LANDMARK MALL REDEVELOPMENT

PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL 27, 2022

PROJECT TEAM

APPLICANT
FOULGER-PRATT DEVELOPMENT, LLC
12435 PARK POTOMAC AVE
SUITE 200
POTOMAC, MD 20854
TEL. 240-499-9684
CONTACT: JAY KELLY

ATTORNEY
WIRE GILL LLP
700 NORTH FAIRFAX STREET
SUITE 600
ALEXANDRIA, VA 22314
TE. 703-677-3129
CONTACT: KENNETH WIRE

CIVIL ENGINEER
URBAN, LTD.
4200D TECHNOLOGY COURT
CHANTILLY, VA 20151
TEL. 703-376-4221
CONTACT: CLAYTON TOCK, P.E.

ARCHITECT
TORTI GALLAS + PARTNERS
1923 VERMONT AVENUE NW
2ND FLOOR
WASHINGTON, DC 20001
TEL. 202-232-3132
CONTACT: SARAH ALEXANDER, AIA, LEED AP BD+C

TRAFFIC ENGINEER
GOROVE SLADE
225 REINEKERS LANE
SUITE 750
ALEXANDRIA, VA 22314
TEL. 202-540-1926
CONTACT: ROBERT SCHIESEL, P.E.

UTILITY ENGINEER
DAVIS UTILITY CONSULTING, LLC
3975 FAIR RIDGE DRIVE
SUITE 125-SOUTH
FAIRFAX, VA 22033
TEL. 703-945-9606
CONTACT: DAVID GRAHAM

AREA TABULATIONS:

BLOCK E LOT AREA = 2.49 AC. 108,575 AC.
BLOCK G LOT AREA = 1.43 AC. 62,083 AC.
TOTAL DEVELOPMENT AREA = 3.91 AC. 170,658 AC.

ZONING TABULATIONS:

ON-SITE LOCATIONS / ADDRESSES: T.M. #047.02-03-11 / 5801 DUKE ST. ALEXANDRIA, VA 2231

TOTAL SITE/LOT AREAS: 170,658 SF OR 3.91 ACRES

EXISTING ZONE: CDD #29 (COORDINATED DEVELOPMENT DISTRICT #29)
PROPOSED ZONE: CDD #29 (COORDINATED DEVELOPMENT DISTRICT #29)

OPEN SPACE REQUIREMENTS: 42,664 SF (25% OF DEVELOPMENT AREA AT-OR ABOVE GRADE)

OPEN SPACE PROVIDED: 17,274 SF (AT-GRADE)
25,490 SF (ABOVE-GRADE)
TOTAL OPEN SPACE PROVIDED: 42,764 SF (25.05%)

EXISTING USE: SHOPPING CENTER
PROPOSED USE: MIXED-USE: - RESIDENTIAL, RETAIL, OFFICE

FLOOR AREA CALCULATION:

BUILDING E	GROSS AREA (SF)	FLOOR AREA (SF)
RETAIL	58,670	55,887
RESIDENTIAL	177,572	157,159
MEDICAL OFFICE	123,316	112,174
BUILDING E SUBTOTAL:	359,558	325,220
BUILDING G	GROSS AREA (SF)	FLOOR AREA (SF)
RETAIL	25,453	22,908
RESIDENTIAL	227,773	201,953
BUILDING G SUBTOTAL:	253,226	224,861
TOTAL AREAS:	612,784	550,081

FLOOR AREA RATIO TABULATION (FAR):
COMBINED FAR PERMITTED: 4.86*
COMBINED FAR PROPOSED: 3.22
*470,000 SF PERMITTED FOR BLOCK E AND 290,000 SF PERMITTED FOR BLOCK G CDD CONCEPT PLAN.

DENSITY:
BLOCK E: 146 UNITS (MULTIFAMILY)
BLOCK G: 244 UNITS (MULTIFAMILY)

PROPOSED DENSITY: N/A

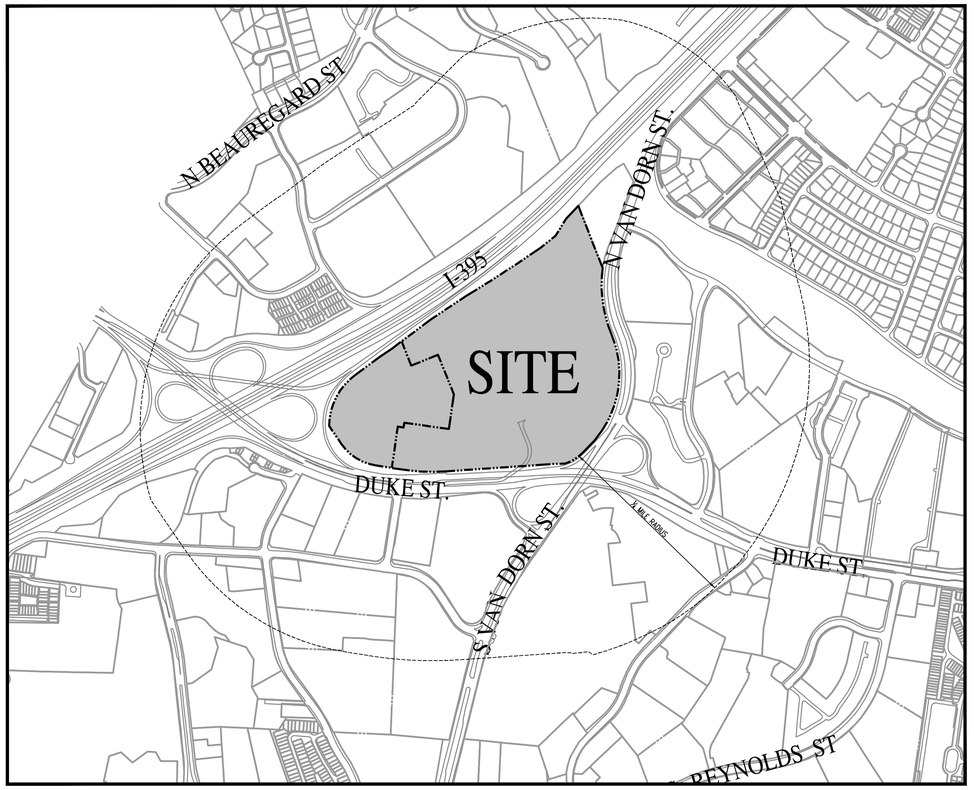
MIN/MAX BLDG.: BLOCK E: EAST: 70 FT. MIN, 85 FT. MAX.
HEIGHT PERMITTED: WEST: 70 FT. MIN, 180 FT MAX.
BLOCK G: 70 FT. MIN, 85 FT. MAX.

BUILDING HEIGHT PROPOSED: BLOCK E: MOB 87 FT; E.1:76 FT.
BLOCK G: 84.5 FT.

AVG. FINISHED GRADE: BLOCK E: 200.55 FT.
BLOCK G: 198.58 FT.

YARDS: REQUIRED: N/A PROPOSED: N/A

FRONTAGE: REQUIRED: N/A PROPOSED: N/A



VICINITY MAP
SCALE: 1"=500'

PARKING TABULATIONS:

PARKING REQUIRED:

BLOCK E:
BLOCK E (RETAIL): RATIO: 3.9 SP/1,000 SF* = 219 SPACES
BLOCK E (MULTIFAMILY): RATIO: 1.2/UNIT* = 176 SPACES
BLOCK E (MEDICAL OFFICE): RATIO: 3.9 SP/1000 SF* = 438 SPACES
BLOCK E PARKING REQUIRED: 833 SPACES

BLOCK G:
BLOCK G (RETAIL): RATIO: 3.9 SP/1,000 SF* = 90 SPACES
BLOCK G (MULTIFAMILY): RATIO: 1.2/UNIT* = 204 SPACES
BLOCK G PARKING REQUIRED: 294 SPACES

TOTAL PARKING REQUIRED: 1,127 SPACES

*PARKING RATIOS REFLECT APPROVED CDD CONCEPT PLAN

PARKING PROVIDED:

BLOCK E
BLOCK E (RETAIL): 181 SPACES
BLOCK E (MULTIFAMILY): 189 SPACES
BLOCK E (MEDICAL OFFICE): 490 SPACES
BLOCK E PARKING PROVIDED: 860 SPACES

BLOCK G
BLOCK G (RETAIL): 112 SPACES
BLOCK G (MULTIFAMILY): 318 SPACES
BLOCK G PARKING PROVIDED: 430 SPACES

TOTAL PARKING PROVIDED: 1,290 SPACES

LOADING SPACES REQUIRED: RATIO: 1/20,000 SF (RETAIL)=4 SPACES
LOADING SPACES PROVIDED: 5 SPACES

TRIP GENERATION:

BLOCK E

Land Use	ITE Code	Size	Weekday AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	Weekday PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily Total
Total External Residential Trips			6	18	24	16	10	26	318
Total External Retail Trips			14	6	20	41	45	86	1,902
Total External Medical Trips			154	42	196	87	227	314	3,400
OVERALL NON-AUTO MODE TRIPS			-43	-29	-72	-63	-85	-148	-2,199
OVERALL DEVELOPMENT TRIPS			174	66	240	144	282	427	5,621

BLOCK G

Land Use	ITE Code	Size	Weekday AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	Weekday PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily Total
Total External Residential Trips			10	29	39	27	16	43	533
Total External Retail Trips			6	3	9	17	18	35	1,037
OVERALL NON-AUTO MODE TRIPS			-14	-31	-45	-40	-30	-70	-1,231
OVERALL DEVELOPMENT TRIPS			16	32	48	43	35	78	1,570

SHEET INDEX

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PROJECT NARRATIVE:

THE OVERALL LANDMARK PARCEL IS BORDERED TO THE NORTH BY HENRY G. SHIRLEY MEMORIAL HWY (I-395), TO THE SOUTHEAST BY DUKE STREET, AND TO THE EAST BY VAN DORN STREET. SPECIFIC TO THIS SITE, BLOCKS E & G ARE BORDERED TO THE NORTH BY THE EXISTING PARKING GARAGE, TO THE SOUTHWEST BY FUTURE BLOCK A, B AND Q, TO THE SOUTHEAST BY FUTURE BLOCKS F AND N, AND TO THE EAST BY FUTURE BLOCK I.

THE PURPOSE OF THE REDEVELOPMENT FOR BLOCKS E & G IS TO ALLOW FOR A RANGE OF USES ACROSS THE SITE. THESE USES WOULD INCLUDE RETAIL, OFFICE (INCLUDING MEDICAL OFFICE), AND MULTIFAMILY RESIDENTIAL. THESE USES MAY BE IMPLEMENTED ANYWHERE ON THE SITE, SUBJECT TO CAPACITY OF INFRASTRUCTURE.

LIST OF EXISTING APPROVALS:

- CDD CONCEPTUAL DESIGN PLAN #2020-00007
- DSP #2021-00012

GREEN BUILDING NARRATIVE:

THE APPLICANT WILL COMPLY WITH CONDITION #102 OF CDD2020-00007. PLEASE SEE GREEN BUILDING APPROACH ON SHEET 53.

SHEET
01
OF
53

COMMONWEALTH OF VIRGINIA
CLAYTON C. TOCK
Lic. No. 036790
04/27/22
PROFESSIONAL ENGINEER

urban
Planners•Engineers•Landscape Architects•Land Surveyors
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PLAN DATE
11-19-2021
04-27-2022-
-

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

MASTER LANDMARK SITE TABULATIONS

DEVELOPMENT SUMMARY

Use	Floor Area	Residential Units	Hotel Keys
Hospital	464,467		
Office	-		
Medical Office	282,743		
Multifamily	1,118,245	1,129 units	
Affordable Multifamily	-	0 units	
Senior Housing (AL/IL)	-	0 units	
2-over-2 Townhomes	-	0 units	
Traditional Townhomes	-	0 units	
Condo Flats	-	0 units	
Hotel	-		0 keys
Retail	201,875		
Grocer	-		
Firestation	-		
Garage / Loading / Service			
Total	**2,067,330**	**1,129 units**	**0 keys**
FAR over Gross Land Area	**0.9215**		

INOVA HOSPITAL CAMPUS

	Building A		Building B		Building C		Block D		Block E		Block G		Block H		Block I		Block F		Block N		Block J		Block K		Block L		Blocks M	
	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units	Floor Area	Units
Hospital	464,467	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Office	-	-	94,212	-	76,357	-	-	-	112,174	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multifamily	-	-	-	-	-	-	-	-	157,159	146	201,953	244	-	-	408,583	390	-	-	-	-	-	-	350,550	349	-	-	-	-
Affordable Multifamily	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Senior Housing (AL/IL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-over-2 Townhomes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Traditional Townhomes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Condo Flats	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hotel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail	-	-	-	-	-	-	-	-	55,887	-	22,908	-	-	-	93,000	-	3,120	-	2,244	-	-	-	30,080	-	-	-	-	-
Grocer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Firestation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garage / Loading / Service	298,250 (TOTAL GARAGE)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	127,550	-	-	-	-	-
Total	**762,717**	**-**	**94,212**	**-**	**76,357**	**-**	**-**	**-**	**325,220**	**146**	**224,861**	**244**	**-**	**-**	**501,583**	**390**	**3,120**	**-**	**2,244**	**-**	**-**	**-**	**508,180**	**349**	**-**	**-**	**-**	**-**

PARKING TABULATIONS

INOVA HOSPITAL CAMPUS

Parking Requirement	Parking Ratio	Totals	Building A		Building B		Building C		Block D		Block E		Block G		Block H		Block I		Block F		Block N		Block J		Block K		Block L		Blocks M	
			REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED
PARKING RATES																														
Hospital	1/ 2 BEDS		TBD	(SEE BELOW)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Office	3.2 / 1,000 GSF		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Medical Office	3.9 / 1,000 GSF		-	-	408	(SEE BELOW)	335	(SEE BELOW)			438	490																		
Multifamily	1.2 / unit		-	-	-	-	-	-	-	-	176	189	204	318	-	-	-	507	-	-	-	-	-	-	-	322	-	-	-	-
Affordable Multifamily	0.8 / unit		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Senior Housing (AL/IL)	0.7 / unit		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2-over-2 Townhomes	2.0 / unit		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Traditional Townhomes	2.0 / unit		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Condo Flats	1.3 / unit		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hotel	0.7 / key		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Retail	3.9 / 1,000 GSF		-	-	-	-	-	-	-	-	219	181	90	112	-	-	-	323	-	-	-	-	-	-	-	EX. GARAGE,	-	-	-	-
Grocer	50 spaces		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	BLOCKS E/G	-	-	-	-
Firestation			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
VEHICLE PARKING																														
STANDARD PARKING SPACES			-	TBD	-	TBD	-	TBD	-	-	-	396	-	132	-	-	-	131	-	-	-	-	-	-	-	128	-	-	-	-
COMPACT PARKING SPACES			-	TBD	-	TBD	-	TBD	-	-	-	441	-	286	-	-	-	673	-	-	-	-	-	-	-	184	-	-	-	-
HANDICAP PARKING SPACES (NON-VAN)			-	TBD	-	TBD	-	TBD	-	-	-	20	-	9	-	-	-	24	-	-	-	-	-	-	-	8	-	-	-	-
HANDICAP PARKING SPACES (VAN)			-	TBD	-	TBD	-	TBD	-	-	-	3	-	3	-	-	-	2	-	-	-	-	-	-	-	2	-	-	-	-
TOTAL PARKING PROVIDED:		**3,952**		1,510					-	-	-	860	-	430	-	-	-	830	-	-	-	-	-	-	-	322	-	-	-	-
PARKING PROVIDED IN EXISTING GARAGE				550 (EXISTING GARAGE)					-	-	-	860	-	430	-	-	-	830	-	-	-	-	-	-	-	-	-	-	-	-
PARKING PROVIDED IN PROPOSED GARAGE				960 (ABOVE GRADE GARAGE + BELOW GRADE GARAGE)					-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	322	-	-	-	-
LOADING SPACES																		3								2				
BICYCLE PARKING																														

ZONING TABULATIONS

INOVA HOSPITAL CAMPUS

Zoning Requirement	Building A	Building B	Building C	Block D		Block E		Block G		Block H		Block I		Block F		Block N		Block J		Block K		Block L		Blocks M	
	PROPOSED			REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED	REQUIRED	PROPOSED
LOT AREA (SQ. FT.)	452,343 (COMBINED INOVA HOSPITAL CAMPUS AREA)			-	-	-	100,225	-	56,428	-	-	-	112,066	-	112,495	-	112,495	-	-	-	-	-	98,964	-	-	-	-	-	-
LOT WIDTH (FT.)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FRONT YARD (FT.)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SIDE YARD (FT.)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
REAR YARD (FT.)	-			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FLOOR AREA (SQ. FT.)	933,286 (COMBINED FLOOR AREA FOR BUILDINGS A,B,C)			-	-	-	325,220	-	224,861	-	-	-	485,000	-	-	-	-	-	-	-	-	-	459,686	-	-	-	-	-	-
FAR (PER LOT)	2.06 (COMBINED FAR FOR BUILDINGS A,B,C)			-	-	-	3.24	-	3.98	-	-	-	4.33	-	-	-	-	-	-	-	-	-	4.64	-	-	-	-	-	-
OPEN SPACE (SF / %)	15%			-	-	-	25.37%	-	25.00%	-	-	-	34.93%	-	-	-	-	-	-	-	-	-	28.16%	-	-	-	-	-	-
GROUND FLOOR	53,530			-	-	-	-	-	-	-	-	-	6,123	-	-	-	-	-	-	-	-	-	4,771	-	-	-	-	-	-
ABOVE GROUND	10,000			-	-	-	-	-	-	-	-	-	33,017	-	-	-	-	-	-	-	-	-	23,102	-	-	-	-	-	-
TOTAL OPEN SPACE	62,530			-	-	-	-	-	-	-	-	-	39,140	-	-	-	-	-	-	-	-	-	27,873	-	-	-	-	-	-
AVERAGE FINISHED GRADE (FT.)	216.34 (PROPOSED)	209.86 (PROPOSED)	212.07 (PROPOSED)	-	-	-	200.55	-	198.58	-	-	-	193.00	-	-	-	-	-	-	-	-	-	199.21	-	-	-	-	-	-
MAX. BUILDING HEIGHT (FT.)	159	52	60	-	-	-	98 / 85	-	85	-	-	-	85	-	-	-	-	-	-	-	-	-	85	-	-	-	-	-	-
CROWN COVERAGE (SQ. FT.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MAX. RESI DENTISTY (UNITS/AC.)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dwelling Unit Summary	-	-	-	-	-	-	146	-	244	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
STUDIO UNITS	-	-	-	-	-	-	TBD	-	TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
ONE BEDROOM UNITS	-	-	-	-	-	-	TBD	-	TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
ONE BEDROOM DEN UNITS	-	-	-	-	-	-	TBD	-	TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
TWO BEDROOM UNITS	-	-	-	-	-	-	TBD	-	TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
TWO BEDROOM DEN UNITS	-	-	-	-	-	-	TBD	-	TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	TBD	-	-	-	-	-	-
LOADING SPACES	1	1	1	-	-	3	3	2	3	-	-	-	3	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-
TRIP GENERATION (ADT)	5,774	910	3,317	-	-	-	7,482	-	2,073	-	-	-	5,173	-	-	-	-	-	-	-	-	-	2,159	-	-	-	-	-	-

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

DATE RECORDED _____

_____ INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO.

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11 – 19 – 2021
04 – 27 – 2022

Urban Ltd.
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COMMONWEALTH OF VIRGINIA
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04.27.22
PROFESSIONAL ENGINEER

GENERAL NOTES & DETAILS

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL 2022

C.I.= N/A

SCALE: N/A

SHEET 02 OF 53

FILE No. RZ-1877

Urban, Ltd. – J:_JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-04-GNOTES.dwg [GNOTES] April 27, 2022 – 11:09am awalia

GENERAL NOTES

1. THE SUBJECT SITE IS LOCATED ON THE FOLLOWING CITY OF ALEXANDRIA ASSESSMENT MAP NO.s: LOT 602 LANDMARK MALL REDEVELOPMENT R/S: 047.02-03-11 (5801 DUKE ST), AND IS ZONED CDD.
2. OWNER: LANDMARK LAND HOLDINGS, LLC C/O FOULGER-PRATT DEVELOPMENT, LLC
3. ADDRESS: 12435 PARK POTOMAC AVE, SUITE 200, POTOMAC, MD, 20854
4. THE SITE IS LOCATED IN THE HOLMES RUN WATERSHED.
5. CONSTRUCTION PERMITS ARE REQUIRED FOR THIS PROJECT. THE APPROVED SITE PLAN MUST BE ATTACHED TO THE PERMIT APPLICATION THAT FULLY DETAILS THE CONSTRUCTION AS WELL AS LAYOUTS AND SCHEMATICS OF THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS.
6. ALL PUBLIC AND PRIVATE EASEMENTS OR ALL KNOWN PUBLIC AND PRIVATE EASEMENTS, INCLUDING ALL UTILITY, EGRESS, AND CONSERVATION RESTRICTIONS ARE SHOWN. THE APPLICANT SHALL NOT CONSTRUCT ANY PERMANENT STRUCTURES OVER ANY EXISTING OR PROPOSED PUBLIC EASEMENTS UNLESS OTHERWISE APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
7. ALL NEW CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND TO THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC).
8. PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. IF CITY'S EXISTING PUBLIC INFRASTRUCTURE, INCLUDING BUT NOT LIMITED TO, STREETS, ALLEYWAYS, DRIVEWAY APRONS, SANITARY AND STORM SEWERS, STREET LIGHTING, TRAFFIC AND PEDESTRIAN SIGNALS, SIDEWALKS, CURB AND GUTTER, AND STORM WATER DROP INLET STRUCTURES ARE DAMAGED BY THE CONTRACTOR OR BY ACTIVITIES RELATING TO THE SITE CONSTRUCTION THEN THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). A PRE-CONSTRUCTION WALK/SURVEY OF THE SITE SHALL OCCUR WITH CONSTRUCTION AND INSPECTION STAFF TO DOCUMENT EXISTING CONDITIONS PRIOR TO ANY LAND DISTURBING ACTIVITY.
9. ALL IMPROVEMENTS TO THE CITY'S RIGHT-OF-WAY SUCH AS CURB, GUTTER, SIDEWALK, AND DRIVEWAY APRONS, ETC., ARE DESIGNED PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS.
10. ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHT-OF-WAYS, REQUIRED FOR ANY UTILITY INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES).
11. CONTRACTOR MUST ENSURE THAT THERE IS NO DISTURBANCE ON ADJACENT PROPERTIES WITHOUT RECORDED EASEMENT OR NOTARIZED LETTER OF PERMISSION FROM THE ADJACENT PROPERTY OWNERS.
12. ALL REQUIRED STATE AND FEDERAL PERMITS, WHICH COULD INCLUDE PERMITS FROM THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (VDCR), VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ), VIRGINIA DEPARTMENT OF HISTORIC RESOURCES (VDHR), UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA), ARMY CORPS OF ENGINEERS AND VIRGINIA MARINE RESOURCES, MUST BE IN PLACE FOR ALL PROJECT CONSTRUCTION AND MITIGATION WORK PRIOR TO RELEASE OF THE FINAL SITE PLAN. THIS INCLUDES THE STATE REQUIREMENT FOR A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES FOR LAND DISTURBING ACTIVITIES GREATER THAN 2,500. INFORMATION REGARDING THE VSMP GENERAL PERMIT CAN BE FOUND ONLINE AT: http://www.dcr.virginia.gov/soil_and_water/vsmp.shtml.
13. PERMITS FROM THE CITY OF ALEXANDRIA OFFICE OF ENVIRONMENTAL QUALITY (OEQ), TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES), AND BUILDING AND FIRE CODE ADMINISTRATION SHALL BE OBTAINED BY THE APPLICANT, AS REQUIRED AND DOCUMENTED HEREIN. THE CONTRACTOR CAN CONTACT ALEXANDRIA FIRE AND CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
14. ANY WORK IN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A SEPARATE PERMIT FROM THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE CONTRACTOR CAN CONTACT THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES AT (703) 746-4035 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
15. THE PROPERTY ADDRESS MUST BE CLEARLY MARKED IN THE FRONT AND BACK OF THE PROPOSED DEVELOPMENT SITE DURING CONSTRUCTION FOR EMERGENCY RESPONSE PURPOSES IN CONTRASTING COLORS FOR EASY IDENTIFICATION.
16. THE APPLICANT SHALL CONTACT THE CRIME PREVENTION UNIT OF THE ALEXANDRIA POLICE DEPARTMENT AT 703-746-1920 REGARDING SECURITY HARDWARE FOR NEW CONSTRUCTION. THIS SHALL BE COMPLETED PRIOR TO ISSUANCE OF BUILDING PERMIT.
17. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE OCCURS ON SITE TO PREVENT PONDING OR DRAINAGE PROBLEMS ON ADJACENT PROPERTIES.
18. A SEPARATE DESIGN IS REQUIRED FOR ALL WALLS 24" AND OVER IN HEIGHT FROM THE GRADE AND SUBJECT TO SEPARATE PERMITS TO BE OBTAINED BY THE OWNERS. GEOTECHNICAL AND STRUCTURAL DESIGN IS TO BE COMPLETED BY OTHERS. THIS FINAL SITE PLAN SHOWS LOCATION, PROPOSED GRADING, AND DESIGN OF ALL THE WALLS.
19. ALL SANITARY LATERALS AND/OR SEWERS NOT SHOWN IN THE EASEMENTS SHALL BE OWNED AND MAINTAINED PRIVATELY.
20. ALL STORM DRAINS NOT SHOWN WITHIN AN EASEMENT OR IN A PUBLIC RIGHT-OF-WAY SHALL BE OWNED AND MAINTAINED PRIVATELY.
21. ALL WATER FACILITY CONSTRUCTIONS SHALL CONFORM TO VIRGINIA AMERICAN WATER (VAW) STANDARDS AND SPECIFICATIONS. NO WORK CAN BE COMPLETED ON EXISTING AND PROPOSED WATER FACILITIES UNTIL ALL EASEMENTS AND AGREEMENTS WITH VAW ARE FINALIZED, EXECUTED AND RECORDED. DEVELOPER OR CONTRACTOR SHALL CONTACT VAW AT 703-706-3889 TO OBTAIN AN APPROVED PROPOSAL AND PAY ALL REQUIRED FEES, PRIOR TO THE START OF CONSTRUCTION, DEMOLITION AND INSPECTION OF WATER FACILITIES, INCLUDING, BUT NOT LIMITED TO, WATER MAINS, FIRE HYDRANTS, DOMESTIC AND FIRE SERVICE LINES. ALL THE PROPOSED WET TAPS ON AN EXISTING WATER MAIN SHALL BE CONSTRUCTED BY VAW
22. PRIOR TO THE RELEASE OF THE FINAL SITE PLAN, A TRAFFIC CONTROL PLAN FOR CONSTRUCTION DETAILING PROPOSED CONTROLS TO TRAFFIC MOVEMENT, LANE CLOSURES, CONSTRUCTION ENTRANCES, HAUL ROUTES, AND STORAGE AND STAGING SHALL BE PROVIDED FOR INFORMATION PURPOSES; HOWEVER, AN AMENDED TRAFFIC CONTROL PLAN, IF REQUIRED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES SHALL BE SUBMITTED TO THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES ALONG WITH THE BUILDING PERMIT APPLICATION. THE FINAL SITE PLAN SHALL INCLUDE A STATEMENT "FOR INFORMATION ONLY" ON THE TRAFFIC CONTROL PLAN SHEETS.
23. THIS SITE IS NOT LOCATED WITHIN A COMBINED SEWER AREA.
24. THE SITE CONTAINS EXISTING STORM SEWER, SANITARY SEWER, WATERLINES, ELECTRIC, AND OVERHEAD UTILITY. THE SUBJECT PLAN PROPOSES THE ADDITION OF STORM SEWER, SANITARY SEWER, WATERLINES, ELECTRIC, AND TELECOMMUNICATION CONNECTIONS. SOME OF THE EXISTING UTILITIES WILL REMAIN BUT NEW ONES WILL BE ADDED.
25. THE APPLICANT IS RESPONSIBLE FOR THE MAINTENANCE OF ALL SPECIAL PAVING MATERIAL INSTALLED WITHIN THE PUBLIC RIGHT OF WAY PER DEVELOPMENT CONDITION 26.

ADDITIONAL NOTES

1. CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
2. 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.

EXISTING CONDITIONS SURVEY NOTES

1. HORIZONTAL DATUM* NORTH AMERICAN DATUM OF 1983, NAD83
   VERTICAL DATUM* NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD88*
2. UTILITY INFORMATION, AS SHOWN ON THIS PLAN, IS TAKEN FROM THE RECORDS AND/OR FIELD SURVEY COMPLETED BY URBAN LTD., DATED 05/10/2012; AND CANNOT BE GUARANTEED. FOR EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES, NOTIFY "MISS UTILITY" AT 1-800-257-7777 AND 811 72 HOURS BEFORE THE START OF ANY EXCAVATION OR CONSTRUCTION. THE CONSTRUCTION WORKERS AND CONTRACTOR(S) ARE ENCOUNGED TO VISIT DOMINION VIRGINIA POWER WEB SITE AT WWW.DOM.COM (KEYWORD SAFETY) FOR ADDITIONAL SAFETY INSTRUCTIONS.
3. LOCATION AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES TO BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR/ENGINEER SHOULD DIG TEST PITS BY HAND AT ALL UTILITY CROSSINGS TO VERIFY EXACT LOCATION.
4. THE BOUNDARY INFORMATION FOR THE SUBJECT SITE IS BASED ON A CURRENT FIELD SURVEY PREPARED BY URBAN LTD., DATED 02/01/2012 IN ACCORDANCE WITH THE REQUIREMENTS OF VIRGINIA ASSOCIATION OF LAND SURVEYORS.

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

ENVIRONMENTAL SITE ASSESSMENT

1. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS, AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASES TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
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 703-746-4996.
3. UNLESS APPROVED BY THE DIRECTOR OF TRANSPORTATION & ENVIRONMENTAL SERVICES (T&ES) 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.

SANITARY FLOW COMPUTATIONS

TOTAL FLOW FROM BUILDING E&G=
300 GPD/UNIT * 390 UNITS + 200 GPD/1,000 S.F. * 190,967 S.F. = 155,193 GPD
PEAK FACTOR FLOW FROM BUILDING = 155,193 GPD * 4.0 = 620,772 OR 0.62 MGD

THE TOTAL ESTIMATED FLOW EXCEEDS 10,000 GPD AND IS THEREFORE SUBJECT MEMORANDUM TO INDUSTRY NO. 06-14, WHICH STATES THAT AT THE TIME OF THE FINAL SITE PLAN,

1. THE APPLICANT SHALL PROVIDE ADEQUATE SANITARY SEWER OUTFALL ANALYSIS, AS GENERALLY DESCRIBED BELOW, SUFFICIENT TO DETERMINE EXISTING AND FUTURE FLOWS IN THE CITY-OWNED SEWERS THAT ARE USED BY THE DEVELOPMENT/REDEVELOPMENT PROJECT. THE SANITARY SEWER ADEQUATE OUTFALL ANALYSIS SHALL BE COMPLETED UP TO THE TRUNK SEWER DOWNSTREAM WITH A MINIMUM DIAMETER OF 24" OR TO A POINT AS DIRECTED BY T&ES STAFF.
2. THE APPLICANT SHALL PROVIDE AN ESTIMATE OF THE AVERAGE DAY AND PEAK WASTEWATER FLOW DISCHARGED UPSTREAM AND DOWNSTREAM OF THE DEVELOPMENT SITE UNDER EXISTING CONDITIONS AND THE CONTRIBUTION OF SANITARY FLOW FROM THE PROPOSED DEVELOPMENT SITE TO THE TRUNK SEWER USING THE FACTORS DESCRIBED BELOW:

A. AVERAGE DESIGN FLOWS:
I. SINGLE FAMILY HOME/TOWNHOUSE 350 GPD/UNIT
II. MULTI-FAMILY (CONDO, APARTMENT) 300 GPD/UNIT
III. OFFICE/RETAIL 200 GPD/1000 S.F.
IV. HOTEL 130 GPD/ROOM

B. THE SANITARY SEWERS SHALL BE DESIGNED FOR PEAK FLOW USING A PEAKING FACTOR OF 4 APPLIED TO THE AVERAGE FLOW.

C. AT THE DISCRETION OF T&ES STAFF, EXISTING CONDITIONS PEAK FLOWS, BASED ON LONG-TERM MONITORING AND/OR SEWER MODELING, MAY BE AVAILABLE TO THE APPLICANT FOR USE IN DETERMINING SANITARY SEWER CAPACITY.

D. SHORT-TERM TEMPORARY FLOW MONITORING OR WATER METER DATA MAY NOT BE USED IN LIEU OF COMPUTING EXISTING FLOWS. LONG-TERM MONITORING MAY BE USED SUBJECT TO THE APPROVAL OF THE DIRECTOR OF T&ES.

3. IN LIEU OF THE ESTIMATION OF THE AVERAGE DAY AND PEAK HOUR WASTEWATER FLOW, THE DIRECTOR OF T&ES AT HIS DISCRETION MAY REQUEST THE APPLICANT TO MEASURE THE SANITARY FLOW UPSTREAM AND DOWNSTREAM OF THE PROPOSED DEVELOPMENT SITE TO DETERMINE THE CURRENT SANITARY FLOW DISCHARGED INTO THE TRUNK SEWER UPSTREAM OF THE DEVELOPMENT SITE AND THE CURRENT CONTRIBUTION OF THE SANITARY FLOW TO THE TRUNK SEWER FROM THE DEVELOPMENT SITE UNDER EXISTING CONDITIONS.
4. THE APPLICANT SHALL ESTIMATE ADDITIONAL AVERAGE DAY AND PEAK HOUR WASTEWATER FLOW TO BE DISCHARGED INTO THE TRUNK SEWER FROM THE PROPOSED DEVELOPMENT SITE UNDER PROPOSED CONDITIONS USING THE FACTORS DESCRIBED ABOVE.
5. THE SANITARY SEWER ADEQUATE OUTFALL ANALYSIS SHALL ACCOUNT FOR THE EXISTING AND FUTURE NEEDS.
6. THE CITY OF ALEXANDRIA, AT ITS DISCRETION, WILL PROVIDE THE APPLICANT WITH ANY READILY AVAILABLE DATA TO ASSIST IN COMPLETION OF THE ADEQUATE OUTFALL ANALYSIS. THE ADDITIONAL PARAMETERS REQUIRED TO COMPLETE THE ANALYSIS SHALL BE FIELD MEASURED (I.E., LENGTH, PIPE DIAMETER, MATERIAL OF CONSTRUCTION, AND SLOPE, ETC.) AND/OR ESTIMATED (I.E., MANNING'S ROUGHNESS COEFFICIENT) BY THE APPLICANT. THE APPLICANT SHALL USE THE CRITERIA ESTABLISHED BY THE ENGINEERS AND SURVEYORS (ESI) INSTITUTE, AS SHOWN ON THE ESI CHECK LIST, WHERE APPLICABLE.
7. THE APPLICANT SHALL PROVIDE ALL THE MEASURED AND/OR ESTIMATED DATA AND CALCULATIONS ON THE ADEQUATE SANITARY SEWER OUTFALL ANALYSIS ON THE PLANS FOR REVIEW BY THE CITY STAFF.
8. THE INCREASED PEAK FLOW WILL BE PLACED IN THE CITY OF ALEXANDRIA WASTEWATER FLOW CAPACITY REGISTRY TO DETERMINE THAT THE CITY HAS SUFFICIENT TREATMENT CAPACITY AVAILABLE IN THE ALEXANDRIA SANITATION AUTHORITY (ASA) ADVANCED WASTEWATER TREATMENT PLANT (A WWTP) AND IN VARIOUS INTERCEPTOR SEWERS IN THE CITY OF ALEXANDRIA.
9. SANITARY SEWER SYSTEMS THAT SERVE OVER 400 PEOPLE REQUIRE THE APPROVAL OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ). THEREFORE, THE APPLICANT SHALL COMPLY WITH ALL THE REGULATORY REQUIREMENTS OF THE STATE OF VIRGINIA.
10. THE INSTALLATION OF PLUMBING FIXTURES THROUGHOUT THE CITY SHALL BE GOVERNED BY LOCATION. IN THE AREAS A AND B SHOWN IN THE ATTACHED MAP, THE SANITARY SEWER PLUMBING FIXTURES AND DRAINS LOCATED BELOW THE FIRST FLOOR (INCLUDING PARKING STRUCTURES) SHALL HAVE IN-STRUCTURE OR ON-SITE PLUNPED DISCHARGE TO THE CITY'S GRAVITY COLLECTION SYSTEM.
11. THE PUMPED FACILITIES SHALL BE PROVIDED WITH A STANDBY SOURCE OF POWER (I.E., BATTELY OR GENERATOR).
12. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR THE PERPETUAL OWNERSHIP, CAPITAL, AND MAINTENANCE AND OPERATION OF THE PUMPS AND APPURTENANCES.
13. NO FOUNDATION DRAIN, BASEMENT DRAIN, OR STAIRWELL BASEMENT ACCESS DRAIN SHALL BE CONNECTED TO THE CITY OR ASA SANITARY SEWER.

