ARM Group LLC
Engineers and Scientists

December 16, 2022

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

Re: Limited Scope Project Plan
Cold Mill Complex Retrofit (United Safety Technology) Internal Building Work
Tradepoint Atlantic
Sparrows Point, MD 21219

Dear Ms. Brown:

On behalf of Tradepoint Atlantic (TPA), ARM Group LLC (ARM) is pleased to submit the following Limited Scope Project Plan (LSPP) to the Maryland Department of the Environment (MDE). The project covered by this LSPP consists of the sub-slab utility installation work, for use by United Safety Technology, Inc (UST), a tenant who is retrofitting the Cold Mill Complex on Parcel A4. This construction is a continuation of the UST retrofit of the Cold Mill Complex which was initiated under the *Supplemental Construction Plan Letter Proposed Slab Demolition Area A: Parcel A4* (Letter Plan) submitted to the Agencies on April 25, 2022. Demolition has commenced in accordance with the Letter Plan. There is both a completed off Sub-Parcel phase of this utility installation as well as an on-parcel phase, which is included in this LSPP. This LSPP addresses proposed construction within the building including repair and upgrade of the building slab.

The work included in this LSPP is not intended to be the basis for the issuance of a No Further Action Letter (NFA) or a Certificate of Completion (COC). While a comprehensive Response and Development Work Plan (RADWP) is not warranted, the scope of work for the Cold Mill Complex retrofit will remain subject to many of the standard requirements for intrusive construction work outlined in RADWPs previously approved by the agencies and summarized in the Response and Development Completion Report for Parcel A4 (Revision 1 dated September 13, 2021). The project-specific requirements for the proposed construction tasks are outlined herein.

Project Summary – This phase of the Cold Mill Complex retrofit work consists of the installation of utilities underneath the floor slab of the Cold Mill Complex of Sub-Parcel A4-1. The limit of disturbance (LOD) of the proposed work is shown on **Figure 1**. The entire floor slab within the LOD will be removed to facilitate utility installation. Groundwater is at approximately 5 feet below

ground surface (bgs). Existing soils and groundwater below the floor slab may be encountered during the proposed work. Utilities will be installed to a maximum depth of 4 feet bgs. Additional construction details are provided in the development drawing set, which is included as **Attachment 1**.

Summary of Current Soil and Groundwater Conditions – The relevant soil boring locations from preceding Parcel A4 Phase II Investigation (Revision 3 dated December 20, 2019) located proximate to the LOD are shown on **Figure 1**. **Figure S1** summarizes relevant soil sample results that exceeded the Project Action Limits (PALs). PAL exceedances in the soil samples relevant for the proposed development project were limited to one inorganic (arsenic), two semi-volatile organic compounds (SVOCs) (benzo[a]pyrene and dibenz[a,h]anthracene), and Oil & Grease.

The shallow groundwater locations from preceding Parcel A4 Phase II Investigation (Revision 3 dated December 20, 2019) which are located proximate to the LOD are shown on **Figure GW1**. **Figure GW1** also presents a summary of the shallow groundwater results that exceeded the PALs. Shallow groundwater PAL exceedances in the vicinity of the proposed development project consisted of two inorganics (iron and manganese), one SVOC (1-dioxane), gasoline range organics (GRO), and Oil & Grease.

Work Requirements and Contingencies – An Environmental Professional (EP) will provide oversight through all phases of the Cold Mill Complex retrofit. The roles and responsibilities of the EP are outlined in the attached scope summary document (**Attachment 2**). **Attachment 2** provides screening requirements, documentation, and contingency measures to be implemented in the event the project encounters conditions indicative of contamination that may not have already been characterized.

Site work is currently ongoing in accordance with the demolition Letter Plan. A pre-construction meeting was held at that time to address proper operating procedures for working onsite and monitoring excavations in potentially contaminated material.

All phases of the Cold Mill Complex retrofit project are being completed under a contractor Health and Safety Plan (HASP), which shall be reviewed during each phase of work. The contractor HASP will be required to meet site-specific Personal Protective Equipment (PPE) requirements.

Modified Level D PPE has been adopted for use by Construction Workers conducting ground intrusive work throughout the entire duration of the Cold Mill Complex retrofit to mitigate potential risk. The use of modified Level D PPE was implemented immediately (Day 1) and will continue throughout the duration of intrusive work. The modified Level D PPE requirements for this project, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE Standard Operational Procedure (SOP) provided as **Attachment 3**. Typical utility cross sections are provided as **Attachment 4**.

The EP will ensure that intrusive work throughout all phases of the Cold Mill Complex retrofit are monitored. Evidence of NAPL will be reported to MDE within 24 hours. If evidence of NAPL is encountered, preventive measures will be implemented to prevent the discharge to, or migration of NAPL. The standard Utility Excavation NAPL Contingency Plan is provided as **Attachment 5**. The contingency plan provides protocols to be followed if NAPL is encountered during construction. Preventative measures to inhibit the spread of petroleum product will be conducted in accordance with this plan.

Materials Management and Surface Restoration – Construction activities are limited to Parcel A4 and may produce waste soil (excavated material) which has not yet been approved for reuse as fill.

If there are no visual indications of potential contamination and no elevated photoionization detector (PID) detections above 10 parts per million (ppm), material removed from excavations can be re-used as backfill on-site. Materials that are determined by the EP to warrant segregation based on elevated PID readings above 10 ppm or other field observations of potential contamination will be stockpiled separately. Potentially impacted materials should be covered with a polyethylene tarp to minimize potential exposures and erosion. Material that is generated from excavations that is not proposed (or suitable) for reuse within the subject parcel will be subject to review and approval by the MDE prior to final disposal. A summary of sampling results for the stockpile(s) including a description of the material, estimated volume, and sampling parameters will be provided to the MDE to determine the suitability of the material for reuse. Stockpiled soil may be considered for use as fill at other areas of the TPA property depending on the analytical results.

Subsurface materials may also be taken to an appropriate non-hazardous landfill (which may include Greys Landfill if approved by TPA) for proper disposal if the concentrations of the sampled materials indicate that the materials are not hazardous. Composite samples will be collected from stockpiles intended for disposal at Greys Landfill, with analysis for toxicity characteristic leaching procedure (TCLP) volatile organic compounds (VOCs), TCLP semi-volatile organic compounds (SVOCs), TCLP Metals, and total polychlorinated biphenyls (PCBs).

Material determined to be hazardous waste shall be shipped off-site in accordance with applicable regulations to an appropriate and permitted Resource Conservation and Recovery Act (RCRA) disposal facility.

No existing surface engineering controls (i.e., capping remedies) will be impacted by this scope of work. As stated in the Response and Development Completion Report for Parcel A4 (Revision 1 dated September 13, 2021), no capping remedy was required for Parcel A4. Any voids underneath the floor slab will be required to be backfilled with field screened native materials or bedding and fill materials approved by the MDE. Potential fill materials that are proposed for use (except for field-screened and inspected excavated trench spoils) must be approved by the MDE prior to use.

The EP will be responsible for monitoring organic vapor concentrations in the worker breathing zone within the demolished floor slab area, and groundwater that is encountered within the trenches will be managed in accordance with the procedures outlined in **Attachment 2**.

Shallow groundwater may be encountered below the floor slab during construction. If groundwater is encountered during work and depending on the location and volume of accumulated water, the water will either be transported to the Tin Mill Canal (TMC) or directly to the Humphrey Creek Wastewater Treatment Plant (HCWWTP) pursuant to the HCWWTP Constituent Threshold Limits for Dewatering Activities related to Remediation Development and Capping letter dated March 3, 2021. Water in the TMC feeds into the HCWWTP where it is treated prior to release into Bear Creek. Water that is sent to the TMC will be pumped through a filter bag or equivalent to remove suspended solids prior to discharge. The threshold levels are as follows:

Analysis	**Threshold Levels**
Total metals by USEPA Method 6020A	1,000 ppm
PCBs by USEPA Method 8082	>Non-Detect
SVOCs by USEPA Method 8270C	1 ppm
VOCs by USEPA Method 8260B	1 ppm
Oil & Grease by USEPA Method 1664	200 ppm
TPH-DRO by USEPA Method 8015B	200 ppm
TPH-GRO by USEPA Method 8015B	200 ppm

The most recent sample concentrations for each groundwater location shown on **Figure GW1** were compared to the above thresholds. None of the concentrations exceeded the thresholds.

Schedule & Reporting – At this time, TPA is requesting approval to continue with this phase of the Cold Mill Complex retrofit work. This phase of the Cold Mill Complex retrofit is expected to be completed by the First Quarter 2023. A Completion Letter Report will be submitted to the MDE upon finishing the Cold Mill Complex retrofit.

