PRELIMINARY DEVELOPMENT SPECIAL USE PERMIT

BLOCK "B"

OAKVILLE

ALEXANDRIA, VIRGINIA

NARRATIVE DESCRIPTION OF DEVELOPMENT

THIS SITE IS BORDERED TO THE NORTH BY CALVERT AVENUE; TO THE SOUTH BY SWANN AVENUE; TO THE EAST BY RICHMOND HIGHWAY; AND TO THE WEST BY BLOCK D, THE SITE IS CURRENTLY ZONED COORDINATED DEVELOPMENT DISTRICT (CDD #24).

THE EXISTING SITE CONSISTS OF INDUSTRIAL/COMMERCIAL WAREHOUSE BUILDINGS.

THIS PROJECT PROPOSES TWO (2) LEVELS OF BELOW GRADE PARKING, A CONCRETE PODIUM CONTAINING AT-GRADE AND MEZZANINE PODIUM ROOFTOP AMENITY SPACE; AND 5 LEVELS OF WOOD FRAME MULTI-FAMILY RESIDENTIAL ABOVE THE CONCRETE PODIUM WITH RETAIL. THERE WILL ALSO BE SOME AT-GRADE PARKING SPACES LOCATED WITHIN THE PODIUM.

THIS PROJECT ALSO INCLUDES THE DESIGN OF THE STREETSCAPE FROM THE BACK OF CURB TO THE BUILDING FACE. THE BMP TREE WELLS ALONG CALVERT AVENUE ARE DESIGNED AND CONSTRUCTED AS PART OF THE INFRASTRUCTURE PLAN. ALSO INCLUDED ARE THE UTILITY CONNECTIONS THAT WILL SERVE THIS BUILDING.

VEHICULAR ACCESS TO THE BLOCK B WILL BE FROM OAKVILLE STREET.

SPECIAL USE PERMITS/ZONING MODIFICATIONS/WAIVERS

1. DEVELOPMENT SPECIAL USE PERMIT WITH PRELIMINARY SITE PLAN.
2. MODIFICATION OF THE VISION CLEARANCE REQUIREMENTS.
3. ENCROACHMENT REQUEST.
4. TRANSPORTATION MANAGEMENT PLAN SPECIAL USE PERMIT.
5. MODIFICATION TO THE HEIGHT-TO-SETBACK RATIO REQUIREMENT OF SECTION 6-403(A).

AREA DISTURBED : 1.81 AC OR 78,800 SF
SITE AREA (BLOCK B) : 1.43 AC OR 62,590 SF
IMPERVIOUS AREA : 1.34 AC OR 58,370 SF

COMPLETE STREETS

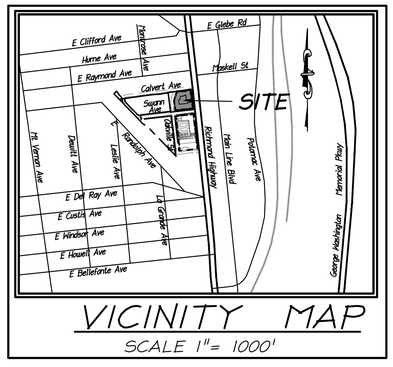
	New	Upgraded
Crosswalks (number)		
Standard	0	0
High Visibility	0	0
Curb Ramps	0	0
Sidewalks (LF)	903	0
Bicycle Parking (number of spaces)		
Public/Visitor	0	N/A
Private/Garage	0	N/A
Bicycle Paths (LF)	0	N/A
Pedestrian Signals	0	0

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
12/04/2020
PROFESSIONAL ENGINEER

DATE	REVISION
9-4-20	DSUP SUBMISSION #1
10-20-20	DSUP SUBMISSION #2
12-04-20	VERIFICATION SUBMISSION

PREPARED BY:

christopher consultants
engineering · surveying · land planning
christopher consultants, ltd.
9900 main street (fourth floor) · fairfax, va 22031-3907
703.273.6820 · fax 703.273.7636



VICINITY MAP
SCALE 1"= 1000'

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C101	NOTES AND TABULATIONS
C200	OVERALL EXISTING CONDITIONS PLAN
C201	EXISTING CONDITIONS PLAN
C300	OVERALL PRELIMINARY PLAN
C301	PRELIMINARY SITE PLAN
C302	PRELIMINARY GRADING PLAN
C303	DIMENSION PLAN
C304	OPEN SPACE PLAN
C305	OVERALL OPEN SPACE PLAN
C400	FIRE SAFETY PLAN
C500	CONTEXTUAL PLAN
C600	SANITARY SEWER OUTFALL ANALYSIS
C601	SANITARY SEWER ANALYSIS (ULTIMATE FLOW - WITH UPGRADES)
C602	SANITARY SEWER ANALYSIS (ULTIMATE FLOWS - NO UPGRADES)
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C701	BMP MAP
C702	OVERALL POST-BMP MAP
C703	PRELIMINARY BMP DETAILS
C704-C705	OVERALL OUTFALL MAP
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C900-902	TURNING MOVEMENT ANALYSIS
C910	STRIPING AND SIGNAGE PLAN
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A103-B	BUILDING PLANS
A104-B	BUILDING PLANS
A106-B	GFA DIAGRAMS
A107-B	DIAGRAMS
A401-B	BUILDING SECTIONS
A402-B	BUILDING SECTIONS
A501-B	BUILDING ELEVATIONS
A502-B	BUILDING ELEVATIONS
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L002	GENERAL NOTES
L101	STREETSCAPE MATERIALS + PLANTING PLAN
L102	COURTYARD MATERIALS PLAN
L201	COURTYARD PLANTING PLAN
L202	PLANTING SCHEDULE + TABULATIONS
L202A	SITEWIDE BIODIVERSITY TRACKING
L301	SOIL VOLUME PLAN
L302	LIMITS OF IRRIGATION PLAN
L501	DETAILS - VAULT SECTIONS
L502	DETAILS - SECTIONS
L511	DETAILS - HARDSCAPE
L601	DETAILS - PLANTING

APPLICANT
BRE/DP ALEXANDRIA PROPERTY OWNER LLC
345 PARK AVENUE
NEW YORK, NY 10154

CIVIL ENGINEER
christopher consultants, ltd.
9900 MAIN STREET
FOURTH FLOOR
FAIRFAX, VIRGINIA 22031
(703) 273-6820

ATTORNEY
LAND, CARROLL, & BLAIR, PC.
524 KING STREET
ALEXANDRIA, VA 22314
(703) 836-1000

APPLICANT
BRE/DP ALEXANDRIA PROPERTY OWNER LLC
345 PARK AVENUE
NEW YORK, NY 10154

LANDSCAPE ARCHITECT
LANDDESIGN
200 SOUTH PEYTON STREET
ALEXANDRIA, VA 22314
(703) 549-7784

ARCHITECT
SK+I ARCHITECTURE
4600 EAST-WEST HIGHWAY
SUITE 700
BETHESDA, MD 20814
(301) 654-9300

TRAFFIC ENGINEER
KIMLEY HORN & ASSOCIATES, INC.
11400 COMMERCE PARK DRIVE
RESTON, VA 20191
(703) 674-1300

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

C100

110149

ZONING TABULATIONS

SITE ADDRESSES & TAX MAP NUMBERS:	025.03-02-13 (420 SWANN AV), 025.03-02-12 (2610 RICHMOND HIGHWAY)
EXISTING ZONE:	COORDINATED DEVELOPMENT DISTRICT (CDD #24)
PROPOSED ZONE:	COORDINATED DEVELOPMENT DISTRICT (CDD #24)
SMALL AREA PLAN DISTRICT:	POTOMAC WEST
EXISTING SITE AREA:	025.03-02-13 - 86,998 S.F. OR 2.00 AC. 025.03-02-12 - 107,420 S.F. OR 2.47 AC. NOTE: BLOCK B CONSISTS OF PORTIONS OF THESE TWO EXISTING PARCELS.
PROPOSED SITE AREA:	BLOCK B 62,590 S.F. OR 1.43 AC.
EXISTING USE:	025.03-02-13 - OFFICE/COMM WHSE 025.03-02-12 - OFFICE/COMM WHSE
PROPOSED USE:	MULTI-FAMILY RESIDENTIAL AND RETAIL
OPEN SPACE PROVIDED:	ABOVE GRADE - 14,500 SF AT GRADE (NON-SIDEWALK) - 0 SF AT GRADE (PRIVATE SIDEWALK) - 0 SF TOTAL - 14,500 SF NOTE: OPEN SPACE REQUIREMENTS FOR THIS BLOCK ARE CUMULATIVE WITH BLOCKS A1, A2 AND C. REFER TO OPEN SPACE TRACKING CHART ON SHEET C305.
AVERAGE FINISHED GRADE:	46.8
SETBACK REQUIRED:	N/A
SETBACK PROVIDED:	8' (WEST), 0' (NORTH), 0' (EAST), 0' (SOUTH)
FRONTAGE REQUIRED:	N/A
FRONTAGE PROVIDED:	187' (NORTH), 243' (SOUTH), 243' (EAST), 251' (WEST)
MAXIMUM BUILDING HEIGHT ALLOWED:	90'
MAXIMUM BUILDING HEIGHT PROVIDED:	85'
GFA ALLOWED: (PER CDD #24)	RETAIL - 25,000 SF RESIDENTIAL - 270,000 SF SERVICE/LOADING/BOH - 10,000 SF ABOVE GRADE GARAGE - 30,000 SF TOTAL - 335,000 SF NOTE: GROSS FLOOR AREA (GFA) IS DEFINED AS THE SUM OF ALL GROSS HORIZONTAL AREAS UNDER A ROOF OR ROOFS. THESE AREAS ARE MEASURED FROM THE EXTERIOR FACES OF WALLS OR FROM THE CENTERLINE OF PARTY WALLS. ELEVATORS AND STAIR BULKHEADS, MULTI-STORY ATRIUMS AND SIMILAR VOLUMETRIC CONSTRUCTION , NOT INVOLVING FLOOR AREA SPACE ARE EXCLUDED. BELOW GRADE PARKING IS EXCLUDED FOR BLOCKS A, B, C AND D IN OAKVILLE. (DEFINITION FROM PAGE 22 OF OAKVILLE TRIANGLE & ROUTE 1 CORRIDOR VISION PLAN AND URBAN DESIGN STANDARDS & GUIDELINES)
GFA PROPOSED:	RETAIL - 15,000 SF RESIDENTIAL - 255,000 SF SERVICE/LOADING/BOH - 3,000 SF ABOVE GRADE GARAGE - 23,000 SF TOTAL - 296,000 SF NOTE: BELOW GRADE GARAGE IS 115,000 SF AND IS NOT INCLUDED IN THE GFA CALCULATION.
UNITS PROVIDED:	252 UNITS
PARKING REQUIRED:	RESIDENTIAL: MINIMUM - 278 SPACES MAXIMUM - 327 SPACES RETAIL: MINIMUM - 4 SPACES MAXIMUM - 45 SPACES NOTE: SEE PARKING REQUIREMENT CHART ON THIS SHEET FOR DETAILED BREAKDOWN.
PARKING PROVIDED:	369 SPACES (45 RETAIL, 324 RESIDENTIAL)
APPROXIMATE TOTAL AREA DISTURBED:	1.81 AC OR 78,800 SF
EXISTING AVG. DAILY TRIPS:	ENTIRE OAKVILLE DEVELOPMENT = 2,100 VPD
PROPOSED AVG. DAILY TRIPS:	ENTIRE OAKVILLE DEVELOPMENT: 5,713 VPD BLOCK B: 612 VPD (SEE TRAFFIC STUDY FOR MORE INFO)
PROPOSED LOADING SPACES:	1 (THERE IS AN ADDITIONAL DESIGNATE LOADING SPACE LOCATED ON OAKVILLE STREET)

NOTES:

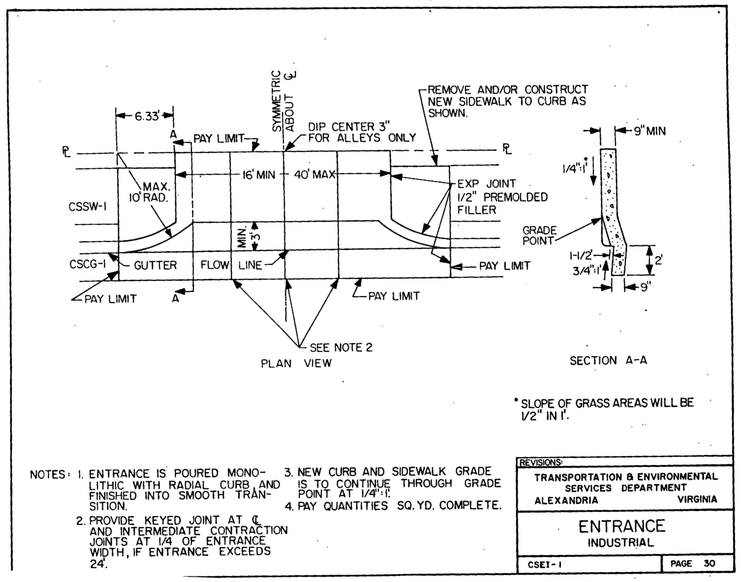
1.) TO THE BEST OF OUR KNOWLEDGE THERE ARE AREAS ONSITE CONTAINING CONTAMINATED SOILS OR CONTAMINATED GROUNDWATER.

2.) TO THE BEST OF OUR KNOWLEDGE THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS CURRENTLY LOCATED AT THE PROPERTY OR AREAS LOCATED WITHIN 1,000 FEET OF A SANITARY LANDFILL.

3.) IN ACCORDANCE WITH THE CITY OF ALEXANDRIA'S MARINE CLAY AREAS MAP DATED NOVEMBER 1976, THERE ARE NO AREAS OF MARINE CLAY LOCATED IN THE VICINITY OF THIS SITE.

4.) THIS PROJECT IS NOT LOCATED WITHIN A COMBINED SEWER AREA.

5.) THIS SITE IS LOCATED IN THE POTOMAC RIVER WATERSHED.



PARKING CHART:

STB04 - Oakville Block B 10.19.2020										
PARKING REQUIREMENTS BLOCK B										
Block B	GFA	STUDIOS	1 BR	2 BR	TOTAL UNITS	TOTAL # BEDROOMS	TOTAL MAX. PARKING REQ'D*	TOTAL MIN. PARKING REQ'D AFTER CREDIT**	PROVIDED	RATIO PROVIDED
MARKET RATE UNITS	NA	0	167	75	242	317	317	269	320	1 space per Bedroom
ADU	NA	10	0	0	10	NA	8	6	6	.60 space per unit
RETAIL	15,000						45	45	45	3 SPACES PER 1,000 SF
TOTAL PARKING							370	320	371	

RES. MARKET REQ'D =1 SPACE PER BEDROOM * RATIO CREDIT 1- (1 X (0.10 +.05) = 0.85**
RES. ADU REQ'D =.75 SPACE PER UNIT * RATIO CREDIT 0.75 - (.10 + .05) = 0.60**
RETAIL REQ'D = 3 SPACES PER 1,000 SF
(A) 10% credit for being within BRT walkshed + (B) 5% credit for being within ¼ mile of 4 or more bus routes .**

PARKING PROVIDED	STANDARD	COMPACT	HC	TOTAL	SQUARE FOOT	SF/SPACE	COMPACT RATIO
1ST/G1	35	8	4	47	22,816	485	17%
P1	71	78	6	155	58,094	375	50%
P2	77	92	0	169	58,094	344	54%
TOTAL*	183	178	10	371	139,004	375	48%

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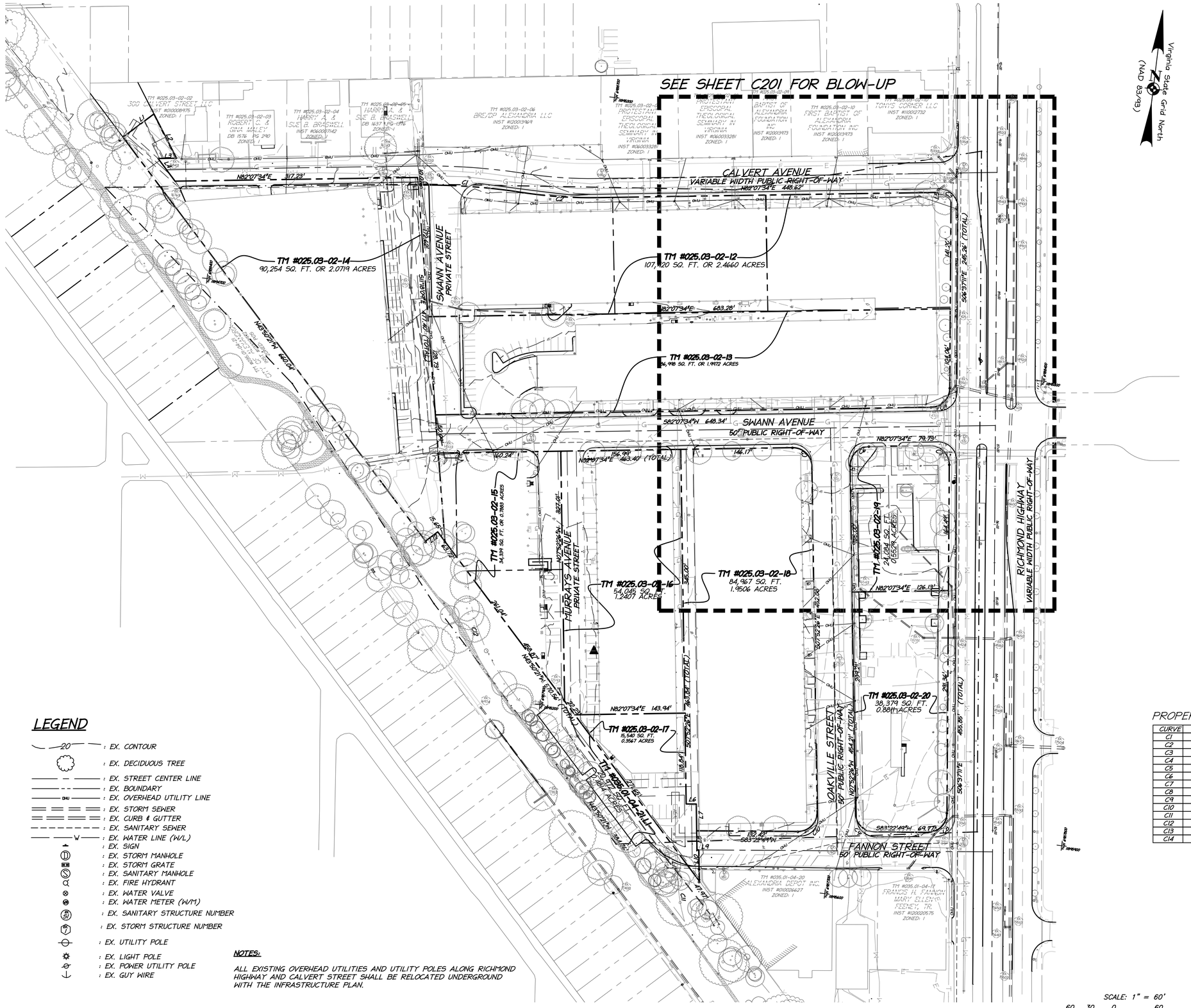
christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

NOTES AND TABULATIONS

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N/A
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C101
110149



LEGEND

- : EX. CONTOUR
- : EX. DECIDUOUS TREE
- : EX. STREET CENTER LINE
- : EX. BOUNDARY
- : EX. OVERHEAD UTILITY LINE
- : EX. STORM SEWER
- : EX. CURB & GUTTER
- : EX. SANITARY SEWER
- : EX. WATER LINE (W/L)
- : EX. SIGN
- : EX. STORM MANHOLE
- : EX. STORM GRATE
- : EX. SANITARY MANHOLE
- : EX. FIRE HYDRANT
- : EX. WATER VALVE
- : EX. WATER METER (W/M)
- : EX. SANITARY STRUCTURE NUMBER
- : EX. STORM STRUCTURE NUMBER
- : EX. UTILITY POLE
- : EX. LIGHT POLE
- : EX. POWER UTILITY POLE
- : EX. GUY WIRE

NOTES:

ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG RICHMOND HIGHWAY AND CALVERT STREET SHALL BE RELOCATED UNDERGROUND WITH THE INFRASTRUCTURE PLAN.

EXISTING TREE INVENTORY - ONSITE

TREE #	SPECIES	SIZE (in)
141	PECAN	10
142	WILLOW OAK	16
143	WILLOW OAK	20
144	HONEY LOCUST	8
145	RED MAPLE	12
146	RED MAPLE	10
147	HONEY LOCUST	10
148	ELM	14
149	SILVER MAPLE	20
150	KWANZAN CHERRY	10
151	KWANZAN CHERRY	10
152	KWANZAN CHERRY	14
153	KWANZAN CHERRY	12
154	HONEY LOCUST	10
155	HONEY LOCUST	10
156	HONEY LOCUST	8
157	HONEY LOCUST	14
158	HONEY LOCUST	12
159	HONEY LOCUST	12
160	KWANZAN CHERRY	12
161	HONEY LOCUST	10
162	HONEY LOCUST	10
163	HONEY LOCUST	10
164	KWANZAN CHERRY	10
165	KWANZAN CHERRY	4
166	WILLOW OAK	10
167	HONEY LOCUST	8
168	KWANZAN CHERRY	8
169	HONEY LOCUST	8
170	KWANZAN CHERRY	8
171	HONEY LOCUST	8
172	HONEY LOCUST	4
173	HONEY LOCUST	8
174	HONEY LOCUST	10
175	KWANZAN CHERRY	10
176	KWANZAN CHERRY	8
177	KWANZAN CHERRY	8
178	KWANZAN CHERRY	10
179	PURPLE PLUM	10
180	GINKGO	8
181	DOGWOOD	5
182	DOGWOOD	3
183	DOGWOOD	5
184	DOGWOOD	5
185	DOGWOOD	5
186	GINKGO	5
187	PURPLE PLUM	10
188	HONEY LOCUST	8
189	HONEY LOCUST	12
190	KWANZAN CHERRY	5
191	WILLOW OAK	5
192	KWANZAN CHERRY	12
193	HONEY LOCUST	10
194	HONEY LOCUST	10
195	HONEY LOCUST	5
196	HONEY LOCUST	8
197	HONEY LOCUST	5
198	HONEY LOCUST	4
199	HONEY LOCUST	5
200	GINKGO	4
201	WILLOW OAK	5 (x2)
202	WILLOW OAK	11
203	WILLOW OAK	10
204	WILLOW OAK	8

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L1	N46°09'39"E	50.62'
L2	S34°01'59"E	65.00'
L3	S82°07'34"W	24.16'
L4	S43°50'21"E	37.06'
L5	S07°52'26"E	2.01'
L6	N83°22'49"E	13.24'
L7	S07°52'26"E	34.99'
L8	S07°52'26"E	25.01'
L9	N83°22'49"E	2.36'
L10	S07°52'26"E	40.68'
L11	S07°47'12"E	28.65'
L12	S46°09'39"W	19.99'

PROPERTY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	800.00'	136.51'	9°46'35"	68.42'	N87°02'09"E	136.34'
C2	567.14'	96.98'	9°47'50"	48.61'	N87°01'30"E	96.86'
C3	18.00'	19.10'	60°47'51"	10.56'	S67°33'05"E	18.22'
C4	25.00'	38.70'	88°41'18"	24.43'	S37°42'15"W	34.95'
C5	25.00'	39.28'	90°00'54"	25.01'	S52°52'26"E	35.36'
C6	25.00'	39.27'	90°00'00"	25.00'	N37°07'34"E	35.36'
C7	25.00'	39.82'	91°15'15"	25.55'	S52°14'49"E	35.74'
C8	25.00'	39.27'	90°00'00"	25.00'	S36°22'49"W	35.36'
C9	25.00'	38.72'	88°44'45"	24.46'	N52°14'49"W	34.97'
C10	25.00'	39.76'	91°06'50"	25.49'	S37°49'05"W	35.70'
C11	242.81'	63.53'	14°59'29"	31.95'	S15°16'56"E	63.35'
C12	271.56'	162.43'	34°16'12"	83.72'	N26°42'15"W	160.02'
C13	850.00'	145.04'	9°46'35"	72.70'	N87°02'09"E	144.86'
C14	517.14'	88.43'	9°47'50"	44.32'	N87°01'30"E	88.32'

APPROVED
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DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. –

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

DATE RECORDED

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

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OVERALL EXISTING CONDITIONS PLAN

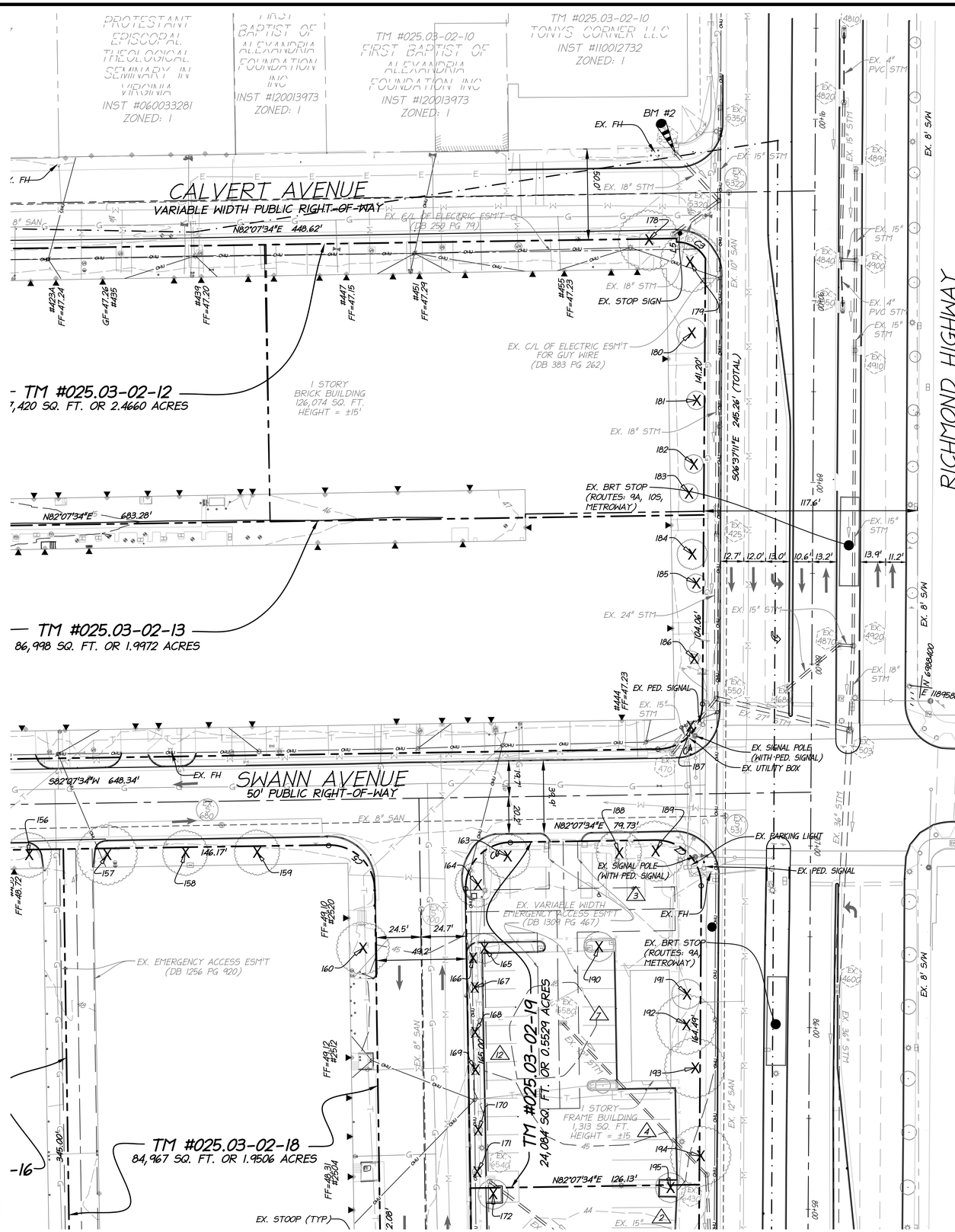
OAKVILLE BLOCK B

PRELIMINARY DSUP

THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=60'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C200
1101149

P:\PX\Projects\14007\011100\110149 Block B Prelim DSUP\C200 OVERALL EXISTING CONDITIONS PLAN.dwg, 10/20/2020 12:29:17 PM, _AutoCAD PDF (General Documentation).pc3



