WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

metro

POTOMAC YARD METRORAIL STATION

CITY OF ALEXANDRIA, VA

CONTRACT FQ16146

PRELIMINARY DSUP - #2018-0017

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
COVER SHEET

ARUP
77 Water Street
New York, NY 10005
T +1 212 896 3000
www.arup.com

Scale: NTS

File Name

Drawing Status: **PRELIMINARY DSUP**

Job No	Drawing No	Issue
254922	COVER	

PLOT BY: Esteban Garcia PLOT TIME: 11/16/2018 4:07 PM

24x36h

DEVELOPMENT PRELIMINARY SITE PLAN
POTOMAC YARD METRORAIL STATION
CITY OF ALEXANDRIA, VIRGINIA
PRELIMINARY DSUP #2018-0017

ZONING TABULATIONS

PROPOSED PARCEL	PARCEL A-1A*	PARCEL 612 B1*
PROPOSED ZONING OF SITE	UT, CDD#10, 19	UT, CDD#10, 19
EXISTING USES OF SITE	PARK/WETLANDS/RAIL CORRIDOR/TRACTION POWER SUBSTATION	POTOMAC YARD PARK
PROPOSED USE	STATION PROPER/PED BRIDGE/AC BUILDING/TRACTION POWER SUBSTATION	PEDESTRIAN BRIDGE/ENTRY PAVILION
LOT AREA MINIMUM REQUIRED BY ZONING	N/A	N/A
LOT AREA	6.15631 AC	0.8327 AC
NUMBER OF DWELLING UNITS	N/A	N/A
UNITS/ACRE	N/A	N/A
DENSITY	N/A	N/A
GROSS SF OF BUILDINGS	62182.00	21894.00
STATION	46922.00	N/A
AC BUILDING SF	2752.00	N/A
SOUTH PED BRIDGE/RAMP SF	6606.00	5650.00
SOUTH ENTRY PAVILLION SF	N/A	6194.00
NORTH PED BRIDGE SF	1415.00	N/A
NORTH PAVILION	N/A	10050.00
EXISTING TRACTION POWER SUBSTATION	4487.00	N/A
NET SF OF BUILDINGS	56190.00	18848.00
STATION	40930.00	N/A
AC BUILDING SF	2752.00	N/A
SOUTH PED BRIDGE/RAMP SF	6606.00	5650.00
SOUTH ENTRY PAVILLION SF	N/A	5423.00
NORTH PED BRIDGE SF	1415.00	N/A
NORTH PAVILION	N/A	7775.00
EXISTING TRACTION POWER SUBSTATION	4487.00	N/A
FAR EXISTING	0.02	0.00
FAR PROPOSED	0.39	0.31
OPEN SPACE REQUIRED	0.21	0.52
AVERAGE FINISH GRADE - STATION	18.75	N/A
AVERAGE FINISH GRADE - AC ROOM	29.00	N/A
BUILDING HEIGHT - STATION	50.00'	N/A
BUILDING HEIGHT - AC ROOM	26.20	N/A
BUILDING HEIGHT - ENTRY PAVILION	N/A	35.50
BUILDING SETBACKS REQUIRED	N/A	N/A
FRONTANGE REQUIRED	N/A	N/A
PARKING SPACES REQUIRED	N/A	N/A
PARKING SPACES PROPOSED	N/A	N/A
LOADING SPACES REQUIRED AND PROPOSED	N/A	N/A
TRIP GENERATION METHOD	N/A	N/A

* SEE PRELIMINARY SUBDIVISION PLAT 05/04/16 FOR IDENTIFICATION OF PROPOSED PARCELS

AREA TABULATIONS

AREA TABULATIONS		
EXISTING IMPERVIOUS	2.83 AC	
PROPOSED IMPERVIOUS	3.81 AC	
LIMITS OF DISTURBANCE	13.00 AC	
RPA DESCRIPTION	**EXISTING**	**PROPOSED**
WITHIN RPA	1.92 AC	1.92 AC
WITHIN RPA+50'	3.73 AC	3.73 AC
WITHIN RPA+100'	5.45 AC	5.45 AC
IMPERVIOUS WITHIN RPA	0.05 AC	1.35 AC
IMPERVIOUS WITHIN RPA+50'	0.45 AC	2.63 AC
IMPERVIOUS WITHIN RPA+100'	1.28 AC	3.57 AC
PERVIOUS WITHIN RPA	1.87 AC	0.57 AC
PERVIOUS WITHIN RPA+50'	3.28 AC	1.1 AC
PERVIOUS WITHIN RPA+100'	4.17 AC	1.88 AC

OWNER

CITY OF ALEXANDRIA
301 KING STREET
ALEXANDRIA VA 22314

SITE PLANS

1. THE PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.
2. SEE DRAWING NO. C-05 THROUGH C-09 FOR BMP AND STORM WATER MANAGEMENT REQUIREMENTS AND MITIGATION
3. SOIL AND/OR GROUNDWATER CONTAMINATION: SEE THE POTOMAC YARD METRORAIL STATION DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS) DATED APRIL, 2015.
4. THE PROJECT WILL NOT EXCEED 10,000 GPD OF SANITARY FLOWS.

SANITARY FLOW ANALYSIS

Part of building any new occupiable structure that connects to the City of Alexandria sanitary sewer is determination of the sewage generated by the building and its occupants so the City can determine if the sanitary sewer system will be over-burdened by the new demands. The City of Alexandria has issued *Memorandum to Industry No. 06-14* that describes the necessary calculation methodology for standard building types in order to determine the average daily design flow. Using the guidance the City of Alexandria, the flow analysis is based on the *Virginia Administrative Code 9VAC-25-790-460, Table 3* for Interstate Rest Area as a comparable building type, and is as follows:

Discharge facility[1]	Contributing Design Units	Flow gpd	BOD_5 #day [3]	S.S. #day	Flow duration, hours
Interstate rest areas	Per person	5	0.01	0.01	24

To determine the number of persons who are anticipated to use the facilities, the prime contributor to the sewage generation of the Station, the assumption on frequency of usage applied:

The annual station ridership has been approximated as 5,000 riders per day for opening year 2020. The future anticipated ridership in 2040 is anticipated to be 13,200 riders per day. Of these riders, it is assumed that only of 5% will use the toilet room facilities because historically, the public refrains from using toilet facilities in such high-volume public spaces. Therefore:

$$13{,}200\ persons\ per\ day\ x\ 5\% = 660\ persons\ per\ day$$

$$660\ persons\ per\ day\ x\ 5\ gallons\ per\ day = \boxed{3{,}300\ gallons\ per\ day\ (GPD)}$$

WMATA LOW DISTORTION PROJECTION SYSTEM

Washington Metropolitan Area Transit Authority (WMATA)
Low Distortion Projection (LDP) Coordinate System Definition

The WMATA Coordinate System was designed such that linear distortion is minimized throughout the existing and proposed WMATA service area. The magnitude of linear distortion does not exceed 20 parts per million (0.1 foot per mile) along WMATA rail lines at the topographic surface of the Earth or in tunnels. Therefore actual "ground" distances measured between points will equal grid "maps" distances between the same points to within ±0.1 foot per mile everywhere within the WMATA system.
The approximate WMATA system hub was used for the WMATA Coordinate System central meridian. Although this essentially minimizes convergence angles for the existing WMATA system, it does not minimize convergence angles for proposed additions to the system.

Linear unit: U.S. survey foot (sft)

Note: 1 sft ≡ 1200 / 3937 meter ≈ 0.304 800 609 601 219 202 438 meter
1 sft = 1.000 002 international feet

Geometric reference system (geodetic datum): North American Datum of 1983 (NAD 83)
Datum realization (datum tag): NAD 83 (2011) epoch 2010.00 realization of the US National Spatial Reference System (NSRS).

Map projection: Lambert Conformal Conic (single parallel)

Projection parameters (single parallel definition):

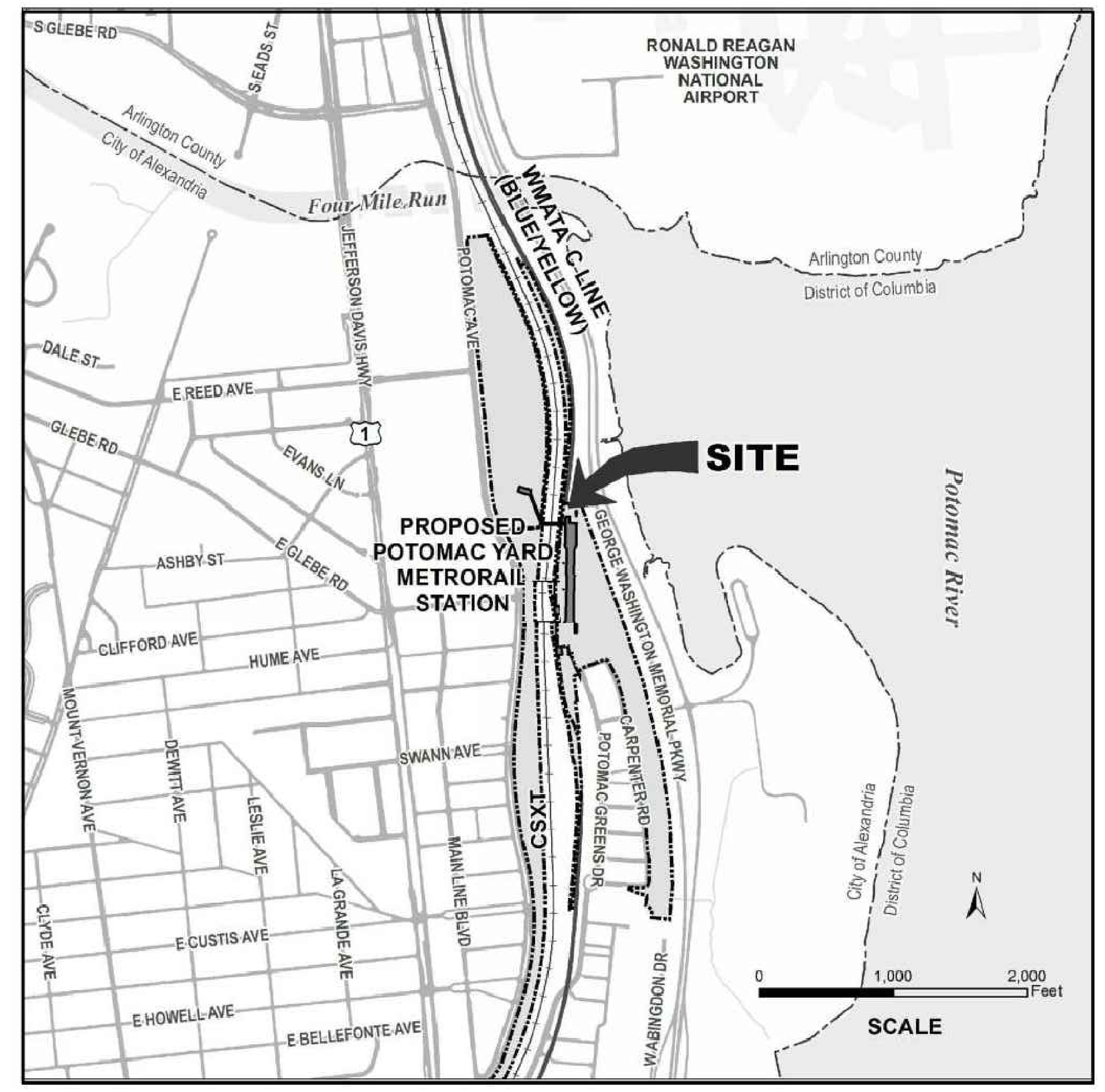
Standard parallel (latitude of grid origin):	38° 50' 00.00000" N (≈ +38.833 333 333 333 333...°)
Longitude of central meridian:	77° 02' 00.00000" W (≈ −77.033 333 333 333 333...°)
False northing (at grid origin):	150,000.000 sft (≈ 45,720.091 440 182 880... m)
False easting (at central meridian):	200,000.000 sft (≈ 60,960.121 920 243 840... m)
Standard parallel scale factor:	1.000 000 000 (exact)

Projection parameters (alternate generic double parallel definition):

Latitude of north standard parallel:	38° 50' 00.00000" N (≈ +38.833 333 333 333 333...°)
Latitude of south standard parallel:	38° 50' 00.00000" N (≈ +38.833 333 333 333 333...°)
Latitude of grid origin:	38° 50' 00.00000" N (≈ +38.833 333 333 333 333...°)
Longitude of central meridian:	77° 02' 00.00000" W (≈ −77.033 333 333 333 333...°)
False northing (at grid origin):	150,000.000 sft (≈ 45,720.091 440 182 880... m)
False easting (at central meridian):	200,000.000 sft (≈ 60,960.121 920 243 840... m)
Additional scale applied at grid origin:	1.000 000 000 (exact)

Note: The alternate "double parallel" definition is used in some software packages, such as ESRI products, rather than the single parallel definition. Both definitions yield identical results.

VICINITY MAP



NARRATIVE

DSUP 2018-0017 IS AN AMENDMENT TO DSUP 2016-004

THE PROJECT CONSISTS OF CONSTRUCTION OF A NEW METRORAIL STATION AND ANCILLARY FACILITIES LOCATED AT POTOMAC YARD WITHIN THE CITY OF ALEXANDRIA ALONG THE EXISTING METRORAIL BLUE AND YELLOW LINES BETWEEN THE RONALD REAGAN WASHINGTON NATIONAL AIRPORT STATION AND THE BRADDOCK ROAD STATION. THE PROJECT WILL INCLUDE THE METRORAIL STATION, A PEDESTRIAN AND BICYCLE BRIDGES WITH ACCOMPANYING ACCESSIBLE RAMP, AND AN ENTRY PAVILLION. THE PROJECT WOULD SERVE EXISTING NEIGHBORHOODS AND RETAIL CENTERS AS WELL AS HIGH-DENSITY, TRANSIT-ORIENTED DEVELOPMENT PLANNED BY THE CITY OF ALEXANDRIA. THE PROJECT WOULD PROVIDE ACCESS TO THE REGIONAL METRORAIL SYSTEM FOR THE U.S. ROUTE 1 CORRIDOR OF NORTH ALEXANDRIA.

SEE SHEETS G-01A AND G-01B FOR ADDITIONAL NOTES PERTAINING TO CITY OF ALEXANDRIA SITE PLAN APPROVAL AND PROJECT REQUIREMENTS.

SHEET INDEX

REQUIRED APPLICATIONS

1. DEVELOPMENT SPECIAL USE PERMIT
2. REZONING TO UT - UTILITIES AND TRANSPORTATION ZONE
3. SPECIAL USE PERMIT - BUILDING HEIGHT UP TO 50 FEET
4. SPECIAL USE PERMIT - FAR UP TO 0.50
5. MASTER PLAN AMENDMENT

FLOODPLAIN NOTES

1. THE SITE LIES WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATOIN (WSE) AND THE 100-YEAR FLOOD PLAIN WSE IS SHOWN ON THE SITE PLAN PER THE DEMARCATION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
2. THE PLANS WILL COMPLY WITH THE CONDITIONS OF SITE PLAN APPROVAL.

RPA NOTES

1. THE SUBJECT PROPERTY LIES WITHIN A CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA). FIELD DEMARCATED/VERIFIED 50 FEET AND 100 FEET RESOURCE PROTECTION LINES ARE SHOWN ON THE SITE PLAN.
2. SEE AREA CALCULATIONS AND STORMWATER CALCULATIONSFOR FURTHER DETAIL.

COMPLETE STREETS TABULATION

	NEW	UPGRADE
Crosswalks (number)	-	-
Standard	-	-
High Visibility	-	-
Curb Ramps	-	-
Sidewalks (LF)	-	-
Bicycle Parking (number spaces)	-	-
Public/Visitor	-	-
Private/Garage	-	-
Bicycle Paths (LF)	-	-
Pedestrian Signals	-	-

DESIGN GUIDELINES

1. THE PROPOSED PROJECT IS LOCATED WITHIN THE OLD AND HISTORIC ALEXANDRIA DISTRICT AND THE ALEXANDRIA HISTORIC DISTRICT DESIGN GUIDELINES APPLY.
2. THE PROPOSED PROJECT IS LOCATED WITHIN THE POTOMAC YARD/POTOMAC GREENS SMALL AREA, THE POTOMAC YARD URBAN DESIGN GUIDELINES APPLY.

SOIL INFORMATION

GEOTECHNICAL INFORMATION PROVIDED IN THE BORING LOGS OF THE ORIGINAL CONSTRUCTION OF THE BLUE/YELLOW LINE, PERFORMED IN 1977, DO NOT DETECT OR MAKE REFERENCE TO MARINE CLAYS. ADDITIONALLY, THE MARINE CLAY AREAS MAP PREPARED BY THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR THE CITY OF ALEXANDRIA, 1976, DO NOT DETECT OR MAKE REFERENCE TO MARINE CLAYS IN THE IMMEDIATE AREA AFFECTED BY CONSTRUCTION OF THE POTOMAC YARD STATION.

EXISTING CONDITIONS PLAN NOTES

1. THE PROJECT IS LOCATED IN AN AREA OF KNOWN CONTAMINATION. AS SUCH, REQUISITE ENVIRONMENTAL INVESTIGATIONS AND REPORTS BE REQUIRED NO LATER THAN DURING THE FINAL SITE PLAN, WHICH INCLUDES BUT NOT LIMITED TO, SUBSURFACE SITE INVESTIGATION (PHASE II), SOIL REMEDIATION PLAN, HEALTH AND SAFETY PLAN, AND THE DESIGN AND INSTALLATION OF A VAPOR BARRIER. INITIAL AIR MONITORING WILL BE REQUIRED, AND CONTINUATION DURING CONSTRUCTION WILL BE CONTINGENTUPON MONITORING DATA.
2. SOILS INFORMATION: GEOTECHNICAL INFORMATION PROVIDED IN THE BORING LOGS OF THE ORIGINAL CONSTRUCTION OF THE BLUE/YELLOW LINE, PERFORMED IN 1977, DO NOT DETECT OR MAKE REFERENCE TO MARINE CLAYS. ADDITIONALLY, THE MARINE CLAY AREAS MAP PREPARED BY THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR THE CITY OF ALEXANDRIA, 1976, DO NOT DETECT OR MAKE REFERENCE TO MARINE CLAYS IN THE IMMEDIATE AREA AFFECTED BY CONSTRUCTION OF THE POTOMAC YARD STATION.
3. THE NORTH MERIDIAN AND HORIZONTAL CONTROL ARE BASED ON THE WMATA 2009 LOW DISTORTION PROJECTION SYSTEM. VERTICAL DATUM IS NAVD 88.

CO-APPLICANT

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY (WMATA)
600 FIFTH STREET N.W.
WASHINGTON DC, 20001

APPLICANT

CITY OF ALEXANDRIA
301 KING STREET
ALEXANDRIA VA 22314

CONSULTANT/ARCHITECT TO WMATA

DB Final Design:
Leuterio Thomas, LLC
6710 Oxon Hill Road, Suite 310
National Harbor, MD 20745

DB Bridging Documents:
KGP DESIGN STUDIO 1777 CHURCH ST NW
WASHINGTON DC 20036

CONSULTANT/ENGINEER TO WMATA

DB Final Design:
ARUP
77 Water Street
New York, NY 10005

DB Bridging Documents:
AECOM
2101 WILSON BLVD
ARLINGTON VA 22201

APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

________ DIRECTOR ________ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

________ DIRECTOR ________ DATE

________ CHAIRMAN, PLANNING COMMISSION ________ DATE

DATE RECORDED ________
INSTRUMENT NO. ________ DEED BOOK NO. ________ PAGE NO. ________

COMMONWEALTH OF VIRGINIA
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Job Title
POTOMAC YARD METRORAIL STATION

Key Plan

Drawing Title
COVER SHEET

SHEET 1 OF 38

ARUP
77 Water Street
New York, NY 10005
T +1 212 896 3000
www.arup.com

Scale: N.T.S.
File Name
Drawing Status: PRELIMINARY DSUP
Job No: 254922
Drawing No: G-01
Issue: A

PLOT TIME: 11/16/2018 5:10 PM
PLOT BY: Swati Kalia

24x36h

EXISTING CONDITIONS SURVEY NOTES

1. HORIZONTAL DATUM* WMATA LOW DISTORTION PROJECTION SYSTEM
   VERTICAL DATUM* NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88.
2. UTILITY INFORMATION, AS SHOWN ON THIS PLAN IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED BY MERCADO CONSULTANTS, INC., DATED 01/2016,AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-257-7777 AND 811, 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION. THE CONSTRUCTION WORKERS AND CONTRACTOR(S) ARE ENCOURAGED TO VISIT DOMINION VIRGINIA POWER WEB SITE AT: www.dom.com (KEYWORD SAFETY) FOR ADDITIONAL SAFETY INSTRUCTIONS.
3. LOCATION AND DEPTH OF ALL EXISTING UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.
4. THE BOUNDARY INFORMATION FOR THE SUBJECT SITE IS BASED ON A CURRENT FIELD SURVEY PREPARED BY A. MORTON THOMAS & ASSOCIATES, INC., DATED 03/2016 IN ACCORDANCE WITH THE REQUIREMENTS OF VIRGINIA ASSOCIATION OF LAND SURVEYORS.

*PER MEMORANDUM TO INDUSTRY, JULY 20, 2005; THE PLAN SHALL BE PREPARED USING VIRGINIA STATE PLANE (NORTH ZONE) COORDINATES BASED ON NAD83 AND NAVD88; HOWEVER, IF THE CURRENT DRAWINGS ARE PREPARED USING NORTH AMERICAN DATUM OF 1927 (NAD27) AND NORTH GEODETIC VERTICAL DATUM OF 1929 (NGVD29), THEN THE AS-BUILT DRAWINGS SHALL PROVIDE A CONVERSION TABLE OF SANITARY AND STORM SEWER DATA IN THE NAD83 AND NAVD88 DATUMS.

CITY STANDARD GENERAL NOTES

1. THE SUBJECT SITE IS LOCATED ON CITY OF ALEXANDRIA ASSESSMENT TAX PARCELS 025.02-01-36 AND 025.04-03-01.
2. OWNER: CITY OF ALEXANDRIA.
3. FINAL DEED BOOK IS TO BE DETERMINED UPON APPROVAL OF COMBINED PROPERTIES THAT WILL COMPROSE PROPOSED LOT A-1A AND 612 B1
4. ADDRESS IS NOT YET DETERMINED
5. AREA TABULATION (SEE SHEET G-01 FOR AREA TABULATIONS).
6. THE NATURAL SOILS AT THE SITE CONSIST OF KEYPORT SILT LOAM AS DESDXCRIBED IN THE NVPDC FROM U.S. Department of Agriculture. Soil Survey of Fairfax and Alexandria Counties, Virginia. ADDITIOANL GEOTECHNICAL STUDIES WIL LBE PERFORMED PRIOR TO FINAL SITE PLAN APPROVAL FROM THE CITY OF ALEXANDRIA.
7. THE SITE IS LOCATED IN THE FOUR MILE RUN/POTOMAC RIVER A12 WATERSHED.
8. CONSTRUCTION PERMITS ARE REQUIRED FOR THIS PROJECT. THE APPROVED SITE PLAN MUST BE ATTACHED TO THE PERMIT APPLICATION THAT FULLY DETAILS THE CONSTRUCTION AS WELL AS LAYOUTS AND SCHEMATICS OF THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS.
9. ALL PUBLIC AND PRIVATE EASEMENTS OR ALL KNOWN PUBLIC AND PRIVATE EASEMENTS, INCLUDING ALL UTILITY, EGRESS, AND CONSERVATION RESTRICTIONS ARE SHOWN. THE APPLICANT SHALL NOT CONSTRUCT ANY PERMANENT STRUCTURES OVER ANY EXISTING OR PROPOSED PUBLIC AND/OR PRIVATE EASEMENTS UNLESS OTHERWISE APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
10. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
11. BUILDING HEIGHT SHALL NOT EXCEED THE ALLOWABLE LIMIT BY CITY OF ALEXANDRIA ZONING ORDINANCE OR AS APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
12. ALL NEW CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND TO THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC)
13. FLOOR AREA CALCULATIONS WITH ALLOWABLE LIMITS, AS APPROVED BY PLANNING COMMISSION AND CITY COUNCIL, ARE DEMONSTRATED HEREIN.
14. PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. If City's existing public infrastructure, including but not limited, to streets, alleyways, driveway aprons, sanitary and storm sewers, street lighting, traffic and pedestrian signals, sidewalks, curb and gutter, and storm water drop inlet structures are damaged BY THE CONTRACTOR OR BY ACTIVITIES RELATING TO THE SITE CONSTRUCTION THEN THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). A pre-construction walk/survey of the site shall occur with Construction and Inspection Staff to document existing conditions prior to any land disturbing activity.
15. ALL IMPROVEMENTS TO THE CITY'S RIGHT-OF-WAY SUCH AS CURB, GUTTER, SIDEWALK, AND DRIVEWAY APRONS, ETC., ARE DESIGNED PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS.
16. ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHT-OF-WAYS, REQUIRED FOR ANY UTILITY INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES).
17. CONTRACTOR MUST ENSURE THAT THERE IS NO DISTURBANCE ON ADJACENT PROPERTIES WITHOUT RECORDED EASEMENT OR NOTARIZED LETTER OF PERMISSION FROM THE ADJACENT PROPERTY OWNERS.
18. All required state and federal permits, which could include permits from the Virginia Department of Conservation and Recreation (VDCR), Virginia Department of Environmental Quality (VDEQ), virginia department of historic resources (VDHR), united states Environmental Protection Agency (usepa), Army Corps of Engineers and Virginia Marine Resources, must be in place for all project construction and mitigation work prior to release of the final site plan. This includes the state requirement for a Virginia Stormwater Management Program (VSMP) General Permit for Discharges of Stormwater from Construction Activities for land disturbing activities greater than 2,500. Information regarding the VSMP General Permit can IS found online at: http://www.dcr.virginia.gov/soil_and_water/vsmp.shtml.
19. PERMITS FROM THE CITY OF ALEXANDRIA OFFICE OF ENVIRONMENTAL QUALITY (OEQ), TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES), AND BUILDING AND FIRE CODE ADMINISTRATION SHALL BE OBTAINED BY THE APPLICANT, AS REQUIRED AND DOCUMENTED HEREIN. THE CONTRACTOR CAN CONTACT ALEXANDRIA FIRE AND CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
20. ANY WORK IN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A SEPARATE PERMIT FROM THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE CONTRACTOR CAN CONTACT THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES AT (703) 746-4035 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
21. THE PROPERTY ADDRESS MUST BE CLEARLY MARKED IN THE FRONT AND BACK OF THE PROPOSED DEVELOPMENT SITE DURING CONSTRUCTION FOR EMERGENCY RESPONSE PURPOSE IN CONTRASTING COLORS FOR EASY IDENTIFICATION.
22. THE APPLICANT SHALL CONTACT THE CRIME PREVENTION UNIT OF THE ALEXANDRIA POLICE DEPARTMENT AT 703-838-4520 REGARDING SECURITY HARDWARE FOR NEW CONSTRUCTION. THIS SHALL BE COMPLETED PRIOR TO ISSUANCE OF BUILDING PERMIT.
23. ROOF DRAINAGE SYSTEM, SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEM MUST BE INSTALLED SO AS NEITHER TO ADVERSELY IMPACT UPON, NOR CAUSE EROSION DAMAGE TO ADJACENT PROPERTIES OR THE PUBLIC RIGHT OF WAY.
24. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE OCCURS ON SITE TO PREVENT PONDING OR DRAINAGE PROBLEMS ON ADJACENT PROPERTIES.
25. IN THE EVENT, THE PROPOSED ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON PUBLIC RIGHT OF WAY OR PRIVATE PROPERTIES THEN THE APPLICANT SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO THE ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
26. PER THE REQUIREMENTS OF SECTION 8-1-12 OF THE CITY CHARTER AND CODE; WHEN THE BUILDING FOOTING HAS BEEN PLACED AND THE WALLS HAVE BEEN RAISED TO THE FIRST JOIST BEARING OR STORY HEIGHT ABOVE GRADE, A PLOT PLAN SHOWING THE EXACT LOCATION OF THE WALLS SHALL BE PREPARED BY A LICENSED, CERTIFIED PUBLIC LAND SURVEYOR OR PROFESSIONAL ENGINEER AND FILED WITH THE BUILDING OFFICIAL FOR APPROVAL BEFORE PROCEEDING FURTHER WITH THE CONSTRUCTION.
27. A SEPARATE DESIGN IS REQUIRED FOR ALL WALLS 24" AND OVER IN HEIGHT FROM THE GRADE AND SUBJECT to separate permits to be obtained by the owners. geotechnical and structural design is to be COMPLETED by others. this FINAL SITE plan SHOWS location, proposed grading, AND DESIGN OF ALL THE WALLS.
28. SUBMIT A SURVEY, CONSISTENT WITH THE REQUIREMENTS FOR CERTIFICATE OF OCCUPANCY CHECKLIST, TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO REQUESTING AN INSPECTION FOR A CERTIFICATE OF OCCUPANCY.
29. ALL SANITARY LATERALS AND/OR SEWERS NOT SHOWN IN THE EASEMENTS SHALL BE OWNED AND MAINTAINED PRIVATELY.
30. ALL STORM DRAINS NOT SHOWN WITHIN AN EASEMENT OR IN A PUBLIC RIGHT OF WAY SHALL BE OWNED AND MAINTAINED PRIVATELY.
31. ALL WATER FACILITY CONSTRUCTION SHALL CONFORM TO VIRGINIA AMERICAN WATER COMPANY STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONTACT VIRGINIA AMERICAN WATER COMPANY AT (703) 549-7080 TO COORDINATE CONSTRUCTION AND INSPECTION OF WATER FACILITIES.
32. The sidewalks shall remain opened during construction or pedestrian access shall be maintained to the satisfaction of the Director of Transportation and Environmental Services throughout the construction of the project.
33. Prior to the release of the final site plan, a Traffic Control Plan for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for information purpose; however, an amended Traffic Control Plan, if required by the Director of Transportation and Environmental Services shall be submitted to the Director of TRANSPORTATION AND ENVIRONMENTAL SERVICES along with the Building Permit Application. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets.
34. A CERTIFICATE OF OCCUPANCY SHALL BE OBTAINED PRIOR TO ANY OCCUPANCY OF THE BUILDING OR PORTION THEREOF, IN ACCORDANCE WITH VIRGINIA USBC 115.0.

EMERGENCY VEHICLE EASEMENTS NOTE

ALL EMERGENCY VEHICLE EASEMENTS WILL BE PROVIDED BY WAY OF POTOMAC GREENS DRIVE PER COORDINATION AND DISCUSSIONS WITH THE CITY OF ALEXANDRIA FIRE AND EMERGENCY RESPONSE OFFICIALS.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. AN EROSION AND SEDIMENT CONTROL PLAN MUST BE APPROVED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO ANY LAND DISTURBING ACTIVITY GREATER THAN 2,500 SQUARE FEET.
2. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES shall BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH), VIRGINIA REGULATIONS §4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
3. AN EROSION AND SEDIMENT CONTROL PLAN IS INCLUDED WITH THESE FINAL PLANS FOR APPROVAL BY THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR REFERENCE BY THE EROSION AND SEDIMENT CONTROL PERMIT.
4. A "CERTIFIED LAND DISTURBER" (CLD) SHALL BE NAMED IN A LETTER TO THE DIVISION CHIEF OF CONSTRUCTION AND INSPECTION (C&I), DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO ANY LAND DISTURBING ACTIVITIES. IF THE CLD CHANGES DURING THE PROJECT, THAT CHANGE MUST BE NOTED IN A LETTER TO THE DIVISION CHIEF. A NOTE TO THIS EFFECT SHALL BE PLACED ON THE PHASE I EROSION AND SEDIMENT CONTROL SHEETS ON THE SITE PLAN.
5. THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CONSTRUCTION AND INSPECTION (C&I) DIVISION MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENTS OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION. THE RESPONSIBLE CERTIFIED LAND DISTURBER (cld) shall ATTEND the PRE-CONSTRUCTION MEETING.
6. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND ALL OTHER EROSION AND SEDIMENT CONTROL MEASURES INTENDED TO CONTROL EROSION AND TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
7. CONSTRUCTION SHALL BE SEQUENCED SUCH THAT GRADING OPERATION CAN BEGIN AND END AS QUICKLY AS POSSIBLE. AREAS NOT TO BE DISTURBED MUST BE CLEARLY MARKED OR FLAGGED.
8. AN INSPECTION BY THE CITY OF ALEXANDRIA IS REQUIRED AFTER INITIAL INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND BEFORE ANY CLEARING OR GRADING CAN BEGIN.
9. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
10. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN THOSE INDICATED ON THESE PLANS INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE CITY OF ALEXANDRIA.
11. THE DEVELOPER AND CONTRACTORS ARE TO KEEP DENUDED AREAS TO A MINIMUM. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. ANY STOCKPILED MATERAIL which WILL REMAIN IN PLACE LONGER THAN 10 DAYS must be SEEDED FOR TEMPORARY VEGETATION AND MULCHED WITH STRAW MULCH OR OTHERWISE STABILIZED.
12. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED OR OTHERWISE STABILIZED AS SOON AS POSSIBLE BUT NO LATER THAN 48 HOURS AFTER GRADING.
13. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
14. DURING DEWATERING OPERATIONS, WATER SHALL BE PUMPED THROUGH AN APPROVED FILTERING DEVICE OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY IMPACT FLOWING STREAMS OR OFF-SITE PROPERTY.
15. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES DAILY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
16. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AND AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL (T&ES) SERVICES OF THE CITY OF ALEXANDRIA.
17. ANY DENUDED SLOPES, EITHER DISTURBED OR CREATED BY THIS PLAN THAT EXCEED 2500 SQUARE FEET SHALL BE SODDED AND PEGGED FOR STABILITY AND EROSION CONTROL. AT THE COMPLETION OF THE PROJECT AND PRIOR TO THE RELEASE OF THE BOND, ALL DISTURBED AREAS SHALL BE STABILIZED PERMANENTLY AND ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED.
18. ALL VEHICLES SHALL BE CLEANED BEFORE ENTERING ONTO THE PUBLIC RIGHT-OF-WAY.
19. THE WASH WATER FROM THE CONSTRUCTION ENTRANCE SHALL BE FILTERED THROUGH THE PROVIDED SILT FENCE TO ENSURE THAT NO SEDIMENT LADEN RUNOFF IS ALLOWED TO RUNOFF ON TO THE ADJACENT PROPERTY OR THE PUBLIC RIGHT OF WAY.
20. INSTALL SILT FENCE AND TREE PROTECTION, WHERE APPLICABLE.
21. DUST CONTROL SHALL BE ACCOMPLISHED BY TEMPORARY VEGETATIVE COVER AND BY IRRIGATION AS NEEDED.

SEQUENCE OF CONSTRUCTION FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES

1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS; AND STABILIZE CONSTRUCTION ENTRANCE AS SHOWN ON THIS PLAN.
2. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED / VERIFIED IN FIELD BY THE CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
3. INSTALL INLET PROTECTION AT EXISTING STORM DRAIN INLETS AS NECESSARY AND AS SHOWN ON THIS PLAN.
4. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES AS NECESSARY AND AS DIRECTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR.
5. CONDUCT DEMOLITION AND CONSTRUCTION ACTIVITIES ACCORDING TO THE APPLICABLE PLANS.
6. AS CONTRIBUTARY DRAINAGE AREAS ARE STABILIZED AND WITH THE PERMISSION OF THE EROSION AND SEDIMENT CONTROL INSPECTOR, REMOVE INDIVIDUAL EROSION AND SEDIMENT CONTROL PRACTICES.
7. UPON COMPLETION OF DEMOLITION, CONSTRUCTION AND LAND DISTURBING ACTIVITIES; PROVIDE PERMANENT STABILIZATION ACCORDING TO APPROVED METHODS AND REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.

