

Logged in 2/22/10 SW  
Logged out 3/3/10 SW

**CRIFE ARCHITECTS + ENGINEERS**

Architects, Engineers & Surveyors 317-844-6777

PJT. NO. 090324-20000 SUBMIT NO. 312510 Erosion & Sedimentation Control

- APPROVED  
Fabrication/installation may be undertaken. Approval does not authorize changes to the Contract Sum or Contract Time.
- APPROVED AS CORRECTED
- RESUBMIT: Limit corrections to items marked.
- REJECTED; REVISE & RESUBMIT  
Fabrication and/or installation may NOT be undertaken.



Architects + Engineers

Reviewed only for general conformance with project design concept and general compliance with the Contract Documents. Corrections or comments made in review do not relieve contractor from compliance with requirements of the contract documents. Approval of a specific item shall not include approval of an assembly of which the item is a component. Contractor is responsible for: all dimensions; information pertaining to the fabrication process or to the means, methods, techniques, sequence and procedure of construction; coordination of work with other trades; and performing of work in safe and satisfactory manner.

Signed by: [Signature]

Consultant/Department: Cripe Architects + Engineers

Date: 3/3/10

**COMMENTS:**

Multiple horizontal lines provided for entering comments.



**Submittal Item**

**Project** [IPS-III-1015] - 015 - Thomas D. Gregg  
Elementary School

**View Date** 2/18/2010

Enginnuity Management & Consulting Corp.  
Ste 230  
6214 Morenci Trail  
Indianapolis, IN 46268  
Phone: 317-297-5601  
Fax: 317-423-5460

**Submittal Item No.**  
00452

**General Information**

<b>Item No.</b>	00452	<b>Revision</b>	0
<b>Package No. Rev.</b>	<u>312510.0</u>		
<b>Description</b>	Product Information for Inlet Protection		
<b>CSI Code</b>	31 25 10 - Erosion and Sedimentation Control	<b>Submitting Company</b>	MacDougall Pierce Construction, Inc.
<b>Reference No.</b>		<b>Copies Required</b>	1
<b>Status</b>	Requested from Prime	<b>Item Type</b>	Product Data
<b>Responsible Team Member</b>	Sahara Williams (Enginnuity Management & Consulting Corp.)		
<b>Item Notes</b>			
<b>Primary Response</b>			
<b>Submission Notes</b>			
<b>Review Notes</b>			

**Dates**

<b>Material Required on Site</b>	<b>Required Lead Time (days)</b>
<b>Approved Submittal Required By</b>	<b>Required Review Time (days)</b>
<b>Submission Due</b>	

**Manufacturer**



**Campbell Land Development  
Construction Waste**  
935 West Troy Avenue  
Indianapolis, IN 46225  
Office: 317.783.1500  
Fax: 317.783.4860

Reviewed by WJB  
of Enginuity for  
CQM Team on  
02/18/2010

# SUBMITTAL

**Date:** February 9, 2010

**Project Name:** IPS Thomas D. Gregg Elementary School No. 15

**Architecture/Engineer:**  
Durkin & Villalta Partners Engineering  
8440 Woodfield Crossing Blvd., Suite 175  
Indianapolis, IN 46240

**Construction Quality Manager (CQM):**  
Garcia Construction Group  
6002 N. Michigan Road  
Indianapolis, IN 46228

**Contractor:**  
MacDougal Pierce  
12720 Ford Drive  
Fishers, IN 46038

**Subcontractor:**  
Campbell Land  
Development  
935 West Troy Ave.  
Indianapolis, IN 46225

**Supplier:**  
Midwest Construction  
Products  
3901 S. Madison Ave.  
Indianapolis, IN 46227

**Manufacturer:**  
Dandy Products Inc.  
6200 Eiterman Rd.  
Dublin, OH 43016

**Unique identifier, including revision number** \_\_\_\_\_

**Number and title of appropriate Specification Section** 312510  
Erosion and Sedimentation Control

**Drawing number and detail references, as appropriate** C403: EC-15,EC-36

**Other necessary identification** Inlet Protection

**BEAVER DAM®  
CURB AND GUTTER INLET/GRATE PROTECTION SYSTEM GUIDE  
SPECIFICATION**

**PRODUCT:**

BEAVER DAM®

**MANUFACTURER:**

Dandy Products Inc.  
6200 Eiterman Road  
Dublin, Ohio 43016  
Phone: 1-800-591-2284  
Fax: 1-614-799-8760  
E mail [dlc@dandyproducts.com](mailto:dlc@dandyproducts.com)  
Web [www.dandyproducts.com](http://www.dandyproducts.com)

**1.0 Description:**

- 1.1 Work covered under this item consists of installing a Beaver Dam® curb and gutter inlet protection system. The purpose is to keep silt, sediment and construction debris out of the storm water system.

**2.0 Material:**

- 2.1 The Beaver Dam® curb and gutter inlet protection unit shall be a sewn geotextile fabric unit enclosing a porous structure in the form of a cylindrical tube placed in front of and extending beyond the inlet opening on both sides and have a geotextile fabric envelope fitted to the individual grate(s) on the street side of the sewn unit for grate(s) to be inserted and to completely enclose the grate(s).
- 2.2 The Beaver Dam® shall have lifting devices to allow manual inspection of the storm water system.
- 2.3 The Beaver Dam® unit shall utilize an orange monofilament fabric with the following characteristics:

PROPERTY	TEST METHOD	UNITS	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.44 (100)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
% Open Area	COE - 22125-86	%	10
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Permittivity	ASTM D 4491	sec <sup>-1</sup>	2.14
Permeability	ASTM 4491	cm/sec	0.142
Water Flow Rate	ASTM 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	5607 (145)

Ultraviolet Resistance	ASTM D 4355	%	70
Color			Orange <sup>1</sup>

<sup>1</sup>The color orange is a trademark of Dandy Products, Inc.

