

PROJECT COBRA GRADING PLAN

AREA B: SUB-PARCEL B6-5
TRADEPOINT ATLANTIC
SPARROWS POINT, MARYLAND

Prepared For:



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Prepared By:



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Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Stewart Kabis".

Stewart Kabis, P.G.
Project Geologist II

A handwritten signature in black ink, appearing to read "Kaye Guille".

Kaye Guille, P.E., PMP
Senior Engineer

Revision 0 – October 19, 2021

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1.0 INTRODUCTION

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic, has prepared this Grading Plan for a portion of Area B designated as Sub-Parcel B6-5 (the Site). The Site comprises approximately 5 acres of the 3,100-acre former plant property located as shown on **Figure 1**.

The conduct of any environmental assessment and cleanup activities on the Tradepoint Atlantic property, as well as any associated development, is subject to 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 majority of the Site remains subject to the requirements of the Multimedia Consent Decree between Bethlehem Steel Corporation, the USEPA, and the MDE (effective October 8, 1997) as documented in correspondence received from the USEPA on September 12, 2014.

An application to enter the full Tradepoint Atlantic property (3,100 acres) into the Maryland Department of the Environment Voluntary Cleanup Program (MDE-VCP) was submitted to the MDE and delivered on June 27, 2014. The property's current and anticipated future use is Tier 3 (Industrial) and plans for the property include demolition and redevelopment over several years.

The Site consists of approximately 5 acres currently slated for grading (site preparation) for the future construction of a large building designated as the Project Cobra building. The proposed rough grading plan for this project is provided in **Appendix A** and is also shown on **Figure 2**. This site preparatory work is not intended to be the basis for the issuance of a No Further Action Letter (NFA) or a Certificate of Completion (COC). Future development and construction of the building will be subject to the submission of a separate Response and Development Work Plan (RADWP), which will evaluate the environmental condition of the Site and provide the standard requirements that have been approved for construction projects on the property.

2.0 SITE DESCRIPTION AND HISTORY

2.1. SITE DESCRIPTION

The Site consists of approximately 5 acres, the majority of which is within Parcel B6 with a smaller portion in Parcel B22. The position of the Site within the greater Tradepoint Atlantic property is provided on **Figure 1**. The proposed rough grading plan for the Site is provided in **Appendix A** and is also shown on **Figure 2**. The Site is currently zoned Manufacturing Heavy-Industrial Major (MH-IM), and is not occupied. All former buildings at the Site have been demolished, and the Site has been cleared of all significant vegetation. There is no groundwater use on-site or within the surrounding Tradepoint Atlantic property.

According to Figure B-2 of the Stormwater Pollution Prevention Plan (SWPPP) Revision 6 dated February 22, 2018, stormwater from the majority of the Site is discharged through the permitted National Pollution Discharge Elimination System (NPDES) Outfall 014 at the end of the Tin Mill Canal (TMC), which discharges into Bear Creek to the west. Stormwater from the far southern portion of the Site is discharged through NPDES Outfall 017 into Jones Creek to the east.

2.2. SITE 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.

As stated above, the Site encompasses portions of Parcel B6 and Parcel B22. Parcel B6 was formerly occupied by a portion of the Hot Strip Mills area, which contained numerous product manufacturing operations. The processes associated with this area are further described in the Parcel B6 Phase II Investigation Work Plan (Revision 2) dated March 16, 2018. There were two sampling targets from the Parcel B6 Phase II Investigation that are within the Sub-Parcel B6-5 LOD—a pickler tank and a waste acid tank. Soil sample results from the Phase II Investigation are summarized below. The portion of Parcel B22 covered by this Grading Plan did not historically include any significant steel making processes.

3.0 LOCATIONS OF POTENTIAL CONCERN

The scope of development covered by this document is limited to fill material placement and grading activities which will be performed by Construction Workers using heavy equipment. No utility installations or other excavations will be conducted during this phase of development; any such activities will be covered by a subsequent RADWP to be submitted in the future for the construction of the proposed building. Since excavation work will not be conducted under this Grading Plan, and the proposed fill material placement and grading activities will be performed by Construction Workers inside enclosed vehicle cabs, which mitigates exposure risk, a full human health Screening Level Risk Assessment (SLRA) is not necessary for this proposed work. Although a formal SLRA is not being presented within this Grading Plan, an evaluation of existing data was completed to determine whether any locations of potential concern exist within the proposed limit of disturbance (LOD).

