## RESPONSE AND DEVELOPMENT COMPLETION REPORT

#### AREA B: SUB-PARCEL B6-2 Marketing Center TRADEPOINT ATLANTIC SPARROWS POINT, MARYLAND

Prepared For:



**TRADEPOINT ATLANTIC** 1600 Sparrows Point Boulevard Sparrows Point, Maryland 21219

Prepared By:



ARM GROUP LLC 9175 Guilford Road Suite 310 Columbia, Maryland 20146

ARM Project No. 20010206

Respectfully Submitted, ARM Group LLC

Melisser R. Hritz

Melissa Replogle Hritz, E.I.T. Staff Engineer

Alul Pets

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

Revision 0 – October 18, 2021

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Daily Dust Data Summaries	Following Text



#### **1.0 INTRODUCTION**

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic, has prepared this Interim Use Completion Report for a portion of Area B: Sub-Parcel B6-2 on Tradepoint Atlantic property that has been designated as the Marketing Center (the Site). This report documents the work completed under the Sub-Parcel B6-2 Interim Use Work Plan: Marketing Center dated July 1, 2019 and the associated Comment Response Letter dated August 12, 2019. The location of Parcel B6 on the Tradepoint Atlantic property is shown on **Figure 1**, and Sub-Parcel B6-2 is shown on **Figure 2**. The Marketing Center Area is shown on **Figure 3**. Additional work completed within the sub-parcel (including the development of Retail Area #1) will be addressed in additional documents to be submitted under separate cover.

The Sub-Parcel B6-2 development area boundary was adjusted from the boundary originally presented in the Sub-Parcel B6-2 RADWP. The updated boundary was presented in the Sub-Parcel B6-2 RADWP Addendum: SLRA Update dated June 28, 2021. The updated boundary consists of approximately 38 acres, the majority of which is within the northern portion of Parcel B6 with approximately 0.14 acres in the adjacent Parcel A6. The Tin Mill Canal (also designated as Parcel B16) flows adjacent to the development area to the south. Response work associated with the Tin Mill Canal is covered by several other documents submitted under separate covers.

The Marketing Center is located within a portion of Sub-Parcel B6-2 and consists of approximately 0.033 acres in the northwest portion of the sub-parcel. The Site currently consists of a 2-story above-grade building. As part of the development of Retail Area #1, the Marketing Center will be enclosed by portions of the ingress and egress roads. These roads were approved for construction under the Sub-Parcel B6-2 Response and Development Work Plan (RADWP) Addendum dated May 22, 2018 and displayed on **Figure 2** and **Figure 3**. Development also included the construction of the lighting improvements along the ingress and egress roads (and the roads themselves). The development of the roads themselves is documented within the Development Completion Report for Sub-Parcel B6-2 Retail Area #1 and are covered by the existing RADWP Addendum (dated May 22, 2018), but lighting improvements were not included in the original RADWP Addendum so they were included (with caps) under the Interim Use Work Plan.

Pursuant to Paragraph 3 of the First Amendment to the Administrative Consent Order (ACO), a cost comparison of the commercial environmental remediation costs against the originally budgeted industrial environmental cost estimate was performed. The cost of the environmental oversight work to be performed by an Environmental Professional (EP) for the Marketing Center Area was approximately \$25,000. This cost is equivalent to the normal and customary cost for environmental oversight work performed on industrial parcels at Sparrows Point. The capping specifications and standards for this commercial development (building slab, concrete sidewalks, asphalt paving, clean capped landscaping) are the same as capping specifications and standards for an industrial parcel. Accordingly, there were no additional costs to the Budget based on

commercial development and use; the semi-annual Budget review pursuant to Paragraph 84 of the ACO will continue to be conducted as required.

All documents related to the investigation and development of the sub-parcel are listed in the Reference List in **Appendix A**. Copies of relevant email communication are provided in **Appendix B**.

Phase II Investigations specific to soil and groundwater conditions were performed for the areas surrounding Sub-Parcel B6-2 in accordance with the following agency-approved Phase II Investigation Work Plans:

- Area B: Parcel B6 (Revision 2) dated May 12, 2016.
- Area A: Parcel A6 (Revision 0) dated October 11, 2018.
- Finishing Mills Groundwater Investigation (Revision 1) dated July 7, 2016.

The full analytical results and conclusions of each investigation have been presented to the agencies in the following Phase II Investigation Reports:

- Area B: Parcel B6 (Revision 2) dated March 6, 2018.
- Area A: Parcel A6 (Revision 0) dated June 23, 2020.
- Finishing Mills Groundwater Investigation (Revision 0) dated November 30, 2016.

The Sub-Parcel B6-2 Response and Development Work Plan (RADWP) (Revision 1) dated January 24, 2018 was approved for implementation by the Maryland Department of the Environment (MDE) on February 9, 2018. While a RADWP Addendum was not warranted (because the use of the Marketing Center is not permanent), the scope of work was subject to many of the requirements specified by the Sub-Parcel B6-2 RADWP.

The development of the Sub-Parcel B6-2 Marketing Center generally included slag placement, mass grading, installation of geotextile marker fabric, placement of clean fill for cap in landscaped areas, sewer and minor utility installations.

#### **1.1. REPORT PURPOSE**

The purpose of this Completion Report is to document response actions and development activities completed under the Marketing Center Interim Use Work Plan; actions undertaken as part of this scope of work are believed to be sufficient in order to secure a No Further Action (NFA) Letter and Certificate of Completion (COC) for the Site. In addition, this report is being submitted in accordance with the requirements outlined in the following agreements:



- Administrative Consent Order (ACO) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the Maryland Department of the Environment (MDE), effective September 12, 2014; and
- Settlement Agreement and Covenant Not to Sue (SA) between Tradepoint Atlantic (formerly Sparrows Point Terminal, LLC) and the United States Environmental Protection Agency (USEPA), effective November 25, 2014.

The following section (Section 1.2) provides the project background and Section 1.3 provides an overview of the Site development and response action activities. The response actions performed are described in Section 2.0, site development activities are summarized in Section 3.0, and conclusions are provided in Section 4.0.

#### **1.2. PROJECT BACKGROUND**

#### **1.2.1.** Site Description and History

From the late 1800s until 2012, the production and manufacturing of steel was conducted at Sparrows Point. Iron and steel production operations and processes at Sparrows Point included raw material handling, coke production, sinter production, iron production, steel production, and semi-finished and finished product preparation. In 1970, Sparrows Point was the largest steel facility in the United States, producing hot and cold rolled sheets, coated materials, pipes, plates, and rod and wire. The steel making operations at the Facility ceased in fall 2012. Beginning in 2013, a contractor demolished the majority of the above-grade structures on the site-wide property. Demolition of historical above-grade structures is largely complete.

