

Response and Development Work Plan Addendum

Retail Area #4 – Project Bayou

**Area B: Sub-Parcel B6-2
Tradepoint Atlantic
Sparrows Point, Maryland**

Prepared For:



TRADEPOINT ATLANTIC
1600 Sparrows Point Boulevard
Sparrows Point, Maryland 21219

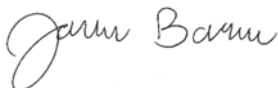
Prepared By:



ARM GROUP LLC
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ARM Project No. 21010206

Respectfully Submitted,

A handwritten signature in cursive script that reads "Joshua M. Barna".

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

A handwritten signature in cursive script that reads "Kaye Guille".

Kaye Guille, P.E., PMP
Senior Engineer

Revision 1 – May 17, 2022

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1.0 INTRODUCTION

1.1. BACKGROUND

ARM Group LLC (ARM), on behalf of Tradepoint Atlantic (TPA), has prepared this Response and Development Work Plan (RADWP) Addendum to facilitate the construction of a retail/restaurant building designated as Retail Area #4. The proposed construction of Retail Area #4 has been designated as “Project Bayou”. This retail lot is proposed for occupancy and use on Sub-Parcel B6-2 (the Site). The proposed layout of Retail Area #4 is shown on **Figure 1**.

Pursuant to Paragraph 3 of the First Amendment to the Administrative Consent Order (ACO), a cost comparison of the commercial environmental remediation costs against the originally budgeted industrial environmental cost estimate shall be performed. The estimated cost of the environmental oversight work to be performed by an Environmental Professional (EP) for Retail Area #4 is \$50,000. This cost is equivalent to the normal and customary cost for environmental oversight work performed on industrial parcels at Sparrows Point. The capping specifications and standards for this commercial development (building slab, concrete sidewalks, asphalt paving, clean capped landscaping) are the same as capping specifications and standards for an industrial parcel. Accordingly, there are no additional costs to the Budget based on commercial development and use; the semi-annual Budget review pursuant to Paragraph 84 of the ACO will continue to be conducted as required.

The construction and use of any retail lot at the Site must be approved by the Maryland Department of the Environment (MDE) and the United States Environmental Protection Agency (USEPA). The proposed major grading and utility installation tasks for the Site were covered by the agency-approved Sub-Parcel B6-2 RADWP (Revision 1 dated January 24, 2018).

The RADWP provided a Screening Level Risk Assessment (SLRA) for the entire Site to evaluate potential risks to Composite Workers and Construction Workers. The SLRA was recently updated to account for changes in the proposed boundary of the retail area, including the removal of the southern portion of the retail area originally proposed to the south of the Tin Mill Canal (TMC). The revised SLRA was presented in the Sub-Parcel B6-2 RADWP Addendum: SLRA Update dated June 28, 2021. The SLRA concluded that a capping remedy would adequately protect Composite Workers and site visitors from potential future exposures once the retail lots are occupied. The SLRA also determined the length of time that Construction Workers can perform ground intrusive work at the Site before site-specific health and safety measures may be needed for worker protection. This evaluation indicates that additional site-specific health and safety measures (beyond standard Level D protection) would be required only if an individual worker exceeded 40 exposure days of intrusive work.

1.2. OBJECTIVES

The approved Sub-Parcel B6-2 RADWP specified that a brief Addendum detailing the site plan for each retail lot would be provided to the MDE and USEPA once the plans for each retail lot were finalized. The RADWP stated that the Addendum would need to include the layout of the proposed retail lot, along with an indication of the proposed final capping remedy. The objectives of this document are to allow the construction of the proposed retail development at the Site, to allow occupancy prior to full implementation of the site-wide (Sub-Parcel B6-2) capping remedy, and to demonstrate that there are no concerns related to the proposed intrusive work schedule for Construction Workers.

2.0 RADWP ADDENDUM

2.1. REQUIREMENTS OF THE ADDENDUM

The Sub-Parcel B6-2 RADWP provides cross sections and specifications for all types of capping remedies which may be installed during the development of each retail lot, including requirements for any paved areas, landscaped areas, and/or stormwater ponds. The RADWP is the primary guidance document for all future development activities associated with the retail area. The RADWP established the following procedure to obtain agency approval to begin the construction of each individual retail lot:

Once plans for each retail lot are finalized, the MDE and USEPA will be provided with a brief RADWP Addendum detailing the site plan for the retail lot, along with an indication of the proposed final capping remedy, and a discussion of any concerns related to the intrusive work schedule (if any) associated with the construction of the applicable retail lot. Multiple retail lots may be combined into the same addendum if the sequencing of development is conducive to a single submission. The SLRA presented herein will serve as the primary reference document for any future development associated with Sub-Parcel B6-2, and addenda will be prepared and submitted to the agencies as necessary.

In addition, the proposed retail lot may be constructed and occupied prior to full implementation of the capping remedy which is required for the entire Site. The site-wide capping remedy throughout Sub-Parcel B6-2 is proposed to be installed using a phased approach as the individual retail lots are developed. To facilitate the use of the proposed retail lot, interim measures could be required for some retail lots to protect workers and visitors, as outlined in the RADWP as follows:

Depending on occupancy opportunities prior to the completion of all retail development phases, access restrictions or other mechanisms will be used to prevent potential exposures to uncapped portions of the Composite Worker Area during the interim period to temporarily prevent potential exposures until the required capping remedy is fully implemented. With these temporary restrictions, the Composite Worker and child/youth visitors will not be exposed to potentially impacted soils while commercial activities are being conducted on (completed) capped portions of the Site. If occupancy of the Site is proposed prior to full implementation of the capping remedy for the Composite Worker Area, a detailed RADWP Addendum must be submitted to the agencies and approved prior to use. The RADWP Addendum would need to include details of the proposed interim measures including locations and protocols for the installation and maintenance of the proposed remedy. The interim measures could include temporary access restrictions (e.g., fencing) and/or temporary capping mechanisms (e.g., crushed concrete), among other possible responses.

There are no interim remedies to be installed for Retail Area #4. The development area will be fully capped by surface engineering controls as more fully described in Section 2.2.2.

2.2. RETAIL AREA #4

Figure S1 presents a summary of the soil sample results that exceeded the Project Action Limits (PALs) within Retail Area #4. There were no semivolatile organic compounds (SVOC) or diesel range organics (DRO) soil exceedances within Retail Area #4. **Figure GW1** present all groundwater sample results that exceeded the PALs within Retail Area #4.

2.2.1. General Development Protocols

The construction of the retail lot will remain subject to all development implementation protocols outlined in the Sub-Parcel B6-2 RADWP (Revision 1 dated January 24, 2018) and RADWP Addendum: SLRA Update (dated June 28, 2021), including but not limited to the following:

- Development activities will be conducted under the property-wide Health and Safety Plan (HASP) and all ground intrusive work will be performed in accordance with the modified Level D Personal Protective Equipment (PPE) requirements outlined in the property-wide Sparrows Point Development PPE Standard Operational Procedure (SOP).
- Oversight will be provided by an EP during permanent cap installation, as well as all intrusive construction activities.
- Soil screening requirements will be implemented as required.
- Erosion and sediment controls will be installed as required.
- Dust monitoring will be implemented as required.
- If dewatering is necessary, sampling and disposal will be conducted as required.
- The NAPL Contingency Plan will be implemented as required.
- Utility backfill materials must be approved by the MDE Voluntary Cleanup Program (VCP). MDE VCP clean fill approved for commercial land use will be required at depths and alignments where the utility trench could be considered to be part of a landscaped cap (i.e., depths less than or equal to 2 feet). Slag or other approved backfill soil not meeting the MDE VCP definition of clean fill may be used in areas where the utility trench will be covered by an additional cap.

2.2.2. Proposed Layout and Capping Remedy

Development drawings for the proposed retail lot are provided in **Appendix A**. As indicated in the drawings, the proposed retail lot will include a 2,437 square foot fast food restaurant building. The retail lot will be capped by paved driveways and parking areas, paved building slab, and landscaped areas between the paved areas. The proposed cap areas and types are shown on **Figure 2**. All of the cross sections for each type of proposed capping remedy will be required to meet the minimum thicknesses given in the Sub-Parcel B6-2 RADWP.

Driveways will be constructed to allow access to and from the retail lot. As indicated in the site plan drawing provided in **Appendix A**, paved drives and parking lots are currently proposed in several areas within the lease boundary, with primary access on the southern side of the retail lot. The paved drives and parking lots will also be subject to the minimum cap thicknesses given in the Sub-Parcel B6-2 RADWP. Areas within the Retail Area #4 boundary not covered by asphalt, building slab, or concrete will be considered landscaped areas and will be capped with a minimum of 2 feet of clean fill (meeting VCP requirements for commercial land use) prior to being planted. Trees will be installed with a minimum of 2 feet of clean fill (meeting VCP requirements for commercial land use) around the root ball. A geotextile marker fabric will be placed between the clean backfill and underlying soils.

The major utility trenching and installation tasks were conducted under the scope of work described in the Sub-Parcel B6-2 RADWP. However, as shown in the site plan drawing in **Appendix A**, additional utilities and tie-ins will be installed under this Addendum.

2.2.3. Construction Worker Ground Intrusive Work

As indicated in the site plan drawings provided in **Appendix A**, additional utilities and tie-ins will be installed under this Addendum. Ground intrusive activities which could result in potential Construction Worker exposures are expected to be limited primarily to utility installation tasks performed by specific crews. The revised SLRA presented in the Sub-Parcel B6-2 RADWP Addendum: SLRA Update dated June 28, 2021 indicated that an exposure duration of 40 days did not result in any potentially unacceptable risk or hazard for Construction Workers.

As a conservative and protective measure, during all development work on the TPA property, Construction Workers performing ground intrusive work will adhere to the upgraded PPE requirements outlined in the property-wide Sparrows Point Development PPE SOP. The PPE SOP was created after the submission of the Sub-Parcel B6-2 RADWP but was attached to the Sub-Parcel B6-2 RADWP Addendum: SLRA Update dated June 28, 2021. The approved modified Level D PPE requirements, including specific PPE details, planning, tracking/supervision, enforcement, and documentation, are outlined in the PPE SOP.

3.0 REPORTING AND IMPLEMENTATION SCHEDULE


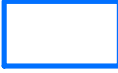

A Development Completion Report and Notice of Completion of Remedial Actions will be prepared following construction of each proposed retail lot. The Development Completion Report will summarize the completed capping activities.

The proposed implementation schedule is provided below.