The purpose of this evaluation was to determine whether any future response actions and/or monitoring are reasonably anticipated to be required to facilitate future use of the Site. This evaluation was based on existing data which were collected during completed Phase II Investigations on the Tradepoint Atlantic property, including work associated with the Parcel B6 and Parcel B22 Phase II Investigations. The respective Phase II Investigation Reports for these tasks have been submitted to the MDE and USEPA (Parcel B6 Revision 2 dated March 16, 2018 and Parcel B22 Revision 1 dated August 8, 2019). The relevant soil boring locations from the Parcel B6 and Parcel B22 Phase II Investigations are included on **Figure 3**. While the Finishing Mills Groundwater Investigation covered the area encompassing the Site, there were no groundwater locations located within or near the Site boundary (LOD). The nearest groundwater locations from the Finishing Mills Groundwater Investigation are shown on **Figure 4**.

3.1. SUMMARY OF SOIL INVESTIGATIONS

Soil conditions within and surrounding the Site have been characterized by the Parcel B6 and Parcel B22 Phase II Investigations. The Phase II Investigation Reports for these parcels have been submitted to the MDE and USEPA (submittal dates listed above). Relevant soil boring locations from these Phase II Investigations are shown on **Figure 3**. The data from these investigations were used to assess locations of potential concern within the LOD of the Site.

Lead, polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH)/Oil & Grease, and non-aqueous phase liquid (NAPL) are subject to special requirements as designated by the agencies. Data from within, and in close proximity to, the Project Cobra building were evaluated to determine presence or absence of any locations of potential concern including: lead concentrations above 10,000 mg/kg, PCB concentrations above 50 mg/kg, TPH/Oil & Grease concentrations above 6,200 mg/kg, and physical evidence of NAPL.

Based on the Phase II Investigations, there were no notable concentrations of lead, PCBs, TPH, or evidence of NAPL detected in soil at the Site.

A boring located just outside the northern border of the Site in Parcel B6 (B6-056-SB) was identified as a location of potential concern due to evidence of trace NAPL observed in a narrow interval within the soil core. A piezometer was installed at this location with a total depth of 15 feet below ground surface and gauged at 0 hours and 30 days with an oil-water interface probe. There was no evidence of NAPL observed in the piezometer during either measurement, therefore the piezometer was abandoned. No additional response actions or monitoring are anticipated at this location.

3.2. SUMMARY OF GROUNDWATER INVESTIGATIONS

Groundwater at the Site has already been characterized by the Finishing Mills Groundwater Investigation. The Phase II Investigation Report for this investigation has been submitted to the MDE and USEPA (submittal date listed above). However, there were no Finishing Mills groundwater monitoring locations within or near the Site boundary (LOD). The nearest groundwater locations from the Finishing Mills Groundwater Investigation are shown on **Figure 4**. While it is not anticipated that groundwater will be encountered during grading activities, the results from the groundwater sampling at the nearby locations are summarized in the Finishing Mill Groundwater Investigation Report.

4.0 PROPOSED GRADING PLAN

Tradepoint Atlantic is proposing to perform material placement and grading on the designated 5 acres of Parcel B6 and Parcel B22 in preparation for the future construction of a building. The proposed future use of the Site is Tier 3 (Industrial).

The scope of development covered by this document is limited to fill material placement and grading activities which will be performed by Construction Workers inside the enclosed vehicle cabs of heavy equipment. Therefore, it is not expected that significant exposures to potentially contaminated soil or groundwater will occur during the work proposed under this Grading Plan. The proposed rough grading plan is provided in **Appendix A**. No utility installations or other excavations will be conducted during this phase of development; any such activities will be covered by a project-specific RADWP. The use of enclosed vehicles mitigates, but does not completely eliminate, potential exposure risks for Construction Workers. General health and safety controls (level D protection) outlined in the property-wide Health and Safety Plan (HASP provided in **Appendix B**) will mitigate any potential incidental risk to Construction Workers during fill material placement and grading activities.

The process of completing the proposed activities at the Site involves the tasks listed below. As-built and regulatory documentation for the outlined tasks and procedures related to site grading will be provided in an Interim Completion Report. A final Development Completion Report will be necessary following the construction of the Project Cobra building, as will be specified within the RADWP associated with the project. Depending on the schedule of subsequent development, the preparatory grading work discussed herein may be incorporated into the final Development Completion Report in lieu of an interim report.

Historically, there were no monitoring wells located within the Site boundary. As such, no monitoring well abandonments are required prior to grading activities.

4.1. GRADING AND SITE PREPARATION

As indicated on the proposed rough grading plan in **Appendix A**, fill material will be placed to raise the elevation at the Site. The current and final (proposed) ground surface elevations are indicated on the grading plan. The proposed work will require importing material to the Site. No excavations are planned to be conducted during this phase of the project. It is not anticipated that unsuitable materials (i.e., poor soils) will be encountered.

