



October 17, 1997

Refer to: HNG-14

Mr. John Marinelli Lifetime Lumber Products Division of Jomarico, Inc. Fiberglass Reinforced Recycled Plastic Lumber 3407 Oak Alley Ct., Number 503 Toledo, Ohio 43606

Dear Mr. Marinelli:

We have reviewed the test results on your recycled guardrail offset blocks contained in the document titled "Test Reports for Highway Guardrail Offset Blocks (Blockouts) - A Composite of 100 percent Recycled Materials" prepared for you by The University of Detroit Mercy and dated June 12, 1997, which was sent to Mr. James Hatton with your letter of July 3. On September 9 you sent us a sample, full-size blockout of your product for which you are requesting Federal Highway Administration's (FHWA) acceptance. Final drawings showing all pertinent dimensions of Type A and Type B blockouts (Enclosure 1) were forwarded with your October 15 letter.

In reviewing the information in the report and by comparing test results to similar products that we have previously accepted for use on the National Highway System (NHS), we conclude that your product will perform acceptably when used with either the wood or steel post w-beam guardrail systems. In particular, we noted that your recycled blockout exhibited a minimum compressive strength of 2,300 psi (15.9 Mpa) which compares favorably with standard wood blockouts as well as with some previously accepted composite designs. Therefore your company's blockout will be acceptable for use on the NHS when selected by a State department of transportation.

Since your product is proprietary, its use on Federal-aid projects, except exempt, non-NHS projects, is subject to the conditions stated in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed for your information (Enclosure 2). Please note that this acceptance is limited to the expected crash performance of your product and does not address its durability. We anticipate that agencies using your blockout will require certification that the material you supply will have essentially the same chemical composition and mechanical properties as those that were tested and which we are assuming are the same properties as those of the sample block you supplied to us.

In anticipation of your planned tests on a system using recycled posts as well as blockouts, we are sending you a copy of our July 25 memorandum (Enclosure 3) which provides detailed guidelines for testing roadside hardware and reporting test results to us. Please call Mr. James Hatton of my staff at (202) 366-1329, if you have any questions on the specific tests to be run prior to your submission of a formal request for FHWA acceptance.

Sincerely yours,

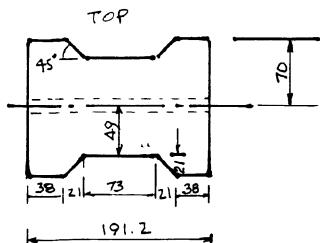
Dwight A. Horne, Chief

Federal-Aid and Design Division

3 Enclosures

Geometric and Safety Design Group Acceptance Letter B-43

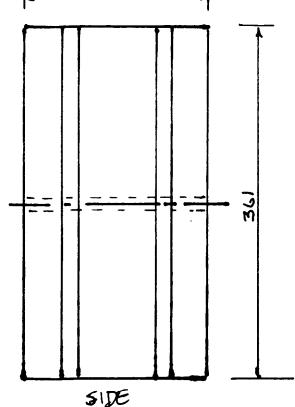
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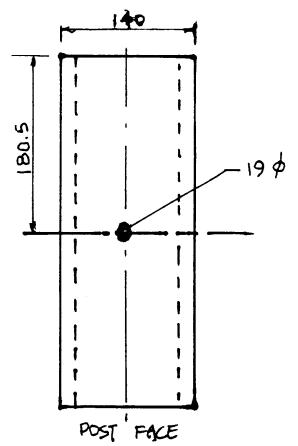


LIFETIME HIGHWAY GUARDRAIL BLOCKOUTS ARE A COMPOSITE OF 100% RECYCLED PLASTIC, GROUND RUBBER TIRES AND WASTE GLASS FIBERS.

THIS DRAWING SHOWS STYLE "B" FOR RECTANGULAR OR SQUARE WOOD POSTS.

DIMENSIONS ARE MILLIMETERS.