<u>Task</u>	<u>Proposed Completion Date</u>
Anticipated RADWP Addendum Approval	June 2022
Installation of Erosion and Sediment Controls	June 2022
Utility Installation	August 2022
Permanent Capping Remedy Installation	April 2023
Submittal of Completion Report/ Notice of Completion of Remedial Actions*	August 2023



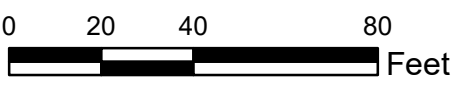
*Notice of Completion of Remedial Actions shall be prepared by Professional Engineer registered in Maryland and submitted with the Development Completion Report to certify that the work is consistent with the requirements of this RADWP Addendum and the retail lot is suitable for occupancy.

FIGURES




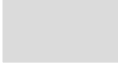



 Retail Area #4 LOD
 B6-2 Retail Area Boundary
 Parcel Boundary

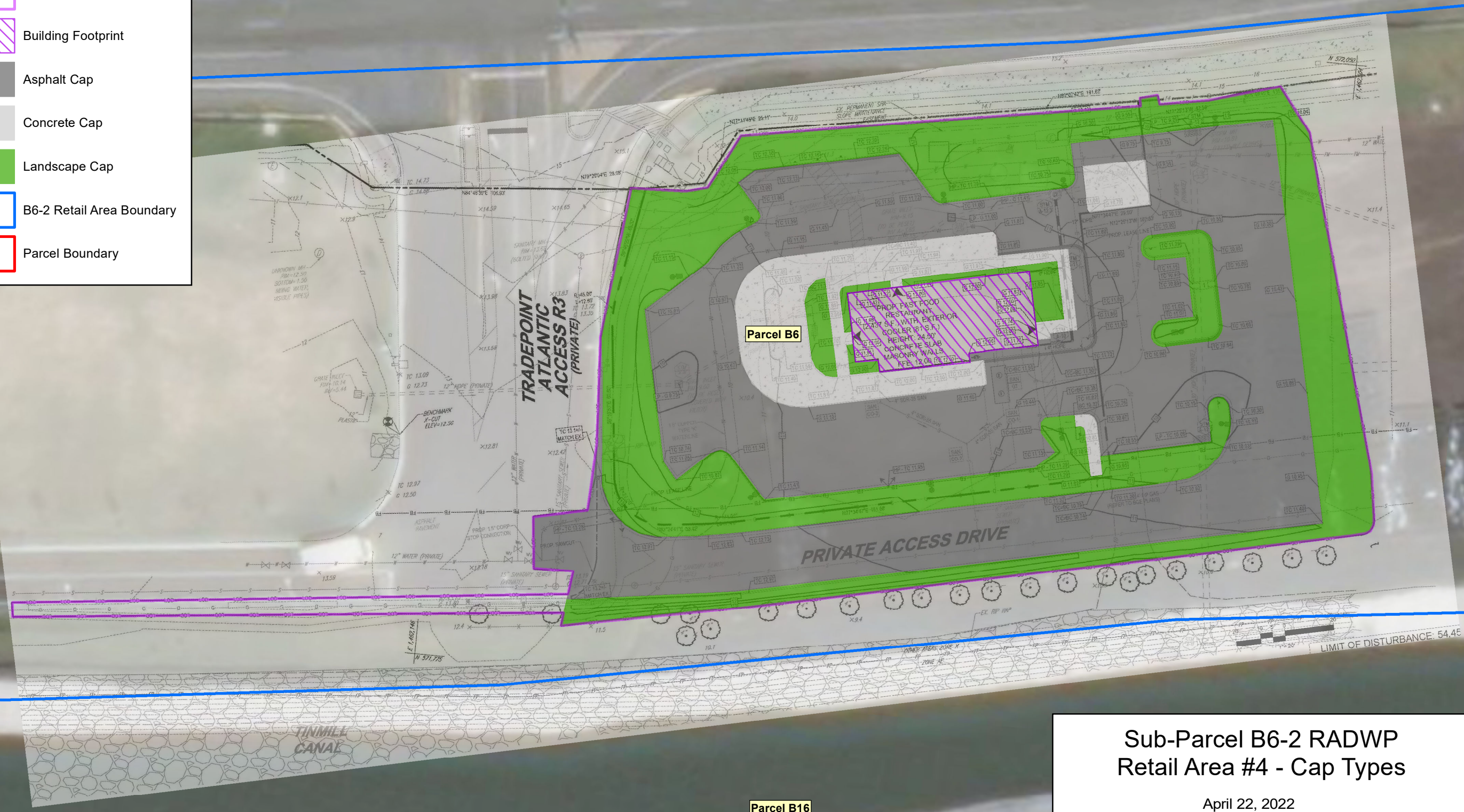


Parcel B16

Sub-Parcel B6-2 RADWP Retail Area #4 - Project Bayou		Figure 1
April 22, 2022		
  ARM Group LLC Engineers and Scientists	Tradepoint Atlantic	
	Sparrows Point	
	Baltimore County, MD	
	ARM Project 21010206	
		

Source: Esri, Maxar, GeoEye, Earthstar



-  Retail Area #4 LOD
-  Building Footprint
-  Asphalt Cap
-  Concrete Cap
-  Landscape Cap
-  B6-2 Retail Area Boundary
-  Parcel Boundary

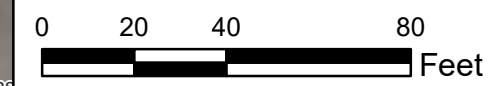


Sub-Parcel B6-2 RADWP
Retail Area #4 - Cap Types



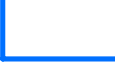

April 22, 2022

Figure
2

  <p>ARM Group LLC Engineers and Scientists</p>	Tradepoint Atlantic
	Sparrows Point
	Baltimore County, MD
	ARM Project 21010206



Source: Esri, Maxar, GeoEye, Earth*

-  Parcel B6 Phase II Boring Location
-  Retail Area #4
-  B6-2 Retail Area
-  Parcel Boundary

B6-033-SB-1
 Arsenic: 3.6
 Manganese: 65,400
 Thallium: 71.6 J

B6-033-SB-4
 Arsenic: 11.4
 Manganese: 42,600
 Thallium: 37.1 J



Parcel B6

Parcel B16

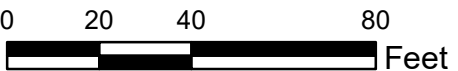
Sub-Parcel B6-2 RADWP
 Retail Area #4
 Soil PAL Exceedances (mg/kg)

May 9, 2022

Figure
S1








ARM Group LLC
 Engineers and Scientists



Tradepoint Atlantic
Sparrows Point
Baltimore County, MD
ARM Project 21010206

Source: Esri, Maxar, GeoEye, Earthstar



 Monitoring Well
 Retail Area #4
 B6-2 Retail Area
 Parcel Boundary
 (T) = Total
 (D) = Dissolved

FM-010-PZS
VOC
SVOC
 Benz[a]anthracene: 0.046 J
 Naphthalene: 7.9 J
 Pentachlorophenol: 7.6
TPH/O&G
 DRO: 924
Inorganic
 Thallium (D): 5.1 J
 Vanadium (D): 392

TM16-PZM007
VOC
SVOC
 Naphthalene: 2.9
PCB
TPH/O&G
 DRO: 1,280 J
Inorganic
 Thallium (D): 4.9 J
 Vanadium (T): 407

Parcel B6

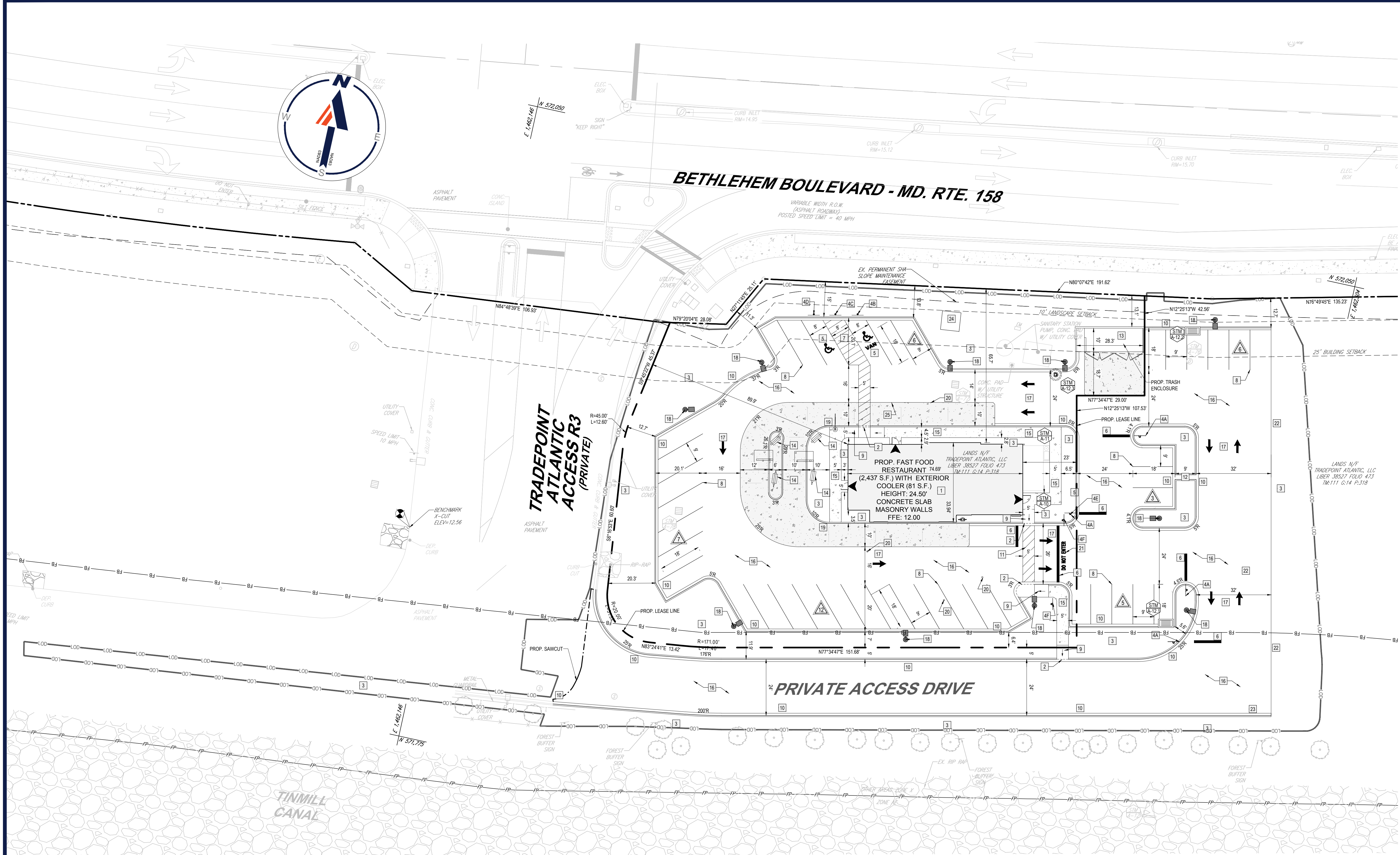
Parcel B16

Sub-Parcel B6-2 RADWP Retail Area #4 Groundwater PAL Exceedances (ug/L) May 9, 2022		Figure GW1
  ARM Group LLC Engineers and Scientists	Tradepoint Atlantic	
	Sparrows Point	
	Baltimore County, MD	
	ARM Project 21010206	