DEMOLITION

1. A SEPARATE PERMIT IS REQUIRED FOR DEMOLITION; HOWEVER, NO DEMOLITION SHALL BEGIN UNTIL ALL EROSION AND SEDIMENT AND TREE PROTECTION CONTROLS ARE IN PLACE AND ARE APPROVED BY AN EROSION AND SEDIMENT CONTROL INSPECTOR OF THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES.
2. ALL WORK SHALL BE PERFORMED IN STRICT COMPLIANCE WITH THE MOST CURRENT APPLICABLE FEDERAL, STATE , AND LOCAL LAWS AND REGULATIONS, INCLUDING BUT NOT LIMITED, TO ENVIRONMENTAL PROTECTION AGENCY (EPA), OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), VIRGINIA OCCUPATIONAL AND SAFETY HEALTH COMPLIANCE PROGRAM (VOSH ENFORCEMENT), VIRGINIA OVERHEAD HIGH VOLTAGE LINE SAFETY ACT, NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAPS), AND NATIONAL INSTITUTE OF OCCUPATIONAL SAFETY AND HEALTH (NIOSH).
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF WORK WITH REPRESENTATIVE UTILITY COMPANIES AND FOR THE IMPLEMENTATION OF REQUIRED UTILITY-RELATED WORK.
4. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY HAZARDOUS MATERIALS DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL DOCUMENT SAME TO THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
5. DISCONNECTION OF SERVICES AND SYSTEMS SUPPLYING UTILITIES TO BE ABANDONED OR DEMOLISHED SHALL BE COMPLETED PRIOR TO OTHER SITE DEMOLITION IN FULL COMPLIANCE WITH APPLICABLE CODES, REGULATIONS, AND THE REQUIREMENTS OF UTILITY PURVEYORS HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE UTILITY PURVEYORS, PAYMENT OF ASSOCIATED FEES AND PROCUREMENT OF ALL NECESSARY PERMITS.
6. PRIOR TO REMOVAL OF MATERIALS OVER EXISTING UTILITY SYSTEMS, THE CONTRACTOR SHALL DOCUMENT EXISTING CONDITIONS AND, IF AT VARIANCE WITH CONDITIONS AS REPRESENTED ON THE PLANS, NOTIFY THE OWNER'S REPRESENTATIVE AND OBTAIN DIRECTIONS AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
7. THE CONTRACTOR SHALL BACKFILL EXCAVATED AREAS WITH APPROVED MATERIALS/CLEAN FILL AS PER THE REQUIREMENTS OF VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT).
8. THE CONTRACTOR SHALL PROTECT AND PREVENT DAMAGE TO EXISTING ON-SITE UTILITY DISTRIBUTION FACILITIES THAT ARE TO REMAIN. ACTIVE UTILITY DISTRIBUTION FACILITIES ENCOUNTERED DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES SHALL BE SHUT OFF AT THE SERVICE MAIN WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE.
9. DURING DEMOLITION AND/OR CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE UPON ENCOUNTERING ANY EXISTING UTILITIES AND/OR UTILITY SYSTEM STRUCTURES NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL DOCUMENT THE SAME AND FORWARD THE INFORMATION TO THE RESIDENT ENGINEER/OWNER'S REPRESENTATIVE, AND OBTAIN DIRECTION AS TO THE APPROPRIATE ACTION(S) TO BE TAKEN.
10. THE CONTRACTOR OR APPLICANT SHALL WORK WITH THE CITY STAFF TO REUSE THE EXISTING, LEFTOVER, UNUSED, AND/OR DISCARDED BUILDING MATERIALS AS PART OF THE DEMOLITION PROCESS OR THE CONSTRUCTION DEBRIS MUST BE REMOVED TO AN APPROVED LANDFILL WITH ADEQUATE FREQUENCY IN ACCORDANCE WITH THE VIRGINIA STATE LINER CONTROL ACT.

SIGN CONSTRUCTION

A SEPARATE PERMIT IS REQUIRED FOR SIGN CONSTRUCTION.

CEMETERY AND/OR BURIAL GROUNDS

THERE IS NO OBSERVABLE, HISTORICAL, OR ARCHAEOLOGICAL EVIDENCE OF CEMETERIES OR BURIAL GROUNDS ON THIS PROPERTY. FURTHERMORE, IT IS ILLEGAL TO DISTURB HUMAN REMAINS WITHOUT OBTAINING APPROPRIATE LEGAL AUTHORIZATION. IF BURIALS ARE FOUND DURING THE ARCHAELOGICAL INVESTIGATION AND NEED TO BE MOVED PRIOR TO DEVELOPMENT, THE APPLICANT SHALL BE RESPONSIBLE FOR THE ARCHAEOLOGICAL REMOVAL AND FOR OBTAINING THE NECESSARY LEGAL DOCUMENTS, INCLUDING A PERMIT FROM THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES FOR THE ARCHAELOGICAL REMOVAL OF BURIALS.

RODENT ABATEMENT NOTE

PRIOR TO THE ISSUANCE OF A DEMOLITION PERMIT, A RODENT ABATEMENT PLAN SHALL BE SUBMITTED TO THE CITY OF ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION THAT WILL OUTLINE WHAT STEPS HAVE AND WILL BE TAKEN TO PREVENT THE SPREAD OF RODENTS FROM THE CONSTRUCTION SITE TO THE SURROUNDING COMMUNITY AND SEWERS. THE CONTRACTOR CAN CONTACT THE ALEXANDRIA DEPARTMENT OF CODE ADMINISTRATION AT 703-746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION. PLEASE BE ADVISED ONCE ANY DEMOLITION HAS BEEN COMPLETED ANY ABOVE GROUND BAIT BOXES MUST BE RELOCATED TO WITHIN 50 FEET OF A STRUCTURE IN KEEPING WITH EPA REGULATIONS. IF THIS IS NOT POSSIBLE, THEY SHALL BE REMOVED AND REGULAR INSPECTIONS OF THE SITE CONDUCTED BY A VIRGINIA LICENSED PEST EXTERMINATOR TO ENSURE THE SITE REMAINS RODENT FREE.

MARINE CLAY STATEMENT

NO MARINE CLAYS EXISTS ON SITE FOR BLOCK K.

SOLID WASTE MANAGEMENT

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

SITE ACCESSIBILITY NOTES

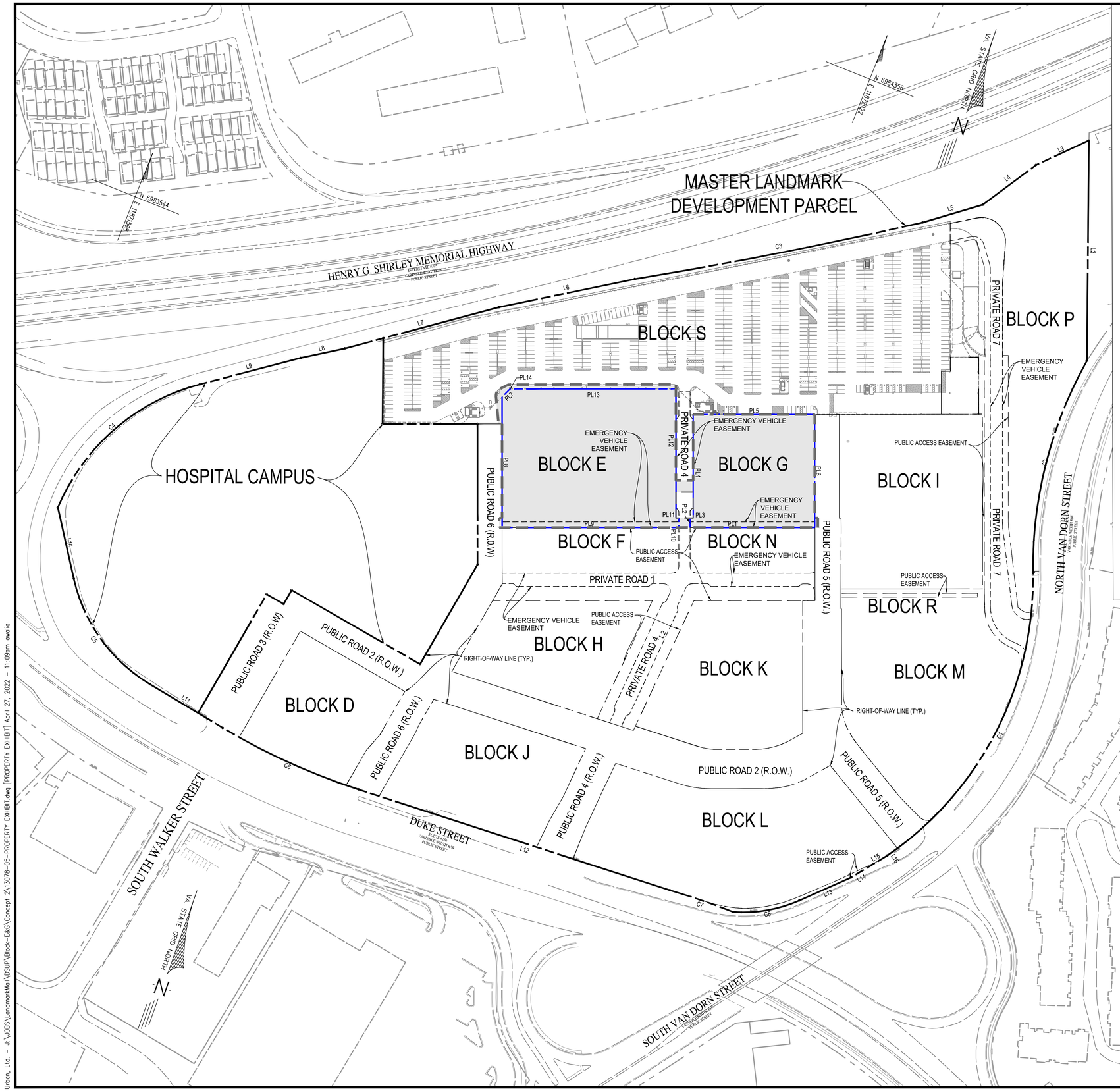
1. ALL BUILDINGS WITHIN THE BOUNDARY OF THIS SITE SHALL HAVE AT LEAST ONE "ACCESSIBLE ROUTE" THAT CONFORMS TO "ADA"-"ACCESSIBLE ROUTE" STANDARDS. THESE STANDARDS INCLUDE, BUT ARE NOT LIMITED TO: MAXIMUM WALK SLOPE=1:20 AND MAXIMUM RAMP SLOPE=1:12. ALL WALKS WILL BE BROOM-FINISHED CONCRETE UNLESS OTHERWISE SPECIFIED ON THESE DRAWINGS AND/OR THE ARCHITECTURAL PLANS.
2. ALL "ACCESSIBLE" PARKING SPACES SHALL BE DESIGNATED WITH APPROPRIATE SIGNAGE.
3. THE PAVEMENT SLOPE WITHIN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION.

ARCHAEOLOGY NOTES

1. ALL REQUIRED ARCHAEOLOGICAL PRESERVATION MEASURES SHALL BE COMPLETED PRIOR TO GROUND-DISTURBING ACTIVITIES (SUCH AS CORING, GRADING, FILLING, VEGETATION REMOVAL, UNDERGROUNDING UTILITIES , PILE DRIVING, LANDSCAPING AND OTHER EXCAVATIONS AS DEFINED IN SECTION 2-151 OF THE ZONING ORDINANCE) OR A RESOURCE MANAGEMENT PLAN MUST BE IN PLACE TO PRESERVE AND/OR RECOVER SIGNIFICANT RESOURCES IN CONCERT WITH CONSTRUCTION ACTIVITIES. TO CONFIRM, CALL ALEXANDRIA ARCHAEOLOGY AT (703) 838-4399.
2. CALL ALEXANDRIA ARCHAEOLOGY (703-746-4399) TWO WEEKS BEFORE THE STARTING DATE OF ANY GROUND DISTURBANCE SO THAT AN INSPECTION OR MONITORING SCHEDULE FOR CITY ARCHAEOLOGISTS CAN BE ARRANGED.
3. THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ECT.) 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 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.
5. ALL REQUIRED ARCHAEOLOGICAL MEASURES SHALL BE COMPLETED IN COMPLIANCE WITH SECTION 11-411 OF THE ZONING ORDINANCE.

CONSTRUCTION NOTES

1. THE EXISTING UNDERGROUND UTILITIES SHOWN HEREIN ARE BASED UPON AVAILABLE INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATION OF ALL UTILITIES BEFORE COMMENCING WORK AND FOR ANY DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO LOCATE OR PRESERVE THESE UNDERGROUND UTILITIES. IF DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHOULD ENCOUNTER UTILITIES OTHER THAN THOSE SHOWN ON THE PLANS, HE SHALL IMMEDIATELY NOTIFY THE ENGINEER AND TAKE NECESSARY ACTION AND PROPER STEPS TO PROTECT THE FACILITY AND ASSURE THE CONTINUATION OF SERVICE.
2. THE CONTRACTOR SHALL DIG TEST PITS AS REQUIRED FOLLOWING NOTIFICATION AND MARKING OF ALL EXISTING UTILITIES TO VERIFY THE LOCATION AND DEPTH OF EXISTING UTILITIES TEST HOLES TO BE PERFORMED AT LEAST 30 DAYS PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED IMMEDIATELY TO THE OWNER AND ENGINEER. REDESIGN AND APPROVAL BY REVIEWING AGENCIES SHALL BE OBTAINED, IF REQUIRED.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
4. THE CONTRACTOR SHALL VISIT THE SITE AND SHALL VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION.
5. THE CONTRACTOR SHALL CLEAR THE SITE OF ALL TREES, BUILDINGS, FOUNDATIONS, ETC., WITHIN THE LIMITS OF CONSTRUCTION UNLESS OTHERWISE SPECIFIED, AND SHALL BE RESPONSIBLE FOR ENSURING THAT EXISTING UTILITIES ARE DISCONNECTED.
6. THE DEVELOPER SHALL PROVIDE OVER-LOT GRADING TO PROVIDE POSITIVE DRAINAGE AND PRECLUDE PONDING OF WATER.
7. ALL AREAS, ON OR OFFSITE, WHICH ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON, SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. THE MINIMUM ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS, SEED MIXTURE TO BE AS RECOMMENDED BY THE CITY AGENT. ALL SLOPES 3:1 AND GREATER SHALL BE SODDED AND PEGGED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE CITY OF ALEXANDRIA.
8. EXISTING SEPTIC FIELDS, IF APPLICABLE, SHALL BE ABANDONED IN ACCORDANCE WITH VIRGINIA HEALTH DEPARTMENT STANDARDS AND SP



LINE AND CURVE TABLE FOR MASTER LANDMARK PARCEL

LINE	BEARING	DISTANCE
L1	N 22°31'14" W	4.34'
L2	N 21°18'19" W	467.89'
L3	S 43°10'11" W	124.06'
L4	S 31°28'43" W	140.72'
L5	S 51°36'25" W	133.19'
L6	S 56°26'03" W	294.13'
L7	S 53°09'18" W	338.60'
L8	S 56°03'08" W	95.82'
L9	S 53°28'53" W	221.61'
L10	S 34°28'32" E	154.97'
L11	S 80°55'52" E	180.07'
L12	N 86°05'08" E	694.45'
L13	N 44°09'27" E	119.69'
L14	N 37°04'34" E	27.45'
L15	N 37°04'34" E	62.71'
L16	S 54°49'53" E	0.01'

CURVE	ARC LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH	TANGENT
C1	699.67'	714.22'	56°07'44"	N 05°32'41" E	672.03'	380.79'
C2	468.83'	898.89'	29°53'01"	N 07°34'42" W	463.54'	239.88'
C3	622.78'	10000.00'	3°34'06"	S 57°02'00" W	622.68'	311.49'
C4	413.23'	450.00'	52°36'49"	S 27°10'28" W	398.86'	222.47'
C5	283.79'	350.00'	46°27'26"	S 57°42'15" E	276.08'	150.22'
C6	317.24'	1400.00'	12°58'59"	S 87°25'22" E	316.56'	159.30'
C7	141.68'	1512.69'	5°21'59"	N 87°02'47" E	141.63'	70.89'
C8	144.40'	291.56'	28°22'37"	N 58°20'45" E	142.93'	73.71'

LINE TABLE FOR BLOCK E & G LOTS

LINE	BEARING	DISTANCE
PL1	S 68°08'39" W	264.46'
PL2	N 21°51'22" W	20.00'
PL3	N 68°08'38" E	6.50'
PL4	N 21°51'22" W	220.10'
PL5	N 68°07'27" E	258.00'
PL6	S 21°50'50" E	240.19'
PL7	S 23°07'25" W	24.04'
PL8	S 21°51'22" E	277.25'
PL9	N 68°08'39" E	375.00'
PL10	N 21°51'22" W	20.00'
PL11	S 68°07'58" W	6.00'
PL12	N 21°51'24" W	274.38'
PL13	S 68°07'27" W	351.43'
PL14	S 68°07'27" W	0.57'

LOT AREAS

BLOCK E: 2.49 AC. (108,575 SF)
BLOCK G: 1.43 AC. (62,083 SF)

LEGEND

LOT LINES
LIMITS OF DISTURBANCE

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

No.	DATE	DESCRIPTION
		REVISIONS

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CLAYTON C. TOCK
Lic. No. 036790
ENGINEER
PROFESSIONAL
04.27.22

PROPERTY EXHIBIT
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
SCALE: 1"=100'
C.I.= N/A

SHEET
03
OF
53

FILE No.
RZ-1877

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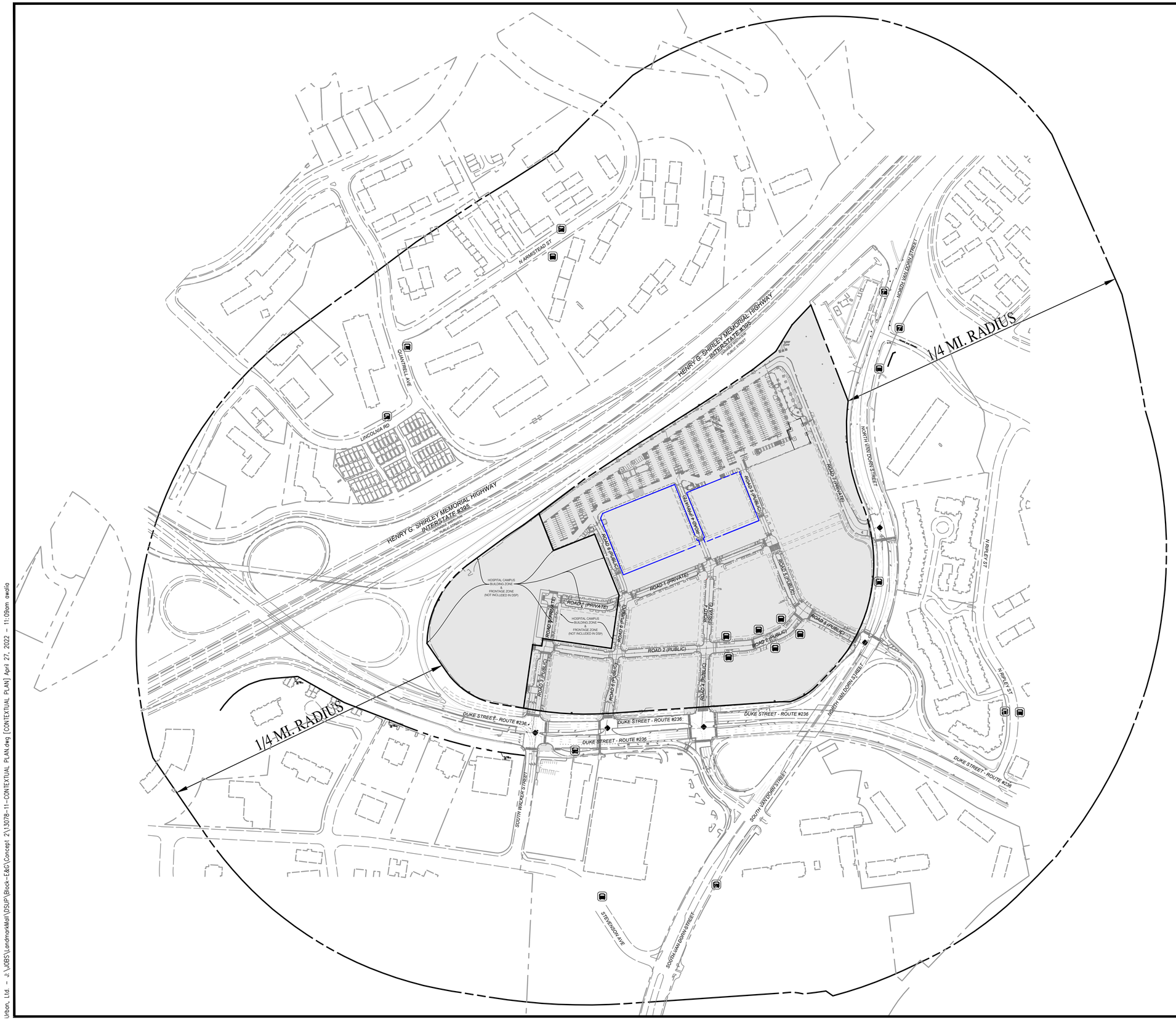

LEGEND

- LOT LINES
- TRANSIT STOP
- PROPOSED PROJECT SITE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

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CONTEXTUAL PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=200' C.I.= N/A DATE: APRIL 2022

SHEET 04 OF 53

FILE No. RZ-1877

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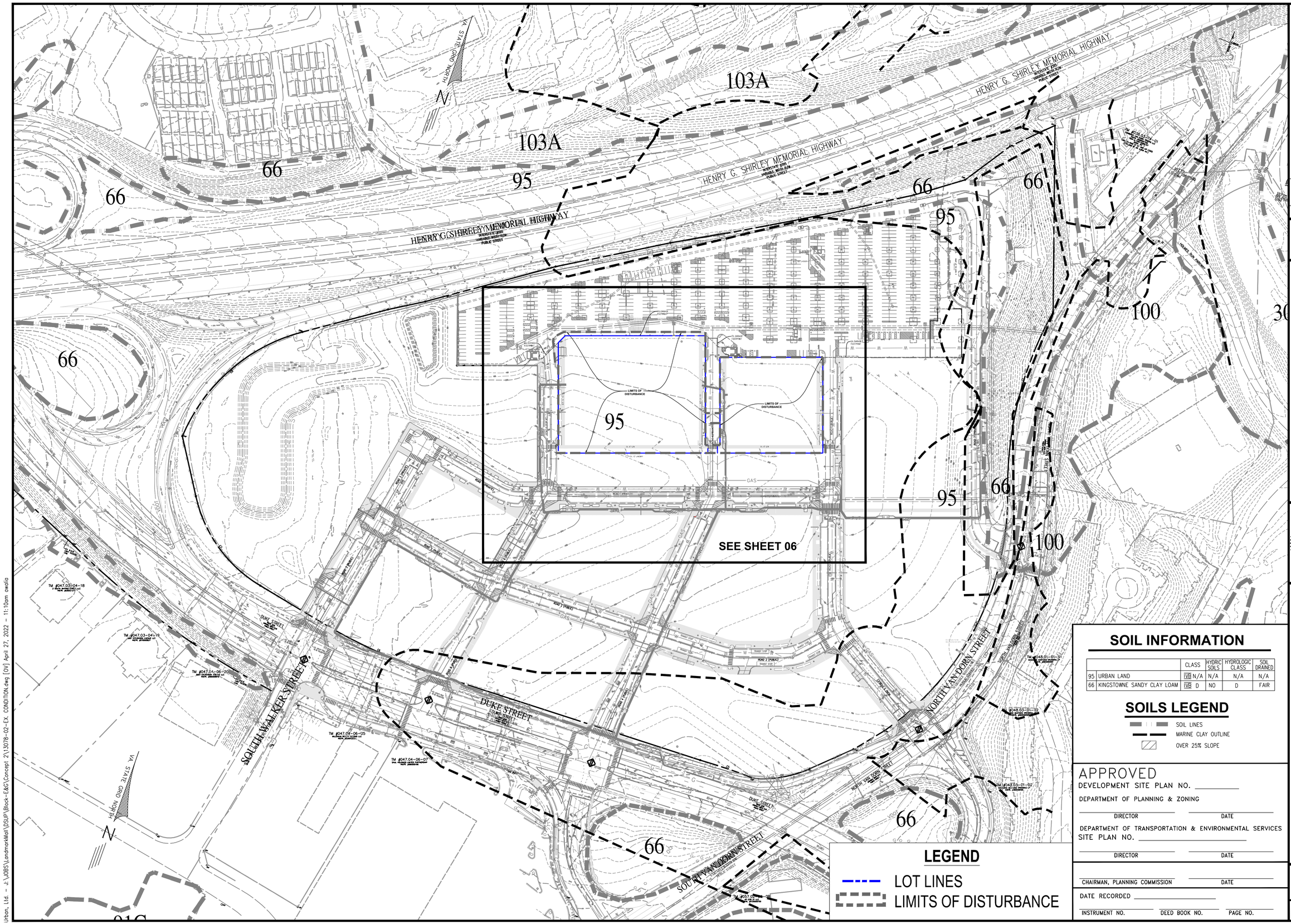

SOIL INFORMATION

		CLASS	HYDRIC SOILS	HYDROLOGIC CLASS	SOIL DRAINED
95	URBAN LAND	IVB N/A	N/A	N/A	N/A
66	KINGSTOWNE SANDY CLAY LOAM	IVB D	NO	D	FAIR

SOILS LEGEND

SOIL LINES
MARINE CLAY OUTLINE
OVER 25% SLOPE

LEGEND

LOT LINES
LIMITS OF DISTURBANCE

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____
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04.27.22

OVERALL EXISTING CONDITIONS
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: 1"=100' C.I.= 2' DATE: APRIL, 2022

SHEET 05 OF 53

FILE No. RZ-1877

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EX. GARAGE FOOTPRINT

EX. 10' SANITARY EASEMENT

EX. CSES-1 PRIVATE ENTRANCE

LIMITS OF DISTURBANCE

EX. 6' BMP/ PLANTER (PRIVATELY MAINTAINED)

EXTENT OF PARALLEL PARKING

EX. CURB EXTENSION

EX. COMM. HANDHOLE

EX. 8'X16'X10' ELECT. BOX

EX. COMM. DUCT BANK

EX. ELEC. DUCT BANK

EX. STOP SIGN (TYP.)

EX. FH

EX. TREE PIT (TYP.)

EX. 8' S/W

EX. 12' LANEWAY

EX. SWM FACILITY

EX. BIKE LANE

EX. WATERMAIN

EX. 10' SAN. ESMT.

EX. 10' CROSSWALK (TYP.)

EX. 10' CROSS WALK (TYP.)

EX. STOP SIGN (TYP.)

EX. TREE WELL (TYP.)

PRIVATELY MAINTAINED

ROAD 6 (PUBLIC)

ROAD 4 (PRIVATE)

ROAD 5 (PUBLIC)

ROAD 1 (PRIVATE)

CAR SHARE STATION

ENTRANCE IS FURTHER (CITY STAFF)

VA STATE GRID NORTH

LEGEND

LOT LINES

LMITS OF DISTURBANCE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

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PROFESSIONAL
04.27.22

EXISTING CONDITIONS

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=30' C.I.= 2' DATE: APRIL 2022

SHEET 06 OF 53

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HENRY G. SHIRLEY MEMORIAL HIGHWAY
INTERSTATE 495/
VARIABLE WIDTH R/W
PUBLIC STREET

HENRY G. SHIRLEY MEMORIAL HIGHWAY
INTERSTATE 495/
VARIABLE WIDTH R/W
PUBLIC STREET

HENRY G. SHIRLEY MEMORIAL HIGHWAY
INTERSTATE 495/
VARIABLE WIDTH R/W
PUBLIC STREET

VA. STATE GRID NORTH

BLOCK A/B/C

BLOCK E / RESIDENTIAL

BLOCK E / WMB

BLOCK G

BLOCK F

BLOCK N

BLOCK Q

FUTURE BLOCK I DSUP

SEE SHEET 08

DUKE STREET

SOUTH WALKER STREET

NORTH VAN DORN STREET

SOUTH VAN DORN STREET

ROUND RUN (NRSWC)

No.	DATE	DESCRIPTION
		REVISIONS

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11-19-2021
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CLAYTON C. TOCK
Lic. No. 038790
EXPIRES 04.27.22
REGISTERED PROFESSIONAL ENGINEER

OVERVIEW PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=100' | C.I.=N/A | DATE: APRIL 2022

LEGEND

LOT LINES

LIMITS OF DISTURBANCE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

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BLOCK A/B/C

BLOCK Q

BLOCK F

BLOCK N

BLOCK E / MOB

BLOCK E / RESIDENTIAL

BLOCK G

FUTURE BLOCK I DSUP

EX. GARAGE FOOTPRINT

EX. CSES-1 PRIVATE ENTRANCE

ELEC. ROOM

LOADING

BIKE STORAGE

TRASH

LOBBY

RESIDENTIAL BUILDING ABOVE

GROUND FLOOR RETAIL

POOL ABOVE (EXACT SIZE & LOCATION T.B.D)

NORTH LOBBY

WATER

GAS

MEDICAL OFFICE

M.O.B TRASH

UTILITY ROOM

RETAIL

EX. CURB EXTENSION

BUILDING ABOVE

EXTENT OF PARALLEL PARKING

PROP. 5' S/W

RESIDENTIAL AMENITY

RESIDENTIAL COURTYARD

ROAD 6 (PUBLIC)

ROAD 5 (PUBLIC)

ROAD 4 (PRIVATE)

ROAD 1 (PRIVATE)

PUBLIC ROAD

EX. 8' S/W

EX. 12' LANEWAY

PROP. TREE PIT (TYP.)

BIKESHARE STATION

EX. BIKE LANE

EX. 10' CROSSWALK (TYP.)

EX. STOP SIGN (TYP.)

POTENTIAL AERIAL BRIDGE CONNECTION (FINAL LOCATION/DESIGN T.B.D WITH DSUP)

ENTRANCE IS FURTHER CITY STAFF)

VA STATE GRID NORTH

LEGEND

LOT LINES

LIMITS OF DISTURBANCE

APPROVED

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

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04.27.22

CONCEPT PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: 1"=30'

C.I.= N/A

SHEET 08 OF 53

FILE No. RZ-1877

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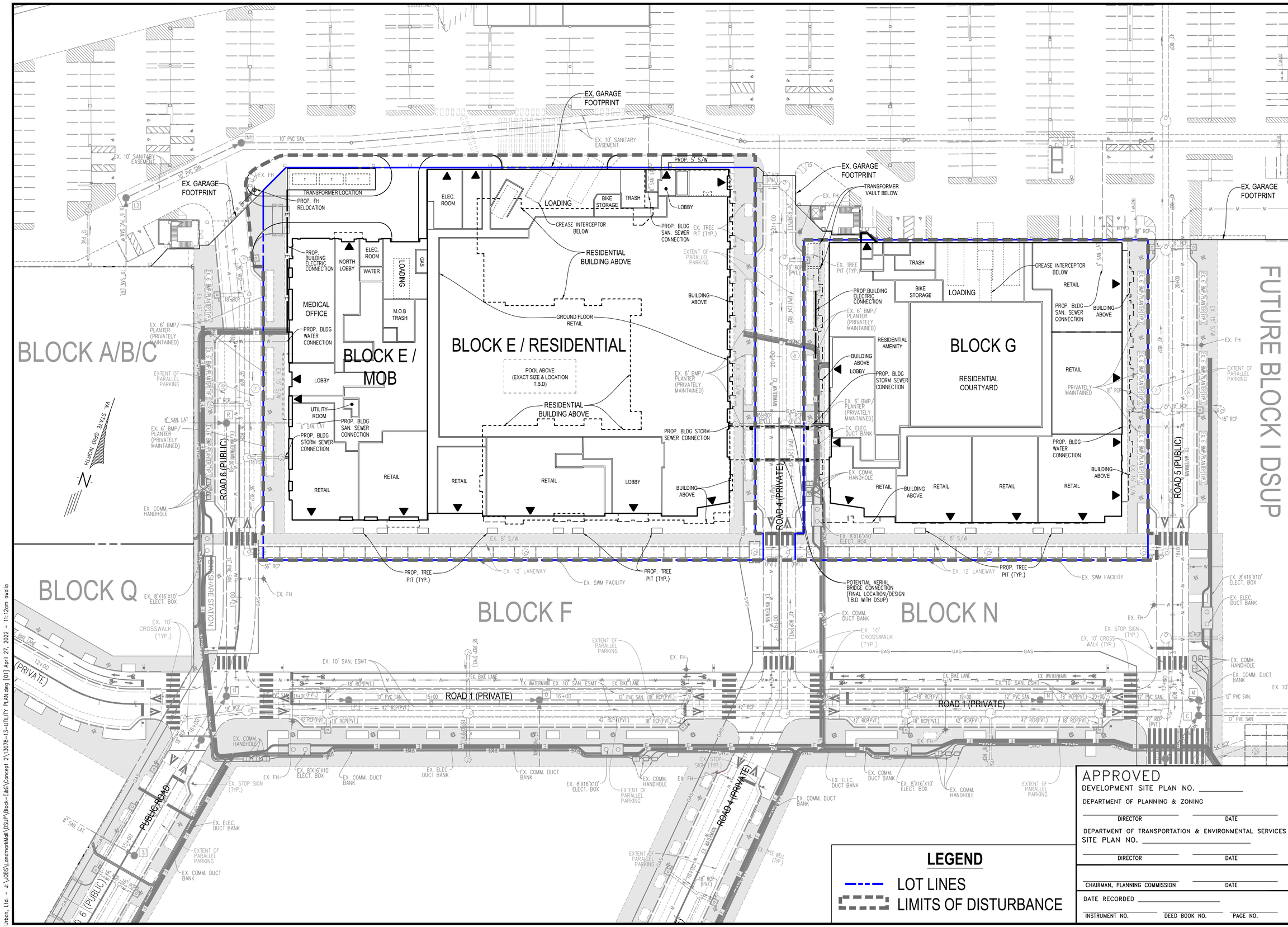

LEGEND

LOT LINES

LIMITS OF DISTURBANCE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

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04/27/22
PROFESSIONAL ENGINEER

UTILITY PLAN

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=30' C.I.= N/A DATE: APRIL, 2022

SHEET 09 OF 53

FILE No. RZ-1877

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EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

BLOCK A/B/C

BLOCK E / MOB

BLOCK E / RESIDENTIAL

BLOCK G

FUTURE BLOCK I DSUP

BLOCK Q

BLOCK F

BLOCK N

MEDICAL OFFICE

NORTH LOBBY

ELEC. ROOM

WATER

LOADING

GAS

M.O.B TRASH

UTILITY ROOM

LOBBY

RETAIL

ELEC. ROOM

LOADING

BIKE STORAGE

TRASH

LOBBY

RESIDENTIAL BUILDING ABOVE

GROUND FLOOR RETAIL

POOL ABOVE (EXACT SIZE & LOCATION T.B.D)

RESIDENTIAL BUILDING ABOVE

BUILDING ABOVE

RETAIL

LOBBY

PROP. BLDG STORM SEWER CONNECTION

BUILDING ABOVE

RETAIL

TRASH

BIKE STORAGE

LOADING

RESIDENTIAL AMENITY

BUILDING ABOVE

LOBBY

PROP. BLDG STORM SEWER CONNECTION

RESIDENTIAL COURTYARD

RETAIL

BUILDING ABOVE

RETAIL

PRIVATELY MAINTAINED

BUILDING ABOVE

RETAIL

BUILDING ABOVE

RETAIL

RETAIL

RETAIL

RETAIL

RETAIL

EX. 6' BMP/ PLANTER (PRIVATELY MAINTAINED)

EX. TREE PIT (TYP.)

PROP. TREE PIT (TYP.)

