Response and Development Work Plan Addendum

Retail Area #2 – Flex Building

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
9175 Guilford Road
Suite 310
Columbia, Maryland 21046

ARM Project No. 20010206

Respectfully Submitted,

Ryan Clancy, E.I.T.
Project Engineer

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

Revision 0 – July 8, 2021

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FIGURES

APPENDICES

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 Flex Building designated as Retail Area #2. This retail lot is proposed for occupancy and use on Sub-Parcel B6-2 (the Site). The proposed layout of Retail Area #2 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 #2 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, asphalts 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 Stated 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 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 lot 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 designed. 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 #2. The development area will be fully capped by surface engineering controls, and a permanent perimeter fence will be installed along the perimeter as more fully described in Section 2.2.2.

2.2. RETAIL AREA #2

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.

Due to the known presence of NAPL along the proposed western access driveway in the vicinity of historical soil boring B6-066-SB, utility alignments and invert elevations must be considered with respect to these impacts prior to trenching. Soil screening will be especially important during any excavation of existing soil in these areas. Observations and delineation results for NAPL in the vicinity of the western access driveway are detailed in the NAPL Delineation Completion Report for B6-066-PZ (Revision 0 dated April 14, 2020) and related Comment Response Letter dated March 26, 2021.

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 62,000 square-foot Flex 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.

A permanent perimeter fence will be installed along the majority of the perimeter to prevent access to other areas of Sub-Parcel B6-2 that are not covered by this plan. The approximate alignment of the perimeter fence is shown on **Figure 2**, although the alignment may be subject to minor modification. The perimeter fence will prevent access to uncapped portions of Sub-Parcel B6-2 while additional retail lots are being designed and constructed. The perimeter fence will enclose the northern and western perimeters of Retail Area #2 (with the exception of the western end of the access road which extends across a BGE utility easement; the fence cannot be installed across the easement) and will also run along the TMC at the southern perimeter of the Retail Area #2. A perimeter fence will not be installed along the eastern perimeter of the Retail Area #2 where it adjoins with existing paved roadways and other previously developed retail areas (the Marketing Center and Royal Farms).

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 are currently proposed along several alignments within the lease boundary, with primary access at the eastern and southwestern ends of the retail lot. The paved drives will also be subject to the minimum cap thicknesses given in the Sub-Parcel B6-2 RADWP. Areas within the Retail Area #2 boundary not covered by asphalt, building slab, or concrete will be considered landscaped areas and will consist of 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. Tradepoint Atlantic is proposing to use the Mirafi® 140N nonwoven geotextile (or equal) as the preferred marker fabric for this development project. This product has been accepted but was not originally specified as a preferred material within the Sub-Parcel B6-2 RADWP. A product sheet for this fabric is included as **Appendix B**.

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 drawing 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 conservatism 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 and installation of the perimeter fence.

The proposed implementation schedule is provided below.

Task	**Proposed Completion Date**
Anticipated RADWP Addendum Approval	August 1, 2021
Installation of Erosion and Sediment Controls	October 1, 2021
Utility Installation	December 1, 2021
Permanent Capping Remedy Installation	February 2, 2022
Submittal of Completion Report/ Notice of Completion of Remedial Actions*	June 1, 2022

*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

Parcel A6

Parcel B6

TRADEPOINT ATLANTIC
LIBER 38527 FOLIO 473
TM:111 G:14 P:318

PROP. OFFICE BUILDING
62,000 S.F.
PARKING: 178 SPACES
TRUCK LOADING SPACES: 8
FUTURE TRUCK LOADING SPACES: 7
DRIVE-IN DOORS: 5
FUTURE DRIVE-IN DOORS: 5
HEIGHT = 25'±
CONCRETE FIRST FLOOR
MASONRY WALLS

TRADEPOINT ATLANTIC ACCESS R1

PRIVATE ACCESS DRIVE

TIN MILL CANAL

Parcel B16

Parcel B21

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

Sub-Parcel B6-2 RADWP
Retail Area #2 - Flex Building

July 8, 2021

Figure
1

ARM Group LLC
Engineers and Scientists

0 45 90 180
Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project 20010206

Parcel A6

Parcel B6

TRADEPOINT ATLANTIC
LIBER 38527 FOLIO 473
TM:111 G:14 P:318

PROP. OFFICE BUILDING
42,000 S.F.
PARKING: 176 SPACES
TRUCK LOADING SPACES: 0
FUTURE TRUCK LOADING SPACES: 7
DRIVE-IN DOORS: 5
FUTURE DRIVE-IN DOORS: 5
HEIGHT = 20'±
CONCRETE FIRST FLOOR
MASONRY WALLS

TRADEPOINT ATLANTIC
ACCESS R1

PRIVATE ACCESS DRIVE

TIN MILL CANAL

Parcel B16

Parcel B21

- Retail Area #2 LOD
- Standard Duty Asphalt Cap
- Heavy Duty Asphalt Cap
- Concrete Cap
- Building Footprint
- Landscape Cap
- Perimeter Fence (approx. alignment)
- B6-2 Retail Area Boundary
- Parcel Boundary

Sub-Parcel B6-2 RADWP
Retail Area #2 - Capping Areas

July 8, 2021

Figure 2

ARM Group LLC
Engineers and Scientists

0 45 90 180 Feet

Tradepoint Atlantic

Sparrows Point

Baltimore County, MD

ARM Project 20010206

APPENDIX A

STANDARD DRAWING LEGEND
FOR ENTIRE PLAN SET

LIMIT OF WORK		—LOW—LOW—
LIMIT OF DISTURBANCE		—LOD—LOD—
EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE	
	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	
	EASEMENT LINE	
	SETBACK LINE	
	CONCRETE CURB & GUTTER	CURB AND GUTTER SPILL TRANSITION DEPRESSED CURB AND GUTTER
	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
X	PARKING COUNTS	X
—170— 169	CONTOUR LINE	190 187
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00 / TC 516.00 BC 515.55 / MATCH EX (518.02 ±)
SAN #	SANITARY LABEL	SAN #
X #	STORM LABEL	X #
—SL—	SANITARY SEWER LATERAL	—SL—
—W—	UNDERGROUND WATER LINE	—W—
—E—	UNDERGROUND ELECTRIC LINE	—E—
—G—	UNDERGROUND GAS LINE	—G—
—OH—	OVERHEAD WIRE	—OH—
—T—	UNDERGROUND TELEPHONE LINE	—T—
—C—	UNDERGROUND CABLE LINE	—C—
	STORM SEWER	
—S—	SANITARY SEWER MAIN	—S—
	HYDRANT	
S	SANITARY MANHOLE	S
D	STORM MANHOLE	D
WM	WATER METER	◑
WV	WATER VALVE	●
□	GAS VALVE	□
⊠	GAS METER	⊠
	TYPICAL END SECTION	
OR	HEADWALL OR ENDWALL	OR
	GRATE INLET	
	CURB INLET	
○	CLEAN OUT	○
E	ELECTRIC MANHOLE	E
T	TELEPHONE MANHOLE	T
EB	ELECTRIC BOX	EB
EP	ELECTRIC PEDESTAL	EP
	MONITORING WELL	
	TEST PIT	
	BENCHMARK	
	BORING	

STANDARD ABBREVIATIONS
FOR ENTIRE PLAN SET

AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BUILDING BENCHMARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR (AT DOOR)
GH	GRADE HIGHER SIDE OF WALL
GL	GRADE LOWER SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
L/S	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PA	POINT OF ANALYSIS
PC	POINT CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
R/W	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
S/W	SIDEWALK
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TELE	TELEPHONE
TPF	TREE PROTECTION FENCE
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WIDE
W/L	WATER LINE
W/M	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

