



construction managers

general contractors

design builders

Engineering Solutions

Shop Drawing Review

Project: Echelon Date: 12-15-17

Submittal# ESC - 1 By: MJS

☐ APPROVED

☐ REJECTED

☒ APPROVED AS NOTED

****Seed mix needs to be as shown on C.052****

SUBMITTAL REVIEW

Project # 417 The Residences at Echelon

Date: December 11, 2017

Submittal Number: 31 1000 02 a Erosion Control
Product Data for Fence, Seed, and
Accessories

Sequence Number: 19

Subcontractor: Erosion Specialists
Lindsay Theobold

Submit To: NSPJ Architects
Tim Hauschild

SUBMITTAL FOR APPROVAL

Job Name/No: 417 The Residences at Echelon

☒ REVIEWED

☐ REVISE & RESUBMIT

☐ REVIEWED& NOTED

☐ REJECTED

Submittal received for general compliance with the Contract Documents. Contractor's review does not relieve sub/vendor of responsibility for dimension, quantities, accuracy or completion of submittals or from any responsibilities required by terms and conditions of Subcontract/PO with Luke Draily Construction Co., Inc.. Sub/Vendors shall follow all manufacturer installation instructions. Installing contractor shall be responsible to coordinate with trades for hookup, supports, routing, etc.

By: JDW

Date:

John Wilcox

From: Matt Schlicht <mschlicht@es-kc.com>
Sent: Friday, December 15, 2017 8:21 AM
To: John Wilcox; 'Tim Hauschild'
Cc: T.J. Watreas; Pam Becker; 'Jake Loveless'; cevans@nspjarch.com; 'Brad Hus'
Subject: RE: Echelon 31 1000 02 a Erosion Control.pdf
Attachments: 31 1000 02 a Erosion Control ES REVIEW.pdf

See attached

Please note the **seed mix is incorrect** and the acreage listed on the shop drawing is 10.5 acres and 2 acres in the email

Matthew J. Schlicht

Engineering Solutions
50 SE 30th Street
Lee's Summit, MO 64082
P (816) 623-9888
F (816) 623-9849
www.engineeringsolutionskc.com

From: John Wilcox [mailto:jwilcox@lukedrailly.com]
Sent: Monday, December 11, 2017 12:40 PM
To: Tim Hauschild <THauschild@nspjarch.com>
Cc: T.J. Watreas <tjwatreas@lukedrailly.com>; Pam Becker <pbecker@lukedrailly.com>; Jake Loveless <jake@griffinriley.com>; cevans@nspjarch.com; Matt Schlicht <mschlicht@es-kc.com>; Brad Hus <bhus@nspjarch.com>
Subject: Echelon 31 1000 02 a Erosion Control.pdf

Tim,
Submittal for review. Standard stuff, however it does include temp seeding for areas around the roadway – less than 2 acres - that you might want to verify.

John Wilcox / Project Manager
LUKE DRAILY CONSTRUCTION
75 NW Business Park Lane
Riverside, MO 64150
Office: 816.459.8531 Fax: 816.459.8533
Mobile: 816.730.1067



Master Label

Permit (Missouri) 83110
Permit (Kansas) SD3510
Critical Site Products
16245 South 71 Hiway
Belton Missouri 64012

R030522

Account Name EROSION SPECIALISTS
Invoice # RESIDENCE @ ECHELON
Blend Name TEMP
Total 10.50 acre Pckg Wt 967.867 LBS Bulk
Date Nov-17 Lot: CS171130.1

Item#	Bulk Wt	LBS Item	Bulk/PLS	Identification	Lot#	Origin	TestDate	Purity	Germ	Inert	Hard	Crop	Weed	Noxious
1	92.17779	90.00000	PLS	ANNUAL RYE	L1131752	OR	Sep-17	99.63%	98.00%	0.12%	0.00%	0.25%	0.00%	None
2														
3														
4														
5														
6														
7														
8														
9														

Totals	92.18	90.00
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Blend Composition

Item#	Lot#	% of Blend	Identification	# PLS	# Inert	# Crop	# Weed	#Bulk	Germ+Hard	TO WEIGH	Blend Bulk
1	L1131752	100.0000	ANNUAL RYE	90.0000	0.11061335	0.2304	0.0000	92.1778	88.2000		967.867

