PRGS REDEVELOPMENT
PRELIMINARY INFRASTRUCTURE DEVELOPMENT SITE PLAN
ALEXANDRIA, VIRGINIA

NARRATIVE DESCRIPTION OF DEVELOPMENT

THIS SITE IS BORDERED TO THE NORTH BY SLATERS LANE; TO THE SOUTH BY CITY OF ALEXANDRIA PROPERTY; TO THE EAST BY POTOMAC RIVER; AND TO THE WEST BY NORFOLK SOUTHERN CORPORATION. THE SITE IS CURRENTLY ZONED COORDINATED DEVELOPMENT DISTRICT (CDD #30).

THE EXISTING SITE IS FORMER POTOMAC RIVER GENERATING STATION.

THIS INFRASTRUCTURE PLAN PROVIDES THE PROPOSED STREET NETWORK AND SUPPORTING UTILITIES FOR THE ULTIMATE DEVELOPMENT. THE ROADS PROPOSED WITH THIS PROJECT INCLUDE NORTH FAIRFAX STREET (PRIVATE), PROPOSED ROAD A (PUBLIC), PROPOSED ROAD B (PRIVATE), PROPOSED ROAD C (PRIVATE) AND PROPOSED ROAD D (PRIVATE). THE PROPOSED UTILITIES INCLUDE STORM, WATER, SANITARY AND DRY UTILITIES. SOME OF THE EXISTING UTILITIES WILL REMAIN, AS SHOWN ON THIS PLAN. THE ULTIMATE SIDEWALKS AND STREETSCAPES WILL BE PROPOSED AND BUILT WITH THE DSUPS OF THE CORRESPONDING BLOCK THAT THE SIDEWALK FRONTS. THE EXISTING PUMP HOUSE AND GATE HOUSE WILL REMAIN. THE CONNECTION OF SLATERS LANE WITH PROPOSED ROAD A WILL BE RE-DESIGNED WITH THIS PLAN TO ALLOW FOR VEHICLES TO TURN RIGHT FROM SLATERS LANE TO PROPOSED ROAD A AND FOR VEHICLES TO TURN LEFT FROM PROPOSED ROAD A TO SLATERS LANE. A PEDESTRIAN CROSSING WILL ALSO BE PROVIDED AT THIS CONNECTION.

THE ULTIMATE BUILD OUT OF THIS SITE WILL INCLUDE MIXED-USE BUILDINGS (RETAIL, OFFICE, HOTEL, ARTS AND MULTIFAMILY).AND WILL BE PROCESSED UNDER SEPARATE BLOCK DSUPs.

ACCESS TO THE SITE WILL BE FROM FAIRFAX STREET AND SLATERS LANE.

IDSP APPLICATION

1. DEVELOPMENT SITE PLAN WITH PRELIMINARY SITE PLAN.

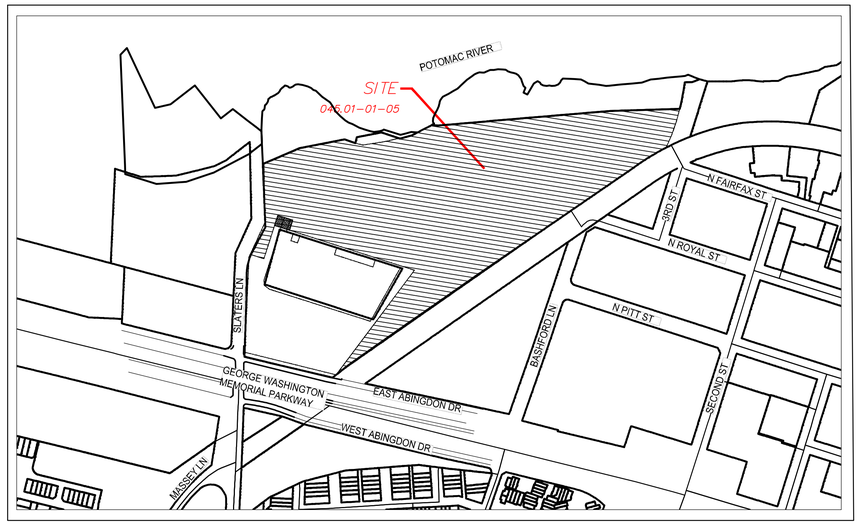
LIST OF EXISTING APPROVALS:

- MASTER PLAN AMENDMENT #2022-00001
- MASTER PLAN AMENDMENT #2022-00002
- TEXT AMENDMENT #2022-00006
- TEXT AMENDMENT #2022-00007
- REZONING #2022-00003
- REZONING #2022-00004
- CDD CONCEPTUAL DESIGN PLAN #2021-00004

LIST OF REQUESTED SITE PLANS AND AMENDMENTS:

- IDSP WITH PRELIMINARY INFRASTRUCTURE SITE PLAN
- SUBDIVISION APPLICATION WITH PRELIMINARY SUBDIVISION PLAT

VICINITY MAP
SCALE 1"= 300'



SHEET INDEX

C000	COVER SHEET
C100	NOTES AND TABULATIONS
C101	CONTEXTUAL PLAN
C102-C104	PUBLIC VS. PRIVATE ROAD AND EASEMENT EXHIBIT
C200	OVERALL EXISTING CONDITIONS PLAN
C200A-C200C	TREE SCHEDULE
C201-C204	EXISTING CONDITIONS PLAN
C205-C206	TREE PRESERVATION PLAN - NORTHWEST
C207	TREE PRESERVATION PLAN - WEST
C208	TREE PRESERVATION PLAN - SOUTH
C209	TREE PRESERVATION PLAN - EAST
C210-C215	TREE PRESERVATION PLAN NOTES AND DETAILS
C216	LANDSCAPE MANAGEMENT PLAN
C300	OVERALL SITE PLAN
C301-C304	SITE PLAN
C305-C306	DIMENSIONS PLAN
C307-C309	PRELIMINARY PAVEMENT MARKING & SIGNING OVERVIEW
C400A	OVERALL UTILITY PLAN
C400-C403	UTILITY PLAN
C404	FIRE SAFETY PLAN
C500-C503	GRADING PLAN
C600	PRE DEVELOPMENT IMPERVIOUS
C601	POST DEVELOPMENT IMPERVIOUS
C602	SWM COMPUTATIONS AN NARRATIVES
C602A	EX. PEPCO HYDROGRAPHS
C602B	FINAL DESIGN SWM COMPUTATIONS
C603	BMP COMPUTATIONS AND DETAILS
C604-C607	SWM-BMP PLAN
C608-C609	BMP COMPUTATIONS
C610	MAJOR WQIA AND ADEQUATE OUTFALL ANALYSIS
C612	OVERALL DRAINAGE AREA MAP
C613-C617	DRAINAGE AREA MAP
C618-C619	STORM SEWER COMPUTATIONS
C700-C701	SANITARY SEWER PLAN
C702-C703	SANITARY SEWER COMPUTATIONS
C800-C807	SIGHT DISTANCE PLAN AND PROFILE
C900-C912	INTERSECTION MANEUVERING STUDY
A300	OPEN SPACE & CIRCULATION PLAN
A400	STORM PIPE SECTIONS
A500	UTILITY PHASING PLAN
A900	ROADWAY AND OPEN SPACE SPECIFIC PHASING PLAN
A901-1	INFRASTRUCTURE CONDITIONS
A901-2	INFRASTRUCTURE CONDITIONS
L001	COMPREHENSIVE OPEN SPACE PLAN
L002	OPEN SPACE PRECEDENTS
L003-L004	WOONERF
L005	RETAINING WALL DETAILS
L100	LANDSCAPE SCHEDULE
L101-L102	LANDSCAPE PLAN

PROFESSIONAL SEAL AND SIGNATURE

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

DATE	REVISION
01-13-2023	COMPLETENESS SUBMISSION
03-10-2023	SECOND COMPLETENESS SUBMISSION

APPLICANT
HRP POTOMAC, LLC
1199 N FAIRFAX ST.
SUITE 808
ALEXANDRIA, VA 22314
312 796-6564
STEEN, SIOBHAN <SSteen@hilcoglobal.com>

CIVIL ENGINEER
christopher consultants,ltd.
4035 RIDGE TOP RD
SUITE 601 FAIRFAX,
VIRGINIA 22030
703 273-6820

TRAFFIC ENGINEER
GOROVE SLADE
225 REINEKERS LANE
SUITE 750
ALEXANDRIA, VIRGINIA 22314
703 721-3044

ATTORNEY
WIRE GILL
700 N FAIRFAX ST
Suite 600
ALEXANDRIA, VA 22314
703 836-5757

ARCHITECT
GENSLER
2020 K STREET NW
WASHINGTON, D.C. 20006
202 721-5200

LANDSCAPE ARCHITECT
OJB LANDSCAPE ARCHITECTURE
ONE BOWDOIN SQUARE,
SUITE 801
BOSTON, MASSACHUSETTS 02114
857 233-5171

SUSTAINABILITY CONSULTANT
ARUP
1120 CONNECTICUT AVENUE
SUITE 1110
WASHING, D.C. 20036
202 729-8220

DRY UTILITY CONSULTANT
RICHTER & ASSOCIATES
7519 STANDISH PLACE
SUITE 320
ROCKVILLE, MD 20855
301 548-7475

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: C000

112206

ZONING TABULATIONS

SITE ADDRESSES & TAX MAP NUMBERS:	045.01-01-05 (1300 N ROYAL ST.)
OWNER:	HRP POTOMAC, LLC
INSTRUMENT NUMBER:	200019599
EXISTING ZONE:	CDD-30
PROPOSED ZONE:	CDD-30
SMALL AREA PLAN DISTRICT:	OLD TOWN NORTH
EXISTING SITE AREA:	821,848 S.F. OR 18.86704 AC. (AFTER SUBDIVISION) SUBJECT TO CHANGE WITH THE DEDICATION OF ROAD A.
EXISTING USE:	FORMER POTOMAC RIVER GENERATING STATION
PROPOSED USE:	INFRASTRUCTURE
PROPOSED SITE AREA:	821,848 S.F. OR 18.86704 AC.
APPROXIMATE TOTAL AREA DISTURBED:	280,091 S.F. OR 6.43 AC. SUBJECT TO CHANGE WITH THE DEDICATION OF ROAD A.
EX. IMPERVIOUS AREA:	210,395 S.F. OR 4.83 AC.
PROP. IMPERVIOUS AREA:	280,091 S.F. OR 6.43 AC.
OPEN SPACE REQUIRED:	N/A
OPEN SPACE PROVIDED: (GROUND LEVEL)	N/A
OPEN SPACE BREAKDOWN:	N/A
PARKING REQUIRED:	N/A
PARKING PROVIDED:	N/A
EXISTING DAILY AVG. TRIPS:	0
PROPOSED DAILY AVG. TRIPS:	N/A

Trip Generation Analysis – Proposed (without Mode Split Reductions)

Use	ITE Land Use Code	Amount	Units	AM Peak Hour	PM Peak Hour	ADT
General Office Building	710	865,235	Gross Floor Area	727	753	10,031
Multifamily Housing (High-Rise)	222	1,106	Dwelling Units	299	354	5,021
Supermarket	850	20,000	Gross Floor Area	57	179	1,877
Shopping Center	820	67,755	Gross Floor Area	64	258	2,558
Hotel	310	296	Rooms	136	175	2,365
Museum (Arts Space)	580	19,900	Gross Floor Area	6	4	70
			Total	1,289	1,723	21,922

TRIP GENERATION IS BASED ON A CONSERVATIVE DEVELOPMENT PROGRAM CONTAINED IN THE MULTIMODAL TRANSPORTATION STUDY, AND IS SUBJECT TO CHANGE AS BLOCK PLANS ARE FURTHER DEVELOPED

UTILITY CONTACTS:

WASHINGTON GAS
MR, PAT ESTRADA-PALMA
6801 INDUSTRIAL ROAD
SPRINGFIELD, VA 22151
(703) 750-4289

VERIZON
MR, STEVE H PURYEAR, SUPERVISOR-ENGINEERING
2980 FAIRVIEW PARK DRIVE, 6TH FLOOR
FALLS CHURCH, VA 22042
(703) 204-5072

DOMINION VIRGINIA POWER
MR, KEN HOLMES
907 WEST GLEBE ROAD,
ALEXANDRIA, VA 22305
(703) 838-2478

VIRGINIA AMERICAN WATER COMPANY
STEVEN CHEN
2225 DUKE STREET
ALEXANDRIA, VA 22314
(703) 706-3863

COMCAST CABLE
MR, GUSTAVO CATELLON
2707 WILSON BLVD.
ARLINGTON, VA 22201
(703) 926-0534

CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
301 KING STREET, ROOM 4100
ALEXANDRIA, VA 22314
(703) 746-4025

ARCHAEOLOGY NOTES

1. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
2. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
3. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
4. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.

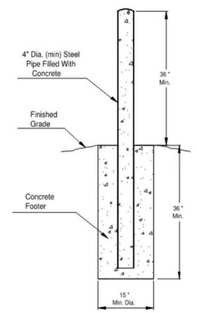
GREEN BUILDING NARRATIVE

THE APPLICANT IS SUBMITTING A COORDINATED SUSTAINABILITY STRATEGY TO IMPLEMENT THE GREEN BUILDING REQUIREMENTS OF THE CDD.

GENERAL NOTES

1. THE BOUNDARY INFORMATION FOR THE SUBJECT SITE IS BASED ON A CURRENT FIELD SURVEY PREPARED BY christopher consultants, Ltd. BETWEEN THE DATES OF JUNE 26 AND JULY 3, 2019 IN ACCORDANCE WITH THE REQUIREMENTS OF VIRGINIA ASSOCIATION OF LAND SURVEYORS.
2. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM AERIAL SURVEY AND SUPPLEMENTED WITH FIELD TOPO COMPLETED BY christopher consultants, Ltd. BETWEEN THE DATES OF JUNE 26 AND AUGUST 21, 2019 AND UPDATED ON MAY 20, 2020 AND BETWEEN THE DATES OF JUNE 16 AND JUNE 18, 2020 AND ON JANUARY 27, 2021 AND BETWEEN THE DATES OF SEPTEMBER 14 AND NOVEMBER 17, 2021; AND CAN NOT BE GUARANTEED FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MSS UTILITY" AT 1-800-57-7777 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 FOR ADDITIONAL SAFETY INSTRUCTIONS.
3. HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM (VCS) 1983 - NORTH AS ESTABLISHED FROM A CURRENT GPS SURVEY.
4. THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM (NAVD 88) AS ESTABLISHED FROM A CURRENT GPS SURVEY.
5. THE SITE IS CURRENTLY DEVELOPED AS POTOMAC RIVER GENERATING STATION. THERE ARE NO NATURAL FEATURES ON THE SITE THAT NEED TO BE PRESERVED OR PROTECTED. THERE IS A RESOURCE PROTECTION AREA (RPA) BUFFER ON SITE. MODIFICATIONS TO THIS AREA WILL BE IN ACCORDANCE WITH CURRENT CITY OF ALEXANDRIA REQUIREMENTS FOR REDEVELOPMENT WITHIN THE RPA. THERE IS A WETLAND OF MINIMAL ECOLOGICAL VALUE ON THE PROPERTY AND ANY PERMITS REQUIRED FROM THE COE WILL BE OBTAINED.
6. ANY POTENTIAL NEGATIVE IMPACT ON ADJOINING PROPERTIES BY THIS PROPOSED PROJECT WILL BE MITIGATED BY PROVIDING ADEQUATE PUBLIC INFRASTRUCTURE, MINIMIZING TRAFFIC IMPACTS AND PRESERVING THE RESOURCE PROTECTION AREA.
7. THE NATURAL SOILS AT THE SITE CONSIST OF LEAN CLAY (CL), SILT (ML), CLAYEY SAND (SC), CLAYEY GRAVEL WITH SAND (GC) AND CLAYEY SAND WITH GRAVEL (SC) PROVIDED BY THE GEOTECHNICAL INVESTIGATION PERFORMED BY GeoCapitol Engineering, LLC. AND DATE JUNE 11, 2021.
8. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO MARINE CLAYS ON SITE.
9. TO THE BEST OF OUR KNOWLEDGE CONTAMINATED SOIL MAY BE ON SITE.
10. SITE IS NOT WITHIN A COMBINED SEWER.
11. THE SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED.
12. ALL EMERGENCY VEHICLE EASEMENTS ARE SHOWN ON THE PLAN AND SHALL BE RECORDED WITH ALEXANDRIA LAND RECORDS.
13. CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
14. DEWATERING AND OTHER CONSTRUCTION RELATED DISCHARGE LIMITS TO THE SEWER SYSTEM ARE REGULATED BY ALEXRENEW PRETREATMENT. CONTRACTOR IS REQUIRED TO CONTACT ALEXRENEW'S PRETREATMENT COORDINATOR AT 703-721-3500 X2020
15. THE SITE DOES NOT LIE WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATION (WSE) PER THE DEMARCTION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA).

NOTES:
1. MOST STREETS AND SIDEWALKS PROVIDED WITH THIS PLAN WILL BE BUILT IN AN INTERIM CONDITION AS NOTED IN THE PAVEMENT SECTION AND SIDEWALK DETAILS. IT IS UNDERSTOOD THAT SOME RIGHT-OF-WAYS WILL BE CONSTRUCTED ONLY IN FINAL CONDITION BASED ON THE SEQUENCING OF THE PHASING PLAN.
2. TOP COAT WILL NOT BE PROVIDED IN THE INTERIM CONDITION.
3. PAVEMENT SECTION SHOWN IS PER THE STANDARD DETAILS PROVIDED IN THE CITY OF ALEXANDRIA'S MEMO TO INDUSTRY #02-09.



Bollards shall be located not less that 3' from the protected object.

Typical Bollard Detail

Lighting Guidelines:

1. Street lights should be placed to avoid conflict with street trees, and should not be located within the sidewalks but rather be placed between and in-line with the street trees.
2. Consideration for adequate lighting should be given for pedestrian/ bicycle trails and parks to maximize safety and comfort of parks and trail users.
3. All street lights should be designed to minimize light spillover. Where located next to residential uses, street lights should include shielding as needed to prevent lighting from directly entering residential windows or adjoining public parks.

E. Historic Interpretation

In an effort to recognize and celebrate the rich history of Old Town North, the Historic Interpretation Guide is intended to provide guidance for the implementation of historic interpretation on various sites, based on the key historical themes identified in the Old Town North Historic Interpretation Guide (See Related Studies in the OTN SAP Appendix). Whether for the Alexandria Canal, the old spring houses or one of the many industrial sites that once existed here, the purpose is to integrate historic interpretation to convey many narratives and historical themes found in this neighborhood. The interpretive design guide encourages creative and engaging interpretation. The end result will be a historic interpretation program that links various sites in the area with common themes, such as industry and transportation, while reminding residents, workers and visitors of the intriguing and varied past of Old Town North.

Early in the concept process, applicants should consult with staff from Planning & Zoning (Historic Preservation) and the Office of Historic Alexandria (including Alexandria Archaeology) regarding how to integrate historic interpretation into the site design and to consider options for historic interpretation related to the project, based on the OTN Historic Interpretation Guide.

Standards:
1. All development and redevelopment sites will include some form of historic interpretation whether as a site-specific installation or part of a broad thematic approach.

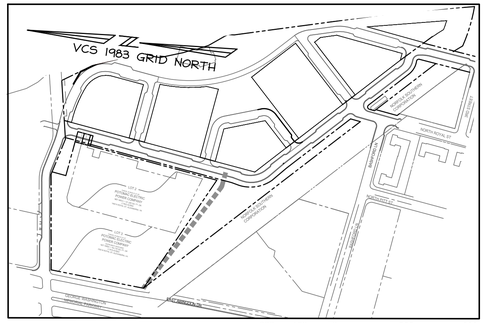
Guidelines :
1. Creative approaches to historic interpretation are encouraged. Interpretive elements may be incorporated into the site and building design, and/or mobile/digital resources dedicated to the neighborhood. The OTN Historic Interpretation Guide offers strategies in Section V: Catalogue.



Figure 4.03: George Washington Parkway Lighting Fixture



Figure 4.04 Black Colonial Lighting Fixture



ENVIRONMENTAL SITE ASSESSMENT

1. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IN 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 ALEXANDRA 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.
2. 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.
3. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITILE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS.

- MONDAY THROUGH FRIDAY FROM 7 AM TO 6 PM.
- SATURDAYS FROM 9 AM TO 6 PM
- NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS.

PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:

- MONDAY THROUGH FRIDAY FROM 9 AM TO 6 PM AND
- SATURDAYS FROM 10 AM TO 4 PM.

ABBREVIATIONS

APRX.	APPROXIMATE
BLDG.	BUILDING
BMP	BEST MANAGEMENT PRACTICE
C.O.	CLEANOUT
COA	CITY OF ALEXANDRIA
CMP	CORRUGATED METAL PIPE
CT	CONIFEROUS TREE
DATUR	DATA ACCORDING TO UTILITY RECORDS
D.B.	DEED BOOK
D.I.P.	DUCTILE IRON PIPE
DT	DECIDUOUS TREE
EOI	END OF INFORMATION
EX.	EXISTING
ESMT.	EASEMENT
FH	FIRE HYDRANT
FTOC	FLUSH TOP OF CURB
HP	HIGH POINT
LOC.	LOCATION
LOD	LIMITS OF DISTURBANCE
LN	LANE
LP	LOW POINT
MH	MANHOLE
MT.	MOUNT
OFD	OVERFLOW DRAIN
PG.	PAGE
PROP.	PROPOSED
RCP	REINFORCED CONCRETE PIPE
RES	RESIDENTIAL
R.O.W.	RIGHT OF WAY
RSTR	RESTRICTION
SAN	SANITARY
SD	STORM DRAIN
ST.	STREET
STM/STRM	STORM
SWM	STORMWATER MANAGEMENT
TBR	TO BE REMOVED
TBS	TO BE SAVED
TBV	TO BE VACATED
TC	TOP OF CURB
TEMP.	TEMPORARY
TYP	TYPICAL
V.D.	VERTICAL DRAIN
VRRM	VIRGINIA RUNOFF REDUCTION METHOD
W/L	WATER LINE
WRPD	WRAPPED

LEGEND

EXISTING	DESCRIPTION	PROPOSED
260	INDEX CONTOUR	260
258	INTERMEDIATE CONTOUR MINOR	258
	PROPERTY LINE	
	RIGHT-OF-WAY	
	PARCEL LINE	
	ROAD CENTERLINE	
	CURB	
	EDGE OF PAVEMENT	
	ADJACENT PROPERTY LINE	
	TREE LINE	
	CURB & GUTTER	
x x x x x	FENCE	x x x x x
	STREET LIGHT	
	ELECTRIC	
	STORM SEWER	
	TELECOM	
FM FM	SANITARY FORCE MAIN	FM FM
	SANITARY SEWER	
D	STORM MANHOLE	
S	SANITARY MANHOLE	
4	PARKING SPACES	4
	SANITARY SEWER	
	WATER LINE	
G G G	GAS LINE	G G G
F.H.	FIRE HYDRANT	F.H.
	ACCESSIBLE CURB RAMP	
5	STORM STRUCTURE NUMBER	5
12" Concrete Pipe	STORM LABEL	12" RCP
S 8	SANITARY SEWER STRUCTURE NUMBER	S 8
8" PVC SDR-26	SANITARY SEWER LABEL	8" PVC SDR-26
1234 11.22	EX. TREE 1234 = ID NUMBER 11.22 = ELEVATION	
	ENTRANCE	
(P)	PRIMARY ENTRANCE	(P)
P	PARKING METER	P

christopher consultants
4035 ridge top rd
Suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

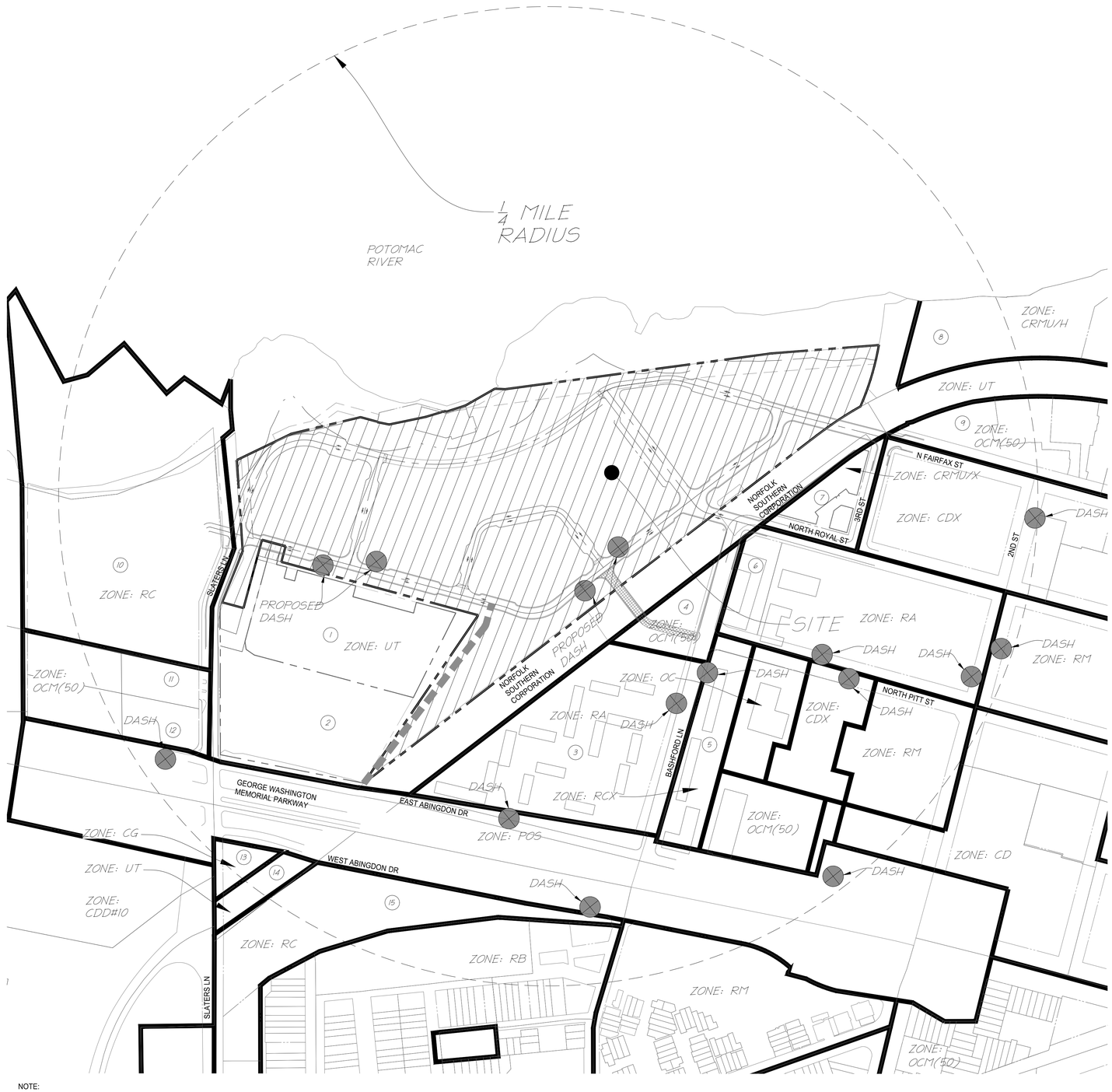
SHEET TITLE:

NOTES AND TABULATIONS

SHEET No.

C100

112206



NOTE:
ALL BUS STOPS SHOWN ARE EXISTING UNLESS OTHERWISE NOTED.

OWNERSHIP INFORMATION

1. POTOMAC ELECTRIC POWER COMPANY
   1400 N. ROYAL ST
   USE: LEGAL PARCEL BENEATH LEASED ZONE: UT
2. POTOMAC ELECTRIC POWER COMPANY
   1500 N. ROYAL ST
   USE: VACANT LAND COMMERC.
   ZONE: UT
3. HARBOR TERRACE CONDOMINIUM
   551 BASHFORD LA
   USE: CONDO MASTER CARDS
   ZONE: RA
4. KESTERMANN ANNA H TR
   501 BASHFORD LA
   USE: REPAIR SERVICES
   ZONE: OCM
5. RIVERTON CONDOMINIUM
   610 BASHFORD LA
   USE: CONDO MASTER CARDS
   ZONE: RCX
6. POTOMAC SHORES CONDOMINIUM
   – MULTIPLE OWNERS
   400 BASHFORD LA
   USE: CONDO (GARDEN)
   ZONE: RA
7. 1201 ROYAL OWNER LLC
   1201 N ROYAL ST
   USE: CONDO (HI-RISE)
   ZONE: CRMU/X
8. TRANSPOTOMAC CANAL CENTER OWNERS ASSOCIATION INC
   1 CANAL CENTER PZ
   USE: VACANT LAND COM AREA
   ZONE: CRMU/H
9. 1199 N FAIRFAX OWNER LLC
   1199 N FAIRFAX ST
   USE: OFFICE BUILDINGS
   ZONE: OCM (50)
10. MARINA TOWERS CONDOMINIUM
    501 SLATERS LA
    USE: CONDO MASTER CARDS
    ZONE: RC
11. SALVATION ARMY NATIONAL CORPORATION
    605 SLATERS LA
    USE: CHARITABLE
    ZONE: OCM (50)
12. SALVATION ARMY NATIONAL CORPORATION
    615 SLATERS LA
    USE: CHARITABLE
    ZONE: OCM (50)
13. TRAN INVESTMENTS LLC
    700 SLATERS LA
    USE: GENERAL COMMERCIAL
    ZONE; CG
14. R F AND P RAILROAD
    3 GEORGE WASHINGTON MEM PY
    USE: OP.RAILROAD VDT
    ZONE: UT
15. CVR MASON HALL LLC
    1420 W ABINGDON DR
    USE: MED RISE ELEV (4-6S)
    ZONE: RC

LEGEND

- SITE
- (17) OWNER INFORMATION NUMBER
- PROPERTY LINE
- ZONING LINE

VCS 1983 GRID NORTH

150 75 0 150 300
GRAPHIC SCALE
1" = 150'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: ##
CHECKED: KW

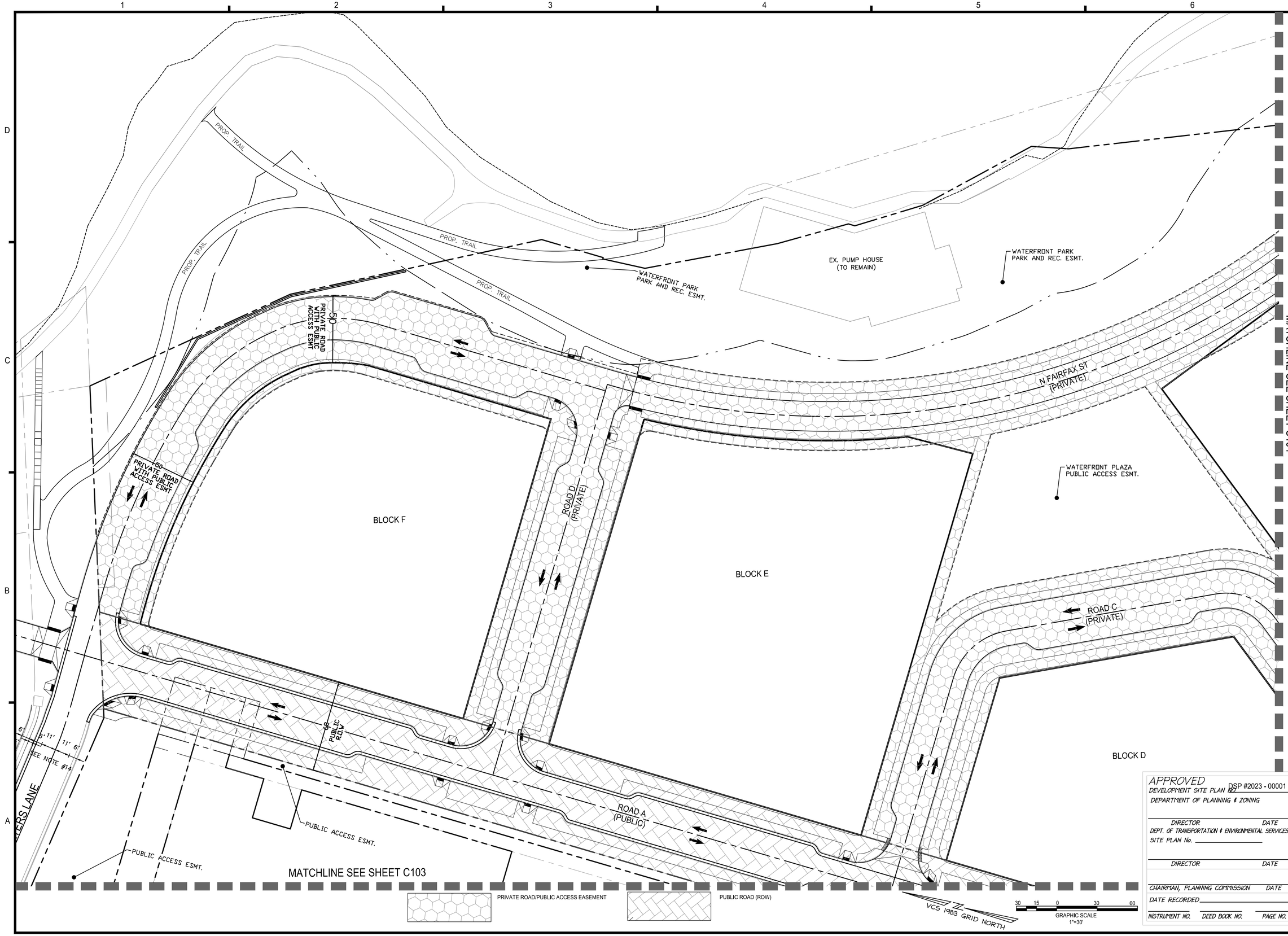
SHEET TITLE:

CONTEXTUAL PLAN

SHEET No.

C101

112206



APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

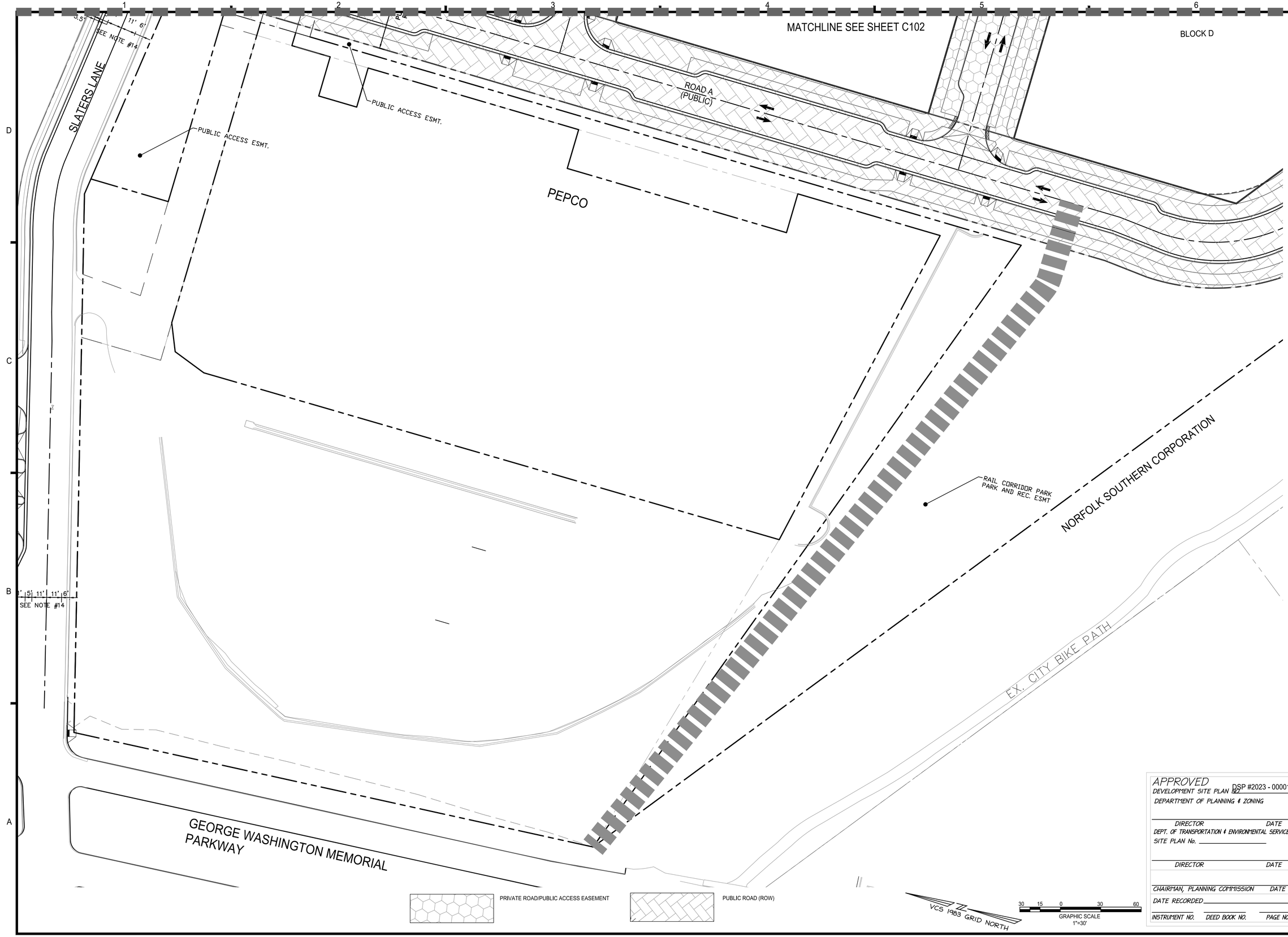
SHEET TITLE:

PUBLIC VS. PRIVATE ROAD AND EASEMENT EXHIBIT

SHEET No.

C102

112206



APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

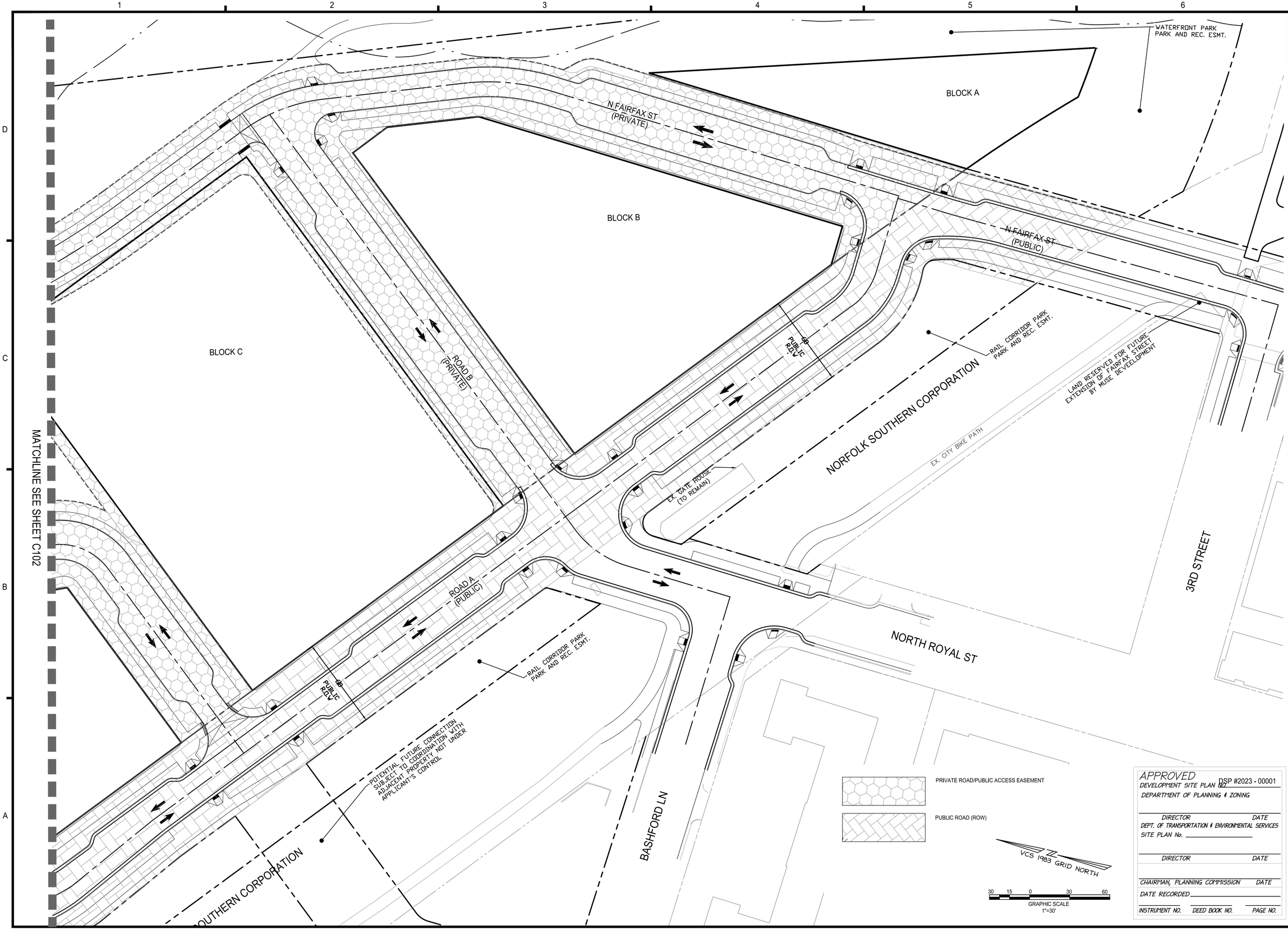
PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

PUBLIC VS. PRIVATE ROAD AND EASEMENT EXHIBIT

SHEET No.
C103

112206



christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

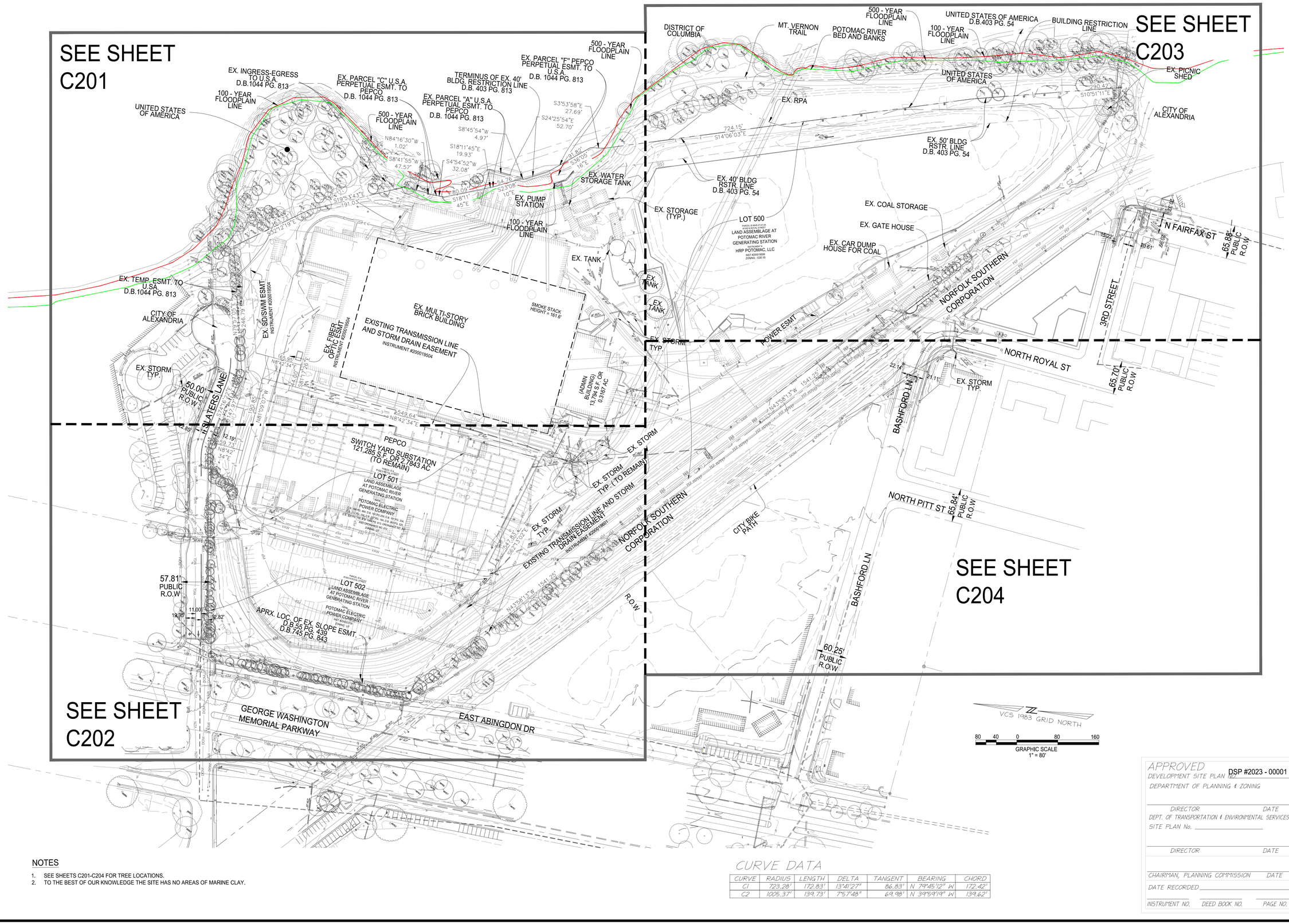
SHEET TITLE:

PUBLIC VS. PRIVATE ROAD AND EASEMENT EXHIBIT

SHEET No.

C104

112206



NOTES

1. SEE SHEETS C201-C204 FOR TREE LOCATIONS.
2. TO THE BEST OF OUR KNOWLEDGE THE SITE HAS NO AREAS OF MARINE CLAY.

CURVE DATA

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	723.28'	172.83'	13°41'27"	86.83'	N 79°45'12" W	172.42'
C2	1005.37'	139.73'	7°57'48"	69.98'	N 39°59'19" W	139.62'

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN NO.
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: ##
CHECKED: KW

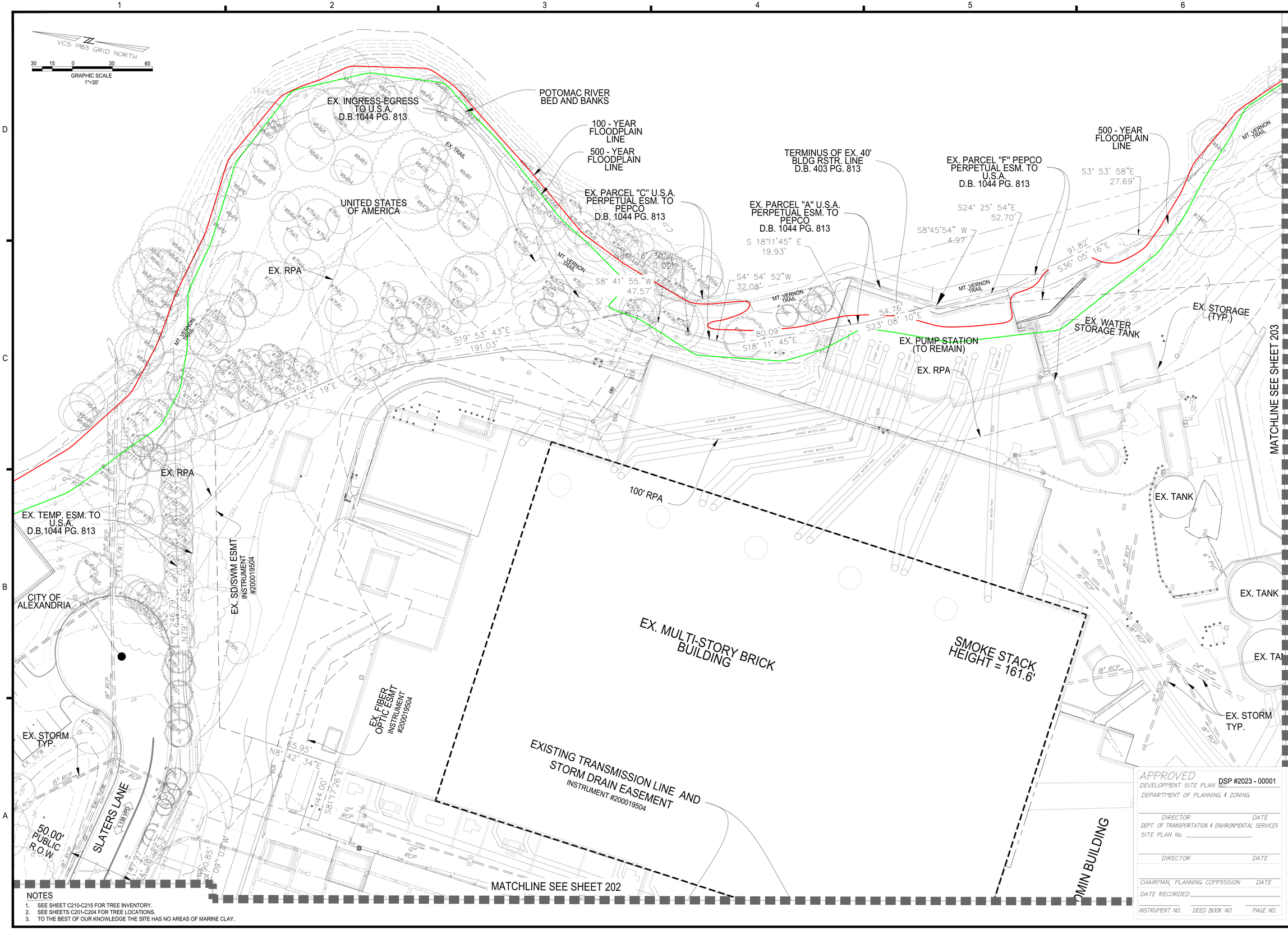
SHEET TITLE:

OVERALL EXISTING CONDITIONS PLAN

SHEET No.

C200

112206



NOTES

1. SEE SHEET C210-C215 FOR TREE INVENTORY.
2. SEE SHEETS C201-C204 FOR TREE LOCATIONS.
3. TO THE BEST OF OUR KNOWLEDGE THE SITE HAS NO AREAS OF MARINE CLAY.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

APPROVED
DSP #2023 - 00001
DEVELOPMENT SITE PLAN NO.
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

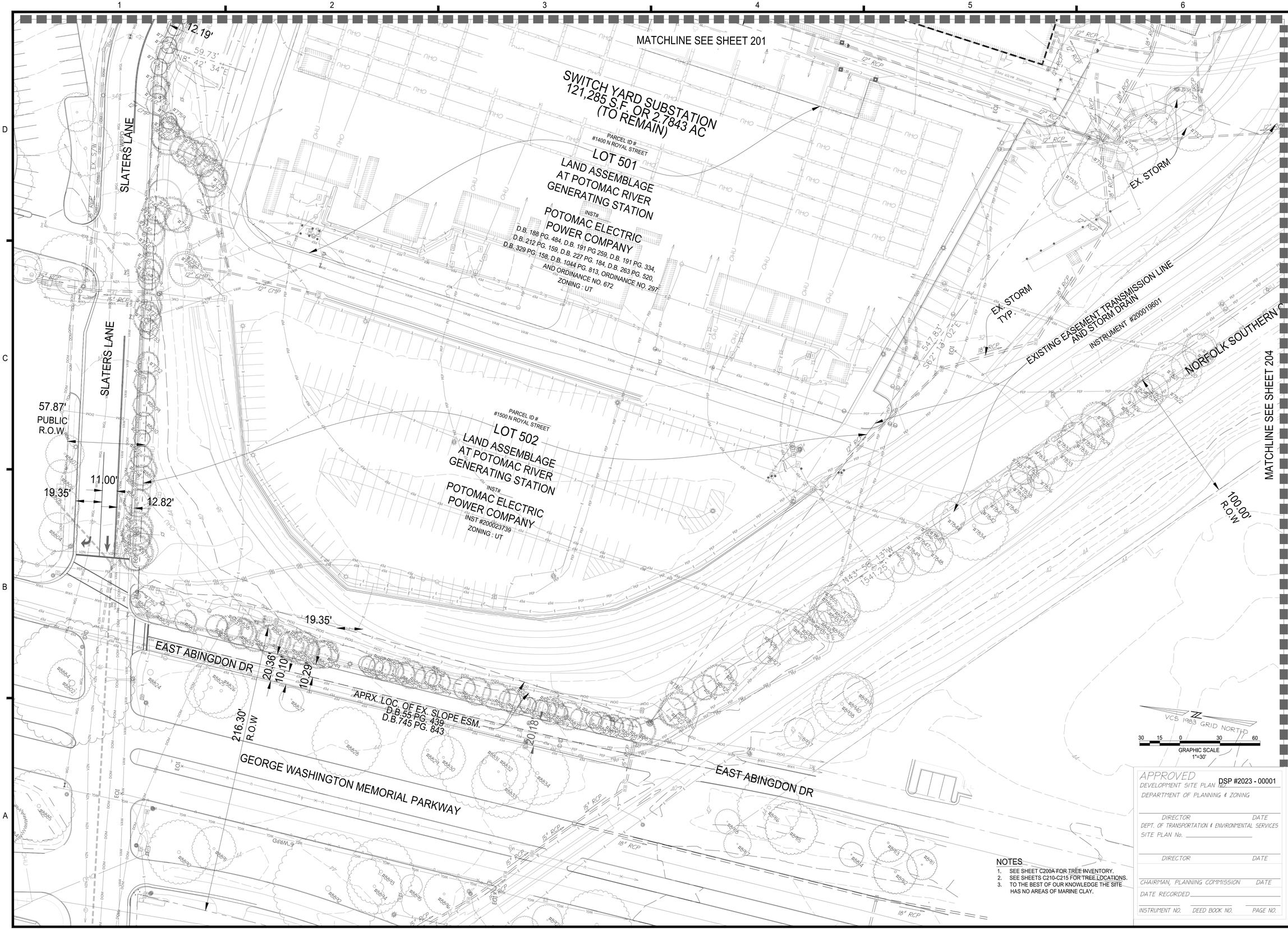
SHEET TITLE:

EXISTING CONDITIONS

SHEET No.

C201

112206



NOTES

1. SEE SHEET C200A FOR TREE INVENTORY.
2. SEE SHEETS C210-C215 FOR TREE LOCATIONS.
3. TO THE BEST OF OUR KNOWLEDGE THE SITE HAS NO AREAS OF MARINE CLAY.

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN NO.
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

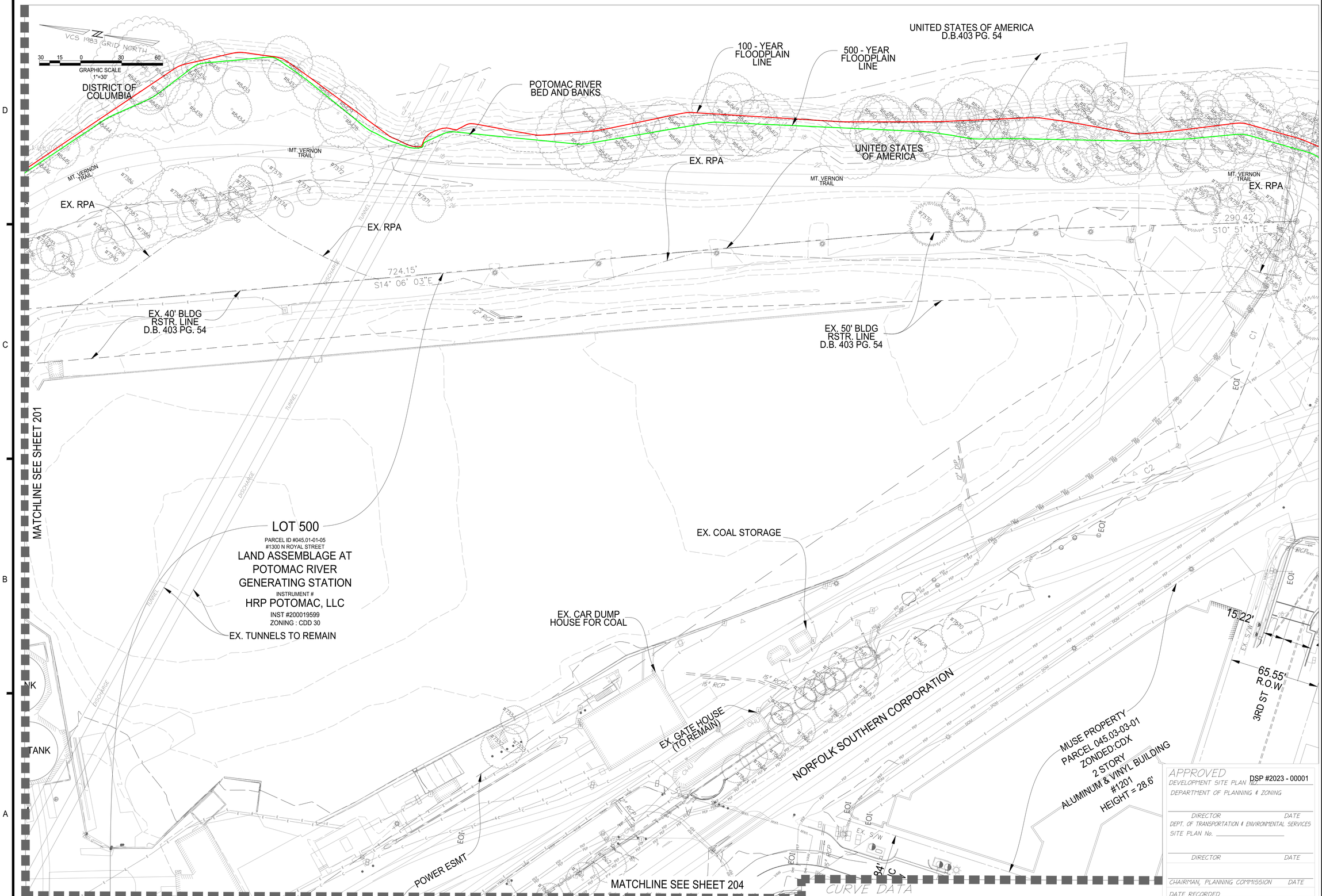
SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET No.

C202

112206



NOTES
1. SEE SHEET C210-C215 FOR TREE INVENTORY.
2. SEE SHEETS C201-C204 FOR TREE LOCATIONS.
3. TO THE BEST OF OUR KNOWLEDGE THE SITE HAS NO AREAS OF MARINE CLAY.

CURVE DATA

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	723.28'	172.83'	13°41'27"	86.83'	N 79°45'12" W	172.42'
C2	1005.37'	139.73'	7°57'48"	69.98'	N 39°59'19" W	139.62'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

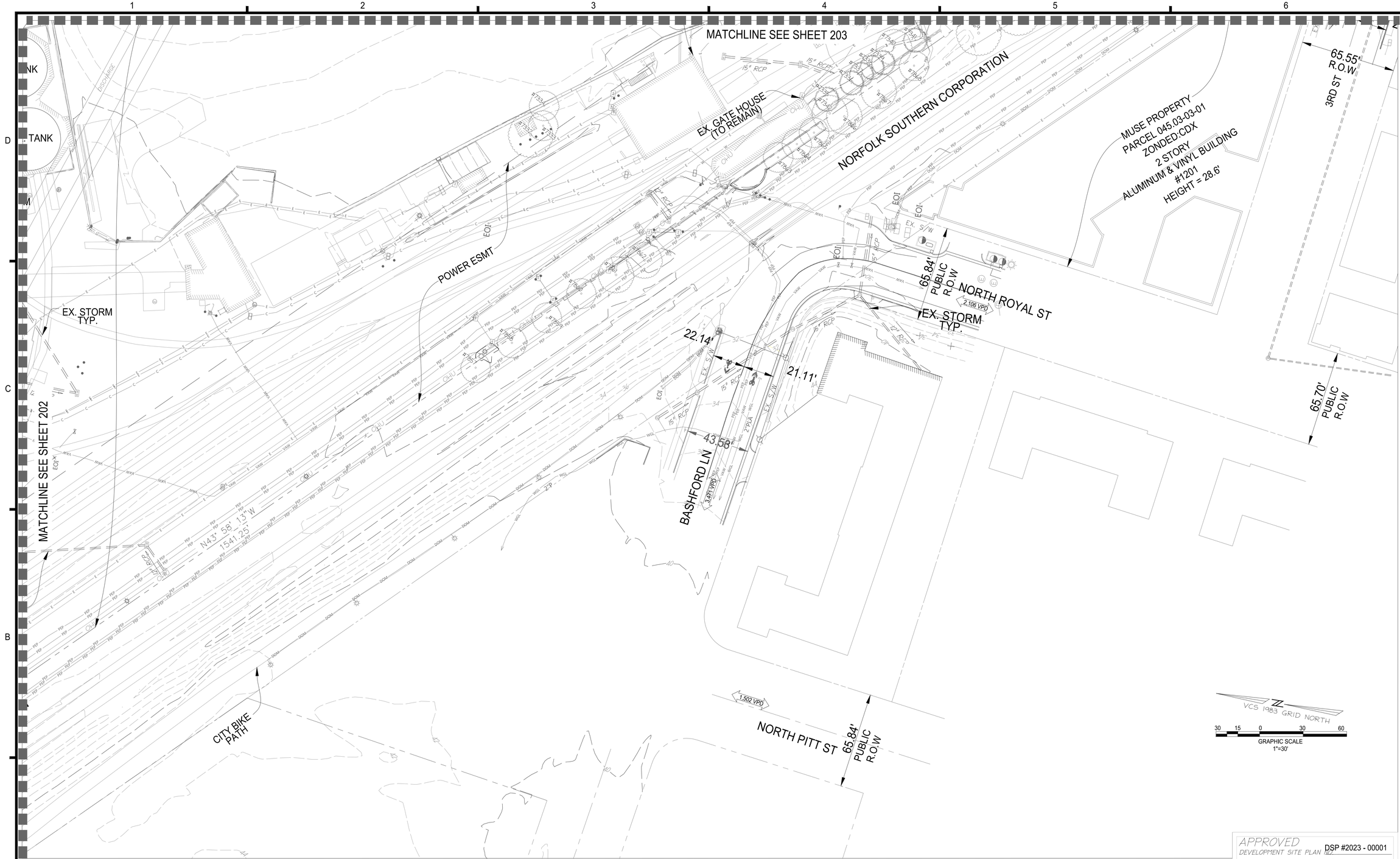
MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
EXISTING CONDITIONS PLAN

SHEET No.
C203

112206



NOTES

1. SEE SHEET C200A FOR TREE INVENTORY.
2. SEE SHEETS C210-C215 FOR TREE LOCATIONS.
3. TO THE BEST OF OUR KNOWLEDGE THE SITE HAS NO AREAS OF MARINE CLAY.

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

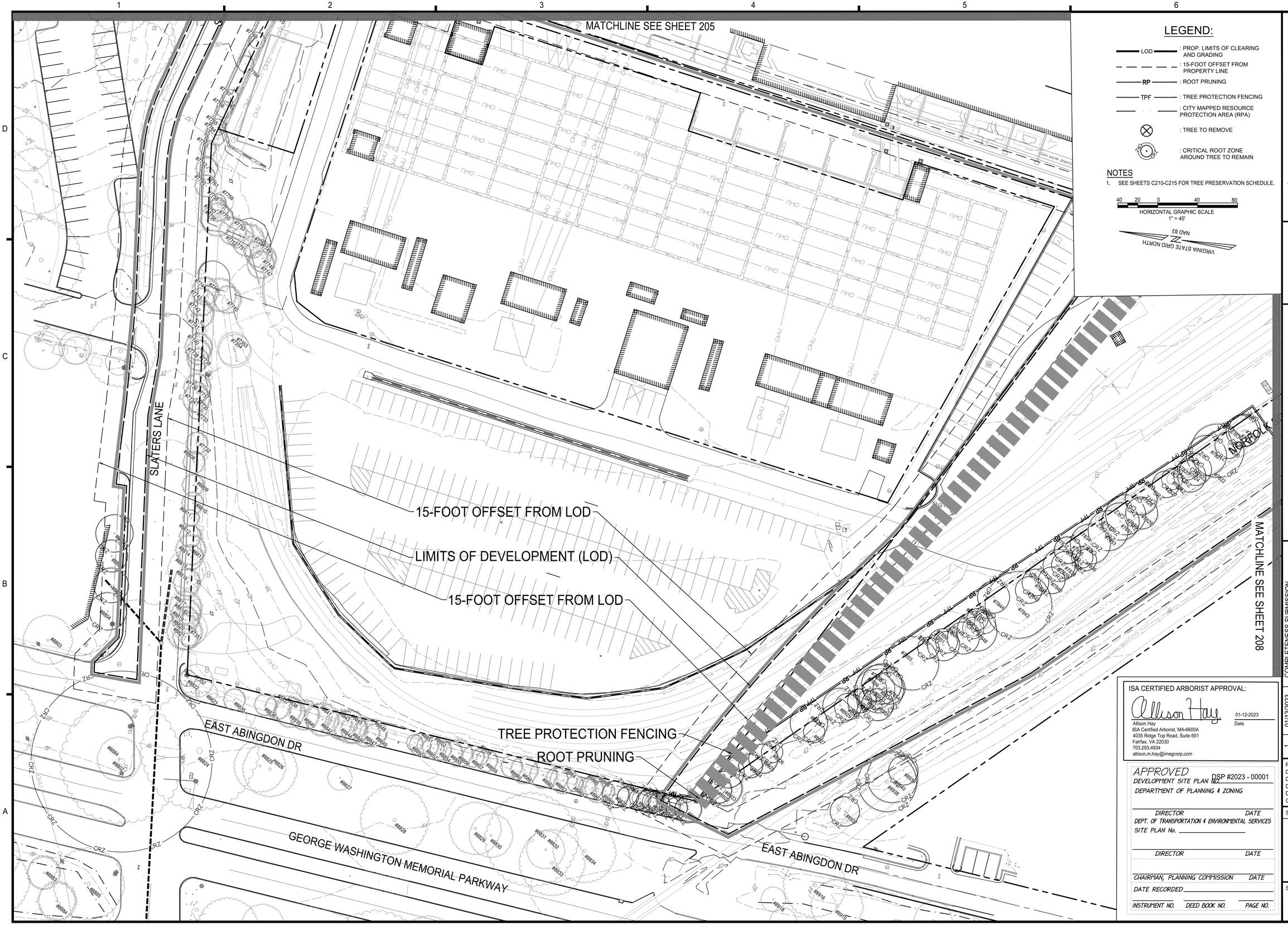
SHEET TITLE:

EXISTING CONDITIONS PLAN

SHEET No.

C204

112206



LEGEND:

- LOD : PROP. LIMITS OF CLEARING AND GRADING
- : 15-FOOT OFFSET FROM PROPERTY LINE
- RP : ROOT PRUNING
- TPF : TREE PROTECTION FENCING
- : CITY MAPPED RESOURCE PROTECTION AREA (RPA)
- : TREE TO REMOVE
- : CRITICAL ROOT ZONE AROUND TREE TO REMAIN

NOTES

1. SEE SHEETS C210-C215 FOR TREE PRESERVATION SCHEDULE.

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

VIRGINIA STATE GRID NORTH
NAD 83

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — 01-12-2023 (Date)

Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: AH
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN - NORTHWEST

SHEET No.

C206

112206

POTOMAC RIVER
BED AND BANKS

TREE PROTECTION FENCING

ROOT PRUNING

RESOURCE PROTECTION AREA (RPA)

15-FOOT OFFSET FROM LOD

LIMITS OF DEVELOPMENT (LOD)

15-FOOT OFFSET FROM LOD

SLATERS LANE

1.18% (PD)

MATCHLINE SEE SHEET 207

MATCHLINE SEE SHEET 206

LEGEND:

- LOD : PROP. LIMITS OF CLEARING AND GRADING
- : 15-FOOT OFFSET FROM PROPERTY LINE
- RP : ROOT PRUNING
- TPF : TREE PROTECTION FENCING
- : CITY MAPPED RESOURCE PROTECTION AREA (RPA)
- : TREE TO REMOVE
- : CRITICAL ROOT ZONE AROUND TREE TO REMAIN

NOTES

1. SEE SHEETS C210-C215 FOR TREE PRESERVATION SCHEDULE.

20 10 0 20 40
HORIZONTAL GRAPHIC SCALE
1" = 20'

VIRGINIA STATE GRID NORTH
NAD 83

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — 01-12-2023 (Date)

Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: AH
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN - NORTHEAST

SHEET No.

C205

112206

MATCHLINE SEE SHEET 207

MATCHLINE SEE SHEET 206

15-FOOT OFFSET FROM LOD

LIMITS OF DEVELOPMENT (LOD)

15-FOOT OFFSET FROM LOD

TREE PROTECTION FENCING

ROOT PRUNING

NORFOLK SOUTHERN CORPORATION

CITY BIKE PATH

BASHFORD LN

1,502 VPD

LEGEND:

- LOD : PROP. LIMITS OF CLEARING AND GRADING
- : 15-FOOT OFFSET FROM PROPERTY LINE
- RP : ROOT PRUNING
- TPF : TREE PROTECTION FENCING
- : CITY MAPPED RESOURCE PROTECTION AREA (RPA)
- : TREE TO REMOVE
- : CRITICAL ROOT ZONE AROUND TREE TO REMAIN

NOTES

1. SEE SHEETS C210-C215 FOR TREE PRESERVATION SCHEDULE.

40 20 0 40 80

HORIZONTAL GRAPHIC SCALE
1" = 40'

VIRGINIA STATE GRID NORTH
NAD 83

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023
Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: AH
CHECKED: KW

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

SHEET TITLE:

TREE PRESERVATION PLAN - WEST

SHEET No.

C208

112206

POTOMAC RIVER
BED AND BANKS

ROOT PRUNING
TREE PROTECTION FENCING

15-FOOT OFFSET FROM LOD
LIMITS OF DEVELOPMENT (LOD)
15-FOOT OFFSET FROM LOD
RESOURCE PROTECTION AREA (RPA)

MATCHLINE SEE SHEET 205

MATCHLINE SEE SHEET 208

NORFOLK SOUTHERN CORPORATION

N FAIRFAX ST
5,278 VPD

3RD ST

NORTH ROYAL ST
2,106 VPD

LEGEND:

- LOD : PROP. LIMITS OF CLEARING AND GRADING
- : 15-FOOT OFFSET FROM PROPERTY LINE
- RP : ROOT PRUNING
- TPF : TREE PROTECTION FENCING
- : CITY MAPPED RESOURCE PROTECTION AREA (RPA)
- : TREE TO REMOVE
- : CRITICAL ROOT ZONE AROUND TREE TO REMAIN

NOTES

1. SEE SHEETS C210-C215 FOR TREE PRESERVATION SCHEDULE.

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

VIRGINIA STATE GRID NORTH
NAD 83

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023
Allison Hay Date
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: AH
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN - SOUTH

SHEET No.

C207

112206

POTOMAC RIVER
BED AND BANKS

TREE PROTECTION FENCING

15-FOOT OFFSET FROM LOD

15-FOOT OFFSET FROM LOD

RESOURCE PROTECTION AREA (RPA)

MATCHLINE SEE SHEET 205

MATCHLINE SEE SHEET 208

MATCHLINE SEE SHEET 207

LEGEND:

- LOD : PROP. LIMITS OF CLEARING AND GRADING
- : 15-FOOT OFFSET FROM PROPERTY LINE
- RP : ROOT PRUNING
- TPF : TREE PROTECTION FENCING
- : CITY MAPPED RESOURCE PROTECTION AREA (RPA)
- : TREE TO REMOVE
- : CRITICAL ROOT ZONE AROUND TREE TO REMAIN

NOTES

1. SEE SHEETS C210-C215 FOR TREE PRESERVATION SCHEDULE.

40 20 0 40 80
HORIZONTAL GRAPHIC SCALE
1" = 40'

VIRGINIA STATE GRID NORTH
NAD 83

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023
Allison Hay — Date
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: AH
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN - EAST

SHEET No.

C209

112206

TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
6450	*ACER RUBRUM*	RED MAPLE	16	16	18	72	OFFSITE	REMAIN	NATIVE	Few cavities in trunk
6869	*UNIDENTIFIED*	DEAD TREE	17	17	20	25	OFFSITE	REMAIN		Tree in water, multitrunk, one snagged trunk, other have peeling bark, ivy
7327	*ACER RUBRUM*	RED MAPLE	18	18	11	69	ONSITE	REMOVE	NATIVE	Damaged roots, possibly from mowing
7328	*ACER RUBRUM*	RED MAPLE	13	13	12	84	ONSITE	REMOVE	NATIVE	Uneven canopy, one small scaffold branch to be pruned
7329	*ACER RUBRUM*	RED MAPLE	15	15	10	63	ONSITE	REMOVE	NATIVE	Damaged roots, possibly from mowing
7330	*QUERCUS PHELLOS*	WILLOW OAK	20	20	28	78	ONSITE	REMOVE	NATIVE	Some dead scaffold branches
7331	*QUERCUS PHELLOS*	WILLOW OAK	25	25	24	72	ONSITE	REMOVE	NATIVE	Girdling roots
7332	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	22	72	ONSITE	REMOVE	NATIVE	Multiple trunks, all in good condition, uneven canopy
7333	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	7	75	ONSITE	REMOVE	NATIVE	
7334	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	12	69	ONSITE	REMOVE	NATIVE	Two trunks, one growing between concrete wall and piping
7335	*THUJA SPP.*	ARBORVITAE	8	8	48	69	ONSITE	REMOVE	NATIVE	
7336	*THUJA SPP.*	ARBORVITAE	8	8	40	69	ONSITE	REMOVE	NATIVE	Scaffold branches snagged and broken, some large branches to prune
7337	*THUJA SPP.*	ARBORVITAE	8	8	24	69	ONSITE	REMOVE	NATIVE	Snagged scaffold branches
7338	*THUJA SPP.*	ARBORVITAE	8	8	24	66	ONSITE	REMOVE	NATIVE	Scaffold branches snagged and broken, some large branches to prune, some dead branches
7339	*THUJA SPP.*	ARBORVITAE	8	8	14	72	ONSITE	REMOVE	NATIVE	
7340	*QUERCUS VELUTINA*	BLACK OAK	12	12	15	53	ONSITE	REMOVE	NATIVE	Many broken scaffold branches, many vines on trunk and pulling on scaffold branches, many dead limbs to prune
7341	*THUJA SPP.*	ARBORVITAE	8	8	34	69	ONSITE	REMOVE	NATIVE	Snagged scaffold branches
7342	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	12	12	42	63	ONSITE	REMOVE	INVASIVE	Triple trunk, low split, English ivy on all three trunks, many large branches need to be pruned
7343	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	25	25	19	63	ONSITE	REMOVE	NATIVE	Leaning towards fence, some dead branches
7344	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	25	25	12	69	ONSITE	REMOVE	NATIVE	One dead trunk out of two, intense lean to remaining trunk, exacerbated by growing on steep hillside,
7345	*PRUNUS SEROTINA*	BLACK CHERRY	15	15	36	69	ONSITE	REMOVE	NATIVE	Co-dominant stems
7346	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	30	66	ONSITE	REMOVE	NATIVE	Few large dead limbs, vines on trunk, scaffold branches uneven, second dead trunk
7347	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	12	12	13	75	ONSITE	REMOVE	INVASIVE	
7348	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	12	63	OFFSITE	REMOVE	NATIVE	Removal is subject to coordination with the National Park Service. Extreme lean, laying on fence, extreme vine coverage, many dead l
7349	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	20	20	11	75	ONSITE	REMOVE	INVASIVE	
7350	*ACER RUBRUM*	RED MAPLE	12	12	12	81	OFFSITE	REMAIN	NATIVE	
7351	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	12	12	30	75	ONSITE	REMOVE	INVASIVE	
7352	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	12	12	36	69	OFFSITE	REMAIN	INVASIVE	
7353	*QUERCUS VELUTINA*	BLACK OAK	12	12	9	75	ONSITE	REMAIN	NATIVE	Twin with 7354, bad location between fence and electric box
7354	*QUERCUS VELUTINA*	BLACK OAK	12	12	6	69	ONSITE	REMAIN	NATIVE	Twin with 7353, bad location between fence and electric box
7355	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	26	75	ONSITE	REMOVE	NATIVE	3" caliper at DBH, multi-trunk
7356	*PINUS VIRGINIANA*	VIRGINIA PINE	15	15	16	75	OFFSITE	REMAIN	NATIVE	Many dead lower branches due to forest cover nearby, trunk is slightly curved at top, many vines in canopy
7357	*QUERCUS PHELLOS*	WILLOW OAK	10	10	12	72	OFFSITE	REMAIN	NATIVE	
7358	*QUERCUS VELUTINA*	BLACK OAK	6	8	9	78	OFFSITE	REMAIN	NATIVE	Some dead lower branches
7359	*QUERCUS PALUSTRIS*	PIN OAK	8	8	6	75	OFFSITE	REMAIN	NATIVE	
7360	*PYRUS CALLERYANA*	CALLERY PEAR	10	10	7	69	OFFSITE	REMAIN	INVASIVE	Crack in trunk, uneven canopy
7361	*ULMUS AMERICANA*	AMERICAN ELM	25	25	12	72	OFFSITE	REMAIN	NATIVE	
7362	*QUERCUS VELUTINA*	BLACK OAK	30	45	60	75	OFFSITE	REMAIN	NATIVE	Two main trunks, one dead scaffold branch, some vines on trunks
7363	*MORUS SPP.*	MULBERRY	12	12	30	72	OFFSITE	REMOVE		Removal is subject to coordination with the National Park Service
7364	*MORUS SPP.*	MULBERRY	12	12	12	63	OFFSITE	REMOVE		Removal is subject to coordination with the National Park Service. Many small dead branches, many vines on trunk and in canopy
7365	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	20	20	18	72	OFFSITE	REMOVE	NATIVE	Removal is subject to coordination with the National Park Service
7366	*MORUS SPP.*	MULBERRY	8	8	8	25	OFFSITE	REMOVE		Removal is subject to coordination with the National Park Service. Dead, many invasive vines
7367	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	15	15	30	72	OFFSITE	REMOVE	NATIVE	Removal is subject to coordination with the National Park Service
7368	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	26	69	OFFSITE	REMAIN	NATIVE	Uneven canopy
7369	*CERCIS CANADENSIS*	EASTERN REDBUD	12	12	74	59	OFFSITE	REMAIN	NATIVE	Girdling roots, some dead branches
7370	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	15	15	36	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
7371	*MALUS SPP.*	CRABAPPLE	12	12	78	75	OFFSITE	REMAIN	NATIVE	Multistemmed
7372	*ACER SACCHARINUM*	SILVER MAPLE	22	22	22	47	OFFSITE	REMAIN	NATIVE	Extreme canopy dieback, epicormic sprouting only, peeling bark
7373	*PRUNUS SEROTINA*	BLACK CHERRY	9	9	7	75	OFFSITE	REMAIN	NATIVE	
7374	*AMELANCHIER ARBOREA*	COMMON SERVICEBERRY	6	8	40	75	OFFSITE	REMAIN	NATIVE	One branch dieback
7375	*MORUS SPP.*	MULBERRY	5	8	12	59	OFFSITE	REMAIN		Covered with ivy
7376	*QUERCUS VELUTINA*	BLACK OAK	15	15	13	72	OFFSITE	REMAIN	NATIVE	Some branch dieback, one wound in trunk
7377	*PRUNUS SEROTINA*	BLACK CHERRY	4	8	6	72	OFFSITE	REMAIN	NATIVE	
7378	*QUERCUS VELUTINA*	BLACK OAK	16	16	15	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
7379	*ULMUS AMERICANA*	AMERICAN ELM	10	10	12	72	OFFSITE	REMAIN	NATIVE	
7380	*QUERCUS RUBRA*	NORTHERN RED OAK	8	8	9	75	OFFSITE	REMAIN	NATIVE	Some branches being pulled down by vines
7381	*QUERCUS PALUSTRIS*	PIN OAK	8	8	9	75	OFFSITE	REMAIN	NATIVE	
7382	*ULMUS PUMILA*	SIBERIAN ELM	15	15	19	66	OFFSITE	REMAIN	EXOTIC	Some large dead branches, foliage has galls and isn't growing properly
7383	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	6	69	OFFSITE	REMAIN	NATIVE	
7384	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	9	72	OFFSITE	REMAIN	NATIVE	Uneven leader, many vines on trunk
7385	*QUERCUS PALUSTRIS*	PIN OAK	25	25	24	75	OFFSITE	REMAIN	NATIVE	
7386	*ULMUS AMERICANA*	AMERICAN ELM	25	25	19	75	OFFSITE	REMAIN	NATIVE	
7387	*QUERCUS PALUSTRIS*	PIN OAK	22	22	21	72	OFFSITE	REMAIN	NATIVE	
7388	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	15	63	OFFSITE	REMAIN	NATIVE	Three leaders, one dead, two rubbing together and fungus at joint, large cracking in bark
7389	*UNIDENTIFIED*	DEAD TREE	5	8	12	25	OFFSITE	REMAIN		Without bark
7390	*QUERCUS FALCATA*	SOUTHERN RED OAK	8	8	10	75	OFFSITE	REMAIN	NATIVE	Many dead lower branches
7391	*QUERCUS RUBRA*	NORTHERN RED OAK	15	15	9	72	OFFSITE	REMAIN	NATIVE	
7392	*QUERCUS VELUTINA*	BLACK OAK	15	15	12	66	OFFSITE	REMAIN	NATIVE	Central leader is gnarled and dead, all canopy growth is coming from eastern leader
7393	*MORUS SPP.*	MULBERRY	12	12	9	66	OFFSITE	REMAIN		Leaning
7394	*MORUS RUBRA*	RED MULBERRY	15	15	24	69	OFFSITE	REMAIN	NATIVE	Triple leader, many vines on trunk and in canopy
7395	*ACER NEGUNDO*	BOXELDER	8	8	11	47	OFFSITE	REMAIN	NATIVE	Covered with ivy
7396	*MORUS RUBRA*	RED MULBERRY	15	15	20	63	OFFSITE	REMAIN	NATIVE	Very uneven canopy, many vines on trunk and in canopy
7397	*PRUNUS SEROTINA*	BLACK CHERRY	22	22	51	69	OFFSITE	REMAIN	NATIVE	Co-dominant stems
7398	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	20	66	OFFSITE	REMAIN	NATIVE	Leaders pulled to side, uneven canopy
7399	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	8	66	OFFSITE	REMAIN	NATIVE	
7400	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	16	72	OFFSITE	REMAIN	NATIVE	Many vines in canopy
7510	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	11	25	OFFSITE	REMAIN	NATIVE	Dead or dying; all branches removed and top half of trunk snapped off
7511	*ILEX OPACA*	AMERICAN HOLLY	15	15	27	72	OFFSITE	REMAIN	NATIVE	Tree overgrown with ivy
7512	*ACER SACCHARINUM*	SILVER MAPLE	18	18	13	69	OFFSITE	REMAIN	NATIVE	English ivy on tree, lean to trunk
7513	*ACER SACCHARINUM*	SILVER MAPLE	18	18	12	69	OFFSITE	REMAIN	NATIVE	
7514	*ACER SACCHARINUM*	SILVER MAPLE	10	10	6	72	ONSITE	REMAIN	NATIVE	English ivy on tree, lean to trunk
7516	*ACER SACCHARINUM*	SILVER MAPLE	15	15	24	66	OFFSITE	REMAIN	NATIVE	English ivy on tree, lean to trunk, multiple leaders, uneven canopy
7517	*ACER SACCHARINUM*	SILVER MAPLE	12	12	12	66	OFFSITE	REMAIN	NATIVE	
7520	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	9	25	OFFSITE	REMAIN	NATIVE	Dead
7521	*ULMUS AMERICANA*	AMERICAN ELM	48	72	24	66	OFFSITE	REMAIN	NATIVE	Ivy on trunk, few dead branches, snagged scaffold branch
7522	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	12	25	ONSITE	REMOVE	NATIVE	Removal is subject to coordination with the National Park Service; dead
7524	*ACER SACCHARINUM*	SILVER MAPLE	12	12	11	69	OFFSITE	REMAIN	NATIVE	Vines on trunk and in canopy, leaning trunk
7525	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	13	63	OFFSITE	REMAIN	NATIVE	
7526	*QUERCUS VELUTINA*	BLACK OAK	10	10	9	56	OFFSITE	REMAIN	NATIVE	Vines on trunk and in canopy, leaning trunk, almost no crown vegetation
7527	*UNIDENTIFIED*	DEAD TREE	2	8	9	25	OFFSITE	REMAIN		
7528	*ILEX OPACA*	AMERICAN HOLLY	10	10	12	72	OFFSITE	REMAIN	NATIVE	Some vines on trunk, large branch from another tree laying in canopy
7529	*ACER NEGUNDO*	BOXELDER	20	20	14	47	OFFSITE	REMAIN	NATIVE	Leaning, broken leader
7530	*PRUNUS SEROTINA*	BLACK CHERRY	18	18	39	25	OFFSITE	REMAIN	NATIVE	Dead
7531	*UNIDENTIFIED*	DEAD TREE	10	10	10	25	OFFSITE	REMAIN		
7532	*ACER NEGUNDO*	BOXELDER	10	10	6	56	OFFSITE	REMAIN	NATIVE	Top half of both leaders broken off
7533	*ULMUS AMERICANA*	AMERICAN ELM	10	10	31	41	OFFSITE	REMAIN	NATIVE	Holes in trunk
7534	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	36	25	OFFSITE	REMAIN	NATIVE	Dead
7535	*PRUNUS SEROTINA*	BLACK CHERRY	22	22	20	47	OFFSITE	REMAIN	NATIVE	Co-dominant, one trunk dead, canopy dieback
7536	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	9	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
7537	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	20	20	14	66	OFFSITE	REMAIN	NATIVE	
7538	*ULMUS AMERICANA*	AMERICAN ELM	12	12	7	72	OFFSITE	REMAIN	NATIVE	Slight lean
7539	*ULMUS AMERICANA*	AMERICAN ELM	15	15	13	66	OFFSITE	REMAIN	NATIVE	Ivy on trunk
7540	*ACER NEGUNDO*	BOXELDER	12	12	34	47	OFFSITE	REMAIN	NATIVE	Multiple trunks, most canopy vegetation is dead, only a few branches remain alive
7541	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	39	66	OFFSITE	REMAIN	NATIVE	
7542	*ACER SACCHARINUM*	SILVER MAPLE	12	12	14	75	OFFSITE	REMAIN	NATIVE	Slight lean to trunk
7543	*ULMUS AMERICANA*	AMERICAN ELM	12	12	22	53	OFFSITE	REMAIN	NATIVE	Ivy on trunk
7544	*ACER SACCHARINUM*	SILVER MAPLE	10	10	12	50	OFFSITE	REMAIN	NATIVE	Dead vines on tree, uneven canopy with dead leaders
7545	*PLATANUS OCCIDENTALIS*	SYCAMORE	12	12	14	69	OFFSITE	REMAIN	NATIVE	
7546	*ACER NEGUNDO*	BOXELDER	20	20	55	69	OFFSITE	REMAIN	NATIVE	Strong lean to trunk, epicormic sprouting, low scaffold branching
7547	*ACER SACCHARINUM*	SILVER MAPLE	8	8	11	69	OFFSITE	REMAIN	NATIVE	
7548	*ACER SACCHARINUM*	SILVER MAPLE	12	12	11	59	OFFSITE	REMAIN	NATIVE	Only a few branches still alive
7549	*ACER SACCHARINUM*	SILVER MAPLE	8	8	6	59	OFFSITE	REMAIN	NATIVE	
7550	*ACER SACCHARINUM*	SILVER MAPLE	15	15	13	66	OFFSITE	REMAIN	NATIVE	Leaning trunk, uneven canopy growth
7551	*ACER SACCHARINUM*	SILVER MAPLE	15	15	19	72	OFFSITE	REMAIN	NATIVE	Co-dominant stems
7552	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	13	25	OFFSITE	REMAIN	NATIVE	Dead
7553	*ACER NEGUNDO*	BOXELDER	15	15	9	63	OFFSITE	REMAIN	NATIVE	Dead scaffold branch
7554	*ULMUS AMERICANA*	AMERICAN ELM	20	20	25	66	OFFSITE	REMAIN	NATIVE	Uneven canopy, multiple trunks, epicormic sprouting
7555	*ULMUS AMERICANA*	AMERICAN ELM	15	15	25	72	OFFSITE	REMAIN	NATIVE	
7556	*ACER NEGUNDO*	BOXELDER	8	8	11	75	OFFSITE	REMAIN	NATIVE	Some vines in canopy
7557	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	13	66	OFFSITE	REMAIN	NATIVE	Leaning over river

INVASIVE SPECIES MANAGEMENT PLAN

Ailanthus altissima | Tree-of-Heaven

Plants under four feet should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between June and September, for approximately two to three years, or until plant death occurs.