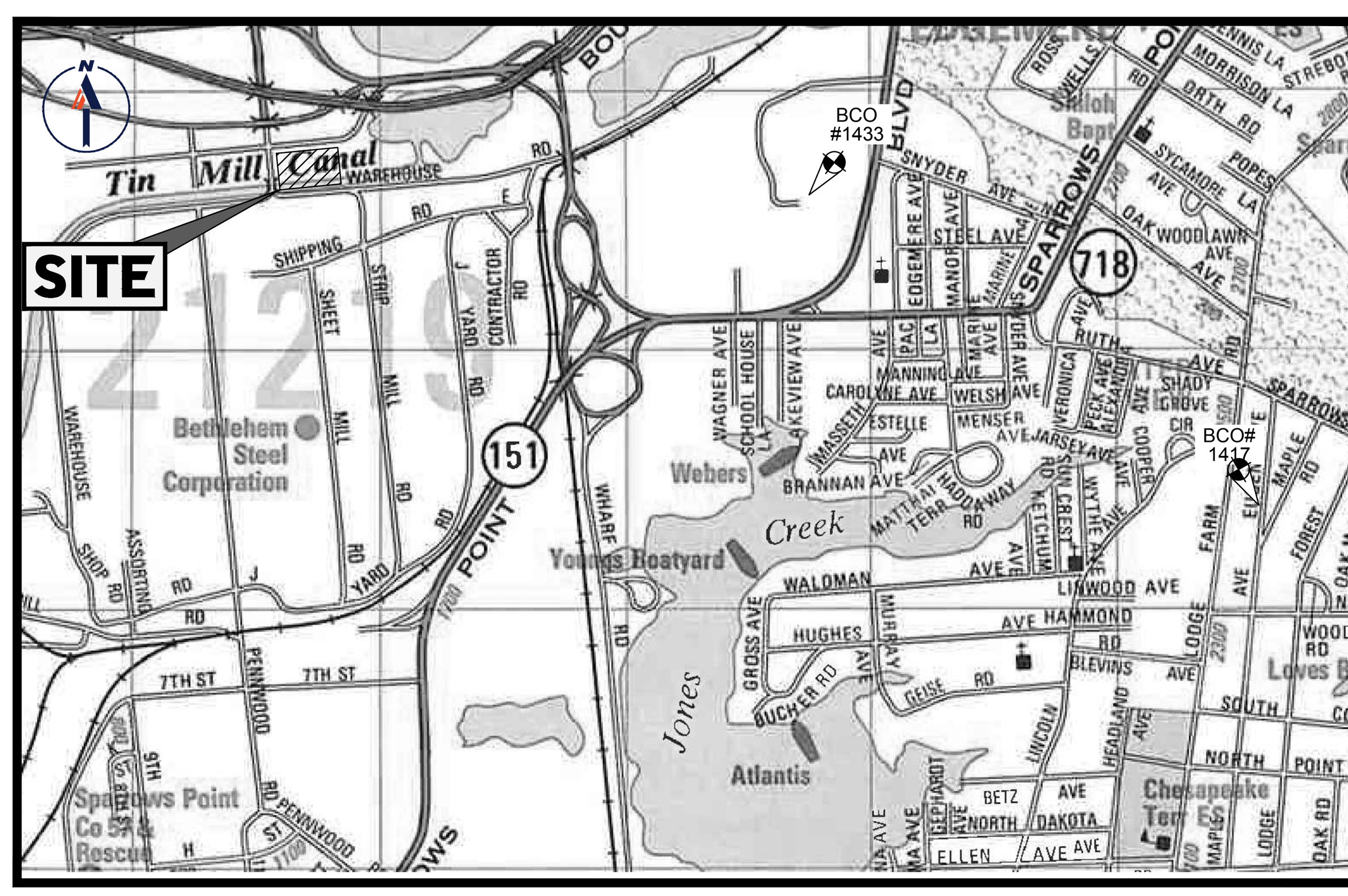
PROPOSED FLEX BUILDING

FOR

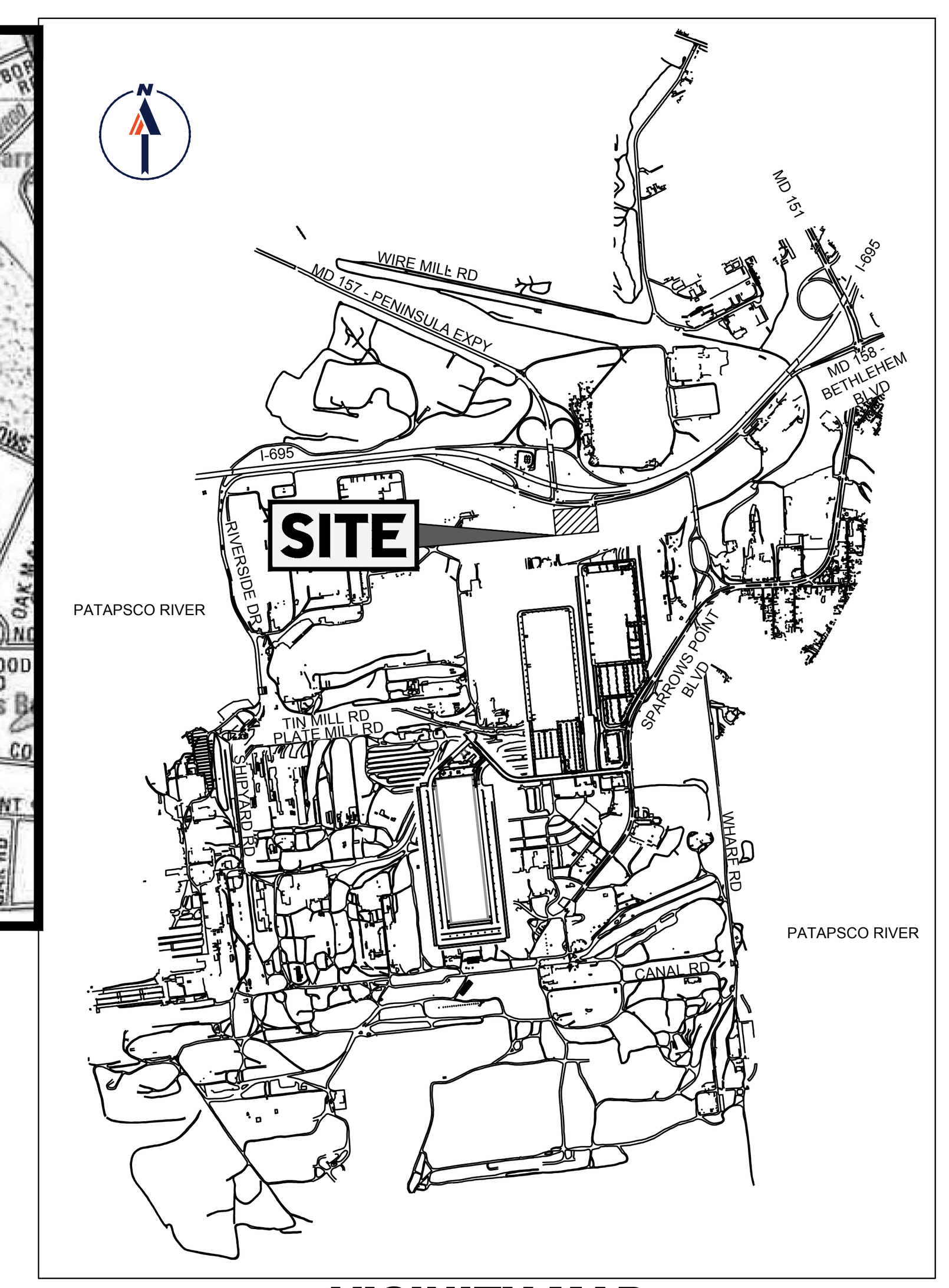
TRADEPOINT ATLANTIC

PHASE II PLANS

LOCATION OF SITE
6995 BETHLEHEM BOULEVARD
BALTIMORE, MD 21219
TM 111, GRID 14, PARCEL 318
ELECTION DISTRICT 15
COUNCILMANIC DISTRICT 7
BALTIMORE COUNTY



LOCATION MAP
COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 20602153-5
SCALE: 1"=2000'



VICINITY MAP
SCALE: 1"=3000'

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 1,469,030.75, ELEV. 14.11
EAST SIDE OF LODGE FARM ROAD
SOUTH OF LINCOLN AVE

GENERAL NOTE:
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS AND IN FULL CONFORMANCE WITH LOCAL REGULATIONS AND CODES.

PREPARED BY

BOHLER

CONTACT: MICHAEL J. GESELL, P.E.

REFERENCES
- EXISTING CONDITIONS
  CAD FILES PROVIDED BY TRADEPOINT ATLANTIC
  ENTITLED: "BASE - UTILITIES", "BASE - TOPO", "BASE - PLANOMETRICS"
  RECEIVED: 5/27/16
- SURVEY
  ENTITLED: "TOPOGRAPHIC SURVEY, TRADE POINT ATLANTIC; SPARROWS POINT; 15TH ELECTION DISTRICT; BALTIMORE COUNTY, MARYLAND"
  PREPARED BY: BOHLER ENGINEERING
  DATE: 2/24/21

UTILITY CONTACTS
- WATER AND SEWER
  BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS
  111 WEST CHESAPEAKE AVENUE
  TOWSON, MD 21204
  CONTACT: D'ANDREA WALKER
  PHONE: (410) 887-3306
- GAS AND ELECTRIC:
  BGE
  1068 N. FRONT ST. ROOM 401
  BALTIMORE, MD 21202
  PHONE: (410) 850-4620
- CABLE:
  COMCAST BUSINESS SERVICES
  5001 METRO DRIVE
  BALTIMORE, MD 21215
  PHONE: (800) 391-3000
- TELEPHONE
  VERIZON
  99 SHAWAN ROAD
  COCKEYSVILLE, MD 21030
  PHONE: (410) 393-5793
- STORM DRAIN:
  BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS
  111 WEST CHESAPEAKE AVENUE
  TOWSON, MD 21204
  CONTACT: D'ANDREA WALKER
  PHONE: (410) 887-3306

GOVERNING AGENCIES
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  111 WEST CHESAPEAKE AVENUE
  TOWSON, MD 21204
  CONTACT: D'ANDREA WALKER
  PHONE: (410) 887-3306
- MARYLAND DEPARTMENT OF THE ENVIRONMENT
  1800 WASHINGTON BOULEVARD
  BALTIMORE, MD 21230
  CONTACT: DANIEL LAIRD, P.E.
  PHONE: (410) 537-4311
- BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
  111 WEST CHESAPEAKE AVENUE, ROOM 319
  TOWSON, MD 21204
  CONTACT: KRITTY UDHIN, P.E.
  PHONE: (410) 887-4488
- BALTIMORE COUNTY DEPARTMENT OF DEVELOPMENT MANAGEMENT
  111 WEST CHESAPEAKE AVENUE
  TOWSON, MD 21204
  CONTACT: LLOYD MOXLEY
  PHONE: (410) 887-3321

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TOTAL NUMBER OF SHEETS	19

OWNER/DEVELOPER
TRADEPOINT DEVELOPMENT, LLC
1600 SPARROWS POINT BLVD
BALTIMORE, MD 21219
CONTACT: MICHAEL BARRY
PHONE: 443-649-5070

OWNER'S/DEVELOPER'S CERTIFICATION:
I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS

SIGNATURE OWNER/DEVELOPER DATE

PRINT NAME TITLE

CONSULTANT'S CERTIFICATION:
I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE CONSULTANT DATE

MICHAEL J. GESELL, PE 44097
PRINT NAME MD LICENSE NUMBER

E&S 1 OF 7

ISSUED FOR CONSTRUCTION
SIGNATURE DATE

SIGNATURE DATE SIGNATURE DATE

THIS DOCUMENT IS NOT ISSUED BY BOHLER FOR CONSTRUCTION WITHOUT (3) SIGNATURES

PROJECT #

REVISION DATE:

MDE PROJECT #
XX-SF-XXX

REVIEWED AND APPROVED FOR SEDIMENT CONTROL UNDER SECTION 4-105

BY DATE

MARYLAND DEPARTMENT OF THE ENVIRONMENT

TM BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
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.:	MD16206636
DRAWN BY:	JHS
CHECKED BY:	MJG
DATE:	3/19/2021
CAD I.D.:	MD16206636-SDP-0

PROJECT:

FLEX BUILDING

FOR

TRADEPOINT ATLANTIC

6995 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. 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: 6/9/21

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-101

ORG. DATE - 3/19/2021

H:\16\MD16206636\DRAWINGS\PLAN SETS\CONSTRUCTION DOCUMENTS\MD16206636-SDP-0----->LAYOUT: C-101 - COVER SHEET
MG

LEGEND

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

SITE KEYNOTES

1. SITE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR THE EXACT DIMENSIONS OF THE BUILDING AND THE LOCATION OF DOORWAYS, UTILITIES, ETC.
2. DEPRESSED CURB AND GUTTER
3. LANDSCAPED AREA
4. 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)