0 20 40 80 Feet

Source: Esri, Maxar, GeoEye, Earthstar

APPENDIX A



REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	8/21/21	REVISED PER COUNTY COMMENTS	MJM	MJM
2	4/11/22	REV. PER UPDATED LAYOUT	DMD	MJM

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

PROJECT No.: MD16206640
 DRAWN BY: ISL
 CHECKED BY: MJG
 DATE: 08/30/2021
 CAD ID: 2

PROJECT BAYOU

FOR

TRADEPOINT ATLANTIC

7301 BETHLEHEM BOULEVARD
 BALTIMORE, MD 21219
 TM 111, GRID 14, PARCEL 318
 ELECTION DISTRICT 15
 COUNCILMANIC DISTRICT 7
 BALTIMORE COUNTY

BOHLER

901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21204
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

M.J. GESELL

PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 4402
 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. 4409; EXPIRATION DATE: 6/3/23

OWNER/DEVELOPER

TRADEPOINT ATLANTIC, LLC
 1600 SPARROWS POINT BLVD
 BALTIMORE, MD 21219
 CONTACT: MIKE HURWITZ
 PHONE: 410-635-4443

SITE PLAN

SHEET NUMBER:
C-301

REVISION 2 - 4/11/22

- SITE KEYNOTES**
- SITE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING AND THE LOCATION OF DOORWAYS, UTILITIES, ETC.
 - DEPRESSED CURB AND GUTTER
 - LANDSCAPED AREA
 - TRAFFIC SIGNAGE
 - ALL SIGNS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) BY THE U.S. DEPARTMENT OF TRANSPORTATION.
 - 4A. "STOP" SIGN (R1-1)
 - BOLLARD MOUNTED ADA ACCESSIBLE PARKING SIGNAGE (WITH VAN ACCESSIBLE SIGNAGE)
 - 4B. BOLLARD MOUNTED "NO PARKING IN ACCESS AISLE" SIGNAGE
 - 4C. BOLLARD MOUNTED ADA ACCESSIBLE PARKING SIGNAGE
 - 4E. "NO RIGHT TURN" SIGN
 - 4F. "DO NOT ENTER" SIGN (R5-1)
 - ADA PARKING SYMBOL (WHITE SYMBOL WITH BLUE BACKGROUND)
 - 24" WHITE PAINTED STOP BAR
 - 4" WHITE PAVEMENT MARKINGS, 45° ANGLE, 2" O.C.
 - 4" WHITE PARKING STALL PAVEMENT MARKING (9x18" TYP.)
 - ACCESSIBLE CURB RAMP
 - 6" CURB AND GUTTER
 - CROSSWALK - 12" WHITE PAVEMENT MARK, 45° ANGLE 4" O.C.
 - 2" CONCRETE FLUME
 - TRASH ENCLOSURE (REFER TO ARCHITECTURAL PLANS)
 - MENU BOARD (REFER TO ARCHITECTURAL PLANS)
 - CONCRETE SIDEWALK
 - STANDARD DUTY ASPHALT PAVEMENT
 - WHITE PAINTED DIRECTIONAL ARROW
 - SITE LIGHT (REFER TO APPROVED LIGHTING PLAN)
 - 6" HEADER CURB
 - SANITARY CLEANOUT
 - "DO NOT ENTER" GRAPHIC
 - EDGE OF PAVEMENT
 - NOT USED
 - RELOCATED TRANSFORMER (REFER TO APPROVED BGE PLAN)
 - 4" WHITE SOLID PAVEMENT MARKING

- SITE NOTES**
- TOTAL SITE AREA: 30,058 S.F. OR 0.69 AC.
 - PROPERTY SITE AREA: 132,225,998 S.F. OR 3,035.49 AC.
 - PROPOSED FLOOR AREA: 2,437 S.F. WITH EXTERIOR COOLER (81 S.F.)
 - DEED REFERENCE: LIBER 35478, FOLIO 379
 - ELECTION DISTRICT: 15TH
 - COUNCILMANIC DISTRICT: 7TH
 - TAX MAP 111, GRID 14, PARCEL 318
 - TAX ACCT. NOS.: 1502024000
 - OWNER: TRADEPOINT ATLANTIC, LLC, 1600 SPARROWS POINT BLVD, BALTIMORE, MD 21219
 - DEVELOPER/APPLICANT: TRADEPOINT DEVELOPMENT, LLC, 1600 SPARROWS POINT BLVD, BALTIMORE, MD 21219
 - ZONE: MH-IM (MANUFACTURING - HEAVY - INDUSTRIAL - MAJOR)
 - PREVIOUS ZONING CASES: NONE
 - WATERSHED: BALTIMORE HARBOR
 - CENSUS TRACT: 9800.00
 - ALL SOILS ARE URBAN LAND, UDORTMENTS, 0 TO 8% SLOPES
 - EXISTING USE: VACANT
 - PROPOSED USE: FAST FOOD RESTAURANT BUILDING
 - PARKING REQUIRED:
 - RESTAURANT: 16 SPACES PER 1,000 SF FLOOR AREA = 39 SPACES
 - TOTAL REQUIRED: (2,437 SF / 1,000 SF = 38.99) 39 SPACES
 - TOTAL PROVIDED: 39 SPACES (INCLUDING 2 ADA SPACES)
 - STRUCTURE HEIGHT:
 - REQUIRED: UNLIMITED
 - PROPOSED: 24.50±
 - THIS SITE IS SERVED BY PUBLIC WATER AND SEWER SYSTEMS.
 - THERE ARE NO KNOWN WELLS OR SEPTIC SYSTEMS LOCATED WITHIN THE PROPOSED DEVELOPMENT AREA.

- PAVEMENT LEGEND**
- STANDARD DUTY ASPHALT PAVEMENT
 - CONCRETE SIDEWALK
 - HEAVY DUTY CONCRETE

MARYLAND COORDINATE SYSTEM (MCS)

GENERAL GRADING NOTES

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT OR DISCREPANCY BETWEEN THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE OR APPLICABLE CODES, REGULATIONS, LAWS, RULES, STATUTES AND ORDINANCES, IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD, IN WRITING, OF SAID CONFLICT AND DISCREPANCY PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR'S FAILURE TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE CONTRACTOR'S FULL AND COMPLETE ACCEPTANCE OF ALL RESPONSIBILITY TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS, LAWS, STATUTES, ORDINANCES AND CODES AND, FURTHER, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SAME.
- SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS MUST BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. SUBGRADE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBGRADE BE DEEMED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBGRADE IS TO BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL COMPACTED AS DIRECTED BY THE GEOTECHNICAL REPORT. EARTHWORK ACTIVITIES INCLUDING, BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO.
- THE CONTRACTOR MUST COMPLY, TO THE FULLEST EXTENT, WITH THE LATEST OSHA STANDARDS AND REGULATIONS, AND/OR ANY OTHER AGENCY WITH JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES AND CONSULTANT SHALL HAVE NO RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES.
- PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND NOT EXCEPTED FOR BUTT JOINTS, MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILES OF DEBRIS WILL BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.
- THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCING ANY CONSTRUCTION. CONTRACTOR MUST CONFIRM AND ENSURE 0.75% MINIMUM SLOPE AGAINST ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.0% MINIMUM ON ASPHALT (EXCEPT WHERE ADA REQUIREMENTS LIMIT GRADES), TO PREVENT PONDING. CONTRACTOR MUST IMMEDIATELY IDENTIFY, IN WRITING TO THE ENGINEER, ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE, OR PROJECT COSTS. IF CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER NOTIFICATION, MUST BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, CONTRACTOR SHALL INDEMNIFY, DEFEND AND HOLD HARMLESS THE DESIGN ENGINEER FOR ANY DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM SAME.
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% GUTTER GRADE ALONG CURB FACE. IT IS CONTRACTOR'S OBLIGATION TO ENSURE THAT DESIGN ENGINEER APPROVES FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION OF SAME.
- REFER TO SITE PLAN FOR ADDITIONAL NOTES.
- IN THE EVENT OF DISCREPANCIES AND/OR CONFLICTS BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE AND CONTROL. CONTRACTOR MUST IMMEDIATELY NOTIFY THE DESIGN ENGINEER, IN WRITING, OF ANY DISCREPANCIES AND/OR CONFLICTS.
- CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF SITE MATERIAL SOURCES AND DISPOSAL FACILITIES. CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO ENGINEER AND OWNER PRIOR TO INITIATING ANY WORK.
- WHERE RETAINING WALLS (WHETHER OR NOT THEY MEET THE JURISDICTIONAL DEFINITION) ARE IDENTIFIED ON PLANS, ELEVATIONS IDENTIFIED ARE FOR THE EXPOSED PORTION OF THE WALL. WALL FOOTINGS/FOUNDATION ELEVATIONS ARE NOT IDENTIFIED HEREIN AND ARE TO BE DETERMINED BY THE CONTRACTOR BASED ON FINAL STRUCTURAL DESIGN SHOP DRAWINGS PREPARED BY THE APPROPRIATE PROFESSIONAL LICENSED IN THE STATE WHERE THE CONSTRUCTION OCCURS.
- CONSULTANT IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, SHALL HAVE NO LIABILITY FOR ANY HAZARDOUS MATERIALS, HAZARDOUS SUBSTANCES, OR POLLUTANTS ON, ABOUT OR UNDER THE PROPERTY.