Processed slag aggregate sourced from the Tradepoint Atlantic property will be used as the fill material for this project, and the placement of this material will necessitate that the Site will be subject to surface engineering controls (i.e., capping) in the future when the RADWP is prepared for the Project Cobra building. No other fill materials will be used at the Site without the approval

of the MDE. Fill sources shall be free of organic material, frozen material, or other deleterious material.

5.0 GRADING IMPLEMENTATION PROTOCOLS

This plan specifically discusses protocols for the handling of fill materials in association with the planned grading and site preparation activities at the Site. In particular, this plan highlights the minimum standards for construction practices to reduce potential risks to workers and the environment. No utility installations or other excavations will be conducted during this phase of development. On-site rough grading activities for the Project Cobra building will consist of fill material placement and subsequent grading by Construction Workers inside the enclosed vehicle cabs of heavy equipment, which mitigates exposure risk. Therefore, it is not expected that significant exposures to potentially contaminated soil or groundwater will occur during the work proposed under this Grading Plan.

The Site is located entirely within the historical Finishing Mills area. Groundwater conditions throughout the Finishing Mills area have already been characterized by the Finishing Mills Groundwater Investigation, although there were no groundwater monitoring locations located within the sub-parcel B6-5 boundary.

Trace NAPL was observed in a narrow interval within the soil core at B6-056-SB. A piezometer was installed at this location and NAPL was not observed to accumulate in the casing.

5.1. EROSION/SEDIMENT CONTROL

Erosion and sediment controls will be installed prior to commencing work in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control. The erosion and sediment controls will be approved by the MDE. In addition, the following measures will be taken to prevent contaminated soil from exiting the Site:

- Stabilized construction entrance will be placed at site entrance.
- A dry street sweeper will be used as necessary on adjacent roads, and the swept dust will be collected and properly managed.
- Accumulated sediment removed from silt fence, and sediment traps if applicable, shall be periodically removed and returned to the Site.

5.2. FILL

Processed slag aggregate sourced from the Tradepoint Atlantic property will be used as the fill material for this project. No other fill materials will be used at the Site without the approval of the MDE. Processed slag aggregate can be used as structural fill under areas to be capped without any additional required testing or approvals. Tradepoint Atlantic understands that the placement of slag aggregate at the Site will necessitate that the Project Cobra building will be subject to a capping requirement when it is evaluated in a subsequent RADWP for construction of the

warehouse building, unless separate approvals are received from the MDE following appropriate laboratory testing of the material.

5.3. DUST CONTROL

General construction operations, including grading, will be performed at the Site. These activities are anticipated to be performed in areas of soil impacted with constituents of potential concern (COPCs). Best management practices should be undertaken at the Tradepoint Atlantic property as a whole to prevent the generation of dust which could impact other areas of the property outside of the immediate work zone. To limit worker exposure to contaminants borne in dust and windblown particulates, dust monitoring will be performed in the immediate work zone and at the upwind and downwind perimeter of the Site, and dust control measures will be implemented if warranted based on the monitoring results. The action level proposed for the purpose of determining the need for dust suppression techniques (e.g. watering and/or misting) during the development activities at the Site will be 3.0 milligrams per cubic meter (mg/m^3). The lowest of the site-specific dust action levels, Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL), and American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) was selected as the proposed action level.

The Environmental Professional (EP) will be responsible for the dust monitoring program. Air monitoring will be performed using Met One Instruments, Inc. E-Sampler dust monitors or equivalent real-time air monitoring devices. The EP will set-up dust monitoring equipment at the outset of grading work or other dust-generating activities, and continuous dust monitoring will be performed during this work. In addition to work area monitoring, a dust monitor will be placed at selected perimeter locations that will correspond to the upwind and downwind boundaries based on the prevailing wind direction predicted for that day. The prevailing wind direction will be assessed during the day, and the positions of the perimeter monitors will be adjusted if there is a substantial shift in the prevailing wind direction. Once all dust-generating activities are complete, the dust monitoring program may be discontinued. If additional dust-generating activities commence, additional dust monitoring activities will be performed.

If sustained dust concentrations exceed the action level ($3.0 \text{ mg}/\text{m}^3$) at any of the monitoring locations as a result of conditions occurring at the Site, operations will be stopped temporarily until dust suppression can be implemented. The background dust concentration will be utilized to evaluate whether Site activities are the source of the action level exceedance. Background concentrations will be based on measurements over a minimum of a 1-hour period at the upwind Site boundary. This upwind data will be used to calculate a time weighted average background dust concentration. The background dust concentration may need to be recalculated periodically during the workday, based on changed upwind conditions. Operations may be resumed once monitoring indicates that dust concentrations are below the action level.