Parcel B6 comprises approximately 148.5 acres of the approximately 3,100-acre former steel mill that operated for over one hundred years. Within the parcel, several iron and steel work processes were completed within the areas formerly known as the Hot Strip Mills Area (primarily in Parcel B6) and part of the Finishing Mills Area (primarily in Parcel B22). The former facilities and processes in the Hot Strip Mill Area (located South of the Site) generally included heating and rolling hot bands of metal, and cooling and coiling of the finished products. Several railways which supported the Hot Strip Mill and larger Finishing Mills Area passed through Parcel B6. Minor structures formerly located within Parcel B6, included service buildings, access gates, and parking lots. More information regarding previous steel finishing activities can be found in the Phase II Investigation Report – Area B: Parcel B6 (Revision 2 dated March 16, 2018).

Sub-Parcel B6-2 consists of approximately 38 acres, the majority of which is within the northern portion of Parcel B6 with approximately 0.14 acres in the adjacent Parcel A6. The sub-parcel was zoned Manufacturing Heavy-Industrial Major (MH-IM) and was not occupied prior to the start of development activities. Sub-Parcel B6-2 was not occupied prior to the start of development activities and all former buildings were demolished except for a 2-story steel structure (Marketing Center) previously installed as shown on **Figure 3**.

A small petroleum recovery facility was previously located near the western end of Sub-Parcel B6-2. The oil recovery facility was identified within Weaver Boos' Phase I Environmental Site Assessment (ESA) (dated May 19, 2014) based on historical aerial imagery as being located adjacent to the waterway formerly known as Humphrey Creek.

The Marketing Center development area consists of approximately 0.033 acres and is located within the northwest portion of Sub-Parcel B6-2, as indicated on **Figure 3**. The Site is zoned Tier 2 (Commercial).

#### **1.2.2.** Historical Environmental Activities

Prior to demolition, a portion of the Sub-Parcel B6-2 Development Area was formerly occupied by a small petroleum recovery facility that was previously located west of the Site and in addition a small rectangular surface impoundment which was diked to separate it from the Humphrey Creek. Minor structures formerly located at the Site included service buildings, access gates, and parking lots. More information regarding historical activities can also be found in the Phase II Investigation Work Plan for Parcel B6 (Revision 2 dated May 12, 2016; supplemented by a comment response letter dated November 28, 2016), as well as in the Parcel B6 Phase II Investigation Report (Revision 1 dated May 9, 2017).

A Phase I ESA was completed by Weaver Boos Consultants for the entire Sparrows Point property on May 19, 2014. The Phase I ESA identified particular features across the Tradepoint Atlantic property which presented potential risks to the environment. The results of the Phase I ESA are described in more detail in the Sub-Parcel B6-2 RADWP (Revision 1 dated May 20, 2018).

The Phase I ESA identified the following RECs within the Sub-Parcel B6-2 boundaries:

- Apparent Historical Surface Impoundment ("G" Gate) (REC 22, Finding 273)
- TMC Oil Recovery Plant and Impoundment (REC 26, Finding 278)

Relevant SWMUs and AOCs were also identified as located in Figure 3-1 from the DCC Report. There were no SWMUs or AOCs identified within the Sub-Parcel B6-2 boundary.

None of the identified RECs were located within the Marketing Center development area.

#### **1.2.3.** Phase II Investigation

Phase II Investigations specific to soil and groundwater conditions were performed for the areas surrounding Sub-Parcel B6-2 in accordance with the requirements outlined in the ACO as further described in the following agency-approved Phase II Investigation Work Plans:

- Area B: Parcel B6 (Revision 2) dated May 12, 2016.
- Area A: Parcel A6 (Revision 0) dated October 11, 2018.



• Finishing Mills Groundwater Investigation (Revision 1) dated July 7, 2016.

All soil and groundwater samples were collected and analyzed in accordance with agencyapproved protocols during these Phase II Investigations, the specific details of which can be reviewed in each agency-approved Work Plan. Each Phase II Investigation was developed to target specific features which represented a potential release of hazardous substances and/or petroleum products to the environment, including RECs, SWMUs, and AOCs as well as numerous other targets defined from former operations that would have the potential for environmental contamination. Samples were also collected at site-wide locations to ensure full coverage of each investigation area. The full analytical results and conclusions of each investigation have been presented to the agencies in the following Phase II Investigation Reports:

- Area B: Parcel B6 (Revision 2) dated March 6, 2018.
- Area A: Parcel A6 (Revision 0) dated June 23, 2020.
- Finishing Mills Groundwater Investigation (Revision 0) dated November 30, 2016.

#### **1.3. SITE DEVELOPMENT AND RESPONSE ACTIONS**

The Site has been developed for interim commercial use. Site use will involve indoor workers in the Marketing Center building and visitors entering and leaving the Site. This Completion Report addresses mass grading, and geotextile marker fabric, placement of clean fill for cap in landscaped areas, sewer, and minor utility installations in the Marketing Center Area of Sub-Parcel B6-2. Final development of this Site and further development of Sub-Parcel B6-2 (including the Marketing Center) will be addressed in documents to be submitted under separate cover.

The response and development actions approved for protection of human health and the environment at the Site included environmental capping. The placement of slag aggregate beneath the parking areas requires the entire sub-parcel to be subject to an environmental capping requirement.



#### 2.0 RESPONSE ACTIVITIES

#### **2.1. Well Abandonment**

There were no permanent monitoring wells and/or piezometers installed in the footprint of the Marketing Center Area of Sub-Parcel B6-2. Therefore, no permanent monitoring wells or temporary piezometers remain.



#### 3.0 SITE DEVELOPMENT ACTIVITIES

This section presents a summary of the completed development work as well as materials management and other protocols that were followed during the development work performed under the Sub-Parcel B6-2 Marketing Center Interim Use Work Plan and associated Comment Response Letter to adequately mitigate potential risks for future uses of the property. The development area is shown in **Figure 2** and **Figure 3**.

Development activities began on October 1, 2019 with DXI as the General Contractor. Full-time oversight was performed by an Environmental Professional (EP) provided by Hillis Carnes Engineering Associates (HCEA) during intrusive development activities to ensure compliance with environmental regulations and the development plans, including performing dust monitoring and soil screening services. The Notice of Completion of Remedial Actions letter provided by HCEA (**Appendix C**) states that the project was completed in general accordance with the Sub-Parcel B6-2 RADWP and associated addendums. Daily Field Reports prepared by the EP are provided as an electronic attachment. Select photos from general development activities are included in **Appendix D**.

#### **3.1. PRE-CONSTRUCTION MEETING**

Prior to any earthwork being conducted on-site, a pre-construction meeting was held to address proper operating procedures for working on-site and handling potentially contaminated material. Records are provided in **Appendix E**.