PRIVATE STORM STRUCTURE SCHEDULE

NAME	TYPE	RIM ELEV. (FT.)	INVERTS
A-10	PROP. CLEANOUT	11.74'	INV IN = 9.86' (EX. 6') INV OUT = 9.86' (EX. 12')
A-11	PROP. CLEANOUT	11.89'	INV IN = 9.86' (EX. 6') INV OUT = 9.56' (EX. 12')
A-12.1	DOUBLE TYPE "S" COMBO INLET (BALT. COUNTY STD. D-2.20)	9.58'	INV IN = -0.03' (EX. 30') INV OUT = -0.03' (EX. 30')
A-12.2	DOUBLE TYPE "S" COMBO INLET (BALT. COUNTY STD. D-2.20)	9.00'	INV OUT = 2.85' (EX. 30')
A-12.3	PROP. MH	10.69'	INV IN = 3.27' (EX. 18') INV IN = 9.26' (EX. 12') INV OUT = 3.27' (EX. 18')
A-76	EX. TYPE 'C' MANHOLE	9.27'	INV IN = 3.40' (EX. 12') INV IN = 2.90' (EX. 18') INV IN = 2.50' (EX. 30') INV OUT = 2.40' (EX. 30')
A-77	EX. TYPE 'S' INLET	11.00'	INV IN = 3.85' (EX. 15') INV OUT = 3.55' (EX. 15')
A-78	EX. TYPE 'S' INLET	9.75'	INV IN = 4.55' (EX. 12') INV OUT = 4.30' (EX. 15')

BENCHMARK INFORMATION

ELEVATIONS ARE BASED ON NAVD 88 COORDINATES AND MERIDIAN ARE BASED ON THE MARYLAND COORDINATE SYSTEM (MCS) PER THE FOLLOWING MONUMENTS:
 BCO# 1433 (CAPPED REBAR)
 N 571,683.79, E 1,466,230.69, ELEV. 16.59
 IN MEDIAN OF NORTH POINT BLVD SOUTH OF NORTH SNYDER AVE.
 BCO# 1417 (MAG SPIKE)
 N 569,685.10, E 1,469,030.752, ELEV. 14.17
 EAST SIDE OF LODGE FARM ROAD IN SIDEWALK



BALTIMORE COUNTY STANDARD GRADING PLAN NOTES

- THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT ON ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
- ALL SWALES HAVE BEEN DESIGNED BY THE ENGINEER TO CONVEY RUNOFF ACCORDING TO BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS.
- THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.
- STORMWATER MANAGEMENT HAS BEEN PROVIDED BY A TIMING VARIANCE AND POSTING OF A SURETY IN THE AMOUNT OF \$44,820 FOR 0.63 ACRES OF IMPERVIOUS AREA. APPROVED ON SEPTEMBER 8, 2021, TRACKING #07-21-3547

SITE SPECIFIC GRADING NOTES

- ALL UTILITIES SHOWN ARE PRIVATE UNLESS NOTED OTHERWISE.
- THE SUBJECT DEVELOPMENT AREA IS LOCATED IN FLOOD ZONE 'X' (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BALTIMORE COUNTY, MARYLAND (UNINCORPORATED AREAS) PANEL 555 OF 560", MAP NUMBER 2400105555, MAP REVISED MAY 5, 2014, AND PLAN PREPARED BY PAI DEV. PLANS REVIEW, DATED SEPTEMBER 21, 2016, PER MAP 0555F, DATED SEPTEMBER 26, 2008
- ADDITIONAL EXISTING UTILITIES AND SITE FEATURES LOCATED WITHIN THE LIMIT OF DISTURBANCE NOT IDENTIFIED AS "TO BE REMOVED" OR "TO BE RELOCATED" MAY REQUIRE REMOVAL OR RELOCATION AS DIRECTED BY THE GEOTECHNICAL ENGINEER OR TRADEPOINT DEVELOPMENT.
- EXISTING UTILITIES NOTED AS "TO REMAIN" WITHIN THE LIMIT OF DISTURBANCE MUST BE MAINTAINED TO PROVIDE SERVICE FOR THE PROPOSED DEVELOPMENT.
- SPOT ELEVATIONS NOTED AS ± HAVE BEEN INTERPOLATED FROM EXISTING TOPOGRAPHY. CONTRACTOR IS TO VERIFY THESE SPOT ELEVATIONS PRIOR TO CONSTRUCTION, AND TO NOTIFY BOHLER IN WRITING IF THE ACTUAL ELEVATIONS DIFFER.
- EXISTING TOPOGRAPHY SHOWN IS BASED UPON A FIELD RUN TOPOGRAPHIC SURVEY COMPLETED ON JUNE 16, 2021 BY BOHLER (PROJECT NO. SD16206640)

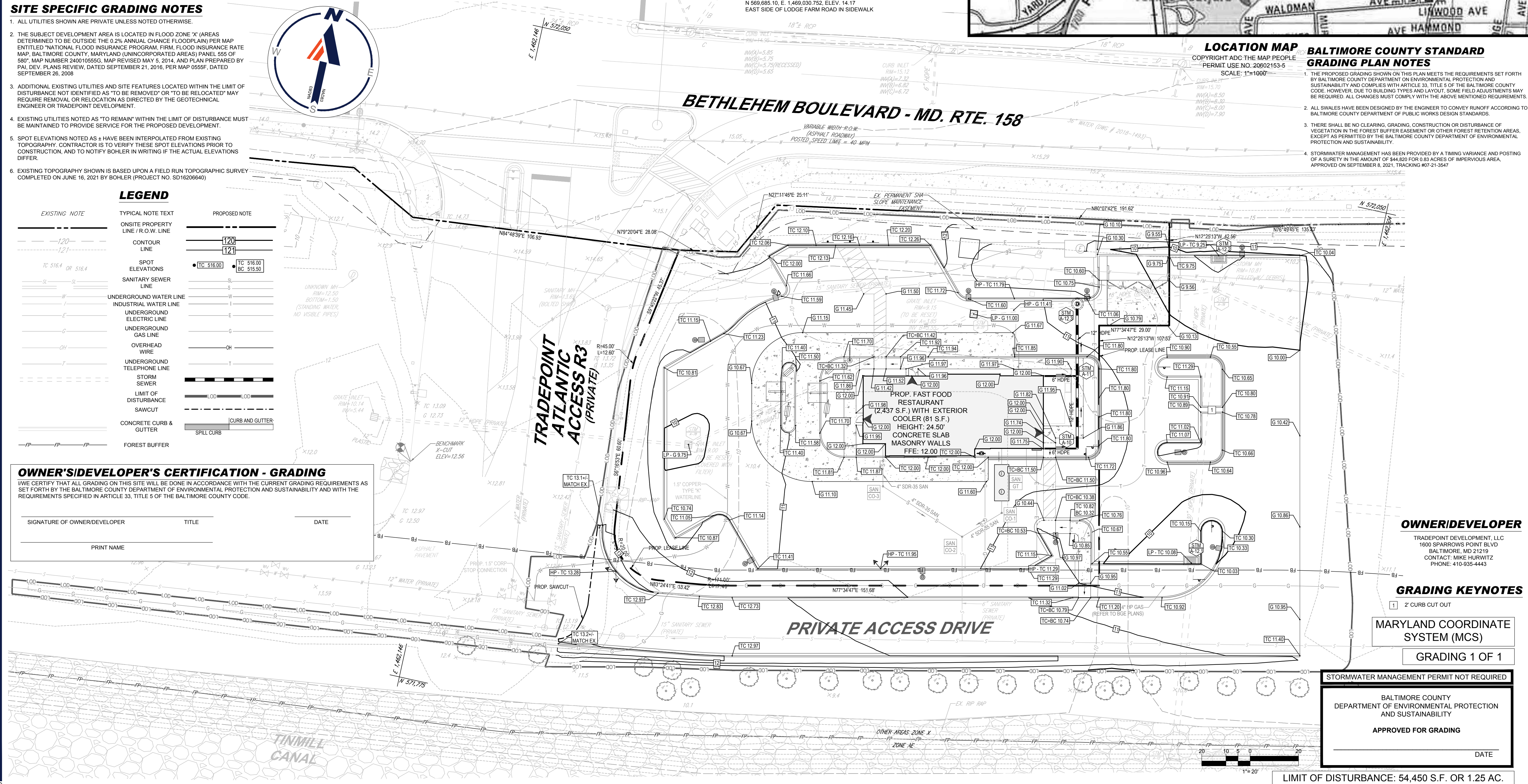
LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
ON-SITE PROPERTY LINE / R.O.W. LINE	ON-SITE PROPERTY LINE / R.O.W. LINE	ON-SITE PROPERTY LINE / R.O.W. LINE
CONTOUR LINE	CONTOUR LINE	CONTOUR LINE
SPOT ELEVATIONS	SPOT ELEVATIONS	SPOT ELEVATIONS
SANITARY SEWER LINE	SANITARY SEWER LINE	SANITARY SEWER LINE
UNDERGROUND WATER LINE	UNDERGROUND WATER LINE	UNDERGROUND WATER LINE
INDUSTRIAL WATER LINE	INDUSTRIAL WATER LINE	INDUSTRIAL WATER LINE
UNDERGROUND ELECTRIC LINE	UNDERGROUND ELECTRIC LINE	UNDERGROUND ELECTRIC LINE
UNDERGROUND GAS LINE	UNDERGROUND GAS LINE	UNDERGROUND GAS LINE
OVERHEAD WIRE	OVERHEAD WIRE	OVERHEAD WIRE
UNDERGROUND TELEPHONE LINE	UNDERGROUND TELEPHONE LINE	UNDERGROUND TELEPHONE LINE
STORM SEWER	STORM SEWER	STORM SEWER
LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE	LIMIT OF DISTURBANCE
SAWCUT	SAWCUT	SAWCUT
CONCRETE CURB & GUTTER	CURB AND GUTTER	CURB AND GUTTER
FOREST BUFFER	FOREST BUFFER	FOREST BUFFER

OWNER'S/DEVELOPER'S CERTIFICATION - GRADING

I/WE CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

SIGNATURE OF OWNER/DEVELOPER	TITLE	DATE
PRINT NAME		



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

REVISIONS

REV	DATE	COMMENT	DRAWN BY	CHECKED BY
1	8/21/21	REVISED PER COUNTY COMMENTS	MJM	MJM
2	4/11/22	REV. PER UPDATED LAYOUT	DMJ	MJM

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.: MD16206640
 DRAWN BY: ISL
 CHECKED BY: MJM
 DATE: 08/30/2021
 CAD LID: 2

PROJECT BAYOU
 FOR
TRADEPOINT ATLANTIC
 7301 BETHLEHEM BOULEVARD
 BALTIMORE, MD 21219
 TM 111, GRID 14, PARCEL 318
 ELECTION DISTRICT 15
 COUNCILMANIC DISTRICT 7
 BALTIMORE COUNTY

BOHLER
 901 DULANEY VALLEY ROAD, SUITE 801
 TOWSON, MARYLAND 21204
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 MD@BohlerEng.com

M.J. GESELL
 PROFESSIONAL ENGINEER
 MARYLAND LICENSE NO. 4497
 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. 4497, EXPIRATION DATE: 6/30/23

FINAL GRADING PLAN
 SHEET NUMBER: **C-401**
 REVISION 2 - 4/11/22

GRADING KEYNOTES

- 2" CURB CUT OUT

MARYLAND COORDINATE SYSTEM (MCS)

GRADING 1 OF 1

STORMWATER MANAGEMENT PERMIT NOT REQUIRED

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

APPROVED FOR GRADING

DATE

LIMIT OF DISTURBANCE: 54,450 S.F. OR 1.25 AC.

