



ARM Group LLC

Engineers and Scientists

November 5, 2020

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

Re: Work Plan Update Letter:
Pre-Development Supplemental Investigation
Project Liberty Area
Area B: Parcel B13
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of Tradepoint Atlantic (TPA), ARM Group LLC (ARM) previously submitted a Pre-Development Supplemental Investigation Work Plan on November 29, 2018 for a designated portion of Area B: Parcel B13 (the Site) to the Maryland Department of the Environment (MDE) and United States Environmental Protection Agency (USEPA). This Work Plan Update Letter modifies the proposed site boundary (as shown on **Figure 1** through **Figure 9**) and sampling plan. The MDE provided comments on December 10, 2018 and December 11, 2018 requesting additional groundwater sample locations and additional soil borings to investigate potential impacts associated with the “Storage Area”. These comments have been incorporated into this Work Plan Update Letter. The number and distribution of sample locations have been modified due to the site boundary change, and therefore, this update should be reviewed as a new plan for Project Liberty.

Following submission of the previous Work Plan (in 2018), slag reclamation has occurred throughout the Site, bringing the ground surface to its final proposed grade. Further slag reclamation is not proposed and, therefore, the adjustment of sampling intervals proposed as part of the original Work Plan will not be required to account for the removal of material. Therefore, soil samples will be collected starting at the 0 to 1 foot depth interval.

This Work Plan Update Letter provides revised figures showing the proposed soil boring locations (**Figure 4**) in relation to the historical site facility areas from the Description of Current Conditions (DCC) Report (**Figure 5**) and historical drawing sets 5000 (**Figure 6**), 5100 (**Figure 7**), and 5500 (**Figure 8**). Note that, because the Site boundary has been expanded towards the east in relation

to the previously proposed Site boundary, soil boring locations have been adjusted to fully characterize the Site area. This includes the addition of a third soil boring as B13-091-SB to investigate the “Storage Area” shown on the historical drawing sets.

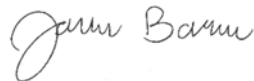
Figure 9 shows the proposed groundwater sample locations, which have been modified from the previous Work Plan. In accordance with agency request, additional groundwater sample locations have been added beyond those proposed in the original Work Plan in order to determine the presence or absence of potential groundwater impacts at the Site. Also note that, as shown on **Figure 9**, the groundwater sample analytical results from one historical Phase II piezometer (B13-045-PZ) are also relevant for this development project.

As shown on **Figure 4**, the sampling proposed in the previous Work Plan has been partially implemented. Soil borings B13-086-SB, B13-087-SB, B13-092-SB, B13-093-SB, and B13-094-SB have already been completed. During the previous soil boring investigation activities, a trace non-aqueous phase liquid (NAPL) sheen was observed at B13-086-SB from 21.5 to 23 feet below ground surface (bgs). Therefore, a screening piezometer was installed to assess potential NAPL mobility in this area. No NAPL was measured in this screening piezometer, which has since been abandoned. The details of this prior NAPL investigation can be found in the NAPL Completion Report for Parcel B13 (B13-086-SB) dated September 17, 2020.

Sample analytical results from both the new and completed borings will be included in a forthcoming Response and Development Work Plan. With the exception of the soil sampling interval adjustments (which are no longer required), all field protocols will be conducted in accordance with the original Work Plan submission dated November 29, 2018.