STORM STRUCTURE DATA

STM CB 334
TOP=39.36
IN=34.36 15" RCP FR 393
OUT=32.67 27" RCP TO 4540

STM MH 359
TOP=40.01
FULL OF DEBRIS
NOT ACCESSIBLE

STM CB 393
TOP=39.56
IN=36.51 15" RCP FR 359
OUT=35.76 15" RCP TO 334

STM MH 425
TOP=46.09
COVERED
NOT ACCESSIBLE

STM CB 470
TOP=45.73
OUT=41.78 15" RCP TO 550

STM CB 550
TOP=45.95
IN=39.51 15" RCP FR 470
IN=38.50 24 RCP FR 425
OUT=38.46 27" RCP TO 7503

STM DI 2210
TOP=47.19
BOTTOM= 40.14
FULL OF DEBRIS

STM GI 2581
TOP=43.47
BOTTOM= 41.07
FULL OF DEBRIS

STM CB 2828
TOP=43.47
IN=39.81 15" RCP FR 2829
IN=39.89 15" RCP FR 2890
OUT=39.82 24" RCP TO 6220

STM MH 2829
TOP=43.69
IN=39.79 15" RCP FR 4150
OUT=39.72 15" RCP TO 2828

STM GI 2890
TOP=43.22
IN=40.07 12" PVC FR 2920
OUT=39.92 24" RCP TO 2828

STM CB 2920
TOP=44.00
IN=41.50 12" PVC FR 3070
OUT=41.45 12" PVC TO 2890

STM GI 2590
TOP=44.07
OUT=41.97 10" PVC TO 2581

STM GI 3070
TOP=43.60
OUT=42.35 12" PVC TO 2920

STM GI 4150
TOP=42.70
IN=40.55 12" RCP FR 4300
OUT=40.50 12" RCP TO 2829

STM GI 4215
TOP=42.18
IN=39.69 15" RCP FR 6540
OUT=39.51 15" RCP TO 6424

HEADWALL 4300
INV IN = 42.23 12" PVC TO 4150

STM CB 4540
TOP=39.14
IN=32.14 15" RCP FR 334
OUT=32.04 15" RCP TO 5530

STM MH 4568
TOP=41.33
FILTERRA TREEWELL
NOT ACCESSIBLE

STM CB 4580
TOP=43.04
IN=35.84 36" RCP FR 4600
IN=34.94 15" RCP FR 6424
OUT=34.89 42" RCP TO 4650

STM GI 4600
TOP=44.99
UNDER CONSTRUCTION
INACCESSIBLE

STM CB 4650
TOP=43.30
IN=34.92 42" RCP FR 4580
OUT=34.80 42" RCP TO 4670

STM CB 4670
TOP=40.90
IN=34.30 36" RCP FR 4650
IN=35.90 18" RCP FR 5543
OUT=34.20 36" RCP TO 7504

STM MH 4680
TOP=46.04
OUT=43.34 15" RCP TO 4870

STM MH 4810
TOP=46.82
FILTERRA TREEWELL
NOT ACCESSIBLE

STM MH 4820
TOP=46.65
IN=42.75 4" PVC FR 4810
OUT=42.60 15" RCP TO 4840

STM MH 4840
TOP=46.27
IN=42.17 15" RCP FR 4820
IN=42.37 4" PVC FR 4850
OUT=42.15 15" RCP TO 4900

STM CB 4850
TOP=46.30
FILTERRA TREEWELL
NOT ACCESSIBLE

STM CB 4870
TOP=46.33
IN=42.68 15" RCP FR 4680
OUT=42.63 15" RCP TO 4920

STM CB 4891
TOP=46.71
OUT=42.61 15" RCP TO 4900

STM CB 4900
TOP=46.53
IN=42.08 15" RCP FR 4891
IN=42.08 15" RCP FR 4840
OUT=42.02 15" RCP TO 4910

STM CB 4910
TOP=46.67
IN=41.62 15" RCP FR 4900
OUT=41.52 15" RCP TO 4920

STM CB 4920
TOP=46.39
IN=40.39 15" RCP FR 4910
IN=38.43 15" RCP FR 4970
OUT=40.33 18" RCP TO 7503

STM CB 5090
TOP=46.23
OUT=41.75 18" RCP TO 5320

STM MH 5320
TOP=46.18
IN=40.83 18" RCP FR 5350
IN=40.83 18" RCP FR 5330
IN=40.83 18" RCP FR 5090
OUT=40.78 18" RCP TO 425

STM CB 5330
TOP=46.35
OUT=41.75 18" RCP TO 5320

STM MH 5330
TOP=46.67
COVERED
INACCESSIBLE

STM CB 5502
TOP=36.84
FILTERRA TREEWELL
NOT ACCESSIBLE

STM CB 5510
TOP=37.35
IN=30.65 30" RCP FR 5530
IN=32.45 18" RCP FR 5640
OUT=30.55 30" RCP TO 5502

STM CB 5530
TOP=39.28
IN=32.01 24" RCP FR 4540
OUT=31.90 30" RCP TO 5510

STM CB 5543
TOP=40.73
IN=36.73 4" PVC FR 4568
OUT=36.08 18" RCP TO 4670

STM CB 5640
TOP=37.15
IN=33.15 4" PVC FR 5650
OUT=32.75 15" RCP TO 5510

STM CB 5650
TOP=37.51
FILTERRA TREEWELL
NOT ACCESSIBLE

STM GI 6220
TOP=42.23
IN=39.31 24" RCP FR 2828
IN=39.73 15" RCP FR 6240
OUT=39.23 24" RCP TO N

STM GI 6240
TOP=43.91
OUT=39.91 12" PVC TO 6220

STM GI 6424
TOP=43.10
IN=38.89 15" RCP FR 6430
IN=38.96 15" RCP FR 4218
OUT=38.56 24" RCP TO 4580

STM MH 6430
TOP=44.49
IN=39.18 15" RCP FR 6580
OUT=39.16 15" RCP TO 6424

STM MH 6540
TOP=44.69
COVERED
NOT ACCESSIBLE

STM MH 6580
TOP=43.97
COVERED
NOT ACCESSIBLE

STM CB 6763
TOP=46.69
OUT=43.54 TO N

STM CB 6842
TOP=46.68
OUT=43.73 TO S

STM DI 6974
TOP=44.76
OUT=41.76 18" CMP TO 7353

STM DI 7353
TOP=44.97
IN=40.94 18" CMP FR 6974
IN=42.27 15" CMP FR W
OUT=40.89 18" CMP TO 7400

STM DI 7400
TOP=46.94
IN=39.54 18" CMP FR 7353
OUT=39.44 18" CMP TO 7501

HEADWALL 7483
FULL OF DEBRIS
PIPE NOT VISIBLE

STM DI 7501
TOP=45.77
IN=38.32 18" CMP FR 7400
OUT=38.27 18" CMP TO S

STM MH 7503
TOP=45.83
IN=39.78 18" RCP FR 4920
IN=37.93 27" RCP FR 550
OUT=37.88 36" RCP TO 4600

STM MH 7504
TOP=40.79
IN=32.79 36" RCP FR 4670
OUT=29.69 36" RCP TO E

STM CB 7507
TOP=35.96
IN=24.06 30" RCP FR 5502
OUT=28.96 30" RCP TO S

SANITARY SEWER STRUCTURE DATA

SAN MH 336
TOP=38.48
IN=30.10 10" CONC. FR 531
IN=30.78 10" LINED FR 1760
OUT=30.07 10" LINED TO 7505

SAN MH 531
TOP=46.57
IN=35.02 10" RCP FR 5322
IN=35.52 10" CLAY FR 680
OUT=34.92 10" CONC. TO 336

SAN MH 680
TOP=46.71
IN=38.91 4" CLAY FR 1440
OUT=38.88 10" CLAY TO 531

SAN MH 700
TOP=45.40
OUT=39.72 8" PVC TO 7502

SAN MH 1440
TOP=45.68
INVERT N/A - CLAY

SAN MH 1760
TOP=42.63
IN=37.23 LAT FR S
IN=37.13 8" RCP FR 7502
IN=37.13 8" RCP FR 1811
OUT=37.03 10" LINED TO 336

SAN MH 1811
TOP=44.81
IN=38.12 10" RCP FR 2220
OUT=38.10 10" RCP TO 1760

SAN MH 2220
TOP=51.05
IN=41.65 8" PVC FR 2580
OUT=41.55 8" PVC TO 1811

SAN MH 2580
TOP=45.18
IN=42.53 8" PVC FR N
OUT=42.51 8" PVC TO 2220

SAN MH 5322
TOP=46.27
IN=38.07 10" PVC FR N
IN=38.47 10" RCP FR 5990
OUT=37.97 10" RCP TO 531

SAN MH 5990
TOP=45.55
OUT=41.85 10" RCP TO 5322

SAN MH 6785
TOP=43.87
IN=33.97 FR E
IN=33.97 FR W
IN=33.97 FR S
OUT=33.77 TO N

SAN MH 7502
TOP=43.65
IN=38.90 LAT FR E
IN=38.53 8" PVC FR 700
OUT=38.50 8" RCP TO 1760

SAN MH 7505
TOP=37.00
IN=27.55 10" PVC FR W
IN=27.30 10" LINED FR 336
OUT=27.25 10" LINED TO 750

SAN MH 7506
TOP=37.86
IN=32.16 FR W
IN=25.56 10" LINED FR 7505
OUT=25.46 10" LINED TO 750

SAN MH 7509
TOP=38.79
IN=24.94 10" PVC FR 7510
IN=24.94 10" PVC FR 7506
OUT=24.74 10" CONC TO 7518

IN=24.94 10" PVC FR 7506
OUT=24.74 10" CONC TO 7518

SAN MH 7510
TOP=39.12
IN=28.22 FR W
IN=28.32 FR S
OUT=28.12 TO 7506

SAN MH 7511
TOP=38.76
IN=21.66 12" PVC FR 7514
OUT=21.56 12" PVC TO 7512

SAN MH 7512
TOP=39.76
IN=20.65 12" PVC FR 7511
OUT=20.57 12" PVC TO 7515

SAN MH 7514
TOP=37.40
IN=22.90 10" CONC FR 7518
OUT=22.80 12" PVC TO 7511

SAN MH 7515
TOP=40.26
IN=20.40 12" PVC FR 7512
OUT=20.30 12" PVC TO 7516

SAN MH 7518
TOP=38.48
IN=24.18 10" CONC FR 7509
OUT=24.08 10" CONC TO 7514

PROPERTY LINE TABLE

LINE	BEARING	DISTANCE
L1	N46°09'34"E	50.62'
L2	S34°01'54"E	65.00'
L3	S82°07'34"W	24.16'
L4	S43°50'21"E	37.06'
L5	S07°52'26"E	2.01'
L6	N83°22'49"E	13.24'
L7	S07°52'26"E	34.99'
L8	S07°52'26"E	25.01'
L9	N83°22'49"E	2.36'
L10	S07°52'26"E	40.68'
L11	S07°47'12"E	28.65'
L12	S46°09'39"W	19.99'

PROPERTY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	BEARING	CHORD
C1	800.00'	136.51'	9°46'35"	68.42'	N87°02'09"E	136.34'
C2	567.14'	96.98'	9°47'50"	48.61'	N87°01'30"E	96.86'
C3	18.00'	19.10'	60°47'51"	10.56'	S67°33'05"E	18.22'
C4	25.00'	38.70'	88°41'18"	24.43'	S37°42'15"W	34.95'
C5	25.00'	39.28'	90°00'54"	25.01'	S52°52'26"E	35.36'
C6	25.00'	39.27'	90°00'00"	25.00'	N37°07'34"E	35.36'
C7	25.00'	39.82'	91°15'15"	25.55'	S62°14'49"E	35.74'
C8	25.00'	39.27'	90°00'00"	25.00'	S38°22'49"W	35.36'
C9	25.00'	38.72'	88°44'45"	24.46'	N52°14'49"W	34.97'
C10	25.00'	39.76'	91°06'50"	25.49'	S37°49'05"W	35.70'
C11	242.81'	63.53'	14°59'29"	31.95'	S15°16'56"E	63.35'
C12	271.56'	162.43'	34°16'12"	83.72'	N26°42'15"W	160.02'
C13	850.00'	146.04'	9°46'35"	72.70'	N87°02'09"E	144.86'
C14	517.14'	88.43'	9°47'50"	44.32'	N87°01'30"E	88.32'

NOTES:

ALL EXISTING OVERHEAD UTILITIES AND UTILITY POLES ALONG RICHMOND HIGHWAY AND CALVERT STREET SHALL BE RELOCATED UNDERGROUND WITH THE INFRASTRUCTURE PLAN.

NOTE:
SEE SHEET C101 FOR EXISTING TREE DATA.

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

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

EXISTING CONDITIONS PLAN

OAKVILLE BLOCK B

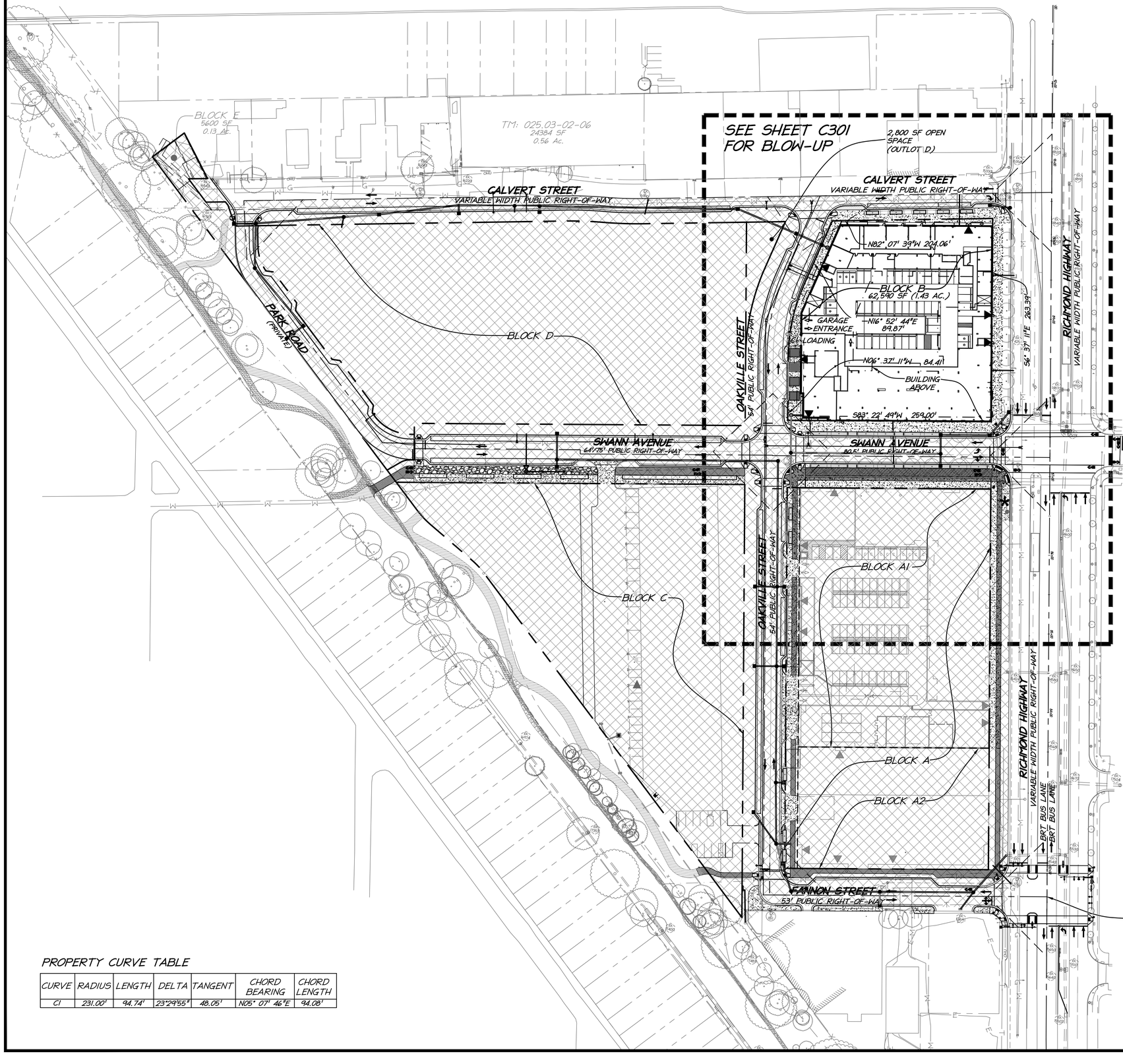
PRELIMINARY DSUP

THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C201
1101149

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AREA DISTURBED:1.81 AC OR 78,800 SF



LEGEND

- DENOTES NUMBER OF STANDARD PARKING SPACES
- BUILDING PROJECTION ABOVE
- CURB AND GUTTER
- HEADER CURB
- CENTERLINE OF STREET
- PROPERTY BOUNDARY
- PROPOSED BUILDING OUTLINE
- PROPOSED BUILDING ENTRANCE
- STORM WATER LINE
- LIMITS OF DISTURBANCE
- PROPOSED SIDEWALK
- PROPOSED TREE PITS
- PROPOSED TREE
- BLOCKS TO BE DEVELOPED UNDER SEPARATE PLANS

SCALE: 1" = 60'

60 30 0 60 120

GRAPHIC SCALE

PROPERTY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD BEARING	CHORD LENGTH
C1	231.00'	94.74'	23°29'55"	48.05'	N05° 07' 46"E	94.08'

NOTES:
1. A TWO LEVEL BELOW GRADE PARKING GARAGE IS PROPOSED BELOW BLOCKS B WITH THIS APPLICATION.

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR — DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. –
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9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OVERALL PRELIMINARY PLAN

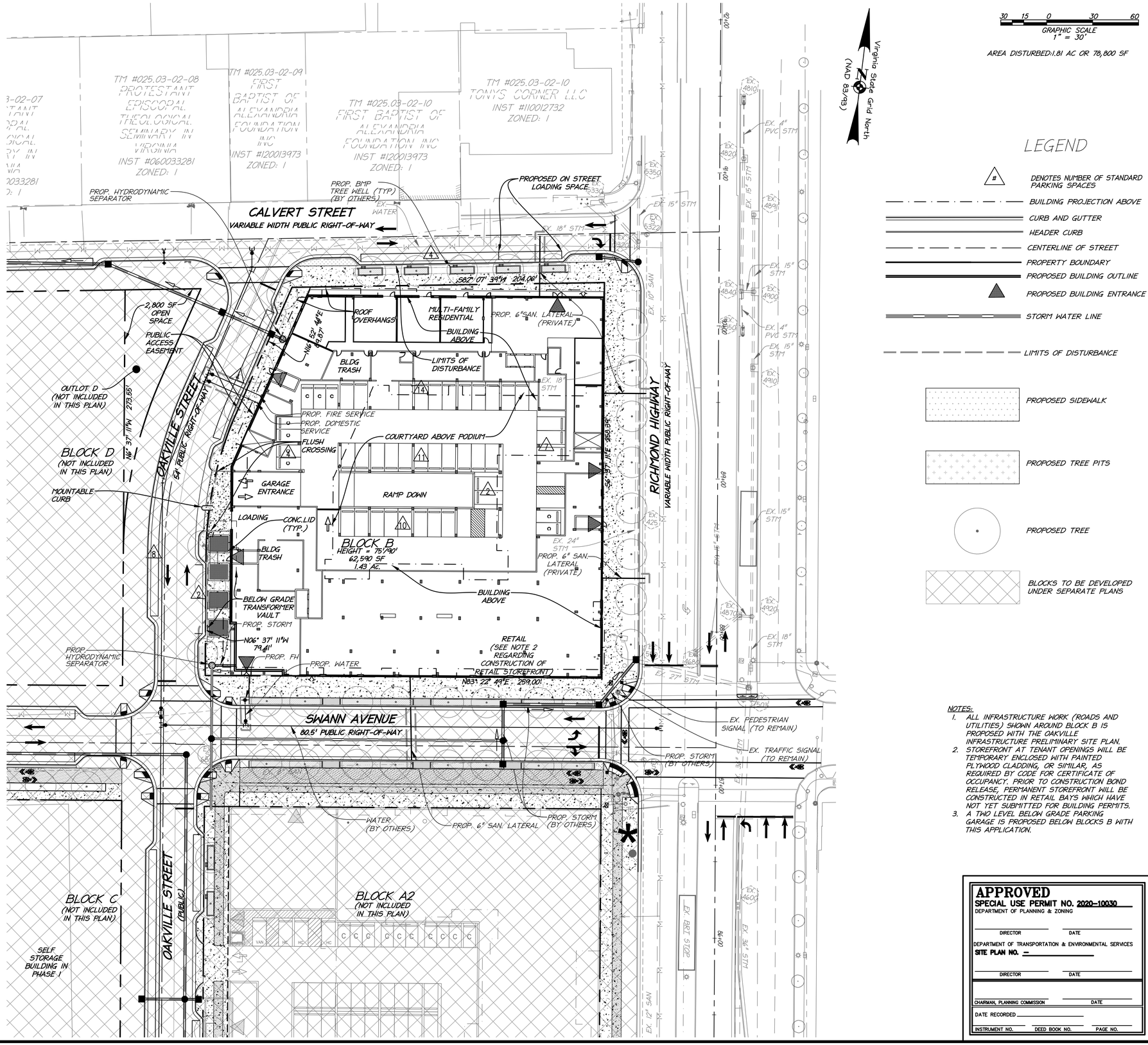
OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=60'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C300
1101149

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BLOCK B ENTRANCE TRAFFIC VOLUME:

Garage Entrance	AM Peak Hour		PM Peak Hour		Daily	
	IN	OUT	IN	Out	IN	OUT
B Garage - residential/retail	**42**	**60**	**67**	**50**	**612**	**612**



LEGEND

- DENOTES NUMBER OF STANDARD PARKING SPACES
- BUILDING PROJECTION ABOVE
- CURB AND GUTTER
- HEADER CURB
- CENTERLINE OF STREET
- PROPERTY BOUNDARY
- PROPOSED BUILDING OUTLINE
- PROPOSED BUILDING ENTRANCE
- STORM WATER LINE
- LIMITS OF DISTURBANCE
- PROPOSED SIDEWALK
- PROPOSED TREE PITS
- PROPOSED TREE
- BLOCKS TO BE DEVELOPED UNDER SEPARATE PLANS

NOTES:

1. ALL INFRASTRUCTURE WORK (ROADS AND UTILITIES) SHOWN AROUND BLOCK B IS PROPOSED WITH THE OAKVILLE INFRASTRUCTURE PRELIMINARY SITE PLAN.
2. STOREFRONT AT TENANT OPENINGS WILL BE TEMPORARY ENCLOSED WITH PAINTED PLYWOOD CLADDING, OR SIMILAR, AS REQUIRED BY CODE FOR CERTIFICATE OF OCCUPANCY. PRIOR TO CONSTRUCTION BOND RELEASE, PERMANENT STOREFRONT WILL BE CONSTRUCTED IN RETAIL BAYS WHICH HAVE NOT YET SUBMITTED FOR BUILDING PERMITS.
3. A TWO LEVEL BELOW GRADE PARKING GARAGE IS PROPOSED BELOW BLOCKS B WITH THIS APPLICATION.

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SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. —

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9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
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Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

PRELIMINARY SITE PLAN

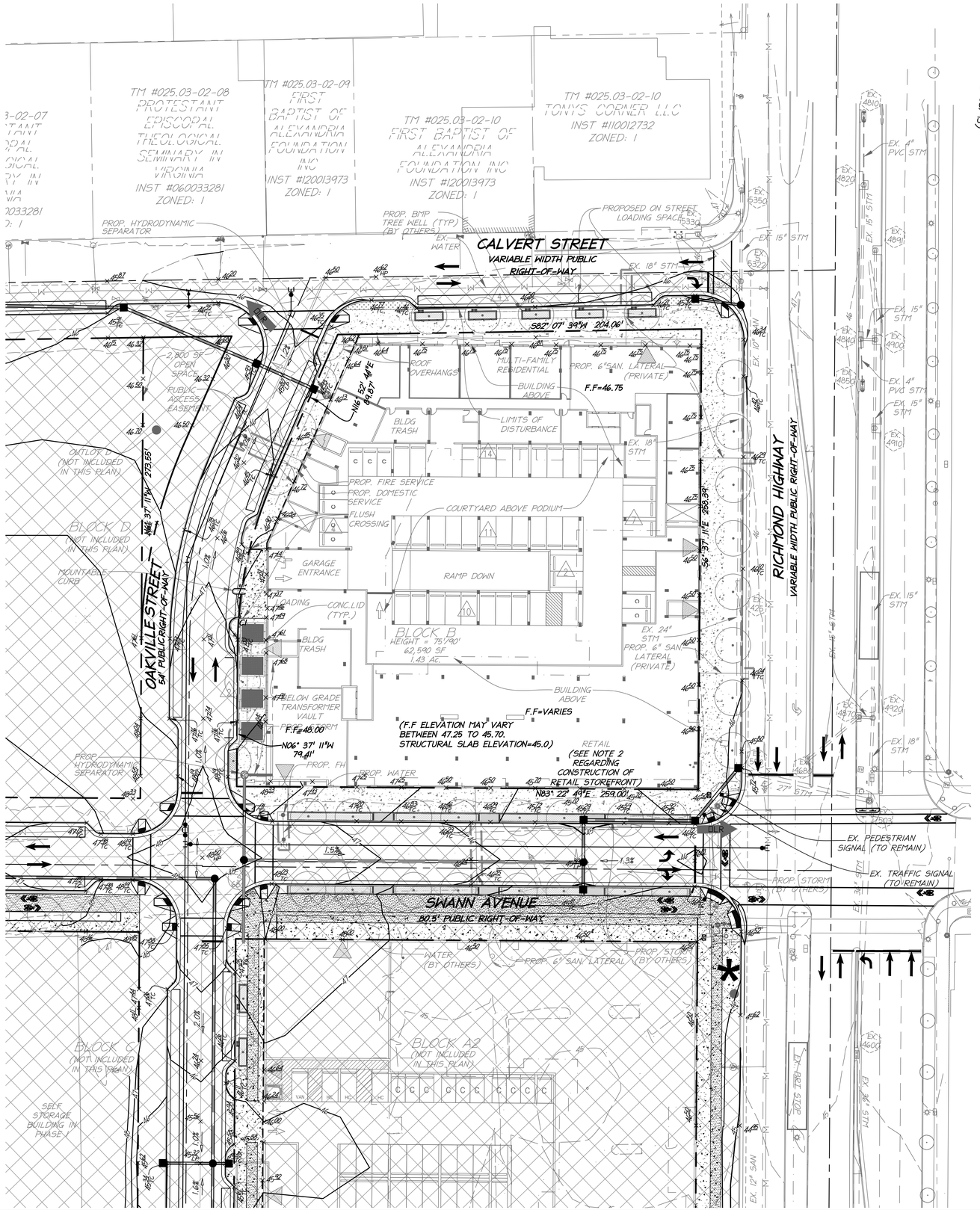
OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C301
1101149

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*** starts at southwest corner and goes clockwise**

AFG Point	Elevation
1	48.33
2	47.91
3	47.68
4	47.46
5	47.14
6	46.88
7	46.72
8	46.69
9	46.66
10	46.64
11	46.64
12	46.75
13	46.75
14	46.75
15	46.75
16	46.75
17	46.75
18	46.75
19	46.75
20	46.75
21	46.75
22	46.75
23	46.50
24	46.50
25	46.50
26	46.50
27	46.50
28	46.50
29	46.50
30	46.50
31	46.50
32	46.50
33	46.50
34	46.50
35	46.50
36	46.50
37	47.93
AFG =	**46.8**



30 15 0 30 60

GRAPHIC SCALE
1" = 30'

AREA DISTURBED:1.81 AC OR 78,800 SF

LEGEND

- # — DENOTES NUMBER OF STANDARD PARKING SPACES
- BUILDING PROJECTION ABOVE
- CURB AND GUTTER
- HEADER CURB
- CENTERLINE OF STREET
- PROPERTY BOUNDARY
- PROPOSED BUILDING OUTLINE
- LIMITS OF DISTURBANCE
- PROPOSED BUILDING ENTRANCE
- PROPOSED SPOT SHOT
- BLOCKS TO BE DEVELOPED UNDER SEPARATE PLANS

NOTES:

1. ALL INFRASTRUCTURE WORK (ROADS AND UTILITIES) SHOWN AROUND BLOCK B IS PROPOSED WITH THE OAKVILLE INFRASTRUCTURE PRELIMINARY SITE PLAN.
2. STOREFRONT AT TENANT OPENINGS WILL BE TEMPORARY ENCLOSED WITH PAINTED PLYWOOD CLADDING, OR SIMILAR, AS REQUIRED BY CODE FOR CERTIFICATE OF OCCUPANCY. PRIOR TO CONSTRUCTION BOND RELEASE, PERMANENT STOREFRONT WILL BE CONSTRUCTED IN RETAIL BAYS WHICH HAVE NOT YET SUBMITTED FOR BUILDING PERMITS.
3. A TWO LEVEL BELOW GRADE PARKING GARAGE IS PROPOSED BELOW BLOCKS B WITH THIS APPLICATION.