PATENT PENDING

OWNER: Departments of Transportation

LOCATION: VQV(OUS

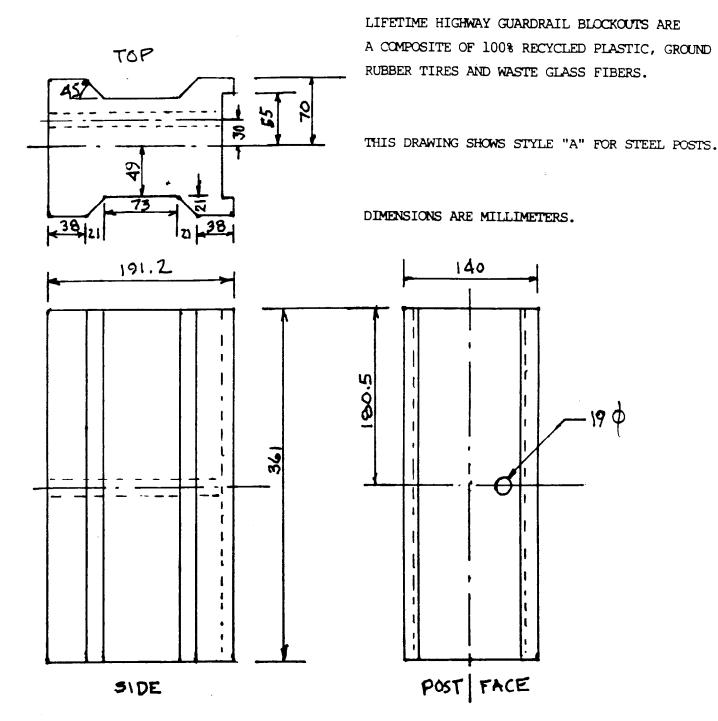
VENDOR: JOMARICO, INC.

TOLEDO, OHIO

TELEPHONE: 419-537-0002 FAX: 419-537-0006

DATE 10-15-97

AGENT: JOHN MARINELLI



PATENT PENDING

OWNER: Departments of Transportation

LOCATION: Various

TOLEDO, OHIO

TELEPHONE: 419-537-0002 FAX: 419-537-0006

DATE 10-15-97 AGENT: JOHN MARINELLI

VENDOR: JOMARICO, INC.

these materials must occur in the United States.

- (2) The State has standard contract provisions that require the use of domestic materials and products, including steel materials, to the same or greater extent as the provisions set forth in this section.
- (3) The State elects to include alternate bid provisions for foreign and domestic steel materials which comply with the following requirements. Any procedure for obtaining alternate bids based on furnishing foreign steel materials which is acceptable to the Division Administrator may be used. The contract provisions must (i) require all bidders to submit a bid based on furnishing domestic steel materials, and (ii) clearly state that the contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic steel materials unless such total bid exceeds the lowest total bid based on furnishing foreign steel materials by more than 25 percent.
- (4) When steel materials are used in a project, the requirements of this section do not prevent a minimal use of foreign steel materials, if the cost of such materials used does not exceed one-tenth of one percent (0.1 percent) of the total contract cost or \$2,500, whichever is greater. For purposes of this paragraph, the cost is that shown to be the value of the steel products as they are delivered to the project.
- (c)(1) A State may request a waiver of the provisions of this section if;
- (i) The application of those provisions would be inconsistent with the public interest; or
- (ii) Steel materials/products are not produced in the United States in sufficient and reasonably available quantities which are of a satisfactory quality.
- (2) A request for waiver, accompanied by supporting information, must be submitted in writing to the Regional Federal Highway Administrator (RFHWA) through the FHWA Division Administrator. A request must be submitted sufficiently in advance of the need for the waiver in order to allow time for proper review and action on the request. The RFHWA will have approval authority on the request.

