

ARM Group Inc.

Engineers and Scientists

August 12, 2019

Ms. Barbara Brown Project Coordinator Maryland Department of the Environment 1800 Washington Boulevard Baltimore, MD 21230

Re: Interim Use Work Plan:

Marketing Center

Area B: Sub-Parcel B6-2 (Retail Area)

Comment Response Letter

Tradepoint Atlantic

Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group Inc. (ARM) is pleased to provide the following responses to comments provided by the Maryland Department of the Environment (MDE) via email on July 16, 2019 regarding the previous submission of the Interim Use Work Plan (dated July 1, 2019) for the proposed Marketing Center to be constructed within the retail area designated as Sub-Parcel B6-2 (the Site) of the Tradepoint Atlantic property located in Sparrows Point, Maryland. This letter will serve as an Addendum to the Interim Use Work Plan.

Responses to specific MDE comments are given below; the original comments are included in italics with responses following. In addition to the comments provided below, Tradepoint Atlantic indicated that while representatives of the MDE were on-site on July 16, 2019, they requested a summary of the work to be completed under the Interim Use Work Plan. This summary was to include a description of work to be competed, summary of the details, and references to the location of additional details. The summary of work is provided below:

The Interim Use Work Plan covers improvements on an area within Sub-Parcel B6-2 designated as the Marketing Center, as well as a limited scope of work in areas along the surrounding ingress and egress roads. The Interim Use Work Plan does not cover work that has already been approved for implementation at the Site. Specifically, the construction of the Royal Farms tenant area as well as the paved ingress and egress roads were covered by the previous Response and Development work Plan (RADWP) Addendum dated May 22, 2018. Details related to the construction of the Royal Farms tenant area and the roads can be found in this separate plan.

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Work to be completed under the Interim Use Work Plan includes the installation of landscaped caps and concrete sidewalks in the immediate area surrounding the existing building in the Marketing Center. The work area for these cap installations is highlighted on **Figure 1** and **Figure 2** from the Interim Use Work Plan. A simplified development figure is attached as **Figure 3**; this simplified figure was previously provided to the MDE via email on July 8, 2019. The detailed plan view of this area is provided on sheet C-302, and the cross-section details for these types of caps can be found on sheets C-901 and C-705.

Additionally, the work covered by the Interim Use Work Plan includes the installation of 36 electrical light poles (including associated trenching) along the ingress/egress roads. The electrical conduits are planned to be installed at 30 inches below ground surface (bgs) except for those going to the light poles, which will be installed at approximately 18 inches bgs. Hand boxes and poles will be installed at approximately 35 inches bgs. The excavations for the light poles and trenches will be capped by pavement or additional landscaped caps to be installed along the perimeters of the ingress/egress roads. The roads themselves were covered by the existing RADWP Addendum (dated May 22, 2018), but lighting improvements were not included in the original RADWP Addendum so they are included (with caps) under this Interim Use Work Plan. The locations of the light poles are shown on sheets C-302 through C-304, the conceptual trench alignments are shown (sketched by BGE) with the tree planting plan on sheets C-707 through C-709, and the light pole details can be found on sheet C-710. A pavement parking lot will be installed to the south and east of the Marketing Center, but the paved areas were covered by the existing RADWP Addendum (dated May 22, 2018).

The proposed work also includes the installation of temporary caps in the areas enclosed by the proposed ingress/egress roads to the south of the Marketing Center parking lot and to the east of the Royal Farms tenant area. This work was not included in the previous submission of the Interim Use Work Plan. Within the existing RADWP Addendum (dated May 22, 2018), the enclosed area to the east of the Royal Farms was designated as a "Future Development Area" to be addressed in a separate development plan. This area is highlighted on the attached Figure 4, which was extracted from the existing RADWP Addendum (dated May 22, 2018). At present, a tenant has not been selected for either area, and Tradepoint Atlantic intends to temporarily cap these areas during the interim period. The temporary caps will consist of 4 inches of certified clean crushed recycled concrete. These areas are identified on the attached Figure 5 (provided by Tradepoint Atlantic), which shows that all of the areas enclosed by the roads will be capped, either with permanent caps (i.e., pavement or landscaping) or temporary caps (i.e., crushed concrete). No areas of uncovered slag will remain exposed within the perimeter of the ingress/egress roads. As with other temporary caps on the property, the crushed concrete temporary caps will be subject to the established inspection requirements for this type of cap (inspected monthly, any deficiencies reported within 48 hours, any required corrective actions taken within 15 business days, etc.).

