U.S. Department
Of Transportation
Federal Highway
Administration

400 Seventh St., S.W.
Washington, D.C. 20590

November 8, 1993

Refer to: HNG-14/SS-41

Richard Strizki, P.E.
Box 66-K, R.R. #1
Uniondale, Pennsylvania 18470

Dear Mr. Strizki:

Thank you for your September 13 letter requesting the Federal highway Administration's (FHWA) acceptance of the "Adjustable Anchor and Bracket Assembly" for use with load concentrating breakaway couplings. The load concentrating couplings are of the type used in the New Jersey breakaway sign supports and the Transpo-Safety Break-Safe breakaway devices. Your design is essentially an alternative method of connecting the coupling to the post and to the foundation. The key modifications include the use of roller "T's" welded to each side of a post to form stiffened web brackets that serve as the post base plate, pop rivets to hold the eccentric load washers in their correct orientation on the base plate, and an anchor assembly that allows vertical and horizontal adjustments to be made during the final placement of the sign. Drawings of the brackets and anchor assemblies are enclosed.

We have reviewed the material you submitted and concur that the modifications to the brackets and use of the "adjustable Anchor and Bracket Assembly" should have no affect on breakaway performance. Thus, it is acceptable for use on National Highway System (NHS) projects when used with an acceptable load concentrating coupling, if proposed by a State. However, we do have two recommendations regarding installation and use of these assemblies. When two or more of the "C" shaped shims that are provided for adjusting the height of the couplings are they should be oriented 180 degrees from one another. Also, we believe the axis of symmetry of the washers should be perpendicular to the centerline of the highway. These orientations would help to ensure proper bearing for the coupling during impact.

Our acceptance is limited to the characteristics of the assembly when used with a matching acceptable breakaway coupling, and does not cover the structural features of the coupling, nor the assembly. Presumably, you will supply potential users with sufficient information on structural design and installation requirements to ensure proper performance. We anticipate that the States will require certification from you that the hardware furnished is compatible with couplings, and that the combination of couplings

and your hardware will meet the FHWA change in velocity requirements when used with your hardware.

Because your adjustable anchor and bracket assembly is proprietary, to be used in Federal-aid projects on the NHS it must be: (a) supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that it is essential for synchronization with existing highway facilities or that no equally suitable alternate exists; or (c) it must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed.