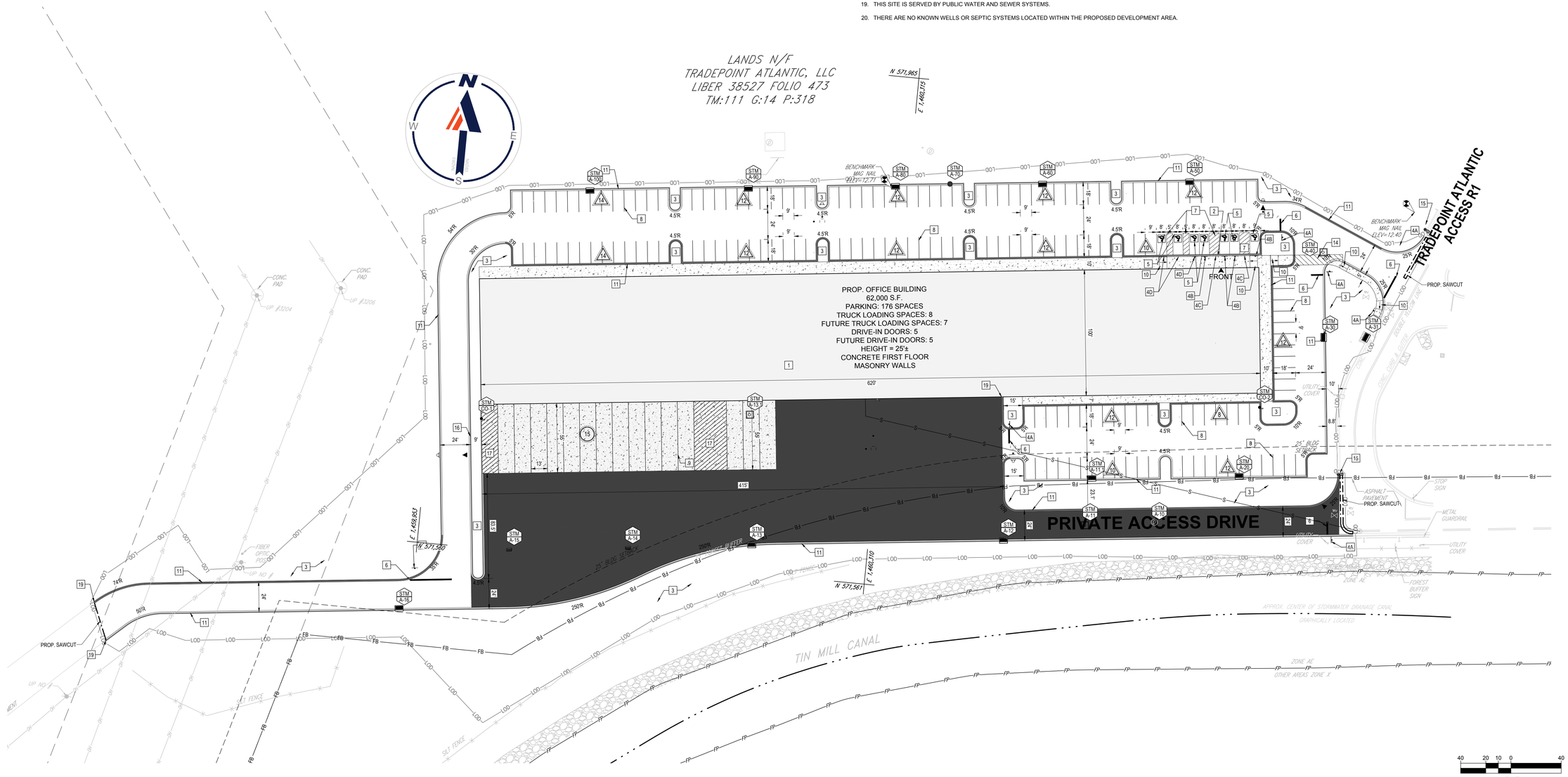
   4B. BOLLARD MOUNTED ADA ACCESSIBLE PARKING SIGNAGE (WITH VAN ACCESSIBLE SIGNAGE)

   4C. BOLLARD MOUNTED "NO PARKING IN ACCESS AISLE" SIGNAGE

   4D. BOLLARD MOUNTED ADA ACCESSIBLE PARKING SIGNAGE
5. ADA PARKING SYMBOL (WHITE SYMBOL WITH BLUE BACKGROUND)
6. 24" WHITE PAINTED STOP BAR
7. 4" WHITE PAVEMENT MARKING; 45° ANGLE, 2' O.C.
8. 4" WHITE PARKING STALL PAVEMENT MARKING (9'x18' TYP.)
9. 4" SINGLE SOLID YELLOW PAVEMENT MARKING (TYP.)
10. ACCESSIBLE CURB RAMP
11. 6" CURB W/ 1.5' GUTTER
12. SITE LIGHT (REFER TO PHOTOMETRIC PLANS)
13. LOADING DOCK DOOR (TYP.) (REFER TO ARCHITECTURAL PLANS)
14. CROSSWALK - 12" WHITE PAVEMENT MARK, 45° ANGLE 4' O.C.
15. RELOCATED SITE LIGHT
16. 6" HEADER CURB
17. 4" YELLOW PAVEMENT PARKING; 45° ANGLE, 2' O.C.
18. METAL STAIRS (REFER TO ARCHITECTURAL PLANS)
19. 5' CURB TAPER

SITE NOTES

1. TOTAL SITE AREA: 132,225,998 S.F. OR 3,035.49 AC.
2. PROPERTY SITE AREA: 1132,225,998 S.F. OR 3,035.49 AC.
3. PROPOSED FLOOR AREA: 62,000 S.F.
4. DEED REFERENCE: LIBER 35478, FOLIO 379
5. ELECTION DISTRICT: 15TH
6. COUNCILMANIC DISTRICT: 7TH
7. TAX MAP 111, GRID 14, PARCEL 318
8. TAX. ACCT. NOS.: 1502024000
9. OWNER:
   TRADEPOINT DEVELOPMENT, LLC.
   1600 SPARROWS POINT BLVD
   BALTIMORE, MD 21219
10. DEVELOPER/APPLICANT:
    TRADEPOINT DEVELOPMENT, LLC.
    1600 SPARROWS POINT BLVD
    BALTIMORE, MD 21219
11. ZONE: MH-IM (MANUFACTURING - HEAVY - INDUSTRIAL - MAJOR)
12. PREVIOUS ZONING CASES: NONE
12. WATERSHED: BALTIMORE HARBOR
13. CENSUS TRACT: 9800.00
14. ALL SOILS ARE URBAN LAND, UDORTHENTS, 0 TO 8% SLOPES
15. EXISTING USE: VACANT
16. PROPOSED USE: FLEX BUILDING
17. PARKING
    REQUIRED: OFFICE:3.3 PER 1,000 SF FLOOR AREA = 165 SPACES; WAREHOUSE: 1 SPACE PER EMPLOYEE = 11 SPACES
    •• PROVIDED: 176 SPACES
    ••• INCLUDING 7 ADA SPACES
18. STRUCTURE HEIGHT
    • REQUIRED: UNLIMITED
    • PROPOSED: 25'±
19. THIS SITE IS SERVED BY PUBLIC WATER AND SEWER SYSTEMS.
20. THERE ARE NO KNOWN WELLS OR SEPTIC SYSTEMS LOCATED WITHIN THE PROPOSED DEVELOPMENT AREA.



H:\186\MD16206636\DRAWINGS\PLAN SETS\CONSTRUCTION DOCUMENT\SMD16206636-SPP-0---1-LAYOUT C-301 - SITE PLAN

MJG

BOHLER

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

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD16206636
DRAWN BY:	JHS
CHECKED BY:	MJG
DATE:	3/19/2021
CAD I.D.:	MD16206636-SPP-0

PROJECT:

FLEX BUILDING

FOR

TRADEPOINT ATLANTIC

6995 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
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SHEET TITLE:

SITE PLAN

SHEET NUMBER:

C-301

ORG. DATE - 3/19/2021

LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE	
120 / 121	CONTOUR LINE	120 / 121
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00; TC 516.00 / BC 515.50
SL	SANITARY SEWER LINE	SL / S
W	UNDERGROUND WATER LINE	W
I	INDUSTRIAL WATER LINE	I
E	UNDERGROUND ELECTRIC LINE	E
G	UNDERGROUND GAS LINE	G
OH	OVERHEAD WIRE	OH
T	UNDERGROUND TELEPHONE LINE	T
	STORM SEWER	
FM	SANITARY SEWER FORCE MAIN	FM
	LIMIT OF DISTURBANCE	LOD
	CONCRETE CURB & GUTTER	CURB AND GUTTER / SPILL CURB

SITE SPECIFIC GRADING NOTES

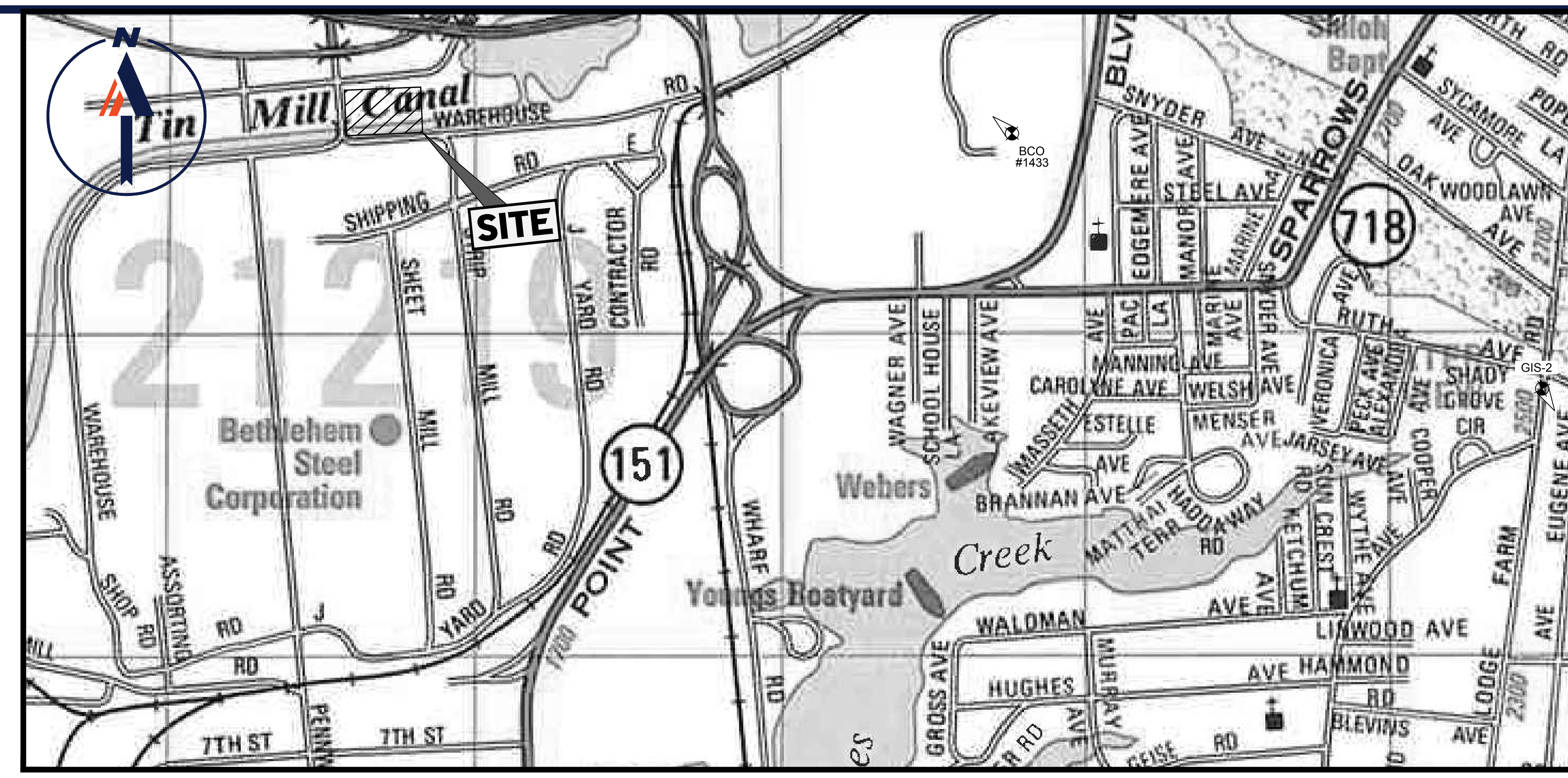
1. ALL UTILITIES SHOWN ARE PRIVATE UNLESS OTHERWISE NOTED.
2. THE SUBJECT DEVELOPMENT AREA IS LOCATED IN FLOOD ZONE 'X' (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "NATIONAL FLOOD INSURANCE PROGRAM, FIRM, FLOOD INSURANCE RATE MAP, BALTIMORE COUNTY, MARYLAND (UNINCORPORATED AREAS) PANEL 555 OF 580", MAP NUMBER 240010555G, MAP REVISED MAY 5, 2014, AND PLAN PREPARED BY PAI, DEV. PLANS REVIEW, DATED SEPTEMBER 21, 2016, PER MAP 0555F, DATED SEPTEMBER 26, 2008
3. 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.
4. EXISTING UTILITIES NOTED AS "TO REMAIN" WITHIN THE LIMIT OF DISTURBANCE MUST BE MAINTAINED TO PROVIDE SERVICE FOR THE PROPOSED DEVELOPMENT.
5. EXISTING GRADES SHOWN ON THIS PLAN ARE FROM THE APPROVED MASS GRADING PLANS. IF ACTUAL EXISTING GRADES DIFFER FROM WHAT IS SHOWN ON THESE PLANS, CONTRACTOR IS TO NOTIFY BOHLER IN WRITING.
6. EXISTING MANHOLE, CLEANOUT, AND VALVE COVERS WITHIN THE LIMIT OF DISTURBANCE NOT IDENTIFIED AS "TO BE REMOVED" ARE TO BE ADJUSTED TO MEET FINAL GRADES.
7. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE, SOURCE INFORMATION FROM PLANS AND MARKINGS HAVE BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE REQUIRED.
8. ON SITE-TOPOGRAPHY BASED UPON FIELD RUN SURVEY COMPLETED BY BOHLER ON FEBRUARY 24, 2021.

