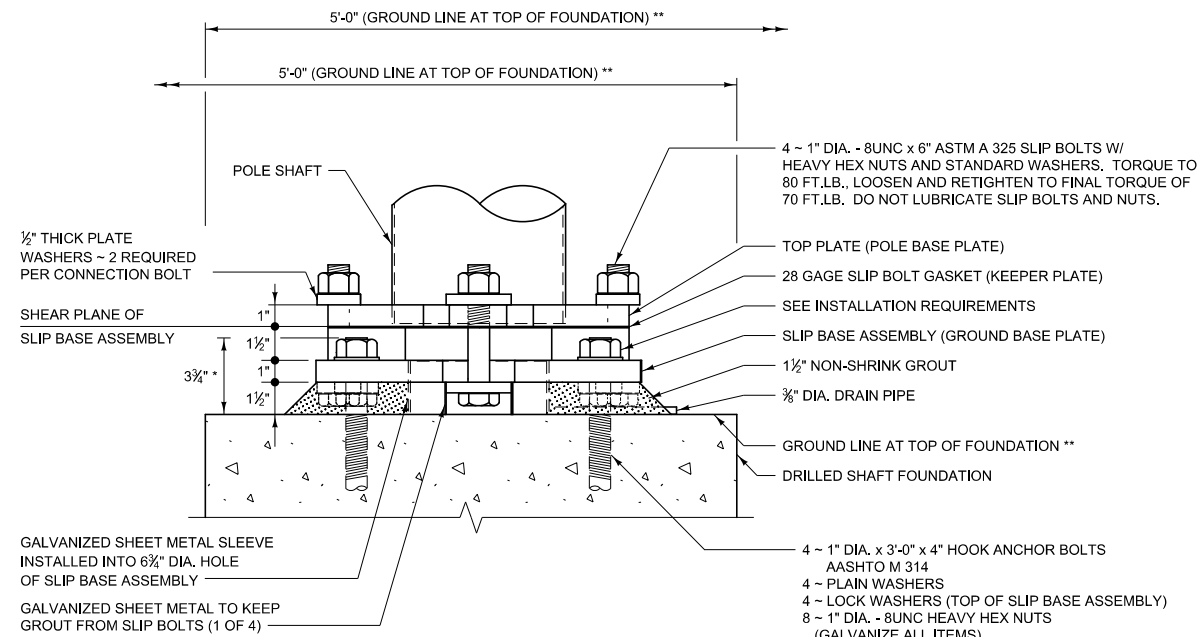


ISOMETRIC VIEW

INSTALLATION REQUIREMENTS FOR TOP NUTS OF ANCHOR BOLTS
FIELD LUBRICATE BEARING FACE AND THREADS OF TOP ANCHOR BOLT NUTS WITH A STICK WAX. TIGHTEN TOP NUTS TO SNUG-TIGHT. SNUG-TIGHT IS DEFINED AS THE TIGHTNESS THAT EXISTS WHEN THE GROUND BASE PLATE IS IN FIRM CONTACT WITH THE TOP AND BOTTOM NUTS, AND IS ATTAINED BY THE FULL EFFORT OF A MAN USING AN ORDINARY SPUD WRENCH. AFTER THE SNUG-TIGHT CONDITION IS ATTAINED, ROTATE THE TOP NUTS AN ADDITIONAL 45° (+20°,-0°).



FOUR BOLT SLIP BASE

NOTES:

CONFORM SLIP BOLT GASKET (KEEPER PLATE) TO ASTM A 653 GRADE 33 WITH COATING ASTM G 90.

CONFORM ALL PLATES TO ASTM A 709 (GRADE 36) OR AASHTO M 270.

GALVANIZE ALL STRUCTURAL STEEL AFTER FABRICATION ACCORDING TO ASTM A 123. ALL CONTACT AREAS OF STRUCTURAL STEEL ARE TO BE FREE OF GALVANIZING BEADS AND RUNS.

ELECTRO-PLATE ALL CONNECTING HARDWARE (HIGH STRENGTH BOLTS, HEAVY HEX NUTS AND STD. WASHERS) WITH CADMIUM IN ACCORDANCE WITH ASTM B 766 CLASS 12.