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 LLC



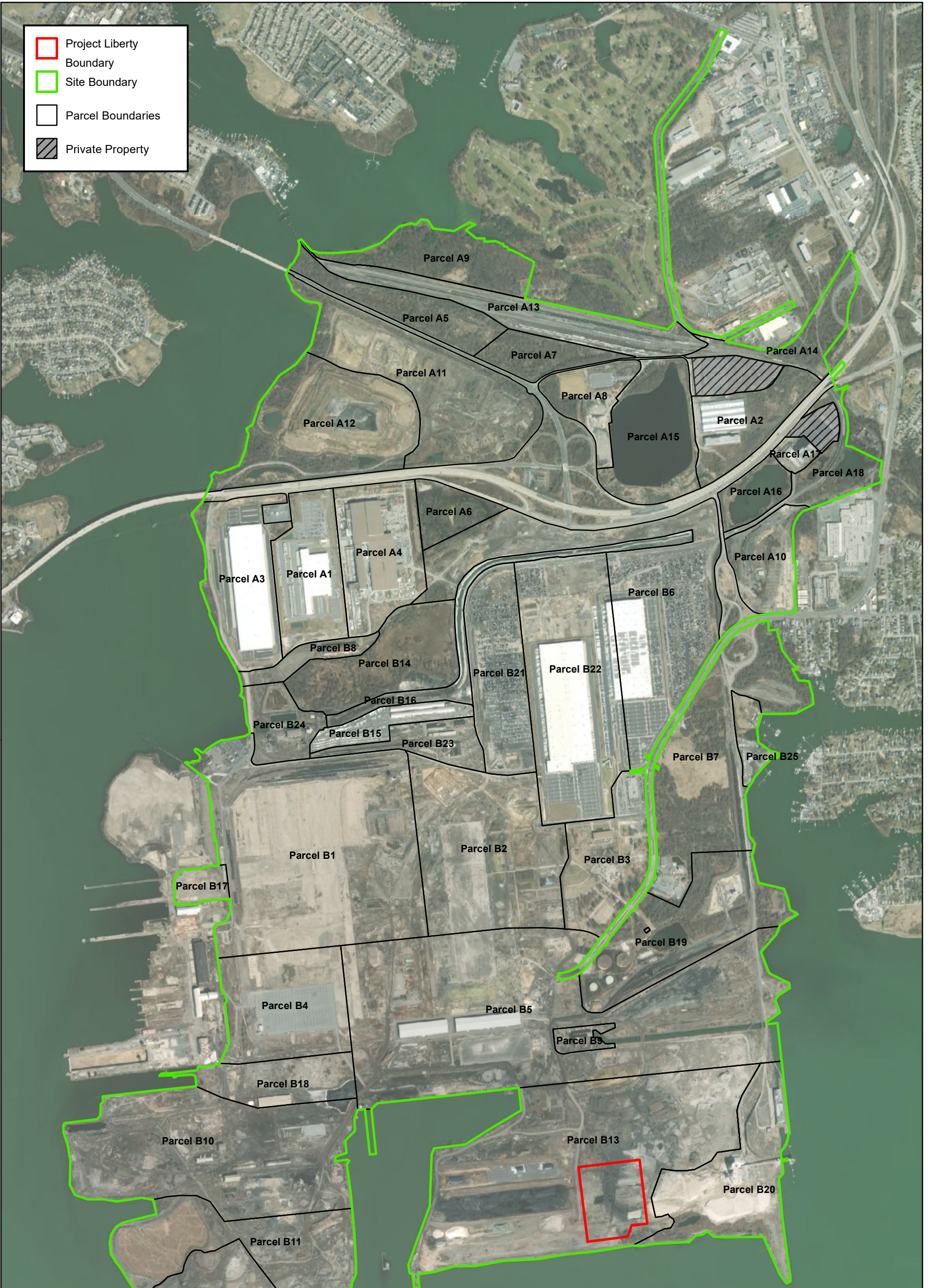
Joshua M. Barna, G.I.T.
Staff Geologist



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

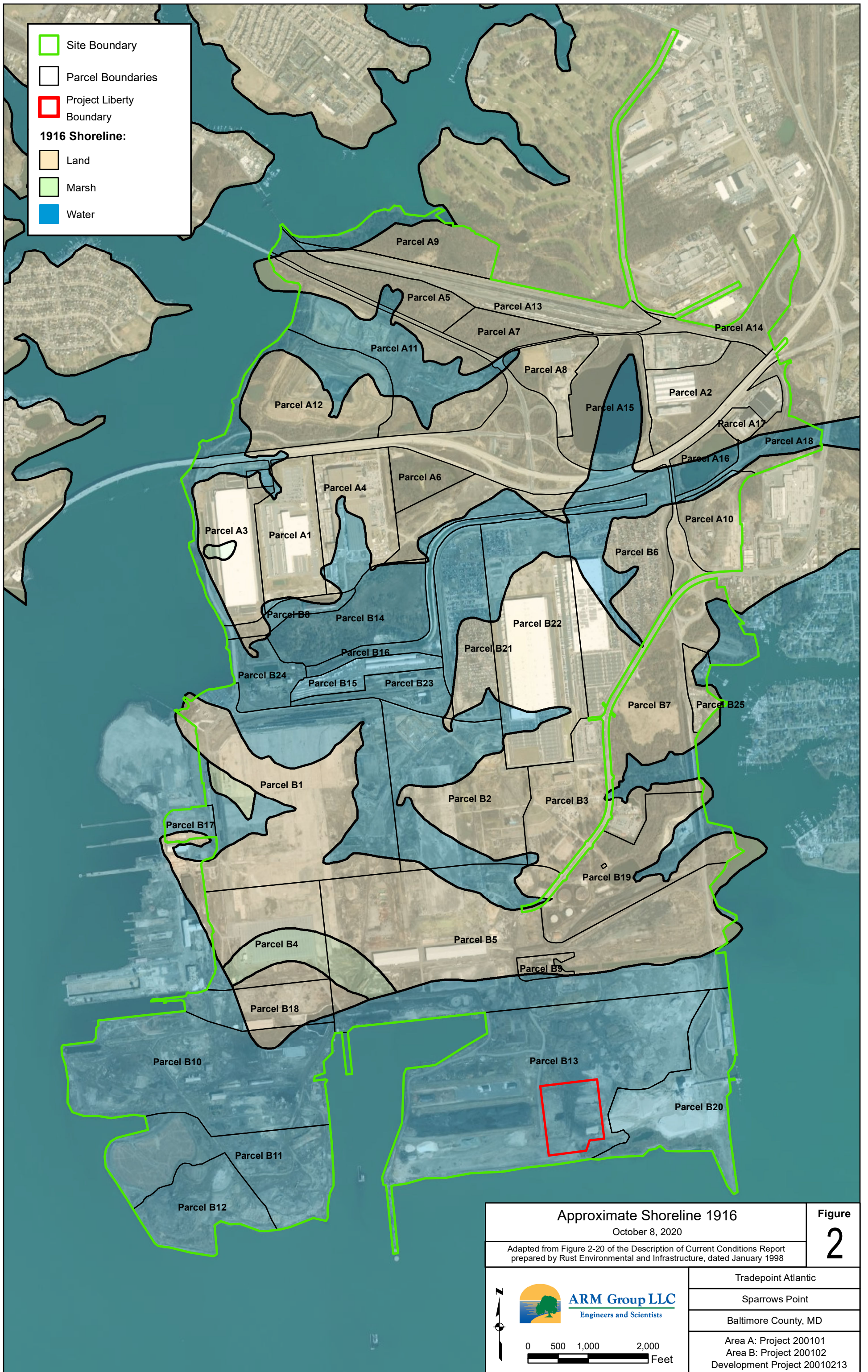


FIGURES



- Project Liberty Boundary
- Site Boundary
- Parcel Boundaries
- Private Property

