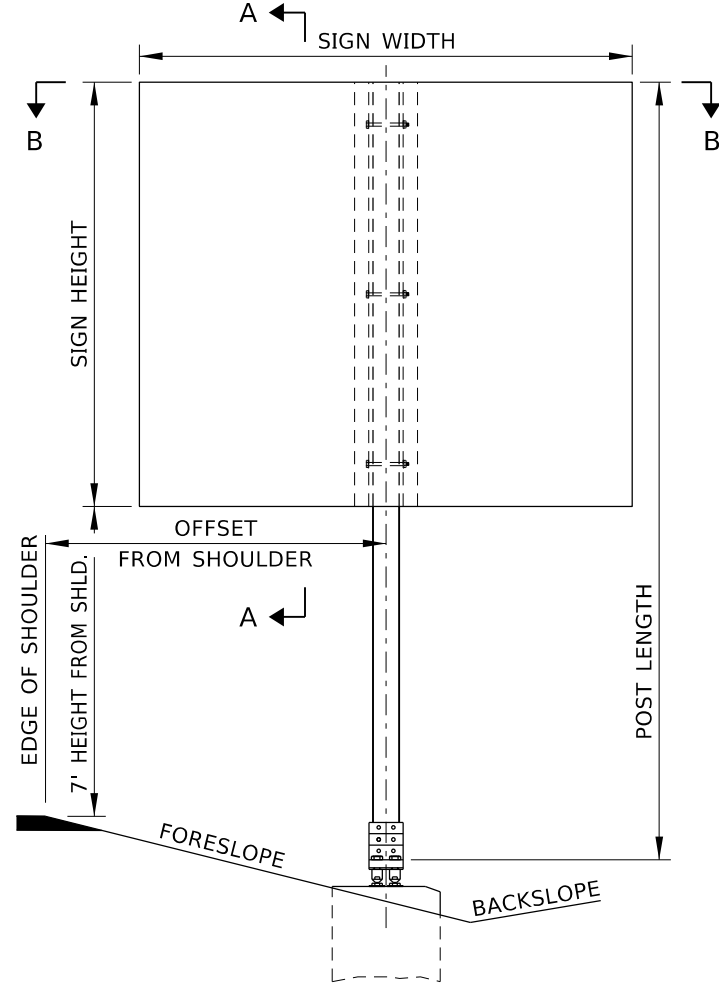
INSTALLATION OF SIGN(S) WITHOUT SIGN BRACE MOUNTS AND BRACES

COVER PLATE DETAIL

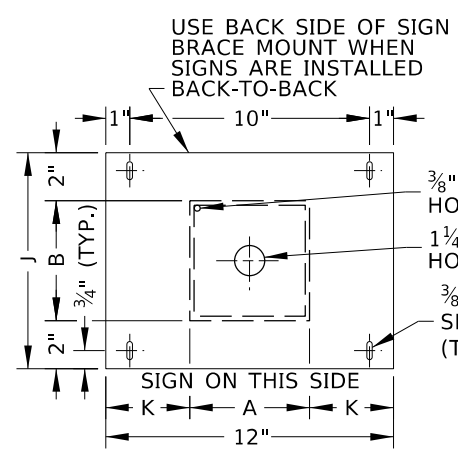


INSTALLATION OF SIGNS WITH SIGN BRACE MOUNTS AND BRACES

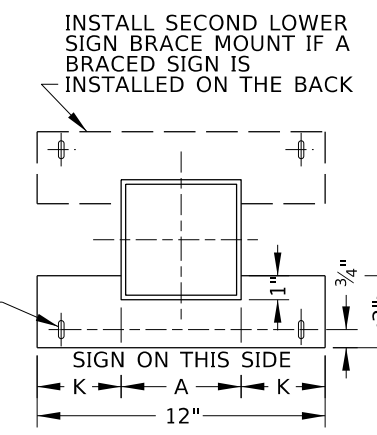
SIGN ASSEMBLY MEASUREMENTS



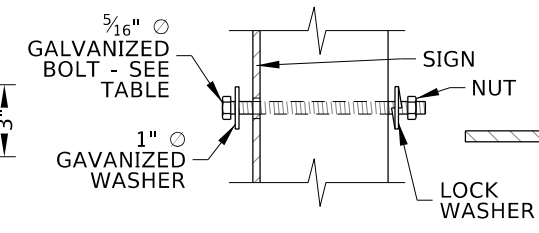
INSTALLATION OF TYPE C EXTRUDED ALUMINUM SIGN
SEE NOTE NO. 11



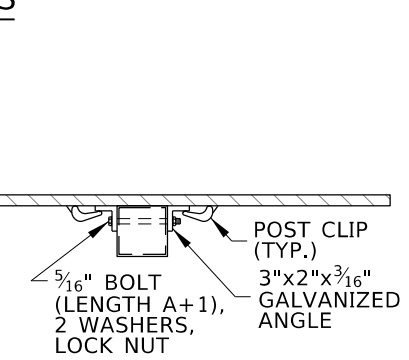
UPPER SIGN BRACE MOUNT DETAIL



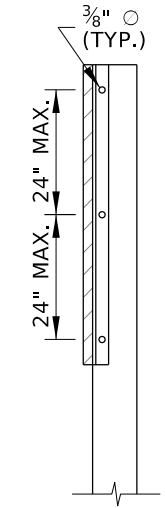
LOWER SIGN BRACE MOUNT DETAIL



FASTENER DETAIL
SEE NOTE NO. 10



SECTION B-B



SECTION A-A

SIGN POST, FOUNDATION, AND TEMPLATE TABLE

POST TYPE	STEEL TUBE POST SIZE			POST WEIGHT (LB/FT)	MAXIMUM SIGN LOAD (SFxFT)	BREAK-SAFE ASSEMBLY MODEL	SIGN BRACE MOUNT*					SIZE (DIAxDEPTH) (INxIN)	CONCRETE (CY)	FOUNDATION			REINFORCING STEEL HOOPS			TEMPLATE			FASTENERS SIGN BOLT LENGTH (IN)		