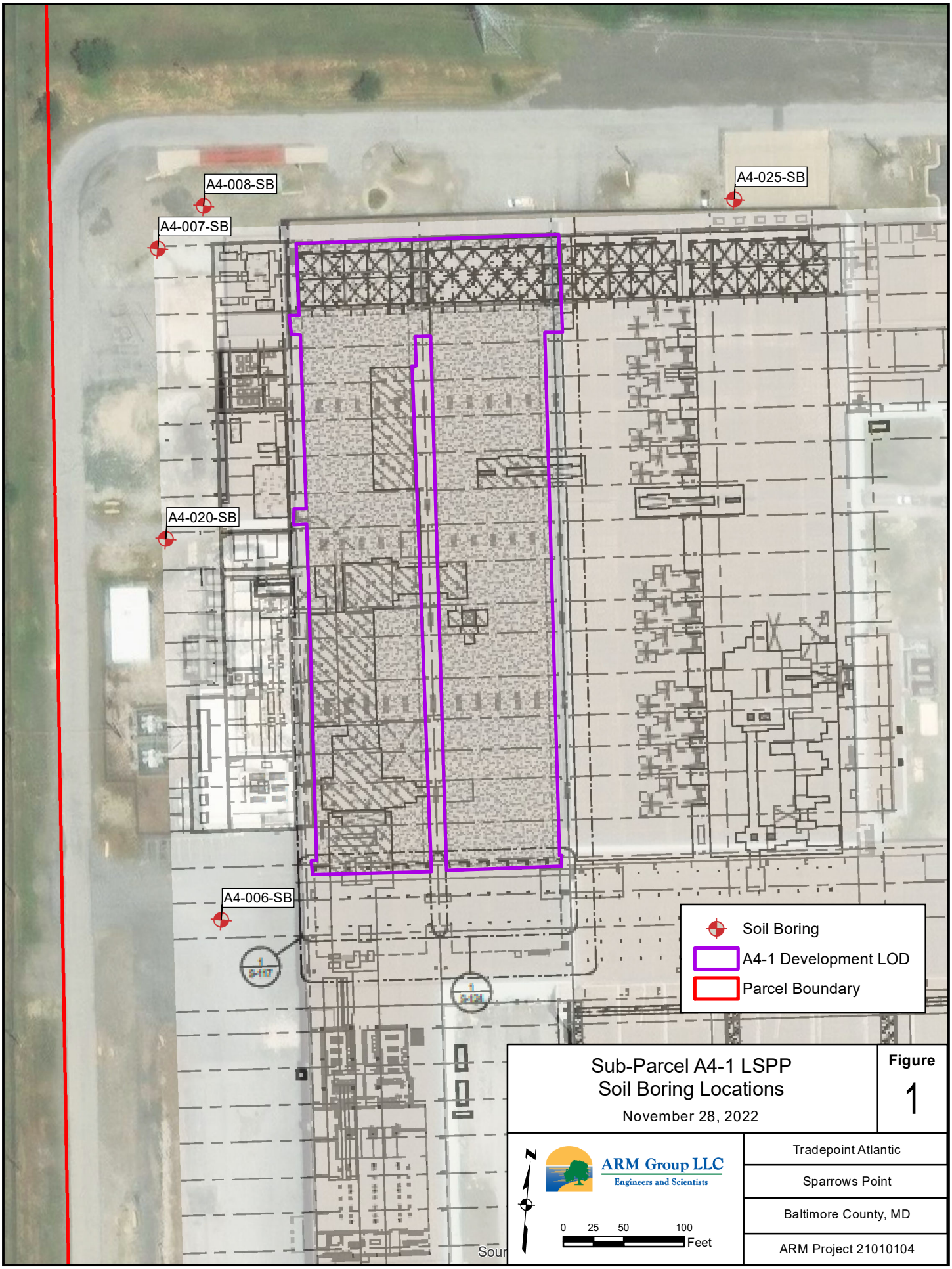
If you have questions regarding any information covered in this document, please feel free to contact Peter Haid at Tradepoint Atlantic: 443-649-5055.

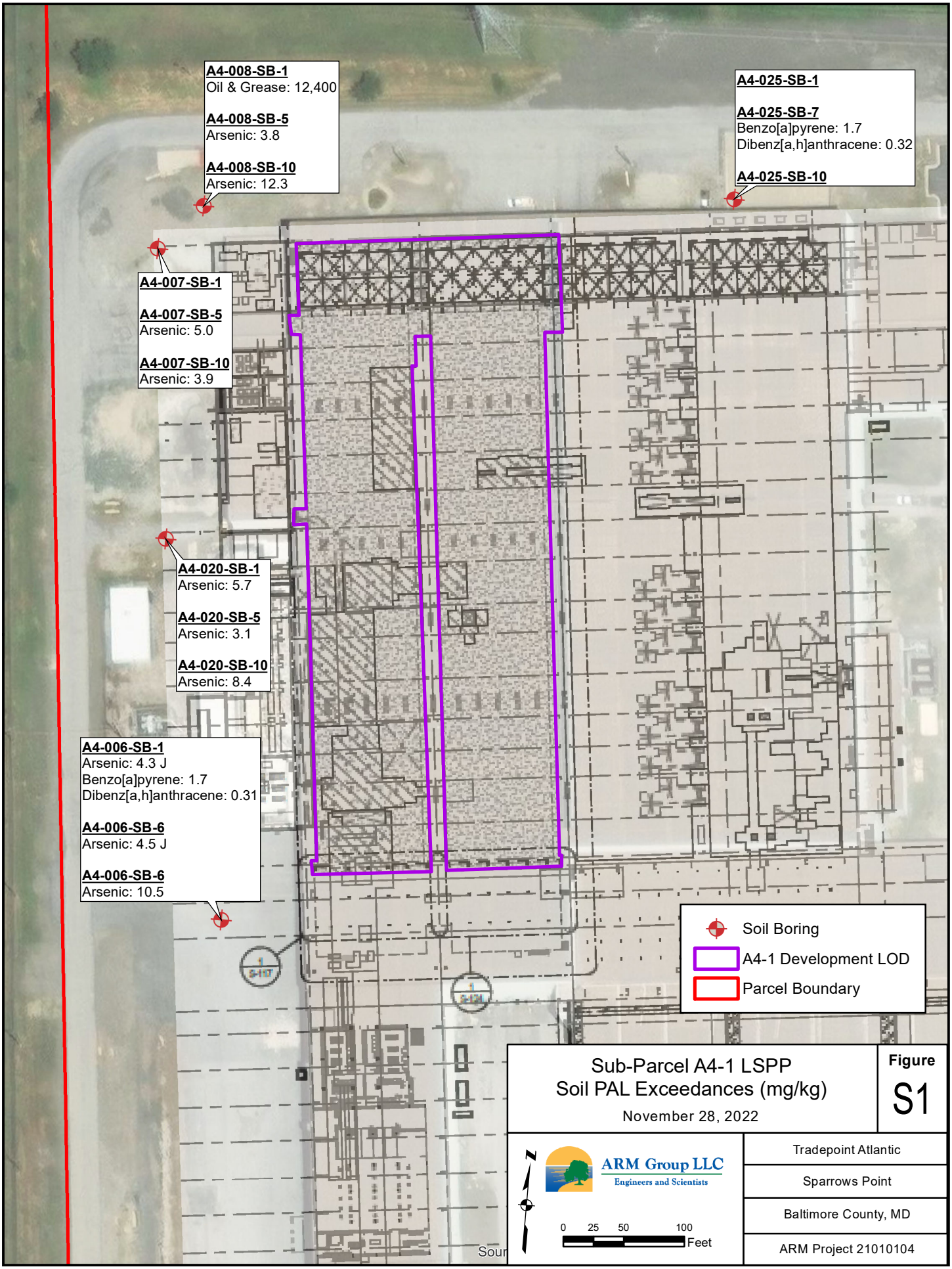
Respectfully Submitted,
ARM Group LLC

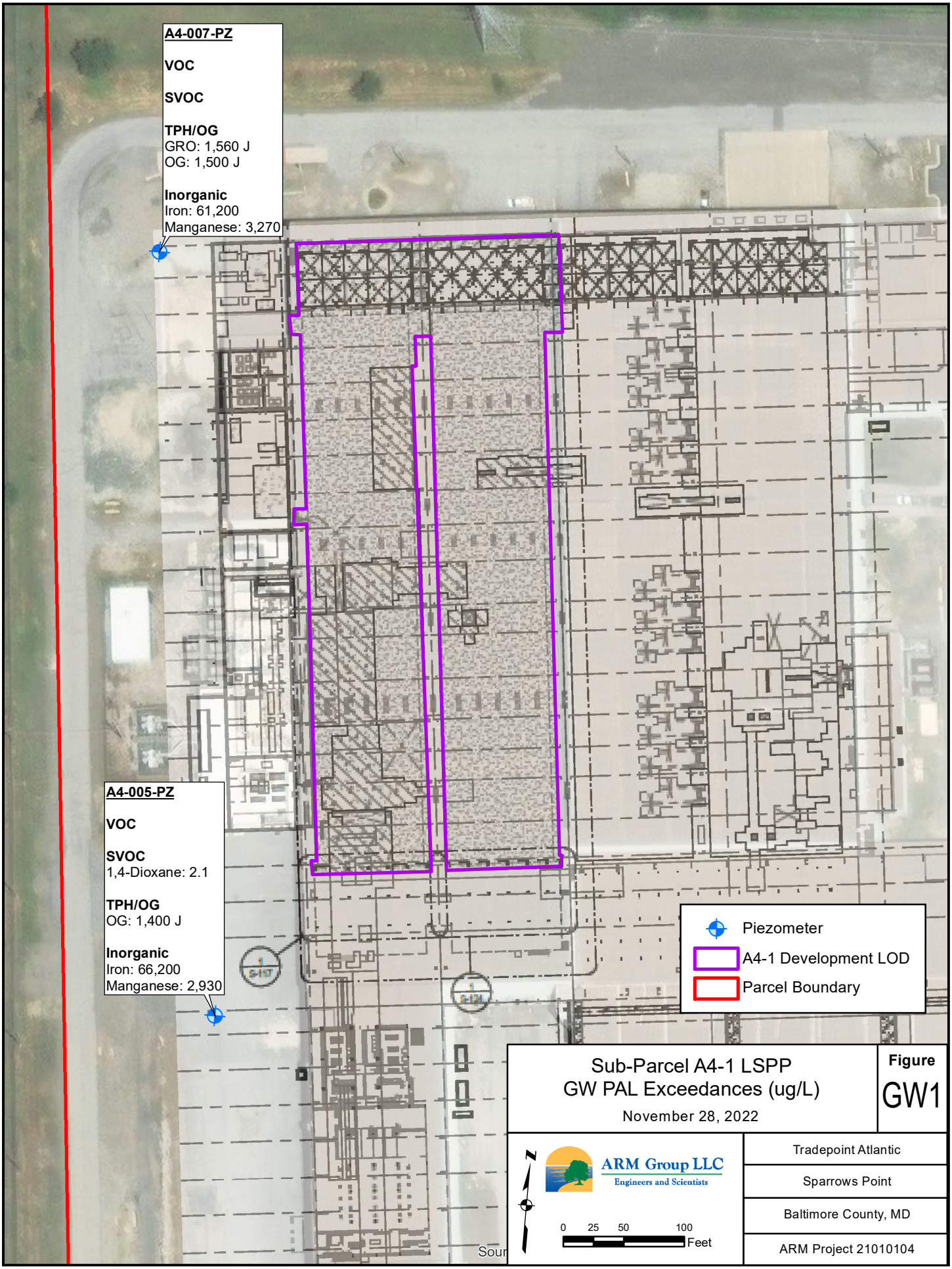
Joshua M. Barna, G.I.T.
Project Geologist