#### **3.2. GRADING AND SITE PREPARATION**

Prior to development under the Marketing Center Interim Use Work Plan and associated Comment Response Letter, processed slag fill from elsewhere on the Tradepoint Atlantic property was placed across the entire Sub-Parcel B6-2 in preparation for further development activities. Mass grading was performed across the entire site under the Sub-Parcel B6-2 RADWP. Mass grading was documented in the Sub-Parcel B6-2 Interim Development Completion Report, dated September 22, 2021. No excess material was generated during grading activities. No materials left the 3,100-acre property.

#### **3.3.** UTILITY INSTALLATION

Excavated material that did not exhibit evidence of impacts was replaced in the utility trenches as backfill. The majority of utility excavations completed under the Marketing Center Interim Use Work Plan and associated Comment Response Letter were completed within the slag layer placed during grading activities. Slag excavated from utility trenches was replaced inside the trenches as backfill.



#### **3.4. FILL MATERIALS**

The following fill materials were used during the Marketing Center development:

- Clean fill, approved by the MDE via email on April 12, 2017;
- Topsoil, approved by the MDE via email on August 31, 2017

Clean fill approval documentation is provided in Appendix F.

#### **3.5. PLACEMENT OF SUB-BASE**

Processed slag aggregate from elsewhere on the Tradepoint Atlantic property was used during grading activities across the entire sub-parcel prior to the start of Marketing Center development work. Processed slag aggregate was also placed as sub-base beneath paved areas during the Marketing Center development work. The placement of slag aggregate beneath the paved areas requires the entire Marketing Center Area to be subject to an environmental capping requirement.

#### **3.6. SOIL SAMPLING AND DISPOSAL**

The EP screened excavated material with a MiniRAE photoionization detector (PID). During site grading and utility activities completed under the Sub-Parcel B6-2 RADWP, no soil was segregated due to elevated PID readings, odors, or staining.

#### **3.7. DUST CONTROL**

General construction operations, including removal of existing foundations or utilities, soil excavation and transport, soil grading, trenching for utilities, and cap construction activities were performed at the Site. To limit worker exposure to contaminants borne on dust and windblown particulates, dust control measures were to be implemented, if warranted when the above activities were performed. The action level used for the purpose of determining the need for additional dust suppression techniques (e.g. watering and/or misting) during the response and development activities on Site was 3.0 mg/m<sup>3</sup>.

Dust monitoring was performed with three MetOne E-sampler dust monitors. The dust monitors were placed daily upwind of, downwind of, and inside the active work zone. Dust readings were recorded at each monitor at a rate of once per minute. Daily summaries of 15-minute average dust readings are provided as an electronic attachment. Dust control measures were implemented if a sustained level above 3.0 mg/m<sup>3</sup> was observed. No exceedances of the 3.0 mg/m<sup>3</sup> action level were observed during construction activities. The Contractor utilized a water truck to mitigate dust generation during the development work operations.



No electronic dust monitoring was performed during the second quarter of 2020 because the majority of the site was capped. Instead, visual dust monitoring was performed, and no visible dust migration was observed in the second quarter of 2020.

#### **3.8. WATER MANAGEMENT**

Groundwater was not encountered during the work performed under the Marketing Center Interim Use Work Plan and associated Comment Response Letter; therefore, no dewatering was performed.

#### **3.9. HEALTH AND SAFETY**

The contractor was responsible for following safety procedures, including schedule limitations, to control contact with potentially contaminated soil or groundwater. The RADWP specified limits for exposure days of ground-intrusive work for each employee. In lieu of tracking exposure days, the site contractors elected to employ Modified Level D personal protective equipment (PPE), as allowed by the RADWP. The acknowledgement form signed by the site contractor is provided in **Appendix G**.

#### **3.10. NOTABLE OCCURRENCES**

During the work completed under the Marketing Center Interim Use Work Plan and associated Comment Response Letter, no notable occurrences were recorded by the EP.

#### 3.11. PAVING

As stated in the Notice of Completion of Remedial Actions prepared by HCEA (**Appendix C**), the environmental paving cap installed in the Marketing Center Area meets the required thicknesses specified in the Marketing Center Interim Use Work Plan and associated Comment Response Letter.

#### **3.12. LANDSCAPED AREAS**

As stated in the Notice of Completion of Remedial Actions (**Appendix C**), capping in the landscaped areas was installed to meet the specifications established in the Marketing Center Interim Use Work Plan and associated Comment Response Letter. As discussed above in Section 3.4 (Fill Materials), the materials used in landscaped areas were approved by the MDE (**Appendix F**).

The selected marker fabric (see **Appendix H**) meets the specifications given in the Marketing Center Interim Use Work Plan and associated Comment Response Letter.



#### **3.13. TEMPORARY COVER AREAS**

As discussed in the Request for Modifications to Response and Development Work Plan Addendum (Revision 2) Royal Farms Station – Retail Area #1 Area B: Sub-Parcel B6-2, two areas had a temporary, one-foot cover installed in preparation for future development in those areas. Both areas were filled with certified clean fill as approved by the MDE and are displayed on **Figure 3**. Additional details are provided in the Response and Development Completion Report for Sub-Parcel B6-2 – Retail Area #1 to be submitted under separate cover.

#### 3.14. POST REMEDIATION REQUIREMENTS

Long-term conditions related to future use of the Site will be described within the NFA and COC. Post remediation requirements will include compliance with the conditions specified in the NFA, COC, and the deed restrictions recorded for the Site. Deed restrictions as defined by the MDE VCP in the NFA and COC will be recorded by the responsible party within 30 days after receipt of the final NFA.

The entire Site will be subject to a restriction that limits the use of the property to non-residential land use as well as a restriction prohibiting the use of groundwater for any purpose at the Site and a requirement to characterize, containerize, and properly dispose of groundwater in the event of deep excavations encountering groundwater.

Maintenance requirements will include inspection and maintenance of landscape and hardscape capped areas to minimize degradation of the cap and exposure to the underlying soil. Specific inspection protocols and maintenance schedules will be incorporated into an Institutional Controls and Operations & Maintenance Plan to be submitted under separate cover covering both the Marketing Center Area and Retail Area #1.

The responsible party will perform cap maintenance inspections, perform maintenance of the cap, and retain cap inspection records. Areas of the cap that have degraded will be repaired in accordance with the Institutional Controls and Operations & Maintenance Plan. The MDE shall be notified within ten business days of any repairs that are the result of cap failure. The notification will include documentation of the conditions being repaired and the location of the repair.

In addition, the MDE will be provided with a written notice at least 30 days prior to any planned excavation activities at the Site that will penetrate through the cap. Written notice of planned excavation activities will include the proposed date(s) for the excavation, location of the excavation, health and safety protocols (as required), clean fill source (as required), and proposed characterization and disposal procedures in accordance with applicable local, state and federal requirements.



#### 4.0 CONCLUSION

Between October 1, 2019 and November 14, 2019, response and development actions were conducted as part of the redevelopment of the Site identified as the Marketing Center Area within Sub-Parcel B6-2. The remedial actions specified in the RADWP included: capping of building and parking areas with paving; capping of landscaped areas and utility corridors within the cap with clean fill; and implementation of institutional controls (to be addressed in separate closure documents).