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. –

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phone 703.273.6820 · fax 703.273.6820

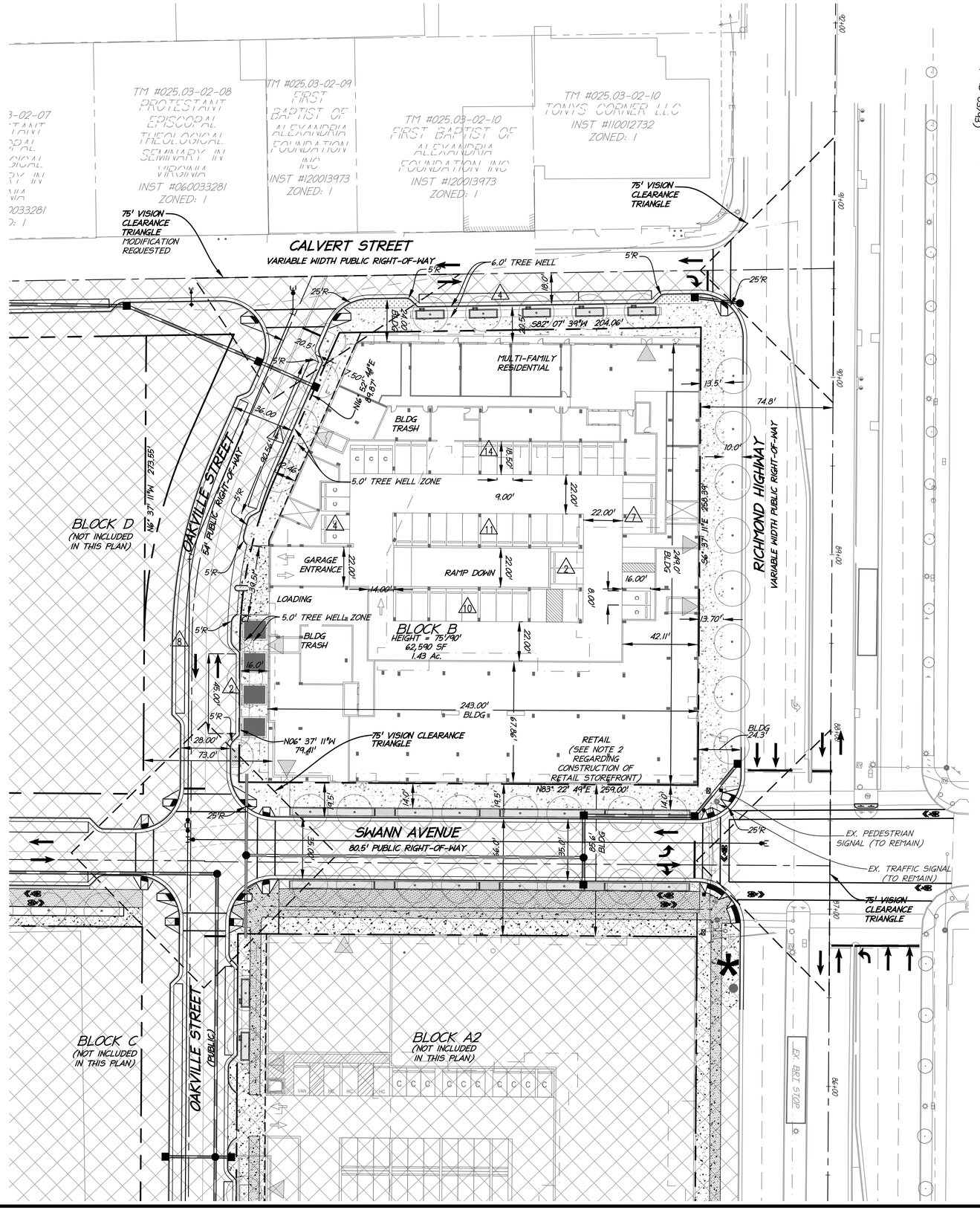
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Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

PRELIMINARY GRADING PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
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CHECKED: KMW
SHEET No.
C302
110149

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LEGEND

- DENOTES NUMBER OF STANDARD PARKING SPACES
- BUILDING PROJECTION ABOVE
- CURB AND GUTTER
- HEADER CURB
- CENTERLINE OF STREET
- PROPERTY BOUNDARY
- PROPOSED BUILDING OUTLINE
- PROPOSED BUILDING ENTRANCE
- STORM WATER LINE
- PROPOSED SPOT SHOT
- PROPOSED SIDEWALK
- PROPOSED TREE PITS
- PROPOSED TREE
- BLOCKS TO BE DEVELOPED UNDER SEPARATE PLANS

NOTES:

1. ALL INFRASTRUCTURE WORK (ROADS AND UTILITIES) SHOWN AROUND BLOCK B IS PROPOSED WITH THE OAKVILLE INFRASTRUCTURE PRELIMINARY SITE PLAN.
2. STOREFRONT AT TENANT OPENINGS WILL BE TEMPORARY ENCLOSED WITH PAINTED PLYWOOD CLADDING, OR SIMILAR, AS REQUIRED BY CODE FOR CERTIFICATE OF OCCUPANCY. PRIOR TO CONSTRUCTION BOND RELEASE, PERMANENT STOREFRONT WILL BE CONSTRUCTED IN RETAIL BAYS WHICH HAVE NOT YET SUBMITTED FOR BUILDING PERMITS.
3. ALL DIMENSIONS NEAR THE BUILDING/PROPERTY LINE ARE ASSUMED TO BE TO THE PROPERTY LINE UNLESS OTHERWISE NOTED BY A 'BLDG' LABEL.
4. A TWO LEVEL BELOW GRADE PARKING GARAGE IS PROPOSED BELOW BLOCKS B WITH THIS APPLICATION.

APPROVED
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DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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Lic. No.55868
10/20/2020
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DIMENSION PLAN

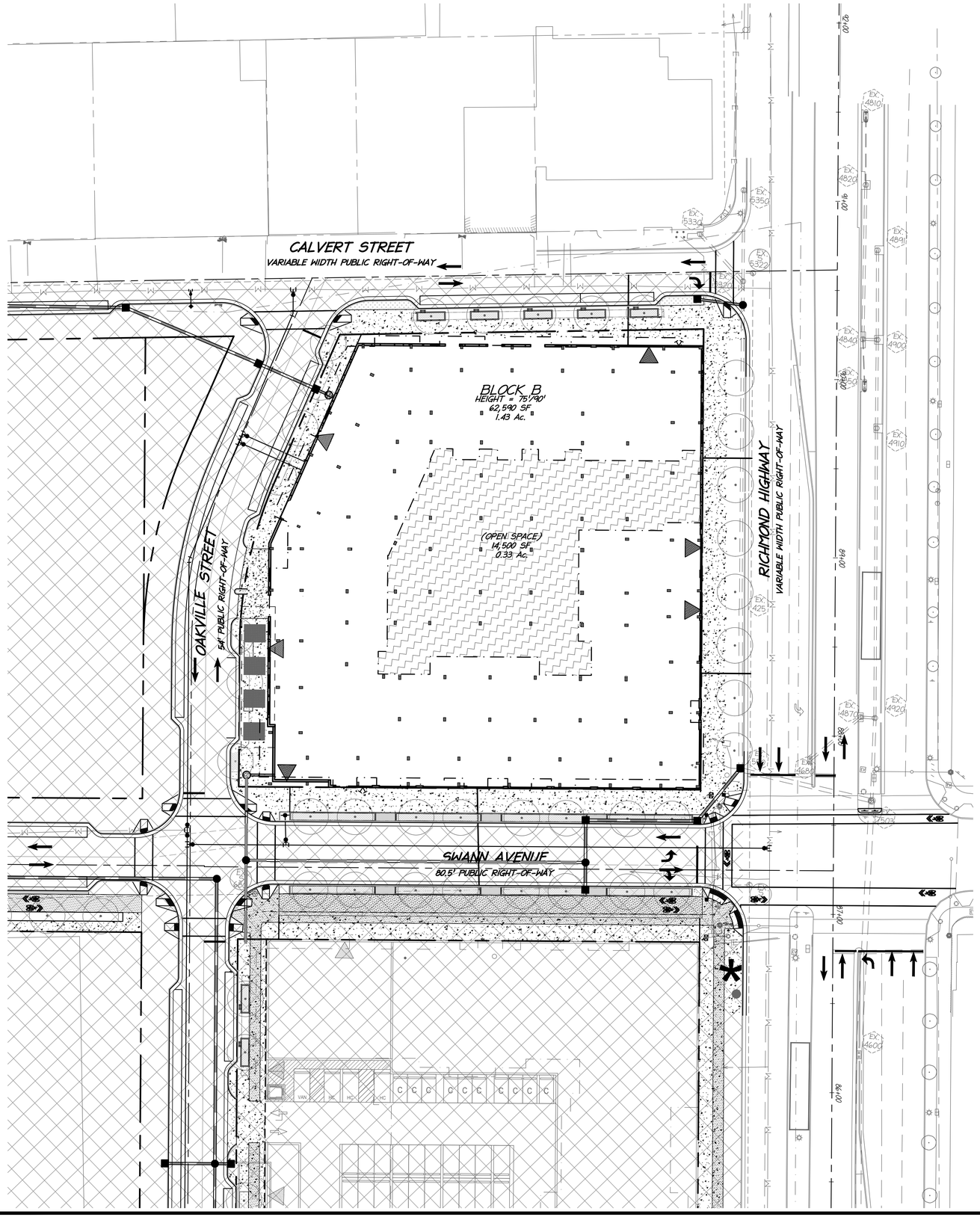
OAKVILLE BLOCK B
PRELIMINARY DSUP

THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C303

1101149

P:\PX\Projects\14007\011100\110149 Block B Prelim DSUP\C303 DIMENSION PLAN.dwg, 10/20/2020 12:32:39 PM, AutoCAD PDF (General Documentation).pc3



AREA DISTURBED:1.81 AC OR 78,800 SF

OPEN SPACE NARRATIVE:

THIS SITE PROPOSES 14,500 SF OF ABOVE GROUND OPEN SPACE AND 0 SF OF AT-GRADE OPEN SPACE. THIS SITE IS A PORTION OF AN OVERALL OPEN SPACE PLAN, REFER TO SHEET C305 FOR THE OVERALL OPEN SPACE PLAN AND TRACKING CHART.

OPEN SPACE = 14,500 SF (0.33 Ac.)

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. –

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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phone 703.273.6820 · fax 703.273.6820

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10/20/2020
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OPEN SPACE PLAN

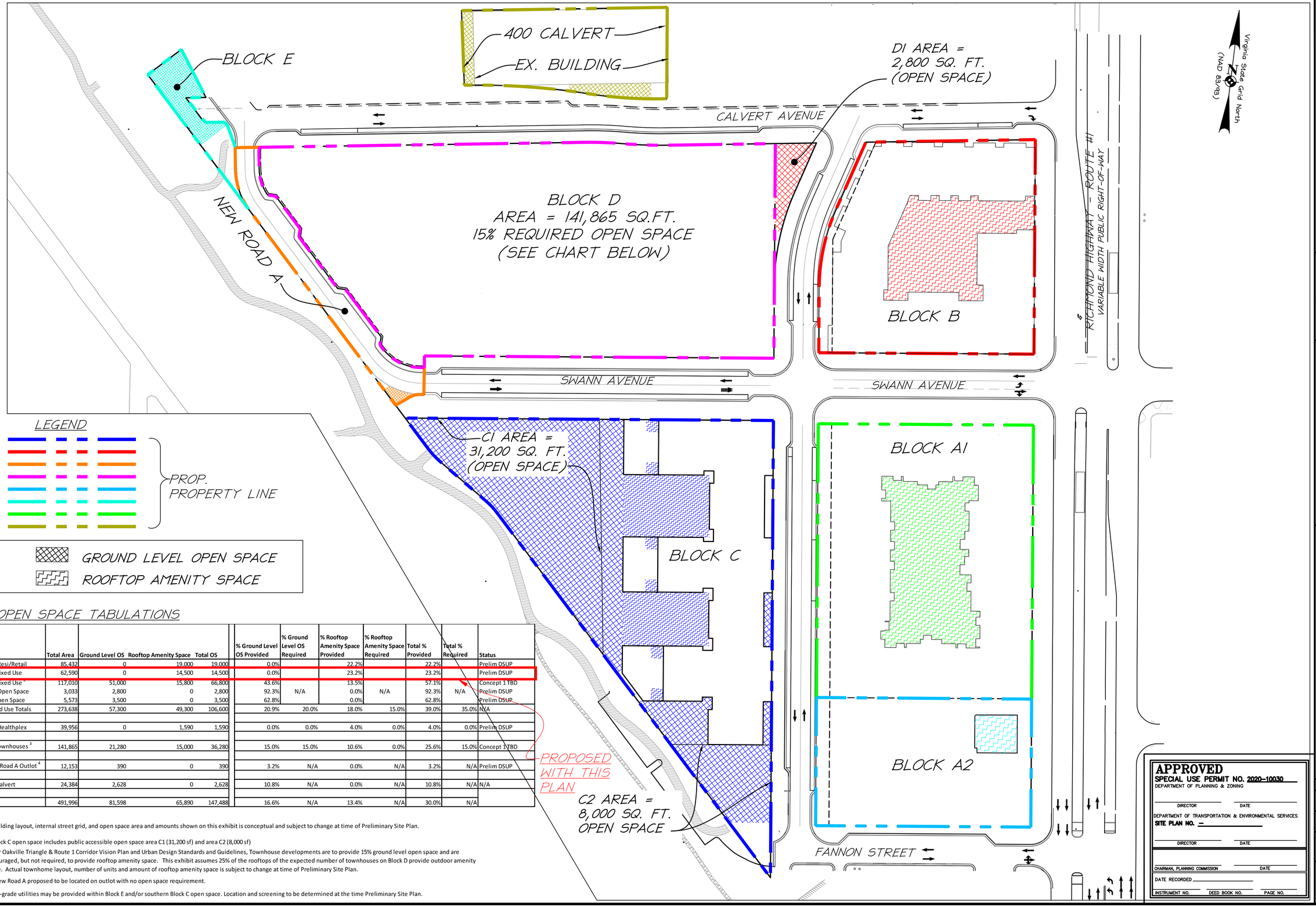
OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
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C304
1101149

P:\EX\Projects\14007\011100\110149 Block B Prelim DSUP\C304 OPEN SPACE PLAN.dwg, 10/20/2020 12:33:06 PM, AutoCAD PDF (General Documentation).pc3

FOR INFORMATIONAL PURPOSES ONLY

GRAPHIC SCALE
50 25 0 50 100
1" = 50'



LEGEND

PROP. PROPERTY LINE

GROUND LEVEL OPEN SPACE

ROOFTOP AMENITY SPACE

OPEN SPACE TABULATIONS

Block	Total Area	Ground Level OS	Rooftop Amenity Space	Total OS	% Ground Level OS Provided	% Ground Level OS Required	% Rooftop Amenity Space Provided	% Rooftop Amenity Space Required	Total % Provided	Total % Required	Status
A1 - Resi/Retail	85,432	0	19,000	19,000	0.0%		22.2%		22.2%		Prelim DSUP
B - Mixed Use	62,590	0	14,500	14,500	0.0%		23.2%		23.2%		Prelim DSUP
C - Mixed Use [5]	117,010	51,000	15,800	66,800	43.6%		13.5%		57.1%		Concept 1 TBD
D1 - Open Space	3,033	2,800	0	2,800	92.3%	N/A	0.0%	N/A	92.3%	N/A	Prelim DSUP
E - Open Space	5,573	3,500	0	3,500	62.8%		0.0%		62.8%		Prelim DSUP
Mixed Use Totals	273,638	57,300	49,300	106,600	20.9%	20.0%	18.0%	15.0%	39.0%	35.0%	N/A
A2 - Healthplex	39,956	0	1,590	1,590	0.0%	0.0%	4.0%	0.0%	4.0%	0.0%	Prelim DSUP
D - Townhouses [3]	141,865	21,280	15,000	36,280	15.0%	15.0%	10.6%	0.0%	25.6%	15.0%	Concept 1 TBD
New Road A Outlot [4]	12,153	390	0	390	3.2%	N/A	0.0%	N/A	3.2%	N/A	Prelim DSUP
400 Calvert	24,384	2,628	0	2,628	10.8%	N/A	0.0%	N/A	10.8%	N/A	N/A
Total	491,996	81,598	65,890	147,488	16.6%	N/A	13.4%	N/A	30.0%	N/A	

1. Building layout, internal street grid, and open space area and amounts shown on this exhibit is conceptual and subject to change at time of Preliminary Site Plan.

2. Block C open space includes public accessible open space area C1 (31,200 sf) and area C2 (8,000 sf)

3. Per Oakville Triangle & Route 1 Corridor Vision Plan and Urban Design Standards and Guidelines, Townhouse developments are to provide 15% ground level open space and are encouraged, but not required, to provide rooftop amenity space. This exhibit assumes 25% of the rooftops of the expected number of townhouses on Block D provide outdoor amenity space. Actual townhome layout, number of units and amount of rooftop amenity space is subject to change at time of Preliminary Site Plan.

4 - New Road A proposed to be located on outlot with no open space requirement.

5 - At-grade utilities may be provided within Block E and/or southern Block C open space. Location and screening to be determined at the time Preliminary Site Plan.

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OVERALL OPEN SPACE PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=50'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C305
110149

P:\FX\Projects\14007\01100\110149 Block B Prelim DSUP\C305 OVERALL OPEN SPACE PLAN.dwg, 10/20/2020 12:34:06 PM, _AutoCAD PDF (General Documentation).pc3

AREA DISTURBED:1.81 AC OR 78,800 SF

BUILDING CODE ANALYSIS BUILDING B	
USE:	MIXED USE (RES. GARAGE, RETAIL, RES. AMENITIES)
USE GROUP:	R-2, S-2, M, A, B
TYPE OF CONSTRUCTION:	IIIA OVER IA
NUMBER OF STORIES:	7 STORIES (5 STORIES OVER 1 STORY PODIUM)
BUILDING HEIGHT:	85.0 FT
FIRE SUPRESSION/DETECTION:	FULLY SPRINKLERED, NFPA13

Virginia State Grid North (NAD 83/93)

TM #025.03-02-08
PROTESTANT EPISCOPAL THEOLOGICAL SEMINARY IN VIRGINIA
INST #06003328I
ZONED: I

TM #025.03-02-09
FIRST BAPTIST OF ALEXANDRIA ALLEGHANY FOUNDATION INC
INST #120013973
ZONED: I

TM #025.03-02-10
FIRST BAPTIST OF ALEXANDRIA ALLEGHANY FOUNDATION INC
INST #120013973
ZONED: I

TM #025.03-02-10
TONYS CORNER LLC
INST #110012732
ZONED: I

EX. FIRE HYDRANT

CALVERT STREET
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
EX. WATER

PROP. FIRE DEPARTMENT CONNECTION

PROP. FIRE SERVICE
PROP. DOMESTIC SERVICE

BLOCK B
HEIGHT = 75'/90'
62,590 SF
1.43 Ac.

BLOCK D
(NOT INCLUDED IN THIS PLAN)

OAKVILLE STREET
54' PUBLIC RIGHT-OF-WAY
PROP. WATER

RICHMOND HIGHWAY
VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
EX. WATER

PROP. FIRE DEPARTMENT CONNECTION
PROP. FH
PROP. WATER

PROP. WATER
PROP. FIRE HYDRANT

SWANN AVENUE
80.5' PUBLIC RIGHT-OF-WAY

EX. PEDESTRIAN SIGNAL (TO REMAIN)
EX. TRAFFIC SIGNAL (TO REMAIN)

WATER (BY OTHERS)

BLOCK C
(NOT INCLUDED IN THIS PLAN)

BLOCK A2
(NOT INCLUDED IN THIS PLAN)

EX. BRT STOP

EX. 12" SAN

LEGEND

- : PROPOSED R.O.W.
- : BUILDING ENTRANCE
- FH : FIRE HYDRANT
- FDC : PROPOSED FIRE DEPARTMENT CONNECTION
- : EX. FIRE HYDRANT
- : FIRE TRUCK ACCESS ENVELOPE

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

APPROVED
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9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

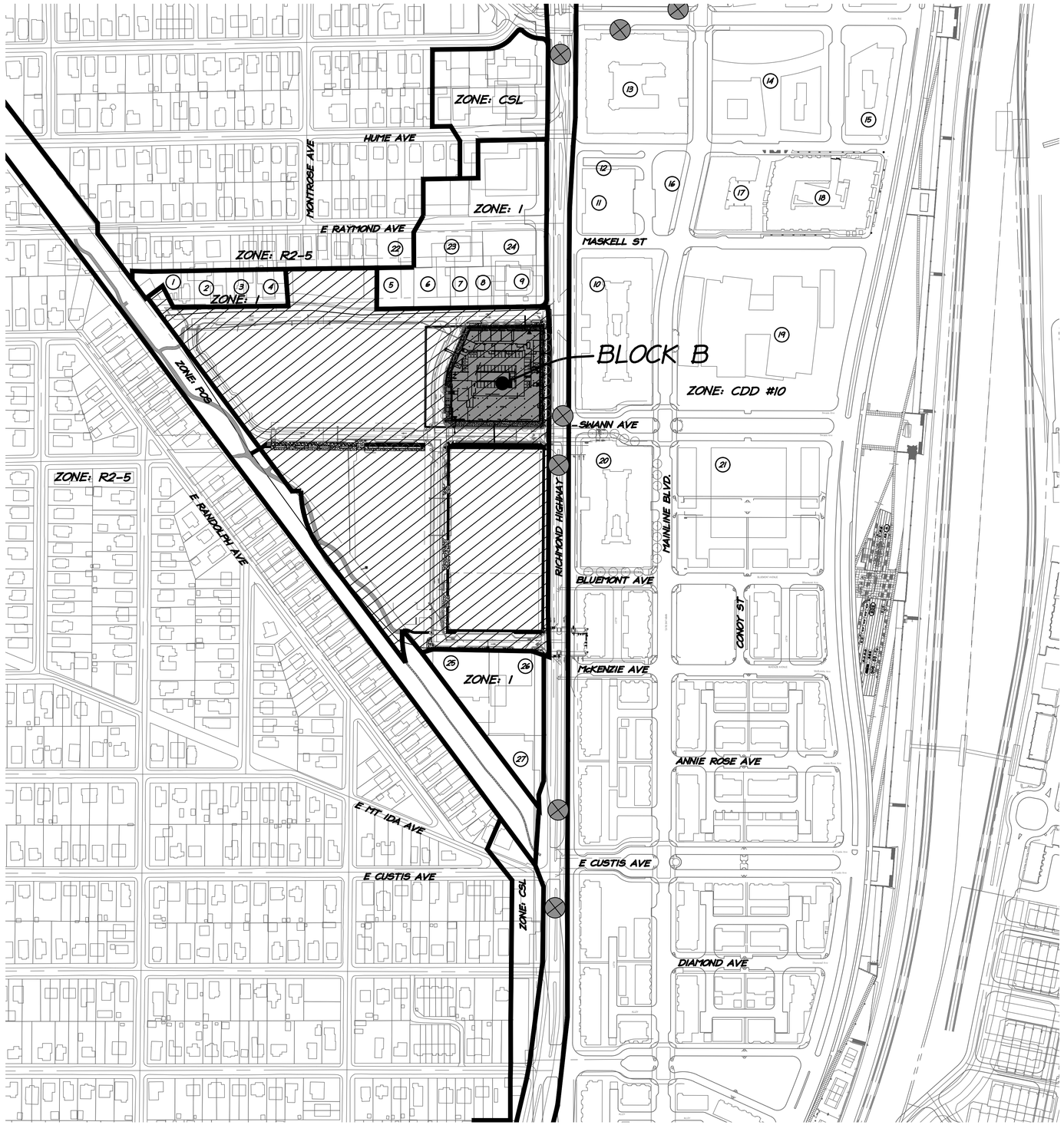
COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

FIRE SAFETY PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C400
1101149

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Virginia State Grid North (NAD 83/93)

LEGEND

- SITE
- (17) OWNER INFORMATION NUMBER
- BUS STOP (BRT)
- PROPERTY LINE
- STREET CENTER LINE
- ZONING LINE

OWNERSHIP INFORMATION

1. 300 CALVERT STREET LLC
   300 CALVERT AVE E
   USE: GENERAL COMMERCIAL
   ZONE: I
2. MALEY ROBERT C III OR GINA
   304 CALVERT AVE
   USE: GENERAL COMMERCIAL
   ZONE: I
3. BRASWELL HARRY A OR SUE B
   308 CALVERT AVE
   USE: OFFICE/COMMERCIAL WAREHOUSE
   ZONE: I
4. BRASWELL HARRY A OR SUE B
   312 CALVERT AVE
   USE: OFFICE/COMMERCIAL WAREHOUSE
   ZONE: I
5. 410-420 CALVERT AVENUE LLC
   410 CALVERT AVE
   USE: OFFICE COMMERCIAL WAREHOUSE
   ZONE: I
6. 410-420 CALVERT AVENUE LLC
   420 CALVERT AVE
   USE: OFFICE COMMERCIAL WAREHOUSE
   ZONE: I
7. FIRST BAPTIST OF ALEXANDRIA FOUNDATION INC
   434 CALVERT AVE
   USE: VACANT LANE-INDUSTRIAL
   ZONE: I
8. FIRST BAPTIST OF ALEXANDRIA FOUNDATION INC
   446 CALVERT AVE
   USE: OFFICE/COMMERCIAL WAREHOUSE
   ZONE: I
9. TONYS CORNER LLC
   2700 JEFFERSON DAVIS HY
   USE: VACANT LAND COMMERCIAL
   ZONE: I
10. POTOMAC YARD DEVELOPMENT LLC
    2600 MAIN LINE BV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
11. STATION AT POTOMAC YARD CONDOMINIUM
    2801 JEFFERSON DAVIS HY
    USE: CONDO MASTER CARDS
    ZONE: CDD #10
12. LBG PARCEL H LLC
    601 SEATON AV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
13. NOTCH 8 RESIDENTIAL LLC
    2900 MAIN LINE BV
    USE: MED RISE ELEV (4-6S)
    ZONE: CDD#10
14. LBG PARCEL E LLC
    2901 MAIN LINE BV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
15. LBG PARCEL B LLC
    2900 POTOMAC AV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
16. POTOMAC YARD HOMEOWNERS ASSOCIATION INC
    2802 MAIN LINE BV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
17. GATEWAY RESIDENCES AT EXCHANGE LLC
    701 SEATON AV
    USE: MED RISE ELEV (4-6S)
    ZONE: CDD #10
18. GATEWAY RESIDENCES AT EXCHANGE LLC
    731 SEATON AV
    USE: MED RISE ELEV (4-6S)
    ZONE: CDD #10
19. POTOMAC YARD DEVELOPMENT LLC
    2601 MAIN LINE BV
    USE: VACANT LAND COMMERCIAL
    ZONE: CDD #10
20. POTOMAC YARD APARTMENTS LLC
    2500 MAIN LINE BV
    USE: MED RISE ELEV (4-6S)
    ZONE: CDD #10
21. POTOMAC YARD DEVELOPMENT LLC
    MAIN LINE BV
    USE: VACANT LAND-RESID
    ZONE: CDD #10
22. POTOMAC FLATS CONDOMINIUM
    409 E RAYMOND AV
    USE: CONDO MASTER CARDS
    ZONE: R 2-5
23. SKINKER THOMAS C AND MARJORIE B TR
    415 E RAYMOND AV
    USE: OFFICE/COMMERCIAL WAREHOUS
    ZONE: I
24. TONYS CORNER LLC
    2706 JEFFERSON DAVIS HY
    USE: SUB-PARCEL
    ZONE: I
25. ALEXANDRIA DEPOT INC
    405 FANNON ST
    USE: OFFICE/COMMERCIAL WAREHOUSE
    ZONE: I
26. FANNON FRANCIS H III FEENEY MARY
    2320 JEFFERSON DAVIS HY
    USE: REPAIR SERVICES
    ZONE: I

NOTE:
1.) TRANSIT STOPS FOR THE BRT ARE LOCATED IN THE MIDDLE OF ROUTE 1.