PROP. 5' S/W

EX. 8' S/W

EX. 12' LANEWAY

EX. SWM FACILITY

EX. BIKE LANE

POTENTIAL AERIAL BRIDGE CONNECTION (FINAL LOCATION/DESIGN T.B.D WITH DSUP)

ROAD 6 (PUBLIC)

ROAD 1 (PRIVATE)

ROAD 4 (PRIVATE)

ROAD 5 (PUBLIC)

PUBLIC ROAD

BIKESHARE STATION

VA STATE GRID NORTH

LEGEND

LOT LINES

LIMITS OF DISTURBANCE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

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Lic. No. 036790
ENGINEER
04.27.22
PROFESSIONAL

GRADING PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: 1"=30' C.I.= 2'

SHEET 10 OF 53

FILE No. RZ-1877

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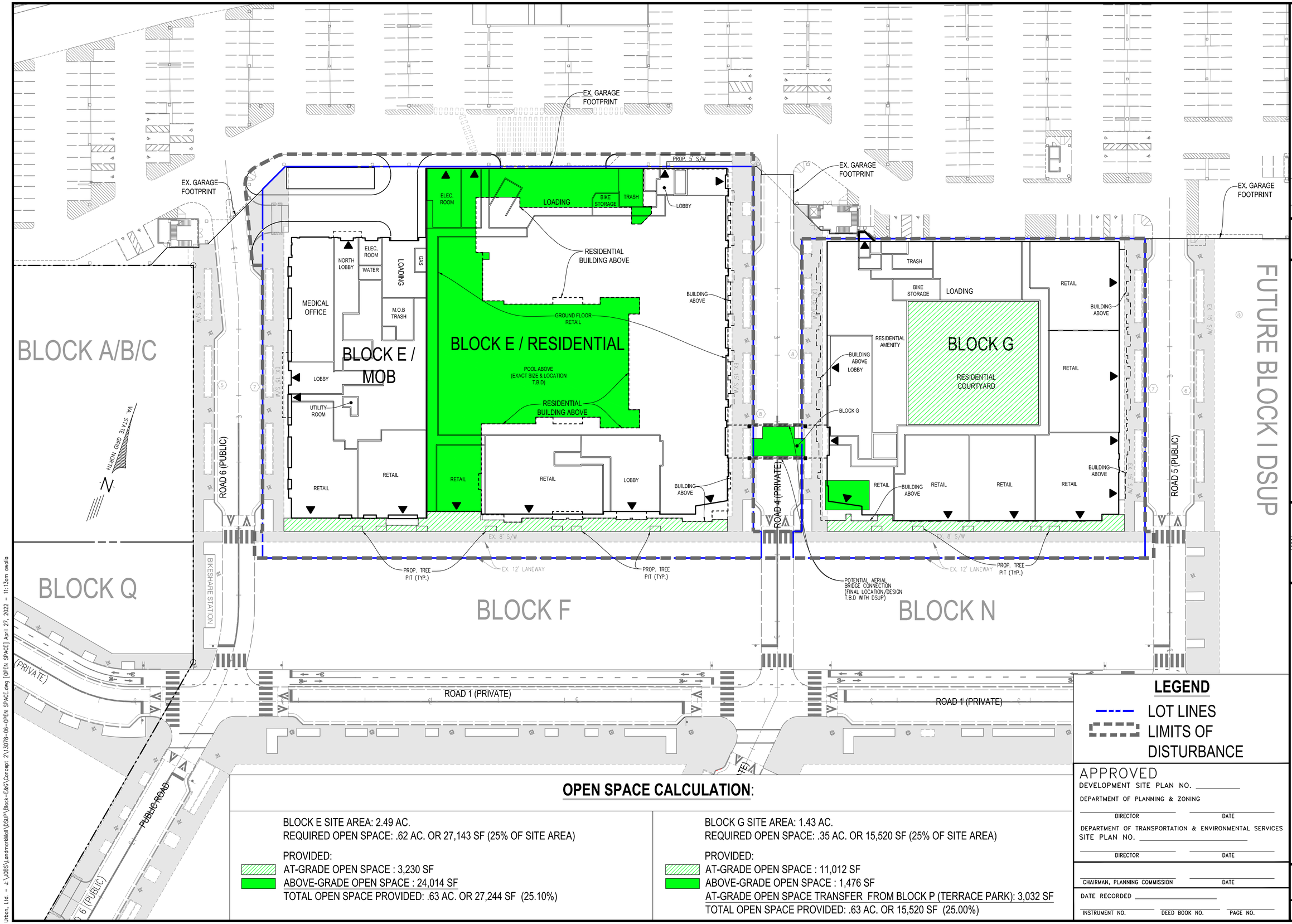

OPEN SPACE CALCULATION:

BLOCK E SITE AREA: 2.49 AC.
REQUIRED OPEN SPACE: .62 AC. OR 27,143 SF (25% OF SITE AREA)

PROVIDED:
AT-GRADE OPEN SPACE : 3,230 SF
ABOVE-GRADE OPEN SPACE : 24,014 SF
TOTAL OPEN SPACE PROVIDED: .63 AC. OR 27,244 SF (25.10%)

BLOCK G SITE AREA: 1.43 AC.
REQUIRED OPEN SPACE: .35 AC. OR 15,520 SF (25% OF SITE AREA)

PROVIDED:
AT-GRADE OPEN SPACE : 11,012 SF
ABOVE-GRADE OPEN SPACE : 1,476 SF
AT-GRADE OPEN SPACE TRANSFER FROM BLOCK P (TERRACE PARK): 3,032 SF
TOTAL OPEN SPACE PROVIDED: .63 AC. OR 15,520 SF (25.00%)

LEGEND

LOT LINES
LIMITS OF DISTURBANCE

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____
DATE RECORDED _____
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CLAYTON C. POCK
Lic. No. 036790
PROFESSIONAL ENGINEER
04.27.22

OPEN SPACE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL 2022
C.I.=N/A
SCALE: 1"=50'

SHEET 11 OF 53

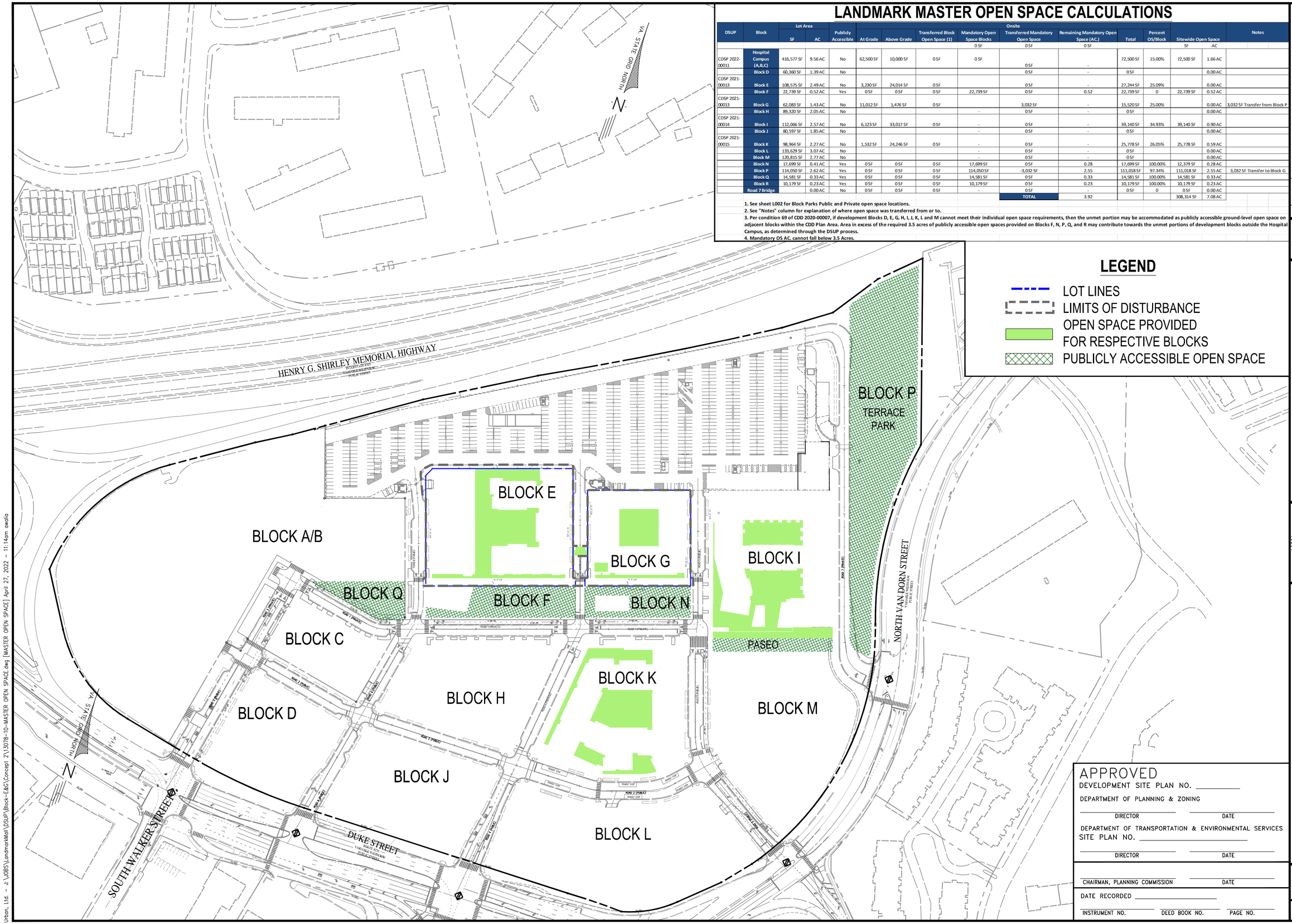
FILE No. RZ-1877

Urban, Ltd. – J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\3078-06-OPEN SPACE.dwg [OPEN SPACE] April 27, 2022 – 11:13am awalo

LANDMARK MASTER OPEN SPACE CALCULATIONS

DSUP	Block	Lot Area SF	Lot Area AC	Publicly Accessible	Onsite At Grade	Onsite Above Grade	Onsite Transferred Block Open Space (1)	Onsite Mandatory Open Space Blocks	Onsite Transferred Mandatory Open Space	Remaining Mandatory Open Space (AC.)	Onsite Total	Onsite Percent OS/Block	Sitewide Open Space SF	Sitewide Open Space AC	Notes
								0 SF	0 SF	0 SF					
CDSP 2022-00011	Hospital Campus (A,B,C)	416,577 SF	9.56 AC	No	62,500 SF	10,000 SF	0 SF	0 SF	0 SF	-	72,500 SF	15.00%	72,500 SF	1.66 AC	
	Block D	60,360 SF	1.39 AC	No					0 SF	-	0 SF			0.00 AC	
CDSP 2021-00013	Block E	108,575 SF	2.49 AC	No	3,230 SF	24,014 SF	0 SF		0 SF	-	27,244 SF	25.09%		0.00 AC	
	Block F	22,739 SF	0.52 AC	Yes	0 SF	0 SF	0 SF	22,739 SF	0 SF	0.52	22,739 SF	0	22,739 SF	0.52 AC	
CDSP 2021-00013	Block G	62,083 SF	1.43 AC	No	11,012 SF	1,476 SF	0 SF		3,032 SF	-	15,520 SF	25.00%		0.00 AC	3,032 SF Transfer from Block P
	Block H	89,320 SF	2.05 AC	No				-	0 SF	-	0 SF			0.00 AC	
CDSP 2021-00014	Block I	112,066 SF	2.57 AC	No	6,123 SF	33,017 SF	0 SF	-	0 SF	-	39,140 SF	34.93%	39,140 SF	0.90 AC	
	Block J	80,597 SF	1.85 AC	No				-	0 SF	-	0 SF			0.00 AC	
CDSP 2021-00015	Block K	98,964 SF	2.27 AC	No	1,532 SF	24,246 SF	0 SF	-	0 SF	-	25,778 SF	26.05%	25,778 SF	0.59 AC	
	Block L	133,629 SF	3.07 AC	No				-	0 SF	-	0 SF			0.00 AC	
	Block M	120,815 SF	2.77 AC	No				-	0 SF	-	0 SF			0.00 AC	
	Block N	17,699 SF	0.41 AC	Yes	0 SF	0 SF	0 SF	17,699 SF	0 SF	0.28	17,699 SF	100.00%	12,379 SF	0.28 AC	
	Block P	114,050 SF	2.62 AC	Yes	0 SF	0 SF	0 SF	114,050 SF	-3,032 SF	2.55	111,018 SF	97.34%	111,018 SF	2.55 AC	3,032 SF Transfer to Block G
	Block Q	14,581 SF	0.33 AC	Yes	0 SF	0 SF	0 SF	14,581 SF	0 SF	0.33	14,581 SF	100.00%	14,581 SF	0.33 AC	
	Block R	10,179 SF	0.23 AC	Yes	0 SF	0 SF	0 SF	10,179 SF	0 SF	0.23	10,179 SF	100.00%	10,179 SF	0.23 AC	
	Road 7 Bridge		0.00 AC	No	0 SF	0 SF	0 SF	-	TOTAL	3.92	-	0	0 SF	0.00 AC	-
													308,314 SF	7.08 AC	

1. See sheet L002 for Block Parks Public and Private open space locations.
2. See "Notes" column for explanation of where open space was transferred from or to.
3. Per condition 69 of CDD 2020-00007, if development Blocks D, E, G, H, I, J, K, L and M cannot meet their individual open space requirements, then the unmet portion may be accommodated as publicly accessible ground-level open space on adjacent blocks within the CDD Plan Area. Area in excess of the required 3.5 acres of publicly accessible open spaces provided on Blocks F, N, P, Q, and R may contribute towards the unmet portions of development blocks outside the Hospital Campus, as determined through the DSUP process.
4. Mandatory OS AC. cannot fall below 3.5 Acres.



STUDY POINT "1"

STUDY POINT "2"

UNDETAINED TO STUDY POINT 1
DA = 8.24 ACRES

UNDETAINED TO STUDY POINT 1
DA = 27.34 ACRES

UNDETAINED TO STUDY POINT 2
DA = 20.03 ACRES

UNDETAINED TO STUDY POINT 2
DA = 11.21 ACRES

T.M #047.02-03-11
LOT 602
1,789,430 S.F.
41.0796 ACRES

T.M #042.02-03-10
LOT 601
452,443 S.F.
10.3867 ACRES

HENRY C. SHIRLEY MEMORIAL HIGHWAY

LANDMARK MALL

DUKE STREET

SOUTH VAN DORN STREET

SOUTH WALKER STREET

HOLMES RUN PARKWAY

sears

macy's

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

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Lic. No. 038790
PROFESSIONAL ENGINEER
04/27/22

SWM PRE DEVELOPMENT PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=100' C.I.= 2' DATE: APRIL 2022

SHEET 13 OF 53

FILE No. RZ-1877

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STUDY POINT "1":
ONSITE DA TO VAULT 4
DA = 8.06 AC
CN= 98
TC = 10 MINS

STUDY POINT "1":
BLOK G DA TO VAULT 2
DA = 1.30 AC
CN= 95
TC = 10 MINS

STUDY POINT "1":
BLOCK I DA TO VAULT 2
DA = 2.57 AC
CN= 95
TC = 10 MINS

OFFSITE UNDETAINED
DRAINAGE AREA
TO STUDY POINT "1"
DA = 6.45AC
CN= 95
TC = 15 MINS

STUDY POINT "1":
BLOCK E DA TO VAULT 2
DA = 2.30 AC
CN= 95
TC = 10 MINS

STUDY POINT "1":
PORTION OF INOVA DA TO VAULT 2
DA = 3.51 AC
CN= 95
TC = 10 MINS

STUDY POINT "1":
BLOCK H DA TO VAULT 2
DA = 1.61 AC
CN= 95
TC = 10 MINS

STUDY POINT "1":
BLOCK K DA TO VAULT 2
DA = 2.53 AC
CN= 95
TC = 10 MINS

STUDY POINT "1":
PARKS, ROADS, S/W, ETC.
DA TO VAULT 2
DA = 17.46 AC
CN= 95
TC = 10 MINS

STUDY POINT "2":
ONSITE DA TO VAULT 3
DA = 20.73 AC
CN= 95
TC = 10 MINS

OFFSITE UNDETAINED
DRAINAGE AREA
TO STUDY POINT "2"
DA = 11.21AC
CN= 95
TC = 10 MINS

STUDY POINT "1"

STUDY POINT "2"

VAULT 2

VAULT 3

VAULT 4

BLOCK I

T.M #047.02-03-11
LOT 602
1,789,430 S.F.
41.0796 ACRES

T.M #047.02-03-10
LOT 601
452,443 S.F.
10.3867 ACRES

HENRY G. SHIRLEY MEMORIAL HIGHWAY

DUKE STREET

SOUTH WALKER STREET

NORTH WALKER STREET

HOLMES RUN PARKWAY

NOTE:
*ALL STORMWATER BMP FACILITIES SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY.
**DISCHARGE FROM GARAGE SUMP PUMPS MUST BYPASS BMPS AND DETENTION STRUCTURES.

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DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
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CHAIRMAN, PLANNING COMMISSION _____ DATE _____
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04/27/22

SWM POST DEVELOPMENT PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL 2022
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SWM PRE - Study Point "1"

SWM PRE OFFSITE Undetained Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
4.880	98	Paved parking, HSG D
3.360	80	>75% Grass cover, Good, HSG D
8.240	91	Weighted Average
3.360		40.78% Pervious Area
4.880		59.22% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					Direct Entry,

1 Year Flow Calculations

Runoff = 16.03 cfs@ 12.15 hrs, Volume= 50,067 cf, Depth>1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 20.03 cfs@ 12.15 hrs, Volume= 63,254 cf, Depth>2.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 32.58 cfs@ 12.15 hrs, Volume= 117,174 cf, Depth>3.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM PRE Onsite UNDETAINED Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
11.210	98	Paved parking, HSG D
16.130	80	>75% Grass cover, Good, HSG D
27.340	87	Weighted Average
16.130		59.00% Pervious Area
11.210		41.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 52.17 cfs@ 12.09 hrs, Volume= 136,159 cf, Depth>1.37"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 67.33 cfs@ 12.09 hrs, Volume= 176,935 cf, Depth>1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 116.25 cfs@ 12.09 hrs, Volume= 348,346 cf, Depth>3.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

STUDY POINT 1 SWM PRE FLOWS

1 Year Flow Calculations

Inflow Area = 1,549,865 sf, 45.22% Impervious, Inflow Depth >1.44" for 1-yr event
Inflow = 66.27 cfs @ 12.10 hrs, Volume= 186,226 cf
Primary = 66.27 cfs @ 12.10 hrs, Volume= 186,226 cf , Atten= 0%Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

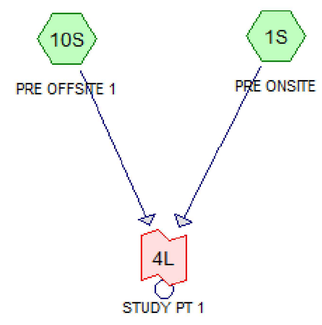
2 Year Flow Calculations

Inflow Area = 1,549,865 sf, 45.22% Impervious, Inflow Depth >1.86" for 2-yr event
Inflow = 84.95 cfs @ 12.10 hrs, Volume= 240,188 cf
Primary = 84.95 cfs @ 12.10 hrs, Volume= 240,188 cf , Atten= 0%Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

10 Year Flow Calculations

Inflow Area = 1,549,865 sf, 45.22% Impervious , Inflow Depth > 3.60" for 10-yr event
Inflow = 145.10 cfs @ 12.10 hrs , Volume= 465,520 cf
Primary = 145.10 cfs @ 12.10 hrs , Volume= 465,520 cf , Atten= 0% Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

PRE-DEVELOPMENT HYDROCAD MODEL - Study Point "1"



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SWM COMPS & NARRATIVE
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PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C.I.= N/A
SCALE: N/A

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FILE No.
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SWM POST - Study Point "1"

SWM POST OFFSITE Undetained Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
6.449	95	Urban commercial, 85% imp, HSG D
0.967		15.00% Pervious Area
5.482		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.0					**Direct Entry,**

1 Year Flow Calculations

Runoff = 14.72 cfs@ 12.15 hrs, Volume= 47,538 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 17.82 cfs@ 12.15 hrs, Volume= 58,407 cf, Depth> 2.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 27.18 cfs@ 12.15 hrs, Volume= 101,915 cf, Depth> 4.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Block I DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
2.570	95	Urban commercial, 85% imp, HSG D
0.386		15.00% Pervious Area
2.184		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 6.98 cfs@ 12.08 hrs, Volume= 18,970 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 8.43 cfs@ 12.08 hrs, Volume= 23,306 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 12.70 cfs@ 12.08 hrs, Volume= 40,668 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Block G DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
1.295	95	Urban commercial, 85% imp, HSG D
0.194		15.00% Pervious Area
1.101		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 3.52 cfs@ 12.08 hrs, Volume= 9,559 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 4.25 cfs@ 12.08 hrs, Volume= 11,744 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 6.40 cfs@ 12.08 hrs, Volume= 20,492 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Block E DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
2.300	95	Urban commercial, 85% imp, HSG D
0.345		15.00% Pervious Area
1.955		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					**Direct Entry,**

1 Year Flow Calculations

Runoff = 6.25 cfs@ 12.08 hrs, Volume= 16,977 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 7.54 cfs@ 12.08 hrs, Volume= 20,858 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 11.36 cfs@ 12.08 hrs, Volume= 36,395 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST PORTION OF INOVA DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
3.510	95	Urban commercial, 85% imp, HSG D
0.527		15.00% Pervious Area
2.983		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 9.53 cfs @ 12.08 hrs, Volume= 25,909 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 11.51 cfs @ 12.08 hrs, Volume= 31,831 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 17.34 cfs @ 12.08 hrs, Volume= 55,542 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Block H DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
1.610	95	Urban commercial, 85% imp, HSG D
0.242		15.00% Pervious Area
1.368		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 4.37 cfs@ 12.08 hrs, Volume= 11,884 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 5.28 cfs@ 12.08 hrs, Volume= 14,600 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 7.95 cfs@ 12.08 hrs, Volume= 25,477 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Block K DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
2.530	95	Urban commercial, 85% imp, HSG D
0.380		15.00% Pervious Area
2.151		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 6.87 cfs@ 12.08 hrs, Volume= 18,675 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 8.30 cfs@ 12.08 hrs, Volume= 22,943 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 12.50 cfs@ 12.08 hrs, Volume= 40,035 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

SWM POST Onsite DETAINED (VAULT #2) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
3.645	95	Urban commercial, 85% imp, HSG D
0.547		15.00% Pervious Area
3.098		85.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 9.90 cfs@ 12.08 hrs, Volume= 26,905 cf, Depth> 2.03"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 11.96 cfs@ 12.08 hrs, Volume= 33,055 cf, Depth> 2.50"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 18.01 cfs@ 12.08 hrs, Volume= 57,678 cf, Depth> 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

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

No.	DATE	DESCRIPTION
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PLAN DATE
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04-27-2022

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COMMONWEALTH OF VIRGINIA
BENJAMIN CLAXTON C. TOCK
Lic. No. 036790
PROFESSIONAL ENGINEER
04/21/22

SWM COMPS & NARRATIVE
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C.I.= N/A
SCALE: N/A

SHEET
15
OF
53

FILE No.
RZ-1877

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SWM POST - Study Point "1"

POST-DEVELOPMENT HYDROCAD MODEL - Study Point "1"

SWM POST Onsite DETAINED (VAULT #4) Runoff Calculations

Curve Number Calculations

Area (ac)	CN	Description
8.060	98	Paved parking, HSG D
8.060		100.00% Impervious Area

Time of Concentration Calculations

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.0					Direct Entry,

1 Year Flow Calculations

Runoff = 23.76 cfs @ 12.08 hrs, Volume= 68,545 cf, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 1-yr Rainfall=2.70"

2 Year Flow Calculations

Runoff = 28.16 cfs @ 12.08 hrs, Volume= 82,450 cf, Depth> 2.82"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 2-yr Rainfall=3.20"

10 Year Flow Calculations

Runoff = 40.96 cfs @ 12.08 hrs, Volume= 137,581 cf, Depth> 4.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Landmark Mall 24-hr S1 10-yr Rainfall=5.20"

STUDY POINT 1 SWM POST FLOWS

1 Year Flow Calculations

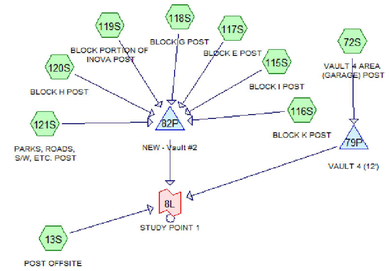
Inflow Area = 1,392,570 sf, 88.78%Impervious, Inflow Depth >2.09" for 1-yr event
Inflow = 39.40 cfs @ 12.18 hrs, Volume= 242,361 cf
Primary = 39.40 cfs @ 12.18 hrs, Volume= 242,361 cf, Atten= 0%, Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

2 Year Flow Calculations

Inflow Area = 1,392,570 sf, 88.78%Impervious, Inflow Depth >2.55" for 2-yr event
Inflow = 52.77 cfs @ 12.21 hrs, Volume= 296,122 cf
Primary = 52.77 cfs @ 12.21 hrs, Volume= 296,122 cf, Atten= 0%, Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs

10 Year Flow Calculations

Inflow Area = 1,392,570 sf, 88.78%Impervious, Inflow Depth >4.39" for 10-yr event
Inflow = 118.46 cfs @ 12.15 hrs, Volume= 509,764 cf
Primary = 118.46 cfs @ 12.15 hrs, Volume= 509,764 cf Atten= 0%, Lag= 0.0 min
Primary outflow = Inflow, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs



ENERGY BALANCE METHOD TO STUDY POINT "1"

$Q_{(Developed)}$=	39.40	cfs
$Q_{(Pre\text{-}Developed)}$=	66.27	cfs
$RV_{(Pre\text{-}Developed)}$=	4.28	ac-ft
$RV_{(Developed)}$=	5.56	ac-ft
I.F. =	0.8	(0.8 for sites greater than one acre) (0.9 for sites less than or equal to one acre)

Q Developed		I.F x ($Q_{Pre\text{-}Developed}$ x $RV_{Pre\text{-}Developed}$)/$RV_{Developed}$
39.40	≤	40.81

VAULT #2

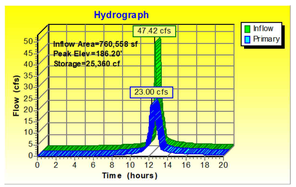
1 YEAR EVENT SUMMARY

Inflow Area = 760,558 sf 85.00%Impervious, Inflow Depth >2.03" for 1-yr event
Inflow = 47.42 cfs@ 12.08 hrs, Volume= 128,878 cf
Outflow = 23.00 cfs@ 12.27 hrs, Volume= 127,952 cf, Atten= 52%, Lag= 11.1 min
Primary = 23.00 cfs@ 12.27 hrs, Volume= 127,952 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 186.20'@ 12.27 hrs Surf.Area= 4,200 sf Storage= 25,360 cf

Plug-Flow detention time=15.8 min calculated for 127,888 cf (99% of inflow)
Center-of-Mass det. time=12.7 min (769.2 - 756.5)

Primary OutFlow Max=23.00 cfs @ 12.27 hrs HW=186.20' (Free Discharge)
└1=Culvert (Passes 23.00 cfs of 222.28 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 23.00 cfs @ 11.50 fps)
  ├3=Orifice/Grate (Controls 0.00 cfs)
  └4=Orifice/Grate (Controls 0.00 cfs)



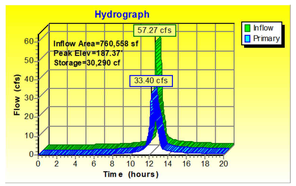
2 YEAR EVENT SUMMARY

Inflow Area = 760,558 sf, 85.00%Impervious, Inflow Depth >2.50" for 2-yr event
Inflow = 57.27 cfs@ 12.08 hrs, Volume= 158,337 cf
Outflow = 33.40 cfs@ 12.23 hrs, Volume= 157,324 cf, Atten= 42%, Lag= 8.6 min
Primary = 33.40 cfs@ 12.23 hrs, Volume= 157,324 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 187.37' @ 12.23 hrs Surf.Area= 4,200 sf Storage= 30,290 cf

Plug-Flow detention time=15.5 min calculated for 157,324 cf (99% of inflow)
Center-of-Mass det. time=12.7 min (764.5 - 751.8)

Primary OutFlow Max=33.38 cfs @ 12.23 hrs HW=187.37' (Free Discharge)
└1=Culvert (Passes 33.38 cfs of 256.50 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 25.25 cfs @ 12.63 fps)
  ├3=Orifice/Grate (Orifice Controls 8.13 cfs @ 3.47 fps)
  └4=Orifice/Grate (Orifice Controls 0.00 cfs @ 0.09 fps)



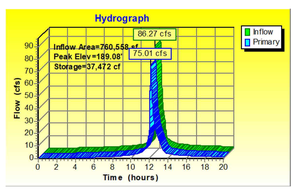
10 YEAR EVENT SUMMARY

Inflow Area = 760,558 sf, 85.00%Impervious, Inflow Depth >4.36" for 10-yr event
Inflow = 86.27 cfs@ 12.08 hrs Volume= 276,287 cf
Outflow = 75.01 cfs@ 12.14 hrs Volume= 274,936 cf, Atten= 13%, Lag= 3.5 min
Primary = 75.01 cfs@ 12.14 hrs Volume= 274,936 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 189.08' @ 12.14 hrs Surf.Area= 4,200 sf Storage= 37,472 cf

Plug-Flow detention time=12.9 min calculated for 274,798 cf (99% of inflow)
Center-of-Mass det. time=10.7 min (749.4 - 738.7)

Primary OutFlow Max=74.94 cfs @ 12.14 hrs HW=189.08' (Free Discharge)
└1=Culvert (Passes 74.94 cfs of 299.43 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 28.22 cfs @ 14.11 fps)
  ├3=Orifice/Grate (Orifice Controls 18.02 cfs @ 7.21 fps)
  └4=Orifice/Grate (Orifice Controls 28.71 cfs @ 4.20 fps)



VAULT #4

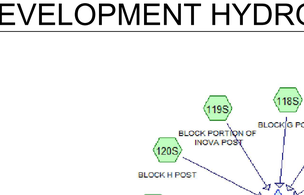
1 YEAR EVENT SUMMARY

Inflow Area = 351,094 sf ,100.00%Impervious, Inflow Depth >2.34" for 1-yr event
Inflow = 23.76 cfs @ 12.08 hrs, Volume= 68,545 cf
Outflow = 3.28 cfs @ 12.67 hrs, Volume= 66,871 cf, Atten= 86%, Lag= 35.2 min
Primary = 3.28 cfs @ 12.67 hrs, Volume= 66,871 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 178.68' @ 12.67 hrs Surf.Area= 4,200 sf Storage= 32,256 cf

Plug-Flow detention time=112.5 min calculated for 66,871 cf (98% of inflow)
Center-of-Mass det. time=101.9 min (834.7 - 732.9)

Primary OutFlow Max=3.28 cfs @ 12.67 hrs HW=178.68' (Free Discharge)
└1=Culvert (Passes 3.28 cfs of 99.40 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 3.28 cfs @ 13.12 fps)
  ├3=Orifice/Grate (Orifice Controls 0.00 cfs @ 0.03 fps)
  └4=Orifice/Grate (Controls 0.00 cfs)



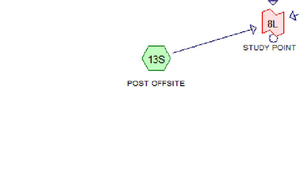
2 YEAR EVENT SUMMARY

Inflow Area = 351,094 sf ,100.00%Impervious, Inflow Depth >2.82" for 2-yr event
Inflow = 28.16 cfs @ 12.08 hrs, Volume= 82,450 cf
Outflow = 6.70 cfs @ 12.56 hrs, Volume= 80,392 cf, Atten= 76%, Lag= 28.4 min
Primary = 6.70 cfs @ 12.56 hrs, Volume= 80,392 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 179.70' @ 12.56 hrs Surf.Area= 4,200 sf Storage= 36,536 cf

Plug-Flow detention time=108.4 min calculated for 80,392 cf (98% of inflow)
Center-of-Mass det. time=97.5 min (827.0 - 729.5)

Primary OutFlow Max=6.70 cfs @ 12.56 hrs HW=179.70' (Free Discharge)
└1=Culvert (Passes 6.70 cfs of 109.02 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 3.50 cfs @ 14.00 fps)
  ├3=Orifice/Grate (Orifice Controls 3.20 cfs @ 3.49 fps)
  └4=Orifice/Grate (Controls 0.00 cfs)



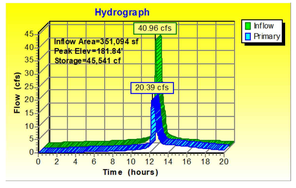
10 YEAR EVENT SUMMARY

Inflow Area = 351,094 sf ,100.00%Impervious, Inflow Depth >4.70" for 10-yr event
Inflow = 40.96 cfs @ 12.08 hrs, Volume= 137,581 cf
Outflow = 20.39 cfs @ 12.28 hrs, Volume= 132,914 cf, Atten= 50%, Lag= 11.6 min
Primary = 20.39 cfs @ 12.28 hrs, Volume= 132,914 cf

Routing by Stor-Ind method, Time Span= 0.00-20.00 hrs, dt= 0.01 hrs
Peak Elev= 181.84' @ 12.28 hrs Surf.Area= 4,200 sf Storage= 45,541 cf

Plug-Flow detention time=88.5 min calculated for 132,914 cf (97% of inflow)
Center-of-Mass det. time=73.7 min (792.9 - 719.2)

Primary OutFlow Max=20.39 cfs @ 12.28 hrs HW=181.84' (Free Discharge)
└1=Culvert (Passes 20.39 cfs of 126.90 cfs potential flow)
  └2=Orifice/Grate (Orifice Controls 3.92 cfs @ 15.67 fps)
  ├3=Orifice/Grate (Orifice Controls 7.25 cfs @ 7.91 fps)
  └4=Orifice/Grate (Orifice Controls 9.22 cfs @ 6.15 fps)



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DEPARTMENT OF PLANNING & ZONING
_____ DIRECTOR _____ DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
_____ DIRECTOR _____ DATE
_____ CHAIRMAN, PLANNING COMMISSION _____ DATE
DATE RECORDED _____
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No.	DATE	DESCRIPTION

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04-27-2022

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COMMONWEALTH OF VIRGINIA
CLAYTON C. POCK
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ENGINEER
PROFESSIONAL
04/27/22

SWM COMPS & NARRATIVE
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C.I.= N/A
SCALE: N/A

SHEET 16 OF 53

FILE No. RZ-1877

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BLOCK A/B/C

BLOCK E/ MOB

BLOCK E / RESIDENTIAL

BLOCK G

BLOCK Q

BLOCK F

BLOCK N

FUTURE BLOCK I DSUP

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

ROOF AREA TO BIORETENTION FACILITY = 40,080 SF

ROOF AREA TO BIORETENTION FACILITY = 28,725 SF

PROP. 5' S/W

EX. 6' BMP PLANTER (TYP.)

EX. 15' S/W

EX. 6' BMP/ PLANTER (PRIVATELY MAINTAINED)

EXTENT OF PARALLEL PARKING

PROP. BLDG STORM SEWER CONNECTION

PROP. BLDG STORM SEWER CONNECTION

EX. 8' S/W

EX. 12' LANEWAY

PROP. TREE PIT (TYP.)

EX. SWM FACILITY

EX. 10' CROSSWALK (TYP.)

EX. STOP SIGN (TYP.)