Tradepoint Atlantic Area A and Area B Parcels October 8, 2020		Figure 1
	ARM Group LLC Engineers and Scientists	Tradepoint Atlantic Sparrows Point Baltimore County, MD
	Area A: Project 200101 Area B: Project 200102 Development Project 20010213	



Approximate Shoreline 1916

October 8, 2020

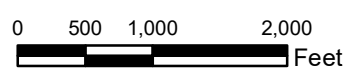
Adapted from Figure 2-20 of the Description of Current Conditions Report prepared by Rust Environmental and Infrastructure, dated January 1998

Figure

2



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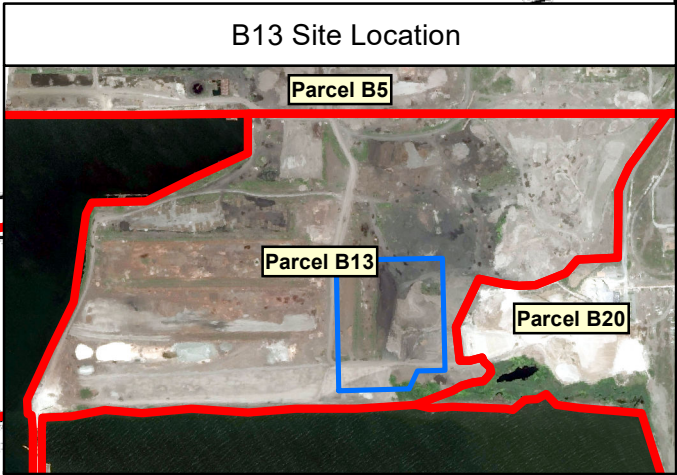
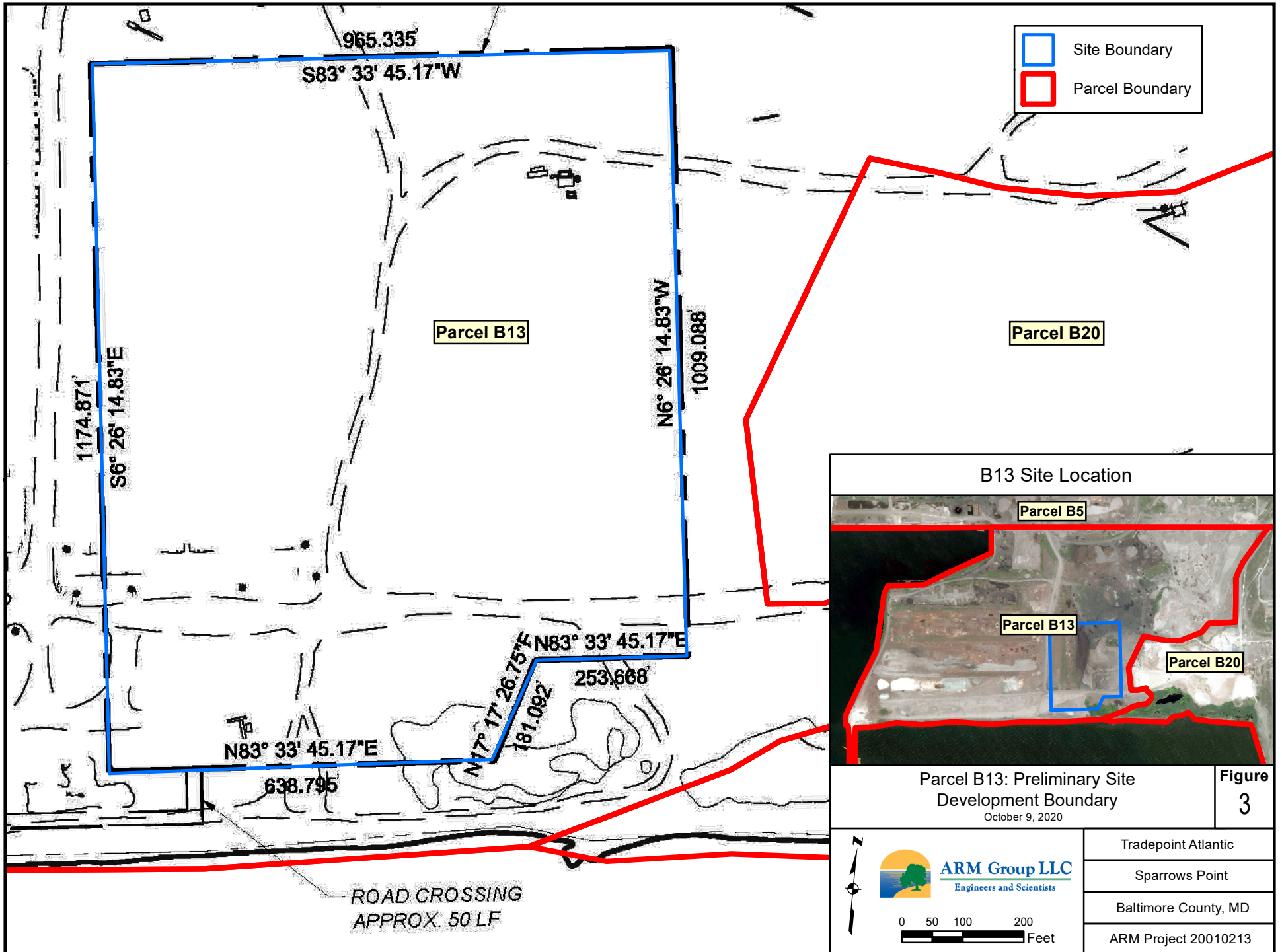