Kaye Guille, P.E., PMP
Senior Engineer

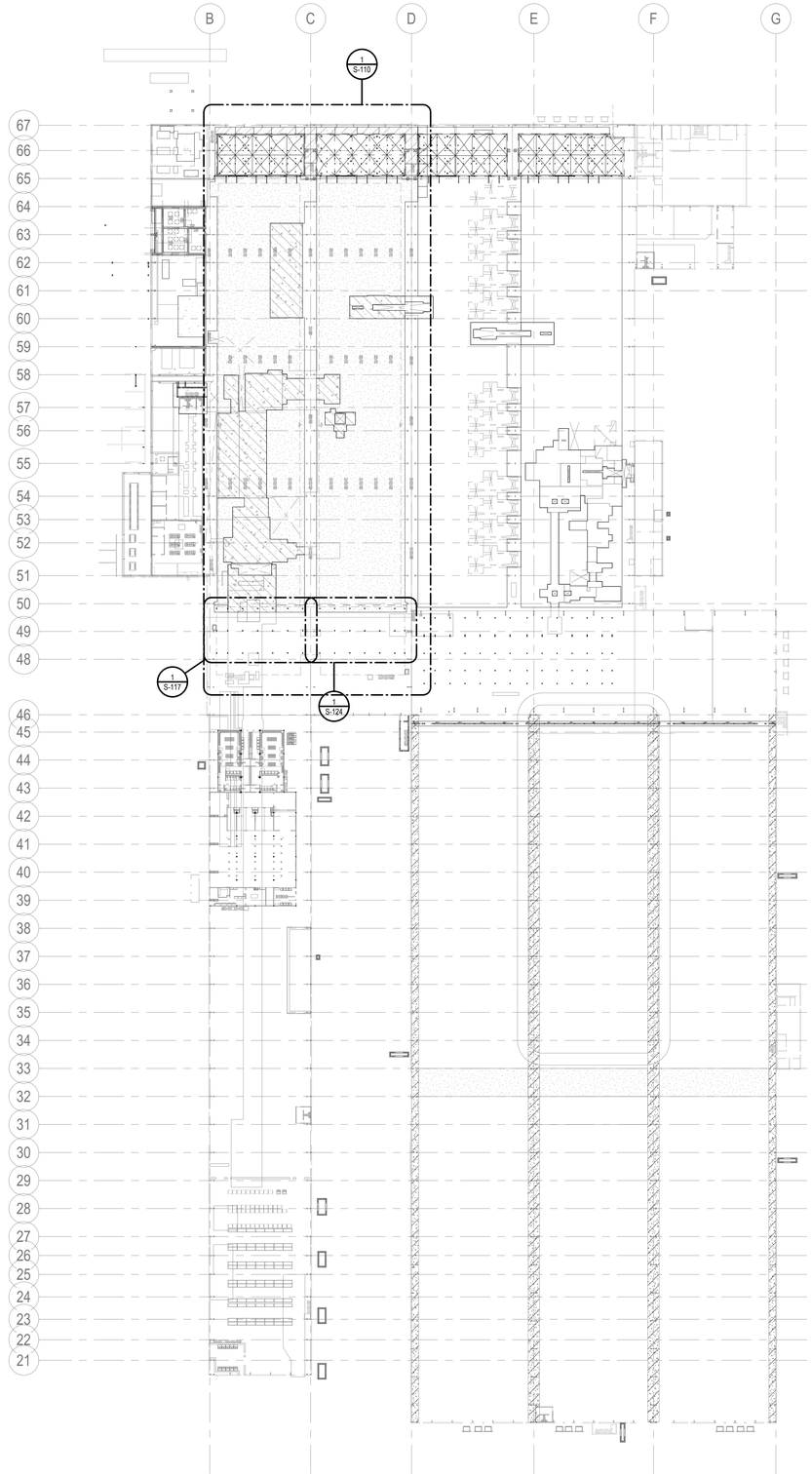
FIGURES


A4-008-SB
A4-007-SB
A4-025-SB
A4-020-SB
A4-006-SB
Soil Boring
A4-1 Development LOD
Parcel Boundary
Sub-Parcel A4-1 LSPP
Soil Boring Locations
November 28, 2022
Figure
1
ARM Group LLC
Engineers and Scientists
0 25 50 100
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010104

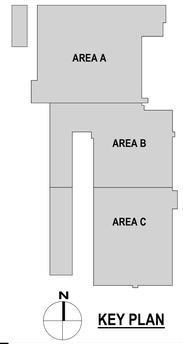

A4-008-SB-1
Oil & Grease: 12,400
A4-008-SB-5
Arsenic: 3.8
A4-008-SB-10
Arsenic: 12.3
A4-025-SB-1
A4-025-SB-7
Benzo[a]pyrene: 1.7
Dibenz[a,h]anthracene: 0.32
A4-025-SB-10
A4-007-SB-1
A4-007-SB-5
Arsenic: 5.0
A4-007-SB-10
Arsenic: 3.9
A4-020-SB-1
Arsenic: 5.7
A4-020-SB-5
Arsenic: 3.1
A4-020-SB-10
Arsenic: 8.4
A4-006-SB-1
Arsenic: 4.3 J
Benzo[a]pyrene: 1.7
Dibenz[a,h]anthracene: 0.31
A4-006-SB-6
Arsenic: 4.5 J
A4-006-SB-6
Arsenic: 10.5
Soil Boring
A4-1 Development LOD
Parcel Boundary
Sub-Parcel A4-1 LSPP
Soil PAL Exceedances (mg/kg)
November 28, 2022
Figure
S1
ARM Group LLC
Engineers and Scientists
0 25 50 100
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010104


A4-007-PZ
VOC
SVOC
TPH/OG
GRO: 1,560 J
OG: 1,500 J
Inorganic
Iron: 61,200
Manganese: 3,270
A4-005-PZ
VOC
SVOC
1,4-Dioxane: 2.1
TPH/OG
OG: 1,400 J
Inorganic
Iron: 66,200
Manganese: 2,930
Piezometer
A4-1 Development LOD
Parcel Boundary
Sub-Parcel A4-1 LSPP
GW PAL Exceedances (ug/L)
November 28, 2022
Figure
GW1
ARM Group LLC
Engineers and Scientists
0 25 50 100
Feet
Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010104

ATTACHMENT 1



1 GENERAL ARRANGEMENT - FOUNDATION PLAN
1/64" = 1'-0"
_S-124 / S-100



KEY PLAN

03-15-2024
PAUL A. CHILCOAT
STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 29025
5/14/22

HASKELL ARCHITECTS and ENGINEERS, P.A.
MARYLAND- Architecture # 16137

The Haskell Company
111 Riverside Avenue
Jacksonville, Florida 32202
Phone # (904) 791-4500

HASKELL

Document described this chapter shall contain the following certification: "Professional certification. I 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. 39025, Expiration Date: 06/30/2023"

RELEASED ON THE DATE OF: 09/16/2022

UNITED SAFETY TECHNOLOGIES, INC

PROJECT JUPITER - EXISTING BUILDING RENOVATION

BETHLEHEM BLVD, CONDO UNIT 4
BALTIMORE, MD 21219

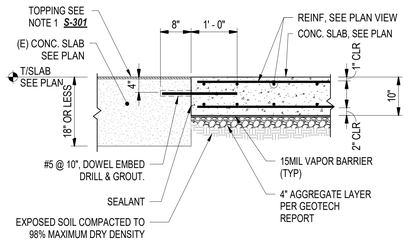
No	DESCRIPTION	DATE
3	INTERIOR SLAB AND UNDERGROUND UTILITY SET	09/16/2022
E	90% DESIGN REVIEW SET	08/19/2022
C	DESIGN DEVELOPMENT SET	07/01/2022
B	DESIGN REVIEW SET	04/15/2022

DRAWN	CHECKED
THT	PAC

AE JOB NUMBER
3601202

GENERAL ARRANGEMENT - FOUNDATION PLAN

S-100
SHEET NUMBER



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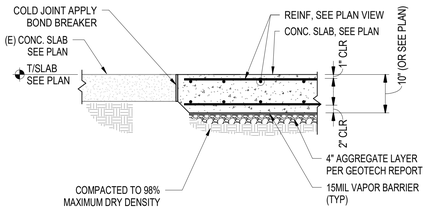

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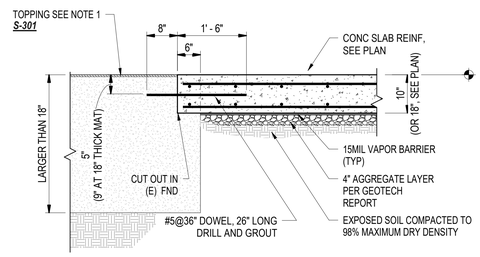
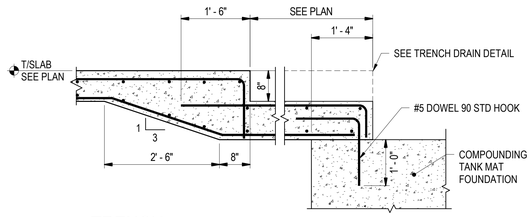
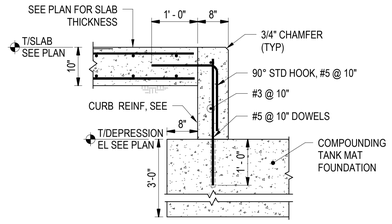
3/4" = 1'-0"