DO NOT ENCLOSE ANY SLIP BOLT HEADS OR WASHERS IN GROUT AND KEEP THEM COMPLETELY MECHANICALLY ACCESSIBLE, ALLOWING BOLTS TO BE FREELY PUSHED OUT DURING VEHICLE IMPACT.

* TOP OF ANCHOR BOLTS MUST BE BELOW SHEAR PLANE.

** IT IS CRITICAL THAT THE GROUND SURROUNDING THE CONCRETE FOUNDATION BE GRADED AND CONTOURED TO PREVENT VEHICLE UNDERCARRIAGE SNAGGING. ALL POINTS ON THE GROUND SURFACE ARE TO BE AT THE TOP OF THE FOUNDATION WITHIN ANY 5'-0" HORIZONTAL DISTANCE EXTENDING OVER THE SLIP BASE AS SHOWN, AND ALIGNING PERPENDICULAR TO THE ROADWAY CENTERLINE OR ON A RADIAL LINE FOR A CURVED ROADWAY.

ROAD CLOSURE GATE
SLIP BASE & FOUNDATION
NO SCALE

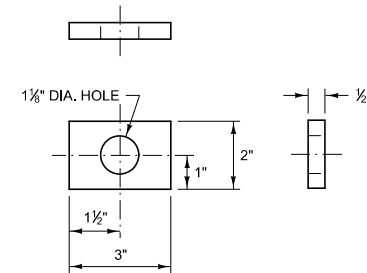
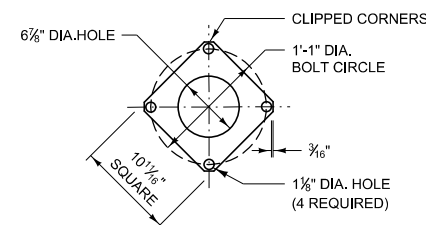
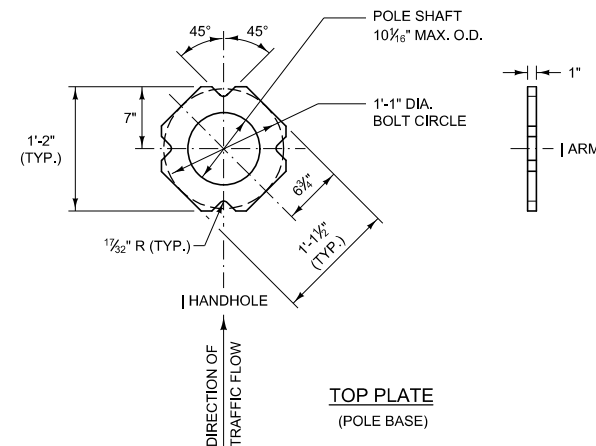


