



U.S. Department
of Transportation
**Federal Highway
Administration**

1200 New Jersey Avenue, SE.
Washington, DC 20590

December 21, 2007

In Reply Refer To: HSSD/CC-96

Mr. Andrew Artar
Vice President Sales and Marketing
Gregory Highway Products
4100 13th Street, SW
Canton, OH 44701

Dear Mr. Artar:

Thank you for your letter requesting the Federal Highway Administration's (FHWA) acceptance of the interface of the FHWA-accepted guardrail terminals (including FLEAT and SKT-MGS) with your company's Gregory Mini-Spacer Guardrail System (GMS-WB31") for use on the National Highway System (NHS). You requested that we find these and any other terminals successfully tested with strong-post w-beam barriers acceptable for use on the NHS under the provisions of the National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

Introduction

The FHWA guidance on crash testing of roadside safety hardware is contained in a memorandum dated July 25, 1997, titled "INFORMATION: Identifying Acceptable Highway Safety Features."

We accepted the use of the Sequential Kinking Terminal (SKT) and the Flared Energy Absorbing Terminal (FLEAT) for use with the 31-inch high Midwest Guardrail System (MGS) in the FHWA acceptance letter CC-88 dated March 8, 2005. Your present request is to permit the use of these two 31-inch height terminals, and other FHWA-accepted w-beam barrier terminals with the 31-inch high GMS-WB31" guardrail which was the subject of the FHWA acceptance letter B-150 dated October 27, 2006. The SKT transition is shown in the enclosed drawing for reference.

Findings

In regard to interfacing FHWA-accepted end terminals to the GMS-WB31" guardrail we find this to be acceptable for use on the NHS under the range of conditions that the terminals were tested, when proposed by a State or local highway agency as long as the following conditions are met:

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ECONOMY**

- 1) There are little or no differences in rail stiffness or in rail deflections,
- 2) There is no difference in rail cross sections,
- 3) There is no difference in post spacings, and
- 4) Only terminals tested with 31 inch high guardrail systems may be used.

Therefore they are acceptable for use with the GMS-WB31" guardrail system, with or without blockouts, on the NHS under the range of conditions that the terminals were tested, when proposed by a State or local highway agency.

Please note the following standard provisions that apply to the FHWA letters of acceptance:

- Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- Any changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was crash tested, it reserves the right to modify or revoke its acceptance.
- You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that they will meet the crashworthiness requirements of the FHWA and the NCHRP Report 350.
- To prevent misunderstanding by others, this letter of acceptance, designated as number CC-96, shall not be reproduced except in full. This letter, and the test documentation upon which this letter is based, is public information. All such letters and documentation may be reviewed at our office upon request.
- The GMS barrier, and the SKT, and FLEAT terminals are patented devices and are considered "proprietary." The use of proprietary devices *specified by a highway agency* for use on Federal-aid projects must meet one of the following criteria: (a) it must be 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 alternative 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.
- This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device for which the applicant is not the patent holder. The

acceptance letter is limited to the crashworthiness characteristics of the candidate device, and the FHWA is neither prepared nor required to become involved in issues concerning patent law. Patent issues, if any, are to be resolved by the applicant.