3 SECTION
3/4" = 1'-0"



4 TRENCH
3/4" = 1'-0"



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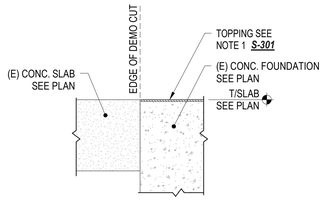

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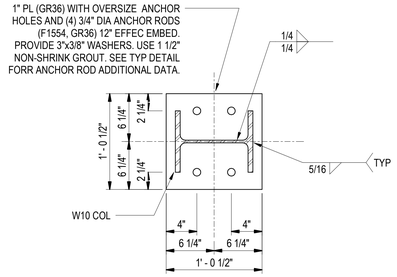
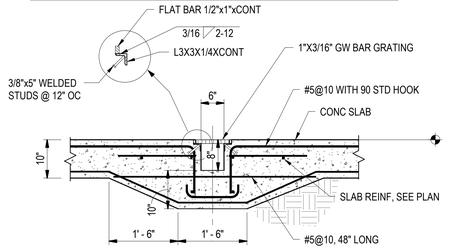
3/4" = 1'-0"

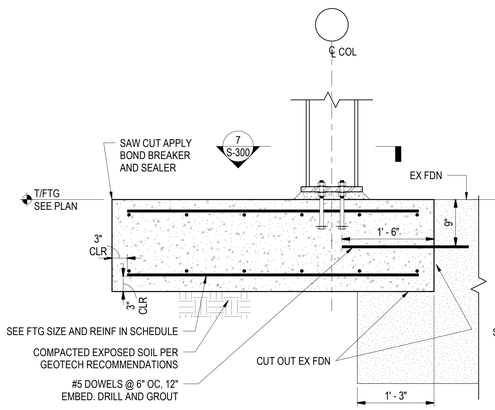


7 DETAIL
1 1/2" = 1'-0"
S-300 / S-300

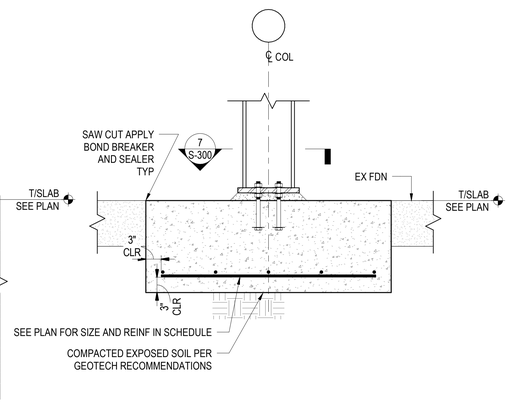
NOTES:
A. SEE ARCH AND MECH DWGS FOR TRENCH DRAIN LOCATIONS AND SLOPES.
B. ALL STEEL @ TRENCH TO BE GALVANIZED.



8 CIP TRENCH DETAIL
3/4" = 1'-0"
S-300



9 SECTION
1" = 1'-0"
S-117 / S-300



10 SECTION
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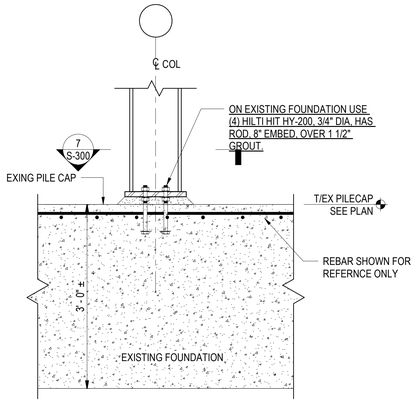
S-117 / S-300



11 SECTION
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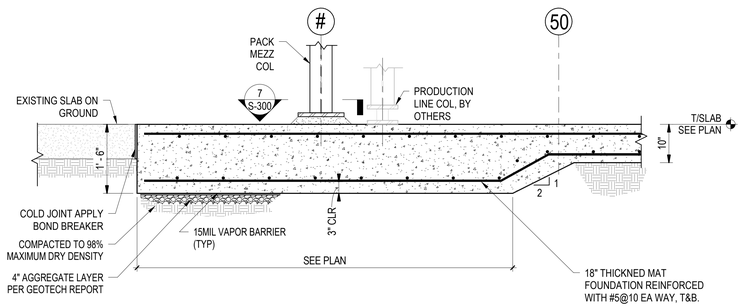
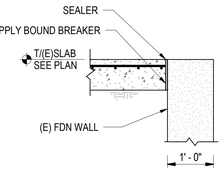
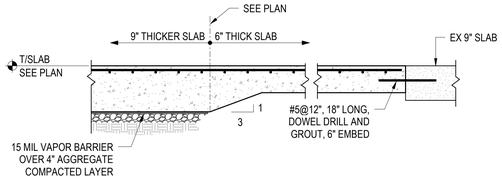
S-117 / S-300



12 MEZZ SLAB THICKENED MAT FOUNDATION DETAIL
3/4" = 1'-0"
S-116 / S-300



13 SECTION
3/4" = 1'-0"
S-118 / S-300



14 SECTION
3/4" = 1'-0"
S-118 / S-300

HASKELL ARCHITECTS and ENGINEERS, P.A.
MARYLAND- Architecture # 16137
The Haskell Company
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Jacksonville, Florida 32202
Phone # (904) 791-4500
HASKELL

03-15-2024
STATE OF MARYLAND
PAUL A. CHLER
No. 16137
PROFESSIONAL ENGINEER
4/14/22

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RELEASED ON THE DATE OF: 09/16/2022

UNITED SAFETY TECHNOLOGIES, INC

PROJECT JUPITER - EXISTING BUILDING RENOVATION

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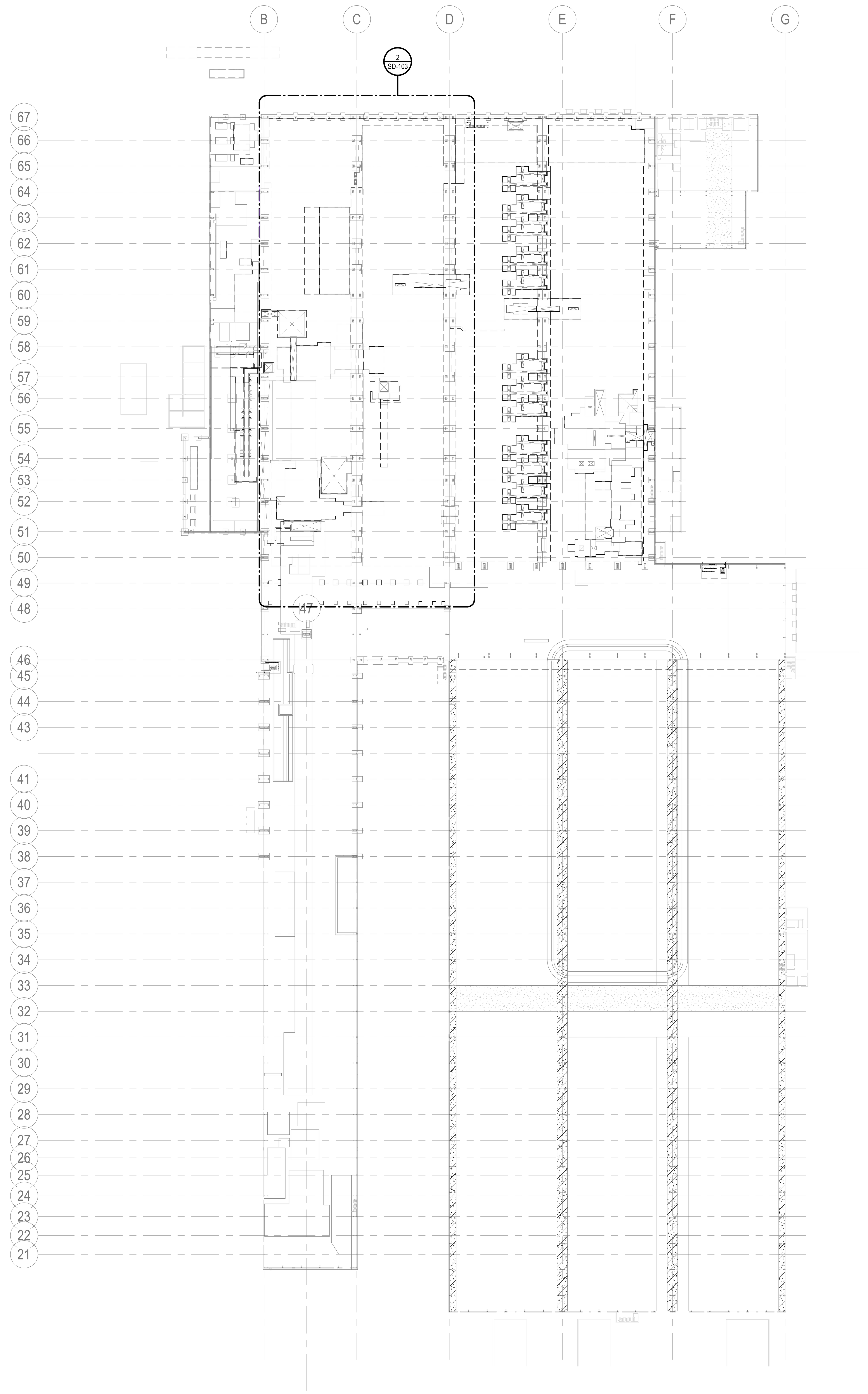
C	DESIGN DEVELOPMENT SET	07/01/2022