As applicable, air monitoring will be conducted during grading activities in the immediate work zones and surrounding areas to assess levels of exposure to Site workers, establish that the work zone designations are valid, and verify that respiratory protection being worn by personnel, if needed, is adequate. Concurrent with the work zone air monitoring, perimeter air monitoring will also be performed to ensure contaminants are not migrating off-site. The concentration measured in the downwind portion of the Site shall not exceed the concentration in the upwind portion, or 3.0 mg/m^3 , unless caused by background dust from upwind of the Site. If exceedances attributable to Site conditions are identified downwind for more than five minutes, dust control measures and additional monitoring will be implemented. The dust suppression measures may include wetting or misting through the use of a hose connected to an available water supply or a water truck stationed at the Site.

Dust control measures will be implemented as described above to address dust generated as a result of grading activities conducted at the Site. However, based on the nature of the area and/or ongoing activities surrounding the Site, it is possible that windblown particulates may come from surrounding areas. As discussed above, the dust concentration in the upwind portion of the Site will be considered when monitoring dust levels in the work zone. A pre-construction meeting will be held to discuss the potential of windblown particulates from other activities impacting the air monitoring required for this response plan. Site contact information will be provided to address the possibility of upwind dust impacts. If sustained dust is observed above the action level (3.0 mg/m^3) and it is believed to originate from off-site (i.e., upwind) sources, this will immediately be reported to the MDE-VCP project team, as well as the MDE Air and Radiation Administration (ARA).

5.4. HEALTH AND SAFETY

A property-wide HASP (provided as **Appendix B**) has been developed and is attached to this plan to present the minimum requirements for worker health and safety protection for the project. The proposed fill material placement and grading activities will be performed by Construction Workers inside enclosed vehicle cabs, which mitigates exposure risk. General health and safety controls (level D protection) will mitigate any potential incidental risk to Construction Workers during fill material placement and grading activities. All contractors working on the Site must prepare their own HASP that provides a level of protection at least as much as that provided by the attached HASP. Alternately, on-site contractors may elect to adopt the HASP provided.

Prior to commencing work, the contractor must conduct a pre-construction safety meeting for all personnel. All personnel must be made aware of the HASP. Although intrusive work is not anticipated to be required for this grading project, safety information shall be provided to personnel who may have incidental exposures to soils which could be impacted by COPCs. Workers will be responsible for following safety procedures to prevent contact with potentially contaminated soil or groundwater (not anticipated).

6.0 PERMITS, NOTIFICATIONS, AND CONTINGENCIES

The participant and their contractors will comply with all local, state, and federal laws and regulations by obtaining any necessary approvals and permits to conduct the activities contained herein. Any permits or permit modifications from State or local authorities will be provided as addenda to this Grading Plan.

There are no wetlands identified within the project area, so no permits are required from the MDE Water Resources Administration.

Contingency measures will include the following:

1. The MDE will be notified immediately of any previously undiscovered contamination, previously undiscovered storage tanks and other oil-related issues, and citations from regulatory entities related to health and safety practices.
2. Any significant change to the implementation schedule will be noted in the progress reports to MDE.

7.0 IMPLEMENTATION SCHEDULE

Progress reports will be submitted to the MDE on a quarterly basis. Each quarterly progress report will include, at a minimum, a discussion of the following information regarding tasks completed during the specified quarter:



- Grading Progress
- Dust Monitoring
- Soil Management (imported materials, stockpiling)
- Notable Occurrences (if applicable)
- Additional Associated Work (if applicable)



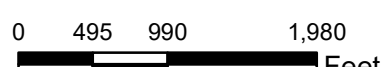
The proposed implementation schedule is shown below.

Task	Proposed Completion Date
Anticipated Plan Approval	October 25, 2021
Slag Delivery & Placement	November 1, 2021 (start)