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

APPROVED
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COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

CONTEXTUAL PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP

THE CITY OF ALEXANDRIA, VIRGINIA

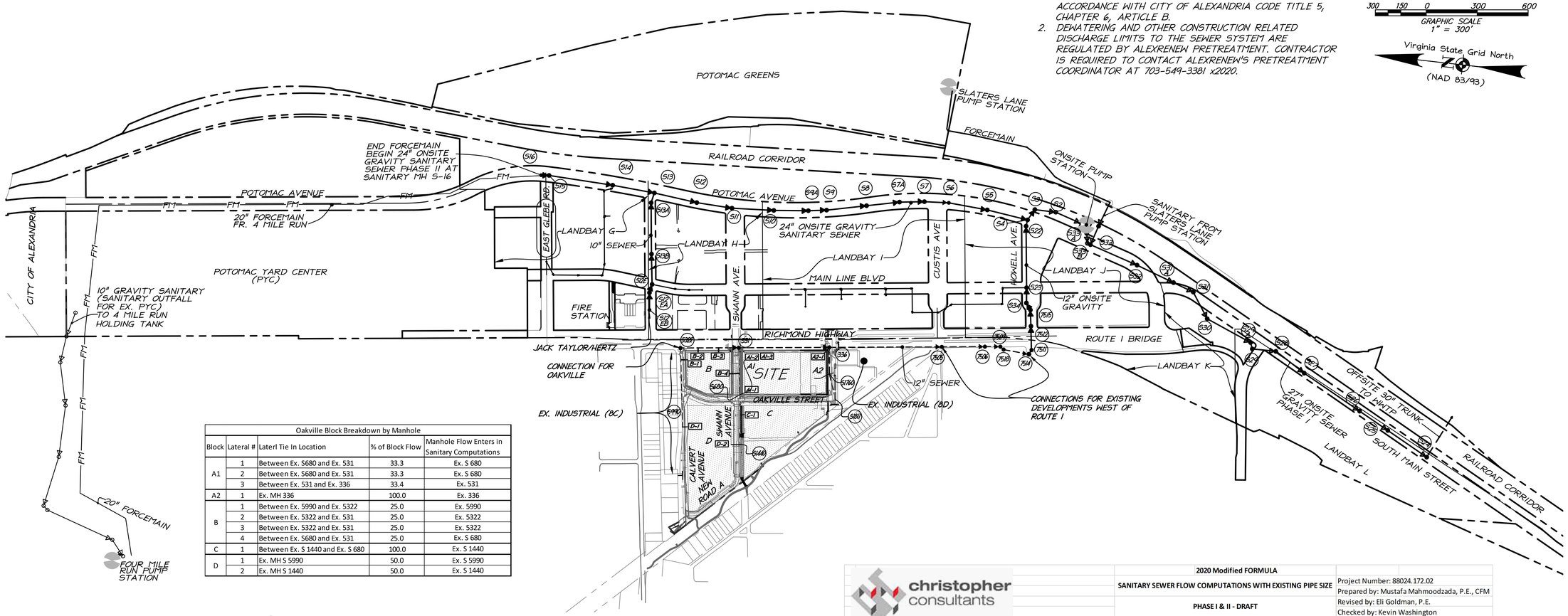
PROJECT NO:14007.011.00
SCALE: 1"=150'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C500
110149

P:\PX\Projects\14007\01100\110149 Block B Prelim DSUP\C500 CONTEXTUAL PLAN.dwg, 10/20/2020 12:35:43 PM, AutoCAD PDF (General Documentation).pc3

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 703-549-3381 x2020.

300 150 0 300 600
GRAPHIC SCALE
1" = 300'

Virginia State Grid North
(NAD 83/93)



Oakville Block Breakdown by Manhole				
Block	Lateral #	Laterl Tie In Location	% of Block Flow	Manhole Flow Enters in Sanitary Computations
A1	1	Between Ex. 5680 and Ex. 531	33.3	Ex. S 680
	2	Between Ex. 5680 and Ex. 531	33.3	Ex. S 680
	3	Between Ex. 531 and Ex. 336	33.4	Ex. 531
A2	1	Ex. MH 336	100.0	Ex. 336
B	1	Between Ex. 5990 and Ex. 5322	25.0	Ex. 5990
	2	Between Ex. 5322 and Ex. 531	25.0	Ex. 5322
	3	Between Ex. 5322 and Ex. 531	25.0	Ex. 5322
	4	Between Ex. 5680 and Ex. 531	25.0	Ex. S 680
C	1	Between Ex. S 1440 and Ex. S 680	100.0	Ex. S 1440
D	1	Ex. MH S 5990	50.0	Ex. S 5990
	2	Ex. MH S 1440	50.0	Ex. S 1440

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OAKVILLE TRIANGLE

SANITARY FLOW CALCULATIONS - DRAFT MODIFIED FORMULA

BLOCKS	BUILDING GFA	OFFICE SANITARY FLOW	OFFICE S.F. (GROSS)	RESIDENTIAL MULTI-FAMILY	MULTI-FAMILY HOUSING UNITS	RESIDENTIAL TOWNHOUSE	TOWNHOUSE UNITS**	RETAIL SANITARY FLOW	RETAIL S.F. (GROSS)	TOTAL PROPOSED SANITARY FLOW (GPD)		
A1	450,000	200 GPD/1,000 S.F.	0	300 GPD/UNIT	324	350 GPD/UNIT	0	200 GPD/1,000 S.F.	30,000	103,200		0.38
A2	96,256	200 GPD/1,000 S.F.	96256	300 GPD/UNIT	0	350 GPD/UNIT	0	200 GPD/1,000 S.F.	0	19,251		0.07
B	335,000	200 GPD/1,000 S.F.	0	300 GPD/UNIT	252	350 GPD/UNIT	0	200 GPD/1,000 S.F.	15,000	78,300		0.29
C	220,000	200 GPD/1,000 S.F.	0	300 GPD/UNIT	220	350 GPD/UNIT	0	200 GPD/1,000 S.F.	0	66,000		0.24
D	250,000	200 GPD/1,000 S.F.	0	300 GPD/UNIT	0	350 GPD/UNIT	73	200 GPD/1,000 S.F.	0	25,550		0.09
	1,131,256		96,256		576		73		45,000	226,301	PHASE I ADF	
	220,000		0		220		0		0	66,000	PHASE II ADF	
	1,351,256		96,256		796		73		45,000	292,301	TOTAL ADF	

PEAK FLOW CALCULATIONS BASED ON CITY'S MEMO TO INDUSTRY 06-14	
PEAKING FACTOR	2.5
PHASE I PEAK FLOW RATE (MGD)	0.57
PHASE II PEAK FLOW RATE (MGD)	0.17
TOTAL PEAK FLOW RATE (MGD)	0.73

LOW FLOW FIXTURES CALCULATIONS	
LFF FACTOR	35%
PHASE I PEAK FLOW REDUCTION (MGD)	0.08
PHASE II PEAK FLOW REDUCTION (MGD)	0.02
TOTAL PEAK FLOW REDUCTION (MGD)	0.10

ULTIMATE BUILD-OUT FLOWS (W/ 2.5 PEAKING FACTOR)	
PHASE I PEAK FLOW RATE (MGD)	0.49
PHASE II PEAK FLOW RATE (MGD)	0.14
TOTAL PEAK FLOW RATE (MGD)	0.63

PEAKING FACTOR	4.0
PHASE I PEAK FLOW RATE (MGD)	0.91
PHASE II PEAK FLOW RATE (MGD)	0.26
TOTAL PEAK FLOW RATE (MGD)	1.17

ULTIMATE BUILD-OUT FLOWS (W/ 4.0 PEAKING FACTOR)	
PHASE I PEAK FLOW RATE (MGD)	0.83
PHASE II PEAK FLOW RATE (MGD)	0.24
TOTAL PEAK FLOW RATE (MGD)	1.07

PHASE I
PHASE II

SANITARY SEWER STRUCTURE DATA

SAN MH 7505
TOP=37.00
IN=27.28 8" PVC FR W
IN=27.20 12" DIP FR 336
OUT=27.10 14" DIP TO 7506

SAN MH 7506
TOP=37.86
IN=32.16 FR W
IN=25.31 12" DIP FR 7505
OUT=25.26 8" DIP TO 7509

SAN MH 7509
TOP=38.79
IN=24.94 FR 7510
IN=24.99 8" DIP FR 7506
OUT=24.69 12" RCP TO 7518

SAN MH 7510
TOP=39.12
IN=28.22 FR W
IN=28.32 FR S
OUT=28.12 TO 7506

SAN MH 7511
TOP=38.76
IN=21.66 12" PVC FR 7514
OUT=21.56 12" PVC TO 7512

SAN MH 7512
TOP=39.76
IN=20.65 12" PVC FR 7515
OUT=20.57 12" PVC TO 7511

SAN MH 7514
TOP=37.40
IN=22.90 12" RCP FR 7518
OUT=22.80 12" PVC TO 7511

SAN MH 7515
TOP=40.26
IN=20.40 12" PVC FR 7512
OUT=20.30 12" PVC TO 7516

SAN MH 7518
TOP=38.48
IN=24.28 12" RCP FR 7509
OUT=24.00 12" RCP TO 7514

SAN MH 9309 (534)
TOP=41.02
IN=20.07 12" PVC FR 7515
OUT=19.91 12" PVC TO 9310

SAN MH 9310 (523)
TOP=43.17
IN=19.25 12" PVC FR 9309
IN=19.24 10" PVC FR 524
OUT=19.20 12" PVC TO 10385

SAN MH 10383 (52)
TOP=46.29
IN=13.29 12" PVC FR 10384
OUT=13.19 12" PVC TO S

SAN MH 10384 (53)
TOP=45.33
IN=13.83 12" PVC FR 54
OUT=13.73 12" PVC TO 10383

SAN MH 10385 (522)
TOP=44.59
IN=17.32 12" PVC FR 9310
OUT=17.30 12" PVC TO 54

NOTES:
1. CALCULATIONS SHOWN ARE PRELIMINARY AND WILL BE FURTHER REFINED AS THE DESIGN PROGRESSES.
2. SOME INVERTS SHOWN ARE BASED ON DESIGN PLANS AND WILL NEED TO BE FIELD VERIFIED PRIOR TO FINALIZING COMPUTATIONS.
3. REFER TO SHEET C203 AND THIS SHEET FOR SANITARY SEWER AS-BUILT DATA. ADDITIONAL AS-BUILT INFORMATION WAS TAKEN FROM THE POTOMAC YARD-OFFSITE SANITARY TRUNK SEWER (30") AND THE POTOMAC YARD ONSITE SANITARY SEWER COLLECTION SYSTEM PHASE I (27").

christopher consultants

2020 Modified FORMULA

SANITARY SEWER FLOW COMPUTATIONS WITH EXISTING PIPE SIZE

PHASE I & II - DRAFT

Project Number: 88024.172.02
Prepared by: Mustafa Mahmoodzada, P.E., CFM
Revised by: Eli Goldman, P.E.
Checked by: Kevin Washington
Date Prepared: 4/16/2020, rev 10/20/2020

		WITH STANDARD WASTEWATER FLOW RATES			ULTIMATE BUILD-OUT FLOWS	
	FLOWS FROM	TO MANHOLE NUMBER	AVERAGE DAILY FLOW RATE (MGD)	PEAK FLOW RATE (MGD)	35% ADF REDUCTION	ULTIMATE BUILD-OUT FLOWS (MGD)
1	FOUR MILE RUN PUMP STATION	S16	N/A	4.000	N/A	4.000
2	POTOMAC AVENUE REDEVELOPMENT - PHASE I & II PEAKED AT 2.5 -LLF ELIGIBLE	S16	2.192	5.480	0.767	4.713
3	LANDBAY G - PEAKED AT 2.5	S14	0.454	1.135	N/A	1.135
4	FIRE STATION - PEAKED AT 2.5	S12E/S13	0.019	0.060	N/A	0.060
5	LANDBAY H - PEAKED AT 2.5	S13	0.370	0.940	N/A	0.940
6	JACK TAYLOR/HERTZ (CDD #7) - PEAKED AT 2.5 - LLF ELIGIBLE	S16	0.200	0.500	0.070	0.430
7	LANDBAY I - PEAKED AT 2.5	S8	0.100	0.240	N/A	0.240
8	LANDBAY J - PEAKED AT 2.5	S23/S4	0.100	0.240	N/A	0.240
9	ROUTE 1 N OAKVILLE - PEAKED AT 2.5 - LLF ELIGIBLE	S16	0.210	0.525	0.074	0.452
10	OAKVILLE TRIANGLE (CDD #24) - PEAKED AT 2.5 - LLF ELIGIBLE	5322/S4	0.292	0.730	0.100	0.630
11	RIVER ROAD PUMPING STATION - PEAKED AT 3	7505/S4	0.170	0.520	N/A	0.520
12	SLATER LANE - PEAKED AT 3	S33	0.250	0.750	N/A	0.750
13	LANDBAY C - PEAKED AT 2.5	S33	0.003	0.010	N/A	0.010
14	LANDBAY L - PEAKED AT 2.5	S27	0.120	0.310	N/A	0.310
15	BRADDOCK METRO NEIGHBORHOOD PLAN - PEAKED AT 3 - LFF ELIGIBLE	SHAFT 20	0.840	2.520	0.294	2.226
16	BRADDOCK FIELDS - PEAKED AT 3 - LFF ELIGIBLE	SHAFT 20	0.014	0.042	0.005	0.037
17	EXISTING DEVELOPMENT - PEAKED AT 3 - LFF ELIGIBLE	SHAFT 17	0.178	0.534	N/A	0.534
18	SEPERATION COMPLETED BY DECEMBER 2019 - PEAKED AT 3	SHAFT 17	0.183	0.549	N/A	0.549
19	REMAINING SEPERATION - PEAKED AT 3	SHAFT 13	0.368	1.104	N/A	1.104
	TOTAL			**20.19**		**18.88**

SANITARY OUTFALL NARRATIVE:

PER MEMO TO INDUSTRY 06-14, THIS OUTFALL ANALYSIS SHALL ANALYZE THE SEWER SYSTEM UNTIL THE SEWER TIES TO A 24" OR LARGER PIPE. THE OAKVILLE SITE WILL TIE INTO THE EXISTING 12" SEWER MAIN RUNNING NORTH TO SOUTH ALONG ROUTE 1. FROM THE INTERSECTION OF ROUTE 1 AND EAST HOWELL AVENUE, THE SEWER GOES EAST UNTIL IT CONNECTS TO THE 24" SEWER IN POTOMAC AVENUE. REFER TO THE 'OAKVILLE BLOCK BREAKDOWN BY MANHOLE' CHART ON THIS SHEET FOR DISTRIBUTION OF BLOCK FLOWS TO THE ON-SITE COLLECTOR SEWER.

BASED ON THIS ANALYSIS, IT IS DETERMINED THAT TWO SANITARY SEWER PIPE RUNS WILL NEED TO BE UPGRADED. PIPE RUN FROM 7506 TO 7509 WILL BE UPGRADED TO A 12" PVC PIPE AND PIPE RUN 7512 - 7515 WILL BE UPGRADED TO A 16" PVC PIPE. THIS UPGRADE WILL BE DESIGNED AND CONSTRUCTED WITH THIS PLAN FOR THE OAKVILLE DEVELOPMENT. FOR INFORMATIONAL PURPOSES ONLY, THE ANALYSIS IS CONTINUED FOR THE 24" PIPE IN POTOMAC AVENUE TO THE 27" ON-SITE SANITARY SEWER AND TO THE 30" POTOMAC YARD OFF-SITE TRUNK SEWER. REFER TO SHEET C603 AND C604 FOR THIS ANALYSIS.

BASED ON THIS ANALYSIS COMPLETED, IT IS OUR ENGINEERING OPINION THAT THIS SEWER HAS AN ADEQUATE OUTFALL.

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
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COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

SANITARY SEWER OUTFALL ANALYSIS

PROJECT NO:14007.011.00
SCALE: 1"=300'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C600
1101149

P:\FX\Projects\14007\01100\110149 Block B Prelim DSUP\C600 SANITARY SEWER OUTFALL ANALYSIS.dwg, 10/20/2020 12:36:41 PM, _AutoCAD PDF (General Documentation).pc3

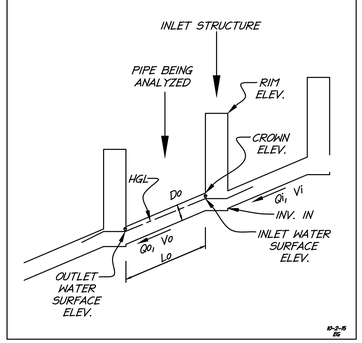
SANITARY SEWER PIPE COMPUTATIONS
(ULTIMATE CONDITION)

On-site Gravity Sewers															
FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions / Comments	Flow Increase (MGD)
5990	5322	40.99	37.92	465	0.66	8	PVC	0.010	1.29	0.83	0.26	0.168	4.18	Ex. North of Calvert (0.05), 1/2 Block D (0.045) and 1/4 Block B (0.0725)	0.168
S1440	S680	41.90	38.98	292	1.00	10	CLAY	0.013	2.38	1.54	0.44	0.285		Block C (0.24) and 1/2 Block D (0.045)	0.285
S680	S531	38.88	35.52	277.4	1.21	10	CLAY	0.013	2.38	1.54	0.95	0.611	3.79	2/3 Block A1 (0.253) and 1/4 Block B (0.0725)	0.326
S1811	S1760	38.1	37.13	153.2	0.63	10	RCP	0.015	1.49	0.96	0.19	0.12	2.34	Existing South of Fannon (0.03)	0.12
S1760	S336	37.03	30.78	156.7	3.99	10	LINED	0.010	5.63	3.64	0.19	0.12	6.14		
Oakville Off-Site Sewer - S31 to S4 (Route 1 --> E. Howell --> Potomac Ave)															
FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions / Comments	Flow Increase (MGD)
5322	531	38.07	35.02	343.2	0.89	10	DIP	0.011	2.42	1.56	0.48	0.313	3.82	1/2 Block B (0.145) + Flow from 5990	0.145
531	336	34.79	30.03	533.70	0.89	10	DIP	0.011	2.42	1.56	1.63	1.051	4.48	1/3 Block A1 (0.127) + Flow from S680	0.127
336	7505	29.98	27.20	658.20	0.42	12	DIP	0.011	2.73	1.76	1.92	1.241	3.52	Block A2 (0.07) + Flow from S1760	0.07
7505	7506	27.10	25.31	254.00	0.70	14	DIP	0.011	5.23	3.38	2.72	1.761	4.73	Development west of RT 1	0.52
7506	7509	25.26	24.99	95.20	0.28	8	DIP	0.011	0.82	0.53	2.72	1.761	2.22		
7509	7518	24.69	24.28	26.00	1.58	12	CONC.	0.015	3.88	2.51	2.72	1.761	5.15		
7518	7514	24.00	22.90	151.00	0.73	12	CONC.	0.015	2.84	1.84	2.72	1.761	3.75		
7514	7511	22.80	21.66	29.50	3.86	12	PVC	0.010	9.10	5.88	2.72	1.761	10.46		
7511	7512	21.56	20.65	138.20	0.66	12	PVC	0.010	3.76	2.43	2.72	1.761	5.39		
7512	7515	20.57	20.40	97.60	0.17	12	PVC	0.010	2.05	1.32	2.72	1.761	2.46		
7515	S34	20.30	20.07	47.00	0.49	12	PVC	0.010	3.24	2.09	2.72	1.761	4.13		
S34	S23	19.91	19.25	92.00	0.72	12	PVC	0.010	3.92	2.53	2.72	1.761	4.99		
S23	S22	19.20	17.32	360.90	0.52	12	PVC	0.010	3.34	2.16	2.91	1.881	4.26	85 Townhouse units from LB I and J	0.12
S22	S4	17.30	17.11	38.00	0.50	12	PVC	0.010	3.27	2.11	2.91	1.881	4.17		
Note: All calcualted capacities are at full flow capacity, when the pipe is approximately 93% full.															

SANITARY SEWER HGL COMPUTATIONS
(ULTIMATE CONDITION)

	Outlet						JUNCTION LOSS												Inlet			
	Water																	Final	Water	Crown	Surcharge	Rim
Inlet	Surf Elev	Do	Qo	Lo	Sfo	Hf	Vo	Ho	Qi	Vi	QiVi	Vi^2	Hi	Angle	Ha	Ht	1.3Ht	0.5Ht	H	Surf Elev	Elev	Depth	Elev
Str.	(ft)	(in)	(cfs)	(ft)	(%)	(ft)	(fps)	(ft)	(cfs)	(fps)		2g	(ft)	(deg)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
Oakville Off-Site Sewer (Route 1 -> Howell -> Potomac)																							
S22	17.91	12	2.91	38.00	0.39	0.15	4.2	0.07	2.91	4.3	12.40	0.28	0.10	14	0.03	0.19	0.00	0.10	0.25	18.16	18.30	0.14	44.59
S23	18.16	12	2.91	360.90	0.39	1.42	4.3	0.07	2.72	5.0	13.60	0.39	0.14	0	0.00	0.21	0.00	0.10	1.53	19.68	20.20	0.52	43.17
S34	20.05	12	2.72	92.00	0.35	0.32	5.0	0.10	2.72	4.1	11.25	0.26	0.09	30	0.07	0.26	0.00	0.13	0.45	20.50	20.91	0.41	41.02
7515	20.87	12	2.72	47.00	0.35	0.16	4.1	0.07	2.72	2.5	6.70	0.09	0.03	30	0.03	0.13	0.00	0.06	0.23	21.10	21.33	0.23	40.26
7512	21.20	12	2.72	97.60	0.35	0.34	2.5	0.02	2.72	5.4	14.69	0.45	0.16	0	0.00	0.18	0.00	0.09	0.43	21.63	21.67	0.04	39.76
7511	21.63	12	2.72	138.20	0.35	0.48	5.4	0.11	2.72	10.5	28.50	1.70	0.59	33	0.53	1.23	0.00	0.62	1.10	22.72	22.56	-0.16	38.76
7514	22.72	12	2.72	29.50	0.35	0.10	10.5	0.42	2.72	3.8	10.22	0.22	0.08	66	0.13	0.63	0.00	0.31	0.42	23.14	23.80	0.66	37.40
7518	23.70	12	2.72	151.36	0.35	0.52	3.8	0.05	2.72	5.2	14.03	0.41	0.14	33	0.13	0.33	0.00	0.16	0.69	24.39	24.98	0.59	38.48
7509	24.81	8	2.72	26.00	3.01	0.78	5.2	0.10	2.72	2.2	6.05	0.08	0.03	0	0.00	0.13	0.00	0.06	0.85	25.66	25.69	0.03	38.79
7506	25.92	14	2.72	95.20	0.15	0.14	2.2	0.02	2.72	4.7	12.89	0.35	0.12	0	0.00	0.14	0.00	0.07	0.22	26.14	26.26	0.12	37.86
7505	26.14	12	2.72	254.00	0.35	0.88	4.7	0.09	1.92	3.5	6.76	0.19	0.07	0	0.00	0.15	0.00	0.08	0.96	27.09	28.10	1.01	37.00
336	27.87	10	1.92	658.20	0.45	2.99	3.5	0.05	1.63	4.5	7.29	0.31	0.11	0	0.00	0.16	0.00	0.08	3.07	30.94	30.98	0.04	38.48
531	30.94	10	1.63	533.70	0.33	1.74	4.5	0.08	0.48	3.8	1.85	0.23	0.08	0	0.00	0.16	0.00	0.08	1.82	32.75	35.79	3.04	45.57
5322	35.69	10	0.48	343.20	0.03	0.10	3.8	0.06							0.00	0.06	0.00	0.03	0.13	35.81	39.07	3.26	46.27
Oakville On-Site Sewer																							
5990	38.45	8	0.26	465.00	0.03	0.13	4.8	0.09	0.00	0.0	0.00	0.00	0.00	0	0.00	0.09	0.00	0.04	0.17	38.62	41.72	3.10	45.55
S680	36.05	8	0.96	277.40	0.37	1.04	4.8	0.09						0	0.00	0.09	0.00	0.04	1.08	37.13	39.55	2.42	46.71
S1760	31.45	10	0.19	156.70	0.00	0.01	6.2	0.15	0.45	3.3	1.48	0.17	0.06	20	0.03	0.24	0.00	0.12	0.13	31.58	37.86	6.28	42.63
S1811	37.66	8	0.19	153.20	0.01	0.02	3.3	0.04						0	0.00	0.04	0.00	0.02	0.04	37.71	38.77	1.06	44.81

HGL DIAGRAM
N.T.S.



FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

SANITARY SEWER ANALYSIS (ULTIMATE FLOWS – NO UPGRADES)

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N.T.S
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C601
110149

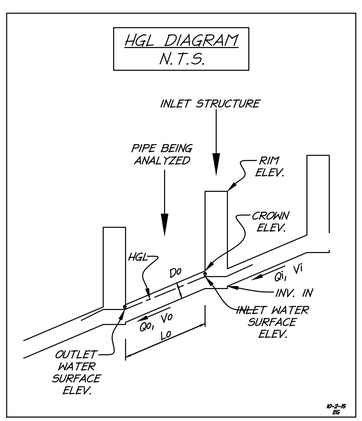
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SANITARY SEWER PIPE COMPUTATIONS
(ULTIMATE CONDITION WITH UPGRADES)

On-site Gravity Sewers														
FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions / Comments	Flow Increase (MGD)
5990	5322	40.99	37.92	465	0.66	8	PVC	0.010	1.29	0.83	0.26	0.168	4.18	Ex. North of Calvert (0.05), 1/2 Block D (0.045) and 1/4 Block B (0.0725)	0.168
S1440	S680	41.90	38.98	292	1.00	10	CLAY	0.013	2.38	1.54	0.44	0.285		Block C (0.24) and 1/2 Block D (0.045)	0.285
S680	S531	38.88	35.52	277.4	1.21	10	CLAY	0.013	2.38	1.54	0.95	0.611	3.79	2/3 Block A1 (0.253) and 1/4 Block B (0.0725)	0.326
S1811	S1760	38.1	37.13	153.2	0.63	10	RCP	0.015	1.49	0.96	0.19	0.12	2.34	Existing South of Fannon (0.03)	0.12
S1760	S336	37.03	30.78	156.7	3.99	10	LINED	0.010	5.63	3.64	0.19	0.12	6.14		
Oakville Off-Site Sewer - S31 to S4 (Route 1 --> E. Howell --> Potomac Ave)															
FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions / Comments	Flow Increase (MGD)
5322	531	38.07	35.02	343.2	0.89	10	DIP	0.011	2.42	1.56	0.48	0.313	3.82	1/2 Block B (0.145) + Flow from 5990	0.145
531	336	34.79	30.03	533.70	0.89	10	DIP	0.011	2.42	1.56	1.63	1.051	4.48	1/3 Block A1 (0.127) + Flow from S680	0.127
336	7505	29.98	27.20	658.20	0.42	12	DIP	0.011	2.73	1.76	1.92	1.241	3.52	Block A2 (0.07) + Flow from S1760	0.07
7505	7506	27.10	25.31	254.00	0.70	14	DIP	0.011	5.23	3.38	2.72	1.761	4.73	Development west of RT 1	0.52
7506	7509	25.26	24.79	95.20	0.49	12	PVC	0.010	3.49	2.26	2.72	1.761	4.6		
7509	7518	24.69	24.28	26.00	1.58	12	CONC.	0.015	3.88	2.51	2.72	1.761	5.15		
7518	7514	24.00	22.90	151.00	0.73	12	RCP	0.015	2.84	1.84	2.72	1.761	3.75		
7514	7511	22.80	21.66	29.50	3.86	12	PVC	0.010	9.10	5.88	2.72	1.761	10.46		
7511	7512	21.56	20.65	138.20	0.66	16	PVC	0.010	3.76	2.43	2.72	1.761	5.39		
7512	7515	20.57	20.40	97.60	0.17	16	PVC	0.010	4.40	2.84	2.72	1.761	3.14		
7515	S34	20.30	20.07	47.00	0.49	12	PVC	0.010	3.24	2.09	2.72	1.761	4.13		
S34	S23	19.91	19.25	92.00	0.72	12	PVC	0.010	3.92	2.53	2.72	1.761	4.99		
S23	S22	19.20	17.32	360.90	0.52	12	PVC	0.010	3.34	2.16	2.91	1.881	4.26	85 Townhouse units from LB I and J	0.12
S22	S4	17.30	17.11	38.00	0.50	12	PVC	0.010	3.27	2.11	2.91	1.881	4.17		
Note: All calcualted capacities are at full flow capacity, when the pipe is approximately 93% full.															