DRAWN	CHECKED
R.W.	PAC

AE JOB NUMBER
3601202

CONC DETAILS

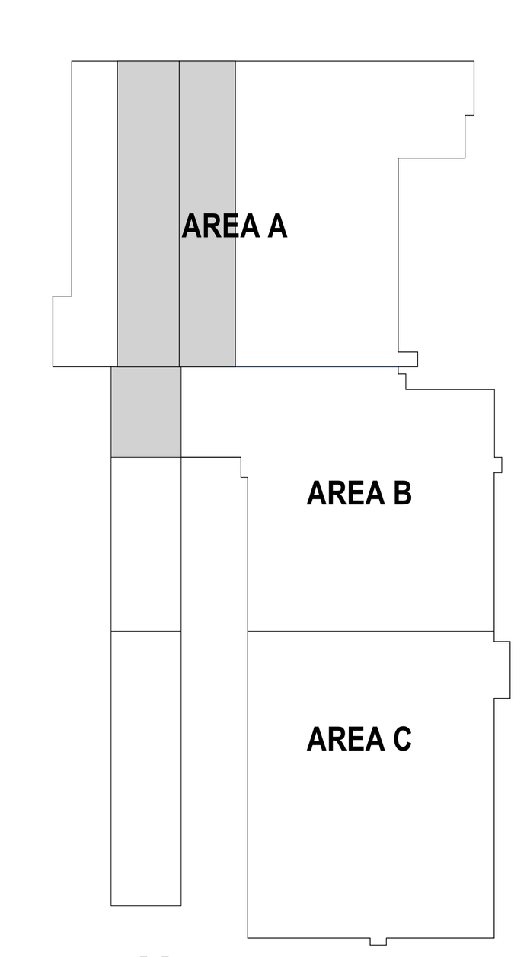
S-300
SHEET NUMBER



1 DEMO - GENERAL ARRANGEMENT - FOUNDATION PLAN

1/64" = 1'-0"

_S-124 / SD-101



KEY PLAN

HASKELL ARCHITECTS and ENGINEERS , P.A.

MARYLAND - Architecture # 16137

HASKELL

The Haskell Company
111 Riverside Avenue
Jacksonville, Florida 32202
Phone # (904) 791-4500

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RELEASED ON THE DATE OF : 09/16/2022

UNITED SAFETY TECHNOLOGIES, INC

PROJECT JUPITER - EXISTING BUILDING RENOVATION RENOVATION

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BALTIMORE, MD 21219

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E	90% DESIGN REVIEW SET	08/19/2022
C	DESIGN DEVELOPMENT SET	07/01/2022
B	DESIGN REVIEW SET	04/15/2022

DRAWN	CHECKED
THT	PAC

AE JOB NUMBER 3601202

DEMO - GENERAL ARRANGEMENT - FOUNDATION PLAN

SD-101

SHEET NUMBER

ATTACHMENT 2

Tradepoint Atlantic Facility

Hillis-Carnes Engineering Associates, Inc.
Environmental Professional Roles

Hillis-Carnes Engineering Associates, Inc. (HCEA) is acting as the Environmental Professional (EP) for development of the Tradepoint Atlantic (TPA) facility. The EP's roles are as follows.

A. Monitoring of Excavated Soils

HCEA will monitor the environmental condition of soil as it is being excavated, including, but not limited to, the following example activities, as applicable: a) site grading and site preparation; b) excavation of underground utility trenches for new utilities; and c) excavation for installation of inlet/manholes. The monitoring includes the following:

1) Soils will be monitored with a calibrated photoionization detector (PID) for evidence of volatile organic compounds (VOCs). Evidence of VOCs is sustained PID readings greater than 10 metered units on the PID;
2) Soils will be inspected for visual indication of environmental impact (i.e., staining apparently due to impact);
3) Soils will be inspected for olfactory indication of environment impact (i.e., odors apparently due to impact);
4) Soils will be inspected for the presence of waste materials; and/or
5) Soils will be inspected for evidence of non-aqueous phase liquids (NAPL, which could potentially be drained or otherwise extracted from the soil).

If soils meeting any of the criteria above are encountered, HCEA will coordinate with the General Contractor and their Subcontractor(s) to segregate those materials by placing the materials on plastic sheeting (6-mil minimum) and covering the material with plastic sheeting at the end of each work day. Each stockpile of contaminated soil will not exceed 500 cubic yards. HCEA will coordinate with the Maryland Department of the Environment's (MDE's) Voluntary Cleanup Program (VCP) Project Manager for further evaluation of this material (e.g., for potential re-use on-parcel, for off-parcel disposal, etc.)

If NAPL is encountered in the utility trench, procedures described in the NAPL Contingency Plan attached to this document will be followed. Refer to the NAPL Contingency Plan for additional details. The NAPL Contingency Plan is included in the Response and Development Work Plan (RADWP) or the Limited Scope Project Plan, as applicable.

If the contractor encounters soils with unusual or strong odors, the contractor should inform the EP in order to evaluate the conditions of the soil.

B. Protocol for Impacted Soils

If soils meeting any of the criteria presented in the Section A are encountered, HCEA will coordinate with the appropriate parties to segregate those materials.

HCEA will then coordinate with TPA and the MDE's VCP Project Manager for further evaluation of this material for: a) potential placement on the parcel on which the project is occurring; b) potential placement on another parcel within the TPA facility; c) potential disposal at Grey's Landfill; or d) potential disposal at an off-terminal location.

Evaluation of the material could include the laboratory analysis of the material for the following parameters: Total Petroleum Hydrocarbons-Diesel Range Organics (TPH-DRO); TPH-Gasoline Range Organics (TPH-GRO); Oil & Grease; Polychlorinated Biphenyls (PCBs); and Priority Pollutant Metals. The specifics of such an evaluation will be provided by HCEA to TPA and the MDE's VCP via a written sampling and analysis plan prior to any work conducted for the evaluation.

C. Protocol for Non-Impacted Soils

Excavated materials that do not meet the criteria presented in Section A will be stockpiled. No excavated materials may be replaced in a trench or excavation as backfill unless monitored/inspected and approved by the MDE. Similarly, separate sampling and approval by the MDE will be required to allow excavated materials to be placed within other areas of the TPA facility outside of the project boundary. In such instances, a sampling Work Plan that includes a description of the material, an estimated volume, and proposed sampling parameters will need to be submitted to the MDE for approval. The resulting analytical data will also be submitted to the MDE to determine the suitability of the material for its specified use. HCEA will coordinate with appropriate parties to facilitate removal of excess materials from the project site and will document approximate quantities and placement locations within the TPA facility.

D. Air Monitoring

HCEA will be on-site conducting daily air monitoring for total dust. At a minimum, this will consist of monitoring for visible dust. When sustained visual dust is observed, HCEA will request that the General Contractor implement methods for supplementing standard dust suppression methods to address dust levels. Such methods could include, but will not necessarily be limited to, an increase in the frequency of water trucks spraying the area, covering of soil piles with plastic sheeting, decrease drop heights of soil from excavation equipment, etc. If visible dust is sustained after additional methods are implemented to reduce dust, real-time dust monitoring equipment may be used.

If real-time dust monitoring is implemented, HCEA's on-site personnel will utilize a monitor to provide mass dust readings throughout the work day within the work area, or immediately downwind of the work area, depending on site conditions and activity. In addition to the work area monitoring, monitors will be stationed daily at two of the four perimeters of the parcel. The perimeters will correspond to those that are upwind and downwind of the work area, based on the predicted prevailing wind direction for that day. The prevailing wind direction will be assessed during the day and the positioning of the upwind and downwind monitors will be adjusted if there is a substantial shift in the prevailing wind direction.

When dust readings are sustained above the total dust action limit of 3.0 milligrams per cubic meter of air (mg/m^3), HCEA will coordinate with the General Contractor to implement additional methods for supplementing the standard dust suppression methods to address the dust levels

E. Monitoring of Dewatering Activity

If dewatering becomes necessary during the Development Phase of the project, the water must be conveyed to the Humphrey Creek Waste Water Treatment Plant (HCWWTP). HCEA will document dewatering activity. During dewatering activities, if gross contamination is observed, the EP will contact the HCWWTP Operator to confirm if laboratory analysis is required, as well as potential analytes. If laboratory analysis of water produced by the dewatering becomes necessary, HCEA will collect water samples for transport to an analytical laboratory. All dewatering activities being conveyed to the HCWWTP via drain lines or direct purge into the Tin Mill Canal will require the use of a filter bag prior to discharge.

F. Monitoring of Worker Breathing Zone

In the event of unexpected/non-standard conditions that appear to warrant monitoring for organic vapor concentrations in the breathing zone of workers in the excavation trench, HCEA will notify TPA and monitoring will be conducted as described in this section. Such conditions include, but are not necessarily limited to, the following: encountering NAPL; unexpected/non-standard odors detected by the EP; and unexpected/non-standard odors or other conditions reported to the EP by the General Contractor or their Subcontractor(s). The monitoring will include attaching tubing to the sample port of the PID and the lowering of the tubing into the excavation trench when an individual(s) will be/is(are) physically enter(ing) the trench and where the unexpected/non-standard condition(s) has(have) been reported.

In the absence of NAPL, if the PID readings are greater than 5 metered units above background in the breathing zone for a 3-minute period, personnel will stop work, retreat from the work area, and allow time (at least 15 minutes) for vapors to dissipate. If monitoring indicates that concentrations still exceed 5 metered units after 15 minutes, HCEA will advise that work not continue without further evaluation.

G. Monitoring of PPE Standard Operation Procedures

An Interim Personal Protective Equipment (PPE) Standard Operational Procedure (SOP) has been prepared for the Sparrows Point Development. HCEA will monitor the implementation of the PPE SOP in accordance with the attachment. This monitoring will include, but is not limited to, at least one daily spot check for implementation of PPE SOP where there is ground intrusive work, with documentation of observations.