STORM STRUCTURE SCHEDULE			
NAME	TYPE	RIM ELEV. (FT.)	INVERTS
A-10	PROP. CLEANOUT	11.74'	INV IN = 9.86' (6") INV OUT = 9.86' (12")
A-11	PROP. CLEANOUT	11.89'	INV IN = 9.86' (6") INV IN = 9.56' (12") INV OUT = 9.56' (12")
A-12.3	PROP. MH	10.69'	INV IN = 3.27' (18") INV IN = 9.26' (12") INV OUT = 3.27' (18")

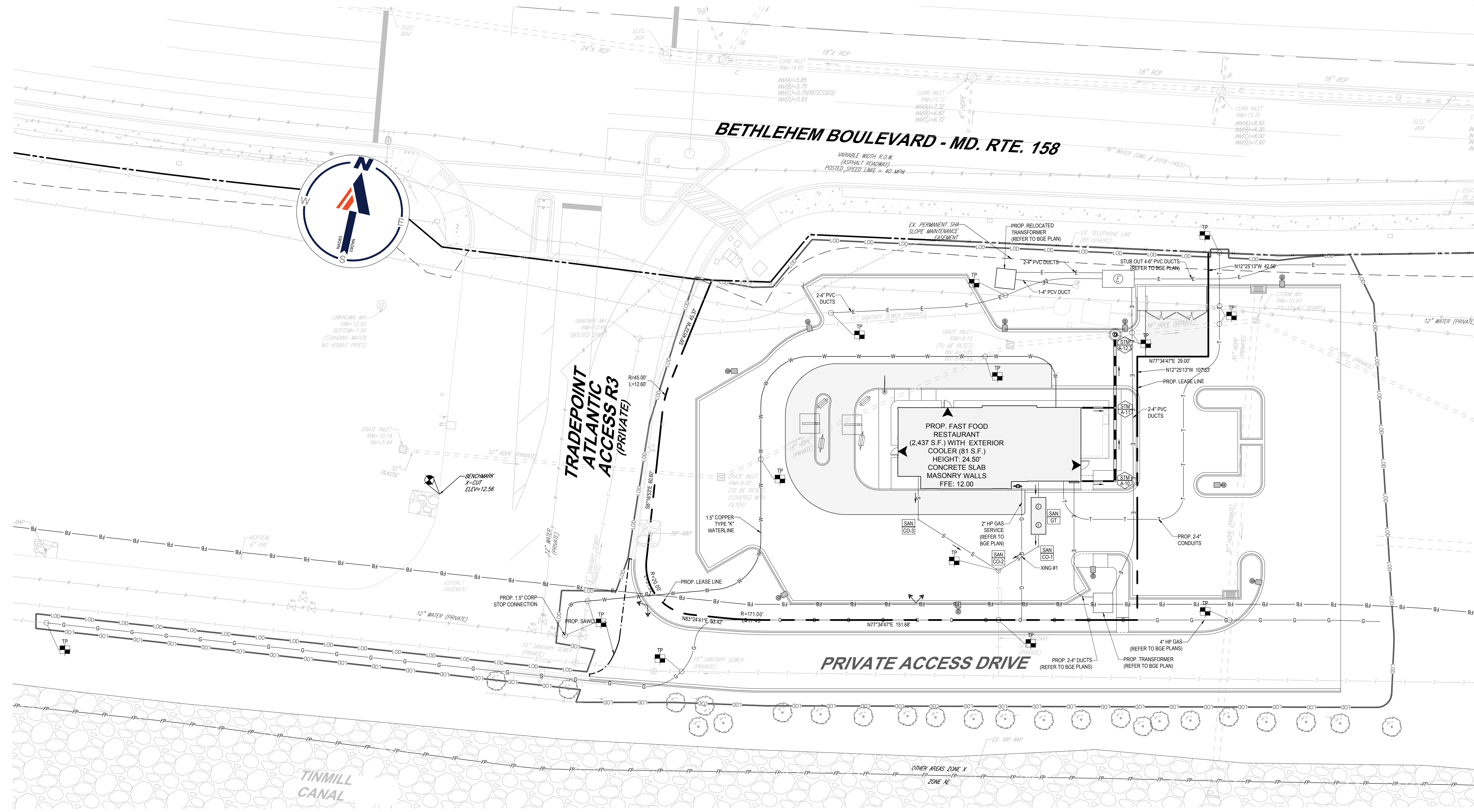
STORM SEWER PIPE SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
A-10	9.86'	BLDG	10.00'	13.47'	1.04%	6"	HDPE
A-11	9.56'	A-10	9.86'	29.98'	1.00%	12"	HDPE
A-11	9.86'	BLDG	10.00'	13.47'	1.04%	6"	HDPE
A-12.3	9.26'	A-11	9.56'	29.84'	1.00%	12"	HDPE

SANITARY STRUCTURE SCHEDULE			
NAME	TYPE	RIM ELEV. (FT.)	INVERTS
CO-1	CLEANOUT	11.06'	INV IN = 7.51' (4") INV OUT = 7.51' (4")
CO-2	CLEANOUT	11.24'	INV IN = 7.12' (4") INV IN = 6.86' (4") INV OUT = -3.98' (15")
CO-3	CLEANOUT	11.25'	INV IN = 7.64' (4") INV OUT = 7.64' (4")
GT	CONNECTION TO GREASE TRAP	11.46'	INV IN = 7.86' (4") INV OUT = 7.61' (4")

SANITARY PIPE SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
CO-1	7.51'	GT	7.61'	5.00'	2.00%	4"	SDR-35 PVC
CO-2	6.86'	CO-3	7.64'	38.77'	2.01%	4"	SDR-35 PVC
CO-2	7.12'	CO-1	7.51'	19.10'	2.04%	4"	SDR-35 PVC
CO-3	7.64'	BLDG	8.00'	17.61'	2.04%	4"	SDR-35 PVC
GT	7.86'	BLDG	8.00'	6.52'	2.15%	4"	SDR-35 PVC

CROSSING TABLE

XING #1	8.50'
BTM. GAS	7.00'
TOP WTR.	7.00'
CLEAR.	1.50'



REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	8/21/21	REVISED PER COUNTY COMMENTS	RMS
2	4/11/22	REV. PER UPDATED LAYOUT	DMD

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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.:	MD16206640
DRAWN BY:	ISL
CHECKED BY:	MJM
DATE:	08/30/2021
CAD ID:	2

PROJECT BAYOU

FOR
TRADEPOINT ATLANTIC
7301 BETHLEHEM BOULEVARD
BALTIMORE, MD 21219
TM 111, GRID 14, PARCEL 318
ELECTION DISTRICT 15
COUNCILMANIC DISTRICT 7
BALTIMORE COUNTY

BOHLER
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

M.J. GESELL
PROFESSIONAL ENGINEER
MARYLAND LICENSE #4497
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. 4497, EXPIRATION DATE: 6/30/23

