COLORADO DEPARTMENT OF TRANSPORTATION

PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY

APL Reference No. 2558-10

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

Material code: 216.02.03.00

FOR INTERNAL CDOT USE

Material code description full name: Turf Reinforcement Mat

PART 1

Product name: P550

Product category: Enviro., Erosion Control\Soil Retention Covering\TRM [Class 3]

Product representative (name & address):
Attn: Todd Croke
Nilex Environmental
15171 East Fremont Drive
Centennial, CO 80112
Phone: (303) 766-2000 FAX: (303) 766-1110

Manufacturer (name & address):
Attn: Jill Pack
North American Green
5401 St. Wendel - Cynthiana Rd.
Poseyville, IN 47633
Phone: (800) 772-2040 FAX: (812) 867-0247

Web-site address: www.nilex.com

Web-site address: www.nagreen.com

Description of the product: (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)
The P550 is a composite turf reinforcement mat (C-TRM) machine produced with a 100% polypropylene fiber matrix incorporated into a permanent three-dimensional netting structure. The matrix is stitch bonded between ultra heavyweight UV stabilized top and bottom nets with 0.50 x 0.50 inch (1.27 x 1.27 cm) openings and an ultra heavyweight UV stabilized, dramatically corrugated (crimped) intermediate netting with 0.50 x 0.50 inch (1.27 x 1.27 cm) openings. The middle corrugated netting forms prominent closely spaced ridges across the entire width of the mat. The three nets are stitched together on 1.50 inch (3.81 cm) centers with UV stabilized polypropylene thread to form a permanent three-dimensional structure. P550 is part of the Vmax Series products, patented and unique within the erosion control industry.

Restrictions, (installation and/or use):

Use of the product, (be specific to CDOT highway activities only):
Designed for use in drainage channels where shear stress may reach 14 lbs/sq ft and on slopes & shorelines where vegetation alone cannot control erosion.

Benefits to CDOT, (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):
P550 allows the use of vegetation in areas previously thought to require up to 30 inch rock riprap or other hard armor solutions. The P550 reinforces vegetation at the stem to provide a permanent vegetated liner that, when compared to rock riprap, has higher performance; costs less; requires less maintenance; is aesthetically pleasing; as well as being safer for pedestrians, motorists and animals. The material is also easier to install and requires no heavy equipment, aside from whatever equipment is used for grading activities.

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

- [x] CDOT : Project Special Provision 216.02 (b)
- [ ] ASTM :
- [ ] AASHTO :
- [x] FHWA : FP-03 713.18 Type 5.A, B, C
- [ ] other :

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

- [x] NTPEP-AASHTO : 2010 NTPEP Report 12001.10
- [ ] FHWA :
- [x] other : TRI / Environmental, Inc. ( ); TTI Hydraulics and Erosion Control Laboratory (October 4, 2001)
- [x] other : Colorado State University (3-03-2004)

State DOT Approvals, (current documentation required):
KS, NM, NY, TX, WI

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

Notes/Additional Comments