A Notice of Completion of Remedial Actions, prepared by the EP, a Professional Engineer registered in Maryland, is enclosed in **Appendix C** to certify that the development actions have been completed in accordance with the requirements described in the Marketing Center Interim Use Work Plan and associated Comment Response Letter. Therefore, the Site is suitable for occupancy and use.

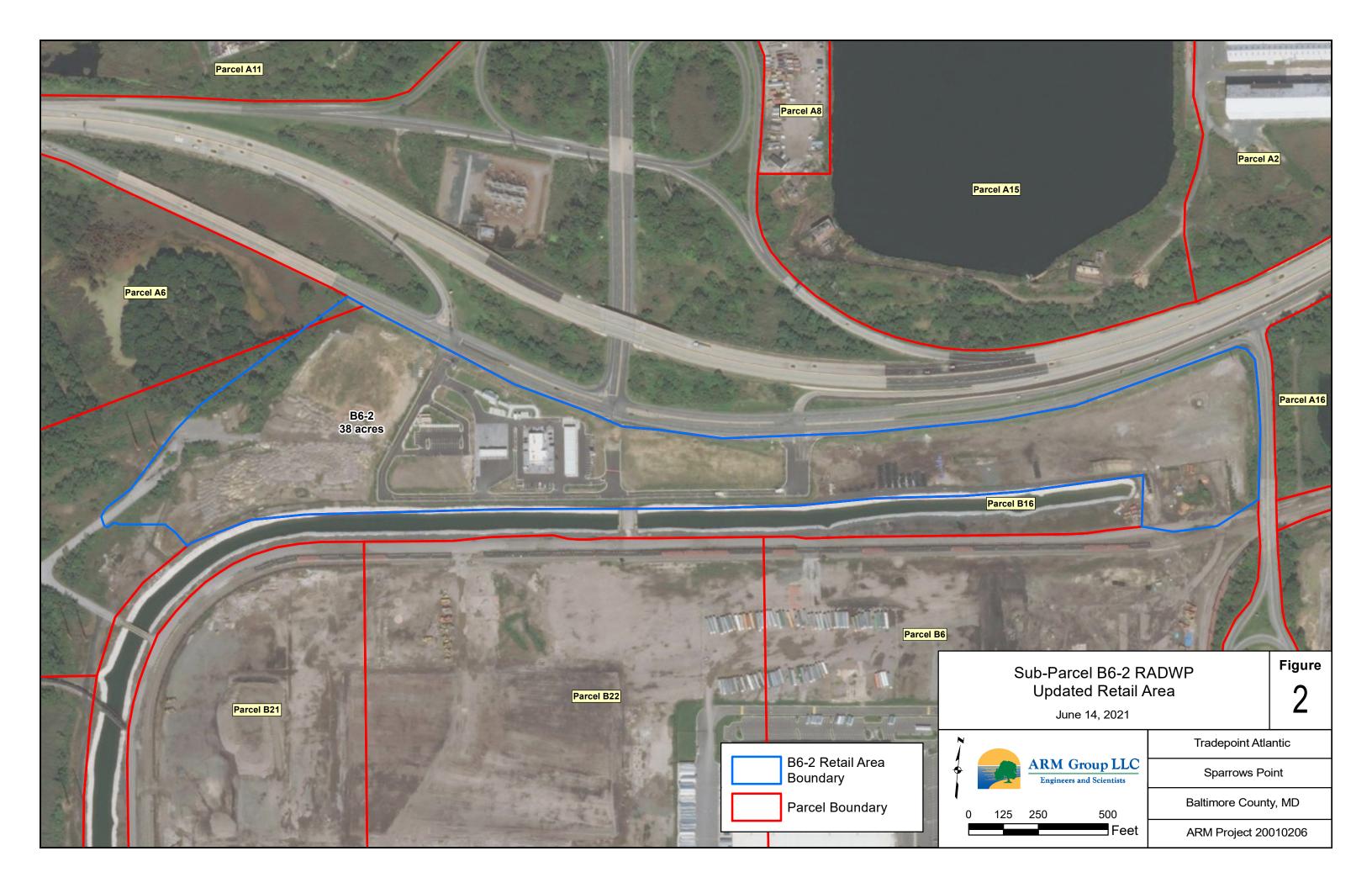
As a result of the information contained herein, it has been demonstrated that the response and development actions have been completed in accordance with the approved RADWP Addendum. With construction of the containment remedy (caps) in conjunction with redevelopment of the Site, the applicable requirements for obtaining an NFA Letter and COC for this Site have been fulfilled. Therefore, Tradepoint Atlantic is respectfully requesting issuance of an NFA Letter for the Site at this time.