Plants over six feet tall should be treated with the basal bark method. The tree should be treated with a 20-30% triclopyr ester oil-based herbicide. The stems should be treated from the ground to approximately three feet up the trunks, careful not to apply so much herbicide that it runs off the stem and pools on the soil. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment should occur between June and September for maximum efficacy. Basal bark methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Hack-and-squirt and cut-stump methods are **not** recommended treatments, as they encourage the sprouty nature of this species and often make the infestation worse.
Look-A-likes: This species is easily confused with some native tree species that have compound leaves and numerous leaflets, such as sumac, black walnut, and hickory. The leaflet edges of these native trees all have teeth, called serrations, while those of tree-of-heaven are smooth, except for occasionally featuring one tooth on the lower side of the leaf. The foul odor produced by the crushed foliage and broken twigs is also unique to tree-of-heaven.

Ampelopsis brevipedunculata | Porcelainberry

Ground-cover vines should be treated with a 2% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season, ideally between April and September, for three years, or until plant death occurs.

Vines growing into tree canopies should be treated with the cut-stump method, and the stump should be treated with a 20% triclopyr ester oil-based spray. When cutting vines, a 'window' should be created, cutting the vine as high up as possible and as low to the ground as possible. Vines should otherwise not be pulled out of trees, as this can damage the tree more than if the vines are left alone. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs.

Artemisia vulgaris | Mugwort

Young vegetation should be treated with a 2% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season, ideally between April and September, for approximately three years, or until plant death occurs.

Celastrus orbiculatus | Oriental Bittersweet

Young vines and ground-cover growth should be treated with a 2% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season, ideally between April and September, for approximately three years, or until plant death occurs.

Vines growing on trees should be treated with the cut-stump method. The vine should be cut, and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. When cutting vines, a 'window' should be created, cutting the vine as high up as possible and as low to the ground as possible. Vines should otherwise not be pulled out of trees, as this can damage the tree more than if the vines are left alone. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, as long as temperatures are above freezing, with spring and summer being the most effective. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Clematis terniflora | Sweet Autumn Virginsbower

Ground-cover vines should be treated with a 5% glyphosate-based foliar herbicide. Addition of a 0.2% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season for three years or until plant death occurs. At least two treatments should be completed between April and May, when the plant is in its weakest growth stage, and then at least one more treatment should be completed between May and August.

Vines growing on trees should be treated with the cut-stump method. The vine should be cut, and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. When cutting vines, a 'window' should be created, cutting the vine as high up as possible and as low to the ground as possible. Vines should otherwise not be pulled out of trees, as this can damage the tree more than if the vines are left alone. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, as long as temperatures are above freezing, with spring and summer being the most effective. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

VA CERTIFIED PESTICIDE APPLICATOR APPROVAL:

Allison Hay — 01-12-2023
Allison Hay — Date:
VA Certified Commercial Pesticide Applicator, 133940-C
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — 01-12-2023
Allison Hay — Date:
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN NOTES AND DETAILS

SHEET No.

C210

112206

TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
7558	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	11	66	OFFSITE	REMAIN	NATIVE	Lean to trunk, many vines
7559	*PLATANUS OCCIDENTALIS*	SYCAMORE	22	22	19	56	OFFSITE	REMAIN	NATIVE	Covered with ivy
7560	*ACER NEGUNDO*	BOXELDER	15	15	22	56	OFFSITE	REMAIN	NATIVE	Leader snapped off, epicormic growth
7561	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	30	44	OFFSITE	REMAIN	NATIVE	Snagged and cut down co-dominant trunk, some wounds and conks on trunk
7562	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	17	69	OFFSITE	REMAIN	NATIVE	One dead leader
7563	*PYRUS CALLERYANA*	CALLERY PEAR	8	8	10	72	OFFSITE	REMAIN	INVASIVE	
7564	*ACER NEGUNDO*	BOXELDER	30	45	21	69	OFFSITE	REMAIN	NATIVE	Leaning trunk, strangely grown limbs
7565	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	21	47	OFFSITE	REMAIN	NATIVE	Snagged branches
7566	*CATALPA SPECIOSA*	NORTHERN CATALPA	15	15	30	69	OFFSITE	REMAIN	NATIVE	One small leader, one large, many sprouts, uneven canopy
7567	*ACER NEGUNDO*	BOXELDER	8	8	27	75	OFFSITE	REMAIN	NATIVE	
7568	*CATALPA SPECIOSA*	NORTHERN CATALPA	12	12	14	72	OFFSITE	REMOVE	NATIVE	Removal is subject to coordination with the National Park Service; many vines in canopy
7569	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	11	50	OFFSITE	REMAIN	NATIVE	Covered with ivy, dead branches
7570	*QUERCUS PHELLOS*	WILLOW OAK	12	12	14	72	OFFSITE	REMAIN	NATIVE	Some vines on trunk
7571	*ULMUS AMERICANA*	AMERICAN ELM	12	12	7	59	OFFSITE	REMAIN	NATIVE	Leaning
7572	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	6	8	9	25	OFFSITE	REMAIN	NATIVE	Dead
7573	*UNIDENTIFIED*	DEAD TREE	6	8	17	25	OFFSITE	REMAIN		
7574	*UNIDENTIFIED*	UNIDENTIFIED	10	10	16		OFFSITE	REMOVE		
7575	*MORUS SPP.*	MULBERRY	25	25	9	47	OFFSITE	REMAIN		
7576	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	21	72	ONSITE	REMOVE	NATIVE	Uneven canopy
7577	*PRUNUS SEROTINA*	BLACK CHERRY	8	8	19	50	ONSITE	REMOVE	NATIVE	
7578	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	14	75	OFFSITE	REMAIN	NATIVE	Many vines
7579	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	7	50	OFFSITE	REMAIN	NATIVE	
7580	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	10	69	OFFSITE	REMAIN	NATIVE	Many vines, leaning trunk
7581	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	12	44	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7582	*ULMUS AMERICANA*	AMERICAN ELM	25	25	26	75	OFFSITE	REMAIN	NATIVE	Slight lean to trunk
7583	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	16	41	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7584	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	14	14	36	66	OFFSITE	REMAIN	NATIVE	Leader dead, second leader highly vegetated
7585	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	16	66	OFFSITE	REMAIN	NATIVE	Lightly covered with ivy
7586	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	18	25	OFFSITE	REMAIN	NATIVE	Dead
7587	*ULMUS AMERICANA*	AMERICAN ELM	10	10	9	56	OFFSITE	REMAIN	NATIVE	Covered with ivy, top heavy
7588	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	19	25	OFFSITE	REMAIN	NATIVE	Dead
7589	*PRUNUS SEROTINA*	BLACK CHERRY	6	8	11	25	OFFSITE	REMAIN	NATIVE	Overgrown with ivy, snagged top
7590	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	19	59	OFFSITE	REMAIN	NATIVE	Lots of ivy
7591	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	15	41	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7592	*PRUNUS SEROTINA*	BLACK CHERRY	6	8	9	38	OFFSITE	REMAIN	NATIVE	One living branch, everything else dead, lots of English ivy
7593	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	14	41	OFFSITE	REMAIN	NATIVE	Covered with ivy, conk on trunk
7594	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	1	8	12	25	OFFSITE	REMAIN	NATIVE	Dead
7596	*QUERCUS VELUTINA*	BLACK OAK	25	25	15	63	OFFSITE	REMAIN	NATIVE	Uneven canopy, much vines on trunk, dead tree leaning against it
7598	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	1	8	9	25	OFFSITE	REMAIN	NATIVE	Dead
7599	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	10	44	OFFSITE	REMAIN	NATIVE	Covered with ivy, dead branches
7600	*PRUNUS SEROTINA*	BLACK CHERRY	8	8	11	63	OFFSITE	REMAIN	NATIVE	Almost all main leaders defoliated except for one
7701	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	11	25	OFFSITE	REMAIN	NATIVE	Dead branches, leaning
7702	*ULMUS AMERICANA*	AMERICAN ELM	8	8	12	59	OFFSITE	REMAIN	NATIVE	Quite small, two stems, lots of vines, uneven canopy, snapped leader on one trunk
7703	*PRUNUS SEROTINA*	BLACK CHERRY	6	8	7	44	OFFSITE	REMAIN	NATIVE	Covered with ivy, dead branches
7704	*ULMUS AMERICANA*	AMERICAN ELM	4	8	6	72	OFFSITE	REMAIN	NATIVE	Some small vines, not straight trunk
7705	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	8	8	9	72	OFFSITE	REMAIN	INVASIVE	Lightly covered with ivy
7706	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	4	8	18	25	OFFSITE	REMAIN	NATIVE	Dead
7707	*ULMUS AMERICANA*	AMERICAN ELM	10	10	7	69	OFFSITE	REMAIN	NATIVE	
7708	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	14	25	OFFSITE	REMAIN	NATIVE	Dead
7709	*QUERCUS PHELLOS*	WILLOW OAK	25	25	33	75	OFFSITE	REMAIN	NATIVE	
7710	*PRUNUS SEROTINA*	BLACK CHERRY	20	20	24	66	OFFSITE	REMAIN	NATIVE	Extreme ivy on trunk, dead scaffold branch, some bark peeling from living branches
7711	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	20	20	40	59	OFFSITE	REMAIN	NATIVE	
7712	*PRUNUS SEROTINA*	BLACK CHERRY	22	22	12	50	OFFSITE	REMAIN	NATIVE	English ivy on trunk, only two living branches
7713	*ACER NEGUNDO*	BOXELDER	35	53	82	66	OFFSITE	REMAIN	NATIVE	Multiple trunks, few dead branches
7714	*ACER NEGUNDO*	BOXELDER	20	20	7	75	OFFSITE	REMAIN	NATIVE	Slight lean
7715	*MORUS SPP.*	MULBERRY	28	28	33	72	OFFSITE	REMAIN		
7718	*ILEX OPACA*	AMERICAN HOLLY	10	10	21	75	OFFSITE	REMAIN	NATIVE	Dual leaders
7719	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	24	53	OFFSITE	REMAIN	NATIVE	Trunk covered with poison ivy
7720	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	20	20	11	69	OFFSITE	REMAIN	NATIVE	Leaning trunk, lots of ivy
7721	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	26	66	OFFSITE	REMAIN	NATIVE	Trunk covered with poison ivy
7722	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	12	69	OFFSITE	REMAIN	NATIVE	Leaning trunk, lots of ivy
7723	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	9	53	OFFSITE	REMAIN	NATIVE	Dead branches, leaning over trail
7725	*UNIDENTIFIED*	DEAD TREE	6	8	7	25	OFFSITE	REMAIN		
7726	*PRUNUS SEROTINA*	BLACK CHERRY	15	15	9	25	OFFSITE	REMAIN	NATIVE	Dead
7727	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	12	63	OFFSITE	REMAIN	NATIVE	Epicormic branches
7728	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	25	25	15	25	OFFSITE	REMAIN	NATIVE	Dead
7729	*PRUNUS SEROTINA*	BLACK CHERRY	18	18	10	69	OFFSITE	REMAIN	NATIVE	Covered with ivy
7730	*ILEX OPACA*	AMERICAN HOLLY	8	8	10	72	OFFSITE	REMAIN	NATIVE	Some holes in trunk, epicormic sprouting, otherwise good form
7731	*QUERCUS RUBRA*	NORTHERN RED OAK	22	22	17	72	OFFSITE	REMAIN	NATIVE	Few dead branches
7732	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	12	75	OFFSITE	REMAIN	NATIVE	
7733	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	7	8	9	75	OFFSITE	REMAIN	NATIVE	
7734	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	5	8	14	75	OFFSITE	REMAIN	NATIVE	
7735	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	11	75	OFFSITE	REMAIN	NATIVE	
7736	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	17	75	OFFSITE	REMAIN	NATIVE	
7737	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	75	OFFSITE	REMAIN	NATIVE	
7738	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	16	75	OFFSITE	REMAIN	NATIVE	
7739	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	9	9	12	75	OFFSITE	REMAIN	NATIVE	
7740	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	59	OFFSITE	REMAIN	NATIVE	Front branches broken and snapped top
7741	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	5	8	6	75	OFFSITE	REMAIN	NATIVE	
7742	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	9	56	OFFSITE	REMAIN	NATIVE	Front branches broken and snapped top
7743	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	9	75	OFFSITE	REMAIN	NATIVE	
7744	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	12	75	OFFSITE	REMAIN	NATIVE	
7745	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	75	ONSITE	REMAIN	NATIVE	
7746	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	31	75	ONSITE	REMAIN	NATIVE	
7747	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	75	ONSITE	REMAIN	NATIVE	
7748	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	15	75	ONSITE	REMAIN	NATIVE	
7749	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	12	75	ONSITE	REMAIN	NATIVE	
7750	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	ONSITE	REMAIN	NATIVE	
7751	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	30	75	ONSITE	REMAIN	NATIVE	
7752	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	15	75	ONSITE	REMAIN	NATIVE	
7753	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	19	75	ONSITE	REMAIN	NATIVE	
7755	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	11	75	ONSITE	REMAIN	NATIVE	
7756	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	16	75	ONSITE	REMAIN	NATIVE	
7757	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	21	75	ONSITE	REMAIN	NATIVE	
7758	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	30	75	ONSITE	REMAIN	NATIVE	
7759	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	34	75	ONSITE	REMAIN	NATIVE	
7760	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	9	75	OFFSITE	REMAIN	NATIVE	
7761	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	75	OFFSITE	REMAIN	NATIVE	
7762	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	6	75	OFFSITE	REMAIN	NATIVE	
7763	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	9	75	OFFSITE	REMAIN	NATIVE	
7764	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	6	75	OFFSITE	REMAIN	NATIVE	
7765	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	6	75	OFFSITE	REMAIN	NATIVE	
7766	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	75	OFFSITE	REMAIN	NATIVE	
7767	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	6	75	OFFSITE	REMAIN	NATIVE	
7768	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	75	OFFSITE	REMAIN	NATIVE	
7769	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	6	75	OFFSITE	REMAIN	NATIVE	
7770	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	75	OFFSITE	REMAIN	NATIVE	
7771	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	59	OFFSITE	REMAIN	NATIVE	Snagged top
7772	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	75	OFFSITE	REMAIN	NATIVE	
7773	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	6	75	OFFSITE	REMAIN	NATIVE	
7774	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	13	75	OFFSITE	REMAIN	NATIVE	
7775	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	OFFSITE	REMOVE	NATIVE	
7776	*ACER PENSYLVANICUM*	STRIPED MAPLE	15	15	12	75	OFFSITE	REMAIN	NATIVE	
7777	*THUJA SPP.*	ARBORVITAE	12	12	22	75	OFFSITE	REMAIN	NATIVE	

INVASIVE SPECIES MANAGEMENT PLAN

Euonymus fortunei | Wintercreeper

Vines growing on trees should be treated with the cut-stump method, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs. Wintercreeper vines usually grow small roots into the bark of the tree, so pulling large swaths of vines off will likely rip off the tree's bark. Instead of creating a window that is 4-6 feet tall, it is instead recommended to create a small, 3-5-inch window in the vine towards the bottom of the tree (treating the stump), and another small window about five feet off the ground. The section of vine in between will die and eventually fall off of the tree without destroying the bark.

Hedera helix | English Ivy

Ground-cover vines should be treated with a 5% glyphosate-based foliar herbicide. Addition of a 0.2% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season for three years or until plant death occurs. At least two treatments should be completed between April and May, when the plant is in its weakest growth stage, and then at least one more treatment should be completed between May and August.

Vines growing on trees should be treated with the cut-stump method, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs. English ivy vines usually grow small roots into the bark of the tree, so pulling large swaths of vines off will likely rip off the tree's bark. Instead of creating a window that is 4-6 feet tall, it is instead recommended to create a small, 3-5-inch window in the vine towards the bottom of the tree (treating the stump), and another small window about five feet off the ground. The section of vine in between will die and eventually fall off of the tree without destroying the bark.

Hydrangea petiolaris | Climbing Hydrangea

Ground-cover vines should be treated with a 5% glyphosate-based foliar herbicide. Addition of a 0.2% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season for three years or until plant death occurs. At least two treatments should be completed between April and May, when the plant is in its weakest growth stage, and then at least one more treatment should be completed between May and August.

Vines growing on trees should be treated with the cut-stump method, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs.

Ligustrum sinense | Chinese Privet

Chinese privet shrubs below five feet in height may be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between March and April, or September and October, for up to three years, or until plant death occurs.

Chinese privet shrubs over five feet in height should be treated with the cut-stump method. The shrub should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Lonicera japonica | Japanese Honeysuckle

Ground-cover vines should be treated with a 2% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season, ideally between April and September, for three years, or until plant death occurs.

Vines growing on trees should be treated with the cut-stump method, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs. When cutting vines, a 'window' should be created, cutting the vine as high up as possible and as low to the ground as possible. Vines should otherwise not be pulled out of trees, as this can damage the tree more than if the vines are left alone

Lonicera maackii | Bush Honeysuckle

As bush honeysuckle shrubs can vary in size and age dramatically, there are multiple treatment recommendations. Plants under five feet should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between May and mid-October, for approximately two to three years, or until plant death occurs.

Plants over five feet tall should be treated with one of two methods: the cut-stump method or the basal bark method. To perform the cut-stump method, the shrub should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, with spring and summer being the most effective. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

To perform the basal bark method, the base of the shrub's stems should be treated with a 20-30% triclopyr ester oil-based herbicide. The stems should be treated from the ground to approximately three feet up the trunks, careful not to apply so much herbicide that it runs off the stem and pools on the soil. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, with spring and summer being most effective. Basal bark methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

VA CERTIFIED PESTICIDE APPLICATOR APPROVAL:

Allison Hay — 01-12-2023
Allison Hay — Date:
VA Certified Commercial Pesticide Applicator, 133940-C
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — 01-12-2023
Allison Hay — Date:
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
TREE PRESERVATION PLAN NOTES AND DETAILS

SHEET No.
C211

112206

TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
7778	*TSUGA CANADENSIS*	EASTERN HEMLOCK	10	10	12	75	OFFSITE	REMAIN	NATIVE	No Hemlock Woolly Adelgid, double trunk, new growth
7779	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	S5	75	OFFSITE	REMAIN		
7780	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	47	75	OFFSITE	REMAIN		
7781	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	48	75	OFFSITE	REMAIN		
7782	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	S3	75	OFFSITE	REMAIN		
7783	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	48	75	OFFSITE	REMAIN		
7784	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	S6	75	OFFSITE	REMAIN		
7785	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	42	75	OFFSITE	REMAIN		
7786	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	39	75	OFFSITE	REMAIN		
7787	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	54	75	OFFSITE	REMOVE		
7788	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	50	75	OFFSITE	REMOVE		
7789	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	52	75	OFFSITE	REMOVE		
7790	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	36	75	OFFSITE	REMOVE		
7791	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	38	75	OFFSITE	REMOVE		
7792	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	38	75	OFFSITE	REMOVE		
7793	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	46	75	OFFSITE	REMOVE		
7794	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	55	75	OFFSITE	REMOVE		
7795	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	OFFSITE	REMOVE	NATIVE	
7796	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	OFFSITE	REMOVE	NATIVE	
7797	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	OFFSITE	REMOVE	NATIVE	
7798	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	75	OFFSITE	REMOVE	NATIVE	
7801	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	63	75	OFFSITE	REMOVE		
7802	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	10	10	44	75	OFFSITE	REMOVE		
7803	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	40	75	OFFSITE	REMOVE		
7804	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	51	75	OFFSITE	REMOVE		
7805	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	55	75	OFFSITE	REMOVE		
7806	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	45	75	OFFSITE	REMOVE		
7807	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	42	75	OFFSITE	REMOVE		
7808	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	54	75	OFFSITE	REMOVE		
7809	*PHOTINIA X FRASERI*	RED TIP PHOTINIA	12	12	53	75	OFFSITE	REMOVE		
7810	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	18	75	OFFSITE	REMOVE	NATIVE	
7811	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	12	75	OFFSITE	REMOVE	NATIVE	
7812	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	7	75	OFFSITE	REMOVE	NATIVE	
7813	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	12	75	OFFSITE	REMOVE	NATIVE	
7814	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	9	75	OFFSITE	REMOVE	NATIVE	
7815	*ACER RUBRUM*	RED MAPLE	15	15	14	63	OFFSITE	REMAIN	NATIVE	Small mechanical damage to trunk, sap sucker holes
7816	*ACER RUBRUM*	RED MAPLE	25	25	18	81	OFFSITE	REMAIN	NATIVE	Roots coming up through mulch, one cavity in branch
7817	*PRUNIS X YEDOENSIS*	YOSHINO CHERRY	20	20	15	72	OFFSITE	REMAIN	EXOTIC	
7818	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	10	59	OFFSITE	REMAIN	NATIVE	Extreme amount of vines
7819	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	21	53	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7820	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	19	25	OFFSITE	REMAIN	NATIVE	Dead
7821	*MORUS SPP.*	MULBERRY	20	20	47	66	OFFSITE	REMAIN		Trunk covered with ivy
7822	*PRUNUS SEROTINA*	BLACK CHERRY	15	15	39	59	OFFSITE	REMAIN	NATIVE	Extreme amount of vines, bad form
7823	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	41	59	OFFSITE	REMAIN	NATIVE	Some dead branches
7824	*PRUNUS SEROTINA*	BLACK CHERRY	6	8	7	25	OFFSITE	REMAIN	NATIVE	Dead
7825	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	7	63	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7826	*PRUNUS SEROTINA*	BLACK CHERRY	4	8	4	S0	OFFSITE	REMAIN	NATIVE	Very overgrown with ivy
7827	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	11	63	OFFSITE	REMAIN	NATIVE	Overgrown with ivy
7828	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	10	S3	OFFSITE	REMAIN	NATIVE	Very patchy growth, extreme ivy
7829	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	12	12	24	S0	OFFSITE	REMAIN	NATIVE	Co-dominant stems, cavity
7830	*LIQUIDAMBAR STYRACIFLUA*	SWEETGUM	15	15	10	59	OFFSITE	REMAIN	NATIVE	Very patchy growth, extreme ivy
7831	*QUERCUS VELUTINA*	BLACK OAK	14	14	15	56	OFFSITE	REMAIN	NATIVE	Covered with ivy
7832	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	1	8	2	56	OFFSITE	REMAIN	NATIVE	Very patchy growth, extreme ivy
7833	*QUERCUS PHELLOS*	WILLOW OAK	15	15	27	72	OFFSITE	REMAIN	NATIVE	
7834	*QUERCUS VELUTINA*	BLACK OAK	15	15	18	69	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches
7835	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	27	S0	OFFSITE	REMAIN	NATIVE	Covered with ivy
7836	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	7	59	OFFSITE	REMAIN	NATIVE	Lean to trunk, extreme ivy
7837	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	14	47	OFFSITE	REMAIN	NATIVE	Covered with ivy
7838	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	24	50	OFFSITE	REMAIN	NATIVE	Dead leader, broken branches, ivy pulling
7839	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	7	0	OFFSITE	REMAIN	NATIVE	
7840	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	15	59	OFFSITE	REMAIN	NATIVE	Dead leader, broken branches, ivy pulling
7841	*PYRUS CALLERYANA*	CALLERY PEAR	10	10	8	59	OFFSITE	REMAIN	INVASIVE	
7842	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	13	53	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches, tree laying in canopy
7843	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	25	25	34	59	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches, main leader snapped off and laying on 7842
7844	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	11	66	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches
7845	*UNIDENTIFIED*	DEAD TREE	4	8	48	25	OFFSITE	REMAIN		Overgrown with ivy, dead snag
7846	*PYRUS CALLERYANA*	CALLERY PEAR	8	8	15	S6	OFFSITE	REMAIN	INVASIVE	Extreme ivy, some dead small branches
7847	*PYRUS CALLERYANA*	CALLERY PEAR	6	8	6	38	OFFSITE	REMAIN	INVASIVE	Leaning, overgrown with ivy, epicormic shoots
7848	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	17	S6	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches
7849	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	26	S3	OFFSITE	REMAIN	NATIVE	
7850	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	11	59	OFFSITE	REMAIN	NATIVE	Extreme ivy, some dead small branches, growing at an angle
7851	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	13	S3	OFFSITE	REMAIN	NATIVE	
7852	*PYRUS CALLERYANA*	CALLERY PEAR	8	8	10	S3	OFFSITE	REMAIN	INVASIVE	Growing through fencing
7853	*MORUS SPP.*	MULBERRY	20	20	50	S6	OFFSITE	REMAIN		Trunk covered with ivy
7854	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	15	S3	OFFSITE	REMAIN	NATIVE	Growing at an angle, extreme ivy coverage
7855	*MORUS SPP.*	MULBERRY	15	15	13	47	OFFSITE	REMAIN		Peeling bark, covered with ivy
7856	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	15	15	9	72	OFFSITE	REMAIN	NATIVE	
7857	*ZELKOVA SERRATA*	ZELKOVA	10	10	12	75	OFFSITE	REMOVE	EXOTIC	
7858	*ZELKOVA SERRATA*	ZELKOVA	10	10	10	75	OFFSITE	REMOVE	EXOTIC	Some peeling bark at base of trunk
7859	*ZELKOVA SERRATA*	ZELKOVA	10	10	9	66	OFFSITE	REMOVE	EXOTIC	
7860	*ZELKOVA SERRATA*	ZELKOVA	10	10	11	75	OFFSITE	REMOVE	EXOTIC	Some ants and peeling bark
7861	*LAGERSTROEMIA SPP.*	CREPE MYRTLE	12	12	38	59	OFFSITE	REMOVE	EXOTIC	Broken stem
7862	*CERCIS CANADENSIS*	EASTERN REDBUD	12	12	33	59	OFFSITE	REMOVE	NATIVE	Broken leaders still alive, cavities in trunks
7863	*LAGERSTROEMIA SPP.*	CREPE MYRTLE	10	10	32	75	OFFSITE	REMOVE	EXOTIC	
7864	*CERCIS CANADENSIS*	EASTERN REDBUD	10	10	29	75	OFFSITE	REMOVE	NATIVE	Uneven canopy, some dead branches
7865	*LAGERSTROEMIA SPP.*	CREPE MYRTLE	10	10	33	75	OFFSITE	REMOVE	EXOTIC	
7866	*ZELKOVA SERRATA*	ZELKOVA	12	12	14	72	OFFSITE	REMOVE	EXOTIC	Very uneven canopy, some dead scaffold branches
7867	*ZELKOVA SERRATA*	ZELKOVA	12	12	12	75	OFFSITE	REMOVE	EXOTIC	
7868	*ZELKOVA SERRATA*	ZELKOVA	10	10	10	25	OFFSITE	REMOVE	EXOTIC	Dead, some fungus growth
7869	*ZELKOVA SERRATA*	ZELKOVA	15	15	48	75	OFFSITE	REMOVE	EXOTIC	
7870	*ZELKOVA SERRATA*	ZELKOVA	15	15	15	75	OFFSITE	REMOVE	EXOTIC	
7903	*QUERCUS VELUTINA*	BLACK OAK	40	60	S0	81	OFFSITE	REMAIN	NATIVE	
8237	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	21	21	9	66	OFFSITE	REMAIN	NATIVE	Lean towards trail, some snagged and dead scaffold branches
8238	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	17	17	10	66	OFFSITE	REMAIN	NATIVE	Many vines pulling on scaffold branches, uneven canopy
8239	*PYRUS CALLERYANA*	CALLERY PEAR	10	10	6	72	OFFSITE	REMAIN	INVASIVE	Trunk overgrown with English ivy
8240	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	23	23	9	69	OFFSITE	REMAIN	NATIVE	Many vines pulling on scaffold branches, uneven canopy, extreme lean to trunk
8241	*ACER NEGUNDO*	BOXELDER	14	14	7	75	OFFSITE	REMAIN	NATIVE	
8242	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	9	69	OFFSITE	REMAIN	NATIVE	Many vines pulling on scaffold branches, uneven canopy, extreme lean to trunk
8243	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	11	63	OFFSITE	REMAIN	NATIVE	Leaning towards river, canopy dieback, dead scaffold branch, trunk overgrown with English ivy
8244	*ULMUS AMERICANA*	AMERICAN ELM	19	19	11	69	OFFSITE	REMAIN	NATIVE	Leaning due to cramped surrounding canopy
8245	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	22	69	OFFSITE	REMAIN	NATIVE	Co-dominant stems
8246	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	20	20	12	25	OFFSITE	REMAIN	NATIVE	Dead
8247	*MORUS SPP.*	MULBERRY	12	12	7	72	OFFSITE	REMAIN		
8248	*ULMUS AMERICANA*	AMERICAN ELM	11	11	9	69	OFFSITE	REMAIN	NATIVE	Leaning, bad structure, few small dead branches
8249	*QUERCUS PHELLOS*	WILLOW OAK	30	45	21	72	OFFSITE	REMAIN	NATIVE	Leaning towards river
8250	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	18	18	14	66	OFFSITE	REMAIN	NATIVE	Leaning, many dead branches, only vegetation growing at top, lower roots coming out of ground and show damage and decay
8251	*ULMUS AMERICANA*	AMERICAN ELM	17	17	8	66	OFFSITE	REMAIN	NATIVE	Leaning over trail, few dead scaffold branches, 8' of trunk overgrown with ivy
8252	*PYRUS CALLERYANA*	CALLERY PEAR	20	20	9	69	OFFSITE	REMAIN	INVASIVE	One large leader dead, many vines pulling on scaffold branches
8253	*GLEDITSIA TRIACANTHOS*	HONEYLOCUST	10	10	8	75	OFFSITE	REMAIN	NATIVE	
8254	*ULMUS AMERICANA*	AMERICAN ELM	22	22	11	66	OFFSITE	REMAIN	NATIVE	One dead leader, other is leaning, some roots exposed by water movement

INVASIVE SPECIES MANAGEMENT PLAN

Morus alba | White Mulberry

As white mulberry trees can vary in size and age dramatically, there are multiple treatment recommendations. Plants under three feet should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between May and September, for approximately two to three years, or until plant death occurs.

Plants between three feet tall and eight feet tall should be treated with the cut-stump method. The tree should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, with spring and summer being the most effective. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Plants over eight feet tall should be treated with the hack-and-squirt or basal bark method. The tree should be treated with a 20-30% triclopyr ester oil-based herbicide. If the basal bark method is being used, the stems should be treated from the ground to approximately three feet up the trunks, careful not to apply so much herbicide that it runs off the stem and pools on the soil. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, with spring and summer being most effective. Hack-and-squirt and cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Nandina domestica | Heavenly Bamboo

Plants should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between May and mid-October, for approximately two to three years, or until plant death occurs.

Paulownia tomentosa| Princesstree

These trees should be treated with the cut-stump method or the basal bark method. If the cut-stump method is being used, the tree should be cut down to approximately 6 inches in height (or lower, if possible) and removed, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs.

If the basal bark method is being used, the stems should be treated from the ground to approximately three feet up the trunks, careful not to apply so much herbicide that it runs off the stem and pools on the soil. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. Treatments should occur 1-2 times per year at any time of year, with spring and summer being most effective. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs.

Phragmites australis | Giant Reed

Young giant reed should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.2% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between August and mid-October, for approximately two to three years, or until plant death occurs.

Pueraria montana, var. lobata | Kudzu

As vines can vary in size and age dramatically, there are multiple treatment recommendations. Ground-cover vines should be treated with a 2% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur three to four times per season, ideally between April and August, for three years, or until plant death occurs.

Vines growing on trees should be treated with the stump cut method, and the stump should be treated with a 20% triclopyr ester oil-based spray. Any plant being treated with the oil-based triclopyr ester solution should be treated one to two times per season for three years, or until plant death occurs. When cutting vines, a 'window' should be created, cutting the vine as high up as possible and as low to the ground as possible. Vines should otherwise not be pulled out of trees, as this can damage the tree more than if the vines are left alone.

Pyrus calleryana | Callery Pear

Callery pear plants below five feet in height may be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between March and October, for up to three years, or until plant death occurs.

Callery pear trees that are over five feet in height should be treated with the cut-stump method. The shrub should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

VA CERTIFIED PESTICIDE APPLICATOR APPROVAL:

Allison Hay 01-12-2023
Allison Hay Date:
VA Certified Commercial Pesticide Applicator, 133940-C
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023
Allison Hay Date:
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
TREE PRESERVATION PLAN NOTES AND DETAILS

SHEET No.
C212

112206

TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
8255	*QUERCUS RUBRA*	NORTHERN RED OAK	25	25	20	72	OFFSITE	REMAIN	NATIVE	
8256	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	12	12	7	59	OFFSITE	REMAIN	INVASIVE	Malformed trunk, many vines, most branched are defoliated
8257	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	9	9	7	66	OFFSITE	REMAIN	INVASIVE	Co-dominant stems, portion leaning over river
8258	*QUERCUS PHELLOS*	WILLOW OAK	10	10	6	75	OFFSITE	REMAIN	NATIVE	One side leader
8259	*PRUNUS SEROTINA*	BLACK CHERRY	19	19	8	59	OFFSITE	REMAIN	NATIVE	Leaning over trail, few dead scaffold branches
8260	*MORUS SPP.*	MULBERRY	28	28	25	59	OFFSITE	REMAIN		Many sprouty trunks, epicormic sprouting, many dead branches in canopy
8261	*QUERCUS RUBRA*	NORTHERN RED OAK	12	12	14	63	OFFSITE	REMAIN	NATIVE	Canopy dieback
8262	*QUERCUS VELUTINA*	BLACK OAK	13	13	16	81	OFFSITE	REMAIN	NATIVE	Some epicormic sprouting, one dead scaffold branch
8263	*ULMUS AMERICANA*	AMERICAN ELM	14	14	16	72	OFFSITE	REMAIN	NATIVE	Half of the trunk overgrown with ivy
8264	*MORUS SPP.*	MULBERRY	14	14	11	69	OFFSITE	REMAIN		Extreme amount of poison ivy on trunk, leaning trunk
8265	*ULMUS AMERICANA*	AMERICAN ELM	8	8	6	72	OFFSITE	REMAIN	NATIVE	Ivy on trunk
8266	*ULMUS AMERICANA*	AMERICAN ELM	23	23	16	72	OFFSITE	REMAIN	NATIVE	Multiple leaders, many poison ivy vines on trunk, epicormic sprouting
8267	*PRUNUS SEROTINA*	BLACK CHERRY	11	11	7	56	OFFSITE	REMAIN	NATIVE	Ivy on trunk, co-dominant trunks, one trunk dead
8268	*QUERCUS PHELLOS*	WILLOW OAK	23	23	19	75	OFFSITE	REMAIN	NATIVE	One branch growing downward
8269	*QUERCUS PHELLOS*	WILLOW OAK	20	20	12	69	OFFSITE	REMAIN	NATIVE	
8270	*ULMUS AMERICANA*	AMERICAN ELM	17	17	11	72	OFFSITE	REMAIN	NATIVE	Three leaders, epicormic sprouting
8271	*ULMUS AMERICANA*	AMERICAN ELM	26	26	14	59	OFFSITE	REMAIN	NATIVE	Leaning over river, canopy dieback, top heavy, ivy on trunk
8272	*ULMUS AMERICANA*	AMERICAN ELM	11	11	7	75	OFFSITE	REMAIN	NATIVE	Leaning tree #8271 sitting in branches, epicormic sprouting, some vines on trunk
8273	*PLATANUS OCCIDENTALIS*	SYCAMORE	11	11	7	63	OFFSITE	REMAIN	NATIVE	Corrective lean, on the edge along river
8274	*PLATANUS OCCIDENTALIS*	SYCAMORE	7	8	9	63	OFFSITE	REMAIN	NATIVE	Vines on trunk, epicormic sprouting, heavily leaning
8275	*UNIDENTIFIED*	DEAD TREE	7	8	7	25	OFFSITE	REMAIN		
8276	*QUERCUS VELUTINA*	BLACK OAK	16	16	15	75	OFFSITE	REMAIN	NATIVE	Vines on trunk, uneven canopy, dead lower branches
8277	*PRUNUS SEROTINA*	BLACK CHERRY	20	20	8	50	OFFSITE	REMAIN	NATIVE	Cavity, leaning, canopy dieback
8278	*QUERCUS PHELLOS*	WILLOW OAK	13	13	8	72	OFFSITE	REMAIN	NATIVE	Many vines, some branches very low on trunk
8279	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	8	63	OFFSITE	REMAIN	NATIVE	
8280	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	9	9	8	59	OFFSITE	REMAIN	NATIVE	Broken leader, many vines on tree, uneven canopy
8281	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	6	66	OFFSITE	REMAIN	NATIVE	
8282	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	10	69	OFFSITE	REMAIN	NATIVE	Many broken branches, many vines on trunk, two leaders
8283	*PLATANUS OCCIDENTALIS*	SYCAMORE	24	24	16	75	OFFSITE	REMAIN	NATIVE	
8284	*LIRIODENDRON TULIPIFERA*	TULIP POPLAR	11	11	9	75	OFFSITE	REMAIN	NATIVE	Some vines, some epicormic sprouting
8285	*UNIDENTIFIED*	DEAD TREE	14	14	7	25	OFFSITE	REMAIN		Snagged trunk
8286	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	17	17	13	72	OFFSITE	REMAIN	NATIVE	Many vines on trunk
8287	*PRUNUS SEROTINA*	BLACK CHERRY	16	16	7	72	OFFSITE	REMAIN	NATIVE	
8288	*ULMUS AMERICANA*	AMERICAN ELM	11	11	6	75	OFFSITE	REMAIN	NATIVE	Many vines
8289	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	8	72	OFFSITE	REMAIN	NATIVE	
8290	*MORUS SPP.*	MULBERRY	10	10	6	69	OFFSITE	REMAIN		Uneven canopy
8291	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	23	23	14	75	OFFSITE	REMAIN	NATIVE	
8292	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	15	15	30	63	OFFSITE	REMAIN	NATIVE	Many broken scaffold branches, second trunk is dead, some decayed heartwood
8293	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	19	19	17	50	OFFSITE	REMAIN	NATIVE	Co-dominant trunks, one trunk snagged
8294	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	17	17	6	69	OFFSITE	REMAIN	NATIVE	Lean in trunk, many vines
8295	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	16	16	16	72	OFFSITE	REMAIN	NATIVE	Along the edge of river
8296	*ACER NEGUNDO*	BOXELDER	14	14	6	75	OFFSITE	REMAIN	NATIVE	Many vines on trunk, uneven canopy
8297	*PRUNUS SEROTINA*	BLACK CHERRY	11	11	6	66	OFFSITE	REMAIN	NATIVE	
8298	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	8	8	11	28	OFFSITE	REMAIN	NATIVE	Tree only has one living branch
8299	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	25	25	12	69	OFFSITE	REMAIN	NATIVE	Along the edge of the river, leaning over river
8300	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	11	11	7	59	OFFSITE	REMAIN	NATIVE	Many vines, heavily leaning
8402	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	13	13	15	72	OFFSITE	REMAIN	NATIVE	Many vines, slightly leaning, uneven canopy
8404	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	11	11	12	69	OFFSITE	REMAIN	NATIVE	Many vines, leaning
8405	*UNIDENTIFIED*	DEAD TREE	8	8	12	25	OFFSITE	REMAIN		Covered with ivy
8406	*PRUNUS SEROTINA*	BLACK CHERRY	23	23	16	75	OFFSITE	REMAIN	NATIVE	Many vines, slight lean in trunk and in scaffold branches
8407	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	18	18	16	69	OFFSITE	REMAIN	NATIVE	Leaning over river, ivy on trunk
8408	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	20	20	15	69	OFFSITE	REMAIN	NATIVE	Many vines, heavy lean in trunk and in scaffold branches
8409	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	16	16	19	72	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8410	*MORUS SPP.*	MULBERRY	17	17	11	59	OFFSITE	REMAIN		Many vines, heavy lean in trunk and in scaffold branches, trunk intertwined with branch
8411	*MORUS SPP.*	MULBERRY	24	24	22	72	OFFSITE	REMAIN		
8412	*ULMUS AMERICANA*	AMERICAN ELM	21	21	19	72	OFFSITE	REMAIN	NATIVE	Multi-stemmed, some vines present
8413	*MORUS SPP.*	MULBERRY	20	20	10	69	OFFSITE	REMAIN		
8414	*QUERCUS RUBRA*	NORTHERN RED OAK	14	14	9	75	OFFSITE	REMAIN	NATIVE	Uneven canopy due to dense tree behind trunk
8415	*ACER NEGUNDO*	BOXELDER	13	13	9	72	OFFSITE	REMAIN	NATIVE	
8416	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	18	18	13	66	OFFSITE	REMAIN	NATIVE	Many vines, two leaders, leaning slightly
8417	*MORUS SPP.*	MULBERRY	20	20	12	59	OFFSITE	REMAIN		Canopy dieback
8418	*MORUS SPP.*	MULBERRY	12	12	12	69	OFFSITE	REMAIN		Many vines, multiple leaders, some dead branches
8419	*MORUS SPP.*	MULBERRY	20	20	14	72	OFFSITE	REMAIN		
8420	*PRUNUS SEROTINA*	BLACK CHERRY	20	20	12	72	OFFSITE	REMAIN	NATIVE	Many vines, uneven canopy
8421	*PRUNUS SEROTINA*	BLACK CHERRY	17	17	11	72	OFFSITE	REMAIN	NATIVE	Ivy on trunk
8422	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	7	72	OFFSITE	REMAIN	NATIVE	Two leaders, many vines
8424	*PRUNUS SEROTINA*	BLACK CHERRY	16	16	10	69	OFFSITE	REMAIN	NATIVE	Many vines, uneven canopy growth, dead scaffold branches
8425	*MORUS SPP.*	MULBERRY	30	45	22	59	OFFSITE	REMAIN		Canopy dieback
8426	*ULMUS AMERICANA*	AMERICAN ELM	16	16	26	66	OFFSITE	REMAIN	NATIVE	Many leaders, epicormic sprouting, vines in branches, some branches merging together
8427	*MORUS SPP.*	MULBERRY	25	25	26	72	OFFSITE	REMAIN		Ivy on trunk some dead branches
8428	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	22	22	16	63	OFFSITE	REMAIN	NATIVE	Three leaders, many vines on tree
8429	*MORUS SPP.*	MULBERRY	14	14	8	72	OFFSITE	REMAIN		
8430	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	19	19	11	72	OFFSITE	REMAIN	NATIVE	Two leaders, many vines on trees, large dead log laying in tree crotch
8431	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	18	18	30	69	OFFSITE	REMAIN	NATIVE	
8432	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	12	12	8	72	OFFSITE	REMAIN	NATIVE	Two leaders, many vines on trees, large dead log laying in tree crotch
8433	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	22	38	OFFSITE	REMAIN	NATIVE	Snagged top, dead scaffold branches
8434	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	14	14	8	72	OFFSITE	REMAIN	NATIVE	Many vines on scaffold branches
8435	*PRUNUS SEROTINA*	BLACK CHERRY	15	15	11	69	OFFSITE	REMAIN	NATIVE	
8436	*PRUNUS SEROTINA*	BLACK CHERRY	9	9	7	72	OFFSITE	REMAIN	NATIVE	Many vines on main branch
8437	*PRUNUS SEROTINA*	BLACK CHERRY	10	10	6	66	OFFSITE	REMAIN	NATIVE	
8438	*ACER SACCHARINUM*	SILVER MAPLE	16	16	35	69	OFFSITE	REMAIN	NATIVE	Low trunk split, many trunks, many galled leaves, some dead branches in canopy
8439	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	9	69	OFFSITE	REMAIN	NATIVE	
8440	*PRUNUS SEROTINA*	BLACK CHERRY	20	20	6	66	OFFSITE	REMAIN	NATIVE	One large branch on equally sized trunk, uneven canopy, leader has been bent sideways
8441	*ULMUS AMERICANA*	AMERICAN ELM	40	60	30	63	OFFSITE	REMAIN	NATIVE	
8442	*ULMUS AMERICANA*	AMERICAN ELM	30	45	16	63	OFFSITE	REMAIN	NATIVE	Extreme lean to trunk, many rubbing branches, uneven canopy
8443	*ULMUS AMERICANA*	AMERICAN ELM	20	20	12	66	OFFSITE	REMAIN	NATIVE	
8444	*ULMUS AMERICANA*	AMERICAN ELM	15	15	22	63	OFFSITE	REMAIN	NATIVE	8 trunks, exposed sapwood, very uneven canopy, many vines
8445	*MORUS SPP.*	MULBERRY	14	14	10	69	OFFSITE	REMAIN		
8446	*MORUS ALBA*	WHITE MULBERRY	9	9	10	66	OFFSITE	REMAIN	INVASIVE	Two leaders, bad form, uneven canopy
8447	*ACER RUBRUM*	RED MAPLE	15	15	30	72	OFFSITE	REMAIN	NATIVE	
8448	*MORUS RUBRA*	RED MULBERRY	11	11	7	66	OFFSITE	REMAIN	NATIVE	Twin leaders, uneven growth, grape vines in canopy
8449	*PLATANUS OCCIDENTALIS*	SYCAMORE	14	14	12	69	OFFSITE	REMAIN	NATIVE	
8450	*JUGLANS NIGRA*	BLACK WALNUT	13	13	14	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
8451	*MORUS SPP.*	MULBERRY	10	10	8	66	OFFSITE	REMAIN		Few dead branches
8452	*ACER SACCHARINUM*	SILVER MAPLE	18	18	20	69	OFFSITE	REMAIN	NATIVE	Many vines, angled trunk
8453	*ACER SACCHARINUM*	SILVER MAPLE	16	16	18	63	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8454	*ACER SACCHARINUM*	SILVER MAPLE	11	11	13	72	OFFSITE	REMAIN	NATIVE	Many vines
8455	*PLATANUS OCCIDENTALIS*	SYCAMORE	17	17	15	72	OFFSITE	REMAIN	NATIVE	
8456	*ACER SACCHARINUM*	SILVER MAPLE	14	14	9	59	OFFSITE	REMAIN	NATIVE	Many vines, angled trunk
8457	*ULMUS AMERICANA*	AMERICAN ELM	8	8	9	72	OFFSITE	REMAIN	NATIVE	
8458	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	5	8	9	34	OFFSITE	REMAIN	NATIVE	Many vines, almost entirely dead, 2 branches at top with vegetation only
8459	*MORUS SPP.*	MULBERRY	26	26	12	59	OFFSITE	REMAIN		Leaning over river, split
8460	*ULMUS AMERICANA*	AMERICAN ELM	28	28	19	66	OFFSITE	REMAIN	NATIVE	Extremely leaning, vines on trunk
8461	*ACER SACCHARINUM*	SILVER MAPLE	21	21	16	59	OFFSITE	REMAIN	NATIVE	Leaning over river, trunk covered with English ivy
8462	*ULMUS AMERICANA*	AMERICAN ELM	13	13	10	53	OFFSITE	REMAIN	NATIVE	Many vines, many broken leaders and scaffold branches
8463	*MORUS SPP.*	MULBERRY	24	24	13	31	OFFSITE	REMAIN		Leaning over river, holes in trunk
8464	*ULMUS AMERICANA*	AMERICAN ELM	22	22	14	47	OFFSITE	REMAIN	NATIVE	Epicormic sprouting, uneven canopy, trunk is growing fully sideways into the water, most roots exposed, many vines on trunk base
8465	*MORUS SPP.*	MULBERRY	24	24	12	41	OFFSITE	REMAIN		Fallen along river bank
8466	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	11	11	9	75	OFFSITE	REMAIN	NATIVE	
8467	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	18	18	40	56	OFFSITE	REMAIN	NATIVE	Overgrown with ivy

INVASIVE SPECIES MANAGEMENT PLAN

Rosa multiflora | Multiflora Rose

As multiflora rose shrubs can vary in size and age dramatically, there are multiple treatment recommendations. Plants under five feet should be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between June and September, for approximately two to three years, or until plant death occurs.

Plants over five feet tall should be treated with the cut-stump method. The shrub should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year, with spring and summer being the most effective. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

Ulmus parvofolia | Chinese Elm

Chinese elm plants below five feet in height may be treated with a 2-5% glyphosate-based foliar herbicide. Addition of a 0.1% water-safe non-ionic surfactant and a dye is recommended to increase the efficacy of the treatment. Foliar treatments should occur two to three times per season, ideally between March and October, for up to three years, or until plant death occurs.

Chinese elm trees that are over five feet in height should be treated with the cut-stump method. The shrub should be cut down as low to the ground as possible and the stump should be treated with a 20-30% triclopyr ester oil-based herbicide. Addition of a vegetable-based basal oil and dye is recommended to increase the efficacy of the treatment. This treatment can occur at any time of year. Cut-stump methods often take more than one year to reach full efficacy, so multi-year monitoring is recommended, but re-treatments are only recommended if it appears that plant death has not fully occurred after the first season.

ISMP Notes:

- All labels, laws, and safety protocols should be followed when applying herbicide, including wearing the appropriate PPE, applying in a safe manner, and applying in appropriate weather.

VA CERTIFIED PESTICIDE APPLICATOR APPROVAL:

Allison Hay — Date: 01-12-2023

Allison Hay
VA Certified Commercial Pesticide Applicator, 133940-C
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — Date: 01-12-2023

Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

DATE RECORDED _____

INSTRUMENT NO. — DEED BOOK NO. — PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN NOTES AND DETAILS

SHEET No.

C213

112206

TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
8468	*PRUNUS SEROTINA*	BLACK CHERRY	22	22	14	44	OFFSITE	REMAIN	NATIVE	Angled trunk, many vines, some scaffolding branches alive but most branches and leader are dead
8469	*MALUS SPP.*	CRABAPPLE	19	19	1S	72	OFFSITE	REMAIN	NATIVE	
8470	*MORUS RUBRA*	RED MULBERRY	19	19	12	66	OFFSITE	REMAIN	NATIVE	Uneven canopy, trunk not growing straight, healed cavity in roots
8471	*UNIDENTIFIED*	DEAD TREE	9	9	9	2S	OFFSITE	REMAIN		
8473	*MORUS SPP.*	MULBERRY	23	23	20	59	OFFSITE	REMAIN		
8474	*ACER SACCHARINUM*	SILVER MAPLE	20	20	18	56	OFFSITE	REMAIN	NATIVE	Cavities in exposed roots, leaning trunk, scaffold branches at strange angles
8475	*PRUNUS SEROTINA*	BLACK CHERRY	1S	1S	30	34	OFFSITE	REMAIN	NATIVE	Co-dominant stems, one trunk snagged
8476	*PRUNUS SEROTINA*	BLACK CHERRY	24	24	22	59	OFFSITE	REMAIN	NATIVE	Lean to trunk, cuts in roots
8477	*ULMUS AMERICANA*	AMERICAN ELM	21	21	17	56	OFFSITE	REMAIN	NATIVE	Co-dominant stems
8478	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	30	4S	1S	2S	OFFSITE	REMAIN	NATIVE	Dead
8479	*ULMUS AMERICANA*	AMERICAN ELM	1S	1S	14	66	OFFSITE	REMAIN	NATIVE	
8480	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	7	8	16	44	OFFSITE	REMAIN	NATIVE	Trunk rotted out, most branches defoliated
8481	*ULMUS AMERICANA*	AMERICAN ELM	24	24	19	7S	OFFSITE	REMAIN	NATIVE	
8482	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	6	8	12	2S	OFFSITE	REMAIN	NATIVE	Dead
8483	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	14	14	13	47	OFFSITE	REMAIN	NATIVE	Snagged leader
8484	*JUGLANS NIGRA*	BLACK WALNUT	8	8	10	56	OFFSITE	REMAIN	NATIVE	Lots of poison ivy, bad form
8485	*UNIDENTIFIED*	DEAD TREE	11	11	9	25	OFFSITE	REMAIN		Overgrown with ivy, conk growth on tree trunk
8486	*ULMUS AMERICANA*	AMERICAN ELM	12	12	12	63	OFFSITE	REMAIN	NATIVE	Many vines, main scaffold branch rubbing against Tree #848S, uneven scaffold growth
8487	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	14	14	13	34	OFFSITE	REMAIN	NATIVE	Conk growth on tree trunk
8488	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	1S	63	OFFSITE	REMAIN	NATIVE	Broken leader, heaving angled trunk growth, scaffold branches growing at angles, dead branches in canopy
8489	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	20	20	18	50	OFFSITE	REMAIN	NATIVE	Co-dominant stems, one trunk snagged, leaning over trail
8490	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	11	11	12	44	OFFSITE	REMAIN	NATIVE	Both leaders broken, two scaffold branches acting as leaders, many vines on trunk
8491	*ULMUS AMERICANA*	AMERICAN ELM	9	9	14	59	OFFSITE	REMAIN	NATIVE	Snagged scaffold branch
8492	*ULMUS AMERICANA*	AMERICAN ELM	19	19	18	63	OFFSITE	REMAIN	NATIVE	Large scaffold branches dead, many vines in canopy and on trunk, trunk at angle
8493	*MORUS SPP.*	MULBERRY	19	19	14	59	OFFSITE	REMAIN		
8494	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	14	14	18	69	OFFSITE	REMAIN	NATIVE	Leader snapped off, main scaffold branches taking its place
8495	*UNIDENTIFIED*	DEAD TREE	10	10	20	2S	OFFSITE	REMAIN		Overgrown with ivy
8496	*ULMUS AMERICANA*	AMERICAN ELM	22	22	21	69	OFFSITE	REMAIN	NATIVE	Very uneven growth, dual leaders
8497	*UNIDENTIFIED*	DEAD TREE	13	13	18	2S	OFFSITE	REMAIN		Overgrown with ivy
8498	*ULMUS AMERICANA*	AMERICAN ELM	13	13	12	25	OFFSITE	REMAIN	NATIVE	Dead
8499	*UNIDENTIFIED*	DEAD TREE	11	11	17	25	OFFSITE	REMAIN		Snagged trunk, overgrown with ivy
8S00	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	16	16	1S	28	OFFSITE	REMAIN	NATIVE	Almost entirely dead, only two branches are alive and vegetated
8801	*QUERCUS VELUTINA*	BLACK OAK	30	4S	24	7S	OFFSITE	REMAIN	NATIVE	Some small branches to prune
8802	*QUERCUS PHELLOS*	WILLOW OAK	4S	68	30	7S	OFFSITE	REMAIN	NATIVE	
8803	*QUERCUS RUBRA*	NORTHERN RED OAK	18	18	12	69	OFFSITE	REMAIN	NATIVE	Canopy dieback
8804	*TILIA CORDATA*	LITTLELEAF LINDEN	14	14	12	7S	OFFSITE	REMAIN	EXOTIC	Some cavities in branch cuttings
880S	*TILIA CORDATA*	LITTLELEAF LINDEN	13	13	12	72	OFFSITE	REMAIN	EXOTIC	
8806	*TILIA CORDATA*	LITTLELEAF LINDEN	12	12	9	72	OFFSITE	REMAIN	EXOTIC	Some root burls, cavity in trunk
8807	*TILIA CORDATA*	LITTLELEAF LINDEN	14	14	14	66	OFFSITE	REMAIN	EXOTIC	Girdling roots, pruned scaffold branches
8808	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	14	56	OFFSITE	REMAIN	NATIVE	Front branches broken off, second leader snapped off
8809	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	18	47	OFFSITE	REMAIN	NATIVE	Broken branches
8810	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	14	7S	OFFSITE	REMAIN	NATIVE	Front branches snapped, top branches growing at bad angles
8811	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	10	59	OFFSITE	REMAIN	NATIVE	Snagged branch
8812	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	16	75	OFFSITE	REMAIN	NATIVE	Front branches broken off, second leader snapped off
8813	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	14	53	OFFSITE	REMAIN	NATIVE	Snagged top
8814	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	9	9	9	7S	OFFSITE	REMAIN	NATIVE	
881S	*ACER RUBRUM*	RED MAPLE	14	14	12	69	OFFSITE	REMAIN	NATIVE	Exposed roots
8816	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	18	75	OFFSITE	REMAIN	NATIVE	
8817	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	18	56	OFFSITE	REMAIN	NATIVE	Snagged leader
8818	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	9	7S	OFFSITE	REMAIN	NATIVE	
8819	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	7	7S	OFFSITE	REMAIN	NATIVE	
8820	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	13	13	12	7S	OFFSITE	REMAIN	NATIVE	
8821	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	9	9	11	75	OFFSITE	REMAIN	NATIVE	
8822	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	1S	56	OFFSITE	REMAIN	NATIVE	Overpruned, entire north face of tree is pruned
8823	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	14	7S	OFFSITE	REMAIN	NATIVE	
8824	*QUERCUS PHELLOS*	WILLOW OAK	43	6S	28	81	OFFSITE	REMAIN	NATIVE	Some epicormic sprouting, some roots coming up by base of trunk
8825	*QUERCUS PHELLOS*	WILLOW OAK	19	19	17	81	OFFSITE	REMAIN	NATIVE	Epicormic sprouting
8826	*QUERCUS PHELLOS*	WILLOW OAK	20	20	22	69	OFFSITE	REMAIN	NATIVE	Large cavity in top of trunk, some large branches to be pruned
8827	*QUERCUS RUBRA*	NORTHERN RED OAK	9	9	6	88	OFFSITE	REMAIN	NATIVE	Some thinning of canopy
8828	*QUERCUS RUBRA*	NORTHERN RED OAK	2S	2S	24	81	OFFSITE	REMAIN	NATIVE	Ivy on tree, canopy leader dead
8829	*QUERCUS PHELLOS*	WILLOW OAK	19	19	17	7S	OFFSITE	REMAIN	NATIVE	
8830	*QUERCUS RUBRA*	NORTHERN RED OAK	16	16	16	88	OFFSITE	REMAIN	NATIVE	Epicormic sprouting
8831	*QUERCUS RUBRA*	NORTHERN RED OAK	34	S1	24	72	OFFSITE	REMAIN	NATIVE	Leader dead, few cavities, epicormic sprouting, some mechanical cuts to roots
8832	*QUERCUS RUBRA*	NORTHERN RED OAK	14	14	11	69	OFFSITE	REMAIN	NATIVE	Few large dead branches, fungus growth on cavities
8833	*QUERCUS PHELLOS*	WILLOW OAK	24	24	1S	72	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion, uneven canopy growth
8834	*QUERCUS RUBRA*	NORTHERN RED OAK	23	23	27	66	OFFSITE	REMAIN	NATIVE	Growing in to willow oak directly next to it
8835	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	23	7S	OFFSITE	REMAIN	NATIVE	
8836	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	13	7S	OFFSITE	REMAIN	NATIVE	
8837	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	9	9	6	7S	OFFSITE	REMAIN	NATIVE	
8838	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	11	7S	OFFSITE	REMAIN	NATIVE	
8839	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	8	7S	OFFSITE	REMAIN	NATIVE	
8840	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	10	7S	OFFSITE	REMAIN	NATIVE	
8841	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	6	7S	OFFSITE	REMAIN	NATIVE	
8842	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	10	7S	OFFSITE	REMAIN	NATIVE	
8843	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	9	75	OFFSITE	REMAIN	NATIVE	
8844	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	9	7S	OFFSITE	REMAIN	NATIVE	
884S	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	12	12	10	7S	OFFSITE	REMAIN	NATIVE	
8846	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	7S	OFFSITE	REMAIN	NATIVE	
8847	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	6	75	OFFSITE	REMAIN	NATIVE	
8848	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	75	OFFSITE	REMAIN	NATIVE	
8849	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	10	7S	OFFSITE	REMAIN	NATIVE	
885O	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	8	7S	OFFSITE	REMAIN	NATIVE	
8851	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	8	7S	OFFSITE	REMAIN	NATIVE	
8852	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	8	75	OFFSITE	REMAIN	NATIVE	
885З	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	7S	OFFSITE	REMAIN	NATIVE	
8854	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	8	59	OFFSITE	REMAIN	NATIVE	Front branches broken off, second leader snapped off
885S	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	6	7S	OFFSITE	REMAIN	NATIVE	
8856	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	75	OFFSITE	REMAIN	NATIVE	
8857	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	7	7S	OFFSITE	REMAIN	NATIVE	
8858	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	9	69	OFFSITE	REMAIN	NATIVE	Front branches broken off
885Ƽ	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	8	7S	OFFSITE	REMAIN	NATIVE	
8860	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	10	7S	OFFSITE	REMAIN	NATIVE	
8861	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	8	75	OFFSITE	REMAIN	NATIVE	
8862	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	7S	OFFSITE	REMAIN	NATIVE	
8863	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	9	7S	OFFSITE	REMAIN	NATIVE	
8864	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	9	7S	OFFSITE	REMAIN	NATIVE	
8865	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	10	75	OFFSITE	REMAIN	NATIVE	
8866	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	7	7S	OFFSITE	REMAIN	NATIVE	
8867	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	9	7S	OFFSITE	REMAIN	NATIVE	
8868	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	7	7S	OFFSITE	REMAIN	NATIVE	
8869	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	7	8	6	7S	OFFSITE	REMAIN	NATIVE	
8870	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	11	75	OFFSITE	REMAIN	NATIVE	
8871	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	11	7S	OFFSITE	REMAIN	NATIVE	
8872	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	6	7S	OFFSITE	REMAIN	NATIVE	
8873	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	10	7S	OFFSITE	REMAIN	NATIVE	
8874	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	6	8	1	69	OFFSITE	REMAIN	NATIVE	Front branches broken off
887S	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	8	72	OFFSITE	REMAIN	NATIVE	Dry lower branches
8876	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	7	8	8	7S	OFFSITE	REMAIN	NATIVE	
8877	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	8	8	10	69	OFFSITE	REMAIN	NATIVE	Snagged lower branches
8878	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	15	69	OFFSITE	REMAIN	NATIVE	Front branches broken off

TREE PRESERVATION SCHEDULE

ALL TREES OVER 1/2 INCH DBH AND SHRUBS OVER 3 FEET IN RPA

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES) / CRITICAL ROOT ZONE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE
5462	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	0.50	69	INSIDE RPA	REMOVE
5463	*LONICERA MAACKII*	BUSH HONEYSUCKLE	3.5 FEET TALL	69	INSIDE RPA	REMOVE
5464	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	0.75	75	INSIDE RPA	REMOVE
5465	*PYRUS CALLERYANA*	CALLERY PEAR	0.75	72	INSIDE RPA	REMOVE
5466	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	2.00	75	INSIDE RPA	REMOVE
5467	*PYRUS CALLERYANA*	CALLERY PEAR	1.00	72	INSIDE RPA	REMOVE
5468	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	0.75	72	INSIDE RPA	REMOVE
5469	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	1.00	75	INSIDE RPA	REMOVE
5470	*ZELKOVA SERRATA*	JAPANESE ZELKOVA	0.60	75	INSIDE RPA	REMOVE
5317	*AILANTHUS ALTISSIMA*	TREE OF HEAVEN	0.50	72	INSIDE RPA	REMOVE
5318	*PRUNUS SEROTINA*	BLACK CHERRY	0.60	69	INSIDE RPA	REMOVE

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023

Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

TREE PRESERVATION PLAN NOTES AND DETAILS

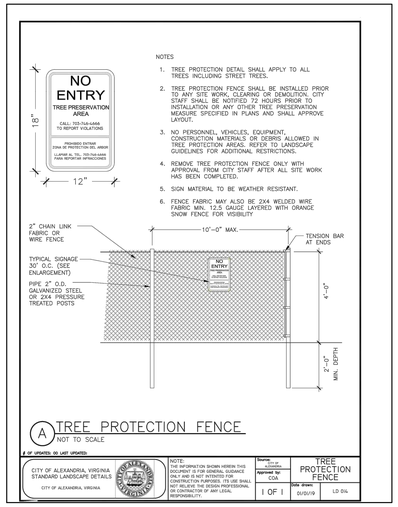
SHEET No.

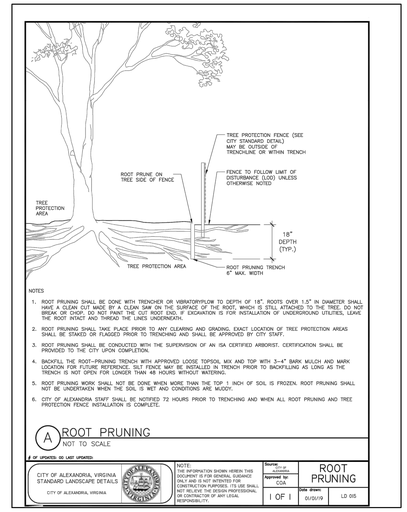
C214

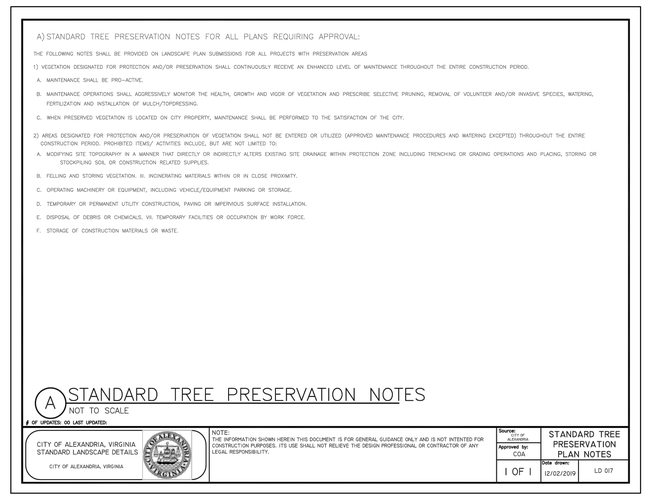
112206

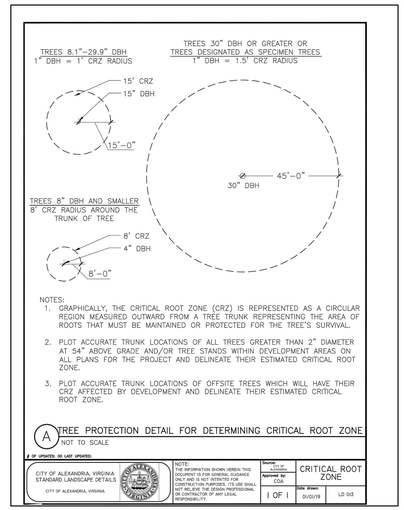
TREE PRESERVATION SCHEDULE

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK DIAMETER (INCHES)	CRITICAL ROOT ZONE RADIUS (FEET)	SURVEYED DRIPLINE RADIUS (FEET)	CONDITION RATING	LOCATION	PROCEDURE	NATIVITY STATUS	COMMENTS
8880	*QUERCUS RUBRA*	NORTHERN RED OAK	21	21	18	69	OFFSITE	REMAIN	NATIVE	
8881	*QUERCUS PALUSTRIS*	PIN OAK	23	23	20	75	OFFSITE	REMAIN	NATIVE	
8882	*PRUNUS SEROTINA*	BLACK CHERRY	19	19	25	59	OFFSITE	REMAIN	NATIVE	
8883	*PINUS STROBUS*	WHITE PINE	12	12	8	75	OFFSITE	REMAIN	NATIVE	
8884	*PINUS STROBUS*	WHITE PINE	14	14	8	75	OFFSITE	REMAIN	NATIVE	
8885	*QUERCUS RUBRA*	NORTHERN RED OAK	26	26	25	63	OFFSITE	REMAIN	NATIVE	Wound on trunk
8886	*QUERCUS PALUSTRIS*	PIN OAK	30	45	25	69	OFFSITE	REMAIN	NATIVE	Wounded roots, possibly from mowing
8887	*QUERCUS RUBRA*	NORTHERN RED OAK	28	28	27	72	OFFSITE	REMAIN	NATIVE	
8888	*QUERCUS RUBRA*	NORTHERN RED OAK	21	21	18	66	OFFSITE	REMAIN	NATIVE	
8890	*QUERCUS PHELLOS*	WILLOW OAK	23	23	14	75	OFFSITE	REMAIN	NATIVE	
8891	*QUERCUS PHELLOS*	WILLOW OAK	16	16	14	72	OFFSITE	REMAIN	NATIVE	
8892	*QUERCUS PHELLOS*	WILLOW OAK	40	60	32	72	OFFSITE	REMAIN	NATIVE	
8893	*QUERCUS PHELLOS*	WILLOW OAK	24	24	18	69	OFFSITE	REMAIN	NATIVE	
8894	*QUERCUS PHELLOS*	WILLOW OAK	20	20	15	72	OFFSITE	REMAIN	NATIVE	
8895	*QUERCUS PHELLOS*	WILLOW OAK	8	8	7	75	OFFSITE	REMAIN	NATIVE	
8896	*QUERCUS RUBRA*	NORTHERN RED OAK	15	15	15	66	OFFSITE	REMAIN	NATIVE	Multi-trunked, some dead branches
8897	*ULMUS AMERICANA*	AMERICAN ELM	14	14	12	72	OFFSITE	REMAIN	NATIVE	
8898	*PINUS STROBUS*	WHITE PINE	20	20	25	56	OFFSITE	REMAIN	NATIVE	Co-dominant stems, snagged top, snagged scaffold branches, pruned
8899	*QUERCUS PHELLOS*	WILLOW OAK	13	13	14	75	OFFSITE	REMAIN	NATIVE	
8900	*QUERCUS RUBRA*	NORTHERN RED OAK	19	19	14	69	OFFSITE	REMAIN	NATIVE	
8901	*ACER RUBRUM*	RED MAPLE	25	25	23	59	OFFSITE	REMAIN	NATIVE	Girdling roots, co-dominant stems, snagged scaffold branch
8902	*ULMUS AMERICANA*	AMERICAN ELM	34	51	29	59	OFFSITE	REMAIN	NATIVE	Many small holes in trunk, few snagged scaffold branches, some pruned branches
8903	*QUERCUS RUBRA*	NORTHERN RED OAK	25	25	20	69	OFFSITE	REMAIN	NATIVE	Some dead scaffold branches
8904	*QUERCUS RUBRA*	NORTHERN RED OAK	17	17	21	59	OFFSITE	REMAIN	NATIVE	Snagged leader and scaffold branches
8905	*QUERCUS RUBRA*	NORTHERN RED OAK	10	10	12	72	OFFSITE	REMAIN	NATIVE	
8906	*QUERCUS RUBRA*	NORTHERN RED OAK	15	15	15	69	OFFSITE	REMAIN	NATIVE	
8907	*QUERCUS PALUSTRIS*	PIN OAK	19	19	18	75	OFFSITE	REMAIN	NATIVE	
8908	*QUERCUS RUBRA*	NORTHERN RED OAK	15	15	18	72	OFFSITE	REMAIN	NATIVE	
8910	*QUERCUS PHELLOS*	WILLOW OAK	32	48	27	59	OFFSITE	REMAIN	NATIVE	Snagged leader and scaffold branches
8911	*ACER RUBRUM*	RED MAPLE	11	11	9	88	OFFSITE	REMAIN	NATIVE	Slightly uneven canopy, some roots exposed by soil erosion
8912	*CRATAEGUS AESTIVALIS*	HAWTHORN	16	16	8	66	OFFSITE	REMAIN	NATIVE	Limb split, very angled trunk, branches on ground
8913	*CELTIS OCCIDENTALIS*	HACKBERRY	14	14	10	69	OFFSITE	REMAIN	NATIVE	Limb split, angled trunk, branches on ground
8914	*ULMUS AMERICANA*	AMERICAN ELM	9	9	12	94	OFFSITE	REMAIN	NATIVE	Very minor root damage to one root from mower
8915	*QUERCUS RUBRA*	NORTHERN RED OAK	19	19	21	97	OFFSITE	REMAIN	NATIVE	
8916	*QUERCUS PHELLOS*	WILLOW OAK	23	23	19	72	OFFSITE	REMAIN	NATIVE	Uneven structure due to crowding, some roots exposed by soil erosion
8917	*ACER RUBRUM*	RED MAPLE	10	10	7	91	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion
8918	*ACER RUBRUM*	RED MAPLE	9	9	7	91	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion
8919	*QUERCUS RUBRA*	NORTHERN RED OAK	18	18	12	72	OFFSITE	REMAIN	NATIVE	
8920	*ULMUS AMERICANA*	AMERICAN ELM	11	11	19	75	OFFSITE	REMAIN	NATIVE	
8921	*ULMUS AMERICANA*	AMERICAN ELM	11	11	19	75	OFFSITE	REMAIN	NATIVE	
8922	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	10	10	10	63	OFFSITE	REMAIN	NATIVE	Large broken branch
8923	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	13	13	16	59	OFFSITE	REMAIN	NATIVE	
8924	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	9	9	15	63	OFFSITE	REMAIN	NATIVE	
8925	*JUNIPERUS VIRGINIANA*	EASTERN REDCEDAR	11	11	18	63	OFFSITE	REMAIN	NATIVE	
8926	*PRUNUS SEROTINA*	BLACK CHERRY	8	8	12	66	OFFSITE	REMAIN	NATIVE	
8927	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	8	8	19	44	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8928	*CATALPA SPECIOSA*	NORTHERN CATALPA	14	14	11	63	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8929	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	13	13	12	59	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8930	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	10	10	14	56	OFFSITE	REMAIN	NATIVE	Trunk covered with ivy
8931	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	9	9	8	63	OFFSITE	REMAIN	NATIVE	
8932	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	7	8	8	50	OFFSITE	REMAIN	NATIVE	
8933	*ROBINIA PSEUDOACACIA*	BLACK LOCUST	9	9	14	50	OFFSITE	REMAIN	NATIVE	Covered with ivy
8934	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	18	18	8	56	OFFSITE	REMAIN	NATIVE	
8935	*PRUNUS SEROTINA*	BLACK CHERRY	12	12	8	63	OFFSITE	REMAIN	NATIVE	
8937	*QUERCUS VELUTINA*	BLACK OAK	11	11	18	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
8938	*POPULUS DELTOIDES*	EASTERN COTTONWOOD	22	22	21	72	OFFSITE	REMAIN	NATIVE	One large dead branch
8939	*PRUNUS SEROTINA*	BLACK CHERRY	11	11	10	75	OFFSITE	REMAIN	NATIVE	Uneven canopy
8940	*PRUNUS SEROTINA*	BLACK CHERRY	19	19	10	72	OFFSITE	REMAIN	NATIVE	Uneven canopy, trunk growing at 45 degree angle
8942	*QUERCUS PALUSTRIS*	PIN OAK	32	48	38	69	OFFSITE	REMAIN	NATIVE	Dual leader some broken branches
8943	*QUERCUS PHELLOS*	WILLOW OAK	12	12	11	72	OFFSITE	REMAIN	NATIVE	Ivy on trunk, some sapsucker holes in trunk
8944	*ULMUS AMERICANA*	AMERICAN ELM	18	18	11	69	OFFSITE	REMAIN	NATIVE	Dual trunks, very low split, could use some pruning for few dead branches
8945	*QUERCUS PHELLOS*	WILLOW OAK	24	24	30	72	OFFSITE	REMAIN	NATIVE	Dual trunks, very low split
8946	*QUERCUS PALUSTRIS*	PIN OAK	11	11	6	72	OFFSITE	REMAIN	NATIVE	Uneven canopy, some curve to trunk, ivy on trunk, some branches to prune
8947	*QUERCUS PHELLOS*	WILLOW OAK	12	12	6	66	OFFSITE	REMAIN	NATIVE	Mechanical damage, uneven canopy, some roots exposed by soil erosion
8948	*QUERCUS PALUSTRIS*	PIN OAK	33	50	22	72	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion, crown shyness
8949	*QUERCUS PALUSTRIS*	PIN OAK	21	21	16	72	OFFSITE	REMAIN	NATIVE	Uneven down, slight lean to trunk, some branches to prune
8951	*QUERCUS PALUSTRIS*	PIN OAK	19	19	20	91	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion
8952	*QUERCUS PALUSTRIS*	PIN OAK	10	10	9	88	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion
8953	*ACER RUBRUM*	RED MAPLE	12	12	12	69	OFFSITE	REMAIN	NATIVE	Some snapped branches, some roots exposed by soil erosion
8954	*QUERCUS PALUSTRIS*	PIN OAK	13	13	10	81	OFFSITE	REMAIN	NATIVE	Roots exposed by soil erosion, some lower branches to prune
8955	*ACER RUBRUM*	RED MAPLE	13	13	14	66	OFFSITE	REMAIN	NATIVE	Roots exposed by soil erosion, some fungus on roots, cavity beginning in trunk
8956	*QUERCUS PALUSTRIS*	PIN OAK	12	12	8	78	OFFSITE	REMAIN	NATIVE	Branch to prune at top of tree
8957	*ACER RUBRUM*	RED MAPLE	13	13	7	72	OFFSITE	REMAIN	NATIVE	Some roots exposed by soil erosion, dense sprouting from base of trunk
8958	*QUERCUS PHELLOS*	WILLOW OAK	34	51	35	69	OFFSITE	REMAIN	NATIVE	One dead limb to prune, some roots exposed by soil erosion, cavity in tree
8959	*QUERCUS PHELLOS*	WILLOW OAK	25	25	24	72	OFFSITE	REMAIN	NATIVE	Some dead branches, power line running through tree, uneven canopy, some large branches to be pruned
9187	*QUERCUS PALUSTRIS*	PIN OAK	22	22	21	63	OFFSITE	REMOVE	NATIVE	Extreme root girdling, some roots coming through brick sidewalk, three instances of damage to trunk and scaffold branch exposing heartwood, uneven scaffold branch structure due to nearby streetlight, some small dead branches throughout canopy
9188	*QUERCUS PALUSTRIS*	PIN OAK	21	21	17	66	OFFSITE	REMAIN	NATIVE	Extreme root girdling, some roots pushing up bricks in brick sidewalk, very uneven scaffold branch structure due to nearby building, some small dead branches throughout canopy
9192	*QUERCUS PALUSTRIS*	PIN OAK	8	8	10	72	OFFSITE	REMAIN	NATIVE	Large rocks placed on base of roots









ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay 01-12-2023
Allison Hay — Date:
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@megcorp.com

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

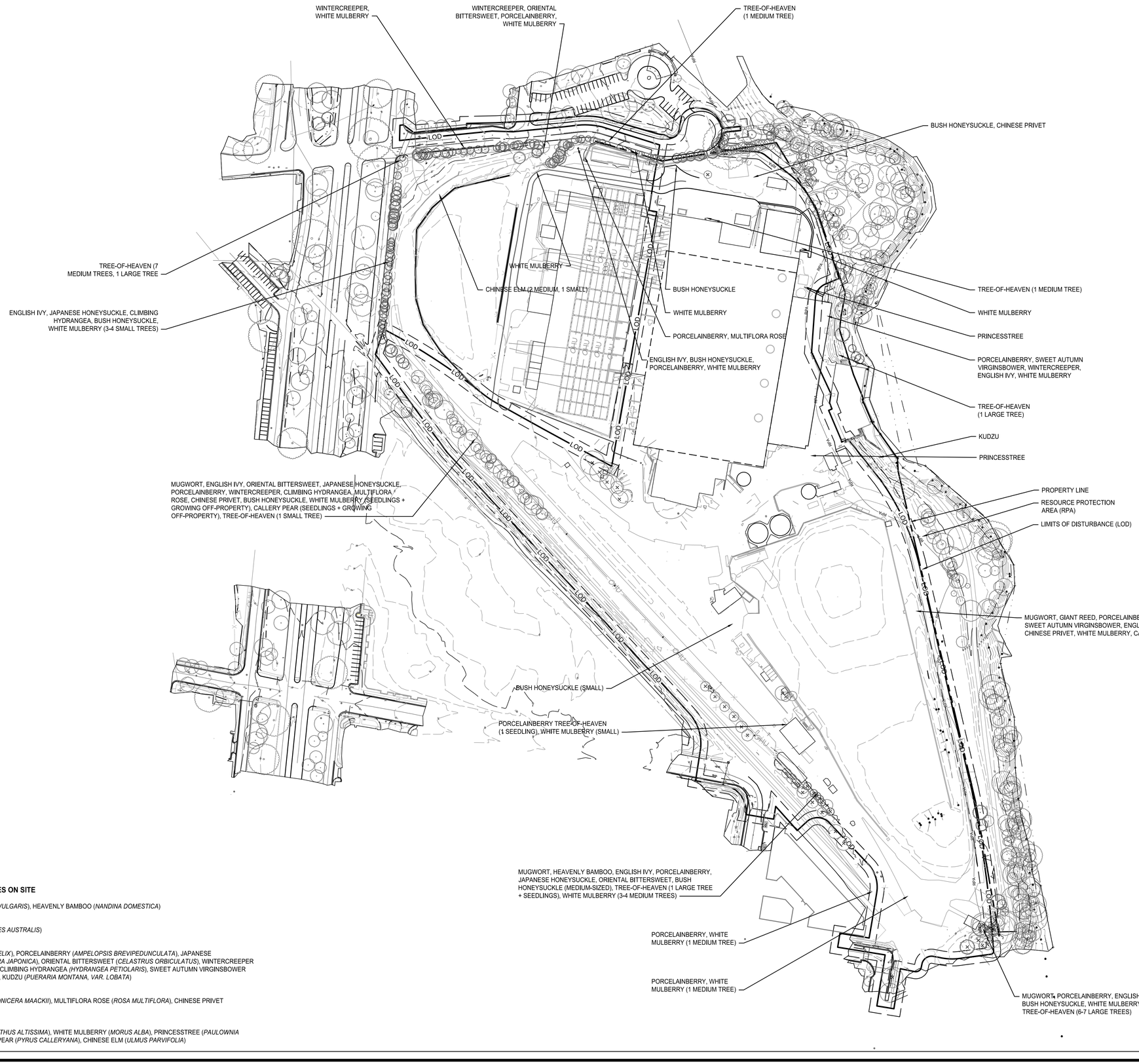
MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
TREE PRESERVATION PLAN NOTES AND DETAILS

SHEET No.
C215

112206



ALL INVASIVE SPECIES ON SITE

FORBS
MUGWORT (*ARTEMESIA VULGARIS*), HEAVENLY BAMBOO (*NANDINA DOMESTICA*)

GRASSES
GIANT REED (*PHRAGMITES AUSTRALIS*)

VINES
ENGLISH IVY (*HEDERA HELIX*), PORCELAINBERRY (*AMPELOPSIS BREVIPEDUNCULATA*), JAPANESE HONEYSUCKLE (*LONICERA JAPONICA*), ORIENTAL BITTERSWEET (*CELASTRUS ORBICULATUS*), WINTERCREEPER (*EUONYMUS FORTUNEI*), CLIMBING HYDRANGEA (*HYDRANGEA PETIOLARIS*), SWEET AUTUMN VIRGINSBOWER (*CLEMATIS TERNIFLORA*), KUDZU (*PUERARIA MONTANA, VAR. LOBATA*)

SHRUBS
BUSH HONEYSUCKLE (*LONICERA MAACKII*), MULTIFLORA ROSE (*ROSA MULTIFLORA*), CHINESE PRIVET (*LIGUSTRUM SINENSE*)

TREES
TREE-OF-HEAVEN (*AILANTHUS ALTISSIMA*), WHITE MULBERRY (*MORUS ALBA*), PRINCESSTREE (*PAULOWNIA TOMENTOSA*), CALLERY PEAR (*PYRUS CALLERYANA*), CHINESE ELM (*ULMUS PARVIFOLIA*)

VA CERTIFIED PESTICIDE APPLICATOR APPROVAL:

Allison Hay — 01-12-2023

Allison Hay
VA Certified Commercial Pesticide Applicator, 133940-C
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

ISA CERTIFIED ARBORIST APPROVAL:

Allison Hay — 01-12-2023

Allison Hay
ISA Certified Arborist, MA-6600A
4035 Ridge Top Road, Suite 601
Fairfax, VA 22030
703.293.4934
allison.m.hay@imegcorp.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
03/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: AH
DRAWN: MG
CHECKED: KW

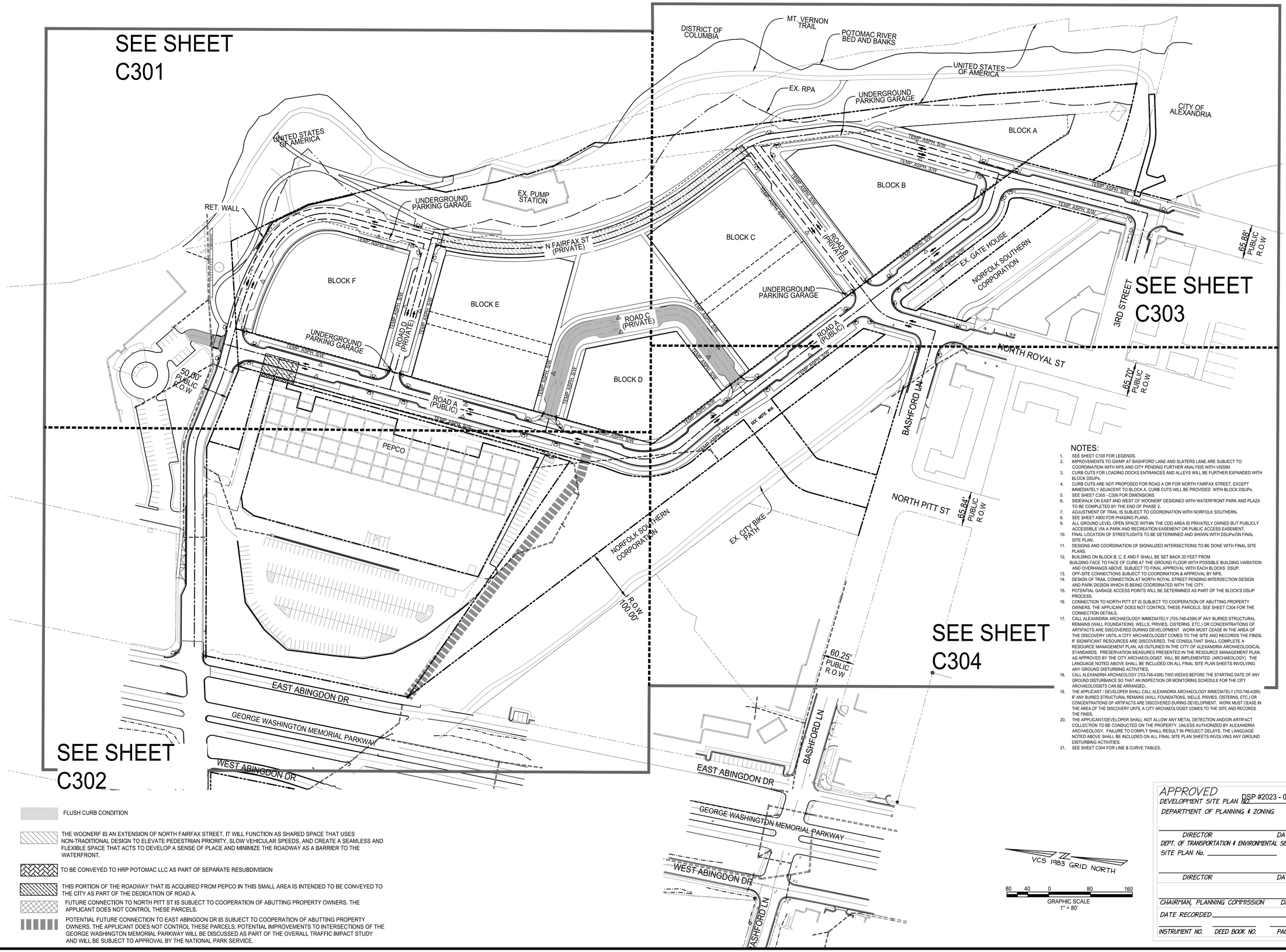
SHEET TITLE:

LANDSCAPE MANAGEMENT PLAN

SHEET No.

