COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 3516-12

Product Evaluation Coordinator
Colorado Department of Transportation
4670 North Holly Street, Unit A
Denver, Colorado 80216

Material code: 208.02.02.00

FOR INTERNAL CDOT USE

Material code description full name: Erosion Control, Silt Berm

PART 1

Product name: GeoRidge Bio

Product category: Environmental, Sediment Control\Ditch Control\Silt Berm

Product representative (name & address):
Attn: Todd Croke
Nilex Environmental Inc.
15253 East Fremont Drive
Centennial, CO 80112
Phone: (303) 766-2000 FAX: (303) 766-1110

Manufacturer (name & address):
Attn: Brian Williams
Nilex, Inc.
9304 – 39 Avenue
Edmonton, Alberta, T6E 6L8 Canada
Phone: (780) 463-9535 FAX: (780) 463-1773

Web-site address: www.nilex.com

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Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)

GeoRidge Bio is a triangular, permeable plastic berm that is designed to dissipate the energy of flowing water in drainage channels, while controlling soil erosion and sediment migration. The tan colored GeoRidge Bio is a temporary product manufactured using a 100% Biodegradable high density plastic that will degrade in 18-24 months. Each GeoRidge Bio unit is 3.28 ft long, 0.738 ft tall, weighing 2.1 pounds.

Nilex recommends that GeoRidge Bio be installed atop a soil retention blanket or turf reinforcement mat using 10 inch long, 3/8 inch diameter pins.

Restrictions, (installation and/or use):

GeoRidge Bio will only function as intended if installed in accordance with manufacturer's recommendations.

Use of the product, (be specific to CDOT highway activities only):

GeoRidge Bio is typically installed in highway medians and roadside channels to control runoff resulting from rain and snow melt.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):

GeoRidge Bio offers a viable cost saving alternative to rock check dams. GeoRidge Bio is lightweight, flexible, easy to install, easy to repair and safer than rock riprap should vehicles or pedestrians come in contact with it. GeoRidge Bio effectively slows the flow of water, allowing sediment to settle on the upstream side, and is also easy to maintain. This biodegradable version is also kinder to the environment by naturally degrading within 2 years and eliminates the need for removal. Nilex believes this biodegradable version offers unique benefits to CDOT, such as less litter in highway medians from broken GeoRidges and better aesthetics due to its tan color.

Specifications, (listing those applicable is required) **& Certificate of Compliance** (required to certify compliance with listed specifications):

- [x] CDOT : Standard Specifications 208.05(g)
- [ ] ASTM :
- [ ] AASHTO :
- [ ] FHWA :
- [ ] other :

Product testing, (from national/independent laboratories or universities) **& Certified Test Report** (CTR required to validate all claims):

- [ ] NTPEP-AASHTO :
- [ ] FHWA :
- [x] other : Research and Development Branch, Alberta Transportation and Utilities (July 1993)
- [x] other : Environmental Biodegradation of Polyethylene, Elsevier LTD (25 March 2003)

State DOT Approvals, (current documentation required):

IL, KS, ME, MS, VT

Sample submitted: [x] yes [ ] no [ ] n/a

Materials Safety Data Sheets (MSDS): [x] yes [ ] no [ ] n/a

Notes/Additional Comments

This biodegradable version is exactly the same shape, strength and dimensions as the GeoRidge with the only difference between the two products being that GeoRidge Bio is made with biodegradable plastic instead of permanent plastic.