SEDIMENT TRAPS AND BASINS

SINCE THE TOTAL DRAINAGE AREA TO BE SERVED IS GREATER THAN THREE ACRES, THEREFORE, A SEDIMENT BASIN IS DESIGNED USING THE CRITERIA THAT THE MINIMUM STORAGE CAPACITY OF THE TRAP IS 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM IS DESIGNED TO MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A 25-YEAR 24-HOUR DURATION STORM. THE RUNOFF COEFFICIENTS USED IN THE RUNOFF CALCULATIONS CORRESPOND TO THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.

COMPUTATION OF PEAK RUNOFF RATE

THE PRE AND POST DEVELOPMENT PEAK RATES OF RUNOFF ARE COMPUTED BY THE RATIONAL METHOD USING THE CITY OF ALEXANDRIA INTENSITY-DURATION-FREQUENCY (IDF) CURVES, DESIGN AND CONSTRUCTION STANDARDS, DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, JULY 1989. AN INLET TIME OF CONCENTRATION OF 5 MINUTES HAS BEEN USED FOR BUSINESS, COMMERCIAL, APARTMENT AND TOWNHOUSE COMPLEXES AS IN AN ULTRA URBAN ENVIRONMENT. ALL HYDROLOGIC ANALYSES RELATED TO PRE AND POST DEVELOPMENT IS BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT, RESPECTIVELY.

STORMWATER MANAGEMENT PLAN

THE PLAN DEMONSTRATES THAT THE SITE HAS BEEN DEVELOPED TO INCREASE THE POST DEVELOPMENT PEAK RUNOFF RATE FROM THE PRE-DEVELOPMENT PEAK RUNOFF RATE FOR A TWO-YEAR AND TEN YEAR STORM CONSIDERED INDIVIDUALLY. THEREFORE, STORMWATER DETENTION IS PROVIDED PER THE REQUIREMENTS OF ARTICLE 13-109(F)(1) OF ALEXANDRIA ZONING ORDINANCE NOT TO RELEASE STORMWATER FROM THE SITE AT A HIGHER RATE THAN PRE DEVELOPMENT CONDITION. AN ADEQUATE OUTFALL ANALYSIS IS PROVIDED TO DEMONSTRATE THAT THE STORMWATER IS DISCHARGED INTO AN ADEQUATE OUTFALL PER THE REQUIREMENTS OF ARTICLE XI, SECTION 11-410 (N).

ADEQUATE OUTFALL ANALYSIS

THE PLAN DEMONSTRATES THE AVAILABILITY OF A STORM SEWER ADEQUATE OUTFALL IN COMPLIANCE WITH THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (DCR), EROSION AND SEDIMENT CONTROL (ESC) REGULATIONS (4VAC50-30-40.19) MINIMUM STANDARD 19 (MS-19), ARTICLE XI SECTION 11-410 (N) OF THE ALEXANDRIA ZONING ORDINANCE (AZO), AND THE APPROVED CONDITION OF DEVELOPMENT.

THE PLAN DEMONSTRATES THAT AN EXISTING NATURAL CHANNEL IS NOT OVERTOPPED FOR A TEN-YEAR STORM AND DOES NOT PRODUCE EROSIVE VELOCITIES FOR A TWO YEAR STORM; THEREFORE, AN ADEQUATE STORM WATER OUTFALL IS ASSUMED TO BE AVAILABLE.

ADDITIONAL STUDIES WILL BE PERFORMED FOR WETLANDS MITIGATION AND RESTORATION WHICH SHALL VERIFY ADEQUATE OUTFALL AND COMPLY WITH ALL CONDITIONS APPLIED DURING SITE PLAN APPROVAL.

STORMWATER BMP AND DETENTION FACILITIES MAINTENANCE AGREEMENT

THE APPLICANT SHALL SUBMIT TO THE CITY OF ALEXANDRIA A STORMWATER BMP AND DETENTION FACILITIES MAINTENANCE AGREEMENT WITH FINAL #2 SUBMISSION THE MAINTENANCE AGREEMENT SHALL BE REGISTERED WITH ALEXANDRIA LAND RECORDS.

ENVIRONMENTAL SITE ASSESSMENT

1. THE PROJECT WILL DISTURB EXISTING WETLANDS BOTH PERMANENTLY AND TEMPORARILY DURING CONSTRUCTION. THE REMAINING WETLANDS WILL BE RESTORED TO ALL EXTENTS POSSIBLE UPON COMPLETION OF TH EPROJECT. ADDITIONALLY, WETLANDS REMEDIATION EFFORTS WILL BE APPLIED OFF-SITE.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS, AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED IN THIS PROJECT, INCLUDING MONITORING WELLS MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-838-4400 EXT 267/255.
4. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 7 AM TO 6 PM AND
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STORMWATER BEST MANAGEMENT PRACTICES (BMP) NOTES

THE STORMWATER BEST MANAGEMENT PRACTICES (BMP) REQUIRED FOR THIS PROJECT SHALL BE CONSTRUCTED AND INSTALLED UNDER THE DIRECT SUPERVISION OF THE DESIGN ENGINEER OR HIS DESIGNATED REPRESENTATIVE. THE DESIGN ENGINEER SHALL MAKE A WRITTEN CERTIFICATION TO THE CITY THAT THE BMPs ARE CONSTRUCTED AND INSTALLED AS DESIGNED AND IN ACCORDANCE WITH THE APPROVED SITE PLAN. IN ADDITION, AGGREGATE LAYERS AND COLLECTOR PIPES MAY NOT BE INSTALLED UNLESS THE DESIGN ENGINEER OR HIS REPRESENTATIVE IS PRESENT.

THE CONTRACTOR SHALL FURNISH THE CITY WITH AN OPERATION AND MAINTENANCE MANUAL FOR ALL BMPs ON THE PROJECT. THE MANUAL SHALL INCLUDE AN EXPLANATION OF THE FUNCTIONS AND OPERATIONS OF EACH BMP AND ANY SUPPORTING UTILITIES, CATALOG CUTS ON ANY MECHANICAL OR ELECTRICAL EQUIPMENT AND A SCHEDULE OF ROUTINE MAINTENANCE FOR THE BMPs AND SUPPORTING EQUIPMENT.

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APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

DATE RECORDED ________
INSTRUMENT NO. — DEED BOOK NO. — PAGE NO.

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STANDARD NOTES

SHEET 2 OF 37

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Scale N.T.S.
File Name
Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	G-01A	A

PLOT TIME: 11/16/2018 3:22 PM
PLOT BY: Esteban Garcia

UTILITY WORKS

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING MINIMUM STANDARDS DESCRIBED IN SECTION 4VAC50-30-40 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) AND ADDITIONAL APPLICABLE PRACTICES FOLLOWED BY THE CITY OF ALEXANDRIA:

a. ALL PRIVATE UTILITIES SHALL BE LOCATED OUTSIDE OF THE PUBLIC RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENTS UNLESS THE UTILITY OWNERS HAVE FRANCHISE AGREEMENT WITH THE CITY OF ALEXANDRIA; HOWEVER, NO ELECTRIC TRANSFORMERS AND SWITCH GEARS / CONTROL BOXES SHALL BE PLACED IN THE PUBLIC RIGHT OF WAY.

b. ALL THE EXISTING AND PROPOSED PUBLIC AND PRIVATE UTILITIES AND EASEMENTS SHALL BE SHOWN AND A DESCRIPTIVE NARRATION OF VARIOUS UTILITIES SHALL BE PROVIDED ON THE PLAN.

c. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN UTILITY SERVICES AT ALL TIMES DURING CONNECTION AND/OR CONSTRUCTION.

d. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.

e. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.

C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.

f. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS TO MINIMIZE EROSION AND PROMOTE STABILIZATION.

g. SHOULD UTILITY CONSTRUCTION BE PERFORMED AFTER COMPLETING EARTHWORK, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACHIEVING 98 PERCENT OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D-1551) COMPACTION IN ALL TRENCH BACKFILL.

h. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE VIRGINIA REGULATIONS §4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS, VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH).

i. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

j. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION, AS DETERMINED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, CITY OF ALEXANDRIA .

k. A REMEDIATION PLAN SHALL BE SUBMITTED DETAILING HOW CONTAMINATED SOILS AND/OR GROUNDWATER WILL BE DEALT WITH, INCLUDING PLANS TO REMEDIATE UTILITY CORRIDORS.

l. UTILITY CORRIDORS IN CONTAMINATED SOIL SHALL BE OVER EXCAVATED BY 2 FEET AND BACKFILLED WITH "CLEAN" SOIL.

m. GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.

n. ALL UTILITIES SUCH AS ELECTRICAL LINES, GAS PIPES, COMMUNICATION CABLES, INCLUDING WATER AND SEWER LATERALS ON PRIVATE PROPERTY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH MINIMUM 3" WIDE 5 MIL OVERALL THICKNESS DETECTABLE UNDERGROUND WARNING TAPE (DUWT). THE DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" FOR DUWT WIDTHS OF 3" AND 24" FOR WIDTHS OF 6" SO AS TO MAKE UNDERGROUND INSTALLATIONS EASY TO FIND USING A NON-FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES, SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE, ACIDS, ALKALIS, AND OTHER SOIL SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS.

COLOR	CODES
RED	CAUTION BURIED ELECTRIC POWER LINES, CABLES, CONDUITS, AND LIGHTING CABLES
YELLOW	CAUTION GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	CAUTION COMMUNICATIONS, ALARM OR SIGNAL LINES, CABLES, OR CONDUITS
BLUE	CAUTION POTABLE WATER
PURPLE	CAUTION RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	CAUTION SEWER, DRAIN LINES, AND FORCE MAIN

SOLID WASTE MANAGEMENT

1. SINCE THE APPLICANT IS NOT REQUIRED BY SECTION 5-1-31 OF THE CITY CHARTER AND CODE TITLE 5: TRANSPORTATION AND ENVIRONMENTAL SERVICES TO USE THE CITY OF ALEXANDRIA'S COLLECTION AND DISPOSAL SERVICES; SOLID WASTE COLLECTION AND DISPOSAL SERVICES SHALL BE PROVIDED BY THE APPLICANT / PRIVATE COLLECTORS AND SHALL BE PASSED ON TO THE NEW OWNER IN CASE OF A SALE OF THE PROPERTY SUBSEQUENT TO THE DEVELOPMENT.

   THE PLAN DEMONSTRATES THAT ADEQUATE SPACE WITHIN EACH UNIT TO ACCOMMODATE A CITY STANDARD SUPER CAN AND RECYCLING CONTAINER HAS BEEN PROVIDED. THE CONTAINERS ARE PLACED INSIDE THE UNITS OR WITHIN AN ENCLOSURE THAT COMPLETELY SCREENS THEM FROM VIEW. THE DEVELOPER SHALL PURCHASE THE STANDARD CONTAINERS FROM THE CITY OR PROVIDE CONTAINERS THAT ARE COMPATIBLE WITH CITY COLLECTION SYSTEM AND APPROVED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.

   THE PLAN DEMONSTRATES THAT ADEQUATE SPACE FOR SOLID WASTE AND RECYCLING CONTAINERS HAS BEEN PROVIDED AND THE DEVELOPMENT MEETS ALL THE MINIMUM STREET STANDARDS, INCLUDING ALL STANDARD CUL-DE-SAC TURNAROUNDS, IF APPLICABLE. THE TRASH TRUCK TURNING MOVEMENTS DEMONSTRATE THAT THE TRASH TRUCK IS ABLE TO PICK UP SOLID WASTE FROM PRIVATE STREETS WITHOUT BACKING UP. THE CONTAINERS HAVE BEEN PLACED WITHIN AN ENCLOSURE THAT COMPLETELY SCREENS THEM FROM VIEW.

2. IN THE EVENT SECTION 5-1-2(12B) OF THE CITY CHARTER AND CODE TITLE 5: TRANSPORTATION AND ENVIRONMENTAL SERVICES IS AMENDED TO DESIGNATE MULTI-FAMILY DWELLINGS IN GENERAL, OR MULTI-FAMILY DWELLINGS WHEN SO PROVIDED BY SPECIAL USE PERMIT (SUP), AS REQUIRED USER PROPERTY [AS DEFINED IN 5-1-2(12B) OF THE CITY CHARTER AND CODE], THEN REFUSE COLLECTION SHALL BE PROVIDED BY THE CITY FOR THE TOWNHOME CONDOMINIUM PORTION OF THIS PLAN.

SIGN CONSTRUCTION

A SEPARATE PERMIT IS REQUIRED FOR SIGN CONSTRUCTION.

LANDSCAPE NOTES

1. SEE DSUP 2016-0005 FOR PROPOSED LANDSCAPE IN AND AROUND POTOMAC GREENS PARK.
2. SEE DSUP 2016-0006 FOR PROPOSED LANDSCAPE IN AND AROUND POTOMAC YARD PARK.
3. ALL PROTECTION AND PRESERVATION MEASURES FOR EXISTING VEGETATION, INCLUDING MAINTENANCE AND PENALTIES SHALL BE PREPARED IN COMPLIANCE WITH LANDSCAPE GUIDELINES OF THE CITY OF ALEXANDRIA AND APPROVED BY THE CITY ARBORIST IN-FIELD PRIOR TO COMMENCEMENT OF ANY SITE DISTURBING AND CONSTRUCTION ACTIVITIES.
4. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED / VERIFIED IN FIELD BY THE CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
5. LOCATION AND METHOD FOR PROTECTION AND PRESERVATION OF EXISTING TREES WILL BE SHOWN ON DEMOLITION, SEDIMENT AND EROSION CONTROL, AND LANDSCAPE PLAN SHEETS.
6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE SURE THAT ANY EXISTING LANDSCAPING WHICH IS TO BE RELOCATED ON THE SITE WILL BE CAREFULLY STORED IN A DESIGNATED AREA BEFORE BEING REPLANTED. COORDINATION WITH THE OWNER FOR MUTUALLY AGREEABLE STORAGE LOCATIONS FOR LANDSCAPE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF PLANT MATERIAL THAT DOES NOT SURVIVE STORAGE AND REPLANTING.
7. APPLICANT MUST INCLUDE ON THE PLAN DOCUMENTATION OF COMMUNICATION WITH THE ADJACENT PROPERTY OWNER(S) VERIFYING NOTIFICATION OF AND AGREEMENT WITH CONSTRUCTION IMPACT, POTENTIAL FOR LOSS, AND AGREED UPON REMEDIAL MEASURES PERTAINING TO THE EXISTING TREE(S) ON ADJACENT PROPERTIES THAT WILL BE AFFECTED BY PROJECT WORK.
8. INCLUDE SPECIFIC CONSTRUCTION STAGING INFORMATION ON THE PLAN THAT INDICATES THE METHODS, AND PROCEDURES TO BE IMPLEMENTED FOR PROTECTION OF EXISTING ON-SITE AND OFF-SITE VEGETATION.
9. PROPOSED PLANTING SHALL BE PROVIDED IN COMPLIANCE WITH LANDSCAPE GUIDELINES OF THE CITY OF ALEXANDRIA.
10. SPECIFICATION FOR ALL PLANTINGS SHALL BE IN ACCORDANCE WITH THE CURRENT AND MOST UP TO DATE EDITION OF ANSI-Z60.1, THE AMERICAN STANDARD FOR NURSERY STOCK AS PRODUCED BY THE AMERICAN ASSOCIATION OF NURSERYMEN; WASHINGTON, D.C.
11. THE APPLICANT SHALL MAKE SUITABLE ARRANGEMENTS FOR PRE-SELECTION TAGGING, PRE-CONTRACT GROWING, OR IS UNDERTAKING SPECIALIZED PLANTING STOCK DEVELOPMENT WITH A NURSERY OR GROWER THAT IS CONVENIENTLY LOCATED TO THE PROJECT SITE, OR UTILIZING OTHER PROCEDURES THAT WILL ENSURE AVAILABILITY OF SPECIFIED MATERIALS. IN THE EVENT THAT SHORTAGES AND/OR INABILITY TO OBTAIN SPECIFIED PLANTINGS OCCURS, REMEDIAL EFFORTS INCLUDING SPECIES CHANGES, ADDITIONAL PLANTINGS AND MODIFICATION TO THE LANDSCAPE PLAN SHALL BE UNDERTAKEN BY THE APPLICANT. ALL REMEDIAL EFFORTS SHALL, WITH PRIOR APPROVAL BY THE CITY, BE PERFORMED TO THE SATISFACTION OF THE DIRECTORS OF PLANNING & ZONING, RECREATION, PARKS & CULTURAL ACTIVITIES AND TRANSPORTATION & ENVIRONMENTAL SERVICES.
12. IN LIEU OF MORE STRENUOUS SPECIFICATIONS, ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP-TO-DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA; GAITHERSBURG, MARYLAND.
13. PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATIONS, A PRE-INSTALLATION/CONSTRUCTION MEETING WILL BE SCHEDULED WITH THE CITY'S ARBORIST AND LANDSCAPE ARCHITECTS TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES.
14. MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED IN PERPETUITY BY THE APPLICANT/OWNER/SUCCESSOR, IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND/OR AS CONDITIONED BY PROJECT APPROVAL.
15. A CERTIFICATION LETTER FOR TREE WELLS, TREE TRENCHES AND PLANTINGS ABOVE STRUCTURE SHALL BE PROVIDED BY THE PROJECT'S LANDSCAPE ARCHITECT. THE LETTER SHALL CERTIFY THAT ALL BELOW GRADE CONSTRUCTION IS IN COMPLIANCE WITH APPROVED DRAWINGS AND SPECIFICATIONS. THE LETTER SHALL BE SUBMITTED TO THE CITY ARBORIST AND APPROVED PRIOR TO APPROVAL OF THE LAST AND FINAL CERTIFICATE OF OCCUPANCY FOR THE PROJECT. THE LETTER SHALL BE SUBMITTED BY THE OWNER/APPLICANT/SUCCESSOR AND SEALED AND DATED AS APPROVED BY THE PROJECT'S LANDSCAPE ARCHITECT.
16. AS-BUILT DRAWINGS FOR LANDSCAPE PLAN AND/OR IRRIGATION/WATER MANAGEMENT SYSTEMS DEPICTED IN DSUP 2016-0005 AND 2016-0006 WILL BE PROVIDED IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES. AS-BUILT DRAWINGS SHALL INCLUDE CLEAR IDENTIFICATION OF ALL VARIATION(S) AND CHANGES FROM APPROVED DRAWINGS INCLUDING LOCATION, QUANTITY AND SPECIFICATION OF ALL PROJECT ELEMENTS.

DEMOLITION NOTES

1. A SEPARATE PERMIT IS REQUIRED FOR DEMOLITION; HOWEVER, nO DEMOLITION SHALL BEGIN UNTIL ALL EROSION AND SEDIMENT and tree PROTECTION CONTROLS ARE IN PLACE AND ARE APPROVED BY AN ERosION AND SEDIMENT CONTROL INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
2. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE MOST CURRENT APPLICABLE FEDERAL, STATE , AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED, TO ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (oSHA), VIRGINIA OCCUPATIONAL AND SAFETY HELATH COMPLIANCE PROGRAM (VOSH ENFORCEMENT), VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT, NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS), AND NATIONAL INSTITUTUE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK WITH REPRESENTATIVE UTILITY COMPANIES AND FOR THE IMPLEMENTATION OF REQUIRED UTILITY-RELATED WORK.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESenTATIVE UPON ENCOUNTERING ANY HAZARDOUS MATERIALS DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
5. DISCONNECTION OF SERVICES AND SYSTEMS SUPPLYING UTILITIES TO BE ABANDONED OR DEMOLISHED SHALL BE COMPLETED PRIOR TO OTHER SITE DEMOLITION IN FULL COMPLIANCE WITH APPLICABLE CODES, REGULATIONS, AND THE REQUIREMENTS OF UTILITY PURVEYORS HAVING JURISDICTION. tHE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY PURVEYORS, PAYMENT OF ASSOCIATED FEES AND PROCUREMENT OF ALL NECESSARY PERMITS.
6. PRIOR TO REMOVAL OF MATERIALS OVER EXISTING UTILITY SYSTEMS, THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS AND, IF AT VARIANCE WITH CONDITIONS AS REPRESENTED ON THE PLANS, NOTIFY THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTIONS AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
7. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH APPROVED MATERIALS / CLEAN FILL AS PER THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF TRANSPORTATION (vdot).
8. THE CONTRACTOR SHALL PROTECT AND PREVENT DAMAGE TO EXISTING ON-SITE UTILITY DISTRIBUTION FACILITIESTHAT ARE TO REMAIN. ACTIVE UTILITY DISTRIBUTION FACILITIES ENCOUNTERED DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES SHALL BE SHUT OFF AT THE SERVICE MAIN WITH THE APROVAL OF THE OWNER'S REPRESENTATIVE.
9. DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY EXISTING UTILITIES AND/OR UTILITY SYSTEM STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DOCUMENT THE SAME AND FORWARD THE INFORMATION TO THE RESIDENT ENGINEER / OWNER'S REPRESENTATIVE, AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
10. THE CONTRACTOR OR APPLICANT SHALL WORK WITH THE CITY STAFF TO REUSE THE EXISTING, LEFTOVER, UNUSED, AND/OR DISCARDED BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS OR THE CONSTRUCTION DEBRIS MUST BE REMOVED TO AN APPROVED LANDFILL WITH ADEQUATE FREQUENCY IN ACCORDANCE WITH THE VIRGINIA STATE LITTER CONTROL ACT.

CONSTRUCTION NOTES

1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREON ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY ACTION AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUATION OF SERVICE.
2. THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED FOLLOWING NOTIFICATION AND MARKING OF ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES TEST HOLES TO BE PERFORMED AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE OWNER AND ENGINEER. REDEISGN AND APPROVAL BY REVIEWING AGENCIES SHALL BE OBTAINED, IF REQUIRED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
4. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
5. THE CONTRACTOR SHALL CLEAR THE SITE OF ALL TREES, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SPECIFIED, AND SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE DISCONNECTED.
6. THE DEVELOPER SHALL PROVIDE OVER-LOT GRADING TO PROVIDE POSITIVE DRAINAGE AND PRECLUDE PONDING OF WATER.
7. ALL AREAS, ON OR OFF-SITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. THE MINIMUM ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS, SEED MIXTURE TO BE AS RECOMMENDED BY THE CITY AGENT. ALL SLOPES 3:1 AND GREATER SHALL BE SODDED AND PEGGED OF OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY OF ALEXANDRIA.
8. EXISTING SEPTIC FIELDS, IF APPLICABLE, SHALL BE ABANDONED IN ACCORDANCE WITH VIRGINIA HEALTH DEPARTMENT STANDARDS AND SPECIFICATIONS.
9. ALL ABOVE GROUND UTILITIES SERVING THE SITE SHALL BE RELOCATED AS REQUIRED BY THE OWNING UTILITY COMPANIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ALL ARRANGEMENTS AND COORDINATING ALL WORK REQUIRED FOR THE NECESSARY RELOCATIONS.
10. PRIOR TO BEGINNING OF CONSTRUCTION, CONTRACTOR SHALL VERIFY FROM THE ARCHITECTURAL DRAWINGS ALL DIMENSIONS, DETAILS, AND TREATMENTS FOR THE PROPOSED BUILDINGS, WALKWAYS, AND OTHER PROPOSED CONSTRUCTION WHERE INDICATED ON THE PLANS.
11. THE CONTRACTOR IS TO VERIFY INVERT, SIZE, AND LOCATION OF BUILDING UTILITY CONNECTIONS WITH THE MECHANICAL PLANS PRIOR TO PLACEMENT OF UNDERGROUND UTILITIES.
12. EXISTING BUILDINGS, FENCES AND OTHER EXISTING PHYSICAL FEATURES ARE TO BE REMOVED AS REQUIRED BY THE CONSTRUCTION.
13. EXISTING CONSTRUCTION SHALL BE REMOVED TO NEAREST JOINT. NEW CONSTRUCTION SHALL BE PROVIDED AS SHOWN AND ANY DAMAGED AREA SHALL BE REPAIRED TO MATCH CONDITIONS EXISTING PRIOR TO CONSTRUCTION OR TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
14. ALL PRIVATE BUILDING CONNECTIONS ARE TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT PLUMBING CODE.
15. TOPS OF EXISTING STRUCTURES WHICH REMAIN IN USE ARE TO BE ADJUSTED IN ACCORDANCE WITH THE GRADING PLAN. ALL PROPOSED STRUCTURE TOP ELEVATIONS ARE TO BE VERIFIED BY THE CONTRACTOR WITH THE SITE GRADING PLANS. IN CASE OF CONFLICT, THE GRADING PLAN SHALL SUPERSEDE PROFILE ELEVATIONS. MINOR ADJUSTMENTS TO MEET FINISHED GRADE ELEVATIONS, IF REQUIRED, SHALL BE MADE IN THE FIELD WITH THE APPROVAL OF SITE INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
16. THE DESIGN, CONSTRUCTION, FIELD PRACTICES, AND METHODS SHALL CONFORM TO THE REQUIREMENTS SET FORTH BY THE CITY OF ALEXANDRIA ZONING ORDINANCE AND DESIGN AND CONSTRUCTION STANDARDS MANUAL. FAILURE TO COMPLY WITH THE CODE, APPLICABLE MANUALS, AND PROVISIONS OF THE CONSTRUCTION AND ESCROW AGREEMENTS OR THE PERMITS SHALL BE DEEMED A VIOLATION.
17. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER/DEVELOPER OR HIS AGENT OF ANY LEGAL RESPONSIBILITIES WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE CITY OF ALEXANDRIA.
18. CONSTRUCTION STAKEOUT SHALL BE UNDER THE DIRECT SUPERVISION OF A LICENSED LAND SURVEYOR IN THE COMMONWEALTH OF VIRGINIA.
19. THE CONTRACTOR IS REFFRRED TO STRUCTURAL, GEOTECHNICAL, MECHANICAL, AND ARCHITECTURAL PLANS FOR FOUNDATION TREATMENT INCLUDING, BUT NOT LIMITED TO, SHEETING AND SHORING FOR BUILDING EXCAVATION, WATERPROFFING FOR FILL AGAINST BUILDINGS, LOCATION OF MECHANICAL EQUIPMENT, AND CONNECTIONS AT THE FACES OF BUILDINGS.
20. SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE PROPOSED ENTRANCE AND/OR CURB & GUTTER TO PRECLUDE THE FORMING OF FALSE GUTTER AND/OR PONDING OF WATER ON THE ROADWAY.
21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A SMOOTH TRANSITION TO EXISTING CURB AND SIDEWALKS, IF APPLICABLE.
22. THE CALIFORNIA BEARING RATIO (CBR) VALUES OF IN-SITU MATERIALS SHALL BE DETERMINED BY FIELD AND/OR LABORATORY TESTS FOR ACTUAL DETERMINATION OF REQUIRED THICKNESSES OF SURFACE, BASE, SUB-BASE, AND SUB GRADE MATERIALS. THE PAVEMENT SECTION SHALL BE DESIGNED BY A GEOTECHNICAL /LICENSED PROPOFESSIONAL ENGINEER TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION.
23. THE THICKNESSES OF SUB-BASE, BASE, AND WEARING COURSE SHALL BE DESIGNED USING "CALIFORNIA METHOD" AS SET FORTH ON PAGE 3-76 OF THE SECOND EDITION OF A BOOK ENTITLED, "DATA BOOK FOR CIVIL ENGINEERS, VOLUME ONE, DESIGN" WRITTEN BY ELWYN E. SEELYE. AN ALTERNATE PAVEMENT SECTION DESIGNED TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES FOR ALL PAVEMENTS INCLUDING EMERGENCY VEHICLE EASEMENT (EVE) TO SUPPORT H-20 LOADING BASED ON CBR AND VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) METHOD (VASWANI METHOD) AND STANDARD MATERIAL SPECIFICATIONS SHALL BE ACCEPTABLE.
24. EMERGENCY VEHICLE EASEMENTS (EVE) AND AMERICAN WITH DISTABILITY (ADA) ACCESSIBLE PARKING SPACES MUST BE DELINEATED WITH PAVEMENT MARKINGS PER THE CITY OF ALEXANDRIA STANDARD SIGNAGE AND AMERICAN WITH DISABILITIES (ADA) REQUIREMENTS.
25. ALL STRIPING SHALL MEET THE REQUIRMENTS OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS (LATEST EDITION) AND SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
26. ALL EARTHWORK OPERATIONS ARE TO BE PERFORMED UNDER THE FULL TIME, ON-SITE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER WITH GEOTECHNICAL TESTING IN ACCORDANCE WITH CONSTRUCTION SPECIFICATIONS AND GEOTECHNICAL REPORT REQUIREMENTS.
27. THE CONTRACTORS SHALL NOT CAUSE OR PERMIT VEHICLES TO IDLE FOR MORE THAN 10 MINUTES WHEN PARKED.
28. UNLESS OTHERWISE APPROVED THE CONTRACTOR SHALL PROVIDE THERMOPLASTIC LADDER STYLE / STANDARD PEDESTRIAN CROSS WALKS AT ALL CROSSINGS AT THE PROPOSED DEVELOPMENT, WHICH MUST BE DESIGNED TO THE SATISFACTION OF THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE DESIGN OF LADDER STYLE OR STANDARD PEDESTRIAN CROSS WALK SHALL BE EVALUATED ON A CASE BY CASE BASIS AND SHALL COMPLY WITH THE REQUIREMENTS OF POLICY MANUAL SECTION 30.18, PEDESTRIAN CROSSWALKS, JULY 13, 2006. A COPY OF THE POLICY MANUAL CAN BE OBTAINED FROM YON LAMBERT, BICYCLE AND PEDESTRIAN COORDINATOR / TRANSPORTATION PLANNER, TELEPHONE (703) 746-4081.

RESOURCE PROTECTION AREA NOTES

1. THE SUBJECT PROPERTY LIES WITHIN A CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA). FIELD DEMARCATED/VERIFIED 50 FEET AND 100 FEET RESOURCE PROTECTION AREA LINES ARE SHOWN ON THE SITE PLAN.
2. VEGETATION IN RPA SHALL ONLY BE DISTURBED UPON APPRVAL OF THE CITY OF ALEXANDRIA.
3. DEVELOPMENT AND USES PROPOSED IN THE RPA ARE IN COMPLIANCE WITH THE REQUIREMENTS OF ARTICLE 13-107 OF THE ALEXANDRIA ZONING ORDINANCE (AZO).

FLOOD PLAIN NOTES

1. THE SITE LIES WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATION (WSE) AND THE 100-YEAR FLOOD PLAIN WSE IS SHOWN ON THE SITE PLAN PER THE DEMARCATION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).
2. THE PLAN WILL COMPLY WITH THE CONDITIONS OF SITE PLAN APPROVAL.

ARCHAEOLOGY NOTES

1. ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED PRIOR TO GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, UNDERGROUNDING UTILITIES, PILE DRIVING, LANDSCAPING AND OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) OR A RESOURCE MANAGEMENT PLAN MUST BE IN PLACE TO PRESERVE AND/OR RECOVER SIGNIFICANT RESOURCES IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT (703) 838-4399.
2. THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-838-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
3. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

CEMETRY AND/OR BURIAL GROUNDS

THERE IS NO OBSERVABLE, HISTORICAL, OR ARCHAEOLOGICAL EVIDENCE OF CEMETERIES OR BURIAL GROUNDS ON THIS PROPERTY.

RODENT ABATEMENT NOTE

PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT OR LAND DISTURBANCE PERMIT, A RODENT ABATEMENT PLAN SHALL BE SUBMITTED TO THE CITY OF ALEXANDRIA BUILDING AND FIRE CODE ADMINISTRATION THAT WILL OUTLINE STEPS THAT WILL BE TAKEN TO PREVENT THE SPREAD OF RODENTS FROM THE CONSTRUCTION SITE TO THE SURROUNDING COMMUNITY AND SEWERS. THE CONTRACTOR CAN CONTACT ALEXANDRIA BUILDING AND FIRE CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.

MOSQUITO CONTROL NOTES

1. SINCE STORM WATER MANAGEMENT (SWM) AND BEST MANAGEMENT PRACTICE (BMP) SYSTEMS THAT HOLD WATER FOR MORE THEN 5 DAYS BETWEEN THE MONTHS OF MAY - OCTOBER HAVE THE POTENTIAL TO CAUSE MOSQUITO BREEDING HABITATS; THEREFORE, SUCH BMPS SHALL BE TREATED WITH A REGISTERED MOSQUITO LARVAL CONTROL PRODUCT. ALL LABELS SHOULD BE FOLLOWED FOR APPLICATION RATES AND AMOUNTS.
2. SINCE EXCESSIVE VEGETATION IN EXISTING BMPS ALSO INCREASES THE POTENTIAL FOR MOSQUITO PROBLEMS; THEREFORE, VEGETATION SHALL BE CONTROLLED AND CUT TO REDUCE MOSQUITO BREEDING.
3. CONTACT THE CITY OF ALEXANDRIA ENVIRONMENTAL HEALTH VECTOR BORNE ILLNESS PROGRAM (703-838-4400 EXT. 326, 327) FOR QUESTIONS OR TREATMENT ASSISTANCE.

APPROVED
SPECIAL USE PERMIT NO. ____________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR ____________ DATE ____________

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____________

DIRECTOR ____________ DATE ____________

CHAIRMAN, PLANNING COMMISSION ____________ DATE ____________

DATE RECORDED ____________
INSTRUMENT NO. ____________ DEED BOOK NO. ____________ PAGE NO. ____________

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STANDARD NOTES

SHEET 3 OF 37

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77 Water Street
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T +1 212 896 3000
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Scale N.T.S.

File Name

Drawing Status
PRELIMINARY DSUP

Job No 254922
Drawing No G-01B
Issue A

PLOT BY: Esteban Garcia PLOT TIME: 11/16/2018 3:33 PM

NOTE:

1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERTICAL IS NAVD 88.

APPROVED
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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
DEVELOPMENT PRELIMINARY SITE PLAN
OVERALL PARCEL PLAN

SHEET 4 OF 37

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File Name

Drawing Status
AMENDED DSUP

Job No 254992
Drawing No G-02
Issue

PLOT BY: Julian Smith PLOT TIME: 11/15/2018 6:49 PM

24x36h

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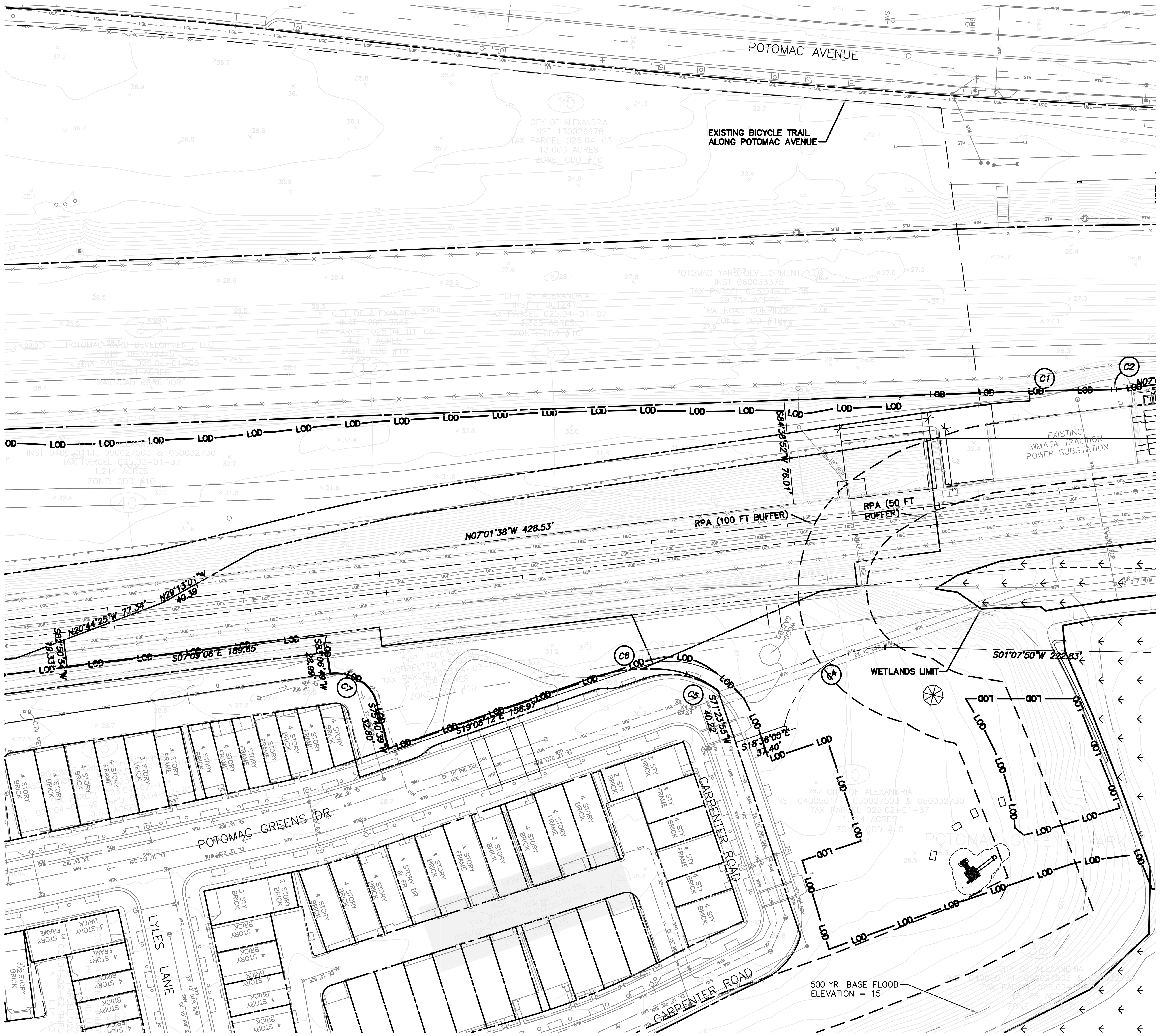

NOTE:

1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERTICAL IS NAVD 88.