C216

112206



NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. IMPROVEMENTS TO GWMP AT BASHFORD LANE AND SLATERS LANE ARE SUBJECT TO COORDINATION WITH NPS AND CITY PENDING FURTHER ANALYSIS WITH VISSIM.
3. CURB CUTS FOR LOADING DOCKS ENTRANCES AND ALLEYS WILL BE FURTHER EXPANDED WITH BLOCK DSUPs.
4. CURB CUTS ARE NOT PROPOSED FOR ROAD A OR FOR NORTH FAIRFAX STREET, EXCEPT IMMEDIATELY ADJACENT TO BLOCK A. CURB CUTS WILL BE PROVIDED WITH BLOCK DSUPs.
5. SEE SHEET C305 - C306 FOR DIMENSIONS.
6. SIDEWALK ON EAST AND WEST OF WOONERF DESIGNED WITH WATERFRONT PARK AND PLAZA TO BE COMPLETED BY THE END OF PHASE 2.
7. ADJUSTMENT OF TRAIL IS SUBJECT TO COORDINATION WITH NORFOLK SOUTHERN.
8. SEE SHEET A900 FOR PHASING PLANS.
9. ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATELY OWNED BUT PUBLICLY ACCESSIBLE VIA A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.
10. FINAL LOCATION OF STREETLIGHTS TO BE DETERMINED AND SHOWN WITH DSUPs/ON FINAL SITE PLAN.
11. DESIGNS AND COORDINATION OF SIGNALIZED INTERSECTIONS TO BE DONE WITH FINAL SITE PLANS.
12. BUILDING ON BLOCK B, C, E AND F SHALL BE SET BACK 20 FEET FROM BUILDING FACE TO FACE OF CURB AT THE GROUND FLOOR WITH POSSIBLE BUILDING VARIATION AND OVERHANGS ABOVE SUBJECT TO FINAL APPROVAL WITH EACH BLOCKS DSUP.
13. OFF-SITE CONNECTIONS SUBJECT TO COORDINATION & APPROVAL BY NPS.
14. DESIGN OF TRAIL CONNECTION AT NORTH ROYAL STREET PENDING INTERSECTION DESIGN AND PARK DESIGN WHICH IS BEING COORDINATED WITH THE CITY.
15. POTENTIAL GARAGE ACCESS POINTS WILL BE DETERMINED AS PART OF THE BLOCK'S DSUP PROCESS.
16. CONNECTION TO NORTH PITT ST IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS. SEE SHEET C304 FOR THE CONNECTION DETAILS.
17. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
18. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
19. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
20. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
21. SEE SHEET C304 FOR LINE & CURVE TABLES.

FLUSH CURB CONDITION

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION

THIS PORTION OF THE ROADWAY THAT IS ACQUIRED FROM PEPCO IN THIS SMALL AREA IS INTENDED TO BE CONVEYED TO THE CITY AS PART OF THE DEDICATION OF ROAD A.

FUTURE CONNECTION TO NORTH PITT ST IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS.

POTENTIAL FUTURE CONNECTION TO EAST ABINGDON DR IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS. POTENTIAL IMPROVEMENTS TO INTERSECTIONS OF THE GEORGE WASHINGTON MEMORIAL PARKWAY WILL BE DISCUSSED AS PART OF THE OVERALL TRAFFIC IMPACT STUDY AND WILL BE SUBJECT TO APPROVAL BY THE NATIONAL PARK SERVICE.

VCS 1983 GRID NORTH

80 40 0 80 160

GRAPHIC SCALE
1" = 80'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

OVERALL SITE PLAN

SHEET No.

C300

112206

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. IMPROVEMENTS TO GWMP AT BASHFORD LANE AND SLATERS LANE ARE SUBJECT TO COORDINATION WITH NPS AND CITY PENDING FURTHER ANALYSIS WITH VISSIM.
3. CURB CUTS FOR LOADING DOCKS ENTRANCES AND ALLEYS WILL BE FURTHER EXPANDED WITH BLOCK DSUPs.
4. CURB CUTS ARE NOT PROPOSED FOR ROAD A OR FOR NORTH FAIRFAX STREET, EXCEPT IMMEDIATELY ADJACENT TO BLOCK A. CURB CUTS WILL BE PROVIDED WITH BLOCK DSUPs.
5. SEE SHEET C305 - C306 FOR DIMENSIONS.
6. SIDEWALK ON EAST AND WEST OF WOONERF DESIGNED WITH WATERFRONT PARK AND PLAZA TO BE COMPLETED BY THE END OF PHASE 2.
7. ADJUSTMENT OF TRAIL IS SUBJECT TO COORDINATION WITH NORFOLK SOUTHERN.
8. SEE SHEET A900 FOR PHASING PLANS.
9. ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATELY OWNED BUT PUBLICLY ACCESSIBLE VIA A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.
10. FINAL LOCATION OF STREETLIGHTS TO BE DETERMINED AND SHOWN WITH DSUP/ON FINAL SITE PLAN.
11. DESIGNS AND COORDINATION OF SIGNALIZED INTERSECTIONS TO BE DONE WITH FINAL SITE PLANS.
12. BUILDING ON BLOCK B, C, E AND F SHALL BE SET BACK 20 FEET FROM BUILDING FACE TO FACE OF CURB AT THE GROUND FLOOR WITH POSSIBLE BUILDING VARIATION AND OVERHANGS ABOVE SUBJECT TO FINAL APPROVAL WITH EACH BLOCKS DSUP.
13. OFF-SITE CONNECTIONS SUBJECT TO COORDINATION & APPROVAL BY NPS.
14. DESIGN OF TRAIL CONNECTION AT NORTH ROYAL STREET PENDING INTERSECTION DESIGN AND PARK DESIGN WHICH IS BEING COORDINATED WITH THE CITY.
15. POTENTIAL GARAGE ACCESS POINTS WILL BE DETERMINED AS PART OF THE BLOCK'S DSUP PROCESS.
16. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
17. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
18. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
19. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
20. SEE SHEET C304 FOR LINE & CURVE TABLES.

UNITED STATES OF AMERICA
PROP. TRAIL
SEE NOTE 13
PROP. RETAINING WALL
EXISTING LOCKED GATE TO BE REMOVED AT THE WIDTH OF THE CITY ROW
REPAIR AND REPLACE EX. STEPS TO INCLUDE A BICYCLE RUNNEL OR PUSH RAMP
S32°12'19"E 163.73'
S19°53'43"E 191.03'
S18°11'45"E 100.02'
L3
L5
L6
L7
L8
L11
S36°05'16"E 91.82'
EX. PUMP HOUSE (TO REMAIN)
WATERFRONT PARK PARK AND REC. ESMT.
50' PRIVATE ROAD PUBLIC ACCESS ESMT.
PUBLIC ACCESS ESMT.
22' EVE ESMT.
8' TEMP. ASPH. S/W
GRASS STRIP
BUILDING SETBACK SEE NOTE #12 ON SHEET C301
75' VISION CLEARANCE TRIANGLE
UNDERGROUND PARKING GARAGE
POTENTIAL BIKESHARE STATION LOCATION
FLUSH CURB
STREET LIGHTS
N FAIRFAX ST (PRIVATE)
8' TEMP. ASPH. ST
WATERFRONT PLAZA PUBLIC ACCESS ESMT.
MATCHLINE SEE SHEET 303
LOT 600
599,334 SQ. FT. OR
13.75882 ACRES
BLOCK F
BLOCK E
BLOCK D
ROAD D (PRIVATE)
ROAD C (PRIVATE)
ROAD A (PUBLIC)
BOLLARDS
ALLEY TO BE DEVELOPED IN BLOCK DSUPs. MINIMUM WIDTH TO BE 22'.
EX. FENCE AT THE WIDTH OF THE CITY ROW TO BE REMOVED
50.00' PUBLIC R.O.W
SLATERS LANE
N79°57'05"E 246.79'
N81°09'07"W 146.85'
S7°41'02"E 147.97'
N08°42'26"E 722.73'
N08°42'34"E 615.69'
S08°42'26"W 827.25'
68' PUBLIC R.O.W
TRANSMISSION LINE/SD ESMT. INSTRUMENT #200019601
MATCHLINE SEE SHEET 302

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION

THIS PORTION OF THE ROADWAY THAT IS ACQUIRED FROM PEPCO IN THIS SMALL AREA IS INTENDED TO BE CONVEYED TO THE CITY AS PART OF THE DEDICATION OF ROAD A

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT. SIDEWALK IS FLUSH WITH PAVEMENT.

FLUSH CURB CONDITION

VCS 1983 GRID NORTH

30 15 0 30 60
GRAPHIC SCALE
1"=30'

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

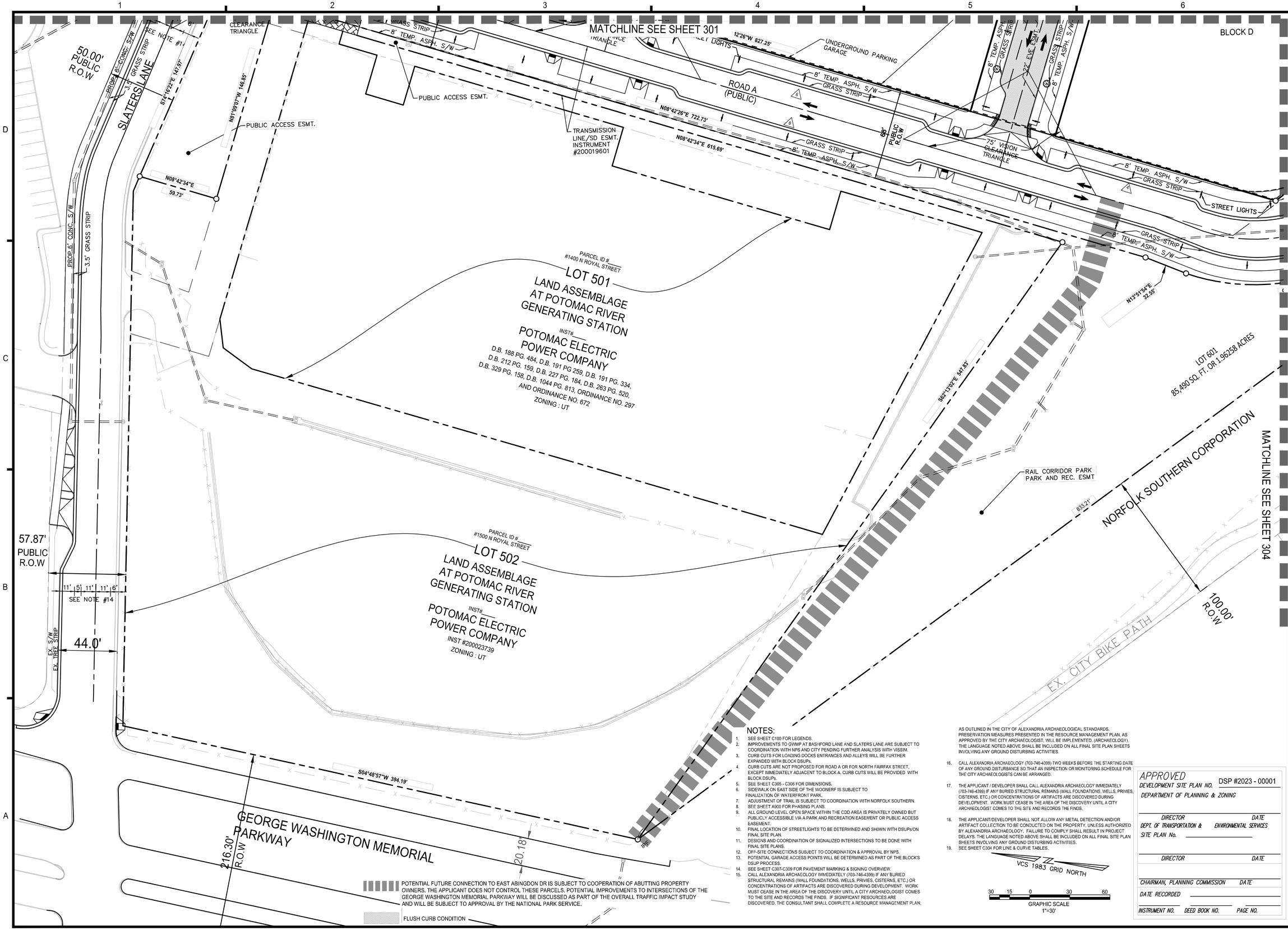
SHEET TITLE:

SITE PLAN

SHEET No.

C301

112206



NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. IMPROVEMENTS TO GWMP AT BASHFORD LANE AND SLATERS LANE ARE SUBJECT TO COORDINATION WITH NPS AND CITY PENDING FURTHER ANALYSIS WITH VISSIM.
3. CURB CUTS FOR LOADING DOCKS ENTRANCES AND ALLEYS WILL BE FURTHER EXPANDED WITH BLOCK DSUPs.
4. CURB CUTS ARE NOT PROPOSED FOR ROAD A OR FOR NORTH FAIRFAX STREET, EXCEPT IMMEDIATELY ADJACENT TO BLOCK A. CURB CUTS WILL BE PROVIDED WITH BLOCK DSUPs.
5. SEE SHEET C305 - C306 FOR DIMENSIONS.
6. SIDEWALK ON EAST SIDE OF THE WOONERF IS SUBJECT TO FINALIZATION OF WATERFRONT PARK.
7. ADJUSTMENT OF TRAIL IS SUBJECT TO COORDINATION WITH NORFOLK SOUTHERN.
8. SEE SHEET A900 FOR PHASING PLANS.
9. ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATELY OWNED BUT PUBLICLY ACCESSIBLE VIA A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.
10. FINAL LOCATION OF STREETLIGHTS TO BE DETERMINED AND SHOWN WITH DSUPs/ON FINAL SITE PLAN.
11. DESIGNS AND COORDINATION OF SIGNALIZED INTERSECTIONS TO BE DONE WITH FINAL SITE PLANS.
12. OFF-SITE CONNECTIONS SUBJECT TO COORDINATION & APPROVAL BY NPS.
13. POTENTIAL GARAGE ACCESS POINTS WILL BE DETERMINED AS PART OF THE BLOCK'S DSUP PROCESS.
14. SEE SHEET C307-C309 FOR PAVEMENT MARKING & SIGNING OVERVIEW.
15. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
16. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
17. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
18. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
19. SEE SHEET C304 FOR LINE & CURVE TABLES.

VCS 1983 GRID NORTH

30 15 0 30 60
GRAPHIC SCALE
1"=30'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

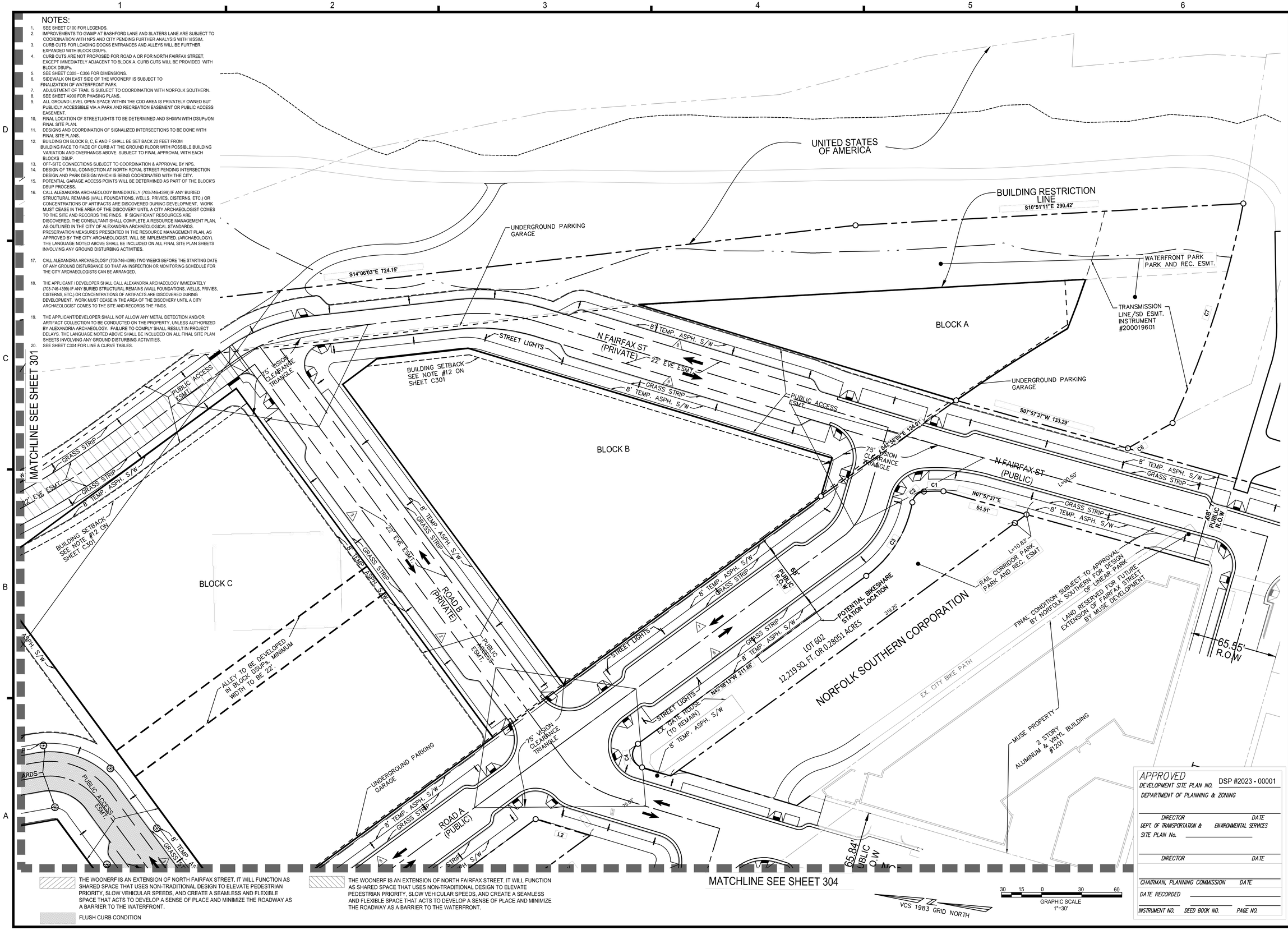
SHEET TITLE:
SITE PLAN

SHEET No.
C302

112206

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. IMPROVEMENTS TO GWMP AT BASHFORD LANE AND SLATERS LANE ARE SUBJECT TO COORDINATION WITH NPS AND CITY PENDING FURTHER ANALYSIS WITH VISSIM.
3. CURB CUTS FOR LOADING DOCKS ENTRANCES AND ALLEYS WILL BE FURTHER EXPANDED WITH BLOCK DSUPs.
4. CURB CUTS ARE NOT PROPOSED FOR ROAD A OR FOR NORTH FAIRFAX STREET, EXCEPT IMMEDIATELY ADJACENT TO BLOCK A. CURB CUTS WILL BE PROVIDED WITH BLOCK DSUPs.
5. SEE SHEET C305 - C306 FOR DIMENSIONS.
6. SIDEWALK ON EAST SIDE OF THE WOONERF IS SUBJECT TO FINALIZATION OF WATERFRONT PARK.
7. ADJUSTMENT OF TRAIL IS SUBJECT TO COORDINATION WITH NORFOLK SOUTHERN.
8. SEE SHEET A900 FOR PHASING PLANS.
9. ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATELY OWNED BUT PUBLICLY ACCESSIBLE VIA A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.
10. FINAL LOCATION OF STREETLIGHTS TO BE DETERMINED AND SHOWN WITH DSUPs/ON FINAL SITE PLAN.
11. DESIGNS AND COORDINATION OF SIGNALIZED INTERSECTIONS TO BE DONE WITH FINAL SITE PLANS.
12. BUILDING ON BLOCK B, C, E AND F SHALL BE SET BACK 20 FEET FROM BUILDING FACE TO FACE OF CURB AT THE GROUND FLOOR WITH POSSIBLE BUILDING VARIATION AND OVERHANGS ABOVE SUBJECT TO FINAL APPROVAL WITH EACH BLOCKS DSUP.
13. OFF-SITE CONNECTIONS SUBJECT TO COORDINATION & APPROVAL BY NPS.
14. DESIGN OF TRAIL CONNECTION AT NORTH ROYAL STREET PENDING INTERSECTION DESIGN AND PARK DESIGN WHICH IS BEING COORDINATED WITH THE CITY.
15. POTENTIAL GARAGE ACCESS POINTS WILL BE DETERMINED AS PART OF THE BLOCK'S DSUP PROCESS.
16. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
17. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
18. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
19. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
20. SEE SHEET C304 FOR LINE & CURVE TABLES.



THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

FLUSH CURB CONDITION

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

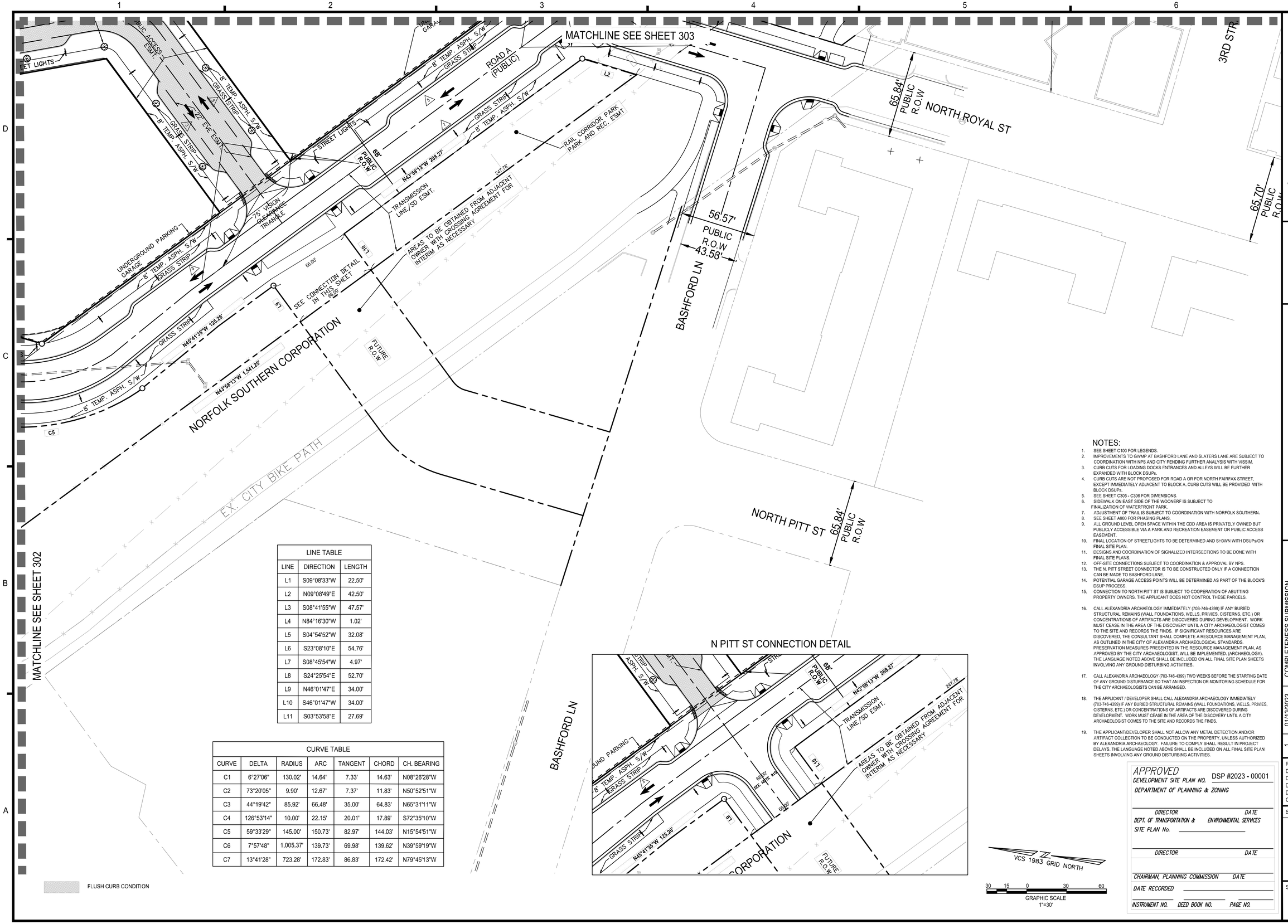
SHEET TITLE:

SITE PLAN

SHEET No.

C303

112206



LINE TABLE		
LINE	DIRECTION	LENGTH
L1	S09°08'33"W	22.50'
L2	N09°08'49"E	42.50'
L3	S08°41'55"W	47.57'
L4	N84°16'30"W	1.02'
L5	S04°54'52"W	32.08'
L6	S23°08'10"E	54.76'
L7	S08°45'54"W	4.97'
L8	S24°25'54"E	52.70'
L9	N46°01'47"E	34.00'
L10	S46°01'47"W	34.00'
L11	S03°53'58"E	27.69'

CURVE TABLE						
CURVE	DELTA	RADIUS	ARC	TANGENT	CHORD	CH. BEARING
C1	6°27'06"	130.02'	14.64'	7.33'	14.63'	N08°26'28"W
C2	73°20'05"	9.90'	12.67'	7.37'	11.83'	N50°52'51"W
C3	44°19'42"	85.92'	66.48'	35.00'	64.83'	N65°31'11"W
C4	126°53'14"	10.00'	22.15'	20.01'	17.89'	S72°35'10"W
C5	59°33'29"	145.00'	150.73'	82.97'	144.03'	N15°54'51"W
C6	7°57'48"	1,005.37'	139.73'	69.98'	139.62'	N39°59'19"W
C7	13°41'28"	723.28'	172.83'	86.83'	172.42'	N79°45'13"W

FLUSH CURB CONDITION

N PITT ST CONNECTION DETAIL

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. IMPROVEMENTS TO GWMP AT BASHFORD LANE AND SLATERS LANE ARE SUBJECT TO COORDINATION WITH NPS AND CITY PENDING FURTHER ANALYSIS WITH VISSIM.
3. CURB CUTS FOR LOADING DOCKS ENTRANCES AND ALLEYS WILL BE FURTHER EXPANDED WITH BLOCK DSUPs.
4. CURB CUTS ARE NOT PROPOSED FOR ROAD A OR FOR NORTH FAIRFAX STREET, EXCEPT IMMEDIATELY ADJACENT TO BLOCK A. CURB CUTS WILL BE PROVIDED WITH BLOCK DSUPs.
5. SEE SHEET C305 - C306 FOR DIMENSIONS.
6. SIDEWALK ON EAST SIDE OF THE WOONERF IS SUBJECT TO FINALIZATION OF WATERFRONT PARK.
7. ADJUSTMENT OF TRAIL IS SUBJECT TO COORDINATION WITH NORFOLK SOUTHERN.
8. SEE SHEET A900 FOR PHASING PLANS.
9. ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATELY OWNED BUT PUBLICLY ACCESSIBLE VIA A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.
10. FINAL LOCATION OF STREETLIGHTS TO BE DETERMINED AND SHOWN WITH DSUPs/ON FINAL SITE PLAN.
11. DESIGNS AND COORDINATION OF SIGNALIZED INTERSECTIONS TO BE DONE WITH FINAL SITE PLANS.
12. OFF-SITE CONNECTIONS SUBJECT TO COORDINATION & APPROVAL BY NPS.
13. THE N. PITT STREET CONNECTOR IS TO BE CONSTRUCTED ONLY IF A CONNECTION CAN BE MADE TO BASHFORD LANE.
14. POTENTIAL GARAGE ACCESS POINTS WILL BE DETERMINED AS PART OF THE BLOCK'S DSUP PROCESS.
15. CONNECTION TO NORTH PITT ST IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS.
16. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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. IF SIGNIFICANT RESOURCES ARE DISCOVERED, THE CONSULTANT SHALL COMPLETE A RESOURCE MANAGEMENT PLAN, AS OUTLINED IN THE CITY OF ALEXANDRIA ARCHAEOLOGICAL STANDARDS. PRESERVATION MEASURES PRESENTED IN THE RESOURCE MANAGEMENT PLAN, AS APPROVED BY THE CITY ARCHAEOLOGIST, WILL BE IMPLEMENTED. (ARCHAEOLOGY). THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.
17. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTOR OR MONITORING SCHEDULE FOR THE CITY ARCHAEOLOGISTS CAN BE ARRANGED.
18. THE APPLICANT / DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) 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.
19. THE APPLICANT/DEVELOPER 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. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.

VCS 1983 GRID NORTH

30 15 0 30 60
GRAPHIC SCALE
1"=30'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

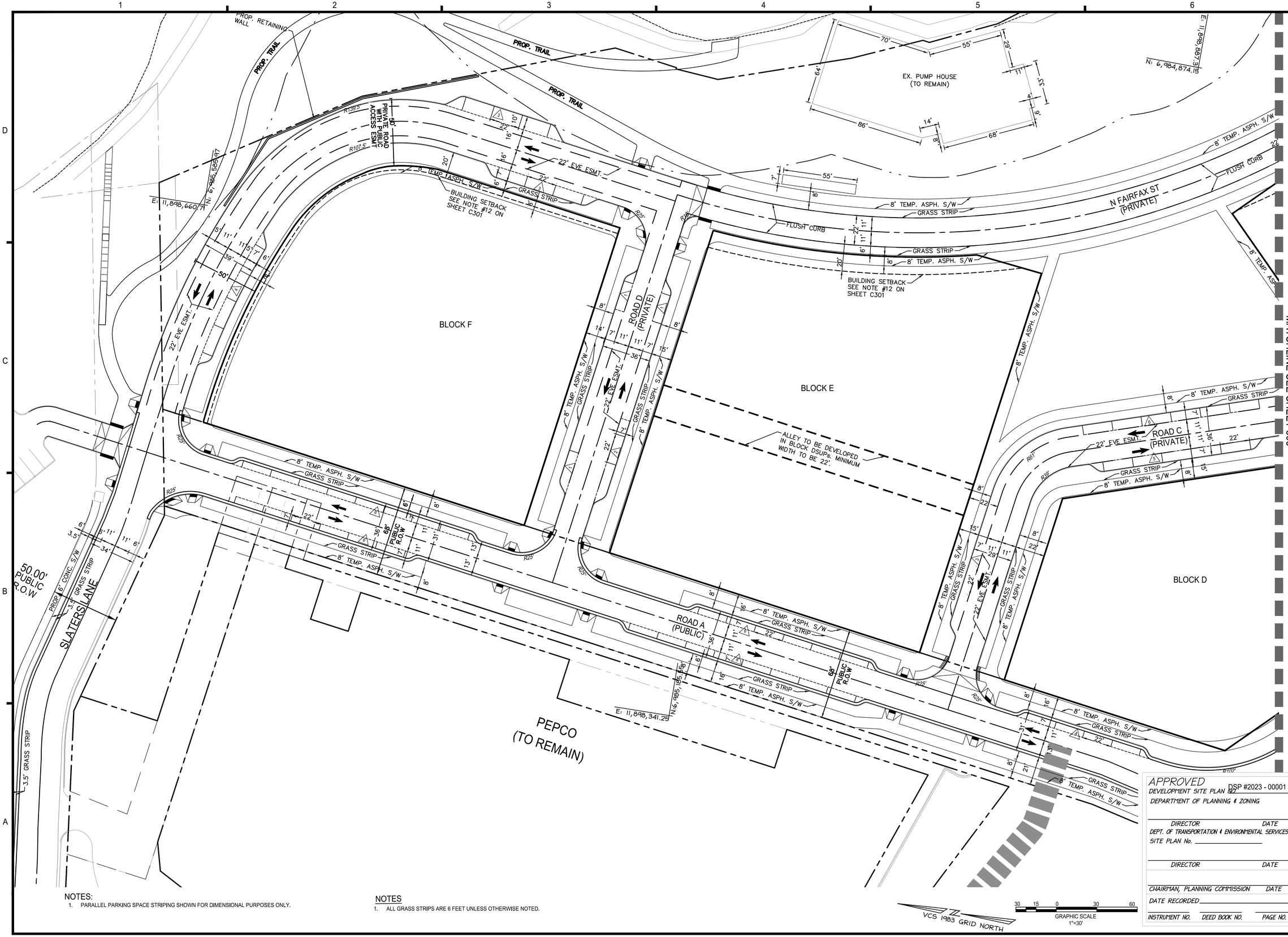
SHEET TITLE:

SITE PLAN

SHEET No.

C304

112206



NOTES:
1. PARALLEL PARKING SPACE STRIPING SHOWN FOR DIMENSIONAL PURPOSES ONLY.

NOTES
1. ALL GRASS STRIPS ARE 6 FEET UNLESS OTHERWISE NOTED.

VCS 1983 GRID NORTH

GRAPHIC SCALE
1"=30'

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

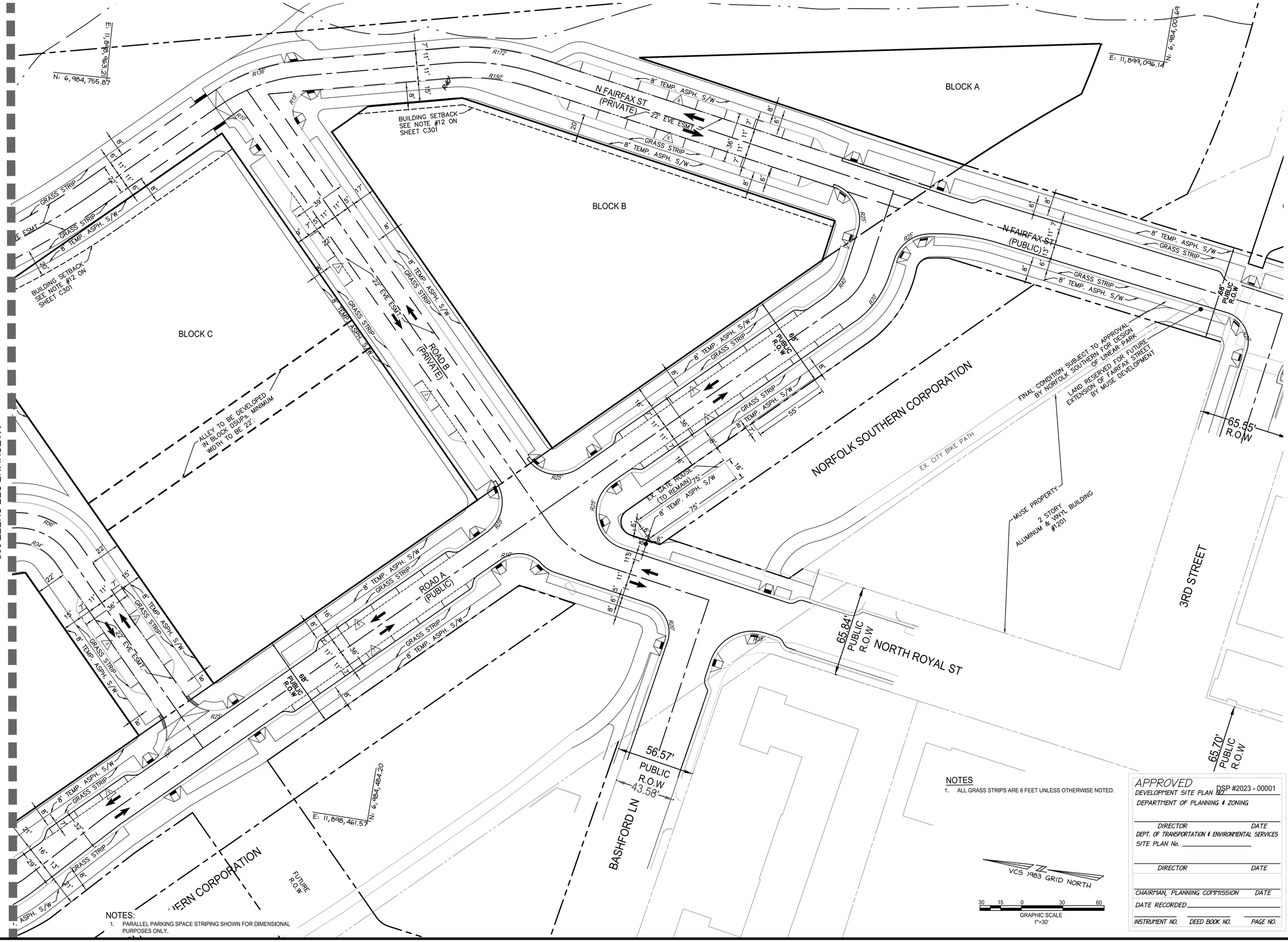
SHEET TITLE:

DIMENSION PLAN

SHEET No.

C305

112206



NOTES
1. ALL GRASS STRIPS ARE 6 FEET UNLESS OTHERWISE NOTED.

NOTES:
1. PARALLEL PARKING SPACE STRIPING SHOWN FOR DIMENSIONAL PURPOSES ONLY.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
DIMENSION PLAN

SHEET No.
C306

112206

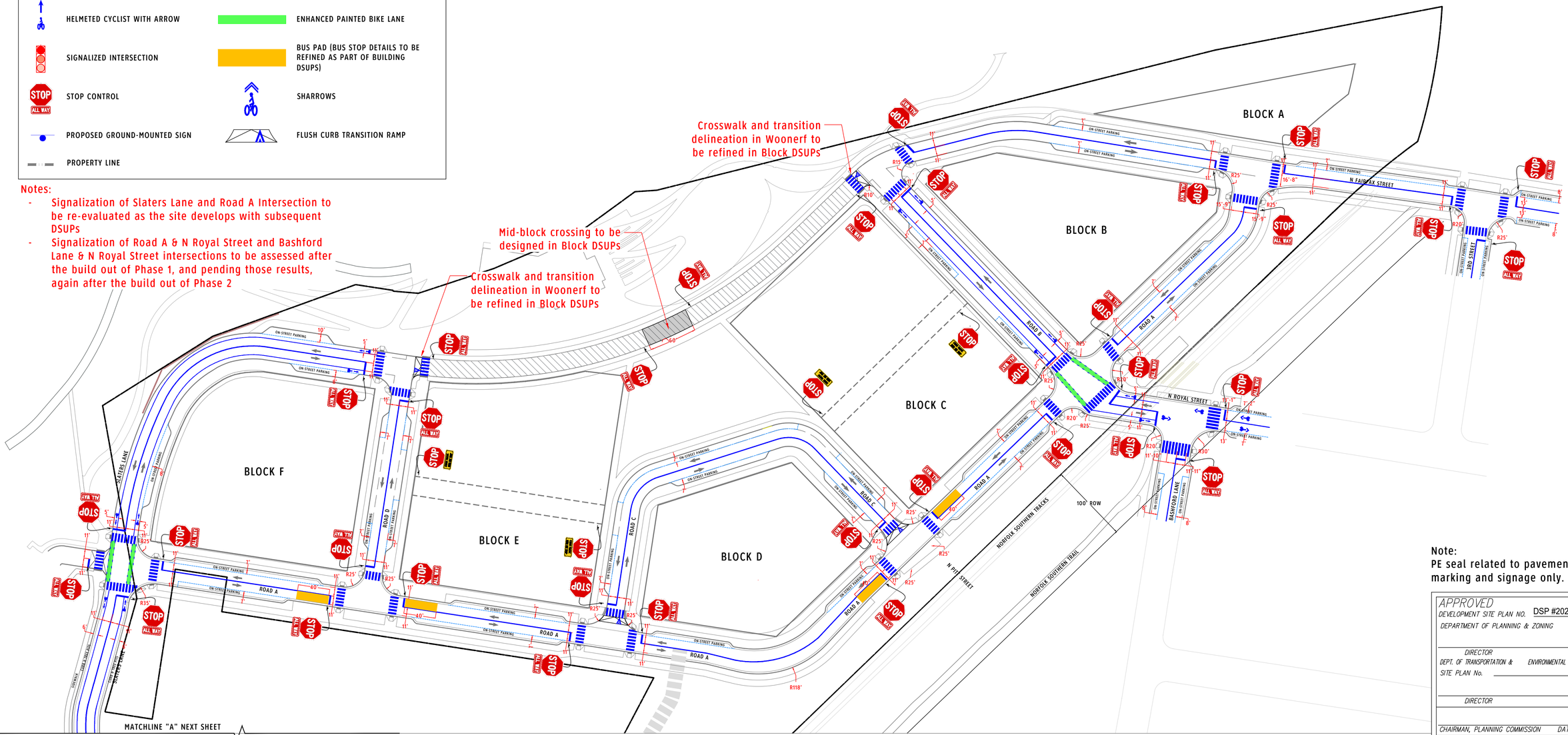
POTOMAC RIVER GENERATING STATION
PRELIMINARY PAVEMENT MARKING & SIGNAGE OVERVIEW

LEGEND

- HELMETED CYCLIST WITH ARROW
- SIGNALIZED INTERSECTION
- STOP CONTROL
- PROPOSED GROUND-MOUNTED SIGN
- PROPERTY LINE
- ENHANCED PAINTED BIKE LANE
- BUS PAD (BUS STOP DETAILS TO BE REFINED AS PART OF BUILDING DSUPS)
- SHARROWS
- FLUSH CURB TRANSITION RAMP

Notes:

- Signalization of Slaters Lane and Road A Intersection to be re-evaluated as the site develops with subsequent DSUPs
- Signalization of Road A & N Royal Street and Bashford Lane & N Royal Street intersections to be assessed after the build out of Phase 1, and pending those results, again after the build out of Phase 2



Note:
PE seal related to pavement marking and signage only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

DRAWING SCALE 0 60' 120'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	03.10.2023
REV.1	
REV.2	
REV.3	

PRELIMINARY PAVEMENT MARKING & SIGNING OVERVIEW
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

GOROVE SLADE
Transportation Planners and Engineers
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

PROJECT NO. 2994-001
SHEET C307

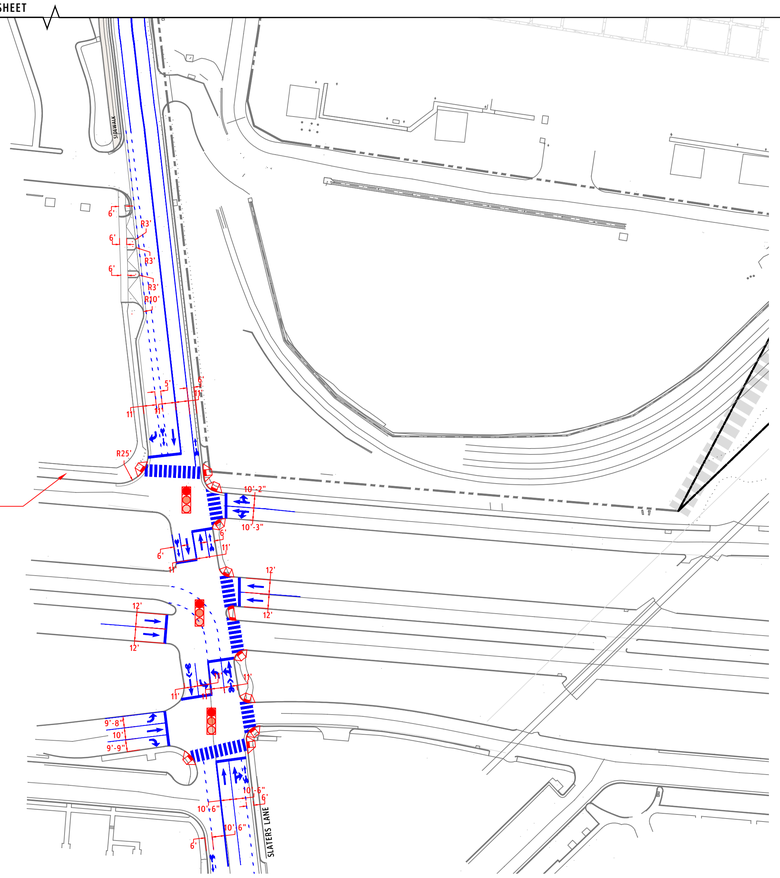
POTOMAC RIVER GENERATING STATION
PRELIMINARY PAVEMENT MARKING & SIGNAGE OVERVIEW (SLATERS LANE)

MATCHLINE "A" PREVIOUS SHEET

LEGEND

- HELMETED CYCLIST WITH ARROW
- SIGNALIZED INTERSECTION
- STOP CONTROL
- PROPOSED GROUND-MOUNTED SIGN
- PROPERTY LINE
- ENHANCED PAINTED BIKE LANE
- BUS PAD (BUS STOP DETAILS TO BE REFINED AS PART OF BUILDING DSUPS)
- SHARROWS
- FLUSH CURB TRANSITION RAMP

Notes:
Design of Slaters Lane and George Washington Memorial Parkway Intersection to be revised pending results of the VISSIM analysis and continued coordination with the City of Alexandria and National Park Service



Note:
PE seal related to pavement marking and signage only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

DRAWING SCALE 0 60' 120'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	03.10.2023
REV.1	
REV.2	
REV.3	

PRELIMINARY PAVEMENT MARKING & SIGNING OVERVIEW
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

GOROVE SLADE
Transportation Planners and Engineers
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

PROJECT NO. 2994-001

SHEET C308

POTOMAC RIVER GENERATING STATION
PRELIMINARY PAVEMENT MARKING & SIGNAGE OVERVIEW (BASHFORD LANE)

LEGEND

- HELMETED CYCLIST WITH ARROW
- SIGNALIZED INTERSECTION
- STOP CONTROL
- PROPOSED GROUND-MOUNTED SIGN
- PROPERTY LINE
- ENHANCED PAINTED BIKE LANE
- BUS PAD (BUS STOP DETAILS TO BE REFINED AS PART OF BUILDING DSUPS)
- SHARROWS
- FLUSH CURB TRANSITION RAMP

Notes:
Design of Bashford Lane and George Washington Memorial Parkway Intersection to be revised pending results of the VISSIM analysis and continued coordination with the City of Alexandria and National Park Service



Note:
PE seal related to pavement marking and signage only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

DRAWING SCALE 0 60' 120'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	03.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

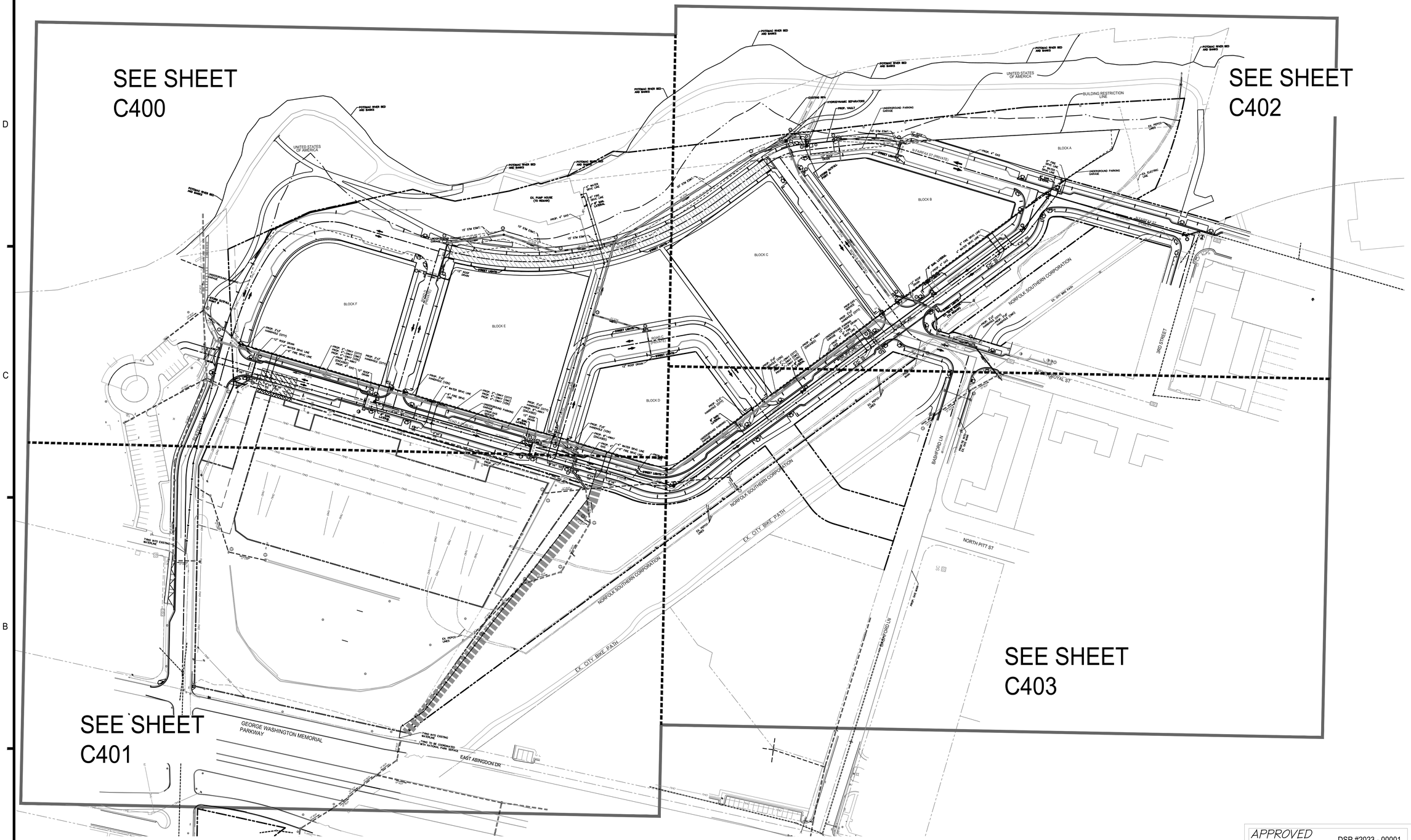
PRELIMINARY PAVEMENT MARKING & SIGNING OVERVIEW
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

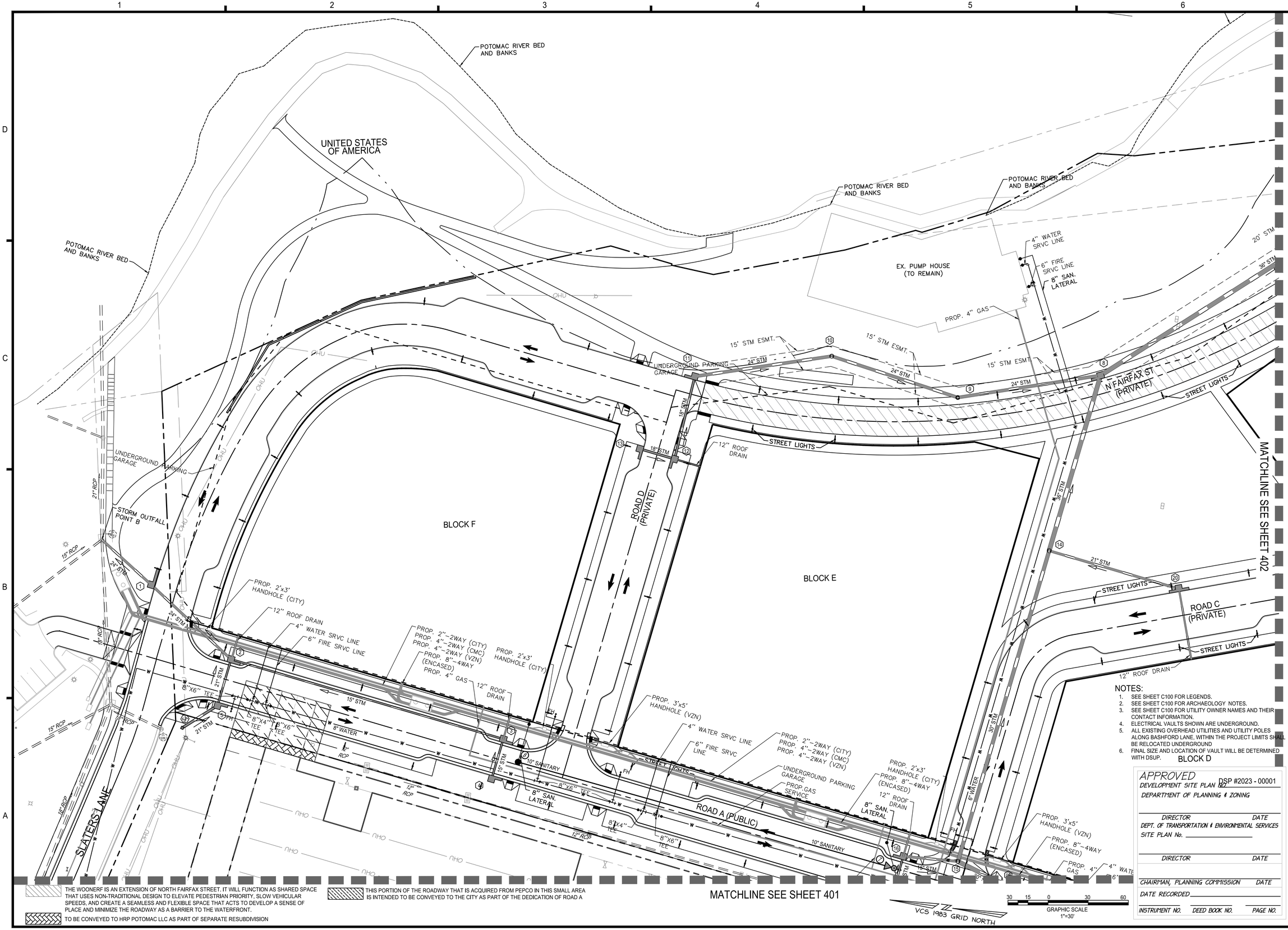
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

PROJECT NO. 2994-001

SHEET C309


SEE SHEET
C400
SEE SHEET
C402
SEE SHEET
C403
SEE SHEET
C401
BLOCK A
BLOCK B
BLOCK C
BLOCK D
BLOCK E
BLOCK F
POTOMAC RIVER BED AND BANKS
UNITED STATES OF AMERICA
N FAIRFAX ST (PRIVATE)
FAIRFAX ST
JAMES JOSEPH PARK
UNDERGROUND PARKING GARAGE
BUILDING RESTRICTION LINE
EX. PEPCO LINES
EX. STORM SEWER
EX. WATER LINE
EX. GAS LINE
EX. ELECTRIC LINE
EX. PEPCO VAULT
EX. PUMP HOUSE (TO REMAIN)
PROP. 4" GAS
PROP. 6" WATER SERVICE LINE
PROP. 8" WATER SERVICE LINE
PROP. 12" WATER SERVICE LINE
PROP. 6" FIRE LINE
PROP. 8" FIRE LINE
PROP. 12" FIRE LINE
PROP. 6" WATER METER
PROP. 8" WATER METER
PROP. 12" WATER METER
PROP. 6" DOMESTIC
PROP. 8" DOMESTIC
PROP. 12" DOMESTIC
PROP. 6" IRRIGATION
PROP. 8" IRRIGATION
PROP. 12" IRRIGATION
PROP. 6" FIRE DEPARTMENT CONNECTION
PROP. 8" FIRE DEPARTMENT CONNECTION
PROP. 12" FIRE DEPARTMENT CONNECTION
PROP. 6" SANITARY
PROP. 8" SANITARY
PROP. 12" SANITARY
PROP. 6" STORM
PROP. 8" STORM
PROP. 12" STORM
PROP. 6" GAS
PROP. 8" GAS
PROP. 12" GAS
PROP. 6" ELECTRIC
PROP. 8" ELECTRIC
PROP. 12" ELECTRIC
PROP. 6" TELECOM
PROP. 8" TELECOM
PROP. 12" TELECOM
PROP. 6" CABLE
PROP. 8" CABLE
PROP. 12" CABLE
PROP. 6" STREET LIGHTING
PROP. 8" STREET LIGHTING
PROP. 12" STREET LIGHTING
PROP. 6" TRAFFIC SIGNAL
PROP. 8" TRAFFIC SIGNAL
PROP. 12" TRAFFIC SIGNAL



NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. SEE SHEET C100 FOR ARCHAEOLOGY NOTES.
3. SEE SHEET C100 FOR UTILITY OWNER NAMES AND THEIR CONTACT INFORMATION.
4. ELECTRICAL VAULTS SHOWN ARE UNDERGROUND.
5. ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG BASHFORD LANE, WITHIN THE PROJECT LIMITS SHALL BE RELOCATED UNDERGROUND
6. FINAL SIZE AND LOCATION OF VAULT WILL BE DETERMINED WITH DSUP.

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION

THIS PORTION OF THE ROADWAY THAT IS ACQUIRED FROM PEPCO IN THIS SMALL AREA IS INTENDED TO BE CONVEYED TO THE CITY AS PART OF THE DEDICATION OF ROAD A

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

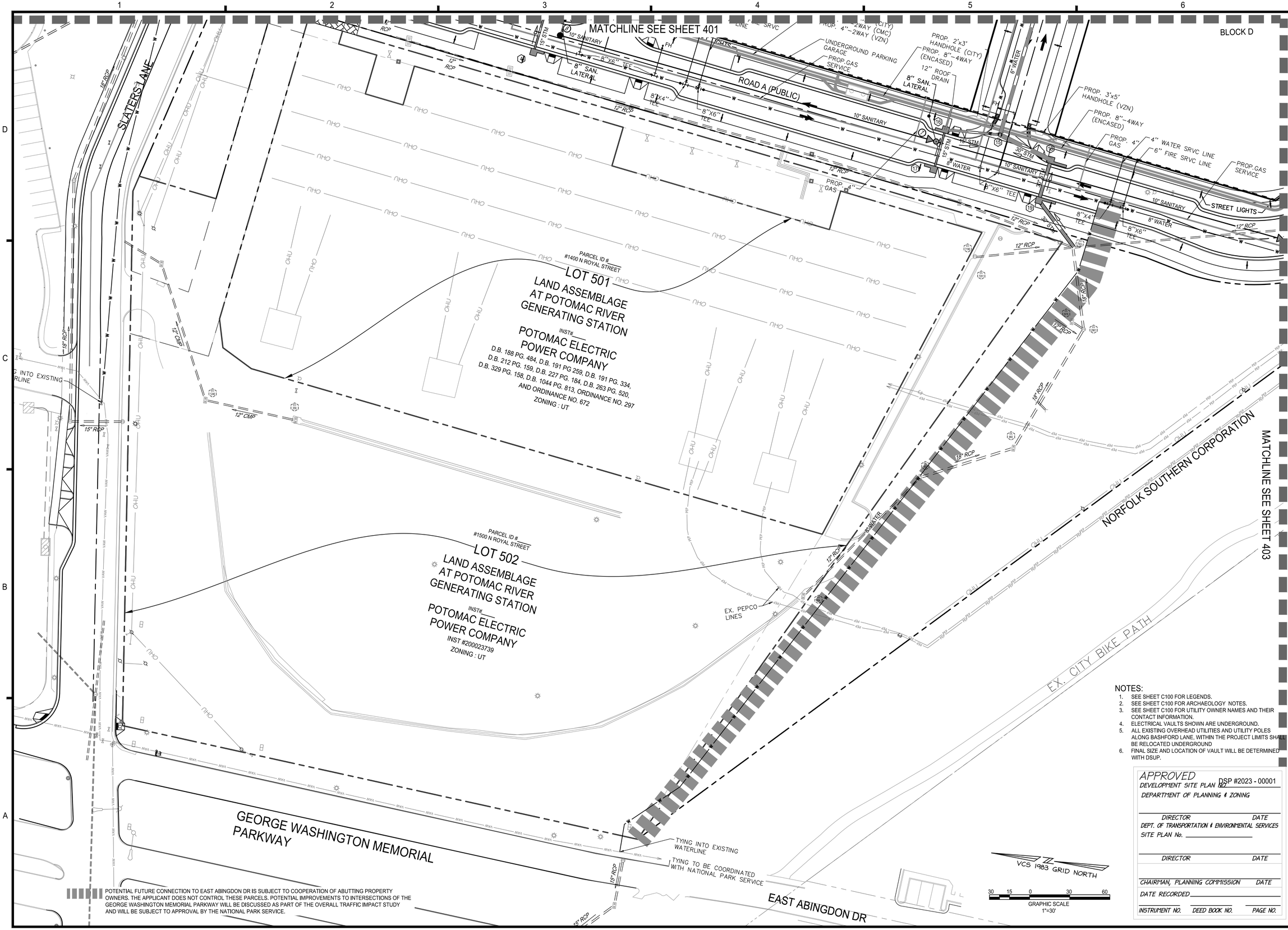
SHEET TITLE:

UTILITY PLAN

SHEET No.

C400

112206



NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. SEE SHEET C100 FOR ARCHAEOLOGY NOTES.
3. SEE SHEET C100 FOR UTILITY OWNER NAMES AND THEIR CONTACT INFORMATION.
4. ELECTRICAL VAULTS SHOWN ARE UNDERGROUND.
5. ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG BASHFORD LANE, WITHIN THE PROJECT LIMITS SHALL BE RELOCATED UNDERGROUND
6. FINAL SIZE AND LOCATION OF VAULT WILL BE DETERMINED WITH DSUP.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

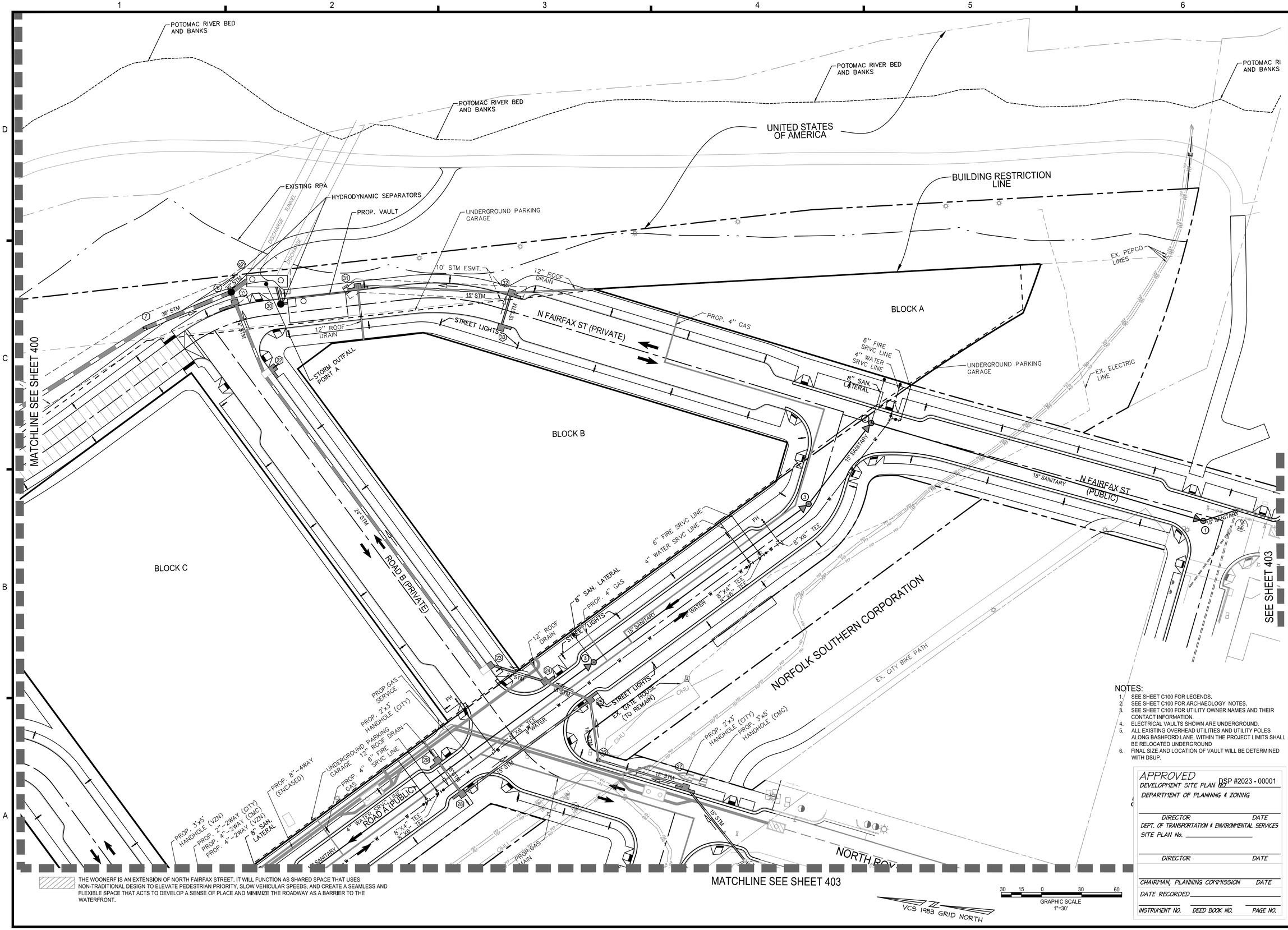
SHEET TITLE:

UTILITY PLAN

SHEET No.

C401

112206



THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. SEE SHEET C100 FOR ARCHAEOLOGY NOTES.
3. SEE SHEET C100 FOR UTILITY OWNER NAMES AND THEIR CONTACT INFORMATION.
4. ELECTRICAL VAULTS SHOWN ARE UNDERGROUND.
5. ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG BASHFORD LANE, WITHIN THE PROJECT LIMITS SHALL BE RELOCATED UNDERGROUND
6. FINAL SIZE AND LOCATION OF VAULT WILL BE DETERMINED WITH DSUP.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

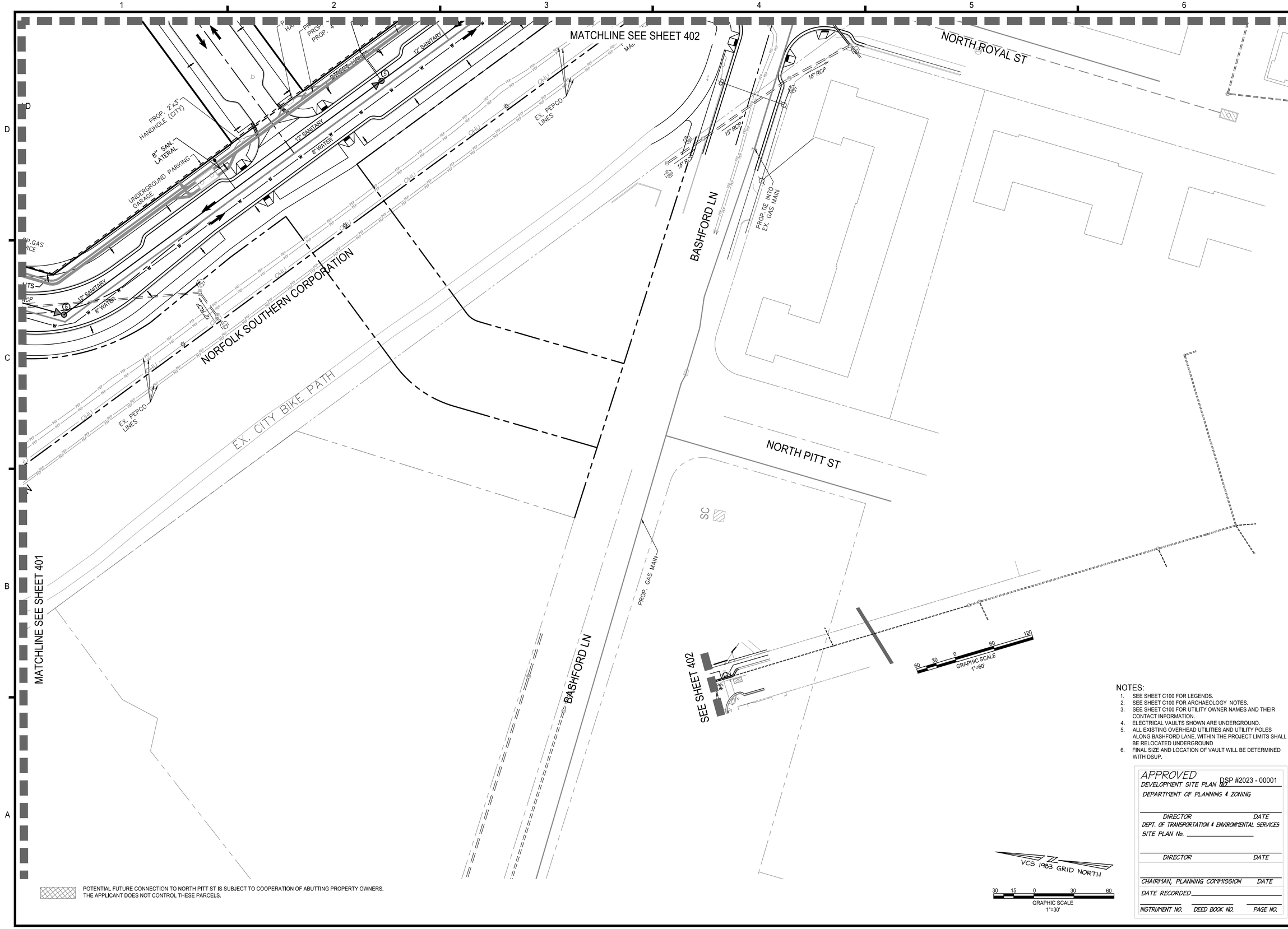
SHEET TITLE:

UTILITY PLAN

SHEET No.

C402

112206



POTENTIAL FUTURE CONNECTION TO NORTH PITT ST IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS.

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. SEE SHEET C100 FOR ARCHAEOLOGY NOTES.
3. SEE SHEET C100 FOR UTILITY OWNER NAMES AND THEIR CONTACT INFORMATION.
4. ELECTRICAL VAULTS SHOWN ARE UNDERGROUND.
5. ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG BASHFORD LANE, WITHIN THE PROJECT LIMITS SHALL BE RELOCATED UNDERGROUND
6. FINAL SIZE AND LOCATION OF VAULT WILL BE DETERMINED WITH DSUP.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

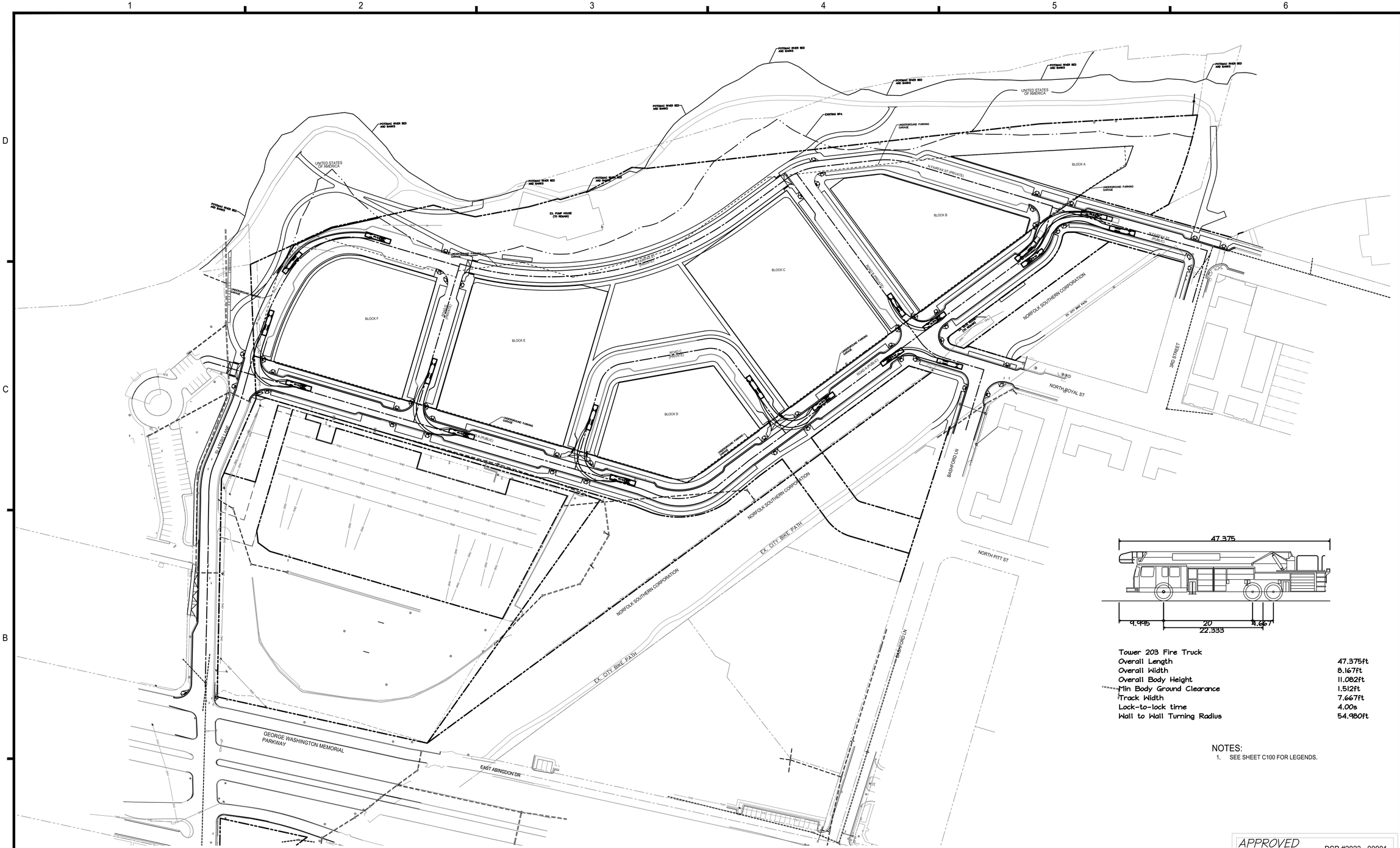
SHEET TITLE:

UTILITY PLAN

SHEET No.

C403

112206



Tower 203 Fire Truck	
Overall Length	47.375ft
Overall Width	8.167ft
Overall Body Height	11.082ft
Min Body Ground Clearance	1.512ft
Track Width	7.667ft
Lock-to-lock time	4.00s
Wall to Wall Turning Radius	54.980ft

NOTES:
1. SEE SHEET C100 FOR LEGENDS.

VCS 1983 GRID NORTH

80 40 0 80 160
GRAPHIC SCALE
1" = 80'

APPROVED
DEVELOPMENT SITE PLAN NO DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

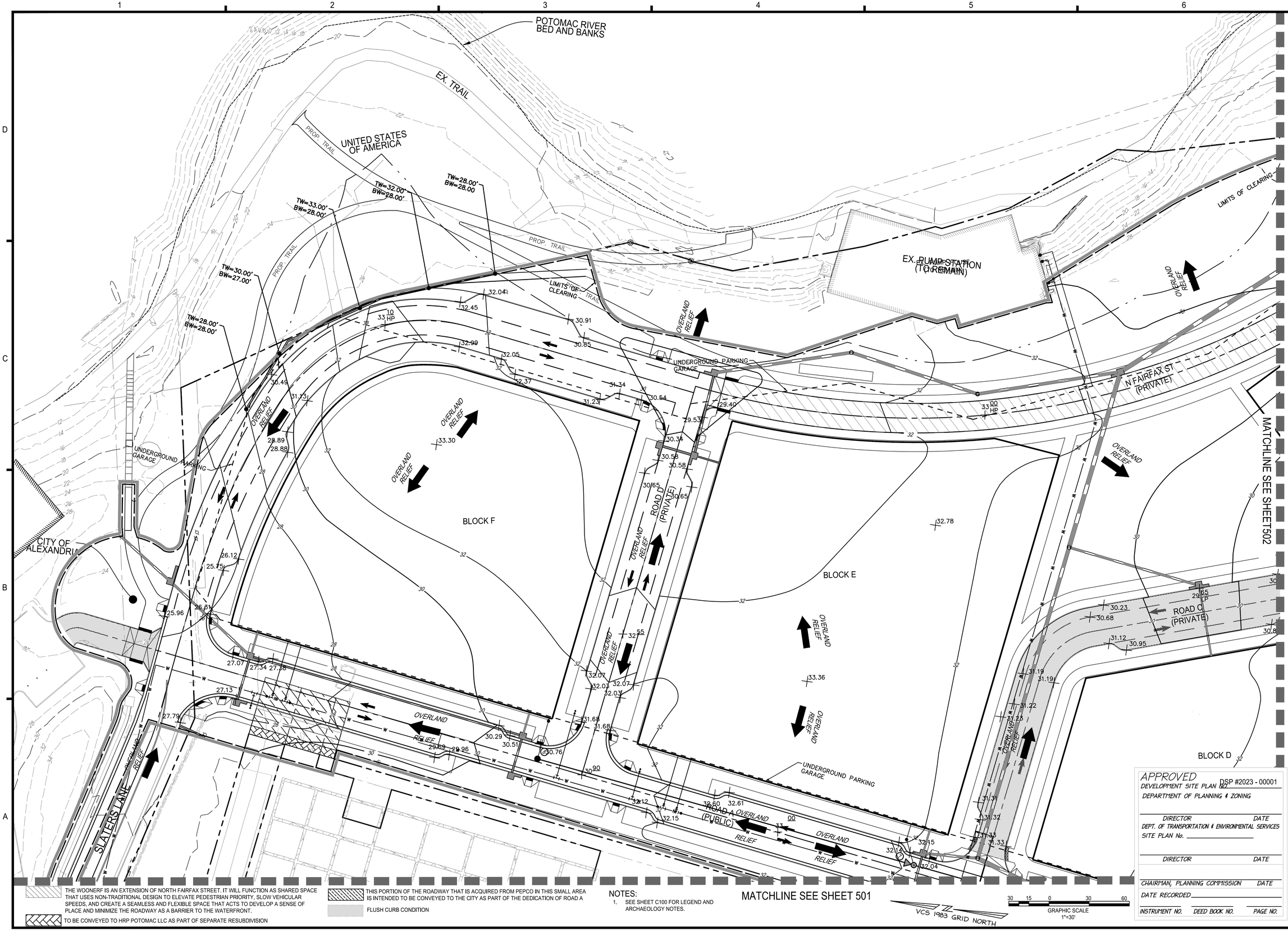
PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

FIRE SAFETY PLAN

SHEET No.
C404

112206



THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION

THIS PORTION OF THE ROADWAY THAT IS ACQUIRED FROM PEPCO IN THIS SMALL AREA IS INTENDED TO BE CONVEYED TO THE CITY AS PART OF THE DEDICATION OF ROAD A

FLUSH CURB CONDITION

NOTES:

1. SEE SHEET C100 FOR LEGEND AND ARCHAEOLOGY NOTES.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

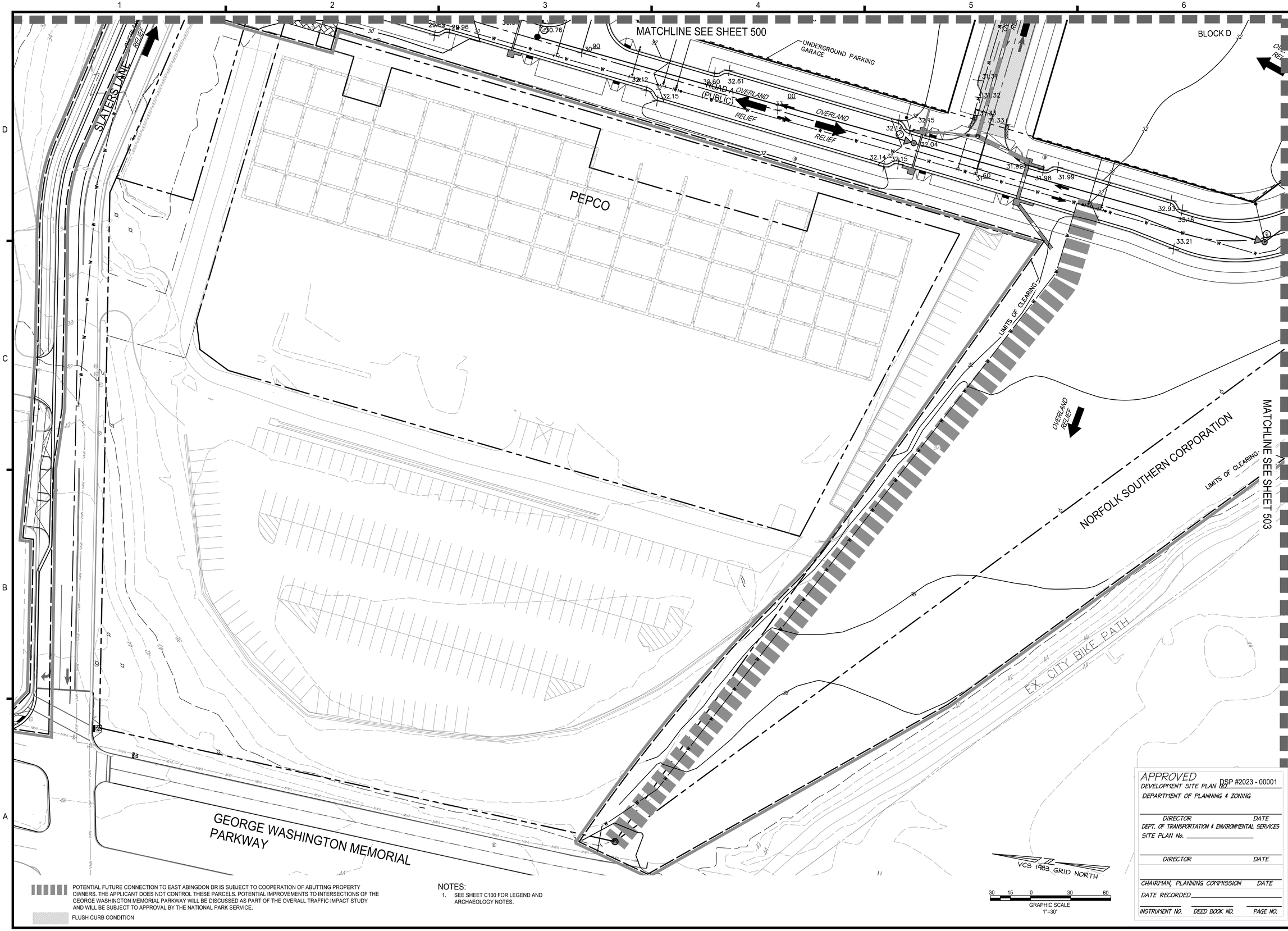
SHEET TITLE:

GRADING PLAN

SHEET No.

C500

112206



POTENTIAL FUTURE CONNECTION TO EAST ABINGDON DR IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS. POTENTIAL IMPROVEMENTS TO INTERSECTIONS OF THE GEORGE WASHINGTON MEMORIAL PARKWAY WILL BE DISCUSSED AS PART OF THE OVERALL TRAFFIC IMPACT STUDY AND WILL BE SUBJECT TO APPROVAL BY THE NATIONAL PARK SERVICE.