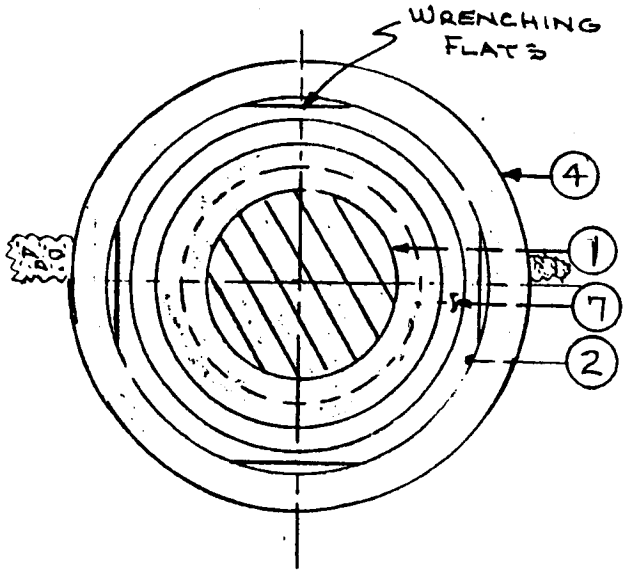
Sincerely yours,

Lawrence A. Staron, Chief
Federal-Aid and Design Division

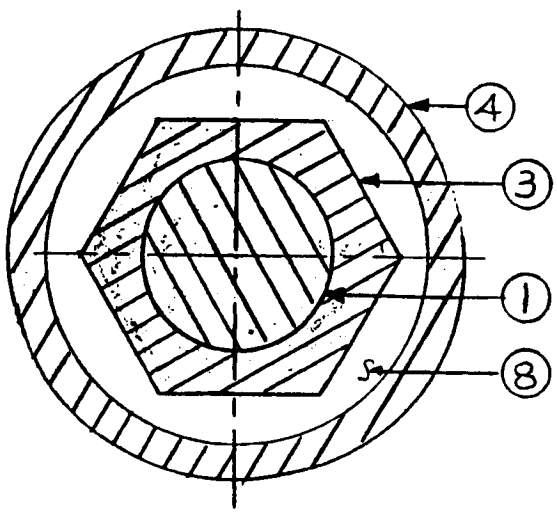
2 Enclosures

Geometric and Roadside Design Acceptance Letter SS-41

HIGH STRIKE
12/19/92



SECTION A-A



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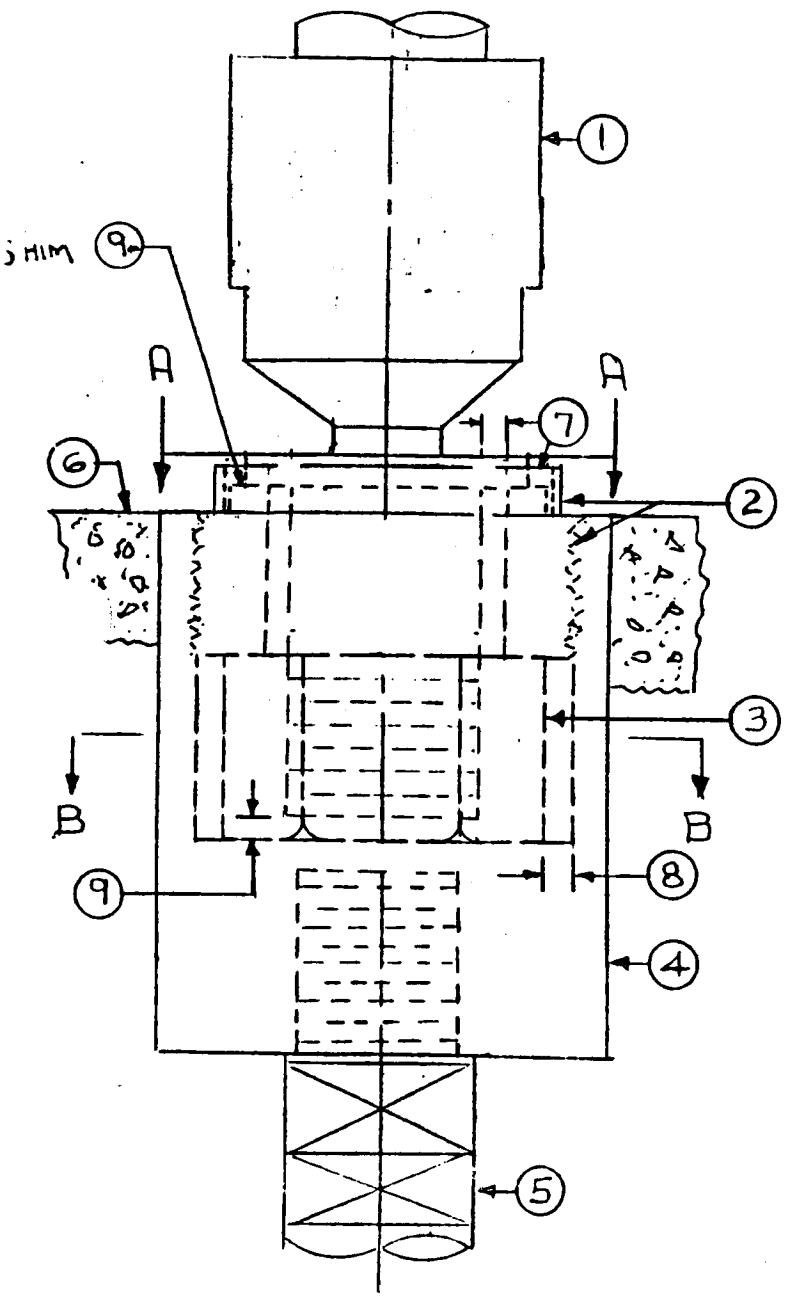
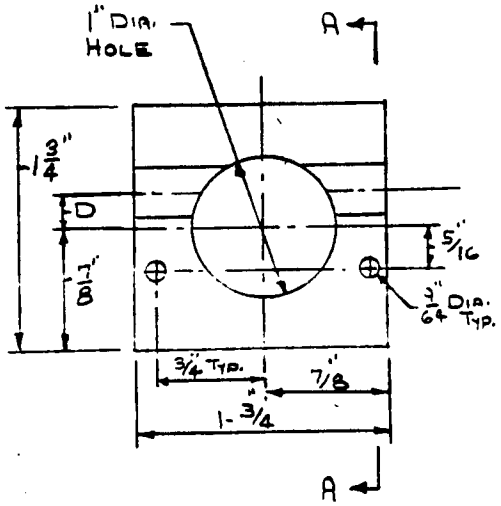
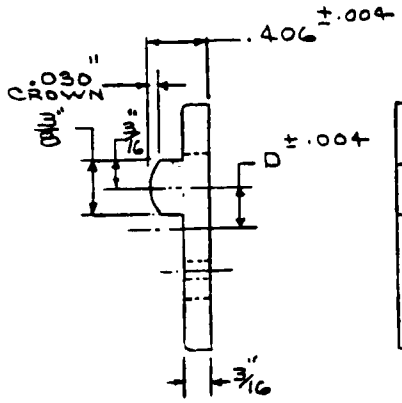