Tradepoint Atlantic

Sparrows Point


Baltimore County, MD


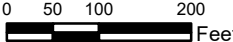
Area A: Project 200101
Area B: Project 200102
Development Project 20010213



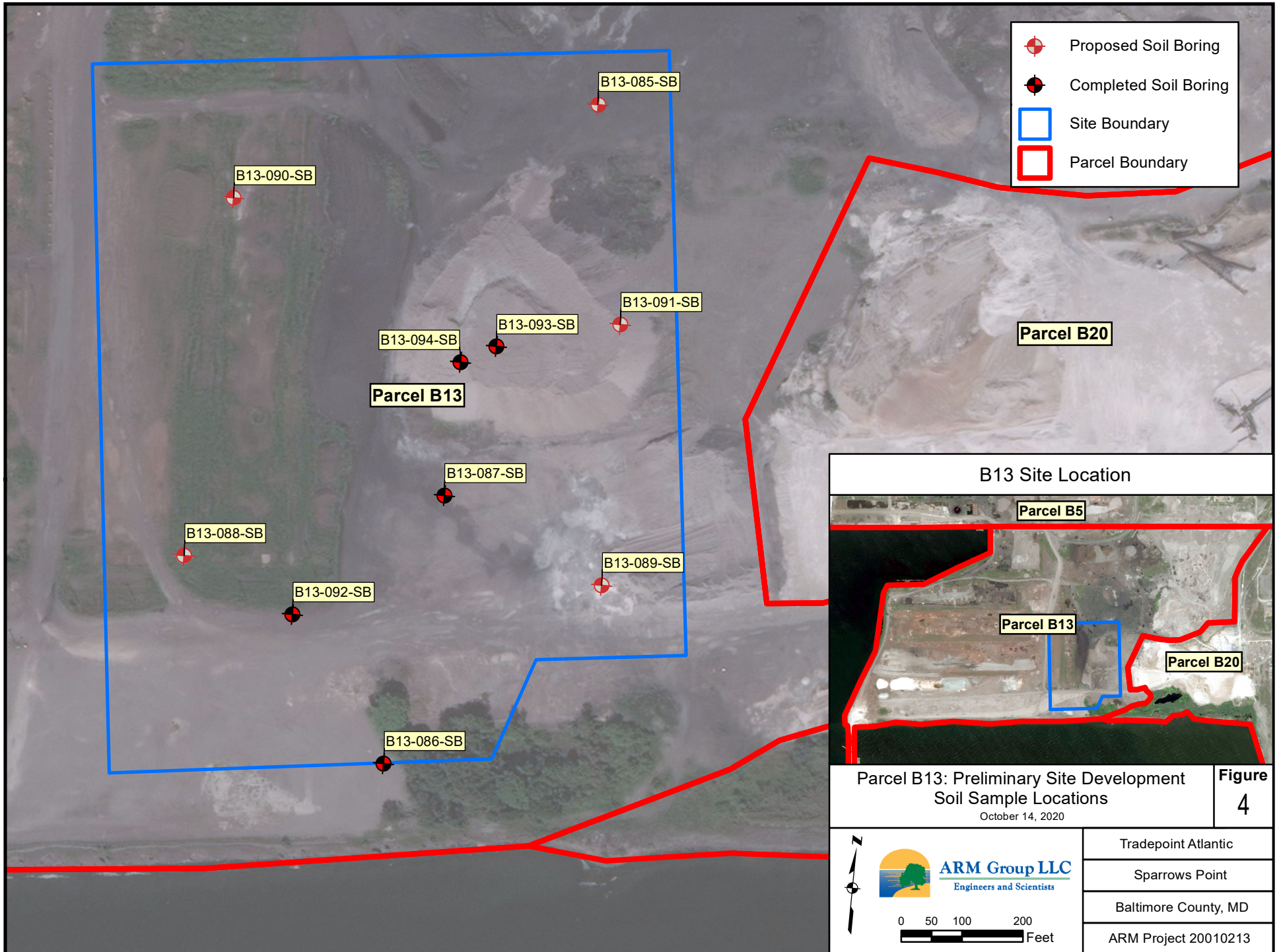
Parcel B13: Preliminary Site Development Boundary
 October 9, 2020





Figure 3


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Sparrows Point
Baltimore County, MD
ARM Project 20010213

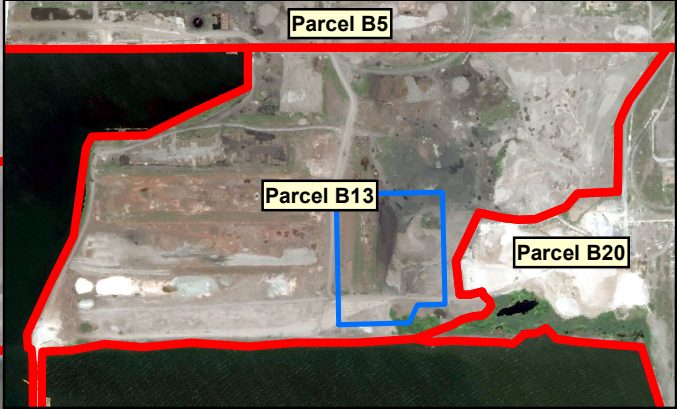


-  Proposed Soil Boring
-  Completed Soil Boring
-  Site Boundary
-  Parcel Boundary