EX. BIKE LANE

BIKE LANE

BIKESHARE STATION

ROAD 1 (PRIVATE)

ROAD 4 (PRIVATE)

ROAD 5 (PUBLIC)

ROAD 6 (PUBLIC)

PUBLIC ROAD

VA STATE GRID NORTH

N

LEGEND

DRAINAGE AREA

BIORETENTION FACILITY

LEGEND

LOT LINES

LIMITS OF DISTURBANCE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

DATE RECORDED _____

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REVISIONS

No.	DATE	DESCRIPTION
1	11-19-2021	
2	04-27-2022	
3		
4		
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PLAN DATE

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COMMONWEALTH OF VIRGINIA
CLAYTON C. YOCK
Lic. No. 036790
PROFESSIONAL ENGINEER
04.27.22

BMP PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL 2022

SCALE: 1"=30'

C.I.= N/A

SHEET 17 OF 53

FILE No. RZ-1877

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Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 44.17

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0*
Post-Development TP Load Reduction for Site (lb/yr):	~~20.98~~ 41.96

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				2.52	2.52
Impervious Cover (acres)				47.75	47.75
					50.27

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				2.52	2.52
Impervious Cover (acres)				47.75	47.75
Area Check	**OK.**	**OK.**	**OK.**	**OK.**	50.27

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)	2.52	2.52
Weighted Rv(turf)	0.25	0.25
% Managed Turf	5%	5%
Impervious Cover (acres)	47.75	47.75
Rv(impervious)	0.95	0.95
% Impervious	95%	95%
Total Site Area (acres)	**50.27**	**50.27**
Site Rv	**0.91**	**0.91**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	3.8327	3.8327
Pre-ReDevelopment Treatment Volume (cubic feet)	166,953	166,953
Pre-ReDevelopment TP Load (lb/yr)	**104.90**	**104.90**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.09	2.09
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*20.61*

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

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

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

LAND COVER SUMMARY – POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	2.52
Weighted Rv (turf)	0.25
% Managed Turf	5%
Impervious Cover (acres)	47.75
Rv(impervious)	0.95
% Impervious	95%
Final Site Area (acres)	**50.27**
Final Post Dev Site Rv	**0.91**

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	2.52
Weighted Rv (turf)	0.25
% Managed Turf	5%
ReDev. Impervious Cover (acres)	47.75
Rv(impervious)	0.95
% Impervious	95%
Total ReDev. Site Area (acres)	**50.27**
ReDev Site Rv	**0.91**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	3.8327
Final Post-Development Treatment Volume (cubic feet)	166,953
Final Post-Development TP Load (lb/yr)	**104.90**
Final Post-Development TP load per acre (lb/acre/yr)	2.09

Post-ReDevelopment Treatment Volume (acre-ft)	3.8327
Post-ReDevelopment Treatment Volume (cubic feet)	166,953
Post-ReDevelopment Load (TP) (lb/yr)*	**104.90**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.09
Max. Reduction Required (Below Pre-ReDevelopment Load)	**20%**
TP Load Reduction Required for Redeveloped Area (lb/yr)	**20.98**

Post-Development Treatment Volume (acre-ft)	--
Post-Development Treatment Volume (cubic feet)	--
Post-Development TP Load (lb/yr)	--
TP Load Reduction Required for New Impervious Area (lb/yr)	**0**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	~~20.98~~ 41.96

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	750.41
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	750.41

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				2.52	2.52	0.25
Impervious Cover (acres)				47.75	47.75	0.95
				Total	50.27	

1.b. Vegetated Roof #2 (Spec #5)	60		11.94		24,705	16,470	41,175	0		25.84	15.50	10.34	
TREEWELLS & BIORETENTION*	80		8.69	0	23,960	5,990	29,950	50	0.00	18.80	16.92	1.88	
11.a.Filtering Practice #1 (Spec #12)	0		8.06	0	0	27,795	27,795	60	0.00	17.44	10.47	6.98	

* 0.92 AC. BLOCK E,
0.45 AC. BLOCK G,
ROOF TO BIORETENTION

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)	47.75	0.00	0.00	0.00	0.00	**OK.**
IMPERVIOUS COVER TREATED (ac)	28.69	0.00	0.00	0.00	0.00	**OK.**
MANAGED TURF AREA (ac)	2.52	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 (ft^3) 166,953

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	**D.A. B**	**D.A. C**	**D.A. D**	**D.A. E**	**TOTAL**
RUNOFF REDUCTION VOLUME ACHIEVED (ft^3)	48,665	0	0	0	0	48,665
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	104.90	0.00	0.00	0.00	0.00	104.90
TP LOAD REDUCTION ACHIEVED (lb/yr)	42.89	0.00	0.00	0.00	0.00	42.89
TP LOAD REMAINING (lb/yr)	62.01	0.00	0.00	0.00	0.00	62.01
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	272.06	0.00	0.00	0.00	0.00	272.06

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	104.90
TP LOAD REDUCTION REQUIRED (lb/yr)	~~20.98~~ 41.96
TP LOAD REDUCTION ACHIEVED (lb/yr)	42.89
TP LOAD REMAINING (lb/yr):	62.01
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY ~~21.91~~ LB/YEAR ** 0.93 LB/YEAR

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	750.41
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	272.06
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	478.35

BMP NARRATIVE

STORMWATER BEST MANAGEMENT PRACTICES FOR THE SUBJECT SITE ARE BEING PROVIDED IN ACCORDANCE WITH VA DEQ AND CITY OF ALEXANDRIA STANDARDS BY USING THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) TO MEET THE WATER QUALITY CRITERIA

THE BELOW REQUIRED TP REMOVAL IS TO BE DISTRIBUTED ACROSS THE SITE ON A PER BLOCK BASIS. THE PHOSPHOROUS LOAD REDUCTION REQUIRED BY THE VRRM WILL BE SATISFIED WITH THE UTILIZATION OF THREE (3) STORMWATER BEST MANAGEMENT PRACTICE (BMP) FACILITITIES IN CONFORMANCE WITH THE STORMWATER BMP CLEARINGHOUSE WEBSITE. THE THREE (3) BMP FACILITIES PROPOSED ARE:

- VEGETATED ROOF (LEVEL 2)
- URBAN BIORETENTION – TREEWELLS (LEVEL 2), BIORETENTION FACILITY (LEVEL 2)
- SAND FILTER (LEVEL 1)

BASED ON THE SUBJECT SITE'S PROPOSED LAND COVER, THE TOTAL PHOSPHOROUS LOAD REDUCTION REQUIRED TO BE REMOVED IS 41.96 LBS/YEAR. THE TOTAL PHOSPHOROUS LOAD REDUCTION ACHIEVED IS 42.89 LBS/YEAR, THEREFORE THE TOTAL PHOSPHOROUS LOAD REDUCTION IS EXCEEDED BY 0.93 LBS/YEAR.

NOTE:
ALL STORMWATER BMP FACILITIES AND COMPUTATIONS SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

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

REVISIONS | No. | DATE | DESCRIPTION

PLAN DATE 11-19-2021 04-27-2022

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COMMONWEALTH OF VIRGINIA ENGINEER CLAYTON C. TOCK Lic. No. 038790 PROFESSIONAL 04/27/22

BMP COMPS & NARRATIVE
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
C.I.= N/A
SCALE: N/A
DATE: APRIL 2022

SHEET 18 OF 53
FILE No. RZ-1877

Urban, Ltd. – J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-12-BMP COMPS & NARRATIVE.dwg [Proposed] April 27, 2022 – 11:16am cwallo

PROPOSED BMP COMPUTATIONS

Project Description

Development or Redevelopment

Drainage Area	Impervious	Pervious	Total
Site Area	47.75 ACRES	2.52 ACRES	50.27 ACRES
On-Site Treated	29.92 ACRES	0.00 ACRES	29.92 ACRES
Off-Site Treated	0 ACRES	0 ACRES	0 ACRES
Total Treated	29.92 ACRES		
Any On-Site Disconnected by a Vegetated Buffer (25 ft)	0 ACRES		
Total On-Site Treated or Disconnected			29.92 ACRES

Water Treatment on site

BMP Type	*Area treated by BMP (acres)*	*Impervious area treated by BMP (acres)*	*BMP efficiency (%)*
SAND FILTER	8.06 ACRES	8.06 ACRES	60 %
TREEWELL	4.79 ACRES	4.79 ACRES	50 %
GREEN ROOF	17.07 ACRES	17.07 ACRES	60 %

Miscellaneous

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

Project is within which watershed? HOLMES RUN WATERSHED

Project discharges to which body of water? HOLMES RUN

PROPOSED WQV TREATMENT:

TOTAL SITE PROP. IMPERVIOUS AREA = 47.75 AC OR 2,079,990 SF

TOTAL SITE WQV REQUIRED = 2,079,990 SF X (0.5 IN/12 IN/FT) = 86,666.25 CF

PROP. TREATED IMPERVIOUS AREA = 29.92 AC OR 1,303,315 SF

TOTAL SITE WQV PROPOSED = 58,866 CF + 16,518 CF + 27,795 CF = 103,179 CF (SEE SHEET ##### FOR TOTAL BMP TREATMENT VOLUME VALUES FROM MASTER SWM PLAN (DSP#2021-00017))

ACTUAL BMP COMPUTATIONS

Project Description

Development or Redevelopment

Drainage Area	Impervious	Pervious	Total
Site Area	47.75 ACRES	2.52 ACRES	50.27 ACRES
On-Site Treated	31.22 ACRES	0.00 ACRES	31.22 ACRES
Off-Site Treated	0 ACRES	0 ACRES	0 ACRES
Total Treated	31.22 ACRES		
Any On-Site Disconnected by a Vegetated Buffer (25 ft)	0 ACRES		
Total On-Site Treated or Disconnected			31.22 ACRES

Water Treatment on site

BMP Type	*Area treated by BMP (acres)*	*Impervious area treated by BMP (acres)*	*BMP efficiency (%)*
SAND FILTER	8.06 ACRES	8.06 ACRES	60 %
TREEWELL	7.32 ACRES	7.32 ACRES	50 %
GREEN ROOF	11.94 ACRES	11.94 ACRES	60 %
BIORETENTION	3.90 ACRES	3.90 ACRES	50 %

Miscellaneous

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

Project is within which watershed? HOLMES RUN WATERSHED

Project discharges to which body of water? HOLMES RUN

ACTUAL WQV TREATMENT:

TOTAL SITE PROP. IMPERVIOUS AREA = 47.75 AC OR 2,079,990 SF

TOTAL SITE WQV REQUIRED = 2,079,990 SF X (0.5 IN/12 IN/FT) = 86,666.25 CF

PROP. TREATED IMPERVIOUS AREA = 31.22 AC OR 1,359,943 SF

TOTAL SITE WQV PROPOSED = 41,175 CF + 29,950 CF + 27,795 CF = 98,920 CF (SEE SHEET 18 FOR TOTAL BMP TREATMENT VOLUME VALUES)

NOTE:
ALL STORMWATER BMP FACILITIES AND COMPUTATIONS SHOWN ON THE PLANS ARE FOR ILLUSTRATIVE PURPOSES ONLY.

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WQVD BMP DATA BLOCKS

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022
C.I.= N/A
SCALE: N/A

SHEET 19 OF 53

FILE No. RZ-1877

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NOTES

1. RESIDENTIAL AREA SANITARY FLOW IS COMPUTED AT THE RATE OF 300 GPD PER UNIT
2. EACH RESIDENTIAL UNIT IS BASED ON A 1,000 G.S.F. FLOOR PLATE
3. RETAIL AND OFFICE AREA SANITARY FLOW IS COMPUTED AT THE RATE OF 200 GPD PER 1,000 S.F. OF NET FLOOR AREA
4. ALL PIPE DATA HAS BEEN OBTAINED BY FIELD SURVEY PERFORMED BY URBAN, LTD.
5. CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
6. 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.
7. THE APPLICANT SHALL PROVIDE A PRE- AND POST-CCTV INSPECTION OF MANHOLE CONNECTION BY A NASSCO MACP CERTIFIED TECHNICIAN.
8. INSUFFICIENT PIPE CAPACITIES OF EXISTING SANITARY SEWER ARE SHOWN ON SHEET 23. THOSE PIPES ARE SHOWN TO BE REMOVED AND REPLACED WITH APPROPRIATELY SIZED PIPES ON SHEET 23.
9. HGL ANALYSIS WILL BE PROVIDED WITH THE FINAL INFRASTRUCTURE SITE PLAN.
10. THE PROJECT SITE IS LOCATED WITHIN THE HOLMES RUN TRUNK SEWER SHED.
11. THE PROJECT SITE IS NOT LOCATED IN THE COMBINED SEWER SYSTEM AREA.

SCALE : 1"=50'

HOLMES RUN TRUNK SEWER (FAIRFAX COUNTY OWNED)

HOLMES RUN TRUNK SEWER (ALEX RENEW OWNED)

002474SSMH (TO REMAIN)

TIE TO AN EX. SAN. SEWER MANHOLE

SMH TOP=85.25
EX. INV IN =70.65
EX. INV OUT =70.62

SMH TOP=85.83
EX. INV IN 30"=68.92
EX. INV OUT 30"=68.91
EX. INV IN EXIS. 12"=68.92

009275SEWP (TO BE REPLACED)
BROAD STONE VAN DORN LATERAL IN = 98.16

EXIS. 14" PVC SAN.

EX. D-1

001804SEWP (TO BE REPLACED)

007604SSMH (TO REMAIN)

HOLMES RUN TRUNK SEWER (ALEX RENEW OWNED)

EX. 33" SANITARY SEWER (COA)

EX. 30" SANITARY SEWER (FAIRFAX COUNTY)

HOLMES RUN TRUNK SEWER (FAIRFAX COUNTY OWNED)

002467SSMH (TO REMAIN)

HENRY G. SHIRLEY MEMORIAL HIGHWAY

LOT 602
1,789,430 S.F.
41.0796 ACRES
T.M #047.02-03-11
LOT 602
1,789,430 S.F.
41.0796 ACRES

HOLMES RUN TRUNK SEWER (FAIRFAX COUNTY OWNED)

HOLMES RUN TRUNK SEWER (ALEX RENEW OWNED)

002474SSMH (TO REMAIN)

TIE TO AN EX. SAN. SEWER MANHOLE

009275SEWP (TO BE REPLACED)
BROAD STONE VAN DORN LATERAL IN = 98.16

001804SEWP (TO BE REPLACED)

007604SSMH (TO REMAIN)

HOLMES RUN TRUNK SEWER (ALEX RENEW OWNED)

HOLMES RUN TRUNK SEWER (FAIRFAX COUNTY OWNED)

002467SSMH (TO REMAIN)

002609SEWP (TO BE REPLACED)

002468SSMH (TO REMAIN)

002603SSMH (TO REMAIN)

002633SSWP (TO BE REPLACED)

002629SEWP (TO BE REPLACED)

002506SSMH (TO REMAIN)

002631SEWP (TO BE REPLACED)

002469SSMH (TO REMAIN)

TIE TO AN EX. SAN. SMH

SMH TOP=138.48
EX. INV IN 12"=112.08
EX. INV OUT 12"=129.77

T.M #047.02-03-10
LOT 601
452,443 S.F.
10.3867 ACRES

T.M #047.02-03-11
LOT 602
1,789,430 S.F.
41.0796 ACRES

DUKE STREET

HOLMES RUN PARKWAY

NORTH VAN DORN STREET

APPROVED

DEVELOPMENT SITE PLAN NO. _____

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COMMONWEALTH OF VIRGINIA
CLAYTON C. TOCK
Lic. No. 038790
PROFESSIONAL ENGINEER
04/27/22

SANITARY SEWER PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: 1"=100' C.I.= 2'

SHEET 20 OF 53

FILE No. RZ-1877

Urban, Ltd. - J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-07-SAN PLAN & CMPS.dwg [SAN01] April 27, 2022 - 11:16am awallo

ADEQUATE OUTFALL ANALYSIS

Blocks		Building G.S.F	Office Sanitary Flow	Office G.S.F	Retail Sanitary Flow	Retail G.S.F	MFH Sanitary Flow	MFH Units	Total Proposed Sanitary Flow (GPD)
HOSPITAL CAMPUS	A	565,525	200GPD/1,000 S.F.	565,525	200GPD/1,000 S.F.		300GPD/UNIT	-	113,105
	B	107,239	200GPD/1,000 S.F.	107,239	200GPD/1,000 S.F.	-	300GPD/UNIT	-	21,448
	C	88,085	200GPD/1,000 S.F.	88,085	200GPD/1,000 S.F.	-	300GPD/UNIT	-	17,617
Total		760,849		760,849		-		-	152,170
LANDMARK	D	335,000	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	-	300GPD/UNIT	335	100,500
	E	328,065	200GPD/1,000 S.F.	131,497	200GPD/1,000 S.F.	-	300GPD/UNIT	172	77,899
	G	257,441	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	-	300GPD/UNIT	222	66,600
	H	90,798	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	42,000	300GPD/UNIT	350	113,400
	I	502,768	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	95,433	300GPD/UNIT	390	136,087
	J	81,344 52,000 S.F. (Fire Station)	200GPD/1,000 S.F.	52000			300GPD/UNIT	235	80,900
	K	503,854	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	28,454	300GPD/UNIT	352	111,291
	L	133,644	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	11,000	300GPD/UNIT	260	80,200
	M	120,815	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	-	300GPD/UNIT	200	60,000
Total		2,353,729		183,497		176,887		2,516	826,877
EX. BUILDING	MULTI-FAMILY USE	135,594	200GPD/1,000 S.F.	-	200GPD/1,000 S.F.	-	300GPD/UNIT	184	55,200.00

Landmark Mall Breakdown by Manhole

	Block	Lateral #	Lateral Tie In Location	% of Block Flow	MH Flow Enters in Sanitary Computations
HOSPITAL CAMPUS	A	1	SMH W1	33.33%	W
		2	SMH V1	33.33%	V
		3	SMH L2	33.33%	L2
	B	1	SMH R	36.09%	R
		2	SMH L2	63.91%	L2
	C	1	SMH L	32.85%	L
		2	SMH K	32.85%	K
		3	SMH T	32.85%	T
	(Garage)	1	SMH S	1.45%	S
LANDMARK MALL	D	1	SMH I2	100%	I2
	E	1	SMH R	50%	R
		2	SMH EX. MM	50%	EX. MM
	G	1	BETWEEN EX.KK & EX.JJ	100%	EX. JJ
	H	1	SMH I	50%	I
		2	SMH O	50%	O
	I	1	SMH EX. II	100%	EX. II
	J	1	SMH I	100%	I
	K	1	BETWEEN E & D	100%	D
	L	1	SMH H1	100%	H1
	M	1	SMH E	100%	E

PROPOSED SANITARY SEWER DESIGN COMPUTATIONS

Project: Landmark Mall

From Point	To Point	RESIDENTIAL 300 GPD/UNIT	OFFICE/RETAIL 200 GDP/ 1000 SF	SFA/SFD DWELLINGS 350 GPD/UNIT	HOTEL 130 GPD/UNIT	PEAK FACTOR	INCR q MGD	FLOW q MGD	FLOW q C.F.S.	Invert Elevation Upper End	Invert Elevation Lower End	Length FT.	Slope %	Dia. IN.	Capacity Q MGD	VEL. F.P.S.	Capacity q/Q %	Pipe Coefficient	Pipe Material	BLOCKS TO STR	Remarks	Rim Elevation	Pipe Cover
W	V	0	188508			4.0	0.15	0.15	0.23	189.77	187.39	132.42	1.80%	12	4.03	3.85	3.74	0.010	PVC		33.33% gpd from Block A	215.00	12.61
V	U	0	188508			4.0	0.15	0.30	0.47	188.18	187.39	72.26	1.10%	12	3.15	3.87	9.58	0.010	PVC		33.33% gpd from Block A	213.75	12.78
U	L	0	0			4.0	0.00	0.30	0.47	187.29	186.25	94.64	1.10%	12	3.15	3.87	9.58	0.010	PVC			213.00	12.86
L	K	0	-			4.0	0.02	0.32	0.50	186.15	184.86	117.14	1.10%	12	3.15	4.00	10.31	0.010	PVC		Flow from Block C	211.00	12.43
K	J	0	-			4.0	0.02	0.35	0.54	184.76	184.18	52.56	1.10%	12	3.15	4.08	11.05	0.010	PVC		Flow from Block C	208.50	11.87
J	I1	0	0			4.0	0.00	0.35	0.54	184.71	184.18	47.70	1.10%	12	3.15	4.08	11.05	0.010	PVC			207.25	11.27
I1	I	0	0			4.0	0.40	0.75	1.16	184.08	181.35	248.57	1.10%	12	3.15	5.09	23.82	0.010	PVC		Flow from Block D	206.00	10.96
I	H1	0	0			4.0	0.55	1.30	2.01	181.25	178.20	276.69	1.10%	12	3.15	5.92	41.30	0.010	PVC		Flow from Block J 50% Flow from Block H	200.50	9.63
H1	H	0	0			4.0	0.32	1.62	2.51	178.10	177.17	85.17	1.10%	12	3.15	6.25	51.49	0.010	PVC		Flow from Block L	196.35	9.12
H	G	0	0			4.0	0.00	1.62	2.51	177.07	175.19	170.85	1.10%	12	3.15	6.25	51.49	0.010	PVC			195.50	9.22
G	F	0	0			4.0	0.00	1.62	2.51	175.09	173.96	102.02	1.10%	12	3.15	6.25	51.49	0.010	PVC			194.80	9.86
F	E	0	0			4.0	0.00	1.62	2.51	173.86	171.82	163.39	1.25%	12	3.36	6.55	48.30	0.010	PVC			193.75	9.94
E	D	0	0			4.0	0.69	2.31	3.57	171.72	169.30	151.17	1.60%	12	3.80	7.84	60.73	0.010	PVC		Flow from Block M Flow from Block K	195.40	11.84
D	C	0	0			4.0	0.00	2.31	3.57	169.20	168.53	40.84	1.65%	12	3.86	7.93	59.81	0.010	PVC			198.50	14.65
C	B	0	0			4.0	0.44	2.74	4.24	168.43	161.89	384.95	1.70%	14	5.90	8.40	46.48	0.010	PVC		Flows from SSMH M & D	198.85	15.21
B	A	0	0			4.0	0.00	2.74	4.24	161.79	158.12	215.56	1.70%	14	5.90	8.40	46.48	0.010	PVC			174.25	6.23
A	002506SSMH	0	0			4.0	1.17	3.92	6.06	158.02	153.71	215.56	2.00%	14	6.40	9.73	61.15	0.010	PVC			181.84	11.91
BLOCK C	L	0	28936			4.0	0.02	0.02	0.04	187.47	186.35	45.00	2.50%	8	1.61	2.46	1.44	0.010	PVC		32.85% gpd from Block C	211.00	11.76
BLOCK C	K	0	28936			4.0	0.02	0.02	0.04	186.08	184.96	45.00	2.50%	8	1.61	2.46	1.44	0.010	PVC		32.85% gpd from Block C	208.50	11.21
BLOCK D	I2	335				4.0	0.40	0.40	0.62	186.23	185.60	25.00	2.50%	12	4.75	5.71	8.47	0.010	PVC			205.25	9.51
I2	I1	0	0			4.0	0.00	0.40	0.62	185.50	184.28	48.93	2.50%	12	4.75	5.71	8.47	0.010	PVC			206.00	10.25
BLOCK J	I	235	52000			4.0	0.32	0.32	0.50	182.70	181.45	50.00	2.50%	6	0.75	5.66	43.29	0.010	PVC			200.50	8.90
BLOCK H	I	175	21000			4.0	0.23	0.23	0.35	182.70	181.45	50.00	2.50%	6	0.75	5.22	30.34	0.010	PVC		50% Flow from Block H	200.50	8.90
BLOCK L	H1	260	11000			4.0	0.32	0.32	0.50	179.55	178.30	50.00	2.50%	6	0.75	5.61	42.91	0.010	PVC			196.35	8.40
BLOCK M	E	200	0			4.0	0.24	0.24	0.37	173.17	171.92	50.00	2.50%	6	0.75	5.23	32.11	0.010	PVC			195.40	11.11
BLOCK K	D	352	28454			4.0	0.45	0.45	0.69	170.65	169.40	50.00	2.50%	8	1.61	6.10	27.65	0.010	PVC			198.50	13.92
BLOCK E	R	86	65749			4.0	0.16	0.16	0.24	183.95	182.70	50.00	2.50%	8	1.61	4.49	9.68	0.010	PVC		50% Flow from Block E	204.00	10.02
BLOCK B	R	0	38703			4.0	0.03	0.03	0.05	183.33	182.70	25.00	2.50%	8	1.61	2.90	1.92	0.010	PVC		36.09% gpd from Block B	204.00	10.34
R	Q	0	0			4.0	0.19	0.19	0.29	182.60	179.02	204.83	1.75%	12	3.97	3.97	4.70	0.010	PVC		Flow from Block B 50% Flow from Block E	204.00	10.70
Q	P	0	0			4.0	0.02	0.21	0.33	178.92	177.31	91.68	1.75%	12	3.97	4.09	5.31	0.010	PVC		Flow from Block C	211.00	16.04
P	O	0	0			4.0	0.00	0.21	0.33	177.21	175.43	143.07	1.25%	12	3.36	3.63	6.28	0.010	PVC			209.00	15.89
O	N	0	0			4.0	0.23	0.44	0.68	175.33	170.63	375.50	1.25%	12	3.36	4.56	13.04	0.010	PVC		50% Flow from Block H	206.35	15.51
N	M	0	0			4.0	0.00	0.44	0.68	170.53	169.05	118.87	1.25%	12	3.36	4.56	13.04	0.010	PVC			201.50	15.48
M	C	0	0			4.0	0.00	0.44	0.68	168.95	168.63	11.50	2.75%	12	4.98	6.01	8.79	0.010	PVC			199.00	15.03
BLOCK C	T		28936			4.0	0.02	0.02	0.04	181.73	180.70	37.50	2.75%	8	1.69	2.46	1.37	0.010	PVC		32.85% gpd from Block C	209.50	13.88
T	S		0			4.0	0.00	0.02	0.04	180.60	179.60	100.23	1.00%	10	1.85	1.91	1.25	0.010	PVC			211.25	15.33
S	Q		1277			4.0	0.00	0.02	0.04	179.50	179.12	37.87	1.00%	10	1.85	1.89	1.31	0.010	PVC		1.45% gpd from Block C Garage	211.00	15.75
BLOCK H	O	175	21000			4.0	0.23	0.23	0.35	176.78	175.53	50.00	2.50%	6	0.75	5.22	30.34	0.010	PVC		50% Flow from Block H	206.35	14.79
BLOCK I	EX.II	390	95433			4.0	0.54	0.54	0.84	170.40	169.15	50.00	2.50%	10	2.92	6.32	18.65	0.010	PVC			199.00	14.30
BLOCK E	EX.MM	86	65749			4.0	0.16	0.16	0.24	181.49	180.52	38.79	2.50%	6	2.00	4.68	7.79	0.010	PVC		50% Flow from Block E	195.13	6.82
BLOCK G	EX.JJ	222	0			4.0	0.27	0.27	0.41	179.66	177.77	75.43	2.50%	6	2.00	5.43	13.32	0.010	PVC			193.99	7.17
BLOCK A & B	L2	0	257045			4.0	0.21	0.21	0.32	185.76	184.48	51.37	2.50%	8	2.00	4.88	10.28	0.010	PVC		63.91% gpd from Block B 33.33% gpd from Block A	194.40	4.32
L2	N1	0	0			4.0	0.00	0.21	0.32	184.38	182.94	95.77	1.50%	10	2.00	4.01	10.28	0.010	PVC			194.40	5.01
N1	EX.NN	0	0			4.0	0.00	0.21	0.32	182.84	181.60	82.52	1.50%	10	2.00	4.01	10.28	0.010	PVC			194.52	5.84
EX.NN	EX.MM	0	0			4.0	0.00	0.21	0.32	181.50	180.42	223.82	0.49%	10	0.99	2.18	20.79	0.013	PVC			195.04	6.77
EX.MM	EX.LL	0	0			4.0	0.16	0.36	0.56	180.39	179.52	74.55	1.17%	10	1.54	3.56	23.53	0.013	PVC		50% Flow from Block E	195.13	7.37
EX.LL	EX.KK	0	0			4.0	0.00	0.36	0.56	179.29	178.72	122.64	0.46%	10	0.96	2.53	37.53	0.013	PVC			194.89	7.80
EX.KK	EX.JJ	0	0			4.0	0.27	0.63	0.97	178.68	177.67	177.43	0.57%	10	1.07	3.15	58.56	0.013	PVC			193.70	7.51
EX.JJ	EX.II	0	0			4.0	0.00	0.63	0.97	177.59	174.74	259.55	1.10%	10	1.49	4.04	42.15	0.013	PVC		Flow from Block G	193.99	8.20
EX.II	002506SSMH	0	0			4.0	0.54	1.17	1.81	174.44	153.71	165.68	12.51%	10	5.02	11.64	23.34	0.013	PVC		Flow from Block I	193.26	9.41

EXISTING SANITARY SEWER DESIGN COMPUTATIONS

Project: Landmark Mall

From Point	To Point	RESIDENTIAL 300 GPD/UNIT	OFFICE/RETAIL 300 GDP/ 1000 SF	SFA/SFD DWELLINGS 350 GPD/UNIT	HOTEL 130 GPD/UNIT	PEAK FACTOR	INCR q MGD	FLOW q MGD	FLOW q C.F.S.	Invert Elevation Upper End	Invert Elevation Lower End	Length FT.	Slope %	Dia. IN.	Capacity Q MGD	VEL. F.P.S.	Capacity q/Q %	Pipe Coefficient	Pipe Material	BLOCKS TO STR	Remarks	Rim Elevation	Pipe Cover
002506SSMH	002469SSMH	2516	1121233.00			4.0	3.92	3.92	6.06	160.03	134.41	111.27	23.03%	10	5.91	10.83	66.31	0.015	Conc.		002506SSMH	192.03	16.00
002469SSMH	007600SSMH	0				4.0	0.00	3.92	6.06	134.24	132.08	28.20	7.66%	12	5.54	7.05	70.70	0.015	Conc.		002469SSMH	148.64	7.20
007600SSMH	002468SSMH	0				4.0	0.00	3.92	6.06	129.77	119.03	221.98	4.84%	12	4.40	5.61	88.96	0.015	Conc.		007600SSMH	138.78	4.51
002468SSMH	002467SSMH	0				4.0	0.00	3.92	6.06	118.81	97.75	299.41	7.03%	12	5.31	6.76	73.78	0.015	Conc.		002468SSMH	125.91	3.55
002467SSMH	007604SSMH	184				4.0	0.22	4.14	6.40	97.45	81.35	109.44	14.71%	12	7.68	15.40	53.89	0.015	Conc.		002467SSMH	107.00	4.78
007604SSMH	002474SSMH	0				4.0	0.00	4.14	6.40	69.50	68.92	112.75	0.51%	12	1.44	1.83	288.21	0.015	Conc.		007604SSMH	92.70	11.60

PROPOSED SANITARY SEWER DESIGN COMPUTATIONS

Project: Landmark Mall

From Point	To Point	RESIDENTIAL 300 GPD/UNIT	OFFICE/RETAIL 200 GDP/ 1000 SF	SFA/SFD DWELLINGS 350 GPD/UNIT	HOTEL 130 GPD/UNIT	PEAK FACTOR	INCR q MGD	FLOW q MGD	FLOW q C.F.S.	Invert Elevation Upper End	Invert Elevation Lower End	Length FT.	Slope %	Dia. IN.	Capacity Q MGD	VEL. F.P.S.	Capacity q/Q %	Pipe Coefficient	Pipe Material	BLOCKS TO STR	Remarks	Rim Elevation	Pipe Cover
002506SSMH	002469SSMH	2516	1121233			4.0	3.92	3.92	6.06	148.40	137.27	111.27	10.00%	14	14.32	17.66	27.35	0.010	PVC			192.03	21.82
002469SSMH	007600SSMH	0				4.0	0.00	3.92	6.06	137.17	134.78	28.20	8.50%	14	13.20	16.85	29.66	0.010	PVC		002506SSMH	148.64	5.73
007600SSMH	002468SSMH	0				4.0	0.00	3.92	6.06	134.68	115.81	221.98	8.50%	14	13.20	16.85	29.66	0.010	PVC		002469SSMH	138.78	2.05
002468SSMH	002467SSMH	0				4.0	0.00	3.92	6.06	115.71	91.01	299.41	8.25%	14	13.01	16.46	30.11	0.010	PVC		007600SSMH	125.91	5.10
002467SSMH	007604SSMH	184				4.0	0.22	4.14	6.40	90.91	81.60	109.44	8.50%	14	13.20	16.90	31.34	0.010	PVC		002468SSMH	107.00	8.05
007604SSMH	002474SSMH	0				4.0	0.00	4.14	6.40	81.50	71.92	112.75	8.50%	14	13.20	16.90	31.34	0.010	PVC		002467SSMH	92.70	5.60

NOTE: WHERE VELOCITIES IN SANITARY SEWER PIPES EXCEED THE MAXIMUM ALLOWABLE VELOCITY OF 10 FT/S, SPECIAL PROVISIONS SHALL BE MADE TO RESTRAIN THE PIPE TO PROTECT AGAINST DISPLACEMENT BY EROSION.

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____
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PROFESSIONAL ENGINEER
04/27/22

SANITARY SEWER COMPUTATIONS
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C1.=N/A
SCALE: N/A

SHEET 21 OF 53

FILE No. RZ-1877

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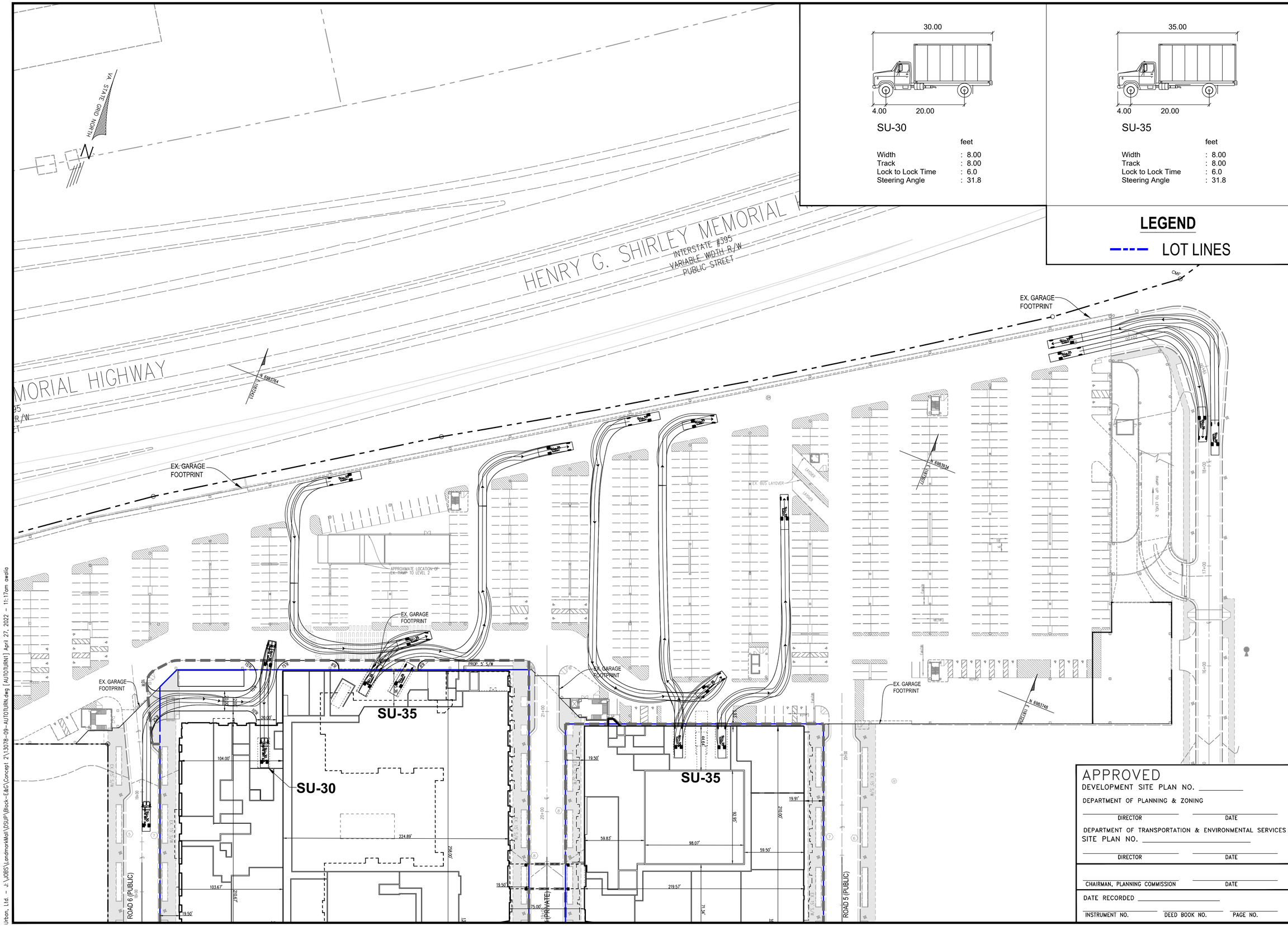

SU-30

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

SU-35

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8

LEGEND

LOT LINES

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

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04/27/22
PROFESSIONAL ENGINEER

AUTOTURN EXHIBIT

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=40' C.I.= N/A DATE: APRIL, 2022

SHEET 22 OF 53

FILE No. RZ-1877

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EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

EX. GARAGE FOOTPRINT

PROP. 5' S/W

EX. CSES-1 PRIVATE ENTRANCE

BLOCK E / MOB

BLOCK E / RESIDENTIAL

BLOCK G

EXTENT OF PARALLEL PARKING

VEHICLE ROUTE

VEHICLE ROUTE

VEHICLE ROUTE

PEDESTRIAN ROUTE

PEDESTRIAN ROUTE

PEDESTRIAN ROUTE

PEDESTRIAN ROUTE

EX. CURB EXTENSION

EX. CURB EXTENSION

ROAD 6 (PUBLIC)

ROAD 4 (PRIVATE)

ROAD 5 (PUBLIC)

EX. 8' S/W

EX. 12' LANEWAY

PROP. TREE PIT (TYP.)

PROP. TREE PIT (TYP.)

EX. 12' LANEWAY

PROP. TREE PIT (TYP.)

BIKESHARE STATION

EX. 10' CROSSWALK (TYP.)

BIKE ROUTE

PEDESTRIAN ROUTE

EXTENT OF PARALLEL PARKING

EX. 10' CROSSWALK (TYP.)

BIKE ROUTE

PEDESTRIAN ROUTE

EX. STOP SIGN (TYP.)

EX. 10' CROSS WALK (TYP.)

EX. BIKE LANE

EX. BIKE LANE

ROAD 1 (PRIVATE)

ROAD 1 (PRIVATE)

VEHICLE ROUTE

EX. STOP SIGN (TYP.)

EX. STOP SIGN (TYP.)

EXTENT OF PARALLEL PARKING

EXTENT OF PARALLEL PARKING

EXTENT OF PARALLEL PARKING

EXTENT OF PARALLEL PARKING

EXTENT OF PARALLEL PARKING

EX. TREE WELL (TYP.)