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Responses to MDE Comments:

1. Per the RDWP for B6-2, all landscaped areas will have a minimum of 24" of clean fill installed above a geotextile fabric. Figure C-705 depicts Perennial/GC Planting Detail with no specified minimum of clean fill and no geotextile fabric. Is this due to the fact that none of this type of planting is planned for the temporary Marketing Center? Explain.

The referenced Perennial/Ground Cover Planting Detail is a spacing and layout detail, and thus does not include information related to the thicknesses, etc. The additional details shown on sheet C-705 (Deciduous and Evergreen Shrub Planting Detail, Deciduous Tree Planting Detail, Evergreen Tree Planting Detail, and Tree Planting on Slope Detail) all show the required 24 inches of clean fill as well as the required geotextile marker fabric between the clean fill and underlying material. Tree plantings will be installed in the vicinity of the Marketing Center, but the cap requirements are satisfied.

2. Project Description –

a. Add statements re: the general minimum requirements approved for capping material in the B6-2 RDWP (ex: 2' of clean fill beneath all landscaped areas with an underlying geotextile fabric marker, 4" of pavement cover over 4" approved subbase material).

The capping remedies will meet the minimum thicknesses specified in the Sub-Parcel B6-2 RADWP (Revision 1 dated January 24, 2018). Specifically, all paved areas will be installed with a minimum of 4 inches of compacted aggregate base and a minimum of 4 inches of overlying pavement surface. Landscaped areas will consist of a minimum of 2 feet of clean fill (meeting VCP requirements for commercial land use) over a geotextile marker fabric prior to being planted. Trees will be installed with a minimum of 2 feet of clean fill (meeting VCP requirements for commercial land use) around the root ball, with a geotextile marker fabric placed between the clean backfill and underlying soils.

b. This section does not state whether there will be paved parking areas around the Marketing Center. Provide details.

A pavement parking lot will be installed to the south and east of the Marketing Center, but the paved areas were covered by the existing RADWP Addendum (dated May 22, 2018). Per the requirements of that separate document, the capping remedy will be required to meet the minimum thicknesses given in the Sub-Parcel B6-2 RADWP.

c. What is the anticipated depth of light poles and trenches? Will these be within the roadway, therefore capped with pavement, or in a sidewalk, so capped with concrete?



Or in a landscaped area? Is there any expectation that groundwater will be encountered during the installations?

The electrical conduits are planned to be installed at 30 inches bgs except for those going to the light poles, which will be installed at approximately 18 inches bgs. Hand boxes and poles will be installed at approximately 35 inches bgs. Based on these depths, groundwater is not expected to be encountered and any dewatering, if required, is expected to be minimal.

The locations of the light poles are shown on sheets C-302 through C-304, and the conceptual trench alignments are shown (sketched by BGE) on sheets C-707 through C-709. The light poles and most of the trenches will be installed in grass strips behind curbs, not in paved areas, so will be within landscaped areas including along the perimeter of the ingress/egress roads. For example, 24 light poles (and associated trenches) are identified along the east, south, and west perimeters of the roads with the tree planting plan on sheets C-707 through C-709. The surface will be installed/repaired in these areas to meet the requirements for landscaped caps. As shown on sheets C-707 through C-709, a limited amount of trenching will be required across the proposed roads, specifically across the three access roads from Bethlehem Boulevard. The roads (covered by the existing RADWP Addendum dated May 22, 2018) will be installed/repaired to meet the specifications for pavement caps.

d. Has the Environmental Professional for this work been selected? If so, provide those details.

Tradepoint Atlantic has selected Hillis-Carnes Engineering Associates, Inc. (HCEA) as the Environmental Professional (EP) to provide oversight on the project.