	A (IN)	B (IN)	C (IN)				D (IN)	E (IN)	F (IN)	G (IN)	H (IN)			J (IN)	K (IN)	BAR SIZE	NUMBER OF BARS	LENGTH (FT)	BAR SIZE	NUMBER OF BARS	LENGTH (FT)	L (IN)		M (IN)	N (IN)
B-2	3	4	3/16	8.15	250	AS4	1 1/16	1 7/16	2 1/16	-	9/16	8	4 1/2	24x60	0.6	4	6	26	4	4	21	7 1/16	36	4 1/4	4 1/2
B-3	5	5	3/16	11.96	517	B525	1 1/8	3/4	1 7/8	1 3/4	9/16	9	3 1/2	30x60	0.9	4	6	26	4	4	28	13	40	3	5 1/2
B-4	6	6	3/16	14.51	760	B525	1 1/8	3/4	1 7/8	1 3/4	9/16	10	3	30x60	0.9	4	6	26	4	4	28	14	40	3	6 1/2

* SEE NOTE NO. 10
† SEE NOTE NO. 11

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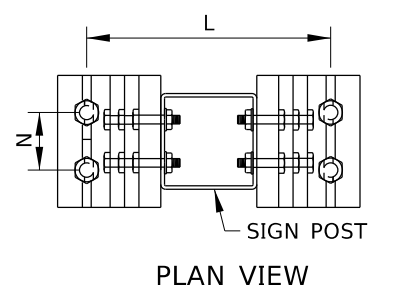
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HIGHWAY DESIGN ENGINEER

