COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

Reference No. 2725-05

Materials Laboratory
Colorado Department of Transportation
4201 East Arkansas Avenue
Denver, Colorado 80222

PART 1: Completed by Product Representative
PART 2: Completed by CDOT Product Evaluation Coordinator
PART 3: Completed by CDOT Expert Product Evaluator
PART 4: Completed by CDOT Materials Engineer

PART 1

Product name:
Precast Type 7 Concrete Barrier Forged Connecting Pin

Product category:
Traffic Control\Barrier

Product representative (name & address):
Portland Bolt & Manufacturing Company, Inc. {Greg Lindsay}
3441 NW Guam Street
Portland, OR 97210

Phone: (800) 599-0565 FAX: (503) 227-4634

Manufacturer (name & address):
Portland Bolt & Manufacturing Company, Inc.
3441 NW Guam Street
Portland, OR 97210

Phone: (800) 547-6758 FAX: (503) 227-4634

Description of product, (be precise, include product differentiation between your products &/or competitor's products):
The proposed "Forged" Connecting Pin meets all diameter, length, grade, and finish criteria as the currently approved Connecting Pins. Portland Bolt's design varies slightly in the style of the "head". The outside diameter of the "lip" on your currently approved Connecting Pin which measures 2-1/8" would be supplied as 2-1/4". Additionally, instead of a hole in the "head" of the Connecting Pin, this design has an additional top lip which facilitates removal of the pin with a standard pry bar.

Usage of product, (be specific to CDOT highway activities only):
This Forged Connecting Pin is used with Precast Type 7 Concrete Barriers.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
This Forged Connecting Pin eliminates the need for a hole in the top of the "head", thus eliminating a rather labor intensive manufacturing operation, and consequently, significantly reducing the cost of the product. Additionally, forging a "head" on the pin is far more efficient from a manufacturing perspective, than threading the top end of the pin and welding a washer, especially considering the pin would need to be heat treated after welding since it is not advisable to weld to heat treated material (A 449). Our Forged Pin design is extremely easy to remove by hooking a standard pry bar under the top lip and lifting the pin out from between the barriers.

Specifications, (identify specifically those applicable) **& Certificate of Compliance** (submittal required):

- ☑ CDOT : M & S Standards, 2000, M-606-14
- ☑ ASTM : A 449 (pin), A 153 (galvanizing)
- ☐ AASHTO:
- ☐ FHWA :
- ☐ other :

Product testing, (national/independent laboratories) **& Certified Test Report** (submittal required):

- ☐ NTPEP-AASHTO:
- ☐ HITEC or FHWA :
- ☐ FHWA or other :
- ☑ other : Portland Bolt Testing Laboratory

State DOT Approvals, (current documentation required):
Washington

Evaluation Procedure, (recommended):
Please review the sample pin and documentation. Mechanically test if necessary. Please approve this design if deemed an equal alternative.

Sample submitted: ☑ yes ☐ no ☐ n/a | Materials Safety Data Sheets (MSDS): ☐ yes ☑ no ☐ n/a

Notes/Additional Comments
A sample has been provided to the Colorado Department of Transportation for evaluation purposes and is available at no cost to any company requesting one. We have successfully obtained approval for this design from the states of Oregon, Washington, Nevada, Alaska, and Utah. It is currently the most common design being used in those states, and in Oregon and Washington, used virtually exclusively.

Manufacturer's Web-site address: www.portlandbolt.com

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