ENTRANCE S FURTHER ITY STAFF)

VA STATE GRID NORTH

N

LEGEND

- LOT LINES
- LIMITS OF DISTURBANCE
- PEDESTRIAN ROUTE
- VEHICLE ROUTE
- BIKE ROUTE

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

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SITE PLAN NO. _____

DIRECTOR _____ DATE _____

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PEDESTRIAN EXHIBIT

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: 1"=30'

C.I.= N/A

SHEET 23 OF 53

FILE No. RZ-1877

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BLOCK A/B/C

BLOCK Q

BLOCK E / MOB

BLOCK E / RESIDENTIAL

BLOCK F

BLOCK G

BLOCK N

FUTURE BLOCK I DSUP

EX. GARAGE FOOTPRINT

APPROXIMATE LOCATION OF EX. RAMP TO LEVEL 2

PROP. FH RELOCATION

EX. CSES-1 PRIVATE ENTRANCE

PROP. 5' S/W

ELEC. ROOM

LOADING

BIKE STORAGE

TRASH

LOBBY

RESIDENTIAL BUILDING ABOVE

NORTH LOBBY

WATER

GAS

MEDICAL OFFICE

PROP. BLDG WATER CONNECTION

M.O.B TRASH

GROUND FLOOR RETAIL

POOL ABOVE (EXACT SIZE & LOCATION T.B.D)

UTILITY ROOM

RETAIL

EX. CURB EXTENSION

EXTENT OF PARALLEL PARKING

BUILDING ABOVE

RESIDENTIAL AMENITY

RESIDENTIAL COURTYARD

PROP. BLDG WATER CONNECTION

213' BUILDING COVERAGE LINE

288' BUILDING COVERAGE LINE

210' BUILDING COVERAGE LINE

ROAD 6 (PUBLIC)

ROAD 5 (PUBLIC)

ROAD 4 (PRIVATE)

ROAD 1 (PRIVATE)

101' BUILDING COVERAGE LINE

227' BUILDING COVERAGE LINE

219' BUILDING COVERAGE LINE

PROP. TREE PIT (TYP.)

EX. 12' LANEWAY

EX. 8' S/W

POTENTIAL AERIAL BRIDGE CONNECTION (FINAL LOCATION/DESIGN T.B.D WITH DSUP)

BIKESHARE STATION

EX. 10' CROSSWALK (TYP.)

EX. BIKE LANE

EX. STOP SIGN (TYP.)

EX. 10' CROSS WALK (TYP.)

PUBLIC ROAD

ENTRANCE IS FURTHER (CITY STAFF)

VA STATE GRID NORTH

TOTAL BUILDING E MOB PERIMETER = 624 FT.

BUILDING PERIMETER COVERED FROM PUBLIC ROAD 6 = 213 FT. (34.13%)
BUILDING PERIMETER COVERED FROM SOUTH SIDE OF MOB BUILDING = 101 FT. (16.18%)

TOTAL BUILDING E MOB COVERAGE = 314 FT. (50.32%)

GROUP CLASSIFICATION: CDD-2

TOTAL BUILDING E RESIDENTIAL PERIMETER = 980 FT.

BUILDING PERIMETER COVERED FROM PRIVATE ROAD 4 = 268 FT. (27.34%)
BUILDING PERIMETER COVERAGE FROM SOUTH SIDE OF BUILDING E = 227 FT. (23.16%)

TOTAL BUILDING E RESI. COVERAGE = 495 FT. (50.51%)

GROUP CLASSIFICATION: CDD-2

TOTAL BUILDING G PERIMETER = 859 FT.

BUILDING PERIMETER COVERED FROM PUBLIC ROAD 5 = 210 FT. (24.44%)
BUILDING PERIMETER COVERED FROM PRIVATE ROAD 4 = 210 FT. (24.44%)
BUILDING PERIMETER COVERED FROM SOUTH SIDE OF BUILDING G = 219 FT (25.49%)

TOTAL BUILDING G COVERAGE = 639 FT. (74.38%)

GROUP CLASSIFICATION: CDD-2

LEGEND

FIRE SERVICE ACCESS

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

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FIRE SERVICE PLAN

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=30' C.I.=N/A DATE: APRIL 2022

SHEET 24 OF 53

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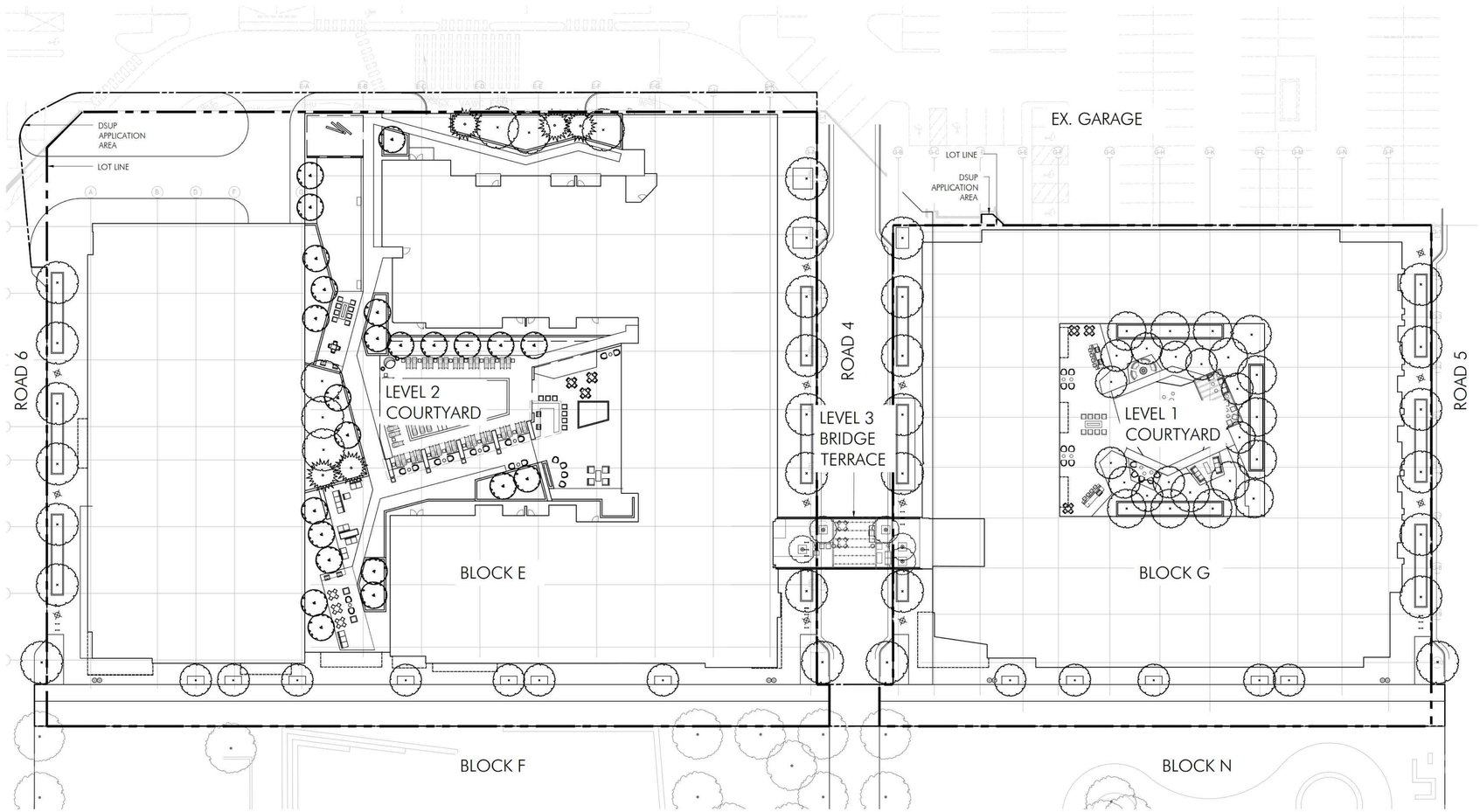

01 OVERALL LANDSCAPE PLAN

1"=30'-0"

FEET 0 15 30 60

VA. STATE GRID NORTH

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LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: AS NOTED | C.I.=N/A | DATE: APRIL, 2022

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SHEET 25 OF 53

FILE No. RZ-1877

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EX. GARAGE

DSUP APPLICATION AREA

LOT LINE

MEDICAL OFFICE

NORTH LOBBY

BMP TREE PIT, PER THE OVERALL LANDMARK MALL REDEVELOPMENT SITE PLAN

LOADING

BIKE STORGE

LOBBY

STREET LIGHT, TYP.

ROAD 6

ROAD 4

LOBBY

PLANTING BED

RETAIL

RETAIL

RETAIL

RETAIL

BLOCK E

LOBBY

CAFE

(8) BIKE PARKING SPACES

(6) BIKE PARKING SPACES

(6) BIKE PARKING SPACES

TRENCH DRAIN, SEE CIVIL

SIDEWALK, SCORED CONCRETE

AMENITY ZONE, SCORED CONCRETE

LANEWAY, SCORED CONCRETE WITH SPECIAL FINISH

TRASH & RECYCLING RECEPTACLES

TRASH & RECYCLING RECEPTACLES

BLOCK F

FEET 0 8 16 32

01 LANDSCAPE PLAN - BLOCK E LEVEL 1

1/16"=1'-0"

VA. STATE GRID NORTH

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11-19-2021
04-27-2022

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Lic. No. 038780
PROFESSIONAL ENGINEER
04/27/22

LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: AS NOTED

C.I.= N/A

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

SHEET 26 OF 53

FILE No. RZ-1877

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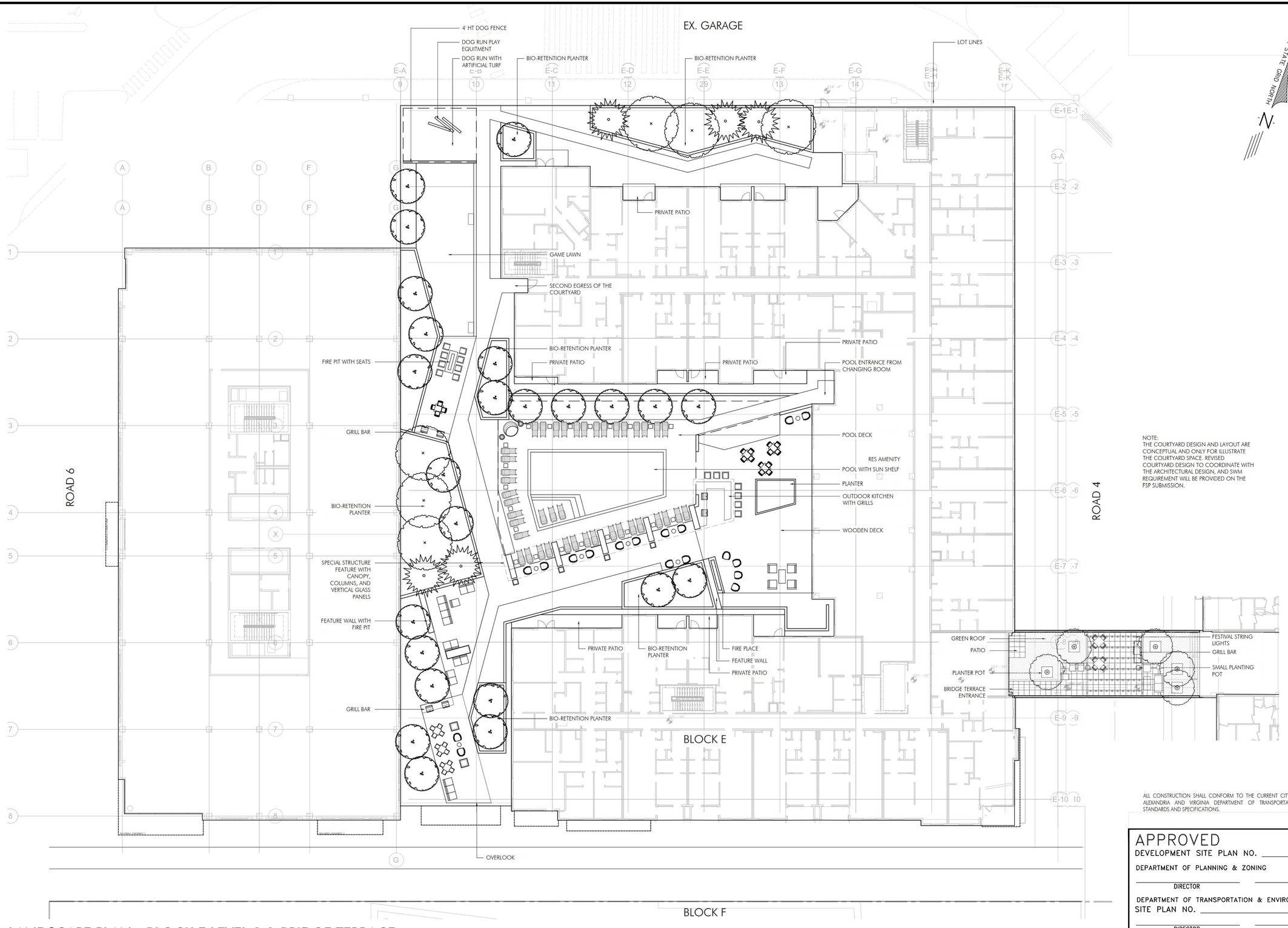

01 LANDSCAPE PLAN - BLOCK E LEVEL 2 & BRIDGE TERRACE
1/16"=1'-0"

NOTE:
THE COURTYARD DESIGN AND LAYOUT ARE CONCEPTUAL AND ONLY FOR ILLUSTRATE THE COURTYARD SPACE. REVISED COURTYARD DESIGN TO COORDINATE WITH THE ARCHITECTURAL DESIGN, AND SWM REQUIREMENT WILL BE PROVIDED ON THE FSP SUBMISSION.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____
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LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED C.I.= N/A DATE: APRIL, 2022

SHEET 27 OF 53
FILE No. RZ-1877

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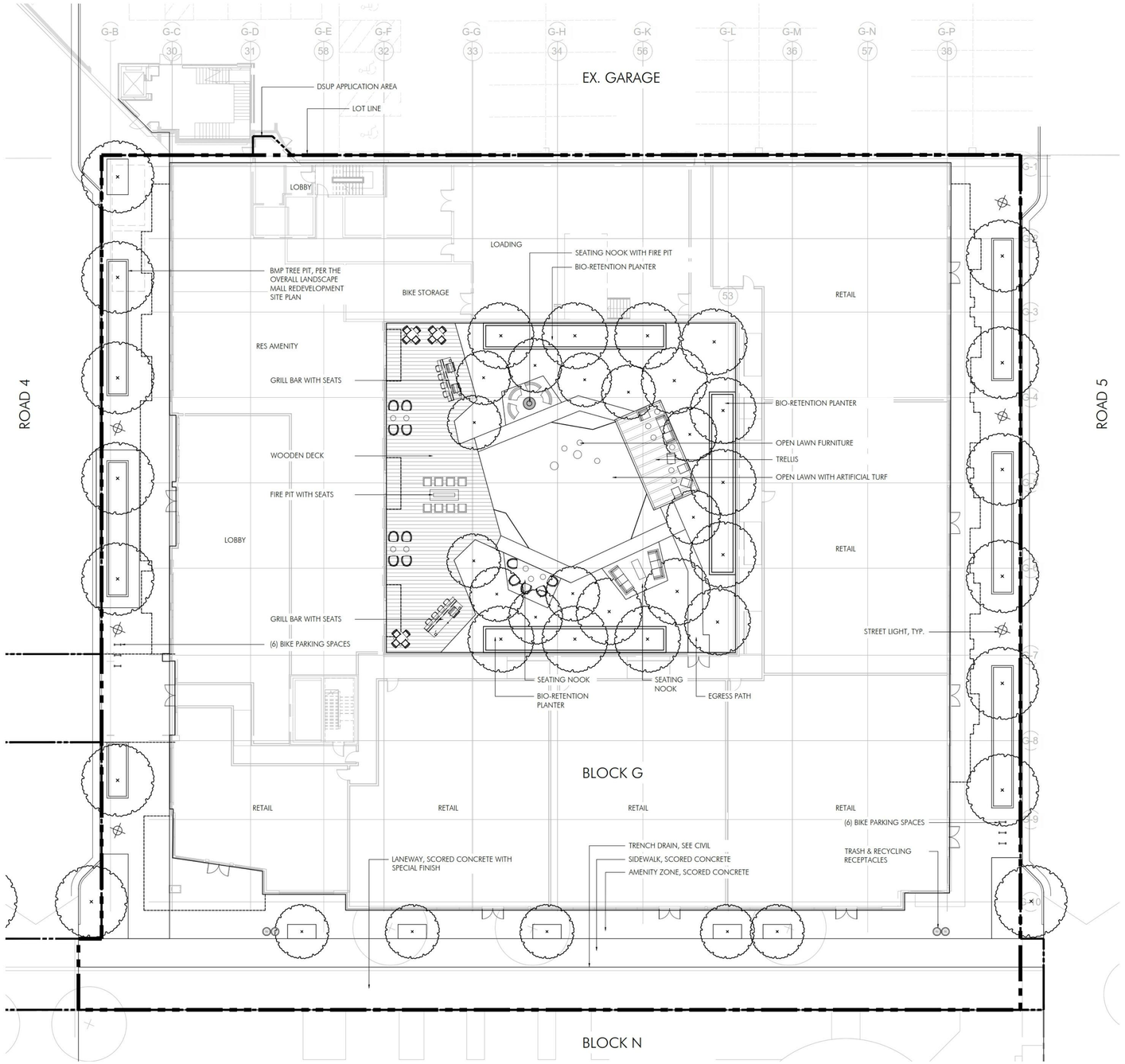

01 LANDSCAPE PLAN - BLOCK G LEVEL 1

1/16"=1'-0"

FEET 0 8 16 32

VA. STATE GRID NORTH

NOTE:
THE COURTYARD DESIGN AND LAYOUT ARE CONCEPTUAL AND ONLY FOR ILLUSTRATE THE COURTYARD SPACE. REVISED COURTYARD DESIGN TO COORDINATE WITH THE ARCHITECTURAL DESIGN, AND SWM REQUIREMENT WILL BE PROVIDED ON THE FSP SUBMISSION.

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED _____
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LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED
C.I.= N/A
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SHEET 28 OF 53

FILE No. RZ-1877

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EX. GARAGE

DSUP APPLICATION AREA

LOT LINE

NOTE:
BMP PLANTER LAYOUT AND STREET TREE SPECIES PER THE OVERALL LANDMARK MALL REDEVELOPMENT SITE PLAN

NOTE:
BMP PLANTER LAYOUT AND STREET TREE SPECIES PER THE OVERALL LANDMARK MALL REDEVELOPMENT SITE PLAN

01|AC 03|IO 02|CA 01|CA

02|MV 03|AC 02|CV 01|CV 03|BN 01|CV 03|NS 02|MV 02|CT 03|LI 02|CC 02|MC 02|CC

01|QP 02|AR 03|QP 01|PA 01|QP

01|QC 01|AR 02|QC 01|AR 03|CK 04|CF

RES AMENITY

BLOCK E

BLOCK F

ROAD 6

ROAD 4

VA. STATE GRID NORTH

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

01 PLANTING PLAN - BLOCK E
1/16"=1'-0"

FEET 0 8 16 32

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
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04/27/22

LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED C.I.= N/A DATE: APRIL, 2022

SHEET 29 OF 53

FILE No. RZ-1877

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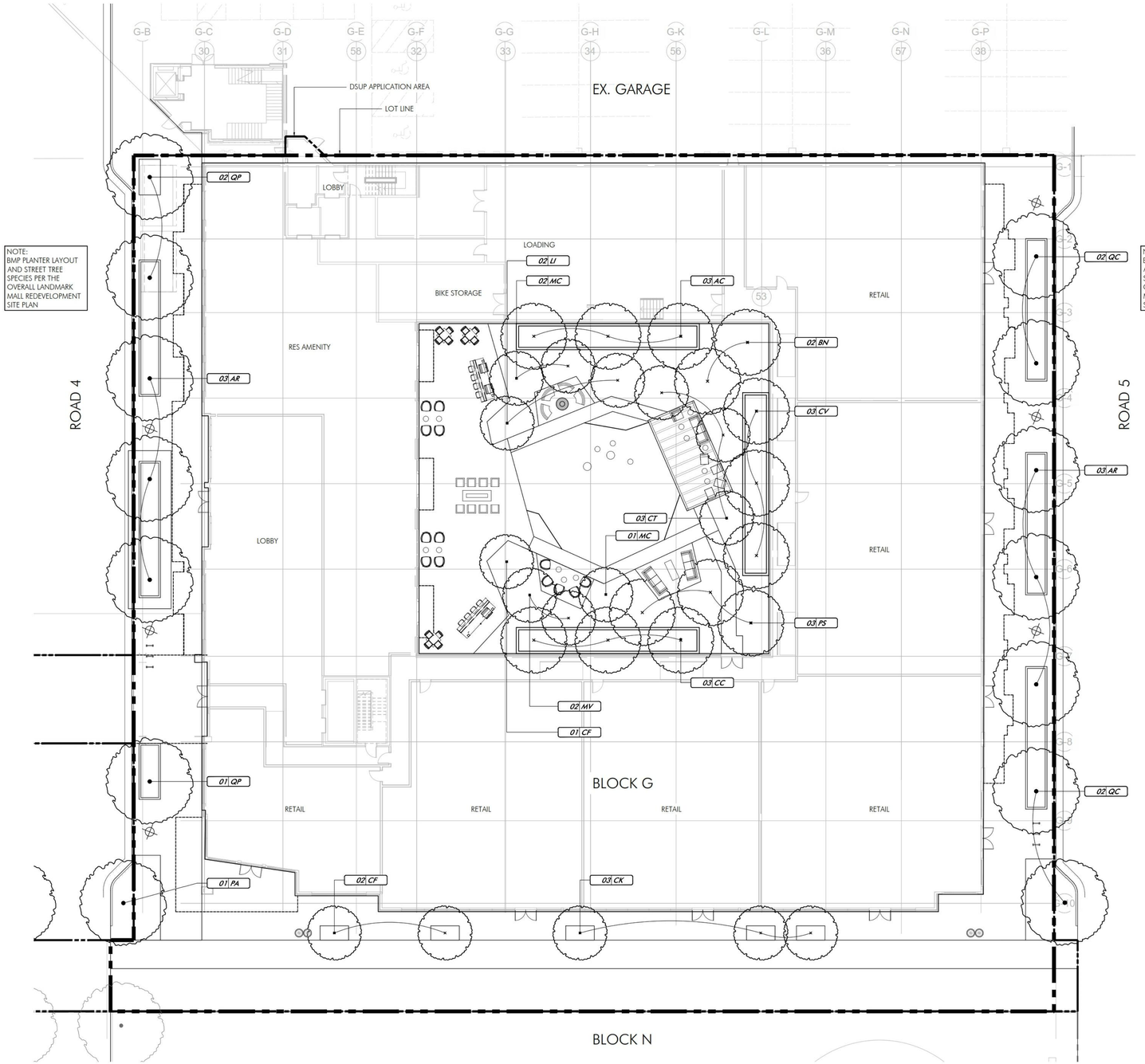

01 PLANTING PLAN - BLOCK G

1/16"=1'-0"

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPI STANDARDS AND SPECIFICATIONS.

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

_____ DIRECTOR _____ DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

_____ DIRECTOR _____ DATE

_____ CHAIRMAN, PLANNING COMMISSION _____ DATE

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LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: AS NOTED | DATE: APRIL, 2022 | C.I.= N/A

SHEET 30 OF 53

FILE No. RZ-1877

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BLOCK E

PLANT SCHEDULE

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE	NOTES	CROWN COVER ALLOWANCE (CCA)		NATIVE PLANTS PROVIDED			ONSITE / OFF-SITE
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/ HYBRID	COMMON NAME	CALIPER/HEIGHT		CCA PER TREE (SF)	TOTAL CROWN COVER (SF)	LOCAL/ REGIONAL (#)	EASTERN U.S. (#)	TOTAL	
STANDARD TREES	AC	4	Amelanchier	canadensis	Autumn Brilliance	Autumn Brilliance Serviceberry	10-12' ht.	B&B, multistem - 3 stems min; full branching	500	2,000	4		4	Onsite (within property line)
	BN	3	Betula	nigra	Dura Heat	Dura Heat River Birch	3-3 1/2" cal.	B&B, single leader; full branching	750	2,250	3		3	Onsite (within property line)
	CA	3	Carpinus	caroliniana		American Hornbeam	3-3 1/2" cal.	B&B, single leader; full branching	500	1,500	3		3	Onsite (within property line)
	CC	4	Cercis	canadensis	Forest Pansy	Forest Pansy Redbud	10-12' ht.	B&B, multistem - 3 stems min; full branching	500	2,000	4		4	Onsite (within property line)
	CF	4	Cornus	florida		Flowering Dogwood	3-3 1/2" cal.	B&B, single leader; full branching	250	1,000	4		4	Onsite (within property line)
	CK	3	Cornus	kousa		Kousa Dogwood	3-3 1/2" cal.	B&B, single leader; full branching	250	750			0	Onsite (within property line)
	CT	2	Chamaecyparis	thyoides		Atlantic White Cedar	3-3 1/2" cal.	B&B, single leader; full branching	250	500	2		2	Onsite (within property line)
	CV	4	Chionanthus	virginicus		Fringe Tree	3-3 1/2" cal.	B&B, single leader; full branching	500	2,000	4		4	Onsite (within property line)
	IO	3	Ilex	opaca		American Holly	8-10' ht.	B&B, heavy; matched; symmetrical	250	750	3		3	Onsite (within property line)
	LI	3	Lagerstroemia	indica		Crepe Myrtle	10-12' ht.	B&B, single leader; full branching	250	750			0	Onsite (within property line)
	MV	4	Magnolia	virginiana		Sweetbay Magnolia	3-3 1/2" cal.	B&B, single leader; full branching	250	1,000	4		4	Onsite (within property line)
	MC	2	Malus	coronaria		Wild Crabapple	3-3 1/2" cal.	B&B, single leader; full branching	500	1,000	2		2	Onsite (within property line)
	NS	3	Nyssa	sylvatica		Black Gum	3-3 1/2" cal.	B&B, single leader; full branching	750	2,250	3		3	Onsite (within property line)
	TOTALS	42							STANDARD TREE CCA:	17,750	36	0	36	
											85.7%	0.0%	85.7%	

BIODIVERSITY TABULATIONS

TREES (URBAN AND STANDARD)
TOTAL NUMBER OF TREES PROPOSED: 42

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Amelanchier	4	9.5%	33%	canadensis	4	9.5%	10%
Betula	3	7.1%	33%	nigra	3	7.1%	10%
Carpinus	3	7.1%	33%	caroliniana	3	7.1%	10%
Cercis	4	9.5%	33%	canadensis	4	9.5%	10%
Chamaecyparis	2	4.8%	33%	thyoides	2	4.8%	10%
Chionanthus	4	9.5%	33%	virginicus	4	9.5%	10%
Cornus	7	16.7%	33%	florida	4	9.5%	10%
				kousa	3	7.1%	10%
Ilex	3	7.1%	33%	opaca	3	7.1%	10%
Lagerstroemia	3	7.1%	33%	indica	3	7.1%	10%
Magnolia	4	9.5%	33%	virginiana	4	9.5%	10%
Malus	2	4.8%	33%	coronaria	2	4.8%	10%
Nyssa	3	7.1%	33%	sylvatica	2	4.8%	10%

CROWN COVER TABULATIONS BUILDING E	
TOTAL SITE AREA (SF)	108,575
25% CROWN COVER REQUIRED (SF)	27,144
EXISTING CROWN COVER (SF)	0
REMOVED CROWN COVER (SF)	0
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	0
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	17,750
Crown Cover from Proposed Shrubs	0
TOTAL CROWN COVER PROVIDED (%)	16.3%
TOTAL CROWN COVER PROVIDED (SF)	17,750

BLOCK E - STREET TREE

NOTE: STREET TREE SPECIES PER THE OVERALL LANDMARK MALL REDEVELOPMENT SITE PLAN

PLANT SCHEDULE

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE	NOTES	CROWN COVER ALLOWANCE (CCA)		NATIVE PLANTS PROVIDED			ONSITE / OFF-SITE
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/ HYBRID	COMMON NAME	CALIPER/HEIGHT		CCA PER TREE (SF)	TOTAL CROWN COVER (SF)	LOCAL/ REGIONAL (#)	EASTERN U.S. (#)	TOTAL	
STANDARD TREES	AR	5	Acer	rubrum	Red Sunset	Red Maple	3-3 1/2" cal.	B&B, single leader; full branching	1,250	6,250	5		5	Onsite (within property line)
	PA	1	Platanus	x acerifolia	Bloodgood	London Plane Tree	3-3 1/2" cal.	B&B, single leader; full branching	1,250	1,250			0	Onsite (within property line)
	QC	3	Quercus	coccinea		Scarlet Oak	3-3 1/2" cal.	B&B, single leader; full branching	1,250	3,750	3		3	Onsite (within property line)
	QP	4	Quercus	phellos		Willow Oak	3-3 1/2" cal.	B&B, single leader; full branching	1,250	5,000	4		4	Onsite (within property line)
	TOTALS	13							STANDARD TREE CCA:	16,250	12	0	12	
											92.3%	0.0%	92.3%	

CROWN COVER TABULATIONS BUILDING E - STREET TREE	
TOTAL SITE AREA (SF)	108,575
25% CROWN COVER REQUIRED (SF)	27,144
EXISTING CROWN COVER (SF)	0
REMOVED CROWN COVER (SF)	0
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	0
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	16,250
Crown Cover from Proposed Shrubs	0
TOTAL CROWN COVER PROVIDED (%)	15.0%
TOTAL CROWN COVER PROVIDED (SF)	16,250

TOTAL CROWN COVER PROVIDED (INCLUDING STREET TREES WITHIN LOT LINE)
=16.3%+15%
=31.3%

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

APPROVED
DEVELOPMENT SITE PLAN NO. _____
DEPARTMENT OF PLANNING & ZONING
DIRECTOR _____ DATE _____
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____
DIRECTOR _____ DATE _____
CHAIRMAN, PLANNING COMMISSION _____ DATE _____
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LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
SCALE: AS NOTED
C.I.= N/A

SHEET 31 OF 53
FILE No. RZ-1877

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BLOCK G

PLANT SCHEDULE

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE	NOTES	CROWN COVER ALLOWANCE (CCA)		NATIVE PLANTS PROVIDED			ONSITE / OFF-SITE
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/ HYBRID	COMMON NAME	CALIPER/HEIGHT		CCA PER TREE (SF)	TOTAL CROWN COVER (SF)	LOCAL/ REGIONAL (#)	EASTERN U.S. (#)	TOTAL	
STANDARD TREES	AC	3	Amelanchier	canadensis	Autumn Brilliance	Autumn Brilliance Serviceberry	10-12' ht.	B&B, multistem - 3 stems min; full branching	500	1,500	3		3	Onsite (within property line)
	BN	2	Betula	nigra		River Birch	10-12' ht.	B&B, multistem - 3 stems min; full branching	750	1,500	2		2	Onsite (within property line)
	CC	3	Cercis	canadensis	Forest Pansy	Forest Pansy Redbud	10-12' ht.	B&B, multistem - 3 stems min; full branching	500	1,500	3		3	Onsite (within property line)
	CF	3	Cornus	florida		Flowering Dogwood	3-3 1/2" cal.	B&B, single leader; full branching	250	750	3		3	Onsite (within property line)
	CK	3	Cornus	kousa		Kousa Dogwood	3-3 1/2" cal.	B&B, single leader; full branching	250	750			0	Onsite (within property line)
	CT	3	Chamaecyparis	thyoides		Atlantic White Cedar	10-12' ht.	B&B, single leader; full branching	250	750	3		3	Onsite (within property line)
	CV	3	Chionanthus	virginicus		Fringe Tree	3-3 1/2" cal.	B&B, single leader; full branching	500	1,500	3		3	Onsite (within property line)
	LI	2	Lagerstroemia	indica		Crepe Myrtle	3-3 1/2" cal.	B&B, single leader; full branching	250	500			0	Onsite (within property line)
	MC	3	Malus	coronaria		Wild Crabapple	3-3 1/2" cal.	B&B, single leader; full branching	500	1,500	3		3	Onsite (within property line)
	MV	2	Magnolia	virginiana		Sweetbay Magnolia	10-12' ht.	B&B, multistem - 3 stems min; full branching	250	500	2		2	Onsite (within property line)
	PS	3	Prunus	serotina		Wild Black Cherry	3-3 1/2" cal.	B&B, single leader; full branching	750	2,250	3		3	Onsite (within property line)
	TOTALS	30							STANDARD TREE CCA:	13,000	25	0	25	
											83.3%	0.0%	83.3%	

BIODIVERSITY TABULATIONS

TREES (URBAN AND STANDARD)

TOTAL NUMBER OF TREES PROPOSED: 30

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Amelanchier	3	10.0%	33%	canadensis	3	10.0%	10%
Betula	2	6.7%	33%	nigra	2	6.7%	10%
Cercis	3	10.0%	33%	canadensis	3	10.0%	10%
Chamaecyparis	3	10.0%	33%	thyoides	3	10.0%	10%
Chionanthus	3	10.0%	33%	virginicus	3	10.0%	10%
Cornus	6	20.0%	33%	florida	3	10.0%	10%
				kousa	3	10.0%	10%
Lagerstroemia	2	6.7%	33%	indica	2	6.7%	10%
Magnolia	2	6.7%	33%	virginiana	2	6.7%	10%
Malus	3	10.0%	33%	coronaria	3	10.0%	10%
Prunus	3	10.0%	33%	serotina	3	10.0%	10%

CROWN COVER TABULATIONS BLOCK G	
TOTAL SITE AREA (SF)	62,083
25% CROWN COVER REQUIRED (SF)	15,521
EXISTING CROWN COVER (SF)	0
REMOVED CROWN COVER (SF)	0
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	0
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	13,000
Crown Cover from Proposed Shrubs	0
TOTAL CROWN COVER PROVIDED (%)	20.9%
TOTAL CROWN COVER PROVIDED (SF)	13,000

BLOCK G - STREET TREE

NOTE: STREET TREE SPECIES PER THE OVERALL LANDMARK MALL REDEVELOPMENT SITE PLAN

PLANT SCHEDULE

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE	NOTES	CROWN COVER ALLOWANCE (CCA)		NATIVE PLANTS PROVIDED			ONSITE / OFF-SITE
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/ HYBRID	COMMON NAME	CALIPER/HEIGHT		CCA PER TREE (SF)	TOTAL CROWN COVER (SF)	LOCAL/ REGIONAL (#)	EASTERN U.S. (#)	TOTAL	
STANDARD TREES	AR	6	Acer	rubrum	Red Sunset	Red Maple	3-3 1/2" cal.	B&B, single leader; full branching	1,250	7,500	6		6	Onsite (within property line)
	QC	3	Quercus	coccinea		Scarlet Oak	3-3 1/2" cal.	B&B, single leader; full branching	1,250	3,750	3		3	Onsite (within property line)
	QP	3	Quercus	phellos		Willow Oak	3-3 1/2" cal.	B&B, single leader; full branching	1,250	3,750	3		3	Onsite (within property line)
	TOTALS	12							STANDARD TREE CCA:	15,000	12	0	12	
											100.0%	0.0%	100.0%	

CROWN COVER TABULATIONS BLOCK G - STREET TREE	
TOTAL SITE AREA (SF)	62,083
25% CROWN COVER REQUIRED (SF)	15,521
EXISTING CROWN COVER (SF)	0
REMOVED CROWN COVER (SF)	0
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	0
Crown Cover from Preserved Shrubs	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	15,000
Crown Cover from Proposed Shrubs	0
TOTAL CROWN COVER PROVIDED (%)	24.2%
TOTAL CROWN COVER PROVIDED (SF)	15,000

TOTAL CROWN COVER PROVIDED (INCLUDING STREET TREES WITHIN LOT LINE)
=20.9%+24.2%
=45.1%

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

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

REVISIONS

No.	DATE	DESCRIPTION

PLAN DATE
11-19-2021
04-27-2022

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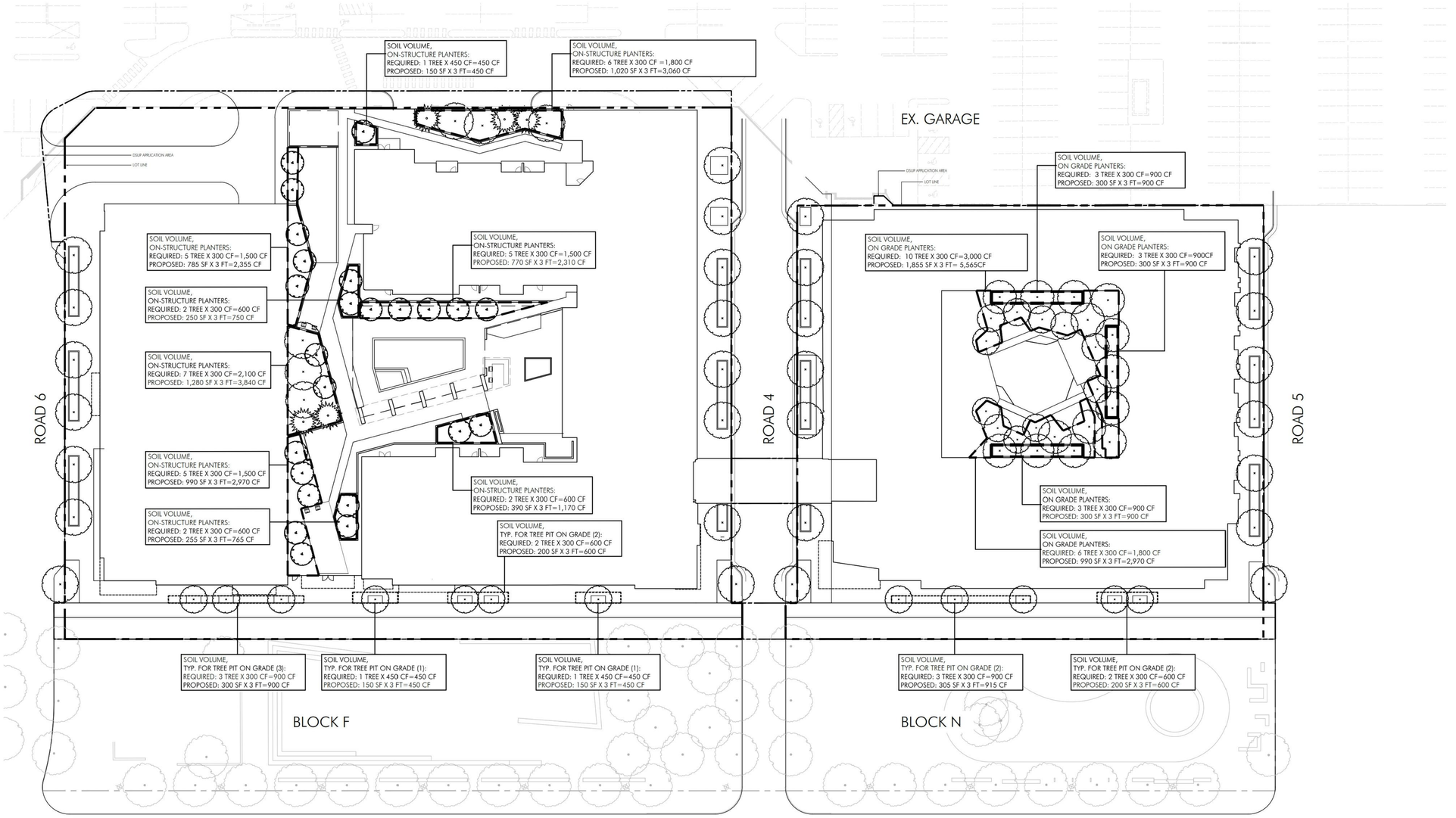
CLAYTON C. TOCK
Lic. No. 038790
PROFESSIONAL
04/27/22

LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
SCALE: AS NOTED
C.I.= N/A

SHEET 32 OF 53

FILE No. RZ-1877

Urban, Ltd. - J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-07-LANDSPACE.dwg [LANDSCAPE(B)] April 27, 2022 - 11:20am awalia



01 SOIL VOLUME PLAN
1"=30'-0"

VA. STATE GRID NORTH

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY C ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATIC STANDARDS AND SPECIFICATIONS.