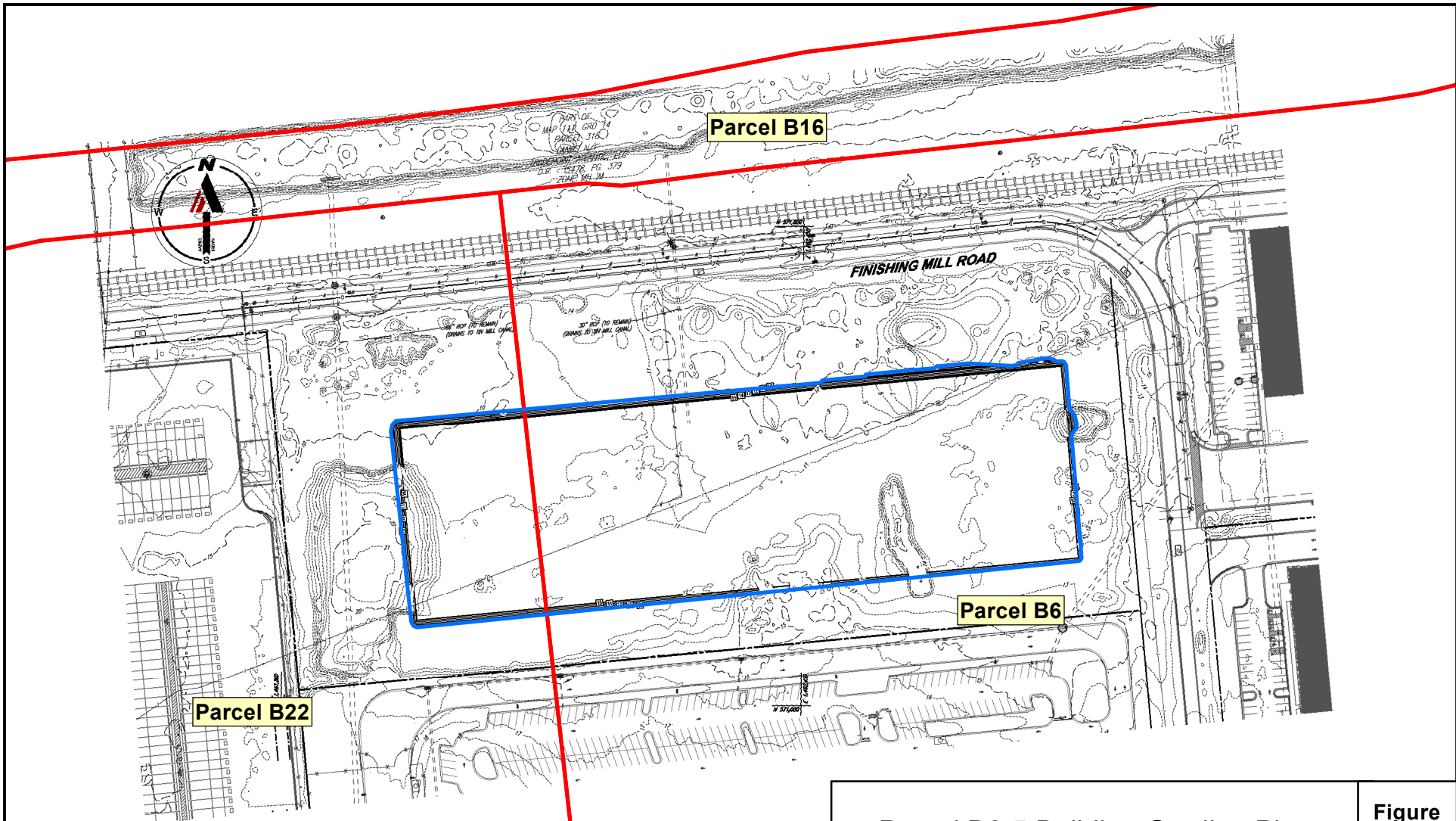
FIGURES



	Parcel Boundary
	Project Cobra Building Outline



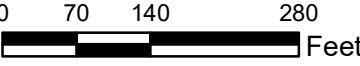
Area A and Area B Parcel Boundaries and Sub-Parcel B6-5 LOD October 15, 2021		Figure 1
  ARM Group LLC Engineers and Scientists		
		Tradepoint Atlantic Baltimore County, MD Tradepoint Atlantic ARM Project 20010206