	11/19/2018	JS	JD	TW
Issue	Date	By	Chkd	Appd

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
EXISTING CONDITIONS
1 OF 3

SHEET 5 OF 37

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File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	EX-01	

24x36h

NOTE:
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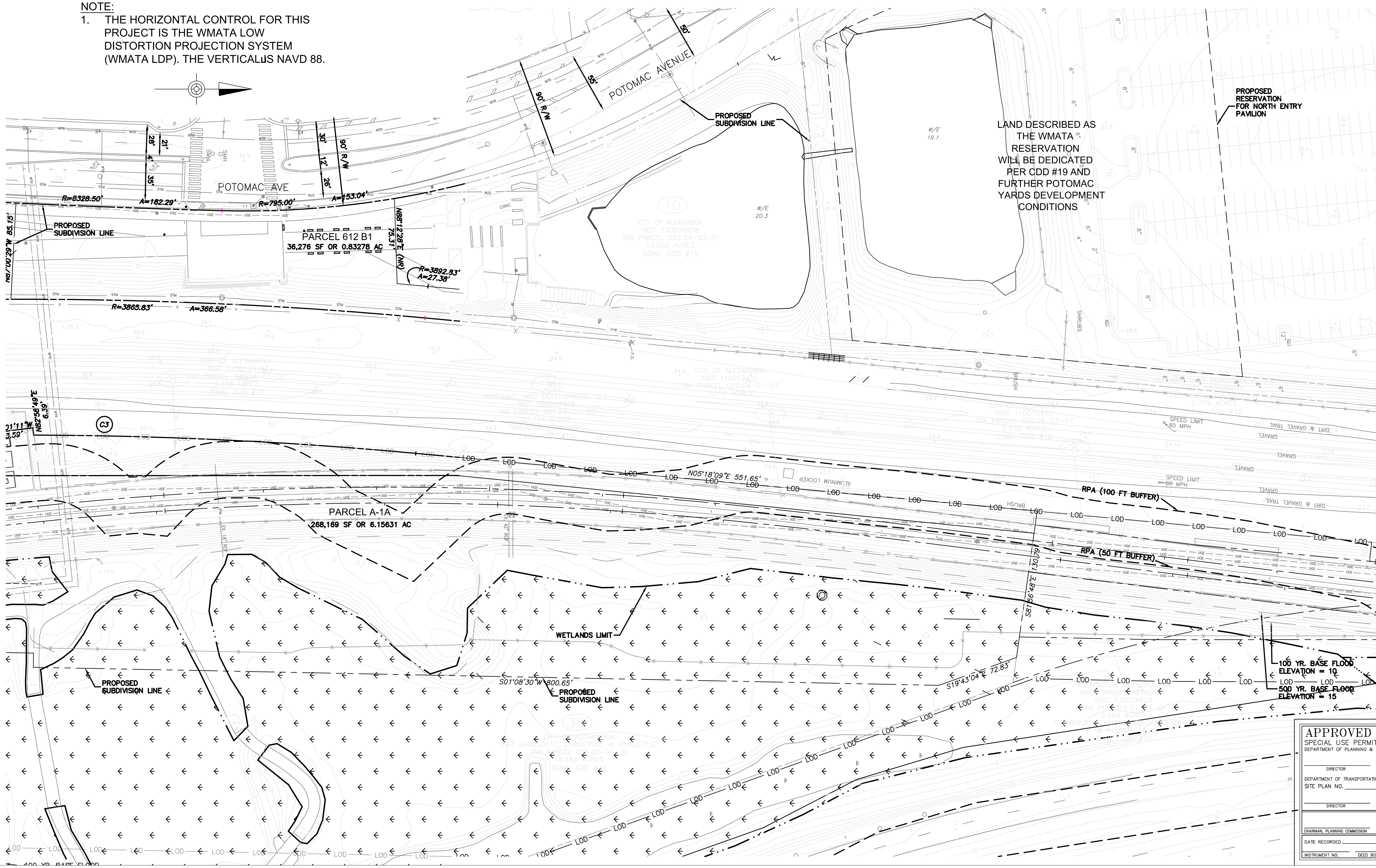

APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
EXISTING CONDITIONS 2 OF 3

SHEET 6 OF 37

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File Name

Drawing Status
PRELIMINARY DSUP

Job No 254922
Drawing No EX-02
Issue

PLOT BY: Esteban Garcia PLOT TIME: 11/16/2018 3:09 PM

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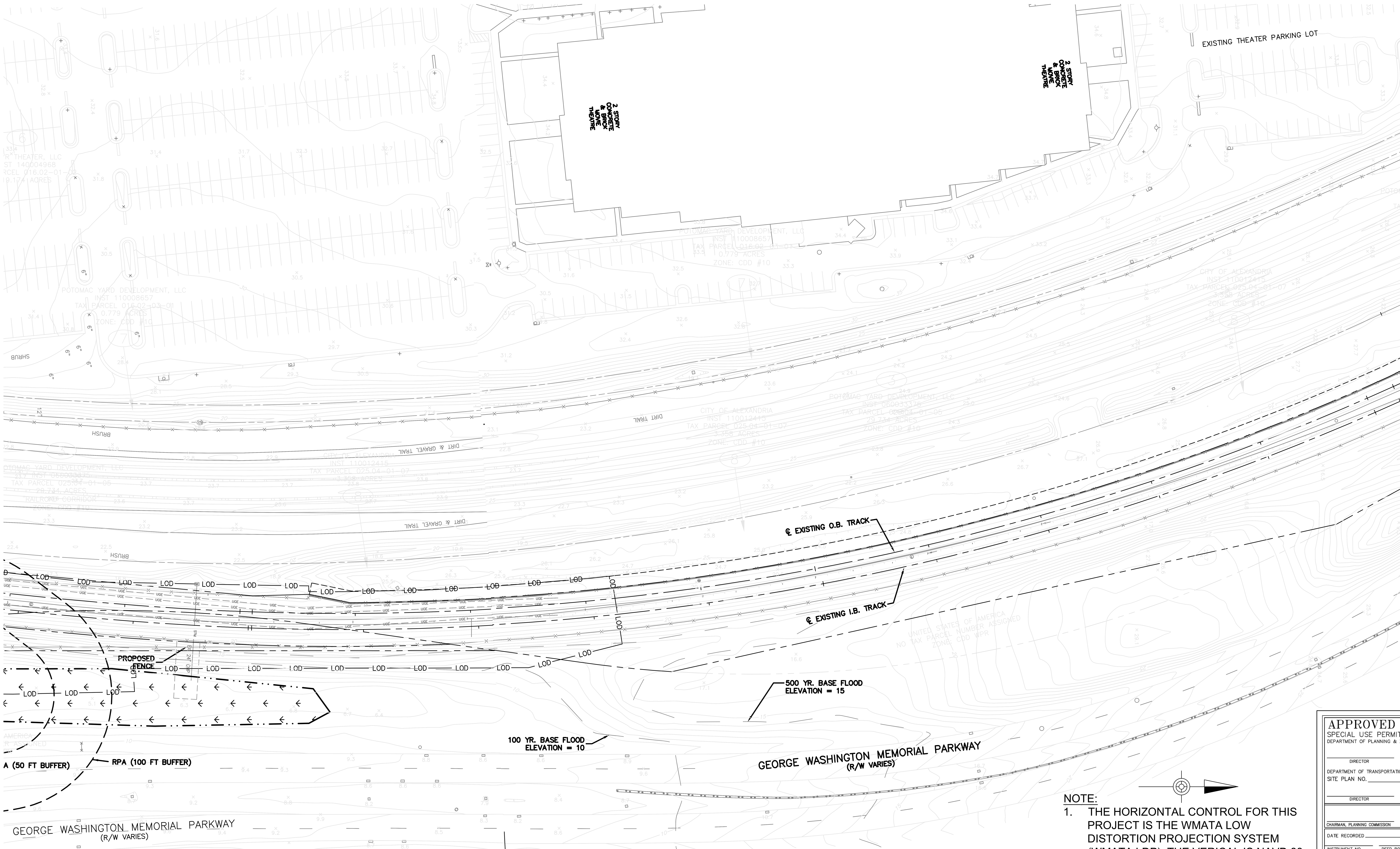


NOTE:

1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERICAL IS NAVD 88.

APPROVED
SPECIAL USE PERMIT NO. ____
DEPARTMENT OF PLANNING & ZONING

DIRECTOR ____ DATE ____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____

DIRECTOR ____ DATE ____

CHAIRMAN, PLANNING COMMISSION ____ DATE ____

DATE RECORDED ____

INSTRUMENT NO. ____ DEED BOOK NO. ____ PAGE NO. ____

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
EXISTING CONDITIONS 3 OF 3

SHEET 7 OF 37

ARUP
77 Water Street
New York, NY 10005
T +1 212 896 3000
www.arup.com

Scale 1"=40'

File Name

Drawing Status
PRELIMINARY DSUP

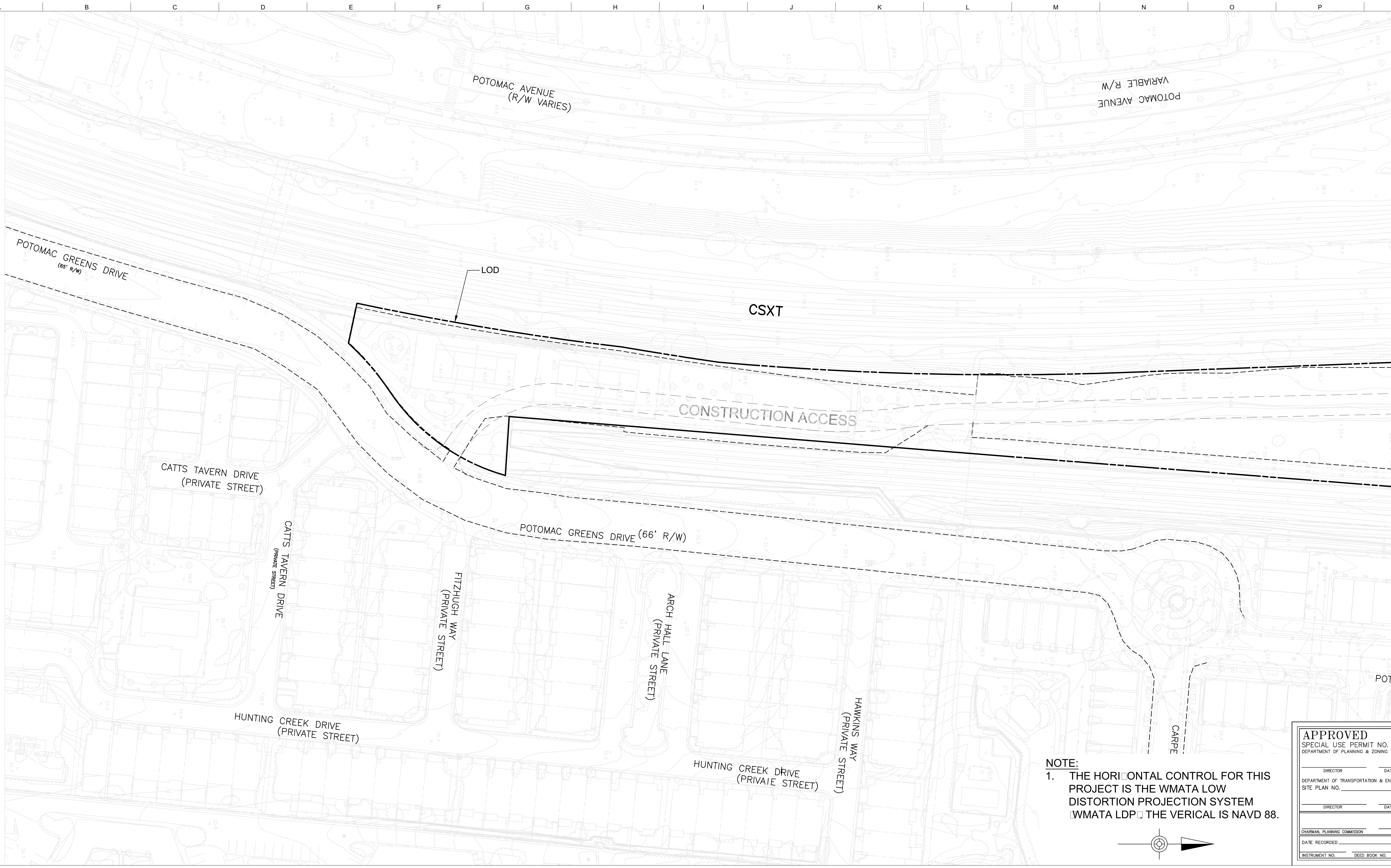
Job No 254922

Drawing No EX-03

Issue

PLOT BY: Esteban Garcia PLOT TIME: 11/16/2018 3:39 PM

24x36h



NOTE:

1. THE HORI□ONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM □WMATA LDP□. THE VERICAL IS NAVD 88.

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. ____________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title

POTOMAC YARD METRORAIL STATION

Drawing Title

EXISTING CONDITIONS AND CONST. ACCESS PLAN 4 OF 4

SHEET 8 OF 37

ARUP

77 Water Street
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Scale 1"□40□

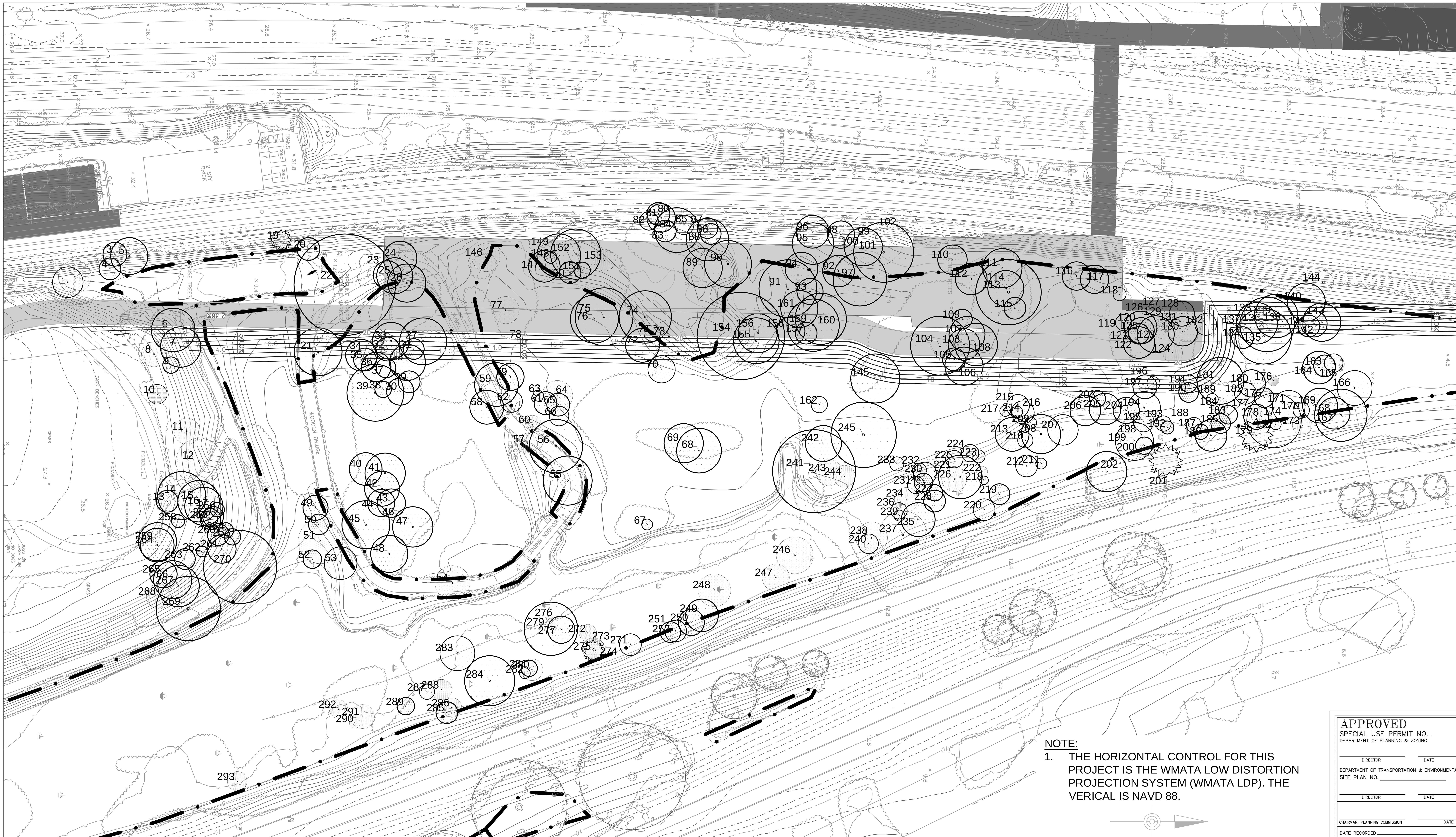
File Name

Drawing Status

PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	**EX-03A**	

24x36h



NOTE:
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DEPARTMENT OF PLANNING & ZONING

DIRECTOR | DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____________

DIRECTOR | DATE

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DATE RECORDED ____________
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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
TREE SURVEY

ARUP
77 Water Street
New York, NY 10005
T +1 212 896 3000
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Scale 1" 50

File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	EX-04	

PLOT TIME: 11/16/2018 3:35 PM
PLOT BY: Julian Smith

24x36h

Inv Num	TBR/TBS	Common Name	Scientific Name	Radius	Height	Life_Exp	Comments
16		black locust	Robinia pseudoacacia	17.5 Feet	45.00	>15	3 leader - 1 dead, cavity at base
17		white mulberry	Morus alba	11 Feet	30.00	5-15	vines
18		black locust	Robinia pseudoacacia	9.5 Feet	45.00	>15	
19		red cedar	Juniperus virginiana	8.5 Feet	25.00	>15	vines
20		black cherry	Prunus serotina	10.5 Feet	28.00	>15	vines
21		bigtooth aspen	Populus grandidentata	22 Feet	50.00	>15	vines
22		bigtooth aspen	Populus grandidentata	46.5 Feet	50.00	>15	nice
23		white mulberry	Morus alba	13 Feet	35.00	>15	2 leaders, vine covered
24		black locust	Robinia pseudoacacia	15.5 Feet	35.00	>15	tr vine covered eng ivy
25		black locust	Robinia pseudoacacia	16.5 Feet	40.00	>15	tr vine covered, cant see tr
26		black locust	Robinia pseudoacacia	17.5 Feet	50.00	>15	tree farthest from path-vine covered tr
27		bigtooth aspen	Populus grandidentata	21.5 Feet	50.00	>15	
28		bigtooth aspen	Populus grandidentata	16.5 Feet	50.00	>15	
29		bigtooth aspen	Populus grandidentata	10 Feet	35.00	>15	leaning
30		bigtooth aspen	Populus grandidentata	12.5 Feet	45.00	>15	
31		bigtooth aspen	Populus grandidentata	9.5 Feet	35.00	>15	
32		bigtooth aspen	Populus grandidentata	11 Feet	45.00	>15	
33		bigtooth aspen	Populus grandidentata	17 Feet	50.00	>15	
34		bigtooth aspen	Populus grandidentata	14.5 Feet	45.00	>15	vines, codom
35		bigtooth aspen	Populus grandidentata	10.5 Feet	45.00	>15	
36		bigtooth aspen	Populus grandidentata	13.5 Feet	55.00	>15	
37		bigtooth aspen	Populus grandidentata	9 Feet	50.00	>15	sealed tr crack
38		eastern cottonwood	Populus deltoides	7.5 Feet	35.00	>15	phototrophic lean
39		eastern cottonwood	Populus deltoides	26 Feet	50.00	>15	large basal wound, is sealing up over time
40		eastern cottonwood	Populus deltoides	15 Feet	50.00	>15	
41		eastern cottonwood	Populus deltoides	18.5 Feet	50.00	>15	codom
42		eastern cottonwood	Populus deltoides	16 Feet	50.00	>15	
43		eastern cottonwood	Populus deltoides	13 Feet	45.00	>15	
44		eastern cottonwood	Populus deltoides	12.5 Feet	40.00	>15	
45		eastern cottonwood	Populus deltoides	22 Feet	50.00	>15	nice
47		eastern cottonwood	Populus deltoides	18.5 Feet	50.00	>15	bayberry at base, codom
48		eastern cottonwood	Populus deltoides	17 Feet	50.00	>15	
49		ailanthus	Ailanthus altissima	11.5 Feet	45.00	>15	invasive, check location via tree obj id
50		American elm	Ulmus americana	9.5 Feet	20.00	>15	re vines
51		black locust	Robinia pseudoacacia	20.5 Feet	50.00	5-15	codom, many wounds on tr,vines
52		ailanthus	Ailanthus altissima	8.5 Feet	35.00	>15	invasive
53		black locust	Robinia pseudoacacia	15 Feet	50.00	<5	tree falling apart
54		black locust	Robinia pseudoacacia	16 Feet	50.00	5-15	center lead is hanging, dead
55		Siberian elm	Ulmus pumila	22.5 Feet	45.00	>15	vines
56		black locust	Robinia pseudoacacia	24.5 Feet	50.00	>15	2 trunks close together, vines
57		black locust	Robinia pseudoacacia	9.5 Feet	50.00	5-15	vines,codom
58		Siberian elm	Ulmus pumila	15.5 Feet	45.00	>15	
59		American sycamore	Platanus occidentalis	20 Feet	60.00	>15	next to path
60		black locust	Robinia pseudoacacia	8 Feet	50.00	5-15	vine covered
61		black locust	Robinia pseudoacacia	10.5 Feet	50.00	>15	codom, vine covered tr
62		black locust	Robinia pseudoacacia	10 Feet	50.00	<5	tr splits
63		black locust	Robinia pseudoacacia	5 Feet	35.00	<5	declining
64		black locust	Robinia pseudoacacia	14 Feet	50.00	5-15	codon, tr splits,vines
65		black locust	Robinia pseudoacacia	10.5 Feet	55.00	>15	vines
66		black locust	Robinia pseudoacacia	9 Feet	40.00	<5	leaning on other tree, lean increasing
67		black locust	Robinia pseudoacacia	5 Feet	45.00	<5	totally vine covered xcept 4 top
68		eastern cottonwood	Populus deltoides	20.5 Feet	60.00	>15	nice
69		eastern cottonwood	Populus deltoides	18 Feet	55.00	>15	hanger, vines
70		eastern cottonwood	Populus deltoides	12.5 Feet	35.00	<5	leaning, tr crack on tension side
71		black willow	Salix nigra	7.5 Feet	30.00	<5	crown broken apart
72		eastern cottonwood	Populus deltoides	15.5 Feet	50.00	>15	
73		black willow	Salix nigra	15 Feet	35.00	5-15	vines
74		eastern cottonwood	Populus deltoides	24 Feet	60.00	>15	codom
75		eastern cottonwood	Populus deltoides	26.5 Feet	60.00	>15	vines
76		black willow	Salix nigra	22 Feet	40.00	>15	vines, some deadwood
77		white mulberry	Morus alba	12.5 Feet	20.00	5-15	totally vine covered
79		white mulberry	Morus alba	12.5 Feet	20.00	>15	vine covered
80		red maple	Acer rubrum	10.5 Feet	35.00	>15	vine covered
81		eastern cottonwood	Populus deltoides	13 Feet	50.00	>15	
82		eastern cottonwood	Populus deltoides	8.5 Feet	40.00	>15	vines
83		eastern cottonwood	Populus deltoides	10 Feet	45.00	>15	leaning, vines dragging down tree
84		eastern cottonwood	Populus deltoides	20.5 Feet	60.00	>15	
85		eastern cottonwood	Populus deltoides	9 Feet	35.00	<5	leaning, many trunk wounds
86		eastern cottonwood	Populus deltoides	9.5 Feet	45.00	>15	big lean towards creek
87		eastern cottonwood	Populus deltoides	9.5 Feet	55.00	>15	vines
88		eastern cottonwood	Populus deltoides	19.5 Feet	60.00	>15	has small dead ldr at base
89		eastern cottonwood	Populus deltoides	18 Feet	55.00	>15	codom
90		eastern cottonwood	Populus deltoides	21.5 Feet	55.00	>15	low branch that is nonw a leadr, in a low area
91		eastern cottonwood	Populus deltoides	26.5 Feet	55.00	>15	in the shrubs
92		eastern cottonwood	Populus deltoides	14.5 Feet	55.00	>15	codom
93		eastern cottonwood	Populus deltoides	12 Feet	55.00	>15	vines
94		eastern cottonwood	Populus deltoides	15 Feet	55.00	>15	
95		eastern cottonwood	Populus deltoides	19 Feet	60.00	>15	one ldr dead, not measured
96		eastern cottonwood	Populus deltoides	15 Feet	50.00	>15	ldr reaching towards trax is dead, not measured
97		eastern cottonwood	Populus deltoides	24.5 Feet	60.00	>15	2 separate trees close together so counted as one
98		eastern cottonwood	Populus deltoides	12.5 Feet	45.00	>15	
99		black locust	Robinia pseudoacacia	25.5 Feet	45.00	5-15	codom at 3', leaning towards tracks
100		eastern cottonwood	Populus deltoides	17.5 Feet	55.00	>15	
101		black locust	Robinia pseudoacacia	27.5 Feet	50.00	>15	codom at 8'
102		elm	Ulmus sp.	16 Feet	30.00	5-15	covered in vines
103		river birch	Betula nigra	14.5 Feet	55.00	>15	vines
104		eastern cottonwood	Populus deltoides	27 Feet	60.00	>15	
105		river birch	Betula nigra	10.5 Feet	50.00	>15	vines
106		eastern cottonwood	Populus deltoides	17.5 Feet	55.00	>15	vines
107		eastern cottonwood	Populus deltoides	16.5 Feet	60.00	>15	
108		river birch	Betula nigra	19.5 Feet	45.00	>15	codom at 8'
109		eastern cottonwood	Populus deltoides	9 Feet	55.00	>15	no vines on tree
110		river birch	Betula nigra	13.5 Feet	45.00	>15	vines
111		eastern cottonwood	Populus deltoides	18 Feet	65.00	>15	vines
112		white mulberry	Morus alba	14.5 Feet	35.00	>15	vines

Inv Num	TBR/TBS	Common Name	Scientific Name	Radius	Height	Life_Exp	Comments
113		silver maple	Acer saccharinum	30 Feet	55.00	>15	4 main stems
114		black locust	Robinia pseudoacacia	16.5 Feet	60.00	>15	vines
115		black locust	Robinia pseudoacacia	10 Feet	45.00	>15	leaning, vines
116		london planetree	Platanus ├ù acerifolia	13 Feet	65.00	>15	vines
117		eastern cottonwood	Populus deltoides	13 Feet	60.00	>15	vines
118		black cherry	Prunus serotina	6 Feet	25.00	<5	vine covered
119		black cherry	Prunus serotina	7.5 Feet	20.00	<5	vine covered
120		silver maple	Acer saccharinum	15 Feet	55.00	>15	
121		silver maple	Acer saccharinum	9.5 Feet	60.00	>15	vines
122		silver maple	Acer saccharinum	14.5 Feet	50.00	>15	1 small ldr broken out, vines
123		silver maple	Acer saccharinum	17 Feet	40.00	>15	vines
124		silver maple	Acer saccharinum	9 Feet	45.00	5-15	vines
125		silver maple	Acer saccharinum	12 Feet	40.00	>15	leaning, vines
126		black cherry	Prunus serotina	11 Feet	35.00	5-15	top dead, vines
127		river birch	Betula nigra	13 Feet	35.00	5-15	leaning, codom, vines
128		silver maple	Acer saccharinum	11.5 Feet	55.00	>15	vines
129		white mulberry	Morus alba	20 Feet	35.00	5-15	vine covered
130		silver maple	Acer saccharinum	13.5 Feet	50.00	>15	
131		silver maple	Acer saccharinum	10 Feet	30.00	5-15	vine covered
132		silver maple	Acer saccharinum	10 Feet	22.00	<5	vine covered
133		silver maple	Acer saccharinum	19 Feet	50.00	>15	sharp fork codom
134		European hornbeam	Carpinus betulus	10 Feet	20.00	>15	take vines off, codom, prob planted
135		elm	Ulmus sp.	25.5 Feet	70.00	>15	codom, vib. dentatum at base
136		American elm	Ulmus americana	25 Feet	70.00	>15	vines
138		river birch	Betula nigra	5 Feet	30.00	5-15	declining, leaning against other tree
139		black locust	Robinia pseudoacacia	20 Feet	65.00	>15	vines
140		eastern cottonwood	Populus deltoides	17.5 Feet	55.00	>15	leaning towards trax,vines
141		European hornbeam	Carpinus betulus	10 Feet	40.00	>15	carpinus betulus probably
142		European hornbeam	Carpinus betulus	12 Feet	45.00	>15	right at end of fence
143		eastern cottonwood	Populus deltoides	17.5 Feet	65.00	>15	
144		river birch	Betula nigra	10 Feet	20.00	5-15	vines covering and pulling tree down, codom
145		eastern cottonwood	Populus deltoides	22.5 Feet	60.00	>15	
146		black willow	Salix nigra	13 Feet	25.00	5-15	1 ldr decling
147		black locust	Robinia pseudoacacia	14.5 Feet	60.00	>15	main ldr good, vines
148		black locust	Robinia pseudoacacia	5.5 Feet	40.00	5-15	leaning towards trax, small tr cav
149		black locust	Robinia pseudoacacia	20 Feet	60.00	>15	codoms, vines
150		black locust	Robinia pseudoacacia	10 Feet	50.00	>15	
151		black locust	Robinia pseudoacacia	7.5 Feet	50.00	5-15	dead br,vines, dead snapped tree adjacent
152		black locust	Robinia pseudoacacia	23 Feet	60.00	>15	codom,vines
153		black willow	Salix nigra	10 Feet	35.00	5-15	tree fell over and resprouted, interesting form, roots in air, covered in vines
154		eastern cottonwood	Populus deltoides	40 Feet	65.00	>15	Vines
155		eastern cottonwood	Populus deltoides	21 Feet	65.00	>15	
156		eastern cottonwood	Populus deltoides	18 Feet	70.00	>15	
157		ailanthus	Ailanthus altissima	10 Feet	55.00	>15	invasive exotic
158		silver maple	Acer saccharinum	13 Feet	30.00	>15	remove vines
159		black locust	Robinia pseudoacacia	24 Feet	60.00	>15	3 leader tree one leader has a broken branch another leader has a trunk wound
160		black locust	Robinia pseudoacacia	23.5 Feet	75.00	>15	3 leader tree, one dead ldr did not measure, vines
161		eastern cottonwood	Populus deltoides	17 Feet	65.00	>15	vines, codom from base
162		black locust	Robinia pseudoacacia	7.5 Feet	45.00	<5	leaning on other tree vines
163		sweetgum	Liquidambar styraciflua	10 Feet	45.00	>15	flagged
164		sweetgum	Liquidambar styraciflua	15 Feet	55.00	>15	carpinus in understory
165		ash	Fraxinus sp.	8.5 Feet	45.00	<5	emerald ash borer
166		ash	Fraxinus sp.	16 Feet	55.00	<5	EAB?
167		pin oak	Quercus palustris	24 Feet	70.00	>15	original planting
168		American elm	Ulmus americana	14.5 Feet	40.00	>15	two trees but close together
169		European hornbeam	Carpinus betulus	16 Feet	45.00	>15	English ivy on trunk
170		ash	Fraxinus sp.	7.5 Feet	45.00	<5	all ash have EAB
171		ash	Fraxinus sp.	15 Feet	60.00	<5	
172		ash	Fraxinus sp.	5 Feet	40.00	<5	
173		elm	Ulmus sp.	9 Feet	25.00	5-15	vine covered
174		ash	Fraxinus sp.	25 Feet	70.00	<5	codom
175		white mulberry	Morus alba	9 Feet	30.00	>15	
176		black cherry	Prunus serotina	5 Feet	25.00	5-15	growing into fence damaging fence
177		elm	Ulmus sp.	11.5 Feet	55.00	>15	many trunk cracks that have sealeld over
178		elm	Ulmus sp.	9 Feet	25.00	5-15	
179		white pine	Pinus strobus	13.5 Feet	30.00	5-15	covered in vines
180		European hornbeam	Carpinus betulus	12.5 Feet	25.00	>15	many carpinus in understory in this area
181		red maple	Acer rubrum	21.5 Feet	60.00	>15	3 major ldrs, tr cav at base, vines
182		ash	Fraxinus sp.	10 Feet	55.00	<5	
183		elm	Ulmus sp.	8.5 Feet	50.00	>15	covered in vines, many small arrowwood viburnum in area
184		willow oak	Quercus phellos	7.5 Feet	35.00	5-15	vines
185		sweetgum	Liquidambar styraciflua	9 Feet	50.00	>15	vines
186		river birch	Betula nigra	14.5 Feet	55.00	>15	slight lean towards Road
187		river birch	Betula nigra	7 Feet	45.00	>15	
188		sweetgum	Liquidambar styraciflua	7 Feet	50.00	<5	large tr wound at 10'
189		ash	Fraxinus sp.	5.5 Feet	40.00	<5	
190		sweetgum	Liquidambar styraciflua	9 Feet	40.00	>15	trunk is bowed
191		silver maple	Acer saccharinum	8 Feet	45.00	>15	
192		sweetgum	Liquidambar styraciflua	6 Feet	40.00	>15	
193		ash	Fraxinus sp.	7 Feet	45.00	<5	
194		ash	Fraxinus sp.	15 Feet	50.00	<5	
195		red maple	Acer rubrum	9.5 Feet	40.00	<5	extremely large trunk opening
196		silver maple	Acer saccharinum	6 Feet	45.00	<5	large trunk beam crack
197		silver maple	Acer saccharinum	11 Feet	45.00	>15	growing through fence, fence down
198		elm	Ulmus sp.	20 Feet	55.00	5-15	lotsa canopy dieback
199		ash	Fraxinus sp.	17.5 Feet	60.00	<5	was 5 ldrs, falling apart
200		willow oak	Quercus phellos	8 Feet	35.00	>15	remove Vines to extend life expectancy
201		white pine	Pinus strobus	13.5 Feet	60.00	>15	vines
202		white mulberry	Morus alba	18.5 Feet	30.00	>15	vines
203		silver maple	Acer saccharinum	7.5 Feet	35.00	>15	
205		silver maple	Acer saccharinum	14.5 Feet	45.00	>15	leaning-could these maples be cultivars? 3 lobed lvs
206		silver maple	Acer saccharinum	14 Feet	40.00	>15	Old trunk wound at base ceiling over
207		ash	Fraxinus sp.	14 Feet	60.00	<5	
208		silver maple cv	Acer saccharinum	18 Feet	55.00	>15	took pix of lvs
209		ash	Fraxinus sp.	5.5 Feet	45.00	<5	branch canker