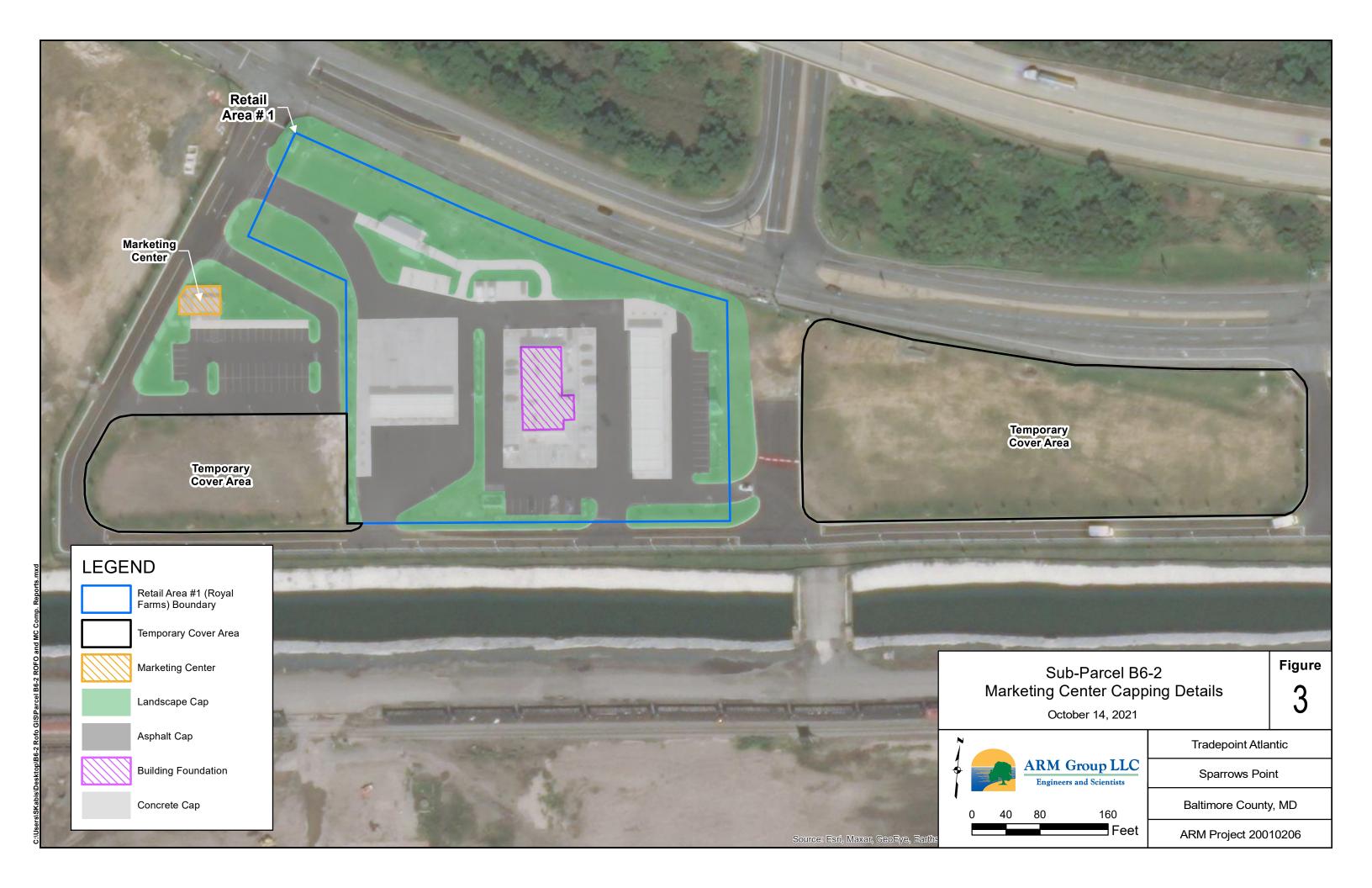
It is ARM's understanding that Tradepoint Atlantic will record the NFA Letter and the deed restrictions identified in the RADWP within 30 days after receipt of the final NFA Letter. Proof of recordation will be submitted to MDE upon receipt from Baltimore County.



# FIGURES







# **APPENDIX A**

#### **Reference List**

#### Sub-Parcel B6-2 Marketing Center

- Weaver Boos Consultants (2014). Phase I Environmental Site Assessment: Former RG Steel Facility. Final Draft. May 19, 2014.
- ARM Group, Inc. (2016). *Phase II Investigation Work Plan, Area B: Parcel B6*. Revision 2. May 12, 2016.
- ARM Group, Inc. (2016). *Phase II Investigation Work Plan, Finishing Mills Groundwater*. Revision 1. July 7, 2016.
- ARM Group, Inc. (2016). *Phase II Investigation Report, Finishing Mills Groundwater*. Revision 0. November 30, 2016.
- ARM Group, Inc. (2017). Utility Excavation NAPL Contingency Plan. Revision 4. June 19, 2017.
- ARM Group, Inc. (2018). *Phase II Investigation Report Area B: Parcel B6*. Revision 2. March 6, 2018.
- ARM Group, Inc. (2018). *Phase II Investigation Work Plan, Area A: Parcel A6.* Revision 0. October 11, 2018.
- ARM Group, Inc. (2018). Response and Development Work Plan Area B: Sub-Parcel B6-2. Revision 1. February 9, 2018.
- ARM Group, Inc. (2019). Interim Use Work Plan, Area B: Sub-Parcel B6-2 Marketing Center. Revision 0. July 1, 2019.
- ARM Group, Inc. (2019). Comment Response Letter: Interim Use Work Plan, Area B: Sub-Parcel B6-2 Marketing Center. August 12, 2019.
- ARM Group, Inc. (2019) Request for Modifications to Response and Development Work Plan Addendum. Royal Farms Station – Retail Area #1 Area B: Sub-Parcel B6-2. (Revision 2) October 24, 2019.
- ARM Group LLC (2020). *Phase II Investigation Report Area A: Parcel A6*. Revision 0. June 23, 2020.
- ARM Group LLC (2021). *RADWP Addendum: SLRA Update Area B: Sub-Parcel B6-2.* June 28, 2021.

# **APPENDIX B**

#### **Keith Progin**

From:Matthew Newman <mnewman@tradepointatlantic.com>Sent:Monday, September 30, 2019 1:19 PMTo:Keith ProginSubject:FW: B6-2 Proposed Modification

See below

Matthew Newman, P.E. Environmental Manager TRADEPOINT ATLANTIC 1600 Sparrows Point Boulevard Baltimore, Maryland 21219 T 410.709.1286 D 443.649.5063 C 443.791.9046 mnewman@tradepointatlantic.com



From: Barbara Brown -MDE- <br/>
barbara.brown1@maryland.gov>
Sent: Monday, September 30, 2019 9:43 AM
To: Matthew Newman <mnewman@tradepointatlantic.com>
Cc: Pete Haid <phaid@tradepointatlantic.com>; Jennifer Sohns -MDE- <jennifer.sohns@maryland.gov>
Subject: B6-2 Proposed Modification

Hello Matt

I spoke to Mark Mank and as an interim capping measure 1 foot of clean fill for commercial land use may be used in place of the crushed concrete-and can be described in the revised addendum.

If you have any questions please feel free to call me

Barbara Brown

--

Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212 general 410 537 3493

<u>Click here</u> to complete a three question customer experience survey.

# **APPENDIX C**

ENGINEERING ASSOCIATES

March 31, 2021

Mr. Pete Haid Tradepoint Atlantic 1600 Sparrows Point Boulevard Baltimore, Maryland 21219 10975 Guilford Road, Suite A Annapolis Junction, MD 20701 Phone (410) 880-4788 Fax (410) 880-4098 www.hcea.com

RE: Notice of Completion of Remedial Actions Area B: Sub-Parcel B6-2 Marketing Center and Interim Cap Baltimore County, Maryland HCEA Project Number 18148A

Mr. Haid:

Hillis-Carnes Engineering Associates, Inc. (HCEA) is pleased to provide this Notice of Completion of Remedial Actions (Notice) for Area B: Sub-Parcel B6-2 (Marketing Center and Interim Cap) in the Sparrows Point area of Baltimore County, Maryland (Site).

In conjunction with HCEA's environmental services at the Site, HCEA was provided with the Interim Use Work Plan: Comment Response Letter for Area B: Sub-Parcel B6-2 (dated August 12, 2019), hereafter referred to as the Work Plan. Based on observations made during HCEA's environmental monitoring at the Site, to the best of our knowledge, understanding, and belief, the project (e.g., grading, utility installation, permanent capping, and temporary capping) was completed in general accordance with the Work Plan.

This Notice has been prepared for the exclusive use of the Client pursuant to the agreement between the Client and HCEA, dated March 27, 2018, in accordance with generally accepted industry practices. All terms and conditions set forth in the agreement are incorporated herein. No warranty, express or implied, is made herein. Use and reproduction of this Notice by any other person is unauthorized.