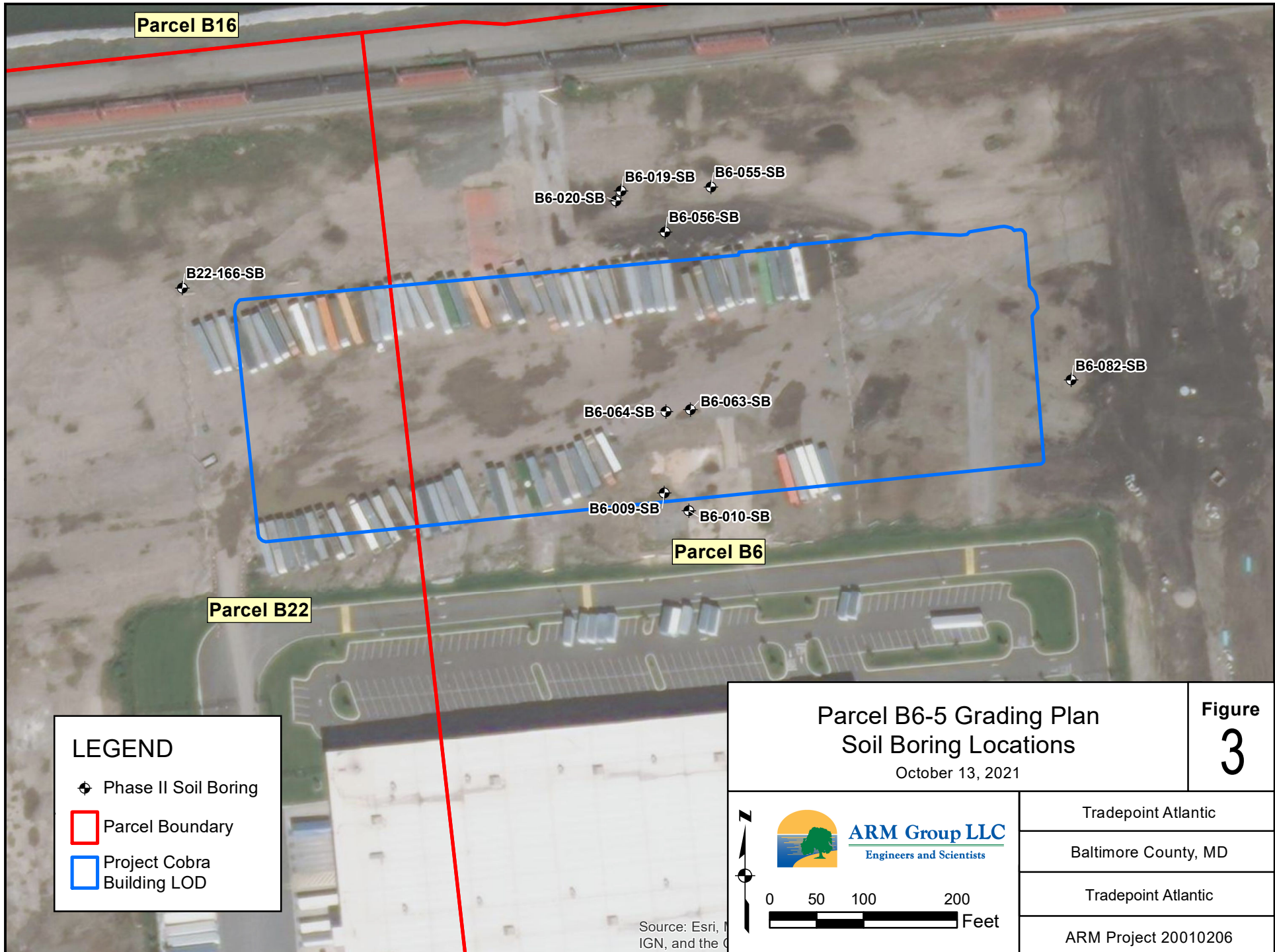
Source: Esri, IGN, and the C



LEGEND

- Parcel Boundary
- Project Cobra Building LOD

<h3>Parcel B6-5 Building Grading Plan</h3> <p>October 14, 2021</p>		Figure 2
 <p>ARM Group LLC Engineers and Scientists</p>	Tradepoint Atlantic	
	Baltimore County, MD	
	Tradepoint Atlantic	
	ARM Project 20010206	
		