H. Documentation of Placement of Clean Fill

HCEA will monitor the placement of 24 inches of clean fill where clean fill is required. Generally, 18 inches of clean fill followed by 6 inches of topsoil will constitute the 24 inches of required clean fill. At approximate 10,000 square-foot intervals, HCEA will document the placement of clean fill, including photo-documentation of a measuring device against the clean fill profile. Photo-documentation will also be utilized to document that the placement of clean fill began immediately at the curbside. After placement, a hand auger will be utilized to evaluate the thickness of clean fill. Hand augering will occur once per every 10,000 square feet of clean fill placement.

I. Confined Spaces and Other Health and Safety Considerations

Any protocols or procedures related to Permitted Confined Spaces or Non-Permitted Confined Spaces, or any other aspects related to worker health and safety, will be the responsibility of the General Contractor.

J. MDE Notification

In the event of unexpected/non-standard conditions, HCEA will notify TPA so that TPA can notify the MDE's VCP Project Manager of such condition(s). Such conditions include, but are not necessarily limited to, the following: conditions warranting monitoring for organic vapor concentrations in the breathing zone of workers in the excavation trench; previously undiscovered contamination; and previously undiscovered storage tanks or other oil-related issues.

K. Close-Out Documentation

HCEA will provide close-out documentation for the project, in accordance with the spreadsheet that is attached. Note that HCEA will be requesting certain documents from the Contractor(s) for this task including, but not necessarily limited to, the following: a) disposal manifests for disposal of impacted soil outside of terminal property and/or Grey's Landfill; b) clean fill affidavits for any material that is imported onto the parcel; and c) truck tickets for any material that is imported onto the parcel.

L. Points of Contact:

TPA: Mr. Pete Haid: 732-841-7935; phaid@tradepointatlantic.com
Mr. Matthew Newman, P.E.: 443-791-9046; mnewman@tradepointatlantic.com
HCEA: Mr. Keith Progin: 443-250-9467; kprogin@hcea.com
MDE VCP: Ms. Barbara Brown: 410-537-3212; barbara.brown1@maryland.gov

Attachments: Sparrows Point Development Interim PPE Standard Operational Procedure (January 20, 2019)
Documentation Requirements for VCP Completion Reports (November 19, 2018)
Utility Excavation NAPL Contingency Plan – Revision 4 (June 19, 2017)

Documentation Requirements for VCP Completion Reports

Documentation	Responsible Party
General:	
Pre-construction meeting - memo with list of attendees and attached EP Roles Summary	EP
Daily Construction Observation Reports	EP
Soil Excavations:	
Soil Screening: PID Readings, Visual and Olfactory Observations (general statement if under 10 ppm; maximum readings if above 10 ppm)	EP
Impacted Soils: Stockpile Locations & Stabilization Measures	EP
Impacted Soils: Waste Characterization Sample Results or MDE inspection results	EP
Impacted Soils: Disposal Manifests (for off-parcel, off-Terminal or at Greys Landfill)	EP
Impacted Soils: Narrative for on-site placement and approximate quantity (in daily report)	EP
Non-Impacted Soils: Off-parcel disposal - Narrative of approximate quantity and location	EP
Non-Impacted Soils: On-parcel placement - Narrative of location for large quantities only (basins	EP
Dust monitoring, as applicable:	
Monitoring equipment (manufacturer and model)	EP
Monitoring locations and results (appended to daily report)	EP
Summary/Log of dust suppression actions (included in daily report)	EP
Construction:	
As-Built Drawings, including: - Minimum thickness of all layers: clean fill, subbase, asphalt layers, floor slabs - Grading and compaction specifications - Detention pond construction - Landscaping details	Contractor
Construction Photos (of milestones; note-worthy occurrences; minimum of monthly)	EP
Over excavation of utility trenches (if needed per NAPL Contingency Plan)	EP
VCP-Approved Clean Fill:	
Source Documentation (e.g., facility affidavit for clean material)	EP
Analytical Results (in absence of facility affidavit)	EP
Truck Tickets for Imported VCP-Approved Clean Fill	EP
Water Management:	
Grading Permit	Contractor
Groundwater Discharge Approvals and locations (as applicable)	EP
Collection/Reporting of samples of water removed from excavations	EP
Documentation of what is sent to WWTP or Outfalls	EP
Health and Safety protocols:	
HASP Acknowledgement (HASP cover page and management approval page)	Contractor

TPA = Tradepoint Atlantic
EP = Environmental Professional

ATTACHMENT 3

Sparrows Point Development - PPE Standard Operational Procedure, Revision 3

Planning, Tracking/Supervision, Enforcement, and Documentation

Planning

- Response and Development Work Plan (RDWP) for each individual redevelopment sub-parcel identifies and documents site conditions.
- RDWP is reviewed and approved by regulators.
- Contractor HASP to address site-specific conditions and PPE requirements:
    - Contractor H&S professional to sign-off on PPE requirements for site workers;
    - Job Safety Analysis (JSA) to be performed for ground intrusive work.
- Project Environmental Professional (EP) assigned to each construction project – monitors project during environmentally sensitive project phases and is available to construction contractor on an as needed basis. EP responsibilities include the following:
    - Dust monitoring
    - Routine ground intrusive breathing space air monitoring
    - Soil tracking
    - Water handling oversight
    - Ground intrusive work observation
    - Notification for unexpected conditions
- Pre-construction meeting identifies EP roles and responsibilities and reviews site conditions.
- Contractor to perform job-site HazCom. HazCom to be addressed in Contractor HASP and include:
    - PPE requirements,
    - Exposure time limits,
    - Identification of chemicals of concern and potential effects of over-exposure (adverse reactions),
    - Methods and routes of potential exposure.
- All personnel that will be performing ground intrusive work within impacted soils shall sign-off on HazCom.
- If, based on a thorough review of Site conditions, it is expected that construction workers will have the potential to encounter materials considered hazardous waste under RCRA or DOT regulations, HAZWOPER-trained personnel will be utilized.

Tracking/Supervision

- Contractor to record any day that there is ground intrusive work and confirm that proper PPE is being worn.
- EP will note ground intrusive work on daily work sheets and perform at least one spot check per day.
- EP will log on daily work sheets PPE compliance for all intrusive work areas at least once per day.

- EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically.

Work Zones Delineation

- Exclusion Zone – The Exclusion Zones will include the areas proposed for excavation or with active trenches, excavations, or ground intrusive work, at a minimum. Personnel working within the exclusion zone will be required to wear Modified Level D PPE as described in this SOP. EP to take example photos of Exclusion Zones/Contamination Reduction Zones periodically. The Exclusion Zones will be identified each work day.
- Contamination Reduction Zone – This work zone is located outside of the exclusion zone, but inside of the limits of development (LOD). The Contamination Reduction Zone will be located adjacent to the Exclusion Zone, and all personal decontamination including removal of all disposable PPE/removal of soil from boots will be completed in the Contamination Reduction Zone.

Documentation

- Contractor HASP and HazCom.
- Contractor ground intrusive tracking record.
- HASP and HazCom sign-in sheets.
- EP pre-con memos.
- EP daily work sheets.
- Records documenting intrusive work and proper PPE use to be provided in completion report.

Enforcement

- Non-compliance of PPE requirements will result in disciplinary action up to and including prohibition from working on Sparrows Point.

Unknown and/or Unexpected Conditions

If unknown and/or unexpected conditions are encountered during the project that the EP determines to have a reasonable potential to significantly impact construction worker health and safety, the following will be initiated:

1. Job stoppage,
2. TPA and MDE notification,
3. Re-assessment of conditions.

Work will not continue until EP has cleared the area. If hazardous waste is identified, a HAZWOPER contractor will be brought in to address. The approved contingency plan will be implemented, where appropriate.

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.

ATTACHMENT 4

GENERAL NOTES:

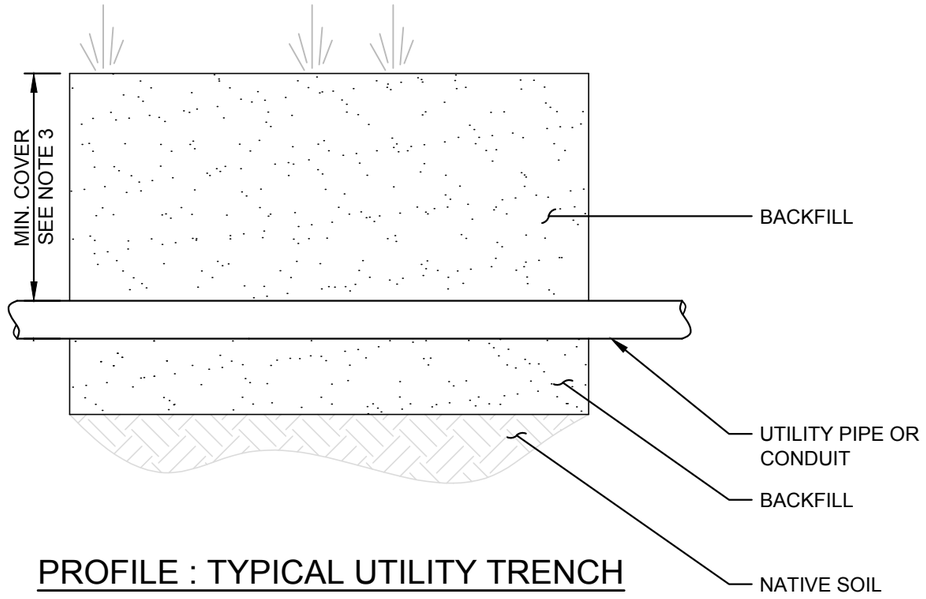
1. ALL PIPES OR CONDUIT SHALL BE LEAK-PROOF AND WATERTIGHT. ALL JOINTS SHALL BE SEALED OR GASKETED.

2. ALL PIPES SHALL BE PROPERLY PLACED AND BEDDED TO PREVENT MISALIGNMENT OR LEAKAGE. PIPE BEDDING SHALL BE INSTALLED IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL FOR ACCUMULATION OF WATER AND CONCENTRATED INFILTRATION.