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

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11-19-2021
04-27-2022

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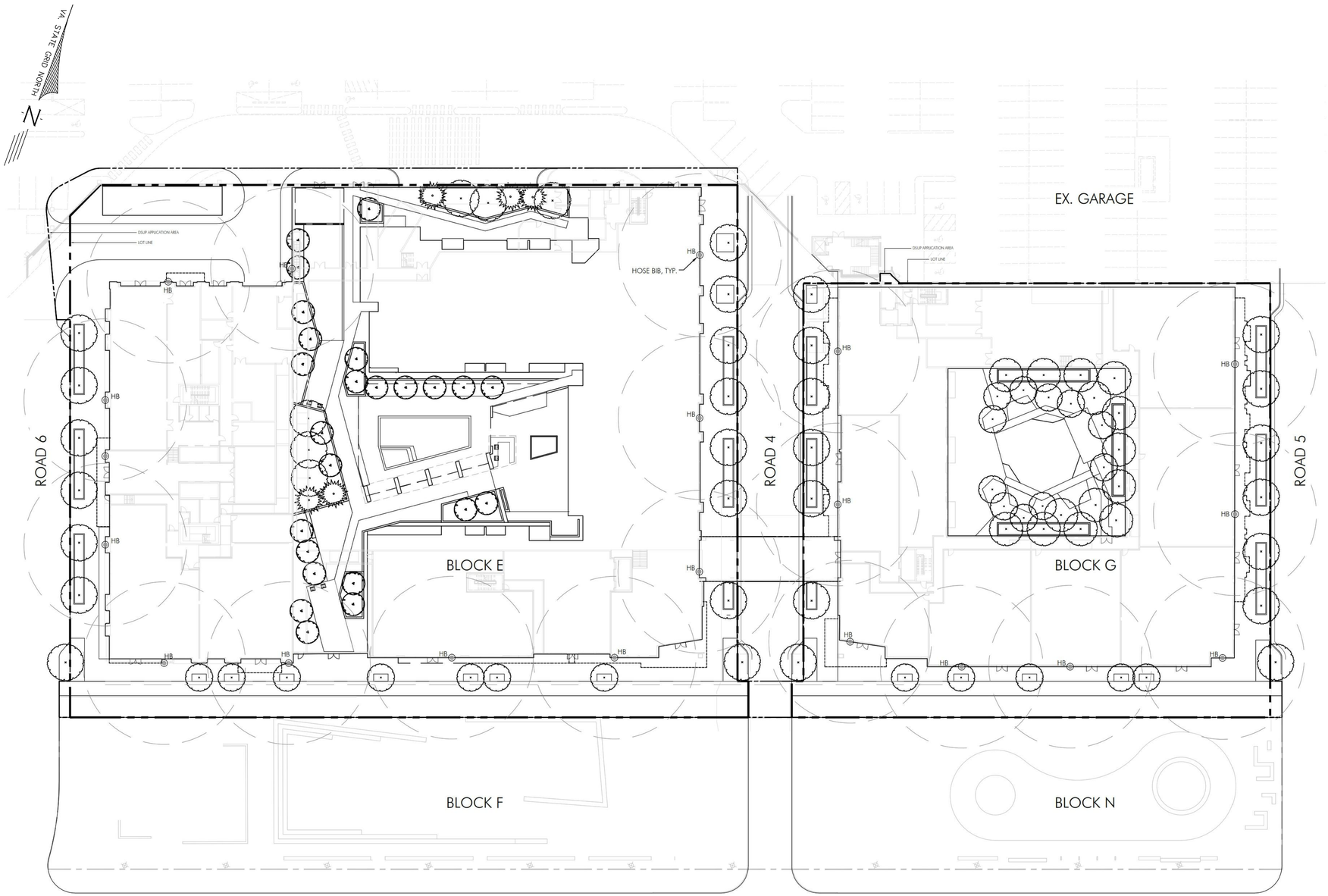
COMMONWEALTH OF VIRGINIA
CLAYTON C. TOCK
Lic. No. 039790
ENGINEER
PROFESSIONAL
04.27.22

LANDSCAPE PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED C.I.= N/A DATE: APRIL, 2022

SHEET 33 OF 53
FILE No. RZ-1877

Urban, Ltd. - J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-07-LANDSPACE.dwg [LANDSCAPE(9)] April 27, 2022 - 11:20am ovalio



LEGEND

HB — HOSE BIB

90' DIAMETER CIRCLE

IRRIGATION METHOD NOTES:

1. IRRIGATION TO BE HAND (MANUAL) WATERING WITH HOSE. PROVIDE HOSE BIBS ALONG THE BUILDING PERIMETERS WITH 90' (MAX.) ON-CENTER SPACING.
2. IF THE OWNER DECIDE TO USE AUTOMATED IRRIGATION SYSTEM, CONTRACTOR TO PROVIDE DESIGN-BUILT SHOP DRAWINGS AND SPECIFICATIONS PREPARED AND SEALED BY CERTIFIED IRRIGATION DESIGNER FOR THE OWNER AND PROJECT LANDSCAPE ARCHITECT TO REVIEW AND APPROVAL. IRRIGATION SYSTEM WITHIN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A MAINTENANCE AGREEMENT WITH THE CITY.

01 LANDSCAPE WATER MANAGEMENT PLAN

1"=30'-0"

FEET 0 15 30 60

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

No.	DATE	DESCRIPTION
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CLAYTON C. TOCK
Lic. No. 038790
04.27.22
REGISTERED PROFESSIONAL

LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

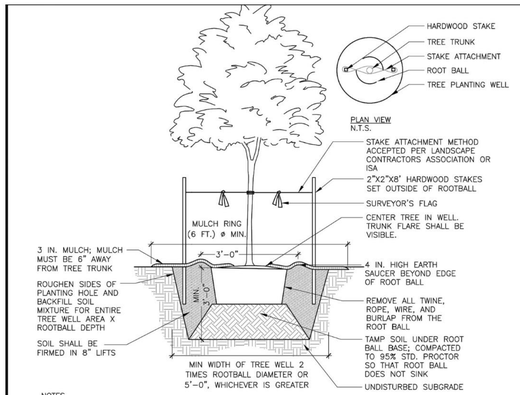
DATE: APRIL, 2022

SCALE: AS NOTED C.I.= N/A

SHEET 34 OF 53

FILE No. RZ-1877

Urban, Ltd. – J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-07-LANDSPACE.dwg [LANDSCAPE(10)] April 27, 2022 – 11:20am awaila



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

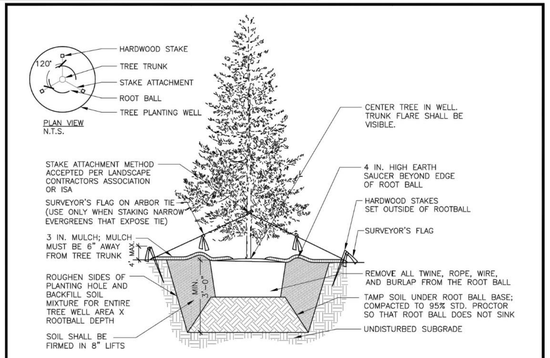
A DECIDUOUS TREE PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

NOTE: THE INFORMATION SHOWN HEREIN THIS DOCUMENT IS FOR GENERAL GUIDANCE ONLY AND IS NOT INTENTED FOR CONSTRUCTION PURPOSES. ITS USE SHALL NOT RELIEVE THE DESIGN PROFESSIONAL OR CONTRACTOR OF ANY LEGAL RESPONSIBILITY.

Source: CITY OF ALEXANDRIA	DECIDUOUS TREE PLANTING
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 001



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

A EVERGREEN TREE PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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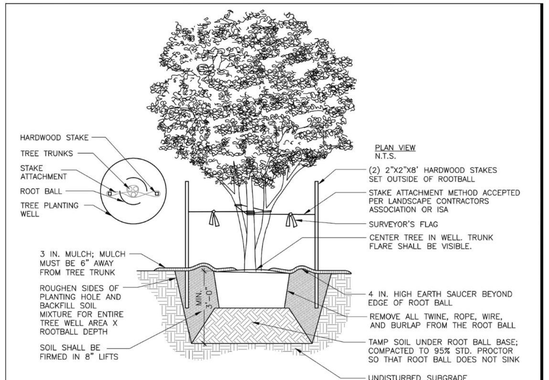
Source: CITY OF ALEXANDRIA	EVERGREEN TREE PLANTING
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 002



NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARDS A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE WELL WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.
7. STAKES WILL BE INSTALLED USING ARBORICULTURE PRACTICES, TREES SHALL STAND PLUM AFTER STAKING.
8. INSTALLATION WILL INCLUDE THE REMOVAL OF ALL STAKING MATERIAL ONE YEAR AFTER INSTALLATION. ANY HOLES LEFT BY REMOVING STAKING SHALL BE FILLED WITH APPROVED TOPSOIL / BACKFILL MIXTURE.
9. CONTRACTOR SHALL USE GALVANIZED EYESCREW & TURNBUCKLE INSTEAD OF ARBOR TIE ONLY FOR TREES OF SIGNIFICANT SIZE AS DIRECTED BY CITY STAFF.

A MULTI-STEM TREE PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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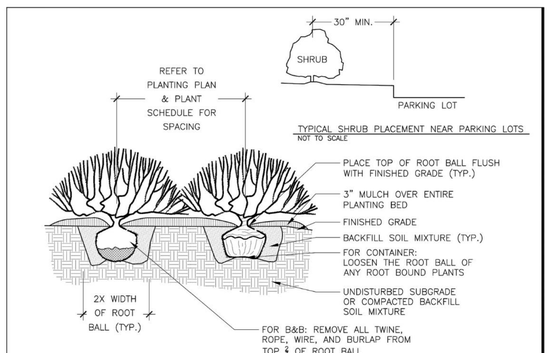
Source: CITY OF ALEXANDRIA	MULTI-STEM TREE PLANTING
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 003



NOTES

1. AT PLANTING, PRUNE ONLY BROKEN OR DEAD BRANCHES PER ANSI 300 STANDARD.
2. PLANTING WELL / TRENCH SHALL BE DUG TO ALLOW TOP OF ROOT BALL TO SET FLUSH WITH EXISTING GRADE.
3. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS. ORIENT BEST FACE OF PLANT TO BE MOST VISIBLE.
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. DO NOT PLACE MULCH IN CONTACT WITH STEM OF PLANTS.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, ESTABLISHMENT WATERING SHALL BE PER THE SPECIFICATIONS ON ALL DETAILS.

A SHRUB PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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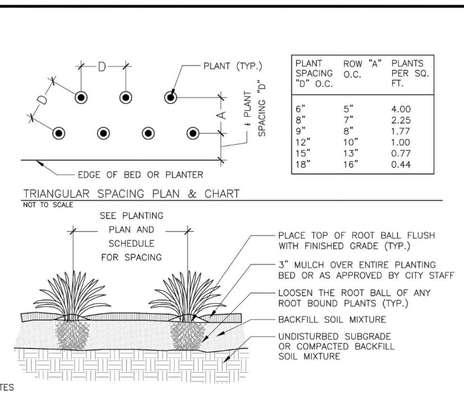
Source: CITY OF ALEXANDRIA	SHRUB PLANTING
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 009



PLANT SPACING "D" O.C.	ROW "A" O.C.	PLANTS PER SQ. FT.
6"	5"	4.00
8"	7"	2.25
9"	8"	1.77
12"	10"	1.00
15"	13"	0.77
18"	16"	0.44

TRIANGULAR SPACING PLAN & CHART
NOT TO SCALE

NOTES

1. PLANTING WELL / TRENCH SHALL BE DUG TO ALLOW TOP OF ROOT BALL TO SET FLUSH WITH EXISTING GRADE.
2. SET PLANTS IN ERECT, STABLE, AND UNIFORM POSITIONS. ORIENT BEST FACE OF PLANT TO BE MOST VISIBLE.
3. GROUND COVERS AND PERENNIALS SHALL BE INSTALLED WITH TRIANGULAR SPACING. REFER TO CHART.
4. UNLESS OTHERWISE DIRECTED BY PROJECT SPECIFICATIONS OR CITY STAFF, SOIL MIXTURE SHALL BE CLEANED OF DEBRIS, AND MEET SOIL COMPOSITION REQUIREMENTS OF CITY OF ALEXANDRIA LANDSCAPE GUIDELINES.
5. DO NOT PLACE MULCH IN CONTACT WITH STEM OR CROWN OF PLANTS.
6. ALL PLANTS MUST BE WATERED AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, PER THE SPECIFICATIONS.

A GROUNDCOVER & PERENNIAL PLANTING
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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Source: CITY OF ALEXANDRIA	GROUNDCOVER & PERENNIAL PLANTING
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 011

01 ALEXANDRIA CITY STANDARD PLANTING DETAILS ON GRADE

SCALE: NTS

No.	DESCRIPTION	DATE
	REVISIONS	

PLAN DATE
11-19-2021
04-27-2022

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CLAYTON C. TOCK
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04/27/22
PROFESSIONAL ENGINEER

LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: AS NOTED | C.I.= N/A | DATE: APRIL, 2022

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS

APPROVED
DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

SHEET 35 OF 53

FILE No. RZ-1877

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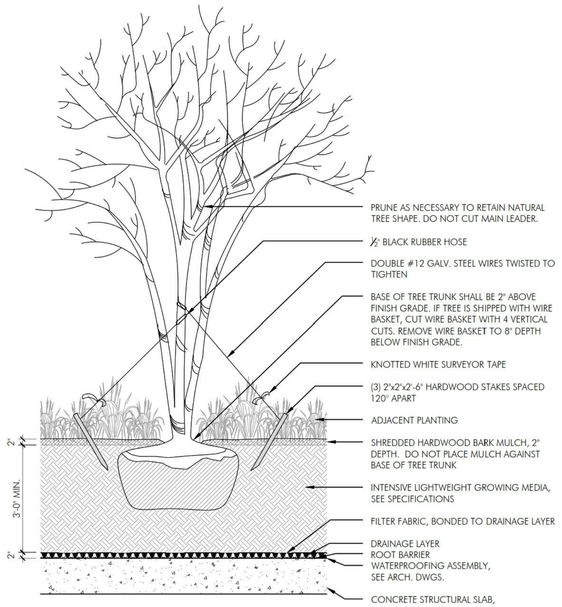
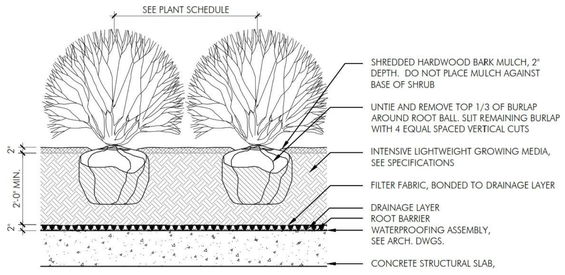


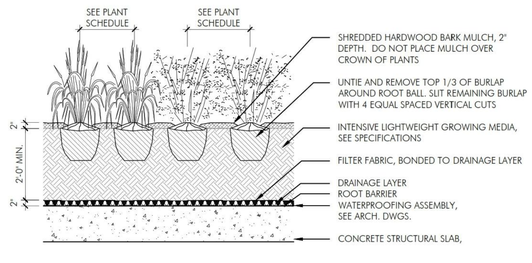
01 TREE PLANTING ON STRUCTURE

1/2" = 1'-0"



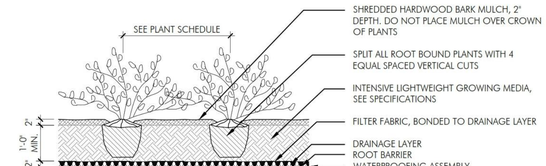
02 SHRUB PLANTING ON STRUCTURE

SCALE : 1/2" = 1'-0"



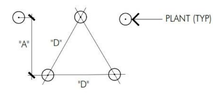
03 PERENNIAL AND ORNAMENTAL GRASS PLANTING ON STRUCTURE

SCALE : 1/2" = 1'-0"



04 GROUNDCOVER PLANTING ON STRUCTURE

SCALE : 1/2" = 1'-0"



NOTE:

GROUND COVERS AND PERENNIALS TO BE INSTALLED WITH TRIANGULAR SPACING.

PLANT SPACING "D"	ROW "A"
6" O.C.	5" O.C.
8" O.C.	7" O.C.
10" O.C.	9" O.C.
12" O.C.	10" O.C.
14" O.C.	12" O.C.
15" O.C.	13" O.C.
16" O.C.	14" O.C.
18" O.C.	16" O.C.
24" O.C.	21" O.C.
30" O.C.	26" O.C.
36" O.C.	30" O.C.

05 PLANT SPACING DIAGRAM

1/2" = 1'-0"

ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ALEXANDRIA AND VIRGINIA DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS.

APPROVED

DEVELOPMENT SITE PLAN NO. _____

DEPARTMENT OF PLANNING & ZONING

DIRECTOR _____ DATE _____

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

SITE PLAN NO. _____

DIRECTOR _____ DATE _____

CHAIRMAN, PLANNING COMMISSION _____ DATE _____

DATE RECORDED _____

INSTRUMENT NO. _____ DEED BOOK NO. _____ PAGE NO. _____

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11-19-2021
04-27-2022

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COMMONWEALTH OF VIRGINIA
CLAYTON C. YOCK
Lic. No. 036790
PROFESSIONAL ENGINEER
04.27.22

LANDSCAPE PLAN

LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

SCALE: AS NOTED C.I.= N/A DATE: APRIL, 2022

SHEET 36 OF 53

FILE No. RZ-1877

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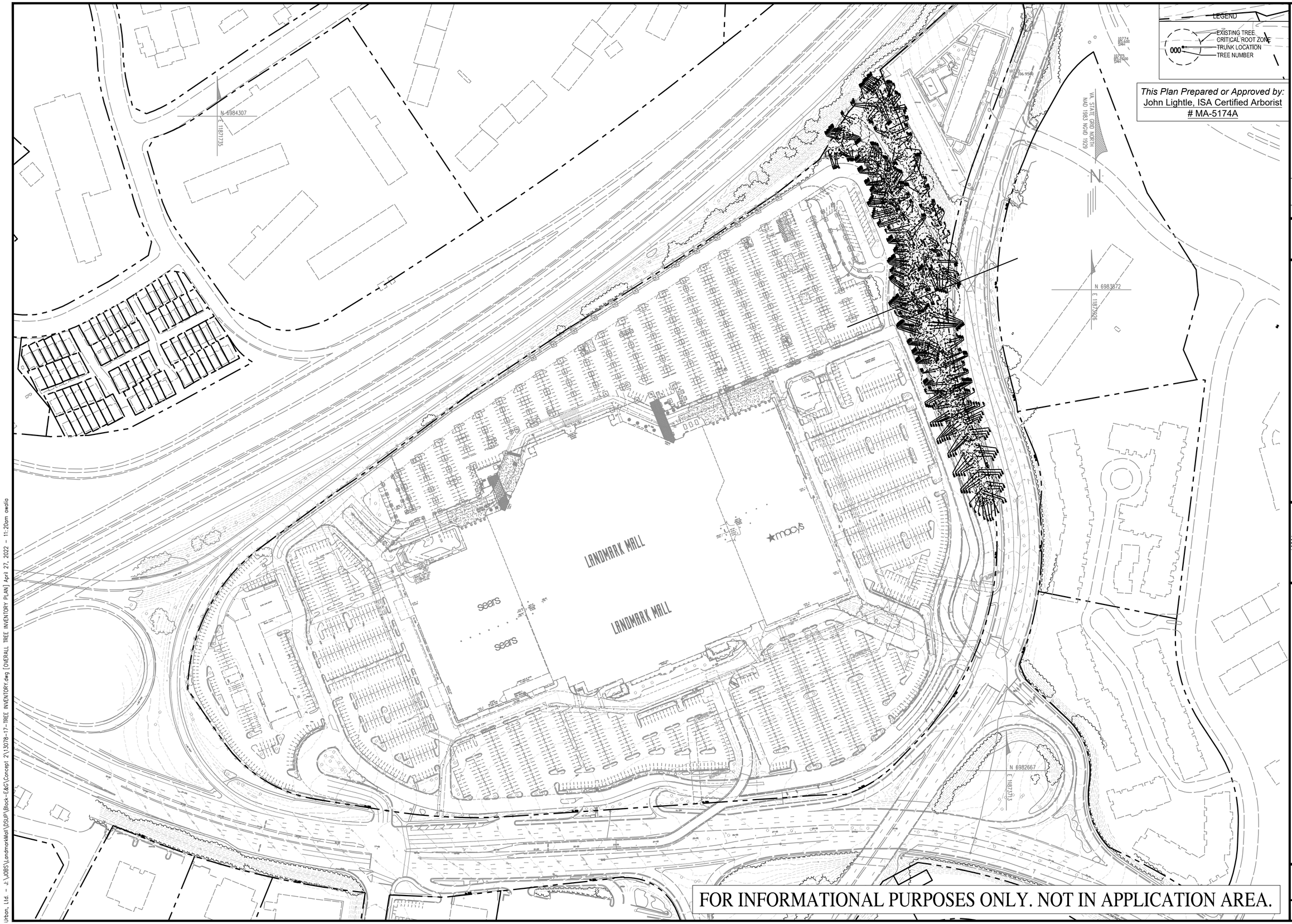

This Plan Prepared or Approved by:
John Lightle, ISA Certified Arborist
MA-5174A

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11-19-2021
04-27-2022

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04/27/22

TREE INVENTORY PLAN
LANDMARK MALL REDEVELOPMENT PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA

SCALE: 1"=100' C.I.= 2' DATE: APRIL, 2022

SHEET
37
OF
53

FILE No.
RZ-1877

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Urban, Ltd. – J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-17-TREE INVENTORY.dwg [OVERALL TREE INVENTORY PLAN] April 27, 2022 – 11:20am awalia

LEGEND

EXISTING TREE
CRITICAL ROOT ZONE
000 TRUNK LOCATION
TREE NUMBER

This Plan Prepared or Approved by:
John Lightle, ISA Certified Arborist
MA-5174A

MATCHLINE
SEE SHEET 37B

ARLINGTON FOREST
SERVICE CENTER

EX. ROW

EX. ROW

EX. ROW

EX. ROW

VCS 1983 NORTH

SCALE: 1"=20'
0 10' 20' 40'

FOR INFORMATIONAL PURPOSES ONLY. NOT IN APPLICATION AREA.

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

No.	DATE	DESCRIPTION
		REVISIONS

PLAN DATE
11-19-2021
04-27-2022

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CHANTILLY, VA. 20151
TEL. 703.642.2306
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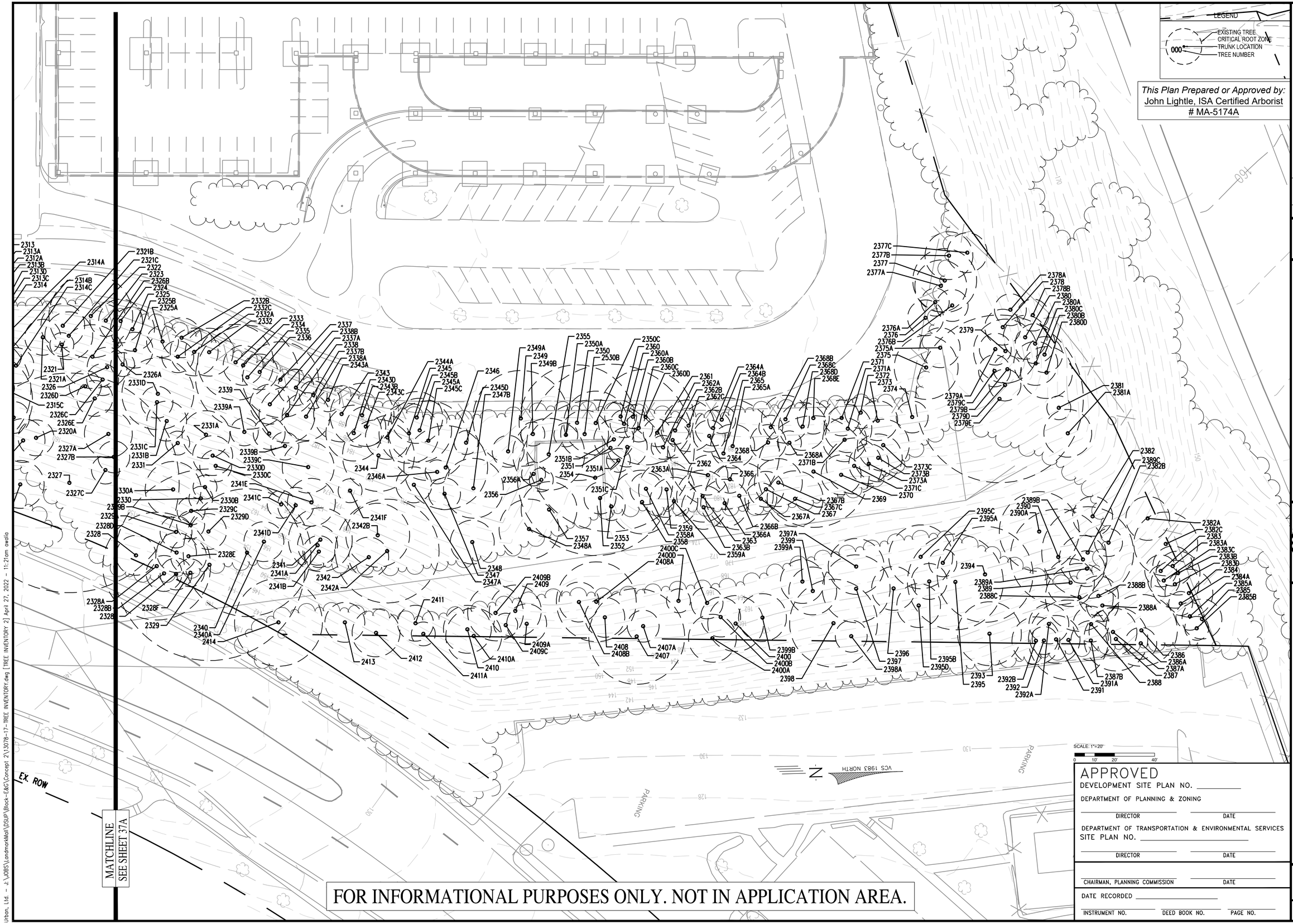
COMMONWEALTH OF VIRGINIA
John Lightle
Lic. No. 1957
04/27/22
CERTIFIED ARBORIST

TREE INVENTORY PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: 1"=20' C.I.= 2' DATE: APRIL, 2022

SHEET
37A
OF
53

FILE No.
RZ-1877

Urban, Ltd. - J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-17-TREE INVENTORY.dwg [TREE INVENTORY] April 27, 2022 - 11:20am avalio



No.	DATE	REVISIONS

PLAN DATE
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TREE INVENTORY PLAN
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C.I.= 2'
SCALE: N/A

SHEET
37B
OF
53

FILE No.
RZ-1877

Urban, Ltd. - J:\JOBS\LandmarkMall\DSUP\Block-E&G\Concept 2\13078-17-TREE INVENTORY.dwg [TREE INVENTORY 2] April 27, 2022 - 11:21am awalia

TREE INVENTORY & CONDITION ANALYSIS

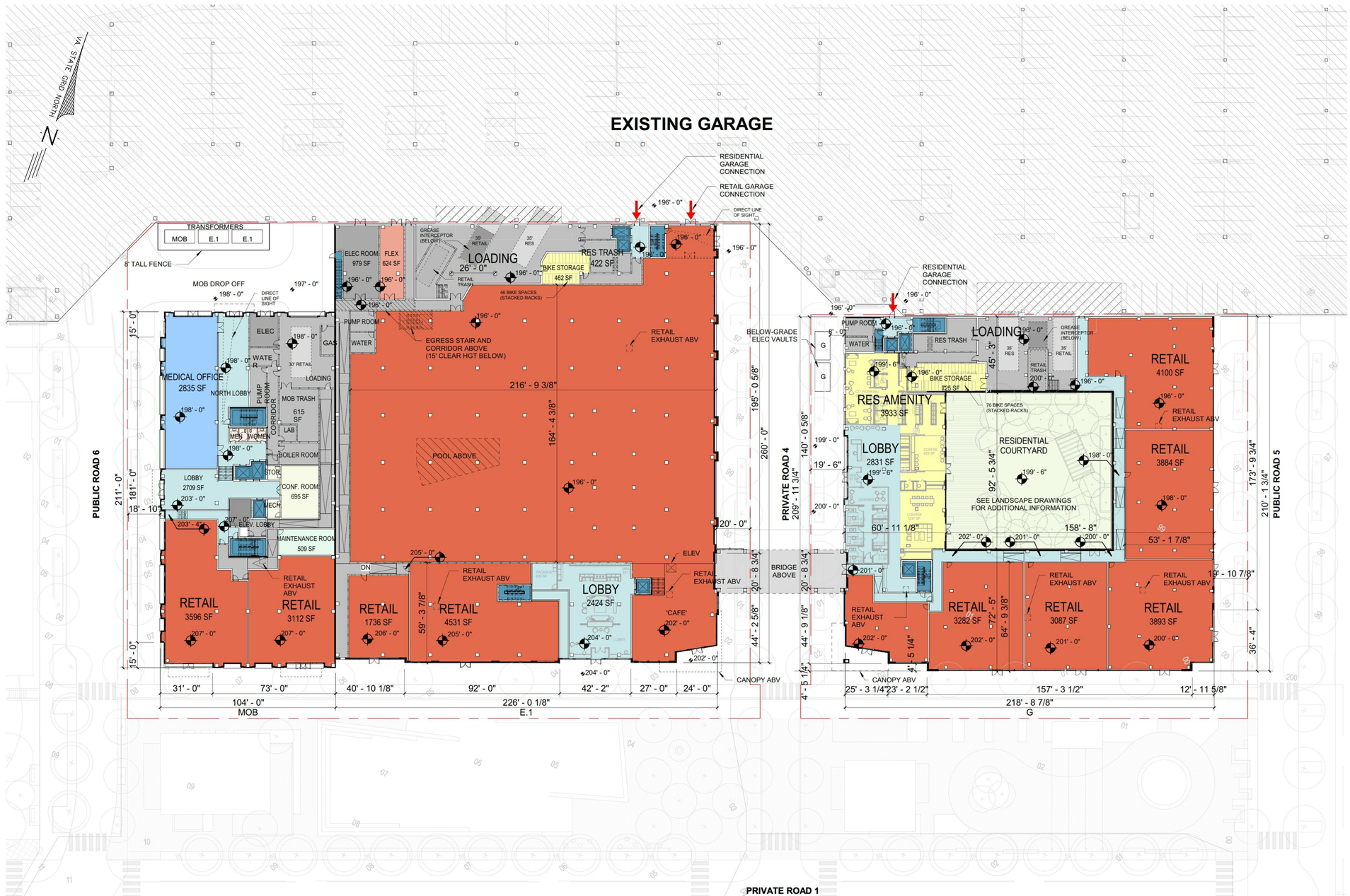
TREE #	BOTANICAL NAME	COMMON NAME	TRUNK SIZE	CRZ SIZE	TRUNK ELEVATION	CRZ ELEVATION	COMMENTS	CONDITION RATING
			DBH (in.)	R (ft.)	Elevation (ft.)	Elevation (ft.)		
2241	*Ailanthus altissima*	Tree of Heaven	7"	7'	177.00	176.50		62.50
2242	*Ailanthus altissima*	Tree of Heaven	6"	6'	179.00	178.50	Crooked	43.75
2243	*Ailanthus altissima*	Tree of Heaven	6"	6'	181.50	181.00		62.50
2244	*Robinia pseudoacacia*	Black Locust	9"	9'	183.75	183.25	Leaning	53.13
2245	*Robinia pseudoacacia*	Black Locust	10"	10'	183.75	183.25		59.38
2246	*Ailanthus altissima*	Tree of Heaven	12"	12'	185.50	185.00		62.50
2247	*Robinia pseudoacacia*	Black Locust	10"	10'	185.50	185.00	Dead	0.00
2248	*Ailanthus altissima*	Tree of Heaven	11"	11'	181.50	181.00		59.38
2249	*Robinia pseudoacacia*	Black Locust	20"	20'	180.00	179.50	Co-dominant, Poor	31.25
2250	*Prunus serotina*	Black Cherry	6"	6'	181.25	180.75		62.50
2251	*Ailanthus altissima*	Tree of Heaven	7"	7'	176.50	176.00		62.50
2252	*Quercus rubra*	Red Oak	26"	26'	174.75	174.25	Co-dominant	43.75
2253	*Quercus alba*	White Oak	16"	16'	174.75	174.25	Co-dominant, Poor, Leaning	28.13
2254	*Quercus rubra*	Red Oak	28"	28'	181.50	181.00		62.50
2255	*Quercus rubra*	Red Oak	18"	18'	179.75	179.25		59.38
2256	*Robinia pseudoacacia*	Black Locust	9"	9'	175.75	175.25		62.50
2257	*Robinia pseudoacacia*	Black Locust	12"	12'	173.75	173.25		71.88
2258	*Robinia pseudoacacia*	Black Locust	8"	8'	181.75	181.25		59.38
2259	*Robinia pseudoacacia*	Black Locust	11"	11'	182.00	181.50		62.50
2259A	*Quercus rubra*	Red Oak	6"	6'	175.75	175.25	AFA	53.13
2260	*Quercus rubra*	Red Oak	16"	16'	181.00	180.50		62.50
2261	*Quercus rubra*	Red Oak	12"	12'	178.50	178.00	Leaning	43.75
2262	*Quercus rubra*	Red Oak	16"	16'	179.00	178.50	Dead	0.00
2263	*Quercus rubra*	Red Oak	10"	10'	181.00	180.50	Dead	0.00
2264	*Robinia pseudoacacia*	Black Locust	12"	12'	169.00	168.50		62.50
2264A	*Ailanthus altissima*	Tree of Heaven	12"	12'	172.75	172.25	Co-dominant	65.63
2264B	*Ailanthus altissima*	Tree of Heaven	8"	8'	183.75	183.25	AFA	53.13
2265	*Quercus rubra*	Red Oak	16"	16'	171.75	171.25		53.13
2265A	*Ailanthus altissima*	Tree of Heaven	6"	6'	169.00	168.50		62.50
2266	*Robinia pseudoacacia*	Black Locust	10"	10'	173.50	173.00		56.25
2267	*Ailanthus altissima*	Tree of Heaven	11"	11'	175.00	174.50		62.50
2267A	*Prunus serotina*	Black Cherry	10"	10'	173.00	172.50	AFA	53.13
2268	*Ulmus americana*	American Elm	8"	8'	183.00	182.50		56.25
2269	*Prunus serotina*	Black Cherry	7"	7'	183.50	183.00	Lost Limbs, Poor	31.25
2270	*Ailanthus altissima*	Tree of Heaven	12"	12'	179.00	178.50		56.25
2271	*Robinia pseudoacacia*	Black Locust	16"	16'	171.00	170.50	Dead	0.00
2272	*Unknown*	Unknown	14"	14'	167.00	166.50	Dead	0.00
2273	*Robinia pseudoacacia*	Black Locust	22"	22'	164.50	164.00	Dead	0.00
2274	*Prunus serotina*	Black Cherry	7"	7'	166.50	166.00		53.13
2275	*Ailanthus altissima*	Tree of Heaven	7"	7'	166.00	165.50	Dead	0.00
2276	*Ailanthus altissima*	Tree of Heaven	8"	8'	162.50	162.00	Dead	0.00
2277	*Prunus serotina*	Black Cherry	7"	7'	165.00	164.50	Leaning	62.50
2278	*Prunus serotina*	Black Cherry	15"	15'	162.50	162.00	Co-Dominant	53.13
2279	*Unknown*	Unknown	17"	17'	173.00	172.50	Multi-stem, Dead	0.00
2280	*Robinia pseudoacacia*	Black Locust	20"	20'	174.00	173.50	Poor	31.25
2280A	*Unknown*	Unknown	6"	6'	185.00	184.50		62.50
2280B	*Ailanthus altissima*	Tree of Heaven	8"	8'	185.00	184.50	Co-Dominant	62.50
2281	*Prunus serotina*	Black Cherry	12"	12'	170.50	170.00		53.13
2282	*Ailanthus altissima*	Tree of Heaven	11"	11'	172.00	171.50		62.50
2283	*Ailanthus altissima*	Tree of Heaven	8"	8'	173.00	172.50		53.13
2284	*Prunus serotina*	Black Cherry	7"	7'	163.50	163.00		62.50
2285	*Robinia pseudoacacia*	Black Locust	11"	11'	163.50	163.00	Dead	0.00
2285A	*Quercus rubra*	Red Oak	14"	14'	168.50	168.00	AFA, Vines	43.75
2286	*Ailanthus altissima*	Tree of Heaven	6"	6'	185.50	185.00	Poor	31.25
2287	*Ailanthus altissima*	Tree of Heaven	9"	9'	184.00	183.50		53.13
2288	*Robinia pseudoacacia*	Black Locust	22"	22'	180.00	179.50		62.50
2289	*Prunus serotina*	Black Cherry	26"	26'	180.00	179.50		62.50
2290	*Ailanthus altissima*	Tree of Heaven	24"	24'	178.00	177.50		53.13
2291	*Unknown*	Unknown	16"	16'	170.00	169.50	Dead	0.00
2292	*Ailanthus altissima*	Tree of Heaven	8"	8'	175.50	175.00		53.13
2293	*Robinia pseudoacacia*	Black Locust	7"	7'	163.00	162.50		62.50
2294	*Ailanthus altissima*	Tree of Heaven	8"	8'	175.50	175.00		62.50