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:
C-501

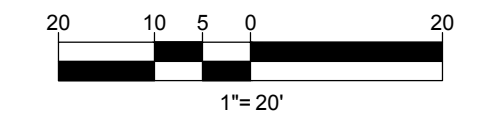
REVISION 2 - 4/11/22

OWNER/DEVELOPER

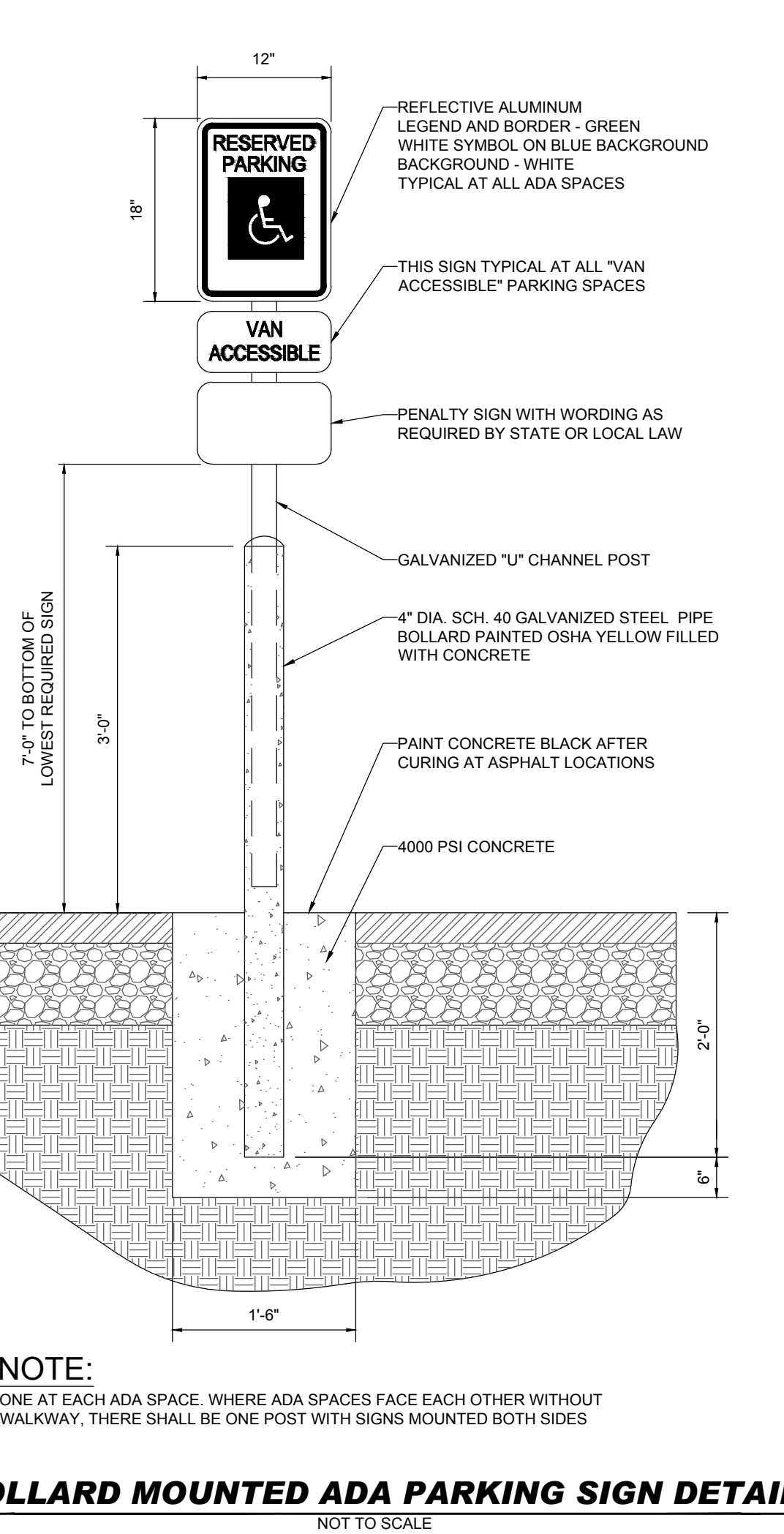
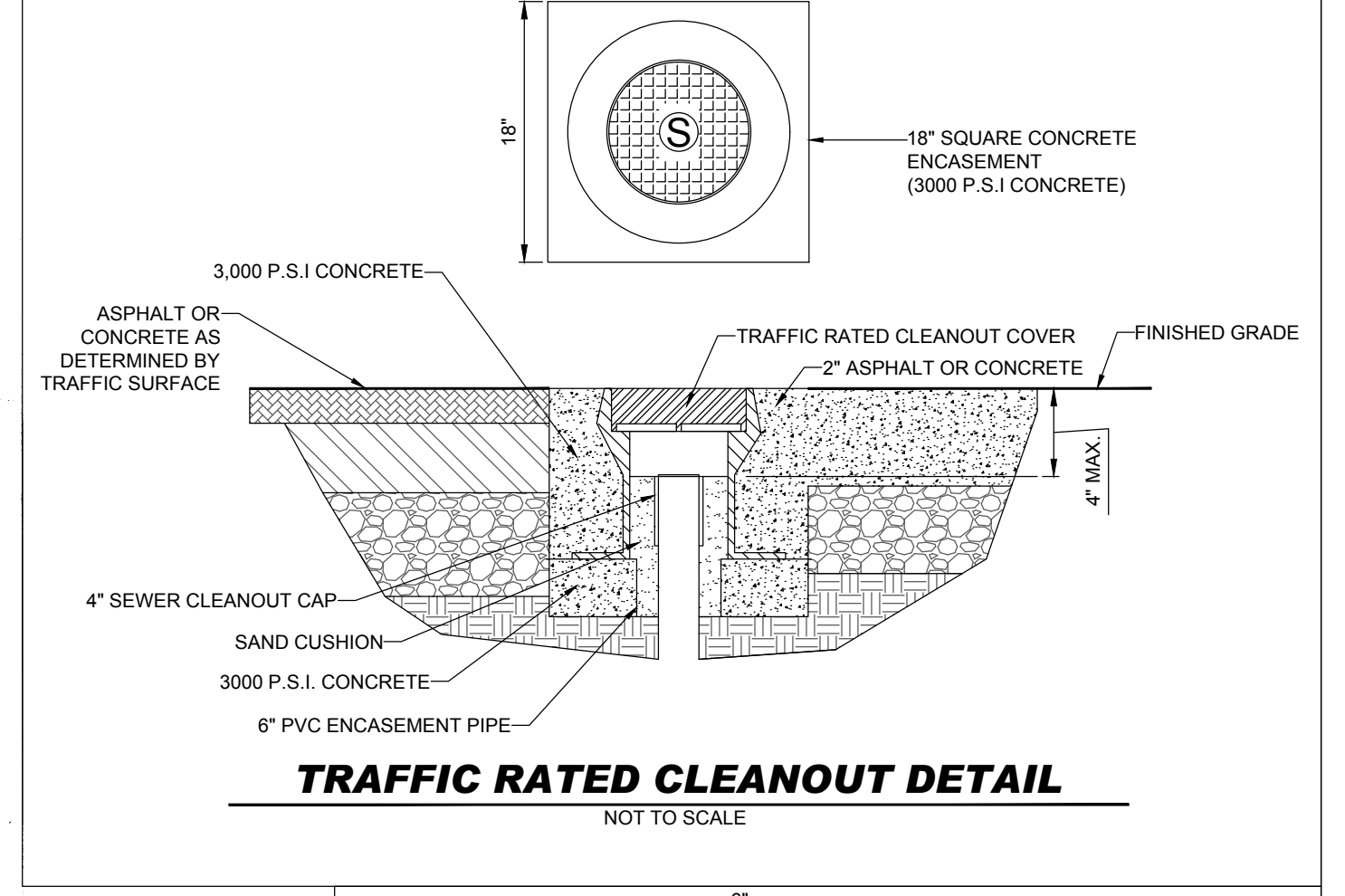
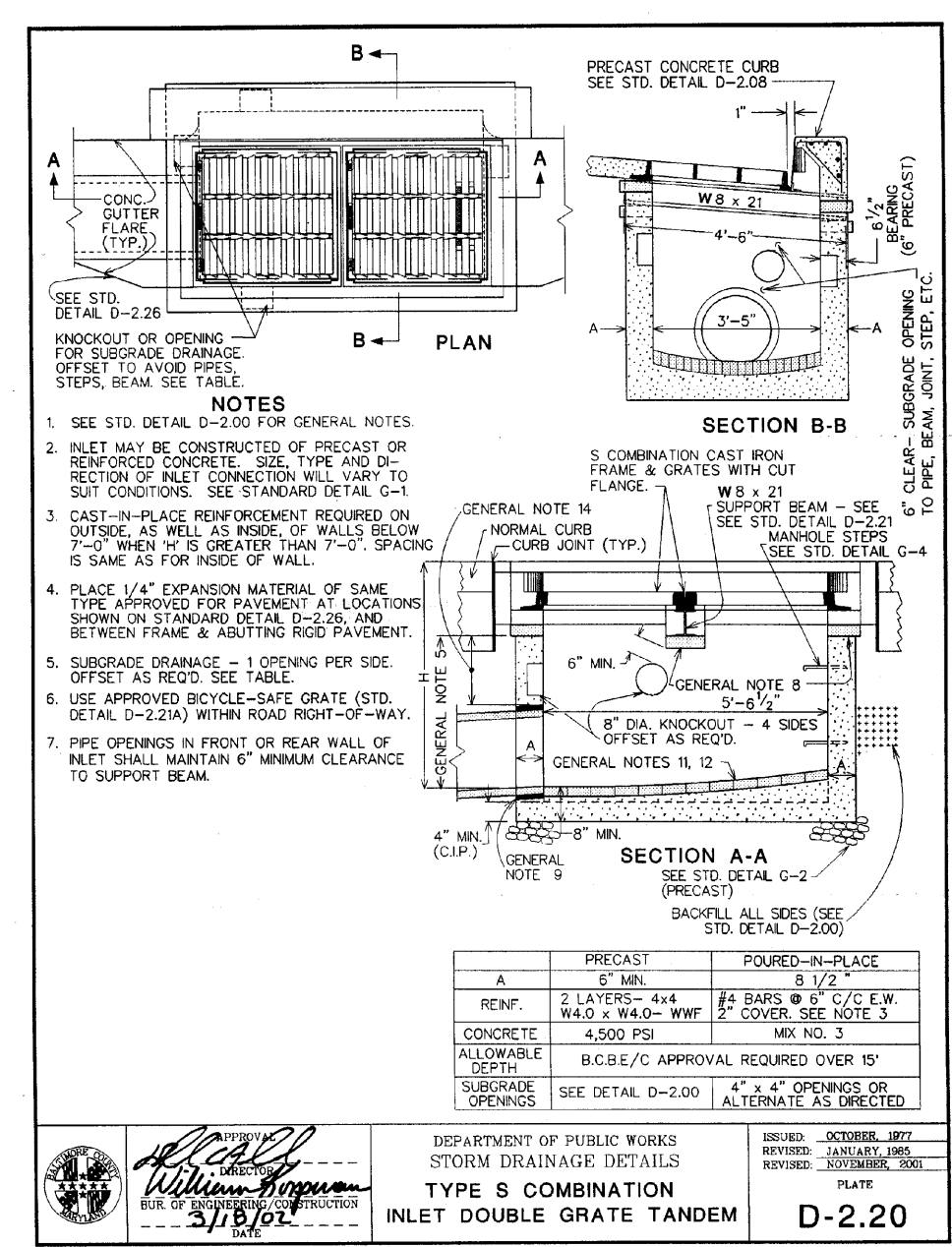
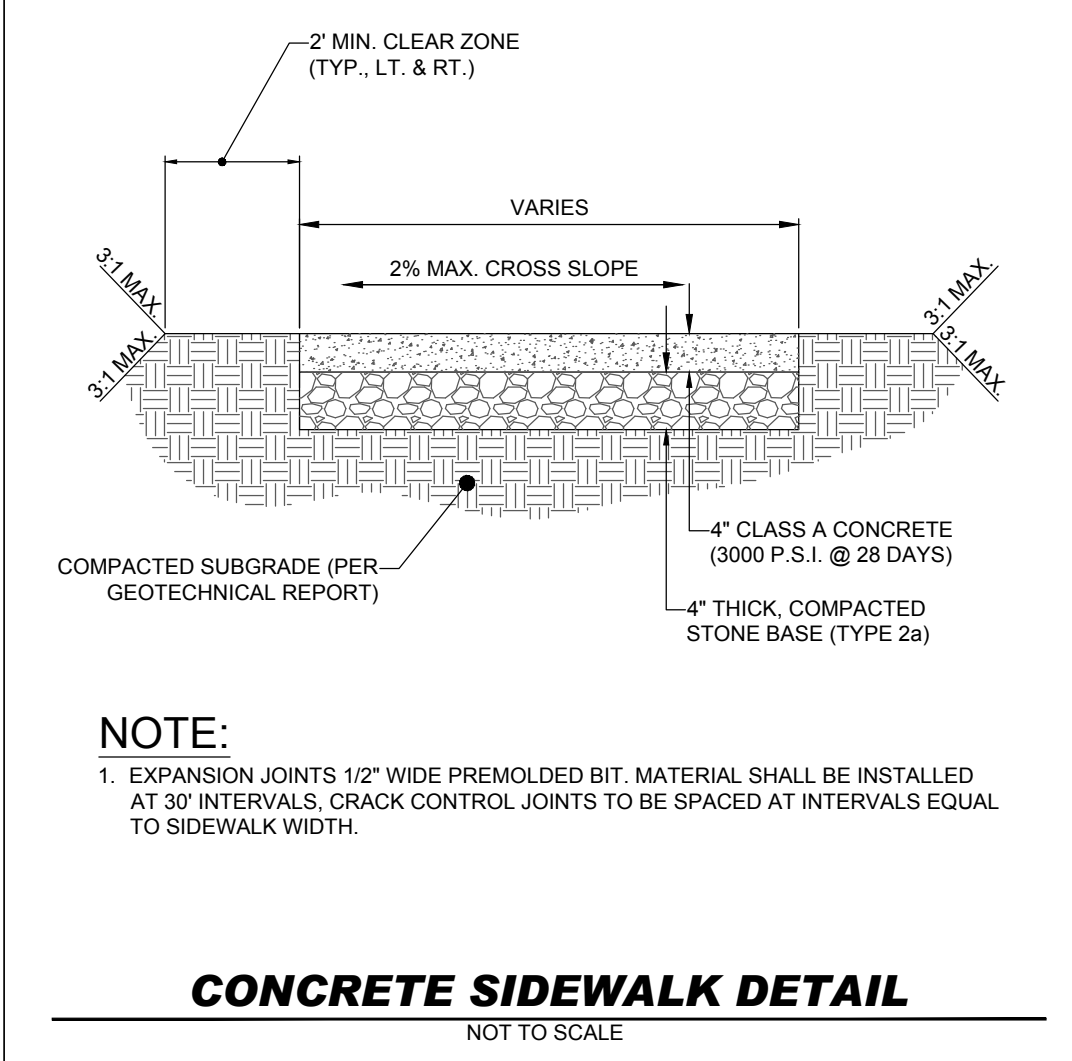