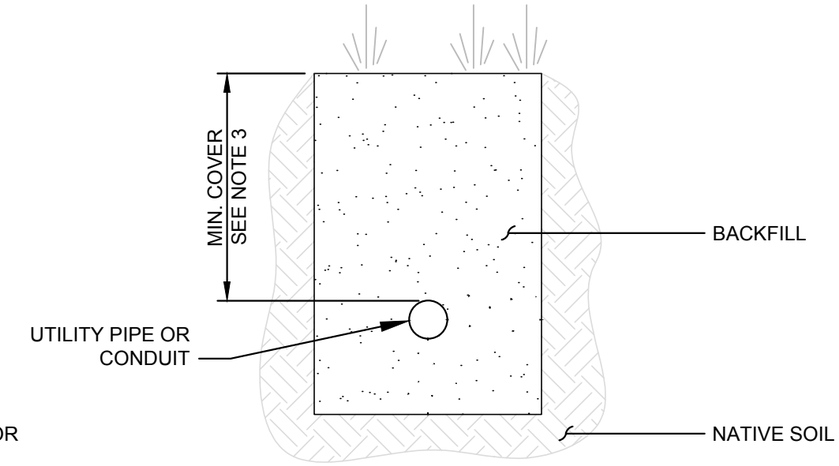
3. MINIMUM COVER ABOVE UTILITY SHALL BE BASED ON SPECIFIC UTILITY REQUIREMENTS.

4. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.

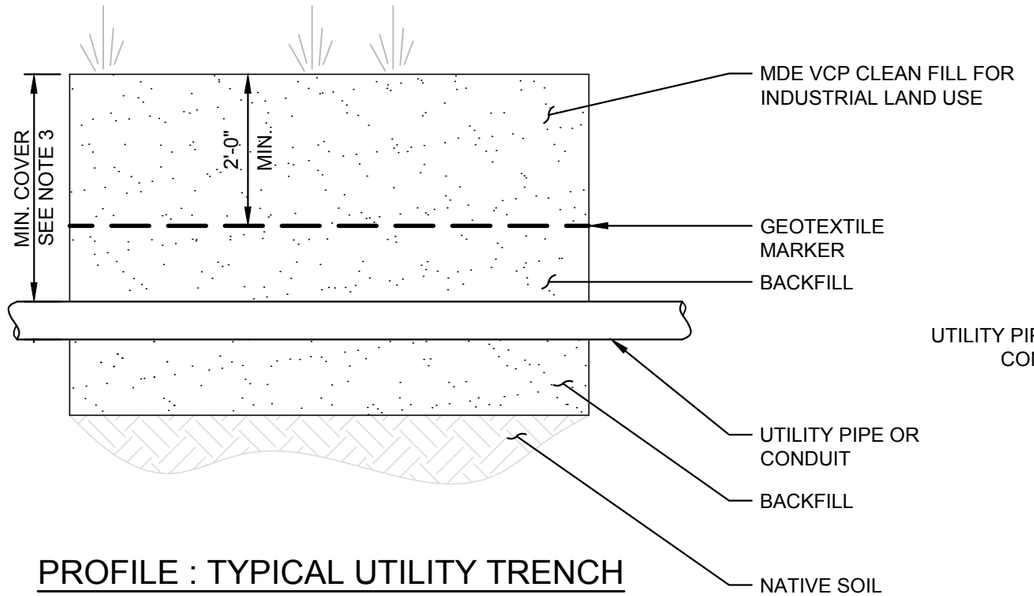
5. FOR ANY UTILITY SEGMENT WHICH GOES THROUGH AN AREA WHICH IS DESIGNATED TO RECEIVE A LANDSCAPED CAP, THE UPPER 2 FEET OF BACKFILL MUST MEET THE REQUIREMENTS OF MDE VCP CLEAN FILL FOR INDUSTRIAL LAND USE. IN THIS CASE THE MDE VCP CLEAN FILL WILL BE UNDERLAIN BY A GEOTEXTILE MARKER FABRIC. UTILITY SEGMENTS WHICH GO THROUGH AREAS WHICH DO NOT REQUIRE CAPPING OR ARE DESIGNATED TO RECEIVED A PAVED CAP WILL BE BACKFILLED WITH MATERIALS APPROVED BY MDE FOR THIS USE.



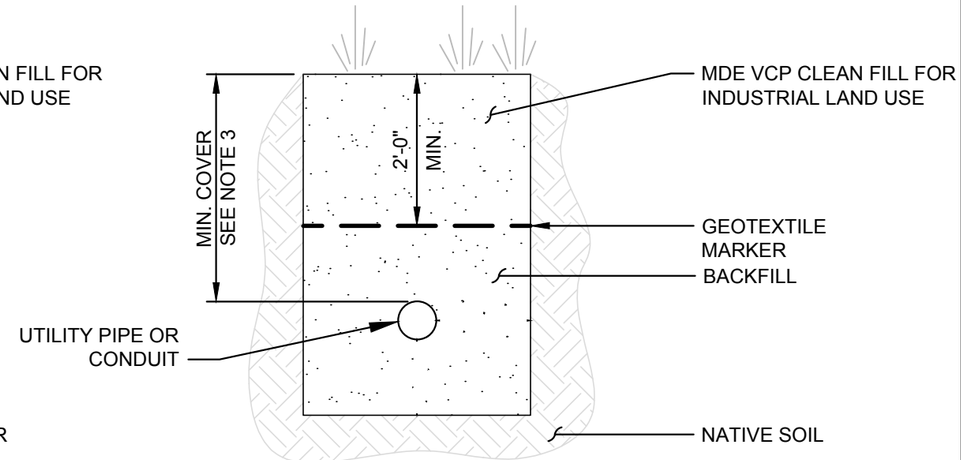
PROFILE : TYPICAL UTILITY TRENCH



SECTION : TYPICAL UTILITY



PROFILE : TYPICAL UTILITY TRENCH
(SEE NOTE 5)



SECTION : TYPICAL UTILITY
(SEE NOTE 5)

ARM Group LLC
Engineers and Scientists

TYPICAL UTILITY
CROSS SECTIONS
Sparrows Point Site
Tradepoint Atlantic

September 2020
1/2" = 1'-0"
160443M

Figure
1

ATTACHMENT 5

Utility Excavation NAPL Contingency Plan

Revision 5 – September 20, 2022

Objectives:

The purpose of this plan is to describe procedures to be followed in the event that non-aqueous phase liquid (NAPL) is encountered in utility trenches or other excavations during development of the Tradepoint Atlantic property. The specific objectives of this plan and the procedures outlined herein are:

1. To ensure identification and proper management of NAPL contaminated soils.
2. To ensure proper worker protection for working in areas of NAPL contamination.
3. To ensure that the installation of new utilities does not create new preferential flow paths for the migration of NAPL or soil vapors.

Identification of Oil & Grease and Petroleum Contaminated Soil:

An Environmental Professional (EP) will be on-site to determine if soils show evidence of the presence of NAPL during installation of utility trenches or other excavation activities completed during development. NAPL-contaminated soils can be identified by the presence of free oil. Free oil (NAPL) is liquid oil which could potentially be drained or otherwise extracted from the soil, and is the focus of this contingency plan, although severe staining accompanied by odors may be addressed via similar contingency measures provided herein (based on the judgement of the EP).

If NAPL is encountered during construction, potentially impacted material from the excavation will be removed and separated on plastic / covered with the same. Additional discussion of removal of material is in the **Soil Excavation, Staging, Sampling and Disposal** section below. If NAPL is encountered in an area where there is no known historical NAPL impact, the MDE will be notified (see **Initial Reporting** section) and the open excavation may be allowed to sit overnight. If after removal of the initial material identified additional NAPL impacted material enters the open excavation, the extent of impacts may be delineated and additional material removed / segregated. .

Soil Excavation, Staging, Sampling and Disposal:

The EP will monitor all utility trenching and excavation activities for signs of potential contamination. In particular, soils will be monitored with a hand-held photoionization detector (PID) for potential volatile organic compounds (VOCs) and will also be visually inspected for the presence of staining, petroleum waste materials, or other indications of NAPL contamination that may be different than what was already characterized.

Soil exhibiting physical evidence of NAPL contamination, which is located within a proposed new utility or subsurface structure (i.e., foundation, sump, electrical vault, underground tank, etc.), will

be excavated and segregated for disposal at the on-site nonhazardous landfill (Greys Landfill) or an off-site facility pending the completion of required analytical testing. If NAPL material continues to enter the open excavation, additional excavation may be continued in the field based on visual screening supplemented by the PID.

Any recovered NAPL impacted material will be segregated and collected for disposal. As required for disposal, samples impacted by NAPL will be collected for profiling/waste characterization and submitted to a fixed laboratory. Upon receipt of any additional characterization analytical results, the stockpiles will be tracked from generation to disposal.

Initial Reporting:

If evidence of NAPL in soil or groundwater is encountered during excavation in an area with no known historic NAPL impact, it will be reported to the MDE. Information regarding the location and characteristics of NAPL contaminated material will be documented as follows:

- Location (Site / Parcel ID with map);
- Approximate extent of contamination (horizontally and vertically – prepare a sketch including dimensions);
- Relative degree of contamination (i.e. free oil with strong odor vs. staining); and
- Visual documentation (take photographs and complete a photograph log)

Utility Installations in Impacted Areas:

Underground piping or conduits installed through areas of known NAPL contamination shall be leak proof and water tight. All joints will be adequately sealed or gasketed, and pipes or conduits will be properly bedded and placed to prevent leakage. Trench backfill will meet the MDE definition of clean fill, or be otherwise approved by the MDE. Bedding must be properly placed and compacted below the haunches of the pipe. Clay, flowable fill, or concrete plugs may be placed every 100 feet across any permeable bedding to minimize the preferential flow and concentration of water along the bedding of such utilities.