TREE INVENTORY & CONDITION ANALYSIS

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK SIZE	CRZ SIZE	TRUNK ELEVATION	CRZ ELEVATION	COMMENTS	CONDITION RATING
			DBH (in.)	R (ft.)	Elevation (ft.)	Elevation (ft.)		
2315A	*Ailanthus altissima*	Tree of Heaven	11"	11'	165.00	164.50		68.75
2315B	*Ailanthus altissima*	Tree of Heaven	24"	24'	164.00	163.50	Multistem	53.13
2315C	*Ailanthus altissima*	Tree of Heaven	6"	6'	168.00	167.50		62.50
2316	*Ailanthus altissima*	Tree of Heaven	12"	12'	160.00	159.50		62.50
2317	*Ulmus americana*	American Elm	8"	8'	162.00	161.50		53.13
2318	*Ailanthus altissima*	Tree of Heaven	8"	8'	148.00	147.50		59.38
2319	*Ulmus americana*	American Elm	12"	12'	149.00	148.50	Leaning, Poor	28.13
2320	*Ailanthus altissima*	Tree of Heaven	11"	11'	158.00	157.50		65.63
2320A	*Ailanthus altissima*	Tree of Heaven	9"	9'	159.00	158.50		68.75
2321	*Ailanthus altissima*	Tree of Heaven	6"	6'	183.00	182.50		53.13
2321A	*Juniperus virginiana*	Eastern Red Cedar	9"	9'	183.00	182.50		62.50
2321B	*Ailanthus altissima*	Tree of Heaven	11"	11'	187.00	186.50		62.50
2321C	*Robinia pseudoacacia*	Black Locust	12"	12'	185.00	184.50		53.13
2322	*Ailanthus altissima*	Tree of Heaven	21"	21'	191.00	190.50	Poor, Co-Dominant	28.13
2323	*Ailanthus altissima*	Tree of Heaven	8"	8'	190.00	189.50		65.63
2324	*Robinia pseudoacacia*	Black Locust	11"	11'	194.00	193.50		68.75
2325	*Robinia pseudoacacia*	Black Locust	12"	12'	190.00	189.50	Poor	28.13
2325A	*Ailanthus altissima*	Tree of Heaven	8"	8'	190.00	189.50		59.38
2325B	*Robinia pseudoacacia*	Black Locust	9"	9'	187.00	186.50	Dead	0.00
2326	*Prunus serotina*	Black Cherry	10"	10'	181.00	180.50		59.38
2326A	*Robinia pseudoacacia*	Black Locust	6"	6'	182.00	181.50	Dead	0.00
2326B	*Robinia pseudoacacia*	Black Locust	16"	16'	182.00	181.50		53.13
2326C	*Robinia pseudoacacia*	Black Locust	8"	8'	178.00	177.50		62.50
2326D	*Robinia pseudoacacia*	Black Locust	8"	8'	174.00	173.50		62.50
2326E	*Robinia pseudoacacia*	Black Locust	9"	9'	172.00	171.50		53.13
2327	*Acer rubrum*	Red Maple	55"	55'	152.00	151.50	Co-Dominant, 1/2 Leaning	50.00
2327A	*Robinia pseudoacacia*	Black Locust	12"	12'	165.00	164.50		53.13
2327B	*Robinia pseudoacacia*	Black Locust	8"	8'	160.00	159.50	Dead	0.00
2327C	*Robinia pseudoacacia*	Black Locust	7"	7'	167.00	166.50		65.63
2328	*Ailanthus altissima*	Tree of Heaven	10"	10'	143.00	142.50		68.75
2328A	*Ailanthus altissima*	Tree of Heaven	27"	27'	142.00	141.50	Co-Dominant	53.13
2328B	*Ailanthus altissima*	Tree of Heaven	9"	9'	142.00	141.50		62.50
2328C	*Ailanthus altissima*	Tree of Heaven	8"	8'	143.00	142.50		62.50
2328D	*Ailanthus altissima*	Tree of Heaven	10"	10'	146.00	145.50		53.13
2328E	*Ailanthus altissima*	Tree of Heaven	9"	9'	146.00	145.50		65.63
2328F	*Ailanthus altissima*	Tree of Heaven	7"	7'	144.00	143.50		68.75
2329	*Ailanthus altissima*	Tree of Heaven	48"	48'	147.00	146.50	Multistem	59.38
2329A	*Ailanthus altissima*	Tree of Heaven	8"	8'	149.00	148.50		53.13
2329B	*Ailanthus altissima*	Tree of Heaven	7"	7'	152.00	151.50		62.50
2329C	*Ulmus americana*	American Elm	7"	7'	155.00	154.50		62.50
2329D	*Ailanthus altissima*	Tree of Heaven	9"	9'	153.00	152.50		53.13
2330	*Ulmus americana*	American Elm	6"	6'	159.00	158.50		59.38
2330A	*Unknown*	Unknown	14"	14'	158.00	157.50	Dead	0.00
2330B	*Prunus serotina*	Black Cherry	6"	6'	162.00	161.50		59.38
2330C	*Robinia pseudoacacia*	Black Locust	6"	6'	166.00	165.50	Dead	0.00
2330D	*Robinia pseudoacacia*	Black Locust	10"	10'	168.00	167.50	Poor	28.13
2331	*Ailanthus altissima*	Tree of Heaven	6"	6'	169.00	168.50		59.38
2331A	*Robinia pseudoacacia*	Black Locust	12"	12'	173.00	172.50	Dead	0.00
2331B	*Prunus serotina*	Black Cherry	10"	10'	173.00	172.50		59.38
2331C	*Robinia pseudoacacia*	Black Locust	8"	8'	176.00	175.50	Dead	0.00
2331D	*Robinia pseudoacacia*	Black Locust	18"	18'	178.00	177.50	Poor	28.13
2332	*Robinia pseudoacacia*	Black Locust	12"	12'	191.00	190.50		59.38
2332A	*Ailanthus altissima*	Tree of Heaven	12"	12'	190.00	189.50	Co-Dominant	65.63
2332C	*Ailanthus altissima*	Tree of Heaven	8"	8'	188.00	187.50		68.75
2332B	*Robinia pseudoacacia*	Black Locust	10"	10'	191.00	190.50	Poor	28.13
2333	*Ailanthus altissima*	Tree of Heaven	19"	19'	191.00	190.50	Co-Dominant	53.13
2334	*Ailanthus altissima*	Tree of Heaven	10"	10'	191.00	190.50		62.50
2335	*Robinia pseudoacacia*	Black Locust	26"	26'	189.00	188.50		62.50
2336	*Ailanthus altissima*	Tree of Heaven	9"	9'	191.00	190.50		53.13
2337	*Ailanthus altissima*	Tree of Heaven	19"	19'	191.00	190.50	Co-Dominant	65.63
2337A	*Ailanthus altissima*	Tree of Heaven	9"	9'	191.00	190.50		68.75
2337B	*Robinia pseudoacacia*	Black Locust	7"	7'	191.00	190.50	Crooked	59.38
2338	*Ailanthus altissima*	Tree of Heaven	14"	14'	185.00	184.50		53.13
2338A	*Ailanthus altissima*	Tree of Heaven	12"	12'	187.00	186.50		62.50
2338B	*Ailanthus altissima*	Tree of Heaven	10"	10'	186.00	185.50		62.50
2339	*Ailanthus altissima*	Tree of Heaven	8"	8'	180.00	179.50		53.13
2339A	*Ailanthus altissima*	Tree of Heaven	7"	7'	178.00	177.50		65.63
2339B	*Ailanthus altissima*	Tree of Heaven	7"	7'	179.00	178.50		68.75
2339C	*Robinia pseudoacacia*	Black Locust	13"	13'	175.00	174.50	Vines	40.63
2340	*Quercus palustris*	Pin Oak	32"	32'	153.00	152.50		43.75
2340A	*Ailanthus altissima*	Tree of Heaven	10"	10'	157.00	156.50	Vines	46.88
2341	*Quercus palustris*	Pin Oak	16"	16'	163.00	162.50		53.13
2341A	*Quercus palustris*	Pin Oak	10"	10'	162.00	161.50		62.50
2341B	*Quercus palustris*	Pin Oak	8"	8'	161.00	160.50		62.50
2341C	*Ulmus americana*	American Elm	7"	7'	167.00	166.50		53.13
2341D	*Unknown*	Unknown	9"	9'	168.00	167.50	Dead	0.00
2341E	*Robinia pseudoacacia*	Black Locust	12"	12'	170.00	169.50	Poor	28.13
2341F	*Ailanthus altissima*	Tree of Heaven	6"	6'	176.00	175.50		65.63
2342	*Prunus serotina*	Black Cherry	10"	10'	164.00	163.50		68.75
2342A	*Ulmus americana*	American Elm	26"	26'	167.00	166.50	Co-Dominant	65.63
2342B	*Ailanthus altissima*	Tree of Heaven	16"	16'	170.00	169.50	Co-Dominant	68.75
2343	*Gleditsia triacanthus*	Honey Locust	14"	14'	190.00	189.50		53.13
2343A	*Ailanthus altissima*	Tree of Heaven	6"	6'	191.00	190.50		62.50
2343B	*Ailanthus altissima*	Tree of Heaven	16"	16'	190.00	189.50		62.50
2343C	*Ailanthus altissima*	Tree of Heaven	10"	10'	189.00	188.50		53.13
2343D	*Robinia pseudoacacia*	Black Locust	14"	14'	187.00	186.50		65.63
2344	*Robinia pseudoacacia*	Black Locust	18"	18'	185.00	184.50	Vines	68.75
2344A	*Ailanthus altissima*	Tree of Heaven	11"	11'	189.00	188.50	Crooked	59.38
2345	*Ailanthus altissima*	Tree of Heaven	15"	15'	190.50	190.00	Co-Dominant	65.63
2345A	*Ailanthus altissima*	Tree of Heaven	16"	16'	191.00	190.50	Co-Dominant	68.75
2345B	*Ailanthus altissima*	Tree of Heaven	13"	13'	192.00	191.50	Co-Dominant	40.63
2345C	*Ailanthus altissima*	Tree of Heaven	20"	20'	190.50	190.00	Co-Dominant, Crooked, 1/2 Dead	25.00
2345D	*Ulmus americana*	Tree of Heaven	6"	6'	191.00	190.50		46.88
2346	*Ailanthus altissima*	Tree of Heaven	21"	21'	187.00	186.50	Multistem	53.13
2346A	*Ulmus americana*	Tree of Heaven	6"	6'	186.00	185.50		62.50
2347	*Ailanthus altissima*	Tree of Heaven	8"	8'	182.00	181.50		62.50
2347A	*Ailanthus altissima*	Tree of Heaven	9"	9'	182.00	181.50		53.13
2347B	*Prunus serotina*	Black Cherry	15"	15'	185.00	184.50	Co-Dominant	65.63
2348	*Prunus serotina*	Black Cherry	11"	11'	175.00	174.50		68.75
2348A	*Ailanthus altissima*	Tree of Heaven	15"	15'	175.00	174.50	Co-Dominant	65.63
2349	*Prunus serotina*	Black Cherry	24"	24'	191.00	190.50	Co-Dominant, Vines	68.75
2349A	*Prunus serotina*	Black Cherry	8"	8'	187.00	186.50	Dead	0.00
2349B	*Ailanthus altissima*	Tree of Heaven	6"	6'	186.00	185.50	Vines	50.00
2350	*Prunus serotina*	Black Cherry	29"	29'	188.00	187.50	Vines	53.13
2350A	*Unknown*	Unknown	6"	6'	185.00	184.50	Dead	0.00
2350B	*Prunus serotina*	Black Cherry	12"	12'	185.00	184.50	Leaning	59.38
2350C	*Prunus serotina*	Black Cherry	16"	16'	189.00	188.50	Dead	0.00
2351	*Prunus serotina*	Black Cherry	42"	42'	183.00	182.50	Vines	59.38
2351A	*Ailanthus altissima*	Tree of Heaven	6"	6'	181.00	180.50		53.13
2351B	*Ailanthus altissima*	Tree of Heaven	10"	10'	185.00	184.50		62.50
2351C	*Robinia pseudoacacia*	Black Locust	10"	10'	185.00	184.50		62.50
2352	*Ulmus americana*	American Elm	8"	8'	174.00	173.50		53.13
2353	*Ailanthus altissima*	Tree of Heaven	7"	7'	175.00	174.50		59.38
2354	*Prunus serotina*	Black Cherry	39"	39'	174.25	173.75	Multistem, 2/3 Dead, Leaning	28.13
2355	*Quercus rubra*	Red Oak	18"	18'	175.25	174.75		65.63
2356	*Acer rubrum*	Red Maple	6"	6'	175.75	175.25		68.75
2356A	*Prunus serotina*	Black Cherry	6"	6'	178.00	177.50	Leaning	53.13
2357	*Juniperus virginiana*	Eastern Red Cedar	14"	14'	175.00	174.50		62.50
2358	*Prunus serotina*	Black Cherry	16"	16'	179.00	178.50		62.50
2358A	*Prunus serotina*	Black Cherry	8"	8'	181.00	180.50		53.13
2359	*Robinia pseudoacacia*	Black Locust	14"	14'	182.00	181.50		65.63
2359A	*Quercus palustris*	Pin Oak	12"	12'	180.00	179.50		68.75
2360	*Ailanthus altissima*	Tree of Heaven	8"	8'	192.00	191.50	Leaning	59.38
2360A	*Ailanthus altissima*	Tree of Heaven	7"	7'	190.00	189.50		65.63
2360B	*Ailanthus altissima*	Tree of Heaven	6"	6'	192.00	191.50		68.75
2360C	*Prunus serotina*	Black Cherry	7"	7'	190.00	189.50		50.00
2360D	*Ailanthus altissima*	Tree of Heaven	24"	24'	192.00	191.50	Co-Dominant	53.13
2361	*Ailanthus altissima*	Tree of Heaven	7"	7'	189.50	189.00		53.13
2362	*Robinia pseudoacacia*	Black Locust	9"	9'	189.00	188.50		62.50
2362A	*Prunus serotina*	Black Cherry	6"	6'	188.00	187.50		62.50

TREE INVENTORY & CONDITION ANALYSIS

TREE #	BOTANICAL NAME	COMMON NAME	TRUNK SIZE	CRZ SIZE	TRUNK ELEVATION	CRZ ELEVATION	COMMENTS	CONDITION RATING
			DBH (in.)	R (ft.)	Elevation (ft.)	Elevation (ft.)		
2362B	*Quercus rubra*	Red Oak	7"	7'	190.00	189.50		53.13
2362C	*Robinia pseudoacacia*	Black Locust	13"	13'	191.00	190.50		65.63
2363	*Robinia pseudoacacia*	Black Locust	13"	13'	180.00	179.50		68.75
2363A	*Unknown*	Unknown	10"	10'	179.00	178.50	Dead	0.00
2363B	*Quercus rubra*	Red Oak	11"	11'	179.00	178.50		59.38
2364	*Quercus palustris*	Pin Oak	8"	8'	189.50	189.00		65.63
2364A	*Robinia pseudoacacia*	Black Locust	9"	9'	191.00	190.50		68.75
2364B	*Quercus palustris*	Pin Oak	7"	7'	192.00	191.50		59.38
2365	*Robinia pseudoacacia*	Black Locust	28"	28'	187.00	186.50	Dead	0.00
2365A	*Prunus serotina*	Black Cherry	11"	11'	188.00	187.50		65.63
2366	*Quercus rubra*	Red Oak	7"	7'	193.00	192.50		68.75
2366A	*Robinia pseudoacacia*	Black Locust	12"	12'	179.00	178.50		59.38
2366B	*Unknown*	Unknown	17"	17'	180.00	179.50	Dead	0.00
2367	*Robinia pseudoacacia*	Black Locust	9"	9'	181.00	180.50	Dead	0.00
2367A	*Robinia pseudoacacia*	Black Locust	8"	8'	179.00	178.50		53.13
2367B	*Quercus rubra*	Red Oak	12"	12'	183.00	182.50		62.50
2367C	*Robinia pseudoacacia*	Black Locust	14"	14'	178.00	177.50		62.50
2368	*Quercus rubra*	Red Oak	9"	9'	189.00	188.50		53.13
2368A	*Unknown*	Unknown	6"	6'	188.00	187.50	Dead	0.00
2368B	*Quercus rubra*	Red Oak	6"	6'	192.00	191.50	Crooked	59.38
2368C	*Ulmus americana*	American Elm	12"	12'	193.00	192.50		65.63
2368D	*Ulmus americana*	American Elm	12"	12'	192.00	191.50		68.75
2368E	*Robinia pseudoacacia*	Black Locust	8"	8'	193.00	192.50		50.00
2369	*Robinia pseudoacacia*	Black Locust	28"	28'	183.00	182.50	Co-Dominant, 1/2 Dead	53.13
2370	*Quercus rubra*	Red Oak	7"	7'	181.00	180.50		53.13
2371	*Quercus rubra*	Red Oak	9"	9'	192.50	192.00		62.50
2371A	*Robinia pseudoacacia*	Black Locust	12"	12'	191.00	190.50		62.50
2371B	*Robinia pseudoacacia*	Black Locust	11"	11'	188.00	187.50		53.13
2371C	*Robinia pseudoacacia*	Black Locust	14"	14'	182.00	181.50		65.63
2372	*Robinia pseudoacacia*	Black Locust	8"	8'	193.00	192.50	Leaning	68.75
2373	*Robinia pseudoacacia*	Black Locust	10"	10'	191.00	190.50	Heavy Lean	37.50
2373A	*Robinia pseudoacacia*	Black Locust	10"	10'	183.00	182.50	Dead	0.00
2373B	*Robinia pseudoacacia*	Black Locust	12"	12'	184.00	183.50	Vines	59.38
2373C	*Robinia pseudoacacia*	Black Locust	13"	13'	186.00	185.50		53.13
2374	*Pyrus calleryana*	Callery Pear	8"	8'	191.00	190.50		62.50
2375	*Robinia pseudoacacia*	Black Locust	16"	16'	194.00	193.50		62.50
2375A	*Robinia pseudoacacia*	Black Locust	10"	10'	194.00	193.50		53.13
2376	*Ulmus americana*	American Elm	9"	9'	194.00	193.50		65.63
2376A	*Robinia pseudoacacia*	Black Locust	7"	7'	194.00	193.50		68.75
2376B	*Robinia pseudoacacia*	Black Locust	8"	8'	194.00	193.50		59.38
2377	*Liquidambar styraciflua*	Sweetgum	16"	16'	194.00	193.50		65.63
2377A	*Ulmus americana*	American Elm	13"	13'	194.00	193.50	Multistem	68.75
2377B	*Robinia pseudoacacia*	Black Locust	12"	12'	194.00	193.50		53.13
2377C	*Robinia pseudoacacia*	Black Locust	10"	10'	194.00	193.50		62.50
2378	*Zelkova serrata*	Japanese Zelkova	9"	9'	194.00	193.50		62.50
2378A	*Zelkova serrata*	Japanese Zelkova	8"	8'	190.00	189.50		53.13
2378B	*Zelkova serrata*	Japanese Zelkova	8"	8'	186.00	185.50	Co-Dominant	59.38
2379	*Gleditsia triacanthus*	Honey Locust	16"	16'	194.00	193.50		53.13
2379A	*Zelkova serrata*	Japanese Zelkova	8"	8'	194.00	193.50		62.50
2379B	*Zelkova serrata*	Japanese Zelkova	7"	7'	192.00	191.50		62.50
2379C	*Zelkova serrata*	Japanese Zelkova	8"	8'	194.00	193.50		53.13
2379D	*Zelkova serrata*	Japanese Zelkova	8"	8'	190.00	189.50		65.63
2379E	*Robinia pseudoacacia*	Black Locust	42"	42'	189.00	188.50	Co-Dominant	68.75
2380	*Robinia pseudoacacia*	Black Locust	11"	11'	189.00	188.50	Dead	0.00
2380A	*Robinia pseudoacacia*	Black Locust	10"	10'	187.00	186.50	Dead	0.00
2380B	*Robinia pseudoacacia*	Black Locust	9"	9'	185.00	184.50	Dead	0.00
2380C	*Robinia pseudoacacia*	Black Locust	11"	11'	187.00	186.50	Dead	0.00
2380D	*Robinia pseudoacacia*	Black Locust	13"	13'	185.00	184.50	Dead	0.00
2381	*Ailanthus altissima*	Tree of Heaven	6"	6'	182.00	181.50		59.38
2381A	*Robinia pseudoacacia*	Black Locust	12"	12'	178.00	177.50	Vine	59.38
2382	*Robinia pseudoacacia*	Black Locust	10"	10'	162.00	161.50		53.13
2382A	*Juniperus virginiana*	Eastern Red Cedar	11"	11'	155.00	154.50		62.50
2382B	*Robinia pseudoacacia*	Black Locust	7"	7'	156.00	155.50		62.50
2382C	*Robinia pseudoacacia*	Black Cherry	16"	16'	149.00	148.50		53.13
2383	*Robinia pseudoacacia*	Black Locust	8"	8'	145.00	144.50	Dead	0.00
2383A	*Robinia pseudoacacia*	Black Locust	10"	10'	145.00	144.50	Dead	0.00
2383B	*Robinia pseudoacacia*	Black Locust	11"	11'	144.00	143.50	Dead	0.00
2383C	*Robinia pseudoacacia*	Black Locust	8"	8'	143.00	142.50		65.63
2383D	*Robinia pseudoacacia*	Black Locust	12"	12'	142.00	141.50		68.75
2384	*Quercus rubra*	Red Oak	12"	12'	141.00	140.50		59.38
2384A	*Robinia pseudoacacia*	Black Locust	6"	6'	141.00	140.50	Dead	0.00
2385	*Robinia pseudoacacia*	Black Locust	10"	10'	139.00	138.50	Dead	0.00
2385A	*Quercus rubra*	Red Oak	7"	7'	139.00	138.50		68.75
2385B	*Quercus rubra*	Red Oak	6"	6'	139.00	138.50		71.88
2386	*Carya glabra*	Pignut Hickory	18"	18'	140.00	139.50	Co-Dominant	75.00
2386A	*Quercus rubra*	Red Oak	8"	8'	139.00	138.50		78.13
2387	*Quercus rubra*	Red Oak	16"	16'	141.00	140.50		68.75
2387A	*Quercus rubra*	Red Oak	12"	12'	142.00	141.50		71.88
2387B	*Quercus rubra*	Red Oak	10"	10'	142.00	141.50		75.00
2388	*Carya glabra*	Pignut Hickory	9"	9'	144.00	143.50		78.13
2388A	*Unknown*	Unknown	8"	8'	146.00	145.50	Dead	0.00
2388B	*Prunus serotina*	Black Cherry	10"	10'	148.00	147.50		65.63
2388C	*Quercus rubra*	Red Oak	17"	17'	149.00	148.50		68.75
2389	*Carya glabra*	Pignut Hickory	12"	12'	153.00	152.50		68.75
2389A	*Carya glabra*	Pignut Hickory	9"	9'	155.00	154.50		71.88
2389B	*Carya glabra*	Pignut Hickory	12"	12'	157.00	156.50	Co-Dominant	75.00
2389C	*Prunus serotina*	Black Cherry	23"	23'	158.00	157.50	Co-Dominant	78.13
2390	*Quercus montana*	Chestnut Oak	24"	24'	158.00	157.50	Vines	59.38
2390A	*Quercus montana*	Chestnut Oak	20"	20'	163.00	162.50	Vines	68.75
2391	*Acer rubrum*	Red Maple	12"	12'	143.00	142.50		71.88
2391A	*Fagus grandifolia*	American



1 1st Floor
1" = 30'-0"

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PROFESSIONAL ENGINEER
04.27.22

ARCHITECTURAL PLANS
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED
C.I.= N/A
DATE: APRIL, 2022

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DIRECTOR DATE
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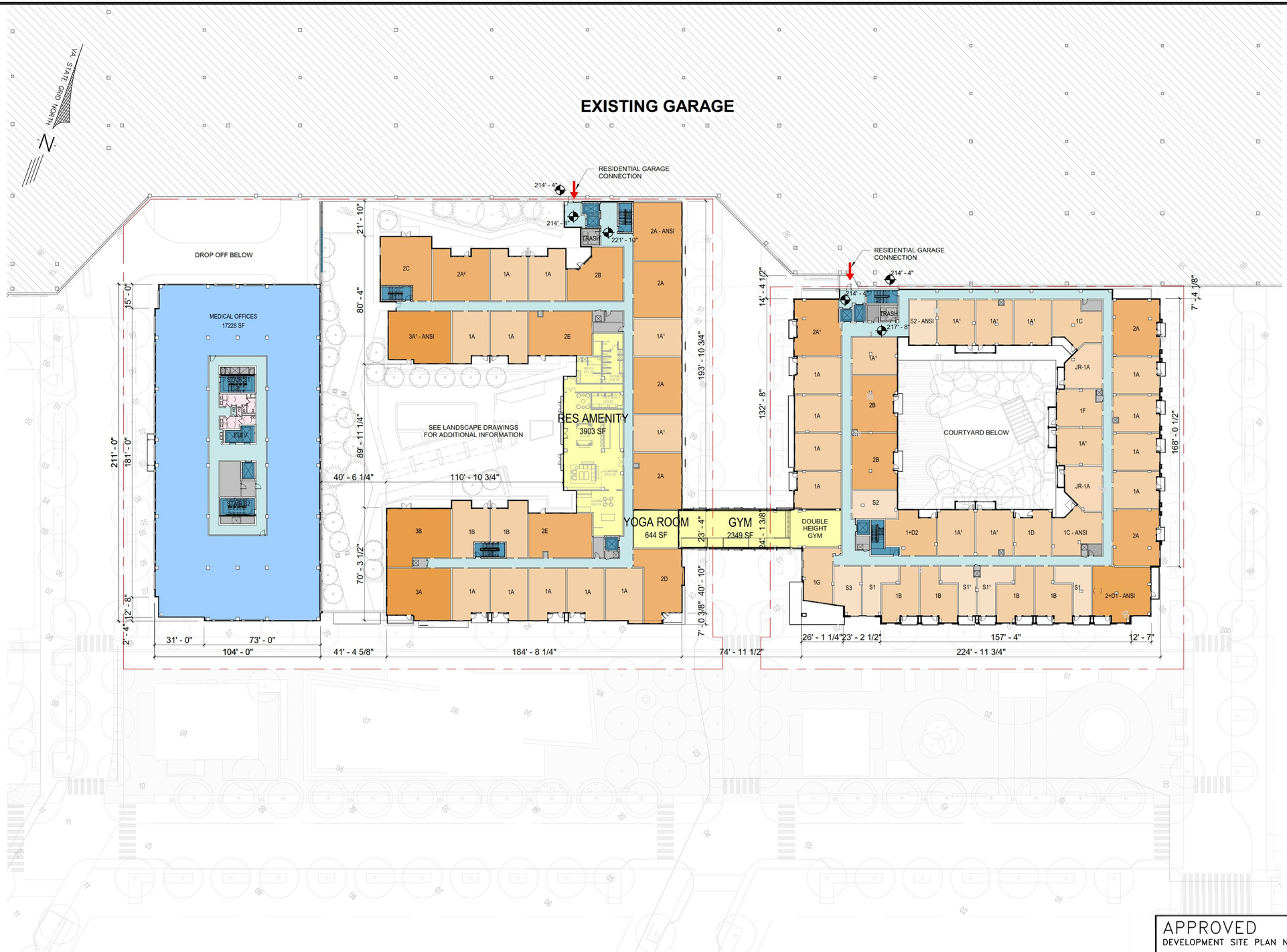

1 2nd Floor

1" = 30'-0"

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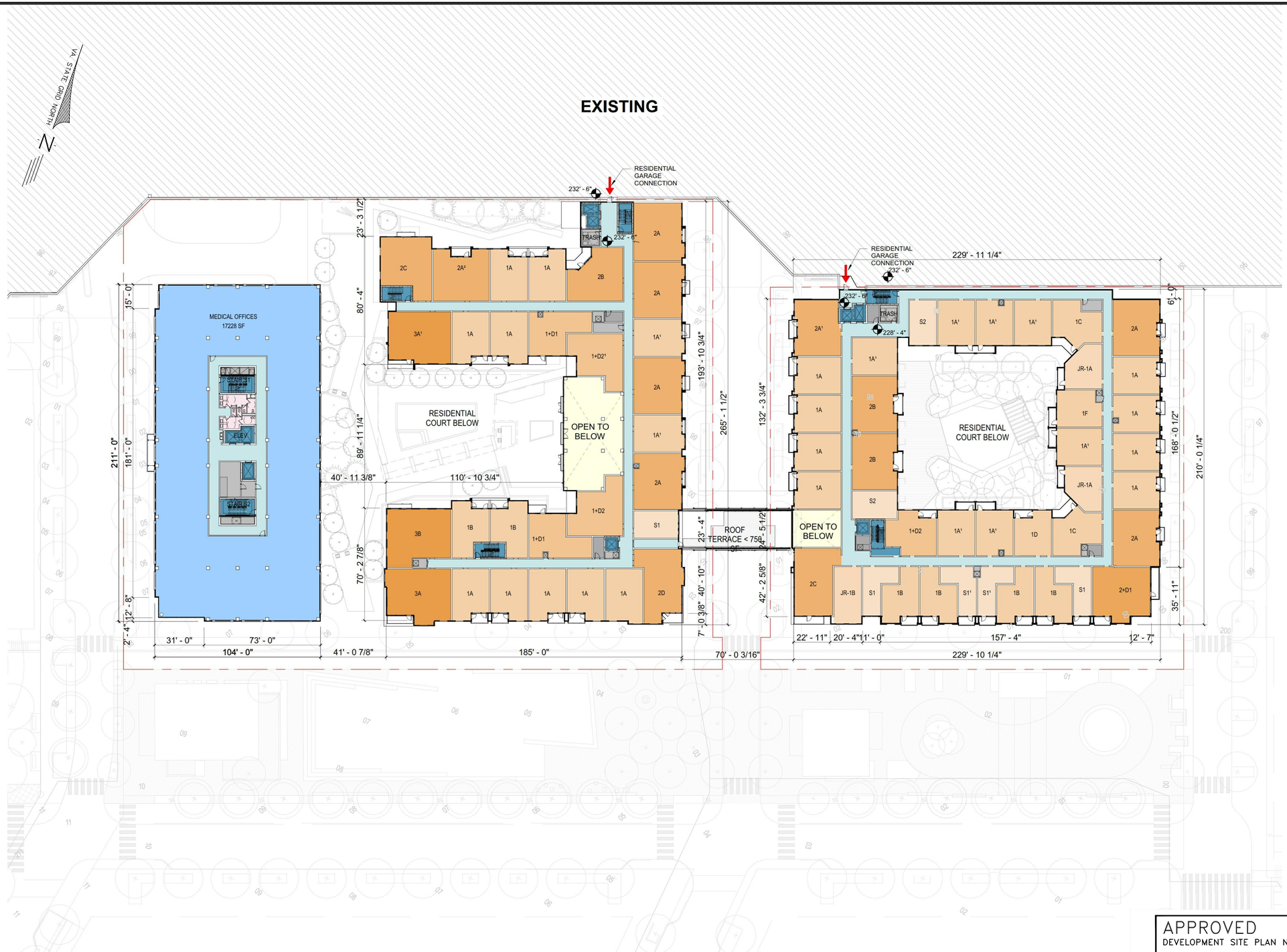

1 3rd Floor
1" = 30'-0"

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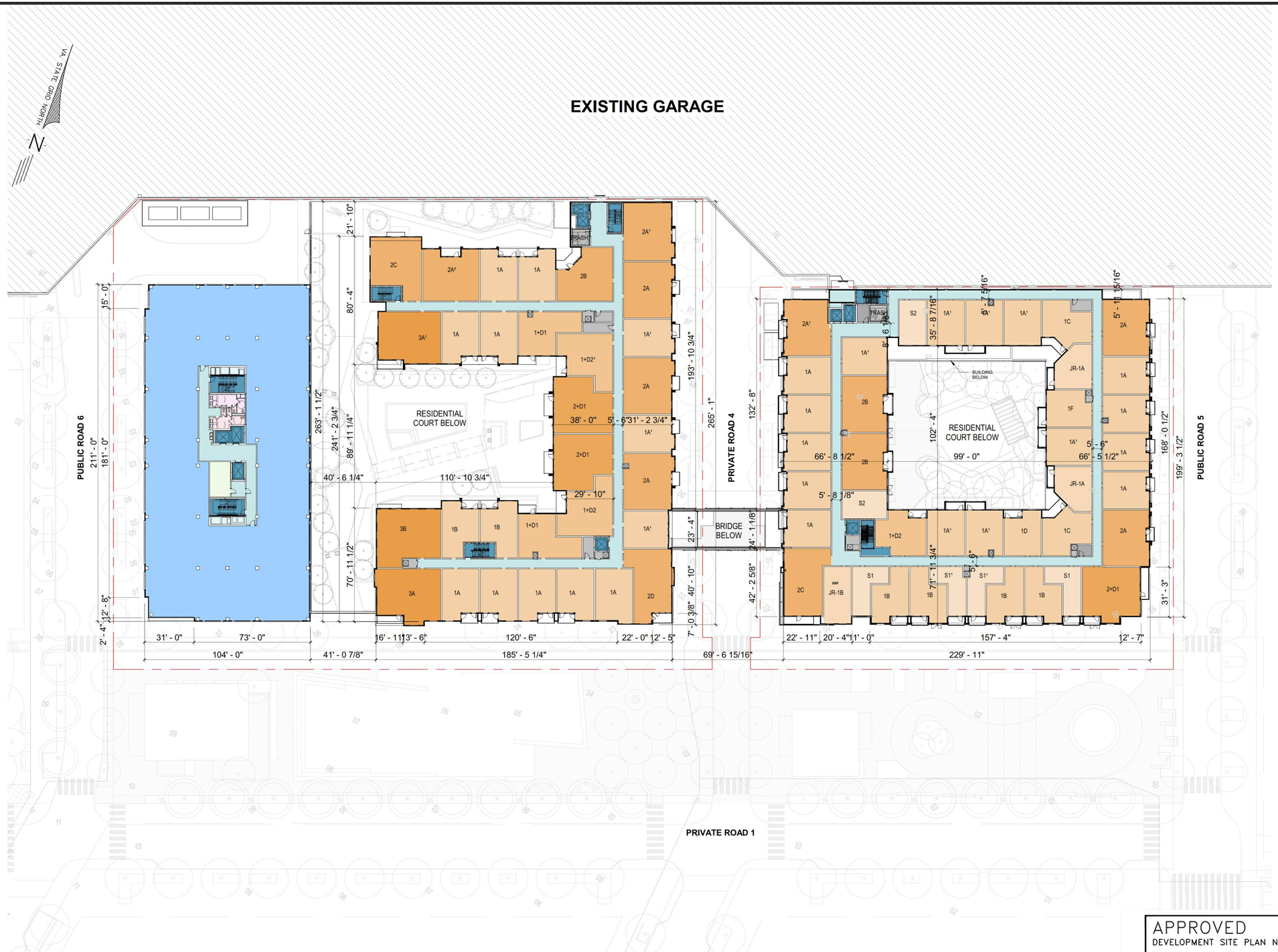