FLUSH CURB CONDITION

NOTES:

1. SEE SHEET C100 FOR LEGEND AND ARCHAEOLOGY NOTES.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

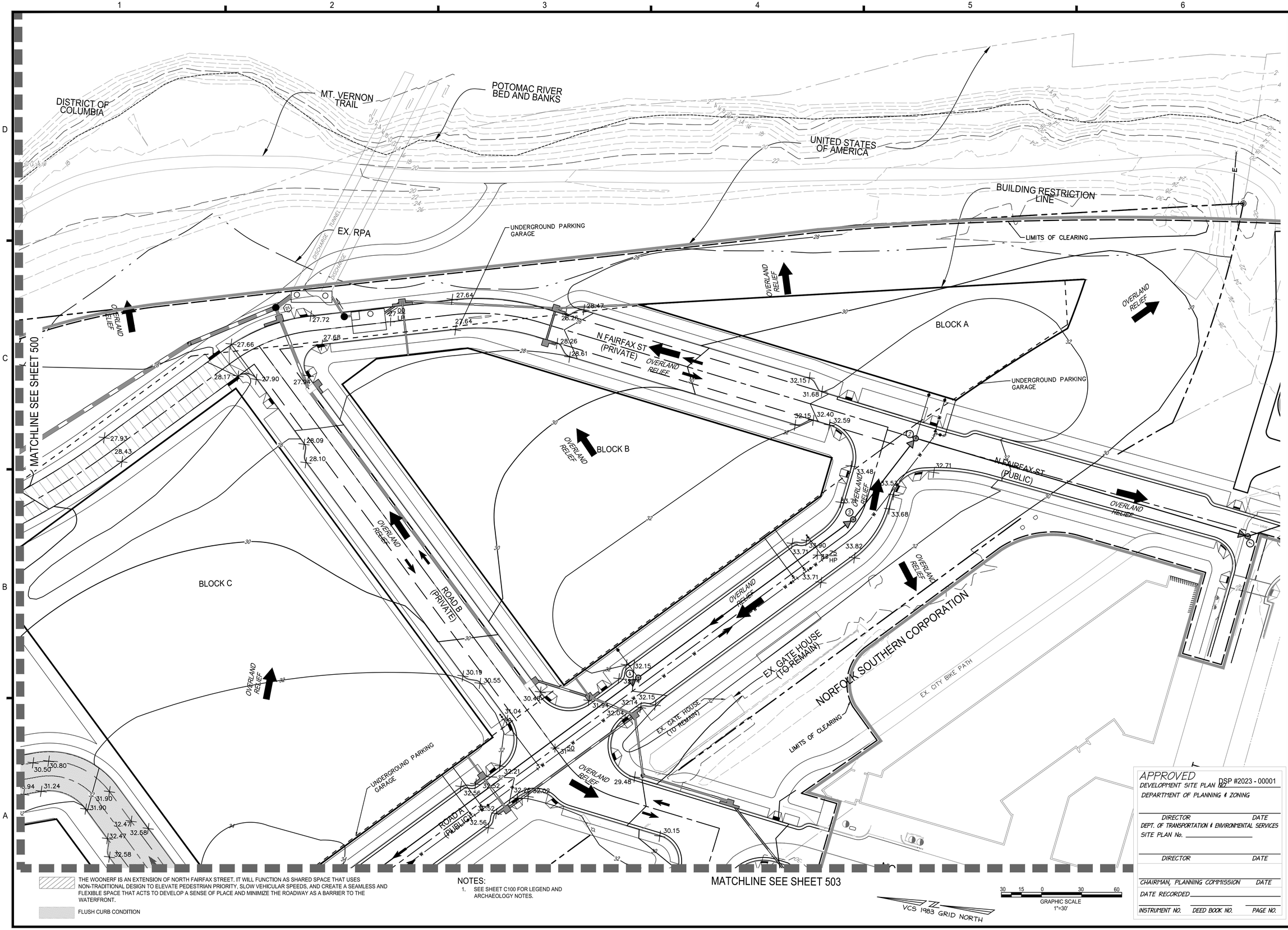
SHEET TITLE:

GRADING PLAN

SHEET No.

C501

112206



APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

GRADING PLAN

SHEET No.

C502

112206

MATCHLINE SEE SHEET 502

MATCHLINE SEE SHEET 501

NORTH ROYAL ST

NORTH PITT ST

BASHFORD LN

BASHFORD LN

NORFOLK SOUTHERN CORPORATION

EX. CITY BIKE PATH

OVERLAND RELIEF

UNDERGROUND PARKING GARAGE

POTENTIAL FUTURE CONNECTION TO NORTH PITT ST IS SUBJECT TO COOPERATION OF ABUTTING PROPERTY OWNERS. THE APPLICANT DOES NOT CONTROL THESE PARCELS.

FLUSH CURB CONDITION

NOTES:

1. SEE SHEET C100 FOR LEGEND AND ARCHAEOLOGY NOTES.

VCS 1983 GRID NORTH

30 15 0 30 60

GRAPHIC SCALE
1"=30'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

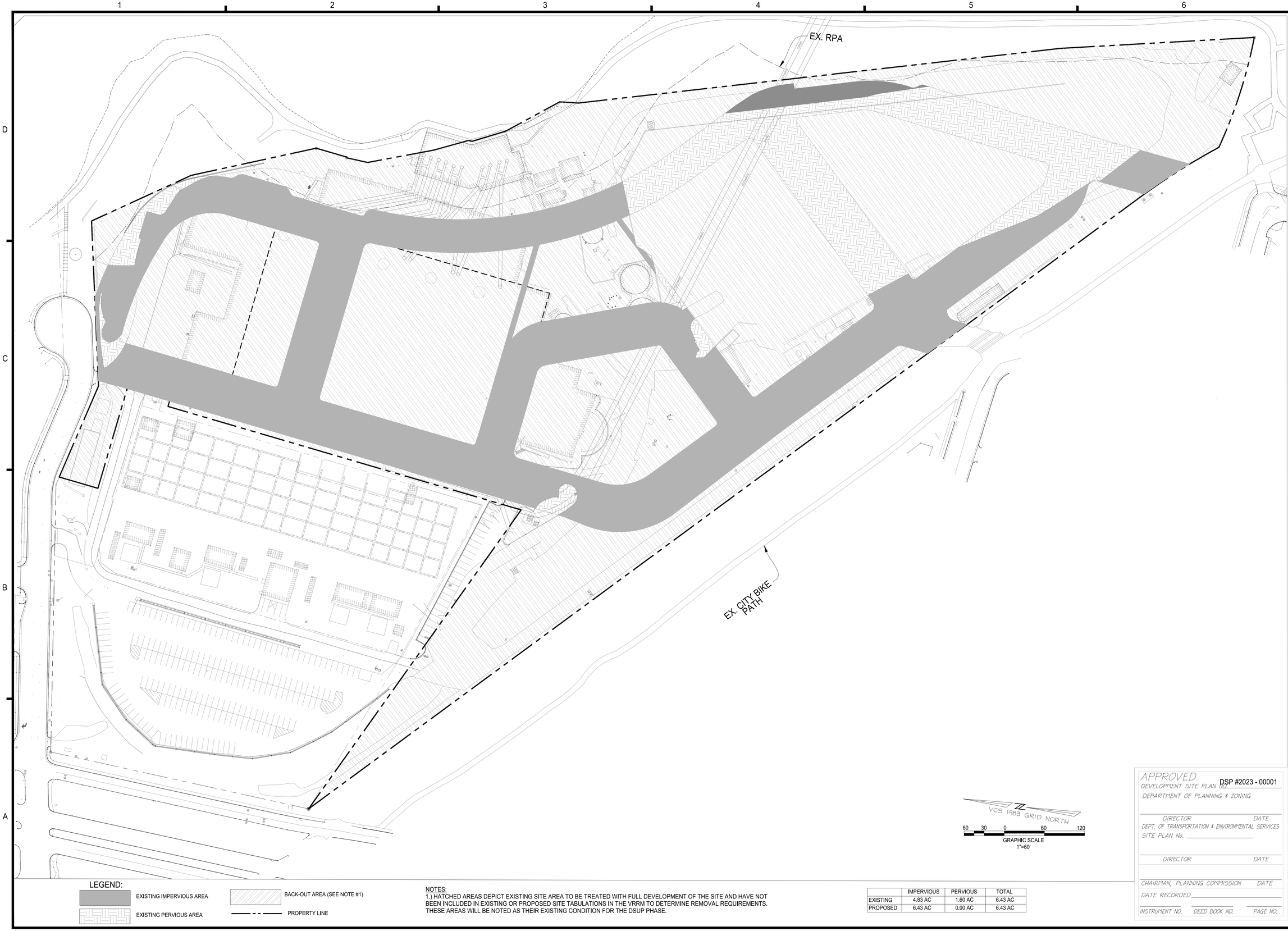
SHEET TITLE:

GRADING PLAN

SHEET No.

C503

112206



LEGEND:

- EXISTING IMPERVIOUS AREA
- EXISTING PERVIOUS AREA
- BACK-OUT AREA (SEE NOTE #1)
- PROPERTY LINE

NOTES:
1.) HATCHED AREAS DEPICT EXISTING SITE AREA TO BE TREATED WITH FULL DEVELOPMENT OF THE SITE AND HAVE NOT BEEN INCLUDED IN EXISTING OR PROPOSED SITE TABULATIONS IN THE VRRM TO DETERMINE REMOVAL REQUIREMENTS. THESE AREAS WILL BE NOTED AS THEIR EXISTING CONDITION FOR THE DSUP PHASE.

	IMPERVIOUS	PERVIOUS	TOTAL
EXISTING	4.83 AC	1.60 AC	6.43 AC
PROPOSED	6.43 AC	0.00 AC	6.43 AC

VCS 1983 GRID NORTH

60 30 0 60 120

GRAPHIC SCALE
1"=60'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

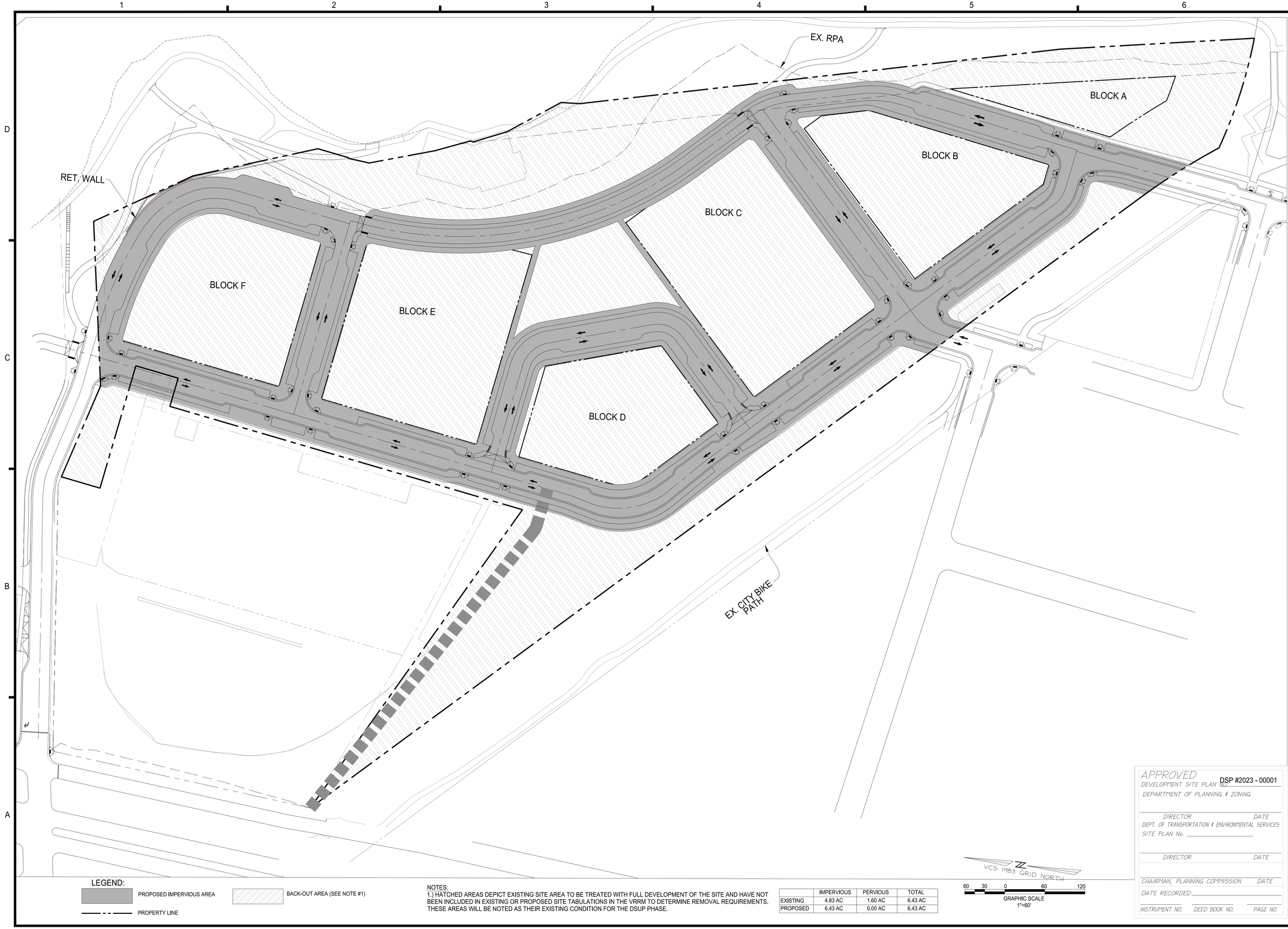
SHEET TITLE:

PRE DEVELOPMENT IMPERVIOUS

SHEET No.

C600

112206



LEGEND:

PROPOSED IMPERVIOUS AREA

BACK-OUT AREA (SEE NOTE #1)

PROPERTY LINE

NOTES:
1.) HATCHED AREAS DEPICT EXISTING SITE AREA TO BE TREATED WITH FULL DEVELOPMENT OF THE SITE AND HAVE NOT BEEN INCLUDED IN EXISTING OR PROPOSED SITE TABULATIONS IN THE VRRM TO DETERMINE REMOVAL REQUIREMENTS. THESE AREAS WILL BE NOTED AS THEIR EXISTING CONDITION FOR THE DSUP PHASE.

	IMPERVIOUS	PERVIOUS	TOTAL
EXISTING	4.83 AC	1.60 AC	6.43 AC
PROPOSED	6.43 AC	0.00 AC	6.43 AC

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

POST DEVELOPMENT IMPERVIOUS

SHEET No.

C601

112206

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, FLOODPLAINS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. FURTHER, THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. ADDITIONALLY, THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS OR GROUNDWATER CONTAMINATION ON THE SITE. THERE IS AN RPA LOCATED ALONG THE EAST SIDE OF THE PROJECT THAT WILL RECEIVE DISTURBANCE.

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 CONTAINERS REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH THE FEDERAL, STATE, AND CITY REGULATIONS.

3. ALL WELLS TO BE DEMOLISHED IN THIS PROJECT, INCLUDING MONITORING WELLS MUST BE CLOSED IN ACCORDANCE WITH THE VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-838-4400 EXT 2672/55.

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
   - SATURDAYS FROM 9 AM TO 6 PM.
   - NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS

   PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 9 AM TO 6 PM AND
   - SATURDAYS FROM 10 AM TO 4 PM.

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.

UTILITIY 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.
F. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED.

WATER QUALITY NARRATIVE

WATER QUALITY REQUIREMENTS

THE POTOMAC RIVER GENERATING STATION INFRASTRUCTURE PROJECT IS A PROPOSED ROAD NETWORK PLAN THAT IS CURRENTLY VACANT, 18.87 ACRES, LOCATED AT 1300 NORTH ROYAL STREET IN ALEXANDRIA VIRGINIA. OF THE 18.87 ACRES 6.43 ACRES WILL BE DEVELOPED WITH THIS PLAN. A PORTION OF THE SITE TO THE NORTH DRAINS TO AN EXISTING STORM DRAIN. THE SITE GENERALLY SLOPES TO THE EAST AND DRAINS TO A TWIN CULVERT. ALL SITE RUNOFF ULTIMATELY DRAINS TO THE POTOMAC RIVER.

HYDROLOGIC SOILS GROUP D IS USED IN VRRM CALCULATIONS PER CITY STANDARDS. PRE-EXISTING CONDITIONS ARE 1.60 ACRES OF MANAGED TURF AND 4.83 ACRES OF IMPERVIOUS AREA. EXISTING CN VALUE = 92. POST DEVELOPED CONDITIONS ARE 0.05 ACRES OF MANAGED TURF AND 6.38 ACRES OF IMPERVIOUS AREA. POST DEVELOPED CN VALUE = 94. THE PHOSPHOROUS REMOVAL REQUIREMENT FOR THIS APPLICATION IS A 20% REDUCTION OF THE TOTAL POST-DEVELOPMENT PHOSPHORUS LOAD. PHOSPHORUS LOAD REMOVAL REQUIRED = 4.90LBS./YEAR. 65% OF PHOSPHOROUS REMOVAL MUST COME FROM NON-PROPRIETARY METHODS PER THE REQUIREMENTS OF MEMO TO INDUSTRY 01-18.

BEST MANAGEMENT PRACTICES (BMP) SHALL BE PROPOSED LINEAR BIORETENTION AREAS. SEE SHEETS C604 TO C607 FOR LOCATIONS OF BMP DEVICES. SEE SHEET C608 FOR SUPPORTING COMPUTATIONS (VRRM SPREADSHEET). PHOSPHOROUS LOAD REMOVAL PROVIDED = 5.73 LBS./YEAR. 88% OF PHOSPHOROUS REMOVAL COMES FROM NON-PROPRIETARY METHODS.

GIVEN THAT WE EXCEED THE PHOSPHOROUS REMOVAL REQUIRED AND GIVEN THAT WE ARE USING 88% NON-PROPRIETARY METHODS WE CONCLUDE THAT WE MEET THE WATER QUALITY REQUIREMENTS FOR THIS PLAN, AS DEMONSTRATED ON SHEET C608.

WATER QUANTITY AND ADEQUATE OUTFALL NARRATIVE

WATER QUANTITY REQUIREMENTS

THE POTOMAC RIVER GENERATING STATION INFRASTRUCTURE PROJECT IS A PROPOSED ROAD NETWORK PLAN THAT IS CURRENTLY VACANT IS 18.87 ACRES AND IS LOCATED AT 1300 NORTH ROYAL STREET IN ALEXANDRIA VIRGINIA. OF THE 18.87 ACRES 6.43 ACRES WILL BE DEVELOPED WITH THIS PLAN. A PORTION OF THE SITE DRAINS TO THE NORTH TO AN EXISTING 21" STORM DRAIN STRUCTURE EX. 6426 AND IS LABELED OUTFALL POINT A. SEE SHEET C612.THE SITE GENERALLY SLOPES TO THE EAST AND DRAINS TO A TWIN CULVERT, PROP, STRUCTURE 6A AND IS LABELED OUTFALL POINT B. ALL SITE RUNOFF ULTIMATELY DRAINS TO THE POTOMAC RIVER.

OUTFALL A DRAINS 2.19 ACRES. 10 YEAR ALLOWABLE FLOW = 15.82 CFS, ACTUAL 10 YEAR FLOW = 15.76 CFS. 2 YEAR VELOCITY = 5.34 FPS AND IS NON-EROSIVE. 100 YEAR ALLOWABLE FLOW = 25.01 CFS. ACTUAL 100 YEAR FLOW = 24.96 CFS.

OUTFALL B DRAINS 4.24 ACRES. 10 YEAR ALLOWABLE FLOW = 30.70 CFS, ACTUAL 100 YEAR FLOW = 30.58 CFS, 2 YEAR VELOCITY = 0.22 FPS AND IS NON-EROSIVE. 100 YEAR ALLOWABLE FLOW = 48.56 CFS. ACTUAL 100 YEAR FLOW = 48.45 CFS.

100 YEAR PRE-DEVELOPMENT = 73.57 CFS. POST DEVELOPMENT RUNOFF = 73.41 CFS. A REDUCTION OF 0.16 CFS IS ACHEIVED THROUGH RUNOFF REDUCTION PRACTICES (BIORETENTION AND THE USE OF A VAULT). THEREFORE WE CONCLUDE THAT WE HAVE MET WATER QUANTITY REQUIREMENTS

ADEQUATE OUTFALL

SEE ADEQUATE OUTFALL ANALYSIS ON SHEET C610.

PRELIMINARY DEVELOPMENT HYDROGRAPHS

Hydrograph Report

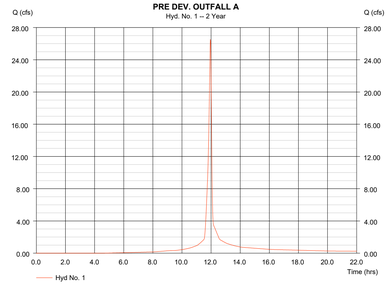
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 1

PRE DEV. OUTFALL A

Hydrograph type	= SCS Runoff	Peak discharge	= 26.52 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 56,580 cuft
Drainage area	= 6.430 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 6.430



Hydrograph Report

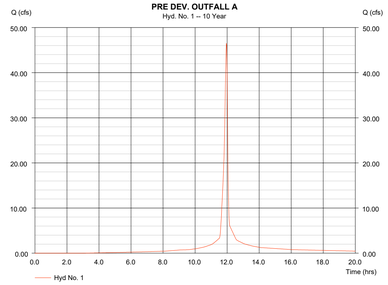
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 1

PRE DEV. OUTFALL A

Hydrograph type	= SCS Runoff	Peak discharge	= 46.52 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 103,136 cuft
Drainage area	= 6.430 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 6.430



Hydrograph Report

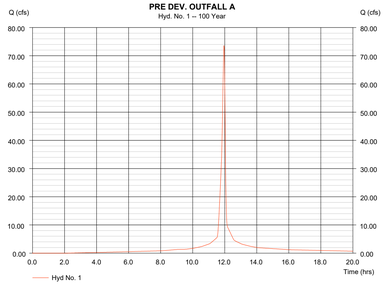
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 1

PRE DEV. OUTFALL A

Hydrograph type	= SCS Runoff	Peak discharge	= 73.57 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 168,347 cuft
Drainage area	= 6.430 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 6.430



Hydrograph Report

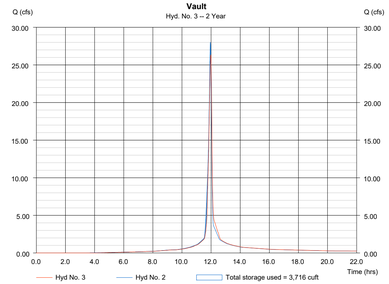
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 3

Vault

Hydrograph type	= Reservoir	Peak discharge	= 26.34 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 61,227 cuft
Inflow hyd. No.	= 2 - POST DEV A	Max. Elevation	= 25.73 ft
Reservoir name	= SWM Vault #1	Max. Storage	= 3,716 cuft

Storage Indication method used.



Hydrograph Report

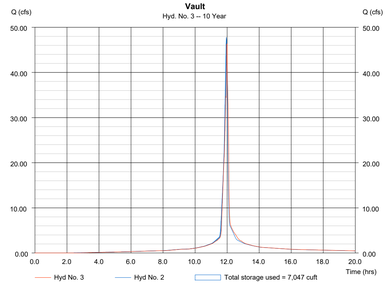
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 3

Vault

Hydrograph type	= Reservoir	Peak discharge	= 46.34 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.98 hrs
Time interval	= 1 min	Hyd. volume	= 108,442 cuft
Inflow hyd. No.	= 2 - POST DEV A	Max. Elevation	= 29.74 ft
Reservoir name	= SWM Vault #1	Max. Storage	= 7,047 cuft

Storage Indication method used.



Hydrograph Report

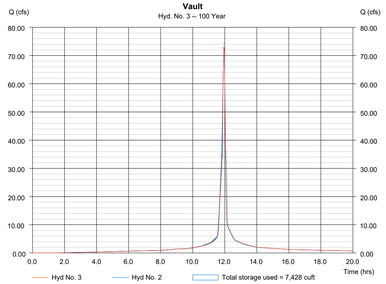
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Monday, 03 / 6 / 2023

Hyd. No. 3

Vault

Hydrograph type	= Reservoir	Peak discharge	= 73.41 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 174,077 cuft
Inflow hyd. No.	= 2 - POST DEV A	Max. Elevation	= 30.20 ft
Reservoir name	= SWM Vault #1	Max. Storage	= 7,428 cuft

Storage Indication method used.



FINAL DESIGN SWM RUNOFF			
	2 YEAR	10 YEAR	100 YEAR
PRE-DEVELOPED CFS	26.52	46.52	73.57
POST DEVELOPED CFS	26.34	46.34	73.41
DIFFERENCE CFS	-0.18	-0.18	-0.16

APPROVED
DEVELOPMENT SITE PLAN No. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

PRELIMINARY DESIGN SWM COMPUTATIONS AND NARRATIVES

SHEET No.

C602

112206

EX. DEVELOPMENT PEPCO HYDROGRAPHS

EX. AREAS USED ARE FROM GENON ENERGY LLC POTOMAC RIVER GENERATING STATION DRAINAGE AREA MAP

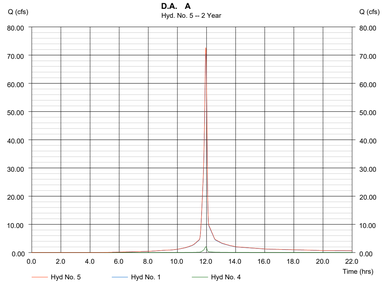
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 5

D.A. A

Hydrograph type	= Combine	Peak discharge	= 72.59 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 154,869 cuft
Inflow hyds.	= 1, 4	Contrib. drain. area	= 17.600 ac



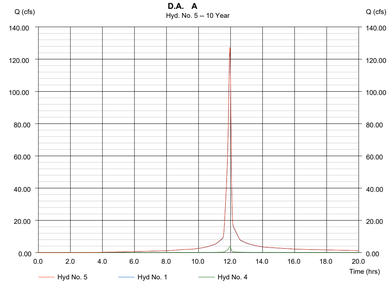
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 5

D.A. A

Hydrograph type	= Combine	Peak discharge	= 127.33 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 282,300 cuft
Inflow hyds.	= 1, 4	Contrib. drain. area	= 17.600 ac



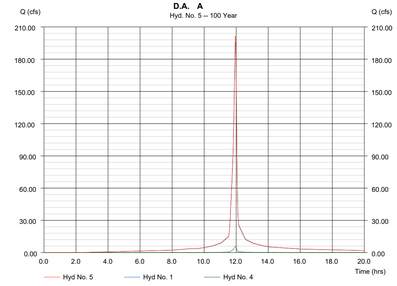
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 5

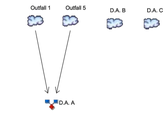
D.A. A

Hydrograph type	= Combine	Peak discharge	= 201.37 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 460,795 cuft
Inflow hyds.	= 1, 4	Contrib. drain. area	= 17.600 ac



Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



Project: PRGS - Hydrograph.gpw - PEPCO.gpw | Tuesday, 03 / 7 / 2023

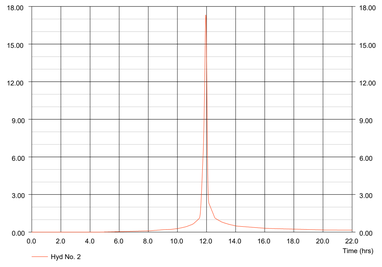
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 2

D.A. B

Hydrograph type	= SCS Runoff	Peak discharge	= 17.32 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 36,958 cuft
Drainage area	= 4.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



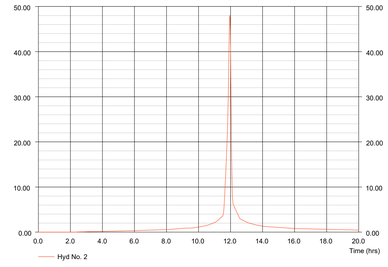
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 2

D.A. B

Hydrograph type	= SCS Runoff	Peak discharge	= 48.05 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 109,962 cuft
Drainage area	= 4.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



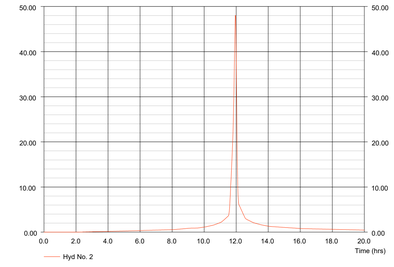
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 2

D.A. B

Hydrograph type	= SCS Runoff	Peak discharge	= 48.05 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 109,962 cuft
Drainage area	= 4.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



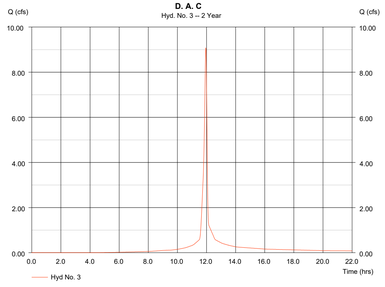
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 3

D.A. C

Hydrograph type	= SCS Runoff	Peak discharge	= 9.074 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 19,359 cuft
Drainage area	= 2.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



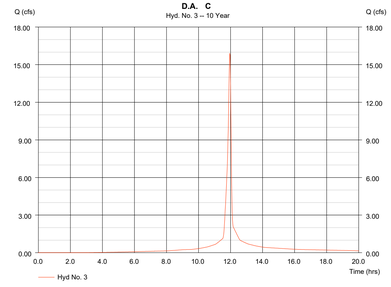
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 3

D.A. C

Hydrograph type	= SCS Runoff	Peak discharge	= 15.92 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 35,288 cuft
Drainage area	= 2.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



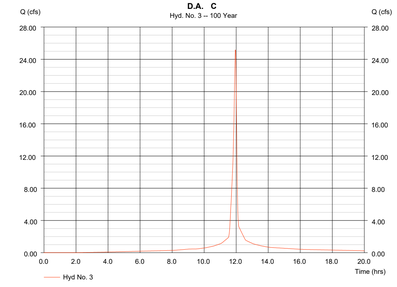
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Thursday, 03 / 2 / 2023

Hyd. No. 3

D.A. C

Hydrograph type	= SCS Runoff	Peak discharge	= 25.17 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 57,599 cuft
Drainage area	= 2.200 ac	Curve number	= 92
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



EX. PEPCO SWM RUNOFF			
	2 YEAR	10 YEAR	100 YEAR
D.A. A	72.59	127.33	201.37
D.A. B	17.32	48.05	48.05
D.A. C	9.07	15.92	25.17
TOTAL	98.98	191.30	274.59

APPROVED
DEVELOPMENT SITE PLAN No. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

EX. PEPCO HYDROGRAPHS

SHEET No.

C602A

112206

PRE-DEVELOPMENT VS. POST-DEVELOPMENT HYDROGRAPHS

FOR INFORMATION ONLY. HYDROGRAPHS SHOW ULTIMATE BUILD OUT CONDITIONS.

Hydrograph Report

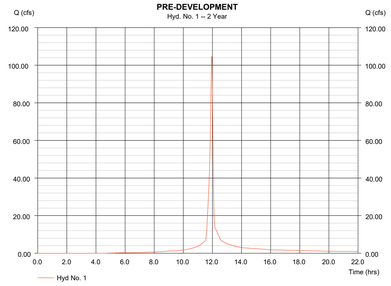
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 1

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 104.81 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 223,593 cuft
Drainage area	= 25.410 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 25.410



Hydrograph Report

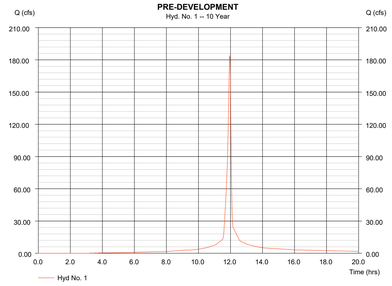
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 1

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 183.83 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 407,571 cuft
Drainage area	= 25.410 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 25.410



Hydrograph Report

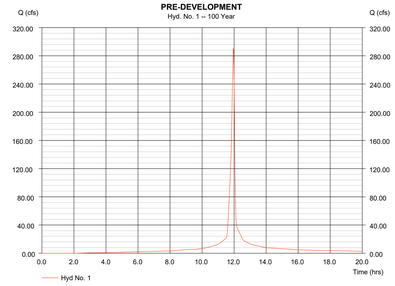
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 1

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 290.72 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 665,273 cuft
Drainage area	= 25.410 ac	Curve number	= 92*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(12.880 x 98) + (5.990 x 80)] / 25.410



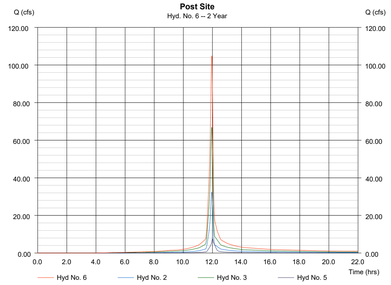
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 6

Post Site

Hydrograph type	= Combine	Peak discharge	= 104.80 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 236,290 cuft
Inflow hyds.	= 2, 3, 5	Contrib. drain. area	= 25.41 ac



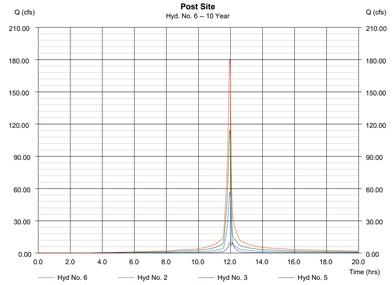
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 6

Post Site

Hydrograph type	= Combine	Peak discharge	= 180.40 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 422,069 cuft
Inflow hyds.	= 2, 3, 5	Contrib. drain. area	= 25.41 ac



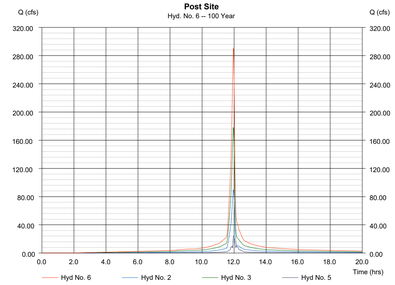
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022 — Friday, 03 / 3 / 2023

Hyd. No. 6

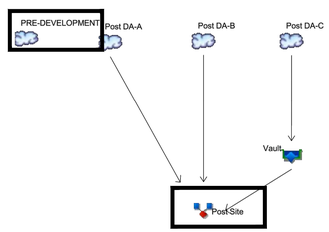
Post Site

Hydrograph type	= Combine	Peak discharge	= 290.55 cfs
Storm frequency	= 100 yrs	Time to peak	= 11.95 hrs
Time interval	= 1 min	Hyd. volume	= 680,928 cuft
Inflow hyds.	= 2, 3, 5	Contrib. drain. area	= 25.41 ac



Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022



Legend

Hyd.	Origin	Description
1	SCS Runoff	PRE-DEVELOPMENT
2	SCS Runoff	Post DA-A
3	SCS Runoff	Post DA-B
4	SCS Runoff	Post DA-C
5	Reservoir	Vault
6	Combine	Post Site

Project: PRGS - Hydrograph.gpw - Final.gpw | Thursday, 12 / 29 / 2022

FINAL DESIGN SWM RUNOFF

	2 YEAR	10 YEAR	100 YEAR
PRE-DEVELOPED CFS	104.81	183.83	290.72
POST DEVELOPED CFS	104.80	180.40	290.55
DIFFERENCE CFS	-0.01	-3.43	-0.17

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

FINAL DESIGN SWM COMPUTATIONS

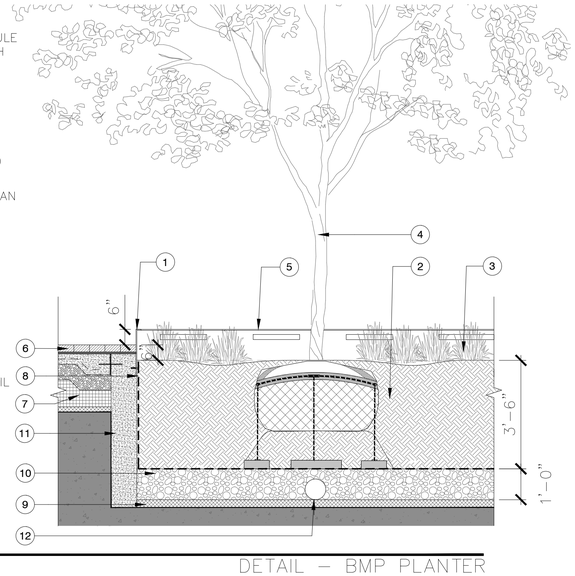
SHEET No.

C602B

112206

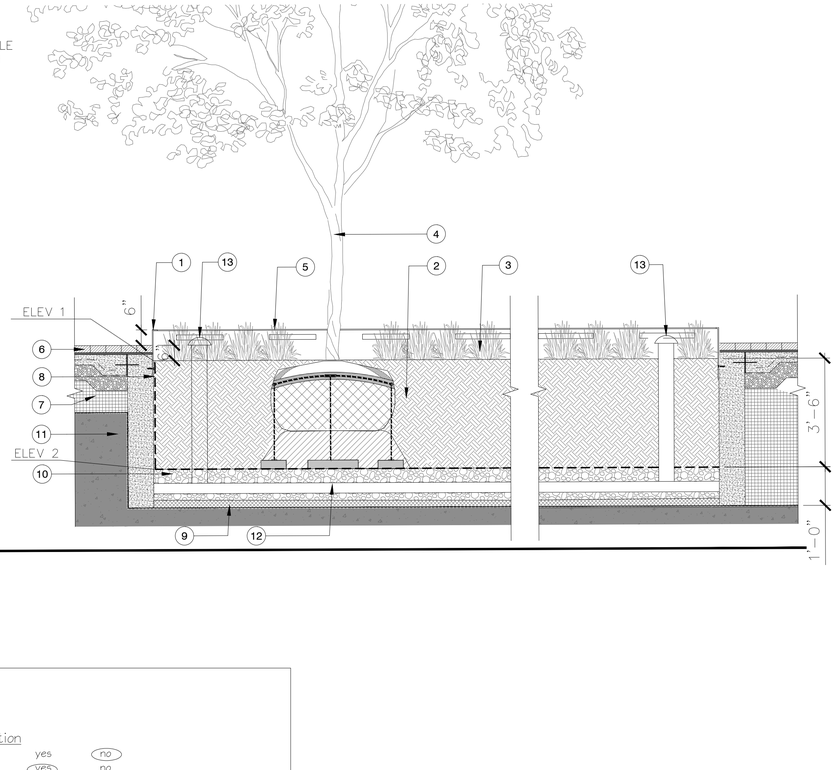
BIORETENTION DETAIL

1. METAL EDGING RE: CONSTRUCTION SCHEDULE FOR COLOR AND FINISH
2. PLANTING SOIL RE: SOIL PLAN
3. PROPOSED PLANTING RE: PLANTING PLAN
4. PROPOSED TREE RE: PLANTING PLAN
5. METAL EDGING BEYOND
6. ADJACENT PAVING. RE: CONSTRUCTION PLAN
7. LIGHTWEIGHT FILL. RE: STRUCTURAL
8. FILTER FABRIC
9. DRAINAGE AND ROOF ASSEMBLY RE: ARCH
10. AGGREGATE STONE. RE: CIVIL
11. REINFORCED C.I.P CONCRETE SLAB RE: STRUCTURAL
12. UNDER DRAIN. RE: CIVIL



DETAIL – BMP PLANTER

1. METAL EDGING RE: CONSTRUCTION SCHEDULE FOR COLOR AND FINISH
2. PLANTING SOIL RE: SOIL PLAN
3. PROPOSED PLANTING RE: PLANTING PLAN
4. PROPOSED TREE RE: PLANTING PLAN
5. METAL EDGING BEYOND
6. ADJACENT PAVING.
7. LIGHTWEIGHT FILL.
8. FILTER FABRIC
9. DRAINAGE AND ROOF ASSEMBLY RE: ARCH
10. AGGREGATE STONE.
11. REINFORCED C.I.P CONCRETE SLAB
12. UNDER DRAIN.
13. OVERFLOW DRAIN/ CLEANOUT



PROPOSED WQVD

Project Description

Development (Redevelopment)

Drainage Area	Impervious	Pervious	Total
On-Site Treated	5.78	0.00	5.78
Off-Site Treated	0.00	0.00	0.00
Total Treated	5.78	0.00	5.78
Any On-Site Disconnected by a Vegetated Buffer (25')			
Total On-Site Treated or Disconnected			5.78

Water Treatment On-Site

BMP Type	Area Treated by BMP (acres)	Impervious Area treated by BMP (acres)	BMP Efficiency (%)
Bioretention	5.61	5.61	25
Grass Channel	0.85	0.85	15
MTD HYDRODYNAMIC	0.17	0.17	20

Miscellaneous Information

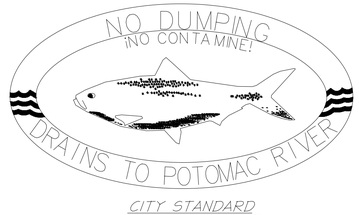
Total WQV treated yes (no)

Detention on Site (yes) no

Project is within which watershed? POTOMAC RIVER

Project Discharges to which body of water? POTOMAC RIVER

das Curb Marker



CITY STANDARD BMP/SWM MARKER

WATERSHED MARKER

TO BE PROVIDED ON STORM INLETS & STRUCTURES

das Manufacturing Incorporated Made in U.S.A.

(800) 549-4029
FAX (803) 681-4024
(803) 681-5807
P.N.# 53-ALX-HR
101802955
www.dasmanufacturing.com

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

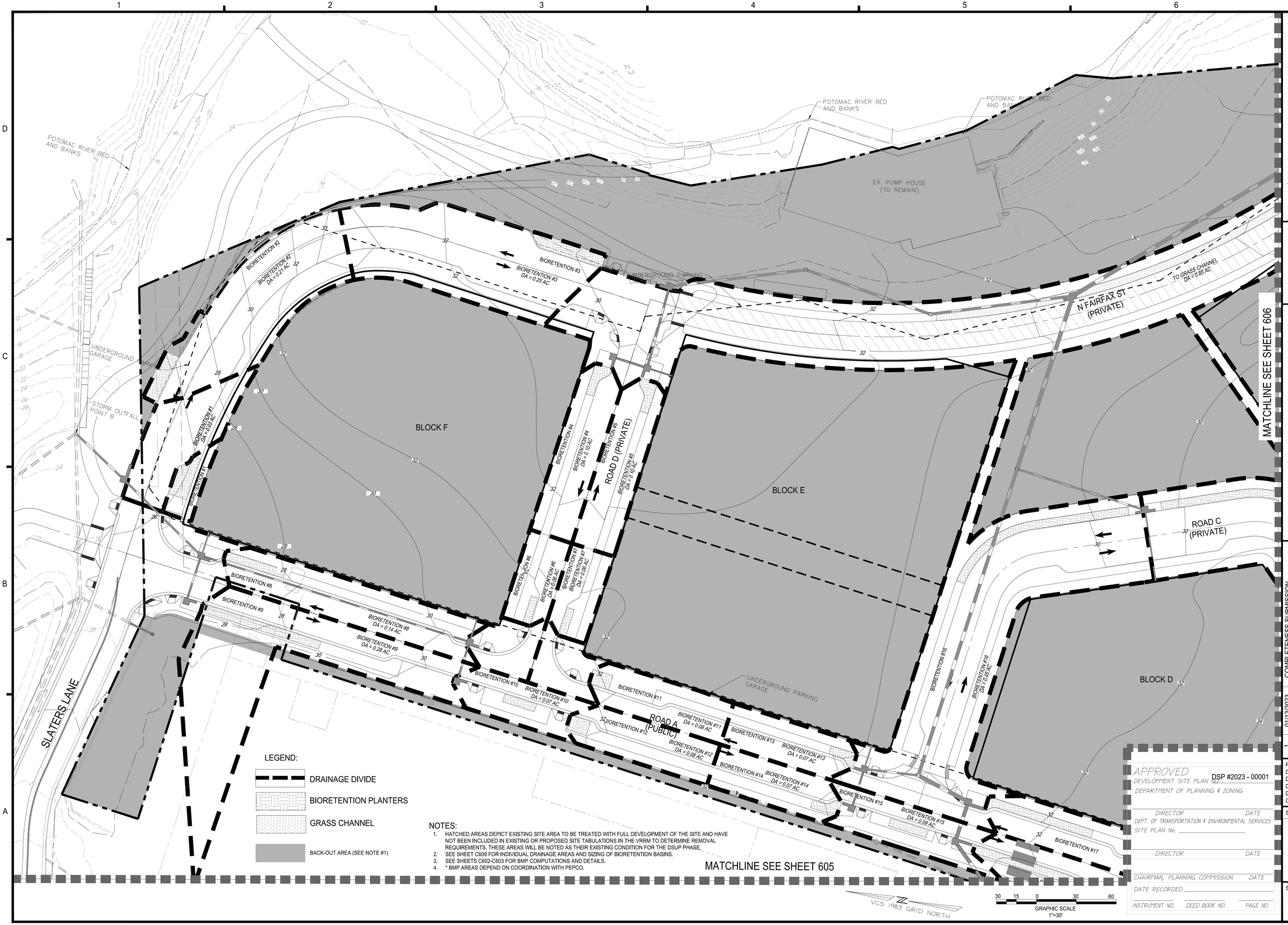
SHEET TITLE:

BMP COMPUTATIONS AND DETAILS

SHEET No.

C603

112206



christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN NO.
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

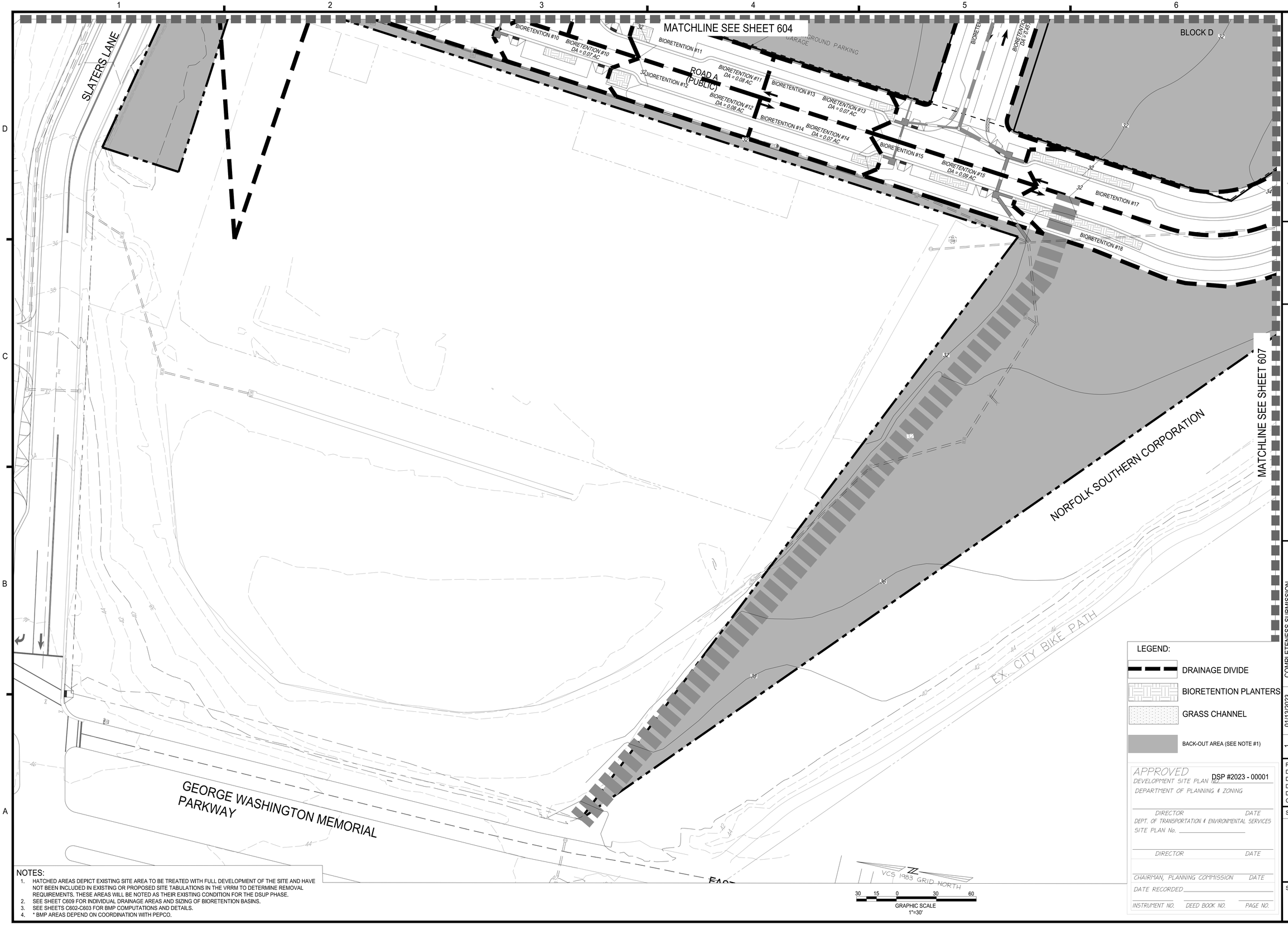
SHEET TITLE:

SWM-BMP PLAN

SHEET No.

C604

112206



NOTES:

1. HATCHED AREAS DEPICT EXISTING SITE AREA TO BE TREATED WITH FULL DEVELOPMENT OF THE SITE AND HAVE NOT BEEN INCLUDED IN EXISTING OR PROPOSED SITE TABULATIONS IN THE VRRM TO DETERMINE REMOVAL REQUIREMENTS. THESE AREAS WILL BE NOTED AS THEIR EXISTING CONDITION FOR THE DSUP PHASE.
2. SEE SHEET C609 FOR INDIVIDUAL DRAINAGE AREAS AND SIZING OF BIORETENTION BASINS.
3. SEE SHEETS C602-C603 FOR BMP COMPUTATIONS AND DETAILS.
4. * BMP AREAS DEPEND ON COORDINATION WITH PEPCO.

LEGEND:

- DRAINAGE DIVIDE
- BIORETENTION PLANTERS
- GRASS CHANNEL
- BACK-OUT AREA (SEE NOTE #1)

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

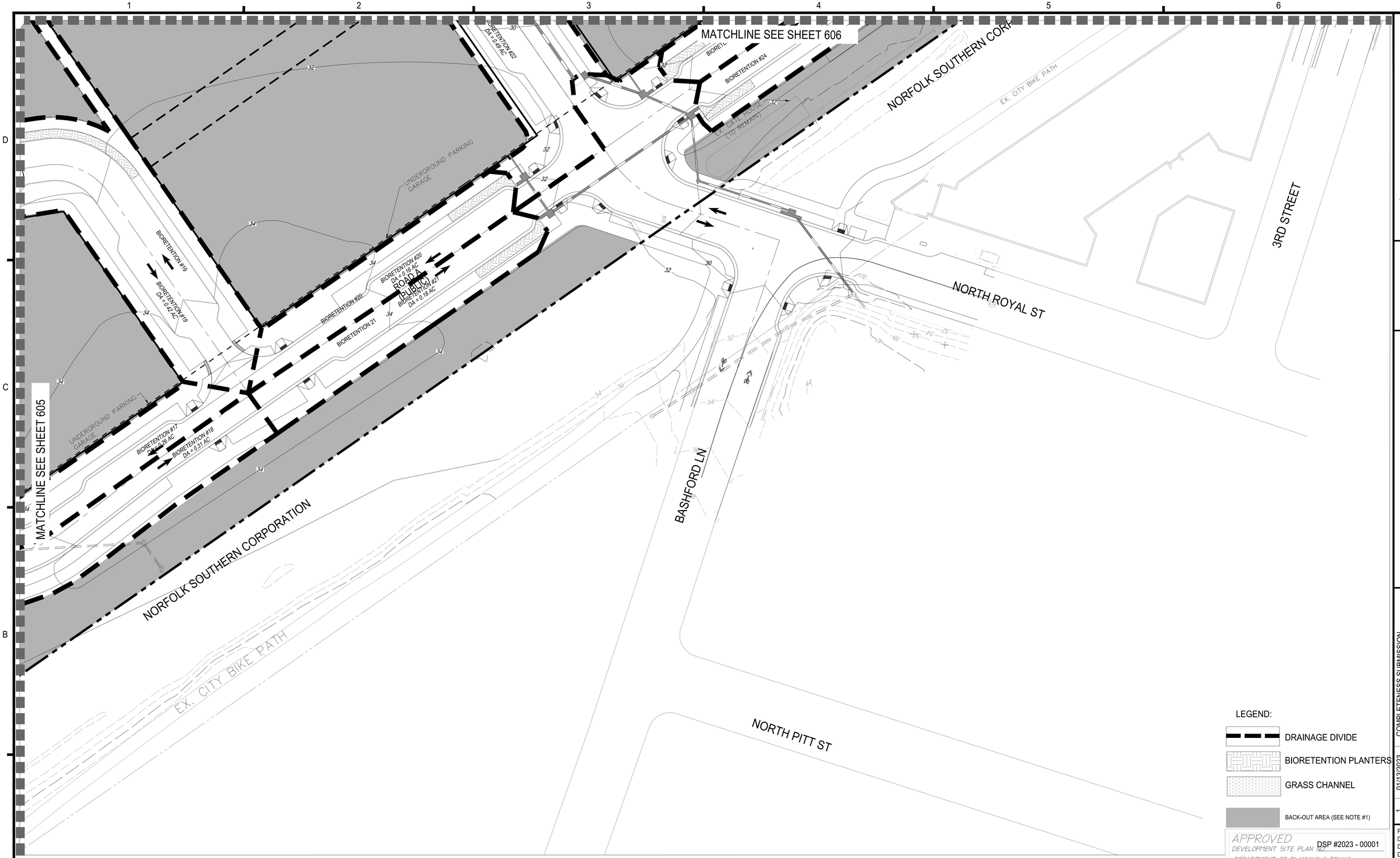
SHEET TITLE:

SWM-BMP PLAN

SHEET No.

C605

112206



LEGEND:

- DRAINAGE DIVIDE
- BIORETENTION PLANTERS
- GRASS CHANNEL
- BACK-OUT AREA (SEE NOTE #1)

NOTES:

1. HATCHED AREAS DEPICT EXISTING SITE AREA TO BE TREATED WITH FULL DEVELOPMENT OF THE SITE AND HAVE NOT BEEN INCLUDED IN EXISTING OR PROPOSED SITE TABULATIONS IN THE VRRM TO DETERMINE REMOVAL REQUIREMENTS. THESE AREAS WILL BE NOTED AS THEIR EXISTING CONDITION FOR THE DSUP PHASE.
2. SEE SHEET C609 FOR INDIVIDUAL DRAINAGE AREAS AND SIZING OF BIORETENTION BASINS.
3. SEE SHEETS C602-C603 FOR BMP COMPUTATIONS AND DETAILS.
4. * BMP AREAS DEPEND ON COORDINATION WITH PEPCO.

VCS 1983 GRID NORTH

30 15 0 30 60

GRAPHIC SCALE
1"=30'

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

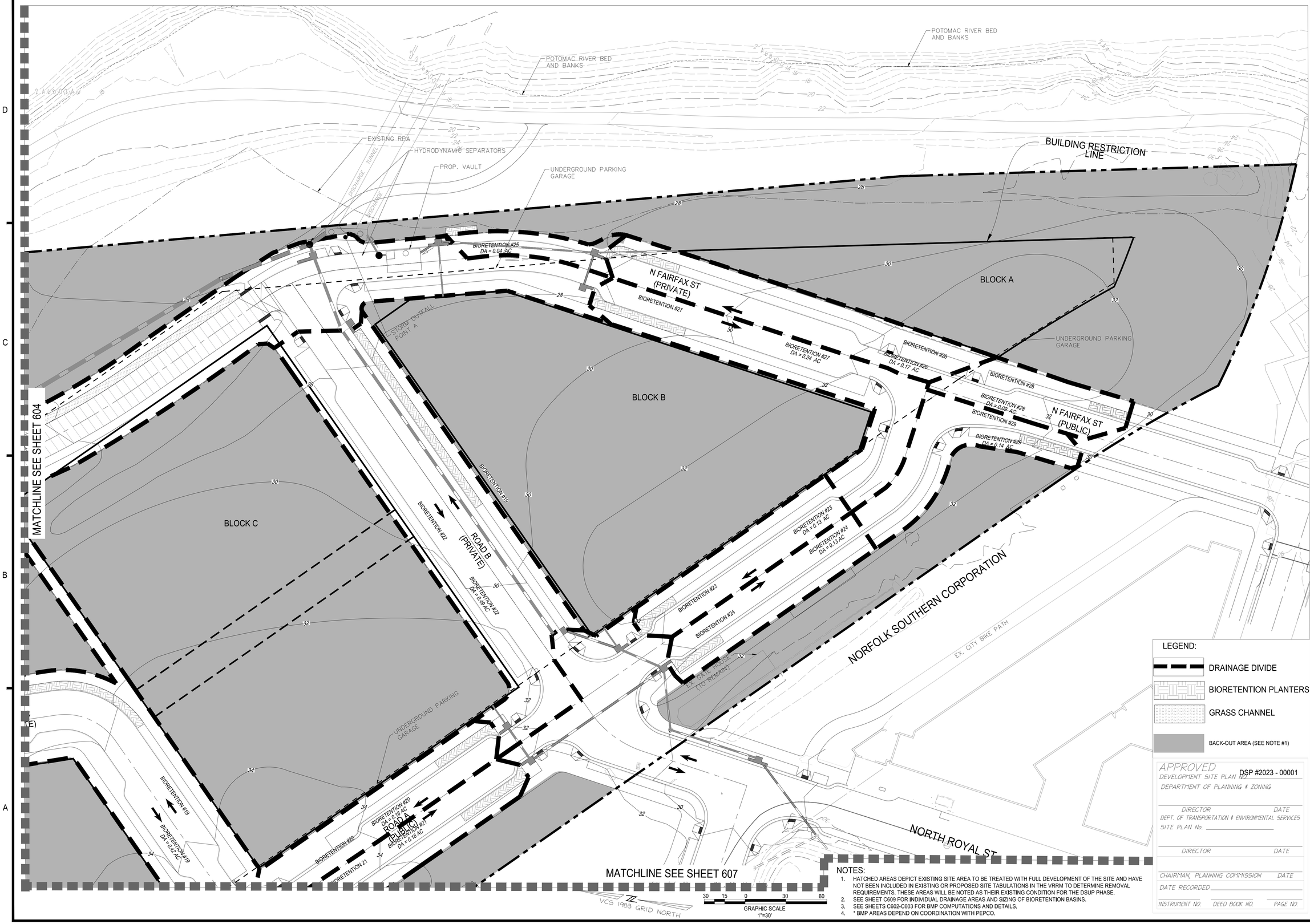
SHEET TITLE:

SWM-BMP PLAN

SHEET No.

C607

112206



LEGEND:

- DRAINAGE DIVIDE
- BIORETENTION PLANTERS
- GRASS CHANNEL
- BACK-OUT AREA (SEE NOTE #1)

NOTES:

1. HATCHED AREAS DEPICT EXISTING SITE AREA TO BE TREATED WITH FULL DEVELOPMENT OF THE SITE AND HAVE NOT BEEN INCLUDED IN EXISTING OR PROPOSED SITE TABULATIONS IN THE VRRM TO DETERMINE REMOVAL REQUIREMENTS. THESE AREAS WILL BE NOTED AS THEIR EXISTING CONDITION FOR THE DSUP PHASE.
2. SEE SHEET C609 FOR INDIVIDUAL DRAINAGE AREAS AND SIZING OF BIORETENTION BASINS.
3. SEE SHEETS C602-C603 FOR BMP COMPUTATIONS AND DETAILS.
4. * BMP AREAS DEPEND ON COORDINATION WITH PEPCO.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

SWM-BMP PLAN

SHEET No.

C606

112206

Project Name:	Potomac River Generating Station
Date:	11/29/2022
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)* → 6.43

Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	1.6
Post-Development TP Load Reduction for Site (lb/yr):	4.90

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
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				1.60	1.60
Impervious Cover (acres)				4.83	4.83
					6.43

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
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.00	0.00
Impervious Cover (acres)				6.43	6.43
Area Check	OK.	OK.	OK.	OK.	6.43

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)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	1.60	0.00
Weighted Rv(turf)	0.25	0.25
% Managed Turf	25%	0%
Impervious Cover (acres)	4.83	4.83
Rv(impervious)	0.95	0.95
% Impervious	75%	100%
Total Site Area (acres)	**6.43**	**4.83**
Site Rv	**0.78**	**0.95**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.4157	0.3824
Pre-ReDevelopment Treatment Volume (cubic feet)	18,108	16,656
Pre-ReDevelopment TP Load (lb/yr)	**11.38**	**10.47**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.77	2.17
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*1.98*

LAND COVER SUMMARY – POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.00
Weighted Rv (turf)	0.00
% Managed Turf	0%
Impervious Cover (acres)	6.43
Rv(impervious)	0.95
% Impervious	100%
Final Site Area (acres)	**6.43**
Final Post Dev Site Rv	**0.95**

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.00
Weighted Rv (turf)	0.00
% Managed Turf	0%
ReDev. Impervious Cover (acres)	4.83
Rv(impervious)	0.95
% Impervious	100%
Total ReDev. Site Area (acres)	**4.83**
ReDev Site Rv	**0.95**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	1.60
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.5090	**Post-ReDevelopment Treatment Volume (acre-ft)**	0.3824	**Post-Development Treatment Volume (acre-ft)**	0.1267
Final Post-Development Treatment Volume (cubic feet)	22,174	**Post-ReDevelopment Treatment Volume (cubic feet)**	16,656	**Post-Development Treatment Volume (cubic feet)**	5,518
Final Post-Development TP Load (lb/yr)	**13.93**	**Post-ReDevelopment Load (TP) (lb/yr)***	**10.47**	**Post-Development TP Load (lb/yr)**	**3.47**
Final Post-Development TP Load per acre (lb/acre/yr)	2.17	Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.17		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	20%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	**2.09**	**TP Load Reduction Required for New Impervious Area (lb/yr)**	**2.81**

[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 requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**4.90**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	81.39	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	99.67

Drainage Area A

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.00	0.00	0.00
Impervious Cover (acres)				3.74	3.74	0.95
				Total	3.74	

Total Phosphorus Available for Removal in D.A. A (lb/yr)	8.10
Post Development Treatment Volume in D.A. A (ft³)	12,897

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40		3.57	0	4,924	7,387	12,311	25	0.00	7.73	4.25	3.48	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0		0.17	7,387	0	7,973	7,973	20	3.48	0.37	0.77	3.08	None

Drainage Area B

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)					0.00	0.00
Impervious Cover (acres)				1.19	1.19	0.95
				Total	1.19	

Total Phosphorus Available for Removal in D.A. B (lb/yr)	2.58
Post Development Treatment Volume in D.A. B (ft³)	4,104

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40		1.19	0	1,641	2,462	4,104	25	0.00	2.58	1.42	1.16	

Drainage Area C

Drainage Area A Land Cover (acres)

CLEAR BMP AREAS

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)					0.00	0.00
Impervious Cover (acres)				0.85	0.85	0.95
				Total	0.85	

Total Phosphorus Available for Removal in D.A. C (lb/yr)	1.84
Post Development Treatment Volume in D.A. C (ft³)	2,931

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
4. Grass Channel (RR)													
4.a. Grass Channel A/B Soils (Spec #3)	20			0	0	0	0	15	0.00	0.00	0.00	0.00	
4.b. Grass Channel C/D Soils (Spec #3)	10		0.85	0	293	2,638	2,931	15	0.00	1.84	0.43	1.41	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0			2,638	0	2,638	2,638	20	1.41	0.00	0.28	1.13	

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)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	3.74	1.19	0.85	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	3.74	1.19	0.85	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³)	22,174

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 (ft³)	4,924	1,641	293	0	0	6,859
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	8.10	2.58	1.84	0.00	0.00	12.52
TP LOAD REDUCTION ACHIEVED (lb/yr)	5.02	1.42	0.71	0.00	0.00	7.15
TP LOAD REMAINING (lb/yr)	3.08	1.16	1.13	0.00	0.00	5.37
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	35.37	11.79	3.68	0.00	0.00	50.85

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	13.93
TP LOAD REDUCTION REQUIRED (lb/yr)	4.90
TP LOAD REDUCTION ACHIEVED (lb/yr)	7.15
TP LOAD REMAINING (lb/yr)	6.78
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 2.24 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	99.67
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	50.85
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	48.81

65% GREEN PRACTICES CALCULATION:

PHOSPHORUS REMOVED BY BIORETENTION #1 = 4.25lb + 1.42 lb = 5.67 lb
PHOSPHORUS REMOVED BY GRASS CHANNEL = 0.43 lb
TOTAL PHOSPHORUS REDUCTION REQUIRED = 4.90 lb/yr

5.67 + 0.43 =6.1/4.90 = 124%

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
BMP COMPUTATIONS

SHEET No.
C608

112206

BIO SIZING - GROUND PLANTERS

Bioretention #1	
Impervious DA (AC)	0.03
Managed DA (AC)	0.00
Treatment Volume (CF)	103
Minimum Area (SF)	58
Actual Area (SF)	120
Upstream BMP	None
Downstream BMP	None
Lat: 38.8216	Long: -77.0412

Bioretention #2	
Impervious DA (AC)	0.21
Managed DA (AC)	0.00
Treatment Volume (CF)	724
Minimum Area (SF)	408
Actual Area (SF)	411
Upstream BMP	None
Downstream BMP	None
Lat: 38.8217	Long: -77.0409

Bioretention #3	
Impervious DA (AC)	0.25
Managed DA (AC)	0.00
Treatment Volume (CF)	862
Minimum Area (SF)	486
Actual Area (SF)	552
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8209	Long: -77.0409

Bioretention #4	
Impervious DA (AC)	0.1
Managed DA (AC)	0.00
Treatment Volume (CF)	345
Minimum Area (SF)	194
Actual Area (SF)	200
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8208	Long: -77.0407

Bioretention #5	
Impervious DA (AC)	0.1
Managed DA (AC)	0.00
Treatment Volume (CF)	345
Minimum Area (SF)	194
Actual Area (SF)	200
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8207	Long: -77.0408

Bioretention #6	
Impervious DA (AC)	0.06
Managed DA (AC)	0.00
Treatment Volume (CF)	207
Minimum Area (SF)	117
Actual Area (SF)	121
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8209	Long: -77.0414

Bioretention #7	
Impervious DA (AC)	0.06
Managed DA (AC)	0.00
Treatment Volume (CF)	207
Minimum Area (SF)	117
Actual Area (SF)	121
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8208	Long: -77.0414

Bioretention #8	
Impervious DA (AC)	0.14
Managed DA (AC)	0.00
Treatment Volume (CF)	483
Minimum Area (SF)	272
Actual Area (SF)	282
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8215	Long: -77.0413

Bioretention #9	
Impervious DA (AC)	0.28
Managed DA (AC)	0.00
Treatment Volume (CF)	966
Minimum Area (SF)	544
Actual Area (SF)	558
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8214	Long: -77.0415

Bioretention #10	
Impervious DA (AC)	0.07
Managed DA (AC)	0.00
Treatment Volume (CF)	241
Minimum Area (SF)	136
Actual Area (SF)	150
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8209	Long: -77.0416

Bioretention #11	
Impervious DA (AC)	0.08
Managed DA (AC)	0.00
Treatment Volume (CF)	276
Minimum Area (SF)	155
Actual Area (SF)	171
Upstream BMP	None
Downstream BMP	None
Lat: 38.8207	Long: -77.0415

Bioretention #12	
Impervious DA (AC)	0.08
Managed DA (AC)	0.00
Treatment Volume (CF)	276
Minimum Area (SF)	155
Actual Area (SF)	171
Upstream BMP	None
Downstream BMP	None
Lat: 38.8207	Long: -77.0416

Bioretention #13	
Impervious DA (AC)	0.07
Managed DA (AC)	0.00
Treatment Volume (CF)	241
Minimum Area (SF)	136
Actual Area (SF)	150
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8202	Long: -77.0416

Bioretention #14	
Impervious DA (AC)	0.07
Managed DA (AC)	0.00
Treatment Volume (CF)	241
Minimum Area (SF)	136
Actual Area (SF)	150
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8202	Long: -77.0418

Bioretention #15	
Impervious DA (AC)	0.09
Managed DA (AC)	0.00
Treatment Volume (CF)	310
Minimum Area (SF)	175
Actual Area (SF)	177
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8200	Long: -77.0418

Bioretention #16	
Impervious DA (AC)	0.45
Managed DA (AC)	0.00
Treatment Volume (CF)	1552
Minimum Area (SF)	874
Actual Area (SF)	884
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8199	Long: -77.0409

Bioretention #17	
Impervious DA (AC)	0.26
Managed DA (AC)	0.00
Treatment Volume (CF)	897
Minimum Area (SF)	505
Actual Area (SF)	510
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8198	Long: -77.0417

Bioretention #18	
Impervious DA (AC)	0.31
Managed DA (AC)	0.00
Treatment Volume (CF)	1069
Minimum Area (SF)	602
Actual Area (SF)	608
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8198	Long: -77.0418

Bioretention #19	
Impervious DA (AC)	0.42
Managed DA (AC)	0.00
Treatment Volume (CF)	1448
Minimum Area (SF)	816
Actual Area (SF)	821
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8195	Long: -77.0408

Bioretention #20	
Impervious DA (AC)	0.16
Managed DA (AC)	0.00
Treatment Volume (CF)	552
Minimum Area (SF)	311
Actual Area (SF)	319
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8186	Long: -77.0408

Bioretention #21	
Impervious DA (AC)	0.18
Managed DA (AC)	0.00
Treatment Volume (CF)	620
Minimum Area (SF)	349
Actual Area (SF)	360
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8185	Long: -77.0409

Bioretention #22	
Impervious DA (AC)	0.49
Managed DA (AC)	0.00
Treatment Volume (CF)	1690
Minimum Area (SF)	952
Actual Area (SF)	959
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8188	Long: -77.0409

Bioretention #23	
Impervious DA (AC)	0.13
Managed DA (AC)	0.00
Treatment Volume (CF)	448
Minimum Area (SF)	252
Actual Area (SF)	258
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8183	Long: -77.0404

Bioretention #24	
Impervious DA (AC)	0.13
Managed DA (AC)	0.00
Treatment Volume (CF)	448
Minimum Area (SF)	252
Actual Area (SF)	258
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8182	Long: -77.0405

Bioretention #25	
Impervious DA (AC)	0.04
Managed DA (AC)	0.00
Treatment Volume (CF)	138
Minimum Area (SF)	78
Actual Area (SF)	138
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8188	Long: -77.0395

Bioretention #26	
Impervious DA (AC)	0.17
Managed DA (AC)	0.00
Treatment Volume (CF)	568
Minimum Area (SF)	320
Actual Area (SF)	331
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8184	Long: -77.0395

Bioretention #27	
Impervious DA (AC)	0.24
Managed DA (AC)	0.00
Treatment Volume (CF)	828
Minimum Area (SF)	466
Actual Area (SF)	475
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8184	Long: -77.0396

Bioretention #28	
Impervious DA (AC)	0.09
Managed DA (AC)	0.00
Treatment Volume (CF)	310
Minimum Area (SF)	175
Actual Area (SF)	180
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8174	Long: -77.0397

Bioretention #29	
Impervious DA (AC)	0.14
Managed DA (AC)	0.00
Treatment Volume (CF)	483
Minimum Area (SF)	272
Actual Area (SF)	280
Upstream BMP	None
Downstream BMP	Hydrodynamic Separator
Lat: 38.8175	Long: -77.0398

Storage Depth for Sizing- Street Planters	
6" PONDING	0.5FT x 1.0Vr
42" MEDIA	3.0FT x 0.25Vr
12" STONE	1.0FT x 0.4Vr
Storage Depth	1.775

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

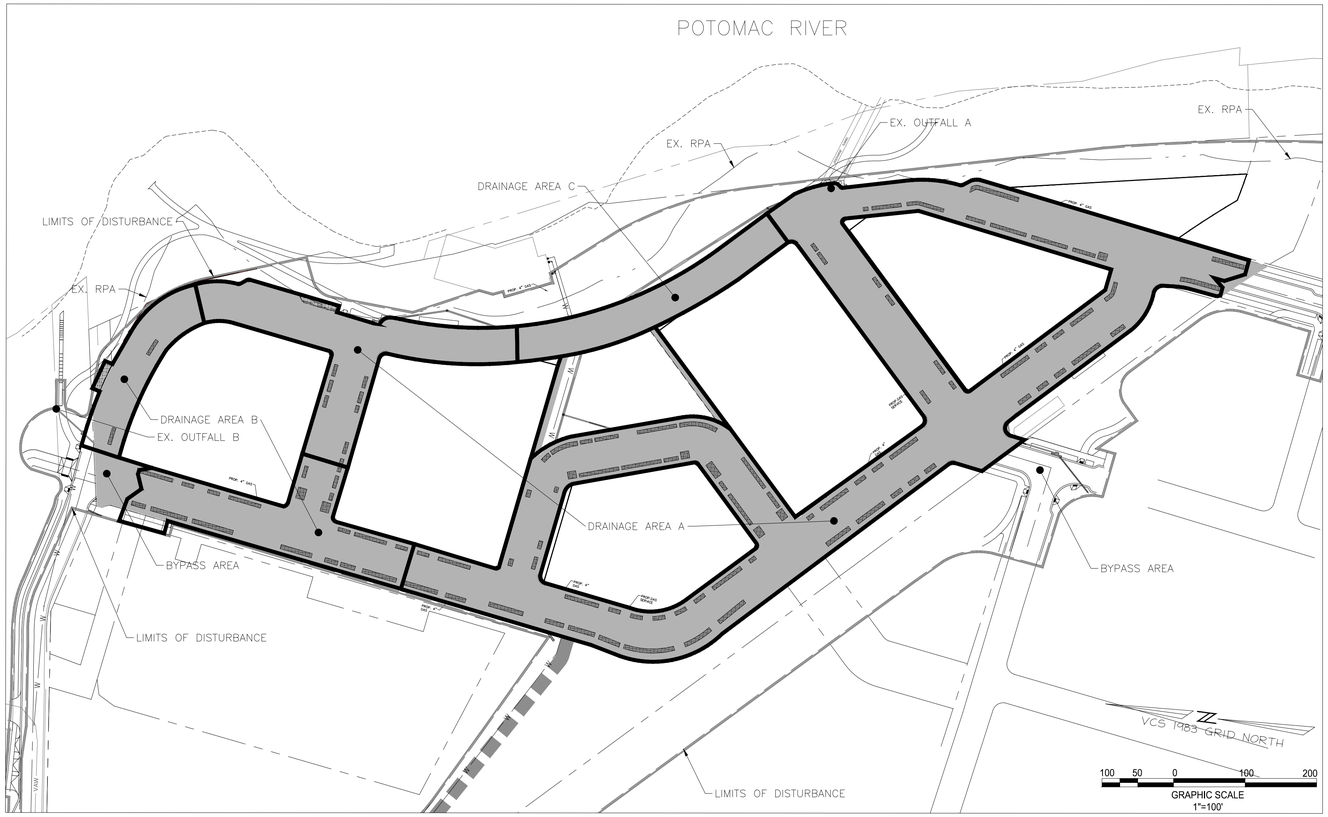
SHEET TITLE:

BMP COMPUTATIONS

SHEET No.

C609

112206



OUTFALL MAP

ADEQUATE OUTFALL NARRATIVE:

THE PROJECT IS LOCATED AT 1300 NORTH ROYAL STREET ALEXANDRIA VIRGINIA AND IS FORMERLY A PEPCO GENERATION PLANT. REDEVELOPMENT OF THE SITE SHALL BEGIN WITH ROAD NETWORK AND UNDERGROUND FACILITIES BEING CONSTRUCTED INCLUDING ALL WET AND DRY UTILITIES. THE TOTAL SITE IS 6.43 ACRES. THERE ARE TWO OUTFALLS FOR THE SITE IDENTIFIED AS OUTFALL A AND OUTFALL B. SEE SHEET C617 FOR STORM DRAIN COMPUTATIONS.

OUTFALL A
EXISTING OUTFALL A IS 4.59 ACRES AND CONSISTS OF DRAINAGE AREA A = 3.74 ACRES AND DRAINAGE AREA C = 0.85 ACRES.
DRAINAGE AREA A
EX. PERVIOUS AREA = 3.02 AC. EX IMPERVIOUS AREA = 0.72 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS AREA = 3.74 AC.

DRAINAGE AREA C
EX. PERVIOUS AREA = 0.71 AC. EX IMPERVIOUS AREA = 0.14 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS AREA = 0.85 AC.

OUTFALL A IS EX. DUAL 96" CULVERT LOCATED IN THE SOUTH EAST OF THE SITE. 10 YEAR PROPOSED Q = 51.80 CFS. 10 YEAR PIPE CAPACITY = 83.75 CFS.

OUTFALL B
EXISTING OUTFALL B IS 1.19 ACRES, AND CONSISTS OF DRAINAGE AREA B.

DRAINAGE AREA B
EX. PERVIOUS AREA =0.66 AC. EX IMPERVIOUS AREA = 0.53 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS 1.19 AC. 2 YEAR VELOCITY IS NON-EROSIVE.

OUTFALL IS EX. 21" STORM PIPE LOCATED IN THE NORTH OF THE SITE. 10 YEAR PROPOSED Q = 8.78 CFS. 10 YEAR PIPE CAPACITY = 11.08 CFS. 2 YEAR VELOCITY IS NON-EROSIVE.

CONCLUSION:
EXISTING OUTFALL A HAS ADEQUATE CAPACITY IN THE DUAL 96" CULVERTS AND THE VELOCITY IS NON-EROSIVE.

EXISTING OUTFALL B HAS ADEQUATE CAPACITY IN THE 21" PIPE AND THE VELOCITY IS NON-EROSIVE.

GIVEN THAT THE EXISTING OUTFALLS HAVE ADEQUATE CAPACITY AND THAT THE VELOCITIES ARE NON-EROSIVE WE CONCLUDE THAT THE OUTFALLS ARE ADEQUATE.

WATER QUALITY IMPACT ASSESSMENT: 13-117

THE PROJECT IS LOCATED AT 1300 NORTH ROYAL STREET ALEXANDRIA VIRGINIA AND IS FORMERLY A PEPCO GENERATION PLANT. REDEVELOPMENT OF THE SITE SHALL BEGIN WITH ROAD NETWORK AND UNDERGROUND FACILITIES BEING CONSTRUCTED INCLUDING ALL WET AND DRY UTILITIES. THE TOTAL SITE IS 6.43 ACRES.

OUTFALL A
EXISTING OUTFALL A IS 4.59 ACRES AND CONSISTS OF DRAINAGE AREA A = 3.74 ACRES AND DRAINAGE AREA C = 0.85 ACRES.

DRAINAGE AREA A
EX. PERVIOUS AREA = 3.02 AC. EX IMPERVIOUS AREA = 0.72 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS AREA = 3.74 AC. OUTFALL IS EX. DUAL 96" CULVERT LOCATED IN THE SOUTH EAST OF THE SITE. WATER QUALITY WILL BE ACHIEVED THROUGH BIO-RETENTION FACILITIES AND MTD DEVICE. SEE THIS SHEET FOR OUTFALL LOCATION AND C608 FOR VRRM CALCULATIONS.

DRAINAGE AREA C
EX. PERVIOUS AREA = 0.71 AC. EX IMPERVIOUS AREA = 0.14 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS AREA = 0.85 AC. OUTFALL IS DUAL 96" STORM DRAIN LOCATED IN THE SOUTH EAST OF THE SITE. WATER QUALITY WILL BE ACHIEVED THROUGH BIO-RETENTION FACILITIES. SEE THIS SHEET FOR OUTFALL LOCATION AND C608 FOR VRRM CALCULATIONS.

OUTFALL B
EXISTING OUTFALL B IS 1.19 ACRES, AND CONSISTS OF DRAINAGE AREA B.

DRAINAGE AREA B
EX. PERVIOUS AREA =0.66 AC. EX IMPERVIOUS AREA = 0.53 AC. PROP. PERVIOUS AREA = 0.00 AC. PROP. IMPERVIOUS 1.19 AC. OUTFALL IS EX. 21" STORM PIPE LOCATED IN THE NORTH OF THE SITE. WATER QUALITY WILL BE ACHIEVED THROUGH BIO-RETENTION FACILITIES. SEE THIS SHEET FOR OUTFALL LOCATION AND C608 FOR VRRM CALCULATIONS.

BYPASS AREA
TWO BYPASS AREAS EXIST. THE TOTAL AREA IS 0.65 AC. UNTREATED AREAS ARE LOCATED AT THE THE INTERSECTION OF ROAD A AND SLATERS LANE ON THE NORTH SIDE AND THE INSTERSECTION OF ROAD A AND N. ROYAL STREET .

C-1:
THIS SITE IS LOCATED ALONG THE BANKS OF THE POTOMAC RIVER. THE RPA HAS BEEN DELINEATED PER SECTION 13-105 AS A 100' BUFFER AREA MEASURED FROM THE TOP OF BANK.

C-2:
THE PROPOSED DISTURBANCE IS TO CONSTRUCT AN ASPHALT ROAD NETWORK. DISTURBANCE IN THE RPA IS PROPOSED GRADING. PERMEABLE PAVEMENT AND CONCRETE SHALL BE USED FOR THIS PROJECT.

C-3:
THE PERMEABLE ASPHALT AND CONCRETE PAVERS WILL BE DESIGNED TO DEQ SPECIFICATIONS TO PROVIDE WATER QUALITY. ADDITIONAL PLANTINGS WILL BE PROVIDED WITH THE WATERFRONT PARK DSUP #.

C-4:
THERE IS EXISTING VEGETATION WITHIN THE AREA OF DISTURBANCE. SEE TREE PRESERVATION PLANS C205 - C216.

C-5:
ADDITIONAL PLANTINGS WILL BE PROVIDED WITH THE WATERFRONT PARK DSUP#. THESE PLANTS WILL INCORPORATE NATIVE VEGETATION.

D-2A:
THE FOLLOWING INFORMATION HAS BEEN PROVIDED IN THE GEOTECHNICAL REPORT. PER THIS REPORT, THE AREA AROUND THE SITE INDICATES SUBSURFACE CONDITIONS CONSIST OF ALLUVIUM OF THE CREATCEOUS GEOLOGIC PERIOD OVERLYING THE SHIRLEY FORMATION WHICH WAS FORMED FROM RIVERINE TERRACE DEPOSITS. EXISTING FILL WAS ENCOUNTERED FROM PREVIOUS SITE DEVELOPMENT. ANY PROPOSED FILL FOR THE SITE WILL BE COMPLIANT WITH THE ENVIRONMENT IN WHICH IT IS PLACED. THE AREA DRAINS FROM WEST TO EAST, TOWARDS THE POTOMAC RIVER.

D-2B:
THE DEVELOPMENT WILL NOT ALTER OR IMPACT THE EXISTING SOILS, TOPOGRAPHY, AND HYDROLOGY.

D-2C-I:
DISTURBANCE OF NON-JURISDICTIONAL WETLANDS, APPROXIMATELY 970 SQ. FT., WILL OCCUR.

D-2C-II:
NO DISRUPTIONS WILL OCCUR IN THE WATER SUPPLY.

D-2C-III:
NO DISRUPTIONS WILL OCCUR IN EXISTING HYDROLOGY.

D-2C-IV:
PROVIDED FILL WILL BE NATIVE, FROM CLEAN ON-SITE CUT MATERIAL, AND NOT AFFECT ANY HYDROLOGY OR WATER SUPPLY. A MINOR AMOUNT OF FILL SHALL OCCUR IN THE RPA.

D-2C-V:
NO DREDGING OF THE POTOMAC RIVER WILL OCCUR.

D-2C-VI:
NO IMPACTS WILL OCCUR ON ANY SHELLFISH BEDS, SUBMERGED AQUATIC VEGETATION, OR FISH SPAWNING AREAS.

D-2C-VII:
TOTAL PHOSPHORUS (TP) LOAD REQUIRED IS 4.90 LB/YR. TOTAL PHOSPHOROUS LOAD ACHIEVED IS 7.15 LB/YR.

D-2C-VIII:
THE IMPERVIOUS AREA HAS INCREASED BY 1.60 AC. THERE WILL BE PERVIOUS PAVEMENT AND CONCRETE INSTALLED.

D-2C-IX:
THE ENTIRE AREA WILL NOT BE CLEARED AND GRADED.

D-2C-X:
THIS DISTURBANCE WILL OCCUR WITH THE IDSP AND IS SLATED FOR MIDDLE OF 2024 AND WILL BE A TOTAL OF 8 MONTH CONSTRUCTION.

D-D-I:
A TWO-PHASE EROSION AND SEDIMENT CONTROL PLAN WILL BE PROVIDED WITH THE IDSP FINAL SITE PLAN. THIS WILL INCLUDE PERIMETER CONTROLS, AND STABILIZATION METHODS.

D-D-II:
THE PERVIOUS PAVEMENT AND CONCRETE WILL BE DESIGNED TO DEQ SPECIFICATIONS. THE REDUCTION IN IMPERVIOUS WILL LOWER THE RUNOFF IN ALL STORM DURATIONS.

D-D-III:
NON JURISDICTIONAL WETLANDS, APPROXIMATELY 970 SQUARE FEET, ARE ON-SITE PER REPORT PROVIDED BY WSSI. THESE WETLANDS WILL BE LOST. BIORETENTION WILL OFFSET THE LOSS OF THESE WETLAND.