Inv Num	TBR/TBS	Common Name	Scientific Name	Radius	Height	Life_Exp	Comments
210		ash	Fraxinus sp.	7 Feet	42.00	<5	
211		ash	Fraxinus sp.	5 Feet	35.00	<5	vines
212		maple	Acer sp.	10 Feet	55.00	<5	almost dead
213		red maple	Acer rubrum	15.5 Feet	55.00	>15	codom
214		ash	Fraxinus sp.	10.5 Feet	60.00	<5	on track side of fence
215		ash	Fraxinus sp.	10.5 Feet	30.00	<5	vine covered
216		silver maple	Acer saccharinum	5 Feet	30.00	<5	vine covered
217		ash	Fraxinus sp.	5 Feet	35.00	<5	vine covered
218		quaking aspen	Populus tremuloides	4 Feet	20.00	<5	vine covered
219		willow oak	Quercus phellos	9.5 Feet	30.00	>15	re vines
220		ash	Fraxinus sp.	10 Feet	40.00	<5	vines
221		silver maple	Acer saccharinum	20 Feet	65.00	>15	vines
223		ash	Fraxinus sp.	6 Feet	35.00	<5	
224		ash	Fraxinus sp.	8 Feet	30.00	<5	severe lean, vines
225		ash	Fraxinus sp.	8 Feet	45.00	<5	
226		silver maple	Acer saccharinum	11.5 Feet	30.00	5-15	wierd shape
227		silver maple	Acer saccharinum	7.5 Feet	30.00	>15	
228		silver maple	Acer saccharinum	10 Feet	35.00	>15	
229		silver maple	Acer saccharinum	8.5 Feet	50.00	>15	roots at the base hold up indicating partial failure
230		ash	Fraxinus sp.	10.5 Feet	50.00	<5	
231		ash	Fraxinus sp.	8 Feet	50.00	<5	
232		ash	Fraxinus sp.	6.5 Feet	50.00	<5	
233		ash	Fraxinus sp.	6.5 Feet	25.00	<5	Vines pulling tree down
234		silver maple	Acer saccharinum	11 Feet	45.00	5-15	hangar in crown
235		silver maple	Acer saccharinum	15.5 Feet	45.00	>15	vines
236		silver maple	Acer saccharinum	7.5 Feet	35.00	<5	one leader long extended
237		silver maple	Acer saccharinum	22 Feet	50.00	5-15	large trunk wound at base tree is leaning
238		silver maple	Acer saccharinum	14.5 Feet	30.00	5-15	large hole at trunk good wildlife tree
239		ash	Fraxinus sp.	5 Feet	30.00	<5	
240		ash	Fraxinus sp.	9 Feet	35.00	<5	
241		eastern cottonwood	Populus deltoides	38 Feet	75.00	>15	codom
242		black locust	Robinia pseudoacacia	16.5 Feet	55.00	>15	vines
243		black locust	Robinia pseudoacacia	12 Feet	40.00	5-15	vines
244		black locust	Robinia pseudoacacia	10 Feet	45.00	5-15	vines
245		eastern cottonwood	Populus deltoides	30 Feet	75.00	>15	codom
246		silver maple	Acer saccharinum	17 Feet	45.00	5-15	many cavities at base
247		silver maple	Acer saccharinum	12.5 Feet	45.00	5-15	
248		silver maple	Acer saccharinum	15 Feet	50.00	5-15	hollow tree, been chewed by beavers awhile ago
249		willow oak	Quercus phellos	15 Feet	50.00	>15	10 feet from Pine
250		white pine	Pinus strobus	12 Feet	65.00	>15	old tr wound sealing up
251		silver maple	Acer saccharinum	9.5 Feet	35.00	>15	vines
252		london planetree	Platanus ├ù acerifolia	10 Feet	50.00	<5	almost dead, can fall on road
253		black locust	Robinia pseudoacacia	7.5 Feet	35.00	>15	leaning over path
254		black locust	Robinia pseudoacacia	7 Feet	40.00	>15	leaning over path
255		black locust	Robinia pseudoacacia	9.5 Feet	45.00	>15	leaning over path
256		box elder maple	Acer negundo	6.5 Feet	30.00	>15	
257		black locust	Robinia pseudoacacia	7.5 Feet	50.00	<5	trunk wounds, small canopy
258		black locust	Robinia pseudoacacia	6 Feet	50.00	>15	
259		black locust	Robinia pseudoacacia	17.5 Feet	50.00	>15	English ivy on trunk
260		black locust	Robinia pseudoacacia	10 Feet	50.00	>15	
261		black locust	Robinia pseudoacacia	13 Feet	50.00	>15	ivy, codom
262		black locust	Robinia pseudoacacia	5 Feet	50.00	>15	eng ivy
263		black locust	Robinia pseudoacacia	9.5 Feet	45.00	>15	was a codom, one ldr dead
264		Siberian elm	Ulmus pumila	15.5 Feet	40.00	>15	
265		box elder maple	Acer negundo	12.5 Feet	45.00	>15	codom at 5'
266		white mulberry	Morus alba	17.5 Feet	45.00	>15	codom
267		white mulberry	Morus alba	19 Feet	35.00	>15	
268		white mulberry	Morus alba	11.5 Feet	20.00	5-15	3 leaders, Vines covering canopy
269		eastern cottonwood	Populus deltoides	29.5 Feet	70.00	>15	on edge of path
270		eastern cottonwood	Populus deltoides	33.5 Feet	65.00	>15	adjacent to path
271		silver maple	Acer saccharinum	10 Feet	40.00	<5	covered in vines
272		silver maple	Acer saccharinum	8 Feet	35.00	5-15	top dead
273		silver maple	Acer saccharinum	10 Feet	25.00	5-15	leaning towards Road
274		white mulberry	Morus alba	9.5 Feet	30.00	5-15	vines
275		white pine	Pinus strobus	9 Feet	60.00	>15	
277		white mulberry	Morus alba	12.5 Feet	45.00	>15	
279		swamp white oak	Quercus bicolor	24.5 Feet	75.00	>15	rubbing against pine, mother of all swamp white oaks
280		white mulberry	Morus alba	10 Feet	30.00	5-15	covered in vines, leaning
281		white mulberry	Morus alba	7.5 Feet	35.00	>15	leaning towards Road
282		white mulberry	Morus alba	5 Feet	20.00	<5	covered in vines
283		ash	Fraxinus sp.	16 Feet	65.00	<5	6 feet from Creek
284		red maple	Acer rubrum	23 Feet	75.00	>15	near outflow
285		white mulberry	Morus alba	10 Feet	40.00	>15	
286		white mulberry	Morus alba	9 Feet	35.00	5-15	
287		American sycamore	Platanus occidentalis	7 Feet	45.00	<5	not much living growth
288		elm	Ulmus sp.	9.5 Feet	35.00	5-15	right next to Sycamore
289		white mulberry	Morus alba	8 Feet	25.00	>15	
291		white mulberry	Morus alba	11 Feet	25.00	5-15	top broken out
292		American sycamore	Platanus occidentalis	8.5 Feet	30.00	5-15	top broken out
293		white mulberry	Morus alba	9 Feet	20.00	5-15	next to big old dead tree

	TREE LOCATED ON CITY OF ALEXANDRIA PROPERTY
	TREE LOCATED ON NATIONAL PARK SERVICE PROPERTY

TBR - TREE TO BE REMOVED
TBS - TREE TO BE SAVED

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DIRECTOR DATE

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SITE PLAN NO. ______

DIRECTOR DATE

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DATE RECORDED ______
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
TREE SURVEY LEGEND

SHEET 10 OF 38

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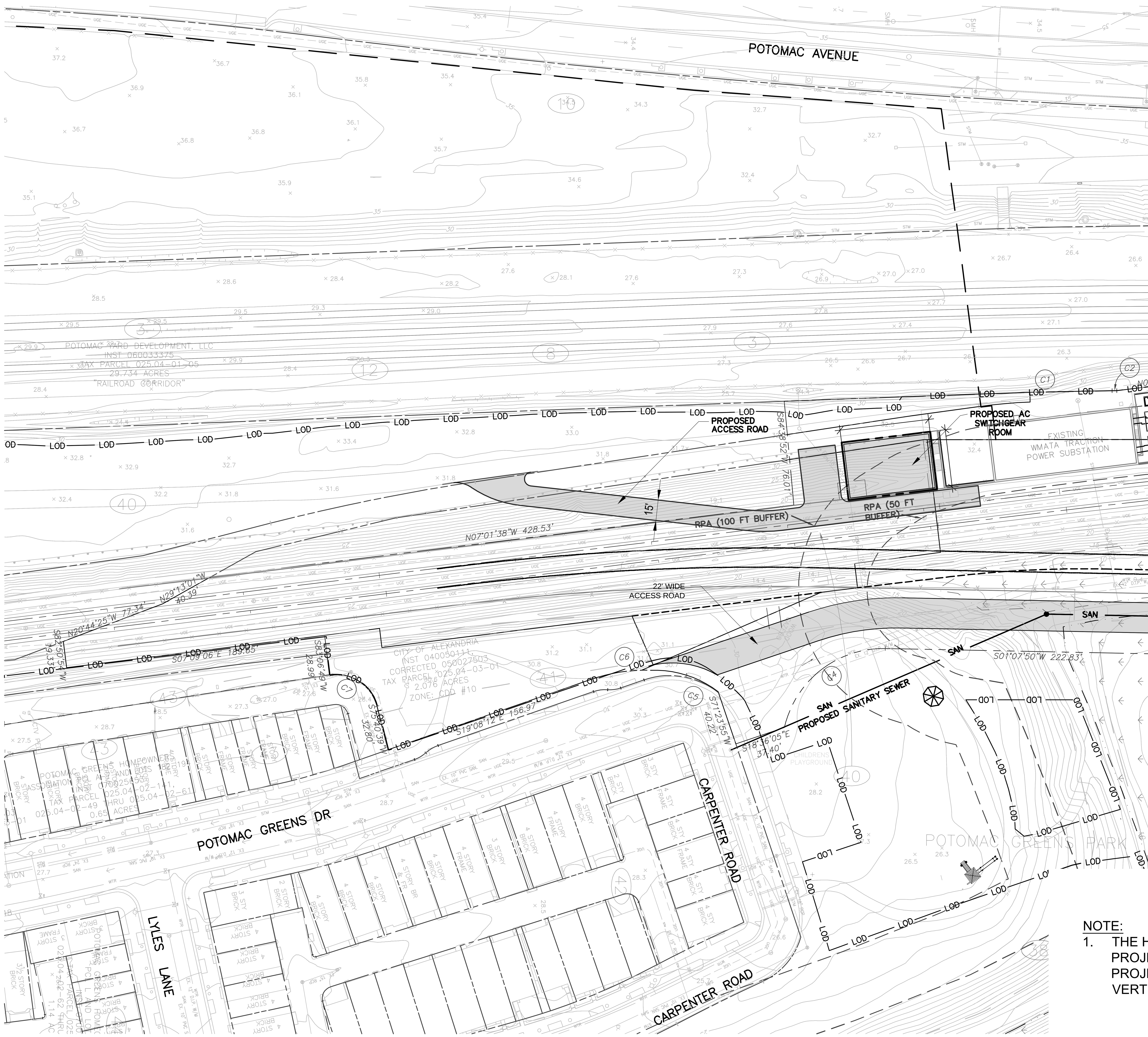
File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	EX-05	A

PLOT BY: Julian Smith
PLOT TIME: 11/16/2018 3:45 PM

24x36h



NOTE:

1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERTICAL IS NAVD 88.

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DIRECTOR DATE

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SITE PLAN NO. ____________

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
DEVELOPMENT PRELIMINARY SITE PLAN 1 OF 3

SHEET 15 OF 37

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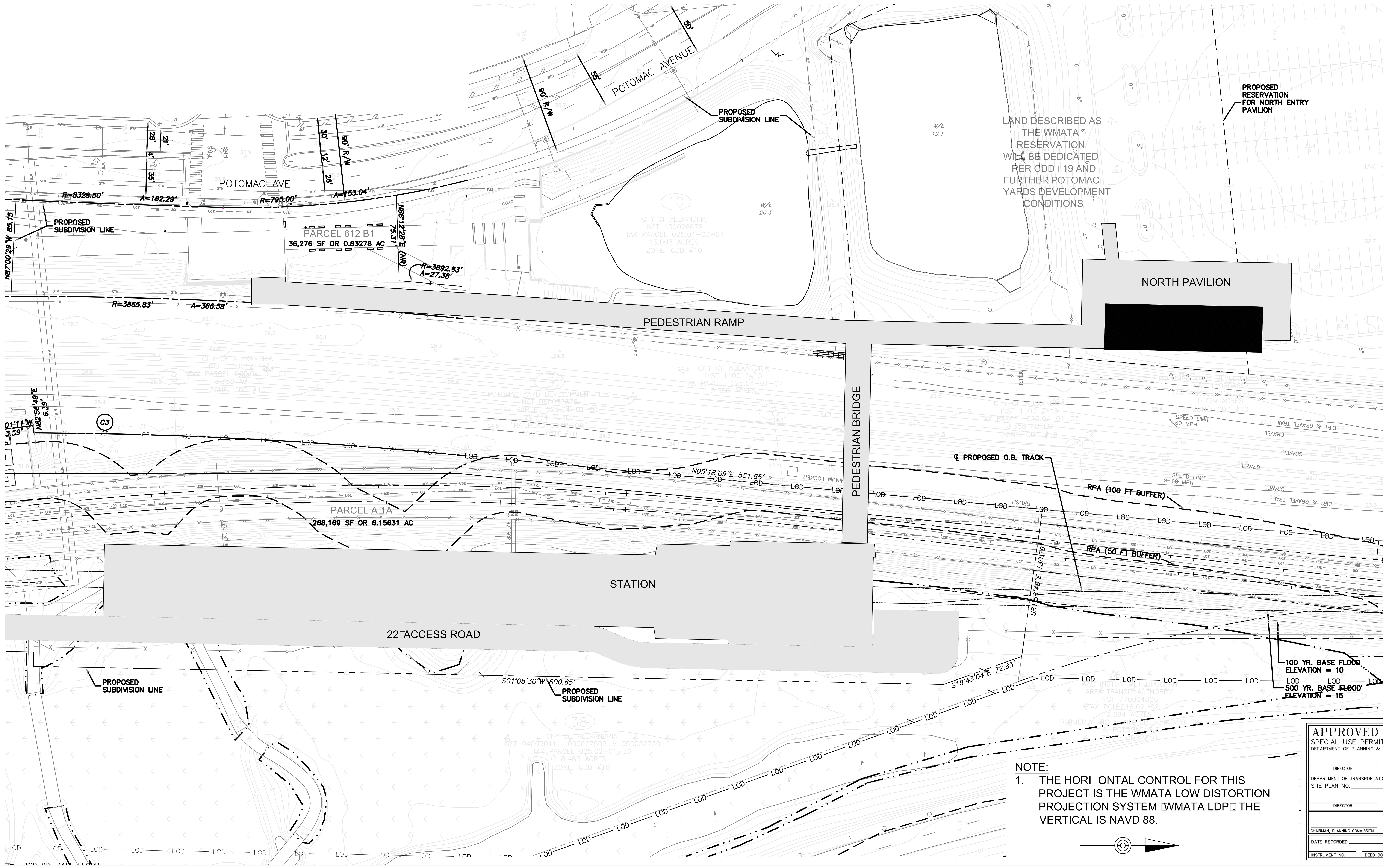
File Name

Drawing Status
PRELIMINARY DSUP

Job No 254922
Drawing No C-01
Issue

24x36h



NOTE:

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client

WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title

POTOMAC YARD METRORAIL STATION

Drawing Title

DEVELOPMENT PRELIMINARY SITE PLAN 2 OF 3

SHEET 16 OF 37

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File Name

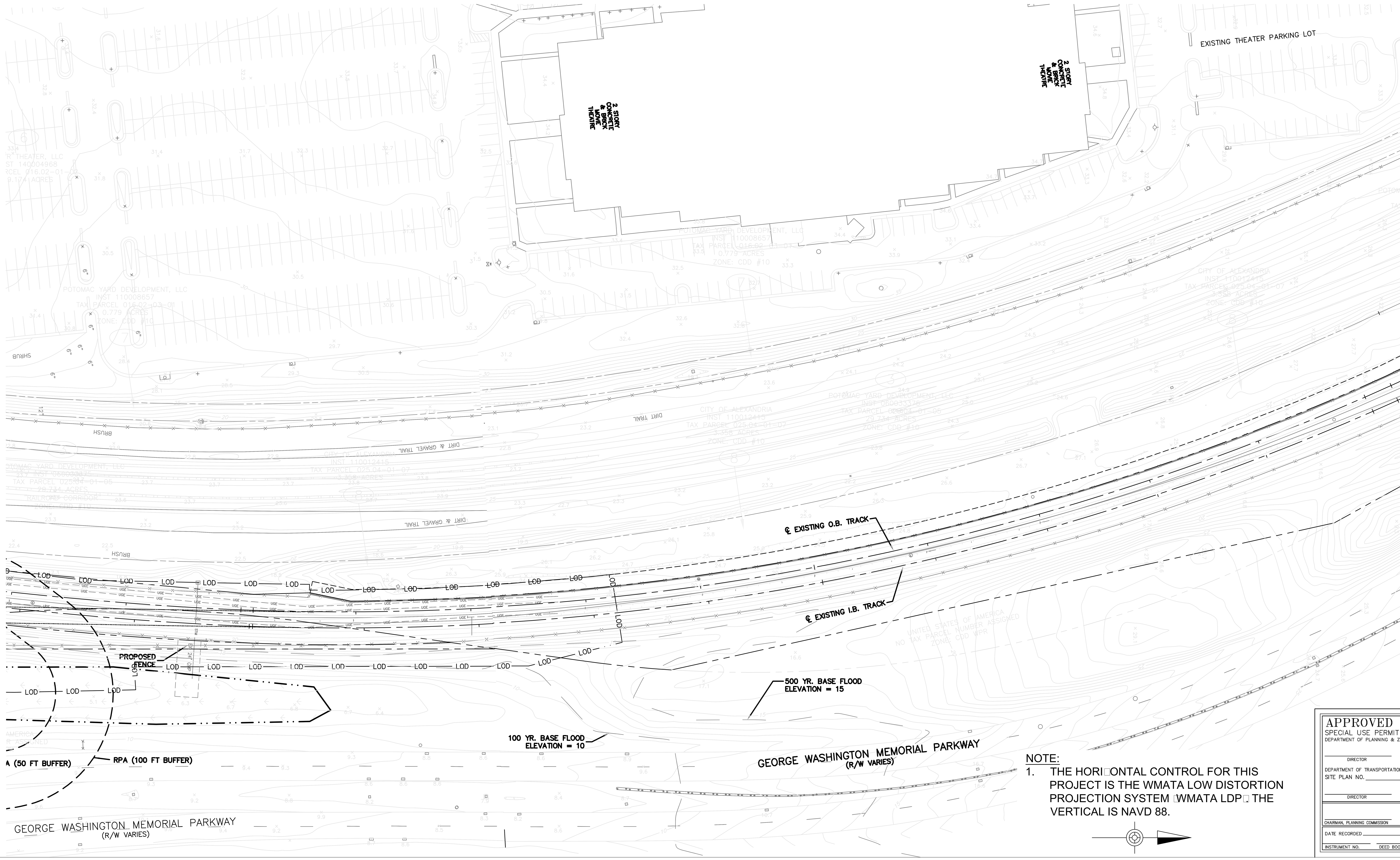
Drawing Status

PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-02	

PLOT BY: Julian Smith PLOT TIME: 11/16/2018 7:32 PM

24x36h



NOTE:
1. THE HORI□ONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM □WMATA LDP□. THE VERTICAL IS NAVD 88.

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
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PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

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WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
DEVELOPMENT PRELIMINARY SITE PLAN 3 OF 3

SHEET 18 OF 38

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File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-03	

PLOT BY: Swati Kalia PLOT TIME: 11/16/2018 12:52 PM

NOTE:

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THOMAS JOHN WAGNER
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PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STORMWATER MANAGEMENT PLAN

SHEET 18 OF 37

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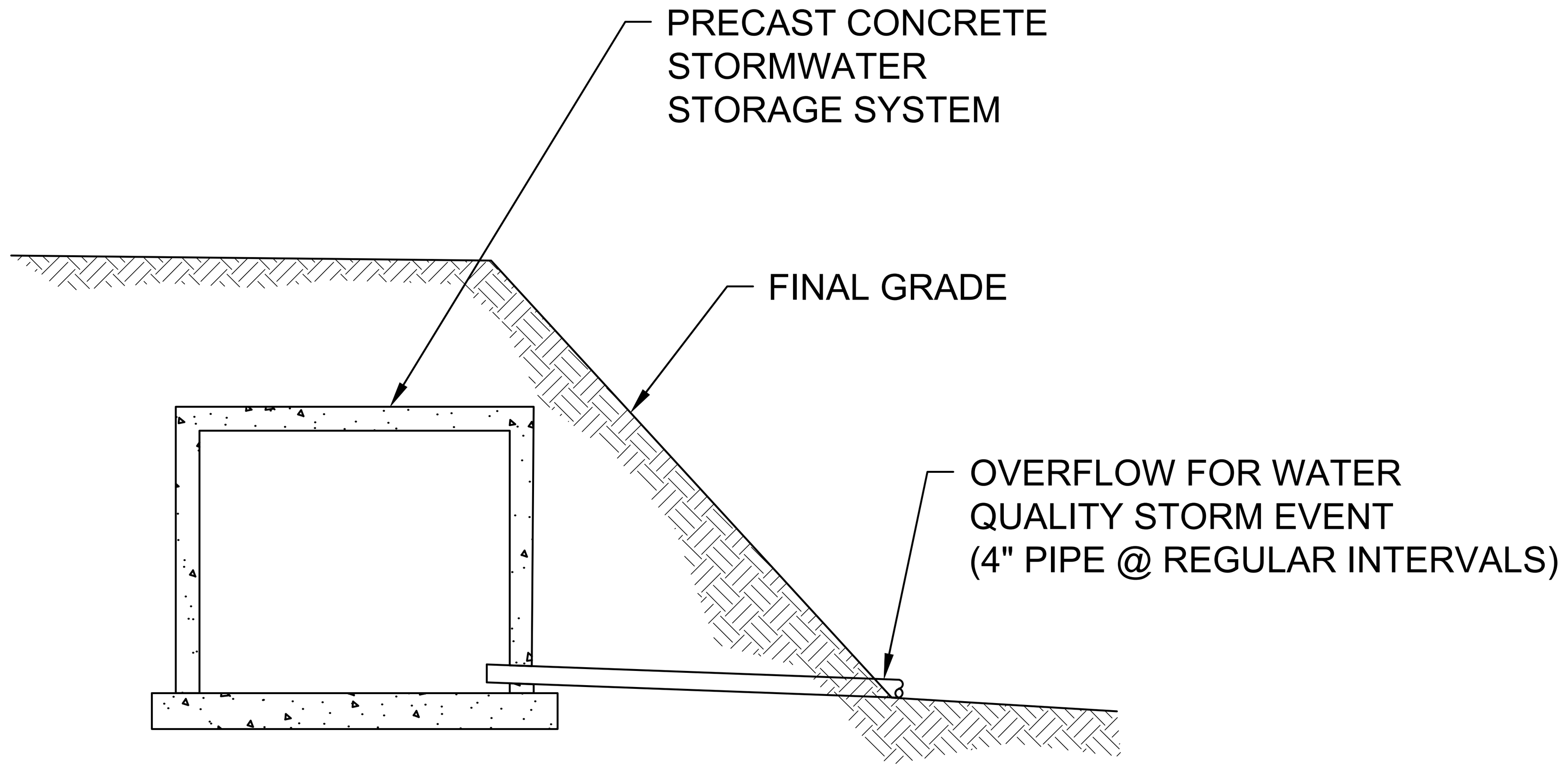
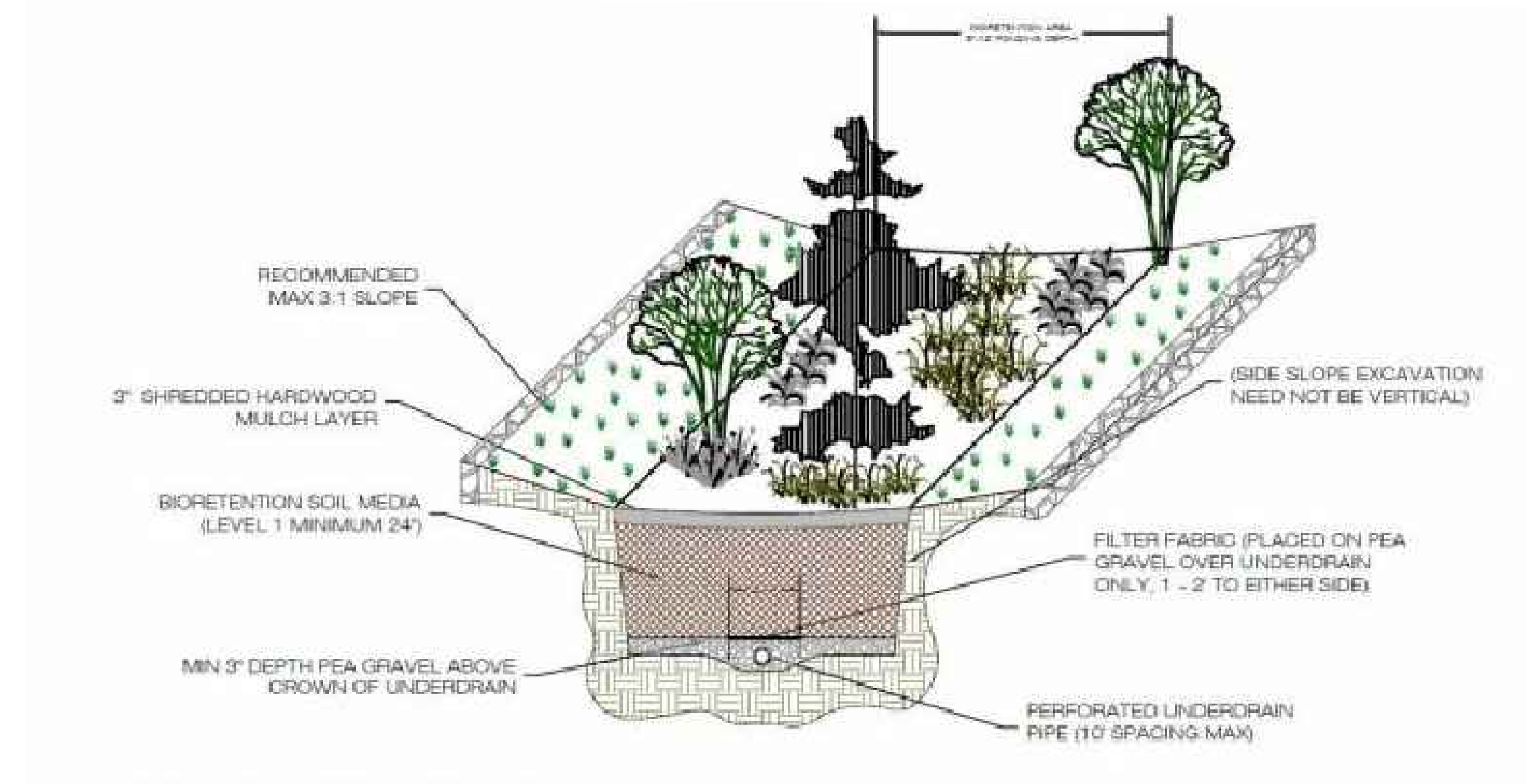
File Name

Drawing Status
PRELIMINARY DSUP

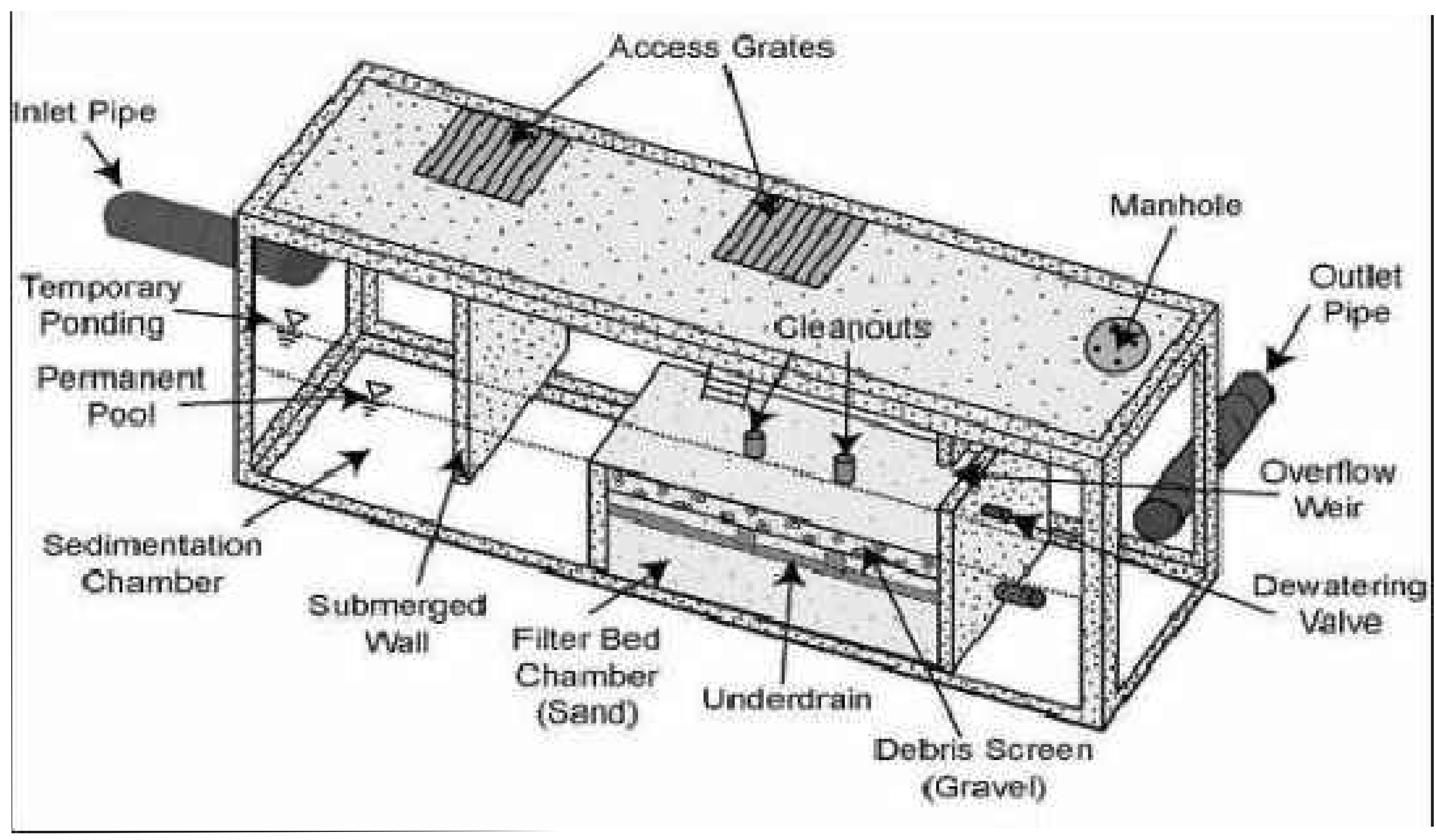
Job No	Drawing No	Issue
254922	C-04	



UNDERGROUND DETENTION BASIN
N.T.S.



TYPICAL BIORETENTION BASIN (LEVEL 1)
N.T.S.



TYPICAL UNDERGROUND SAND FILTER
N.T.S.

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STORMWATER MANAGEMENT DETAILS

SHEET 20 of 38

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File Name
Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-04A	

PLOT BY: Esteban Garcia PLOT TIME: 11/16/2018 1:00 PM

24x36h

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SITE PLAN NO. ____
DIRECTOR DATE
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DATE RECORDED ____
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PLOT BY: Julian Smith PLOT TIME: 11/16/2018 7:37 PM

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
EXISTING DRAINAGE AREA PLAN

SHEET 20 OF 37

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Scale 1":60"
File Name
Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-05	

24x36h

PLOT TIME: 11/16/2018 4:28 PM
PLOT BY: Swati Kalia

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
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PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PROPOSED DRAINAGE AREA PLAN

SHEET 21 of 37

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Scale
1"=60'

File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-06	

APPROVED
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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

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COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PROPOSED BMP PLAN

SHEET 22 OF 37

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Scale 1"□60□

File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	C-06A	

24x36h

Project Name: WMATA POTOMAC YARD METRO STATION
Date: 11/12/2018
Linear Development Project? No

CLEAR ALL (Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 13.00

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.98*
Post-Development TP Load Reduction for Site (lb/yr):	*4.55*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space	0.00	0.00	0.00	5.27	5.27
Managed Turf (acres) -- disturbed, graded for yards or other turf to be	0.00	0.00	0.00	4.90	4.90
Impervious Cover (acres)	0.00	0.00	0.00	2.83	2.83
					13.00

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested	0.00	0.00	0.00	2.21	2.21 *
Managed Turf (acres) -- disturbed, graded for yards or other turf to be	0.00	0.00	0.00	6.98	6.98
Impervious Cover (acres)	0.00	0.00	0.00	3.81	3.81
Area Check	OK.	OK.	OK.	OK.	13.00

** Forest/Open Space areas must be protected in accordance with the Virginia Runoff Reduction Method*

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	5.27	4.29
Weighted Rv(forest)	0.05	0.05
% Forest	41%	36%
Managed Turf Cover (acres)	4.90	4.90
Weighted Rv(turf)	0.25	0.25
% Managed Turf	38%	41%
Impervious Cover (acres)	2.83	2.83
Rv(impervious)	0.95	0.95
% Impervious	22%	24%
Total Site Area (acres)	**13.00**	**12.02**
Site Rv	**0.32**	**0.34**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.3481	0.3440
Pre-ReDevelopment Treatment Volume (cubic feet)	15,163	14,985
Pre-ReDevelopment TP Load (lb/yr)	**9.53**	**9.41**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.73	0.78
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*4.93*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	2.21
Weighted Rv(forest)	0.05
% Forest	17%
Managed Turf Cover (acres)	6.98
Weighted Rv (turf)	0.25
% Managed Turf	54%
Impervious Cover (acres)	3.81
Rv(impervious)	0.95
% Impervious	29%
Final Site Area (acres)	**13.00**
Final Post Dev Site Rv	**0.42**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	2.21
Weighted Rv(forest)	0.05
% Forest	18%
Managed Turf Cover (acres)	6.98
Weighted Rv (turf)	0.25
% Managed Turf	58%
ReDev. Impervious Cover (acres)	2.83
Rv(impervious)	0.95
% Impervious	24%
Total ReDev. Site Area (acres)	**12.02**
ReDev Site Rv	**0.38**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.98
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.4563
Final Post-Development Treatment Volume (cubic feet)	19,874
Final Post-Development TP Load (lb/yr)	**12.49**
Final Post-Development TP Load per acre (lb/acre/yr)	0.96

Post-ReDevelopment Treatment Volume (acre-ft)	0.3787
Post-ReDevelopment Treatment Volume (cubic feet)	16,495
Post-ReDevelopment Load (TP) (lb/yr)*	10.36
Post-ReDevelopment TP Load per acre (lb/acre/yr)	0.86
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	**2.83**

Post-Development Treatment Volume (acre-ft)	0.0776
Post-Development Treatment Volume (cubic feet)	3,380
Post-Development TP Load (lb/yr)	2.12
TP Load Reduction Required for New Impervious Area (lb/yr)	**1.72**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	4.55

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	68.15
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	89.33

Drainage Area A

Stormwater Best Management Practices (RR = Runoff Reduction)

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	5.27
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.47
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	2.90
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	3.37
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	1.90

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	24.10
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)	24.10

Drainage Area B

TOTAL NITROGEN REMOVED IN D.A. B (lb/yr)	3.83

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.10	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	1.93	0.81	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	1.93	0.81	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	1.93	0.06	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	1.93	0.06	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 19,874

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft^3)	3,355	0	0	0	0	3,355
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	5.27	1.79	0.00	0.00	0.00	7.06
TP LOAD REDUCTION ACHIEVED (lb/yr)	3.37	1.21	0.00	0.00	0.00	4.58
TP LOAD REMAINING (lb/yr)	1.90	0.58	0.00	0.00	0.00	2.48
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	24.10	3.83	0.00	0.00	0.00	27.93

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	12.49
TP LOAD REDUCTION REQUIRED (lb/yr)	4.55
TP LOAD REDUCTION ACHIEVED (lb/yr)	4.58
TP LOAD REMAINING (lb/yr):	7.90
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.03 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	89.33
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	27.93
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	61.40

Project Description: **Development** or Redevelopment

Drainage Area	Impervious (ac)	Pervious (ac)	Total (ac)
Site Area	2.83	10.17	13
Onsite Treated	2.74	1.98	4.72
Off-Site Treated	0	0	0
Total Treated	2.74	1.98	4.72
Any On-Site Disconnected by a Vegetated Buffer (25 ft)	0		
Total On-site Treated or Disconnected			4.72

Water Treatment on site

BMP Type	Area treated by BMP (acres)	Impervious Area treated by BMP (acres)	BMP efficiency (%)
Bioretention (Level 1)	3.85	1.93	40%
Hdyrodyamic Device	3.85	1.93	20%
Underground Sand filter	0.87	0.81	60%
Hdyrodyamic Device	0.87	0.81	20%

* Treatment train for BMP Area A is Bioretention to Hydrodynamic Device. Treatment train for BMP Area B is Underground Sand Filter to Hydrodynamic Device. Refer to BMP area plan for summary of total areas treated

Miscellaneous

Total WQV treated:	yes	no
Detention on site:	yes	no

Project is within which watershed ? Potomac-Shenandoah Watershed
Project discharges to which body of water? Potomac River

NOTE:
THE LIMIT OF DISTURBANCE DELINEATION SHOWN IN THE EXISTING CONDITIONS PLANS AND SITE PLANS (SHEETS 5 THRU 18) IS BASED ON THE 'PREVIOUSLY APPROVED LIMIT OF DISTURBANCE' IN DSUP 2016-0004. HOWEVER, THE SITE AREA INDICATED IN THE VRRM CALCULATION IS REFLECTIVE OF THE 'ANTICIPATED LIMIT OF DISTURBANCE' AS SHOWN IN THE LIMIT OF DISTURBANCE KEY PLAN ON SHEET C-08, BASED ON THE LATEST PLANNED CONSTRUCTION STAGING AND PROPOSED IMPROVEMENTS. THE 'ANTICIPATED LIMIT OF DISTURBANCE' IS SUBJECT TO CHANGE AND WILL CONTINUE TO BE ADJUSTED THROUGH FINAL DESIGN.