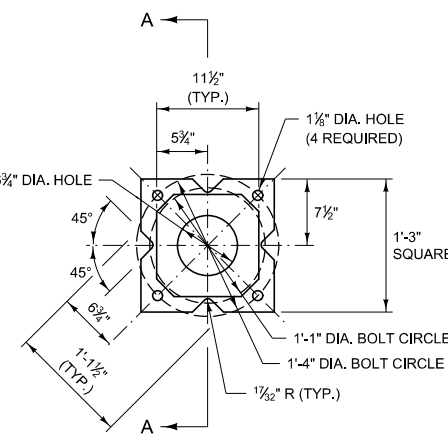
PLATE WASHER



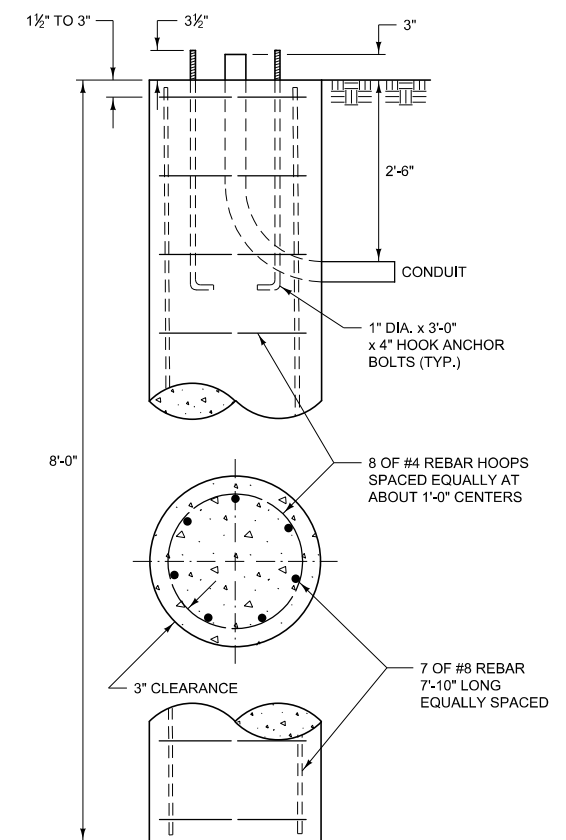
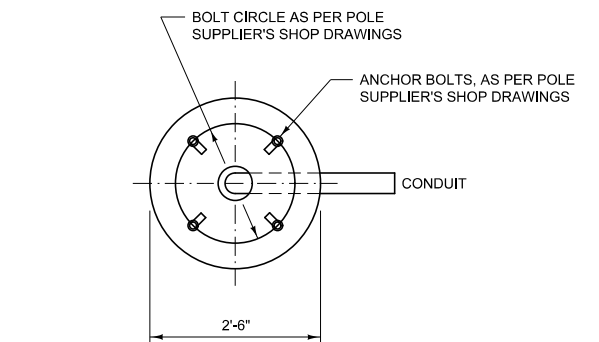
SLIP BOLT GASKET
(KEEPER PLATE)



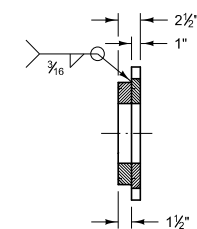
TOP PLATE
(POLE BASE)



SLIP BASE ASSEMBLY
(GROUND BASE PLATE)