Parcel B20


Parcel B13

B13 Site Location



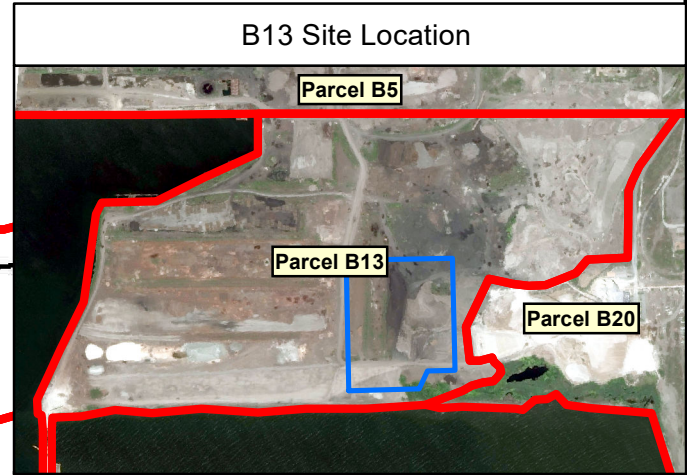
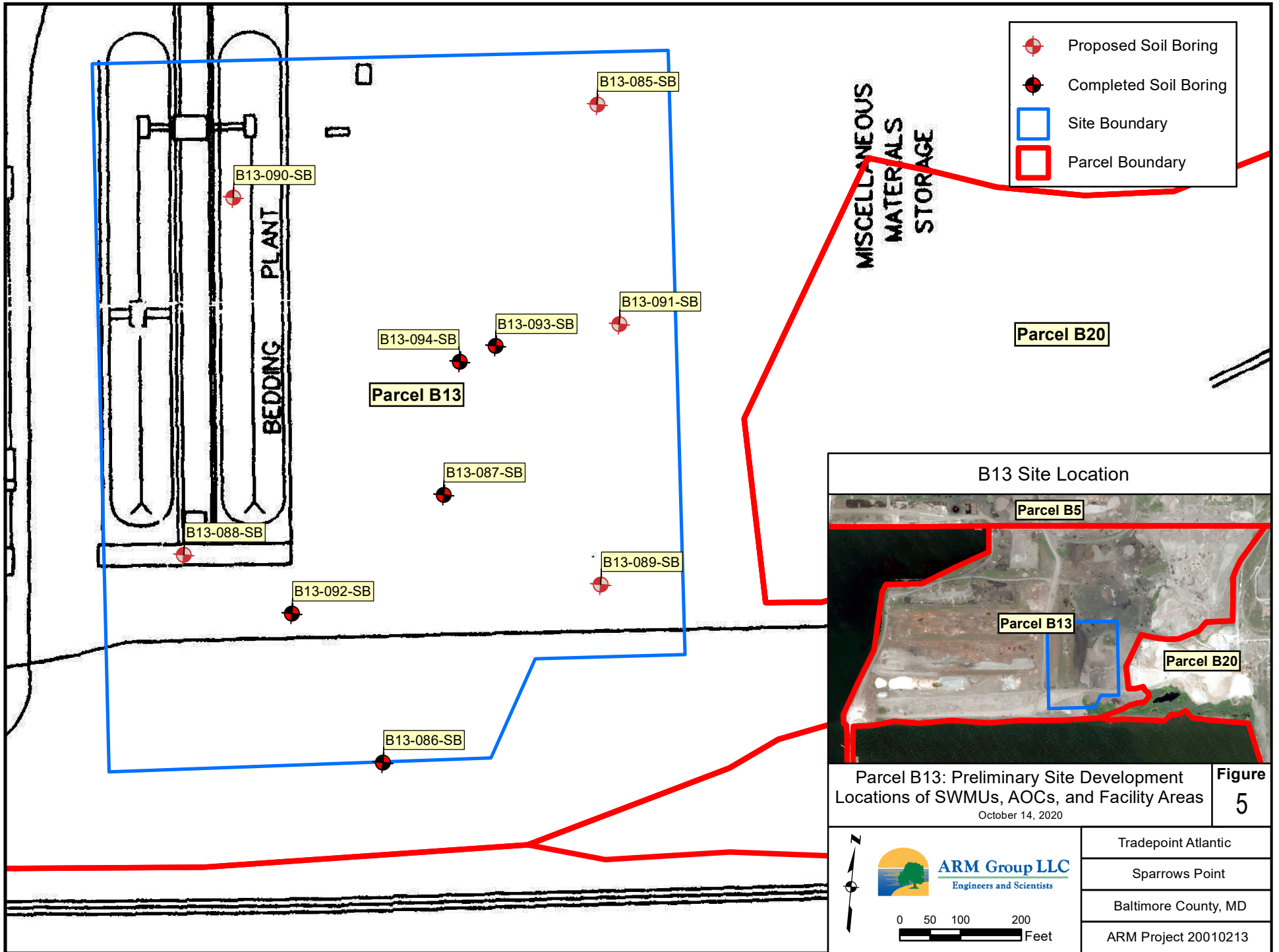
Parcel B13: Preliminary Site Development
Soil Sample Locations
October 14, 2020

Figure
4

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0 50 100 200
Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 20010213