APPROVED
SPECIAL USE PERMIT NO. ______
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ______
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ______
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION
COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STORMWATER MANAGEMENT CALCULATIONS 1 OF 2

SHEET 23 OF 37

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New York, NY 10005
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Scale NTS
File Name
Drawing Status
PRELIMINARY DSUP
Job No 254922
Drawing No C-07
Issue

PLOT TIME: 11/27/2018 4:38 PM
PLOT BY: Esteban Garcia

24x36h

A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q

EXISTING CONDITIONS
THE PROJECT SITE CONSISTS PRIMARILY OF WETLAND AND EXISTING RAIL BED. THE SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED. THE SITE IS PRIMARILY LOCATED EAST OF THE EXISTING WMATA TRACKS AND RUNOFF DRAINS GENERALLY TO A WETLAND/SWAMP TO THE EAST.

PROPOSED CONDITIONS
PROPOSED IMPROVEMENTS CONSIST OF SECTION OF NEW RAIL BED AND NEW METRO PLATFORM, A POWER SWITCHGEAR BUILDING, AND PEDESTRIAN RAMPS AND BRIDGES TO PROVIDE STATION ACCESS FROM NEARBY LOCATIONS. RUNOFF FROM THE PROPOSED SITE WILL GENERALLY DRAIN TO A WETLAND/SWAMP TO THE EAST.

STORMWATER QUALITY
THE PROPOSED PROJECT INCREASES IMPERVIOUS AREA ON THE SITE BY 0.98AC. A REQUIRED 20% PHOSPHORUS REDUCTION OF3.63LB/YR IS COMPUTED BY THE VRRM SPREADSHEET CALCULATIONS (SEE CALCULATIONS, PREVIOUS SHEET).

STORMWATER WILL BE TREATED USING A VARIETY OF PROPRIETARY AND NON-PROPRIETARY BMPS (SEE BMP PLAN FOR DETAILS) INCLUDING GRASS CHANNELS, BIORETENTION, HYDRODYNAMIC DEVICES AND FILTRATION TO TREAT THE ALEXANDRIA TARGET WATER QUALITY VOLUME OF 5,481 CF.

STORMWATER QUANTITY
STORMWATER WILL BE TREATED USING AN UNDERGROUND DETENTION FACILITY LOCATED BELOW THE PROPOSED STATION ACCESS ROAD ON THE EAST SIDE OF THE STATION. IT WILL DISCHARGE INTO THE EXISTING WETLAND AREA. SEE STORAGE VOLUME CALCULATION (THIS SHEET) FOR CHANNEL PROTECTION (1-YR), ESTIMATED AT 8,064 CF, AND FLOOD CONTROL (10-YR), ESTIMATED AT 13,500 CF.

THE OUTFALLS FROM THE SITE DRAIN INTO A 5 ACRE WETLAND/SWAMP AREA, WHICH ULTIMATELY DISCHARGES TO AN EXISTING CULVERT BENEATH THE GEORGE WASHINGTON PARKWAY TO THE EAST. AN EXISTING CHANNEL CONVEYS WATER FROM THE WETLANDS TO THE CULVERT. THE CULVERT AND CHANNEL WERE APPROXIMATELY LOCATED ON THE PLANS BASED ON THE CITY OF ALEXANDRIA GIS MAPPING. THE PROPOSED DRAINAGE AREA PLAN ILLUSTRATES THE FLOW PATH, POINT OF ANALYSIS, AND CONVEYANCE TO THE CULVERTS.

THE CALCULATIONS DEMONSTRATE THAT THE SITE HAS BEEN DEVELOPED TO INCREASE THE POST DEVELOPMENT PEAK RUNOFF RATE FROM THE PRE-DEVELOPMENT PEAK RUNOFF RATE FOR THE ONE-YEAR AND TEN YEAR STORM CONSIDERED INDIVIDUALLY. THEREFORE, STORMWATER DETENTION IS PROVIDED PER THE REQUIREMENTS OF ARTICLE 13-109(F)(1) OF ALEXANDRIA ZONING ORDINANCE NOT TO RELEASE STORMWATER FROM THE SITE AT A HIGHER RATE THAN PRE DEVELOPMENT CONDITION. IN ADDITION TO THE CALCULATION PRESCRIBED IN ARTICLE 13-109(F)(1), A POINT OF ANALYSIS CALCULATION WAS DONE USING A COMPUTER MODEL TO VERIFY THAT THE POST-DEVELOPMENT RUNOFF IS LESS THAN THE PRE-EXISTING RUNOFF TO THE EXISTING CULVERT BENEATH THE GEORGE WASHINGTON PARKWAY.

CITY OF ALEXANDRIA STORMWATER CALCULATIONS PER ARTICLE 13-109(F)(1)

Area Tabulation					RCN
LoD (site area)	236,549	SF	5.43	ac	
Existing Impervious	88,795	SF	2.04	ac	98
Existing Forest	137,713	SF	3.16	ac	77
Existing Pervious	10,041	SF	0.23	ac	80
				Composite	85
Proposed Impervious	131,551	SF	3.02	ac	98
Proposed Forest	4,360	SF	0.10	ac	77
Proposed Pervious	100,624	SF	2.31	ac	80
				Composite	90
Impervious Increase	42,756	SF	0.98	ac	

Storage Volume

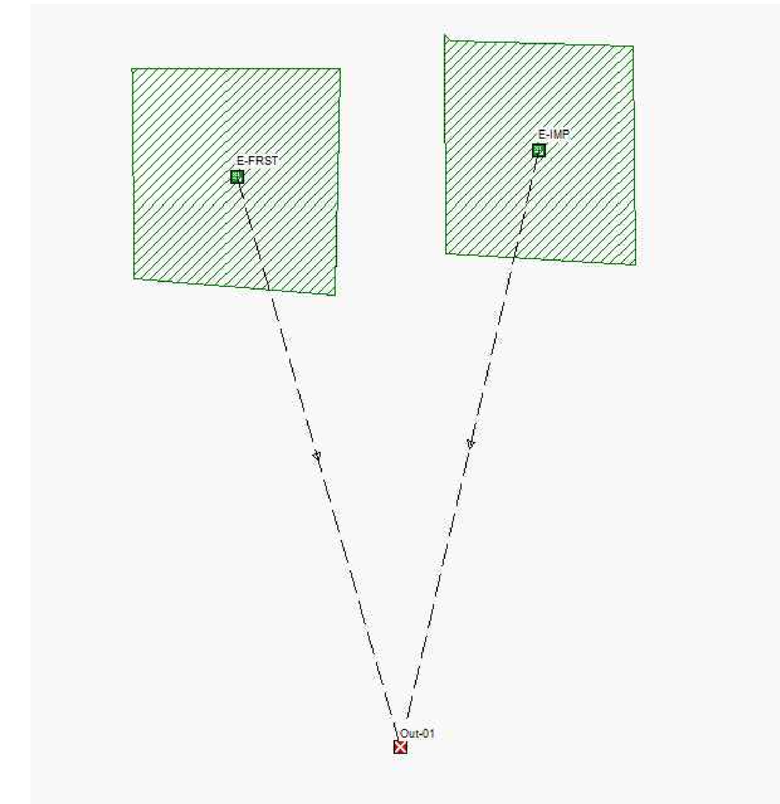
Land Use	HSG	Area	CN	Area	S	I_a	T_c	P_1	I_a/P	q_{u1}	RV_1	q_{p1}	P_{10}	I_a/P	q_{u10}	RV_{10}	q_{p10}
		(ac)		(mi^2)			(hr)	(in)		(csm/in)	(in)	(cfs)	(in)		(csm/in)	(in)	(cfs)
Pre-Developed																	
Impervious	D	2.04	98														
Woods, good condition	D	3.16	77														
Open space, good condition	D	0.23	80														
		5.43	85	0.0085	1.763	0.35	0.1	2.7	0.131	990	1.34	11.26	5.2	0.068	1000	3.55	30.16
Pre-Developed																	
Impervious	D	3.02	98														
Woods, good condition	D	0.10	77														
Open space, good condition	D	2.31	80														
		5.43	90	0.0085	1.117	0.22	0.1	2.7	0.083	990	1.71	14.34	5.2	0.043	1000	4.06	34.48
Adjusted RCN (with runoff reduction)		5.43	87	0.0085	1.431	0.29	0.1	2.7	0.106	995	1.52	12.79	5.2	0.055	1000	3.81	32.29
Target, Woods																	
Woods	D	5.43	77														
		5.43	77	0.0085	2.987	0.60	0.1	2.7	0.221	970	0.87	7.15	5.2	0.115	1000	2.79	23.68

Allowable Post-Development Peak Discharge

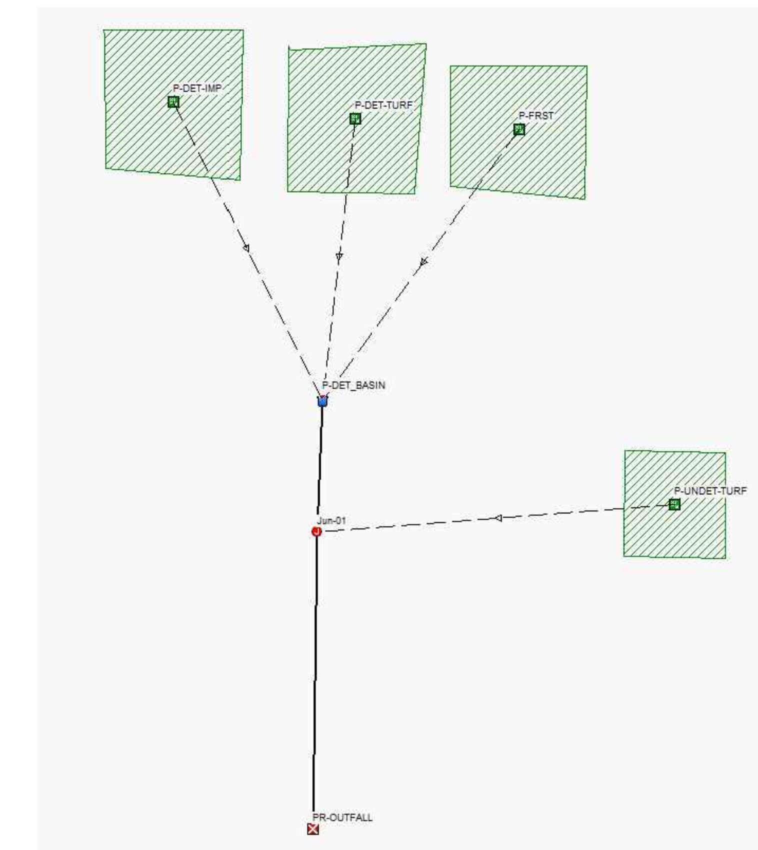
$Q_{1forest}$	7.15	cfs		$Q_{10forest}$		23.68	cfs	
$RV_{1forest}$	0.87	in		$RV_{10forest}$		2.79	in	
$Q_{1Predevelopment}$	11.26	cfs		$Q_{10Predevelopment}$		30.16	cfs	
$RV_{1Predevelopment}$	1.34	in		$RV_{10Predevelopment}$		3.55	in	
$Q_{1Postdevelopment}$	14.34	cfs		$Q_{10Postdevelopment}$		34.48	cfs	
$RV_{1Postdevelopment}$	1.71	in		$RV_{10Postdevelopment}$		4.06	in	
$Q_{1Postdevelopment\ (adjusted)}$	12.79	cfs		$Q_{10Postdevelopment\ (adjusted)}$		32.29	cfs	
$RV_{1Postdevelopment\ (adjusted)}$	1.52	in		$RV_{10Postdevelopment\ (adjusted)}$		3.81	in	
$Q_{1allowable}$	7.97	cfs		$Q_{10allowable}$		22.54	cfs	
Improvement Factor, site > 1ac:		0.8						
$Q_{developed} \leq I.F*(Q_{predeveloped}*RV_{predeveloped})/RV_{developed}$								
Minimum Peak Discharge				Since Allowable > forested, then Allowable applies:				
1-yr, forest	4.10	cfs		1-yr	7.97	cfs allowed		
10-yr, forest	17.37	cfs		10-yr	22.54	cfs allowed		
$(Q_{forested}*RV_{forested})/RV_{developed}$								
Storage Requirements, est	**RV**		**V_r**	**q_o/q_i**	**V_s/V_r**		**V_s**	**V_s**
			(ac-ft)				(ac-ft)	(ft^3)
1-yr	1.52		0.685653	0.622884	0.27		0.185126	8,064.10
10-yr	3.81		1.721881	0.697971	0.18		0.309939	13,500.92

POINT OF ANALYSIS CALCULATION: POST DEVELOPMENT RUNOFF CALCULATION TO EXISTING CULVERT
COMPUTER MODEL DIAGRAM, INPUTS, & OUTPUTS

EXISTING CONDITIONS

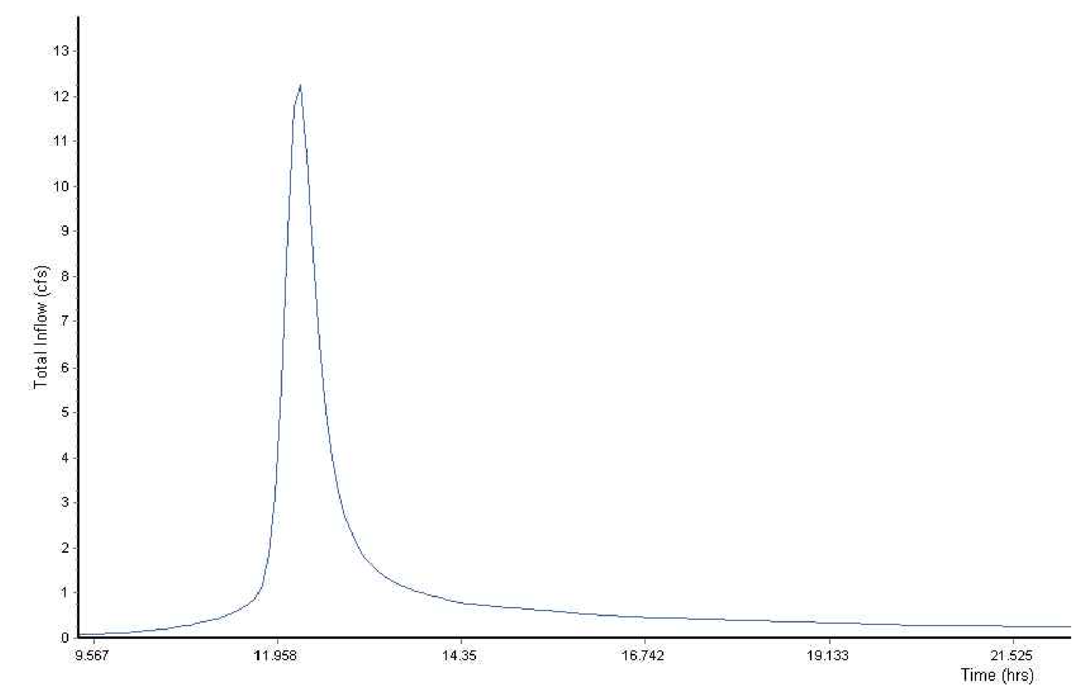


PROPOSED CONDITIONS




```
------------------
Subbasin E-FRST
------------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
Woods & grass combination, Good               3.06          D        79.00
Composite Area & Weighted CN                  3.06                   79.00

-----------------
Subbasin E-IMP
-----------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
-                                             1.85          -        72.00
Composite Area & Weighted CN                  1.85                   72.00
```

```
---------------------
Subbasin P-DET-IMP
---------------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
-                                             1.86          -        98.00
Composite Area & Weighted CN                  1.86                   98.00

----------------------
Subbasin P-DET-TURF
----------------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
< 50% grass cover, Poor                       1.85          D        89.00
Composite Area & Weighted CN                  1.85                   89.00

------------------
Subbasin P-FRST
------------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
Woods & grass combination, Good               0.10          D        79.00
Composite Area & Weighted CN                  0.10                   79.00

------------------------
Subbasin P-UNDET-TURF
------------------------
                                              Area        Soil
Soil/Surface Description                    (acres)       Group        CN
--------------------------------------------------------------------------
> 75% grass cover, Good                       0.46          D        80.00
Composite Area & Weighted CN                  0.46                   80.00
```

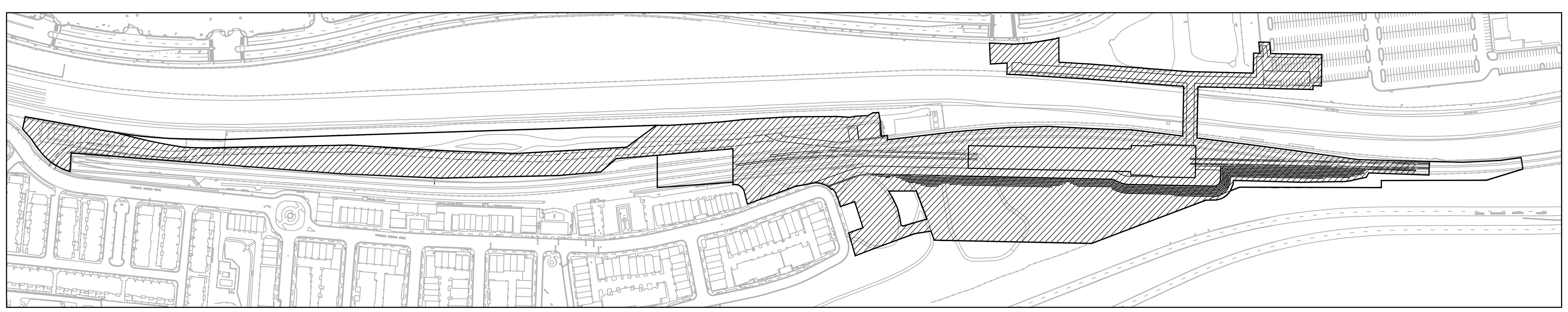



```
-----------------------------------------------------
Outfall Node ID          Flow     Average      Peak
                    Frequency        Flow    Inflow
                          (%)         cfs       cfs
-----------------------------------------------------
PR-OUTFALL              93.23        1.07      4.45
-----------------------------------------------------
System                  93.23        1.07      4.45
```

LIMIT OF DISTURBANCE - KEY PLAN

LIMIT OF DISTURBANCE PER PREVIOUSLY APPROVED DSUP 2016-0004

ANTICIPATED LIMIT OF DISTURBANCE



APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR | DATE

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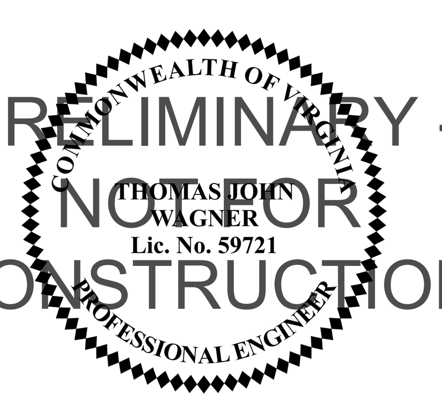
SITE PLAN NO. ________

DIRECTOR | DATE

CHAIRMAN, PLANNING COMMISSION | DATE

DATE RECORDED ________
INSTRUMENT NO. | DEED BOOK NO. | PAGE NO.



PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STORMWATER MANAGEMENT CALCULATIONS 2 OF 2

SHEET 24 OF 37

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Scale
NTS

File Name

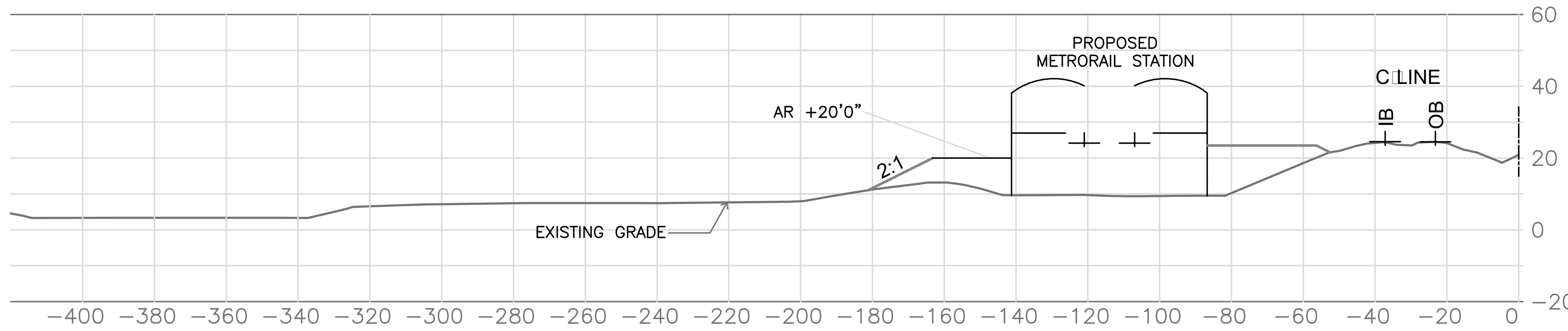
Drawing Status
PRELIMINARY DSUP

Job No 254922 | Drawing No C-08 | Issue

PLOT TIME: 11/27/2018 4:34 PM
PLOT BY: Esteban Garcia

24x36h

451+00



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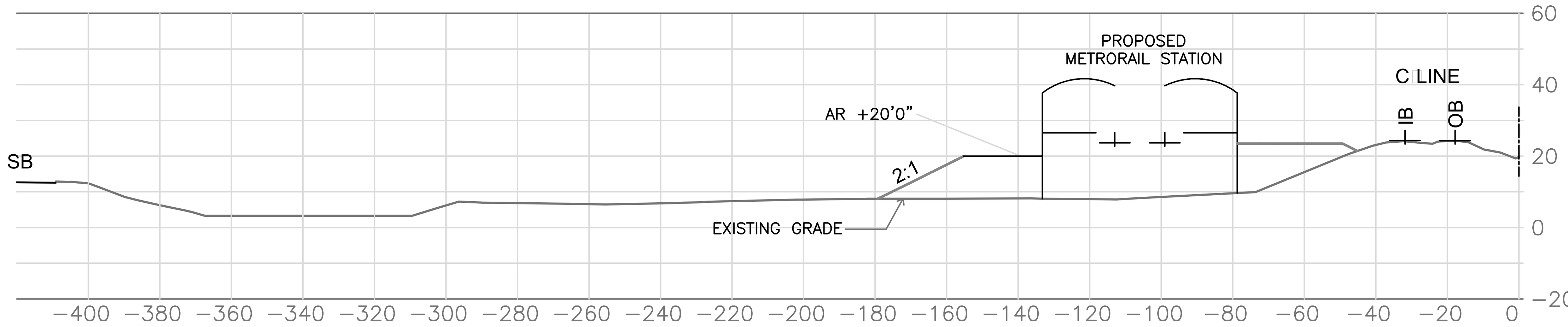

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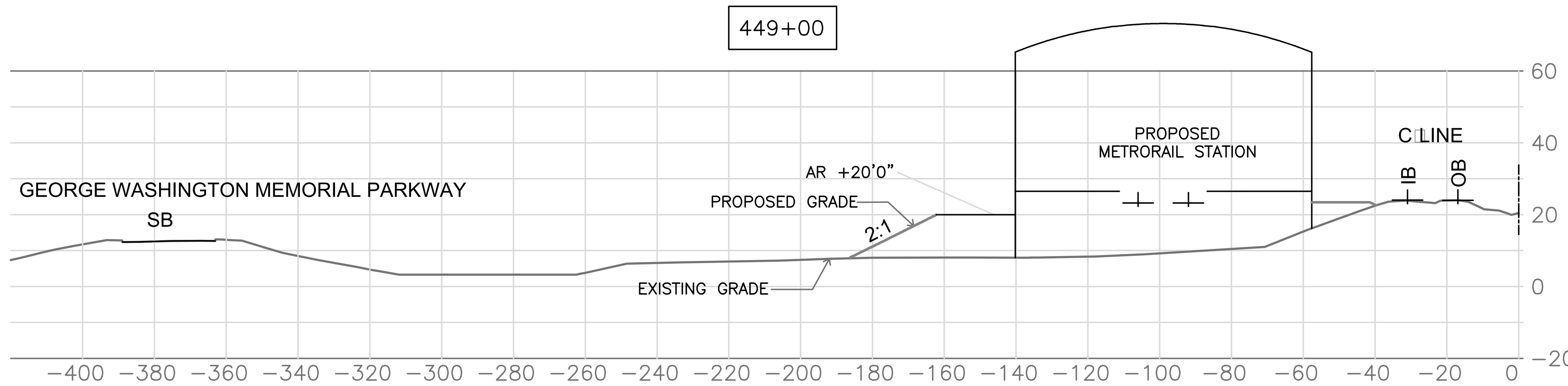

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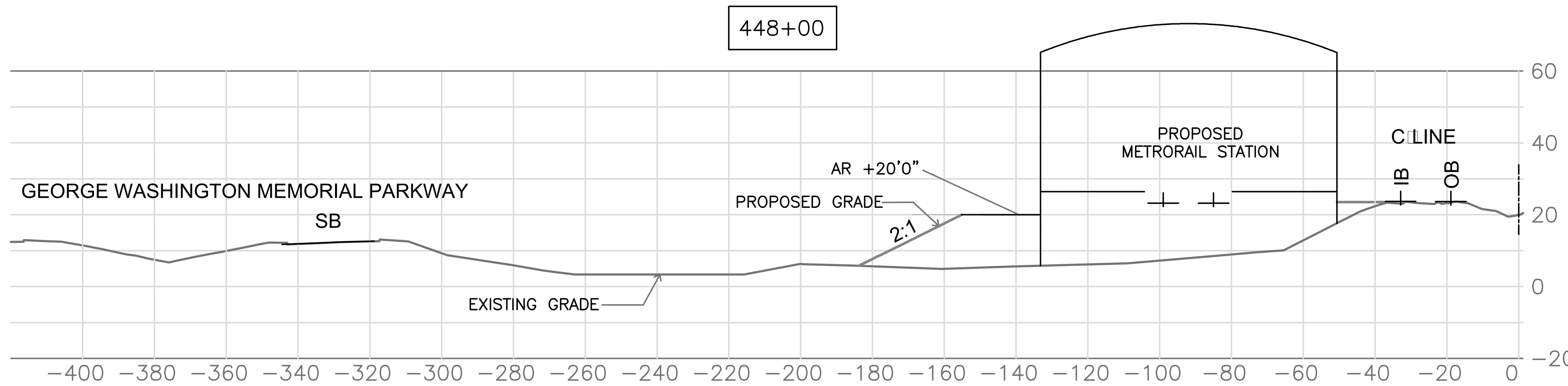

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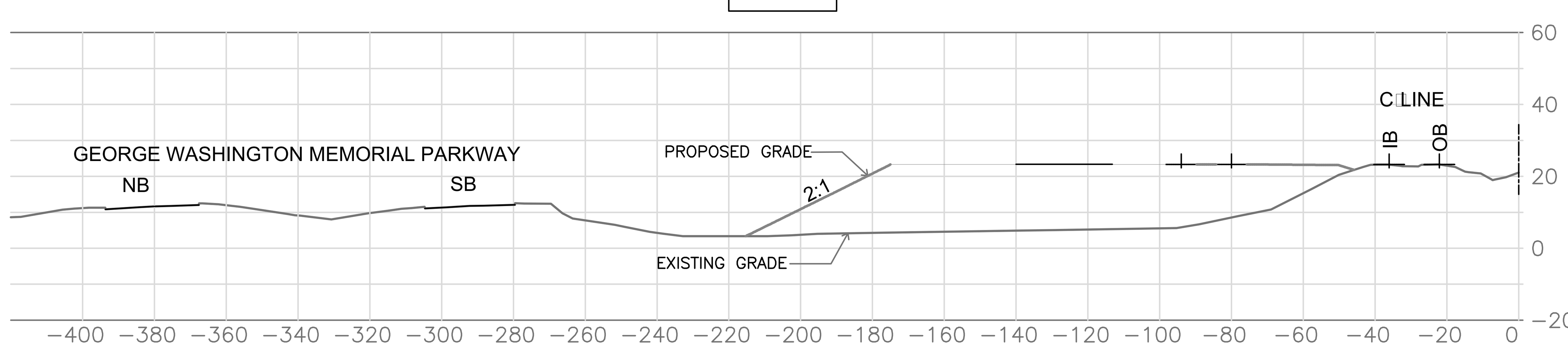

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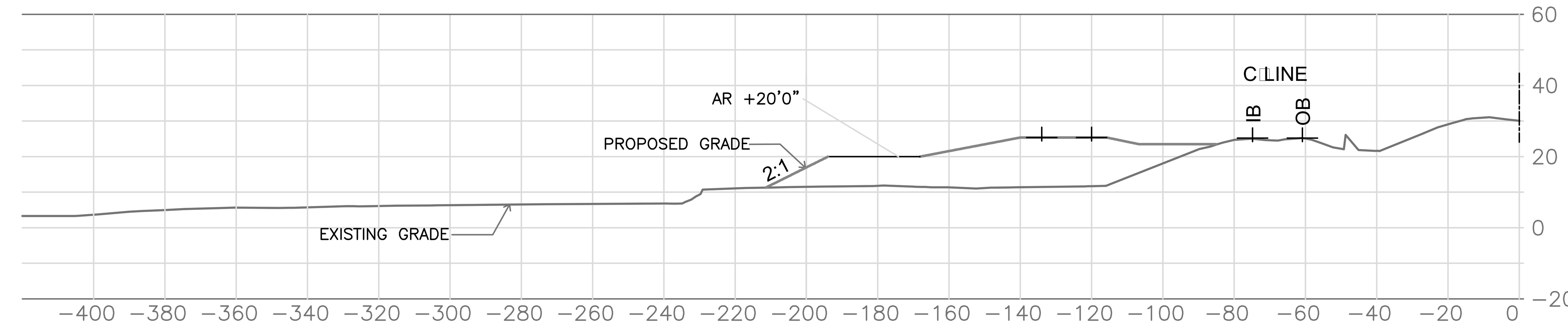

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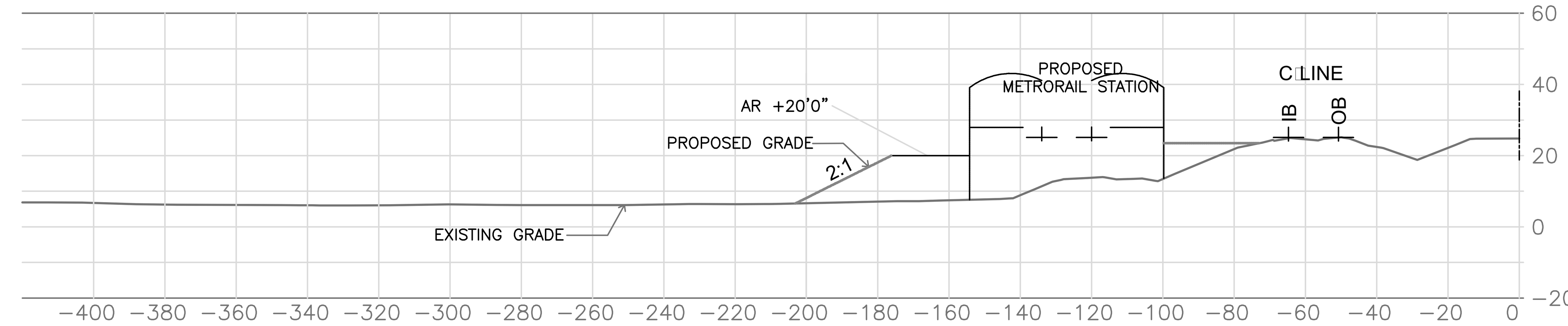

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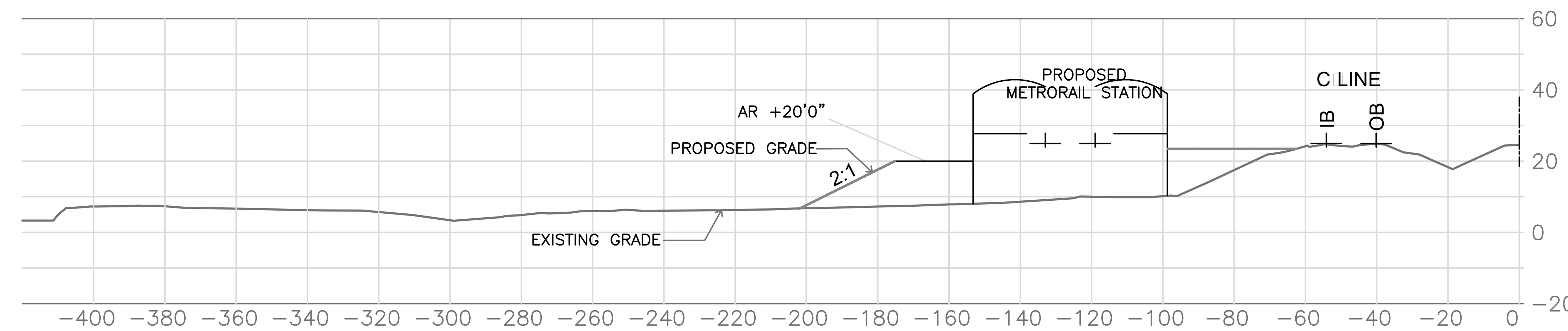

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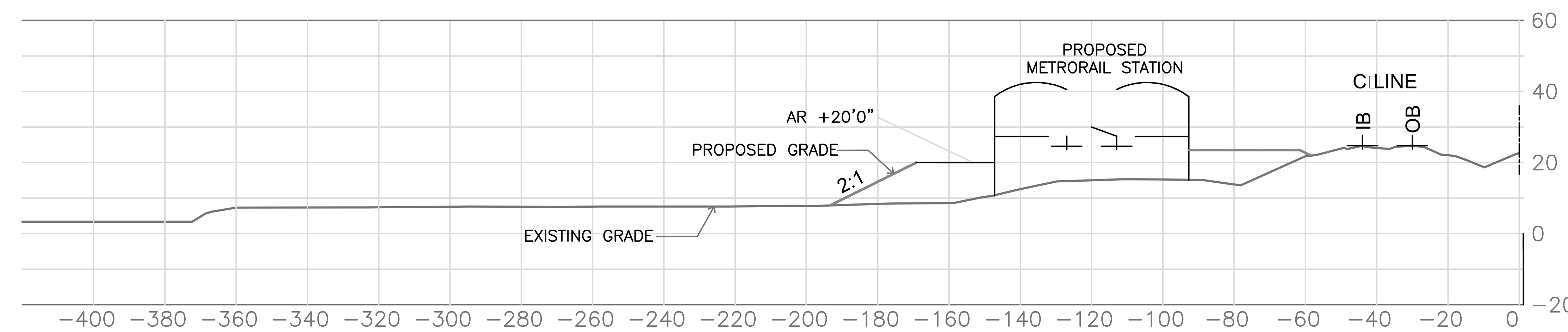

AR = ACCESS ROAD
IB = INBOUND TRACK
OB = OUTBOUND TRACK

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ______

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ______

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON
METROPOLITAN AREA
TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD
METRORAIL STATION

Drawing Title
SITE CROSS SECTIONS

SHEET 26 OF 38

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Scale
1:30

File Name

Drawing Status
PRELIMINARY DSUP

Job No
254922

Drawing No
C-09

Issue

PLOT BY: Swati Kalla PLOT TIME: 11/16/2018 1:47 PM

24x36h

PLOT TIME: 11/16/2018 7:40 PM PLOT BY: Julian Smith

LEGEND

- PLANNED AREA OF DISTURBANCE
- POTENTIAL AREA OF RESTORATION*
- LIMIT OF DISTURBANCE

*RESTORATION LANDSCAPING WILL BE IN ACCORDANCE WITH CITY OF ALEXANDRIA, WMATA, AND NPS STANDARDS.