3. It would be useful to include the approved cap minimum drawings from the approved RDWP along with the engineering drawings provided by Bohler.

The Capping Section Details from the approved Sub-Parcel B6-2 RADWP are provided with this letter as **Attachment 1**.

4. Will the Marketing Center be fenced off from the remainder of the site? Fenced off with the adjacent Royal Farms? The RDWP Addendum Rev. 2, Retail Area No. 1 stated that all adjacent areas to the Royal Farms site would be temporarily landscaped until later development occurs. Some of this area included the surrounding Marketing Center. Once this project and the Royal Farms project are complete, will any uncovered slag remain within the boundary of TPA Access Rd. 1 and Access Rd. 2?



The referenced RADWP Addendum stated that the Royal Farms would be fenced off from the surrounding uncapped areas using "non-ground intrusive chain link temporary storm fencing". However, this approach was developed before the capping plan for the Marketing Center was known. Based on the updated plan, all areas enclosed within the ingress/egress roads will be capped, either with permanent caps (i.e., pavement or landscaping) or temporary caps (i.e., crushed concrete) as shown on the attached **Figure 5**. No areas of uncovered slag will remain exposed within these roads. Therefore, fences are not proposed surrounding the Marketing Center (and are no longer proposed surrounding the adjoining Royal Farms). It is not anticipated that visitors to the Marketing Center or Royal Farms will traverse the Site to areas outside of the access roads. The southernmost road running from east to west will adjoin with the border of the Tin Mill Canal (TMC), which has already been capped by the maintenance cleanup work that was recently completed. The roads will be physically separated from the TMC by a 4-foot high fence.

5. What is the plan for storm water management on this site?

Any stormwater or groundwater that requires dewatering during construction will be pumped to the nearby TMC through a filter bag. Groundwater is not expected to be encountered and any dewatering, if required, is expected to be minimal. Long term, stormwater in this area is being directed to the TMC.

If you have any questions, or if we can provide any additional information at this time, please do not hesitate to contact ARM Group Inc. at 410-290-7775.

Respectfully submitted,

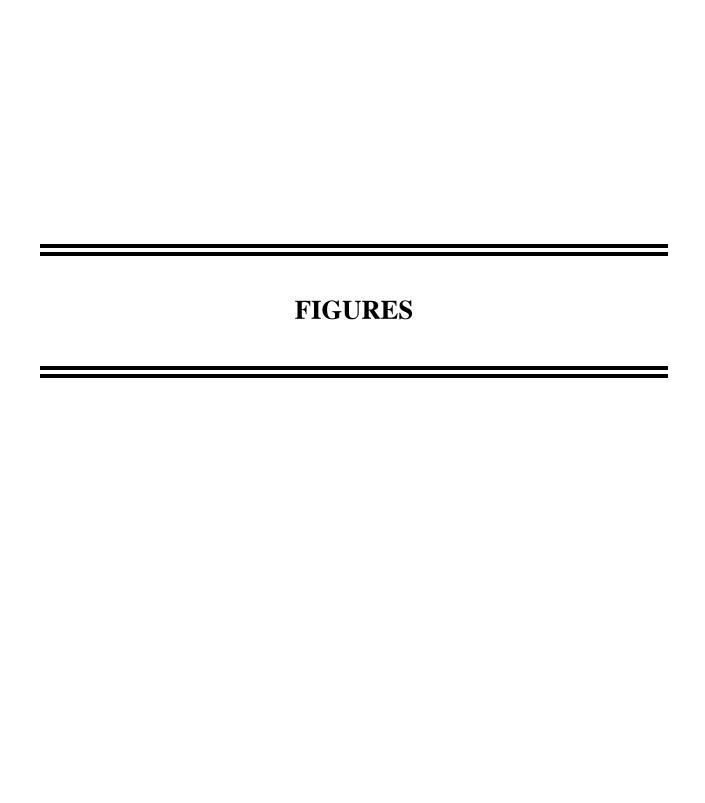
ARM Group Inc.