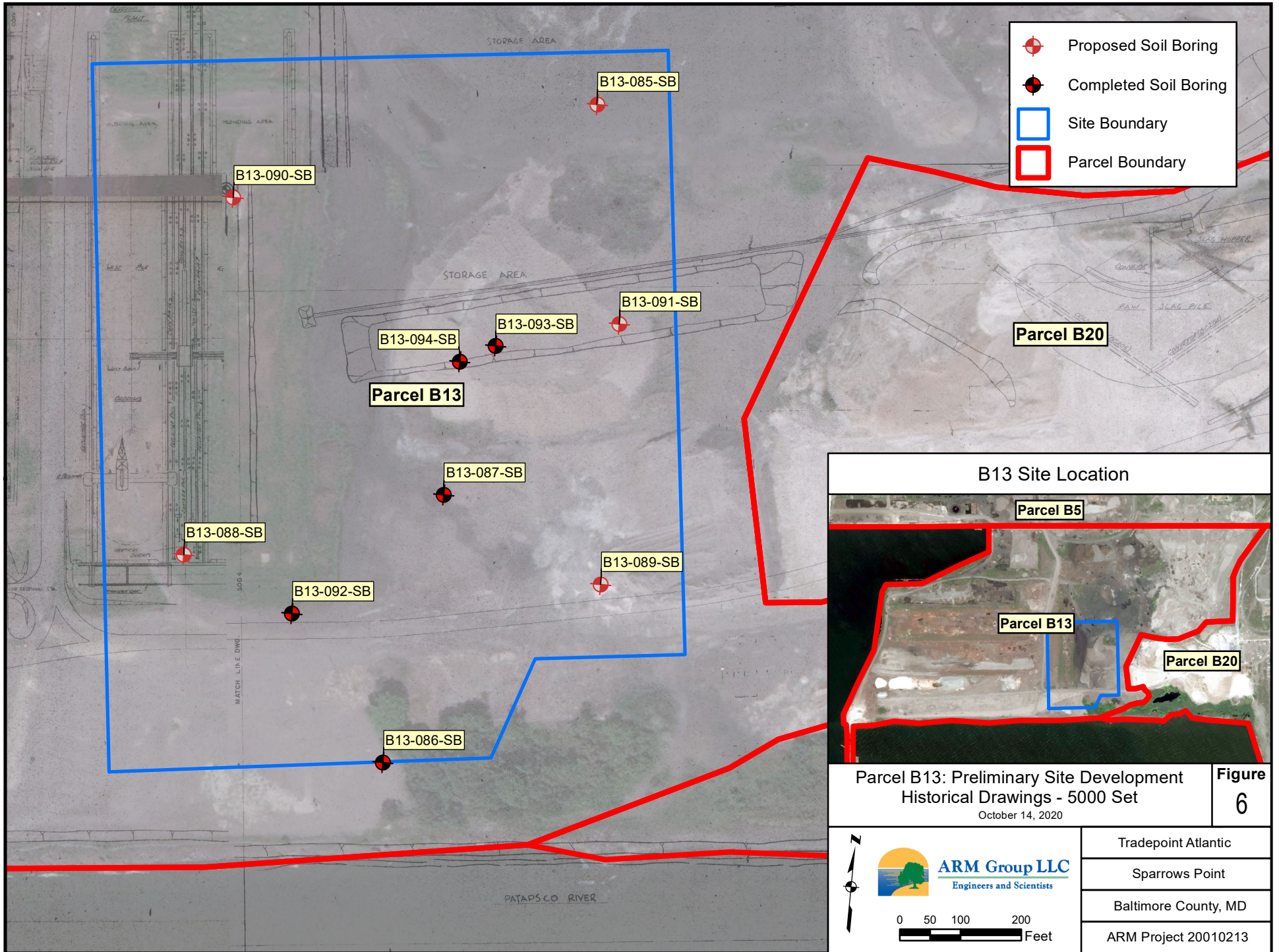
Parcel B13: Preliminary Site Development Locations of SWMUs, AOCs, and Facility Areas
October 14, 2020





Figure 5

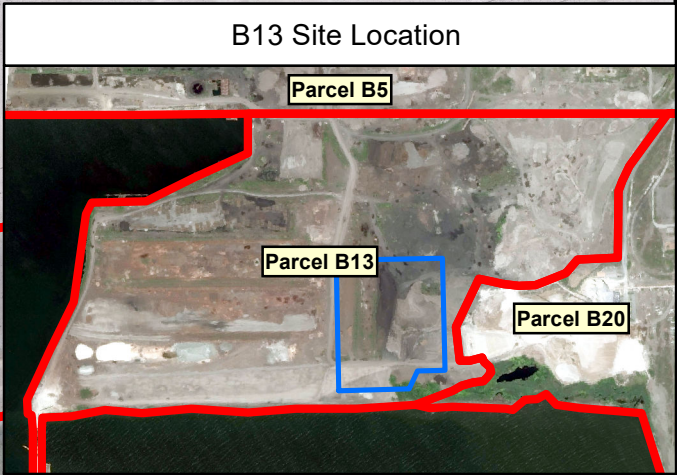



0 50 100 200 Feet


Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 20010213


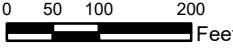


-  Proposed Soil Boring
-  Completed Soil Boring
-  Site Boundary
-  Parcel Boundary