APPROVED
SPECIAL USE PERMIT NO. ____
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

PRELIMINARY - NOT FOR CONSTRUCTION

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
WETLANDS RESTORATION PLAN

SHEET 26 OF 37

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Scale
1" = 50'

File Name

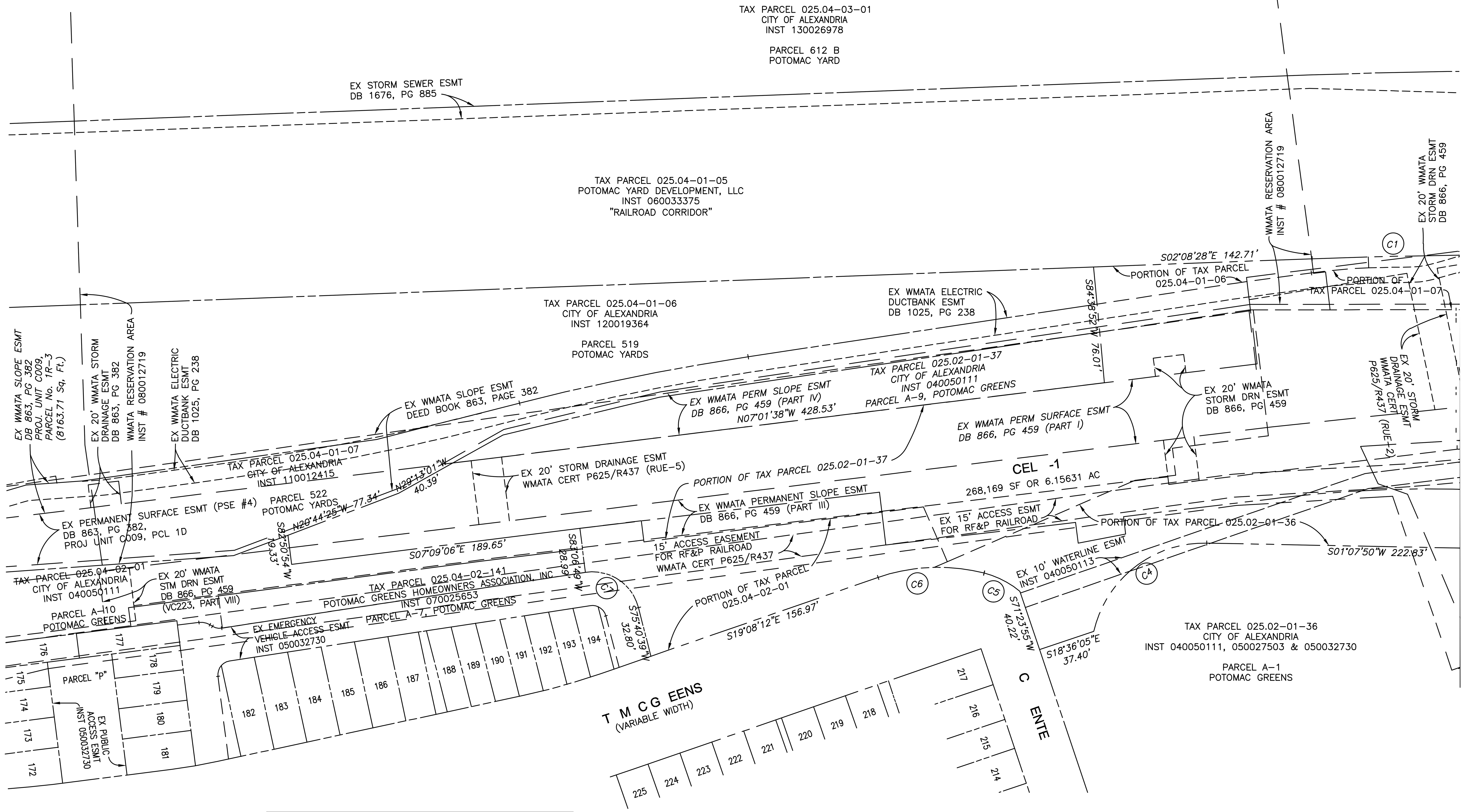
Drawing Status
PRELIMINARY DSUP

Job No
254992

Drawing No
C-10

Issue

24x36h



NOTES:

1. HORIZONTAL DATUM:
   WMATA 2009 LOW DISTORTION PROJECTION SYSTEM
2. THE TAX MAP PARCELS, OWNERS AND ZONING OF IHE PROPERTIES DELINEATED ON THIS PLAT ARE AS FOLLOWS:

   025.04-03-01
   (PARCEL 612 B, POTOMAC YARDS)
   CITY OF ALEXANDRIA
   INST 130026978
   DATED DECEMBER 9, 2013
   ZONED: CDD#10

   025.04-01-06
   (PARCEL 519, POTOMAC YARDS)
   CITY OF ALEXANDRIA
   INST 120019364
   DATED JUNE 19, 2012
   ZONED: CDD#10

   025.04-01-07
   (PARCEL 522, POTOMAC YARDS)
   CITY OF ALEXANDRIA
   INST 110012415
   DATED JULY 8, 2011
   ZONED: CDD#10

   025.02-01-37
   (PARCEL A-9, POTOMAC GREENS)
   CITY OF ALEXANDRIA
   INST 040050111
   DATED DECEMBER 10, 2004
   ZONED: CDD#10

   025.04-02-01
   (PARCEL A-10, POTOMAC GREENS)
   CITY OF ALEXANDRIA
   INST 040050111
   DATED DECEMBER 10, 2004
   ZONED: CDD#10

   025.02-01-36
   (PARCEL A-1, POTOMAC GREENS)
   CITY OF ALEXANDRIA
   INST 040050111
   DATED DECEMBER 10, 2004
   INST 050027503 (CORRECTION)
   RE-RECORD DECEMBER 28, 2004
   INST 050032730 (PLAT OF CORRECTION)
   DATED AUGUST 25, 2005
   ZONED: CDD#10

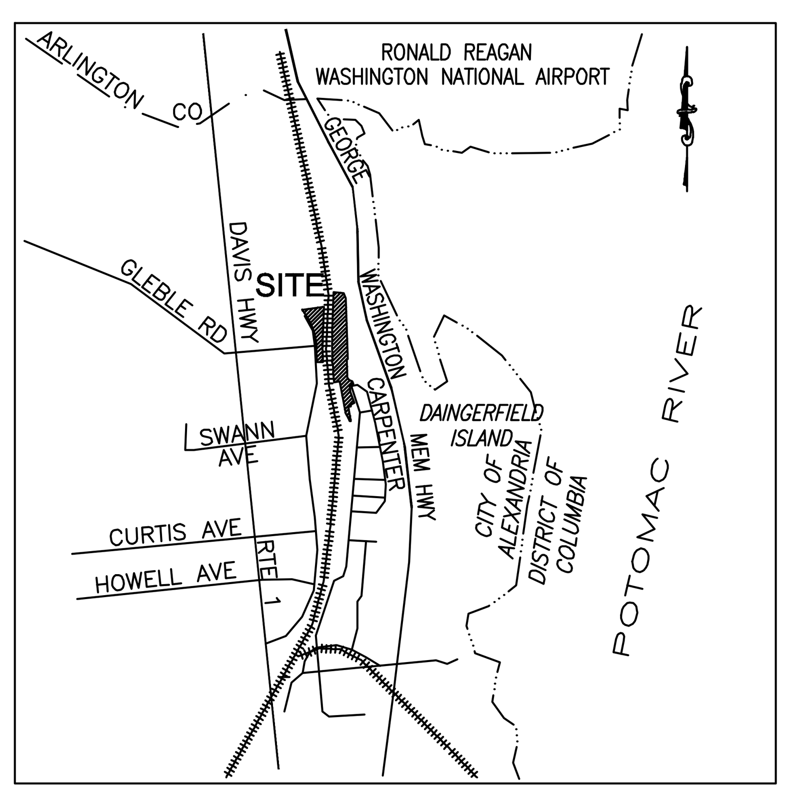
   016.02-02-01
   WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY
   INST 770004826 (DB 863, PG 382)
   DATED JULY 20, 1977
   ZONED: WPR
3. BOUNDARY INFORMATION, AS SHOWN HEREON, IS A COMPILATION OF AVILABLE DEED AND PLAT RECORDS, "BEST FIT" TO FIELD FOUND EVIDENCE.
4. IRON PIPES TO BE SET AT ACCESSIBLE LOT CORNERS AT SUCH TIME THAT OVERLOT GRADING/CONSTRUCTION IS COMPLETE.
5. THE PROPERTIES SHOWN HEREON IS LOCATED IN ZONE AE AND ZONE X PER CITY OF ALEXANDRIA VIRGINIA F.I.R.M. PANEL 0033E, MAP NUMBER 5155190033E REVISED DATE OF JUNE 16, 2011.
6. OWNER AND APPLICANT:
   CITY OF ALEANDRIA
   301 KING STREET
   ALEXANDRIA, VA 22314

   IN COOPERATION WITH:
   WASHINGTON METROPOLITAN TRANSIT AUTHORITY
   600 FIFTH ST NW
   WASHINGTON DC 20001
7. THE SANITARY SEWER POINT OF CONNECTION WILL BE VIA THE EXISTING SANITARY SEWER MANHOLE AT THE CORNER OF POTOMAC GREEN DRIVE AND CARPENTER DRVIVE.
8. SEE SHEETS SD-03 AND SD-04 FOR PROPERTY DETAILS.

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.



VICINITY MAP
SCALE: 1" = 2,000'

NOTE:
1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERTICAL IS NAVD 88.

APPROVED
SPECIAL USE PERMIT NO. ____________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PRELIMINARY SUBDIVISION PLAT 1 OF 4

SHEET 12 OF 38

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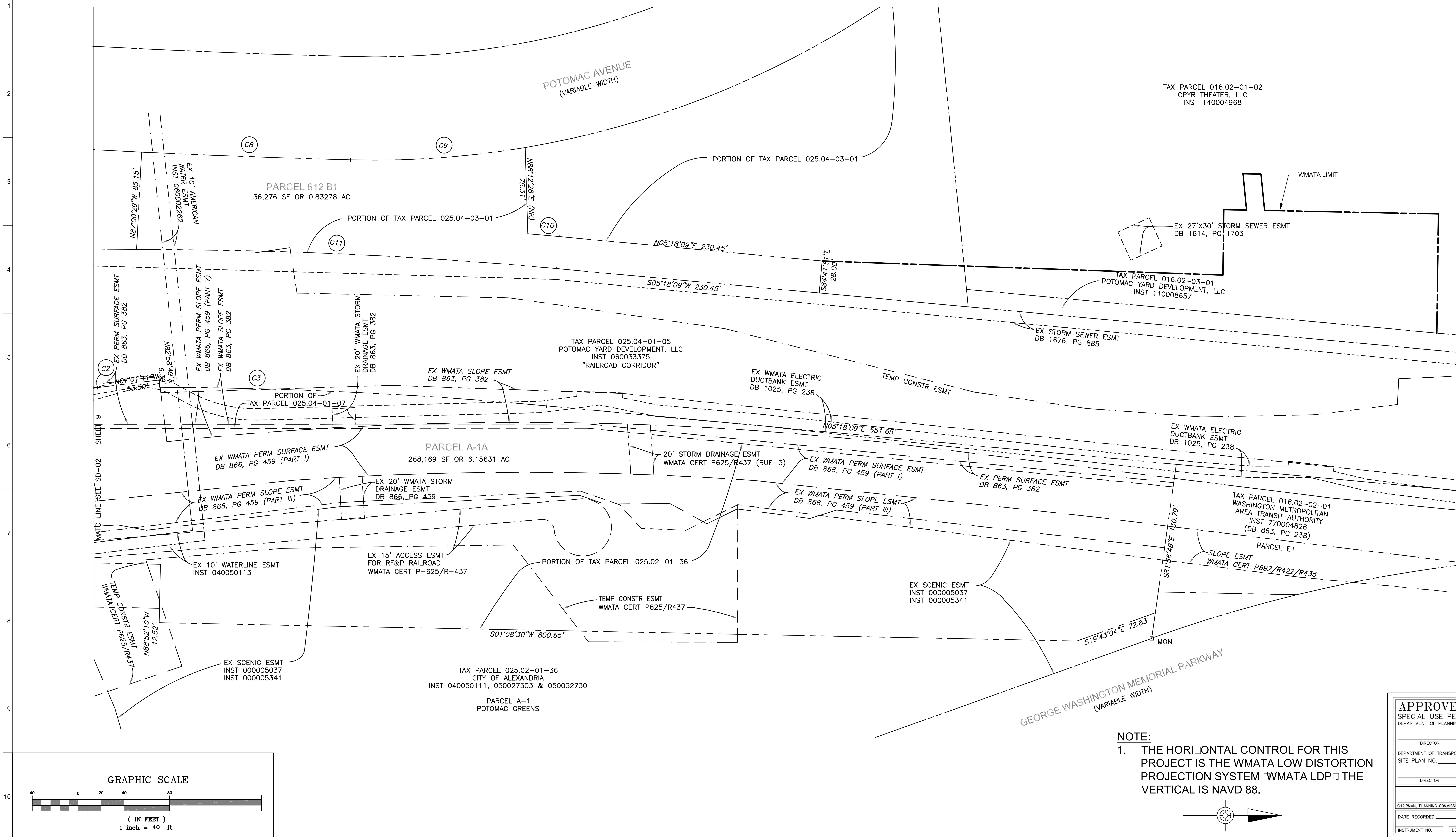
Scale 1"=40'
File Name
Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
254922	SD-01	

PLOT BY: Julian Smith PLOT TIME: 11/16/2018 2:34 PM



NOTE:
1. THE HORI□ONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM □WMATA LDP□ THE VERTICAL IS NAVD 88.

APPROVED
SPECIAL USE PERMIT NO. ____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR ____ DATE ____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ____
DIRECTOR ____ DATE ____
CHAIRMAN, PLANNING COMMISSION ____ DATE ____
DATE RECORDED ____
INSTRUMENT NO. ____ DEED BOOK NO. ____ PAGE NO. ____

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PRELIMINARY SUBDIVISION PLAT 2 OF 4

SHEET 13 OF 37

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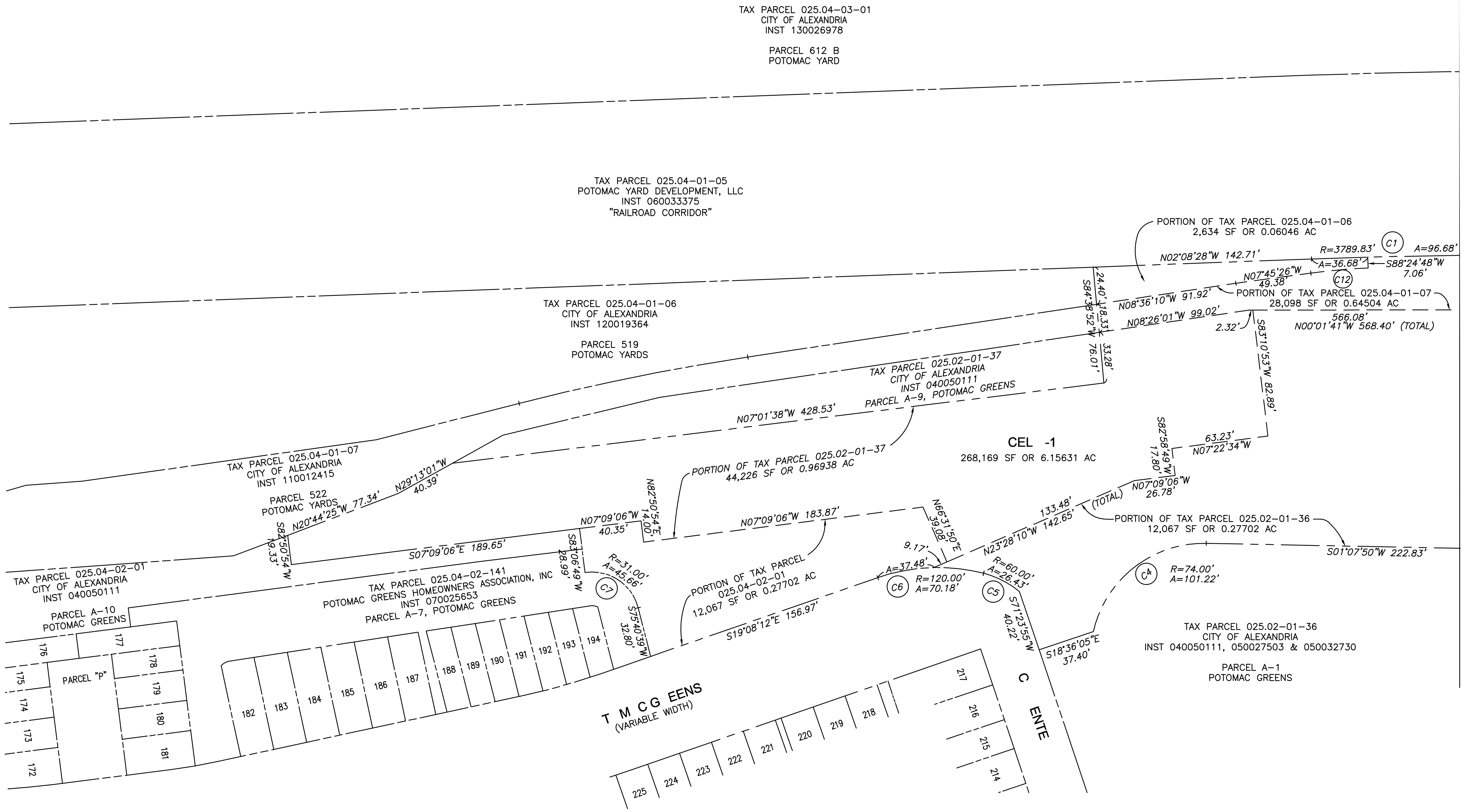
Scale 1"□40□
File Name
Drawing Status
PRELIMINARY DSUP

Job No 254922
Drawing No SD-02
Issue

24x36h



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

AREA TABULATION:

PORTION OF TM PARCEL 025.04-01-06	2,634 SF	OR	0.06046 AC
PORTION OF TM PARCEL 025.04-01-07	28,098 SF	OR	0.64504 AC
PORTION OF TM PARCEL 025.02-01-37	42,226 SF	OR	0.96938 AC
PORTION OF TM PARCEL 025.04-02-01	12,067 SF	OR	0.27702 AC
PORTION OF TM PARCEL 025.02-01-36	183,144 SF	OR	4.20441 AC
PARCEL A-1A (TOTAL)	268,169 SF	OR	6.15631 AC
PARCEL A-1A	268,169 SF	OR	6.15631 AC
PARCEL 612 B1	36,276 SF	OR	0.83278 AC
TOTAL	304,445 SF	OR	6.98909 AC

CURVE TABLE

CURVE NO.	RADIUS	DELTA	LENGTH	TANGENT	CHD BEARING	CHORD
C1	3789.83'	01°27'42"	96.68'	48.34'	N01°24'37"W	96.68'
C2	3789.83'	00°03'06"	3.42'	1.71'	N00°39'13"W	3.42'
C3	3789.83'	05°06'51"	338.28'	169.25'	N02°44'43"W	338.17'
C4	74.00'	78°22'06"	101.22'	60.32'	S38°03'13"E	93.51'
C5	60.00'	25°14'17"	26.43'	13.43'	S26°59'28"W	26.22'
C6	120.00'	33°30'32"	70.18'	36.13'	S02°22'56"E	69.18'
C7	31.00'	84°23'56"	45.66'	28.11'	S33°28'41"W	41.65'
C8	8328.50'	01°15'15"	182.29'	91.15'	N02°06'40"E	182.29'
C9	795.00'	11°01'46"	153.04'	76.76'	N04°01'50"W	152.80'
C10	3892.83'	00°24'11"	27.38'	13.69'	S05°06'03"W	27.38'
C11	3864.83'	05°26'04"	366.58'	183.43'	S02°35'07"W	366.45'
C12	403.13'	05°20'09"	37.54'	18.79'	N05°06'36"W	37.53'

NOTE:

1. THE HORIZONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM (WMATA LDP). THE VERTICAL IS NAVD 88.

APPROVED
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DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ______
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ______
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PRELIMINARY SUBDIVISION PLAT 3 OF 4

SHEET 14 OF 38

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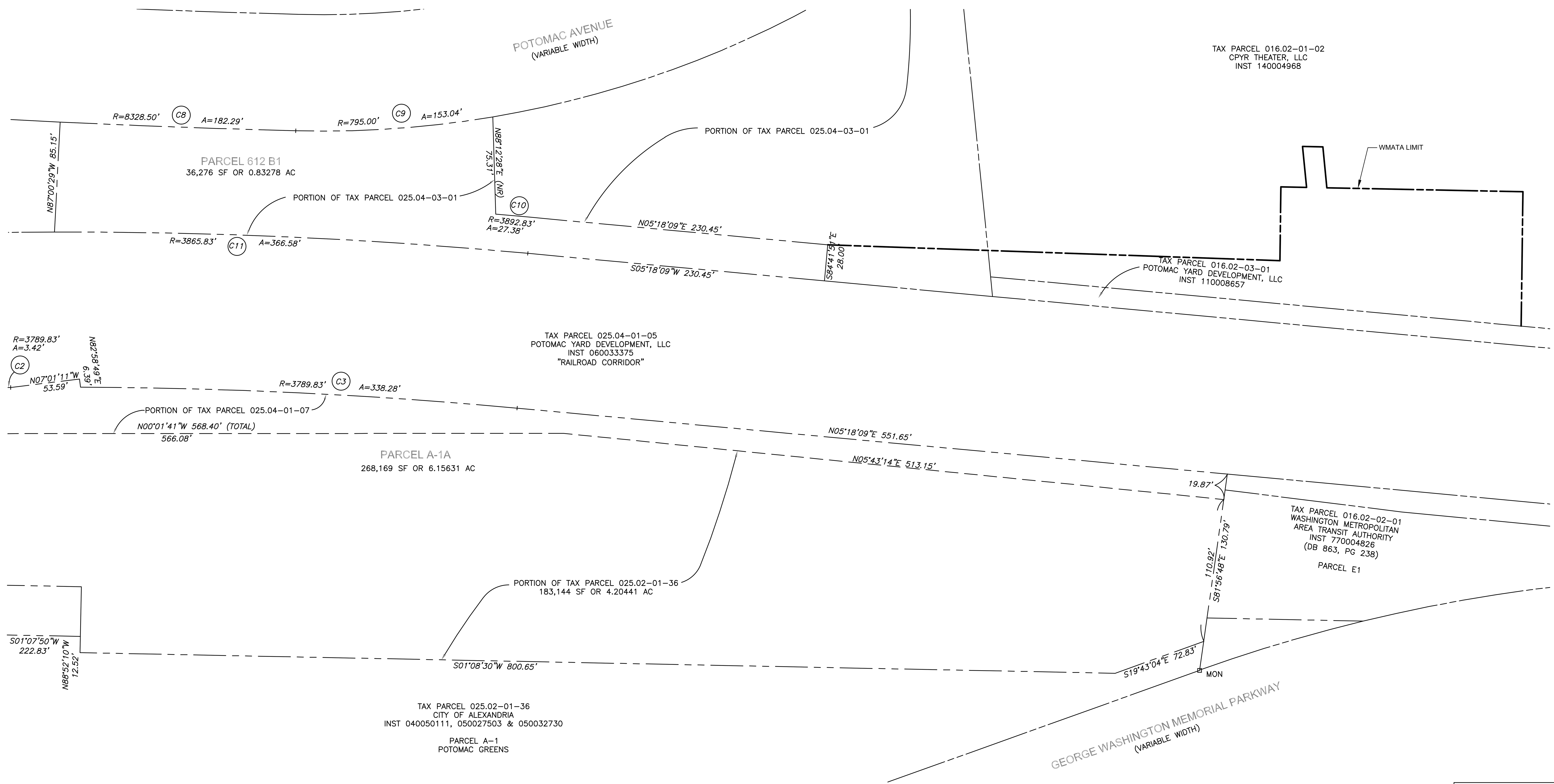
Scale 1"=40'
File Name
Drawing Status
PRELIMINARY DSUP
Job No 254922
Drawing No SD-03
Issue

PLOT BY: Julian Smith PLOT TIME: 11/16/2018 2:35 PM



GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

NOTE:
1. THE HORI□ONTAL CONTROL FOR THIS PROJECT IS THE WMATA LOW DISTORTION PROJECTION SYSTEM □WMATA LDP□ THE VERTICAL IS NAVD 88.

APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ________
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRELIMINARY - NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
THOMAS JOHN WAGNER
Lic. No. 59721
PROFESSIONAL ENGINEER

Issue	Date	By	Chkd	Appd
	11/19/2018	JS	JD	TW

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PRELIMINARY SUBDIVISION PLAT 4 OF 4

SHEET 15 OF 37

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Scale 1"□40□

File Name

Drawing Status
PRELIMINARY DSUP

Job No	Drawing No	Issue
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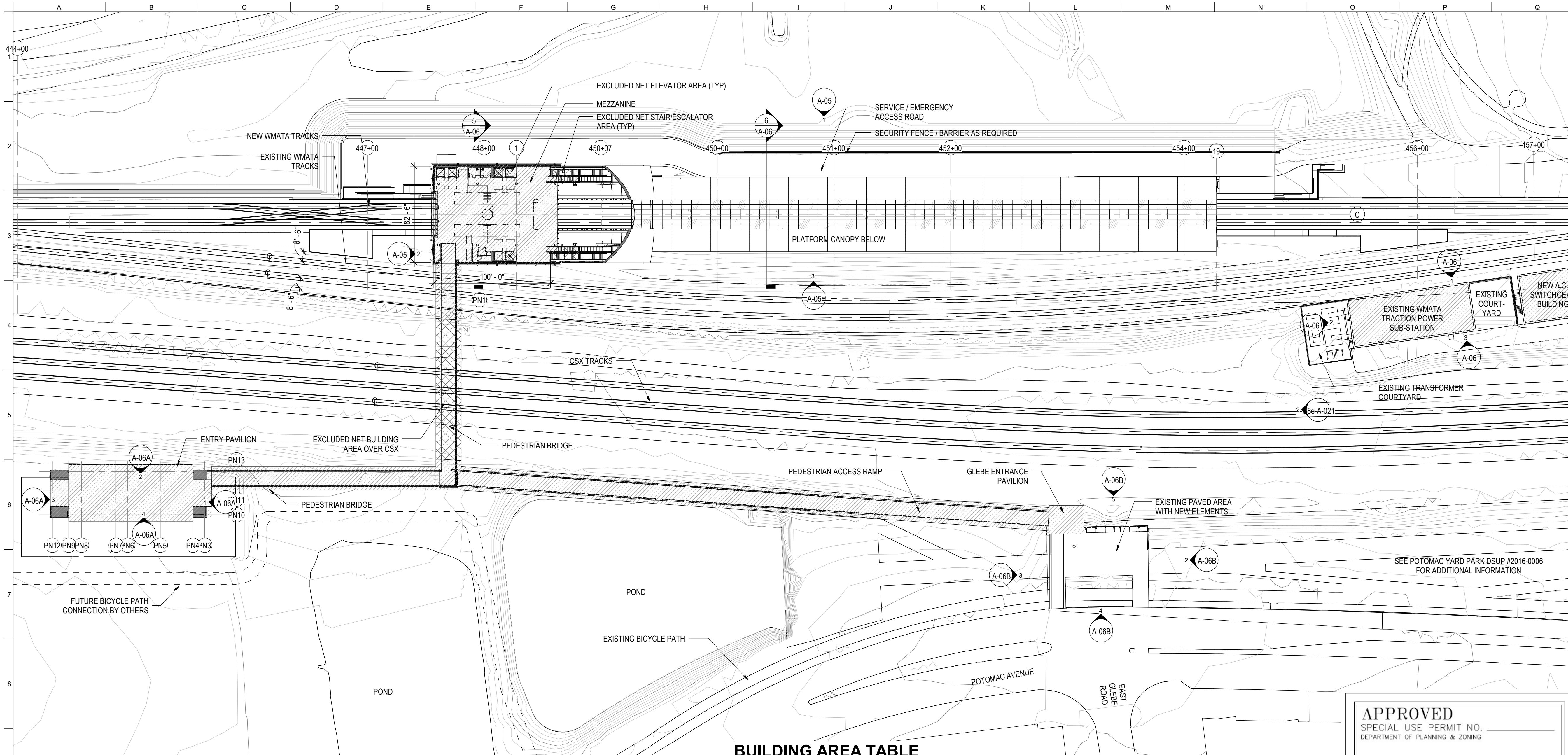

1 FAR PLAN DIAGRAM - MEZZANINE LEVEL

1" = 40'-0"

0' 10' 20' 40'

BUILDING AREA LEGEND

- GROSS BUILDING AREA
- EXCLUDED NET BUILDING AREA

PRELIM. CODE SUMMARY

RAIL STATION -

USE GROUP: A-3, S-1
NUMBER OF STORIES: 1
CONSTRUCTION TYPE: IIA
FLOOR AREA PER FLOOR: REF. FAR AREA TABLE(S)
RAIL STATION AREA (SQ/FT)-
MEZZANINE: 9,096
PLATFORM: 40,953
SERVICE LEVEL: 9,994
TOTAL: 60,043

BUILDING AREA TABLE

GROSS BUILDING AREA	PROPERTY EAST OF CSX (SQFT)	PROPERTY WEST OF CSX (SQFT)
STATION SF	46,922	N/A
AC BUILDING SF	2,752	N/A
SOUTH PED. BRIDGE / RAMP	6,606	5,650
SOUTH ENTRY PAVILION	N/A	6,194
NORTH PED. BRIDGE	1,415	N/A
NORTH PAVILION	N/A	10,050
EXISTING TRACTION POWER SUBSTATION	4,4847	N/A
TOTAL:	62,182	21,894

NET SF OF BUILDING	PROPERTY EAST OF CSX (SQFT)	PROPERTY WEST OF CSX (SQFT)
STATION SF	40,930	N/A
AC BUILDING SF	2,752	N/A
SOUTH PED. BRIDGE / RAMP	6,606	5,650
SOUTH ENTRY PAVILION	N/A	5,423
NORTH PED BRIDGE SF	1,415	N/A
ENTRY PAVILION	N/A	7,775
EXISTING TRACTION POWER SUBSTATION	4,487	N/A
TOTAL:	5,6190	18,848
FAR EXISTING	0.02	0
FAR PROPOSED	0.21	0.52

APPROVED
SPECIAL USE PERMIT NO. ______
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ______

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ______

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
MEZZANINE LEVEL FAR DIAGRAM

SHEET 27 OF 37

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Scale
As indicated
File Name

Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
254992	A-01	27

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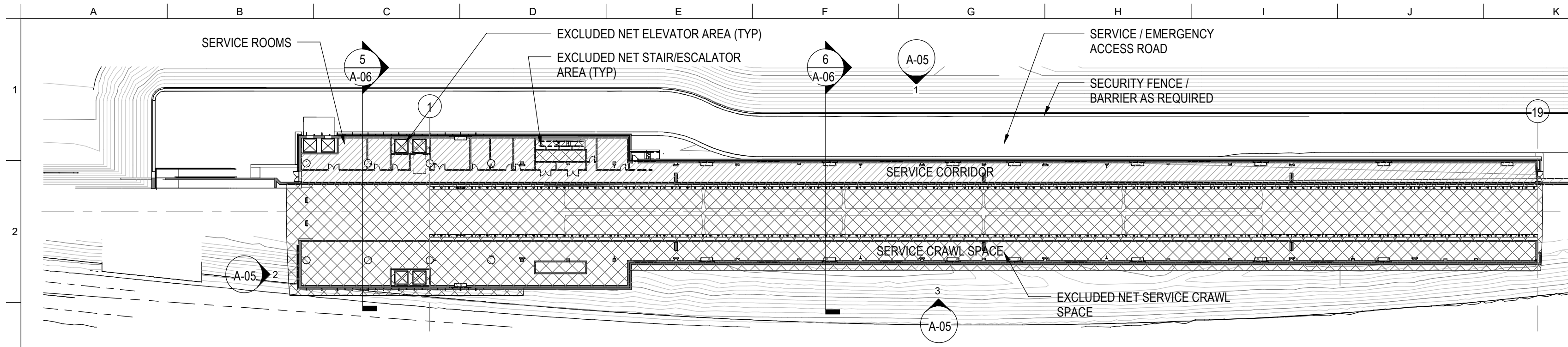
PLOT BY: Christie Melgar PLOT TIME: 5/10/2005 12:24 PM



2 FAR PLAN DIAGRAM - LOWER LEVEL

1" = 40'-0"