D-D-IV:
THE EXISTING GRADES WILL BE HONORED WITH THE FUTURE IMPROVEMENTS.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

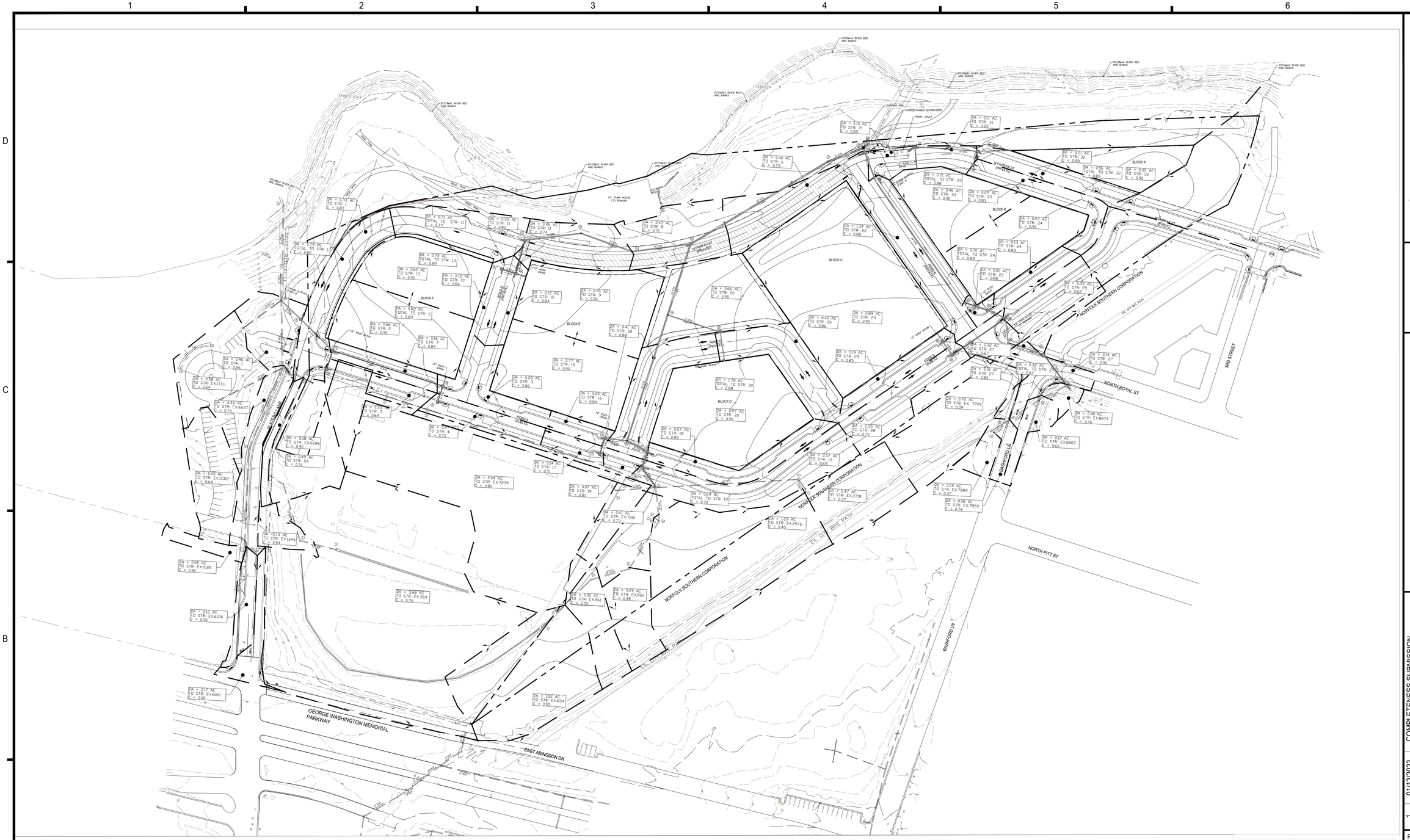
SHEET TITLE:

MAJOR WQIA AND OUTFALL ANALYSIS

SHEET No.

C610

112206



NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

LEGEND:

DRAINAGE DIVIDE

VCS 1983 GRID NORTH

80 40 0 80 160

GRAPHIC SCALE
1" = 80'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

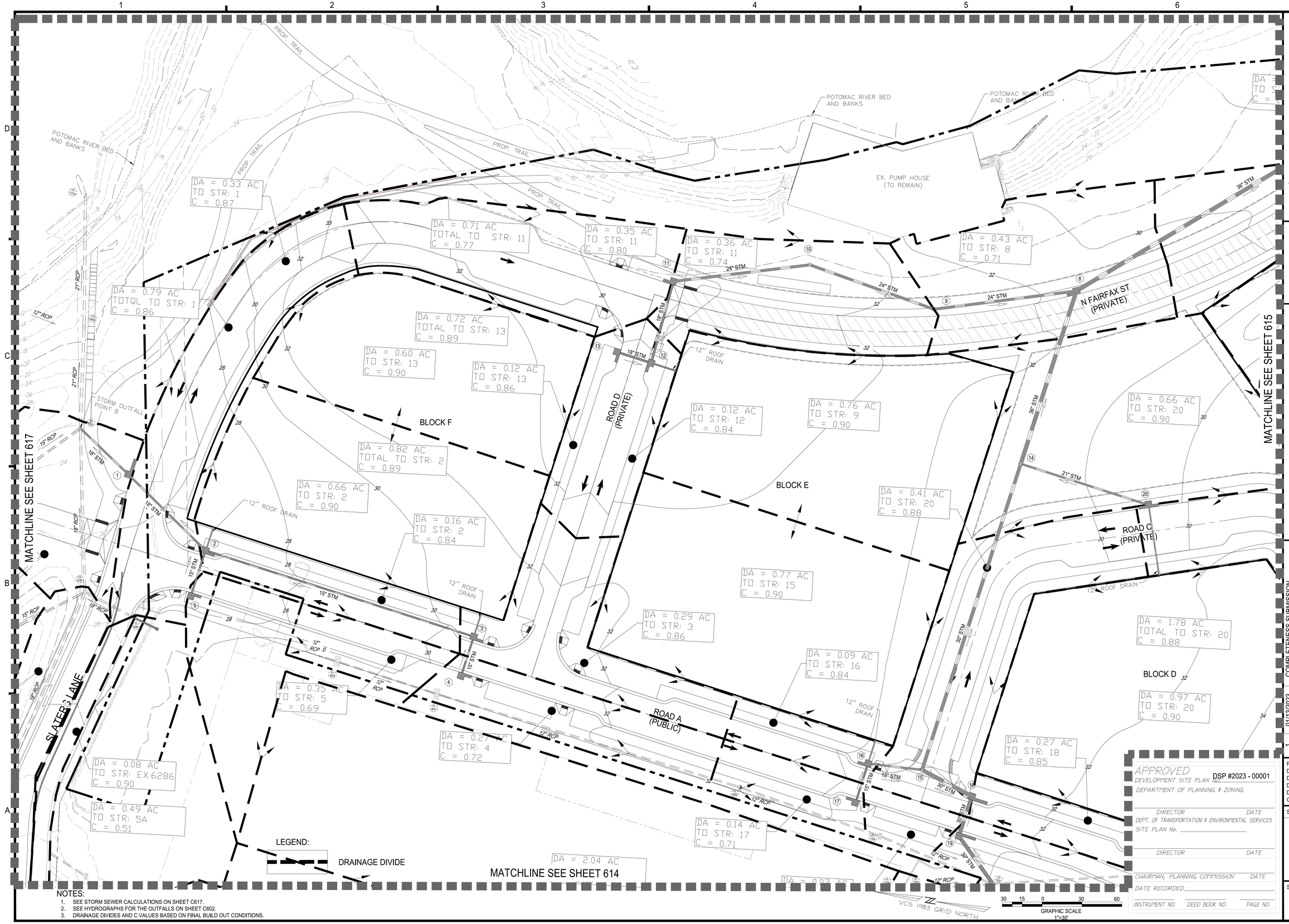
SHEET TITLE:

OVERALL DRAINAGE AREA MAP

SHEET No.

C612

112206



NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

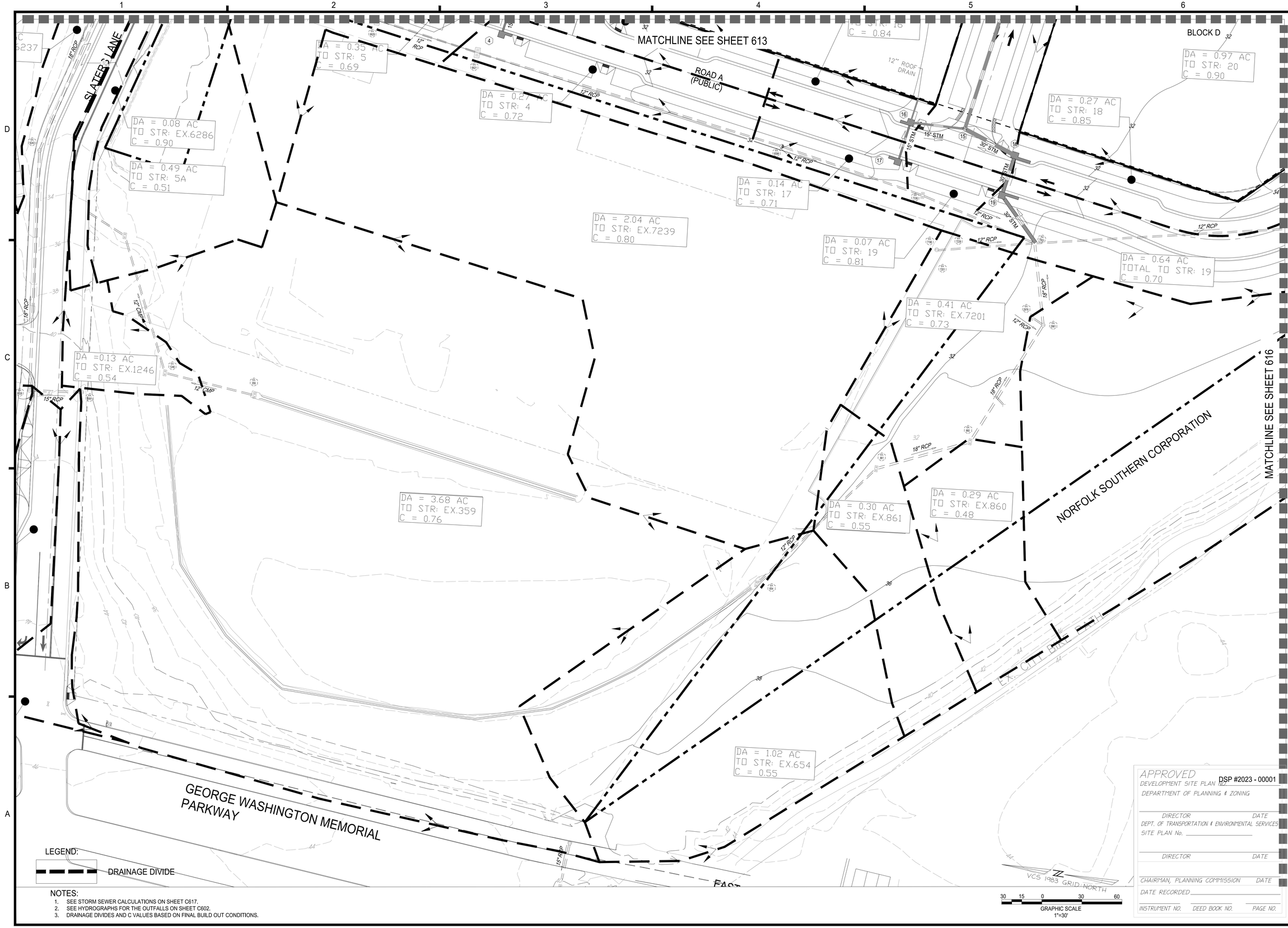
SHEET TITLE:

DRAINAGE AREA MAP

SHEET No.

C613

112206



LEGEND:

DRAINAGE DIVIDE

NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

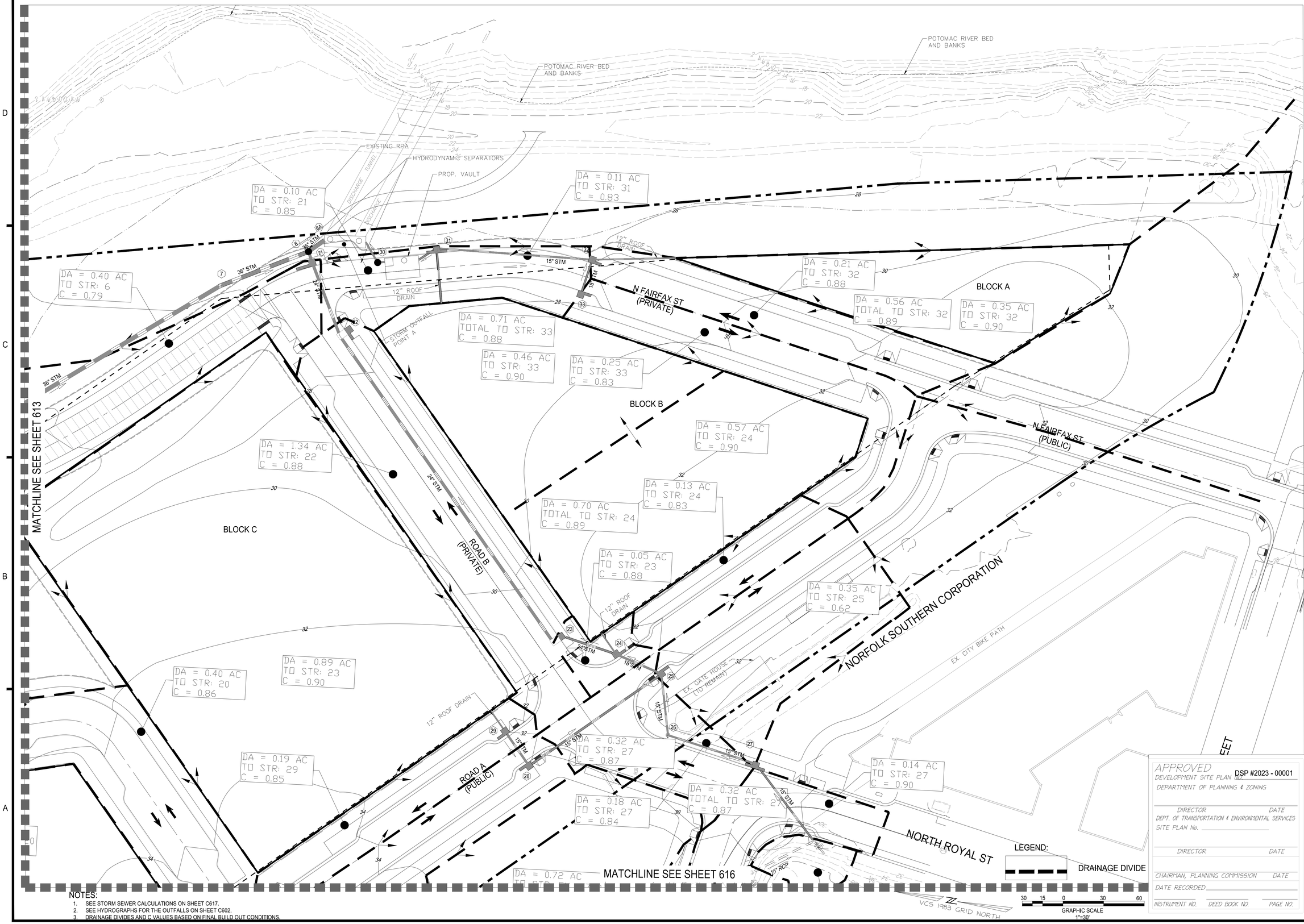
SHEET TITLE:

DRAINAGE AREA MAP

SHEET No.

C614

112206



NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

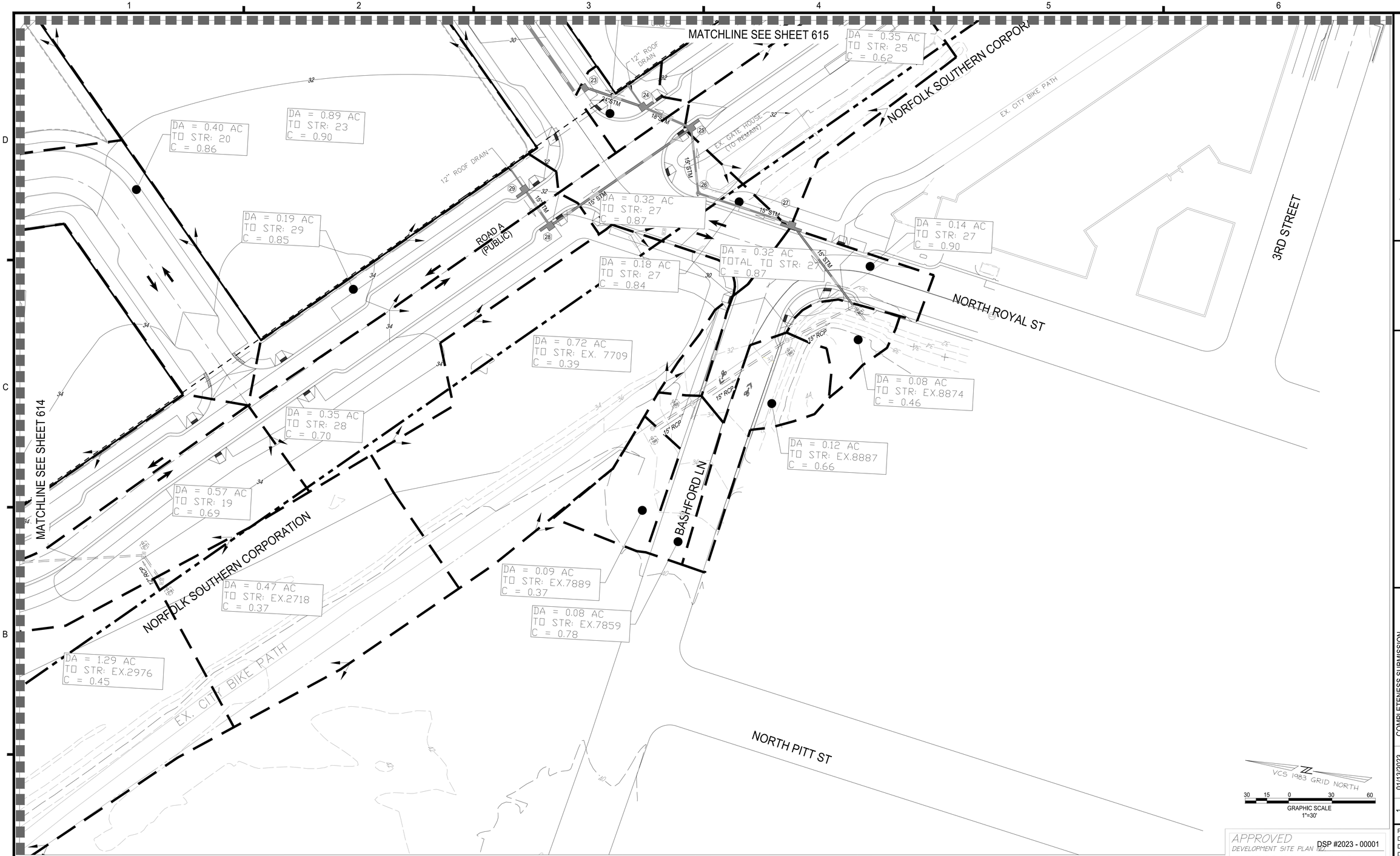
SHEET TITLE:

DRAINAGE AREA MAP

SHEET No.

C615

112206



LEGEND:

DRAINAGE DIVIDE

NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

APPROVED
DEVELOPMENT SITE PLAN DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

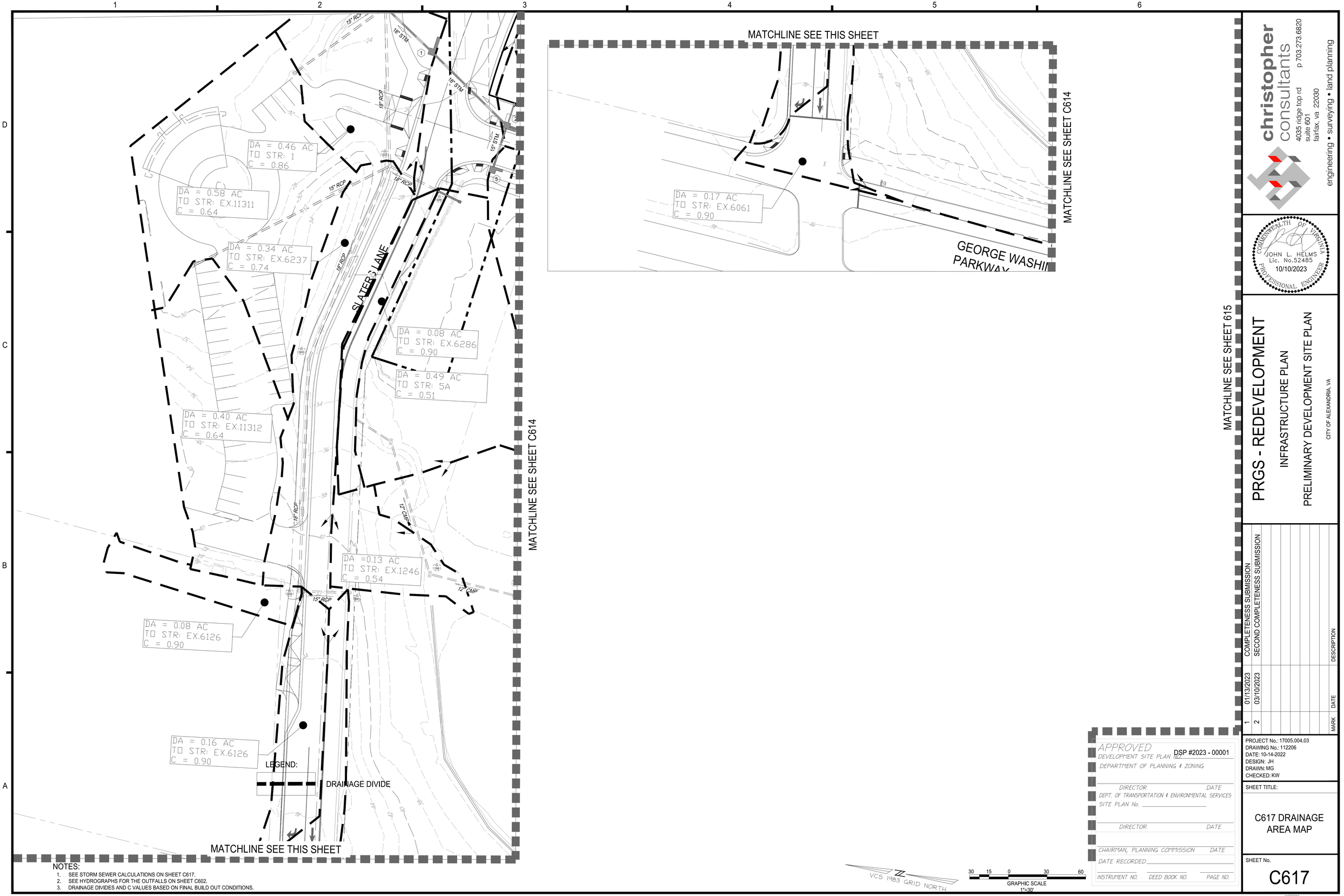
SHEET TITLE:

DRAINAGE AREA MAP

SHEET No.

C616

112206



NOTES:

1. SEE STORM SEWER CALCULATIONS ON SHEET C617.
2. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.
3. DRAINAGE DIVIDES AND C VALUES BASED ON FINAL BUILD OUT CONDITIONS.

VCS 1983 GRID NORTH

30 15 0 30 60
GRAPHIC SCALE
1"=30'

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

C617 DRAINAGE AREA MAP

SHEET No.

C617

112206

STORM SEWER PIPE COMPUTATIONS

FROM	TO	DRAIN.	RUNOFF	CA		INLET	RAINFALL	PIPED IN	RUNOFF	INVERT		LENGTH	SLOPE	DIA.	n	CAPACITY	VELOCITY	FULL FLOW	FLOW				
POINT	POINT	AREA	COEFF.	INCREM.	ACCUM.	TIME	INTENSITY	FROM EXISTING	Q	ELEVATIONS (ft)								VELOCITY	TIME				NOTES
		ACRES	C			MIN.	IN./HR.	C.F.S	C.F.S.	UPPER	LOWER	ft	ft/ft	IN.		C.F.S.	FPS	FPS	SEC.	Q/Qfull	V/Vfull	Vfull	
EX 11312 - EX 6237																							
EX 11312	EX 6237	0.400	0.64	0.256	0.256	5	5.20		1.33	24.68	23.48	171.29	0.00701	15	0.015	4.69	3.3	3.82	52.4	0.28	0.86	3.82	
EX. 6286 - EX. 6237																							
EX 6286	EX 6237	0.080	0.9	0.072	0.072	5	5.20		0.37	23.65	23.56	42.11	0.00214	18	0.015	4.21	1.5	2.38	28.7	0.09	0.62	2.38	
EX 11313 - EX 6426																							
EX 11313	EX 6426	0.580	0.64	0.3712	0.3712	5	5.20		1.93	18.48	17.59	86.95	0.01024	15	0.015	5.66	4.2	4.62	20.9	0.34	0.90	4.62	
EX 6126 -EX 6426																							
EX 6126	EX. 6243	0.160	0.9	0.144	0.369	5	5.20		1.92	37.88	28.85	180.14	0.05013	18	0.015	20.38	7.1	11.53	25.4	0.09	0.62	11.53	Increment 0.225 from Ex. 6061 + Other
EX. 6243	EX 6237	0.000	0	0	0.369	5	5.20		1.92	27.83	22.75	162.59	0.03124	18	0.015	16.09	5.9	9.11	27.4	0.12	0.65	9.11	
EX 6237	EX 6426	0.340	0.74	0.2516	0.9486	5	5.20		4.93	22.48	17.97	123.3	0.03658	18	0.015	17.41	8.4	9.85	14.6	0.28	0.86	9.85	
STRM 4 - EX. 6426																							
4	3	0.270	0.72	0.19	0.19	5.00	5.20		1.01	26.20	25.75	30.97	0.0145	15	0.015	6.75	3.9	5.50	7.9	0.15	0.72	5.50	
3	2	0.290	0.86	0.25	0.44	5.13	5.20		2.31	25.50	22.30	212.00	0.0151	15	0.015	6.88	4.9	5.60	43.0	0.34	0.88	5.60	
2	1	0.820	0.89	0.73	4.54	5.85	5.20		23.58	21.55	18.90	88.40	0.0300	24	0.015	33.95	11.6	10.81	7.6	0.69	1.07	10.81	Increment 3.36 from STRM 5
1	EX. 6426	0.330	0.87	0.29	6.14	6.00	5.20		31.94	18.65	17.02	45.87	0.0355	24	0.015	36.96	13.2	11.76	3.5	0.86	1.12	11.76	
EX. 6426	EX. 6463	0.460	0.86	0.40	6.54	6.00	5.20		34.00	16.77	10.30	76.13	0.0850	21	0.015	40.03	18.6	16.64	4.1	0.85	1.12	16.64	
EX. 6463	EX. 11314				6.54	6.00	5.20		34.00	9.89	-0.18	99.21	0.1015	21	0.015	43.75	20.1	18.19	4.9	0.78	1.10	18.19	
STRM 5 - STRM 2																							
5A	5	0.490	0.51	0.2499	3.1199	5	5.20		16.22	23.70	22.95	31.20	0.0240	21	0.015	21.29	9.7	8.85	3.2	0.76	1.09	8.85	Increment 2.87 from Offsite
5	2	0.350	0.69	0.24	3.36	5.00	5.20		17.48	22.70	21.80	35.97	0.0250	21	0.015	21.72	10.0	9.03	3.6	0.80	1.10	9.03	
STRM 13 - STRM 6A																							
13	12	0.720	0.89	0.64	0.64	5.00	5.20		3.33	27.15	27.00	27.00	0.0056	18	0.015	6.79	3.8	3.84	7.2	0.49	0.98	3.84	
12	11	0.120	0.84	0.10	0.74	5.12	5.20		3.86	26.90	26.58	63.56	0.0050	18	0.015	6.46	3.8	3.66	16.8	0.60	1.03	3.66	
11	10	0.710	0.77	0.55	1.29	5.40	5.20		6.70	26.08	25.56	103.45	0.0050	24	0.015	13.90	4.3	4.42	23.8	0.48	0.98	4.42	
10	9			0.00	1.29	5.80	5.20		6.70	25.46	24.96	99.17	0.0050	24	0.015	13.92	4.4	4.43	22.8	0.48	0.98	4.43	
9	8			0.00	1.29	6.18	5.20		6.70	24.86	24.32	108.04	0.0050	24	0.015	13.86	4.3	4.41	24.9	0.48	0.98	4.41	
8	7	0.430	0.71	6.28	7.56	6.59	5.20		39.33	23.22	21.75	293.01	0.0050	36	0.013	47.24	7.4	6.68	39.4	0.83	1.11	6.68	Increment 6.17 from STRM 14
7	6			0.00	7.56	7.25	5.20		39.33	21.65	21.30	69.87	0.0050	36	0.013	47.21	7.4	6.68	9.4	0.83	1.11	6.68	
6	6A			0.00	10.96	7.41	5.20		57.00	20.55	20.40	14.43	0.0104	36	0.013	68.00	10.8	9.62	1.3	0.84	1.12	9.62	Increment 3.40 from STRM 21
EX.654 - STRM 8																							
EX.654	EX.861	1.020	0.55	0.56	0.56																		
EX.861	EX.860	0.300	0.55	0.17	0.73																		
EX.860	EX.2961	0.290	0.48	0.14	0.87																		
EX.2961	EX.7502				1.45																		Increment 0.58 from EX.2976
EX.7502	19				3.55	5.00	5.20		18.46	26.60	26.38	43.58	0.0050	30	0.015	25.26	5.6	5.15	7.8	0.73	1.08	5.15	Increment 1.96 from EX.7196 & EX.271
19	18	0.640	0.7	0.45	4.00	5.13	5.20		20.79	26.28	26.12	31.44	0.0051	30	0.015	25.36	5.7	5.17	5.5	0.82	1.11	5.17	
18	15	0.270	0.85	0.23	4.23	5.22	5.20		21.99	26.02	25.80	42.46	0.0052	30	0.015	25.59	5.8	5.21	7.3	0.86	1.12	5.21	
15	14				4.40	5.34	5.20		22.90	25.30	24.09	242.10	0.0050	30	0.015	25.13	5.8	5.12	41.8	0.91	1.13	5.12	Increment 0.18 from STRM 16
14	8			0.00	5.97	6.04	5.20		31.04	23.99	23.30	133.60	0.0052	36	0.015	41.54	6.4	5.88	20.8	0.75	1.09	5.88	Increment 1.28 from STRM 20
EX.2976 - EX.2961																							
EX.2976	EX.2961	1.29	0.45	0.58	0.58																		
EX.7201- EX.7502																							
EX.7201	EX.7196	0.41	0.73	0.30	0.30																		
EX.7196	EX.7502	2.04	0.8	1.63	1.93																		
EX.2718 - EX.7502																							
EX.2718	EX.2717	0.47	0.37	0.17	0.17																		
EX.2717	EX.7502			0.00	0.17																		
STRM 17 - STRM 15																							
17	16	0.14	0.71	0.10	0.10	5.00	5.20		0.52	27.40	27.24	30.77	0.0052	15	0.015	4.04	2.3	3.29	13.7	0.13	0.68	3.29	
16	15	0.09	0.84	0.08	0.18	5.23	5.20		0.91	27.14	26.90	40.96	0.0059	15	0.015	4.29	2.7	3.49	15.1	0.21	0.78	3.49	
STRM 20 - STRM 14																							
20	14	1.78	0.88	1.57	1.57	5.00	5.20		8.15	26.20	25.49	100.73	0.0070	21	0.015	11.53	5.2	4.79	19.4	0.71	1.08	4.79	
EX.7889 - STRM 6																							
EX.7889	EX.7859	0.090	0.37	0.03	0.03																		
EX.7859	EX.8887	0.080	0.78	0.06	0.10																		
EX.8887	EX.8874	0.120	0.66	0.08	0.17																		
EX.8874	27	0.080	0.46	0.04	0.21	5.00	5.20		1.10	27.75	27.39	71.16	0.0051	15	0.015	3.98	2.7	3.24	26.4	0.28	0.83	3.24	
27	26	0.320	0.87	0.28	0.49	5.44	5.20		2.55	27.29	26.95	68.30	0.0050	15	0.015	3.95	3.4	3.22	20.0	0.65	1.06	3.22	
26	25				0.49	5.77	5.20		2.55	26.85	26.62	45.46	0.0051	15	0.015	3.98	3.4	3.24	13.2	0.64	1.06	3.24	
25	24	0.350	0.62	0.22	1.39	5.99	5.20		7.25	26.37	26.00	36.41	0.0102	18	0.015	9.18	5.7	5.19	6.4	0.79	1.10	5.19	Increment 0.69 from STRM 28
24	23	0.700	0.89	0.62	2.02	6.10	5.20		10.49	25.50	25.25	42.02	0.0059	24	0.015	15.12	5.2	4.81	8.1	0.69	1.07	4.81	
23	22	0.050	0.88	0.04	2.06	6.24	5.20		10.72	25.15	22.38	272.68	0.0102	24	0.015	19.76	6.4	6.29	42.6	0.54	1.02	6.29	
22	21	1.340	0.88	1.18	3.24	6.95	5.20		16.85	22.28	20.86	57.52	0.0247	24	0.015	30.81	10.0	9.81	5.8	0.55	1.02	9.81	
21	6	0.180	0.87	0.16	3.40	7.04	5.20		17.67	20.76	20.65	9.02	0.0122	24	0.015	21.65	7.7	6.89	1.2	0.82	1.11	6.89	
STRM 29 - STRM 23																							
29	28	0.19	0.85	0.16	0.44	5.37	5.20		2.30	27.22	27.06	31.34	0.0051	15	0.015	4.00	3.4	3.26	9.3	0.57	1.03	3.26	
28	25	0.35	0.7	0.25	0.69	5.53	5.20		3.57	26.96	26.47	46.20	0.0106	18	0.015	9.38	4.9	5.31	9.4	0.38	0.92	5.31	
STRM 33 - STRM VAULT																							
33	32	1.42	0.88	1.25	1.25	5.00	5.20		6.50	24.00	23.50	27.00	0.0185	15	0.015	7.62	7.0	6.21	3.9	0.85	1.12	6.21	
32	31	1.12	0.89	1.00	2.25	5.06	5.20		11.68	22.75	21.60	115.14	0.0100	24	0.015	19.59	6.4	6.24	17.9	0.60	1.03	6.24	
31	STRM VAULT	0.11	0.83	0.09	2.34	5.36	5.20		12.16	21.35	21.25	15.71	0.0064	24	0.015	15.64	5.5	4.98	2.9	0.78	1.10	4.98	
STRM VAULT - STRM 6A																							
STRM VAULT	30								12.16	21.25	21.10	5.31	0.0282	18	0.015	15.30	9.6	8.66	0.6	0.79	1.10	8.66	
30	6A								12.16	20.85	20.30	17.42	0.0316	18	0.015	16.18	10.0	9.15	1.7	0.75	1.09	9.15	
6A	OUTFALL B								69.15	-2.71	-11.05	192.56	0.0433	96	0.013	1898.16	17.0	37.76	11.3	0.04	0.45	37.76	
EX.7709	29	0.72	0.39	0.28	0.28	5.00	5.20		1.46	26.32	25.99	65.07	0.0051	15	0.015	3.99	2.9	3.25	22.2	0.37	0.90	3.25	

NOTES:

1. STORM COMPUTATIONS ARE SUBJECT TO CHANGE WITH FINAL INFRASTRUCTURE PLANS.
2. SEE STORMWATER MASTER PLAN SHEET C700A FOR DRAINAGE DIVIDES.
3. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004,03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

STORM SEWER COMPUTATIONS

SHEET No.

C618

112206

HGL COMPUTATIONS

HGL COMPUTATIONS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Outlet									JUNCTION LOSS										Inlet		
	Water																		Final	Water	Rim	Δ
Inlet	Surf Elev	Do	Qo	Lo	Sfo	Hf	Vo	Ho	Qi	Vi	QiVi	Vi^2	Hi	Angle	Ha	Ht	1.3Ht	0.5Ht	H	Surf Elev	Elev	Freeboard
Str.	(ft)	(in)	(cfs)	(ft)	(%)	(ft)	(fps)	(ft)	(cfs)	(fps)		2g	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
STRM 6126 - EX 6463																						
EX 6463	1.22	21	34.00	99.21	6.13	6.08	20.1	1.57	4.93	8.4	41.57	1.10	0.39	1	0.01	1.96	0.00	0.98	7.06	8.28	18.56	10.28
EX 6426	11.70	21	34.00	76.13	6.13	4.67	18.6	1.35	1.92	5.9	11.37	0.55	0.19	3	0.01	1.55	0.00	0.78	5.44	17.14	23.64	6.50
EX 6237	19.17	18	4.93	123.30	0.29	0.36	8.4	0.28	1.92	7.1	13.61	0.78	0.27	60	0.43	0.98	0.00	0.49	0.85	20.02	27.63	7.61
EX 6243	23.95	18	1.92	162.59	0.04	0.07	5.9	0.14	0.00	0.0	0.00	0.00	0.00	20	0.00	0.14	0.00	0.07	0.14	24.09	32.80	8.71
EX 6126	30.05	18	1.92	180.14	0.04	0.08	7.1	0.20	1.93	4.2	8.04	0.27	0.09	90	0.19	0.48	0.00	0.24	0.32	30.37	42.28	11.91
EX 11313	18.59	15	1.93	86.95	0.12	0.10	4.2	0.07	0.37	1.5	0.55	0.03	0.01	0	0.00	0.08	0.00	0.04	0.14	18.73	25.79	7.06
EX 6286	24.76	18	0.37	42.11	0.00	0.00	1.5	0.01	1.33	3.3	4.35	0.17	0.06	0	0.00	0.07	0.00	0.03	0.03	24.79	27.95	3.16
EX 11312	24.48	15	1.33	171.29	0.06	0.10	3.3	0.04	0.00	0.0	0.00	0.00	0.00	0	0.00	0.04	0.00	0.02	0.12	24.60	28.35	3.75
STRM 4 - EX. 6426																						
1	18.62	24	31.94	45.87	2.65	1.22	13.2	0.67	23.58	11.6	273.27	2.09	0.73	0	0.00	1.40	0.00	0.70	1.92	20.54	24.06	3.52
2	20.54	24	23.58	88.40	1.45	1.28	11.6	0.52	2.31	4.9	11.37	0.38	0.13	63	0.21	0.87	0.00	0.43	1.71	22.25	27.11	4.86
3	23.30	15	2.31	212.00	0.17	0.36	4.9	0.09	1.01	3.9	3.98	0.24	0.08	90	0.17	0.35	0.00	0.17	0.53	23.83	30.37	6.54
4	26.75	15	1.01	30.97	0.03	0.01	3.9	0.06	0.00	0.0	0.00	0.00	0.00	0	0.00	0.06	0.00	0.03	0.04	26.79	30.34	3.55
5	23.20	21	17.48	35.97	1.62	0.58	10.0	0.39	16.22	9.7	157.17	1.46	0.51	41	0.57	1.46	0.00	0.73	1.31	24.51	27.13	2.62
5A	24.51	21	16.22	31.20	1.40	0.44	9.7	0.36	0.00	0.0	0.00	0.00	0.00	0	0.00	0.36	0.00	0.18	0.62	25.13	25.25	0.12
STRM 13 - STRM 6A																						
6	22.80	36	57.00	14.43	0.97	0.14	10.8	0.45	39.33	7.4	292.17	0.86	0.30	152	0.60	1.35	0.00	0.68	0.82	23.62	27.90	4.28
7	23.70	36	39.33	69.87	0.46	0.32	7.4	0.21	39.33	7.4	292.40	0.86	0.30	146	0.60	1.12	0.00	0.56	0.88	24.58	27.95	3.37
8	24.58	36	39.33	293.01	0.46	1.36	7.4	0.21	6.70	4.3	29.04	0.29	0.10	156	0.20	0.52	0.00	0.26	1.62	26.20	32.40	6.20
9	26.20	24	6.70	108.04	0.12	0.13	4.3	0.07	6.70	4.4	29.17	0.29	0.10	149	0.21	0.38	0.00	0.19	0.32	26.52	32.40	5.88
10	26.56	24	6.70	99.17	0.12	0.12	4.4	0.07	6.70	4.3	29.12	0.29	0.10	152	0.21	0.38	0.00	0.19	0.31	26.87	32.00	5.13
11	27.16	24	6.70	103.45	0.12	0.12	4.3	0.07	3.86	3.8	14.55	0.22	0.08	114	0.15	0.31	0.00	0.15	0.27	27.43	29.82	2.39
12	27.78	18	3.86	63.56	0.18	0.11	3.8	0.06	3.33	4.3	14.49	0.29	0.10	90	0.21	0.36	0.00	0.18	0.30	28.08	30.29	2.21
13	28.20	18	3.33	27.00	0.13	0.04	4.3	0.07	0.00	0.0	0.00	0.00	0.00	0	0.00	0.07	0.00	0.04	0.07	28.27	31.29	3.02
EX. 654 - STRM 8																						
14	25.70	36	31.04	133.60	0.29	0.39	6.4	0.16	22.90	5.8	132.62	0.52	0.18	0	0.00	0.34	0.00	0.17	0.56	26.26	30.30	4.04
15	26.26	30	22.90	242.10	0.41	1.00	5.8	0.13	21.99	5.8	128.34	0.53	0.19	139	0.37	0.69	0.00	0.34	1.35	27.60	31.97	4.37
18	27.80	30	21.99	42.46	0.38	0.16	5.8	0.13	20.79	5.7	119.50	0.51	0.18	132	0.36	0.67	0.00	0.34	0.50	28.30	31.70	3.40
19	28.30	24	20.79	31.44	1.12	0.35	5.7	0.13	0.00	0.0	0.00	0.00	0.00	0	0.00	0.13	0.00	0.06	0.42	28.72	31.60	2.88
STRM 17 - STRM 15																						
16	27.90	15	0.91	40.96	0.03	0.01	2.7	0.03	0.52	2.3	1.16	0.08	0.03	139	0.06	0.11	0.00	0.06	0.07	27.97	31.91	3.94
17	28.24	15	0.52	30.77	0.01	0.00	2.3	0.02	0.00	0.0	0.00	0.00	0.00	0	0.00	0.02	0.00	0.01	0.01	28.25	31.91	3.66
STRM 20 - STRM 14																						
20	26.89	21	8.15	100.73	0.35	0.35	5.2	0.10	0.00	0.0	0.00	0.00	0.00	114	0.00	0.10	0.00	0.05	0.41	27.30	29.65	2.35
EX. 7889 - STRM 6																						
21	22.46	24	17.67	9.02	0.81	0.07	7.7	0.23	16.85	10.0	167.96	1.54	0.54	0	0.00	0.77	0.00	0.38	0.46	22.92	27.80	4.88
22	23.98	24	16.85	57.52	0.74	0.42	10.0	0.39	10.72	6.4	68.54	0.63	0.22	69	0.38	0.99	0.00	0.50	0.92	24.90	27.95	3.05
23	26.85	24	10.72	272.68	0.30	0.82	6.4	0.16	10.49	5.2	54.16	0.41	0.14	90	0.29	0.59	0.00	0.30	1.11	27.96	30.96	3.00
24	27.96	24	10.49	42.02	0.29	0.12	5.2	0.10	7.25	5.7	41.57	0.51	0.18	107	0.00	0.28	0.00	0.14	0.26	28.22	30.96	2.74
25	28.22	18	7.25	36.41	0.63	0.23	5.7	0.13	2.55	3.4	8.77	0.18	0.06	132	0.00	0.19	0.00	0.10	0.33	28.55	31.94	3.39
26	28.55	15	2.55	45.46	0.21	0.09	3.4	0.05	2.55	3.4	8.69	0.18	0.06	168	0.13	0.24	0.00	0.12	0.21	28.76	31.95	3.19
27	28.76	15	2.55	68.30	0.21	0.14	3.4	0.05	0.00	0.0	0.00	0.00	0.00	0	0.00	0.05	0.00	0.02	0.16	28.93	29.50	0.57
STRM 29 - STRM 23																						
28	27.67	18	3.57	46.20	0.15	0.07	4.9	0.09	2.30	3.4	7.74	0.18	0.06	88	0.12	0.28	0.00	0.14	0.21	27.88	32.00	4.12
29	28.06	15	2.30	31.34	0.17	0.05	3.4	0.04	0.00	0.0	0.00	0.00	0.00	139	0.00	0.04	0.00	0.02	0.07	28.13	32.00	3.87
STRM 33 - STRM VAULT																						
31	24.40	24	12.16	15.71	0.38	0.06	5.5	0.12	11.68	6.4	75.18	0.64	0.23	167	0.45	0.79	0.00	0.40	0.46	24.86	27.00	2.14
32	24.86	24	11.68	115.14	0.35	0.41	6.4	0.16	6.50	7.0	45.17	0.75	0.26	90	0.53	0.95	0.00	0.47	0.88	25.74	27.80	2.06
33	25.74	15	6.50	27.00	1.35	0.36	7.0	0.19	0.00	0.0	0.00	0.00	0.00	0	0.00	0.19	0.00	0.09	0.46	26.20	27.86	1.66

NOTES:

1. STORM COMPUTATIONS ARE SUBJECT TO CHANGE WITH FINAL INFRASTRUCTURE PLANS.
2. SEE STORMWATER MASTER PLAN SHEET C700A FOR DRAINAGE DIVIDES.
3. SEE HYDROGRAPHS FOR THE OUTFALLS ON SHEET C602.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

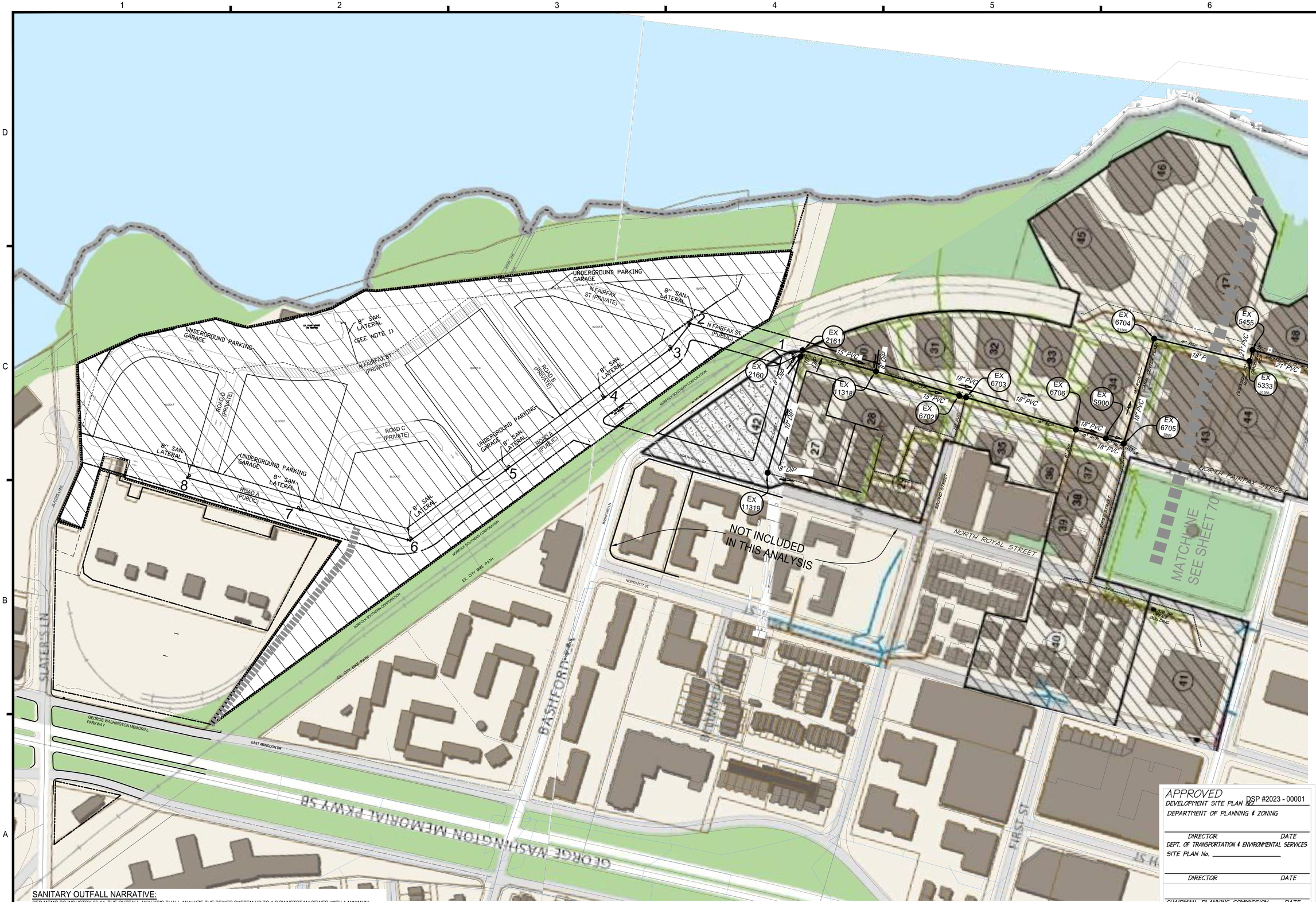
SHEET TITLE:

C619 STORM SEWER COMPUTATIONS

SHEET No.

C619

112206



SANITARY OUTFALL NARRATIVE:

PER MEMO TO INDUSTRY 06-14, THE OUTFALL ANALYSIS SHALL ANALYZE THE SEWER SYSTEM UP TO A DOWNSTREAM SEWER WITH A MINIMUM DIAMETER OF 24 INCHES OR TO A POINT AS DIRECTED BY T&ES STAFF. AS DIRECTED BY CITY STAFF, THE ANALYSIS ENDS AT MANHOLE 005680SSMH WHERE THE CITY SEWER SYSTEM TIES INTO THE POTOMAC INTERCEPTOR OWNED BY ALEXRENEW. TABLE "SANITARY FLOW ESTIMATE" ON SHEET C702 PROVIDE AN ESTIMATE OF SANITARY FLOW FROM EACH BLOCK AS WELL AS THE TOTAL FLOW FROM THE PRGS SITE. SANITARY SEWER COMPUTATIONS ON SHEET C702 PRESENT THE IMPACT OF THE PRGS DEVELOPMENT ON CITY SEWER SYSTEM. AS ILLUSTRATED BY THE COMPUTATIONS, CAPACITY IMPROVEMENTS SHALL BE REQUIRED TO SERVE THE PRGS DEVELOPMENT (SEE SHEET C702 FOR CAPACITY IMPROVEMENT DETAILS).

NOTE:

1. PUMP HOUSE SANITARY TO CONNECT INTO PROPOSED GARAGE AND WILL BE PUMPED TO THE MAIN THROUGH BLOCK C's LATERAL.
2. THE APPLICANT RESERVES THE RIGHT TO ADJUST THE SANITARY ALIGNMENT WITH THE FINAL ENGINEERING TO TIE INTO THE EXISTING 27" LINE AT CANAL CENTER.

LEGEND:

SHED TO 27" SANITARY SEWER

VCS 1983 GRID NORTH

100 50 0 100 200
GRAPHIC SCALE
1"=100'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

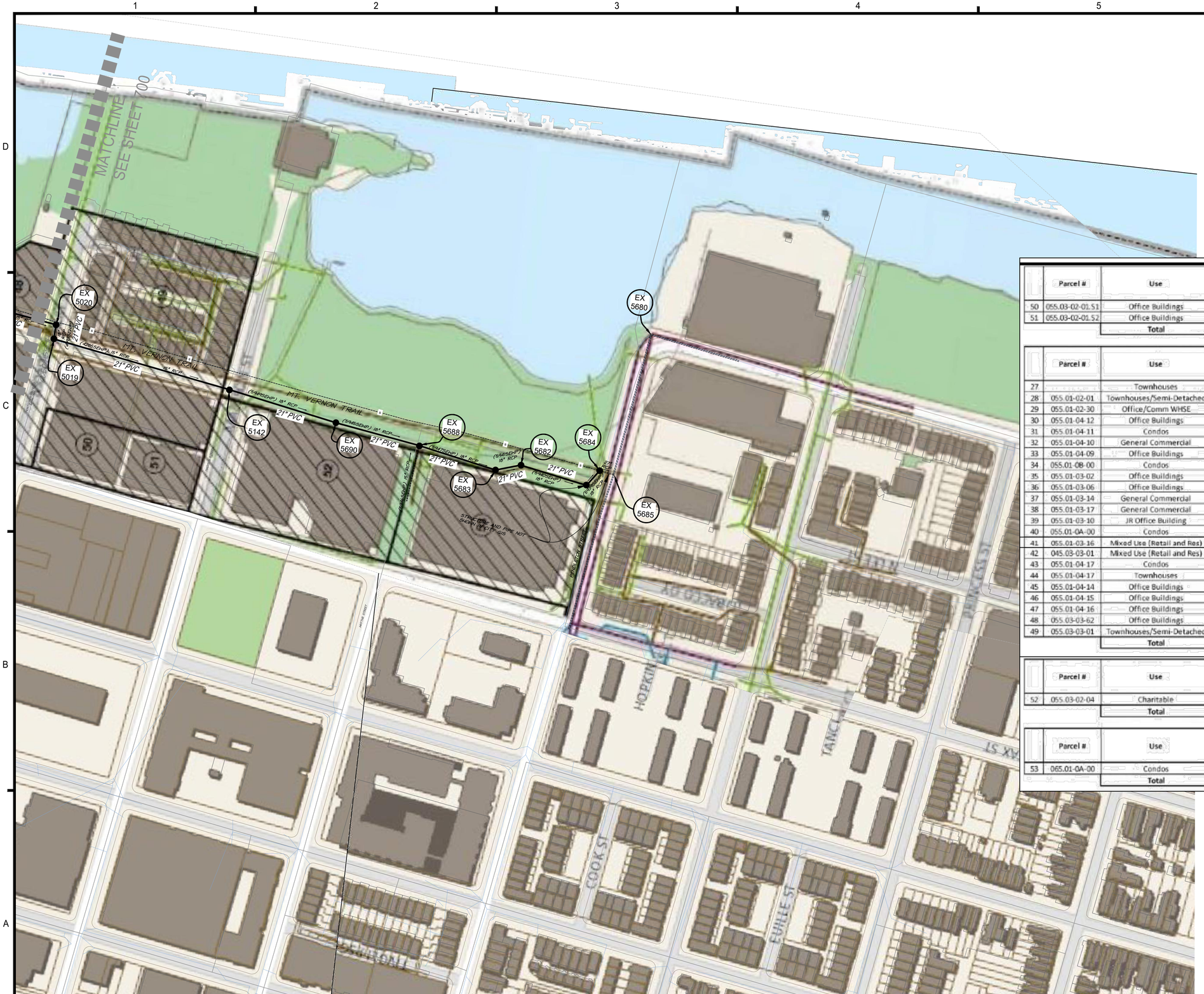
SHEET TITLE:

SANITARY SEWER PLAN

SHEET No.

C700

112206



	Parcel #	Use	Gross Building Area (Sq. Ft.)	# of Units	Unit Flow (GPD)	Total Flow (GPD)	Total Flow (MGD)
50	055.03-02-01.51	Office Buildings	59,621		200/1000	11,924	0.0119
51	055.03-02-01.52	Office Buildings	95,027		200/1000	19,005	0.0190
		Total	**154,648**	-	-	**30,930**	**0.0309**

	Parcel #	Use	Gross Building Area (Sq. Ft.)	# of Units	Unit Flow (GPD)	Total Flow (GPD)	Total Flow (MGD)
27		Townhouses		21	350	7,350	0.0074
28	055.01-02-01	Townhouses/Semi-Detached		29	350	10,150	0.0102
29	055.01-02-30	Office/Comm WHSE	14,400		200/1000	2,880	0.0029
30	055.01-04-12	Office Buildings	115,653		200/1000	23,131	0.0231
31	055.01-04-11	Condos		234	300	70,200	0.0702
32	055.01-04-10	General Commercial	11,599		200/1000	2,320	0.0023
33	055.01-04-09	Office Buildings	39,133		200/1001	7,827	0.0078
34	055.01-08-00	Condos		12	300	3,600	0.0036
35	055.01-03-02	Office Buildings	17,120		200/1000	3,424	0.0034
36	055.01-03-06	Office Buildings	8,964		200/1000	1,793	0.0018
37	055.01-03-14	General Commercial	3,330		200/1000	666	0.0007
38	055.01-03-17	General Commercial	12,908		200/1000	2,582	0.0026
39	055.01-03-10	JR Office Building	3,420		200/1000	684	0.0007
40	055.01-0A-00	Condos		48	300	14,400	0.0144
41	055.01-03-16	Mixed Use (Retail and Res)	13,960	250	300	77,792	0.0778
42	045.03-03-01	Mixed Use (Retail and Res)	5,732	90	200/1000	28,146	0.0281
43	055.01-04-17	Condos		138	300	41,400	0.0414
44	055.01-04-17	Townhouses		41	350	14,350	0.0144
45	055.01-04-14	Office Buildings	155,679		200/1000	31,136	0.0311
46	055.01-04-15	Office Buildings	83,815		200/1000	16,763	0.0168
47	055.01-04-16	Office Buildings	171,268		200/1000	34,254	0.0343
48	055.03-03-62	Office Buildings	136,120		200/1000	27,224	0.0272
49	055.03-03-01	Townhouses/Semi-Detached	39,000	58	350	28,100	0.0281
		Total	832,101	921	2,900	450,170	0.4502

	Parcel #	Use	Gross Building Area (Sq. Ft.)	# of Units	Unit Flow (GPD)	Total Flow (GPD)	Total Flow (MGD)
52	055.03-02-04	Charitable	107,231		200/1000	21,446	0.0214
		Total	**107,231**	-	-	**21,446**	**0.0214**

	Parcel #	Use	Gross Building Area (Sq. Ft.)	# of Units	Unit Flow (GPD)	Total Flow (GPD)	Total Flow (MGD)
53	065.01-0A-00	Condos	40,000	60	300	26,000	0.0260
		Total	**40,000**	**60**	**300**	**26,000**	**0.0260**

NOTE:
1. THE APPLICANT RESERVES THE RIGHT TO ADJUST THE SANITARY ALIGNMENT WITH THE FINAL ENGINEERING TO TIE INTO THE EXISTING 27" LINE AT CANAL CENTER.

VCS 1983 GRID NORTH

100 50 0 100 200
GRAPHIC SCALE
1"=100'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

SANITARY SEWER PLAN

SHEET No.

C701

112206

SANITARY FLOW ESTIMATE

Potomac Power Plant Sanitary Flow Estimate

Area	Office/Cultural (sq. ft.)	Total Office Wastewater (MGD)	Retail (sq. ft.)	Total Retail Wastewater (MGD)	Hotel (sq. ft.)	No. of Rooms	Total Hotel Wastewater (MGD)	No. of Restaurant Seats	Total Restaurant Wastewater (MGD)	Residential (sq. ft.)	No. of Units	Total Residential Wastewater (MGD)	Floor Area	Total (MGD)	Existing Pipes needing replacement
Pump House			10,000	0.0020									10,000	0.0020	none
Block A	58,000.00	0.01	1,500	0.0003				0.00	0.0000				59,500	0.0119	none
Block B	46,000	0.01	20,000	0.0040				0.00	0.0000	327,500	333	0.0999	393,500	0.1131	1: (5455-5020)
Block C	73,000	0.01	30,000	0.0060				0.00	0.0000	508,000	470	0.1410	611,000	0.1616	3: (5455 - 5020), (5019 - 5142), (5690 - 5688)
Block D		0.00	8,000	0.0016						302,000	290	0.0870	310,000	0.0886	6: (6703 - 6706), (5333 - 5455), (5455 - 5020), (5019 - 5142), (5690 - 5688), (5682 - 6312)
Block E		0.00	19,500	0.0039						540,000	560	0.1680	559,500	0.1719	9: (2161-11318), (6703-6706), (5333-5455), (5455-5020), (5019-5142), (5142-5690),(5690-5688), (5683-5682), (5682-6312)
Block F	265,000	0.05	16,000	0.0032						165,000	155	0.0465	446,000	0.1027	11: (2161 - 11318), (11318 - 6702), (6703 - 6706), (5333 - 5455), (5455 - 5020), (5019 - 5142), (5142 - 5690), (5690 - 5688), (5688 - 5683),(5683 - 5682), (5682 - 6312)
Total Onsite Proposed Flow														**0.6518**	
The Mews			5,776	0.0012				0.00	0.0000		90	0.0270	5,776	0.0282	none

Notes:
1. Hotel assumes 300 SF per room and rooms make up 75% of total SF
2. Arts use is assumed to be Retail for Sanitary Flow

EXISTING SANITARY SEWER COMPUTATIONS

POTOMAC POWER PLANT SANITARY SEWER COMPUTATIONS

FROM	TO	INVERTS (FT) UPPER INV	INVERTS (FT) LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	MANNINGS N VALUE	PIPE CAPACITY (CFS)	PIPE CAPACITY (MGD)	AVE. DAILY FLOW (ADF) INCREMENT (MGD)	AVE. DAILY FLOW (ADF) ACCUMULATED (MGD)	PEAK FACTOR	DESIGN FLOW (CFS)	DESIGN FLOW (MGD)	V_{FULL} (FT/S)	V (FT/S)	Q/Q_{FULL}	V/V_{FULL}	REMARKS	
8	**7**	28.13	26.70	287.96	0.50	10	PVC	0.01	2.01	1.30	0.1027	0.102700	4.00	0.64	0.41	3.68	3.23	0.32	0.88	Block F contribution to Prop. 8 = 0.1027 MGD	Survey Information from Prop. Strc. 8- Ex. 6704 is provided by christopher consultants
7	**6**	26.60	24.37	268.20	0.83	10	PVC	0.01	2.60	1.68	0.1719	0.274600	4.00	1.70	1.10	4.76	5.05	0.65	1.06	Block E contribution to Prop. 7 = 0.1719 MGD	
6	**5**	24.20	22.20	291.00	0.69	12	PVC	0.01	3.84	2.48	0.088600	0.363200	4.00	2.25	1.45	4.89	5.04	0.59	1.03	Block D contribution to Prop. 6 = 0.0886 MGD	
5	**4**	22.10	20.60	291.00	0.52	12	PVC	0.01	3.32	2.15	0.163600	0.526800	4.00	3.26	2.11	4.23	4.82	0.98	1.14	Block C & Pump House contribution to Prop. 5 = 0.1636 MGD	
4	**3**	20.35	18.85	195.50	0.77	15	PVC	0.01	7.35	4.75	0.056550	0.583350	4.00	3.61	2.33	5.99	5.89	0.49	0.98	Block B contribution to Prop. 4 = 0.05655 MGD	
3	**2**	18.75	17.75	72.69	1.38	15	PVC	0.01	9.85	6.36	0.056550	0.639900	4.00	3.96	2.56	8.02	7.58	0.40	0.94	Block B contribution to Prop. 3 = 0.05655 MGD	
2	**1**	17.65	16.20	254.69	0.57	15	PVC	0.01	6.33	4.09	0.011900	0.651800	4.00	4.03	2.61	5.16	5.40	0.64	1.05	Block A contribution to Prop. 2 = 0.0119 MGD	
1	**EX 2161**	16.10	15.80	24.50	1.22	15	PVC	0.01	9.29	6.00	0.000000	0.651800	4.00	4.03	2.61	7.57	7.30	0.43	0.96		
EX 2161	EX 11318	15.7	14.75	182.86	0.52	10	DIP	0.013	1.58	1.02	0.035500	0.687300	4.00	4.25	2.75	2.89	2.89	2.69	1.00	**Sub-shed contributions to Ex. 2161: 42 & 27**	
Ex. 11318	Ex. 6702	14.65	13.61	208.88	0.50	10	DIP	0.013	1.55	1.00	0.023100	0.710400	4.00	4.40	2.84	2.83	2.83	2.84	1.00	**Sub-shed contributions to Ex. 11318: 30**	
Ex. 6702	Ex. 6703	13.51	13.30	13.52	1.55	18	RCP	0.015	11.34	7.33	0.070200	0.780600	4.00	4.83	3.12	6.42	6.06	0.43	0.94	**Sub-shed contributions to Ex. 6702: 31**	
Ex. 6703	Ex. 6706	13.2	10.83	275.94	0.86	18	RCP	0.015	8.43	5.45	0.015400	0.796000	4.00	4.93	3.18	4.77	4.93	0.58	1.03	**Sub-shed contributions to Ex. 6703: 32 , 28 & 29**	
Ex. 6706	Ex. S900	10.73	10.36	72.89	0.51	18	RCP	0.015	6.48	4.19	0.017000	0.813000	4.00	5.03	3.25	3.67	4.05	0.78	1.10	**Sub-shed contributions to Ex. 6706: 33 , 35 , 36, 37 , 38 & 39**	
Ex. S900	Ex. 6705(Ex. S899)	10.26	10.04	42.51	0.52	18	RCP	0.015	6.55	4.23	0.003600	0.816600	4.00	5.05	3.27	3.70	4.05	0.77	1.09	**Sub-shed contributions to Ex. S900: 34**	
Ex. 6705(Ex. S899)	Ex. 6704(Ex. S1566)	9.94	8.62	263.41	0.50	18	RCP	0.015	6.44	4.16	0.092200	0.908800	4.00	5.62	3.64	3.65	4.11	0.87	1.13	**Sub-shed contributions to Ex. 6705: 40 & 41**	
Ex. 6704(Ex. S1566)	Ex. S333(Ex. S1356)	8.52	7.34	236.32	0.50	18	RCP	0.015	6.43	4.16	0.000000	0.908800	4.00	5.62	3.64	3.64	4.10	0.87	1.13		
Ex. S333 (Ex. S1356)	Ex. S455*	7.26	7.22	33	0.12	18	RCP	0.015	3.17	2.05	0.055800	0.964600	4.00	5.97	3.86	1.79	1.79	1.88	1.00	**Sub-shed contributions to Ex. S333: 43 & 44**	Survey Information from Ex. S333- Ex. S680 is taken from city approved plan (DSUP2021-10017)
Ex. S455*	Ex. S020 (Ex. S1120)	7.21	6.93	181.00	0.15	18	RCP	0.015	3.58	2.31	0.000000	0.964600	4.00	5.97	3.86	2.03	2.03	1.67	1.00		
Ex. S020 (Ex. S1120)	Ex. S019 (Ex. S1114)	6.73	6.69	33.00	0.12	18	RCP	0.015	3.17	2.05	0.000000	0.964600	4.00	5.97	3.86	1.79	1.79	1.88	1.00		
Ex. S019 (Ex. S1114)	Ex. S142 (Ex. S4021)	6.67	5.53	403.00	0.28	18	RCP	0.015	4.84	3.13	0.000000	0.964600	4.00	5.97	3.86	2.74	2.74	1.23	1.00		
Ex. S142 (Ex. S4021)	Ex. S690 (Ex. S6308)	5.49	5.34	246.00	0.06	18	RCP	0.015	2.25	1.45	0.030900	0.995500	4.00	6.16	3.98	1.27	1.27	2.74	1.00	**Sub-shed contributions to Ex. S142: 50 & 51**	
Ex. S690 (Ex. S6308)	Ex. S688 (Ex. S6309)	5.22	4.99	190.00	0.12	18	RCP	0.015	3.17	2.05	0.000000	0.995500	4.00	6.16	3.98	1.79	1.79	1.95	1.00	**Sub-shed contributions to Ex. S690: 52**	
Ex. S688 (Ex. S6309)	Ex. S683 (Ex. S6310)	4.86	4.28	176.00	0.33	18	RCP	0.015	5.22	3.38	0.026000	1.021500	4.00	6.32	4.09	2.96	2.96	1.21	1.00	**Sub-shed contributions to Ex. S688: 53**	
Ex. S683 (Ex. S6310)	Ex. S682 (Ex. S6311)	4.13	3.66	56.00	0.84	18	RCP	0.015	8.34	5.39	0.000000	1.021500	4.00	6.32	4.09	4.72	5.16	0.76	1.09		
Ex. S682 (Ex. S6311)	S684 (Ex. S6312)	3.48	2.20	174.00	0.74	18	RCP	0.015	7.81	5.04	0.000000	1.021500	4.00	6.32	4.09	4.42	4.91	0.81	1.11		
S684 (Ex. S6312)	Ex. S685 (Ex. S6319)	2.20	-1.50	33.00	11.21	27	RCP	0.015	89.84	58.07	0.137500	1.159000	4.00	7.17	4.64	22.60	13.05	0.08	0.58	Sub-shed contributions to Ex. S684: 45 , 46 , 47 , 48 & 49	
Ex. S685 (Ex. S6319)	Ex. S680	-1.50	-2.21	320.00	0.22	36	RCP	0.015	27.22	17.59	1.720000	2.879000	1.00	9.83	6.36	3.85	3.47	0.36	0.90	Contribution from west to Ex. S685 = 1.72 MGD	

SANITARY SEWER COMPUTATIONS WITH PROPOSED FLOWS

POTOMAC POWER PLANT SANITARY SEWER COMPUTATIONS

FROM	TO	INVERTS (FT) UPPER INV	INVERTS (FT) LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	MANNINGS N VALUE	PIPE CAPACITY (CFS)	PIPE CAPACITY (MGD)	AVE. DAILY FLOW (ADF) INCREMENT (MGD)	AVE. DAILY FLOW (ADF) ACCUMULATED (MGD)	PEAK FACTOR	DESIGN FLOW (CFS)	DESIGN FLOW (MGD)	V_{FULL} (FT/S)	V (FT/S)	Q/Q_{FULL}	V/V_{FULL}	REMARKS	
8	**7**	28.13	26.70	287.96	0.50	10	PVC	0.01	2.01	1.30	0.1027	0.102700	4.00	0.64	0.41	3.68	3.23	0.32	0.88	Block F contribution to Prop. 8 = 0.1027 MGD	Survey Information from Prop. Strc. 8- Ex. 6704 is provided by christopher consultants
7	**6**	26.60	24.37	268.20	0.83	10	PVC	0.01	2.60	1.68	0.1719	0.274600	4.00	1.70	1.10	4.76	5.05	0.65	1.06	Block E contribution to Prop. 7 = 0.1719 MGD	
6	**5**	24.20	22.20	291.00	0.69	12	PVC	0.01	3.84	2.48	0.088600	0.363200	4.00	2.25	1.45	4.89	5.04	0.59	1.03	Block D contribution to Prop. 6 = 0.0886 MGD	
5	**4**	22.10	20.60	291.00	0.52	12	PVC	0.01	3.32	2.15	0.163600	0.526800	4.00	3.26	2.11	4.23	4.82	0.98	1.14	Block C & Pump House contribution to Prop. 5 = 0.1636 MGD	
4	**3**	20.35	18.85	195.50	0.77	15	PVC	0.01	7.35	4.75	0.056550	0.583350	4.00	3.61	2.33	5.99	5.89	0.49	0.98	Block B contribution to Prop. 4 = 0.05655 MGD	
3	**2**	18.75	17.75	72.69	1.38	15	PVC	0.01	9.85	6.36	0.056550	0.639900	4.00	3.96	2.56	8.02	7.58	0.40	0.94	Block B contribution to Prop. 3 = 0.05655 MGD	
2	**1**	17.65	16.20	254.69	0.57	15	PVC	0.01	6.33	4.09	0.011900	0.651800	4.00	4.03	2.61	5.16	5.40	0.64	1.05	Block A contribution to Prop. 2 = 0.0119 MGD	
1	**EX 2161**	16.10	15.80	24.50	1.22	15	PVC	0.01	9.29	6.00	0.000000	0.651800	4.00	4.03	2.61	7.57	7.30	0.43	0.96		
EX 2161	EX 11318	15.7	14.75	182.86	0.52	15	PVC	0.01	6.05	3.91	0.035500	0.687300	4.00	4.25	2.75	4.93	5.29	0.70	1.07	**EX. 10" PIPE TO BE UPGRADED TO 15" PVC**	
Ex. 11318	Ex. 6702	14.65	13.61	208.88	0.50	15	PVC	0.01	5.92	3.83	0.023100	0.710400	4.00	4.40	2.84	4.83	5.28	0.74	1.09	**EX. 10" PIPE TO BE UPGRADED TO 15" PVC**	
Ex. 6702	Ex. 6703	13.51	13.30	13.52	1.55	18	PVC	0.01	17.01	11.00	0.070200	0.780600	4.00	4.83	3.12	9.63	8.24	0.28	0.86	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. 6703	Ex. 6706	13.2	10.83	275.94	0.86	18	PVC	0.01	12.65	8.18	0.015400	0.796000	4.00	4.93	3.18	7.16	6.61	0.39	0.92	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. 6706	Ex. S900	10.73	10.36	72.89	0.51	18	PVC	0.01	9.73	6.29	0.017000	0.813000	4.00	5.03	3.25	5.50	5.50	0.52	1.00	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. S900	Ex. 6705(Ex. S899)	10.26	10.04	42.51	0.52	18	PVC	0.01	9.82	6.35	0.003600	0.816600	4.00	5.05	3.27	5.56	5.56	0.51	1.00	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. 6705(Ex. S899)	Ex. 6704(Ex. S1566)	9.94	8.62	263.41	0.50	18	PVC	0.01	9.66	6.25	0.092200	0.908800	4.00	5.62	3.64	5.47	5.64	0.58	1.03	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. 6704(Ex. S1566)	Ex. S333(Ex. S1356)	8.52	7.34	236.32	0.50	18	PVC	0.01	9.65	6.23	0.000000	0.908800	4.00	5.62	3.64	5.46	5.63	0.58	1.03	**EX. 18" RCP TO BE REPLACED WITH 18" PVC**	
Ex. S333 (Ex. S1356)	Ex. S455*	7.26	7.22	33	0.12	21	PVC	0.01	7.17	4.63	0.055800	0.964600	4.00	5.97	3.86	2.98	3.32	0.83	1.11	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	Survey Information from Ex. S333- Ex. S680 is taken from city approved plan (DSUP2021-10017)
Ex. S455*	Ex. S020 (Ex. S1120)	7.21	6.93	181.00	0.15	21	PVC	0.01	8.10	5.23	0.000000	0.964600	4.00	5.97	3.86	3.37	3.65	0.74	1.08	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S020 (Ex. S1120)	Ex. S019 (Ex. S1114)	6.73	6.69	33.00	0.12	21	PVC	0.01	7.17	4.63	0.000000	0.964600	4.00	5.97	3.86	2.98	3.32	0.83	1.11	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S019 (Ex. S1114)	Ex. S142 (Ex. S4021)	6.67	5.53	403.00	0.28	21	PVC	0.01	10.95	7.08	0.000000	0.964600	4.00	5.97	3.86	4.55	4.63	0.55	1.02	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S142 (Ex. S4021)	Ex. S690 (Ex. S6308)	5.49	5.34	246.00	0.06	24	PVC	0.01	7.26	4.69	0.030900	0.995500	4.00	6.16	3.98	2.31	2.59	0.85	1.12	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S690 (Ex. S6308)	Ex. S688 (Ex. S6309)	5.22	4.99	190.00	0.12	21	PVC	0.01	7.16	4.63	0.000000	0.995500	4.00	6.16	3.98	2.98	3.34	0.86	1.12	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S688 (Ex. S6309)	Ex. S683 (Ex. S6310)	4.86	4.28	176.00	0.33	21	PVC	0.01	11.82	7.64	0.026000	1.021500	4.00	6.32	4.09	4.91	5.00	0.53	1.02	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S683 (Ex. S6310)	Ex. S682 (Ex. S6311)	4.13	3.66	56.00	0.84	21	PVC	0.01	18.86	12.19	0.000000	1.021500	4.00	6.32	4.09	7.84	6.90	0.34	0.88	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
Ex. S682 (Ex. S6311)	S684 (Ex. S6312)	3.48	2.20	174.00	0.74	21	PVC	0.01	17.66	11.41	0.000000	1.021500	4.00	6.32	4.09	7.34	6.62	0.36	0.90	**EX. 18" RCP TO BE UPGRADED TO 21" PVC**	
S684 (Ex. S6312)	Ex. S685 (Ex. S6319)	2.20	-1.50	33.00	11.21	27	RCP	0.015	89.84	58.07	0.137500	1.159000	4.00	7.17	4.64	22.60	13.05	0.08	0.58		
Ex. S685 (Ex. S6319)	Ex. S680	-1.50	-2.21	320.00	0.22	36	RCP	0.015	27.22	17.59	1.720000	2.879000	1.00	9.83	6.36	3.85	3.47	0.36	0.90		

NOTES:

1. SANITARY COMPUTATIONS SHOWN ABOVE REQUIRE CHANGES IN GREEN AND DESCRIBED BELOW:
   Ex. 2161-Ex. 11318 TO BE UPGRADED FROM 10" TO 15" PVC IN NORTH FAIRFAX ST, Ex. 11318-Ex. 6702 TO BE UPGRADED FROM 10" TO 15" PVC IN NORTH FAIRFAX ST, Ex. 6702-Ex. 6703 TO BE REPLACED WITH 18" PVC IN NORTH FAIRFAX ST, Ex. 6703-Ex. 6706 TO BE REPLACED WITH 18" PVC IN NORTH FAIRFAX ST, Ex. 6706-Ex. 900 TO BE REPLACED WITH 18" PVC IN NORTH FAIRFAX ST, Ex. 900-Ex. 6705 TO BE REPLACED WITH 18" PVC IN NORTH FAIRFAX ST, Ex. 6705-Ex. 6704 TO BE REPLACED WITH 18" PVC IN CANAL CENTRAL PLAZA, Ex. 6704-Ex. 5333 TO BE REPLACED WITH 18" PVC WITHIN THE MT. VERNON TRAIL. Ex. 5333-Ex. 5455 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5455-Ex. 5020 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5020-Ex. 5019 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5019-Ex. 5142 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5142-Ex. 5690 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5690-Ex. 5688 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5688-Ex. 5683 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL, Ex. 5683-Ex. 5682 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL AND Ex. 5682-Ex. 5684 TO BE UPGRADED TO 21" PVC WITHIN THE MT. VERNON TRAIL. THESE RUNS CAN BE FIND IN SHEETS C700-C701.
2. SANITARY INFORMATION PROVIDED AS SHOWN ON THE SANITARY SEWER COMPUTATION TABLE ABOVE.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

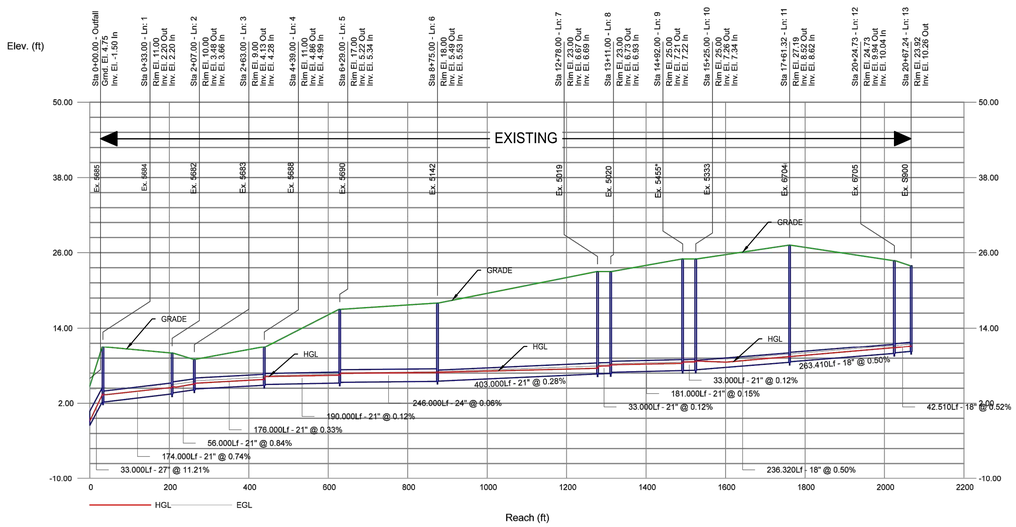
SANITARY SEWER COMPUTATIONS

SHEET No.

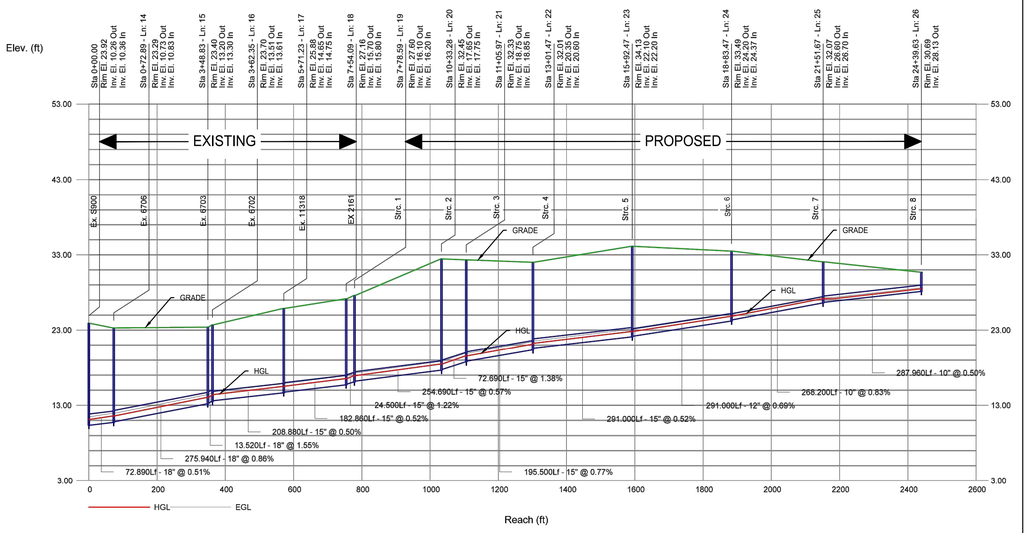
C702

112206

EXISTING WITH PROPOSED SANITARY HGL PROFILE (PART 1 OF 2)



EXISTING WITH PROPOSED SANITARY HGL PROFILE (PART 2 OF 2)



EXISTING WITH PROPOSED SANITARY HGL COMPUTATIONS

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	** (Ex. S6312)	7.19	27	Cir	33.000	-1.50	2.20	11.212	4.35	4.36	0.03	4.39	End	Manhole
2	Ex. 5682 (Ex. S6311)	6.34	21	Cir	174.000	2.20	3.48	0.736	4.39	4.48	0.17	4.65	1	Manhole
3	Ex. 5683 (Ex. S6310)	6.34	21	Cir	56.000	3.66	4.13	0.839	4.65	5.06	n/a	5.06 j	2	Manhole
4	Ex. 5688 (Ex. S6309)	6.34	21	Cir	176.000	4.28	4.86	0.330	5.19	5.79	n/a	5.79	3	Manhole
5	Ex. 5690 (Ex. S6308)	6.18	21	Cir	190.000	4.99	5.22	0.121	6.24	6.47	0.03	6.50	4	Manhole
6	Ex. 5142 (Ex. S4021)	6.18	24	Cir	246.000	5.34	5.49	0.061	6.76	6.91	0.02	6.93	5	Manhole
7	Ex. 5019 (Ex. S1114)	5.99	21	Cir	403.000	5.53	6.67	0.283	6.93	7.57	n/a	7.57	6	Manhole
8	Ex. 5020 (Ex. S1120)	5.99	21	Cir	33.000	6.69	6.73	0.121	7.91	7.95	0.17	8.13	7	Manhole
9	Ex. 5455*	5.99	21	Cir	181.000	6.93	7.21	0.155	8.13	8.36	0.20	8.56	8	Manhole
10	Ex. 5333 (Ex. S1356)	5.99	21	Cir	33.000	7.22	7.26	0.121	8.56	8.58	0.15	8.73	9	Manhole
11	Ex. 6704(Ex. S1566)	5.64	18	Cir	236.320	7.34	8.52	0.499	8.73	9.44	n/a	9.44 j	10	Manhole
12	Ex. 6705(Ex. S899)	5.64	18	Cir	263.410	8.62	9.94	0.501	9.44	10.86	0.39	10.86	11	Manhole
13	Ex. S900	5.07	18	Cir	42.510	10.04	10.26	0.518	10.86	11.13	n/a	11.13	12	Manhole
14	Ex. 6706	5.05	18	Cir	72.890	10.36	10.73	0.508	11.13	11.59	n/a	11.59	13	Manhole
15	Ex. 6703	4.95	18	Cir	275.940	10.83	13.20	0.859	11.59	14.06	n/a	14.06	14	Manhole
16	Ex. 6702	4.85	18	Cir	13.520	13.30	13.51	1.553	14.06	14.36	n/a	14.36	15	Manhole
17	Ex. 11318	4.42	15	Cir	208.880	13.61	14.65	0.498	14.42	15.50	n/a	15.50	16	Manhole
18	EX 2161	4.26	15	Cir	182.860	14.75	15.70	0.520	15.52	16.54	0.23	16.54	17	Manhole
19	Strc. 1	4.03	15	Cir	24.500	15.80	16.10	1.224	16.54	16.91	n/a	16.91	18	Manhole
20	Strc. 2	4.03	15	Cir	254.690	16.20	17.65	0.569	16.92	18.46	n/a	18.46	19	Manhole
21	Strc. 3	3.96	15	Cir	72.690	17.75	18.75	1.376	18.46	19.55	0.11	19.55	20	Manhole
22	Strc. 4	3.61	15	Cir	195.500	18.85	20.35	0.767	19.55	21.12	n/a	21.12	21	Manhole
23	Strc. 5	3.26	15	Cir	291.000	20.60	22.10	0.515	21.26	22.83	0.05	22.83	22	Manhole
24	Strc. 6	2.25	12	Cir	291.000	22.20	24.20	0.687	22.83	24.84	0.23	24.84	23	Manhole
25	Strc. 7	1.70	10	Cir	268.200	24.37	26.60	0.831	24.86	27.18	0.04	27.18	24	Manhole
26	Strc. 8	0.64	10	Cir	287.960	26.70	28.13	0.497	27.18	28.48	n/a	28.48 j	25	Manhole

Pepco EX. Sanitary Outfall | Number of lines: 26 | Run Date: 3/8/2023

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd p 703.273.6820
suite 601
fairfax, va 22030
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:

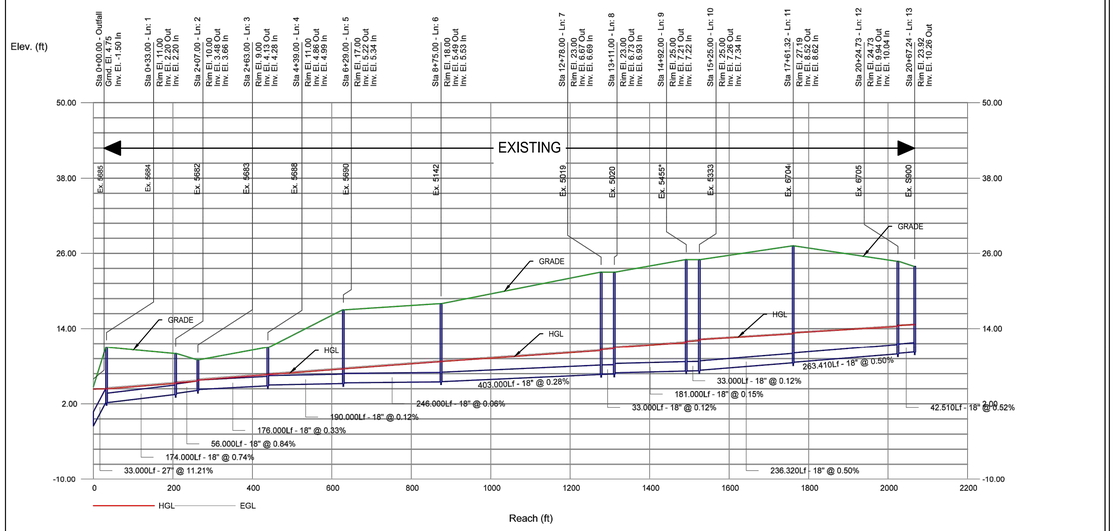
SANITARY SEWER COMPUTATIONS

SHEET No.

