ARM Group LLC
Engineers and Scientists

July 15, 2020

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

Re: Development Completion Report
Area B: Sub-Parcel B4-1 (Revision 1)
Comment Response and Transmittal Letter
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of EnviroAnalytics Group, LLC (EAG), ARM Group LLC (ARM) is pleased to provide the following responses to comments received from the Maryland Department of the Environment (MDE) in an email dated February 28, 2019. The MDE provided review comments regarding the previous Development Completion Report submission (Revision 0) for Sub-Parcel B4-1 (the Site) of the Tradepoint Atlantic property located in Sparrows Point, Maryland. This letter provides responses to the comments and demonstrates that the requested changes to the Development Completion Report have been addressed in a satisfactory manner. Responses to the comments are provided below; the original comments are included in italics with responses following.

1. *Section 2.6 Placement of Subbase: "The parking areas and access roads, approximately 981,800 square feet in total, received a layer of subbase material at least 3 inches thick, which consisted of graded aggregate base (GAB) material"*

   According to No. 6 - Placement of subbase in the RDWP Rev. 2, 8/10/16, "a uniform 8-inch thick layer of subbase materials, which will consist of processed slag" would be placed in the parking areas and access roads for this Site. Explain the discrepancy between thicknesses. Also, define "graded aggregate base material".

   The graded aggregate base (GAB) material placed on the Site consisted entirely of processed slag originating from the Tradepoint Atlantic property. The existing slag subsurface at the Site was rough graded. The surface was brought to grade with approximately 3 to 10 inches of additional GAB (slag) depending on location within the site. The Civil Engineer, Johnson, Mirmiran & Thompson (JMT), determined that the

installed pavement thicknesses would provide sufficient bearing capacity to support the intended uses of the pavement.

2. *Section 2.7 Site Capping: "The 40,000 square foot truck loading area, the Berth Apron at the stern ramp, and additional areas as marked on the Grading and Paving Red-Line As-Built drawings (Appendix A) received heavy duty paving, with asphalt thickness of 4 inches. Therefore, the full thickness of the pavement section (i.e., asphalt cap) placed over the existing soils consisted of a minimum of 6 inches (at least 3 inches of GAB subbase and 3 inches of asphalt) in the light duty areas and a minimum of 7 inches (at least 3 inches of GAB subbase and 4 inches of asphalt) in the heavy duty areas".*

   Explain the discrepancy between thicknesses proposed in the approved work plan vs. actually installed on-site (e.g. the proposed asphalt thickness for the Berth Apron at the stern ramp was 5 inches)."

   The Civil Engineer, Johnson, Mirmiran & Thompson (JMT), determined that the installed pavement thicknesses would provide sufficient bearing capacity to support the intended uses of the pavement.

3. *Section 2.9 Excavated Material Management: Provide additional details regarding soil screening activities and soil excavation/removal activities that took place during utility trenching, light pole and inlet/manhole installation, sediment trap and swale construction, and mass grading for the parking lot. GTA should have details/notes to provide for PID screening of soils, visible inspection, and soil stockpiling. Also, the report states that no soils were removed from the Site, which is assumed to be defined as the entire 3,100 acre Sparrows Point Site. Was any material removed from the B4-1 parcel and stockpiled elsewhere within the larger property?*

   Geo-Technology Associates (GTA) performed periodic site inspections during the development of Sub-Parcel B4-1. Any removed soil that was determined to be unsuitable for compaction was removed from the site and managed by MCM Management Corporation (MCM) in accordance with their Materials Management Plan. No soil was removed from the Tradepoint Atlantic property.

4. *Cut/Fill - provide details regarding fill brought onto the parcel for this project, including type, source, and quantity of fill. The work plan stated that approximately 33,000 cubic yards of fill would be required. Also, provide details regarding the type and source of clean fill used in utility trenches. If soils were removed from this parcel and stockpiled elsewhere on the Site, provide details.*

   The majority of the soil removed during excavations for utilities, light poles, inlet/manholes installations, sediment trap and swale construction, and mass grading for

the parking lot were reused beneath paved areas on Sub-Parcel B4-1. Any soil determined to be unsuitable for compaction was managed by MCM in accordance with their Materials Management Plan. Utility trenches were backfilled with processed slag. All fill brought to the site consisted of processed slag from elsewhere on the Tradepoint Atlantic property.

5. *There is no information regarding dust monitoring for the parcel. Provide details regarding dust control and monitoring for the duration of this project. Also, provide information regarding placement of dust monitors on the parcel.*

   Electronic dust monitoring was not performed during the development of Sub-Parcel B4-1. Visual dust monitoring was performed to ensure that excessive levels of dust did not migrate off site. Dust generated in the active work area and on adjacent roadways was suppressed through the use of water trucks.