SANITARY SEWER HGL COMPUTATIONS
(ULTIMATE CONDITION WITH UPGRADES)

										JUNCTION LOSS											
Inlet Str.	Outlet Water Surf Elev (ft)	Do (in)	Qo (cfs)	Lo (ft)	Sfo (%)	Hf (ft)	Vo (fps)	Ho (ft)	Qi (cfs)	Vi (fps)	QiVi	Vi^2 2g	Hi (ft)	Angle (deg)	Ha (ft)	Ht (ft)	1.3Ht (ft)	0.5Ht (ft)	Final H (ft)	Inlet Water Surf Elev (ft)	Crown Elev (ft)	Surcharge Depth (ft)	Rim Elev (ft)
Oakville Off-Site Sewer (Route 1 -> Howell -> Potomac)																						
S22	17.91	12	2.91	38.00	0.39	0.15	4.2	0.07	2.91	4.3	12.40	0.28	0.10	14	0.03	0.19	0.00	0.10	0.25	18.16	18.30	0.14	44.59
S23	18.16	12	2.91	360.90	0.39	1.42	4.3	0.07	2.72	5.0	13.60	0.39	0.14	0	0.00	0.21	0.00	0.10	1.53	19.68	20.20	0.52	43.17
S34	20.05	12	2.72	92.00	0.35	0.32	5.0	0.10	2.72	4.1	11.25	0.26	0.09	30	0.07	0.26	0.00	0.13	0.45	20.50	20.91	0.41	41.02
7515	20.87	12	2.72	47.00	0.35	0.16	4.1	0.07	2.72	3.1	8.56	0.15	0.05	30	0.04	0.16	0.00	0.08	0.24	21.11	21.33	0.22	40.26
7512	21.20	12	2.72	97.60	0.35	0.34	3.1	0.04	2.72	5.4	14.69	0.45	0.16	0	0.00	0.20	0.00	0.10	0.44	21.64	21.67	0.03	39.76
7511	21.64	12	2.72	138.20	0.35	0.48	5.4	0.11	2.72	10.5	28.50	1.70	0.59	33	0.53	1.23	0.00	0.62	1.10	22.73	22.56	-0.17	38.76
7514	22.73	12	2.72	29.50	0.35	0.10	10.5	0.42	2.72	3.8	10.22	0.22	0.08	66	0.13	0.63	0.00	0.31	0.42	23.15	23.80	0.65	37.40
7518	23.70	12	2.72	151.36	0.35	0.52	3.8	0.05	2.72	5.2	14.03	0.41	0.14	33	0.13	0.33	0.00	0.16	0.69	24.39	24.98	0.59	38.48
7509	24.81	8	2.72	26.00	3.01	0.78	5.2	0.10	2.72	4.6	12.53	0.33	0.12	0	0.00	0.22	0.00	0.11	0.89	25.70	25.69	-0.01	38.79
7506	25.72	14	2.72	95.20	0.15	0.14	4.6	0.08	2.72	4.7	12.89	0.35	0.12	0	0.00	0.20	0.00	0.10	0.25	25.97	26.26	0.29	37.86
7505	26.11	12	2.72	254.00	0.35	0.88	4.7	0.09	1.92	3.5	6.76	0.19	0.07	0	0.00	0.15	0.00	0.08	0.96	27.07	28.10	1.03	37.00
336	27.87	10	1.92	658.20	0.45	2.99	3.5	0.05	1.63	4.5	7.29	0.31	0.11	0	0.00	0.16	0.00	0.08	3.07	30.94	30.98	0.04	38.48
531	30.94	10	1.63	533.70	0.33	1.74	4.5	0.08	0.48	3.8	1.85	0.23	0.08	0	0.00	0.16	0.00	0.08	1.82	32.75	35.79	3.04	45.57
5322	35.69	10	0.48	343.20	0.03	0.10	3.8	0.06							0.00	0.06	0.00	0.03	0.13	35.81	39.07	3.26	46.27
Oakville On-Site Sewer																							
5990	38.45	8	0.26	465.00	0.03	0.13	4.8	0.09	0.00	0.0	0.00	0.00	0.00	0	0.00	0.09	0.00	0.04	0.17	38.62	41.72	3.10	45.55
S680	36.05	8	0.96	277.40	0.37	1.04	4.8	0.09						0	0.00	0.09	0.00	0.04	1.08	37.13	39.55	2.42	46.71
S1760	31.45	10	0.19	156.70	0.00	0.01	6.2	0.15	0.45	3.3	1.48	0.17	0.06	20	0.03	0.24	0.00	0.12	0.13	31.58	37.86	6.28	42.63
S1811	37.66	8	0.19	153.20	0.01	0.02	3.3	0.04						0	0.00	0.04	0.00	0.02	0.04	37.71	38.77	1.06	44.81



SANITARY SEWER UPGRADE NARRATIVE:

BASED ON THIS SANITARY SEWER ANALYSIS THE FOLLOWING UPGRADES WILL BE NEEDED FOR THE SANITARY SEWER SYSTEM TO ADEQUATELY HANDLE THE FLOWS AT FULL BUILD OUT.

- UPSIZE 8" DIP SEWER TO 12" PVC FROM MANHOLE 7506 TO MANHOLE 7509 (95 L.F.)
- UPSIZE 12" RCP SEWER TO 16" PVC FROM MANHOLE 7512 TO MANHOLE 7515 (98 LF)

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

SANITARY SEWER ANALYSIS (ULTIMATE FLOW - WITH UPGRADES)

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N.T.S
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C602
1101149

P:\FX\Projects\14007\011100\110149 Block B Prelim DSUP\C602 SANITARY SEWER OUTFALL ANALYSIS.dwg, 10/20/2020 12:37:04 PM, AutoCAD PDF (General Documentation).pc3

christopher consultants

2020 MODIFIED ULTIMATE BUILD-OUT FLOWS WITH PIPE UPGRADES

PHASE I & PHASE II - DRAFT

Project Number: 88024.172.02
Prepared by: Mustafa Mahmoodzada, P. E. CFM
Checked by: Kevin M. Washington
Date Prepared: 4/16//2020

	24" Gravity Sewer - S16 to S33 (Potomac Ave)														Use Total Sanitary Sewer Flow Computations (Trunk Line)	
	FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V_{FULL} (ft/s)	Assumptions	Inc
design	S16	S15	27.74	27.15	14.30	4.13	24	PVC	0.011	54.31	35.10	6.18	3.99	17.29	4 mile run, North Potomac Yard Phase I & II, JACK TAYLOR, AND ROUTE 1 N OAKVILLE Note: 5.6 MGD of flow from the new pumping station diverted to the downstream of the existing Potomac Yard Pumping Station via the 20-inch force main extension was removed from the design flow.	9.594
design	S15	S14	27.05	23.83	397.20	0.81	24	PVC	0.011	24.07	15.56	6.18	3.99	7.66		
design	S14	S13	23.58	22.75	251.80	0.33	24	PVC	0.011	15.35	9.92	7.94	5.13	4.89	Landbay G	1.135
design	S13	S12	22.65	21.81	254.20	0.33	24	PVC	0.011	15.37	9.93	9.48	6.13	4.89	Fire Station, Landbay H	1.000
design	S12	S11	21.71	21.02	210.10	0.33	24	PVC	0.011	15.32	9.90	9.48	6.13	4.88		
design	S11	S10	20.92	20.10	246.40	0.33	24	PVC	0.011	15.42	9.97	9.48	6.13	4.91		
design	S10	S9A	20.00	19.33	203.40	0.33	24	PVC	0.011	15.35	9.92	9.48	6.13	4.88		
design	S9A	S9	19.23	18.88	107.80	0.32	24	PVC	0.011	15.24	9.85	9.48	6.13	4.85		
design	S9	S8	18.78	17.99	237.00	0.33	24	PVC	0.011	15.44	9.98	9.48	6.13	4.91		
design	S8	S7A	17.89	17.25	195.00	0.33	24	PVC	0.011	15.32	9.90	9.85	6.37	4.88	Landbay I	0.240
design	S7A	S7	17.15	16.67	146.90	0.33	24	PVC	0.011	15.28	9.88	9.85	6.37	4.86		
design	S7	S6	16.57	16.09	144.00	0.33	24	PVC	0.011	15.44	9.98	9.85	6.37	4.91		
design	S6	S5	15.99	15.23	230.30	0.33	24	PVC	0.011	15.36	9.93	9.85	6.37	4.89		
design	S5	S4	15.13	14.32	244.40	0.33	24	PVC	0.011	15.39	9.95	9.85	6.37	4.90		
design/ as-built	S4	S3	14.22	13.83	74.40	0.52	24	PVC	0.011	19.36	12.51	12.01	7.76	6.16	Landbay J, Oakville Triangle, and River RD	1.390
as-built	S3	S2	13.73	13.29	124.20	0.35	24	PVC	0.011	15.91	10.29	12.01	7.76	5.07		
as-built/design slope	S2	S33A (PUMP)	13.19	12.70	151.90	0.32	24	PVC	0.011	15.19	9.81	12.01	7.76	4.83	On-site pump station, Calculated normal depth = 1.80', Max Flow = 17.89 cfs	
	S33A	S33B	--	--	--	--	24	PVC	0.011	-	-	12.01	7.76		Force Main	
	S33B	S33	--	--	--	--	24	PVC	0.011	-	-	12.01	7.76		Force Main	
	27" Gravity Sewer - S33 to S24 (Potomac Ave)															
	FROM	TO	UPPER INV	LOWER INV	L (FT)	SLOPE (%)	DIA (IN)	MATERIAL	N	CAPACITY (cfs)	CAPACITY (MGD)	DESIGN FLOW (cfs)	DESIGN FLOW (MGD)	V (ft/s)	Assumptions	Inc
as-built	S33	S32	27.23	26.37	300.50	0.29	36	PVC	0.011	42.17	27.26	13.18	8.52	5.97	Slater's lane pump station and Landbay C	0.760
as-built	S32	S31A	26.28	25.56	237.50	0.30	36	PVC	0.011	43.40	28.05	13.18	8.52	6.14		
as-built	S31A	S31	25.45	25.02	133.00	0.32	36	PVC	0.011	44.82	28.97	13.18	8.52	6.34		
as-built	S31	S30	24.89	24.41	173.00	0.28	36	PVC	0.011	41.52	26.84	13.18	8.52	5.87		
as-built	S30	S29A	24.30	23.34	295.00	0.33	36	PVC	0.011	44.97	29.06	13.18	8.52	6.36		
as-built	S29A	S29	23.29	22.60	39.50	1.75	36	PVC	0.011	104.19	67.34	13.18	8.52	14.74		
as-built	S29	S28	22.57	22.08	140.00	0.35	36	PVC	0.011	46.64	30.14	13.18	8.52	6.60		
as-built	S28	S27	21.93	21.14	209.50	0.38	36	PVC	0.011	48.41	31.29	13.18	8.52	6.85		
as-built	S27	S26	21.09	20.10	402.00	0.25	36	PVC	0.011	39.12	25.28	13.66	8.83	5.53	Landbay L	0.310
as-built	S26	S25	19.90	19.33	197.50	0.29	36	PVC	0.011	42.35	27.37	13.66	8.83	5.99		
as-built	S25	S24	19.21	18.28	276.00	0.34	36	PVC	0.011	45.76	29.58	13.66	8.83	6.47		

NOTE: THE OFFSITE IMPROVEMENTS OF POTOMAC YARD PHASE I WILL BE COORDINATED AND IMPLEMENTED BY THE CITY AND ALEXRENEW.

POTOMAC YARD PHASE TWO SANITARY SEWER IMPROVEMENTS NARRATIVE:

IN ACCORDANCE WITH CONDITION 48 FOR PHASE II DEVELOPMENT, A 20-INCH FORCE MAIN EXTENSION SHALL BE DESIGNED AND CONSTRUCTED BY THE APPLICANT FROM THE DOWNSTREAM END OF THE PHASE I 16-INCH FORCE MAIN TO THE EXISTING 27-INCH GRAVITY SEWER DOWNSTREAM OF THE EXISTING PYPS. IN ADDITION, THE APPLICANT SHALL REPURPOSE THE EXISTING FOUR MILE RUN (FMR) PUMP STATION 20-INCH FORCE MAIN TO SERVE NORTH POTOMAC YARD PHASE I AND 2 DEVELOPMENT AND REPURPOSE THE PHASE I 16-INCH FORCE MAIN TO SERVE THE FMR PUMP STATION. THE APPLICANT WILL ALSO UPGRADE THE 27" SEWER TO A 36" AND WILL BE RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION. ANY OFFSETS DUE TO THE APPLICANT WILL BE IN ACCORDANCE WITH THIS CONDITION.

NOTE: THIS NARRATIVE IS INCLUDED FOR INFORMATIONAL PURPOSES ONLY. ALL PROPOSED WORK MENTIONED IN THIS NARRATIVE WILL BE COMPLETED BY OTHERS.

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OFF-SITE SANITARY SEWER ANALYSIS

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N.T.S
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C603
1101149

P:\FX\Projects\14007\011100\110149 Block B Prelim DSUP\C603 OFF-SITE SANITARY SEWER ANALYSIS.dwg, 10/20/2020 12:37:09 PM, AutoCAD PDF (General Documentation).pc3

2020 MODIFIED ULTIMATE BUILD-OUT FLOWS WITH UPGRADES
(HYDRAULIC GRADE LINE (HGL) COMPUTATIONS)

christopher consultants

Ultimate Build-Out Flow - Phase II
Hydraulic Grade Line (HGL) Computations
VDOT Form LD-347

Project Number: 88024.172.02
Prepared by: Mustafa Mahmoodzada, P.E., CFM
Checked by: Kevin Washington
Date Prepared: 10/19/2020

Inlet Str.	Outlet Water Surf Elev (ft)	Do (in)	Qo (cfs)	Lo (ft)	Sfo (%)	Hf (ft)	JUNCTION LOSS Vo (fps)	Ho (ft)	Qi (cfs)	Vi (fps)	QiVi	Vi^2 2g	Hi (ft)	Angle (deg)	Ha (ft)	Ht (ft)	1.3 Ht (ft)	0.5 Ht (ft)	Final H (ft)	Inlet Water Surf Elev (ft)	Rim Elev (ft)	Outlet Pipe Crown Elevation (ft)	Inlet Pipe Crown Elevation (ft)	Delta b/w Outlet WSE & Outlet Pipe Crown (see note 6)	Delta b/w Inlet WSE & Inlet Pipe Crown (see note 7)	Invert In (ft)		surface inflow >20% Y or N	K
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)				
27" Onsite Sewer																													
S25	20.23	36	13.66	276.00	0.02	0.07	6.6	0.17	13.66	6.2	84.29	0.59	0.21	0	0.00	0.38	0.00	0.19	0.26	20.48	39.96	22.00	22.12	1.78	1.64	19.33	19.21	N	0.00
S26	21.73	36	13.66	197.50	0.02	0.05	6.2	0.15	13.66	5.8	78.82	0.52	0.18	0	0.00	0.33	0.00	0.16	0.21	21.94	39.68	22.69	22.89	0.96	0.95	20.10	19.90	N	0.00
S27	22.50	36	13.66	402.00	0.02	0.10	5.8	0.13	13.18	6.9	90.56	0.73	0.26	0	0.00	0.39	0.00	0.19	0.29	22.79	39.51	23.88	23.93	1.38	1.14	21.14	21.09	N	0.00
S28	23.54	36	13.18	209.50	0.02	0.05	6.9	0.18	13.18	6.7	87.66	0.69	0.24	35	0.27	0.69	0.00	0.35	0.39	23.93	38.76	24.72	24.87	1.18	0.94	22.08	21.93	N	0.39
S29	24.48	36	13.18	140.00	0.02	0.03	6.7	0.17	13.18	12.3	161.60	2.33	0.82	70	1.42	2.41	0.00	1.21	1.24	25.72	39.35	25.36	25.39	0.88	-0.33	22.60	22.57	N	0.61
S29A	25.72	36	13.18	39.50	0.02	0.01	12.3	0.58	13.18	6.5	85.55	0.65	0.23	45	0.30	1.12	0.00	0.56	0.57	26.29	38.02	26.08	26.13	0.36	-0.15	23.34	23.29	N	0.47
S30	26.29	36	13.18	295.00	0.02	0.07	6.5	0.16	13.18	6.1	79.75	0.57	0.20	35	0.22	0.58	0.00	0.29	0.36	26.65	36.74	27.09	27.20	0.81	0.56	24.41	24.30	N	0.39
S31	26.81	36	13.18	173.00	0.02	0.04	6.1	0.14	13.18	6.4	84.36	0.64	0.22	40	0.27	0.64	0.00	0.32	0.36	27.17	37.70	27.68	27.81	0.87	0.64	25.02	24.89	N	0.43
S31A	27.42	36	13.18	133.00	0.02	0.03	6.4	0.16	13.18	6.2	81.72	0.60	0.21	0	0.00	0.37	0.00	0.18	0.21	27.63	37.05	28.24	28.35	0.82	0.72	25.56	25.45	N	0.00
S32	27.96	36	13.18	237.50	0.02	0.05	6.2	0.15	13.18	6.1	80.41	0.58	0.20	0	0.00	0.35	0.00	0.18	0.23	28.19	37.62	29.07	29.16	1.11	0.97	26.37	26.28	N	0.00
S33	28.77	36	13.18	300.50	0.02	0.07	6.1	0.14	0.00	0.0	0.00	0.00	0.00	90	0.00	0.14	0.00	0.07	0.14	28.91	33.90	30.02	30.31	1.25	1.40		27.23	N	0.70
24" Onsite Sewer (Scenario 2)																													
S2	14.30	24	12.01	151.90	0.17	0.25	6.0	0.14	12.01	6.3	75.63	0.62	0.22	15	0.12	0.47	0.00	0.24	0.49	14.79	46.29	15.98	15.61	1.68	0.82	13.29	13.19	N	0.19
S3	14.89	24	12.01	151.90	0.17	0.25	6.3	0.15	12.01	7.5	90.52	0.88	0.31	60	0.49	0.96	0.00	0.48	0.73	15.62	45.33	16.05	16.15	1.16	0.53	13.83	13.73	N	0.56
S4	15.62	24	12.01	124.20	0.17	0.21	7.5	0.22	12.01	6.1	73.35	0.58	0.20	70	0.35	0.78	0.00	0.39	0.60	16.22	44.75	16.54	16.64	0.92	0.42	14.32	14.22	N	0.61
S5	16.22	24	12.01	74.40	0.17	0.12	6.1	0.14	9.85	6.1	60.21	0.58	0.20	0	0.00	0.35	0.00	0.17	0.30	16.52	41.95	17.45	17.55	1.23	1.03	15.23	15.13	N	0.00
S6	16.83	24	9.85	244.40	0.11	0.27	6.1	0.14	9.85	6.1	60.21	0.58	0.20	5	0.03	0.38	0.00	0.19	0.47	17.30	43.11	18.31	18.41	1.48	1.11	16.09	15.99	N	0.06
S7	17.69	24	9.85	230.30	0.11	0.26	6.1	0.14	9.85	6.1	60.21	0.58	0.20	5	0.03	0.38	0.00	0.19	0.45	18.14	42.95	18.89	18.99	1.20	0.85	16.67	16.57	N	0.06
S7A	18.27	24	9.85	144.00	0.11	0.16	6.1	0.14	9.85	6.1	60.21	0.58	0.20	5	0.03	0.38	0.00	0.19	0.35	18.62	41.49	19.47	19.57	1.20	0.95	17.25	17.15	N	0.06
S8	18.85	24	9.85	146.90	0.11	0.16	6.1	0.14	9.85	6.1	60.21	0.58	0.20	0	0.00	0.35	0.00	0.17	0.34	19.19	39.54	20.21	20.31	1.36	1.12	17.99	17.89	N	0.00
S9	19.59	24	9.85	195.00	0.11	0.22	6.1	0.14	9.48	6.0	57.19	0.56	0.20	5	0.03	0.38	0.00	0.19	0.41	20.00	35.35	21.10	21.20	1.51	1.20	18.88	18.78	N	0.06
S9A	20.48	24	9.48	237.00	0.10	0.25	6.0	0.14	9.48	6.1	57.94	0.58	0.20	0	0.00	0.34	0.00	0.17	0.42	20.90	36.56	21.55	21.65	1.07	0.75	19.33	19.23	N	0.00
S10	20.93	24	9.48	107.80	0.10	0.11	6.1	0.14	9.48	6.1	57.94	0.58	0.20	5	0.03	0.38	0.00	0.19	0.30	21.23	35.97	22.32	22.42	1.39	1.19	20.10	20.00	N	0.06
S11	21.70	24	9.48	203.40	0.10	0.21	6.1	0.14	9.48	6.1	57.94	0.58	0.20	5	0.03	0.38	0.00	0.19	0.40	22.10	37.48	23.24	23.34	1.54	1.24	21.02	20.92	N	0.06
S12	22.62	24	9.48	246.40	0.10	0.26	6.1	0.14	9.48	6.1	57.94	0.58	0.20	5	0.03	0.38	0.00	0.19	0.45	23.07	36.49	24.03	24.13	1.41	1.06	21.81	21.71	N	0.06
S13	23.41	24	9.48	210.10	0.10	0.22	6.1	0.14	9.48	6.1	57.66	0.57	0.20	0	0.00	0.35	0.00	0.17	0.39	23.80	34.78	24.97	25.07	1.56	1.27	22.75	22.65	N	0.00
S14	24.35	24	9.48	254.20	0.10	0.26	6.1	0.14	7.94	8.7	69.12	1.18	0.41	0	0.00	0.56	0.00	0.28	0.54	24.89	33.90	25.90	25.89	1.55	1.00	23.83	23.58	N	0.00
S15	25.43	24	7.94	251.80	0.07	0.18	8.7	0.29	6.18	14.7	90.85	3.36	1.17	0	0.00	1.47	0.00	0.73	0.92	26.35	35.99	29.11	29.21	3.68	2.86	27.15	27.05	N	0.00
S16	28.75	24	6.18	397.20	0.04	0.18	14.7	0.84	0.00	0.0	0.00	0.00	0.00	0	0.00	0.84	0.00	0.42	0.59	29.34	35.99	29.80		1.05			27.74	N	0.00

Notes:
1. All elevation for the 30" and 27" sewer are from the USGS datum
2. All elevation for all other sewers are from the NAD 83 datum (0.83' below the USGS datum)
3. All capacities shown on the chart are full flow capacities, approximately 93% of the maximum capacity.
4. All information is from as-built plans, design information or GIS data and noted appropriately.
5. Velocity values assumed to be at maximum when the pipe is at full capacity.
6. Column (24) = Column (22) - Column (2). A negative value donates that the water surface elevation is higher than the crown of the pipe.
7. Column (25) = Column (23) - Column (20). A negative value donates that the water surface elevation is higher than the crown of the pipe.

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

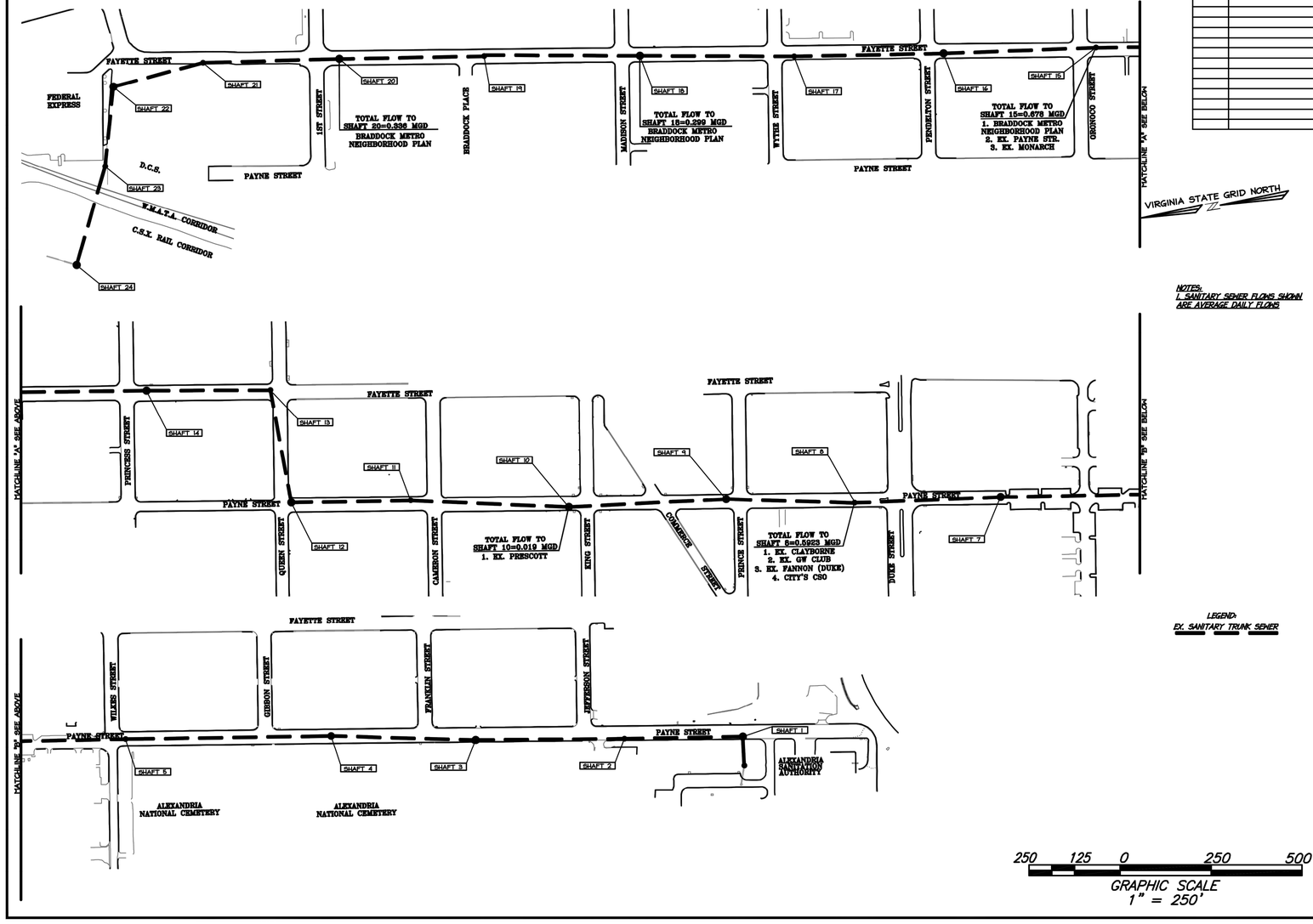
OFF-SITE SANITARY SEWER ANALYSIS

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N.T.S
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C604
1101149

P:\FX\Projects\14007\01100\110149 Block B Prelim DSUP\C603 OFF-SITE SANITARY SEWER ANALYSIS.dwg, 10/20/2020 12:37:12 PM, AutoCAD PDF (General Documentation).pc3

TRUNK SEWER TO WASTEWATER TREATMENT PLANT
(SHAFT 24 - SHAFT 1)



DATE	REVISION

christopher consultants
engineering · surveying · land planning
9900 main street (fourth floor) · fairfax va. 22031-3907
703.273.6820 · fax 703.273.7636

EXISTING 30" OFFSITE SANITARY TRUNK SEWER EXHIBIT 4

POTOMAC VILLAGE
SANITARY ALTERNATIVES
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO: 882496.00
SCALE: 1" = 250'
DATE: OCT. 30, 2009
DESIGN: MAC
DRAWN: MAC
CHECKED:
SHEET No.
1 OF 1
A-832

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

EXISTING 30-INCH SANITARY TRUNK SEWER EXHIBIT

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: N.T.S
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C605
1101149

P:\PX\Projects\14007\01100\110149 Block B Prelim DSUP\C605 EXISTING 30-INCH SANITARY TRUNK EXHIBIT.dwg, 10/20/2020 12:37:19 PM, AutoCAD PDF (General Documentation).pc3

BMP OVERALL APPROACH:

THIS PLAN IS PART OF A BMP MASTER PLAN THAT INCLUDES BLOCK A2, BLOCK B, BLOCK C AND THE INFRASTRUCTURE PLAN, SEE 'CONCEPTUAL BMP NARRATIVE' BELOW FOR MORE INFORMATION.

BMP/SWM TABULATIONS
LIMITS OF DISTURBANCE = 1.81 AC.

EXISTING IMPERVIOUS AREA = 1.68 AC.
EXISTING PERVIOUS AREA = 0.13 AC.

PROPOSED IMPERVIOUS AREA = 1.70 AC.
PROPOSED PERVIOUS AREA = 0.11 AC.

TOTAL PHOSPHORUS REMOVED = 0.93 LBS/YEAR

BMP PRACTICES PROVIDED = STORMWATER PLANTER AND HYDRODYNAMIC SEPARATOR.

BMP NARRATIVE:

THE SITE IS DESIGNED TO UTILIZED STORMWATER PLANTERS, AND HYDRODYNAMIC SEPARATORS TO MEET THE BMP REQUIREMENTS OUTLINED BELOW.

STATE REQUIREMENT:

THIS SITE IS PART OF A BMP MASTER PLAN FOR A PORTION OF THE OAKVILLE TRIANGLE WHICH WILL INCLUDE BLOCK A1, BLOCK A2, BLOCK B, BLOCK C, BLOCK E, AND OUTLOT D. REFER TO BMP MASTER PLAN (DSUP 2020-00024) FOR ALL MASTER PLAN REQUIREMENTS.

MEMO TO INDUSTRY 01-18 REQUIREMENT:

THIS REQUIREMENT WILL BE MET AS A WHOLE FOR THE BMP MASTER PLAN (SEE BMP VRRM DRAINAGE AREA BREAKDOWN ON SHEET C501). THIS PORTION OF THE MASTER PLAN WILL INCLUDE NON-PROPRIETARY PHOSPHORUS REMOVAL CREDIT FOR THE PORTION OF THE BMP TREE WELLS AND PERVIOUS PAVEMENT.

CITY WQVD REQUIREMENT (13-109-E-1):

THIS REQUIREMENT IS FOR THE ENTIRE BMP MASTER PLAN AREA. REFER TO SHEET C200 OF THE BMP MASTER PLAN FOR WQVD CALCULATIONS.

NOTE:
BMP FACILITIES AND LAYOUT SHOWN ON THIS ARE PRELIMINARY AND ARE SUBJECT TO CHANGE.