If required, each trench plug will be constructed with a 2-foot-thick clay plug or 1-foot-thick flowable fill or concrete plug, perpendicular to the pipe, which extends at least 1 foot in all directions beyond the permeable pipe bedding. The plug acts as an anti-seep collar, and will extend above the top of the pipe. A specification drawing for installation of the trench plug has been provided as **Figure 1**.

GENERAL NOTES:

1. ALL PIPES OR CONDUIT PASSING THROUGH AREAS OF PETROLEUM CONTAMINATION SHALL BE LEAK-PROOF AND WATERTIGHT. ALL JOINTS SHALL BE SEALED OR GASKETED.

2. ALL PIPES SHALL BE PROPERLY PLACED AND BEDDED TO PREVENT MISALIGNMENT OR LEAKAGE. PIPE BEDDING SHALL BE INSTALLED IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL FOR ACCUMULATION OF WATER AND CONCENTRATED INFILTRATION.

3. ANTI-SEEP COLLARS FROM THE PIPE MANUFACTURER, THAT ARE PRODUCED SPECIFICALLY FOR THE PURPOSE OF PREVENTING SEEPAGE AROUND THE PIPE, ARE ACCEPTABLE IF INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, AND ONLY WITH PRIOR APPROVAL BY TPA.

4. MINIMUM COVER ABOVE UTILITY SHALL BE BASED ON SPECIFIC UTILITY REQUIREMENTS.

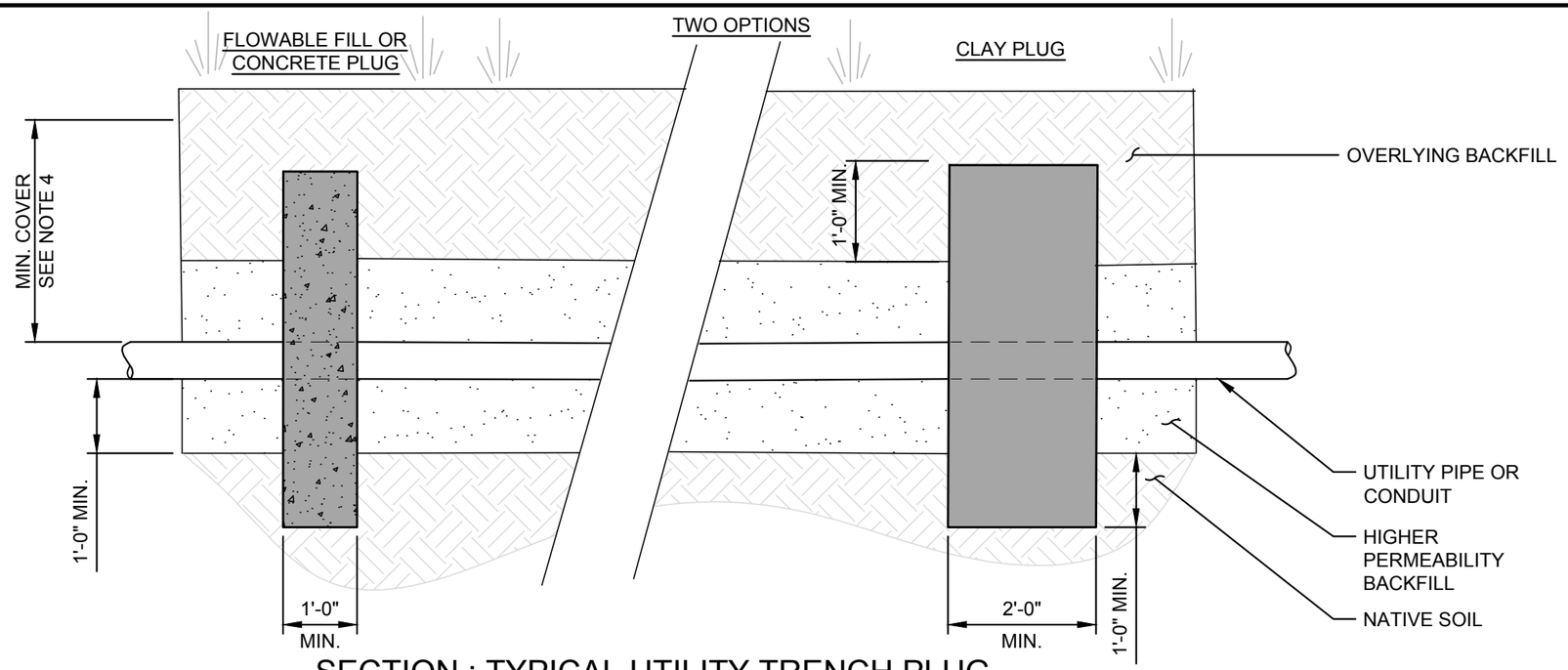
5. TRENCHES SHALL BE BACKFILLED WITH BEDDING AND MATERIALS APPROVED BY MDE.

6. FOR ADDITIONAL REQUIREMENTS, INCLUDING THE USE OF MDE VCP CLEAN FILL FOR INDUSTRIAL LAND USE AND INSTALLATION OF GEOTEXTILE MARKER FABRIC, REFER TO NOTE 5 ON THE TYPICAL UTILITY CROSS SECTIONS.

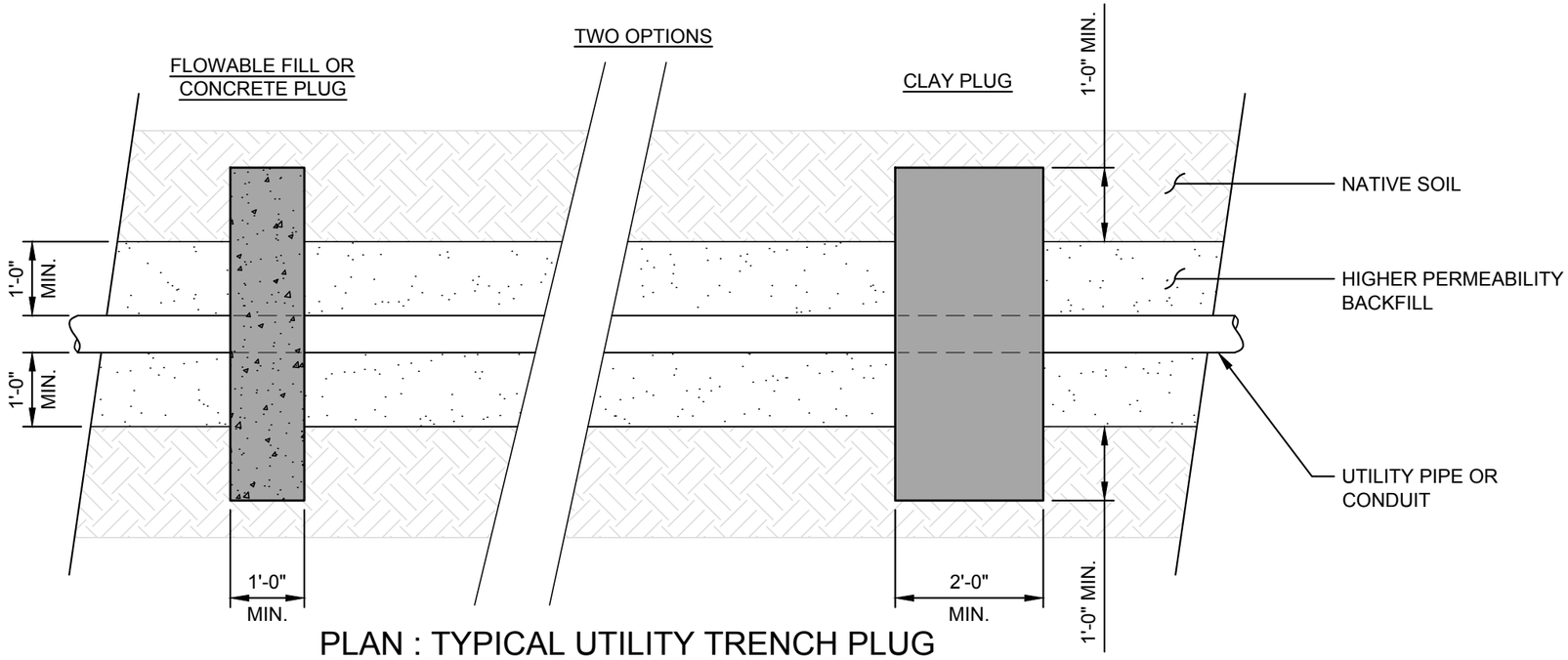
7. ALL UTILITIES INSTALLED THROUGH AREAS CONTAINING NAPL OR ELEVATED CHEMICAL IMPACTS WITH THE POTENTIAL TO TRANSMIT VAPORS ALONG PREFERENTIAL FLOW PATHWAYS SHALL BE EITHER 1) BACKFILLED WITH LOW PERMEABILITY BACKFILL MATERIAL (LESS THAN OR EQUAL TO THE PERMEABILITY OF THE EXISTING SUBGRADE), OR 2) INSTALLED WITH TRENCH PLUGS ALONG THE ALIGNMENT IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN AND THE FOLLOWING NOTES:

   A.) UTILITY TRENCH PLUGS SHALL BE INSTALLED AT 100-FOOT (MAX.) INTERVALS THROUGH ALL AREAS OF NAPL CONTAMINATION.

   B.) UTILITY TRENCH PLUGS SHALL EXTEND A MINIMUM OF 1-FOOT IN ALL DIRECTIONS BEYOND ANY HIGHER PERMEABILITY BACKFILL MATERIALS (I.E., MATERIALS EXCEEDING THE PERMEABILITY OF THE EXISTING SUBGRADE).



SECTION : TYPICAL UTILITY TRENCH PLUG



PLAN : TYPICAL UTILITY TRENCH PLUG

ARM Group LLC
Engineers and Scientists

UTILITY TRENCH PLUG
Sparrows Point Site
Tradepoint Atlantic

September 2020	Figure
Not to Scale	1
160443M	