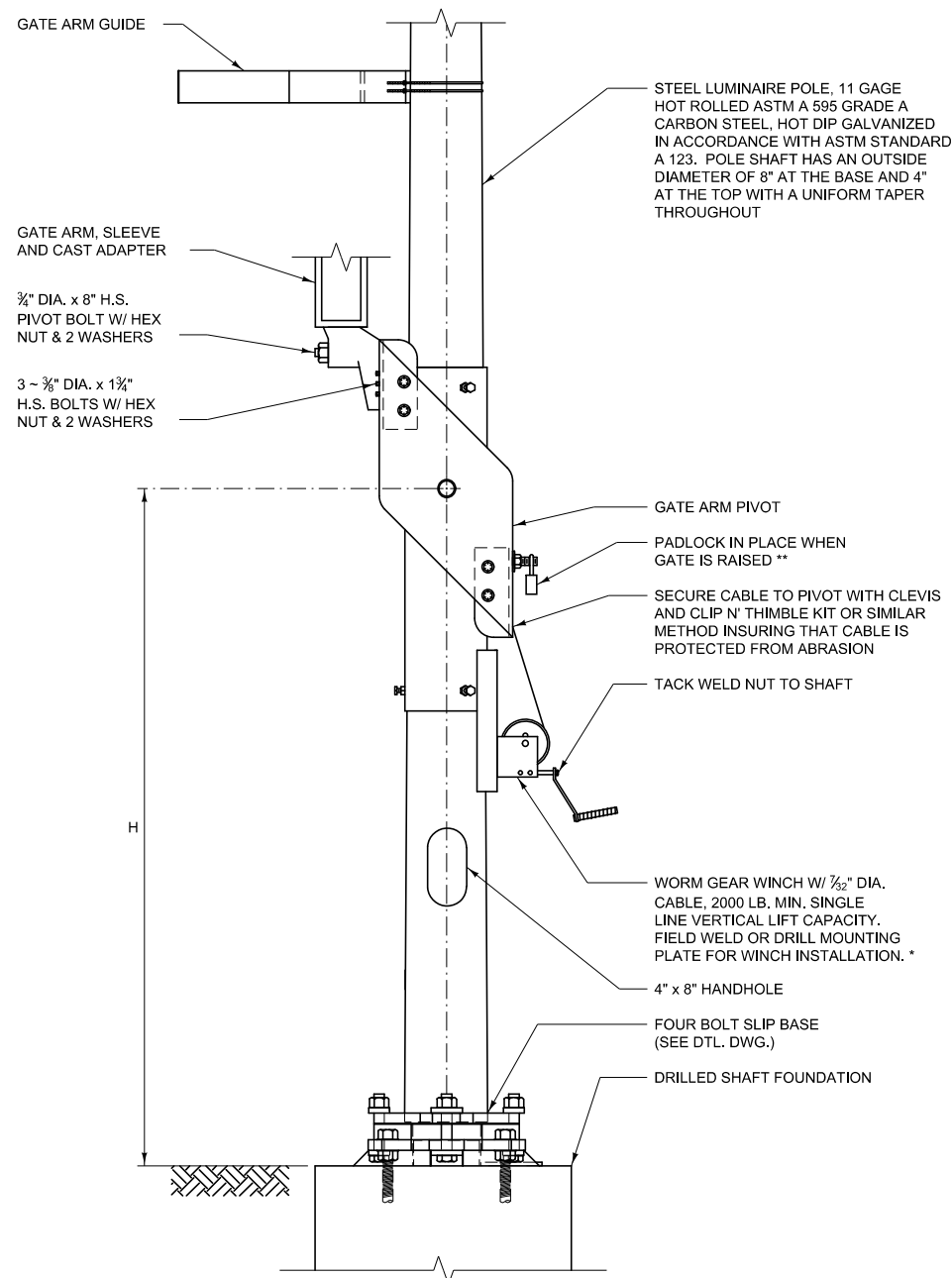


DRILLED SHAFT FOUNDATION
(LUMINAIRE POLE)



SECTION A-A

ROAD CLOSURE GATE
SLIP BASE & FOUNDATION
NO SCALE



ROAD CLOSURE GATE
PIVOT ASSEMBLY

NOTES:

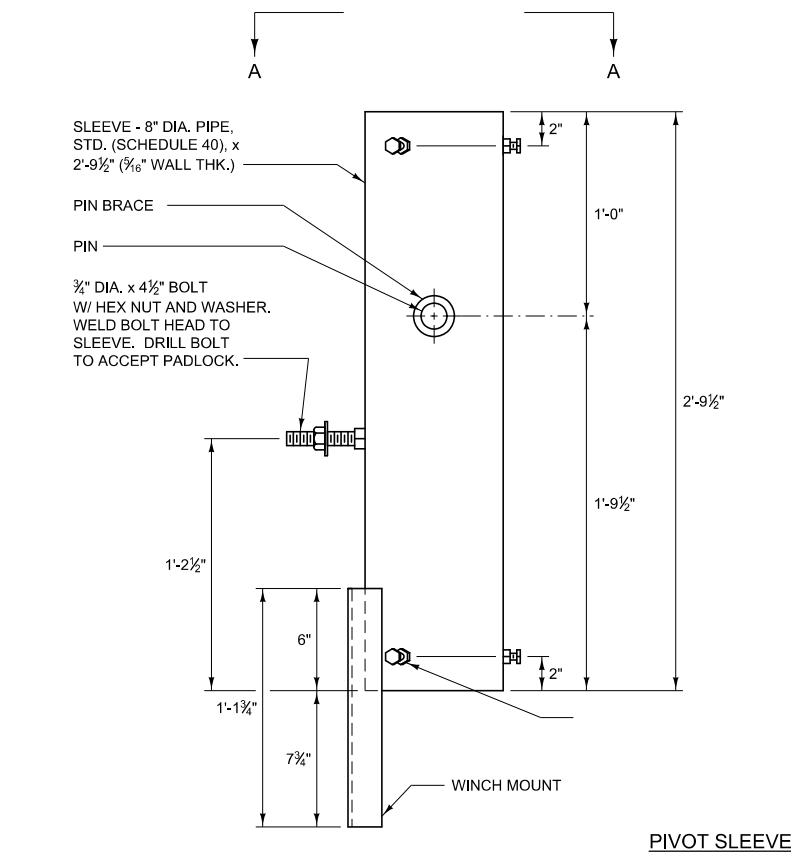
MOUNTING HEIGHT (H) WILL BE SHOWN IN THE PLANS OR SPECIFIED BY THE ENGINEER TO PROVIDE FOR THE PROPER HEIGHT OF THE GATE ABOVE THE ROADWAY.