BMP MASTER PLAN SITE RUNOFF COMPUTATIONS:

PRE-DEVELOPMENT

A = 12.23 ACRES
$C = \frac{(1.05)(0.35) + (11.80)(0.90)}{12.23}$
C = 0.85

T = 5 MINUTES
I_2 = 6.2 INCHES/HOUR
I_{10} = 9.0 INCHES/HOUR

$Q_2 = (0.85)(6.2)(12.23) = 64.45$ CFS
$Q_{10} = (0.85)(9.0)(12.23) = 93.56$ CFS

POST-DEVELOPMENT

A = 12.23 ACRES
$C = \frac{(1.05)(0.35) + (9.99)(0.90)}{12.23}$
C = 0.80

T_C = 5 MINUTES
I_2 = 6.2 INCHES/HOUR
I_{10} = 9.0 INCHES/HOUR

$Q_2 = (0.80)(6.2)(12.23) = 60.66$ CFS
$Q_{10} = (0.80)(9.0)(12.23) = 88.06$ CFS

NET DECREASE IN RUNOFF

Q_2 = 64.45 CFS - 60.66 CFS = 3.79 CFS
Q_{10} = 93.56 CFS - 88.06 CFS = 5.50 CFS

THIS VRRM SPREADHSEET IS BASED ON THE LIMITS OF DISTURBANCE FOR JUST THIS PLAN AND IS SHOWN FOR INFORMATION PURPOSES ONLY!

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

○ 2011 BMP Standards and Specifications ◉ 2013 Draft BMP Standards and Specifications

Project Name:	Oakville - Blocks B
Date:	10/20/2020
Linear Development Project?	No

CLEAR ALL (Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 1.81

Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	0.02
Post-Development TP Load Reduction for Site (lb/yr):	0.78

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, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.13	0.13
Impervious Cover (acres)				1.68	1.68
					1.81

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.11	0.11
Impervious Cover (acres)				1.70	1.70
Area Check	OK.	OK.	OK.	OK.	1.81

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)	0.13	0.11
Weighted Rv(turf)	0.25	0.25
% Managed Turf	7%	6%
Impervious Cover (acres)	1.68	1.68
Rv(impervious)	0.95	0.95
% Impervious	93%	94%
Total Site Area (acres)	**1.81**	**1.79**
Site Rv	**0.90**	**0.91**
Treatment Volume and Nutrient Load		
Pre-ReDevelopment Treatment Volume (acre-ft)	0.1357	0.1353
Pre-ReDevelopment Treatment Volume (cubic feet)	5,911	5,893
Pre-ReDevelopment TP Load (lb/yr)	**3.71**	**3.70**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.05	2.07
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.73

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.11
Weighted Rv (turf)	0.25
% Managed Turf	6%
Impervious Cover (acres)	1.70
Rv(impervious)	0.95
% Impervious	94%
Final Site Area (acres)	**1.81**
Final Post Dev Site Rv	**0.91**
Treatment Volume and Nutrient Load	
Final Post-Development Treatment Volume (acre-ft)	0.1369
Final Post-Development Treatment Volume (cubic feet)	5,962
Final Post-Development TP Load (lb/yr)	**3.75**
Final Post-Development TP Load per acre (lb/acre/yr)	2.07

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.11
Weighted Rv (turf)	0.25
% Managed Turf	6%
ReDev. Impervious Cover (acres)	1.68
Rv(impervious)	0.95
% Impervious	94%
Total ReDev. Site Area (acres)	**1.79**
ReDev Site Rv	**0.91**
Treatment Volume and Nutrient Load	
Post-ReDevelopment Treatment Volume (acre-ft)	0.1353
Post-ReDevelopment Treatment Volume (cubic feet)	5,893
Post-ReDevelopment TP Load (TP) (lb/yr)*	**3.70**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.07
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.74**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.02
Rv(impervious)	0.95
Post-Development Treatment Volume (acre-ft)	0.0016
Post-Development Treatment Volume (cubic feet)	69
Post-Development TP Load (lb/yr)	**0.04**
TP Load Reduction Required for New Impervious Area (lb/yr)	**0.04**

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

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

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

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**0.78**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	26.57	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	26.80

FOR INFORMATIONAL PURPOSES ONLY

WQVD CALCULATIONS

REFER TO SHEET C200 OF THE BMP MASTER PLAN (DSUP 2020-00024) FOR THE WQVD CALCULATIONS

BMP PHASING NARRATIVE

THIS DEVELOPMENT IS BEING CONSTRUCTED IN TWO PHASES:
- PHASE 1 - THE FOLLOWING AREAS WILL BE DESIGNED AND CONSTRUCTED CONCURRENTLY AS PHASE 1: INFRASTRUCTURE, BLOCK A1, BLOCK A2, BLOCK B, NEW ROAD A OUTLOT, BLOCK C OPEN SPACE, BLOCK E.
- PHASE 2 - THE REMAINING PORTION OF THE SITE WILL BE DESIGNED AND CONSTRUCTED AS PHASE 2: BLOCK C RESIDENTIAL BUILDING AND THE OPEN SPACE SOUTH OF THE BUILDING.

NOTE: BLOCK D (TOWNHOUSES) WILL BE DESIGNED BY OTHERS AS A STANDALONE DSUP INDEPENDENT OF ANYTHING BEING COMPLETED IN PHASE 1 OR 2 LISTED ABOVE.

STATE WATER QUALITY COMPLIANCE (VRRM SPREADSHEET): THIS MASTER PLAN WILL SHOW COMPLIANCE FOR BOTH PHASE 1 AND PHASE 2. EACH INDIVIDUAL DSUP FOR EACH PLAN WILL PROVIDE A VRRM SPREADSHEET FOR INFORMATIONAL PURPOSES ONLY.

MEMO TO INDUSTRY 01-18 COMPLIANCE: THIS MASTER PLAN WILL SHOW COMPLIANCE FOR BOTH PHASE 1 AND PHASE 2. THE PHASE 1 MUST PROVIDE THE MINIMUM REQUIRED FOR THAT PHASE TO BE COMPLIANT. AS CURRENTLY DESIGNED, THE REQUIREMENT FOR THE ENTIRE DEVELOPMENT (PHASE 1 AND PHASE 2) IS MET AT THE CONCLUSION OF PHASE 1.

WATER QUALITY VOLUME DEFAULT (WQVD): THIS REQUIREMENT IS ANALYZED BASED ON THE THE MASTER PLAN. ALL IMPERIOUS AREA ON PRIVATE PROPERTY MUST BE TREATED. ANY UNTREATED IMPERVIOUS AREA CAN BE OFF-SET BY IMPERVIOUS AREA TREATED IN THE RIGHT-OF-WAY. A FEE IN LIEU OF CAN BE PAID FOR ANY REMAINING UNTREATED IMPERVIOUS AREA.

MEMO-TO-INDUSTRY 04-14: THE MAXIMUM AMOUNT OF GREEN SIDEWALK INFRASTRUCTURE HAS BEEN PROVIDED BY THE BMP TREE WELLS AND PERMEABLE PAVEMENT SHOWN ON THE MASTER PLAN.

PROJECT SITE RUNOFF COMPUTATIONS:

PRE-DEVELOPMENT

A = 1.81 ACRES

C = 0.86

T = 5 MINUTES
I_2 = 6.2 INCHES/HOUR
I_{10} = 9.0 INCHES/HOUR

$Q_2 = (0.86)(6.2)(1.81) = 9.65$ CFS
$Q_{10} = (0.86)(9.0)(1.81) = 14.01$ CFS

POST-DEVELOPMENT

A = 1.34 ACRES

C = 0.87

T_C = 5 MINUTES
I_2 = 6.2 INCHES/HOUR
I_{10} = 9.0 INCHES/HOUR

$Q_2 = (0.87)(6.2)(1.81) = 9.76$ CFS
$Q_{10} = (0.87)(9.0)(1.81) = 14.17$ CFS

NET DECREASE IN RUNOFF

Q_2 = 9.65 CFS - 9.76 CFS = -0.11 CFS (INCREASED)
Q_{10} = 14.01 CFS - 14.17 CFS = -0.16 CFS (INCREASED)

Project Description
Development (Redevelopment)

Drainage Area	Impervious	Pervious	Total
Site Area (including ROW)	1.70	0.11	1.81
On-Site Treated (excluding ROW)	1.34	0.00	1.34
Off-Site Treated	0.17	0.03	0.20
Total Treated (excluding ROW)	1.34	0.00	1.34
Total Treated (including ROW)	1.51	0.03	1.54

Miscellaneous Information

Total WQV treated yes (no)
Detention on Site yes (no)
Project is within which watershed? FOUR MILE RUN / POTOMAC RIVER
Project Discharges to which body of water? FOUR MILE RUN / POTOMAC RIVER

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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. ____

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

PRELIMINARY BMP COMPUTATIONS

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C700
110149

P:\FX\Projects\14007\011000\110149 Block B Prelim DSUP\C700 PRELIMINARY BMP COMPUTATIONS.dwg, 10/20/2020 12:37:58 PM, _AutoCAD PDF (General Documentation).pc3

THIS VRRM SPREADHSEET IS BASED ON THE LIMITS OF DISTURBANCE FOR JUST THIS PLAN AND IS SHOWN FOR INFORMATION PURPOSES ONLY!

Drainage Area A *(BUILDING B - STORMWATER PLANTERS AND HDS)*

CLEAR BMP AREAS

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)					0.00	0.00
Impervious Cover (acres)				0.76	0.76	0.95
				Total	0.76	

Total Phosphorus Available for Removal in D.A. A (lb/yr): 1.65

Post Development Treatment Volume in D.A. A (ft^3): 2,621

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
2. Rooftop Disconnection (RR)													
2.i. To Stormwater Planter, Urban Bioretention (Spec #9, Appendix A)	40		0.15	0	207	310	517	25	0.00	0.32	0.18	0.15	14.a. MTD - Hydrodynamic
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0		0.61	310	0	2,414	2,414	20	0.15	1.32	0.29	1.17	

Drainage Area B *(BUILDING B - HDS)*

CLEAR BMP AREAS

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)					0.00	0.00
Impervious Cover (acres)				0.58	0.58	0.95
				Total	0.58	

Total Phosphorus Available for Removal in D.A. B (lb/yr): 1.26

Post Development Treatment Volume in D.A. B (ft^3): 2,000

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0		0.58	0	0	2,000	2,000	20	0.00	1.26	0.25	1.00	

Drainage Area C *(TREE WELLS - CALVERT AVENUE)*

CLEAR BMP AREAS

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)				0.01	0.01	0.25
Impervious Cover (acres)				0.07	0.07	0.95
				Total	0.08	

Total Phosphorus Available for Removal in D.A. C (lb/yr): 0.16

Post Development Treatment Volume in D.A. C (ft^3): 250

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.01	0.07	0	100	150	250	25	0.00	0.16	0.09	0.07	

Drainage Area D *(TREE WELLS - SWANN AVENUE)*

CLEAR BMP AREAS

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)				0.02	0.02	0.25
Impervious Cover (acres)				0.10	0.10	0.95
				Total	0.12	

Total Phosphorus Available for Removal in D.A. D (lb/yr): 0.23

Post Development Treatment Volume in D.A. D (ft^3): 363

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists-

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretention #1 or Urban Bioretention (Spec #9)	40	0.02	0.10	0	145	218	363	25	0.00	0.23	0.13	0.10	

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)	0.76	0.58	0.07	0.10	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.76	0.58	0.07	0.10	0.00	OK.
MANAGED TURF AREA (ac)	0.00	0.00	0.01	0.02	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.00	0.00	0.01	0.02	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3): 5,962

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)	207	0	100	145	0	452
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.65	1.26	0.16	0.23	0.00	3.29
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.47	0.25	0.09	0.13	0.00	0.93
TP LOAD REMAINING (lb/yr)	1.17	1.01	0.07	0.10	0.00	2.35
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	1.49	0.00	0.72	1.04	0.00	3.25

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.75
TP LOAD REDUCTION REQUIRED (lb/yr)	0.78
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.93
TP LOAD REMAINING (lb/yr):	2.81
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.16 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	26.80
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	3.25
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	23.55

FOR INFORMATIONAL PURPOSES ONLY

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
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PRELIMINARY BMP COMPUTATIONS

OAKVILLE BLOCK B
PRELIMINARY DSUP
CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C700A
1101149

P:\FX\Projects\14007\011100\110149 Block B Prelim DSUP\C700B PRELIMINARY BMP COMPUTATIONS.dwg, 10/20/2020 12:38:37 PM, AutoCAD PDF (General Documentation).pc3

BMP MASTER PLAN TRACKING CHART

SITE (SEE SHEET C701 FOR SITE BMP MAP AND SHEET C702 FOR OVERALL POST BMP MAP)

Drainage Area Curve Numbers and Runoff Depths*

Curve numbers (CN, CNadj) and runoff depths ($RV_{Developed}$) are computed with and without reduction practices.

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.76
	CN	98	98	98	98

Total Area (acres): 0.76
Runoff Reduction Volume (ft^3): 207

$CN_{(D.A.\ A)}$ = 98

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.47	2.97	4.96
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	2.39	2.89	4.89
Adjusted CN*	97	97	97

**See Notes above*

Drainage Area B		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.58
	CN	98	98	98	98

Total Area (acres): 0.58
Runoff Reduction Volume (ft^3): 0

$CN_{(D.A.\ B)}$ = 98

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.47	2.97	4.96
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	2.47	2.97	4.96
Adjusted CN*	98	98	98

**See Notes above*

Drainage Area C		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.01
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.07
	CN	98	98	98	98

Total Area (acres): 0.08
Runoff Reduction Volume (ft^3): 100

$CN_{(D.A.\ C)}$ = 96

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.26	2.75	4.73
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.91	2.40	4.39
Adjusted CN*	92	92	93

**See Notes above*

Drainage Area D		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.02
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.10
	CN	98	98	98	98

Total Area (acres): 0.12
Runoff Reduction Volume (ft^3): 145

$CN_{(D.A.\ D)}$ = 95

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.16	2.64	4.62
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.82	2.31	4.28
Adjusted CN*	91	91	92

**See Notes above*

BMP VRRM Drainage Area Breakdown / Tracking Chart

Drainage Area 'A' (Block A1)

BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed	TP Removed (nonproprietary)	Notes
2.i. To Stormwater Planter, Urban Bioretention (Spec #9, Appendix A)	0.23	0.23	0.00	0.27	0.27	
14.a. Manufactured Treatment Device-Hydrodynamic	1.60	1.60	0.00	0.74	0	0.23 Acres to (2.i. To Stormwater Planter) in series to (14.a. Manufactured Treatment Device-Hydrodynamic)
Total Treated	**1.83**	**1.83**	**0.00**	**1.01**	**0.27**	
Untreated	0.00	0.00	0.00			
Total	**1.83**	**1.83**	**0.00**			

Drainage Area 'B' (Block A2)

BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed	TP Removed (nonproprietary)	Notes
1.b. Vegetated Roof #2 (Spec #5)	0.20	0.20	0.00	0.26	0.26	
14.a. Manufactured Treatment Device-Hydrodynamic	0.62	0.62	0.00	0.30	0.00	0.2 Acres to (1.b. Vegetated Roof #2 (Sp) in series to (14.a. Manufactured Treatment Device-Hydrodynamic)
Total Treated	**0.82**	**0.82**	**0.00**	**0.56**	**0.26**	
Untreated	0.00					
Total	**0.82**	**0.82**	**0.00**			

Drainage Area 'C' (Block B)

BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed	TP Removed (nonproprietary)	Notes
2.i. To Stormwater Planter, Urban Bioretention (Spec #9, Appendix A)	0.15	0.15	0	0.18	0.18	
14.a. Manufactured Treatment Device-Hydrodynamic	1.19	1.19	0.00	0.54	0.00	
Total Treated	**1.34**	**1.34**	**0.00**	**0.72**	**0.18**	
Untreated	0.00					
Total	1.19	1.34	0.00			

Drainage Area 'D' (Block C)

BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed	TP Removed (nonproprietary)	Notes
14.a. Manufactured Treatment Device-Hydrodynamic	1.09	1.09	0.00	0.47	0.00	
Total Treated	**1.09**	**1.09**	**0.00**	**0.47**	**0.00**	
Untreated	0.00					
Total	**1.09**	**1.09**	**0.00**			
Sub-total Treated (Blocks A, B and C)	**5.08**	**5.08**	**0.00**			
Sub-total Un-Treated (Blocks A, B and C)	**0.00**	**0.00**	**0.00**			

Drainage Area 'E' (ROW and Park Road Outlot)

BMP Device	Total Area Treated	Impervious Area Treated	Pervious Area Treated	TP Removed	TP Removed (nonproprietary)	Notes
BMP Tree Filters - ROW	1.13	1.07	0.06	1.29	1.29	
3.a. Permeable Pavement #1 (Spec #7)	0.08	0.08	0.00	**0.10**	**0.10**	
Total Treated	**1.21**	**1.15**	**0.06**	**1.39**	**1.39**	
Untreated	0.00	0.00	0.00			
Total	1.21	1.15	0.06			
			Grand Total Phosphorus Removed	**4.16**	**2.11**	
			Total Phosphorus Requirement	3.06	1.99	

BMP TREE WELL SEE SHEET C702 FOR OVERALL POST BMP MAP.

Phosphorus Load Reduction Requirements

DA	Area (ac.)	Pre - Imp	Pre - Perv	Post - Imp (2)	Post - Perv	TP Reduction Required	TP Reduction Required with nonproprietary BMPs (1)
BMP Limits	**12.23**	**11.18**	**1.05**	**9.99**	2.24	3.06	1.99

Notes:
(1) Per City's memo-to-industry 01-18, 65% of the total phosphorus removal required by the VRRM must be achieved through
(2) City's WQIF requirement that 100% of the site's impervious area be treated or pay a fee in lieu of ($2/sf) for any untreated

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christopher consultants
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phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

C700A - C700B

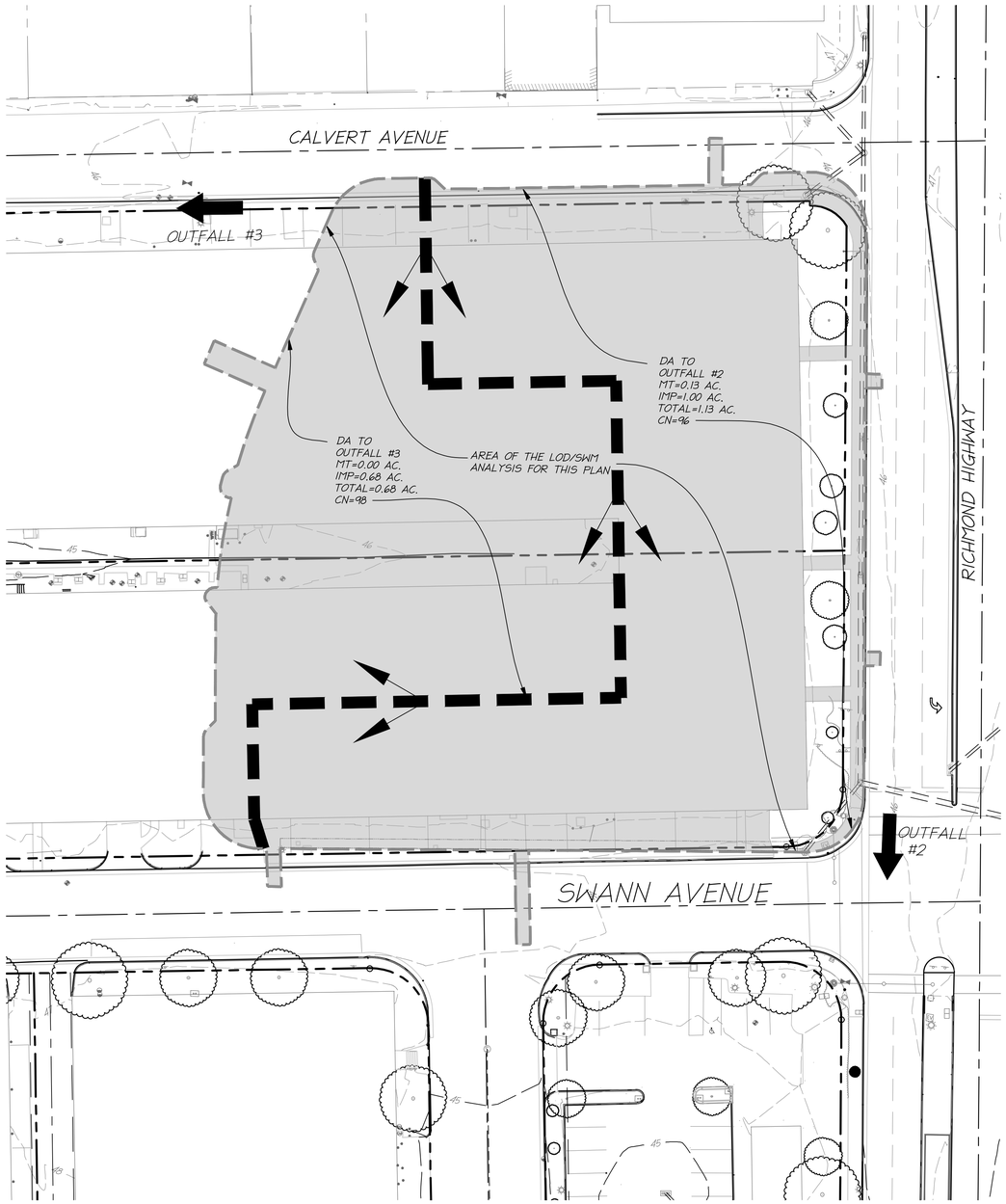
OAKVILLE BLOCK B
PRELIMINARY DSUP
CITY OF ALEXANDRIA, VIRGINIA

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

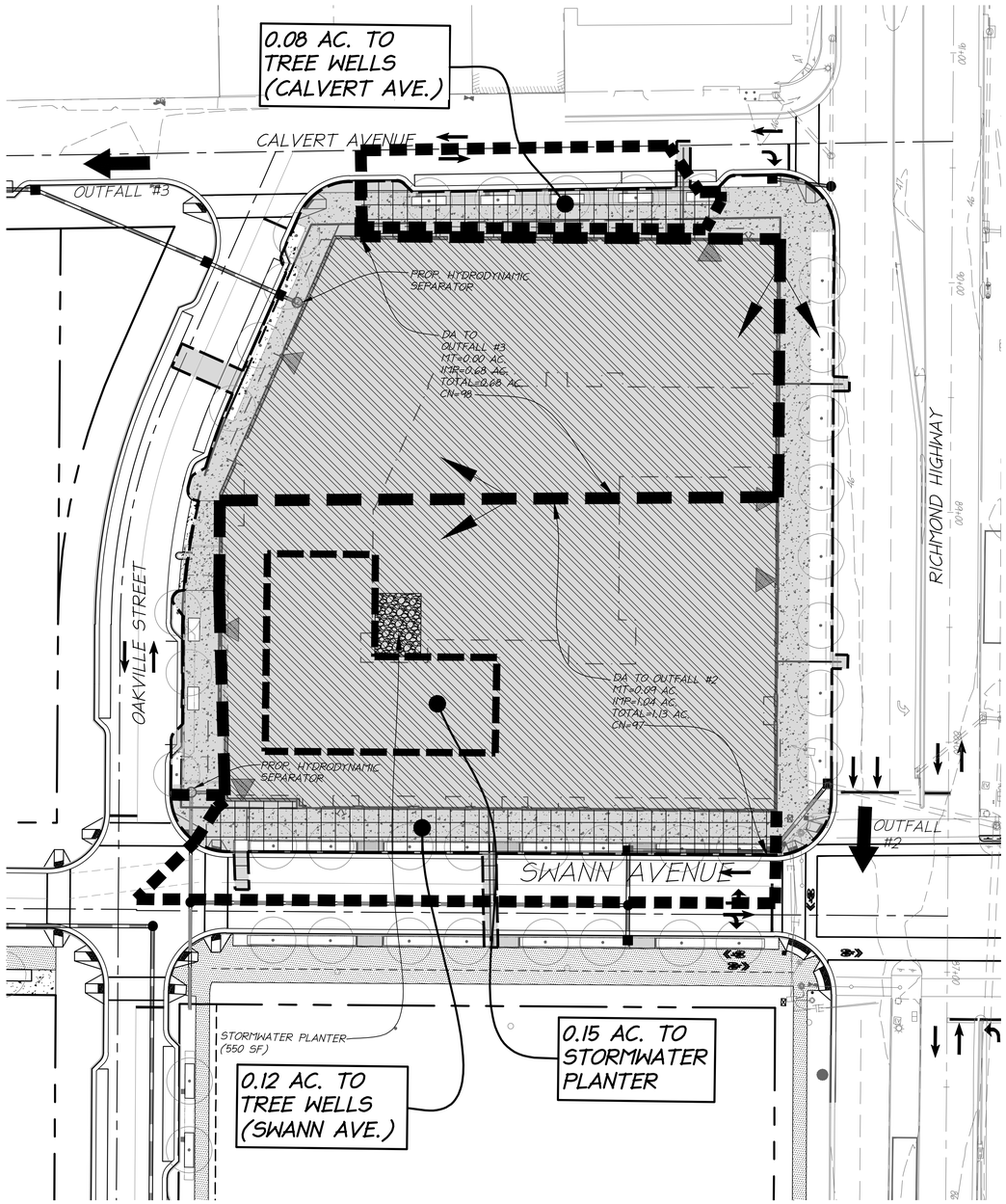
PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No. ----

1101149

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PRE-DEVELOPMENT



POST-DEVELOPMENT

LEGEND:

- LIMITS OF DISTURBANCE (A=1.81 AC.)
- IMPERVIOUS GROUND COVER (A=1.68 AC.)
- IMPERVIOUS GROUND COVER (A=0.13 AC.)

SITE AREA = A=1.81 AC. (IMP.=1.68 AC., PERVIOUS=0.13 AC.)

PRE-DEVELOPED

		DA	IMP	TURF
OUTFALL #2				
To Outfall #1 Storm System	AREA (ACRES)	1.13	1.00	0.13
	CN		98	80
	Total Area	1.13		
	CN ave.	**96**		
OUTFALL #3				
To Outfall #2 Storm System	AREA (ACRES)	0.68	0.68	0.00
	CN		98	80
	Total Area	0.68		
	CN ave.	**98**		

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

NOTE - BMP FACILITIES AND LAYOUT SHOWN ON THIS ARE CONCEPTUAL AND ARE SUBJECT TO CHANGE.
AREA DISTURBED: 1.81 Ac.

LEGEND:

- LIMITS OF DISTURBANCE (AREA=1.81 AC.)
- IMPERVIOUS GROUND COVER (AREA=1.70 AC.)
- AREA TO HYDRODYNAMAIC SEPARATOR (A=1.34 AC.)
- PERVIOUS GROUND COVER (A=0.11 AC.)

SITE AREA = A=1.81 AC. (IMP.=1.70 AC., PERVIOUS=0.11 AC.)