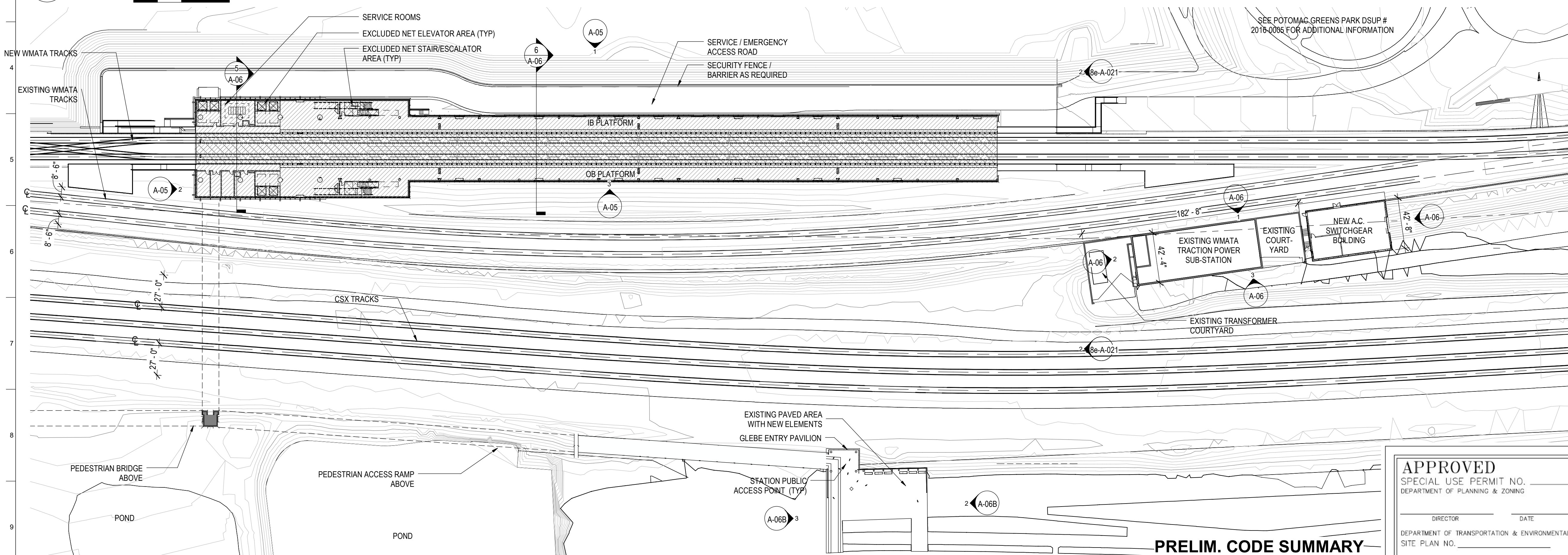
0' 10' 20' 40'

BUILDING AREA TABLE

GROSS BUILDING AREA	PROPERTY EAST OF CSX (SQFT)	PROPERTY WEST OF CSX (SQFT)
STATION SF	46,922	N/A
AC BUILDING SF	2,752	N/A
SOUTH PED. BRIDGE / RAMP	6,606	5,650
SOUTH ENTRY PAVILION	N/A	6,194
NORTH PED. BRIDGE	1,415	N/A
NORTH PAVILION	N/A	10,050
EXISTING TRACTION POWER SUBSTATION	4,4847	N/A
TOTAL:	62,182	21,894

NET SF OF BUILDING	PROPERTY EAST OF CSX (SQFT)	PROPERTY WEST OF CSX (SQFT)
STATION SF	40,930	N/A
AC BUILDING SF	2,752	N/A
SOUTH PED. BRIDGE / RAMP	6,606	5,650
SOUTH ENTRY PAVILION	N/A	5,423
NORTH PED BRIDGE SF	1,415	N/A
ENTRY PAVILION	N/A	7,775
EXISTING TRACTION POWER SUBSTATION	4,487	N/A
TOTAL:	5,6190	18,848
FAR EXISTING	0.02	0
FAR PROPOSED	0.21	0.52

PLOT TIME: 5/10/2005 12:24 PM
PLOT BY: Christie Melgar



1 FAR PLAN DIAGRAM - PLATFORM LEVEL

1" = 40'-0"

0' 10' 20' 40'

BUILDING AREA LEGEND

- GROSS BUILDING AREA
- EXCLUDED NET BUILDING AREA

PRELIM. CODE SUMMARY

RAIL STATION -

USE GROUP: A-3, S-1
NUMBER OF STORIES: 1
CONSTRUCTION TYPE: IIA
FLOOR AREA PER FLOOR: REF. FAR AREA TABLE(S)
RAIL STATION AREA (SQ/FT)-
MEZZANINE: 9,096
PLATFORM: 40,953
SERVICE LEVEL: 9,994
TOTAL: 60,043

APPROVED
SPECIAL USE PERMIT NO. ________
DEPARTMENT OF PLANNING & ZONING

DIRECTOR ________ DATE ________

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ________

DIRECTOR ________ DATE ________

CHAIRMAN, PLANNING COMMISSION ________ DATE ________

DATE RECORDED ________

INSTRUMENT NO. ________ DEED BOOK NO. ________ PAGE NO. ________

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
PLATFORM LEVEL FAR DIAGRAM

SHEET 28 OF 37

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Scale
As indicated

File Name

Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
254992	A-02	28

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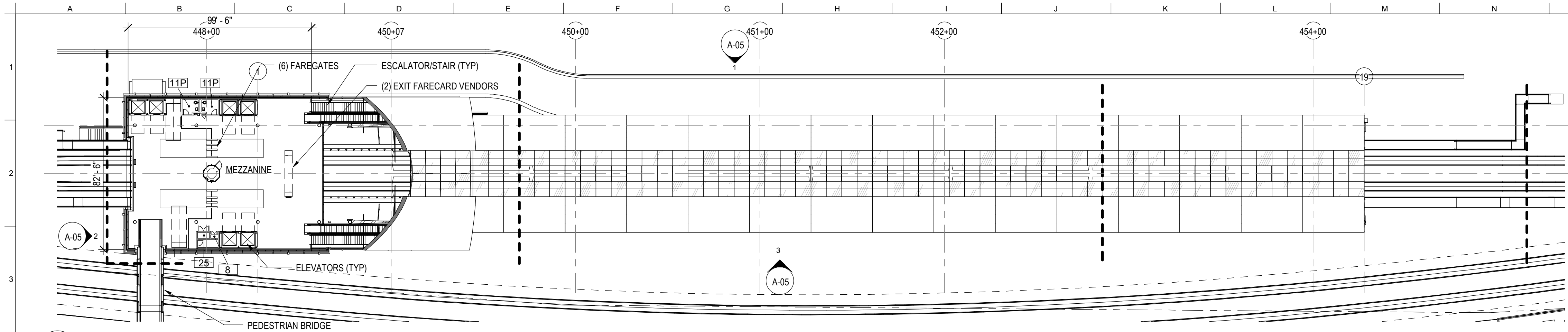
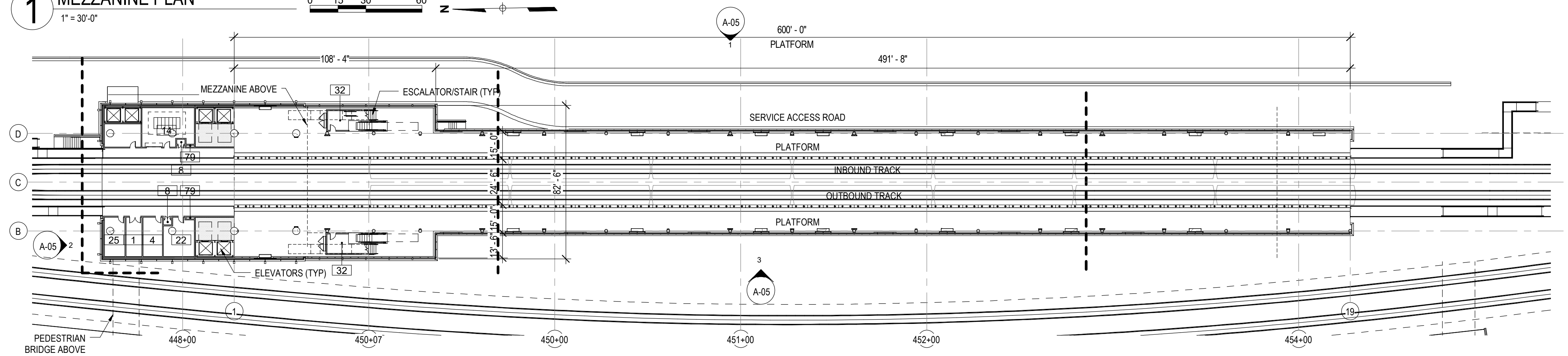
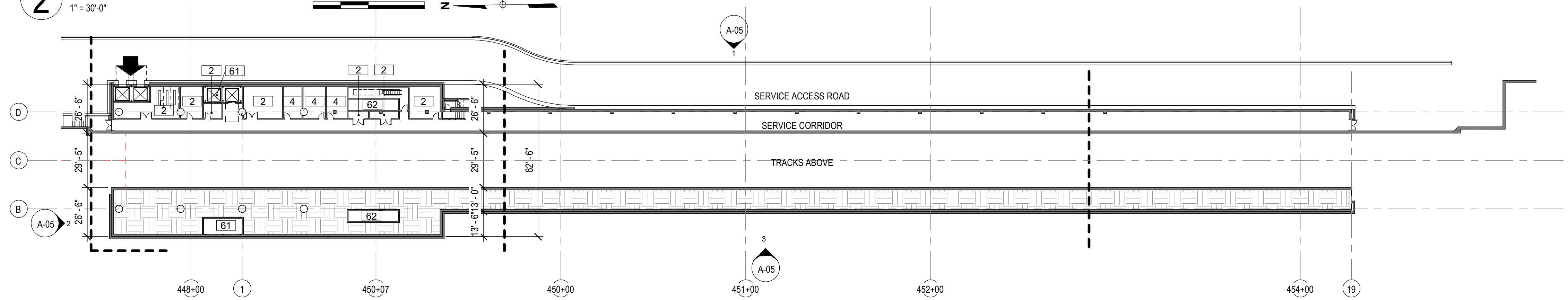


1 MEZZANINE PLAN
1" = 30'-0"



2 PLATFORM PLAN
1" = 30'-0"



3 SERVICE LEVEL PLAN
1" = 30'-0"

ROOM KEY

MARK	NAME
1	MECHANICAL ROOM
2	
4	
5	TRAIN CONTROL ROOM
8	FIRE EQUIPMENT CABINET
10	Room
11	Room
11P	PUBLIC UNISEX WASHROOM
11W	WOMENS STAFF RESTROOM
12	Room
12M	MENS STAFF RESTROOM
13	BATTERY ROOM
14	D.C. TIE BREAKER ROOM
15	AC SWITCHGEAR
16	EXIST. TRACTION POWER BLDG.
17	11P
18	11P
20	EDR
21	CABLE VAULT
22	ELEVATOR MACHINE ROOM
23	EJECTOR ROOM
24	CART STORAGE
25	ELECTRICAL CABINET ROOM
26	COMMUNICATIONS ROOM
27	WATER SERVICE ROOM
28	ELECTRICAL CABINET ROOM
29	FIRE EQUIPMENT CABINET
30	PLNT STORAGE
32	ESCALATOR CONTROL ROOM
37	STORAGE
61	ELEVATOR PIT
62	ESCALATOR PIT
64	ELECTRICAL CLOSET
65	BREAK/LOCKER ROOM
68	ESCALATOR CONTROL ROOM
69	ELEVATOR MACHINE ROOM
71	BIKE STORAGE
77	YARD STORAGE
79	EMERGENCY TRIP STATION
81	AREA OF RESCUE ASSISTANCE
82	SERVICE CRAWL SPACE

PLOT BY: Christie Metger PLOT TIME: 5/10/2005 12:24 PM

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DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. ______
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ______
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
STATION FLOOR PLANS

SHEET 29 OF 37

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Scale
1" = 30'-0"
File Name

Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
254992	A-03	29

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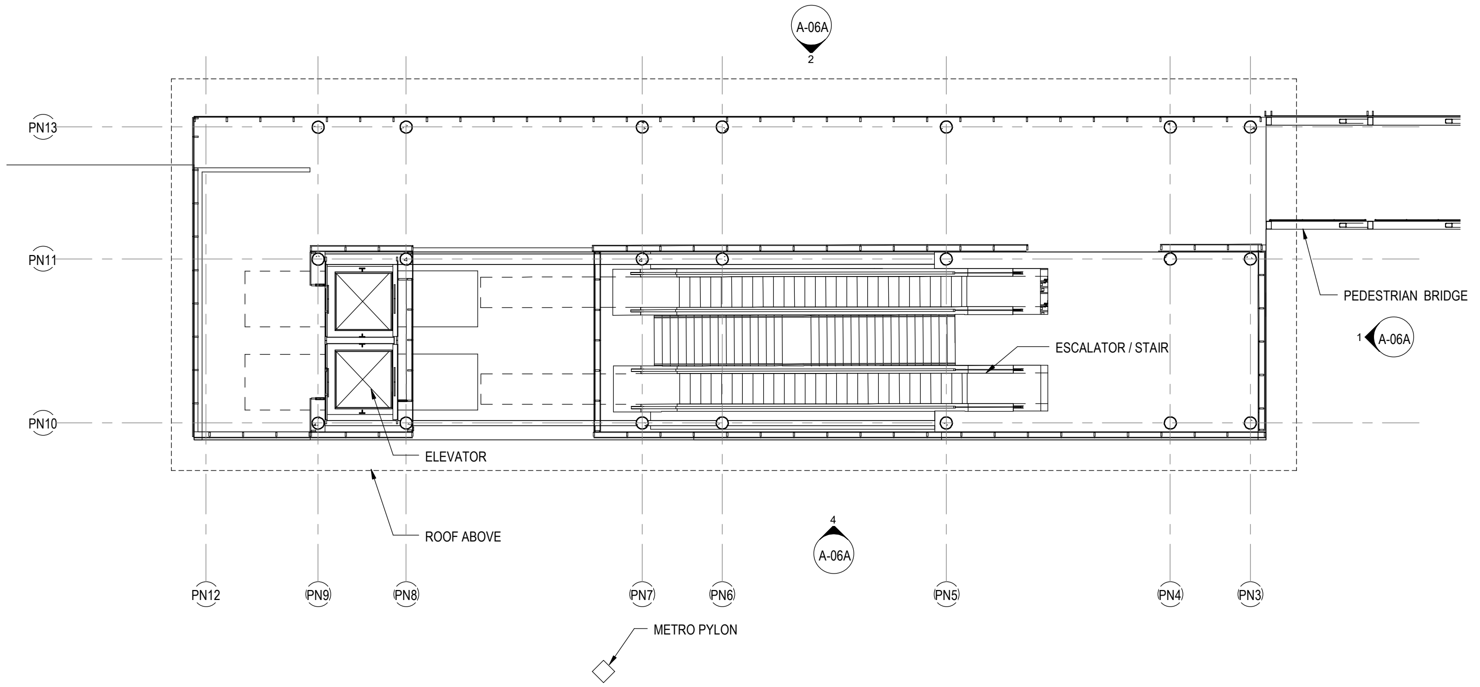
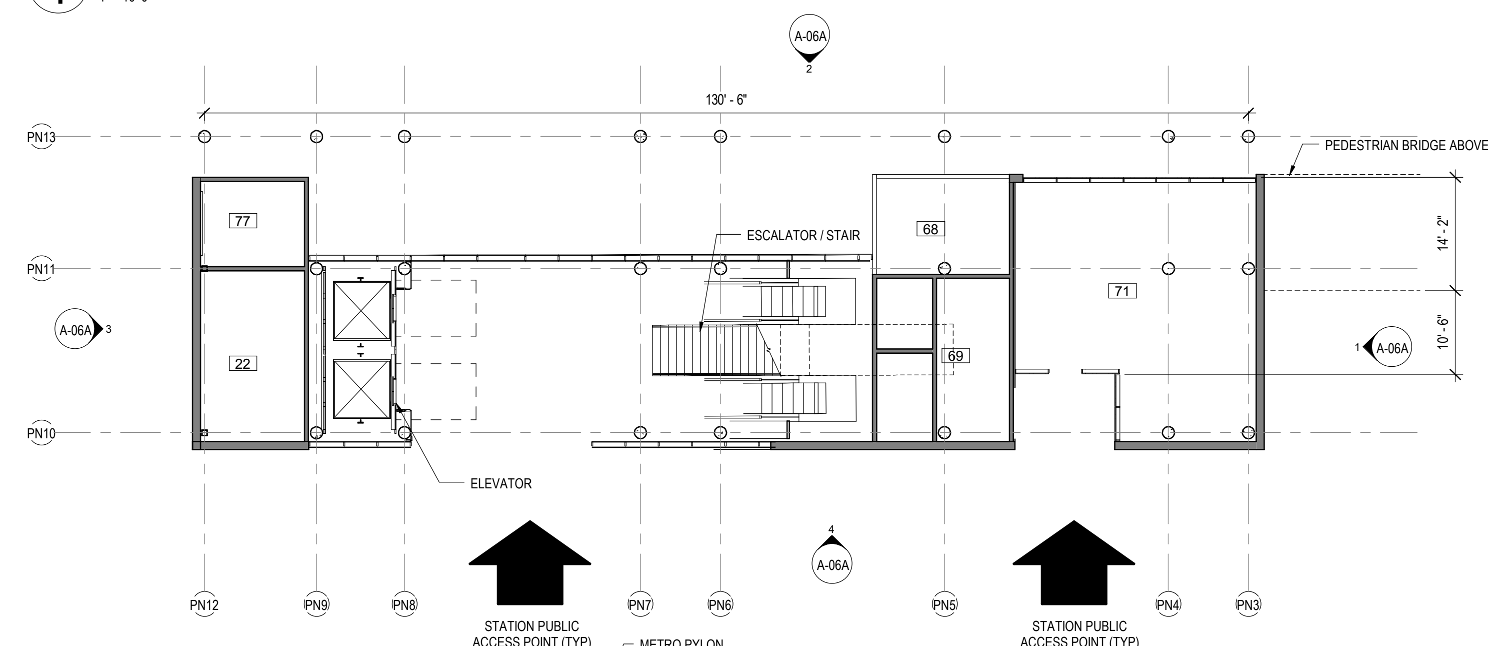


1 ENTRANCE PAVILION PLAN AT MEZZANINE LEVEL

1" = 10'-0"

0' 15' 30' 60'



2 ENTRANCE PAVILION PLAN AT GROUND LEVEL

1" = 10'-0"

0' 15' 30' 60'

ROOM KEY

MARK	NAME
1	MECHANICAL ROOM
2	
4	
5	TRAIN CONTROL ROOM
8	FIRE EQUIPMENT CABINET
10	Room
11	Room
11P	PUBLIC UNISEX WASHROOM
11W	WOMENS STAFF RESTROOM
12	Room
12M	MENS STAFF RESTROOM
13	BATTERY ROOM
14	D.C. TIE BREAKER ROOM
15	AC SWITCHGEAR
16	EXIST. TRACTION POWER BLDG.
17	11P
18	11P
20	EDR
21	CABLE VAULT
22	ELEVATOR MACHINE ROOM
23	EJECTOR ROOM
24	CART STORAGE
25	ELECTRICAL CABINET ROOM
26	COMMUNICATIONS ROOM
27	WATER SERVICE ROOM
28	ELECTRICAL CABINET ROOM
29	FIRE EQUIPMENT CABINET
30	PLNT STORAGE
32	ESCALATOR CONTROL ROOM
37	STORAGE
61	ELEVATOR PIT
62	ESCALATOR PIT
64	ELECTRICAL CLOSET
65	BREAK/LOCKER ROOM
68	ESCALATOR CONTROL ROOM
69	ELEVATOR MACHINE ROOM
71	BIKE STORAGE
77	YARD STORAGE
79	EMERGENCY TRIP STATION
81	AREA OF RESCUE ASSISTANCE
82	SERVICE CRAWL SPACE

PLOT BY: Christie Maiger PLOT TIME: 5/10/2005 12:24 PM

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

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SITE PLAN NO. ______

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ______
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
ENTRANCE PAVILION

SHEET 30 OF 37

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Scale
1" = 10'-0"
File Name

Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
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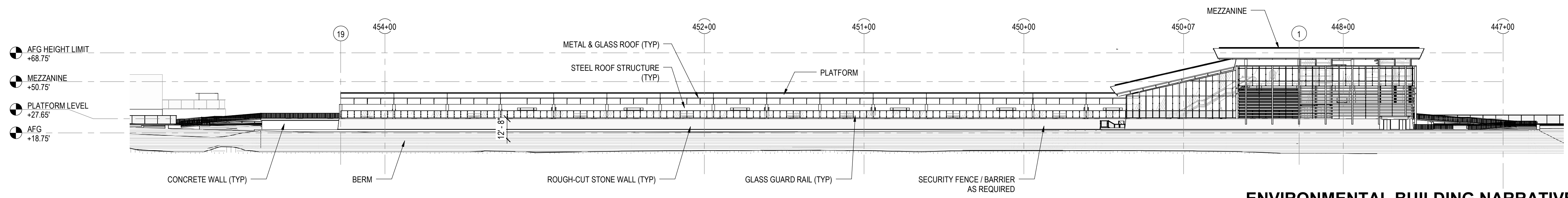


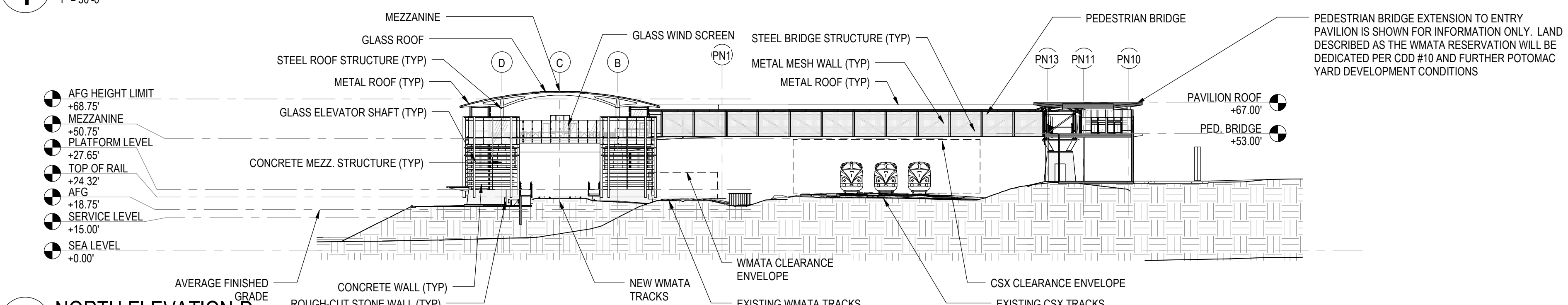
1 EAST ELEVATION-D

1" = 30'-0"

0' 15' 30' 60'

ENVIRONMENTAL BUILDING NARRATIVE

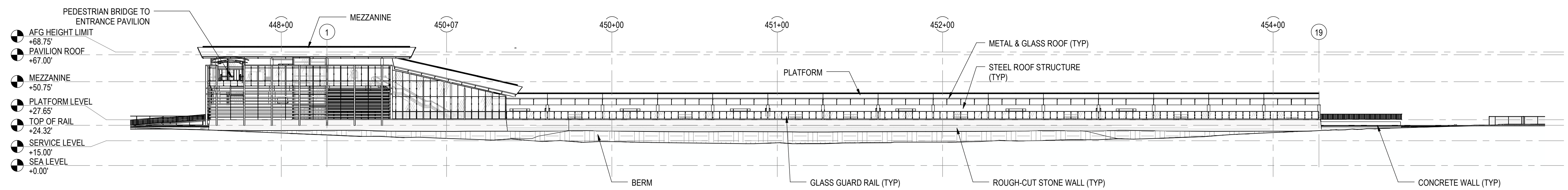
A RESOLUTION PASSED BY THE WASHINGTON METROPOLITAN AREA TRANSITS AUTHORITY (WMATA) BOARD OF DIRECTORS REQUIRES ALL NEW FACILITIES TO BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL ACHIEVE A MINIMUM LEED SILVER CERTIFICATION AS DEFINED UNDER THE LATEST EDITION OF THE US GREEN BUILDING COUNCIL (USGBC) FOR NEW CONSTRUCTION.



2 NORTH ELEVATION-D

1" = 30'-0"

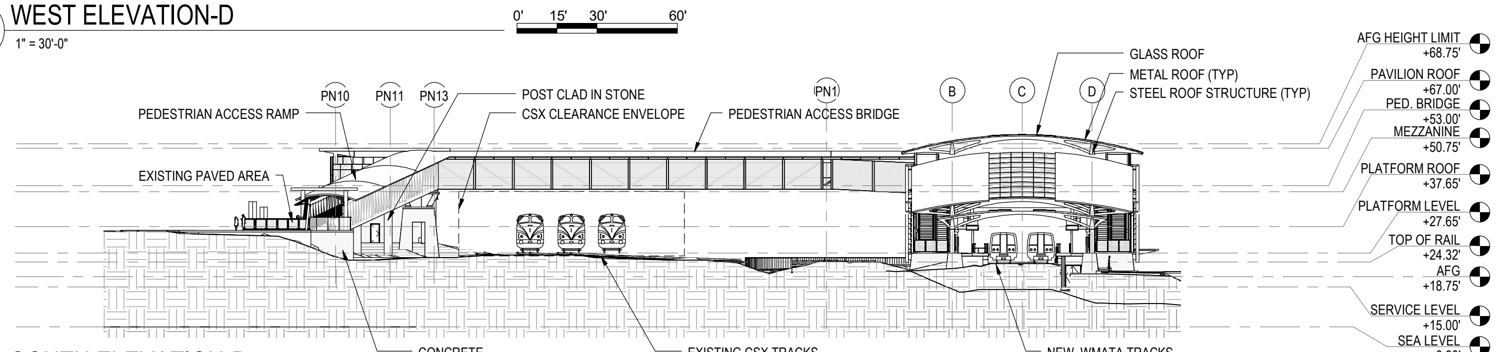
0' 15' 30' 60'



3 WEST ELEVATION-D

1" = 30'-0"

0' 15' 30' 60'



4 SOUTH ELEVATION-D

1" = 30'-0"

0' 15' 30' 60'

APPROVED

SPECIAL USE PERMIT NO. ____________

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. ____________

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED ____________

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
BUILDING ELEVATIONS

SHEET 31 OF 37

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Scale
1" = 30'-0"

File Name

Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
254992	A-05	31

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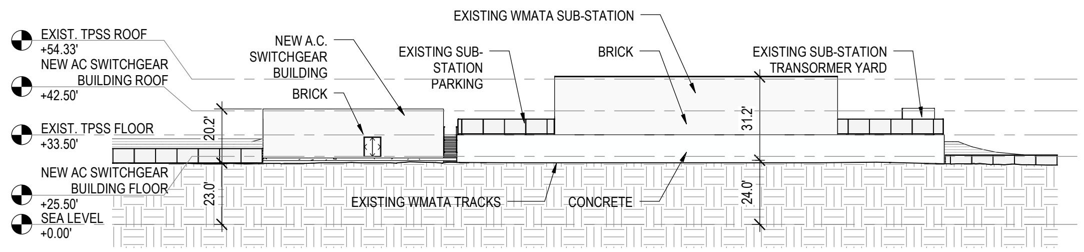
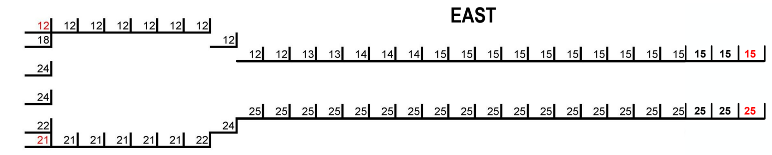


1 SUB-STATION EAST ELEVATION

1" = 30'-0"

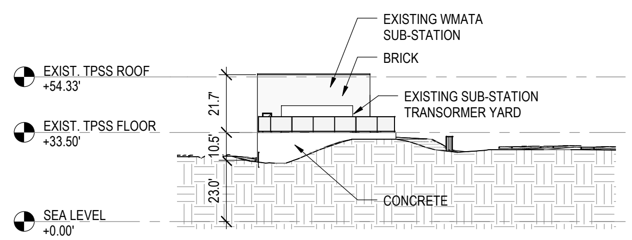
0' 15' 30' 60'

AVERAGE FINISHED GRADE: ELEVATION LOCATION PLAN



AVERAGE FINISHED GRADE: CALCULATION TABLE

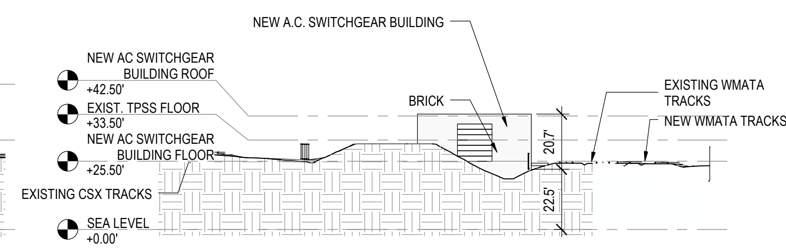
	DISTANCE	GRADE
1	0	15
2	20	15
3	40	15
4	60	15
5	80	15
6	100	15
7	120	15
8	140	15
9	160	15
10	180	15
11	200	15
12	220	14.8
13	240	14.4
14	260	14
15	280	13.6
16	300	13.2
17	320	12.8
18	340	12.4
19	360	12
20	380	12
21	400	12
22	420	12
23	440	12
24	460	12
25	480	12
26	500	12
27	520	12
28	540	17.75
29	560	23.5
30	580	23.5
31	600	22
32	620	20.5
33	640	20.7
34	660	20.9
35	680	21
36	700	21.1
37	720	21.3
38	740	21.5
39	760	24
40	780	24.5
41	800	24.5
42	820	24.5
43	840	24.5
44	860	24.5
45	880	24.5
46	900	24.5
47	920	24.5
48	940	24.5
49	960	24.5
50	980	24.5
51	1000	24.5
52	1020	24.5
53	1040	24.5
54	1060	24.5
55	1080	24.5
56	1100	24.5
57	1120	23
58	1140	21.5
	Total	**18.74052**



2 SUB-STATION NORTH ELEVATION

1" = 30'-0"

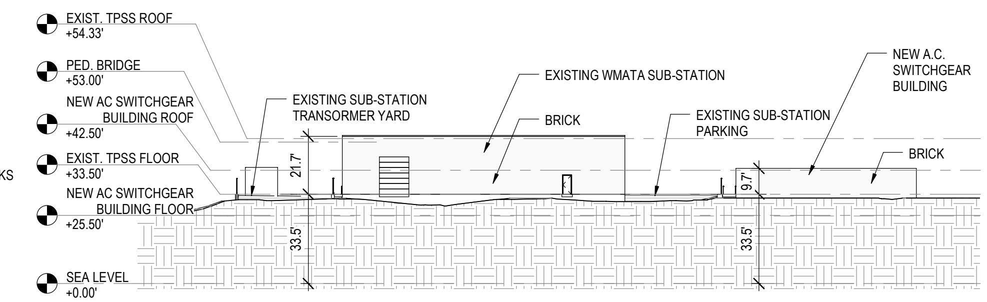
0' 15' 30' 60'



4 SUB-STATION SOUTH ELEVATION

1" = 30'-0"

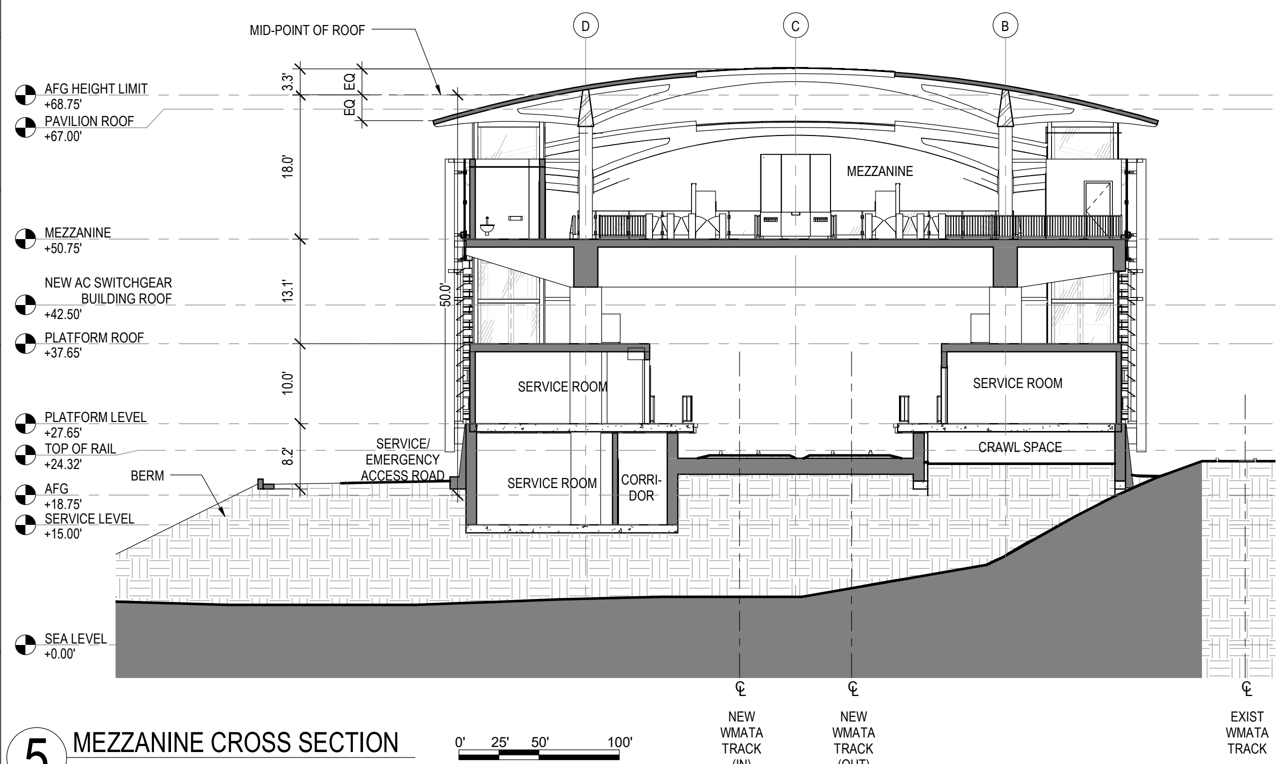
0' 15' 30' 60'



3 SUB-STATION WEST ELEVATION

1" = 30'-0"

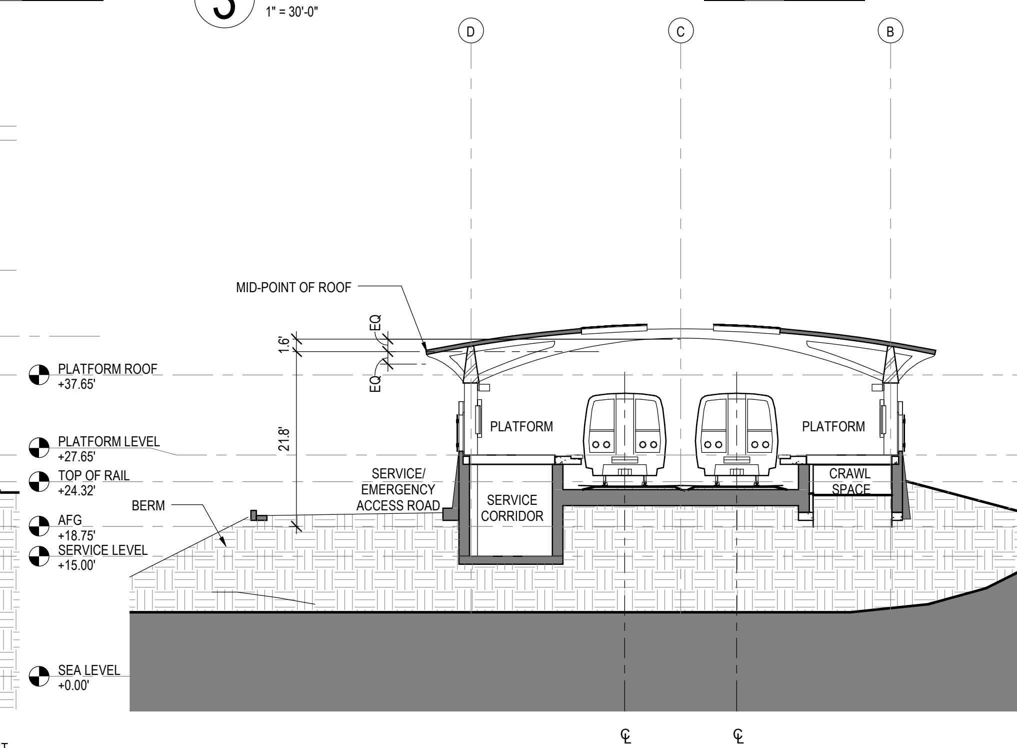
0' 15' 30' 60'