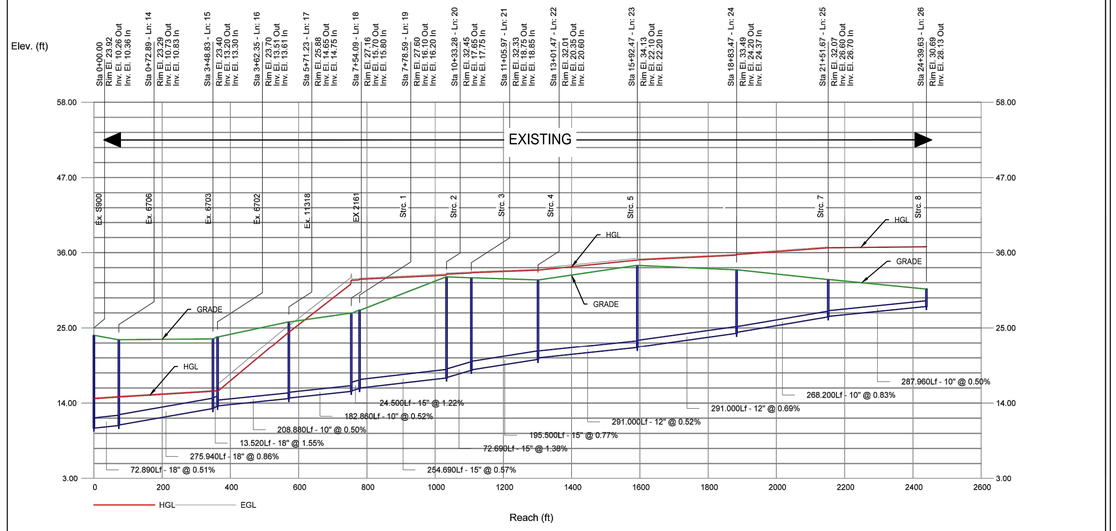
C703

112206

EXISTING SANITARY HGL PROFILE (PART 1 OF 2)



EXISTING SANITARY HGL PROFILE (PART 2 OF 2)



EXITING SANITARY HGL COMPUTATIONS

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1	** (Ex. S6312)	7.19	27	Cir	33.000	-1.50	2.20	11.212	4.35	4.37	0.03	4.40	End	Manhole
2	Ex. 5682 (Ex. S6311)	6.34	18	Cir	174.000	2.20	3.48	0.736	4.40*	5.24*	0.11	5.35	1	Manhole
3	Ex. 5683 (Ex. S6310)	6.34	18	Cir	56.000	3.66	4.13	0.839	5.35	5.61	0.17	5.78	2	Manhole
4	Ex. 5688 (Ex. S6309)	6.34	18	Cir	176.000	4.28	4.86	0.330	5.78*	6.63*	0.03	6.66	3	Manhole
5	Ex. 5690 (Ex. S6308)	6.18	18	Cir	190.000	4.99	5.22	0.121	6.66*	7.54*	0.03	7.57	4	Manhole
6	Ex. 5142 (Ex. S4021)	6.18	18	Cir	246.000	5.34	5.49	0.061	7.57*	8.70*	0.03	8.73	5	Manhole
7	Ex. 5019 (Ex. S1114)	5.99	18	Cir	403.000	5.53	6.67	0.283	8.73*	10.48*	0.18	10.66	6	Manhole
8	Ex. 5020 (Ex. S1120)	5.99	18	Cir	33.000	6.69	6.73	0.121	10.66*	10.80*	0.18	10.98	7	Manhole
9	Ex. 5455*	5.99	18	Cir	181.000	6.93	7.21	0.155	10.98*	11.76*	0.18	11.94	8	Manhole
10	Ex. 5333 (Ex. S1356)	5.99	18	Cir	33.000	7.22	7.26	0.121	11.94*	12.09*	0.18	12.26	9	Manhole
11	Ex. 6704(Ex. S1566)	5.64	18	Cir	236.320	7.34	8.52	0.499	12.26*	13.17*	0.16	13.33	10	Manhole
12	Ex. 6705(Ex. S899)	5.64	18	Cir	263.410	8.62	9.94	0.501	13.33*	14.34*	0.16	14.50	11	Manhole
13	Ex. S900	5.07	18	Cir	42.510	10.04	10.26	0.518	14.50*	14.63*	0.02	14.65	12	Manhole
14	Ex. 6706	5.05	18	Cir	72.890	10.36	10.73	0.508	14.65*	14.88*	0.02	14.89	13	Manhole
15	Ex. 6703	4.95	18	Cir	275.940	10.83	13.20	0.859	14.89*	15.71*	0.02	15.73	14	Manhole
16	Ex. 6702	4.85	18	Cir	13.520	13.30	13.51	1.553	15.73*	15.77*	0.02	15.79	15	Manhole
17	Ex. 11318	4.42	10	Cir	208.880	13.61	14.65	0.498	15.79*	24.30*	0.15	24.45	16	Manhole
18	EX 2161	4.26	10	Cir	182.860	14.75	15.70	0.520	24.45*	31.37*	0.58	31.95	17	Manhole
19	Strc. 1	4.03	15	Cir	24.500	15.80	16.10	1.224	31.95*	32.01*	0.10	32.11	18	Manhole
20	Strc. 2	4.03	15	Cir	254.690	16.20	17.65	0.569	32.11*	32.70*	0.16	32.86	19	Manhole
21	Strc. 3	3.96	15	Cir	72.690	17.75	18.75	1.376	32.86*	33.02*	0.05	33.07	20	Manhole
22	Strc. 4	3.61	15	Cir	195.500	18.85	20.35	0.767	33.07*	33.43*	0.02	33.45	21	Manhole
23	Strc. 5	3.26	12	Cir	291.000	20.60	22.10	0.515	33.45*	34.89*	0.04	34.94	22	Manhole
24	Strc. 6	2.25	12	Cir	291.000	22.20	24.20	0.687	34.94*	35.62*	0.10	35.73	23	Manhole
25	Strc. 7	1.70	10	Cir	268.200	24.37	26.60	0.831	35.73*	36.68*	0.02	36.71	24	Manhole
26	Strc. 8	0.64	10	Cir	287.960	26.70	28.13	0.497	36.71*	36.85*	0.02	36.87	25	Manhole

Pepco EX. Sanitary Outfall | Number of lines: 26 | Run Date: 3/8/2023

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown).

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd
suite 601
fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

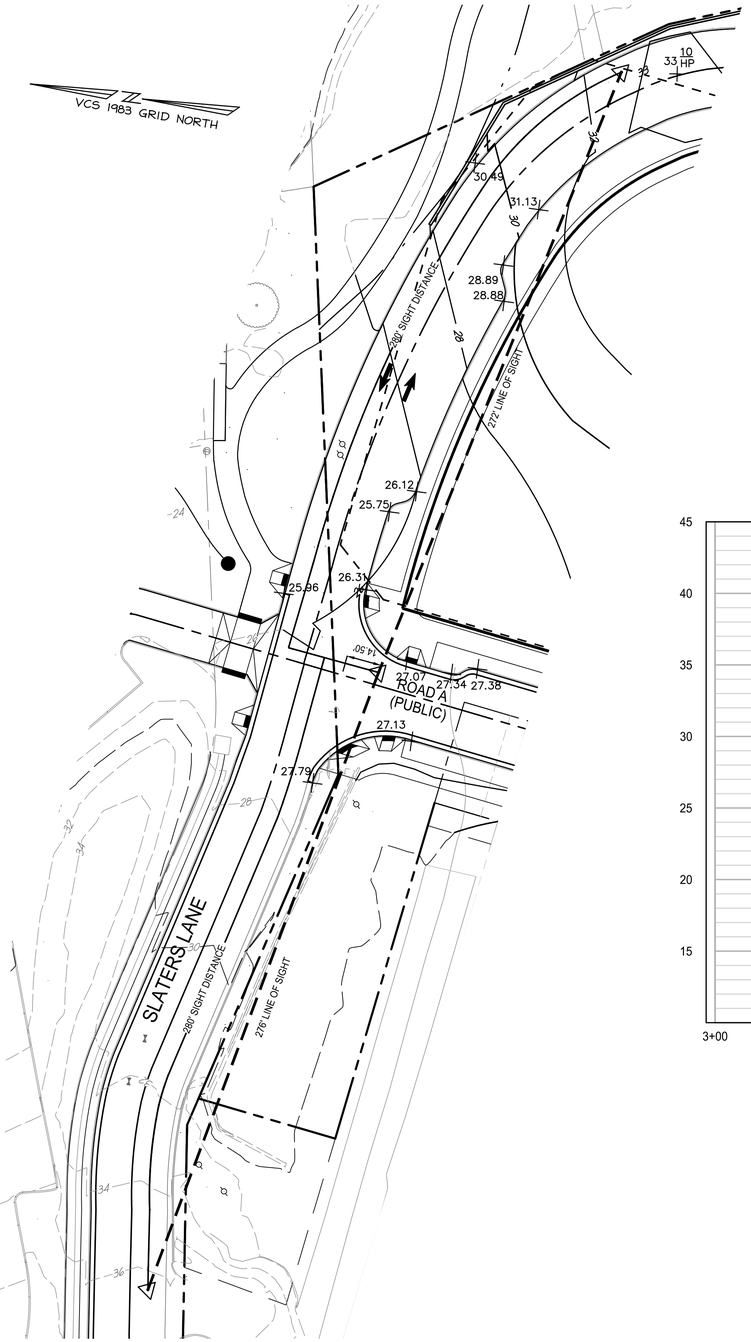
SHEET TITLE:

SANITARY SEWER COMPUTATIONS

SHEET No.

C704

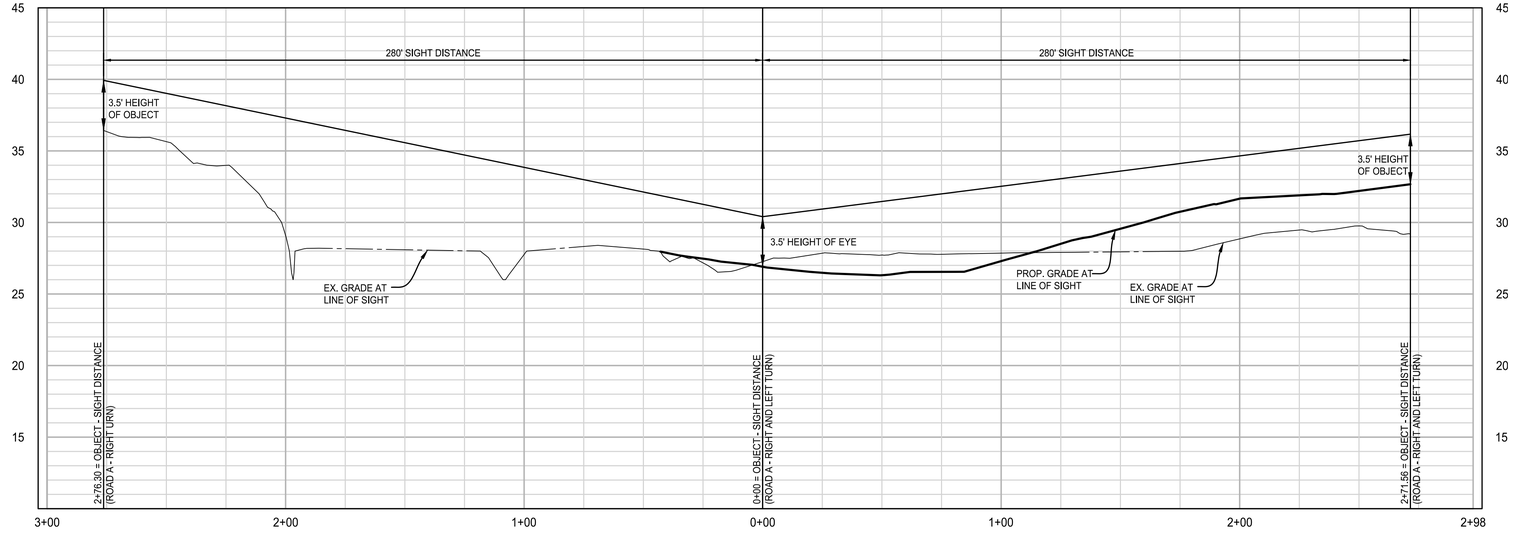
112206



30 15 0 30 60
GRAPHIC SCALE
1"=30'

SLATERS LANE SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED DSP #2023 - 00001
DEVELOPMENT SITE PLAN NO.
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

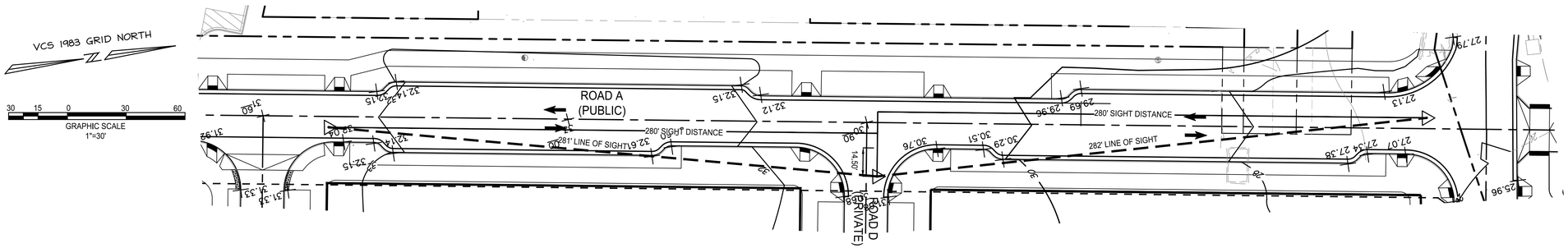
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

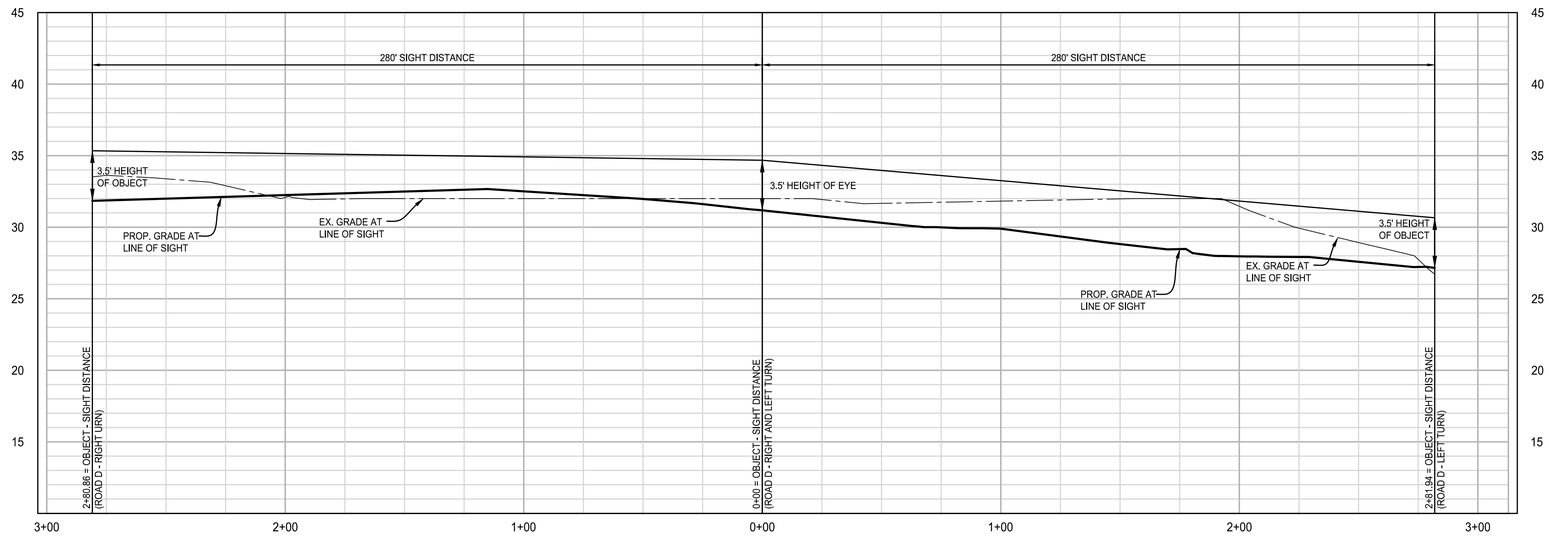
C800

112206



ROAD A SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

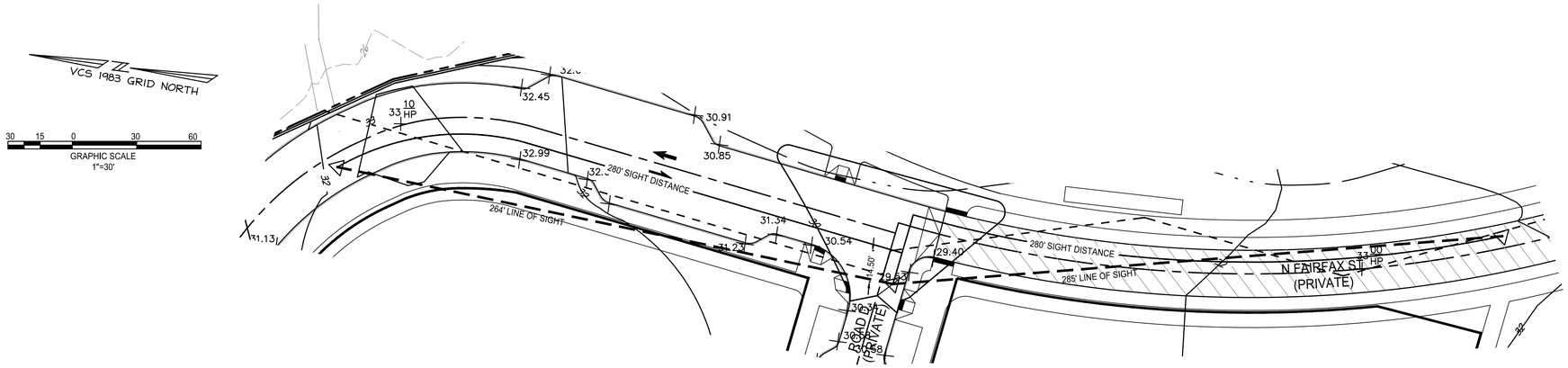
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

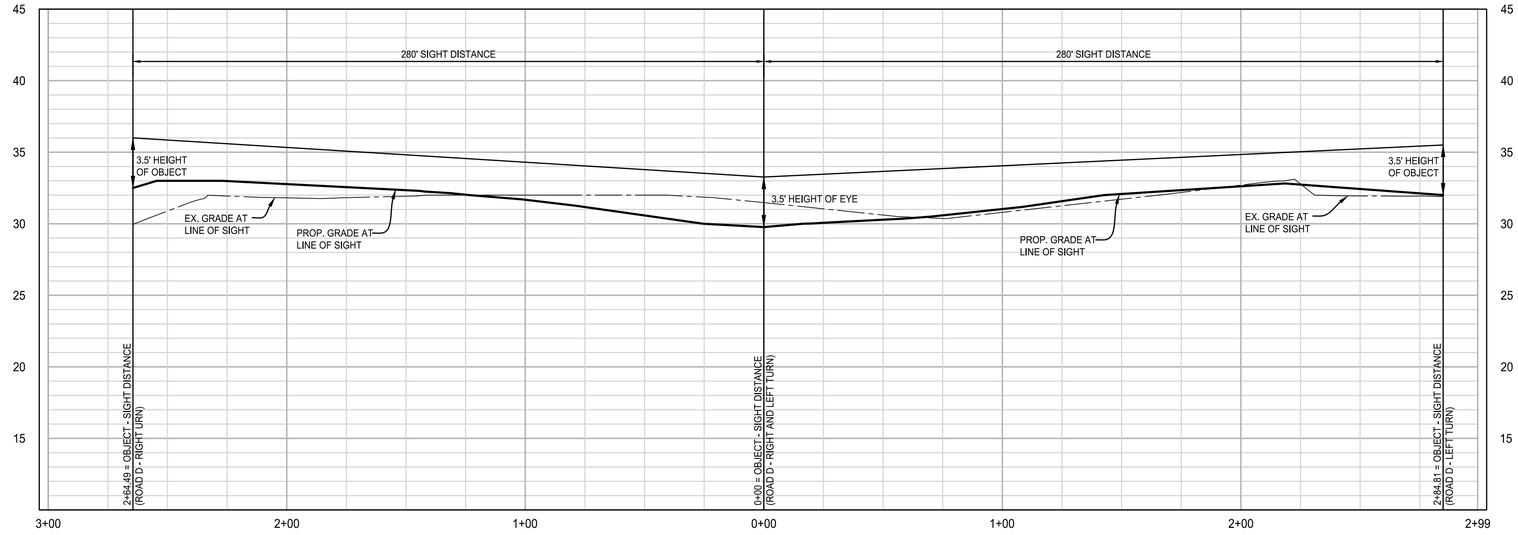
C801

112206



N FAIRFAX STREET SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

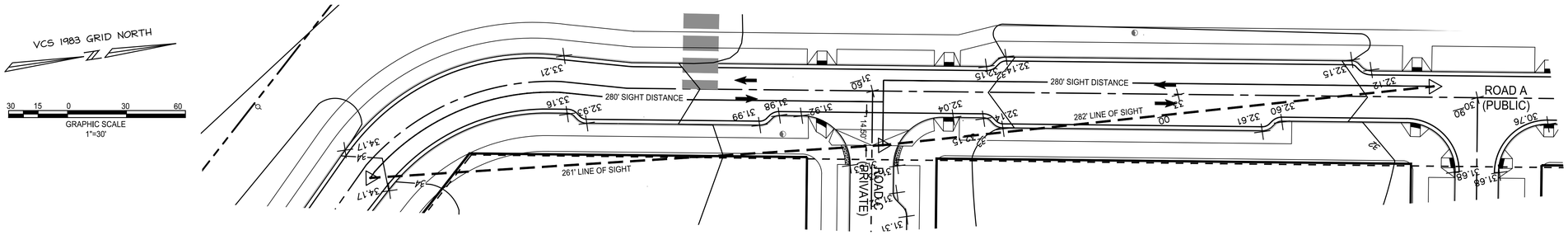
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

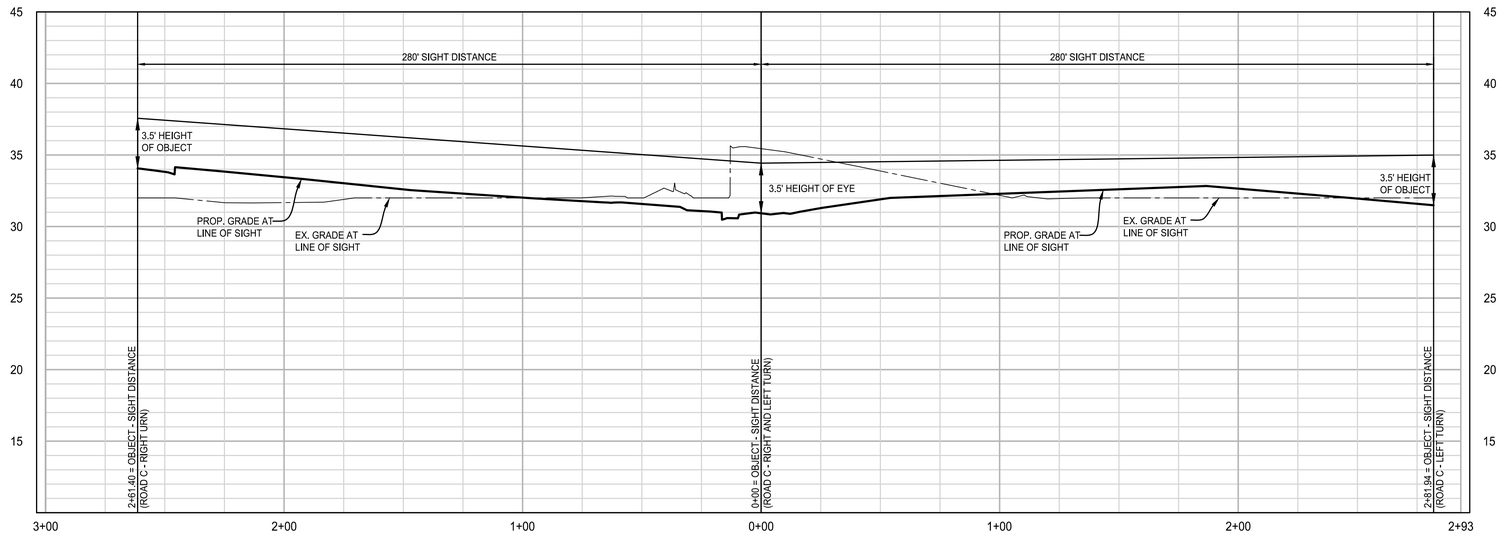
C802

112206



ROAD A SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

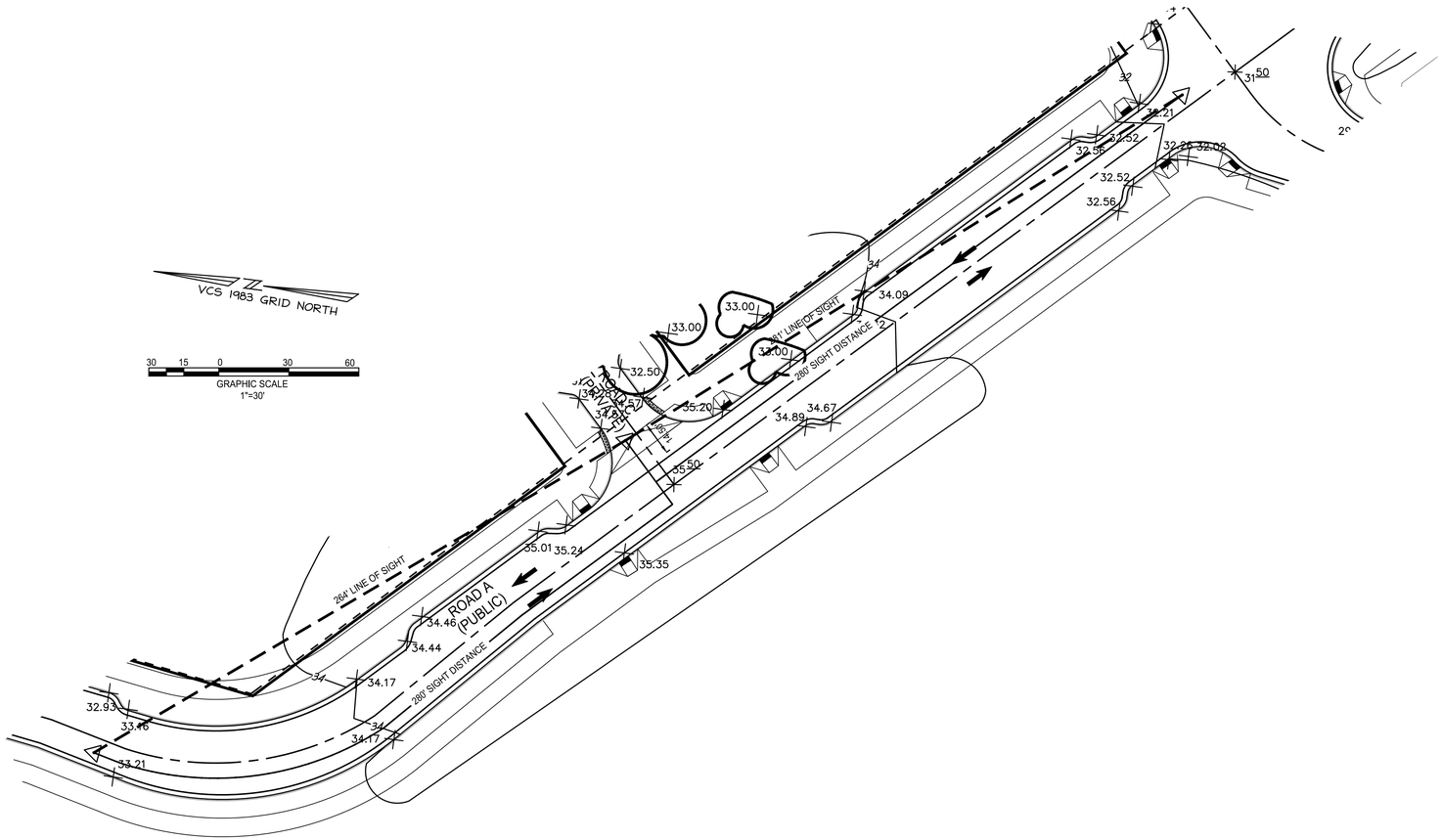
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

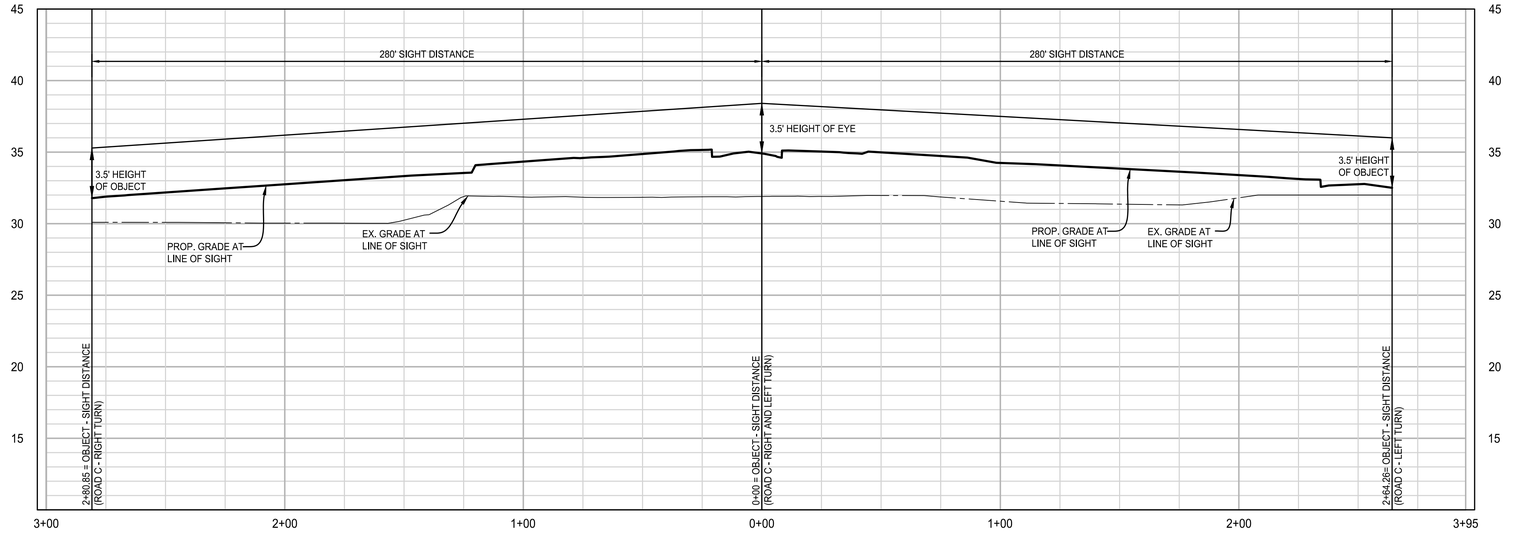
C803

112206



ROAD A SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE: 10-14-2022
DESIGN: JH
DRAWN:MG
CHECKED:KW

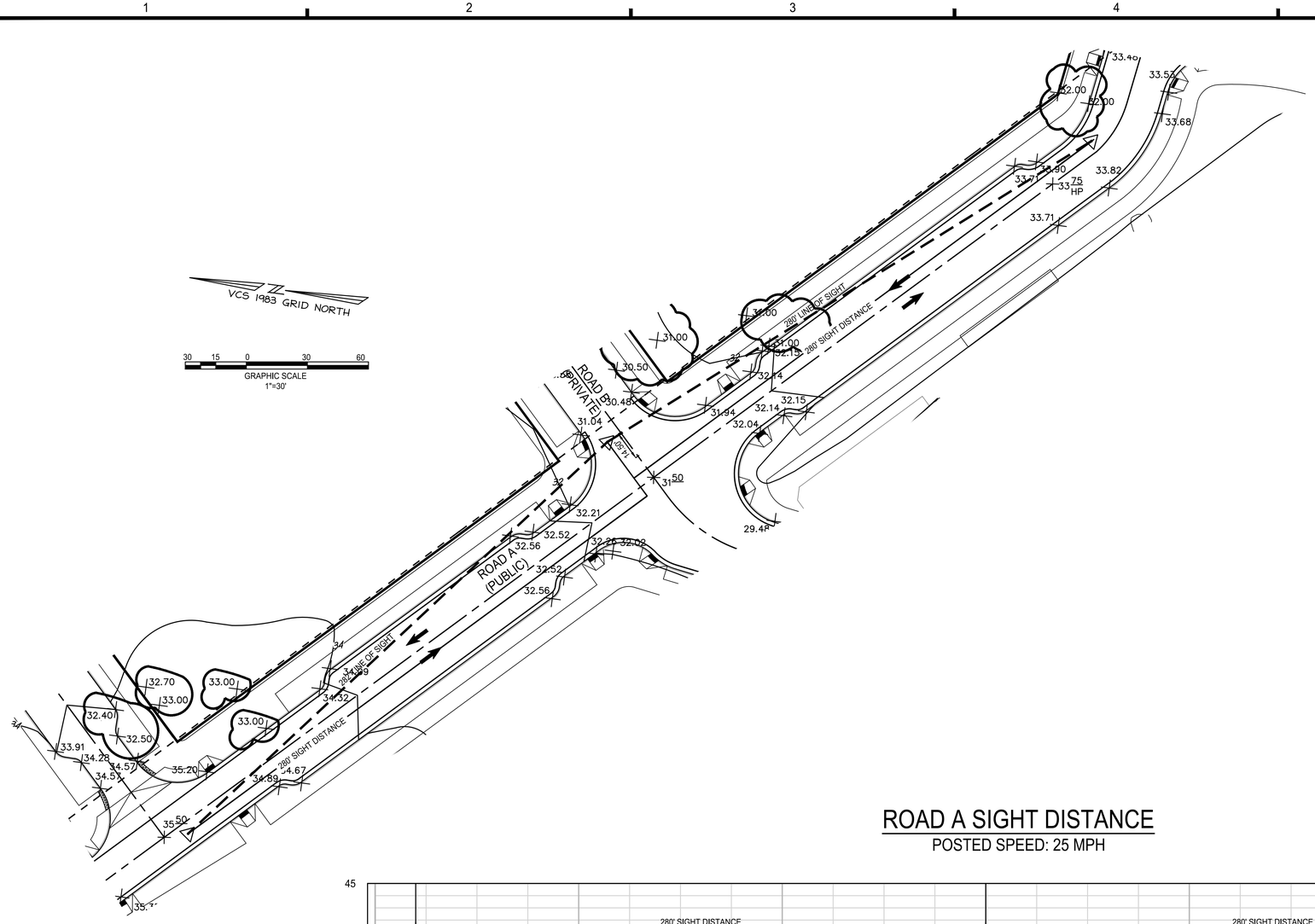
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

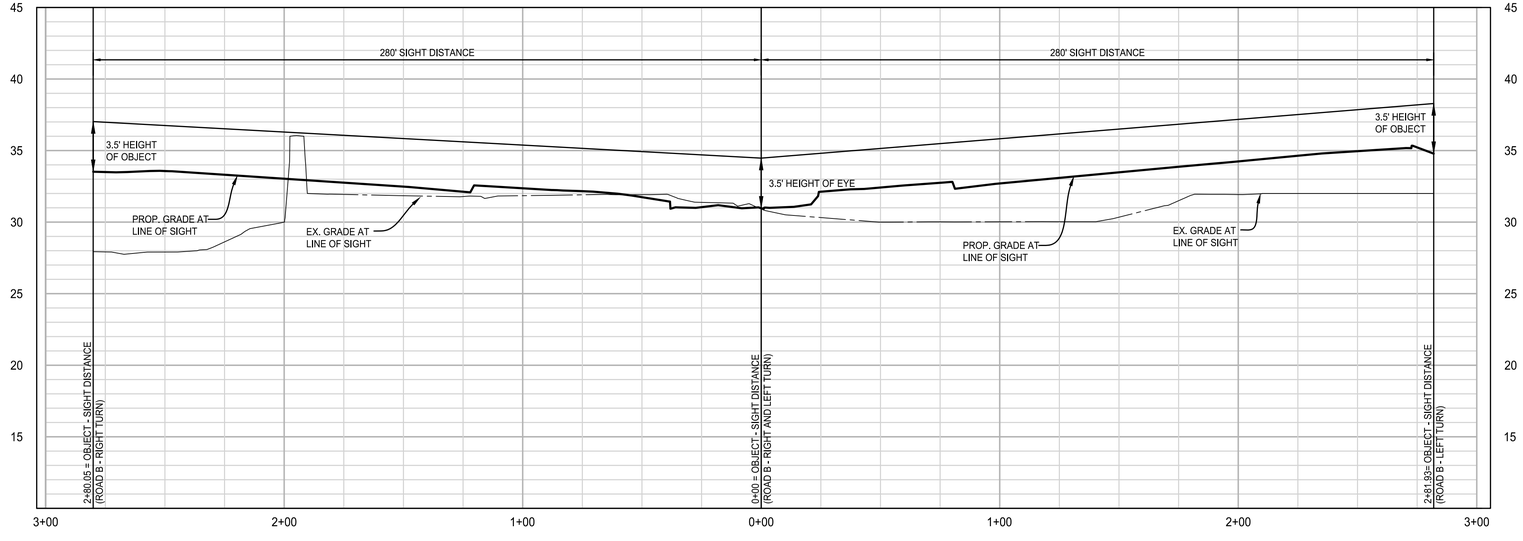
C804

112206



ROAD A SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

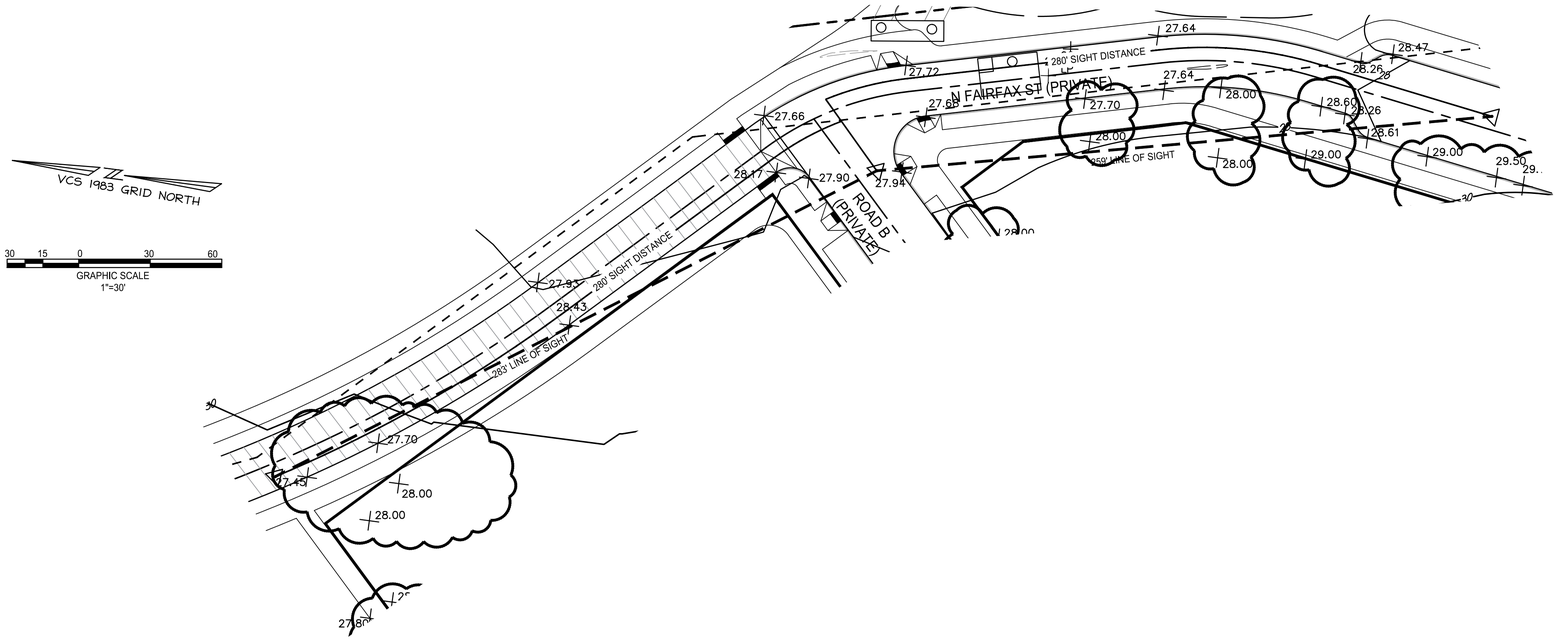
SHEET TITLE:

SIGHT DISTANCE

SHEET No.

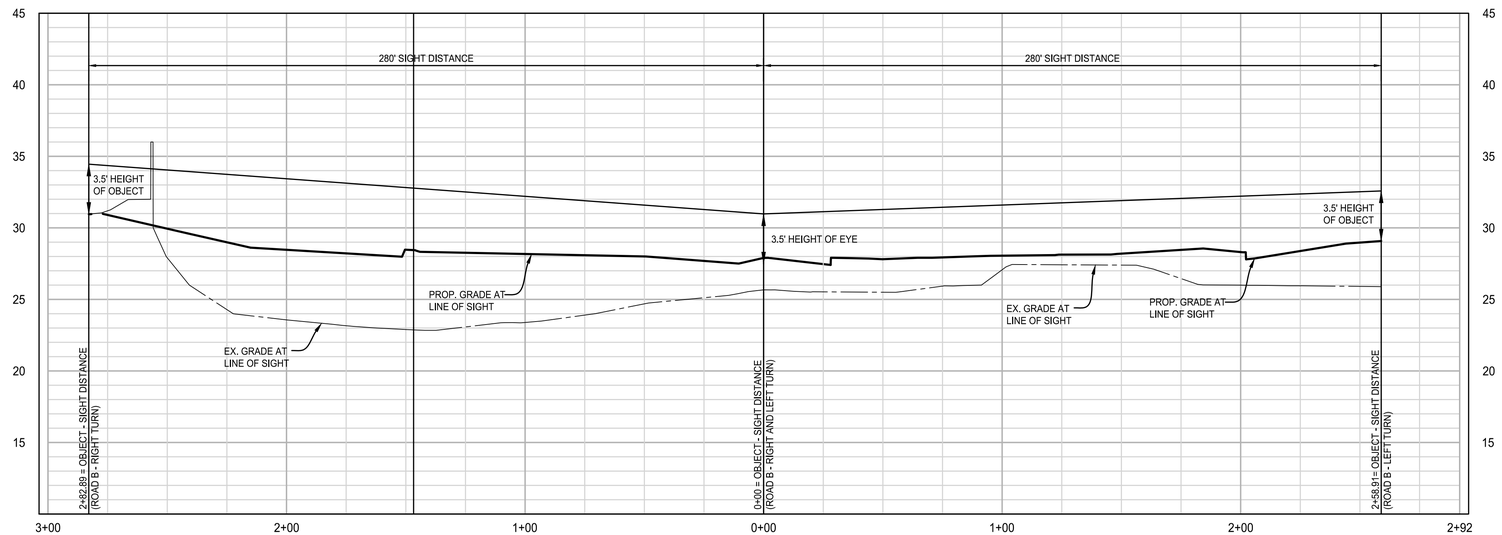
C805

112206



N FAIRFAX STREET SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

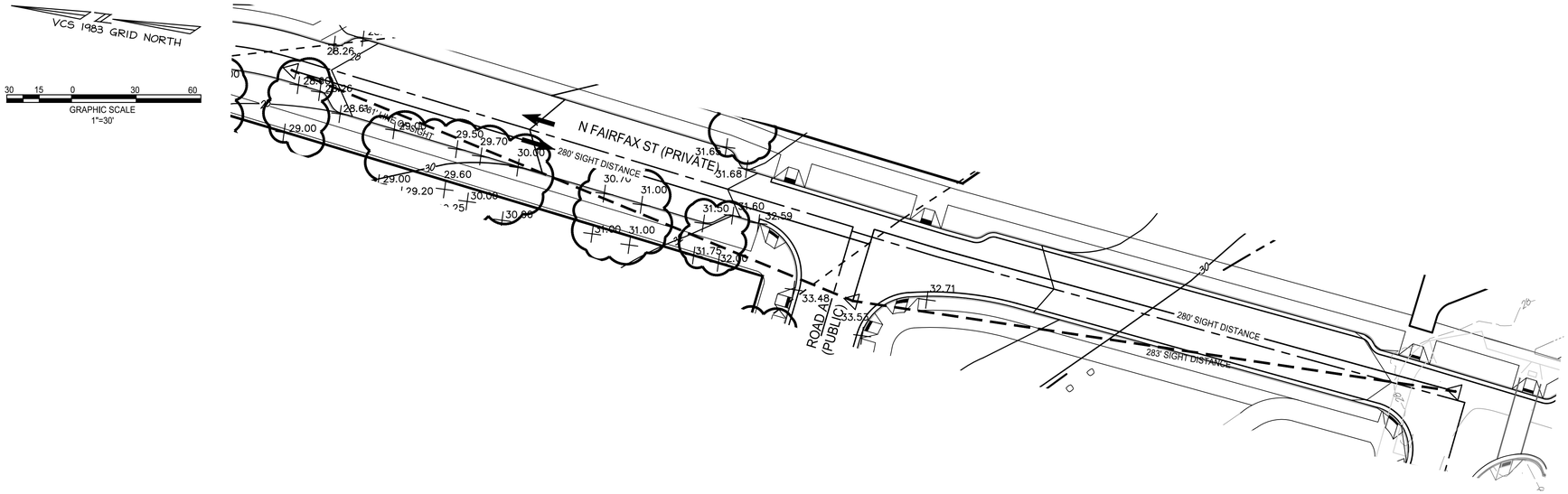
MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

SHEET TITLE:
SIGHT DISTANCE

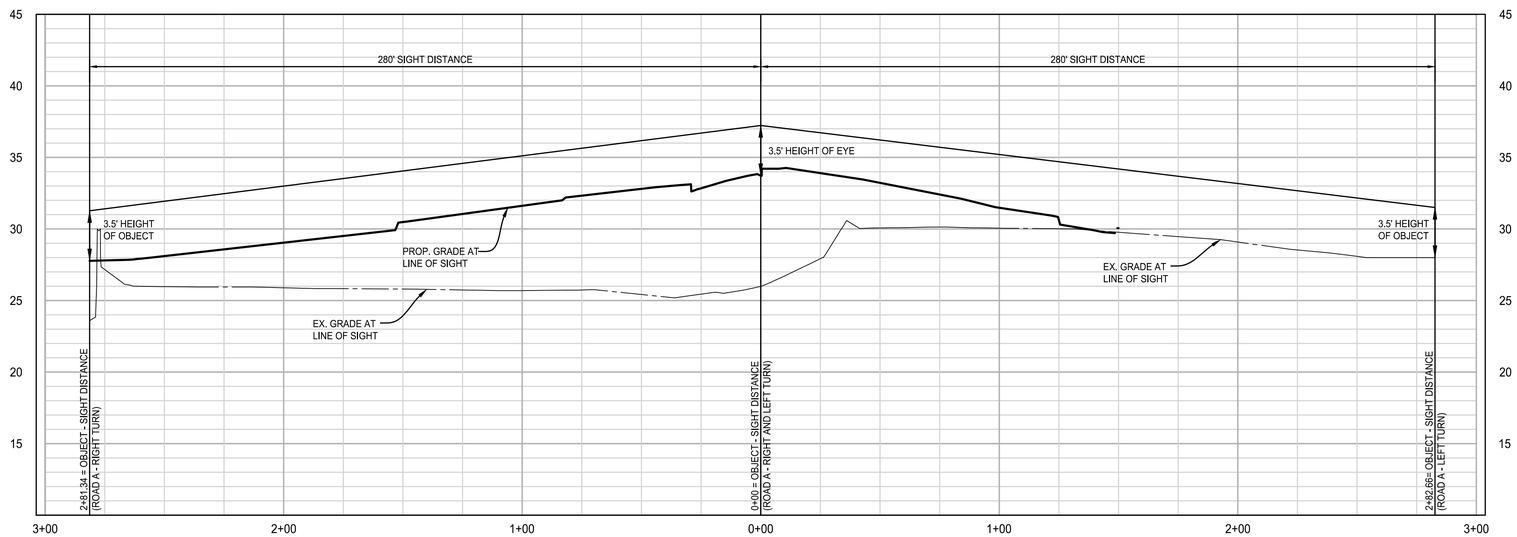
SHEET No.
C806

112206



N FAIRFAX STREET SIGHT DISTANCE

POSTED SPEED: 25 MPH



30 15 0 30 60
HORIZONTAL GRAPHIC SCALE
1"=30'

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1"=5'

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

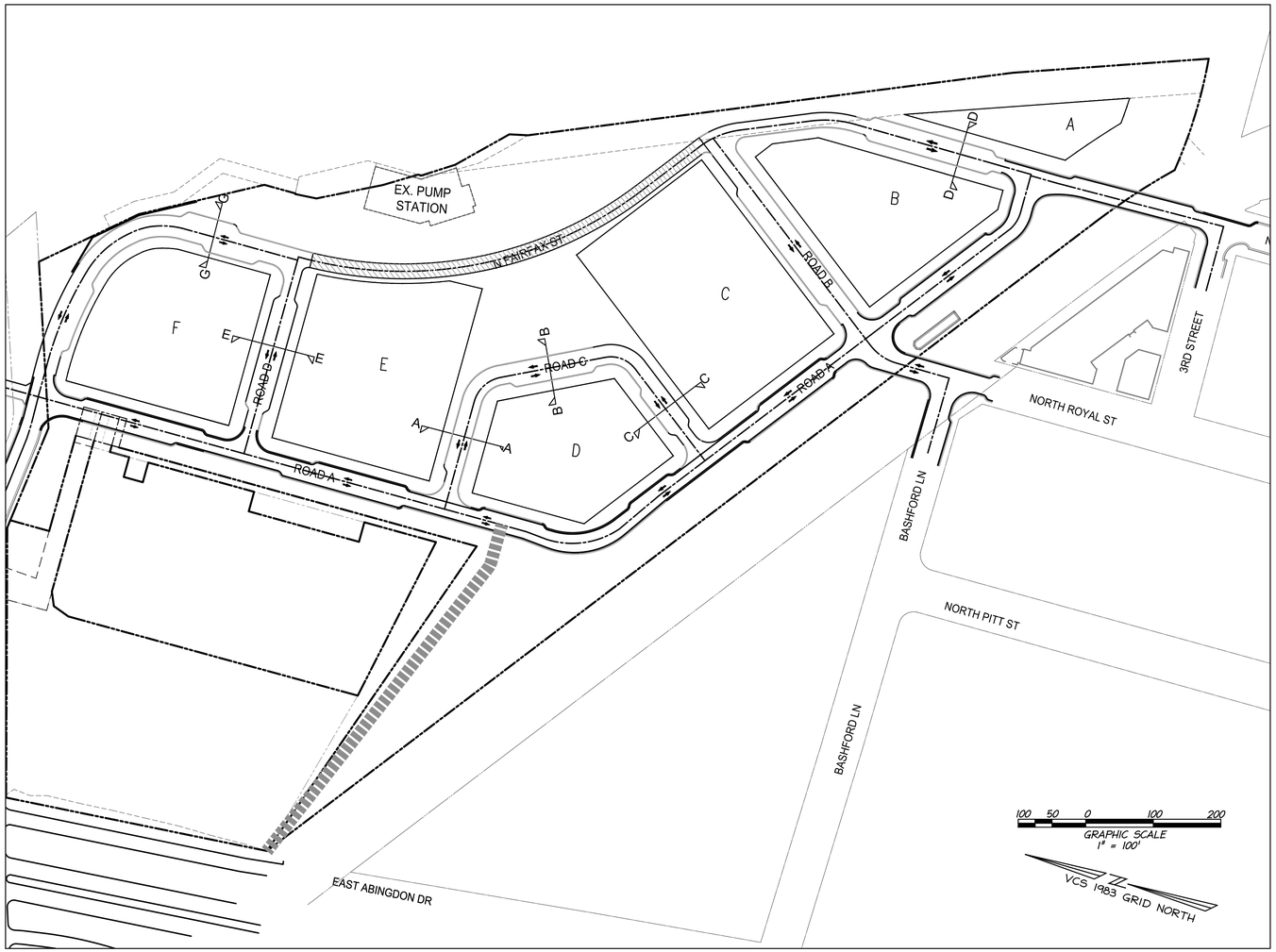
MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

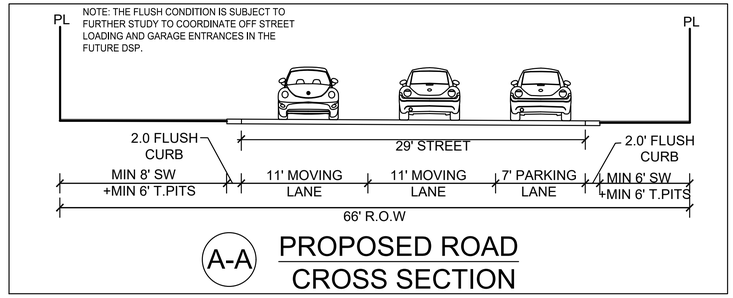
PROJECT No.:17005.004.03
DRAWING No.:112206
DATE: 10-14-2022
DESIGN: JH
DRAWN:MG
CHECKED:KW

SHEET TITLE:
SIGHT DISTANCE

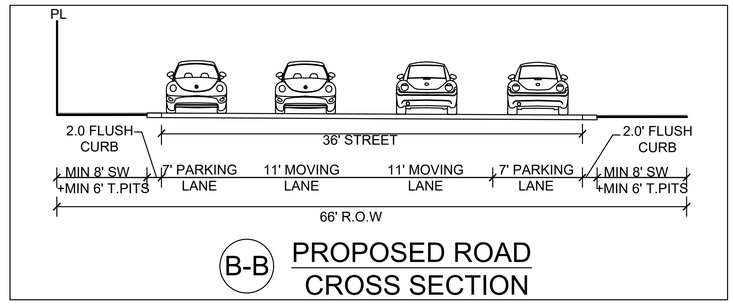
SHEET No.
C807

112206

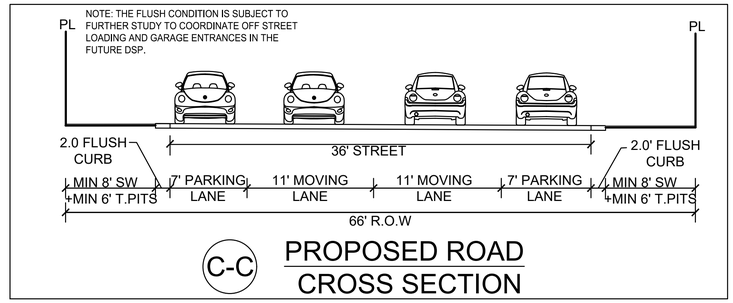




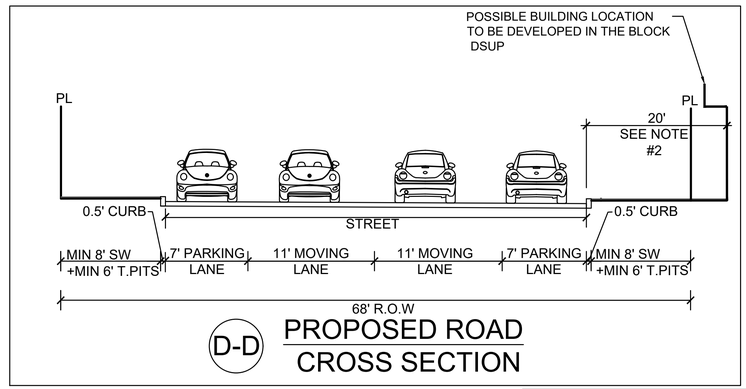
A-A PROPOSED ROAD CROSS SECTION



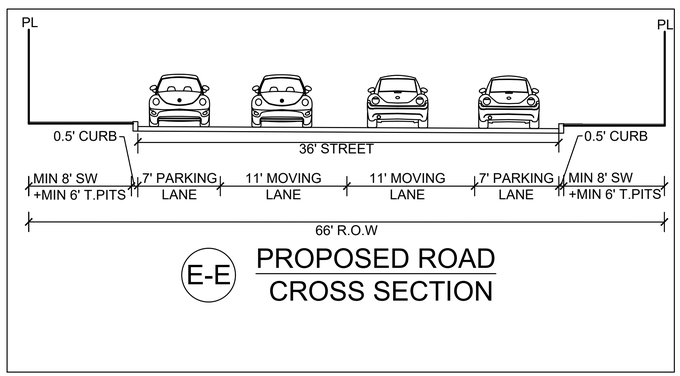
B-B PROPOSED ROAD CROSS SECTION



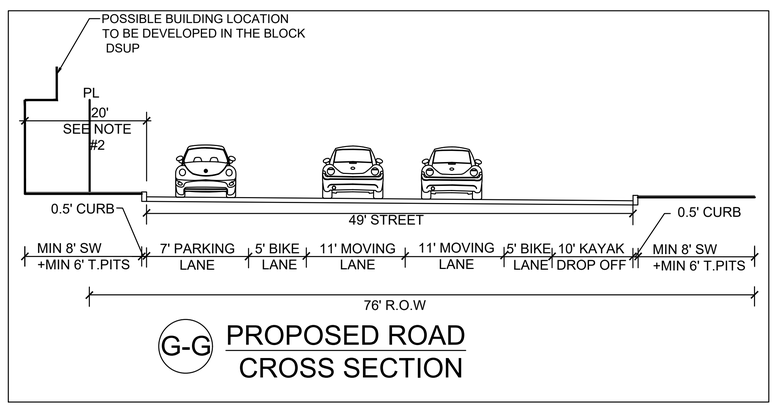
C-C PROPOSED ROAD CROSS SECTION



D-D PROPOSED ROAD CROSS SECTION



E-E PROPOSED ROAD CROSS SECTION



G-G PROPOSED ROAD CROSS SECTION

NOTES:
1. FINAL WIDTH AND CONFIGURATION OF SECTIONS WILL BE DETERMINED AS PART OF THE INFRASTRUCTURE DSP.
2. BUILDING ON BLOCK B, C, E AND F SHALL BE SET BACK 20 FEET FROM BUILDING FACE TO FACE OF CURB AT THE GROUND FLOOR WITH POSSIBLE BUILDING VARIATION AND OVERHANGS ABOVE SUBJECT TO FINAL APPROVAL WITH EACH BLOCKS DSUP.

LEGEND:

T. PITS : TREE PITS
R.O.W : RIGHT OF WAY
SW : SIDEWALK
PL : PARCEL LINE
L : LENGTH

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

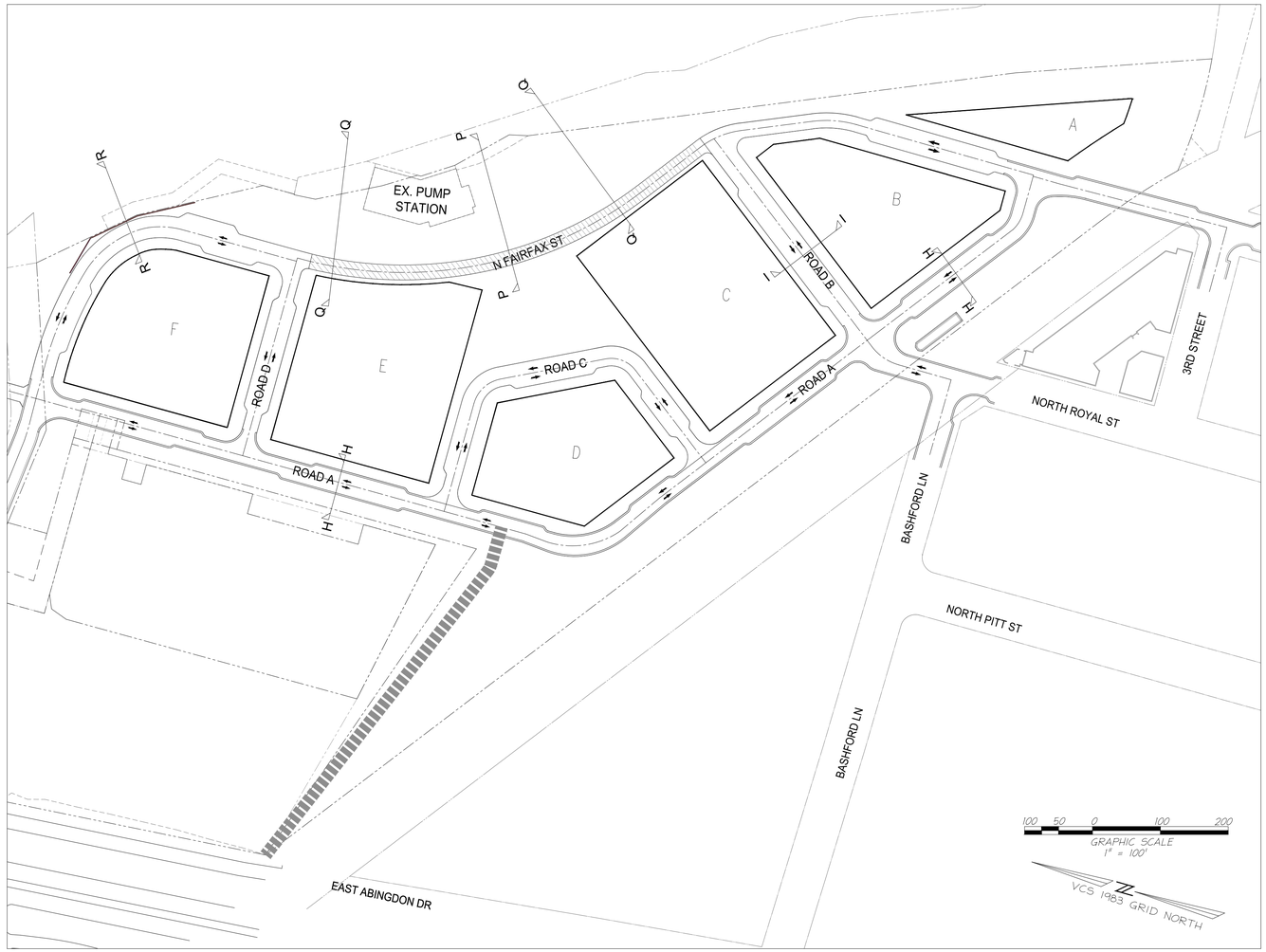
SHEET TITLE:

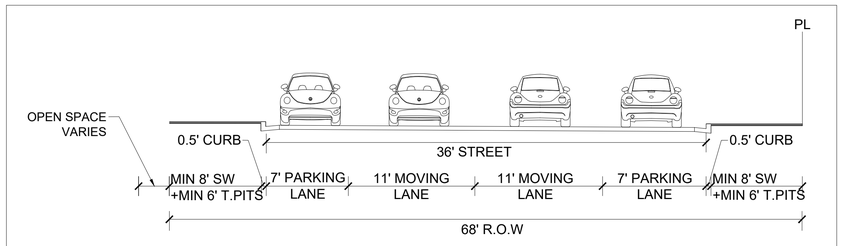
STREET CROSS-SECTIONS

SHEET No.

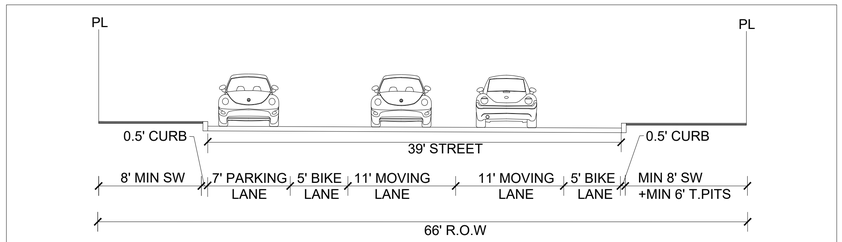
C808

112206



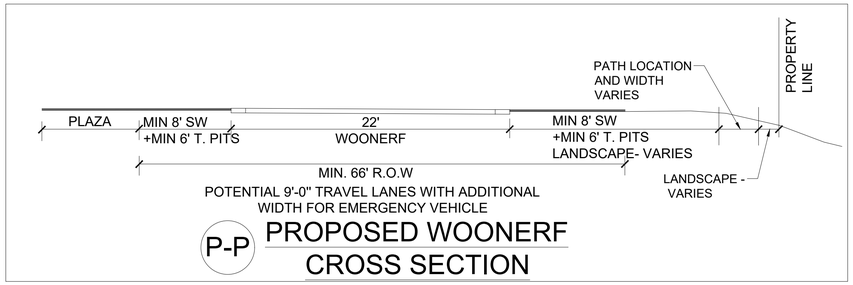


H-H PROPOSED ROAD CROSS SECTION

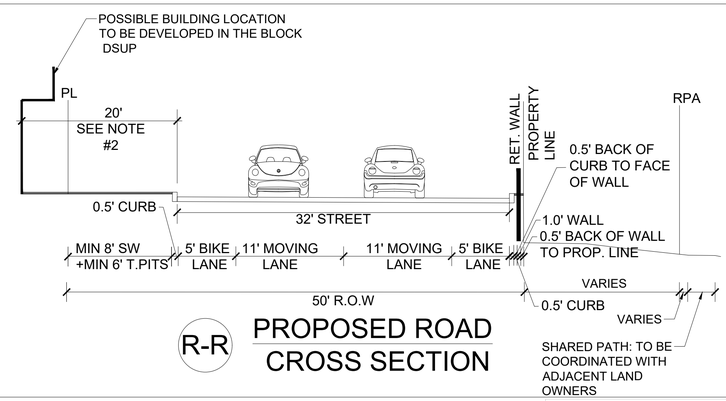


NOTE: STREET TREES WOULD FALL IN PARKING LANE ZONE AND ALTERNATE WITH PARKING TO BE FINALIZED IN BLOCK C DSUP.

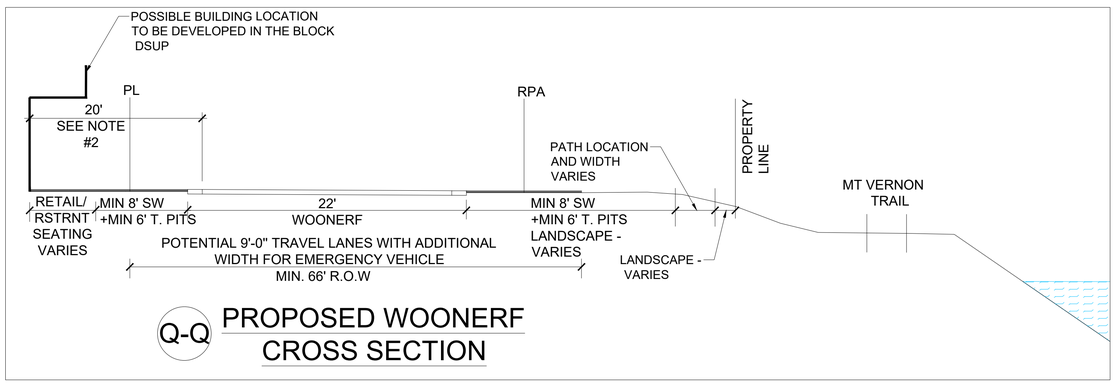
I-I PROPOSED ROAD CROSS SECTION



P-P PROPOSED WOONERF CROSS SECTION



R-R PROPOSED ROAD CROSS SECTION



Q-Q PROPOSED WOONERF CROSS SECTION

NOTES:

1. FINAL WIDTH AND CONFIGURATION OF SECTIONS WILL BE DETERMINED AS PART OF THE INFRASTRUCTURE DSP.
2. BUILDING ON BLOCK B, C, E AND F SHALL BE SET BACK 20 FEET FROM BUILDING FACE TO FACE OF CURB AT THE GROUND FLOOR WITH POSSIBLE BUILDING VARIATION AND OVERHANGS ABOVE SUBJECT TO FINAL APPROVAL WITH EACH BLOCKS DSUP.

LEGEND:

T. PITS : TREE PITS
R.O.W : RIGHT OF WAY
SW : SIDEWALK
PL : PARCEL LINE
L : LENGTH

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

christopher consultants
4035 ridge top rd suite 601 fairfax, va 22030
p 703.273.6820
engineering • surveying • land planning

COMMONWEALTH OF VIRGINIA
JOHN L. HELMS
Lic. No.52485
10/10/2023
PROFESSIONAL ENGINEER

PRGS - REDEVELOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.: 17005.004.03
DRAWING No.: 112206
DATE: 10-14-2022
DESIGN: JH
DRAWN: MG
CHECKED: KW

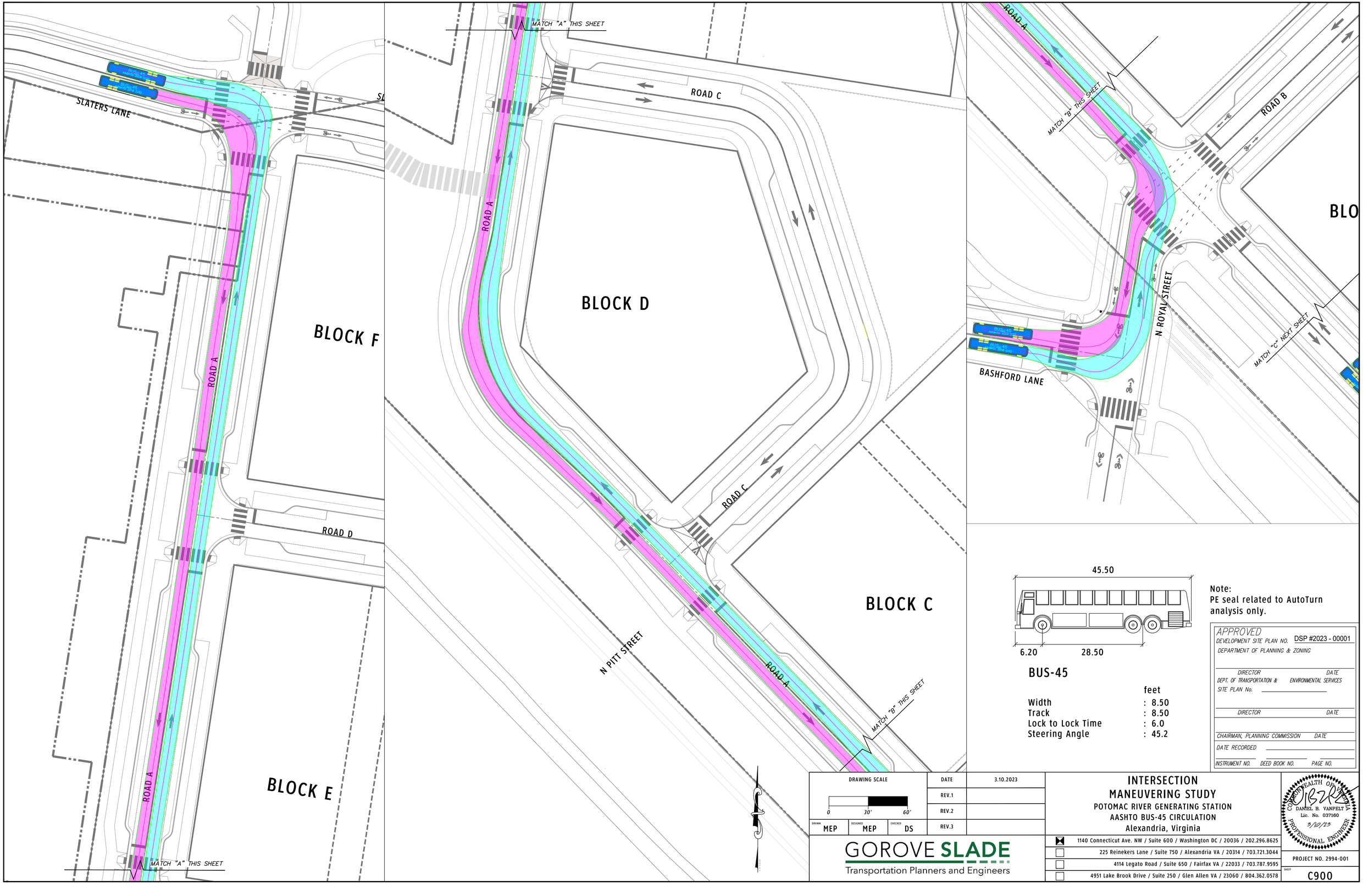
SHEET TITLE:

STREET CROSS-SECTIONS

SHEET No.