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 1,469,030.75, ELEV. 14.11
EAST SIDE OF LODGE FARM ROAD
SOUTH OF LINCOLN AVE



LOCATION MAP

COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 20602153-5
SCALE: 1"=1000'

STORMWATER MANAGEMENT PERMIT NOT REQUIRED

BALTIMORE COUNTY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY

APPROVED FOR GRADING

DATE

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

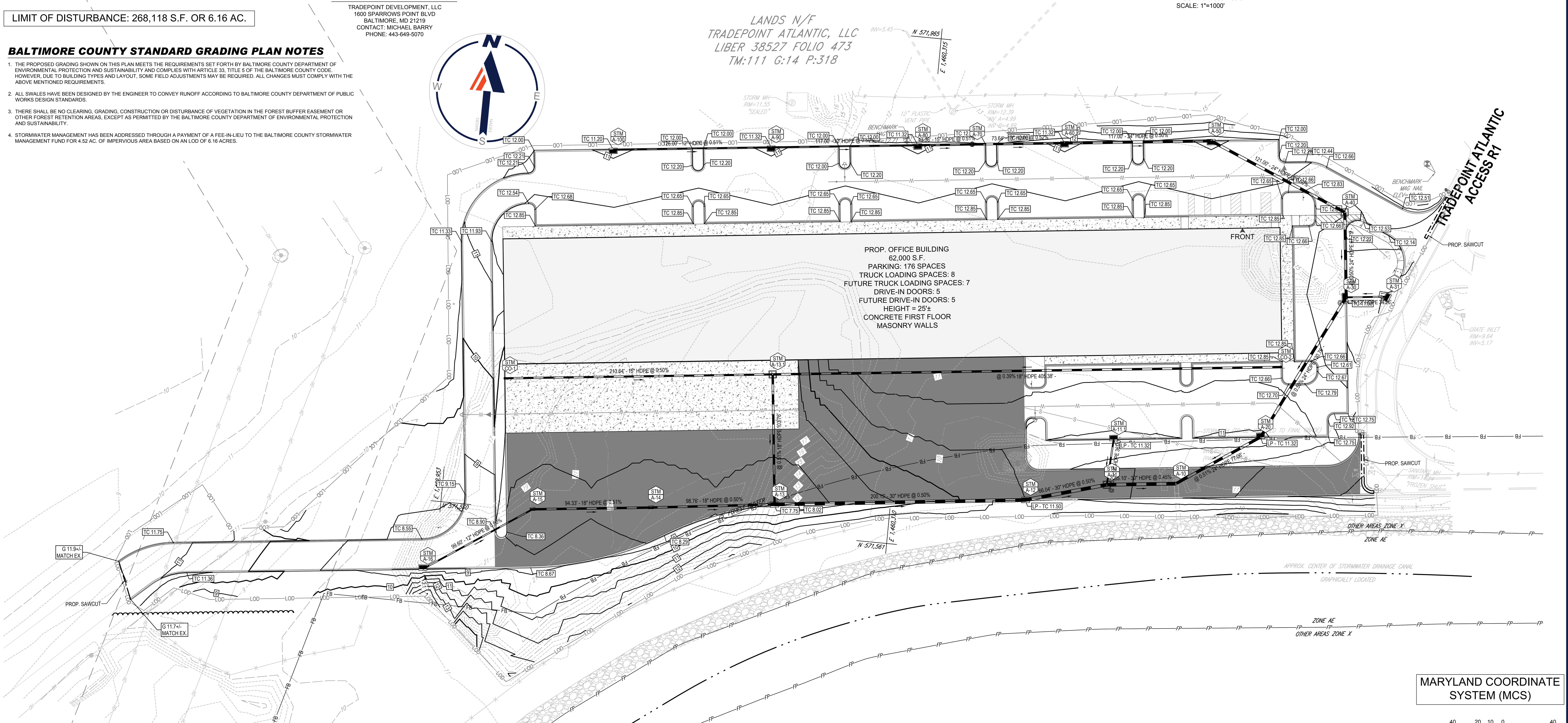
LIMIT OF DISTURBANCE: 268,118 S.F. OR 6.16 AC.

OWNER/DEVELOPER

TRADEPOINT DEVELOPMENT, LLC
1600 SPARROWS POINT BLVD
BALTIMORE, MD 21219
CONTACT: MICHAEL BARRY
PHONE: 443-649-5070

BALTIMORE COUNTY STANDARD GRADING PLAN NOTES

1. THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES 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.
2. ALL SWALES HAVE BEEN DESIGNED BY THE ENGINEER TO CONVEY RUNOFF ACCORDING TO BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS DESIGN STANDARDS.
3. 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.
4. STORMWATER MANAGEMENT HAS BEEN ADDRESSED THROUGH A PAYMENT OF A FEE-IN-LIEU TO THE BALTIMORE COUNTY STORMWATER MANAGEMENT FUND FOR 4.52 AC. OF IMPERVIOUS AREA BASED ON AN LOD OF 6.16 ACRES.



MARYLAND COORDINATE SYSTEM (MCS)

40 20 10 0 40
1"= 40'

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
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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.:	MD16206636
DRAWN BY:	JHS
CHECKED BY:	MJG
DATE:	3/19/2021
CAD I.D.:	MD16206636-SPP-0

PROJECT:

FLEX BUILDING

FOR

TRADEPOINT ATLANTIC

6995 BETHLEHEM BOULEVARD
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SHEET TITLE:

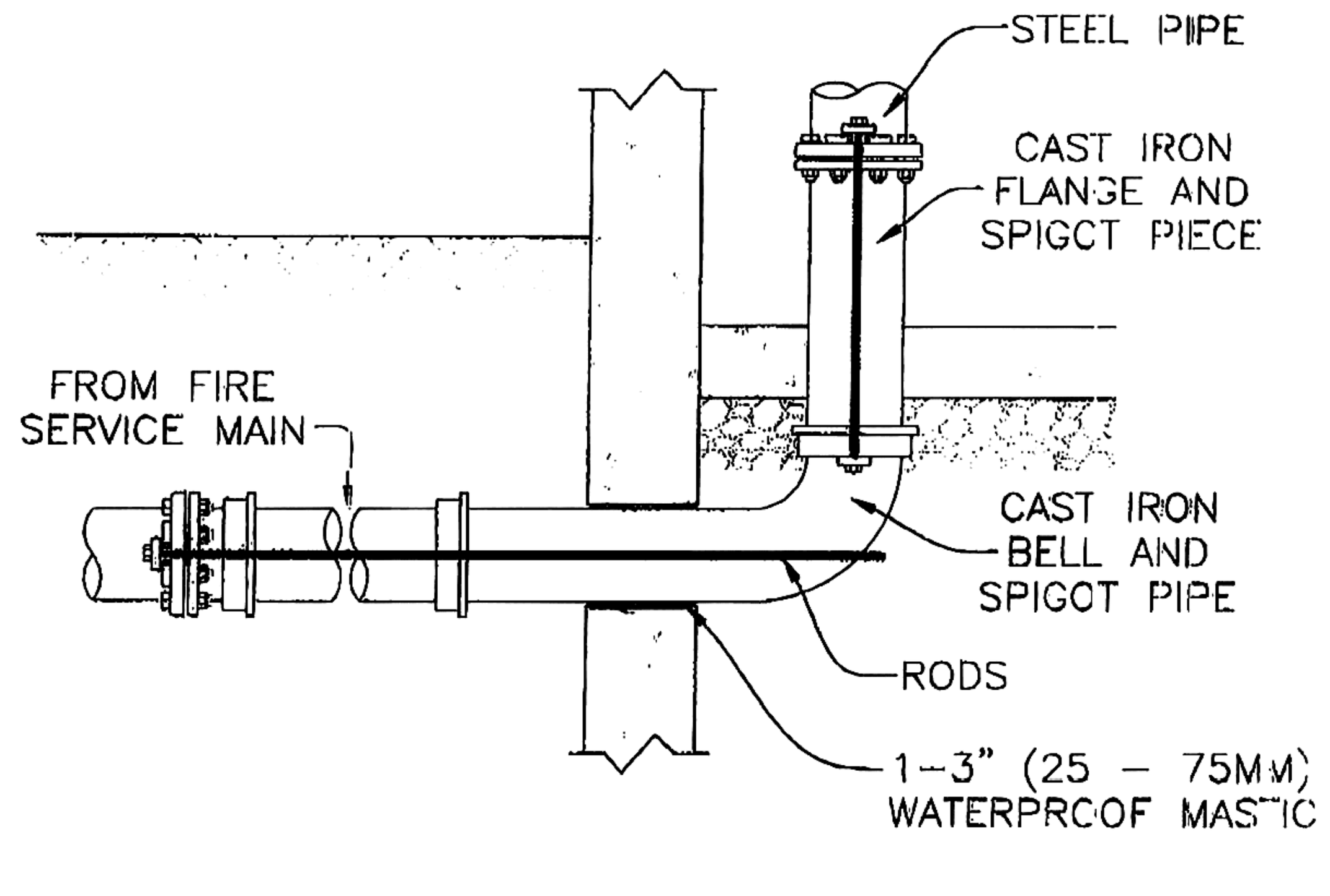
FINAL GRADING PLAN

SHEET NUMBER:

C-401

ORG. DATE - 3/19/2021

H:\16\MD16206636\DRAWINGS\PLAN SETS\CONSTRUCTION DOCUMENTS\MD16206636-SPP-0----->LAYOUT: C-401 - FINAL GRADING PLAN



TYPICAL CONNECTION TO STANDPIPE RISER
NOT TO SCALE

BALTIMORE COUNTY FIRE LINE UTILITY NOTES

1. THE OVERALL INSTALLATION AND DESIGN SHALL BE IN COMPLIANCE WITH NFPA 24, 2007 EDITION, "STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES"; THE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION:; AND THE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS "DESIGN MANUAL".
2. ALL RODDING, CLAMPS, NUTS, BOLTS, AND OTHER RESTRAINING DEVICES EXCEPT THRUST BLOCKS, SHALL BE CLEANED AND COATED WITH BITUMINOUS OR ASPHALT. NFPA 24, 2007 EDITION, SECTION 10.8.3.5.
3. FERROUS METAL PIPING, IF UTILIZED, SHALL BE LINED, AND STEEL PIPE SHALL BE COATED AND WRAPPED. NFPA 24, 2007 EDITION, SECTIONS 10.1.2, 10.1.3, 10.1.6, 10.1.6.2.
4. ALL PIPING , FITTINGS, AND JOINTS SHALL MEET THE REQUIREMENTS SET FORTH IN NFPA 24, 2007 EDITION, SECTION 10.1 THROUGH 10.3.5.
5. THRUST BLOCKS SHALL BE PROVIDED AT ALL CHANGES IN DIRECTION IN THE PIPELINE, AND AT ALL TEES, PLUGS, CAPS, AND BENDS. THRUST BLOCKS SHALL CONFORM TO THE BEARING AREAS NOTED IN THE TEXT OF THE STANDARD AND CONFIGURATIONS NOTED IN THE APPENDIX. NFPA 24, 2007 EDITION, SECTIONS 10.8.1.1 AND 10.8.2.
6. ALL VALVES (>2") CONTROLLING WATER SUPPLIES SHALL BE INSTALLED IN STANDARD VAULTS AS DETAILED BY THE BCDPW "STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION" MANUAL, OR SHALL UTILIZE APPROVED POST INDICATOR VALVES. ROADWAY BOXES ARE NOT ACCEPTABLE. NFPA 24, 2007 EDITION, SECTIONS 6.1, 6.3 AND 6.4; BCDPW "DESIGN MANUAL", WATER MAIN SECTION, SECTION 2-4.7.
7. FIRE HYDRANTS, PUBLIC AND PRIVATE SHALL BE UL LISTED OR BE FM OR BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS APPROVED THREE (3) OUTLET HYDRANTS. OUTLETS SHALL BE 2-2 ½" NST AND 1-4 ½" BALTIMORE COUNTY STEAMER THREAD. NFPA 24, 2007 EDITION, SECTION 7.1.1 AND 7.1.1.2 BCDPW "DESIGN MANUAL", SECTION 2-4.4 STEAMER THREAD, AS DETAILED ON BCDPW PLATE W-3C, DATED 3/5/82. BALTIMORE COUNTY BILL 48-10 SECTION 1:18.3.3.1(3) AND 1:18.3.5.2.
8. FIRE HYDRANTS SHALL HAVE A CENTERLINE SET BACK FROM THE CURB OF 24" AND SHALL HAVE THE CENTERLINE OF THE 4-1/2" STEAMER CONNECTION NO LESS THAN 17" NOR MORE THAN 30" ABOVE FINISHED GRADE, FACING THE ACCESS DRIVE. BCDPW "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION", PLATE W-3A, W-3B.
9. FIRELINES ARE SUBJECT TO A MINIMUM OF A 200-PSI HYDROSTATIC TEST IN ACCORDANCE WITH NFPA 24, 2007 EDITION, SECTION 10.10.2.2.1. ALL THRUST BLOCKS, TIE RODS, VALVES, FITTINGS, AND HYDRANT DRAIN FIELDS SHALL BE EXPOSED FOR FIRE DEPARTMENT INSPECTION AT THE TIME OF THE TEST. PIPE JOINTS MAY BE COVERED AT THE TIME OF THE TEST.
10. THE MINIMUM DEPTH OF COVER FOR ALL UNDERGROUND FIRE LINES SHALL BE A MINIMUM OF 4'-0" MEASURED FROM THE TOP OF THE PIPE. NFPA 24, 2007 EDITION, SECTION 10.4 AND TABLE A10.5.1.
11. PIPE SHALL NOT BE RUN MORE THAN ONE PIPE LENGTH (APPROXIMATELY 20 FEET) UNDER BUILDINGS. FITTINGS SHALL NOT BE LOCATED WITHIN THE BEARING AREA OF ANY FOUNDATIONS UNLESS APPROVED BY THE DESIGN ENGINEER. NFPA 24, 2007 EDITION, SECTION 10.6.
12. SPOOL PIECES ON VERTICAL RISES OR HORIZONTAL STUB-INS SHALL BE WELDED OR SCREWED FLANGE, OR LISTED UNIFLANGE TYPE FITTING. NOTE: UNIFLANGE TYPE FITTINGS SHALL BE SPECIFICALLY LISTED FOR ABOVEGROUND USE.
13. ON SITE (PRIVATE) HYDRANTS SHALL BE PAINTED RED, IN ORDER TO DISTINGUISH THEM FROM (ORANGE) PUBLIC HYDRANTS. BALTIMORE COUNTY BILL 48-10, SECTION 1:18.3.5.2.
14. COORDINATE HYDROSTATIC TEST AND FLUSH WITH CONTRACTOR INSTALLING STUB-IN, SUCH THAT ENTIRE LEAD-IN IS TESTED AS A SINGLE UNIT.
15. COORDINATE HYDROSTATIC TEST AND FLUSH WITH CONTRACTOR INSTALLING LEAD-IN SUCH THAT ENTIRE LEAD TO THE BASE OF THE RISER IS TESTED AS A SINGLE UNIT.
16. RESTRAINED JOINT SYSTEMS. FIRE MAINS UTILIZING RESTRAINED JOINT SYSTEMS SHALL INCLUDE THE FOLLOWING PER NFPA 24, 2007 EDITION, SECTION 10.8.3:
    A. LOCKING MECHANICAL OR PUSH-ON JOINTS
    B. MECHANICAL JOINTS UTILIZING SETSCREW RETAINER GLANDS
    C. BOLTED FLANGE JOINTS
    D. HEAT-FUSED OR WELDED JOINTS
    E. PIPE CLAMPS AND TIE RODS
    F. OTHER APPROVED METHODS OR DEVICES.
17. PRIVATE HYDRANTS SUPPLIED BY FIRE PUMPS: PRIVATE FIRE HYDRANTS LOCATED ON THE DISCHARGE SIDE OF THE FIRE PUMPS SHALL HAVE THEIR BONNETS PAINTED WHITE IN ORDER TO INDICATE THAT SAID HYDRANTS ARE OFF THE DISCHARGE SIDE OF A FIRE PUMP. EXCEPTIONS FOR PRESENTLY EXISTING SYSTEMS MAY BE GRANTED AT THE DISCRETION OF THE CHIEF OF FIRE DEPARTMENT OF DESIGNEE. BALTIMORE COUNTY BILL 48-10 SECTION 1:18.3.5.1.
18. ALL UNDERGROUND PIPING SHALL BE FLUSHED PRIOR TO HYDROSTATIC TESTING IN ACCORDANCE TO NFPA 24, 2007 EDITION, SECTION 10.10.2.1.

SITE SPECIFIC UTILITY NOTES

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STORM STRUCTURE SCHEDULE

NAME	TYPE	RIM ELEV. (FT.)	INVERTS
A-10	EX. MANHOLE	12.48'	INV IN = 1.08' (30") INV IN = 0.53' (24")
A-11	TYPE - 'A' MANHOLE (BALT. CO. STD. D-3.00)	12.00'	INV IN = 1.47' (30") INV IN = 8.13' (12") INV OUT = 1.33' (30")
A-11.1	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	11.00'	INV OUT = 8.32' (12")
A-12	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	11.00'	INV IN = 1.90' (30") INV OUT = 1.80' (30")
A-13	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	7.25'	INV IN = 3.00' (18") INV IN = 4.60' (18") INV OUT = 2.90' (30")
A-13.1	TYPE - 'A' MANHOLE (BALT. CO. STD D-3.07)	9.09'	INV IN = 5.38' (15") INV IN = 6.00' (18") INV OUT = 5.13' (18")
A-14	TYPE 'S' INLET - DOUBLE GRATE (BALT. CO. STD. D-2.19A)	7.25'	INV IN = 3.59' (18") INV OUT = 3.49' (18")
A-15	TYPE 'S' INLET-DOUBLE GRATE (BALT. CO. STD. D-2.19A)	7.25'	INV IN = 4.57' (12") INV OUT = 4.07' (18")
A-16	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	7.57'	INV OUT = 5.07' (12")
A-20	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	12.58'	INV IN = 1.02' (24") INV OUT = 0.92' (24")
A-30	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	11.53'	INV IN = 1.77' (24") INV IN = 4.58' (12") INV OUT = 1.67' (24")
A-31	TYPE B-1 INLET (BALT. CO. STD. D-2.02A)	10.62'	INV OUT = 4.74' (12")
A-40	TYPE 'A' MANHOLE (BALT. CO. STD. D-3.00)	11.95'	INV IN = 2.21' (24") INV OUT = 2.11' (24")
A-50	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	10.82'	INV IN = 2.91' (24") INV OUT = 2.81' (24")
A-60	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	10.82'	INV IN = 3.99' (18") INV OUT = 3.49' (24")
A-70	DOGHOUSE MANHOLE (BALT. CO. STD. D-3.07)	11.35'	INV IN = 6.40' (15") INV OUT = 4.37' (18")
A-80	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	10.82'	INV IN = 6.87' (12") INV OUT = 6.62' (15")
A-90	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	10.82'	INV IN = 7.56' (12") INV OUT = 7.46' (12")
A-100	DOUBLE TYPE 'S' COMBO INLET (BALT. CO. STD. D-3.07)	10.82'	INV OUT = 8.20' (12")
CO-1	PROP. CLEANOUT	7.82'	INV OUT = 6.45' (15")
CO-2	PROP CLEANOUT	9.22'	INV OUT = 7.59' (18")