POST-DEVELOPED

		DA	IMP	TURF
OUTFALL #2				
Tree Wells (Calvert St.)	AREA (ACRES)	0.08	0.07	0.01
	CN	93	See VRRM (sheet 700A)	
Tree Wells (Swann Avenue)	AREA (ACRES)	0.12	0.10	0.02
	CN	92	See VRRM (sheet 700A)	
BMP Stormwater Planters	AREA (ACRES)	0.15	0.15	0.00
	CN	97	See VRRM (sheet 700A)	
BUILDING/SIDEWALK	AREA (ACRES)	0.78	0.72	0.06
	CN		98	80
	Total Area	1.13		
	CN ave.	**96**		
OUTFALL #3				
BUILDING/SIDEWALK	AREA (ACRES)	0.68	0.66	0.02
	CN		98	80
	Total Area	0.68		
	CN ave.	**97**		

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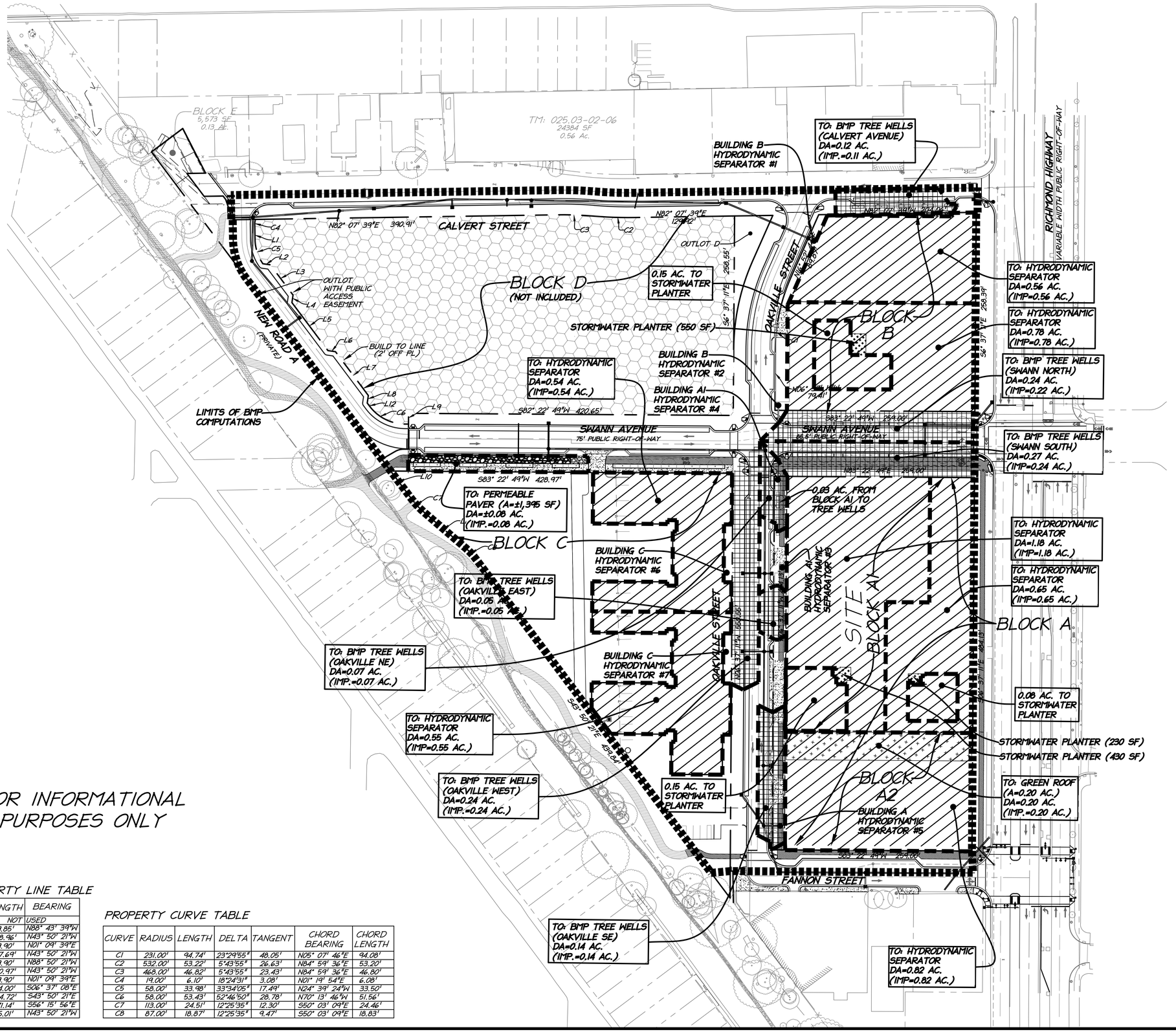
christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

BMP MAP

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C701
1101149



LEGEND

SYMBOL	TITLE
	: PROPERTY LIMITS
LOD	: LIMITS OF DISTURBANCE (12.23 Ac.)
	: VRRM SUB-DRAINAGE AREA DIVIDE (TREE WELLS / PERMEABLE PAVER / HYDRODYNAMIC SEPARATOR)
	: GREEN ROOF (LEVEL 2) A=±0.20 AC. (BUILDING A2)
	: STORMWATER PLANTER DA=0.38 AC. (BUILDINGS A1 & B)
	: HYDRODYNAMIC SEPARATOR BLOCKS RUNOFF TREATED = 5.08 Ac (5.08 Ac. IMP.)
	: BMP TREE WELLS RUNOFF TREATED = 1.13 Ac (1.07 Ac. IMP.)
	: BMP PERMEABLE PAVER ROW RUNOFF TREATED = 0.08 Ac (0.08 Ac. IMP.)
	: BLOCK D (3.26 AC) NOT INCLUDED IN LOD

NON TREATED:
BLOCK = 1.84 AC. (IMP.=0.53, PERVIOUS=1.31)
ROW = 2.52 AC. (IMP.=2.28, PERVIOUS=0.24)
TOTAL = 4.36 AC. (IMP.=2.81, PERVIOUS=1.55)

FOR INFORMATIONAL PURPOSES ONLY

PROPERTY LINE TABLE

LINE	LENGTH	BEARING
L1	NOT	USED
L2	9.85'	N88° 43' 39"W
L3	48.96'	N43° 50' 21"W
L4	9.90'	N01° 09' 39"E
L5	77.69'	N43° 50' 21"W
L6	9.90'	N88° 50' 21"W
L7	70.97'	N43° 50' 21"W
L8	9.90'	N01° 09' 39"E
L9	14.00'	S06° 37' 08"E
L10	44.72'	S43° 50' 21"E
L11	71.14'	S56° 15' 56"E
L12	5.01'	N43° 50' 21"W

PROPERTY CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD BEARING	CHORD LENGTH
C1	231.00'	94.74'	23°29'55"	48.05'	N05° 07' 46"E	94.08'
C2	532.00'	53.22'	5°43'55"	26.63'	N84° 59' 36"E	53.20'
C3	468.00'	46.82'	5°43'55"	23.43'	N84° 59' 36"E	46.80'
C4	19.00'	6.10'	18°24'31"	3.08'	N01° 19' 54"E	6.08'
C5	58.00'	33.98'	33°34'05"	17.49'	N24° 39' 24"W	33.50'
C6	58.00'	53.43'	52°46'50"	28.78'	N70° 13' 46"W	51.56'
C7	113.00'	24.51'	12°25'95"	12.30'	S50° 03' 09"E	24.46'
C8	87.00'	18.87'	12°25'95"	9.47'	S50° 03' 09"E	18.83'

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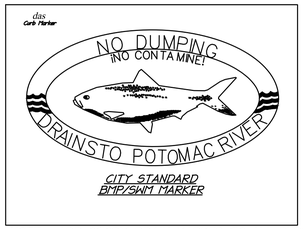
OVERALL POST-BMP MAP

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

APPROVED
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DEPARTMENT OF PLANNING & ZONING
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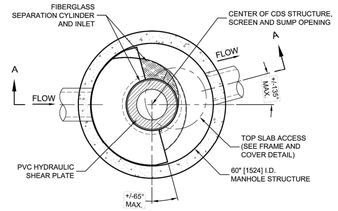
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DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C702
110149

P:\FXA\Projects\14007\01100\110149 Block B Prelim DSUP\C702 POST-BMP MAP.dwg, 10/20/2020 12:40:16 PM, _AutoCAD PDF (General Documentation).pc3

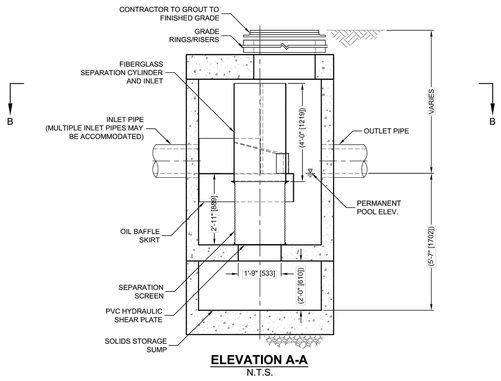


CITY STANDARD
BMP/SWM MARKER

NOTE: ADD STORM DRAIN MARKER TO ALL PUBLIC CURB INLETS WITHIN 50 FEET OF THE PROPERTY LINE

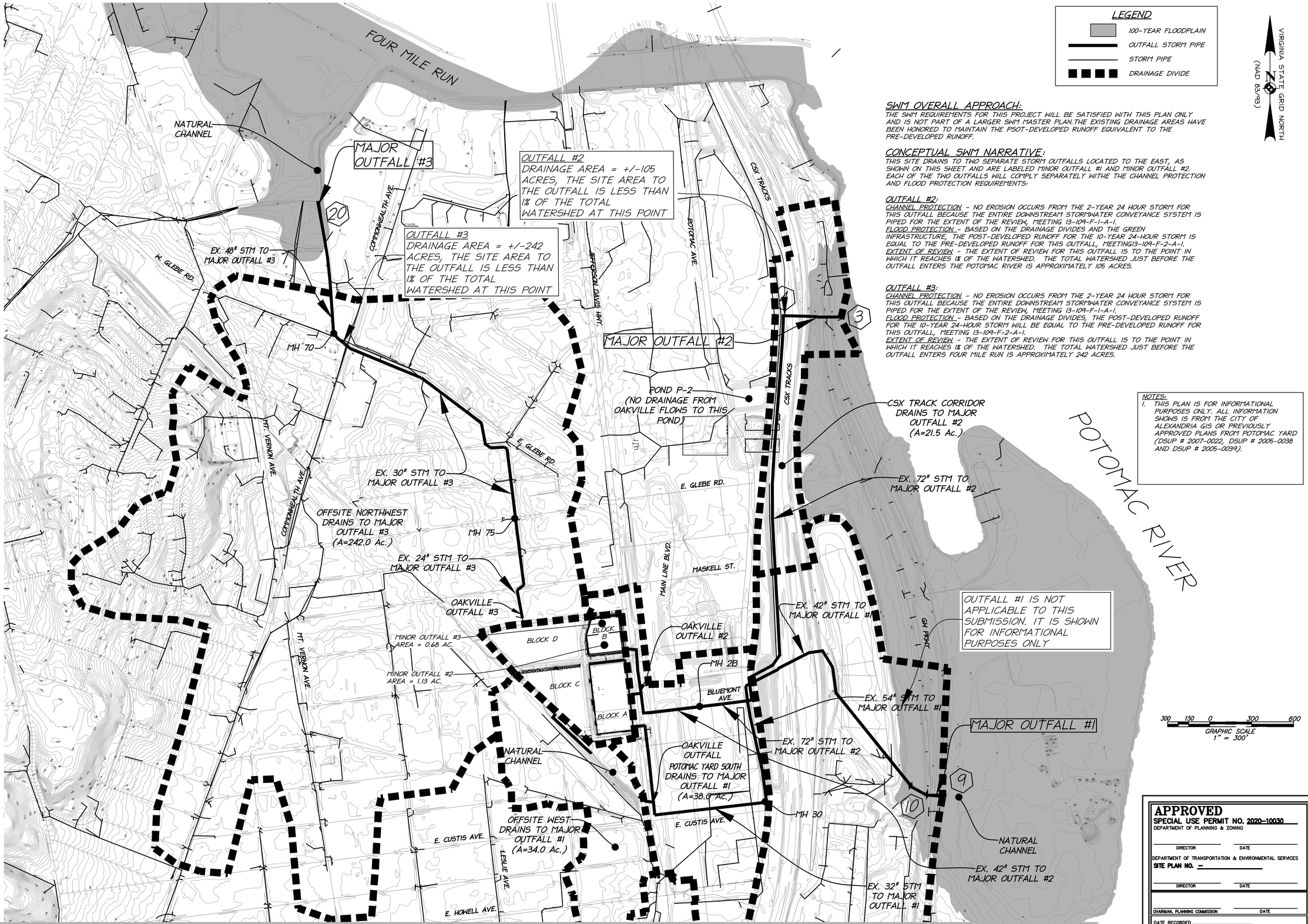


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

GDS
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 5,759,415; 6,641,720; 6,511,595; 6,649,048; 6,511,593; 6,406,615; 6,277,277; 6,136,181; 6,039,872; 5,725,760; 5,707,527; 5,624,576; 5,498,331; 5,492,640; 5,452,795; 5,391,299; 5,322,629; 5,282,972; 5,266,205; 5,233,781; 5,215,680; 5,207,915; 5,200,068; 5,178,762; 5,164,081; 5,159,970; 5,145,584; 5,144,765; 5,057,247; 5,040,922; 5,030,362; 5,024,765; 5,017,282; 4,985,148; 4,971,692; 4,959,152; 4,894,155; 4,888,116; 4,880,532; 4,867,878; 4,865,737; 4,863,592; 4,861,484; 4,851,126; 4,849,100; 4,846,960; 4,840,726; 4,834,884; 4,820,411; 4,818,394; 4,810,370; 4,808,294; 4,804,469; 4,802,983; 4,797,200; 4,790,941; 4,784,760; 4,781,830; 4,778,592; 4,775,468; 4,772,387; 4,770,777; 4,767,519; 4,764,276; 4,759,845; 4,758,344; 4,746,420; 4,744,894; 4,741,829; 4,737,268; 4,731,176; 4,729,829; 4,724,077; 4,720,343; 4,717,481; 4,714,553; 4,713,172; 4,710,297; 4,708,798; 4,707,265; 4,704,207; 4,702,829; 4,698,153; 4,695,369; 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MATCHLINE - SEE SHEET C705

LEGEND

- 100-YEAR FLOODPLAIN
- OUTFALL STORM PIPE
- STORM PIPE
- DRAINAGE DIVIDE

VIRGINIA STATE GRID NORTH (NAD 83/93)

SWM OVERALL APPROACH:
THE SWM REQUIREMENTS FOR THIS PROJECT WILL BE SATISFIED WITH THIS PLAN ONLY AND IS NOT PART OF A LARGER SWM MASTER PLAN. THE EXISTING DRAINAGE AREAS HAVE BEEN HONORED TO MAINTAIN THE PSOT-DEVELOPED RUNOFF EQUIVALENT TO THE PRE-DEVELOPED RUNOFF.

CONCEPTUAL SWM NARRATIVE:
THIS SITE DRAINS TO TWO SEPARATE STORM OUTFALLS LOCATED TO THE EAST, AS SHOWN ON THIS SHEET AND ARE LABELED MINOR OUTFALL #1 AND MINOR OUTFALL #2. EACH OF THE TWO OUTFALLS WILL COMPLY SEPARATELY WITHE THE CHANNEL PROTECTION AND FLOOD PROTECTION REQUIREMENTS:

OUTFALL #2:
CHANNEL PROTECTION - NO EROSION OCCURS FROM THE 2-YEAR 24 HOUR STORM FOR THIS OUTFALL BECAUSE THE ENTIRE DOWNSTREAM STORMWATER CONVEYANCE SYSTEM IS PIPED FOR THE EXTENT OF THE REVIEW, MEETING 13-109-F-1-A-I.
FLOOD PROTECTION - BASED ON THE DRAINAGE DIVIDES AND THE GREEN INFRASTRUCTURE, THE POST-DEVELOPED RUNOFF FOR THE 10-YEAR 24-HOUR STORM IS EQUAL TO THE PRE-DEVELOPED RUNOFF FOR THIS OUTFALL, MEETING13-109-F-2-A-I.
EXTENT OF REVIEW - THE EXTENT OF REVIEW FOR THIS OUTFALL IS TO THE POINT IN WHICH IT REACHES 1% OF THE WATERSHED. THE TOTAL WATERSHED JUST BEFORE THE OUTFALL ENTERS THE POTOMAC RIVER IS APPROXIMATELY 105 ACRES.

OUTFALL #3:
CHANNEL PROTECTION - NO EROSION OCCURS FROM THE 2-YEAR 24 HOUR STORM FOR THIS OUTFALL BECAUSE THE ENTIRE DOWNSTREAM STORMWATER CONVEYANCE SYSTEM IS PIPED FOR THE EXTENT OF THE REVIEW, MEETING 13-109-F-1-A-I.
FLOOD PROTECTION - BASED ON THE DRAINAGE DIVIDES, THE POST-DEVELOPED RUNOFF FOR THE 10-YEAR 24-HOUR STORM WILL BE EQUAL TO THE PRE-DEVELOPED RUNOFF FOR THIS OUTFALL, MEETING 13-109-F-2-A-I.
EXTENT OF REVIEW - THE EXTENT OF REVIEW FOR THIS OUTFALL IS TO THE POINT IN WHICH IT REACHES 1% OF THE WATERSHED. THE TOTAL WATERSHED JUST BEFORE THE OUTFALL ENTERS FOUR MILE RUN IS APPROXIMATELY 242 ACRES.

NOTES:
1. THIS PLAN IS FOR INFORMATIONAL PURPOSES ONLY. ALL INFORMATION SHOWS IS FROM THE CITY OF ALEXANDRIA GIS OR PREVIOUSLY APPROVED PLANS FROM POTOMAC YARD (DSUP # 2007-0022, DSUP # 2005-0038 AND DSUP # 2005-0039).

300 150 0 300 600
GRAPHIC SCALE 1" = 300'

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

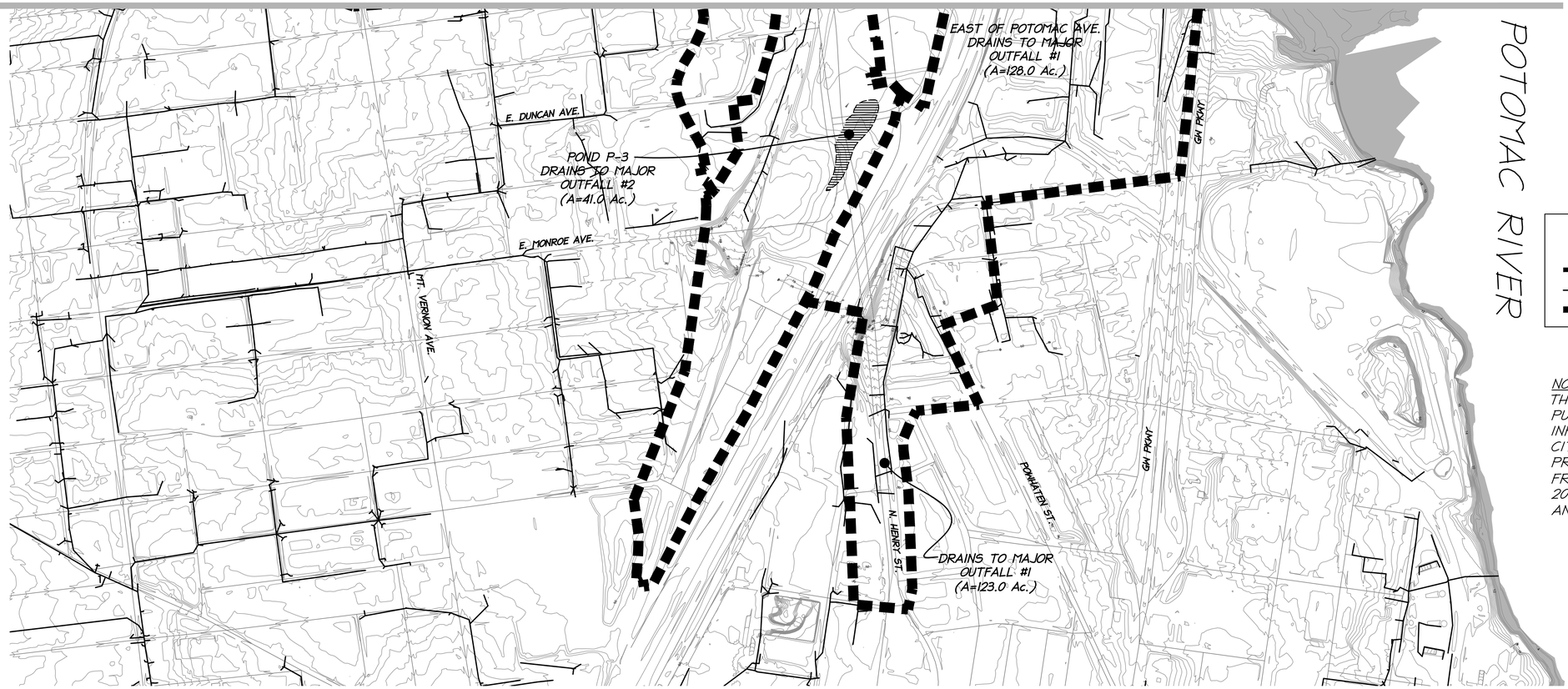
christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OVERALL OUTFALL MAP

OAKVILLE BLOCK B
PRELIMINARY DSUP
CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=300'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C704
1101149



NOTE:
THIS PLAN IS FOR INFORMATIONAL PURPOSES ONLY. ALL INFORMATION SHOWS IS FROM THE CITY OF ALEXANDRIA GIS OR PREVIOUSLY APPROVED PLANS FROM POTOMAC YARD (DSUP # 2007-0022, DSUP # 2005-0038 AND DSUP # 2005-0039).

OUTFALL	PRE						POST					
	1-Year		2-Year		10-Year		1-Year		2-Year		10-Year	
	Q (cfs)	Rv (cf)	Q (cfs)	Rv (cf)	Q (cfs)	Rv (cf)	Q (cfs)	Rv (cf)	Q (cfs)	Rv (cf)	Q (cfs)	Rv (cf)
#2	4.28	9,548	5.15	11,629	8.57	20,014	4.28	9,548	5.15	11,629	8.57	20,014
#3	2.68	6,287	$3.20	7,554	5.23	12,633	2.64	6,011	3.15	7,272	5.2	12,337

NOTES:
1. SEE SHEET C701 FOR DRAINAGE DIVIDES OF SITE AND AVERAGE CN CALCULATIONS.
2. SEE SHEET ##### FOR ADJUSTED CN VALUES.

300 150 0 300 600
GRAPHIC SCALE
1" = 300'

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

OVERALL OUTFALL MAP

OAKVILLE BLOCK B
PRELIMINARY DSUP
CITY OF ALEXANDRIA, VIRGINIA

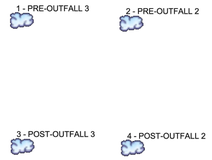
PROJECT NO:14007.011.00
SCALE: 1"=300'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C705
1101149

P:\PX\Projects\14007\011100\110149 Block B Prelim DSUP\C705 OVERALL OUTFALL MAP.dwg, 10/20/2020 12:41:33 PM, AutoCAD PDF (General Documentation).pc3

1

Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020



Legend

Hyd.	Origin	Description
1	SCS Runoff	PRE-OUTFALL 3
2	SCS Runoff	PRE-OUTFALL 2
3	SCS Runoff	POST-OUTFALL 3
4	SCS Runoff	POST-OUTFALL 2

Project: Outfall Flows.gpw | Tuesday, 10 / 20 / 2020

2

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-------	2.683	3.195	-------	-------	5.229	-------	-------	-------	PRE-OUTFALL 3
2	SCS Runoff	-------	4.280	5.146	-------	-------	8.572	-------	-------	-------	PRE-OUTFALL 2
3	SCS Runoff	-------	2.635	3.151	-------	-------	5.199	-------	-------	-------	POST-OUTFALL 3
4	SCS Runoff	-------	4.280	5.146	-------	-------	8.572	-------	-------	-------	POST-OUTFALL 2

Proj. file: Outfall Flows.gpw | Tuesday, 10 / 20 / 2020

3

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	2.683	1	717	6,287	-------	-------	-------	PRE-OUTFALL 3
2	SCS Runoff	4.280	1	717	9,548	-------	-------	-------	PRE-OUTFALL 2
3	SCS Runoff	2.635	1	717	6,011	-------	-------	-------	POST-OUTFALL 3
4	SCS Runoff	4.280	1	717	9,548	-------	-------	-------	POST-OUTFALL 2

Outfall Flows.gpw | Return Period: 1 Year | Tuesday, 10 / 20 / 2020

4

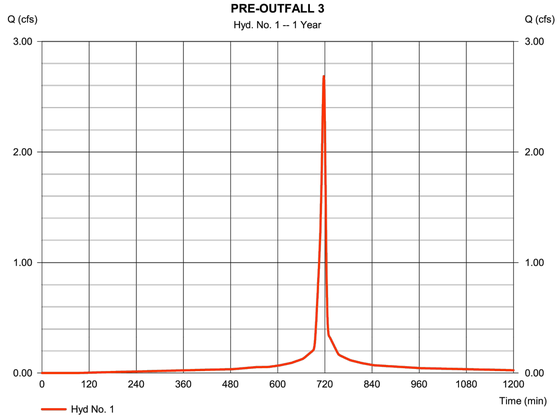
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 1

PRE-OUTFALL 3

Hydrograph type	= SCS Runoff	Peak discharge	= 2.683 cfs
Storm frequency	= 1 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 6,287 cuft
Drainage area	= 0.680 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



5

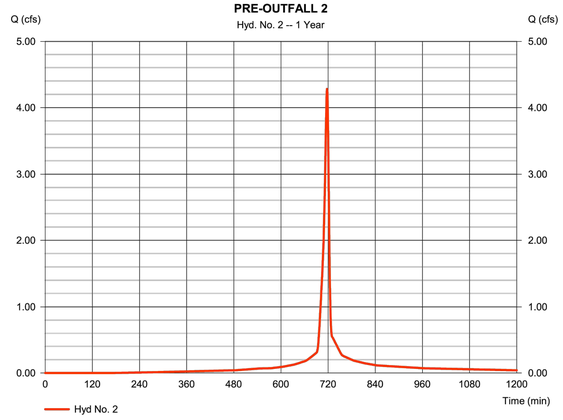
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 2

PRE-OUTFALL 2

Hydrograph type	= SCS Runoff	Peak discharge	= 4.280 cfs
Storm frequency	= 1 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 9,548 cuft
Drainage area	= 1.130 ac	Curve number	= 96
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

PRE AND POST HYDROGRAPH

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

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SITE PLAN NO. —
DIRECTOR — DATE
CHAIRMAN, PLANNING COMMISSION — DATE
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INSTRUMENT NO. — DEED BOOK NO. — PAGE NO.

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C706
110149

P:\FX\Projects\14007\011100\110149 Block B Prelim DSUP\C708 PRE AND POST HYDROGRAPH.dwg, 10/20/2020 12:41:56 PM, AutoCAD PDF (General Documentation).pc3

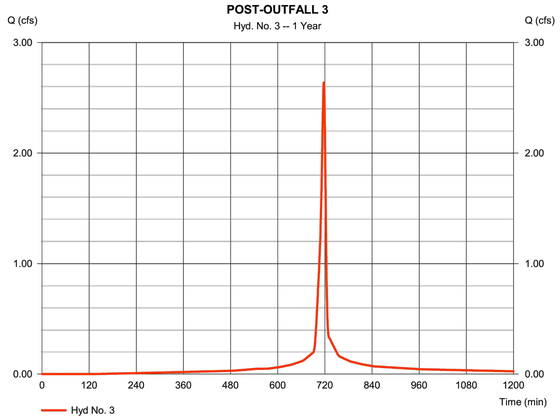
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 3

POST-OUTFALL 3

Hydrograph type	= SCS Runoff	Peak discharge	= 2.635 cfs
Storm frequency	= 1 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 6,011 cuft
Drainage area	= 0.680 ac	Curve number	= 97
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



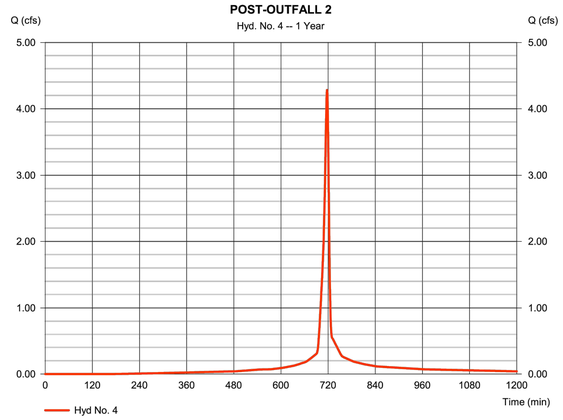
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 4

POST-OUTFALL 2

Hydrograph type	= SCS Runoff	Peak discharge	= 4.280 cfs
Storm frequency	= 1 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 9,548 cuft
Drainage area	= 1.130 ac	Curve number	= 96
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	5.229	1	717	12,633	-------	-------	-------	PRE-OUTFALL 3
2	SCS Runoff	8.572	1	717	20,014	-------	-------	-------	PRE-OUTFALL 2
3	SCS Runoff	5.199	1	717	12,337	-------	-------	-------	POST-OUTFALL 3
4	SCS Runoff	8.572	1	717	20,014	-------	-------	-------	POST-OUTFALL 2

Outfall Flows.gpw — Return Period: 10 Year — Tuesday, 10 / 20 / 2020

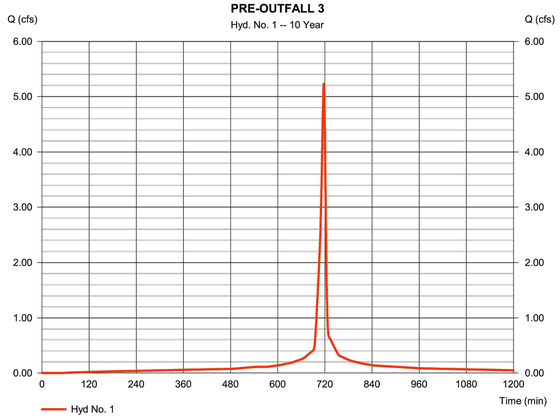
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 1

PRE-OUTFALL 3

Hydrograph type	= SCS Runoff	Peak discharge	= 5.229 cfs
Storm frequency	= 10 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 12,633 cuft
Drainage area	= 0.680 ac	Curve number	= 98
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



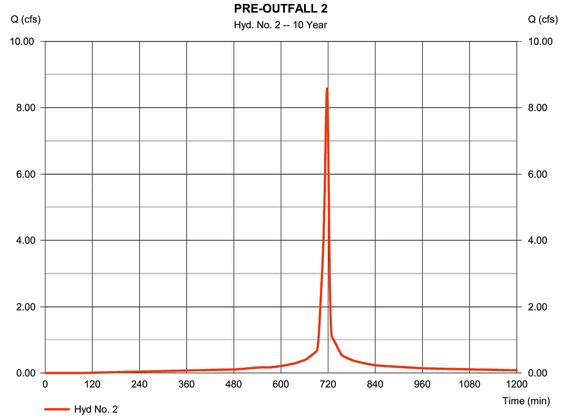
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 2

PRE-OUTFALL 2

Hydrograph type	= SCS Runoff	Peak discharge	= 8.572 cfs
Storm frequency	= 10 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 20,014 cuft
Drainage area	= 1.130 ac	Curve number	= 96
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

PRE AND POST HYDROGRAPH

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DRAWN: HA
CHECKED: KMW
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110149

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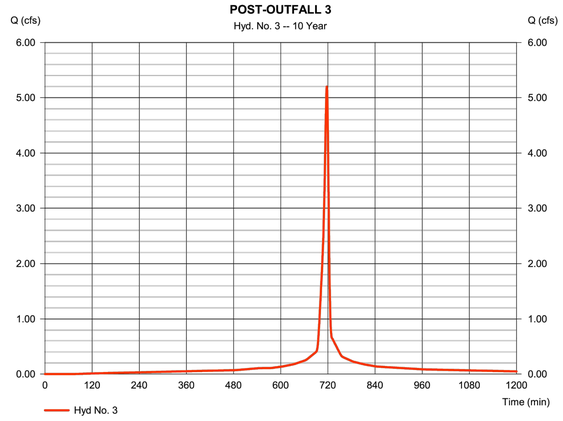
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 3

POST-OUTFALL 3

Hydrograph type	= SCS Runoff	Peak discharge	= 5.199 cfs
Storm frequency	= 10 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 12,337 cuft
Drainage area	= 0.680 ac	Curve number	= 97
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



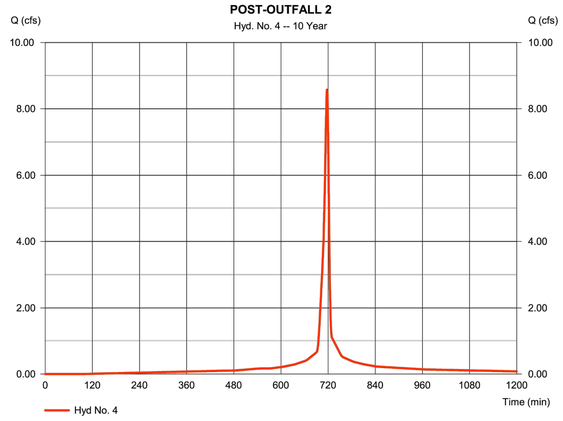
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Hyd. No. 4

POST-OUTFALL 2

Hydrograph type	= SCS Runoff	Peak discharge	= 8.572 cfs
Storm frequency	= 10 yrs	Time to peak	= 717 min
Time interval	= 1 min	Hyd. volume	= 20,014 cuft
Drainage area	= 1.130 ac	Curve number	= 96
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydraflow Rainfall Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	0.0000	0.0000	0.0000	---
2	69.8703	13.1000	0.8658	---
3	0.0000	0.0000	0.0000	---
5	79.2597	14.6000	0.8369	---
10	88.2351	15.5000	0.8279	---
25	102.6072	16.5000	0.8217	---
50	114.8193	17.2000	0.8199	---
100	127.1596	17.8000	0.8186	---

File name: SampleFHA.idf

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	5.69	4.61	3.89	3.38	2.99	2.69	2.44	2.24	2.07	1.93	1.81	1.70
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	6.57	5.43	4.65	4.08	3.65	3.30	3.02	2.79	2.59	2.42	2.27	2.15
10	7.24	6.04	5.21	4.59	4.12	3.74	3.43	3.17	2.95	2.77	2.60	2.46
25	8.25	6.95	6.03	5.34	4.80	4.38	4.02	3.73	3.48	3.26	3.07	2.91
50	9.04	7.65	6.66	5.92	5.34	4.87	4.49	4.16	3.88	3.65	3.44	3.25
100	9.83	8.36	7.30	6.50	5.87	5.36	4.94	4.59	4.29	4.03	3.80	3.60

Tc = time in minutes. Values may exceed 60.