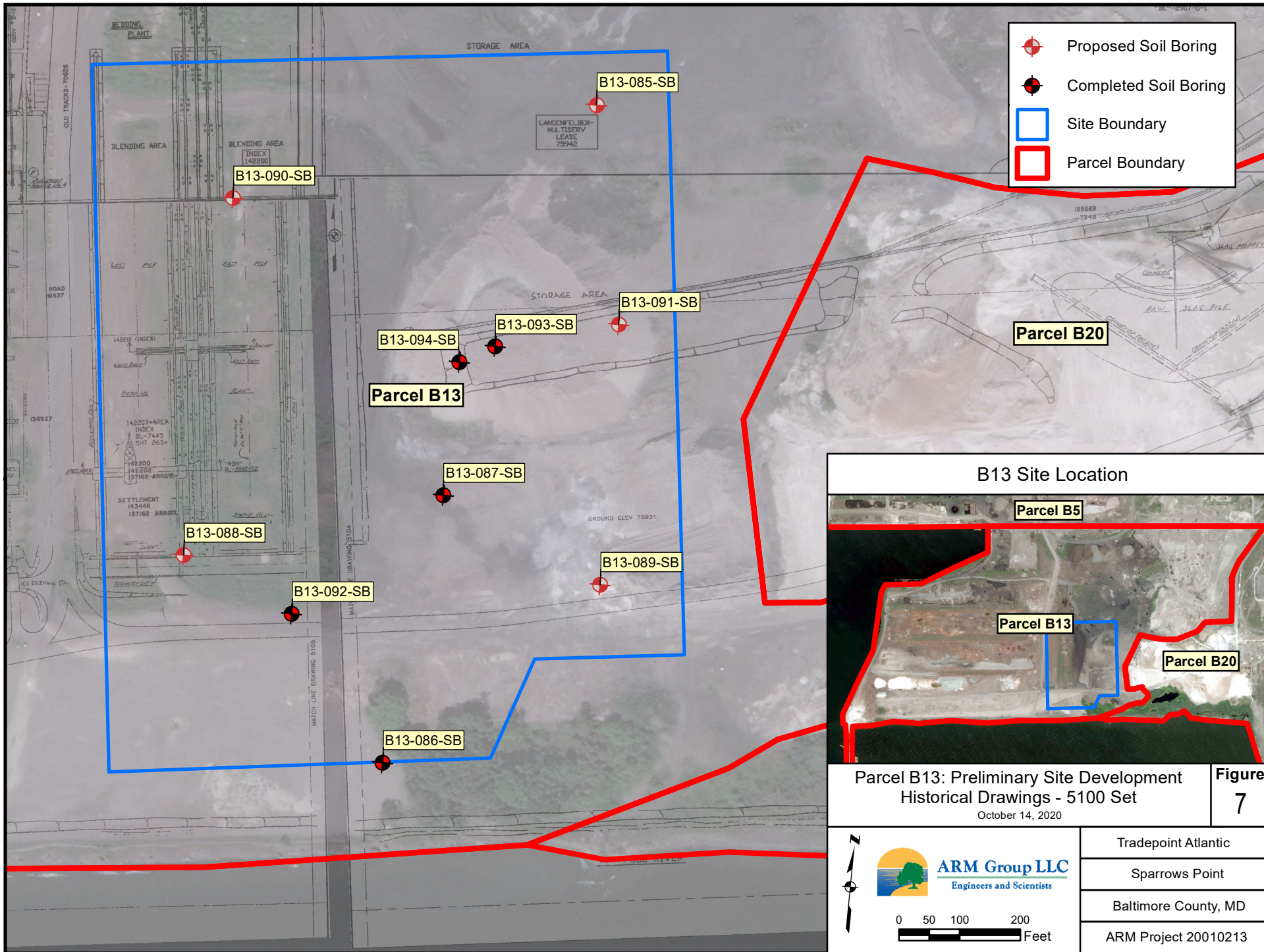






Parcel B13: Preliminary Site Development
 Historical Drawings - 5000 Set
 October 14, 2020 Figure 6

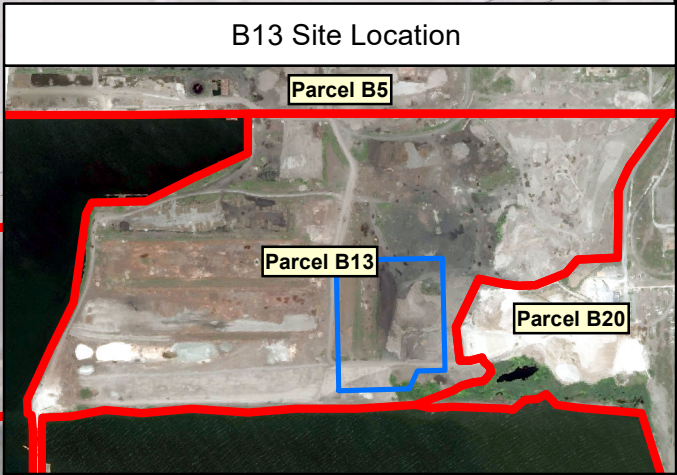

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Sparrows Point
Baltimore County, MD
ARM Project 20010213





-  Proposed Soil Boring
-  Completed Soil Boring
-  Site Boundary
-  Parcel Boundary



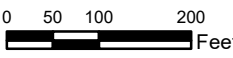
**Parcel B13: Preliminary Site Development
Historical Drawings - 5100 Set**
October 14, 2020