C809

112206



BUS-45

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 45.2

Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

DRAWING SCALE
0 30' 60'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION
AASHTO BUS-45 CIRCULATION
Alexandria, Virginia

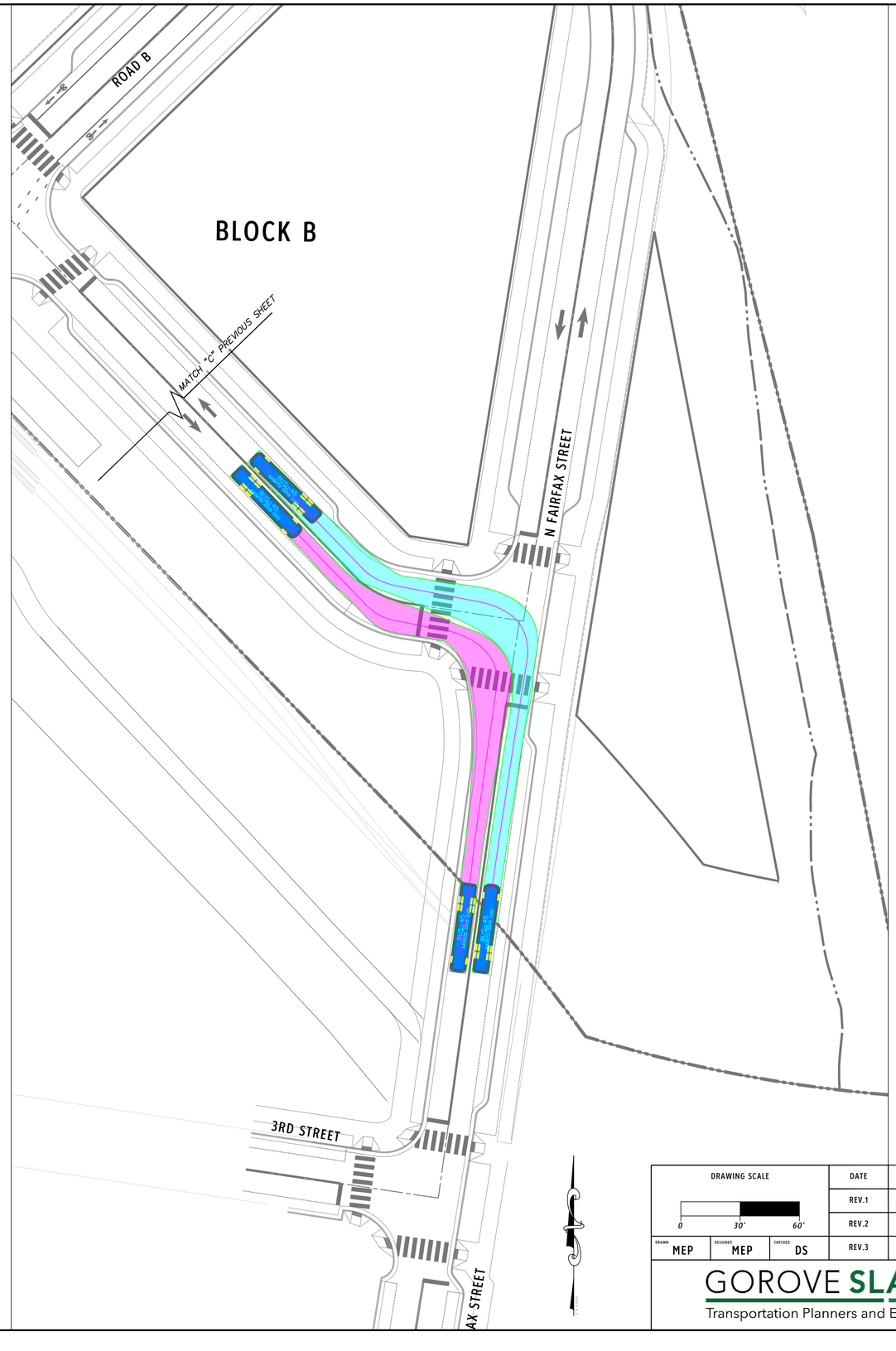
COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

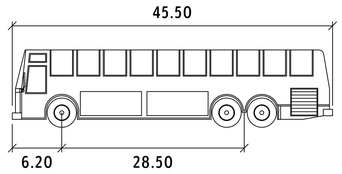
GOROVE SLADE
Transportation Planners and Engineers

1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

PROJECT NO. 2994-001

SHEET C900





BUS-45

	feet
Width	: 8.50
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 45.2

Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

DRAWING SCALE
0 30' 60'

DRAWN MEP | DESIGNED MEP | CHECKED DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION
AASHTO BUS-45 CIRCULATION
Alexandria, Virginia

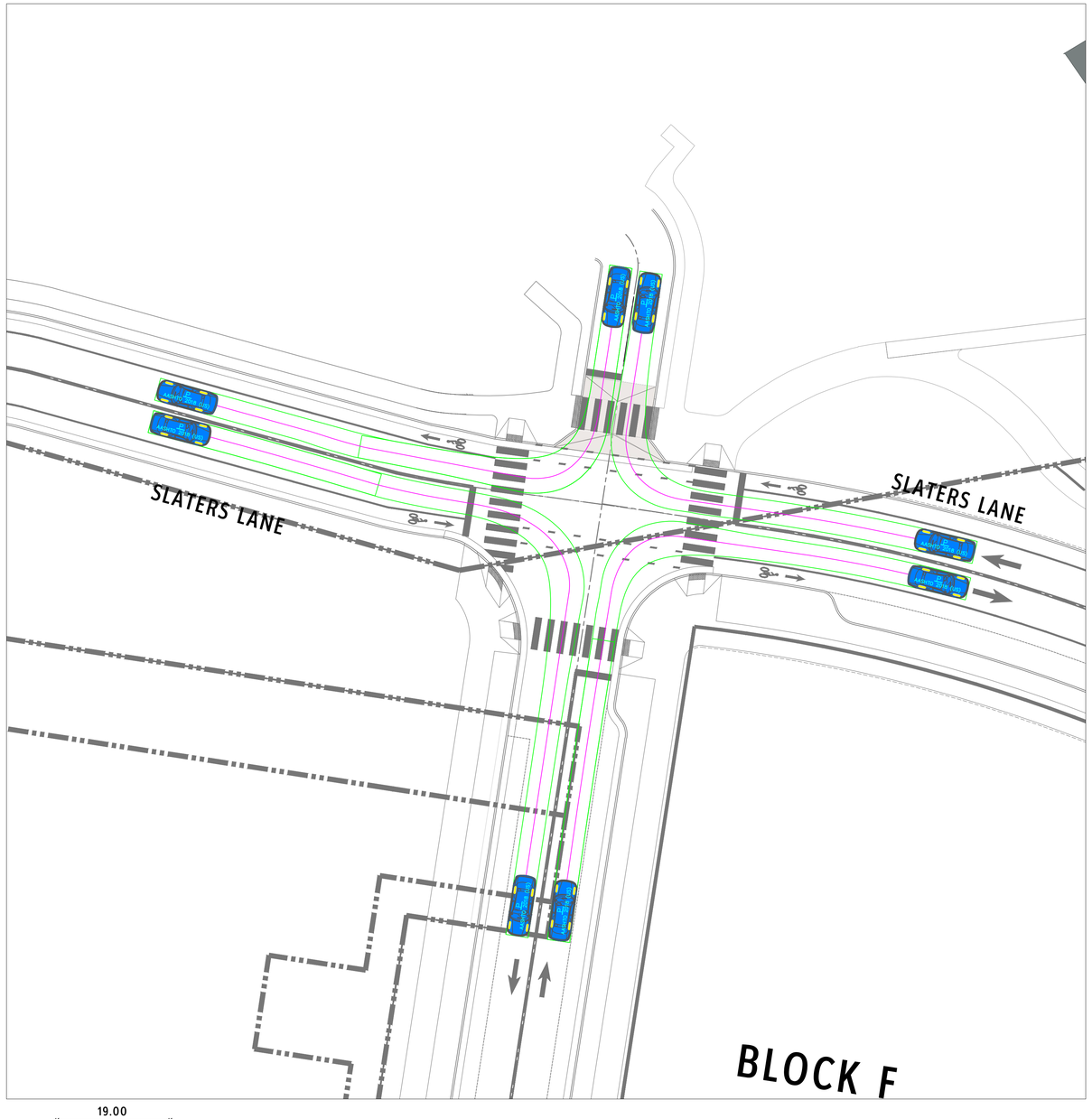
COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

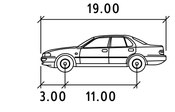
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

PROJECT NO. 2994-001

SHEET C901

SLATERS LANE INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE

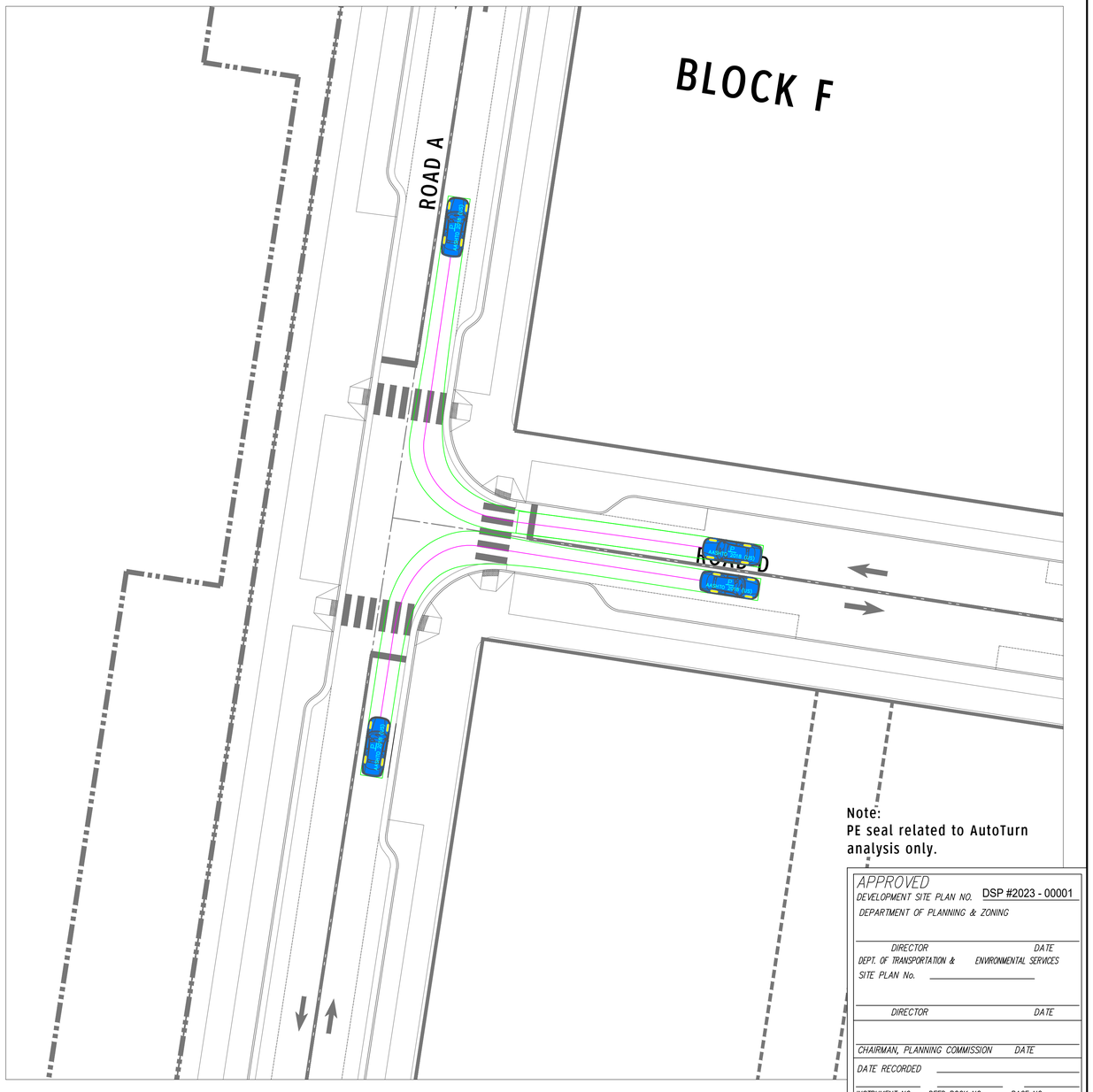




P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

DRAWING SCALE 0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

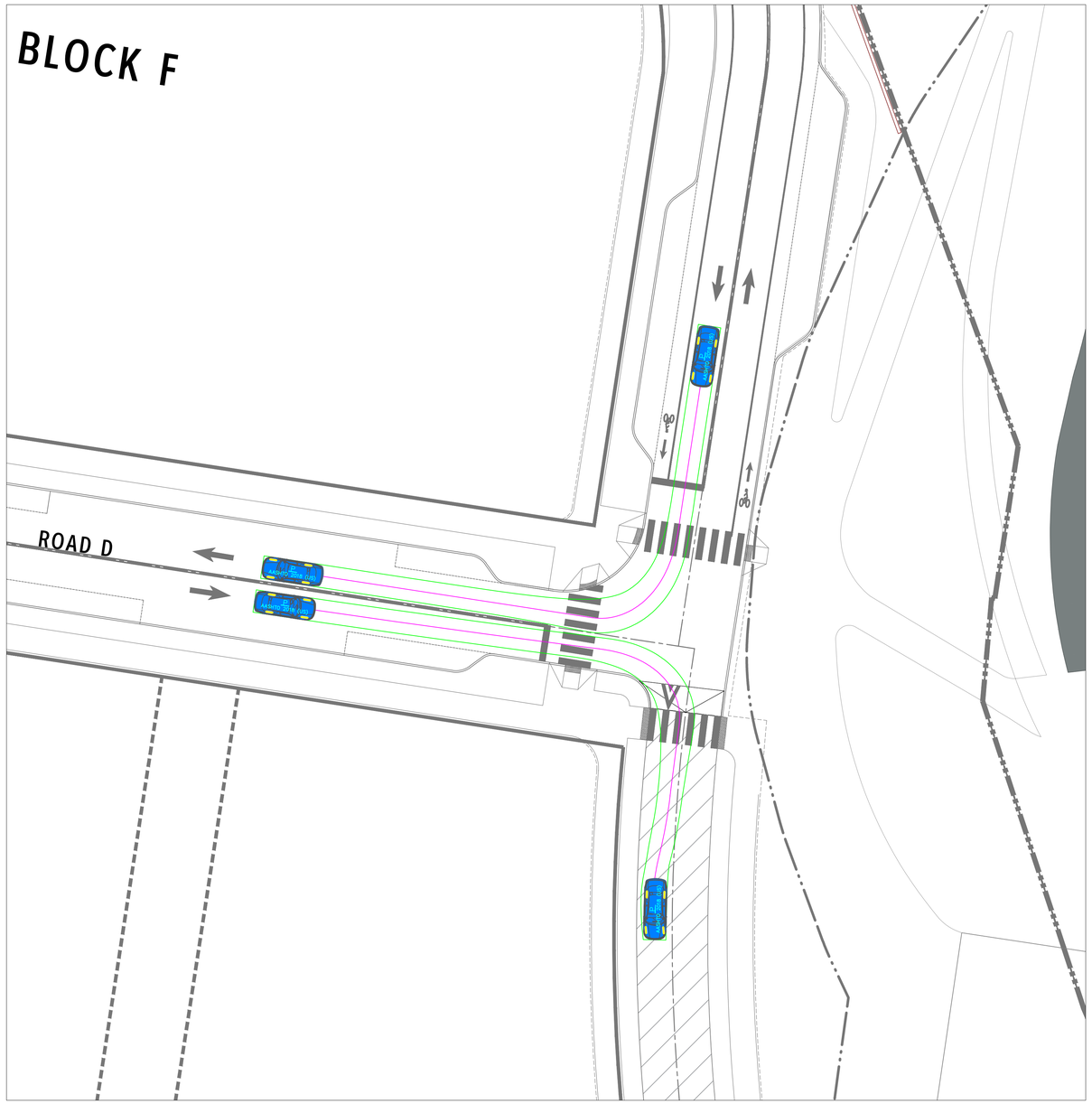
Alexandria, Virginia

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

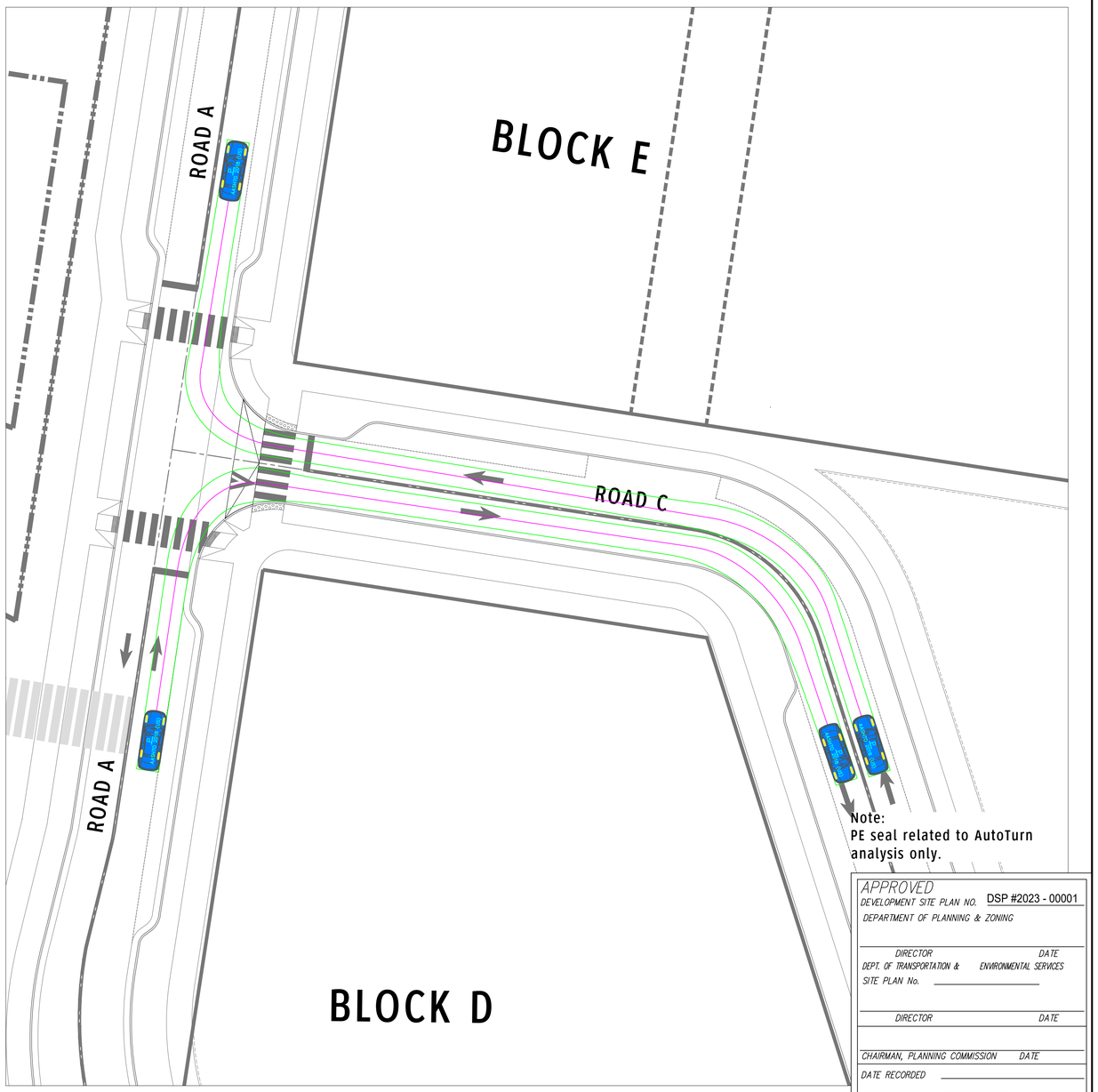
PROJECT NO. 2994-001

SHEET C902

INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



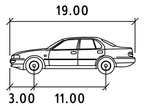
Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

	DATE	3.10.2023
	REV.1	
	REV.2	
	REV.3	

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

GOROVE SLADE
Transportation Planners and Engineers

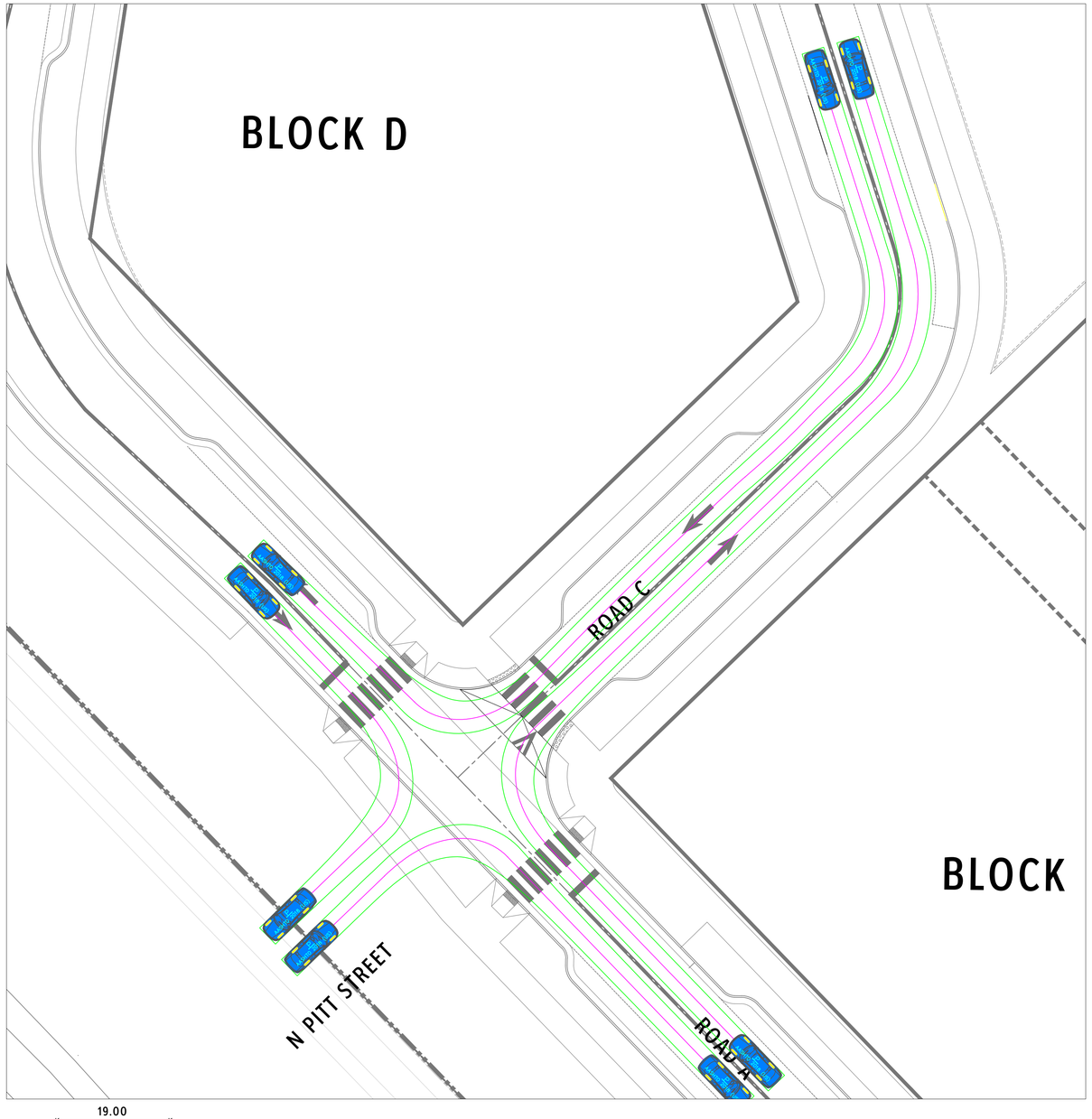
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

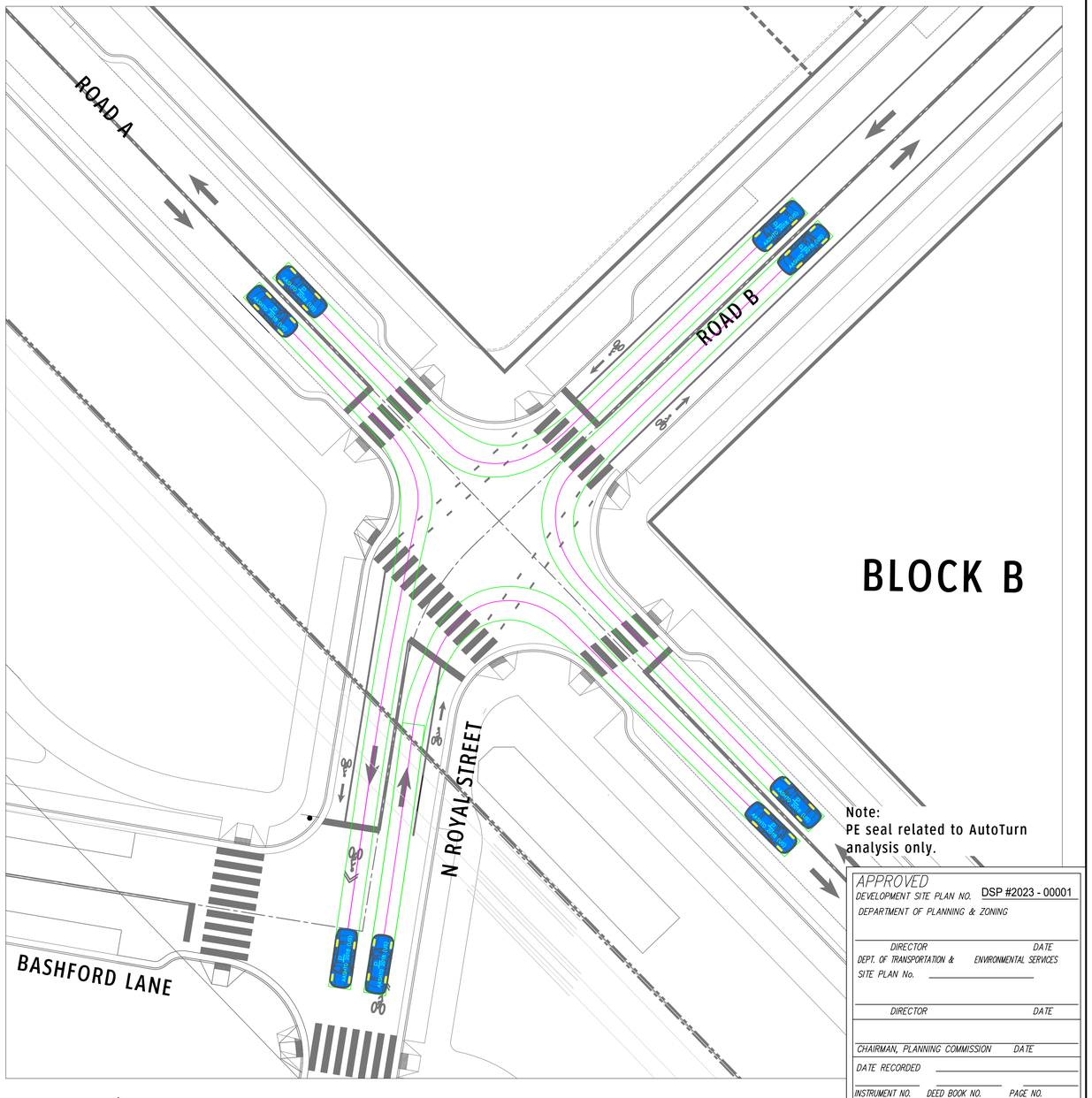
PROJECT NO. 2994-001

SHEET
C903

N PITT STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



N ROYAL STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

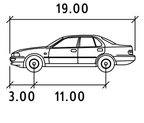
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

DRAWING SCALE
0 20' 40'

DRAWN MEP | DESIGNED MEP | CHECKED DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

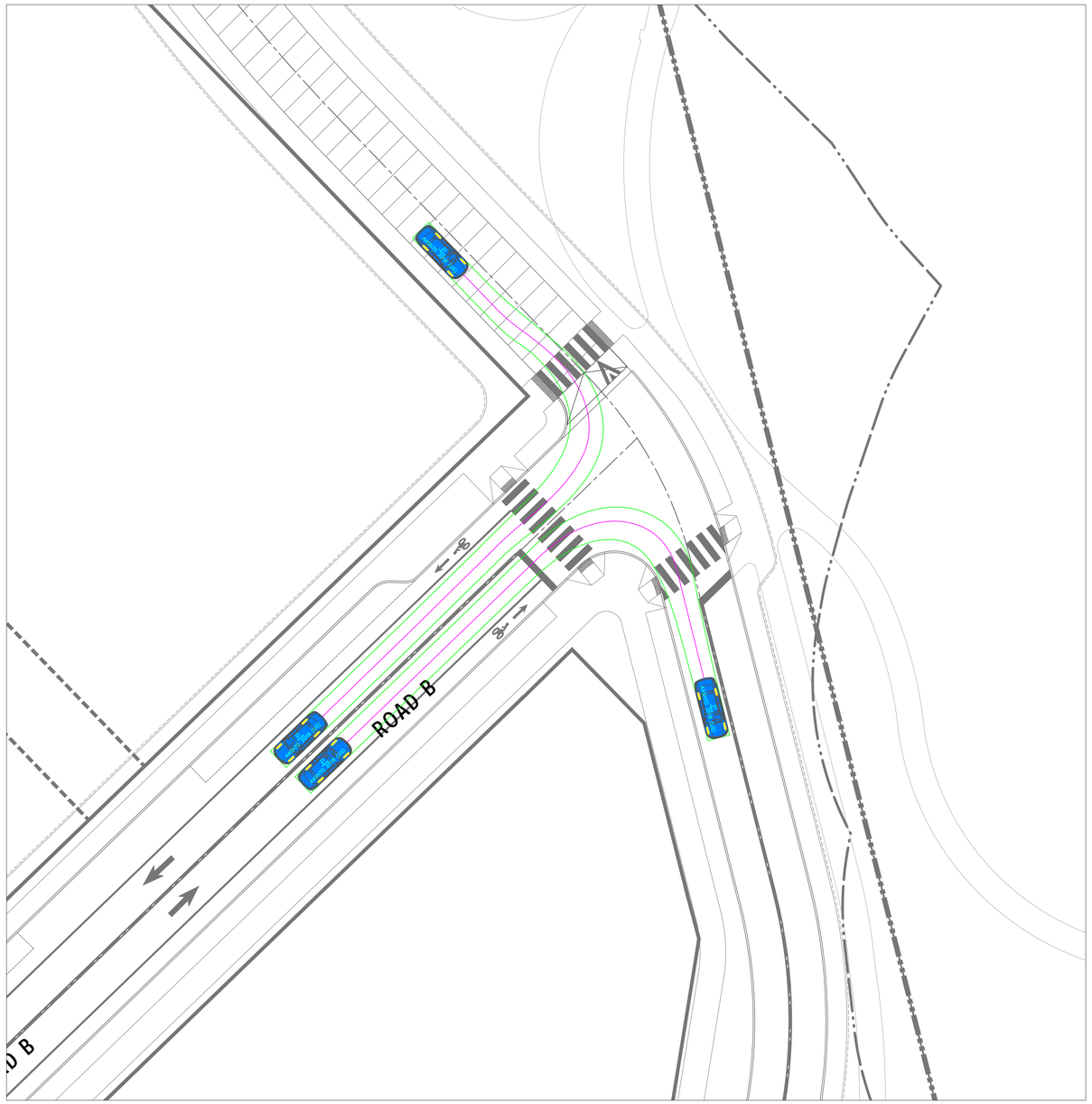
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

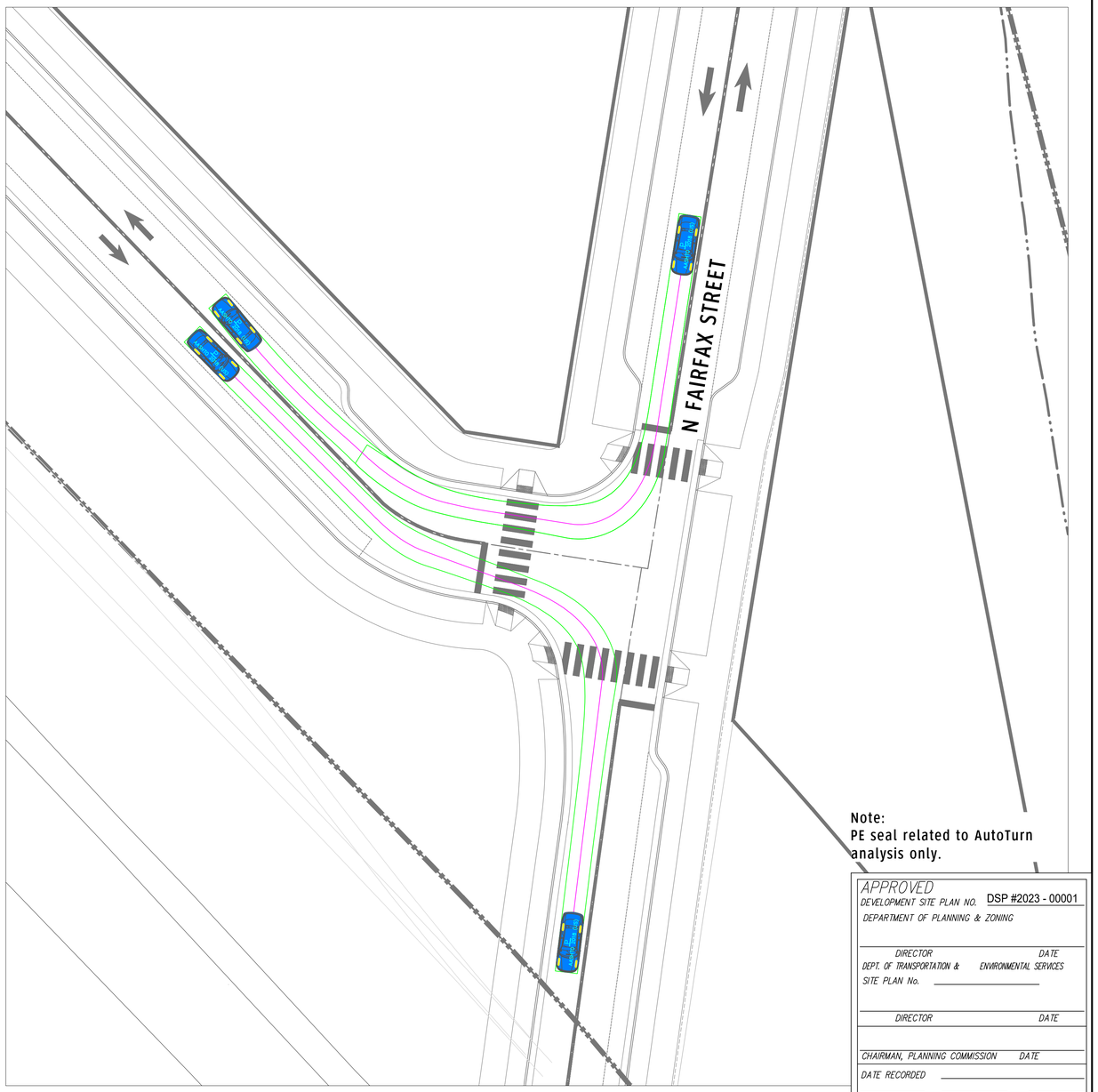
PROJECT NO. 2994-001

SHEET C904

INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



N FAIRFAX STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



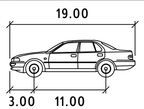
Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

DRAWING SCALE
0 20' 40'

DRAWN MEP | DESIGNED MEP | CHECKED DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

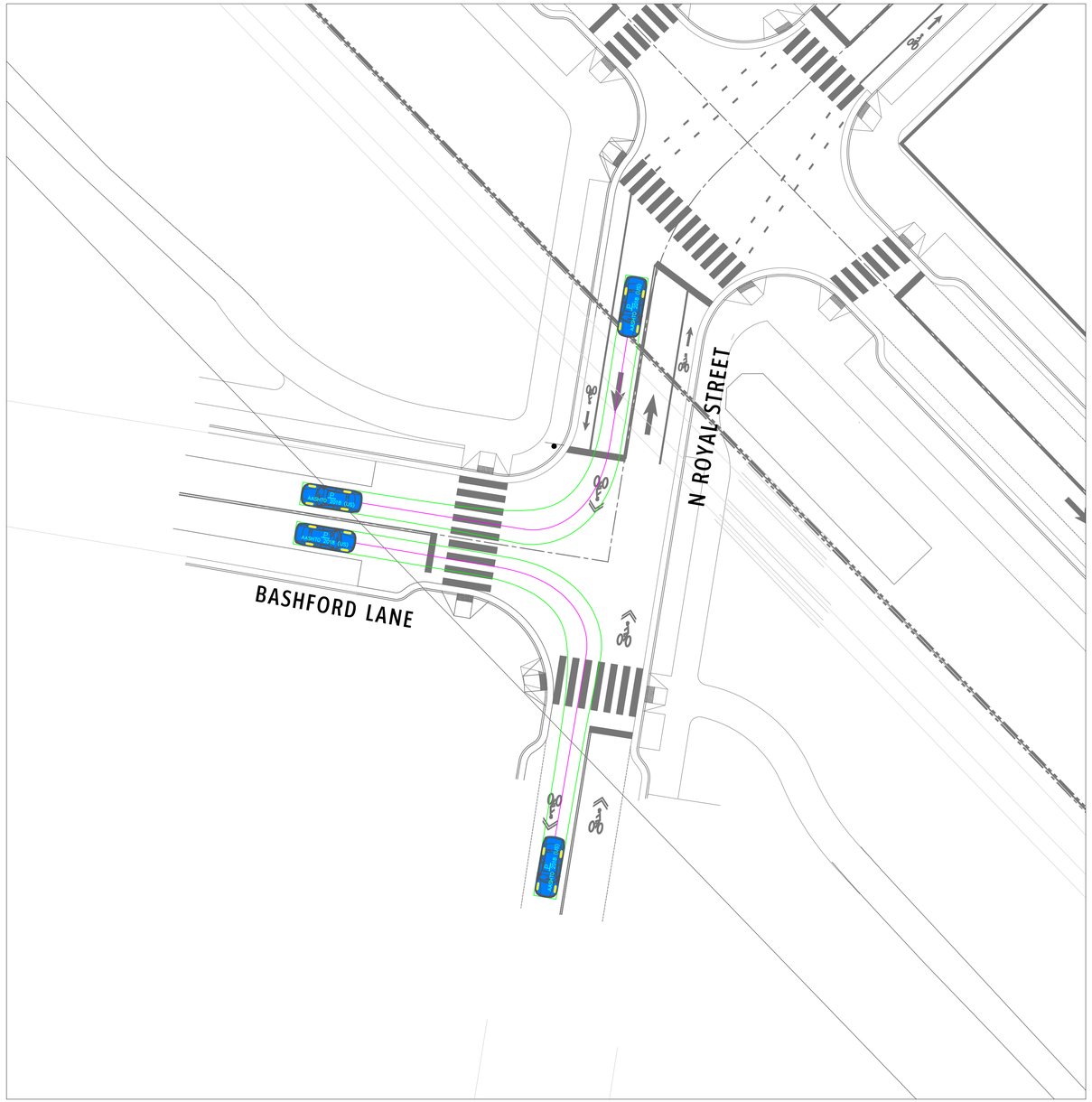
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

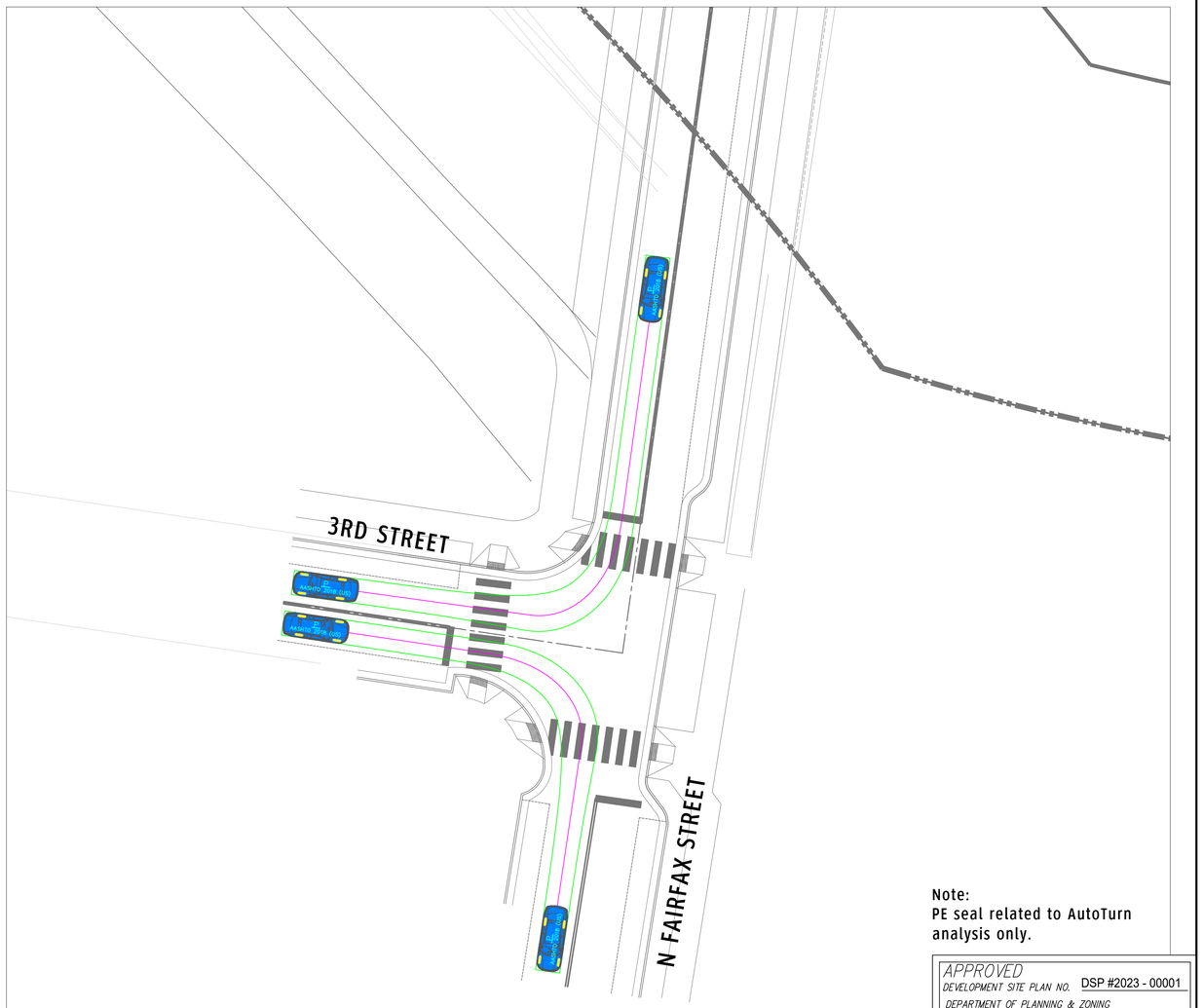
PROJECT NO. 2994-001

SHEET C905

N ROYAL STREET & BASHFORD LANE INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



N FAIRFAX STREET & 3RD STREET INTERSECTION
INTERSECTION MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO P VEHICLE



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

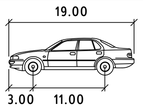
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



P

	feet
Width	: 7.00
Track	: 6.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.6

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

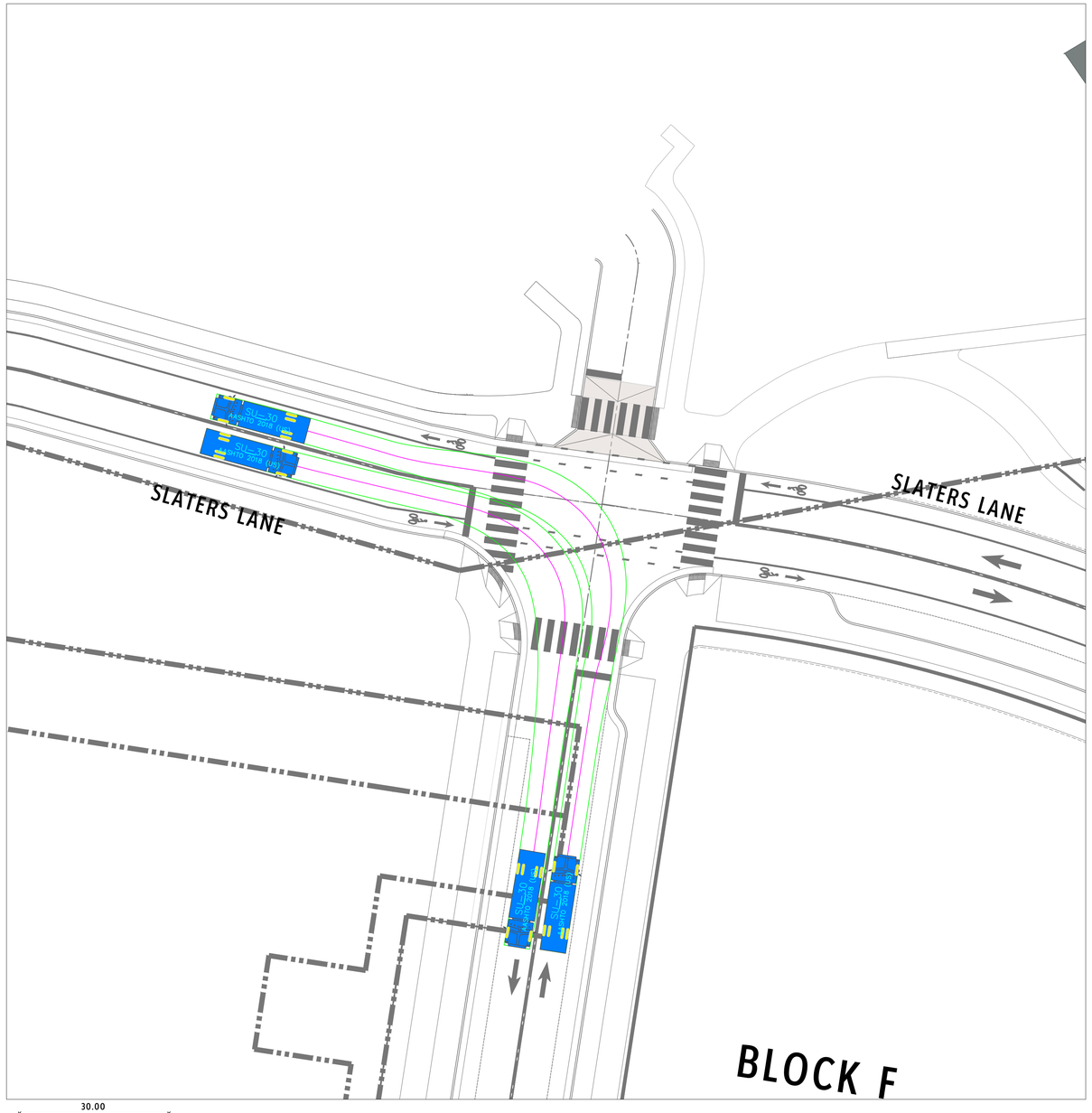
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

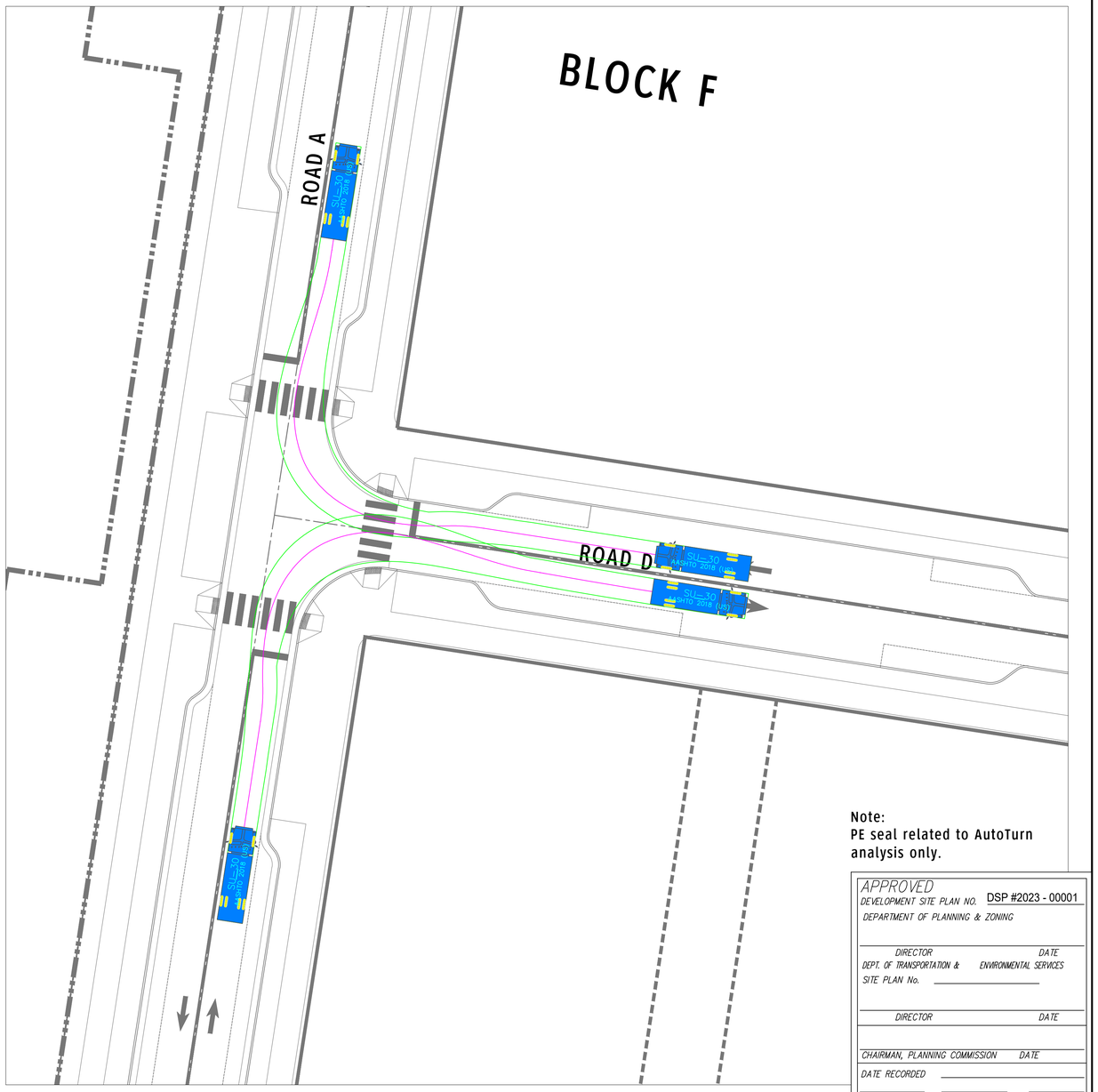
PROJECT NO. 2994-001

SHEET C906

SLATERS LANE INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



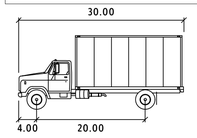
Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

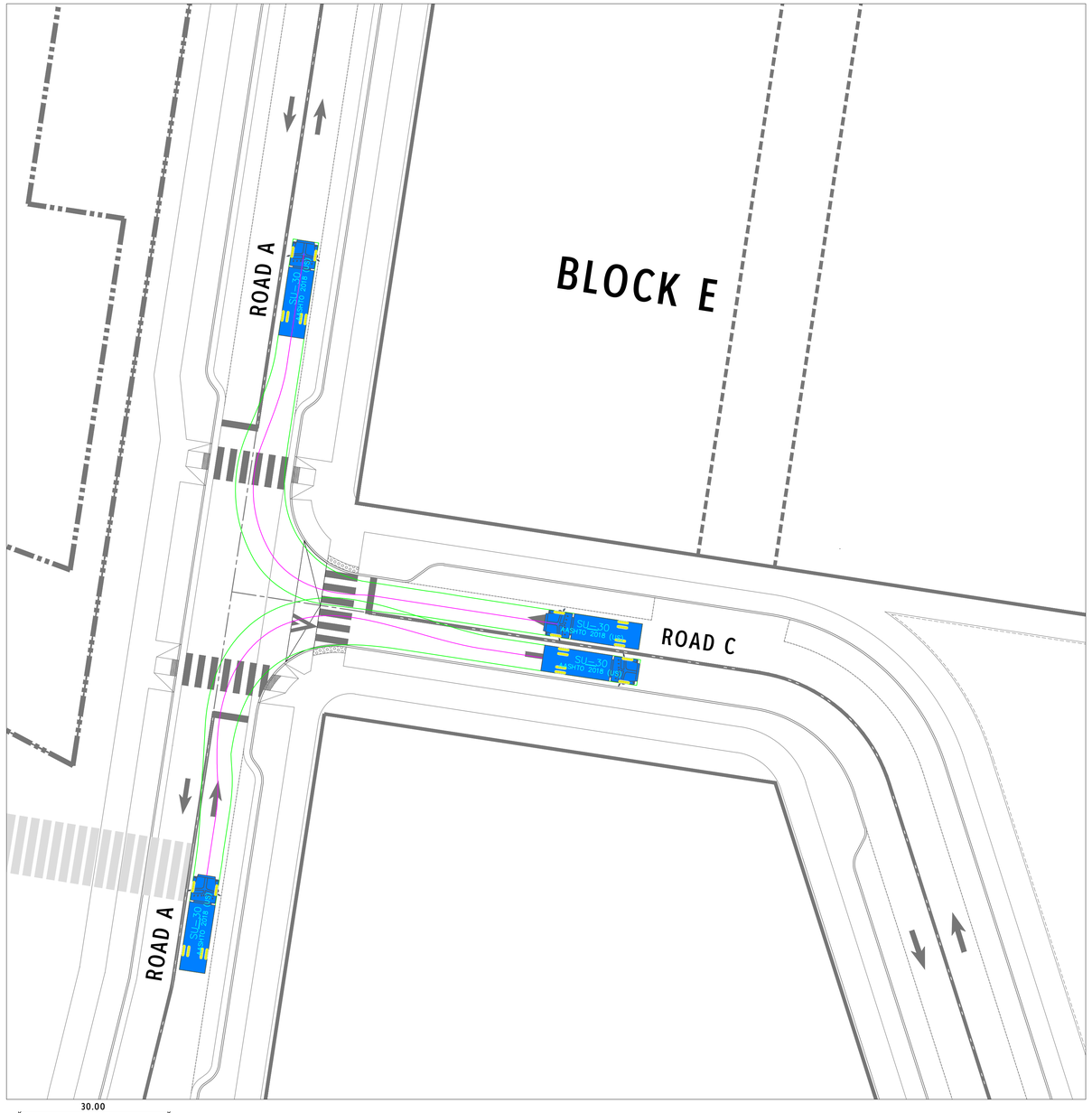
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
5/10/23

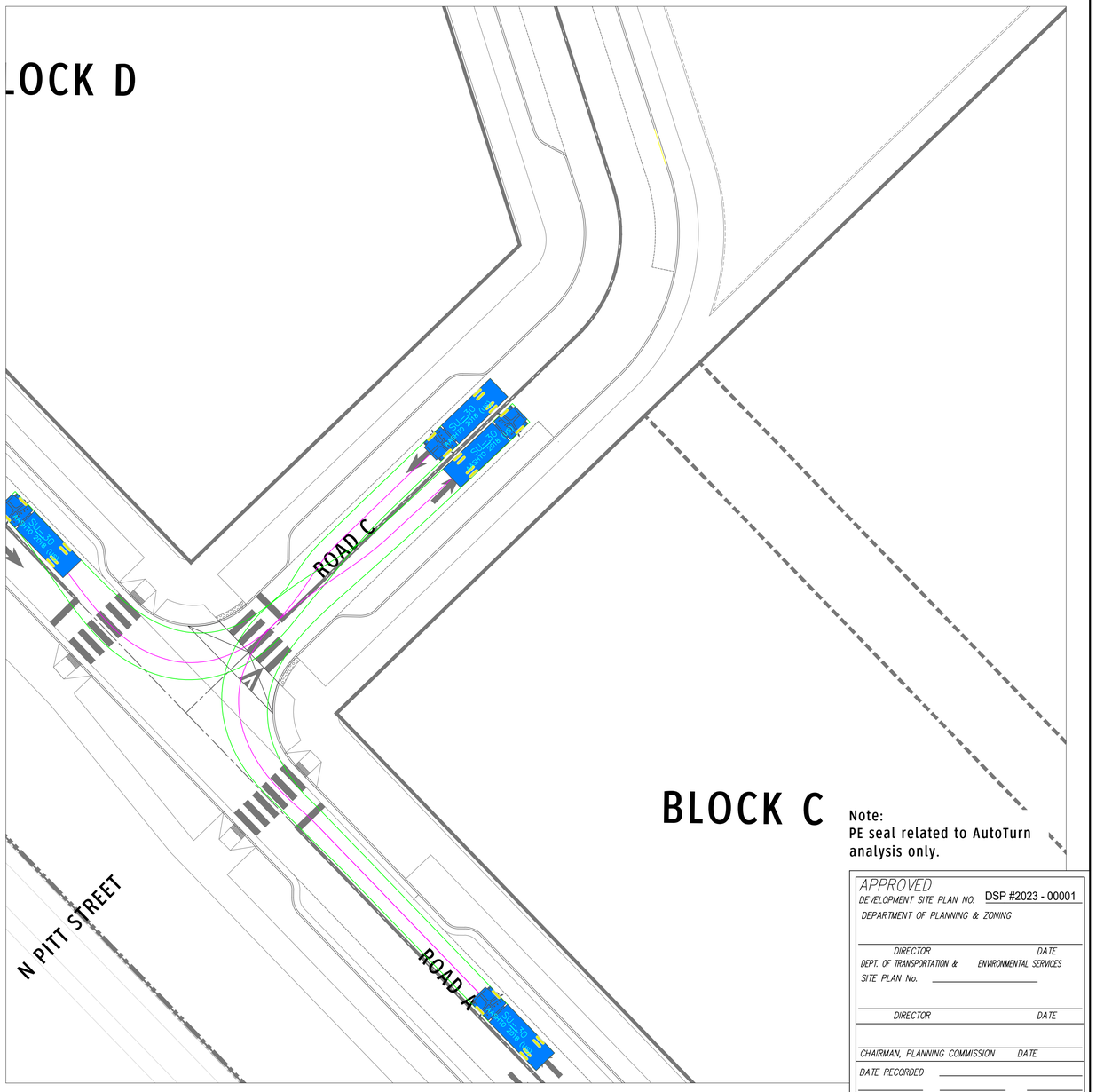
PROJECT NO. 2994-001

SHEET C907

INTERNAL INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



N PITT STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

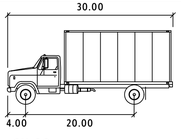
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

DRAWING SCALE			DATE	3.10.2023
0 20' 40'			REV.1	
DRAWN MEP	DESIGNED MEP	CHECKED DS	REV.2	
			REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION
MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

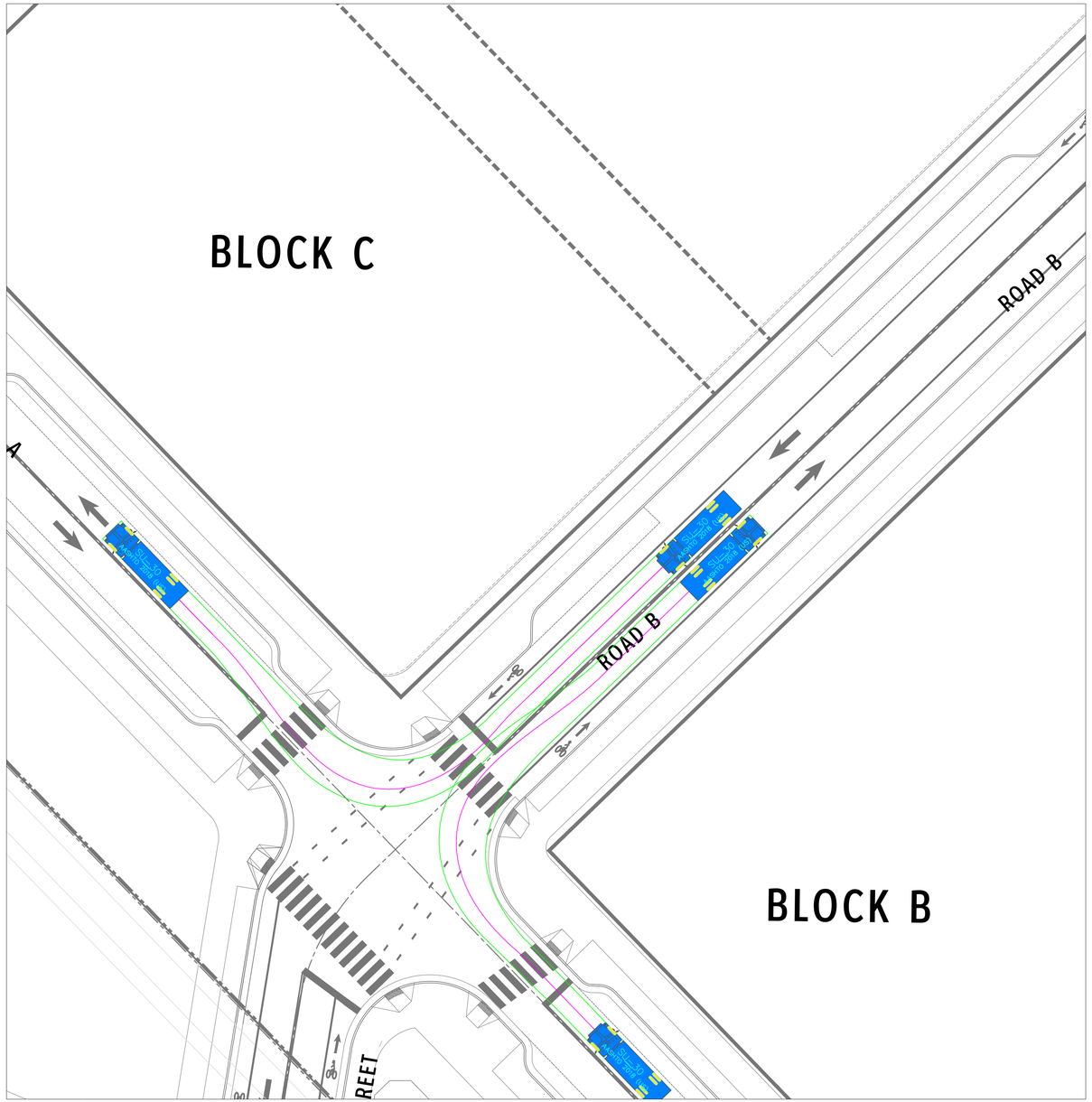
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

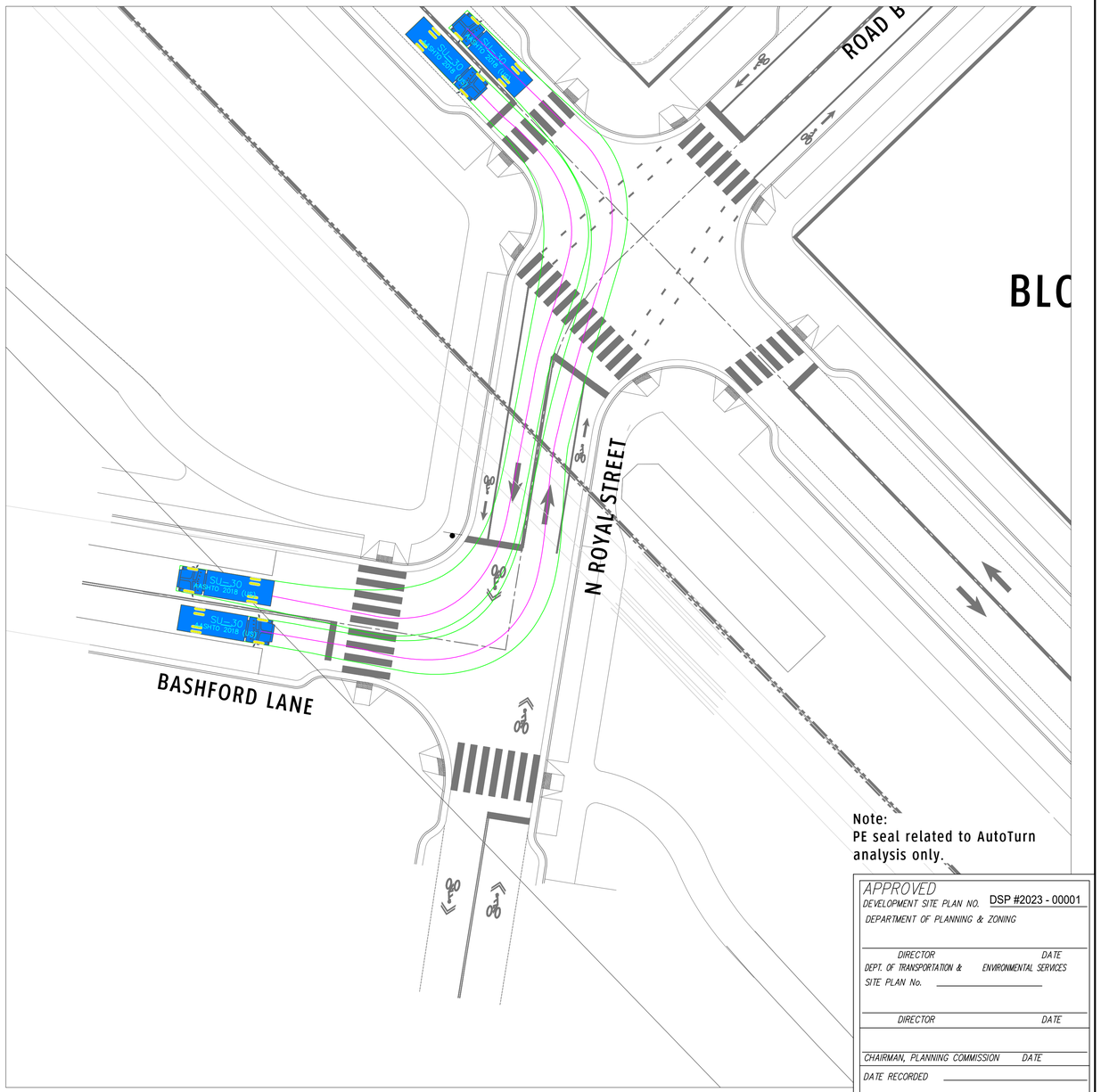
PROJECT NO. 2994-001

SHEET C908

N ROYAL STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



N ROYAL STREET & BASHFORD LANE INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

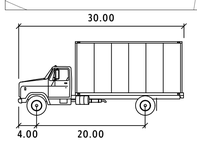
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

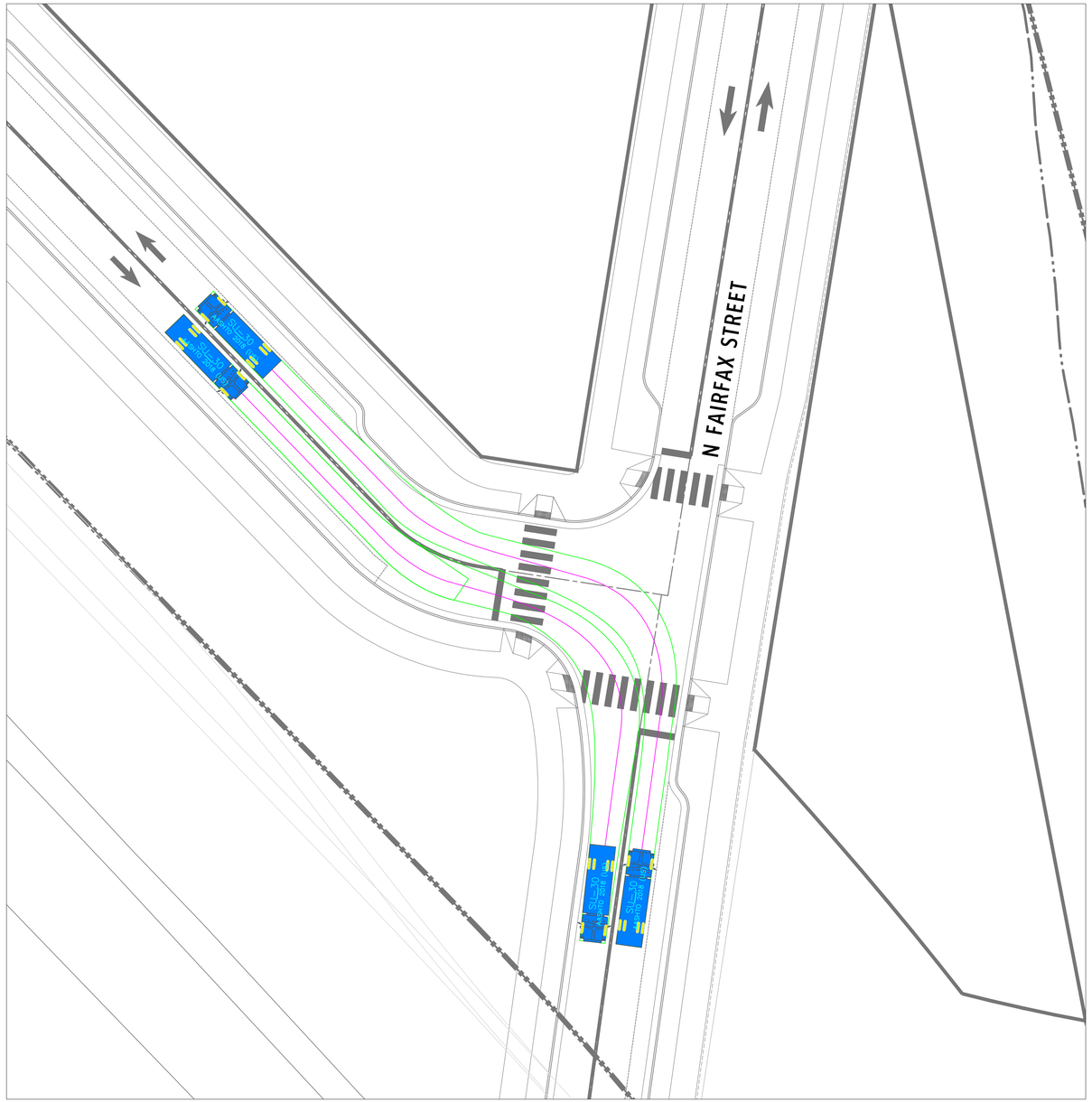
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

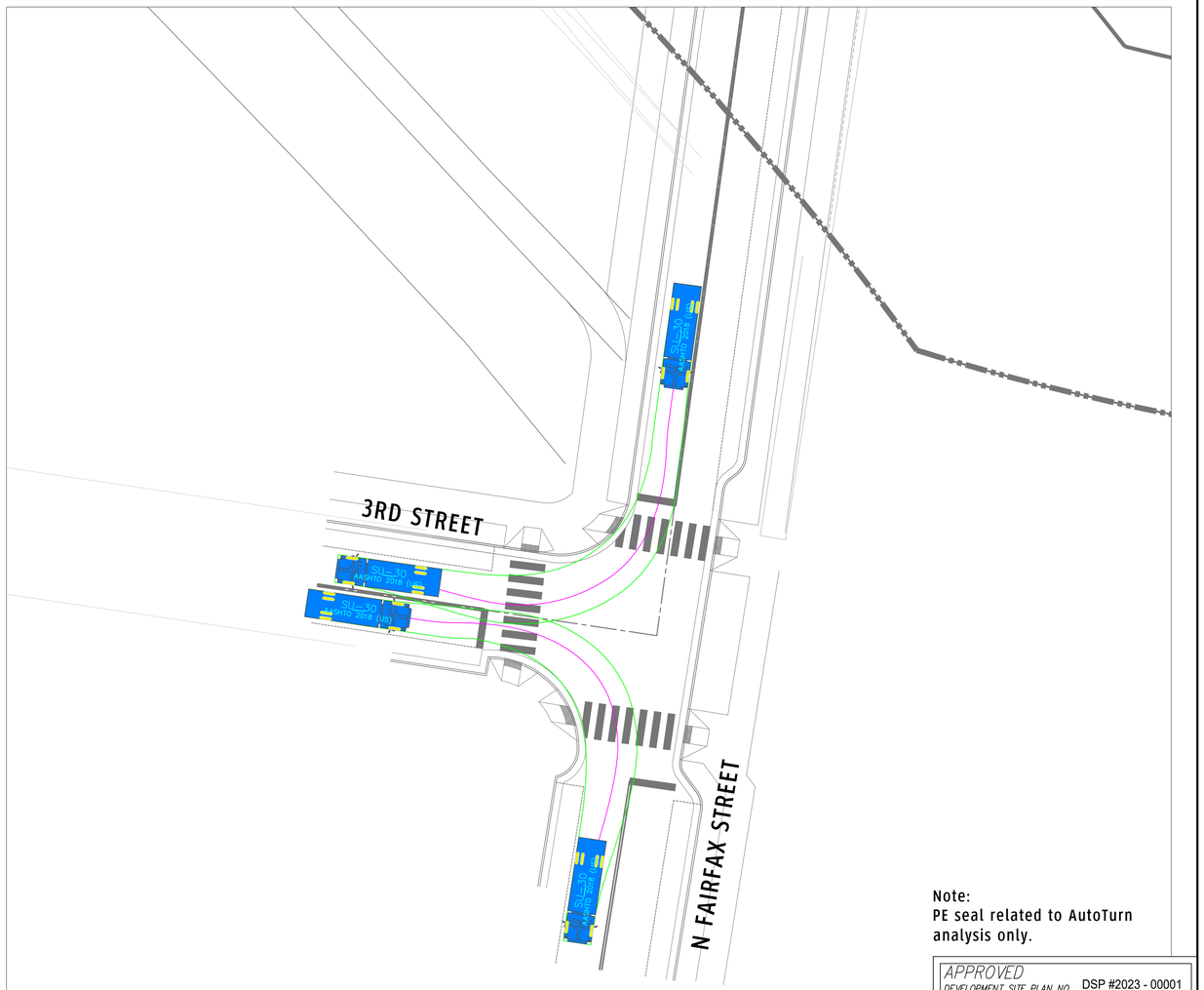
PROJECT NO. 2994-001

SHEET C909

N FAIRFAX STREET INTERSECTION
MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



N FAIRFAX STREET & 3RD STREET
INTERSECTION MANEUVERING DETAIL
DESIGN VEHICLE: AASHTO SU-30



Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

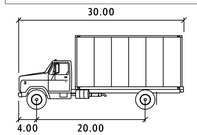
DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____



SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION

Alexandria, Virginia

GOROVE SLADE
Transportation Planners and Engineers

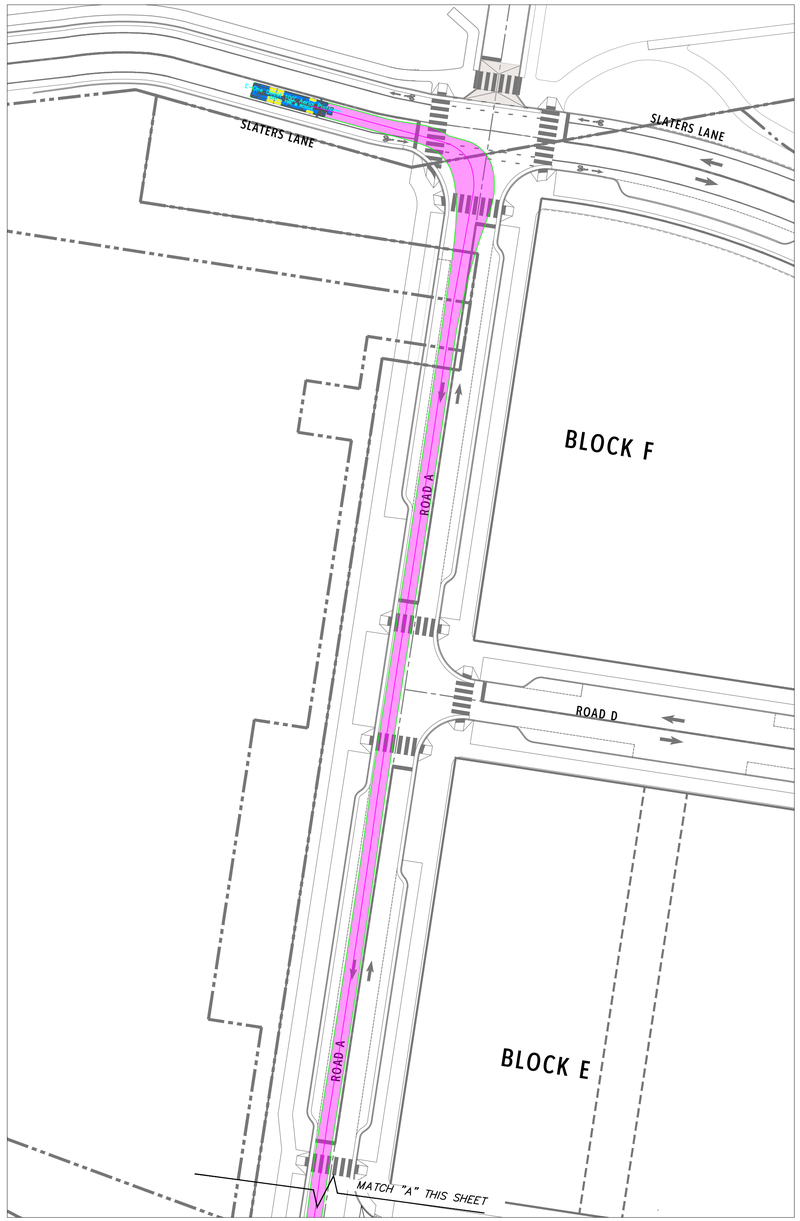
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
PROFESSIONAL ENGINEER
3/10/23

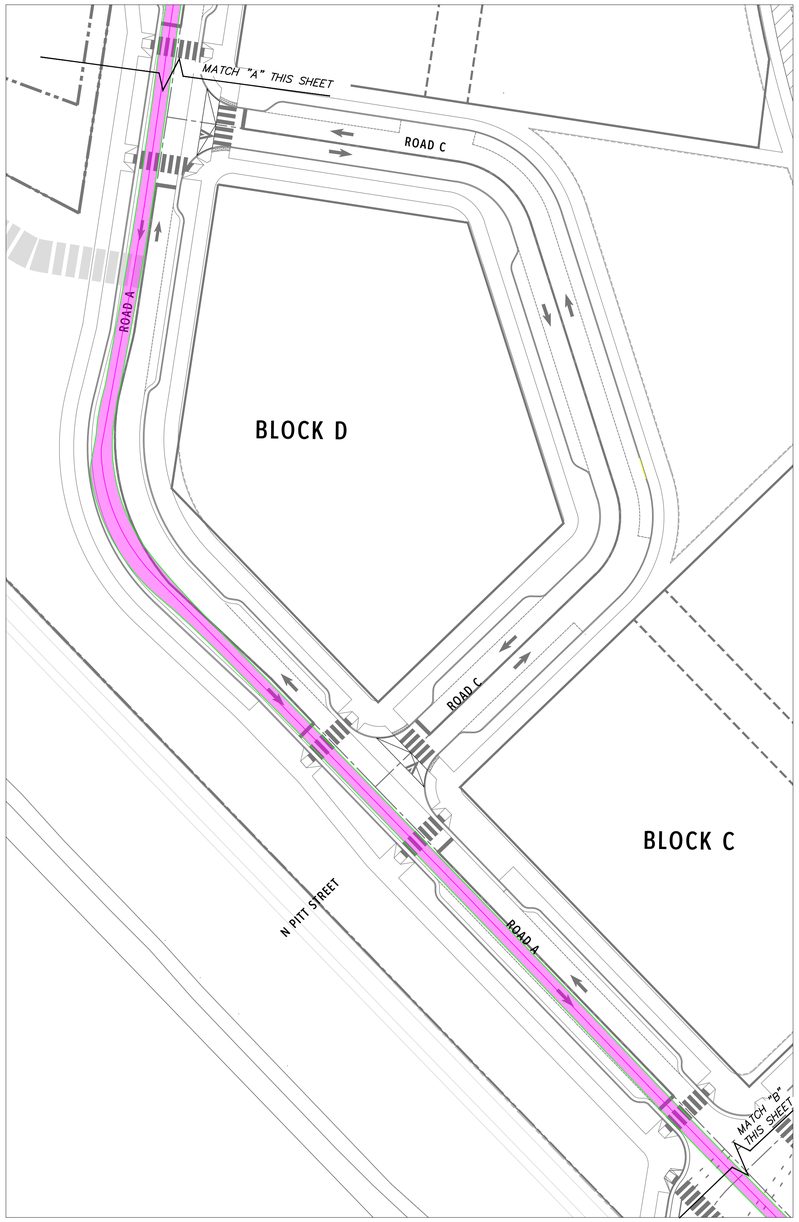
PROJECT NO. 2994-001

SHEET C910

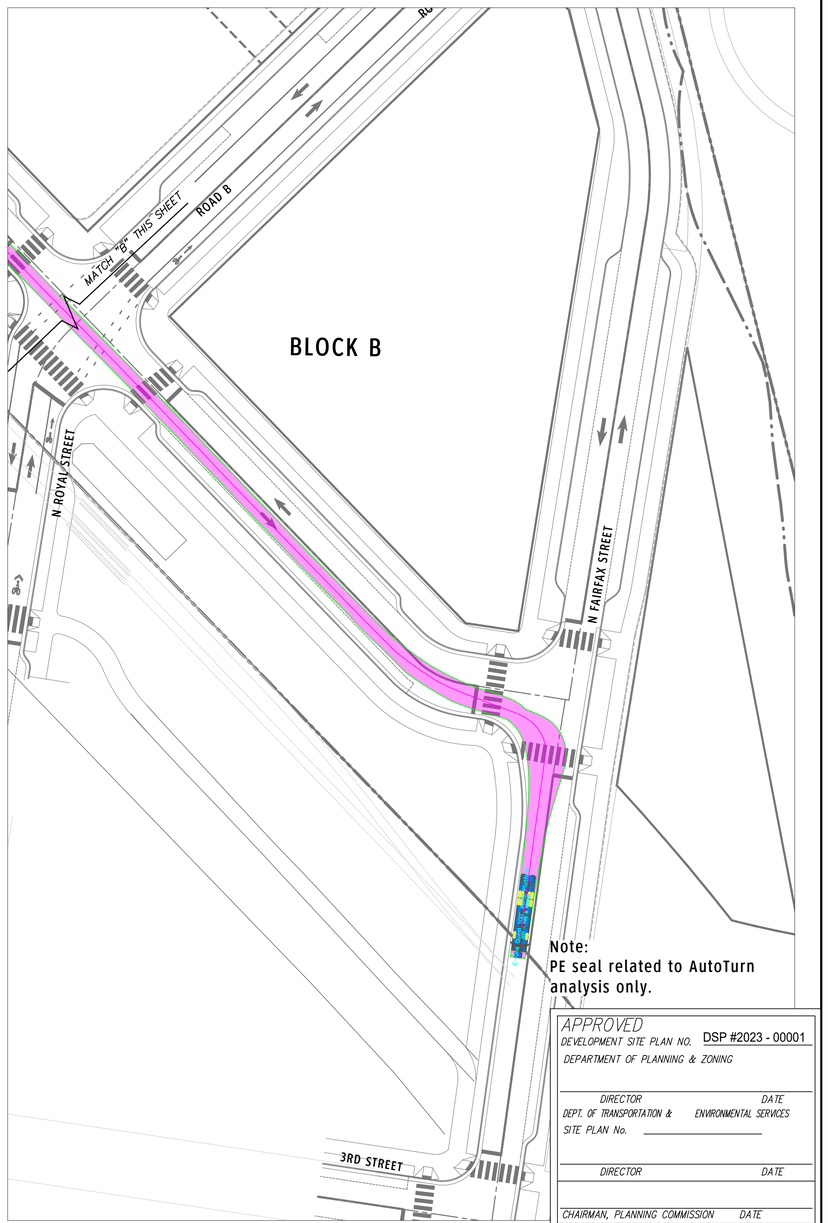
ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



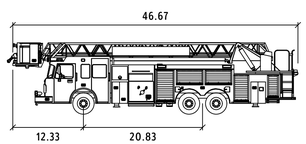
Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



E-One Quest 100' Aerial Platform

feet

Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 38.3

DRAWING SCALE
0 40' 80'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

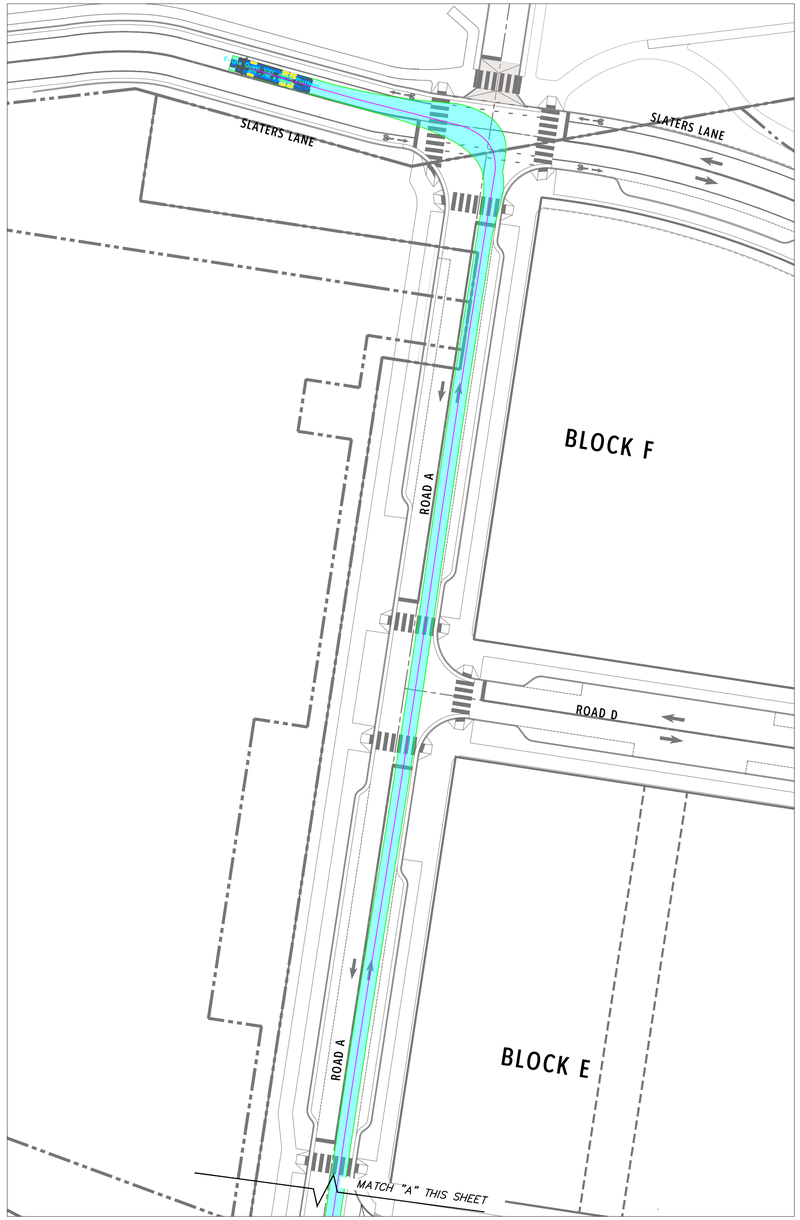
1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

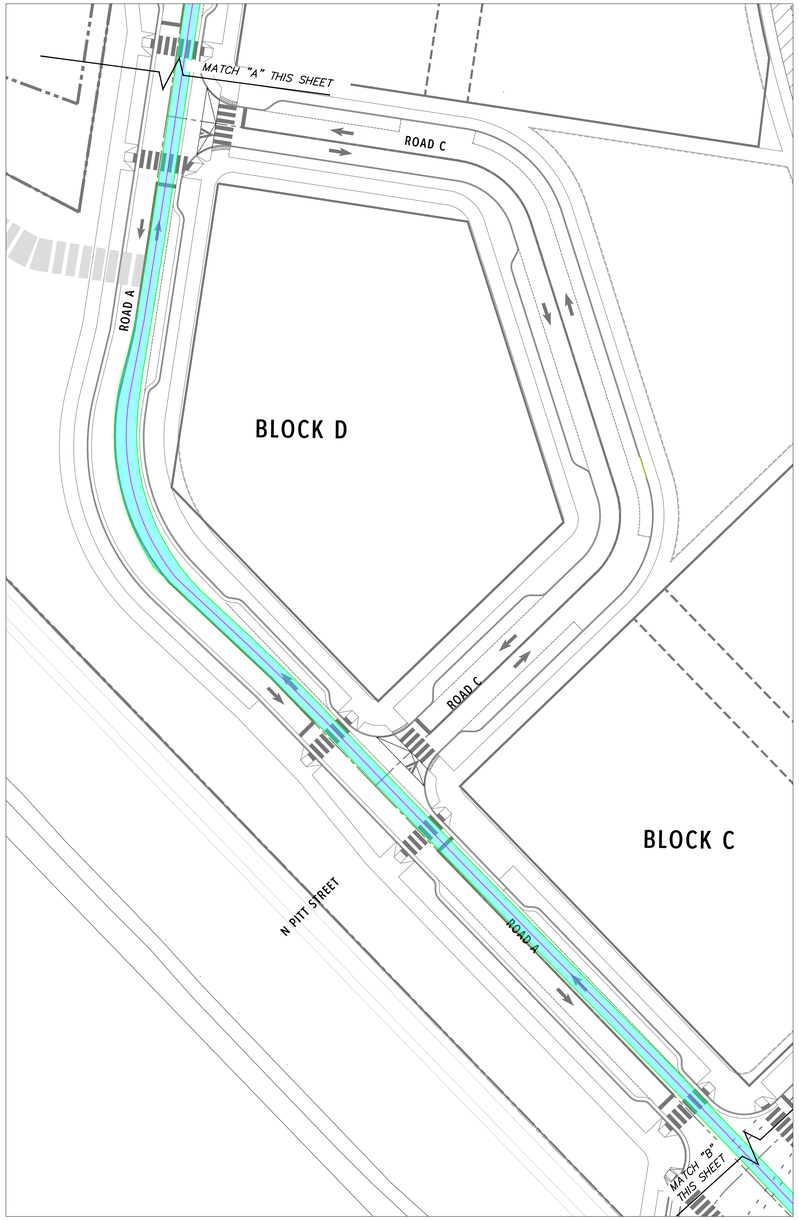
PROJECT NO. 2994-001

SHEET C911

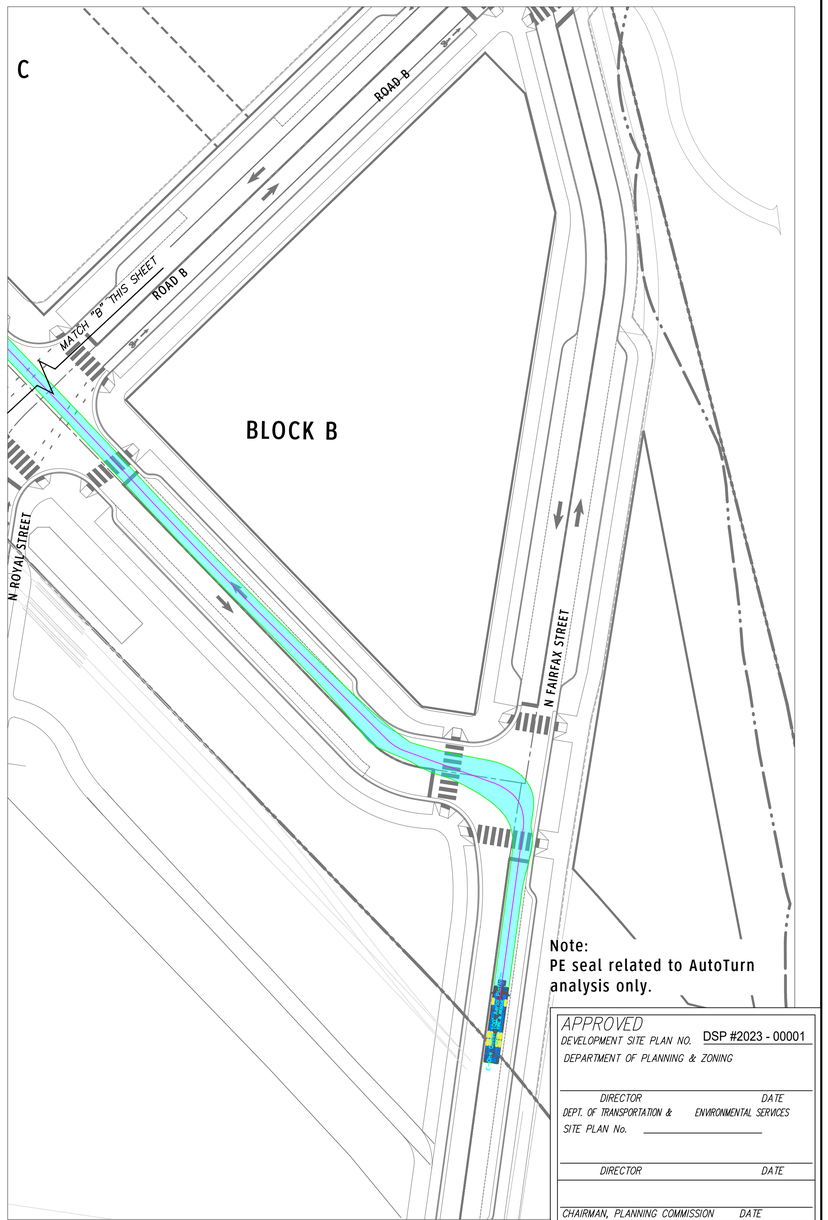
ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



ROAD A
MANEUVERING DETAIL
DESIGN VEHICLE: FIRE TRUCK



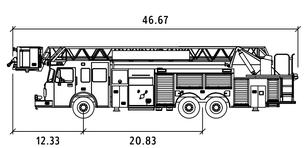
Note:
PE seal related to AutoTurn analysis only.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.



E-One Quest 100' Aerial Platform

	feet
Width	: 8.33
Track	: 8.33
Lock to Lock Time	: 6.0
Steering Angle	: 38.3

DRAWING SCALE
0 20' 40'

DRAWN	DESIGNED	CHECKED
MEP	MEP	DS

DATE	3.10.2023
REV.1	
REV.2	
REV.3	

GOROVE SLADE
Transportation Planners and Engineers

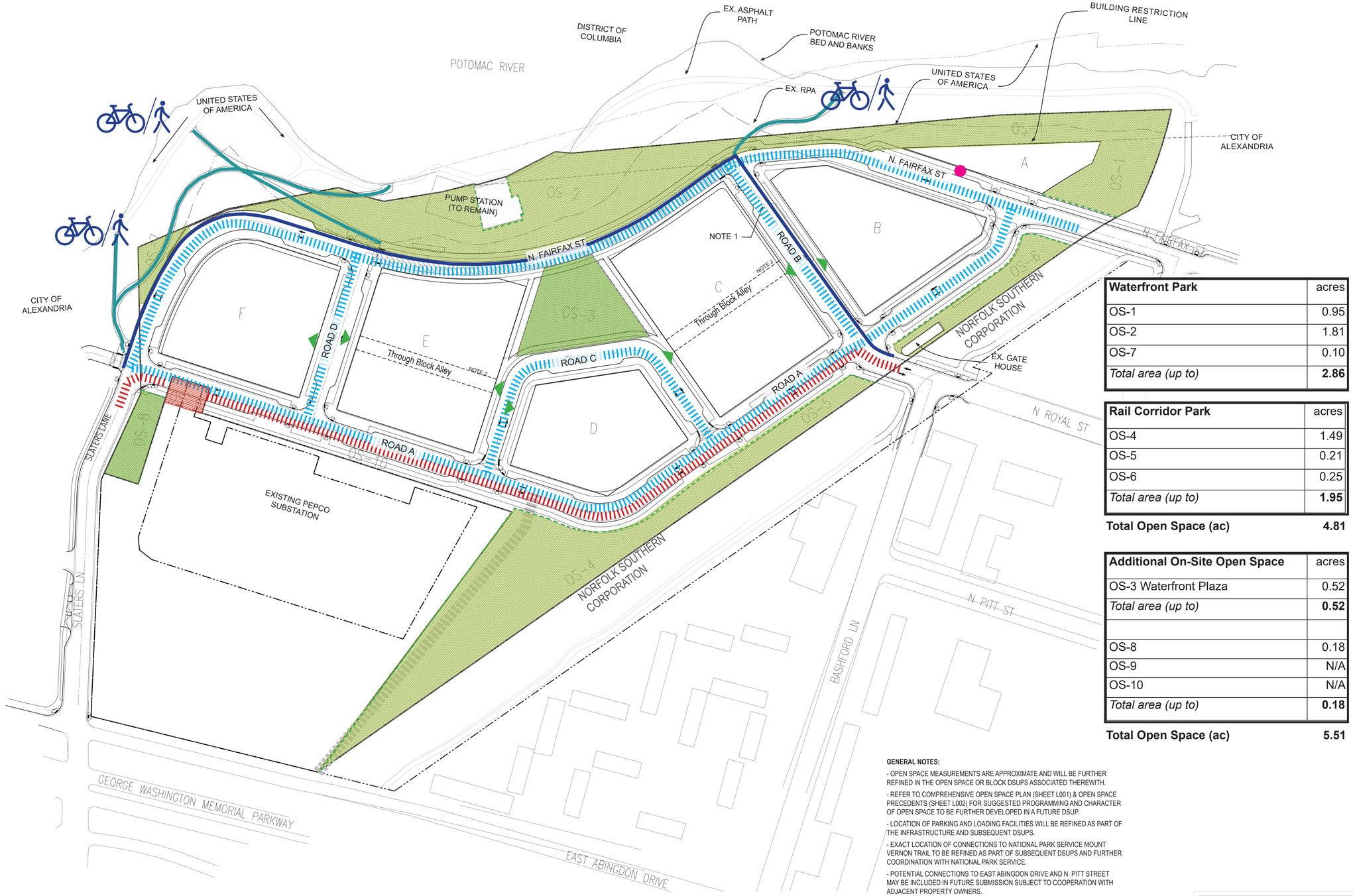
INTERSECTION MANEUVERING STUDY
POTOMAC RIVER GENERATING STATION
Alexandria, Virginia

1140 Connecticut Ave. NW / Suite 600 / Washington DC / 20036 / 202.296.8625
225 Reinekers Lane / Suite 750 / Alexandria VA / 20314 / 703.721.3044
4114 Legato Road / Suite 650 / Fairfax VA / 22033 / 703.787.9595
4951 Lake Brook Drive / Suite 250 / Glen Allen VA / 23060 / 804.362.0578

COMMONWEALTH OF VIRGINIA
DANIEL B. VANPELT IA
Lic. No. 037160
3/10/23
PROFESSIONAL ENGINEER

PROJECT NO. 2994-001

SHEET C912



Waterfront Park	acres
OS-1	0.95
OS-2	1.81
OS-7	0.10
Total area (up to)	**2.86**

Rail Corridor Park	acres
OS-4	1.49
OS-5	0.21
OS-6	0.25
Total area (up to)	**1.95**

Total Open Space (ac) 4.81

Additional On-Site Open Space	acres
OS-3 Waterfront Plaza	0.52
Total area (up to)	**0.52**
OS-8	0.18
OS-9	N/A
OS-10	N/A
Total area (up to)	**0.18**

Total Open Space (ac) 5.51

ON-SITE PUBLICLY ACCESSIBLE OPEN SPACE NOT RELATED TO WATERFRONT PARK OR LINEAR PARK.