### 3.0 Installation:

- 3.1 Place the empty Beaver Dam® unit over the grate as the grate stands on end.
- 3.2 *For oil and sediment model; to install or replace absorbent, place absorbent pillow in pouch, on the bottom (below-grade side) of the unit.*
- 3.3 Tuck the enclosure flap inside to completely enclose the grate.
- 3.4 Holding the lifting devices, being careful not to damage the sewn fabric unit, insert the grate into its frame, street side edge first, then lower back edge with cylindrical tube into place. The cylindrical tube should be partially blocking the curb hood opening when installed properly.

### 4.0 Maintenance:

- 4.1 The contractor shall remove all accumulated sediment and debris from surface and vicinity of unit after each rain event or as directed by engineer/inspector. Dispose of unit no longer in use at an appropriate recycling or solid waste facility.
- 4.2 *For oil and sediment model; remove and replace absorbent when near saturation.*

### 5.0 Method of Measurement:

- 5.1 The quantity to be paid is for the actual number of Beaver Dam® inlet protection units installed

### 6.0 Basis of payment:

- 6.1 The unit price shall include labor, equipment, and materials necessary to complete the work and maintain the Beaver Dam® inlet protection units.
- 6.2 Payment for the completed work will be made at the contract prices for:

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
Beaver Dam®	EA	Curb Inlet Protection Unit (# _____ Inlet)



## DANDY BAG® INLET PROTECTION SYSTEM GUIDE SPECIFICATION

### PRODUCT:

DANDY BAG®

### MANUFACTURER:

Dandy Products Inc.  
6200 Eiterman Rd.  
Dublin, Ohio 43016  
Phone: 1-800-591-2284  
Fax: 1-614-799-8727  
E mail [dlc@dandyproducts.com](mailto:dlc@dandyproducts.com)  
Web [www.dandyproducts.com](http://www.dandyproducts.com)

### 1.0 Description:

1.1 Work covered under this item consists of installing a Dandy Bag® inlet protection system. The purpose is to keep silt, sediment and construction debris out of the storm water system.

### 2.0 Material:

2.1 The Dandy Bag® inlet protection unit shall be a sewn geotextile fabric unit fitted to the individual grate(s) and completely enclosing the grate(s).

2.2 The Dandy Bag® shall have lifting devices to allow manual inspection of the storm water system.

2.3 The Dandy Bag® unit shall utilize an orange monofilament fabric with the following characteristics:

PROPERTY	TEST METHOD	UNITS	MARV
Grab Tensile Strength	ASTM D 4632	kN (lbs)	1.62 (365) x 0.89 (200)
Grab Tensile Elongation	ASTM D 4632	%	24 x 10
Puncture Strength	ASTM D 4833	kN (lbs)	0.44 (100)
Mullen Burst Strength	ASTM D 3786	kPa (psi)	3097 (450)
Trapezoid Tear Strength	ASTM D 4533	kN (lbs)	0.51 (115) x 0.33 (75)
% Open Area	COE - 22125-86	%	10
Apparent Opening Size	ASTM D 4751	mm (US Std Sieve)	0.425 (40)
Permittivity	ASTM D 4491	sec <sup>1</sup>	2.14
Permeability	ASTM 4491	cm/sec	0.142
Water Flow Rate	ASTM 4491	l/min/m <sup>2</sup> (gal/min/ft <sup>2</sup> )	5607 (145)
Ultraviolet Resistance	ASTM D 4355	%	70
Color			Orange <sup>1</sup>

<sup>1</sup>The color orange is a trademark of Dandy Products, Inc.

### 3.0 Installation:

- 3.1 Place the empty Dandy Bag® over the grate as the grate stands on end.
- 3.2 *For oil and sediment model; to install or replace absorbent, place absorbent pillow in pouch, on the bottom (below-grade side) of the unit.*
- 3.3 Tuck the enclosure flap inside to completely enclose the grate.
- 3.4 Holding the lifting devises, insert the grate into the inlet being careful not to damage the Dandy Bag® unit.

### 4.0 Maintenance:

- 4.1 The contractor shall remove all accumulated sediment and debris from surface and vicinity of unit after each rain event or as directed by engineer/inspector. Dispose of unit no longer in use at an appropriate recycling or solid waste facility.
- 4.2 *For oil and sediment model; remove and replace absorbent when near saturation.*

### 5.0 Method of Measurement:

- 5.1 The quantity to be paid is for the actual number of Dandy Bag® inlet protection units installed

### 6.0 Basis of payment:

- 6.1 The unit price shall include labor, equipment, and materials necessary to complete the work and maintain the Dandy Bag® inlet protection units.
- 6.2 Payment for the completed work will be made at the contract prices for:

<u>ITEM</u>	<u>UNIT</u>	<u>DESCRIPTION</u>
Dandy Bag®	EA	Inlet Protection Unit (# _____ Inlet)