5 MEZZANINE CROSS SECTION

1" = 10'-0"

0' 25' 50' 100'



6 PLATFORM CROSS SECTION

1" = 10'-0"

0' 25' 50' 100'

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DEPARTMENT OF PLANNING & ZONING

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Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
BUILDING ELEVATION & SECTIONS

SHEET 32 OF 37

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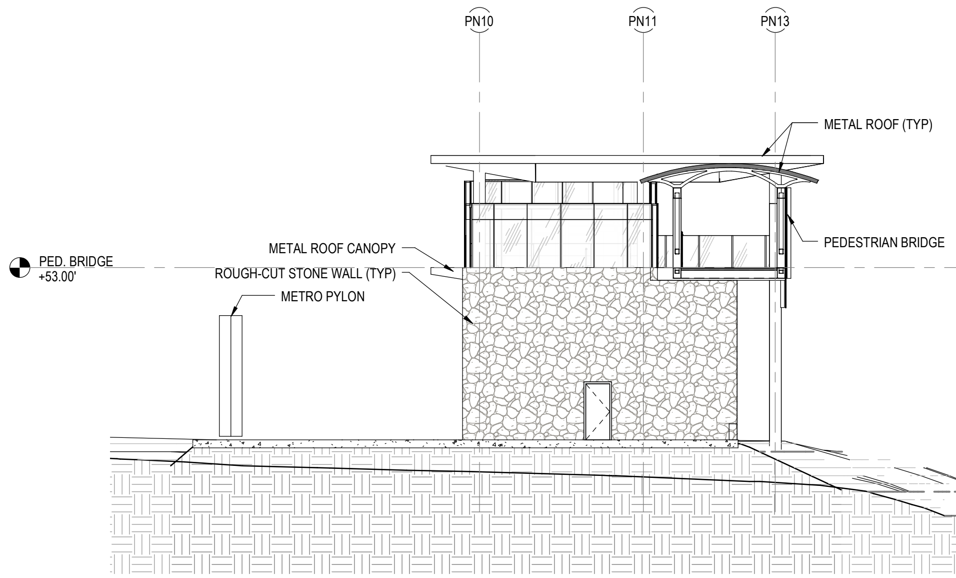
File Name

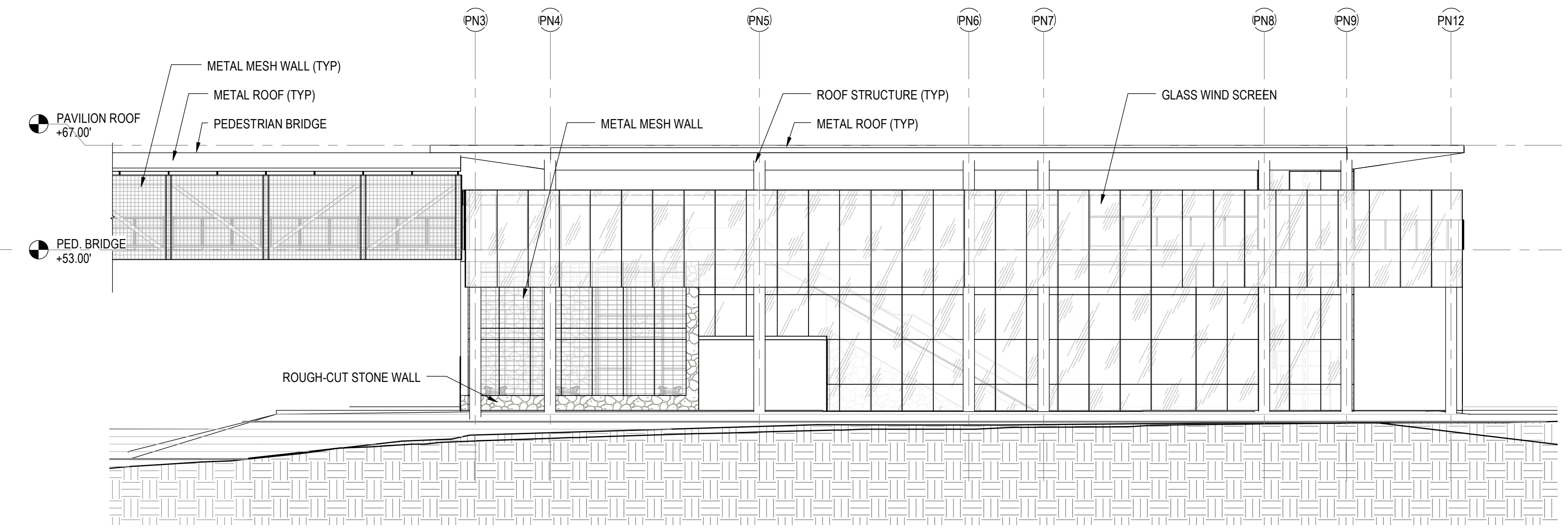
Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
254992	A-06	32

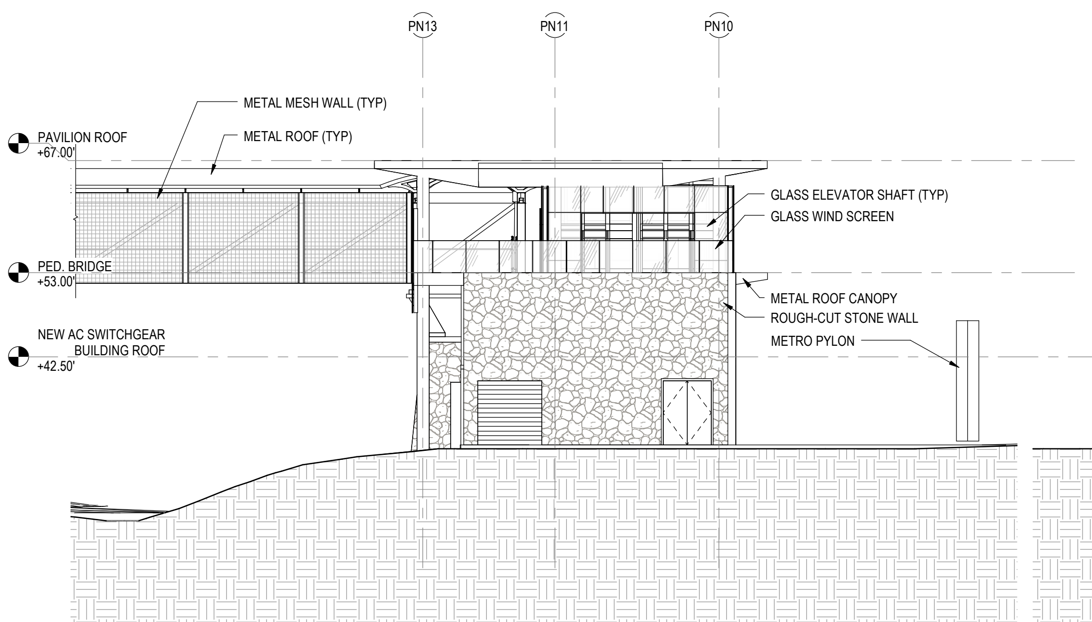
PLOT BY: Christie Melgar PLOT TIME: 5/10/2005 12:24 PM



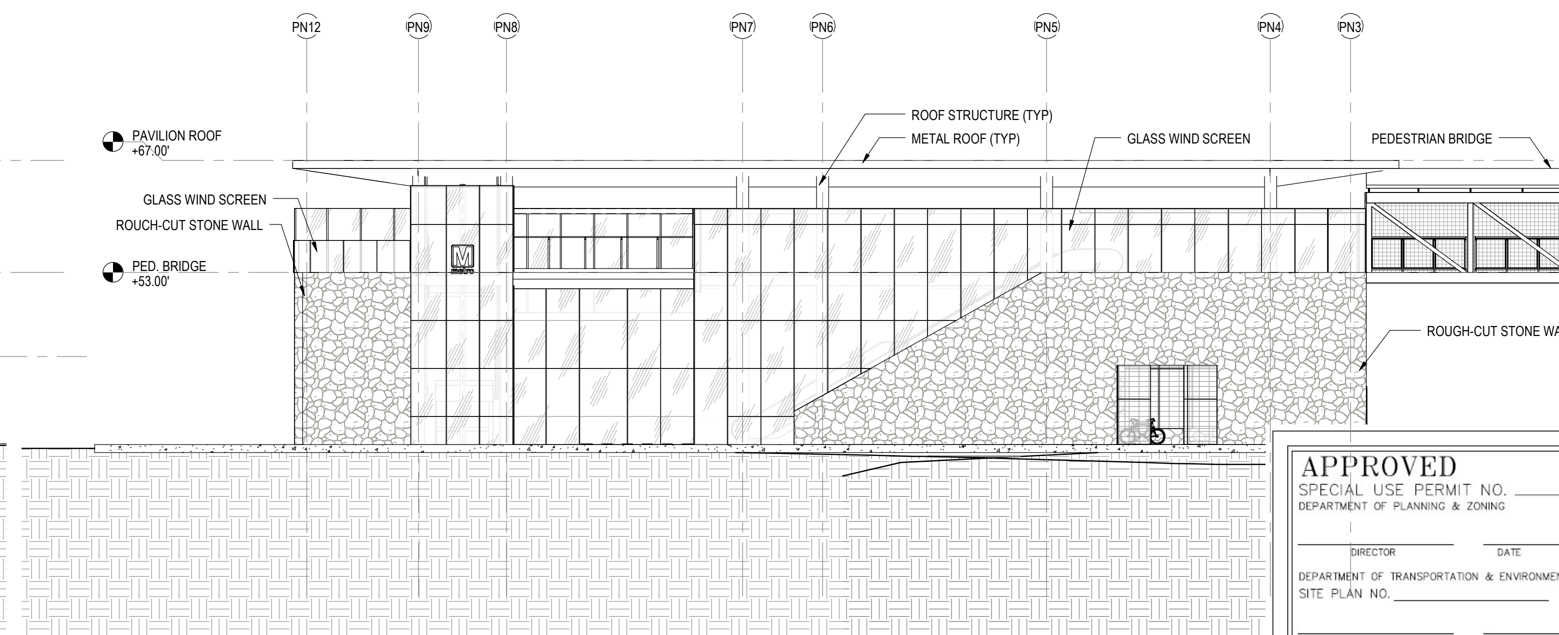
1 ENTRANCE PAVILION NORTH ELEVATION
1" = 10'-0"
0' 25' 50' 100'



2 ENTRANCE PAVILION WEST ELEVATION
1" = 10'-0"
0' 25' 50' 100'



3 ENTRANCE PAVILION SOUTH ELEVATION
1" = 10'-0"
0' 25' 50' 100'



4 ENTRANCE PAVILION EAST ELEVATION
1" = 10'-0"
0' 25' 50' 100'

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Issue	Date	By	Chkd	Appd

Client
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Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
ENTRANCE PAVILION ELEVATIONS

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1" = 10'-0"
File Name

Drawing Status
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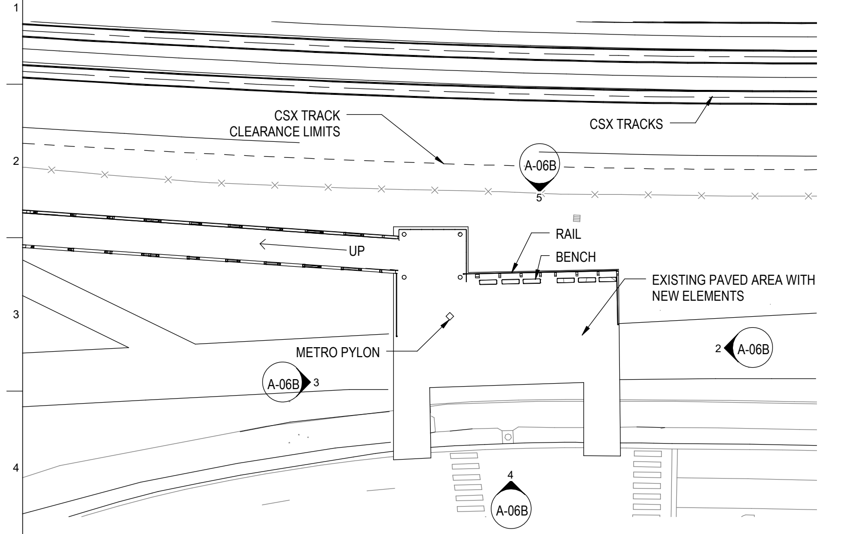
Job No	Drawing No	Issue
254992	A-06A	33

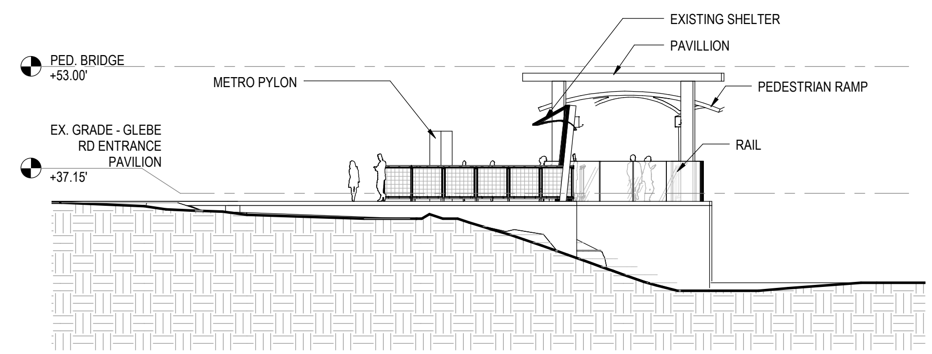
PLOT TIME: 5/10/2005 12:24 PM
PLOT BY: Christie Melgar



1 GLEBE PAVILION PLAN AT GROUND LEVEL

1" = 30'-0"

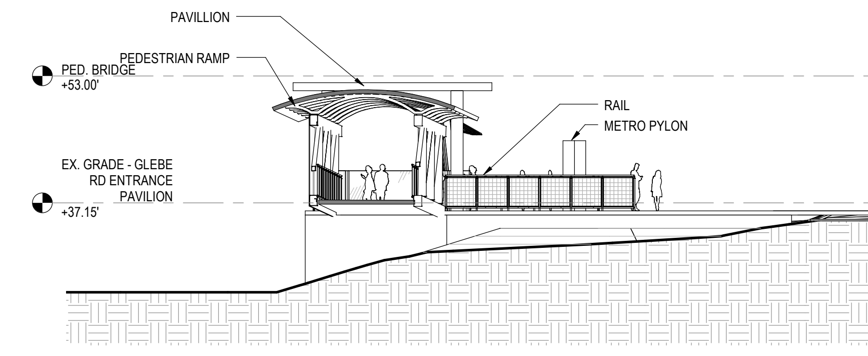
0' 15' 30' 60'



2 GLEBE PAVILION NORTH ELEVATION

1" = 10'-0"

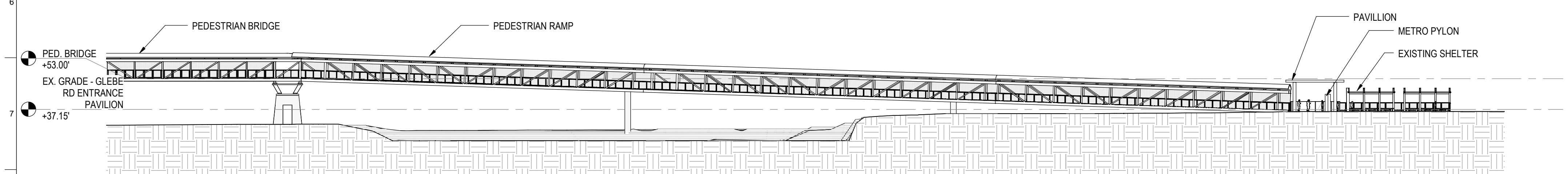
0' 25' 50' 100'



3 GLEBE PAVILION SOUTH ELEVATION

1" = 10'-0"

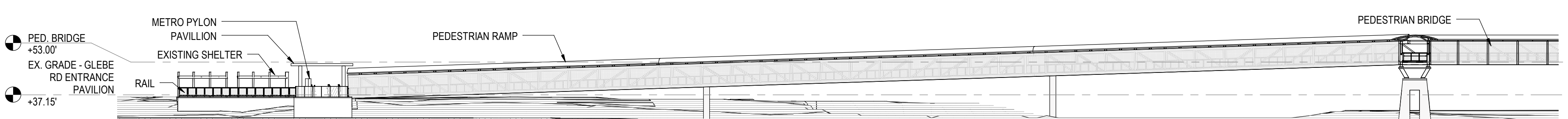
0' 25' 50' 100'



4 GLEBE PAVILION EAST ELEVATION

1" = 30'-0"

0' 15' 30' 60'



5 GLEBE PAVILION WEST ELEVATION

1" = 30'-0"

0' 15' 30' 60'

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DEPARTMENT OF PLANNING & ZONING

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SITE PLAN NO. ____________

DIRECTOR DATE

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Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
GLEBE PAVILION

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Job No	Drawing No	Issue
254992	A-06B	34

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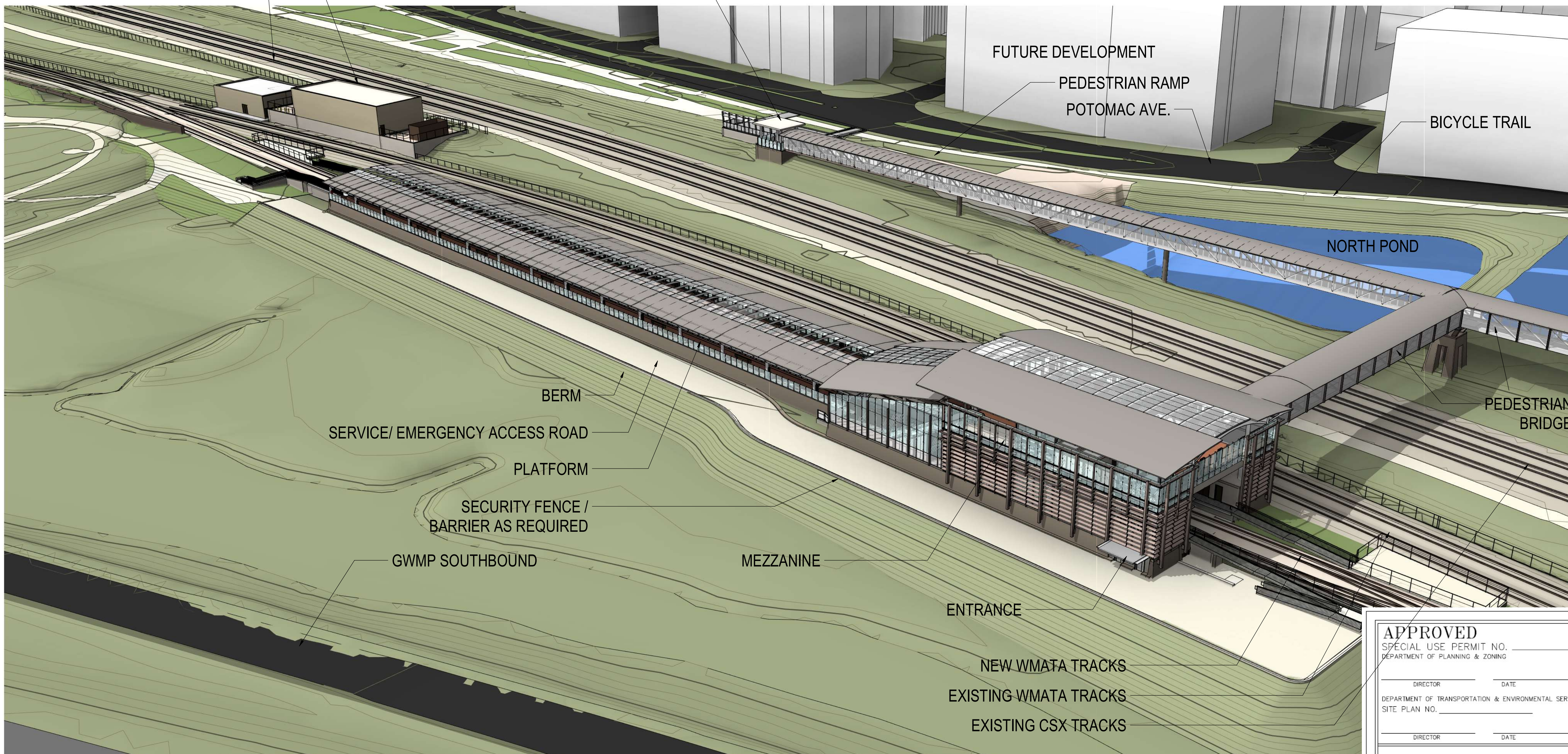

N

0' 10' 20' 40'

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DIRECTOR DATE

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SITE PLAN NO. ______

DIRECTOR DATE

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PLOT BY: Christie Melgar

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Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
OVERHEAD PERSPECTIVE

SHEET 35 OF 37

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Drawing Status
DSUP DRAWINGS

Job No	Drawing No	Issue
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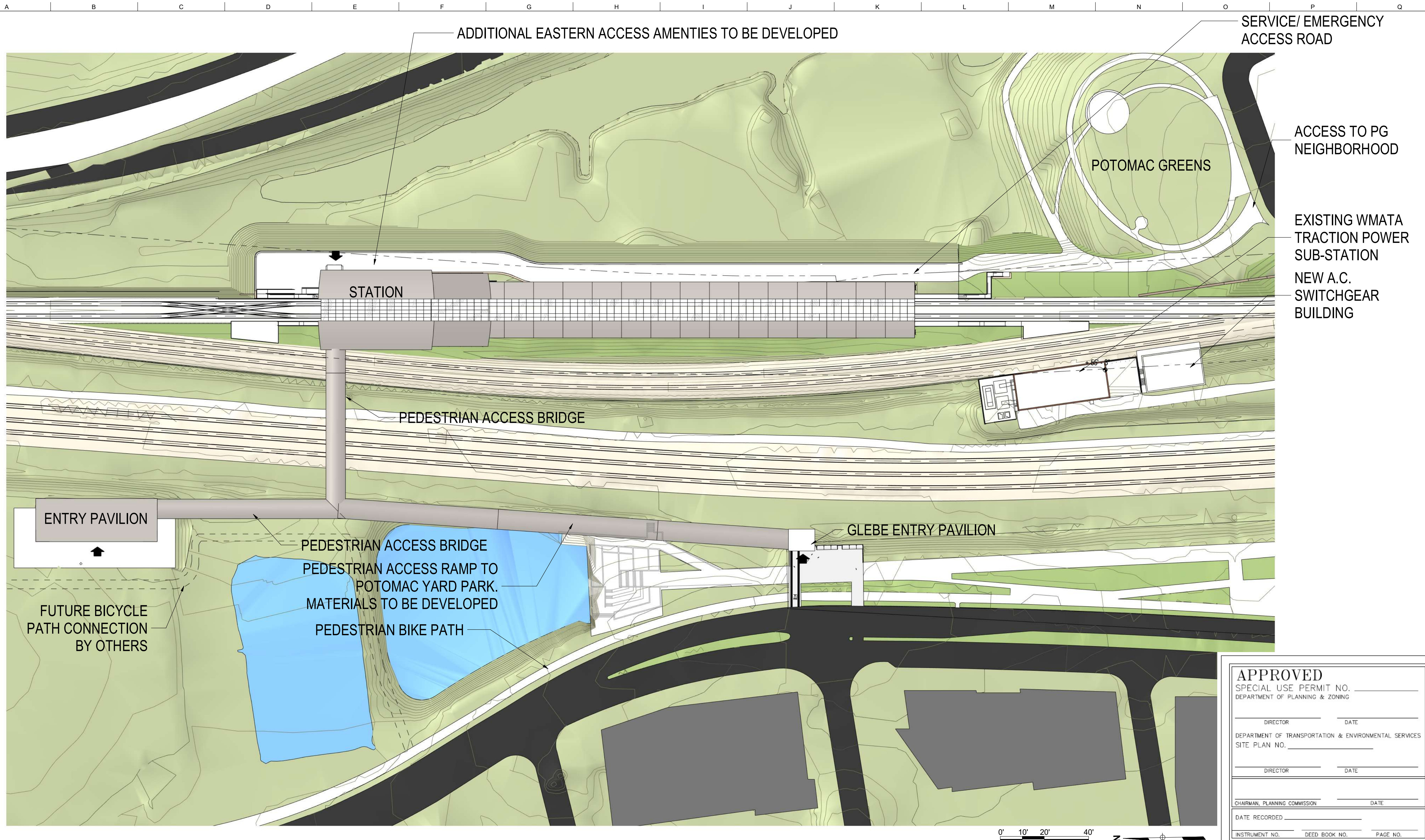

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SITE PLAN NO. ________

DIRECTOR | DATE

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Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
ILLUSTRATIVE PLAN

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1" = 50'-0"

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Job No	Drawing No	Issue
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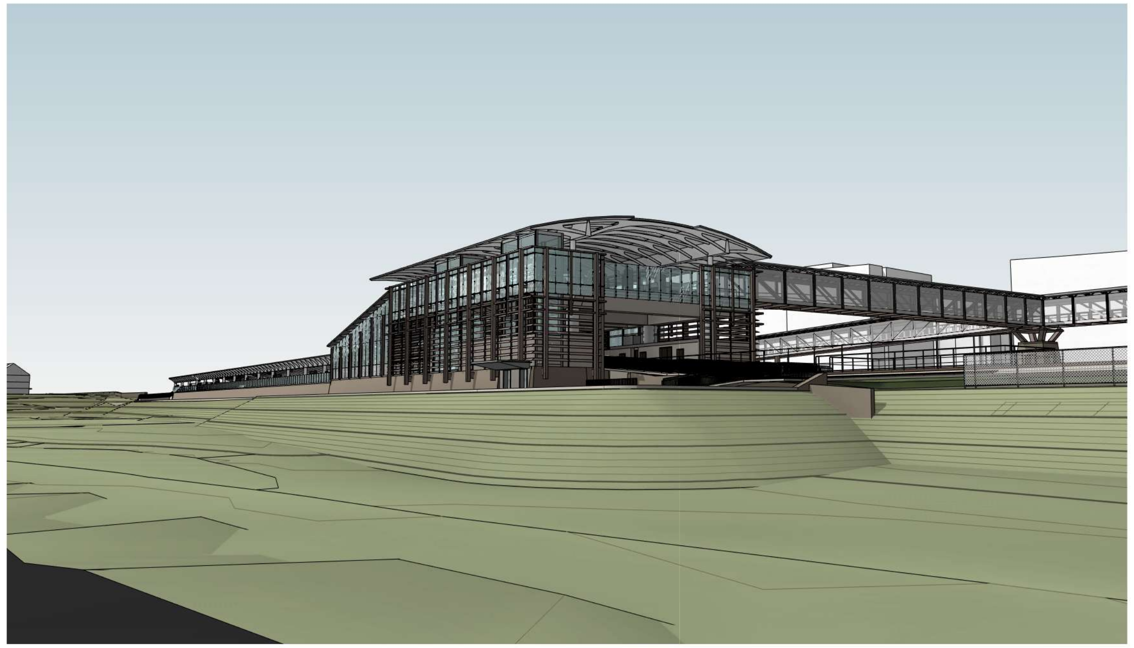
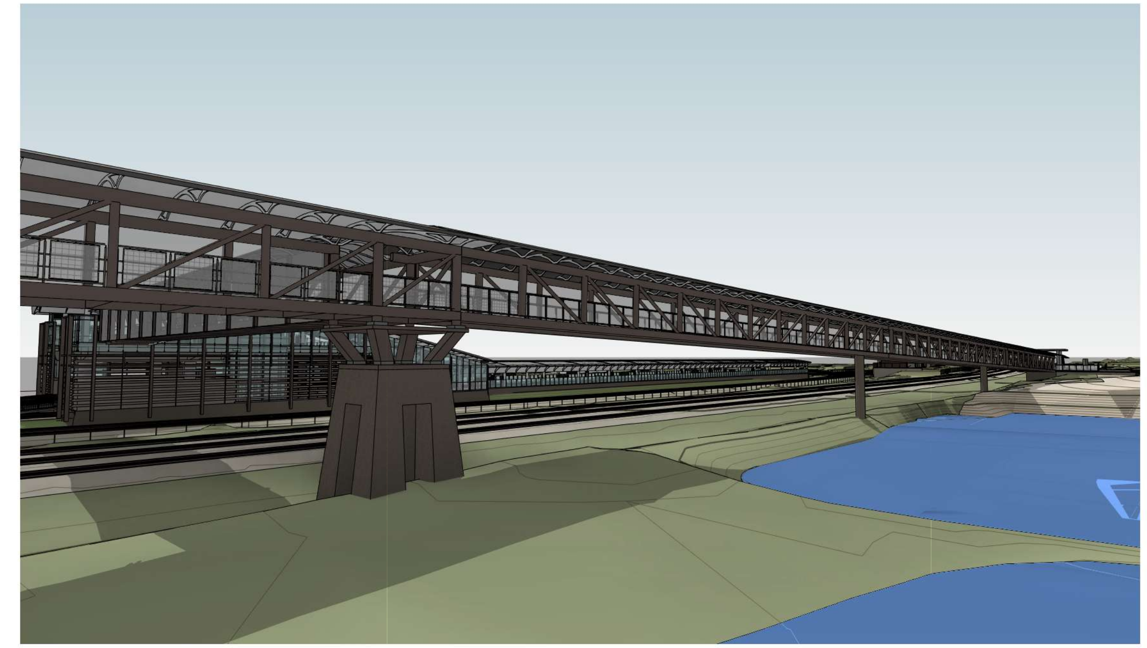
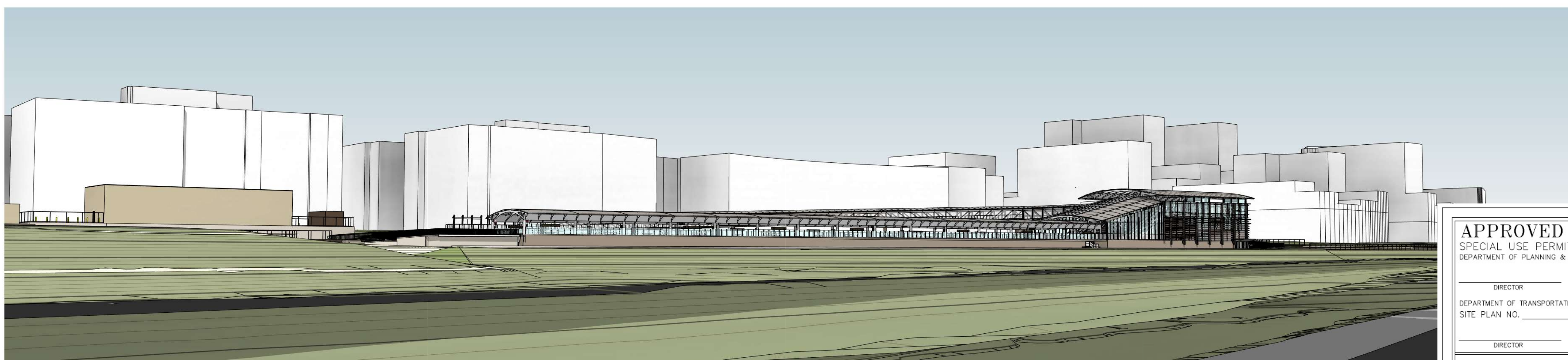


1 GWMP SOUTHBOUND VIEW LOOKING SW



2 NORTH POND VIEW LOOKING SE



3 GWMP NORTHBOUND VIEW LOOKING NW

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Issue	Date	By	Chkd	Appd

Client
WASHINGTON METROPOLITAN AREA TRANSIT AUTHORITY

Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
ILLUSTRATIVE VIEWS

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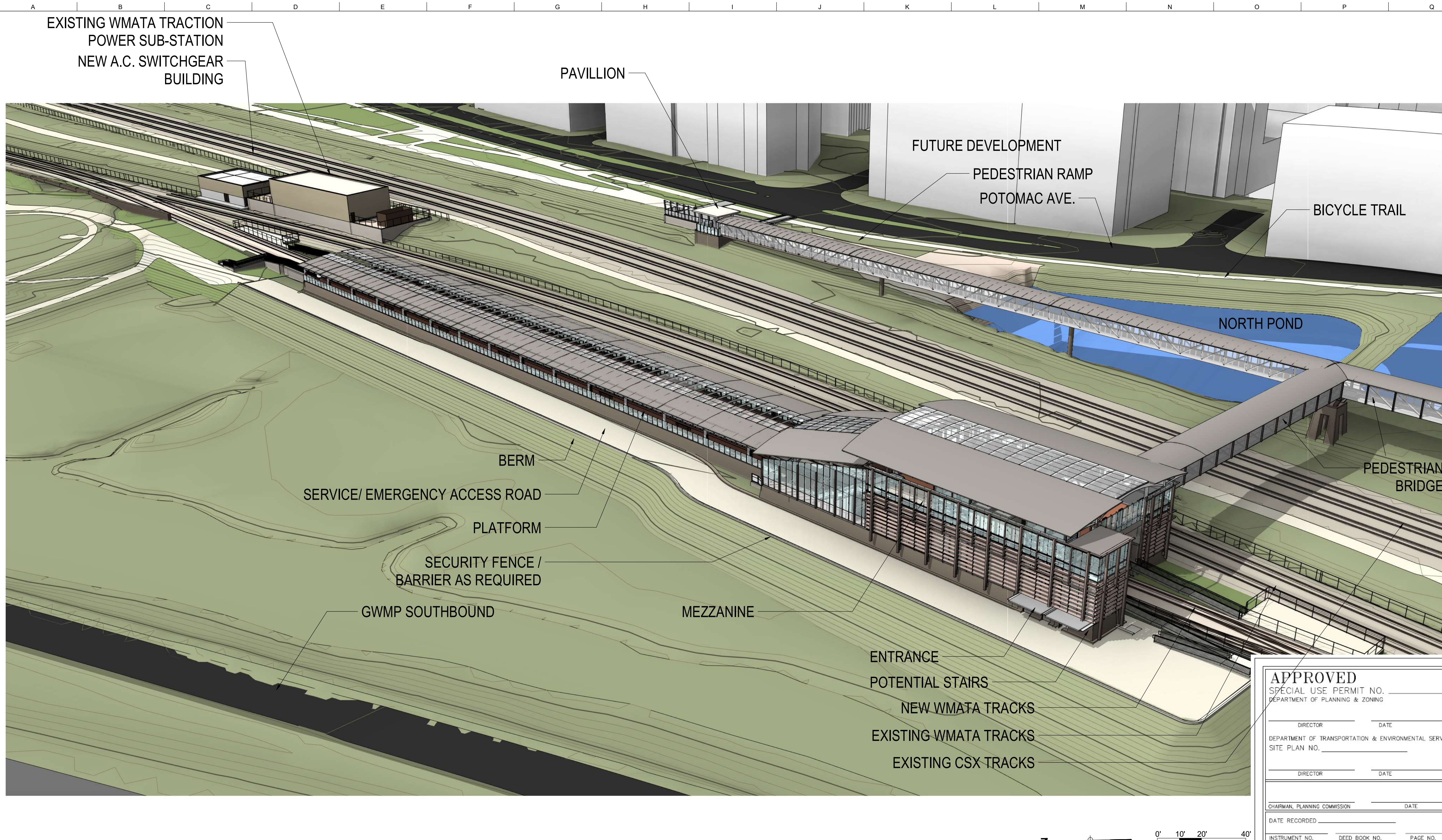

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DIRECTOR ________ DATE ________

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SITE PLAN NO. ________

DIRECTOR ________ DATE ________

CHAIRMAN, PLANNING COMMISSION ________ DATE ________

DATE RECORDED ________

INSTRUMENT NO. ________ DEED BOOK NO. ________ PAGE NO. ________

Issue	Date	By	Chkd	Appd

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Key Plan

Job Title
POTOMAC YARD METRORAIL STATION

Drawing Title
OVERHEAD PERSPECTIVE

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Job No	Drawing No	Issue
254992	XX	35