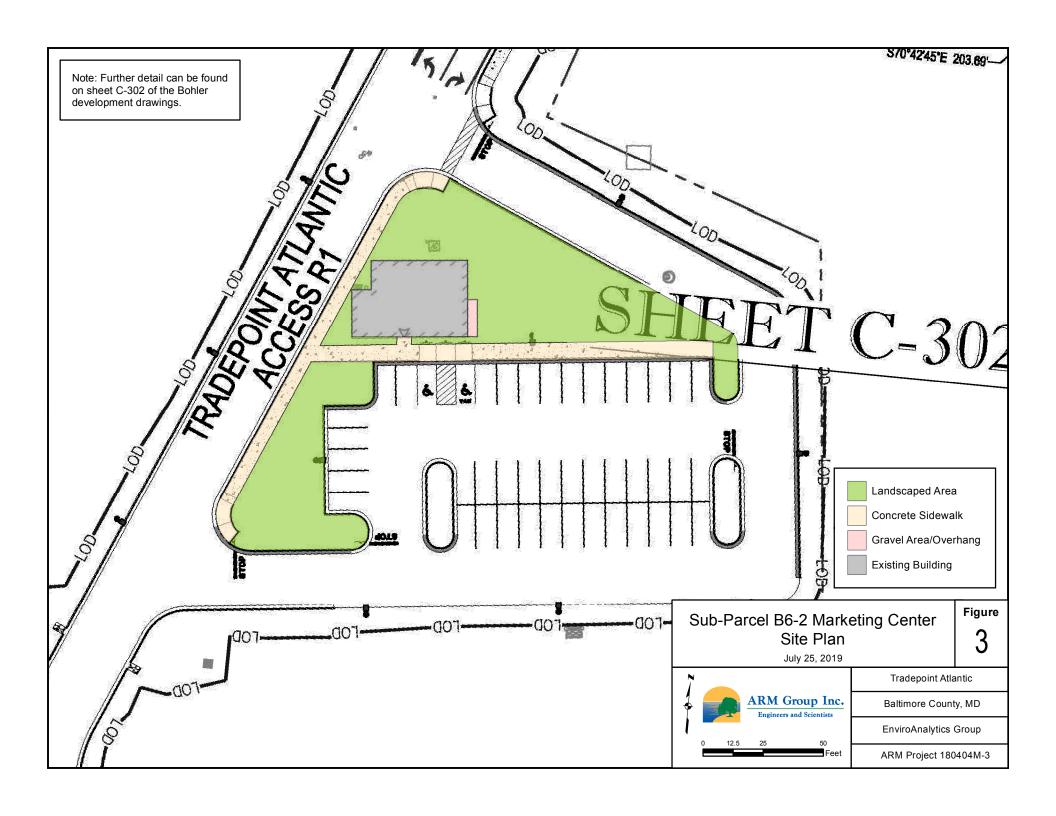
Taylor R. Smith, P.E. Project Engineer

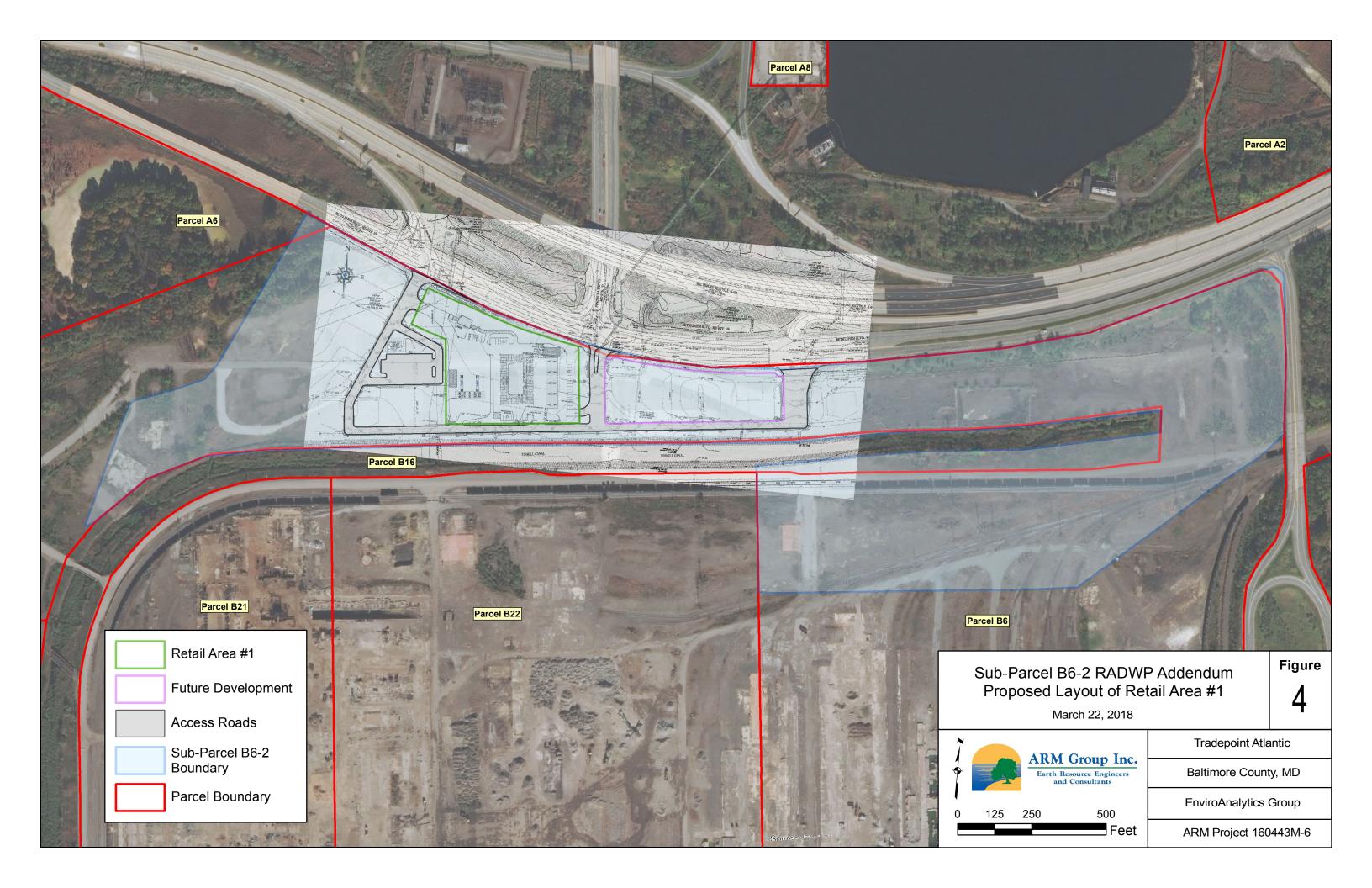