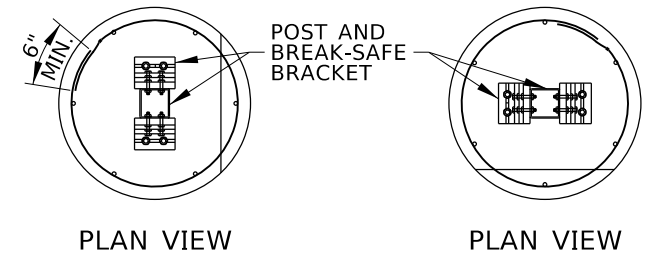
STANDARD DRAWING
STEEL SIGN POST AND FOUNDATION
TYPE B - STEEL TUBE POST

ENGLISH
STANDARD DRAWING NO. 616-6
SHEET 1 OF 2

PROFESSIONAL ENGINEER
RYAN D. LANCASTER
STATE OF IDAHO
MAINT 8, 2014

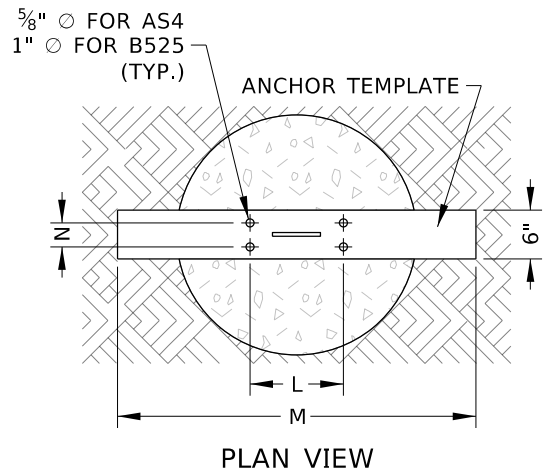


PLAN VIEW

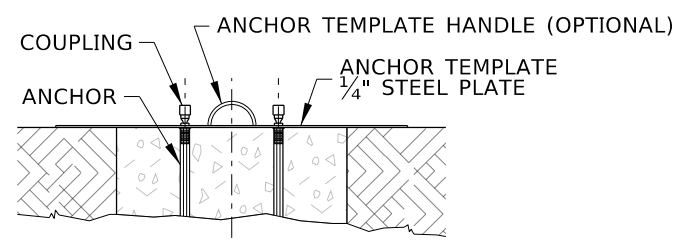


PLAN VIEW

BREAK-SAFE BRACKET DETAIL



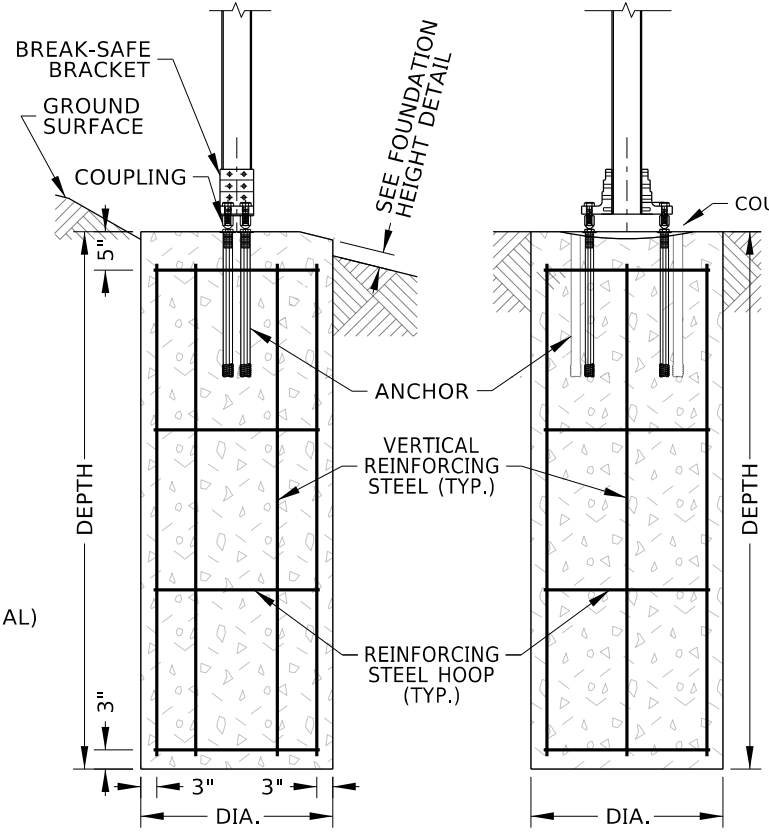
PLAN VIEW



ELEVATION

TEMPLATE DETAIL

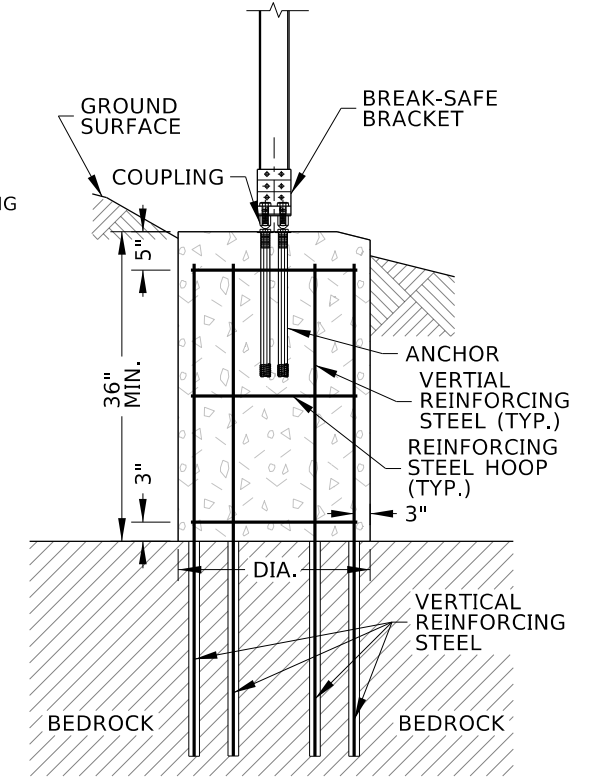