Parcel B16

B22-166-SB

B6-020-SB

B6-019-SB

B6-055-SB

B6-056-SB

B6-082-SB

B6-064-SB

B6-063-SB

B6-009-SB

B6-010-SB

Parcel B6


Parcel B22


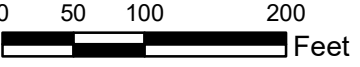
LEGEND

- ◆ Phase II Soil Boring
- ▭ Parcel Boundary
- ▭ Project Cobra Building LOD

Parcel B6-5 Grading Plan
Soil Boring Locations
 October 13, 2021

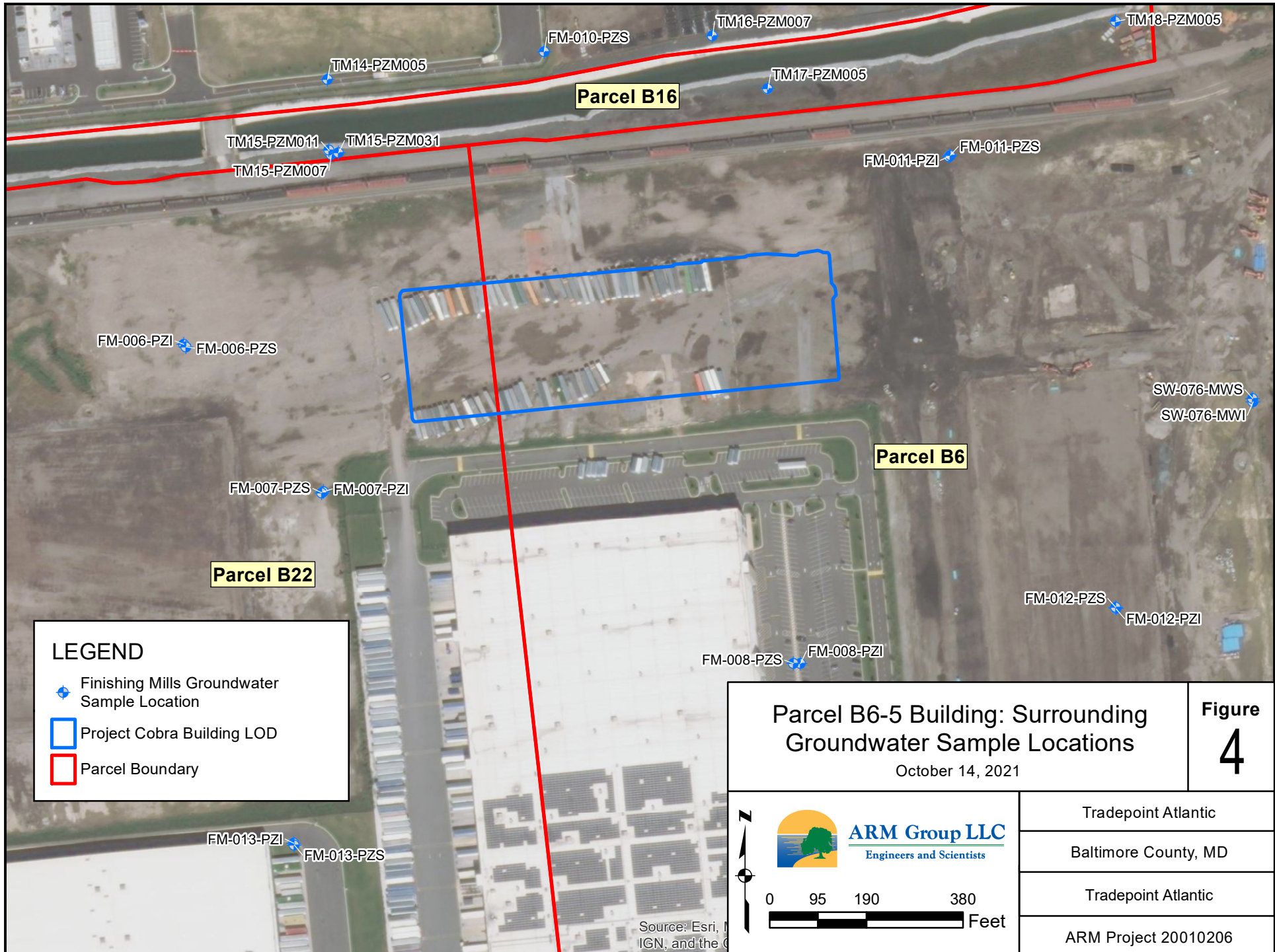
Figure
3


ARM Group LLC
 Engineers and Scientists







Source: Esri, IGN, and the C

Tradepoint Atlantic
Baltimore County, MD
Tradepoint Atlantic
ARM Project 20010206




LEGEND

-  Finishing Mills Groundwater Sample Location
-  Project Cobra Building LOD
-  Parcel Boundary