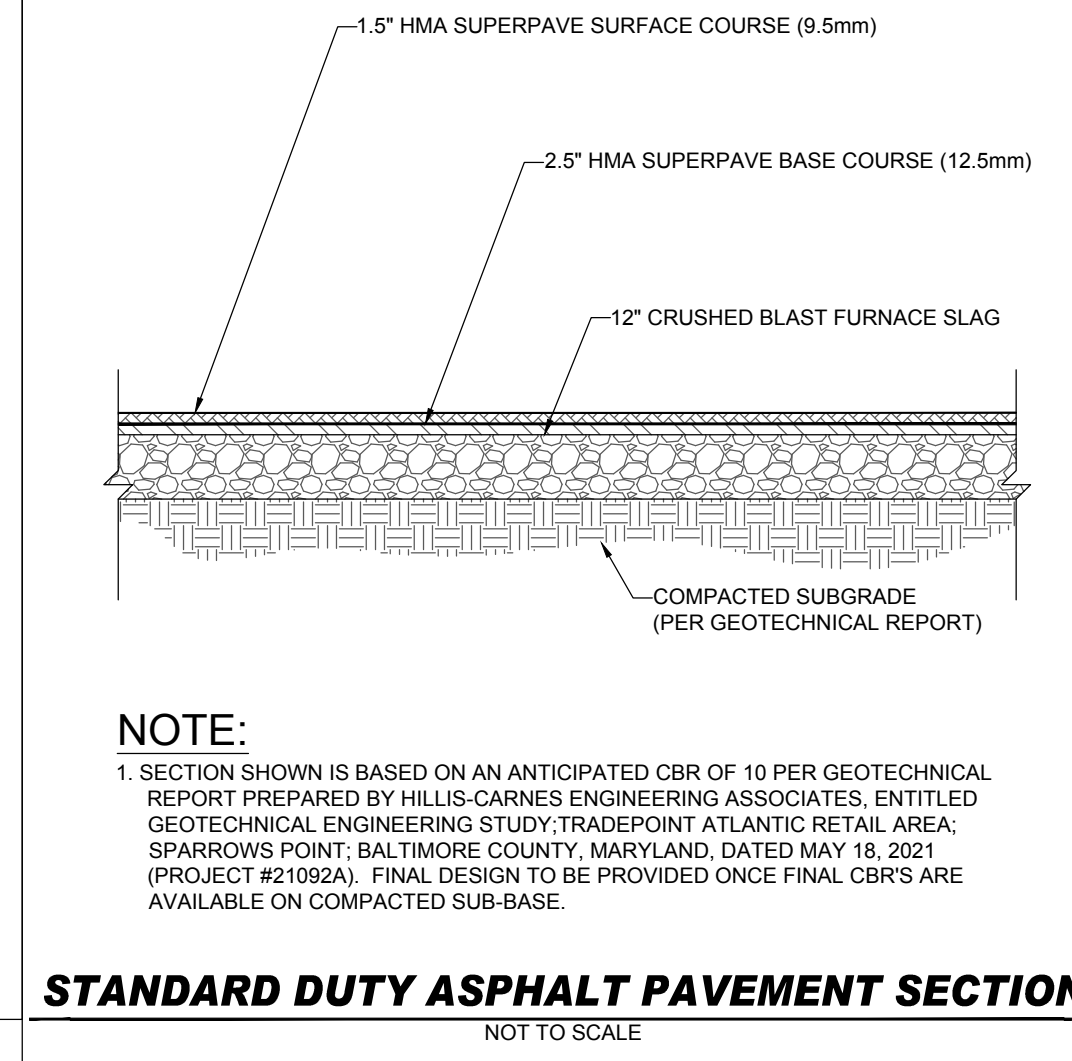
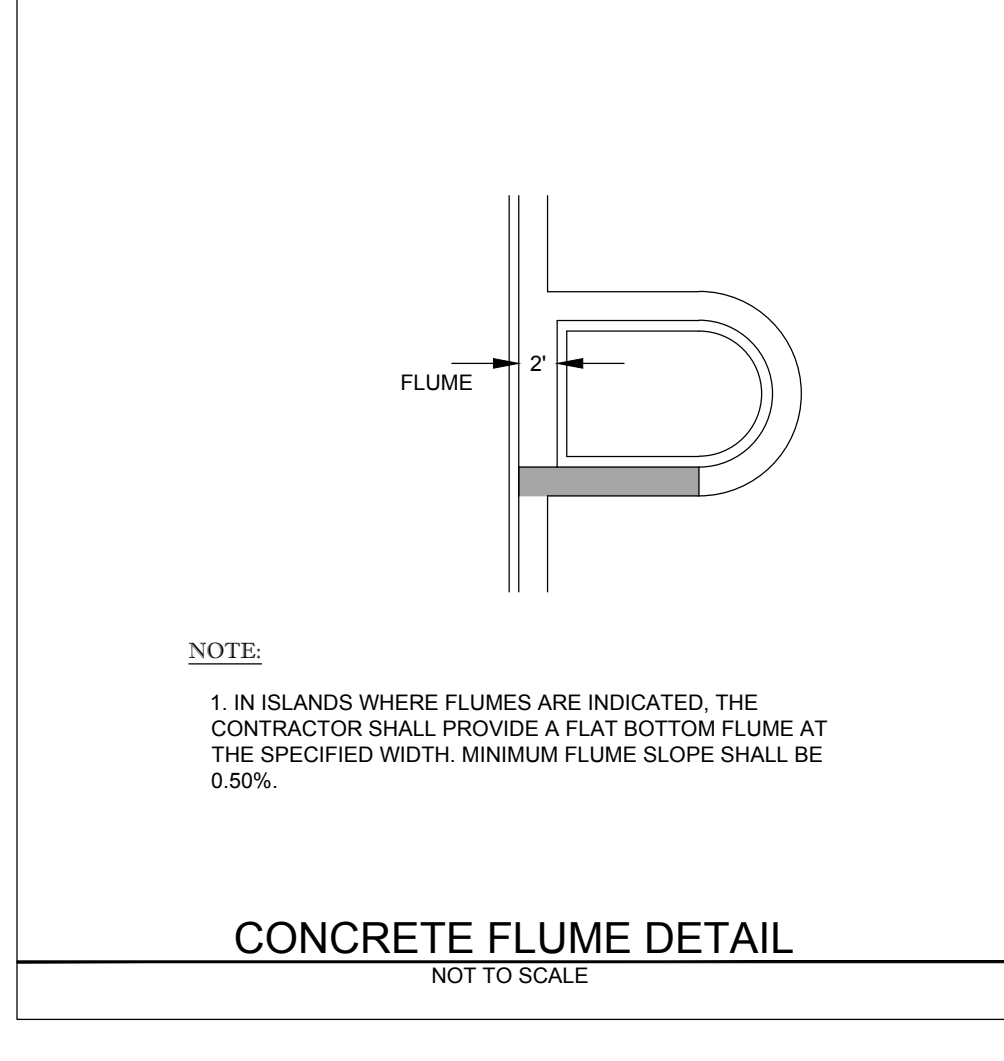
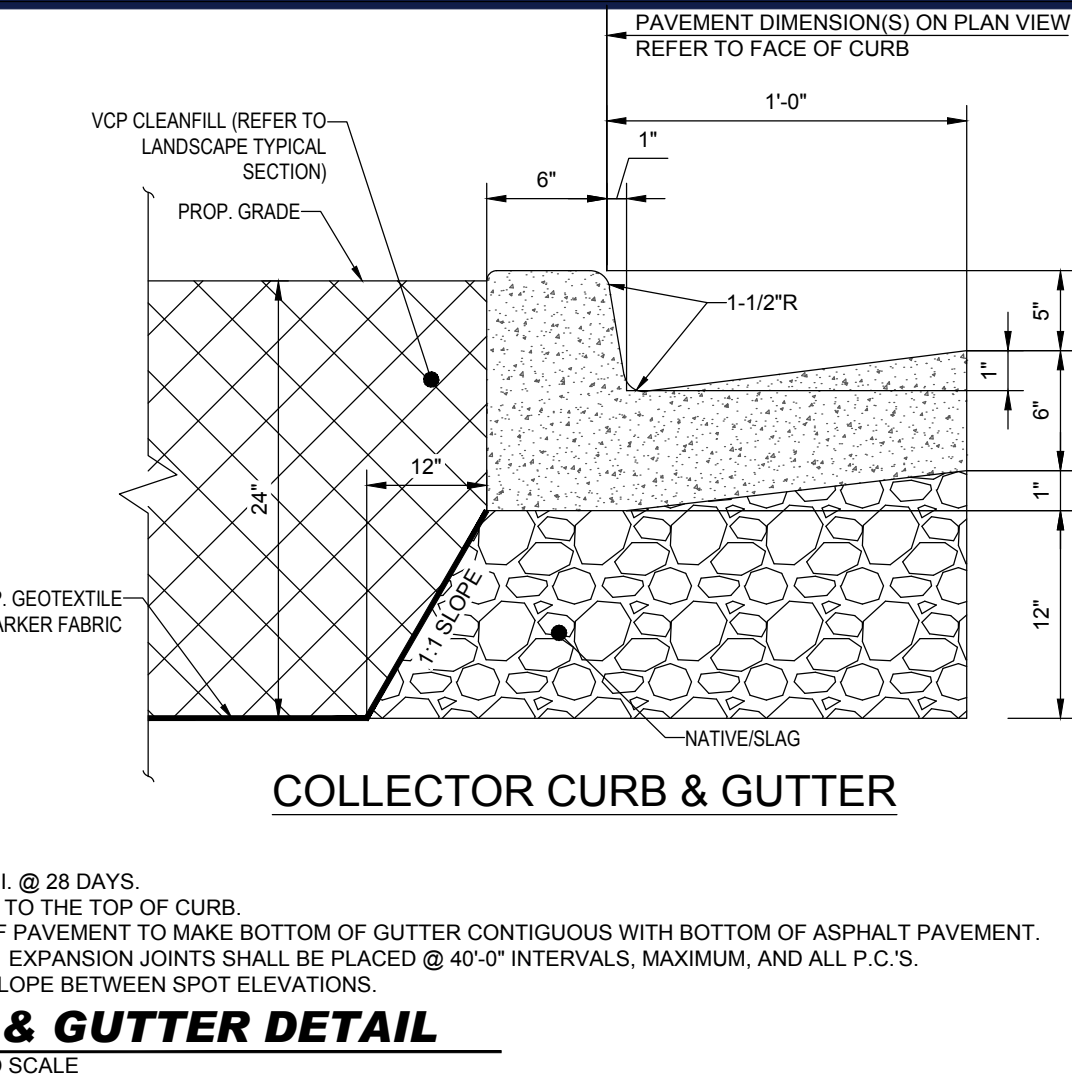
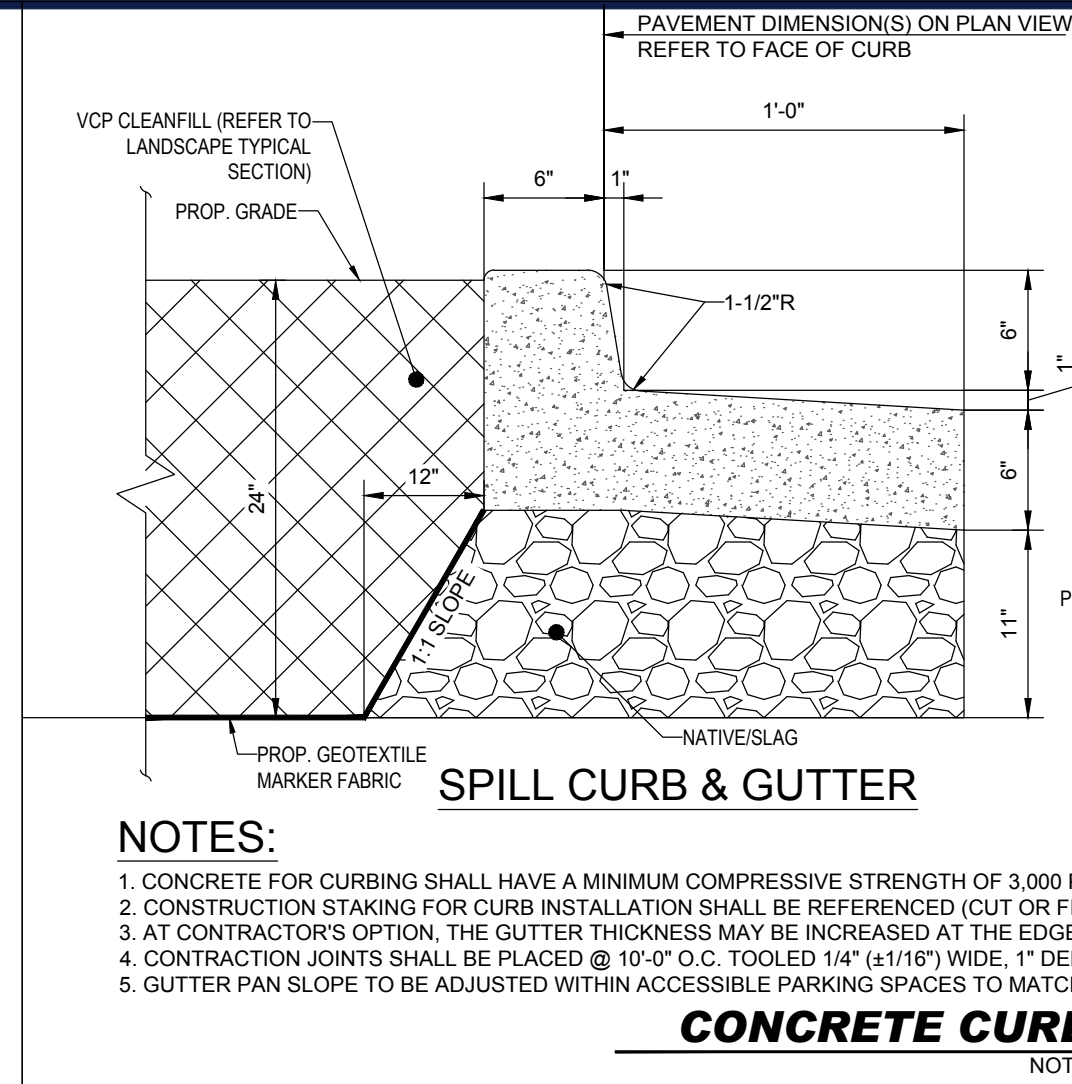
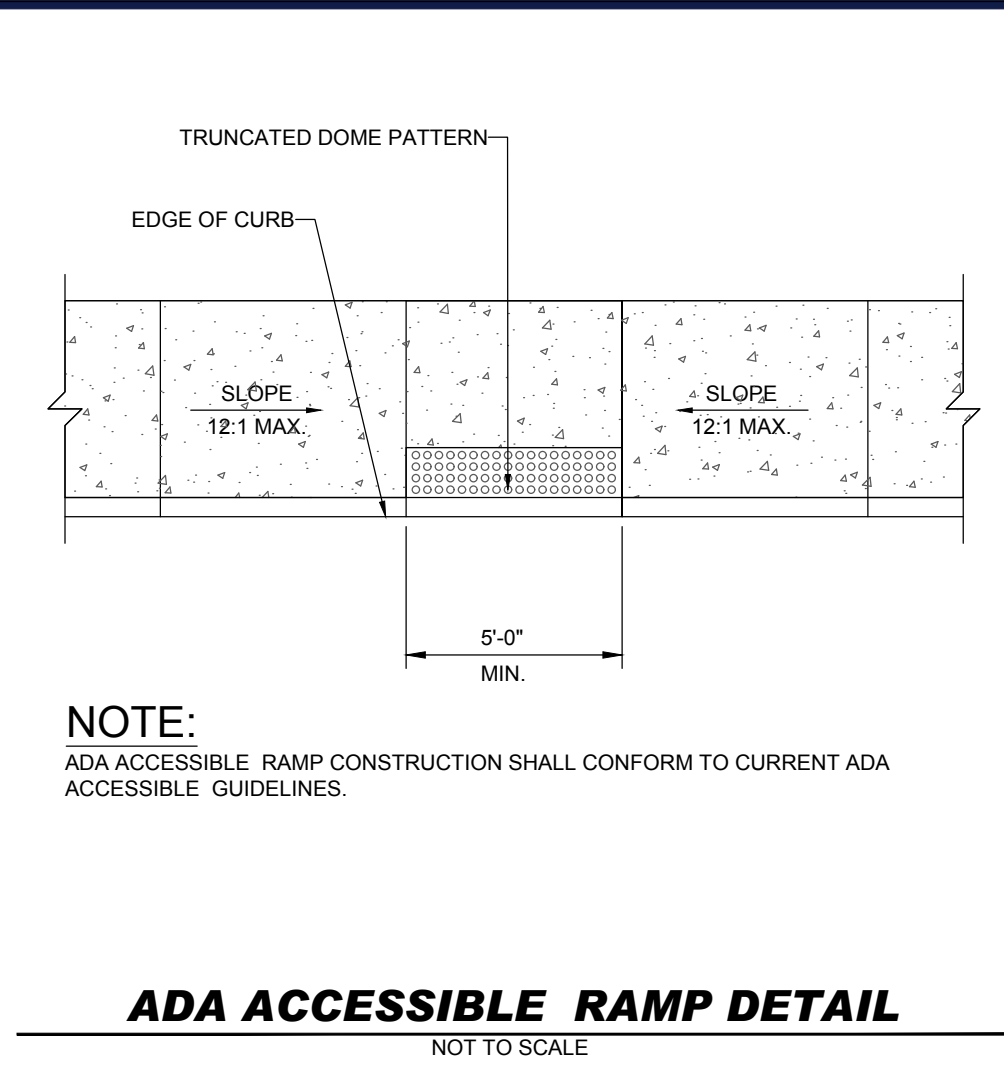
TRADEPOINT DEVELOPMENT, LLC
1800 SPARROWS POINT BLVD
BALTIMORE, MD 21219
CONTACT: MIKE HURWITZ
PHONE: 410-935-4443