SEE NOTE NO. 3



ELEVATION FRONT VIEW
ELEVATION SIDE VIEW

FOUNDATION

SEE NOTE NOS. 8 & 9



ELEVATION FRONT VIEW

ALTERNATE FOUNDATION

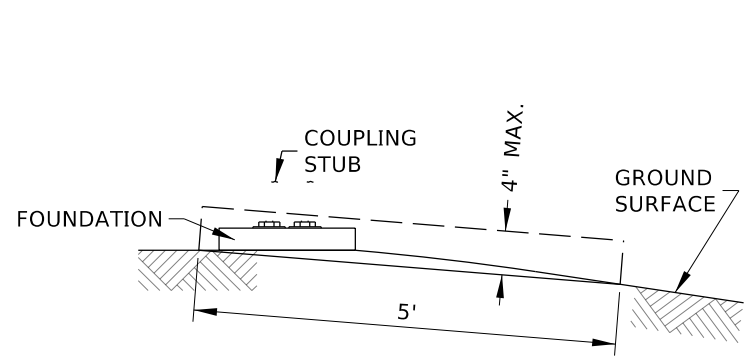
SEE NOTE NO. 9

ALTERNATE FOUNDATION TABLE				
SIZE (DIAXDEPTH) (INxIN)	CONCRETE (CY)	REINFORCING STEEL HOOPS*		
		BAR SIZE	NUMBER OF BARS	LENGTH (FT)
24x36	0.35	4	4	16
30x36	0.55	4	4	21
36x36	0.80	4	4	25

* SEE SIGN POST, FOUNDATION, AND TEMPLATE TABLE FOR VERTICAL REINFORCING STEEL.