**Figure
7**

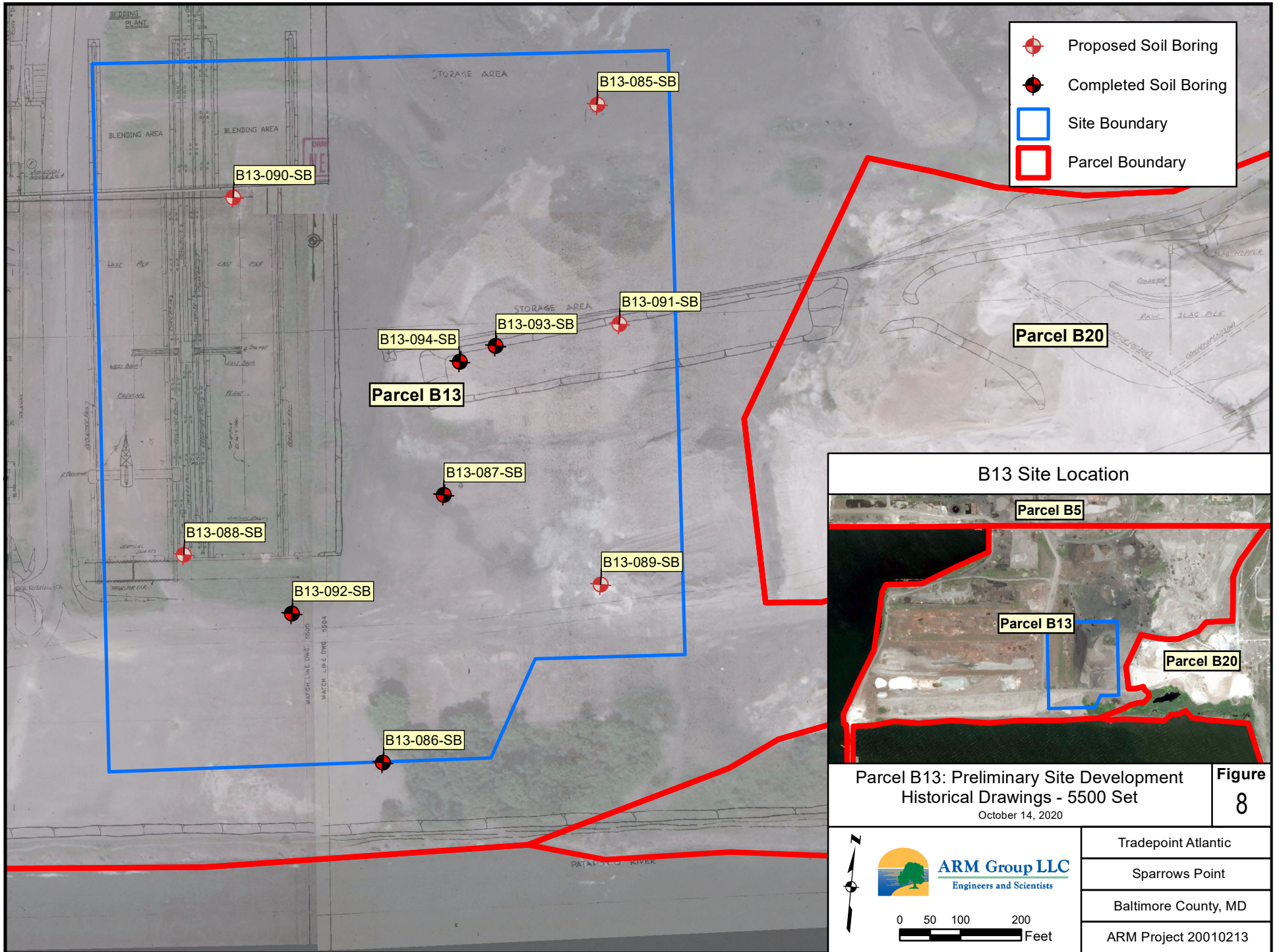








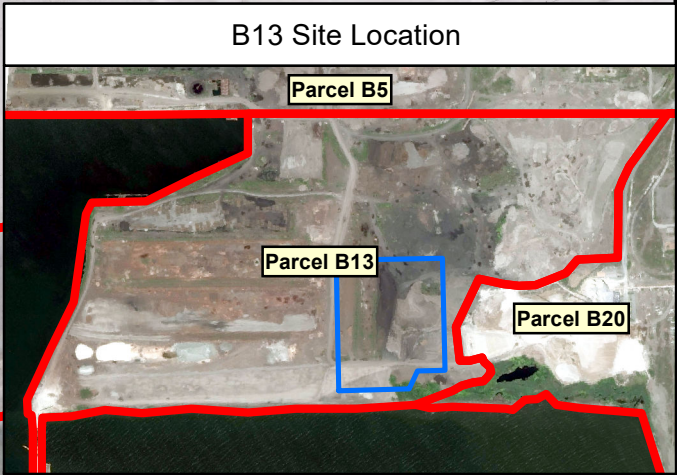
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Baltimore County, MD
ARM Project 20010213





-  Proposed Soil Boring
-  Completed Soil Boring
-  Site Boundary
-  Parcel Boundary

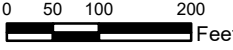


Parcel B13: Preliminary Site Development
 Historical Drawings - 5500 Set
 October 14, 2020

Figure
 8





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0 50 100 200
 Feet

Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 20010213



-  Proposed Piezometer
-  Phase II Piezometer
-  Site Boundary
-  Parcel Boundary

Parcel B13

Parcel B20

B13-090-PZ

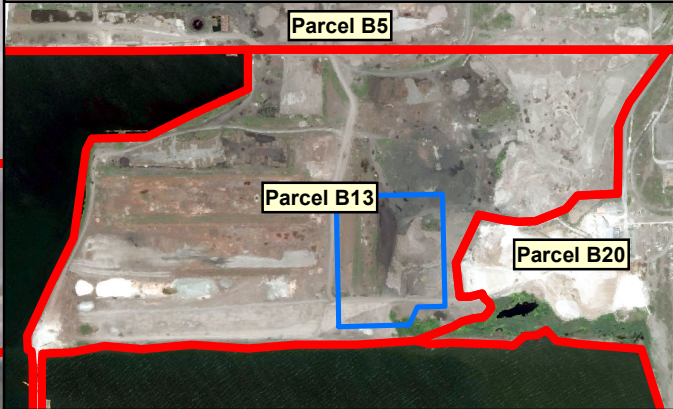
B13-045-PZ

B13-091-PZ

B13-088-PZ

B13-089-PZ

B13 Site Location



**Parcel B13: Preliminary Site Development
Groundwater Sample Locations**

October 14, 2020

**Figure
9**



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0 50 100 200
Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

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