TOTALS	100.0	90.0000	0.11061335	0.2304	0.0000	92.1778	88.2000	0.0000	967.8668
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Total Bulk Pounds	967.867	Total Bags	19	50	#/Bag
			1	17.8668	#/Bag Partial

Critical Site Products, Inc 16245 S. US HWY 71 Belton, MO 64012

Composition	% of Bulk	Blend Composition
ANNUAL RYE	100.0000	% PLS 97.64%
		% Inert 0.12%
		% Crop 0.25%
		% Weed 0.00%
		% Germ 95.68%

	Lot#	CS171130.1
	Permit (Missouri)	83110
	Permit (Kansas)	SD3510
100.0000	Blend Name	

TEMP
RESIDENCE @ ECHELON
Account Name
EROSION SPECIALISTS

Blend Date Nov-17

Net Wt # 50.000

L & M SUPPLY CO., INC.

P.O. Box 640
1800 Springhead Ch. Rd.
Willacoochee, Ga. 31650

912-534-6071
800-948-7870
912-534-6254(fax)

To whom it may concern:

Subject: Certification of L&M 100 Gram Silt Fence.

This letter certifies that our **L&M 100 Silt Fence** fabric meets and/or exceeds the specifications listed below and conforms to AASHTO M288-99 for Temporary Silt Fence. The average laboratory test values for the **L&M 100 Silt Fence** are as follows:

L & M 100 Gram Silt Fence

Property	Test Procedure	American Standard
Style		100 gsm
Weave		11 x 11 weave
Grab Tensile	ASTM D 4632	135x125
Grab Elongation	ASTM D 4632	15 %
CBR Puncture	ASTM D 6241	325 lbs
Trapezoid Tear	ASTM D 4533	60 lbs
Apparent Opening Size	ASTM D 4751	30 sieve
Permittivity	ASTM D 4491	0.1 sec
UV Resistance	ASTM D 4355	80% @ 500 hrs
Water Flow	ASTM D 4491	10 gal/min/ft ²
Roll Width		3 ft

Unless otherwise noted, this certification is based on testing conducted by our Quality Assurance & Quality Control testing laboratories at the time of manufacturing. L & M Supply Co., Inc. issued this letter of certification to indicate our commitment to providing our customers with a quality product which will meet or exceed the minimum average roll values in accordance with the applicable American Society for Testing and Materials (ASTM) test method.

Respectfully,

Quincy McMillan



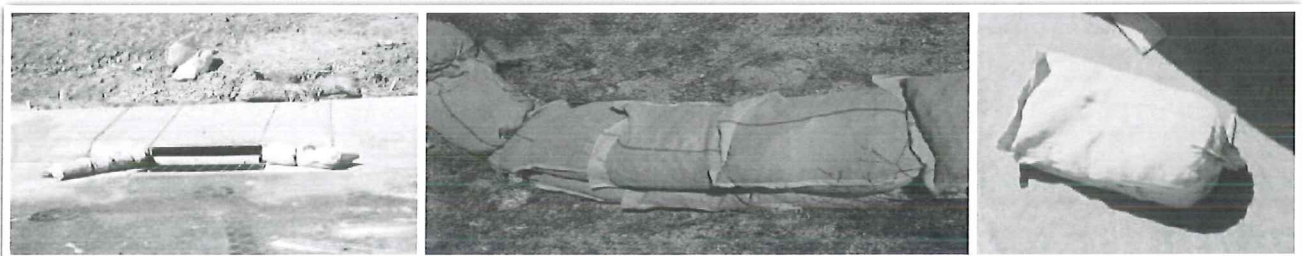
Certificate of Compliance

Ultra-Gravel Bags

We certify that the material to be supplied will meet or exceed the following physical specifications.

Property	Test Method	Woven (Typical:)
Fabric Weight	ASTM D-5261	5 oz/sq./yd.
Grab Tensile (MD/TD)	ASTM D-4632	350/220 lbs
Trapezoid Tear (MD/TD)	ASTM D-4533	146/75 lbs.
Puncture	ASTM D-4833	112 lbs.
Apparent Opening Size	ASTM D-4751	40 US Sieve (0.425mm).
Mullen Burst	ASTM D-3786	388 psi.
Permittivity	ASTM D-4491	2.1 sec ⁻¹
Permeability	ASTM D-4491	0.14 cm/sec
Water Flow	ASTM D-4491	195 gal/min per sq. ft.
UV Resistance (2000hrs)	ASTM D-435v5	>70%

Material : High Density Polyethylene (HDPE)



Available in 14" x 750' rolls.