HCEA appreciates the opportunity to have been of assistance on this project. If you have any questions regarding this Notice, please feel free to contact us at 410-880-4788.

Sincerely, HILLIS-CARNES ENGINEERING ASSOCIATES, INC.

Christopher J. Hillis, P.E. Project Engineer chillis@hcea.com

P.m

Keith M. Progin Senior Environmental Project Manager kprogin@hcea.com

# **APPENDIX D**

Development Photograph Log Sub-Parcel B6-2 Marketing Center Sparrows Point, Maryland



Photo 1: Placement of clean fill and marker fabric



Photo 2: General Site view

Development Photograph Log Sub-Parcel B6-2 Marketing Center Sparrows Point, Maryland



Photo 3: Placement of marker fabric and clean fill

# **APPENDIX E**



# Memo

То:	Mr. Peter Haid – Tradepoint Atlantic
From:	Mr. Keith Progin
Date:	September 27, 2019
Re:	Sub-Parcel B6-2 - Pre-Construction Meeting for Marketing Center and Interim Cap

On September 27, 2019, a pre-construction meeting for the Marketing Center and Interim Cap at Sub-Parcel B6-2 was held at the Tradepoint office at 1600 Sparrows Point Boulevard. In attendance were:

- Mr. Matthew Newman Tradepoint Atlantic
- Mr. DJ Cox DXI Construction
- Mr. DJ Kellum DXI Construction
- Mr. Joe Brennan DXI Construction
- Mr. Keith Progin Hillis-Carnes Engineering

During this meeting, the Environmental Professional roles that will be performed by Hillis-Carnes during the applicable portions of the project were discussed. The roles generally include: a) monitoring of excavated soil; b) air monitoring for particulate dust; c) monitoring of dewatering activity; and d) documentation. A summary of these roles was provided to the attendees.

# **APPENDIX F**

#### **Keith Progin**

From:Gina L. GalimbertiSent:Wednesday, April 12, 2017 1:51 PMTo:'Pete Haid'Subject:RE: Back River Soil

Pete – I spoke with Barbara and she confirmed that the soil from the Back River WWTP is approved for use under areas to be paved and also for use as VCP-approved clean fill for capping.

She is getting back to me on what analyses might be required for the stockpile of soils that has been created due to PID readings. I will hear from her by next Monday at the latest. Gina

Gina Galimberti | Environmental Services Manager HILLIS-CARNES ENGINEERING ASSOCIATES

Cell (410) 991-2867 Phone +1 (410) 880-4788 X1146 Fax +1 (410) 880-4098

From: Pete Haid [mailto:phaid@tradepointatlantic.com] Sent: Wednesday, April 12, 2017 12:18 PM To: Gina L. Galimberti Subject: Back River Soil

Gina:

Any luck on getting through to Barbara on the Back River Soil question?

Thanks.

Pete

#### **Keith Progin**

From:	Fantz, Jeff <jfantz@fclbuilders.com></jfantz@fclbuilders.com>
Sent:	Thursday, August 31, 2017 9:55 AM
То:	Keith Progin
Cc:	Gardner, Mike; O'Brien, Caitlin
Subject:	Fwd: Back River Soil
Attachments:	winmail.dat; ATT00001.htm

Kieth

See email chain below on the Top Soils staged at the north end of my site. Within the body of the email there is MDE approval. This material is screened "Back River Material".

Respectfully,

Jeff Fantz Sr On-Site Project Manager

# CHICAGO | DALLAS | ATLANTA

Cell: 630-795-9015 Email: <u>Jfantz@fclbuilders.com</u>

\*\*Chicago (Itasca, Illinois) 1150 Spring Lake Drive | Itasca, IL | 60143 | 630.773.0050

Begin forwarded message:

From: DJ Cox <<u>DJ@dixieconst.com</u>> Date: August 31, 2017 at 9:50:42 AM EDT To: Jeff Fantz <<u>jfantz@fclbuilders.com</u>> Subject: Fwd: Back River Soil

Email chain from MDE. This is topsoil from the back river site. It was stockpiled the processed (screened) for use.

Sent from my iPhone

Begin forwarded message:

From: Tom Gray <<u>graytrucking@verizon.net</u>> Date: August 30, 2017 at 3:23:23 PM EDT To: Dixie Dj Cox <<u>dj@dixieconst.com</u>> Subject: Fwd: Back River Soil Sent from my iPhone

Begin forwarded message:

From: Brandon Bonanno <<u>bbonanno@mcmdemo.com</u>> Date: August 30, 2017 at 2:48:27 PM EDT To: "graytrucking@verizon.net" <<u>graytrucking@verizon.net</u>> Subject: Back River Soil

Attached and below is the approval from MDE to bring in the Back River Soil to Sparrows Point. This material was testing prior to excavation and approved by MDE (over 100,000 cy of material was brought to the site).

When brought to the site, the topsoil material was separated and stockpiled as that could not be utilized for backfill material.

Thank you,

Brandon J. Bonanno Vice President of Operations MCM Management Corporation <u>bbonanno@mcmdemo.com</u><<u>mailto:bbonanno@mcmdemo.com</u>> 410-292-6356

From: Barbara Brown -MDE-[mailto:barbara.brown1@maryland.gov] Sent: Friday, July 08, 2016 9:12 AM To: Brandon Bonanno Subject: Fwd: Sampling Report

------ Forwarded message ------From: Barbara Brown -MDE-<<u>barbara.brown1@maryland.gov</u><<u>mailto:barbara.brown1@maryla</u> <u>nd.gov</u>>> Date: Tue, Apr 21, 2015 at 9:58 AM Subject: Re: Sampling Report To: "McMillan, Stephen" <<u>smcmillan@walshgroup.com</u><<u>mailto:smcmillan@walshgroup.co</u> <u>m</u>>>, Mike Robertson <<u>MRobertson@aec-</u> <u>env.com</u><<u>mailto:MRobertson@aec-env.com</u>>>, Brandon Bonanno <<u>bbonanno@mcmdemo.com</u><<u>mailto:bbonanno@mcmdemo.com</u>> >, "Bhatia, Kapil" <kbhatia@walshgroup.com<mailto:kbhatia@walshgroup.com>>

Hello All

As noted previously the soil sample from B-46 14-16' exceeds the allowable level of Arsenic for industrial use. Therefore, soil

around B-46 will not be allowed to be transported to Sparrows Point. An investigation should be performed to define the area of elevated Arsenic that must be disposed of properly.

Sparrows Point may use the remaining in-situ soil within the area defined on the attached map at their discretion. This approval is only for Sparrows Point. Transport of soil from the defined area to any other location other than a permitted disposal facility will require separate approvals.

If soil that exhibits odors or staining is encountered during the removal operations it is not approved and should be segregated and properly staged for further testing.