TEST PIT NOTE

CONTRACTOR TO TEST PIT 2 FEET BELOW PROPOSED UTILITY OR UNTIL EXACT LOCATION OF EXISTING UTILITY IS IDENTIFIED AND SUBMIT ANY DISCREPANCIES TO BOHLER ENGINEERING IN WRITING.



H:\1616206640\CADDRAWINGS\PLAN SETS\CONSTRUCTION DOCUMENTS\MD16206640 - UTP - 3 - LAYOUT C-501 UTILITY PLAN



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

REVISIONS

REV	DATE	COMMENT	CHECKED BY
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2	4/11/22	REV. PER UPDATED LAYOUT	DMD

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PROJECT No.: MD16206640
DRAWN BY: ISL
CHECKED BY: MUG
DATE: 06/30/2021
CAD ID.: SDP-2

PROJECT BAYOU
FOR
TRADEPOINT ATLANTIC
7301 BETHLEHEM BOULEVARD
BALTIMORE, MD 21219
TM 111, GRID 14, PARCEL 318
ELECTION DISTRICT 15
COUNCILMANIC DISTRICT 7
BALTIMORE COUNTY

BOHLER
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
MD@BohlerEng.com

M.J. GESELL
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 44057
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. 44057, EXPIRATION DATE: 6/30/23

SHEET TITLE:
CONSTRUCTION DETAILS
SHEET NUMBER:
C-901
REVISION 2 - 4/11/22

H:\161602\640\CAD\DRAWINGS\PLAN SET\CONSTRUCTION DOCUMENTS\MD16206640_SDP-3-1-JAY\OUT-CR01 CONSTRUCTION DETAILS