- (3) Requests for waivers may be made for specific projects, or for certain materials or products in specific geographic areas, or for combinations of both, depending on the circumstances.
- (4) The denial of the request by the RFHWA may be appealed by the State to the Federal Highway Administrator (Administrator), whose action on the request shall be considered administratively final.
- (5) A request for a waiver which involves nationwide public interest or availability issues or more than one FHWA region may be submitted by the RFHWA to the Administrator for action.
- (6) A request for waiver and an appeal from a denial of a request must include facts and justification to support the granting of the waiver. The FHWA response to a request or appeal will be in writing and made available to the public upon request. Any request for a nationwide waiver and FHWA's action on such a request may be published in the FEDERAL REGISTER for public comment.
- (7) In determining whether the waivers described in paragraph (c)(1) of this section will be granted, the FHWA will consider all appropriate factors including, but not limited to, cost, administrative burden, and delay that would be imposed if the provision were not waived.
- (d) Standard State and Federal-aid contract procedures may be used to assure compliance with the requirements of this section.
- (23 U.S.C. 315, sec. 10 of Pub. L. 98-229, 98 Stat. 55, sec. 165 of Pub. L. 97-424, 96 Stat. 2136 and 49 CFR 1.48(b))
- [48 FR 53104, Nov. 25, 1983, as amended at 49 FR 18821, May 3, 1984]

\$ 435.411 Majorial or product selection.

- (a) Pederal funds shall not participate, directly or indirectly, in payment for any premium or royalty on any patented or proprietary material, specification, or process specifically set forth in the plans and specifications for a project, unless:
- (1) Such patented or proprietary item is purchased or obtained through

competitive bidding with equally suitable unpatented items; or

- (2) The State highway agency certifies either that such patented or proprietary item is essential for synchronization with existing highway facilities, or that no equally suitable alternate exists; or
- (3) Such patented or proprietary item is used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes.
- (b) When there is available for purchase more than one nonpatented. nonproprietary material, semifinished or finished article or product that will fulfill the requirements for an item of work of a project and these available materials or products are judged to be of satisfactory quality and equally acceptable on the basis of engineering analysis and the anticipated prices for the related item(s) of work are estimated to be approximately the same. the PS&E for the project shall either contain or include by reference the specifications for each such material or product that is considered acceptable for incorporation in the work. If the State highway agency wishes to substitute some other acceptable material or product for the material or product designated by the successful bidder or bid as the lowest alternate. and such substitution results in an increase in costs, there will not be Federal-aid participation in any increase in costs.
- (c) A State highway agency may require a specific material or product when there are other acceptable materials and products, when such specific choice is approved by the Division Administrator as being in the public interest. When the Division Administrator's approval is not obtained, the item will be nonparticipating unless bidding procedures are used that establish the unit price of each acceptable alternative. In this case Federal aid participation will be based on the lowest price so established.
- (d) Appendix A sets forth the FHWA requirements regarding (1) the specification of alternative types of culvert pipes, and (2) the number and types of such alternatives which must

be set forth in the specifications for various types of drainage installations.

(e) Reference in specifications and on plans to single trade name materials will not be approved on Federal-aid contracts.

635.413 Guaranty and warranty clauses.

- (a) Except as provided in paragraph (b) of this section, clauses that require the contractor to guarantee or warrant materials and workmanship or to otherwise maintain the work for a specified period after its satisfactory completion by the contractor and its final acceptance by the State, will not be approved for use in Federal-aid contracts. Work performed and materials replaced under such guaranty or warranty clauses after final acceptance of work are not eligible for Federal participation.
- (b) Contracts which involve furnishing and/or installing electrical or mechanical equipment should generally include contract clauses that require:
- Manufacturer's warranties or guarantees on all electrical and mechanical equipment consistent with those provided as customary trade practice, or
- (2) Contractors' warranties or guarantees providing for satisfactory inservice operation of the mechanical and electrical equipment and related components for a period not to exceed 6 months following project accept-

635.417 Convict produced materials.

- (a) Materials produced by convict labor may only be incorporated in a Federal aid highway construction project if such materials have been:
- (1) Produced by convicts who are on parole, supervised release, or probation from a prison or
- (2) Produced in a qualified prison facility and the cumulative annual production amount of such materials for use in Federal-aid highway construction does not exceed the amount of such materials produced in such facility for use in Federal-aid highway construction during the 12-month period ending July 1, 1987.
- (b) Qualified prison facility means any prison facility in which convicts,