1 Typical Floor

1" = 30'-0"

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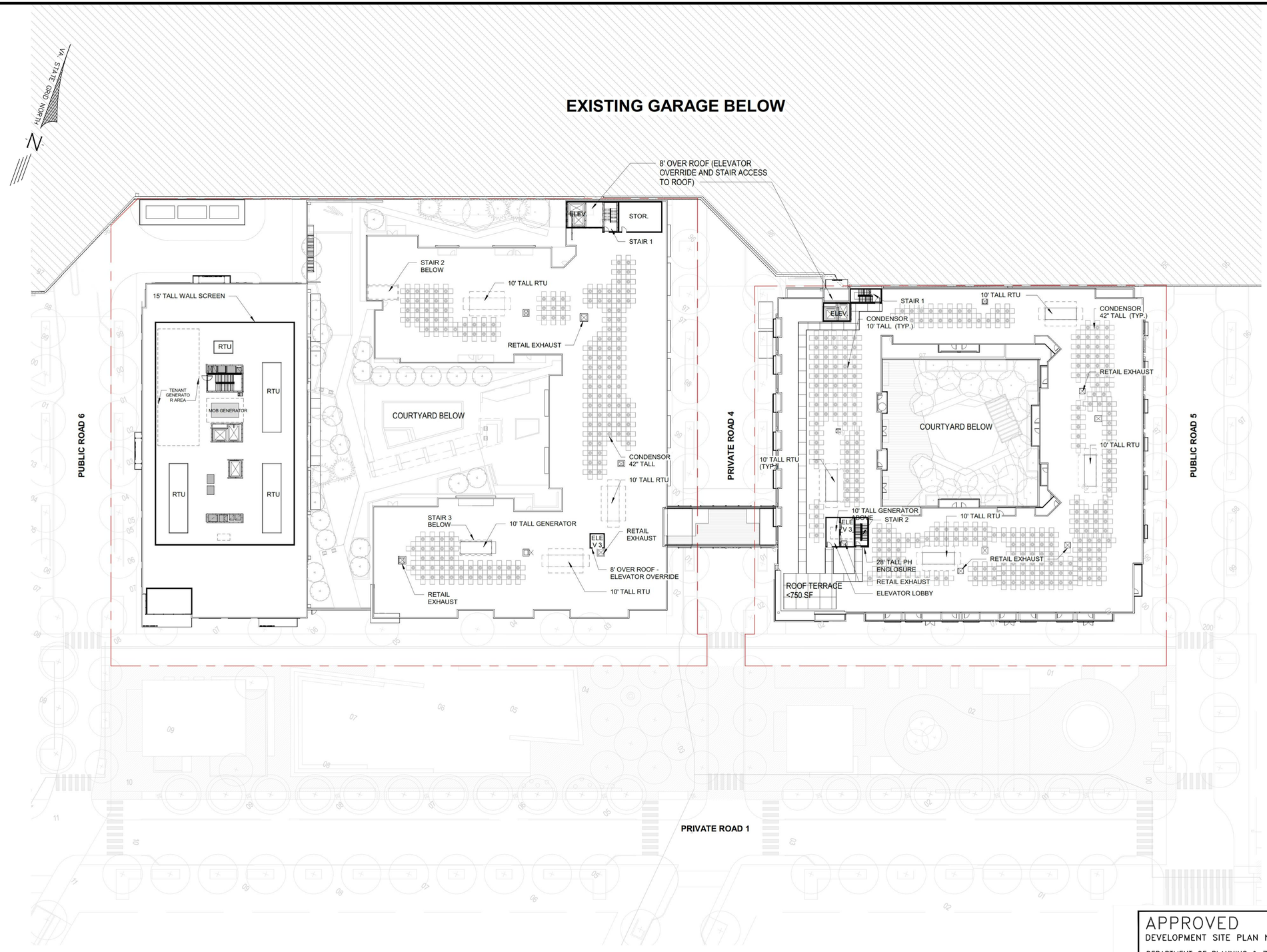

1 Roof Plan

1" = 30'-0"

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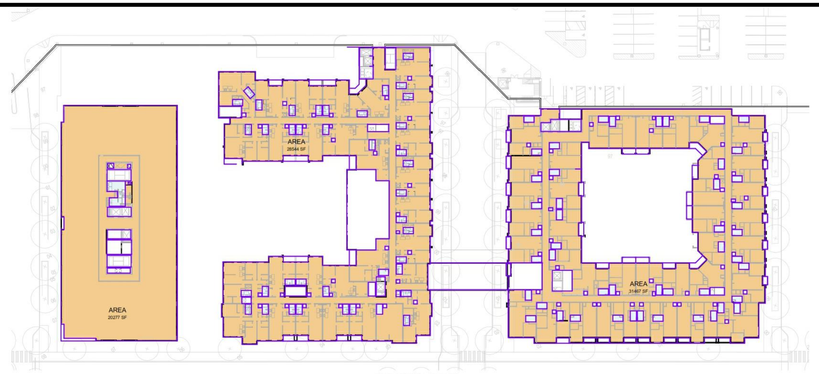


3RD FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**21,799**	**32,167**	**35,289**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	1,222	1,671	1,478
Area Exclusions (Lavatories)	300	1,945	2,344
Net Floor Area - After Exclusions	**20,277**	**28,551**	**31,467**

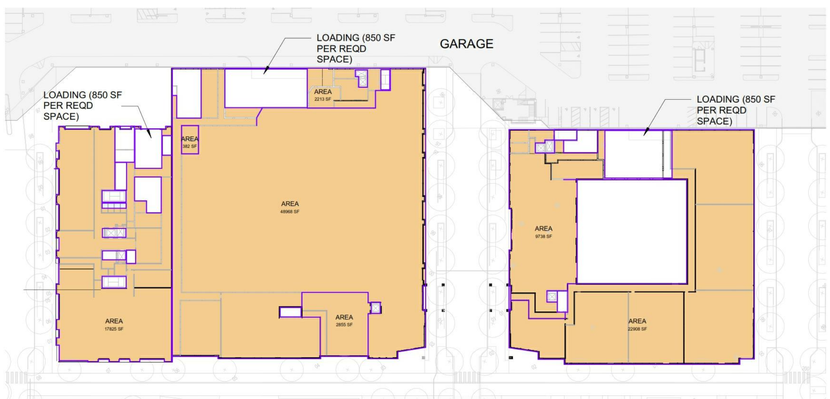
4 3rd Floor - Areas
1/64" = 1'-0"



2ND FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**21,771**	**34,665**	**37,269**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	1,194	1,718	1,471
Area Exclusions (Lavatories)	300	1,845	2,294
Net Floor Area - After Exclusions	**20,277**	**31,102**	**33,504**

3 2nd Floor - Areas
1/64" = 1'-0"



1ST FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**21,325**	**58,556**	**36,343**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	3,400	4,138	3,697
Area Exclusions (Lavatories)	100		
Net Floor Area - After Exclusions	**17,825**	**54,418**	**32,646**

2 1st Floor - Areas
1/64" = 1'-0"



7TH FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	-	-	**35,548**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	-	-	1,503
Area Exclusions (Lavatories)	-	-	2,394
Net Floor Area - After Exclusions	-	-	**31,651**

7 7th Floor - Areas
1/64" = 1'-0"



6TH FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**21,799**	**34,552**	**35,858**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	1,193	1,636	1,503
Area Exclusions (Lavatories)	300	2,194	2,394
Net Floor Area - After Exclusions	**20,306**	**30,722**	**31,961**

6 6th Floor - Areas
1/64" = 1'-0"



FLOORS 4-5

TYPICAL FLOOR AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**21,799**	**34,672**	**35,858**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	1,193	1,636	1,503
Area Exclusions (Lavatories)	300	2,194	2,394
Net Floor Area - After Exclusions	**20,306**	**30,842**	**31,961**

5 Typical Floors - Areas
1/64" = 1'-0"

FLOORS 4-6

TOTAL AREAS

	MOB	BLOCK E.1	BLOCK G
Total Gross Area	**130,292**	**229,284**	**252,023**
Area Exclusions (Vertical Circulation, Shafts, Utilities, Basements, Loading)	9,395	12,435	12,658
Area Exclusions (Lavatories)	1,600	10,372	14,214
Net Floor Area - After Exclusions	**119,297**	**206,477**	**225,151**

Total Gross Area (By Block)	**359,576**	**252,023**
Net Floor Area - After Exclusions (By Block)	**325,774**	**225,151**

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CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
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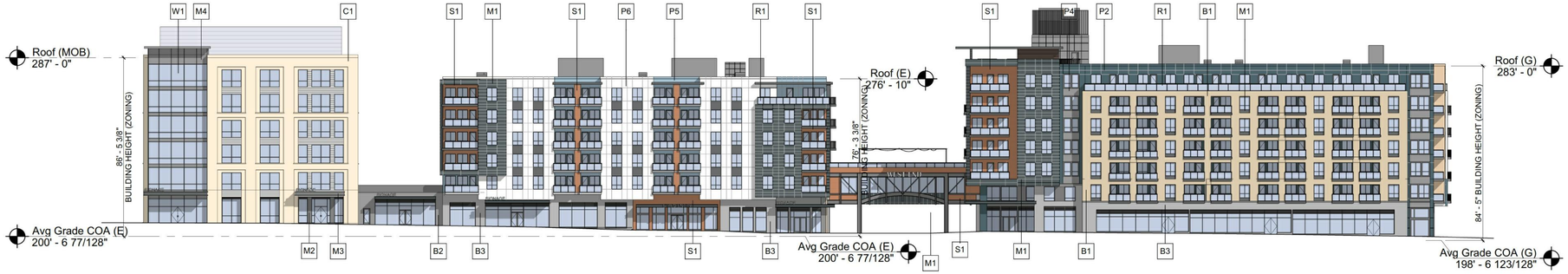


1 MOB, E.1, and G - South Elevation

1" = 30'-0"



2 Building G - West Elevation

1" = 30'-0"



3 Building G - East Elevation

1" = 30'-0"



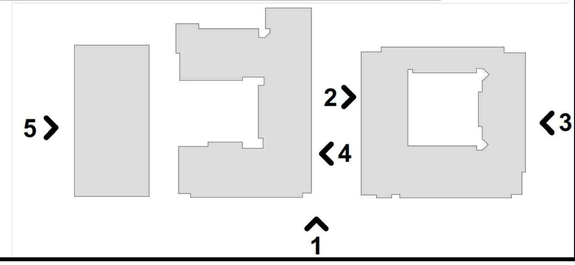
4 Building E.1 - East Elevation

1" = 30'-0"



5 MOB - West Elevation

1" = 30'-0"



MATERIAL LEGEND	
NUMBER	MATERIAL

B1	BRICK - SAND
B2	BRICK - URBAN GRAY
B3	BRICK - BELGIUM GRAY
C1	PRECAST PANEL
M1	METAL PANEL
M2	METAL PANEL
M3	METAL PANEL
M4	METAL PANEL
P1	FIBER CEMENT PANEL
P2	FIBER CEMENT PANEL
P3	FIBER CEMENT PANEL
P4	FIBER CEMENT PANEL
P5	FIBER CEMENT PANEL
P6	FIBER CEMENT PANEL
P7	FIBER CEMENT PANEL
R1	GLASS GUARDRAIL
S1	ACCENT FAUX WOOD
S2	FIBER CEMENT SIDING
S3	FIBER CEMENT SIDING
S4	FIBER CEMENT SIDING
S5	FIBER CEMENT SIDING
W1	CURTAIN WALL

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LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G

CITY OF ALEXANDRIA, VIRGINIA

DATE: APRIL, 2022

SCALE: AS NOTED

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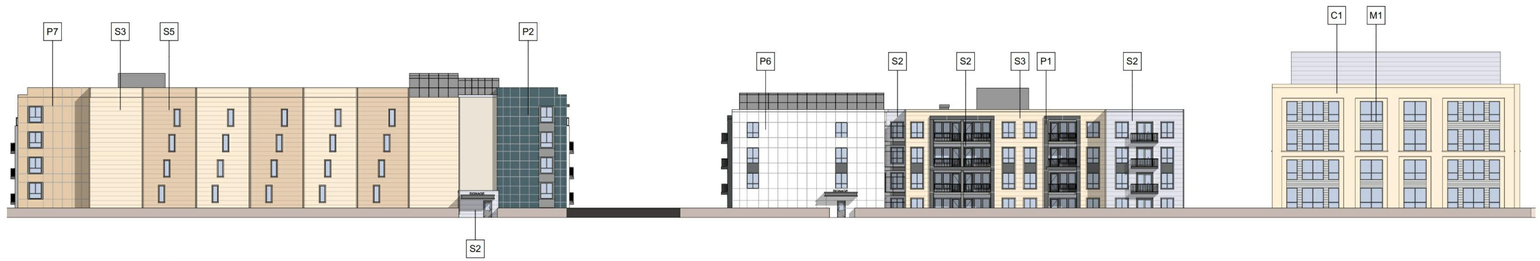
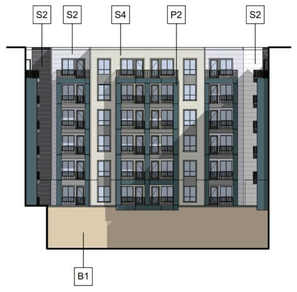


1 G, E.1, MOB - North Elevation
1" = 30'-0"

MATERIAL LEGEND	
NUMBER	MATERIAL
B1	BRICK - SAND
B2	BRICK - URBAN GRAY
B3	BRICK - BELGIUM GRAY
C1	PRECAST PANEL
M1	METAL PANEL
M2	METAL PANEL
M3	METAL PANEL
M4	METAL PANEL
P1	FIBER CEMENT PANEL
P2	FIBER CEMENT PANEL
P3	FIBER CEMENT PANEL
P4	FIBER CEMENT PANEL
P5	FIBER CEMENT PANEL
P6	FIBER CEMENT PANEL
P7	FIBER CEMENT PANEL
R1	GLASS GUARDRAIL
S1	ACCENT FAUX WOOD
S2	FIBER CEMENT SIDING
S3	FIBER CEMENT SIDING
S4	FIBER CEMENT SIDING
S5	FIBER CEMENT SIDING
W1	CURTAIN WALL



2 Building G - West Court Elevation
1" = 30'-0"



3 Building G - East Court Elevation
1" = 30'-0"



4 Building G - South Court Elevation
1" = 30'-0"



5 Building G - North Court Elevation
1" = 30'-0"



6 Building E.1 - West Elevation
1" = 30'-0"



7 Building E.1 - South Court Elevation
1" = 30'-0"



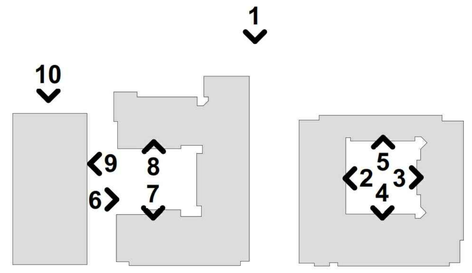
8 Building E.1 - North Court Elevation
1" = 30'-0"



9 MOB - East Elevation
1" = 30'-0"



10 MOB - North Elevation
1" = 30'-0"



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SOUTH ELEVATIONS

	Area	Percentage
Brick	7,494	17%
Accent Faux Wood	2,429	6%
Metal Panel	4,515	10%
Fiber Cement Panel	8,845	20%
Fiber Cement Siding		0%
Precast Panels	3,488	8%
Windows	16,838	39%
Total	43,609	100%

1 MOB, E.1, and G - South Elevation
1" = 30'-0"



G - WEST ELEVATION

	Area	Percentage
Brick	1,635	10%
Accent Faux Wood	1,464	9%
Metal Panel	796	5%
Fiber Cement Panel	7,118	42%
Fiber Cement Siding	389	2%
Precast Panels		0%
Windows	5,552	33%
Total	16,954	100%

3 Building G - West Elevation
1" = 30'-0"



G - EAST ELEVATION

	Area	Percentage
Brick	1,386	8%
Accent Faux Wood		0%
Metal Panel	283	2%
Fiber Cement Panel	9,447	54%
Fiber Cement Siding	395	2%
Precast Panels		0%
Windows	6,136	35%
Total	17,647	100%

4 Building G - East Elevation
1" = 30'-0"



E.1 - EAST ELEVATION

	Area	Percentage
Brick	2,763	14%
Accent Faux Wood	1,355	7%
Metal Panel	679	3%
Fiber Cement Panel	8,166	42%
Fiber Cement Siding		0%
Precast Panels		0%
Windows	6,696	34%
Total	19,659	100%

2 Building E.1 - East Elevation
1" = 30'-0"



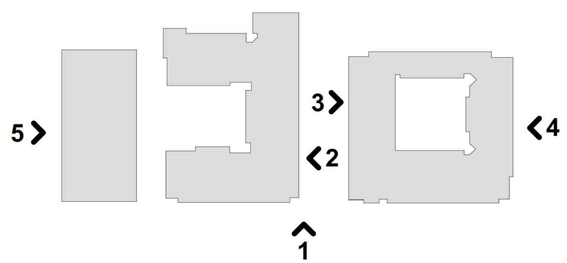
MOB - WEST ELEVATION

	Area	Percentage
Brick		0%
Accent Faux Wood		0%
Metal Panel	2,348	13%
Fiber Cement Panel		0%
Fiber Cement Siding		0%
Precast Panels	9,174	49%
Windows	7,057	38%
Total	18,579	100%

5 MOB - West Elevation
1" = 30'-0"

MATERIAL LEGEND

- BRICK
- ACCENT FAUX WOOD
- METAL PANEL
- FIBER CEMENT PANEL
- FIBER CEMENT SIDING
- PRE-CAST PANEL
- WINDOWS



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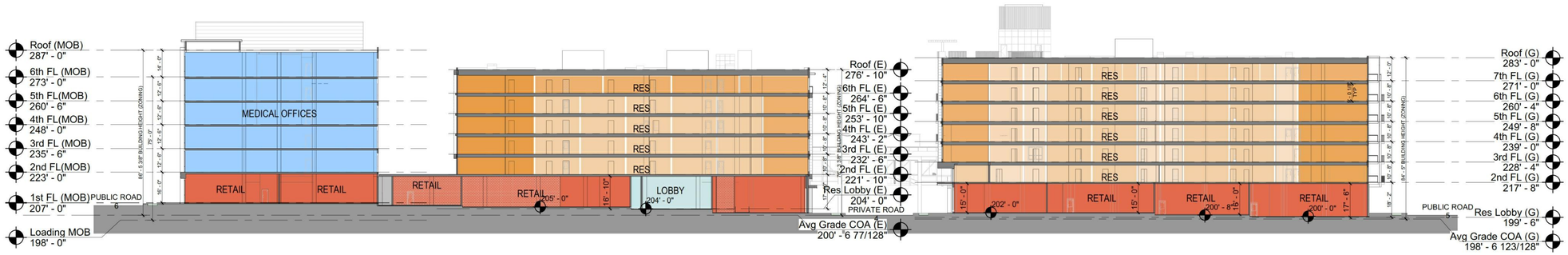
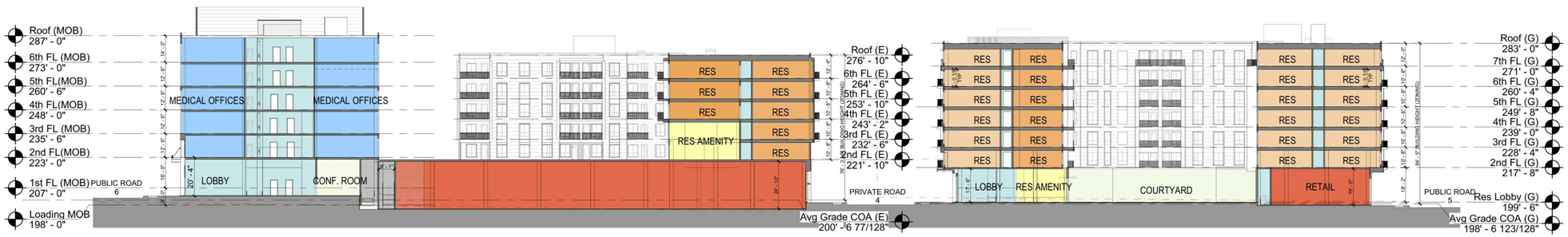


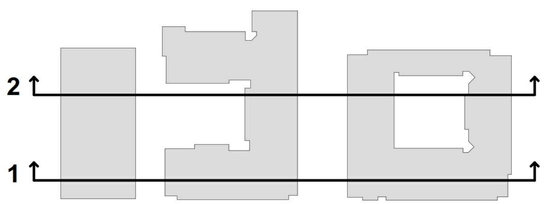
1 Section - MOB, E.1, G

1" = 30'-0"



2 Section - MOB, E.1, G

1" = 30'-0"



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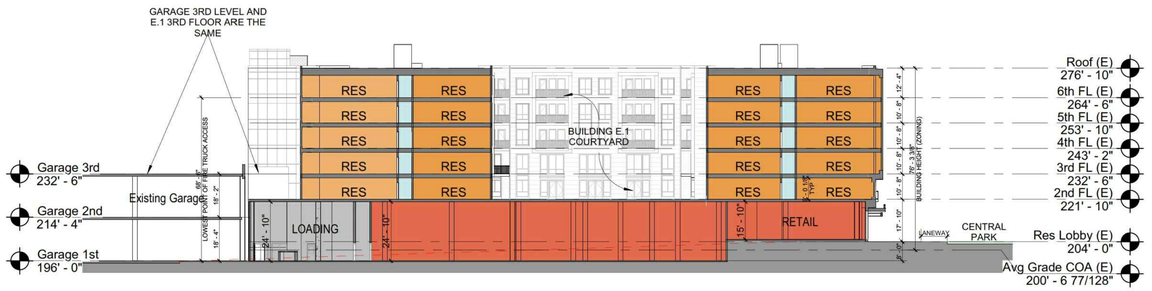
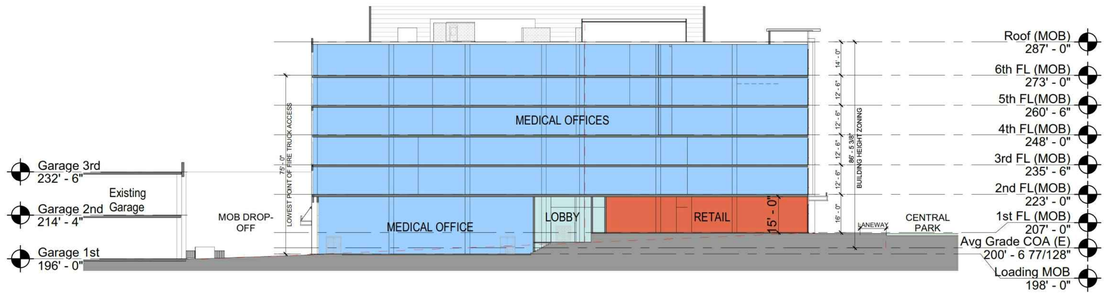


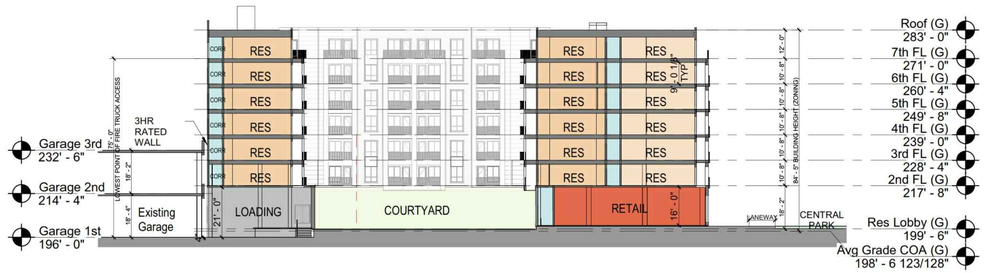
1 Section - Building E.1

1" = 30'-0"



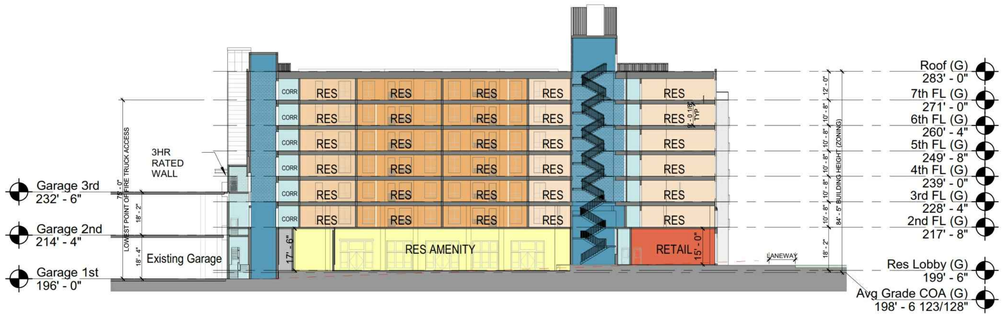
2 Section - MOB

1" = 30'-0"



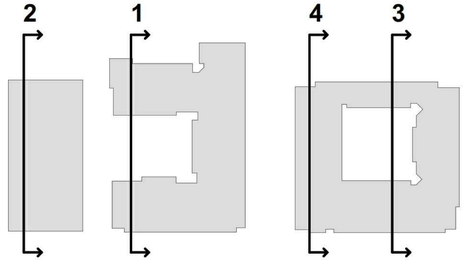
3 Section - Building G

1" = 30'-0"



4 Section - Building G

1" = 30'-0"



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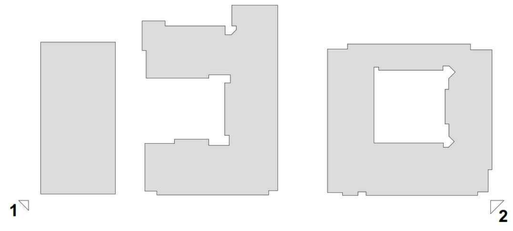
1. VIEW FROM SE



2. VIEW FROM SW



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1. VIEW FROM ROAD 4



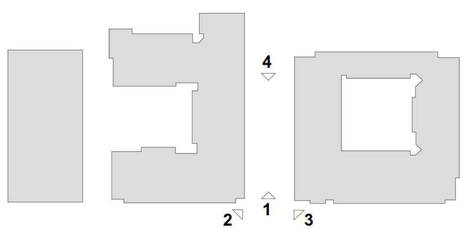
2. VIEW FROM CENTRAL PARK



3. VIEW FROM ROAD 4 LOOKING NORTH



4. VIEW FROM ROAD 4 LOOKING SOUTH



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1. VIEW OF MOB SW



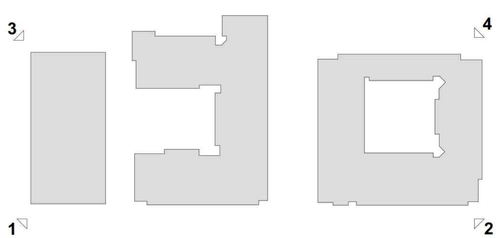
2. VIEW OF BLOCK G SE



3. VIEW FROM GARAGE NW



4. VIEW FROM GARAGE NE



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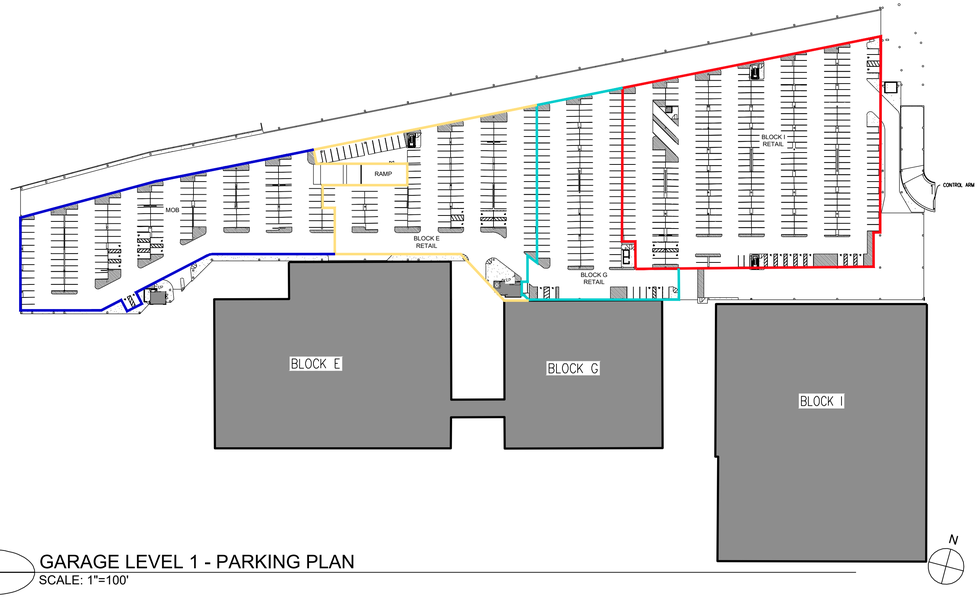
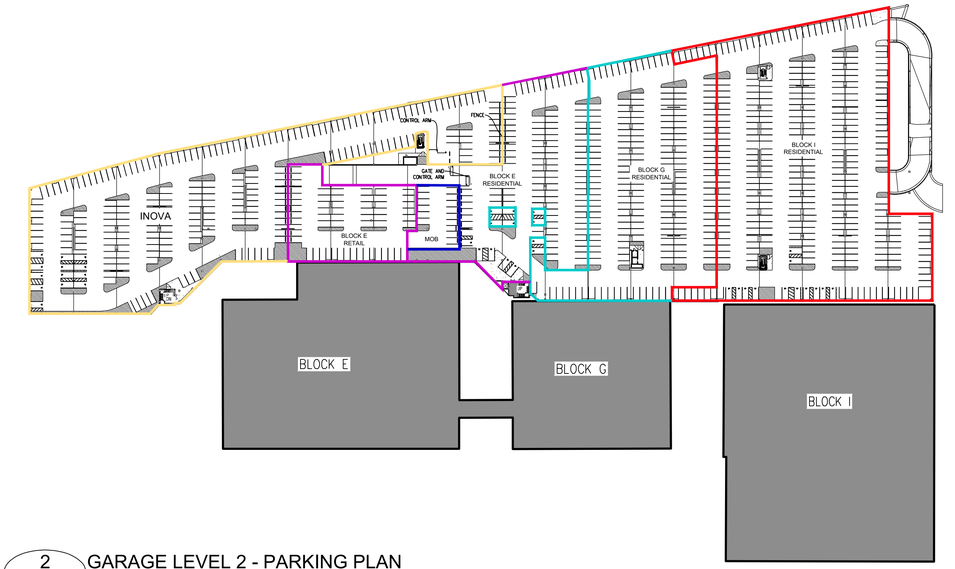
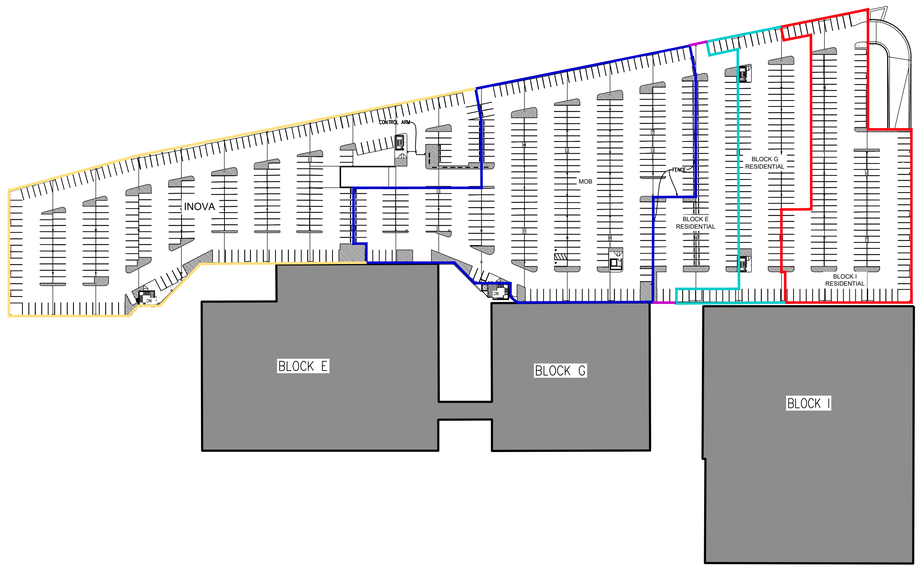


1 GARAGE LEVEL 1 - PARKING PLAN
SCALE: 1"=100'



2 GARAGE LEVEL 2 - PARKING PLAN
SCALE: 1"=100'



3 GARAGE LEVEL 3 - PARKING PLAN
SCALE: 1"=100'

GARAGE PARKING MATRIX

	BLOCK E			BLOCK G	
	M.O.B	RETAIL	RESIDENTIAL	RETAIL	RESIDENTIAL
LEVEL 1	145	125		112	
LEVEL 2	16	56	107		206
LEVEL 3	329		82		112
TOTAL	490	181	189	112	318

PARKING SPOT LOCATIONS, TOTALS AND ALLOCATIONS HAVE NOT BEEN FINALIZED AND WILL BE ADJUSTED WITHIN THE EXISTING GARAGE FOOTPRINT AS NEEDED TO ADDRESS THE CONCERNS.

LEGEND:

- BLOCK I PARKING LIMITS
- BLOCK G PARKING LIMITS
- BLOCK E PARKING LIMITS
- MOB PARKING LIMITS
- INOVA PARKING LIMITS

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

No.	DATE	DESCRIPTION
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PLAN DATE
11-19-2021
04-27-2022

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PROFESSIONAL ENGINEER
04/27/22

ARCHITECTURAL PLANS
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
SCALE: AS NOTED C.I.= N/A DATE: APRIL 2022

SHEET 52 OF 53
FILE No. RZ-1877

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Sustainable Building Partners
2701 Prosperity Avenue, Suite 100
Fairfax, VA 22031

Date: April 21st, 2022

Project: LMR Block E&G

Purpose: Concept 2 Submission - Green Building Approach

General Approach

The Landmark Mall Redevelopment (LMR) project is pursuing LEED Neighborhood Development v4 Plan certification. The LMR Block E&G project is pursuing LEED BD+C Multifamily Mid-rise v4 certification at a Silver level. The project will meet the 2019 Green Building Policy requirements as required by the CDD conditions.

Energy

Sustainable Building Partners is hired to perform whole building energy modeling for the project. The effort will analyze the impacts of the envelope, mechanical, plumbing, and electrical systems on the overall energy performance of the building. The effort is iterative, occurring at key design development milestones. Energy efficiency opportunities will be explored and considered to optimize the overall performance and reduce the environmental impacts of the building. Strategies include but are not limited to:

- Window-to-wall ratio
- Window performance
- Envelope thermal transmittance
- Thermal bridging
- Heating and cooling efficiencies
- Ventilation optimization and controls
- Lighting power density

The project will meet the required 14% energy cost savings, equivalent to 5 LEED NC energy points, and explore higher levels of performance as part of this effort. The project will not be part of a district-wide energy system.

The building will be made solar-ready for potential future installation of PV panels.

Water

The project will use native and adaptive plantings throughout the project. The project will include a high-performing irrigation system using drip irrigation, moisture meters, and controllers where necessary to ensure plantings survive and thrive. The use of non-potable water for irrigation will be evaluated.

Low flow plumbing fixtures and ENERGY STAR appliances will be used to reduce potable water use reduction. A 40% water use reduction, at minimum, will be achieved for plumbing fixtures as required by the Green Building Policy. Potential fixture flow rates include: 0.8/1.28 gpf dual flush water closet, 1.0 gpm lavatory faucet, 1.75 gpm

showerhead, and 1.5 gpm kitchen faucet. All tank water closets, lavatory faucets, and showerheads will be WaterSense labeled ensuring high-quality fixtures.

Indoor Environmental Quality

Overall occupant comfort and indoor air quality will be achieved by ensuring high quality compartmentalization of the units, which will be tested and measured via unit air leakage testing. This ensures contaminant and odor transfer between units is minimized. Additionally, outdoor air will be provided directly from the outdoors into the units and all outdoor air systems will be equipped with a minimum MERV 8 filter.

Indoor air quality concerns will also be mitigated by using low-emitting flooring, paints and coating, insulation, and ceiling systems within the building. This will be managed and confirmed by reviewing product information and ensuring it carries a GreenGuard Gold label (or equivalent), which is a third-party label that confirms volatile organic compounds levels are below prescribed thresholds.

Lastly, the project team will evaluate daylight penetration into units, amenity, and retail spaces. Window and daylit area will be maximized to the greatest extent possible, while still balancing thermal and energy performance.

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GREEN BUILDING APPROACH
LANDMARK MALL REDEVELOPMENT
PHASE II CONCEPT - BLOCK E&G
CITY OF ALEXANDRIA, VIRGINIA
DATE: APRIL, 2022
C.I.= N/A
SCALE: N/A

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