ON-SITE PUBLIC OPEN SPACE (WATERFRONT PARK AND LINEAR PARK)

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX ST. IT WILL FUNCTION AS A SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION
A PORTION WILL BE DEDICATED TO THE CITY FOR THE ROAD A RIGHT-OF-WAY

POTENTIAL PEDESTRIAN & BICYCLE CONNECTION TO NATIONAL PARK SERVICE MOUNT VERNON TRAIL

TWO-WAY BICYCLE ROUTE

POTENTIAL CONNECTION FOR BIKE AND PEDESTRIAN

TWO-WAY STREET (PROPOSED ROADWAY NETWORK WILL INCLUDE BICYCLE AND PEDESTRIAN ACCESS)

TWO-WAY TRANSIT ROUTE

POTENTIAL CURBSIDE LOADING TO BE DEVELOPED IN THE BLOCK DSUP

POTENTIAL PARKING AND LOADING ENTRANCE TO BE DEVELOPED IN THE BLOCK DSUP

GENERAL NOTES:

- OPEN SPACE MEASUREMENTS ARE APPROXIMATE AND WILL BE FURTHER REFINED IN THE OPEN SPACE OR BLOCK DSUPS ASSOCIATED THEREWITH.
- REFER TO COMPREHENSIVE OPEN SPACE PLAN (SHEET L001) & OPEN SPACE PRECEDENTS (SHEET L002) FOR SUGGESTED PROGRAMMING AND CHARACTER OF OPEN SPACE TO BE FURTHER DEVELOPED IN A FUTURE DSUP.
- LOCATION OF PARKING AND LOADING FACILITIES WILL BE REFINED AS PART OF THE INFRASTRUCTURE AND SUBSEQUENT DSUPS.
- EXACT LOCATION OF CONNECTIONS TO NATIONAL PARK SERVICE MOUNT VERNON TRAIL TO BE REFINED AS PART OF SUBSEQUENT DSUPS AND FURTHER COORDINATION WITH NATIONAL PARK SERVICE.
- POTENTIAL CONNECTIONS TO EAST ABINGDON DRIVE AND N. PITT STREET MAY BE INCLUDED IN FUTURE SUBMISSION SUBJECT TO COOPERATION WITH ADJACENT PROPERTY OWNERS.

NOTE 1: EXTENSION OF N. ROYAL STREET TO BE A "GREEN STREET" IN ACCORDANCE WITH THE OLD TOWN NORTH SMALL AREA PLAN

NOTE 2: LOCATION AND DETAILS OF MID-BLOCK ALLEYS ON BLOCKS C & E TO BE DEVELOPED IN THE BLOCK DSUP PROCESS.

NOTE 3: OPEN SPACE CALCULATION HAS BEEN REVISED TO ALIGN WITH THE CITY OF ALEXANDRIA OPEN SPACE STANDARDS REFLECTING THE SIDEWALK ADJACENT TO ROAD A BEING PUBLIC.

NOTE 4: ALL GROUND LEVEL OPEN SPACE WITHIN THE CDD AREA IS PRIVATE WITH A PARK AND RECREATION EASEMENT OR PUBLIC ACCESS EASEMENT.

60 30 0 60 120
GRAPHIC SCALE
1"=60'

VCS 1983 GRID NORTH

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners
HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler
2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
	01-13-2023	Completeness Submission

Seal / Signature

COMMONWEALTH OF VIRGINIA
JOHN KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name
PRGS Redevelopment

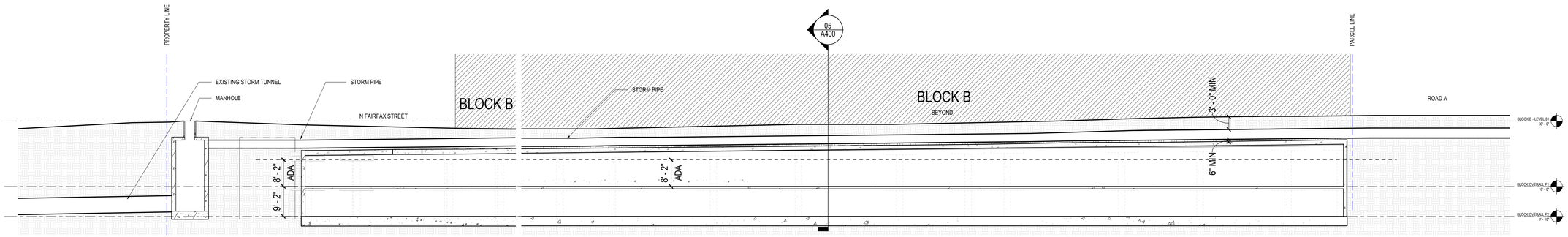
Project Number
09.9145.000

Scale

Description
OPEN SPACE & CIRCULATION PLAN

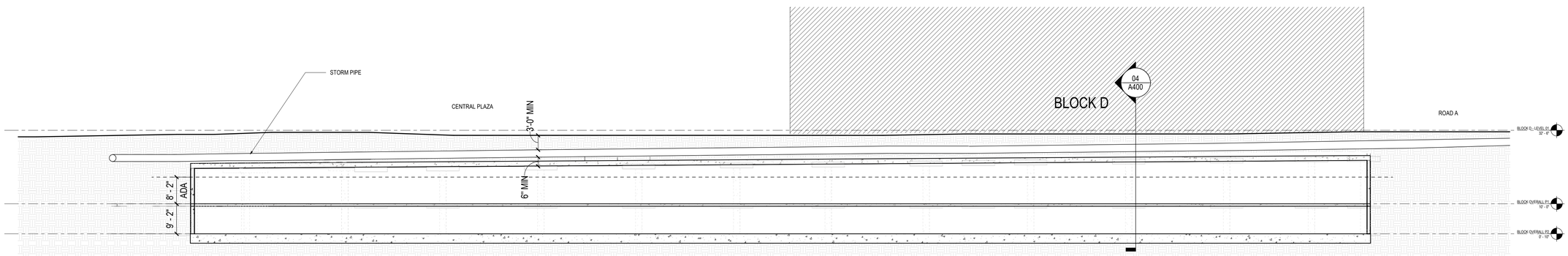
A300

BIM 360://09.9145.000 - Hilco – Potomac River Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
1/3/2023 11:30:34 AM

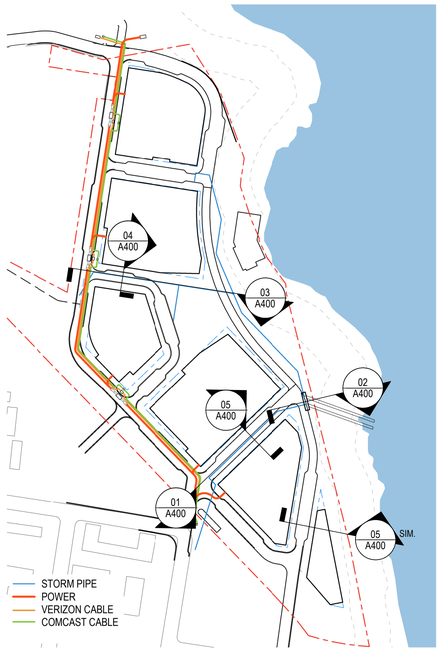


02 STORM PIPE - BC CONTINUED
SCALE: 1/16" = 1'-0"

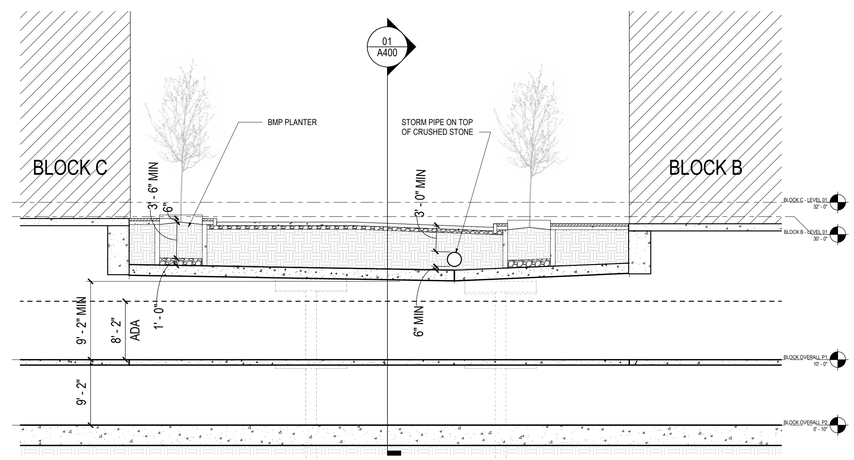
01 STORM PIPE BC
SCALE: 1/16" = 1'-0"



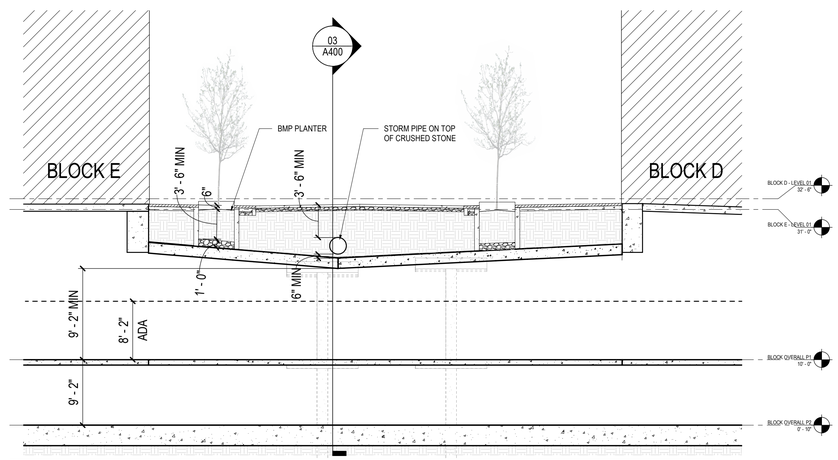
03 STORM PIPE DE
SCALE: 1/16" = 1'-0"



06 SITE UTILITY COORDINATION PLAN 2
SCALE: 1" = 200'-0"



05 STORM PIPE BETWEEN BLOCKS C & B
SCALE: 1" = 10'-0"



04 STORM PIPE BETWEEN BLOCKS D & E
SCALE: 1" = 10'-0"

NOTE:
SECTIONS ARE CONCEPTUAL AND WILL BE FURTHER DEVELOPED IN COORDINATION WITH GARAGE DESIGN, BLOCK DSUPS, AND UTILITY DESIGN.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners
HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler
2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
	03-10-2023	Second Completeness Submission

Seal / Signature

COMMONWEALTH OF VIRGINIA
JAMES KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name
PRGS Redevelopment

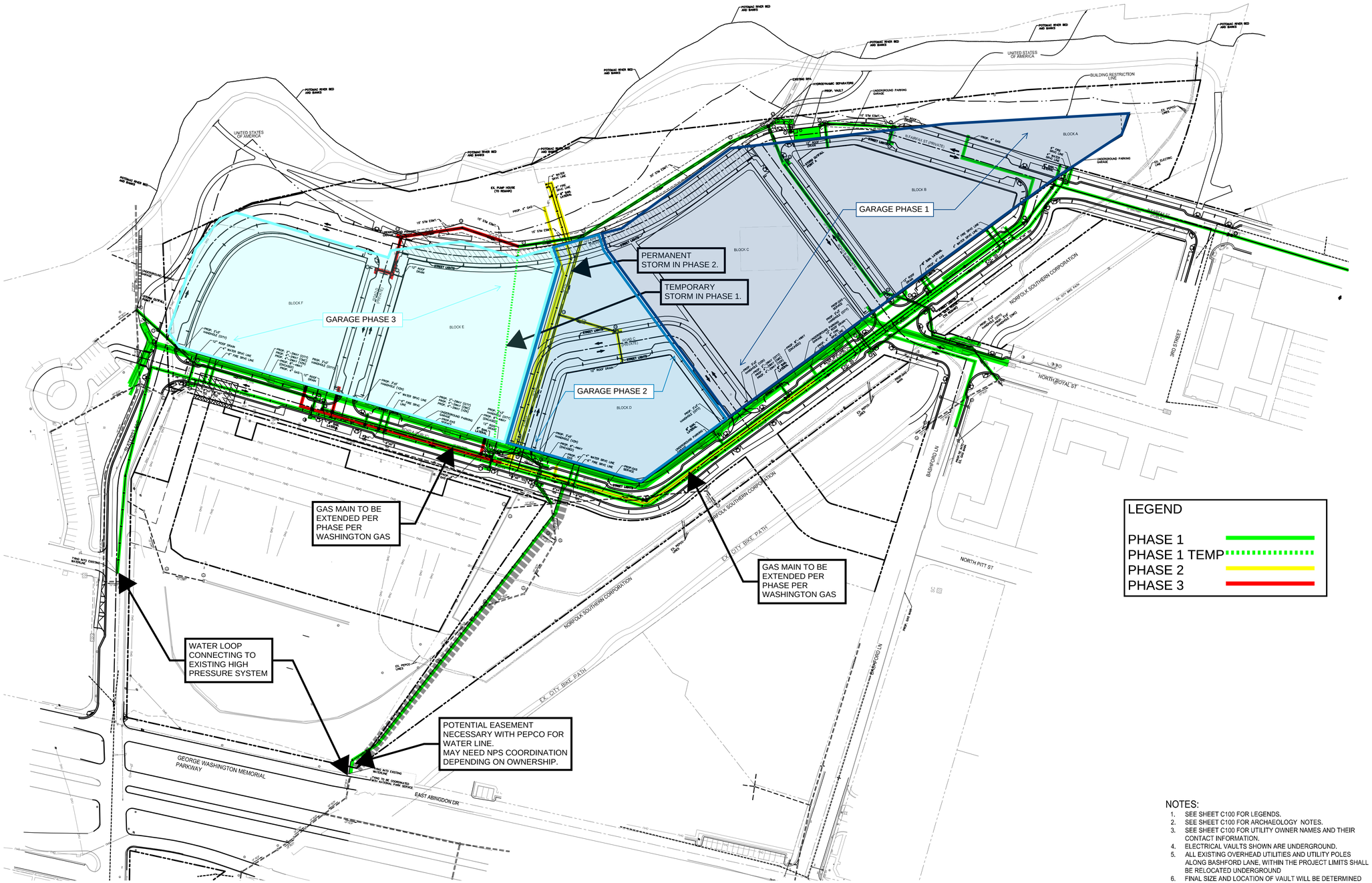
Project Number
09.9145.000

Scale
As indicated

Description
STORM PIPE SECTIONS

A400

BIM 360://009.9145.000 - Hilco – Potomac River Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
3/9/2023 12:05:48 PM



LEGEND

PHASE 1

PHASE 1 TEMP

PHASE 2

PHASE 3

THE WOONERF IS AN EXTENSION OF NORTH FAIRFAX STREET. IT WILL FUNCTION AS SHARED SPACE THAT USES NON-TRADITIONAL DESIGN TO ELEVATE PEDESTRIAN PRIORITY, SLOW VEHICULAR SPEEDS, AND CREATE A SEAMLESS AND FLEXIBLE SPACE THAT ACTS TO DEVELOP A SENSE OF PLACE AND MINIMIZE THE ROADWAY AS A BARRIER TO THE WATERFRONT.

TO BE CONVEYED TO HRP POTOMAC LLC AS PART OF SEPARATE RESUBDIVISION

THIS PORTION OF THE ROADWAY THAT IS ACQUIRED FROM PEPCO IN THIS SMALL AREA IS INTENDED TO BE CONVEYED TO THE CITY AS PART OF THE DEDICATION OF ROAD A

NOTES:

1. SEE SHEET C100 FOR LEGENDS.
2. SEE SHEET C100 FOR ARCHAEOLOGY NOTES.
3. SEE SHEET C100 FOR UTILITY OWNER NAMES AND THEIR CONTACT INFORMATION.
4. ELECTRICAL VAULTS SHOWN ARE UNDERGROUND.
5. ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG BASHFORD LANE, WITHIN THE PROJECT LIMITS SHALL BE RELOCATED UNDERGROUND
6. FINAL SIZE AND LOCATION OF VAULT WILL BE DETERMINED WITH DSUP.

APPROVED

DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

SECOND COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners

HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler

2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
	03-10-2023	Second Completeness Submission

Seal / Signature

COMMONWEALTH OF VIRGINIA
JOHN V. KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name

PRGS Redevelopment

Project Number

09.9145.000

Scale

Description

UTILITY PHASING PLAN

A500

BIM 360://009.9145.000 - Hilco – Potomac River Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
3/9/2023 8:58:41 AM

ROADS & OPEN SPACE PHASING:
PHASE 1

NOTE:

① GWMP intersections: Operational and signal improvements (subject to coordination with City's traffic operations)

② Temporary road: with temporary sidewalks

③ Open Space improvements:

- Interim improvements may be made at these locations until approval from adjacent landowners allows for coordinated permanent improvements to be implemented.
- Future DSUP's will include detail on proposed final and interim conditions improvements.

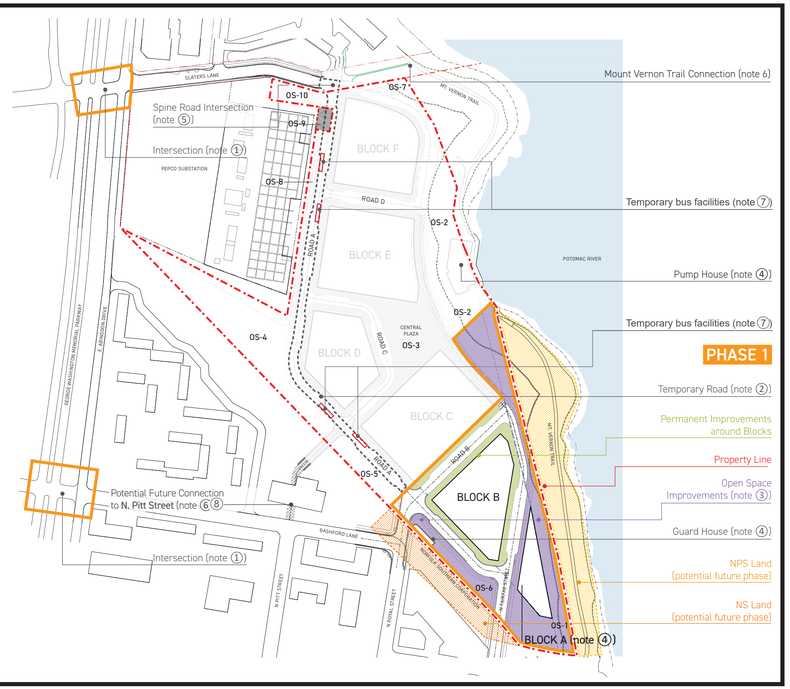
④ Block A, Pump House and Guard House may be developed with any Phase.

⑤ Temporary spine road & Slaters Lane intersection: final geometry and interim finish condition.

⑥ Removed locked gate, repair existing stairs and add a bicycle track, extend sidewalk to new driveway.

⑦ Temporary bus facilities to be developed as part of Block DSUPs.

⑧ Potential future connection to North Pitt St. is subject to cooperation of abutting property owners. The applicant does not control these parcels.



01 ROADS & OPEN SPACE PHASING PLAN: PHASE 1

ROADS & OPEN SPACE PHASING:
PHASE 2

NOTE:

① GWMP intersections: Multimodal operational, physical, and signal improvements identified as part of the Phase 2 MTS

- to be completed as part of Phase 2, subject to coordination with City and NPS approval

② The permanent/final condition of improvements to Slaters Lane may be delayed if potential construction traffic impacts make interim conditions more appropriate subject to the determination and satisfaction of the Director of T&ES.

③ Open Space improvements:

- If it is infeasible for the Waterfront Park area north of the Great Lawn area (exclusive of the Pump House) to be fully completed by the end of Phase 2, a revised schedule may be submitted and approved for park delivery to the satisfaction of the Directors of P&Z and RP&CA prior to issuance of the first certificate of occupancy for the last building in Phase 2.
- Interim improvements may be made at these locations until approval from adjacent landowners allows for coordinated permanent improvements to be implemented.
- Future DSUP's will include detail on proposed final and interim conditions improvements.

④ Block A, Pump House and Guard House may be developed with any Phase.

⑤ Potential future connection to E/W. Abingdon Dr. is subject to cooperation of abutting property owners. The applicant does not control these parcels.

- Potential improvements to intersections of the George Washington Memorial Parkway will be discussed as part of the overall traffic impact study and will be subject to approval by the National Park Service.

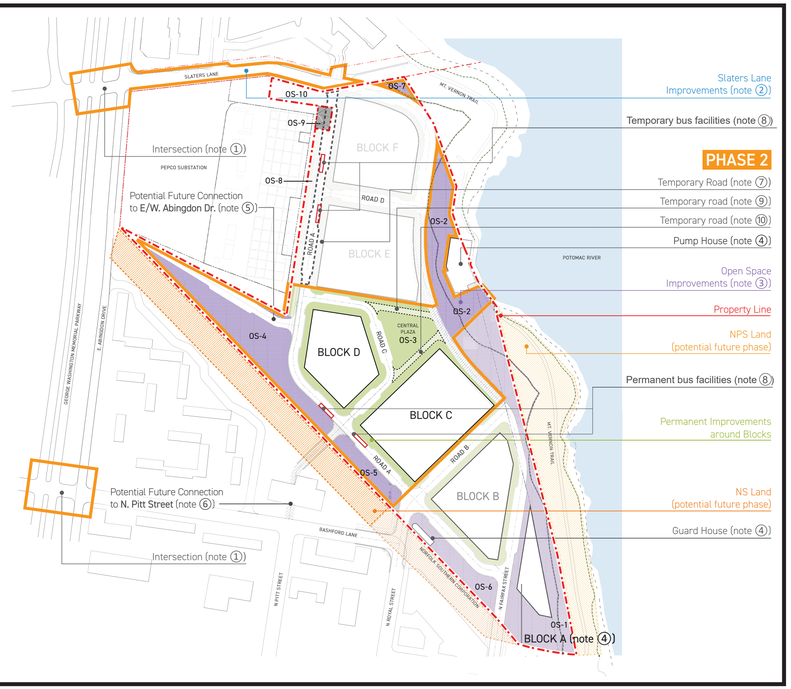
⑥ Potential future connection to North Pitt St. is subject to cooperation of abutting property owners. The applicant does not control these parcels.

⑦ Temporary road: with temporary sidewalks

⑧ Temporary and permanent bus facilities to be developed as part of Block DSUPs

⑨ Temporary road after completion of Block D.

⑩ Temporary road after completion of Block C, to be removed after completion of Block D.



02 ROADS & OPEN SPACE PHASING PLAN: PHASE 2

ROADS & OPEN SPACE PHASING:
PHASE 3

NOTE:

① GWMP intersection improvements completed in previous phases

② Slaters Lane improvements: Subject to coordination with City and adjacent landowners

③ Open Space improvements:

- Interim improvements may be made at these locations until approval from adjacent landowners allows for coordinated permanent improvements to be implemented.
- Future DSUP's will include detail on proposed final and interim conditions improvements.

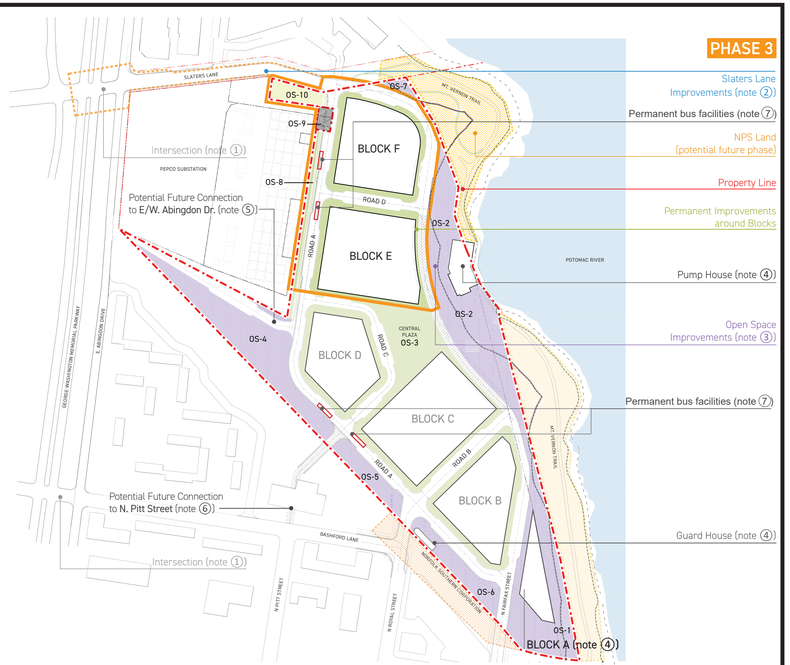
④ Block A, Pump House and Guard House may be developed with any Phase.

⑤ Potential future connection to E/W. Abingdon Dr. is subject to cooperation of abutting property owners. The applicant does not control these parcels.

- Potential improvements to intersections of the George Washington Memorial Parkway will be discussed as part of the overall traffic impact study and will be subject to approval by the National Park Service.

⑥ Potential future connection to North Pitt St. is subject to cooperation of abutting property owners. The applicant does not control these parcels.

⑦ Permanent bus facilities to be developed as part of Block DSUPs



03 ROADS & OPEN SPACE PHASING PLAN: PHASE 3

N

LEGEND

- Property Line
- Phase Line
- Temporary Road
- Building Blocks
- Norfolk Southern Land (potential future phase, subject to landowners' approval)
- National Park Service Land (potential future phase, subject to landowners' approval)
- Permanent Improvements (including adjacent roadway)
- Open Space Improvements (note ③)
- To be conveyed to HRP POTOMAC LLC as part of separate resubdivision

NOTE:

- The intent of these Phasing Plans is to describe the Road and Open Space Improvements to be associated with each Phase of development.
- The exact order of Block and Building phasing may vary.
- In-kind contributions for the cost of design and improvements of the publicly accessible parks will be accounted for at the end of each phase pursuant to CDD Condition No.116.
- Improvements associated with each phase will be completed as each phase is completed.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners

HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler

2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
	03-10-2023	Second Completeness

Seal / Signature

COMMONWEALTH OF VIRGINIA
JAMES KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name
PRGS Redevelopment

Project Number
09.9145.000

Scale

Description
ROADWAY & OPEN SPACE SPECIFIC PHASING PLAN

A900

BIM 360://009.9145.000 - Hilco – Potomac River Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
12/12/2022 10:33:55 AM

Item #		Item # in Conditions	Description	Drawing Reference	Remarks
1		30	The applicant shall construct future development within the CDD Conceptual Design Plan area in the phases. The phases may be revised at the election of the applicant through a future submission of a Supplemental Phasing Plan to the satisfaction of the Directors of Planning & Zoning and Transportation & Environmental Services. Each building DSUP is placed in the phases below based on their order of approval. Each phase is considered completed when the first certificates of occupancy are sought for the last building in a given phase. The following conditions contemplate the phasing, unless revised through a future Supplemental Phasing Plan: a.Phase 1 – Approval of 400,000 square feet of GFA across the CDD site. b.Phase 2 – Blocks C and D or approval of 1.25 million square feet of GFA across the CDD site. c.Phase 3 – Blocks E and F or approval of up to 2.5 million square feet of GFA (on the last block to be developed) across the CDD site. (P&Z, T&ES)	A900	
2		31	In addition to any improvements or requirements outlined in these conditions, the applicant shall provide the following physical improvements with the completion of Phase 1. Phase 1 will be considered complete at the first request for a certificate of occupancy for the last building constructed in Phase 1. a.Road A constructed in interim condition (including roadway, sidewalks and interim multimodal facilities to the satisfaction of the Director of T&ES) from southern property line to Slaters Lane. b.The extension of N. Fairfax Street northward into the site from the N. Fairfax Street and Third Street intersection and the extension of N. Royal Street northeastward into the site (Road B) from the N. Royal Street and Bashford Lane intersection shall be constructed in the final condition and fully operational. c.In the event that Block B is not included in Phase 1, construct all roads adjacent to the Phase 1 block(s) in final condition and fully operational. d.Implementation of a final design for the southern half of Waterfront Park which includes interim improvements up to the Great Lawn area that ends approximately at the northern boundary of Block C with interim connections to the Mount Vernon Trail, pending approval from NPS for off-site connections and to the satisfaction of the Directors of RP&CA, T&ES and P&Z. e.Completion of operational and signal improvements to the intersections of Slaters Lane and Bashford Lane with the George Washington Memorial Parkway (GWMP) identified in the Multimodal Transportation Study (MTS) completed with the CDD. These improvements would be limited to signal timing and phasing improvements and not include physical or signal equipment upgrades. (Pending City and NPS approval) (P&Z) (T&ES) (RP&CA) (PC)	A900	
3		32	In addition to any improvements or requirements outlined in these conditions, the applicant shall provide the following improvements with the completion of Phase 2 of the CDD. Phase 2 will be considered complete with the first request for a certificate of occupancy for the last building in Phase 2: a.N. Fairfax Street (including Woonerf section) in final condition (including roadway and sidewalks) from southern property line to southern parcel line of Block E. b.A Feasibility Study as more particularly described in Condition 37 below. c.The completion of all improvements in final condition to Waterfront Park and interim improvements to Rail Corridor Park. If it is infeasible for the Waterfront Park area north of the Great Lawn area (exclusive of the Pump House) to be fully completed by the end of Phase 2, a revised schedule may be submitted and approved for park delivery to the satisfaction of the Directors of P&Z and RP&CA prior to issuance of the first certificate of occupancy for the last building in Phase 2. d.Completion of the improvements in permanent/final condition to Slaters Lane east of the GWMP and the intersection with Road A and N. Fairfax Street, and the multimodal trail connection between the Slaters Lane end and the Mount Vernon Trail if NPS approval has been granted. The permanent/final condition of improvements to Slaters Lane may be delayed if potential construction traffic impacts make interim conditions more appropriate subject to the determination and satisfaction of the Director of T&ES. e.Improvements to Slaters Lane shall include the Slaters Lane and GWMP intersection (including E. and W. Abingdon Drive) in coordination with National Park Service approval. Completion of the multimodal operational, physical, and signal improvements at the intersections of Slaters Lane and Bashford Lane with the GWMP (including E. and W. Abingdon Drive) identified as part of the CDD MTS, Infrastructure DSP, Feasibility Study and/or subsequent studies, excluding the potential future connection to E. Abingdon Drive, in coordination with the City and pending NPS approval. (P&Z) (T&ES) (RP&CA) (P&Z)	A900	
4	G. Infrastructure	33	In addition to any improvements or requirements outlined in these conditions, the applicant shall provide the following improvements with the completion of Phase 3. Phase 3 will be considered complete with the first request for a certificate of occupancy for the last building In Phase 3: a.All improvements to the public realm (dedicated public and public access easement) shall be constructed in finalized condition. b.Construction of the Pepco Liner open space in final condition. c.A construction of an east-west road connection to the GWMP if determined to be feasible and viable by the Feasibility Study described in Condition 37 below and if approved by NPS and other adjacent property owner(s). d.Improvements to Rail Corridor Park in final condition and improvements to the Old Town North Linear Park consistent with the Contributions section below. (P&Z) (T&ES) (RP&CA)	A900	
5		47	The Infrastructure Development Site Plan (DSP) for the entire CDD plan area shall be approved by the Planning Commission prior to the first preliminary Development Special Use Permit approval for any block with the CDD plan area. The final infrastructure site plan shall be approved prior to the release of the first final site plan for any development block for the site. The infrastructure plan shall at a minimum include the following and additional information deemed necessary for review of the infrastructure plan to the satisfaction of the Directors of Planning & Zoning and Transportation & Environmental Services	-	Acknowledged.
6		47a	The entire final road surface, parking lanes, traffic signs and signals, and necessary roadway markings for all required new streets or portions thereof, including connections to existing streets	C307	
7		47b	Curbs and gutters for all streets	C300	Curb cuts for loading dock entrances & alleys will be further expanded with Block DSUPs.
8		47c	ADA-compliant curb ramps	-	Details for curb cuts and ramps including ADA ramps will be provided in the Block DSUP submissions.
9		47d	Any revised traffic signs, traffic signals, or roadway markings that may be necessary, as determined by the Directors of Planning & Zoning and Transportation & Environmental Services, along existing streets adjacent to the CDD Conceptual Design Plan area	C307	
10		47e	The approved streetscape dimensions as generally shown on the CDD Final Site Plan	C808 & C809	
11		47f	All grading, topography, and spot elevation necessary to review the proposed infrastructure	C500-C503	Included in the Completeness Submission & refined through the final site plan.
12		47g	All necessary above and below-grade utilities, including stormwater, sanitary, water and electrical connection	C400-C403	Included in the Completeness Submission & refined through the final site plan.
13		47h	Any necessary temporary facilities related to transit facilities. (P&Z) (T&ES)	A900	Included in the Completeness Submission & refined through the final site plan.
14		48	The entire length of the proposed Road A, between Slaters Lane and the N. Fairfax Street extension, shall be designed and shown on the Infrastructure DSP. (T&ES)	C300-C306	Included in the Completeness Submission & refined through the final site plan. plan.
15		49	Improvements to Slaters Lane between E. Abingdon Drive and the intersection to Road A as well as the trail connection between Slaters Lane and the Mount Vernon Trail shall be designed and shown in the Infrastructure DSP Plan to the satisfaction of the Director of T&ES. a.Any improvements located within NPS property are subject to NPS approval and absence of that approval will not delay approval of the Infrastructure DSP. (T&ES)	C300-C306	Included in the Completeness Submission & refined through the final site plan.
16		50	The N. Fairfax Street and N. Royal Street extension intersecting Road A shall be designed and shown on the Infrastructure DSP to the satisfaction of the Director of T&ES. (T&ES)	C303	
17		51	The Infrastructure DSP shall include interim as well as proposed final conditions and operations of each roadway improvement and new intersection. (T&ES)	C300-C306 & A900	Included in the Completeness Submission & refined through the final site plan.
18		52	Hydrants on public streets are the responsibility of the city. Hydrants on private streets shall be included within public easements and are the responsibility of the City. (Fire)	-	Hydrants will be indicated on Block DSUPs or Completeness Submission
19		53	All infrastructure within future public rights-of-way shall be designed and constructed to City Standards while materials used within private streets may be alternate materials to the satisfaction of the Directors of T&ES and P&Z and determined during the Infrastructure DSP and amended as applicable in related development block Development Special Use Permits to the satisfaction of the Directors of T&ES and P&Z. (P&Z) (T&ES)	-	Acknowledged.
20		54a	A fully detailed traffic signal design plan for all proposed and/or modified signalized intersections shall be included in the Infrastructure DSP final site plan submission and shall be fully operational prior to opening the streets associated with the Infrastructure DSP subject to the phasing of those streets as indicated herein. All associated equipment, devices, and features of each signalized intersection that would optimize the performance of the signal, provide safe pedestrian and bicycle crossing, and prioritize transit and emergency vehicle throughput shall be included to the satisfaction of the Director of T&ES. a.Any work associated with the construction of new or modification of existing signals shall include two 3-inch conduits of schedule 80 PVC or HDPE, at a depth of 3 feet with a pull wire and tracer cable, connecting to each signal cabinet location along E. Abingdon Drive, W. Abingdon Drive, and the GWMP pending approval from the National Park Service.	C307-C309	Included in DSP concept II submission and the Completeness Submission and refined thru the Final Site Plan.
21		54b	Due to the signals' location along NPS land, the applicant shall coordinate with the NPS on all required processes and complete the required documentation. Any required submission shall be reviewed and to the satisfaction of the Director of T&ES, prior to submission to NPS. (T&ES)	-	The Applicant has monthly meetings with NPS to coordinate all matters related to impacts to NPS property.
22	L. Transportation/Traffic	72	The applicant will be required to provide dedicated bicycle facilities on Road B and N. Fairfax Street north of the Woonerf, to be discussed with City staff. (T&ES)	C307-C309	Bicycle facilities will be refined through the final site plan with city staff.
23		73	Provide bicycle infrastructure with the Slaters Lane connection with the Mount Vernon Trail subject to NPS approval. Details shall be provided with the Infrastructure DSP in coordination with NPS. (T&ES)	-	Included in DSP concept II submission and the Completeness Submission and refined through the Final Site Plan.
24		74	A minimum of two (2) Capital Bikeshare stations shall be located on the site to the satisfaction of the Director of T&ES. The first station shall be provided in Phase 1 and the second shall be provided in Phase 3. (T&ES)	C301 & C303	Specific locations will be included in future block DSUPs.
25		75	Additional on or off-street bicycle facilities may be added to Road B and/or the Pepco Liner open space (OS-8, OS-9 and OS-10) to the satisfaction of the Directors of T&ES, RP&CA and P&Z during the Infrastructure DSP and/or the DSUP tied to the Pepco Liner plan. (T&ES) (P&Z) (RP&CA)	-	Acknowledged.
26		76	N. Fairfax Street north of the Woonerf shall have a minimum 50-foot right-of-way width. (T&ES) (P&Z)	C300 & C303	
27		77	The applicant shall remove the gate and fencing within the Slaters Lane public right-of-way leading to the Mount Vernon Trail prior to the certificate of occupancy for the first building subject to approval of appropriate permits by the City. The applicant shall also provide temporary or permanent bicycle infrastructure within the right-of-way to connect Slaters Lane with the Mount Vernon Trail until the permanent infrastructure is installed per the conditions of approval. (P&Z) (T&ES)	C307 & A900	
28	M. Transit	78	Provide a total of four transit stops along Road A, two in each direction. Bus bulb-outs should be included at all four transit stops given the width of Road A (H-H). (T&ES/DASH)	C307	Included in DSP concept II submission and the Completeness Submission and refined thru the Final Site Plan.
29		79	Bus bulb-outs should extend out into the street beyond any adjacent on-street parallel parking spaces, so buses are able to pull up to the bulb-out curb even when all parking spaces are occupied. (T&ES/DASH)	C307	Included in DSP concept II submission and refined through final site plan.
30	N. Parks and Open Space	87	With the initial Concept-level Infrastructure DSP submission, the applicant shall submit a Comprehensive Open Space Plan, identifying the open space use types for each publicly accessible open space anticipated throughout the CDD plan area. At the request of the Director of RP&CA, this plan shall be amended, if necessary, with subsequent DSUP applications. The open space plan shall provide a mix of active and passive recreation amenities and event/festival space to serve the proposed development subject to the following: a. Active recreation amenities may include volleyball courts, tennis courts, basketball courts, playgrounds, climbing walls/gyms, splash grounds, ice skating rinks, pools, and dog exercise areas. b. An event space/festival area for small concerts or community events, play areas, and dog exercise areas shall be provided at grade, along with other active amenities determined through the DSUP plans. c. Passive recreation amenities may include trails, promenades, plazas, fountains, restrooms, overlooks, open lawn areas, seating, public art, and gardens. d. All publicly accessible open space shall be designed with high quality special paving, furnishings, lighting, electrical service, and irrigation, active and passive amenities to achieve their design intent. e.Interim open space conditions and programming for each space. f.CDD#30 shall incorporate a network of private and public open space that is integrated with adjacent park property and the regional park system. g.The design of the open spaces shall be coordinated with approved plans for the adjacent portion of the future Old Town North Linear Park and improvements to the Mount Vernon Trail (in coordination with the National Park Service). (RP&CA) (P&Z)	L001	Further details related to specific open spaces will be included in future relevant DSUP's.
31		89	Support infrastructure for events and park and open space maintenance shall be provided. Include utilities such as power and water, storage, maintenance access and other accommodations to ensure long-term maintenance. (RP&CA)	-	Will be included in a future final site plan.
32		90	Infrastructure to allow for Wi-Fi and the City fiber optics may be incorporated with each appropriate open space plan to the satisfaction of the Director of RPCA. (RP&CA)	C400A-C403	Included in the Completeness Submission & refined through the final site plan.
33		97	When feasible, existing and future utilities shall not be located in the public and publicly accessible open space because of the limitations they may pose on the design and programming of the open spaces, recognizing that a significant amount of the open spaces planned are located in areas that contain existing utilities and infrastructure in existing easements to remain. Utilities in these open spaces shall be coordinated with the Infrastructure DSP. (RP&CA) (P&Z)	-	Acknowledged.
34		116	Pursuant to the Old Town North Small Area Plan Implementation Developer Contributions Policy, a developer contribution shall be provided by the Applicant to the Old Town North Implementation Fund. The developer contribution amount shall be subject to the following:	-	Acknowledged.
35		116a	A total developer contribution amount of $21,495,167 (2022$) shall be provided for the site based on a developer contribution rate of $11.05 (2022$) for the total amount of 2,150,000 base GFA for the site, which includes a credit for the 204,736 GFA that is available under the existing UT zoning and which excludes the additional GFA (maximum of 350,000) used for the provision of affordable housing and arts and cultural uses.	-	Acknowledged.
36		116b	The developer contributions shall be used for the following: i.The Linear Park Norfolk Southern Railroad Corridor (Segment 2 in OTN Plan) and OS-4 as generally depicted in Exhibit 1. ii.Waterfront Park As generally depicted in the CDD Concept Plan submission as parcels OS-1, OS-2, and OS-7, as well as improvements made to the adjacent Waterfront Park land controlled by National Park Service (NPS), if approved by the National Park Service (NPS). Improvements to the Pumphouse not related to open space improvements will not count towards the contribution.	-	Acknowledged.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

SECOND COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners

HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler

2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
1	03-10-2023	Second Completeness Submission

Seal / Signature

COMMONWEALTH OF VIRGINIA
JASON KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name
PRGS Redevelopment

Project Number
09.9145.000

Scale

Description
INFRASTRUCTURE CONDITIONS

A901-1

BIM 360://009.9145.000 - Hilco – Potomac Rive Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
3/8/2023 3:14:10 PM

37	Q. Contributions	116c	The developer contributions as required herein shall be paid prior to the release of the first certificate of occupancy permit for each building(s) unless contributions are being made subject to paragraph d below.	-	Acknowledged.
38		116d	In lieu of the monetary contributions required herein, the condition may be fulfilled by the applicant through an in-kind contribution for the acquisition (as it relates to Norfolk Southern – Segment 2), design and construction of the Linear Park and Waterfront Park as defined herein in a manner consistent with the intent of the OTNSAP. The applicant shall submit an agreed upon scope of work and cost estimate to the City prior to the release of the final site plan for the Waterfront Park and/or the Linear Park (approval process pending). The final costs for each phase of these improvements will be finalized at the time of final inspection of each phase of these improvements. The work shall be completed in accordance with the CDD phasing requirements in the conditions of approval. The Linear Park improvements shall be completed prior to the end of Phase 3, pending acquisition of the Norfolk Southern Segment 2 by the City. If the in-lieu work costs less than the contribution amount, as demonstrated by the confirmed final costs provided at the completion of each of the phased improvements, the remainder shall be provided to the City as a monetary contribution, prior to approval of final certificate of occupancy for Phase 3. For purposes of clarity, the value of the developer contribution will be calculated at the then current rates at the time the in-kind phased improvements are delivered. The City and the Applicant will continue to work together to coordinate and fund acquisition of the NS corridor.	-	Acknowledged.
39		116e	The contribution rate(s) outlined herein are subject to an annual escalation clause equivalent to the CPI-U for the Washington Metro area. Contribution rates will be recalculated January of each year. The final contribution amount shall be calculated and verified by the Neighborhood Planning and Community Development Division of the Department of Planning and Zoning at the time of Certificate of Occupancy.	-	Acknowledged.
40		116f	All contributions shall be made via wire transfer to the City of Alexandria or other approach as required by the City. Instructions will be provided by the Planning and Zoning Department prior to the time of deposit. Wire transfer documentation must include the source name, receiving department name (Planning & Zoning), applicable fund reference code and the condition number being fulfilled. Payments shall be made prior to the release of the first certificate of occupancy permit.	-	Acknowledged.
41			The applicant will provide an inception-to-date summary on the amount of Developer Contributions received and status of improvements as required herein, as part of each preliminary Development Special Use Permit process within the CDD Conceptual Design Plan area. (P&Z) Exhibit 1 – PRGS Developer Contribution Condition  Railroad corridor to be purchased, designed and constructed as a public park with developer contributions. OS-4 parcel to be designed and constructed with developer contributions.	-	Acknowledged.
42	R. Utilities	117	All proposed storm sewers located within private roads and or land shall be privately owned and maintained. All proposed storm sewers located within public roads or land shall be publicly owned and maintained. (T&ES)	-	Acknowledged.
43		118	All proposed sanitary sewer mains shall be public owned and maintained. All sanitary mains located within private roads and land shall have a public sanitary sewer easement. (T&ES)	-	Acknowledged.
44		119a	All electrical transformers and associated utilities shall be provided in underground vaults which shall comply with all applicable Dominion Virginia Power (DVP) standards. Ventilation grates shall not be located within public open space, sidewalks or streets - public right-of-way, or shall be provided with inlaid paving materials equivalent to those in the surrounding field paving according to Dominion Virginia Power standards and to the satisfaction of the Directors of P&Z, T&ES and RP&CA. The final location of the transformers and/or vaults shall be approved as part of the preliminary Development Special Use Permit review for each building/block. a.No building transformers shall be located within any proposed or future public right-of-way. (P&Z) (T&ES) (RP&CA)	-	Utility plans reduced to one option in completeness submission.
45		120	The project site is located in the combined sewer system area and shall be in compliance with the Combined Sewer System Management Policy set forth in the Memo to Industry 07-14. Stormwater and sanitary flows from the project site shall be discharged to fully separated sewer systems. Sanitary flow shall be discharged to a separate sanitary sewer system which connects to the Potomac Interceptor.	-	A revised stormwater master plan was submitted on 02/03/2023.
46		122	All new utilities serving the CDD, whether located within or outside of the CDD, shall be placed underground at the cost of applicant. All utilities with the exception of those having a franchise agreement with the City shall be located outside the public right-of-way; however, no transformers or switch gears shall be placed in the public right-of-way. (T&ES)	-	Acknowledged.
47		123	A connected underground conduit grid shall be installed in preparation of fiber and cable installation to provide high-speed communication and connectivity to all buildings and traffic signals within the site. The conduits shall be the satisfaction of the Director of T&ES. This shall either be shown as part of Development Special Use Permits for individual buildings or within the Infrastructure DSP. (T&ES)	C400A-C403	Included in the completeness submission & refined through final site plan.
48	W. Stormwater	124	The applicant shall meet the requirements set forth in the Environmental Management Ordinance (Chesapeake Bay Preservation Act) as adopted by the City of Alexandria at the time of the submittal of each preliminary Development Special Use Permit. (T&ES)	-	Acknowledged.
49		125	For projects that implement a Stormwater Master Plan (SWMP), each phase of the development must meet the water quality requirements adopted by the City of Alexandria at the time of the submittal of each preliminary Development Site Plan/Development Special Use Permit. This includes the 1) state phosphorus reduction and 2) Alexandria water quality volume default (WQVD) requirements. The SWMP must be updated prior to the release of each individual DSP/DSUP. (T&ES)	-	A revised stormwater master plan was submitted on 02/03/2023.
50		126	The applicant shall meet the requirements as set forth in Memorandum to Industry 01-18, Use of Manufactured/Proprietary Stormwater BMPs or applicable City Policy at the time of approval for each Development Special Use Permit. In addition, all development shall meet the green infrastructure requirements of the Old Town North Small Area Plan. Underground sand filters and proprietary BMPs may be used a case-by-case basis only if the selected BMPs from the Small Area Plan are proven to be infeasible and after approval by the director of T&ES or his or her designee. (T&ES)	-	Acknowledged.
51		127	The stormwater runoff from impervious surfaces within new public rights-of-way shall receive treatment from stormwater Best Management Practice (BMP) facilities in accordance with Memo to Industry 21-02 or applicable City policy at the time of approval. (T&ES)	-	Acknowledged.
52		128	All stormwater treatment facilities (BMPs) and detention facilities shall be maintained by the property owner, Community Development Authority, Business Improvement District, Master Association, or similar entity. This includes facilities installed in public rights of way. (T&ES)	-	Acknowledged.
53		129	The RPA adjacent to the Potomac River within the CDD area shall be revegetated in a manner compatible with riparian buffer areas. All impervious surfaces must be removed from the RPA with the exception of the existing Pump House, new or existing retaining walls and new or existing trails and stairs constructed for the purpose of connecting the CDD area to the Mount Vernon Trail. No new impervious surfaces may be placed within the RPA except for allowable uses per the City's Environmental Management Ordinance subject to the approval of the director of T&ES. (T&ES)	-	Acknowledged.
54	S. Landscaping	130	A landscape management plan must be submitted with the infrastructure DSP for removal of invasive species plantings from the RPA in the CDD area and future maintenance of the RPA buffer plantings in the CDD area. (T&ES)	C216	Included in the Completeness Subission & refined through final site plan.
55		131	A minimum of approximately 75 percent of the total surface area of the building roofs after deducting amenity space and any rooftop mechanical equipment including elevator overruns/air handlers, etc. In each phase shall be used for sustainable practices. Unless otherwise approved by the Director of T&ES, approximately half of that available building roof area after deducting amenity space and any rooftop mechanical equipment including elevator overruns/air handlers, etc. shall be vegetated green roof where feasible and approximately half shall be used for solar energy, or a combination of these practices. Per the Old Town North Small Area Plan, all buildings with flat rooftops must have some portion of vegetated green roof where feasible. Artistic/Visually appealing designs when viewed from overhead are encouraged due to the site's location within the DCA flight path. (T&ES)	-	Will be included in a future building DSUP.
56		134	Above ground critical infrastructure must be located outside of the 500-year floodplain. (T&ES)	-	Acknowledged.
57		135	All stormwater must ultimately discharge directly to the Potomac River. No stormwater connections will be allowed to the existing combined sewer system. (T&ES)	-	Acknowledged.
58		136	Prior to approval of the Infrastructure DSP, the existing outfall must be evaluated for structural integrity and pending the outcome of that evaluation, will be replaced or lined only if the existing outfall is determined to be compromised or have a remaining useful life of less than 30 years. The assessment must be signed and sealed by a professional engineer and the results reviewed and approved by the Director of T&ES. Ownership and adequate maintenance access must be coordinated and provided by the applicant to allow the City access to maintain the portion of the outfall located on National Park Service property in perpetuity to the satisfaction of the Director of T&ES. (T&ES)	-	Acknowledged.
59		137	Educational signage and/or creative educational exhibits that provide information about water quality and/or the RPA must be incorporated into the site. (T&ES)	-	Acknowledged.
60	T. Sustainability	144	**Coordinated Sustainability Strategy (Sustainability Master Plan):** Prior to the 2nd concept submission of the Infrastructure Development Site Plan (Infrastructure DSP), the Applicant shall develop and submit the Coordinated Sustainability Strategy (CSS) and include the evaluation of approaches for on-site energy generation as part of the review of the Infrastructure DSP. This CSS shall be reviewed and endorsed by City Council prior to or concurrent with the approval of the infrastructure DSP and implemented through DSP/DSUP approvals.	-	A second version of the Coordinated Sustainability Strategy was submitted on 02/14/2023.
61	V. Interim uses and Interim Conditions	158	The applicant shall provide interim infrastructure improvements in the CDD Conceptual Design Plan area to the satisfaction of the Directors of Planning & Zoning and Transportation & Environmental Services when necessary in order to access to a given block from existing public right-of-way. (P&Z) (T&ES)	A900	Included in the Completeness Submission & refined through final site plan.
62	Coordination for Offsite Improvements	165a	As the applicant works through the National Park Service approval process for improvements or modifications to the GWMP within the Slaters Lane and Bashford Lane intersections, the applicant shall coordinate with T&ES staff prior to any submission to the National Park Service: a.At the concept 1 submission of the Infrastructure DSP, the applicant shall designate a point of contact to manage communication and ensure all requirements are met throughout the process.	-	Acknowledged. **Point of Contact:** Michelle Beaman Chang Vice President, Mixed-Use Development Hilco Redevelopment Partners (HRP) 1199 N Fairfax St, Suite 808 Alexandria, VA 22314 Mobile: 202 210-9981 mchang@hilcoglobal.com
63		165b	At the concept 2 submission of the Infrastructure DSP, the applicant shall submit scope, design plans, supportive documents, and any other required documentation to the City thirty (30) business days prior to National Park Service submission for City's review and comments.	-	Coordinating with NPS on those documents & will continue to be shared with the city in advance.
64		165c	By the preliminary plan submission of the Infrastructure DSP, the applicant shall begin coordination with the National Park Service pertaining to improvements associated with this site.	-	Acknowledged.
65		165d	The applicant shall share and/or include the City in any correspondence with the National Park Service.	-	Acknowledged.
66		165e	In the event the improvements are approved by National Park Service, the developer shall continue coordination with the City for implementation/construction prior to the first building Development Special Use Permit of Phase II as shown in the CDD Site Plan. (T&ES)	-	Acknowledged.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PRGS Redevelopment

SECOND COMPLETENESS SUBMISSION

1300 North Royal Street
Alexandria VA 22314

Hilco Redevelopment Partners

HRP Potomac, LLC
1199 N Fairfax St, Suite 808
Alexandria, VA 22314
Tel 312.796.6564
Fax xxx.xxx.xxxx

Gensler

2020 K Street NW
Suite 200
Washington, DC 20006
United States
Tel 202.721.5200
Fax 202.872.8587

	Date	Description
	03-10-2013	Second Completeness Submission

Seal / Signature

COMMONWEALTH OF VIRGINIA
JARED KRIEGER
Lic. No. 0401018114
ARCHITECT

Project Name
PRGS Redevelopment

Project Number
09.9145.000

Scale

Description
INFRASTRUCTURE CONDITIONS

A901-2

BIM 360://009.9145.000 - Hilco – Potomac River Generating Station/Architecture - 09.9145.000 - Hilco – PRGS.rvt
3/8/2023 3:16:48 PM

CONSTRUCTION SCHEDULE

KEY	DESCRIPTION	DETAIL	SPEC	MATERIAL	FINISH	COLOR	COMMENTS
CONCRETE PAVING							
CP-01	CONCRETE PAVING	-	-	CONCRETE PAVING (PEDESTRIAN RATED)	LIGHT BROOM FINISH	NATURAL GREY	REFERENCE LANDSCAPE PLANS FOR LAYOUT AND LOCATIONS. REFERENCE (RE:) CIVIL ENGINEER'S DRAWINGS FOR PAVING THICKNESS AND REINFORCING. CONTRACTOR TO PROVIDE MOCK UP FOR REVIEW AND APPROVAL.
CP-02	CONCRETE PAVING	-	-	CONCRETE PAVING (VEHICULAR RATED)	LIGHT BROOM FINISH	NATURAL GREY	REFERENCE LANDSCAPE PLANS FOR LAYOUT AND LOCATIONS. REFERENCE (RE:) CIVIL ENGINEER'S DRAWINGS FOR PAVING THICKNESS AND REINFORCING. CONTRACTOR TO PROVIDE MOCK UP FOR REVIEW AND APPROVAL.
JO-01	SAWCUT CONTROL JOINT	-	-	1/8" TYPICAL	N/A	N/A	REFERENCE LANDSCAPE PLANS FOR LAYOUT AND LOCATIONS. CONTRACTOR TO PROVIDE MOCK UP FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.
JO-02	DOWELED EXPANSION JOINT	-	-	1/4" WIDTH W/ SNAP CAP AND MASTIC SEALANT	LIGHT SAND @ SEALANT	TO MATCH ADJACENT CONCRETE COLOR	REFERENCE LANDSCAPE PLANS FOR LAYOUT AND LOCATIONS. CONTRACTOR TO PROVIDE MOCK UP FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT. CONTRACTOR TO PROVIDE MOCK UP WITH (4) FOUR DIFFERENT COLOR OPTIONS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.

PLANTING SCHEDULE

TREES

CODE	QTY	LATIN NAME	COMMON NAME	SIZE	SPACING	CONDITION	NOTES
TC	PER PLAN	TILIA CORDATA	LITTLELEAF LINDEN	2" CAL.	PER PLAN	FIELD GROWN	CONSISTENT BRANCHING & STRONG CENTRAL LEADER TYPICAL OF SPECIES. PROVIDE TREE UNDERDRAIN FOR EACH TREE AND TIE INTO STORM SYSTEM OR ON SITE RETENTION. UTILIZE PLATIPUS TREE ANCHORING SYSTEM FOR TREES OVER 4" CALIPER, AND TREE STAPLES FOR 4' AND LESS. PROVIDE TREE ROOT BARRIER ALONG ALL HARDSCAPE WITHIN 10' OF ANY TREE. CONTRACTOR TO PROVIDE SUPPLIER INFORMATION AND PHOTOGRAPHIC IMAGES FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.
AR	PER PLAN	ACER RUBRUM	RED MAPLE	2" CAL.	PER PLAN	FIELD GROWN	CONSISTENT BRANCHING & STRONG CENTRAL LEADER TYPICAL OF SPECIES. PROVIDE TREE UNDERDRAIN FOR EACH TREE AND TIE INTO STORM SYSTEM OR ON SITE RETENTION. UTILIZE PLATIPUS TREE ANCHORING SYSTEM FOR TREES OVER 4" CALIPER, AND TREE STAPLES FOR 4' AND LESS. PROVIDE TREE ROOT BARRIER ALONG ALL HARDSCAPE WITHIN 10' OF ANY TREE. CONTRACTOR TO PROVIDE SUPPLIER INFORMATION AND PHOTOGRAPHIC IMAGES FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.
QP	PER PLAN	QUERCUS PALUSTRIS	PIN OAK	2" CAL.	PER PLAN	FIELD GROWN	CONSISTENT BRANCHING & STRONG CENTRAL LEADER TYPICAL OF SPECIES. PROVIDE TREE UNDERDRAIN FOR EACH TREE AND TIE INTO STORM SYSTEM OR ON SITE RETENTION. UTILIZE PLATIPUS TREE ANCHORING SYSTEM FOR TREES OVER 4" CALIPER, AND TREE STAPLES FOR 4' AND LESS. PROVIDE TREE ROOT BARRIER ALONG ALL HARDSCAPE WITHIN 10' OF ANY TREE. CONTRACTOR TO PROVIDE SUPPLIER INFORMATION AND PHOTOGRAPHIC IMAGES FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT.

SEEDED AREA

CODE	QTY	NAME	DISCRIPTION	SIZE AND SPACING	NOTES
PA01	SF PER PLAN	TURF GRASS SOD	LAWN GRASS	SOLID SOD	CONTRACTOR TO PROVIDE SUPPLIER INFORMATION AND PHOTOGRAPHIC IMAGES FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

OJB

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

SHEET TITLE:

LANDSCAPE SCHEDULE

SHEET No.

L100

PROPOSED FENCE

DEMO TO THE EDGE OF ADJACENT JOINT

CP01
JO-02
JO-01

PROPOSED FENCE

PROPOSED MASONRY COLUMN

JO-02
JO-01 CP01 CP02 PA01

EXISTING LIGHT TO REMAIN

PA01

DEMO TO THE EDGE OF ADJACENT JOINT

PROPOSED MASONRY COLUMN

PROPOSED FENCE

PA01

PROPOSED STREET TREE

EXISTING LIGHT TO REMAIN

PROPOSED FENCE

TACTILE PAVER

VEHICULAR TRANSITION RAMP

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

OJB
One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

SHEET TITLE:

LANDSCAPE PLAN

SHEET No.

L101

PROPOSED STREET TREE
EXISTING LIGHT TO REMAIN
PROPOSED FENCE
PROPOSED STREET TREE
EXISTING LIGHT TO REMAIN
CP01
PA-01
PROPOSED FENCE
PROPOSED STREET TREE
JO-02
JO-01
PA-01
CP01
XISTING LIGHT TO REMAIN
PA-01
CP01
PA-01
CP01
JO-01
JO-02
EXISTING LIGHT TO REMAIN
EXISTING STREET TREE TO REMAIN
EXISTING LIGHT TO REMAIN
DEMO TO THE EDGE OF ADJACENT JOINT

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

OJB
One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

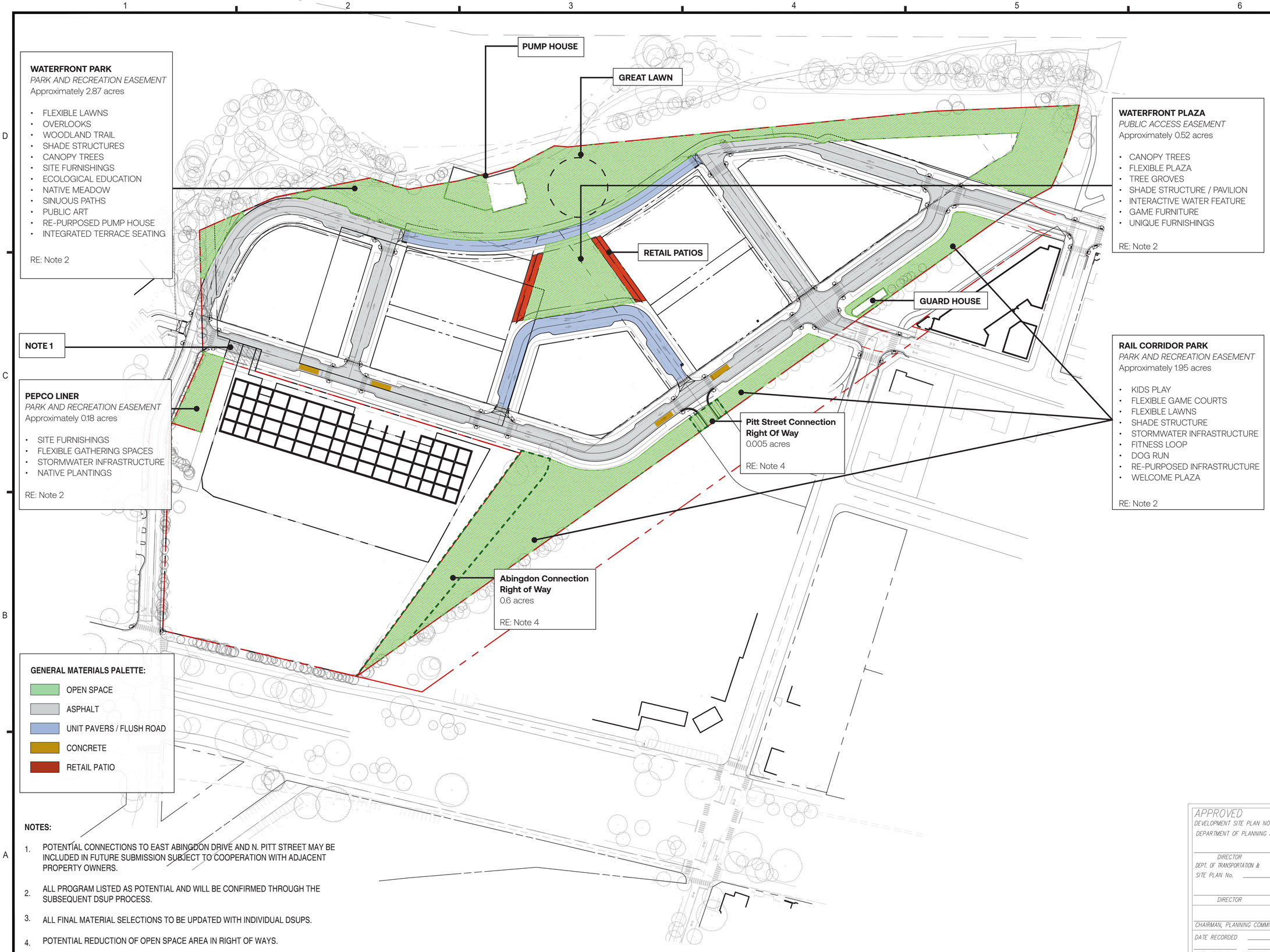
PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

SHEET TITLE:

LANDSCAPE PLAN

SHEET No.

L102



WATERFRONT PARK
PARK AND RECREATION EASEMENT
Approximately 2.87 acres

- FLEXIBLE LAWNS
- OVERLOOKS
- WOODLAND TRAIL
- SHADE STRUCTURES
- CANOPY TREES
- SITE FURNISHINGS
- ECOLOGICAL EDUCATION
- NATIVE MEADOW
- SINUOUS PATHS
- PUBLIC ART
- RE-PURPOSED PUMP HOUSE
- INTEGRATED TERRACE SEATING

RE: Note 2

PEPCO LINER
PARK AND RECREATION EASEMENT
Approximately 0.18 acres

- SITE FURNISHINGS
- FLEXIBLE GATHERING SPACES
- STORMWATER INFRASTRUCTURE
- NATIVE PLANTINGS

RE: Note 2

WATERFRONT PLAZA
PUBLIC ACCESS EASEMENT
Approximately 0.52 acres

- CANOPY TREES
- FLEXIBLE PLAZA
- TREE GROVES
- SHADE STRUCTURE / PAVILION
- INTERACTIVE WATER FEATURE
- GAME FURNITURE
- UNIQUE FURNISHINGS

RE: Note 2

RAIL CORRIDOR PARK
PARK AND RECREATION EASEMENT
Approximately 1.95 acres

- KIDS PLAY
- FLEXIBLE GAME COURTS
- FLEXIBLE LAWNS
- SHADE STRUCTURE
- STORMWATER INFRASTRUCTURE
- FITNESS LOOP
- DOG RUN
- RE-PURPOSED INFRASTRUCTURE
- WELCOME PLAZA

RE: Note 2

GENERAL MATERIALS PALETTE:

- OPEN SPACE
- ASPHALT
- UNIT PAVERS / FLUSH ROAD
- CONCRETE
- RETAIL PATIO

NOTES:

1. POTENTIAL CONNECTIONS TO EAST ABINGDON DRIVE AND N. PITT STREET MAY BE INCLUDED IN FUTURE SUBMISSION SUBJECT TO COOPERATION WITH ADJACENT PROPERTY OWNERS.
2. ALL PROGRAM LISTED AS POTENTIAL AND WILL BE CONFIRMED THROUGH THE SUBSEQUENT DSUP PROCESS.
3. ALL FINAL MATERIAL SELECTIONS TO BE UPDATED WITH INDIVIDUAL DSUPS.
4. POTENTIAL REDUCTION OF OPEN SPACE AREA IN RIGHT OF WAYS.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.3171

OJB

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

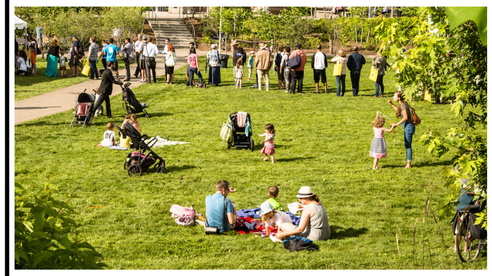
SHEET TITLE:

COMPREHENSIVE OPEN SPACE PLAN

SHEET No.

L001

WATERFRONT PARK



FLEXIBLE LAWN



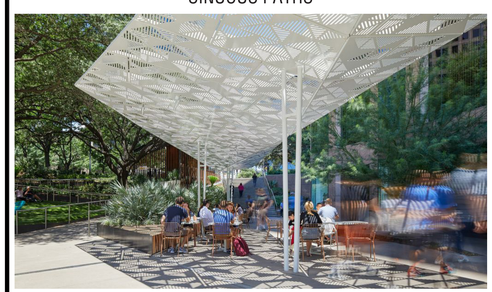
NATIVE MEADOWS & ECOLOGICAL EDUCATION



INTEGRATED TERRACE SEATING



SINUOUS PATHS



SHADE STRUCTURES

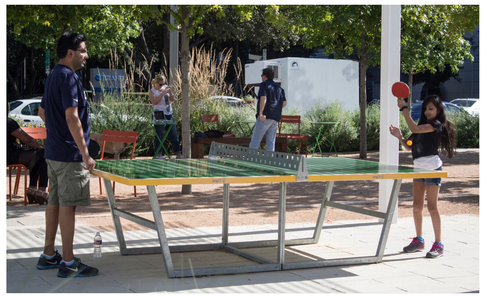
WATERFRONT PLAZA



TREE GROVES



INTERACTIVE WATER FEATURE



GAME FURNITURE



PAVILION



UNIQUE FURNISHINGS

RAIL CORRIDOR PARK



STORMWATER INFRASTRUCTURE



FLEXIBLE LAWNS



RE-PURPOSED INFRASTRUCTURE



FLEXIBLE GAME COURTS



GAMES COURTS

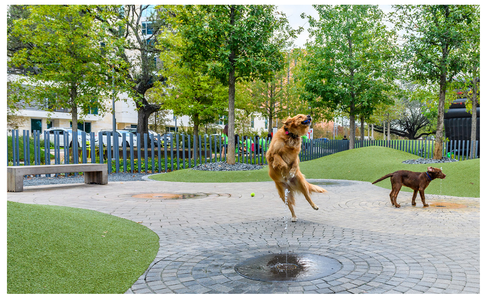
PEPCO LINER



VARIED STREETSCAPE



FITNESS STATION



DOG RUN



FLEXIBLE GATHERING SPACES

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

OJB

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

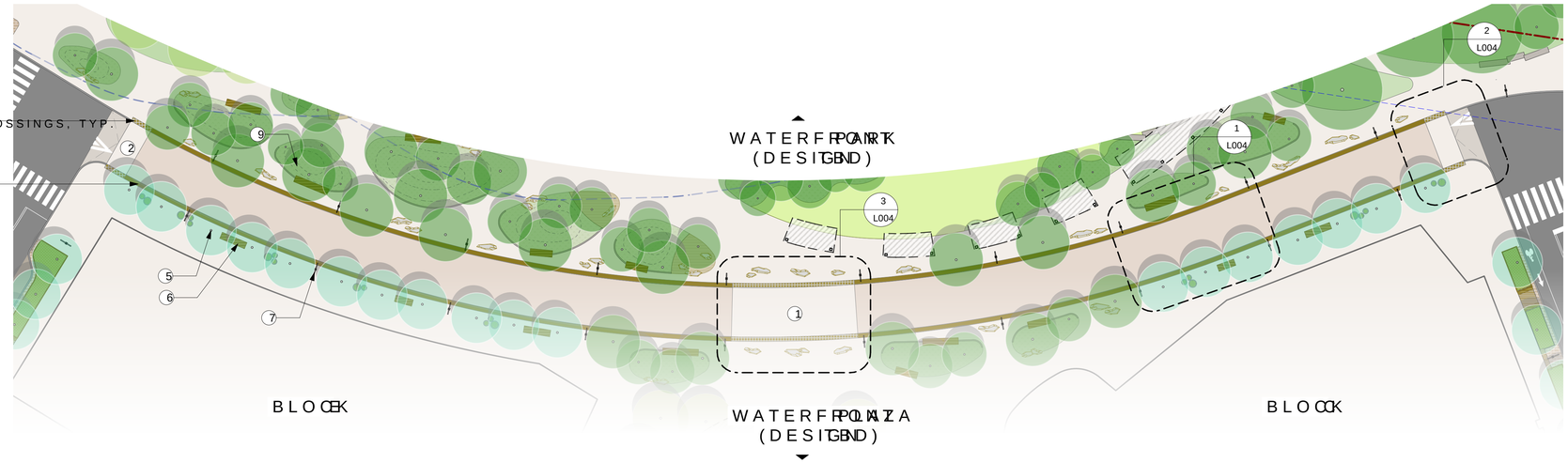
SHEET TITLE:

OPEN SPACE PRECEDENTS

SHEET No.

L002

1. MID-BLOCK CROSSING
2. CROSSING
3. DETECTABLE WARNING PAVING AT CROSSINGS, TYP.
4. ROADWAY DELINEATION
5. STREET TREES, TYP.*
6. BENCHES, TYP.*
7. STREET LIGHTS, TYP.*
8. VEHICULAR DETERRENTS, TYP.**
9. PLANTERS WITH TREES



VEHICULAR DETERRANTS OPTIONS:

5 STREET TREES*





6 BENCHES*









7 STREET LIGHTS*





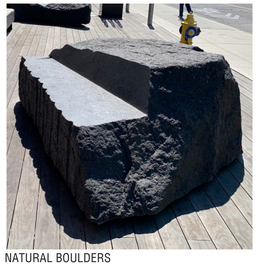




8 VEHICULAR DETERRANTS**



MOVABLE PLANTING POTS



NATURAL BOULDERS



MOVABLE SEATING BLOCKS



STONE BLOCKS

NOTES:

* THESE ELEMENTS ALSO SERVE TO DETER VEHICULAR MOVEMENTS.
** DESIGN OF SPECIFIC VEHICULAR DETERRANTS TO BE DETERMINED IN SUBSEQUENT DSUPs. MAY INCLUDE BOLLARDS.
1. FINAL WOONERF DESIGN TO BE REFINED IN BLOCKS DSUPs.
2. REFER TO COMMON ELEMENTS PACKAGE FOR ADDITIONAL INFORMATION REGARDING THE MATERIALITY AND MAKEUP OF WOONERF.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

OJB

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

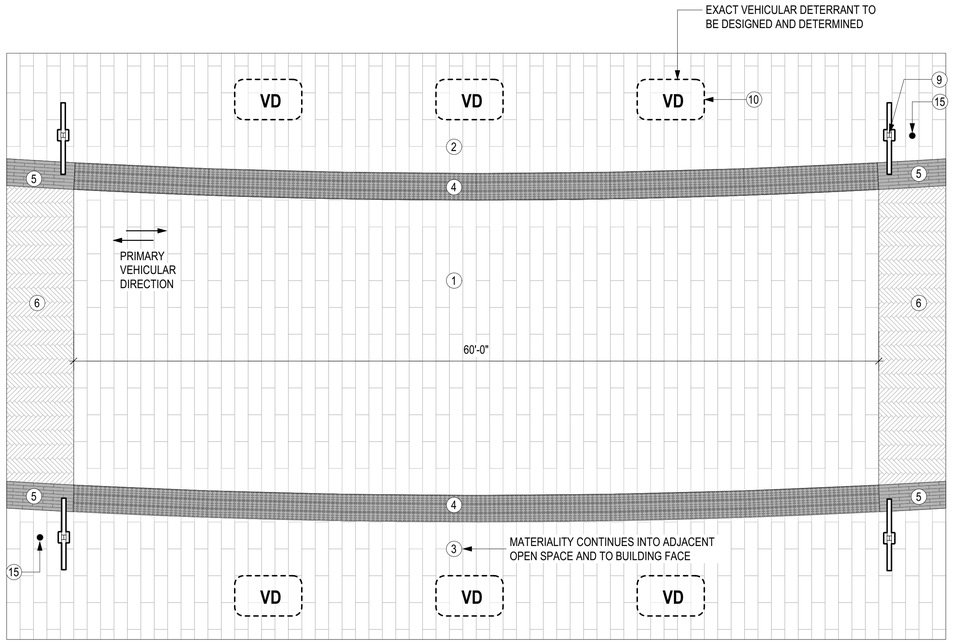
PRGS - REDEVEOPMENT
INFRASTRUCTURE PLAN
PRELIMINARY DEVELOPMENT SITE PLAN
CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

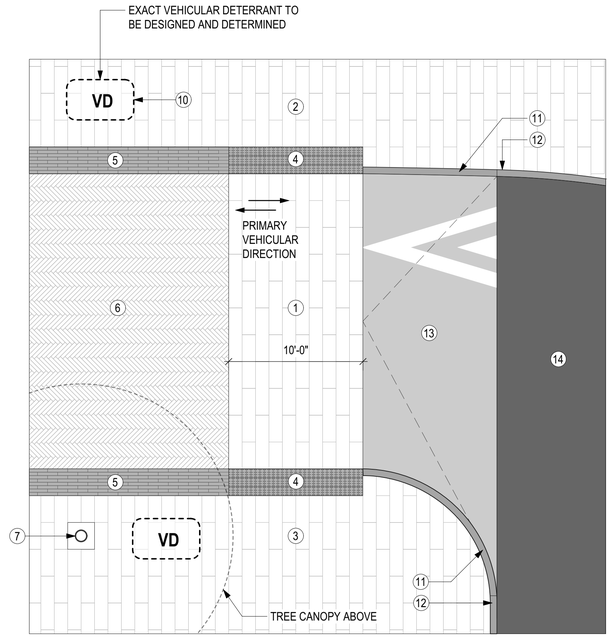
SHEET TITLE:
WOONERF

SHEET No.
L003



SCALE: 3/16" = 1'-0"

ENLARGEMENT PLAN AT MID-BLOCK CROSSING 03

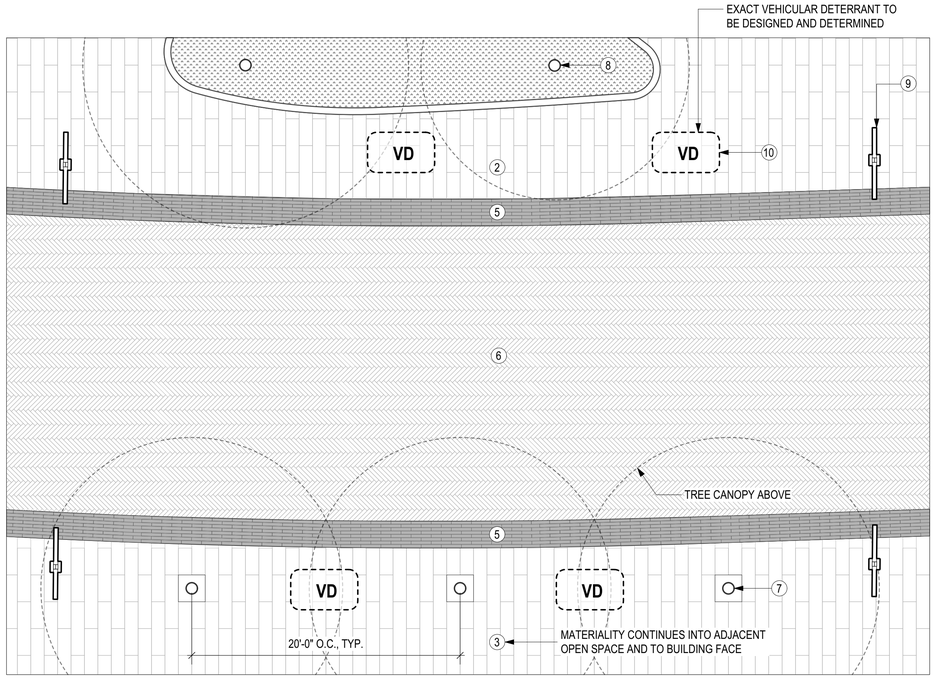


SCALE: 3/16" = 1'-0"

ENLARGEMENT PLAN AT INTERSECTION 02

LEGEND

1. MID-BLOCK CROSSING UNIT PAVER: VEHICULAR-RATED
2. WATERFRONT PARK SIDEWALK PAVER: PEDESTRIAN-RATED
3. WATERFRONT PLAZA SIDEWALK PAVER: PEDESTRIAN-RATED
4. DETECTABLE WARNING PAVER AT CROSSING
5. ROADWAY DELINEATION PAVER
6. ROADWAY UNIT PAVER: VEHICULAR-RATED
7. **STREET TREES, TYP.*** (20' O.C., ON WATERFRON PLAZA SIDE)
8. **TREES IN PLANTING, TYP.*** (DISTANCE VARIED, ON WATERFRONT PARK SIDE)
9. **STREET LIGHTS, TYP.***
10. **VEHICULAR DETERRANTS, TYP. ****
11. TRANSITION CURB, 6" W
12. RAISED CURB, 6" W
13. TRANSITION RAMP
14. ASPHALT ROADWAY
15. TRAFFIC SIGNAGE, REFER TO SIGNAGE PLAN



SCALE: 3/16" = 1'-0"

ENLARGEMENT PLAN AT WOONERF, TYPICAL 01

NOTES:

* THESE ELEMENTS ALSO SERVE TO DETER VEHICULAR MOVEMENTS

** DESIGN OF SPECIFIC VEHICULAR DETERRANTS TO BE DETERMINED IN SUBSEQUENT DSUPs. MAY INCLUDE BOLLARDS.

1. ENLARGEMENT ILLUSTRATION DEMONSTRATE DESIGN INTENT ONLY. PAVING MODULE, MATERIALS & SIZE TO BE DESIGNED IN SUBSEQUENT DSUPs.

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES DATE
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.5171

OJB

COMMONWEALTH of VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

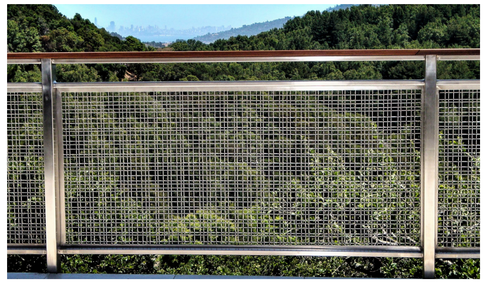
PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

SHEET TITLE:

WOONERF

SHEET No.

L004



GUARD RAIL PRECEDENT

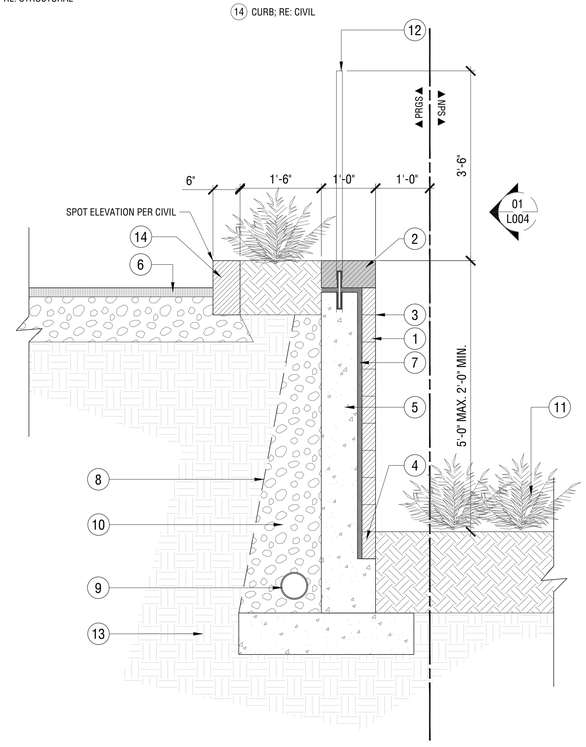


STONE VENEER PRECEDENT

1. STONE VENEER, 6" HEIGHT. LENGTHS VARY, 12 " MIN. TO 36" MAX. VERTICAL JOINTS TO BE MIN. 6" OFFSET SEAM FACE NATURAL FINISH ALL VERTICAL SURFACES
2. 6" THICK, FULL DEPTH CAP STONE THERMAL TOP SEAM FACE, ROCK FACE ALL EXPOSED VERTICAL SURFACES. LENGTHS VARY. 12" MIN. TO 36" MAX.
3. 1/4" JOINTING AT STONE WALL
4. 1 COURSE MIN. STONE VENEER BELOW FINISH GRADE
5. CAST IN PLACE CONCRETE FOOTING RE: STRUCTURAL
6. ADJACENT ROADWAY, RE: CIVIL
7. 1" MORTAR SETTING BED
8. FILTER FABRIC
9. WALL DRAIN RE: CIVIL
10. 3/4" CRUSHED STONE
11. ADJACENT PLANTING, RE: PLANTING PLAN
12. GUARD RAIL
13. COMPACTED SUBGRADE
14. CURB; RE: CIVIL

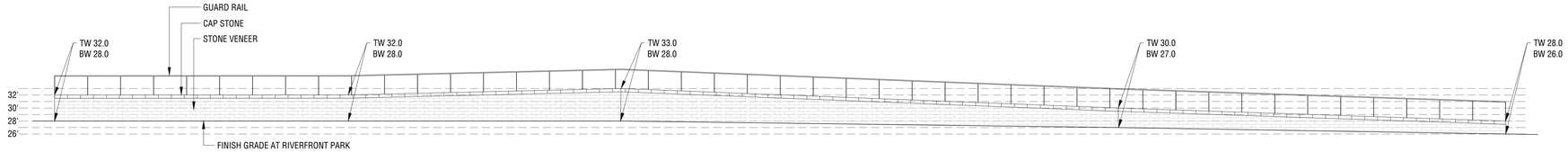
NOTE:

SEE STRUCTURAL FOR REINFORCING. SHOWN ONLY FOR STONE CLADDING



0 8" 16"
SCALE: 3/4" = 1'-0"

RETAINING WALL SECTION 02
DETAIL-FILE



0 4' 8' 16'
SCALE: 1" = 10'

RETAINING WALL ELEVATION 01
DETAIL-FILE

One Bowdoin Square, Suite 801
Boston, Massachusetts 02114
tel 857.233.3171

OJB

COMMONWEALTH OF VIRGINIA
JAMES BURNETT
No. 001105
LANDSCAPE ARCHITECT

PRGS - REDEVEOPMENT

INFRASTRUCTURE PLAN

PRELIMINARY DEVELOPMENT SITE PLAN

CITY OF ALEXANDRIA, VA

MARK	DATE	DESCRIPTION
1	01/13/2023	COMPLETENESS SUBMISSION
2	03/10/2023	SECOND COMPLETENESS SUBMISSION

APPROVED
DEVELOPMENT SITE PLAN NO. DSP #2023 - 00001
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE
DEPT. OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

PROJECT No.:17005.004.03
DRAWING No.:112206
DATE:03-03-2023
DESIGN:SW
DRAWN:YW
CHECKED:RO

SHEET TITLE:

RETAINING WALL DETAILS

SHEET No.

L005