ALL BOLTS DESIGNATED H.S. (HIGH STRENGTH) ARE TO CONFORM TO ASTM A 325. AFTER ROAD CLOSURE GATE ASSEMBLY, PAINT ALL EXPOSED BOLT THREADS OR DAMAGE TO THE GALVANIZING WITH TWO COATS OF ZINC RICH PAINT CONFORMING TO ASTM A 780.

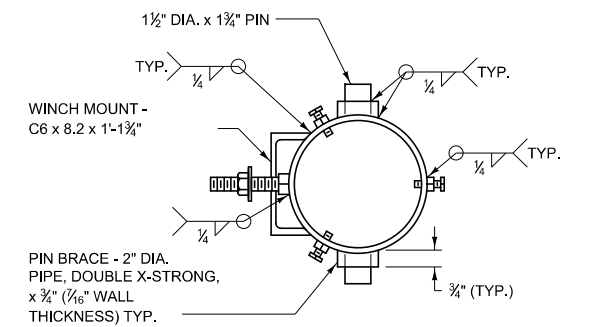
* SUPPLY WORM GEAR WINCH AND CABLE FROM DUTTON - LAINSON (STOCK NUMBER 4Z183), OR EQUIVALENT.

** WHEN THE GATE IS FULLY RAISED, PLACE THE NUT AND WASHER SNUGLY AGAINST THE OUTSIDE OF THE REAR CHANNEL AND PADLOCK IN PLACE. SUPPLY ONE HEAVY, WEATHERPROOF PADLOCK WITH 2 KEYS FOR EACH GATE ARM PIVOT. KEY PAIRED PIVOTS (DIVIDED HIGHWAY INSTALLATION) ALIKE.

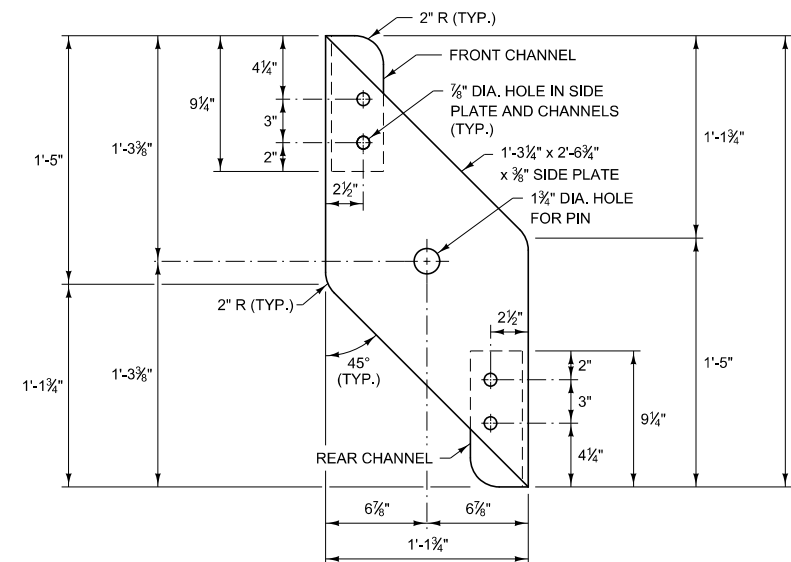
ROAD CLOSURE GATE
PIVOT ASSEMBLY
NO SCALE