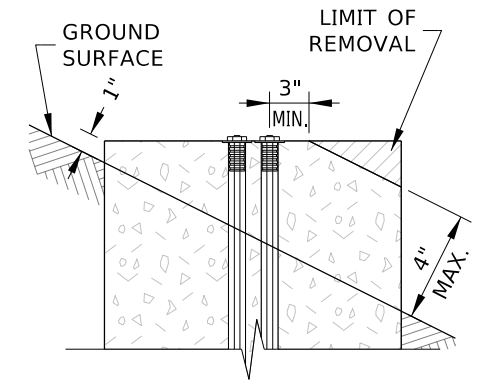
NOTES

- USE TYPE B - STEEL TUBE POSTS - WITH TYPE B - SHEET ALUMINUM, TYPE C - EXTRUDED ALUMINUM PANEL, AND TYPE E - HDO PLYWOOD SIGNS.
- SEE THE TRAFFIC MANUAL TO CALCULATE SIGN LOAD PER POST.
- USE BREAK-SAFE BREAKAWAY SUPPORT SYSTEM WITH TYPE B - STEEL TUBE POSTS. FOLLOW THE MANUFACTURERS INSTRUCTIONS. FABRICATE AND USE AN ANCHOR TEMPLATE TO ENSURE ANCHOR PLACEMENT.
- SEE PROJECT SIGN SUMMARY FOR SIGN ASSEMBLY DIMENSIONS.
- INSTALL ONLY ONE TYPE B - STEEL TUBE POST PER SIGN ASSEMBLY.
- ALIGN POST SO DIMENSION B IS PARALLEL TO THE TRAFFIC DIRECTION.
- STEEL TUBE POSTS (WITH THE BREAK-SAFE BREAKAWAY SUPPORT SYSTEM SHOWN) DO NOT NEED TO BE SHIELDED BY GUARDRAIL OR BARRIER. WHEN STEEL TUBE POSTS ARE INSTALLED BEHIND GUARDRAIL OR BARRIER, ENSURE THE POSTS ARE OUTSIDE OF THE GUARDRAIL OR BARRIER WORKING WIDTH.
- CAST FOUNDATION IN NATIVE SOILS IN AN AUGERED HOLE. IF AN AUGURED HOLE IS IMPRACTICAL, CAST THE FOUNDATION IN A CORRUGATED METAL PIPE FORM AND BACKFILLED IN ACCORDANCE WITH SECTION 210.
- IF SOLID BEDROCK IS ENCOUNTERED WITHIN THE FOUNDATION DEPTH, USE THE ALTERNATE FOUNDATION. QUANTITIES SHOWN FOR THE ALTERNATE FOUNDATION ASSUME 36" DEPTH TO BEDROCK. SOCKET VERTICAL REINFORCING STEEL FOR THE DEPTH SHOWN IN THE FOUNDATION MATERIAL QUANTITIES. DRILL 2 INCH MINIMUM DIAMETER HOLES. FILL DRILLED HOLES WITH GROUT, TYPE B, CLASS 1. NOTIFY THE ENGINEER IF THE DEPTH TO SOLID BEDROCK IS LESS THAN 36". IF LESS THAN 36", REDESIGN OF THE FOUNDATION MAY BE REQUIRED.
- TYPE B - SHEET ALUMINUM - OR TYPE E - HDO PLYWOOD - SIGNS ARE INSTALLED DIRECTLY TO THE POST OR WITH BRACES OR BRACKETS DEPENDENT ON SIGN SIZE AND APPLICATION.
 - IF SIGNS ARE INSTALLED DIRECTLY TO THE POST, WELD A COVER PLATE ON TOP OF THE POST AND DRILL 3/8" HOLES INTO POST TO INSTALL SIGN FASTENERS.
 - IF SIGNS ARE INSTALLED WITH BRACES, WELD SIGN BRACE MOUNTS AND FASTEN THE BRACES TO THE SIGN BRACE MOUNTS.
- FOR TYPE C - EXTRUDED ALUMINUM SIGNS, WELD A COVER PLATE ON TOP OF THE POST AND AFFIX GALVANIZED ANGLE TO POST AND CLIP SIGN TO ANGLE.
- SIGNS CAN BE MOUNTED BACK-TO-BACK IF THE SHAPE OF STOP, YIELD, OR WARNING SIGNS ARE NOT SHIELDED.
- INSTALL SIGNS AT THE FOLLOWING HEIGHTS:
 - IF INSTALLED IN A RURAL AREA, 5 FEET ABOVE THE PAVEMENT ELEVATION OR 4 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN.
 - IF INSTALLED IN THE VICINITY OF A CURB OR IN A BUSINESS, COMMERCIAL, OR RESIDENTIAL AREA WHERE PARKING OR PEDESTRIAN MOVEMENTS ARE LIKELY, 7 FEET ABOVE THE PAVEMENT ELEVATION OR 6 FEET IF A SUPPLEMENTARY PLAQUE IS INSTALLED BELOW THE SIGN. IF INSTALLED LOWER THAN 7 FEET, ENSURE SIGNS DO NOT PROJECT MORE THAN 4 INCHES INTO THE PEDESTRIAN FACILITY.
- WHEN THE SIGN IS INSTALLED ON A BACKSLOPE, ENSURE THE SIGN POST IS AT LEAST 5' HIGHER THAN THE GROUND SURFACE.
- ENSURE NO PART OF THE FOUNDATION OR STUB OF BREAKAWAY SYSTEM PROJECT MORE THAN 4 IN. ABOVE ANY 5 FT. CHORD ALIGNED PERPENDICULARLY TO THE EDGE OF THE HIGHWAY BETWEEN A POINT ON THE GROUND SURFACE ON ONE SIDE OF THE SUPPORT TO A POINT ON THE GROUND SURFACE ON THE OTHER SIDE OF THE SUPPORT.
- DRAWING NOT TO SCALE.



BREAK-SAFE COUPLING STUB HEIGHT DETAIL

SEE NOTE NO. 15



FOUNDATION HEIGHT DETAIL

SEE NOTE NO. 15

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ORIGINAL SIGNED BY: MONICA CRIDER
HIGHWAY DESIGN ENGINEER

STANDARD DRAWING
STEEL SIGN POST AND FOUNDATION
TYPE B - STEEL TUBE POST

ENGLISH
STANDARD DRAWING NO.
616-6
SHEET 2 OF 2

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