T. Neil Peters, P.E. Senior Vice President

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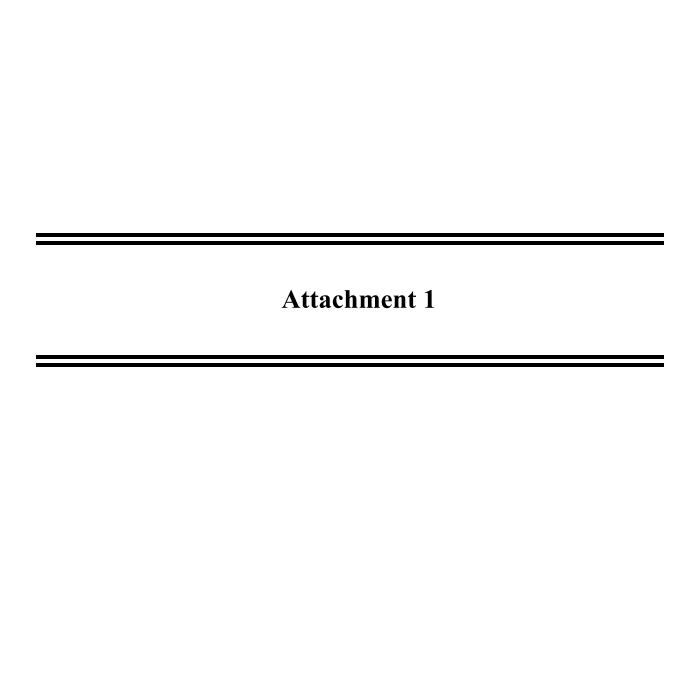