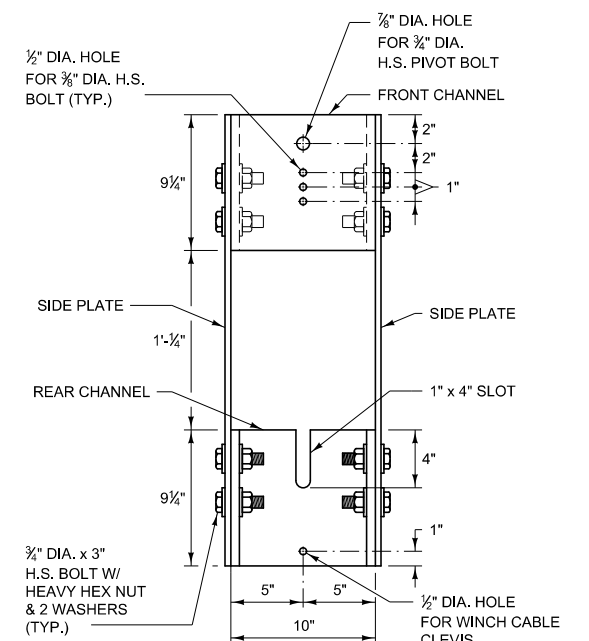
PIVOT SLEEVE



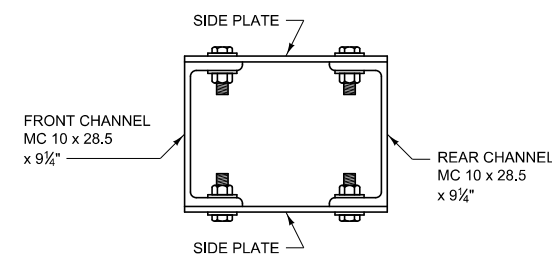
VIEW A-A



ELEVATION



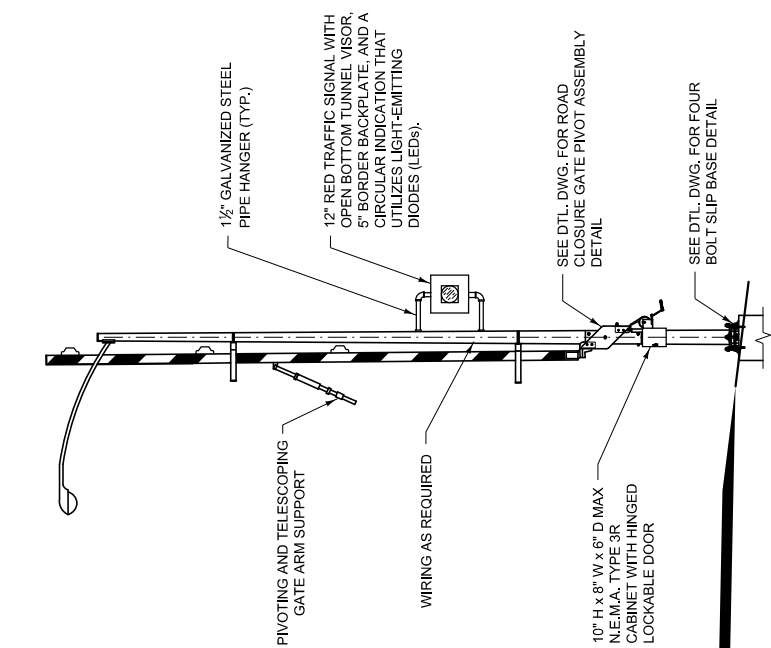
END VIEW



PLAN

ROAD CLOSURE GATE
PIVOT ASSEMBLY
NO SCALE

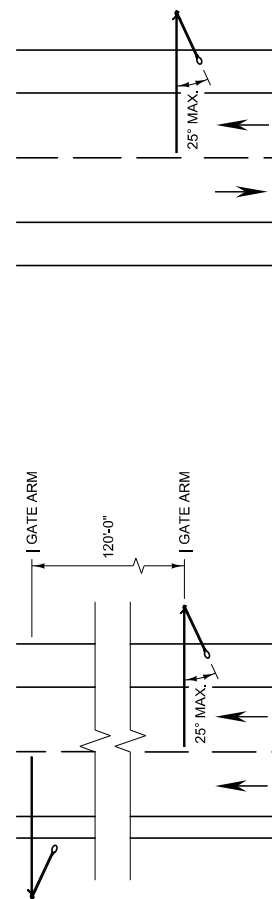
SIDE PLATE



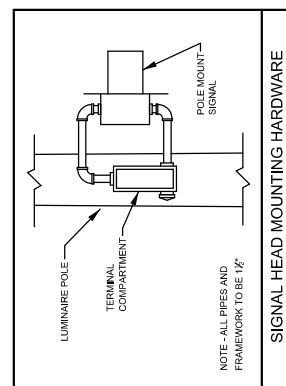
TYPICAL RAISED POSITION