STORM SEWER PIPE SCHEDULE

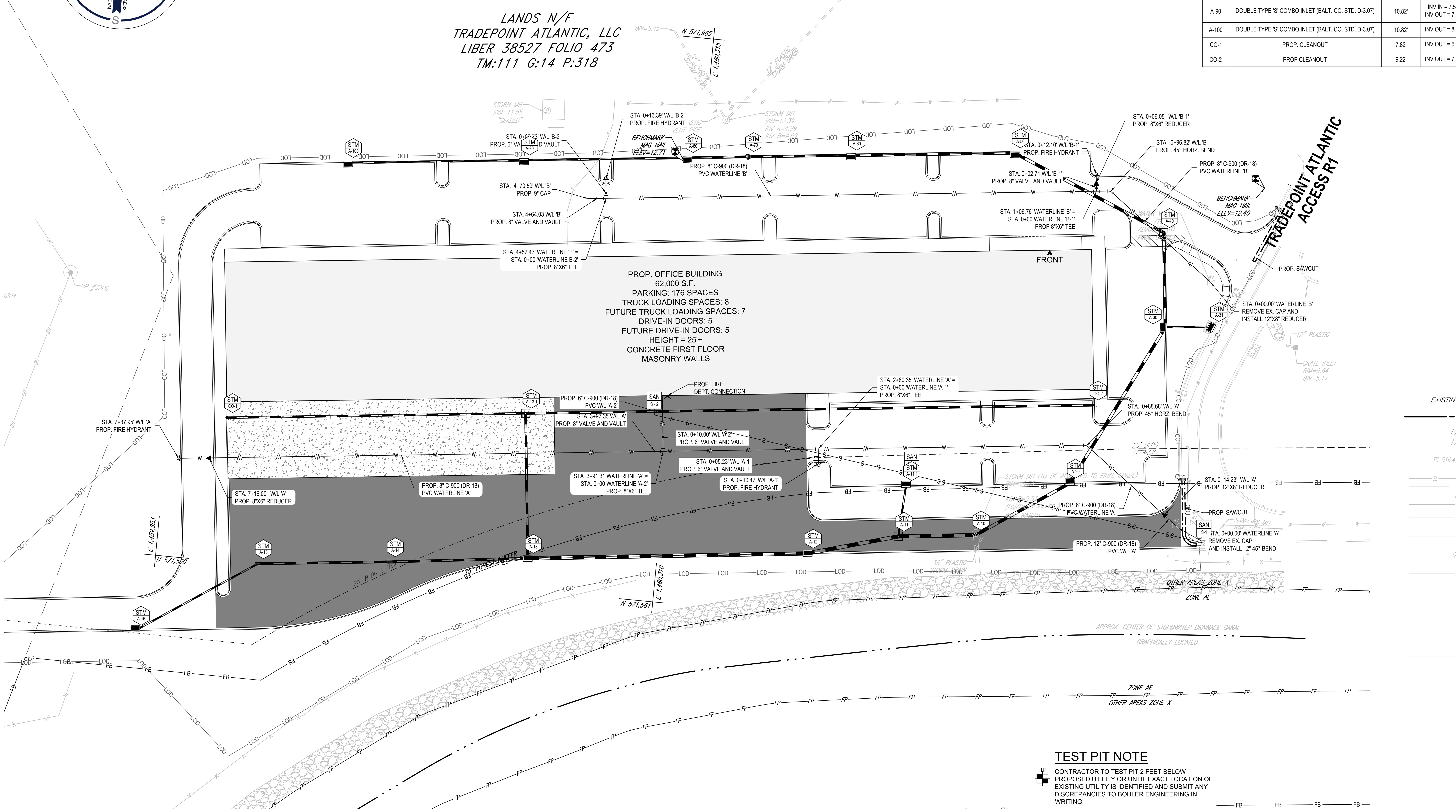
FROM	TO	FROM INV	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
A-90	A-100	7.56'	8.20'	126.00'	0.51%	12"	HDPE
A-80	A-90	6.87'	7.46'	117.00'	0.50%	12"	HDPE
A-70	A-80	6.40'	6.62'	43.36'	0.51%	15"	HDPE
A-60	A-70	3.99'	4.37'	73.64'	0.52%	18"	HDPE
A-50	A-60	2.91'	3.49'	117.00'	0.50%	24"	HDPE
A-40	A-50	2.21'	2.81'	121.00'	0.50%	24"	HDPE
A-30	A-31	4.58'	4.74'	34.26'	0.47%	12"	HDPE
A-30	A-40	1.77'	2.11'	67.75'	0.50%	24"	HDPE
A-20	A-30	1.02'	1.67'	130.76'	0.50%	24"	HDPE
A-15	A-16	4.57'	5.07'	99.60'	0.50%	12"	HDPE
A-14	A-15	3.59'	4.07'	94.33'	0.51%	18"	HDPE
A-13.1	CO-2	6.00'	7.59'	405.38'	0.39%	18"	HDPE
A-13.1	CO-1	5.38'	6.45'	213.64'	0.50%	15"	HDPE
A-13	A-13.1	4.60'	5.13'	103.76'	0.51%	18"	HDPE
A-13	A-14	3.00'	3.49'	98.76'	0.50%	18"	HDPE
A-12	A-13	1.90'	2.90'	200.15'	0.50%	30"	HDPE
A-11	A-11.1	8.13'	8.32'	36.70'	0.52%	12"	HDPE
A-11	A-12	1.47'	1.80'	66.04'	0.50%	30"	HDPE
A-10	A-20	0.53'	0.92'	77.06'	0.51%	24"	HDPE
A-10	A-11	1.08'	1.33'	55.10'	0.45%	30"	HDPE

SANITARY STRUCTURE SCHEDULE

NAME	TYPE	RIM ELEV. (FT.)	INVERTS
CO-1	PROP CLEANOUT	10.96'	INV IN = 7.59' (6") INV OUT = 7.59' (6")
S-1	EX. MANHOLE	13.64'	INV IN = 6.42' (6")
S - 2	PRECAST 48" MANHOLE (BALT. CO. STD. S-4)	12.43'	INV OUT = 8.76' (6") INV OUT = 8.92' (6")

SANITARY PIPE SCHEDULE

FROM	TO	FROM INV	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
S-1	CO-1	6.42'	7.59'	214.61'	0.55%	6"	SDR-35
CO-1	S - 2	7.59'	8.76'	188.97'	0.62%	6"	SDR-35
	S - 2	8.86'	8.92'	13.78'	0.44%	6"	SDR-35



LEGEND

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
	ONSITE PROPERTY LINE / R.O.W. LINE	
120 / 121	CONTOUR LINE	120 / 121
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00 / TC 516.00 BC 515.50
SL / S	SANITARY SEWER LINE	SL / S
W	UNDERGROUND WATER LINE	W
I	INDUSTRIAL WATER LINE	I
E	UNDERGROUND ELECTRIC LINE	E
G	UNDERGROUND GAS LINE	G
OH	OVERHEAD WIRE	OH
T	UNDERGROUND TELEPHONE LINE	T
	STORM SEWER	
FM	SANITARY SEWER FORCE MAIN	FM
	LIMIT OF DISTURBANCE	LOD
	CONCRETE CURB & GUTTER	CURB AND GUTTER / SPILL CURB

40 20 10 0 40
1"= 40'

TEST PIT NOTE

TP
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.

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

REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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PROJECT No.: MD16206636
DRAWN BY: JHS
CHECKED BY: MJG
DATE: 3/19/2021
CAD I.D.: MD16206636-UTP-0

PROJECT:

FLEX BUILDING

FOR

TRADEPOINT ATLANTIC

6995 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
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MD@BohlerEng.com

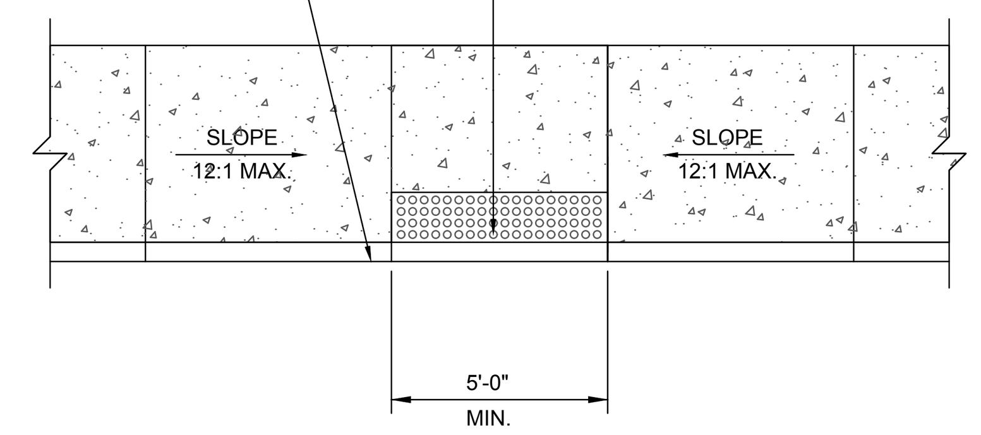
M.J. GESELL
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 44097
PROFESSIONAL CERTIFICATION
I, MICHAEL J. GESELL, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 44097, EXPIRATION DATE: 6/9/21

SHEET TITLE:

UTILITY PLAN

SHEET NUMBER:
C-501

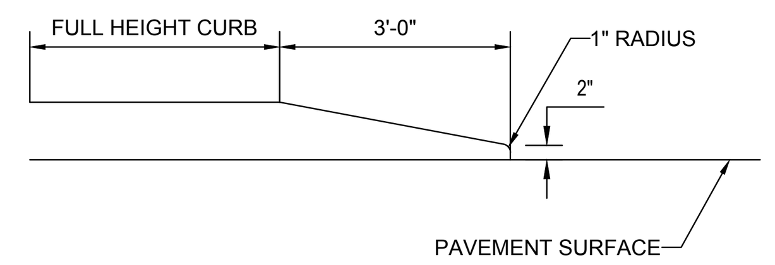
ORG. DATE - 3/19/2021



NOTE:
ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.