Sincerely yours,



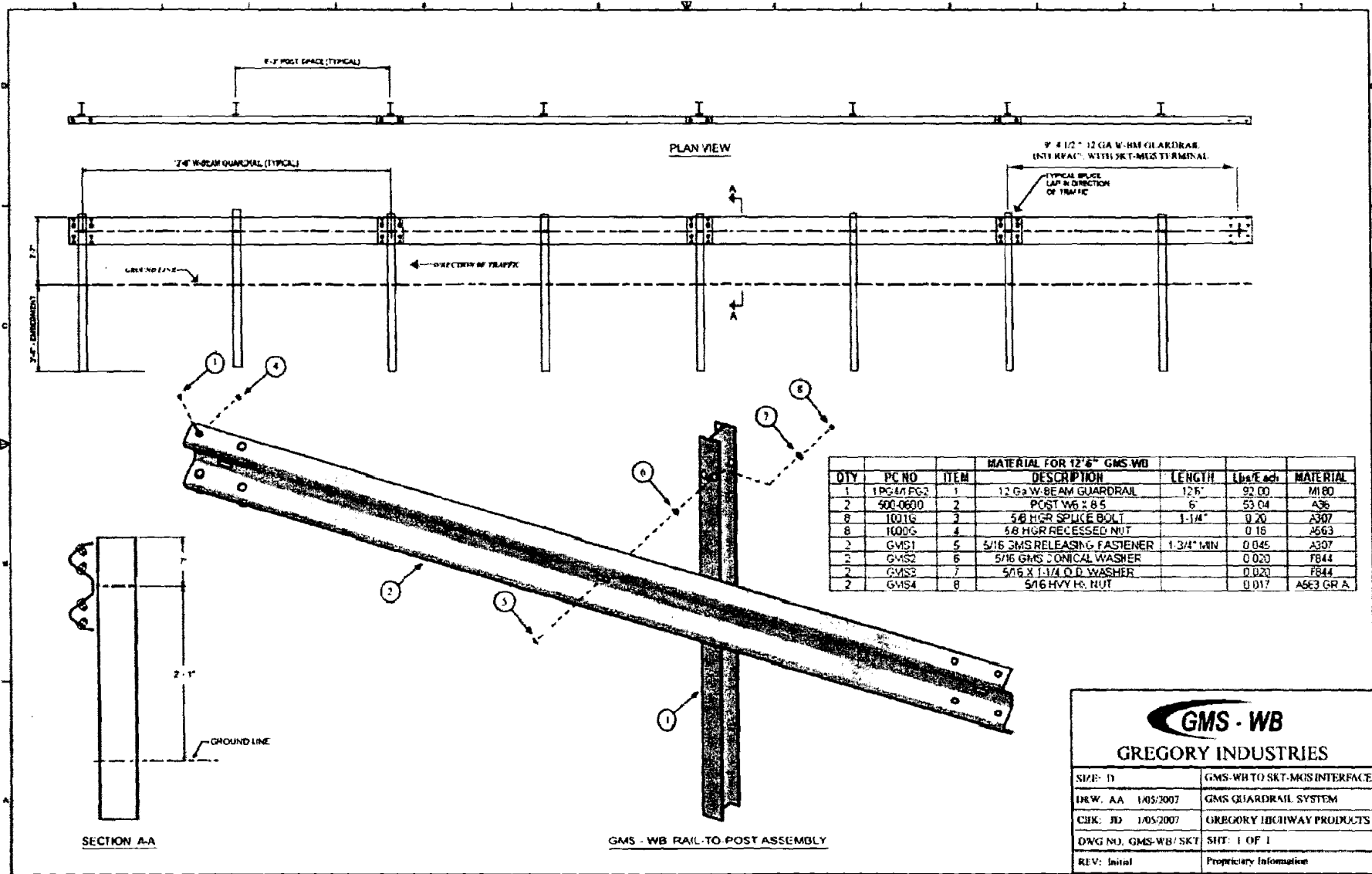
George E. Rice, Jr.
Acting Director, Office of Safety Design
Office of Safety

Enclosures

FHWA:HSSD:NArtimovich:tb:x61331:12/19/07

File: s://directory folder/nartimovich/CC96SKT-MGStoGMS.doc

cc: HSSD (Reader, HSA; Chron File, HSSD; N.Artimovich, HSSD;
M.Bloschock, HSSD; M.McDonough, HSSD)



GMS - WB

GREGORY INDUSTRIES

SIZE: D	GMS-WB TO SKT-MOS INTERFACE
DRW: AA 1/05/2007	GMS GUARDRAIL SYSTEM
CHK: JD 1/05/2007	GREGORY HIGHWAY PRODUCTS
DWG NO: GMS-WB/SKT	SHT: 1 OF 1
REV: Initial	Proprietary Information