08-26-11

SWP-CI "Big Red"

Curb Inlet Protector

By ASP Enterprises and Storm Water Products
Temporary and Reusable Solutions for Sediment Control



109 NW Victoria Drive
Lee's Summit, MO 64086
800-519-2304

- Reusable Curb Inlet Protection
- Environmentally Friendly
- Drops out sediment by dissipating the water energy

"Big Red" Filter Advantages:

- Easy to Install
- Versatile for a variety of curb inlets
- Reusable and Extremely easy to clean
- Made from 90% Inert Recycled Materials

The SWP-CI "Big Red" Filter is a **REUSABLE** inlet protector that keeps out sediment throughout the entire construction project. There are no pockets to fill, no velcro bags, no assembly etc. Simply place in front of the inlet, make sure it lays in the contour, and you are DONE!

Simple installation also translates into simple removal, cleanup and re-use at the next project or phase. Maintenance is simple as well by lifting the unit from the inlet, shaking the mud off of it, removing the sediment on the concrete, and placing the unit back. If it is severely filled with sediment, wash it out in a vegetated area and it is as good as new.

All of these features and benefits combine to make the SWP-CI "Big Red" curb inlet protector the **perfect choice** for all curb inlet applications. It comes in 54" long for single curb inlets and 104" lengths for double curb inlets.

- High Flow Rate
- Made of Durable High-Strength Geotextile
- Fully Reusable
- Made of Recycled Materials



SWP-CI "Big Red"

Curb Inlet Protector

By ASP Enterprises and Storm Water Products



109 NW Victoria Drive
Lee's Summit, MO 64086
800-519-2304

Specifications:

1. Infill Material: shredded recycled rubber tires
2. Weight: approx. 10 lbs per linear foot
3. Diameter: approx. 8"

Geotextile fabric made of durable high flow fabric with the following properties:

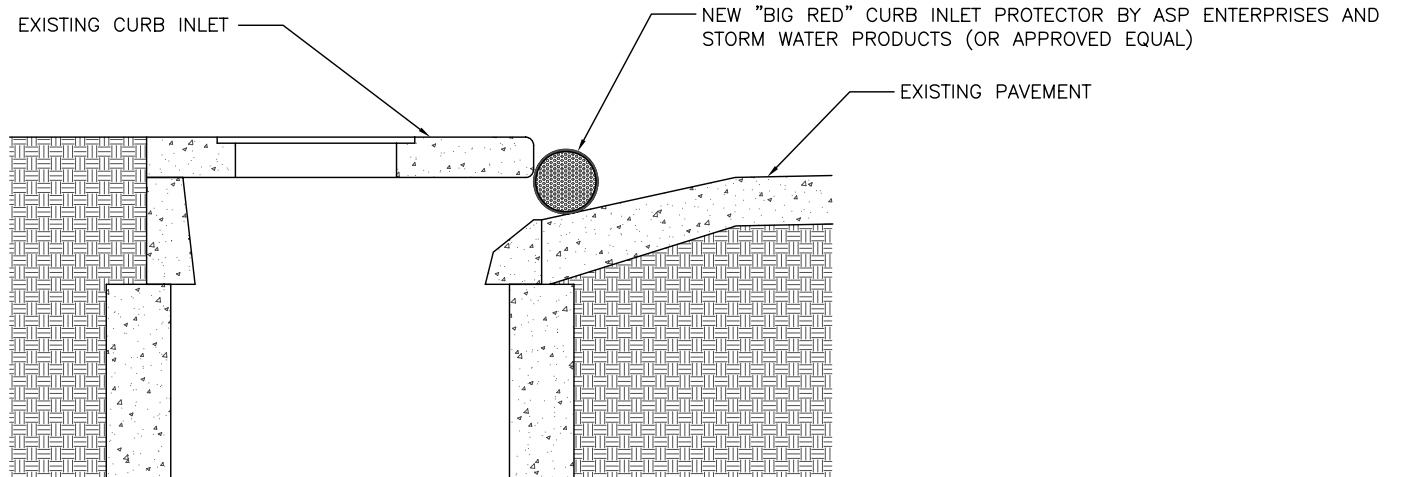
Property	Test Method	Units	Typical Value
Weight	ASTM D5261	oz/sq. yd	9.3
Grab Tensile Strength	ASTM D4632	lb	warp 250 fill 290
Tear Strength (Trapezoid)	ASTM D4533	lb	warp 60 fill 50
Burst	ASTM D3786	psi	440