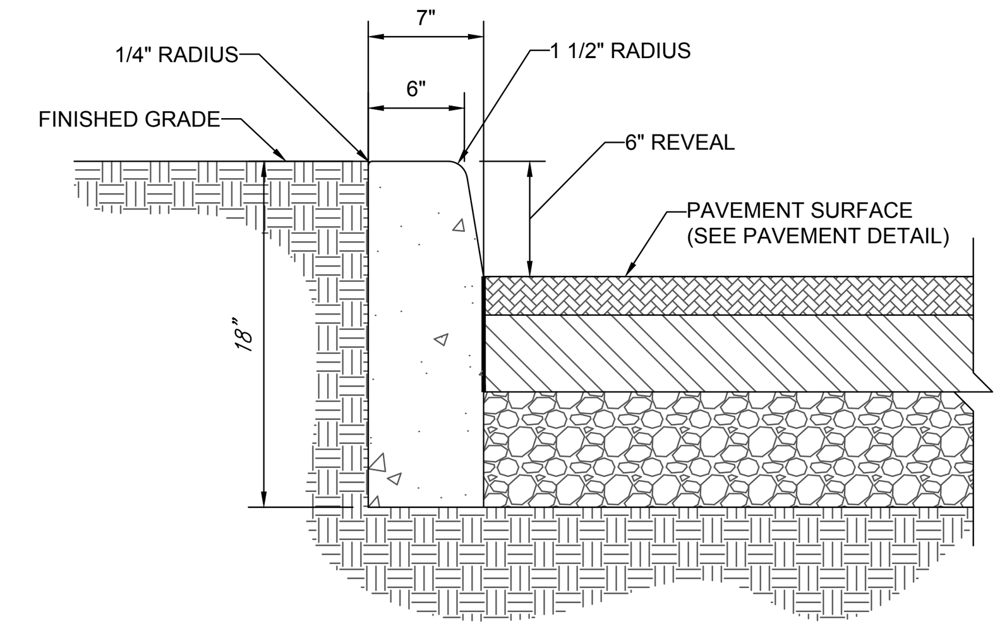
ADA ACCESSIBLE RAMP DETAIL

NOT TO SCALE



CURB TAPER DETAIL

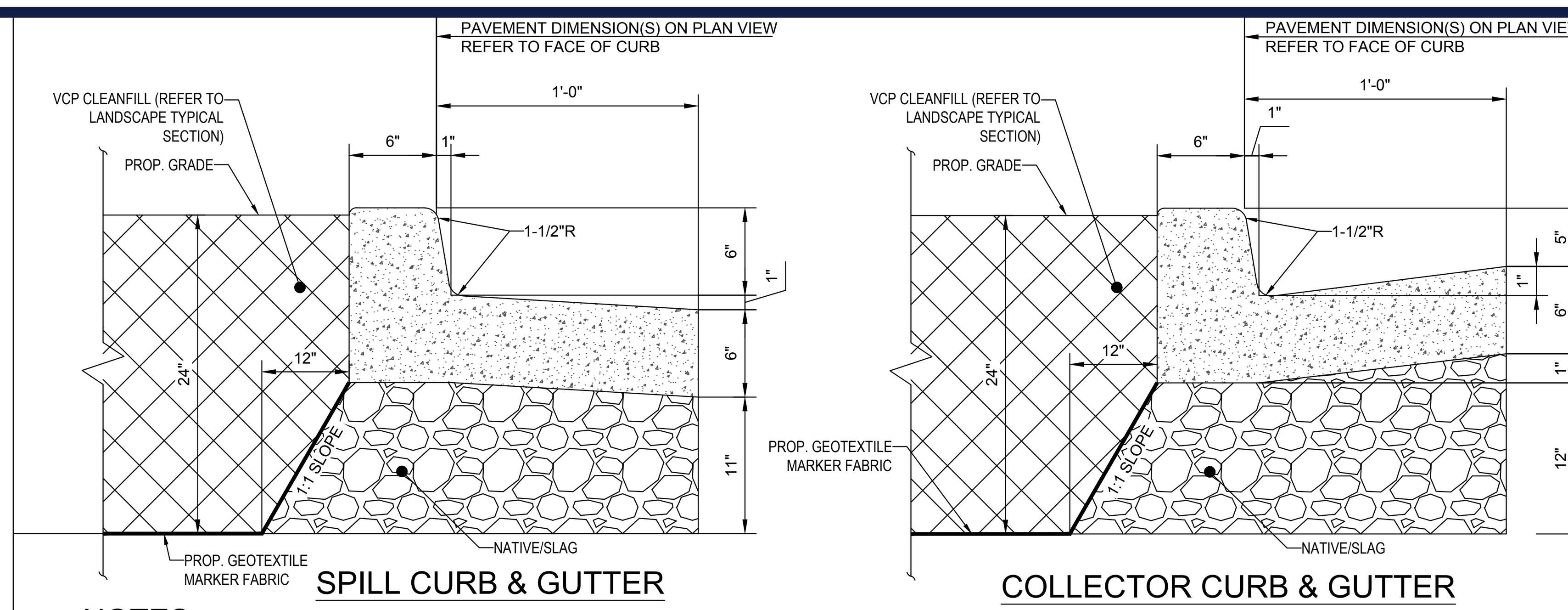
NOT TO SCALE



NOTES:
1. EXPANSION JOINTS TO BE INSTALLED AT 20' INTERVALS.
2. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
3. CONCRETE TO BE CLASS A3 IF CAST IN PLACE OR 4000 P.S.I. IF PRECAST.

HEADER CURB DETAIL

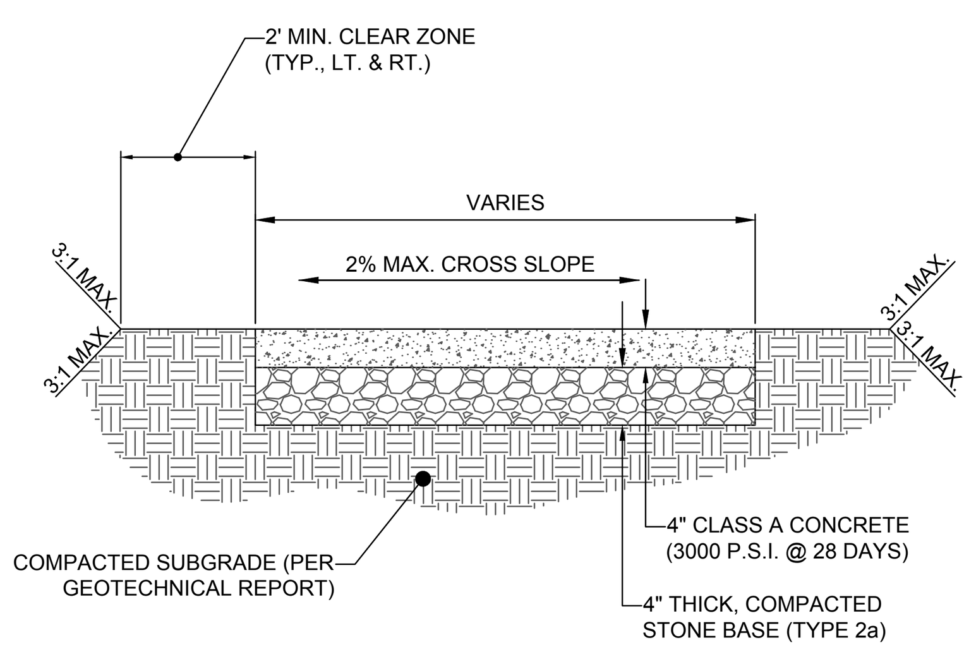
NOT TO SCALE


PAVEMENT DIMENSION(S) ON PLAN VIEW
REFER TO FACE OF CURB
1'-0"
VCP CLEANFILL (REFER TO LANDSCAPE TYPICAL SECTION)
PROP. GRADE
6"
1"
1-1/2"R
6"
1"
6"
12"
24"
1:1 SLOPE
11"
NATIVE/SLAG
PROP. GEOTEXTILE MARKER FABRIC
SPILL CURB & GUTTER
PAVEMENT DIMENSION(S) ON PLAN VIEW
REFER TO FACE OF CURB
1'-0"
VCP CLEANFILL (REFER TO LANDSCAPE TYPICAL SECTION)
PROP. GRADE
6"
1"
1-1/2"R
5"
1"
6"
1"
12"
24"
1:1 SLOPE
12"
PROP. GEOTEXTILE MARKER FABRIC
NATIVE/SLAG
COLLECTOR CURB & GUTTER

NOTES:
1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

CONCRETE CURB & GUTTER DETAIL

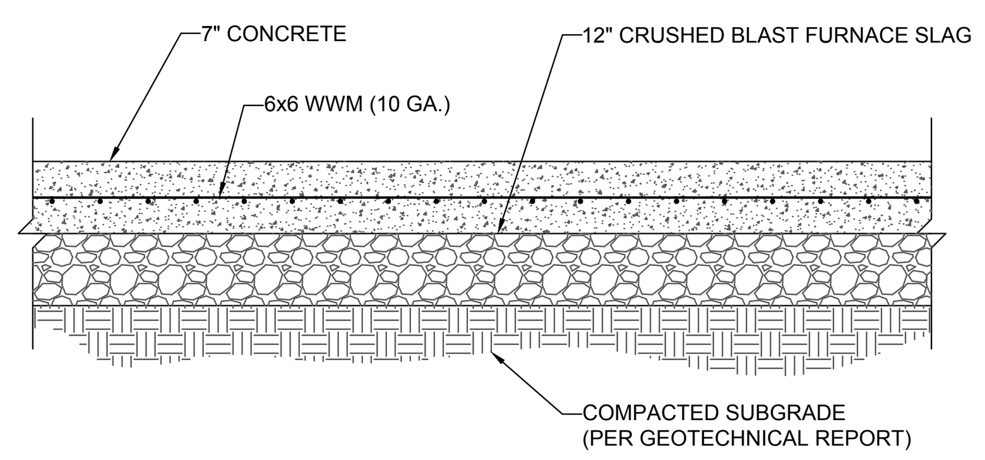
NOT TO SCALE



NOTE:
1. EXPANSION JOINTS 1/2" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS, CRACK CONTROL JOINTS TO BE SPACED AT INTERVALS EQUAL TO SIDEWALK WIDTH.

CONCRETE SIDEWALK DETAIL

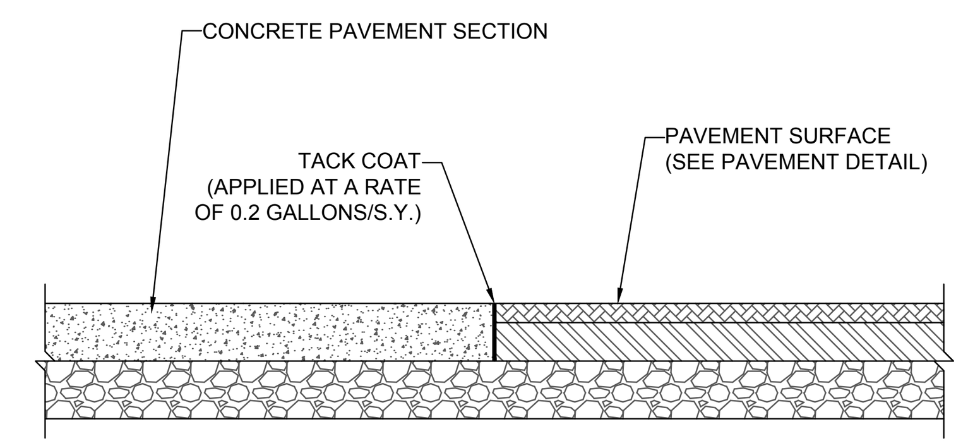
NOT TO SCALE



NOTE:
1. SECTION SHOWN IS BASED ON AN ANTICIPATED CBR OF15 PER GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEERING ASSOCIATES, ENTITLED: "GEOTECHNICAL ENGINEERING STUDY; TRADEPOINT ATLANTIC LOGISTICS CENTER VI; ;TRADEPOINT ATLANTIC; BALTIMORE COUNTY, MARYLAND" , DATED JUNE 15, 2020 (PROJECT #20255A). FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