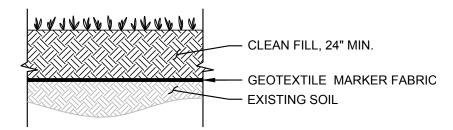








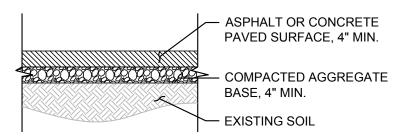
TYPICAL POND SECTION



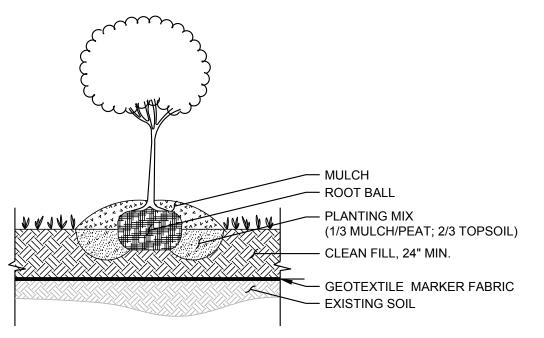
TYPICAL LANDSCAPE SECTION

GEOTEXTILE MARKER FABRIC SPECIFICATIONS

THE GEOTEXTILE MARKER FABRIC SHALL BE A NONWOVEN PERVIOUS SHEET OF POLYPROPYLENE MATERIAL. ADD STABILIZERS AND/OR INHIBITORS TO THE BASE MATERIAL, AS NEEDED, TO MAKE THE FILAMENTS RESISTANT TO DETERIORATION BY ULTRAVIALET LIGHT, OXIDATION AND HEAT EXPOSURE. REGRIND MATERIAL, WHICH CONSISTS OF EDGE TRIMMINGS AND OTHER SCRAPS THAT HAVE NEVER REACHED THE CONSUMER, MAY BE USED TO PRODUCE THE GEOTEXTILE. POST-CONSUMER RECYCLED MATERIAL MAY BE USED. GEOTEXTILE SHALL BE FORMED INTO A NETWORK SUCH THAT THE FILAMENTS OR YARNS RETAIN DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING THE EDGES. GEOTEXTILES SHALL MEET THE REQUIRE, MENTS SPECIFIED IN TABLE 1. WHERE APPLICABLE, TABLE 1 PROPERTY VALUES REPRESENT THE MINIMUM AVERAGE ROLL VALUES IN THE WEAKEST PRINCIPAL DIRECTION. VALUES FOR APPARENT OPENING SIZE (AOS) REPRESENT MAXIMUM AVERAGE ROLL VALUES



TYPICAL PAVING SECTION



TYPICAL PLANTING SECTION

TABLE	1	WOVEN SLIT FILM GEOTEXTILE MINIMUM MD CD		WOVEN MONOFILAMENT GEOTEXTILE UM AVERAGE ROLL		NONWOVEN GEOTEXTILE VALUE ¹	
PROPERTY	TEST METHOD			MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb 75 lb		100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size ²	ASTM D-4751	U.S. Sieve 30 (0.59 mm)		U.S. Sieve 70 (0.21 mm)		U.S. Sieve 70 (0.21 mm)	
Permittivity	ASTM D-4491	0.05 sec ⁻¹		0.28 sec ⁻¹		1.1 sec ⁻¹	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.

Earth Resource Engand Consultant



drawing title		designed JMA		scale	/N
CAPPING SECTION DETAILS	N DETAILS	checked	thecked TNP	date	date 10/24
		drawn	J	MA project no. 1604	1604
project title SPARROWS POINT AREA B ENVIROANALYTICS GROUP	SPARROWS POINT BALT. COUNTY, MARYLAND				

² Values for AOS represent the average maximum opening.