Parcel B6-5 Building: Surrounding Groundwater Sample Locations
 October 14, 2021

Figure 4



ARM Group LLC
 Engineers and Scientists

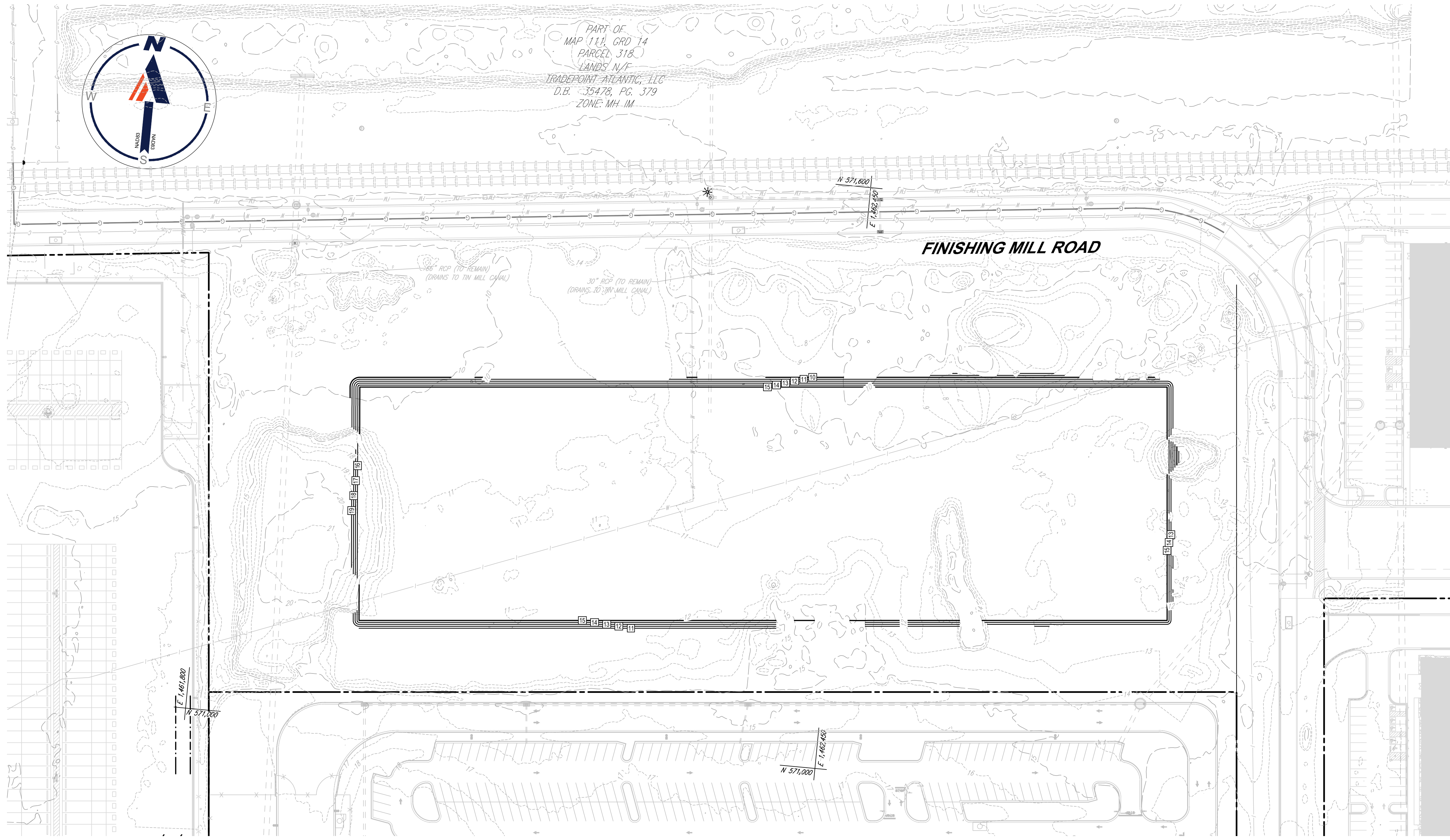



0 95 190 380 Feet

Tradepoint Atlantic
Baltimore County, MD
Tradepoint Atlantic
ARM Project 20010206

Source: Esri, IGN, and the C

APPENDIX A



PART OF
MAP 111, GRID 14
PARCEL 318
LANDS N/T
TRADEPOINT ATLANTIC, LLC
D.B. 35478, PG. 379
ZONE: MH-1M

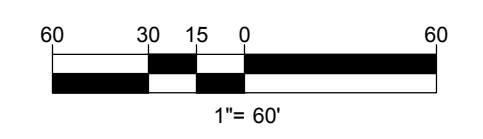
FINISHING MILL ROAD

30' RCP (TO REMAIN)
(DRAINS TO TIN MILL CREEK)

30' RCP (TO REMAIN)
(DRAINS TO TIN MILL CREEK)

E 571,000

N 571,000



ELEVATIONS BASED ON NAVD 88.
COORDINATES AND MERIDIAN ARE BASED ON
THE MARYLAND COORDINATE SYSTEM (MCS)
PER MONUMENTS BCO #1433 AND GIS 2
TRACKING # DRC-2020-000XX; DRC# XXXXX; DIST 15C7

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY

811
Know what's below.
Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: MD16206633
DRAWN BY: JHS
CHECKED BY: MUG
DATE: 7/28/21
CAD ID: MD16206633-GDP-0

PROJECT:

PROJECT COBRA

FOR

TRADEPOINT ATLANTIC

FINISHING MILL ROAD
BALTIMORE, MD 21219
TM 111, GRID 14, PARCEL 318
ELECTION DISTRICT 15
COUNCILMANIC DISTRICT 7
BALTIMORE COUNTY

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M.J. GESELL

PROFESSIONAL ENGINEER
MARYLAND LICENSE # 44097

PROFESSIONAL CERTIFICATION
I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE NO 44097, EXPIRATION DATE: 6/30/23

SHEET TITLE:

ROUGH GRADING PLAN

SHEET NUMBER:

1

MDE # 21-SF-