TYPICAL LOWERED POSITION

ELEVATION
DIVIDED HIGHWAY INSTALLATION SHOWN

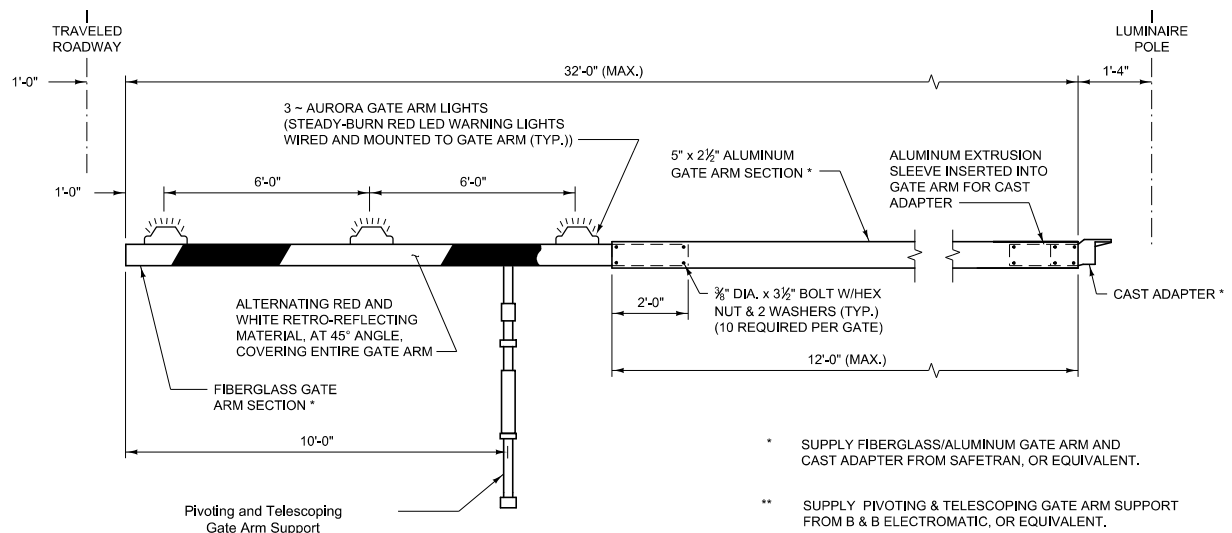


ROAD CLOSURE GATE
NO SCALE

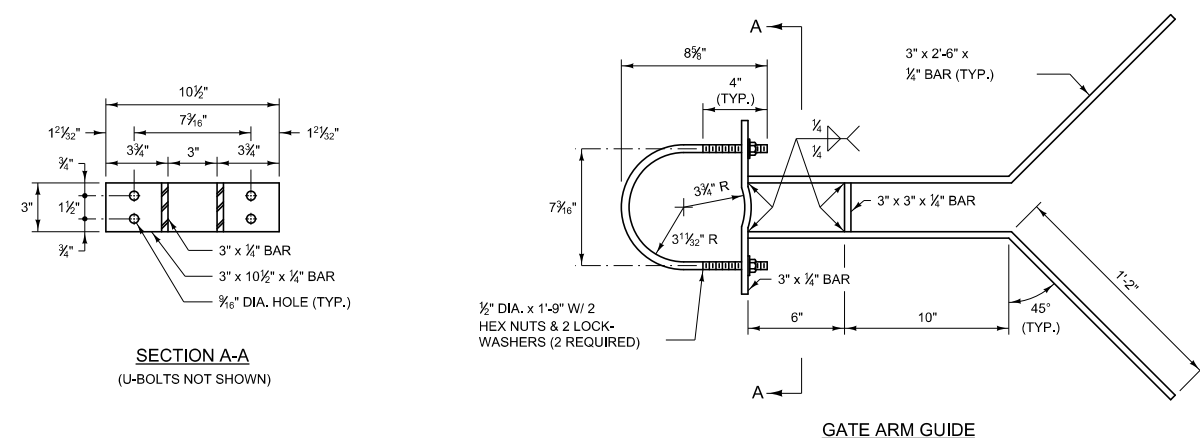


TYPICAL TWO-WAY, TWO-LANE INSTALLATION
(1 GATE REQUIRED)

TYPICAL DIVIDED HIGHWAY INSTALLATION
(2 GATES REQUIRED)



GATE ARM



ROAD CLOSURE GATE
NO SCALE