(Efforts were made to determine flow rate-the fabric exceeded all capacities of the testing equipment)

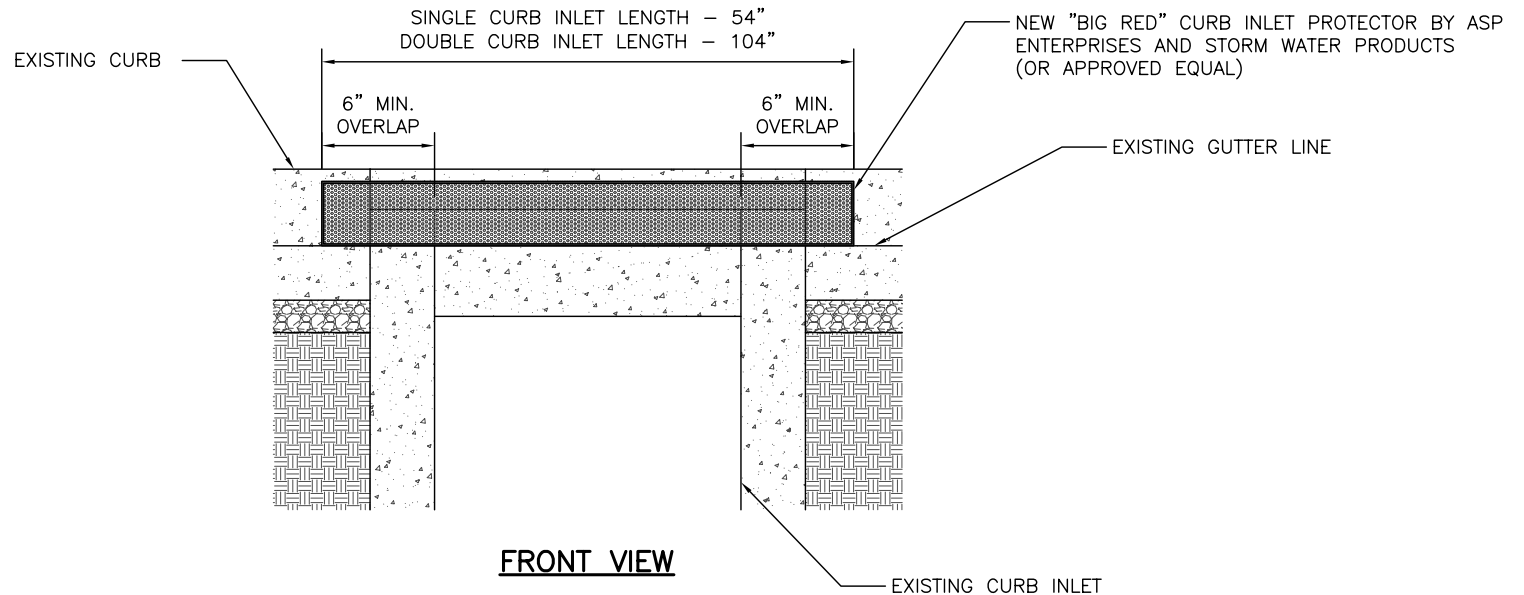


Available locally at ASP Enterprises - 816-554-1191

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SIDE VIEW



FRONT VIEW

DETAIL NOTES:

1. CURB INLET PROTECTOR SHALL BE PLACED IN FRONT OF THE CURB INLET LAYING IN THE CONTOUR WITH A MINIMUM 6" OVERLAP PAST THE EDGE OF THE INLET MOUTH.
2. CURB INLET PROTECTOR SHALL BE INSTALLED AND MAINTAINED PER MANUFACTURER'S SPECIFICATIONS.

"BIG RED" CURB INLET PROTECTION (BR)