DETAIL A

ADJUSTABLE ANCHOR



TOP PLAN WASHER



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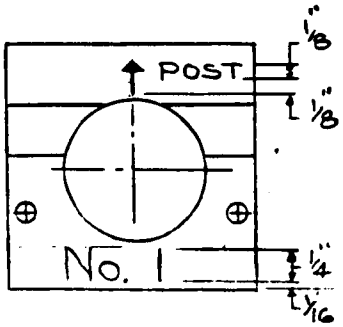


IDENTIFICATION PLAN WASHER

WASHER NUMBER	"D" INCHES
1	.100
2	.150
3	.200
4	.250

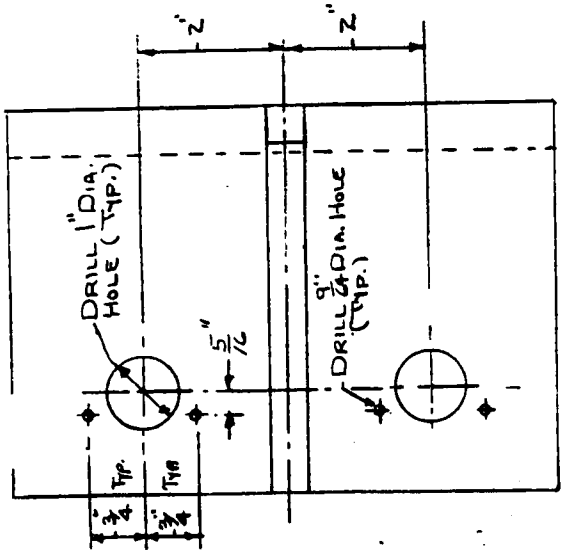
WASHER DETAILS

SCALE FULL SIZE

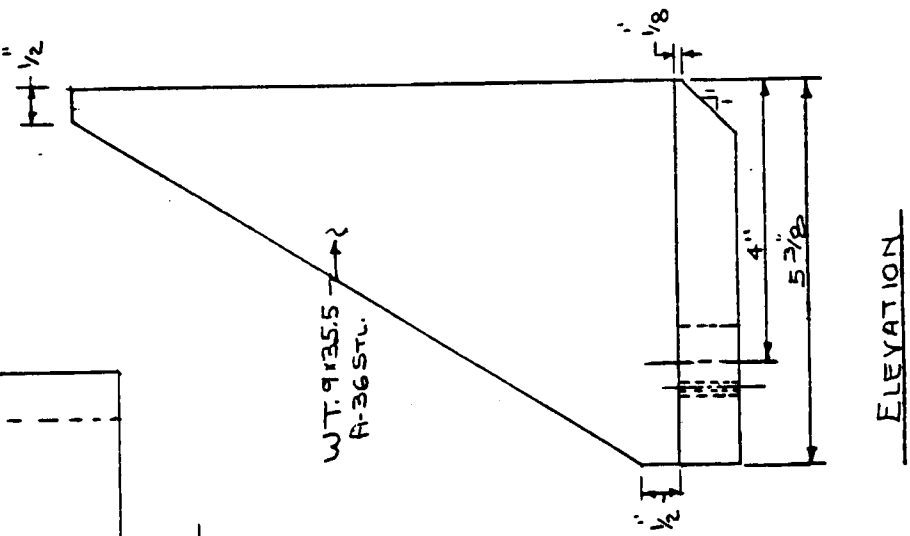
NOTES:

(1) ALL WASHERS SHALL BE PERMANENTLY LABELED WITH APPROPRIATE WASHER NUMBER AND IDENTIFICATION AS SHOWN

(2) MATERIAL SHALL CONFORM TO ASTM A564 TYPE 630 CONDITION H 1025, WITH A MINIMUM YIELD STRENGTH OF 145000 PSI OR 416 STAINLESS STEEL OR EQUIVALENT WITH A MINIMUM TENSILE STRENGTH OF 180000 PSI.



PLAN



ELEVATION