If you have any questions regarding this approval please contact me.

Barbara Brown MDE Project Coordinator

On Tue, Apr 21, 2015 at 9:00 AM, Mike Robertson <<u>MRobertson@aec-env.com</u><<u>mailto:MRobertson@aec-</u> <u>env.com</u>>> wrote: Barbara,

Can you comment yet on the in-situ soils? Archer Western is looking to move this soil soon.

Let me know if there is anything else you need.

Michael J. Robertson Principal [cid:image001.jpg@01CD0E4E.F04DF050]Advantage Environmental Consultants, LLC 8610 Washington Boulevard | Suite 217 | Jessup, MD 20794 Office: 301-776-0500<<u>tel:301-776-0500</u>> | Cell: 410-320-8746<<u>tel:410-320-8746</u>> Fax: 301-776-1123<tel:301-776-1123>

From: Barbara Brown -MDE-[mailto:barbara.brown1@maryland.gov<mailto:barbara.brown1@ maryland.gov>] Sent: Wednesday, April 01, 2015 4:43 PM To: Mike Robertson Cc: McMillan, Stephen; Bhatia, Kapil Subject: Re: Sampling Report

Hi Mike

I just received the additional boring log information I requested-I would like to see if there is any indication why the one sample was so much more elevated then the rest of the sample results...

If Archer Westin wants to move the in-situ soil anywhere other than Sparrows Point-they need to be aware that this soil has not been reviewed for anything other than industrial land use and only by LRP.

Barbara Brown

On Wed, Apr 1, 2015 at 4:38 PM, Mike Robertson <<u>MRobertson@aec-env.com</u><<u>mailto:MRobertson@aec-env.com</u>>> wrote: Barbara,

Have you made a determination regarding the in-situ soils at Back River? I think you said that arsenic in one area may be a problem and that you might want some additional sampling there. Does that mean that Archer Western can move the in-situ soils except for that one area while we look into it further?

Let us know.

Thanks,

Michael J. Robertson Principal [cid:image001.jpg@01CD0E4E.F04DF050]Advantage Environmental Consultants, LLC 8610 Washington Boulevard | Suite 217 | Jessup, MD 20794 Office: 301-776-0500<<u>tel:301-776-0500</u>> | Cell: 410-320-8746<<u>tel:410-320-8746</u>> Fax: 301-776-1123<<u>tel:301-776-1123</u>>

From: Barbara Brown -MDE-[mailto:barbara.brown1@maryland.gov<mailto:barbara.brown1@ maryland.gov>] Sent: Thursday, March 12, 2015 4:33 PM To: Mike Robertson Cc: McMillan, Stephen; Bhatia, Kapil Subject: Re: Sampling Report

Stockpile confusion!!!

Ok we are good and will look at the soil data for the proposed insitu fill source in the trickling area.

Barbara Brown

On Thu, Mar 12, 2015 at 4:19 PM, Mike Robertson <a href="mailto:MRobertson@aec-env.com">MRobertson@aec-env.com</a> <a href="mailto:mrobertson@aec-env.com">env.com</a> <a href="mailto:mrobertson@aec-env.com">mailto:MRobertson@aec-env.com</a> <a href="mailto:mrobertson@aec-env.com">mrobertson@aec-env.com</a> <a href="mailto:mrobertson@aec-env.com">mrobertson@aec-env.com</a>

I confirmed with Kapil that the "museum" stockpile is not being hauled from the site. Please disregard this data for this exercise. This information should be in KCIs final report.

Steve - can you confirm that this material is not being hauled from the site.

Thanks,

Michael J. Robertson Principal [cid:image001.jpg@01CD0E4E.F04DF050]Advantage Environmental Consultants, LLC 8610 Washington Boulevard | Suite 217 | Jessup, MD 20794 Office: 301-776-0500<<u>tel:301-776-0500</u>> | Cell: 410-320-8746<<u>tel:410-320-8746</u>> Fax: 301-776-1123<<u>tel:301-776-1123</u>>

From: McMillan, Stephen [mailto:smcmillan@walshgroup.com<mailto:smcmillan@walshgr oup.com>] Sent: Thursday, March 12, 2015 4:16 PM To: Barbara Brown -MDE-; Mike Robertson Cc: Bhatia, Kapil Subject: RE: Sampling Report

That is not the same stockpile. This is the stock pile we're using for back fill on the site. Essentially, it's a drying bed when you come in the site on the right.

Thanks,

Stephen McMillan Assistant Project Manager The Walsh Group | Archer Western Back River Wastewater Treatment Plant SC 877 & 882, Baltimore, MD An Equal Opportunity Employer 8201 Eastern Avenue Baltimore, MD 21224 smcmillan@walshgroup.com

Ph: 443.563.1190<<u>tel:443.563.1190</u>>

From: Barbara Brown -MDE-[mailto:barbara.brown1@maryland.gov] Sent: Thursday, March 12, 2015 3:56 PM To: Mike Robertson Cc: Bhatia, Kapil; McMillan, Stephen Subject: Re: Sampling Report

Hi All

Where is the Museum Stockpile? Its not the same stockpile that was just sampled by AEC is it?

Barbara Brown

On Thu, Mar 12, 2015 at 3:43 PM, Mike Robertson <<u>MRobertson@aec-env.com</u><<u>mailto:MRobertson@aec-</u> <u>env.com</u>>> wrote: Barbara,

Thank you. Attached is a report that I just received from The Walsh Group which they just received from the owner that KCI did. I suppose that this information should be included in your review regarding the in-situ soils. Did you know this was being done?

Is this why you are delaying your decision about the in-situ soils?

Michael J. Robertson Principal [cid:image001.jpg@01CD0E4E.F04DF050]Advantage Environmental Consultants, LLC 8610 Washington Boulevard | Suite 217 | Jessup, MD 20794 Office: 301-776-0500<<u>tel:301-776-0500</u>> | Cell: 410-320-8746<<u>tel:410-320-8746</u>> Fax: 301-776-1123<tel:301-776-1123>

From: Barbara Brown -MDE-[mailto:barbara.brown1@maryland.gov<mailto:barbara.brown1@ maryland.gov>] Sent: Thursday, March 12, 2015 3:13 PM To: Mike Robertson Cc: McMillan, Stephen; Bhatia, Kapil; Russ Becker; Brandon Bonanno; Dorgan, Doug; <u>RLUTZ@SAUL.COM<mailto:RLUTZ@SAUL.COM</u>> Subject: Re: Sampling Report

MDE VCP has reviewed the sampling results from the soil stockpile as submitted in the report. The soil stockpile is suitable for use for fill material at Sparrows Point. This approval is for industrial land use only and limited only to the stockpile material to be transported to Sparrows Point. MDE VCP will continue to review the results of the in-situ soil sampling. If you have any questions regarding this approval please contact me

On Wednesday, March 11, 2015, Mike Robertson <<u>MRobertson@aec-env.com</u><<u>mailto:MRobertson@aec-</u> <u>env.com</u>>> wrote: Barbara,

Attached is our sampling report completed in accordance with the work plan and MDE comments. We did not need to run any contingent samples as outlined in the work plan.