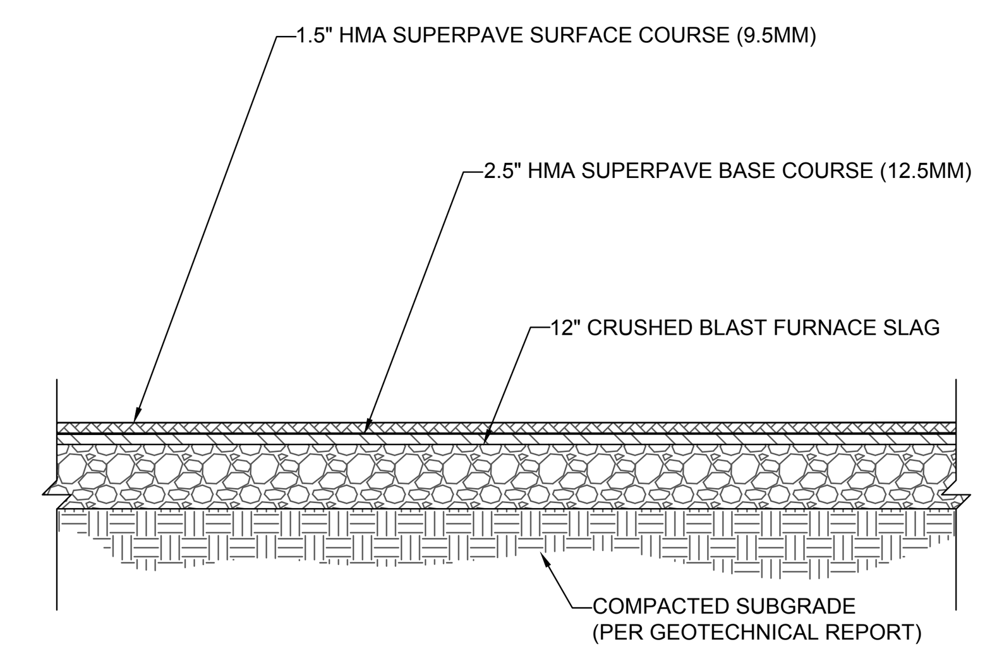
HEAVY DUTY CONCRETE SECTION

NOT TO SCALE



CONCRETE-TO-ASPHALT DETAIL

NOT TO SCALE



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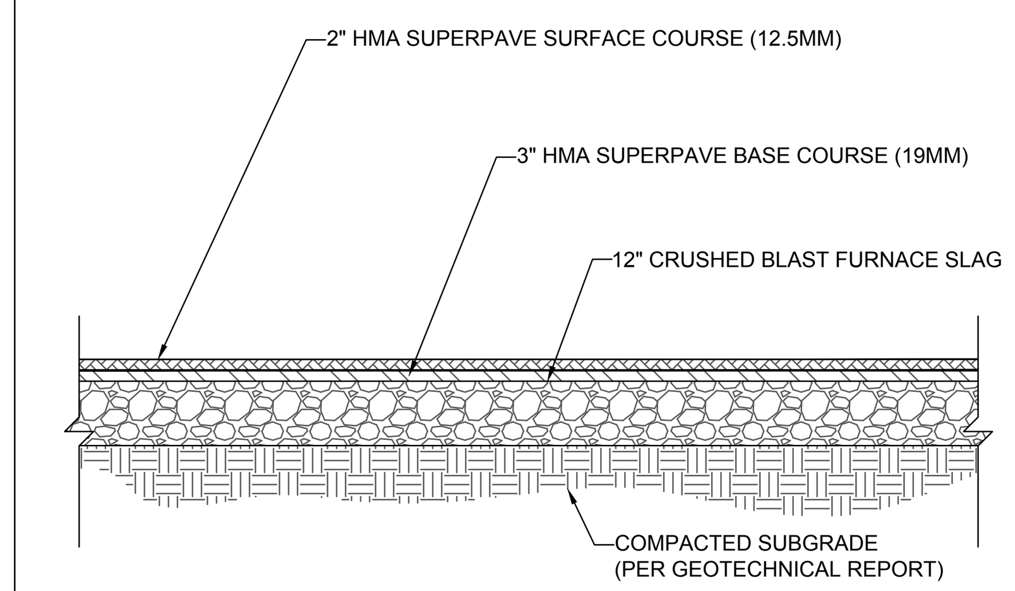
STANDARD DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



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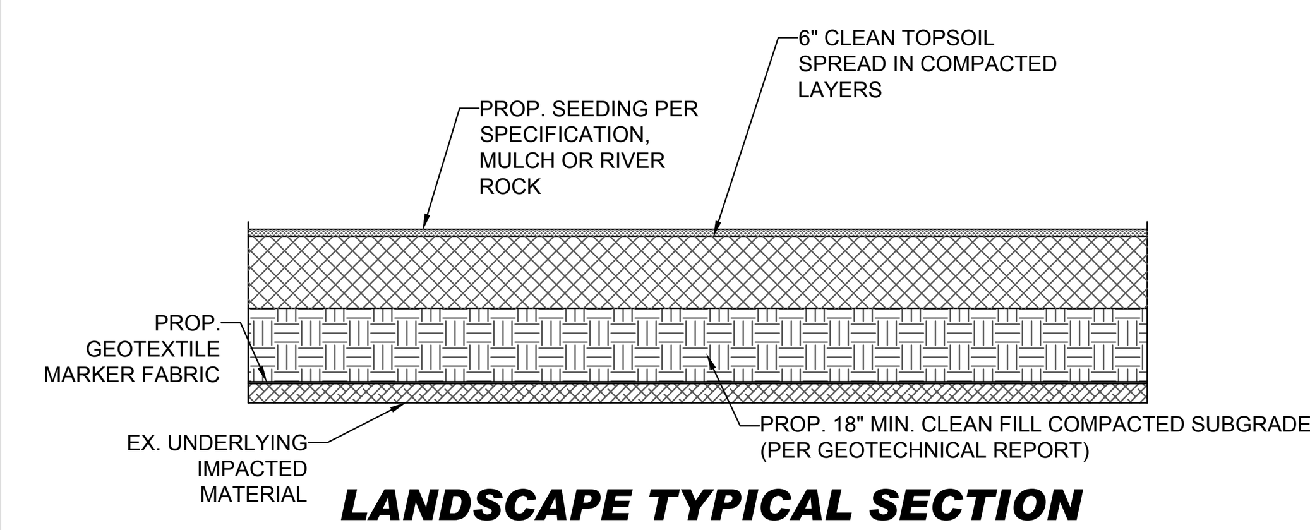
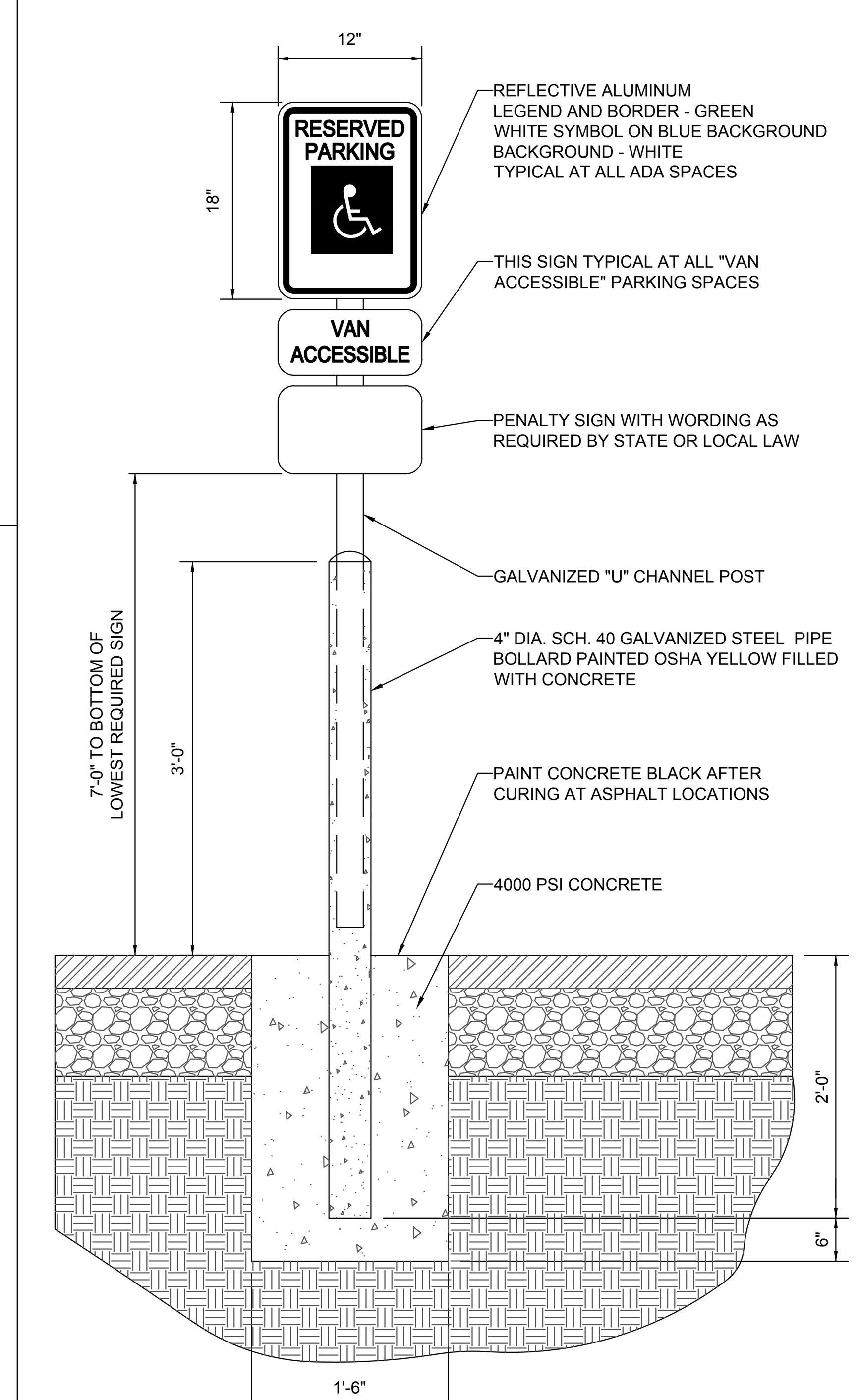
HEAVY DUTY ASPHALT PAVEMENT SECTION

NOT TO SCALE



LANDSCAPE TYPICAL SECTION (LAWN AREA)

NOT TO SCALE


12"
18"
RESERVED PARKING
VAN ACCESSIBLE
REFLECTIVE ALUMINUM
LEGEND AND BORDER - GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND - WHITE
TYPICAL AT ALL ADA SPACES
THIS SIGN TYPICAL AT ALL "VAN ACCESSIBLE" PARKING SPACES
PENALTY SIGN WITH WORDING AS REQUIRED BY STATE OR LOCAL LAW
GALVANIZED "U" CHANNEL POST
4" DIA. SCH. 40 GALVANIZED STEEL PIPE BOLLARD PAINTED OSHA YELLOW FILLED WITH CONCRETE
PAINT CONCRETE BLACK AFTER CURING AT ASPHALT LOCATIONS
4000 PSI CONCRETE
7'-0" TO BOTTOM OF LOWEST REQUIRED SIGN
3'-0"
2'-0"
6"
1'-6"

NOTE:
ONE AT EACH ADA SPACE. WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

BOLLARD MOUNTED ADA PARKING SIGN DETAIL

NOT TO SCALE

BOHLER

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LAND SURVEYING
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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY

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It's fast. It's free. It's the law.

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PROJECT No.:	MD16206636
DRAWN BY:	JHS
CHECKED BY:	MJG
DATE:	3/19/2021
CAD I.D.:	MD16206636-SDP-0

PROJECT:

FLEX BUILDING

FOR

TRADEPOINT ATLANTIC

6995 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
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Fax: (410) 821-7987
MD@BohlerEng.com

M.J. GESELL
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 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: 6/9/21

SHEET TITLE:
CONSTRUCTION DETAILS

SHEET NUMBER:
C-901

ORG. DATE - 3/19/2021

H:\16\MD16206636\DRAWINGS\PLAN SETS\CONSTRUCTION DOCUMENTS\MD16206636-SDP-0----->LAYOUT: C-901 - CONSTRUCTION DETAILS
MG

APPENDIX B

TENCATE GEOSYNTHETICS
Americas

Mirafi® 140N

Mirafi® 140N is a nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi® 140N is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Mirafi® 140N meets AASHTO M288 Class 3 for Elongation > 50%.

TenCate Geosynthetics Americas Laboratories are accredited by Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP). NTPEP Listed

Mechanical Properties	Test Method	Unit	Minimum Average Roll Value	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	120 (534)	120 (534)
Grab Tensile Elongation	ASTM D4632	%	50	50
Trapezoid Tear Strength	ASTM D4533	lbs (N)	50 (223)	50 (223)
CBR Puncture Strength	ASTM D6241	lbs (N)	310 (1380)	
			Maximum Opening Size	
Apparent Opening Size (AOS)	ASTM D4751	U.S. Sieve (mm)	70 (0.212)	
			Minimum Roll Value	
Permittivity	ASTM D4491	sec^{-1}	1.7	
Flow Rate	ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	135 (5500)	
			Minimum Test Value	
UV Resistance (at 500 hours)	ASTM D4355	% strength retained	70	

Physical Properties	Unit	Roll Sizes	
Roll Dimensions (width x length)	ft (m)	12.5 x 360 (3.8 x 110)	15 x 360 (4.5 x 110)
Roll Area	yd^2 (m^2)	500 (418)	600 (502)

365 South Holland Drive
Pendergrass, GA 30567

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Tel 888 795 0808

Fax 706 693 4400
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