6. *There are no details regarding water management. Specifically, was dewatering required during installation of high-mast light poles as detailed in the work plan? Provide all details regarding dewatering activities that occurred on this parcel. Be specific.*

   All dewatering discharges were pumped into a frac tank on site and subsequently trucked to the Humphreys Creek Wastewater Treatment Plant (HCWWTP) with permission from Tradepoint Atlantic personnel. Permission was granted based on visual inspection and general site knowledge.

7. *The location of the western access road appears to have been altered from the approved work plan. Provide details regarding this change.*

   The civil engineering drawings included in *Appendix D* of the Sub-Parcel B4-1 RADWP showed an outdated alignment of the western access road. The Development Plan – Final Field Sample Locations (*Figure 3* of the RADWP) reflected the updated access road layout. The eastern access road alignment was changed to avoid areas with PCB impacts associated with a former substation. The red-line drawings provided in **Appendix A** of the Development Completion Report show the constructed alignments.

8. *Section 2.12 Post-Remediation Requirements: "The access road and Fender Area were not evaluated as a separate EU in the SLRA and are not subject to inspection and maintenance requirements." - Please provide more detail regarding rationale for this area being excluded from maintenance requirements. Was slag brought from another area of the Site and used as a subbase? If so, that may alter the determination that no cap maintenance is required.*

Because slag was used as subbase beneath the entire Site, cap maintenance will be required for the entire Sub-Parcel B4-1 development area, including the access road and Fender Area.

9. *Section 3.0 - Incorrectly identified the parcel as Parcel B15. Please amend. No temporary groundwater collection points are detailed as having been abandoned as part of the development work. Please amend this statement.*

   The references to Parcel B15 and the abandonment of temporary groundwater collection points and wells have been removed. The Site has been correctly identified as Sub-Parcel B4-1.

10. *There are no details provided regarding construction oversight as detailed in Section 5.6 of the RDWP, Rev. 2. Add details to the completion report regarding daily observations of construction activities during site grading, compliance with soil screening requirements, proper cap thickness and construction, and proper water management. This should include photo documentation of site work.*

    Periodic site inspections were performed by GTA during the development of Sub-Parcel B4-1. Site photos have been included with the Sub-Parcel B4-1 Development Completion Report in **Appendix C**.

11. *Based on Appendix B: Electrical Red-Line As-Built Drawings there is guard house located on the parcel. There is no mention of this in the report. Please confirm the presence of a guard house on the property.*

    A prefabricated guard house was installed in the northwest portion of the Site. As-built drawings provided by Porta-King have been included in **Appendix E**.

12. *Provide a legal description of the land in this parcel. Identify contractors and subcontractors that completed work on this parcel.*

    Sub-parcel B4-1 is a 21 acre paved property with one building and a guard shack. The site consists of the area enclosed by the following coordinates:

Northing (US feet)	Easting (US feet)
564295.4016	1457918.531
564147.2759	1456657.199
564347.2323	1456633.717
564404.9424	1456679.297
564649.9283	1456650.527

Northing (US feet)	Easting (US feet)
564626.7181	1456452.885
564825.353	1456429.558
564990.624	1457836.887
564295.4016	1457918.531

ARCO was the General Contractor for the development on Sub-Parcel B4-1. The guard shack in the northwest portion of the Site was constructed by Porta King with concrete poured by Precision Concrete. Additional subcontractors included Gray and Sons (earthwork / paving), Long Fence (fencing), Gettle (electrical), and MGE (plumbing).

13. *Provide documentation regarding any pits that were filled on the parcel, either by MCM or another contractor. Include figures showing the location of former pits on the site.*

    Pit closure documentation is provided in the Clearance Checklist-Closure Report for 20 Acre RoRo Automotive Yard prepared by Jenkins Environmental, Inc. (*Appendix C* of the RADWP and reproduced in the Development Completion Report in **Appendix D**). Figures showing the locations of the pits are included with the pit closure report.

Additional Revisions:

14. Due to the insertion of new appendices, the appendix containing the Operations and Maintenance Plan has been renamed from **Appendix C** to **Appendix F**. The Operations and Maintenance Plan has been updated to include a revised Pavement Inspection Form. The Landscape Inspection Form has been removed because Sub-Parcel B4-1 does not contain landscaped areas.

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

Respectfully submitted,
ARM Group Inc.

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Project Engineer

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