Let me know if you have any questions or comments.

Thank you,

Michael J. Robertson Principal [cid:image001.jpg@01CD0E4E.F04DF050]Advantage Environmental Consultants, LLC 8610 Washington Boulevard | Suite 217 | Jessup, MD 20794 Office: 301-776-0500<<u>tel:301-776-0500</u>> | Cell: 410-320-8746<<u>tel:410-320-8746</u>> Fax: 301-776-1123<<u>tel:301-776-1123</u>>

Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212<<u>tel:410%20537%203212</u>> general 410 537 3493<<u>tel:410%20537%203493</u>>

Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212<<u>tel:410%20537%203212</u>> general 410 537 3493<<u>tel:410%20537%203493</u>> --Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212<<u>tel:410%20537%203212</u>> general 410 537 3493<<u>tel:410%20537%203493</u>>

--Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212<<u>tel:410%20537%203212</u>> general 410 537 3493<<u>tel:410%20537%203493</u>>

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Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212<<u>tel:410%20537%203212</u>> general 410 537 3493<<u>tel:410%20537%203493</u>>

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Barbara Brown MDE-LRP-VCP Section Head direct 410 537 3212 general 410 537 3493

# CRRGP F KZ 'I

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## Modified Level D Contractor Certification Ground Intrusive Work

In accordance with the Response and Development Work Plan (RDWP) for Area B: Sub-Parcel B6-2, Revision 1 dated January 24, 2018, Section 3.5.2, Sub-Parcel B-2 SLRA Results and Risk Characterization, a site-specific ground intrusive work exposure duration of 36 work days was established. In the RADWP Addendum: SLRA Update for Area B: Sub-Parcel B6-2, an amended sitespecific ground intrusive work exposure duration of 40 work days was established In lieu of tracking exposure days for each employee, the employment of Modified Level D personal protective equipment (PPE) or equivalent elevated PPE was established at the site based on Site conditions. Modified Level D is defined below. For this project the contractor adopted Modified Level D PPE upon commencement of work (Day 1).

#### Project Statement:

Prior to the start of the project DXI as well as their subcontractors adopted Modified Level D as the baseline PPE for all personnel involved in ground intrusive work. Modified Level D was used from Day 1 of the project by all personnel involved in ground intrusive work.

Statement Certification:

Company:	DXI Construction INC.
Name:	Leslie M. Gilbert 5.
Title:	Superintendant (utilities)
Signature:	Superintendant (utilities) Lele M. Hill ta.
Date:	9/23/21

#### **Modified Level D PPE**

Modified Level D PPE will include, at a minimum, overalls such as polyethylene-coated Tyvek or clean washable cloth overalls, latex (or similar) disposable gloves (when working in wet/chemical surroundings) or work gloves, steel-toe/steel-shank high ankle work boots with taped chemical-protective over-boots (as necessary), dust mask, hard hat, safety glasses with side shields, and hearing protection (as necessary). If chemical-protective over-boots create increased slip/trip/fall hazardous, then standard leather or rubber work boots could be used, but visible soils from the sides and bottoms of the boots must be removed upon exiting the Exclusion Zone.

### Modified Level D Contractor Certification Ground Intrusive Work

In accordance with the Response and Development Work Plan (RDWP) for Area Sub-Parcel B-6-2 , dated 1/24/18, Section 3-5, Development Area SLRA Results and Risk Characterization, a site-specific ground intrusive work exposure duration of 36 days was established. In lieu of tracking exposure days for each employee, the RDWP allows for the employment of Modified Level D personal protective equipment (PPE) or equivalent elevated PPE as required by Site conditions. Modified Level D is defined below. For this project the contractor adopted Modified Level D PPE upon commencement of work (Day 1).

#### Project Statement:

Prior to the start of the project (contractor name) adopted Modified Level D as the baseline PPE for all personnel involved in ground intrusive work. Modified Level D was used from Day 1 of the project by all personnel involved in ground intrusive work.

Statement Certi	fication:
Company: _	Hopkins and Wayson, Inc.
Name:	Kevin MacQuilliam
Title:	Superintendent
Signature: _	Julla:
Date: _	10/28/19

#### **Modified Level D PPE**

Modified Level D PPE will include, at a minimum, overalls such as polyethylene-coated Tyvek or clean washable cloth overalls, latex (or similar) disposable gloves (when working in wet/chemical surroundings) or work gloves, steel-toe/steel-shank high ankle work boots with taped chemical-protective over-boots (as necessary), dust mask, hard hat, safety glasses with side shields, and hearing protection (as necessary). If chemical-protective over-boots create increased slip/trip/fall hazardous, then standard leather or rubber work boots could be used, but visible soils from the sides and bottoms of the boots must be removed upon exiting the Exclusion Zone.

# **APPENDIX H**

# **NO80N** TECHNICAL DATA SHEET NONWOVEN GEOTEXTILE

N080N is a polypropylene, needle punched nonwoven geotextile for use in drainage and separation applications. It has been stabilized to resist degradation due to ultraviolet exposure and is resistant to commonly encountered mildew, insects and soil chemicals, and is non-biodegradable.

#### SPECIFICATIONS:

The N080N polypropylene nonwoven fabric will utilize the following characteristics:

PROPERTY	TEST METHOD	MIN. AVG. ROLL VALUE
Grab Tensile Strength <sup>1</sup>	ASTM D4632	205 lbs
Grab Tensile Elongation	ASTM D4632	50%
CBR Puncture	ASTM D6241	525 lbs
Trapezoid Tear Strength	ASTM D4533	80 lbs
UV Resistance @ 500 hrs	ASTMD4355	70%
Apparent Opening Size (AOS)	ASTM D4751	80 US Sieve
Permittivity (sec <sup>-1</sup> )	ASTM D4491	1.3 (sec <sup>-1</sup> )
Flow Rate	ASTM D4491	90 gpm/ft²

Values quoted above are the result of multiple tests conducted at an independent testing facility. N080N meets or exceeds values listed. <sup>1</sup>Values apply to both machine and cross-machine directions

PACKAGING:		
Roll Width	12.5 ft.	15 ft.
Roll Length	360 ft.	300 ft.
Roll Area	500 yd <sup>2</sup>	500 yd <sup>2</sup>

Disclaimer: ACF Environmental assumes no liability for the completeness or accuracy of this information or the ultimate use of this information. This document should not be construed as engineering advice. Always consult the project engineer for project specific requirements. The end user assumes sole responsibility for the use of this information and product.

\*ACF Environmental is certified and successfully complies with AASHTO's NTPEP Geotextiles Technical Committee Work Plan