Precip. file name: Sample.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	2.70	3.20	0.00	3.30	5.20	5.77	6.80	7.95
SCS 6-Hr	0.00	1.80	0.00	0.00	2.60	0.00	0.00	4.00
Huff-1st	0.00	1.55	0.00	2.75	4.00	5.38	6.50	8.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	1.75	0.00	2.80	3.90	5.25	6.00	7.10

Hydraflow Table of Contents

Outfall Flows.gpw

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2020 — Tuesday, 10 / 20 / 2020

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christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

C706 HYDROGRAPH - C708

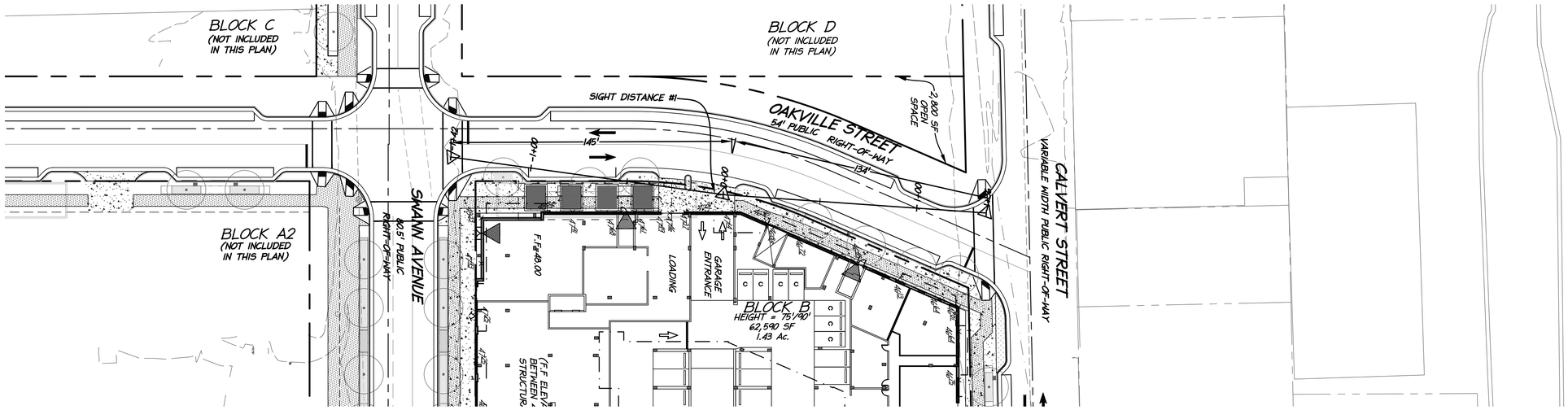
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THE CITY OF ALEXANDRIA, VIRGINIA

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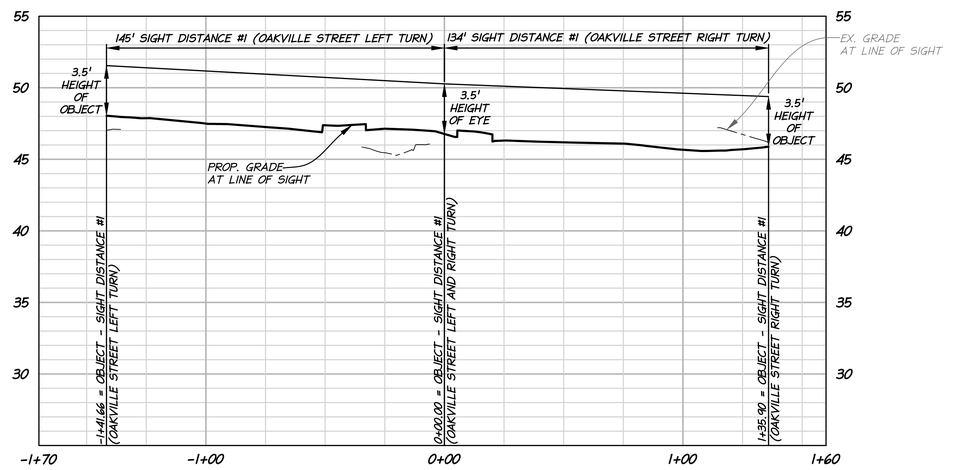
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1101149

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OAKVILLE STREET
SPEED LIMIT: 25 MPH



OAKVILLE STREET SIGHT DISTANCE #1
(FROM GARAGE)
POSTED SPEED: 25 MPH

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

5 2.5 0 5 10
VERTICAL GRAPHIC SCALE
1" = 5'

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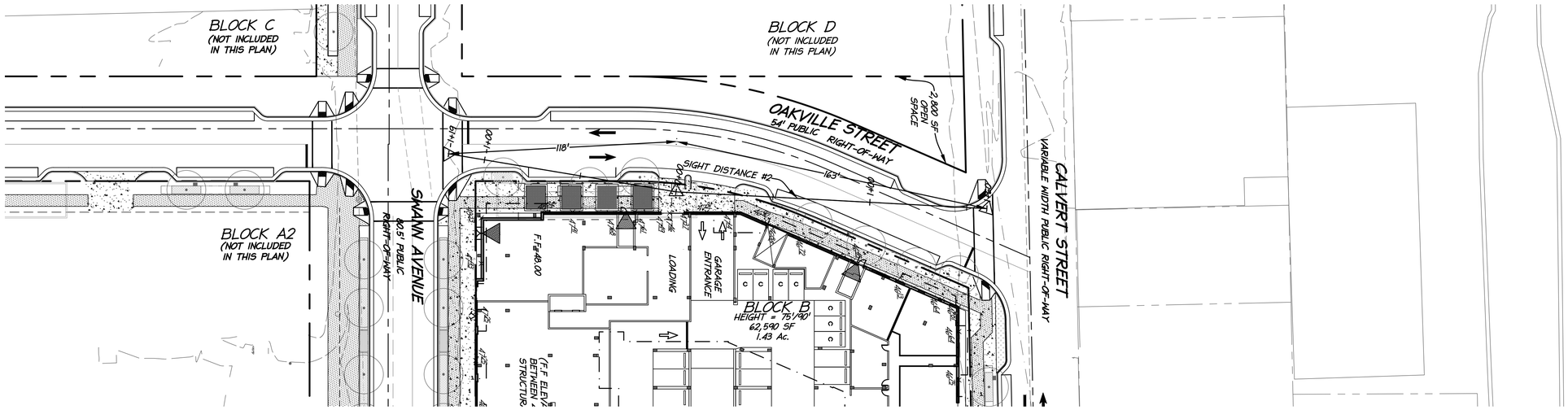
SIGHT DISTANCE PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP

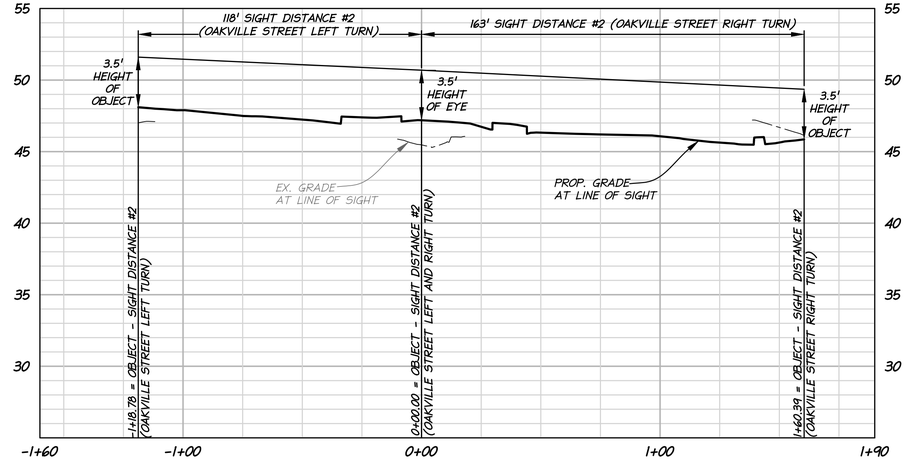
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C800
110149

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OAKVILLE STREET
SPEED LIMIT: 25 MPH



OAKVILLE STREET SIGHT DISTANCE #2
(FROM GARAGE)
POSTED SPEED: 25 MPH

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

VERTICAL GRAPHIC SCALE
5 2.5 0 5 10
1" = 5'

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christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

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Lic. No.55868
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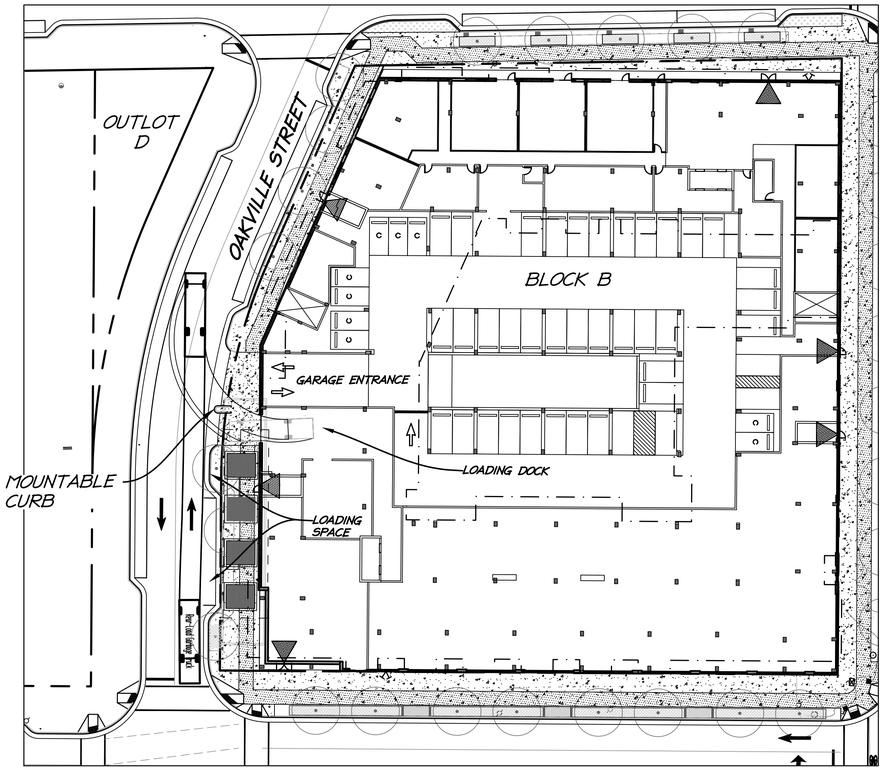
SIGHT DISTANCE PLAN

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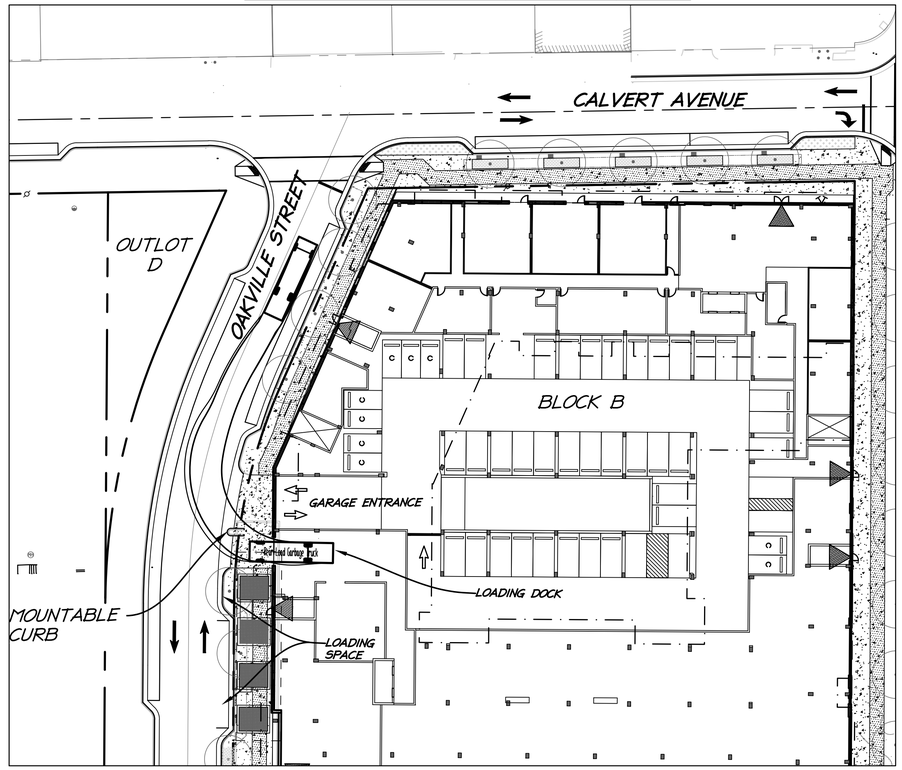
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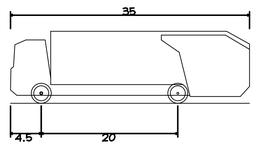
TRASH TRUCK ENTERING LOADING BAY:



TRASH TRUCK EXITING LOADING BAY:

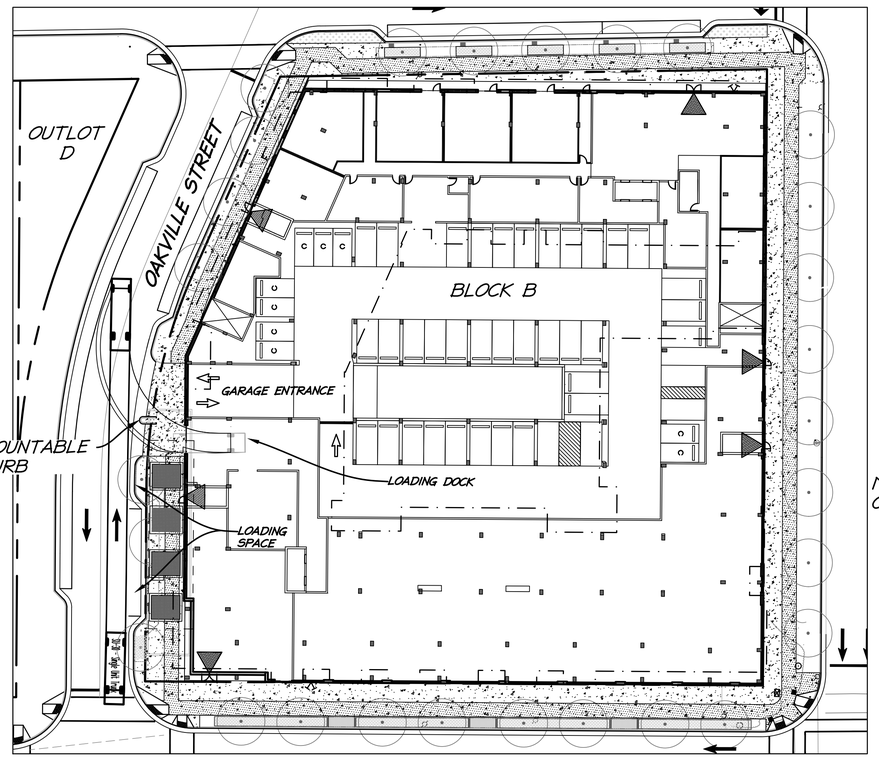




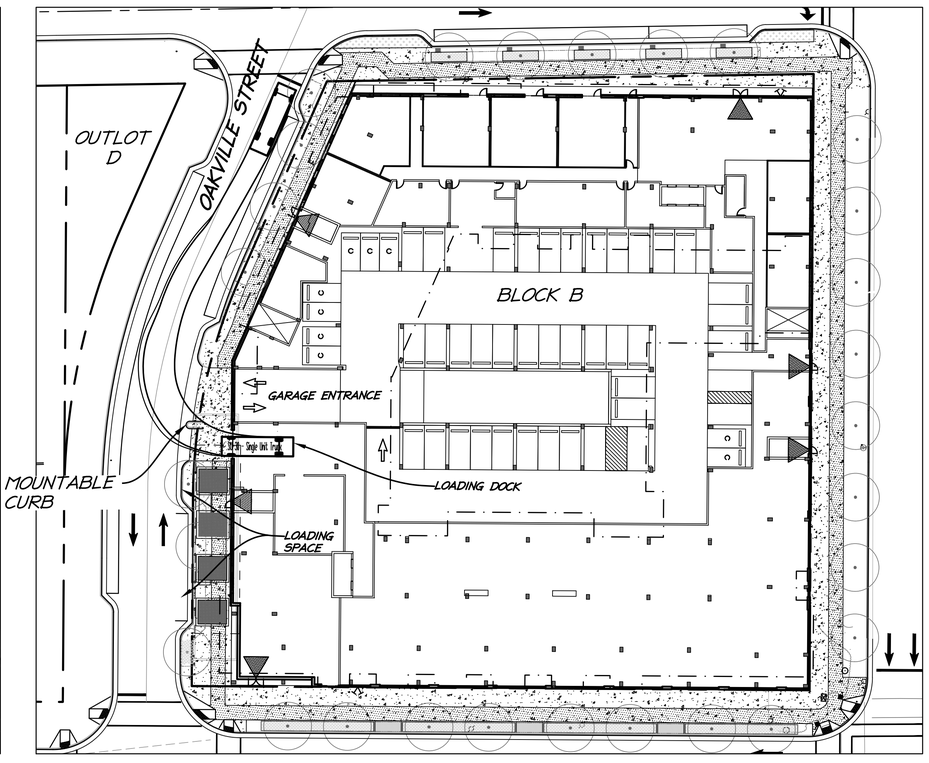


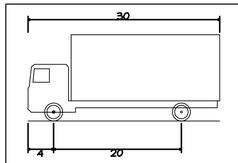
Rear-Load Garbage Truck	
Overall Length	35.000ft
Overall Width	8.375ft
Overall Body Height	10.546ft
Min Body Ground Clearance	1.000ft
Track Width	8.375ft
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	29.300ft

SU-30 ENTERING LOADING BAY:



SU-30 EXITING LOADING BAY:





SU-30 - Single Unit Truck	
Overall Length	30.000ft
Overall Width	8.000ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.367ft
Track Width	8.000ft
Lock-to-lock time	5.00s
Max Steering Angle (Virtual)	31.80°

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

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TURNING MOVEMENT ANALYSIS

OAKVILLE BLOCK B
PRELIMINARY DSUP

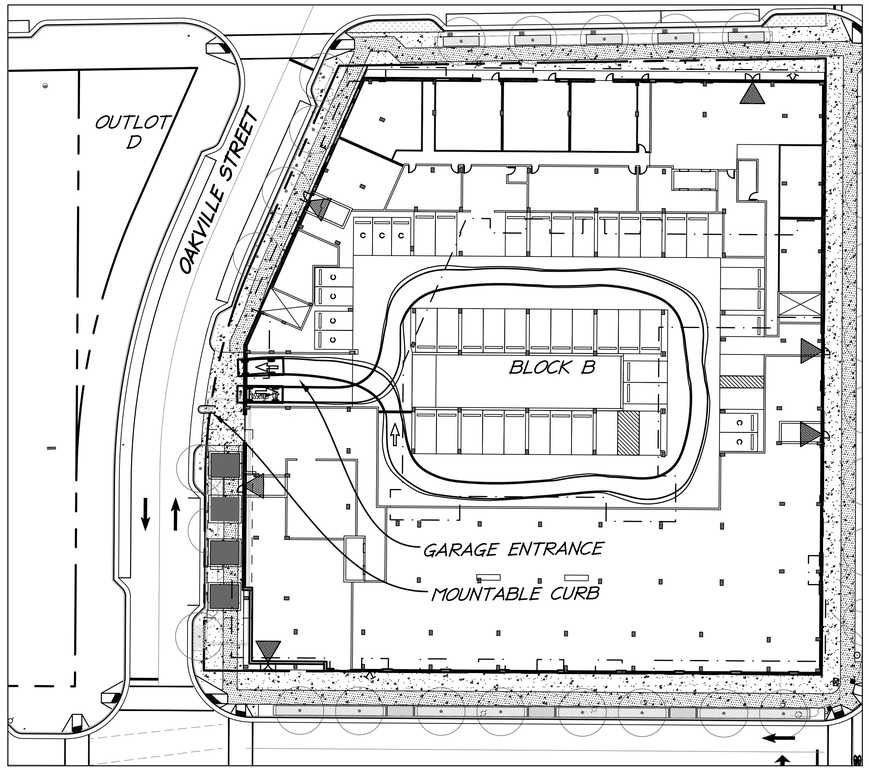
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DRAWN: HA
CHECKED: KMW
SHEET No.

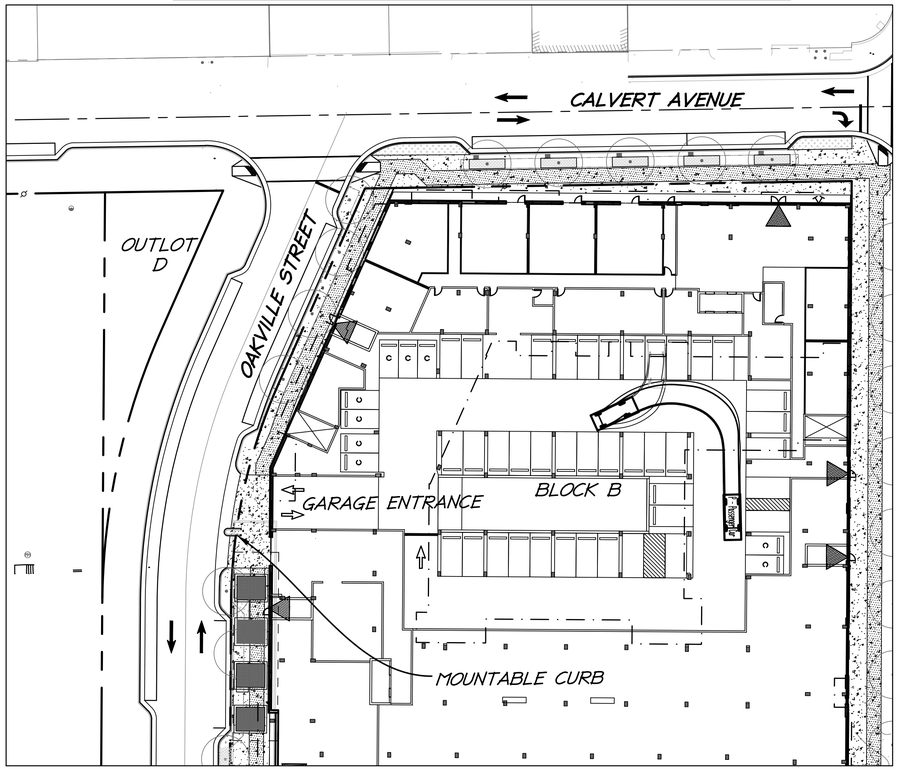
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1101149

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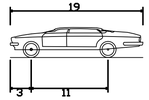
PASSENGER CAR ENTERING AND EXISTING PARKING AREA:



PASSENGER CAR MANEUVER INTO PARKING SPACES:

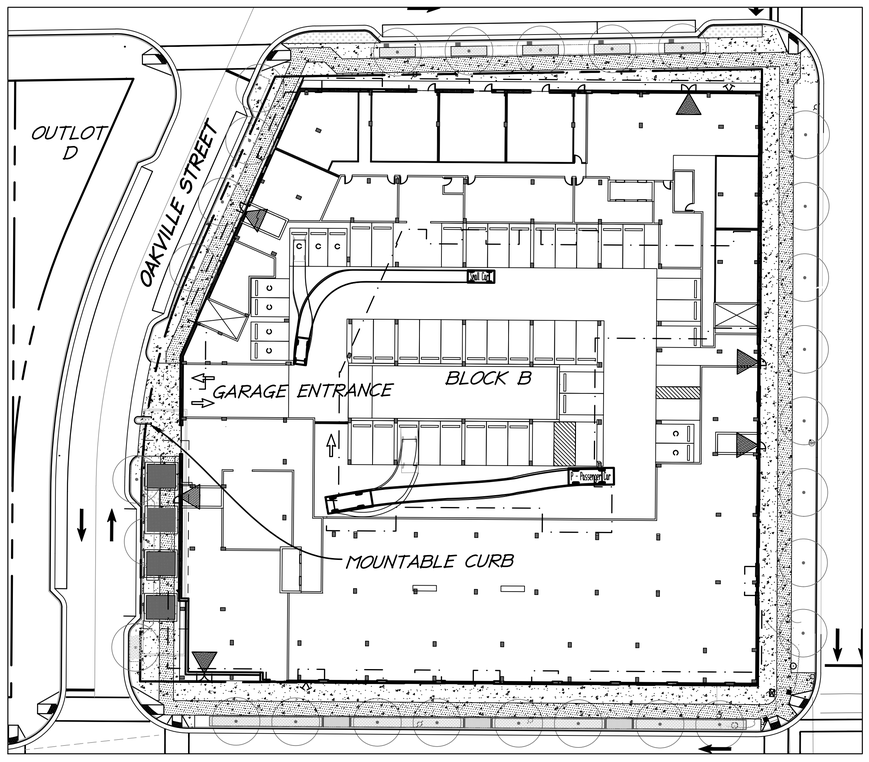




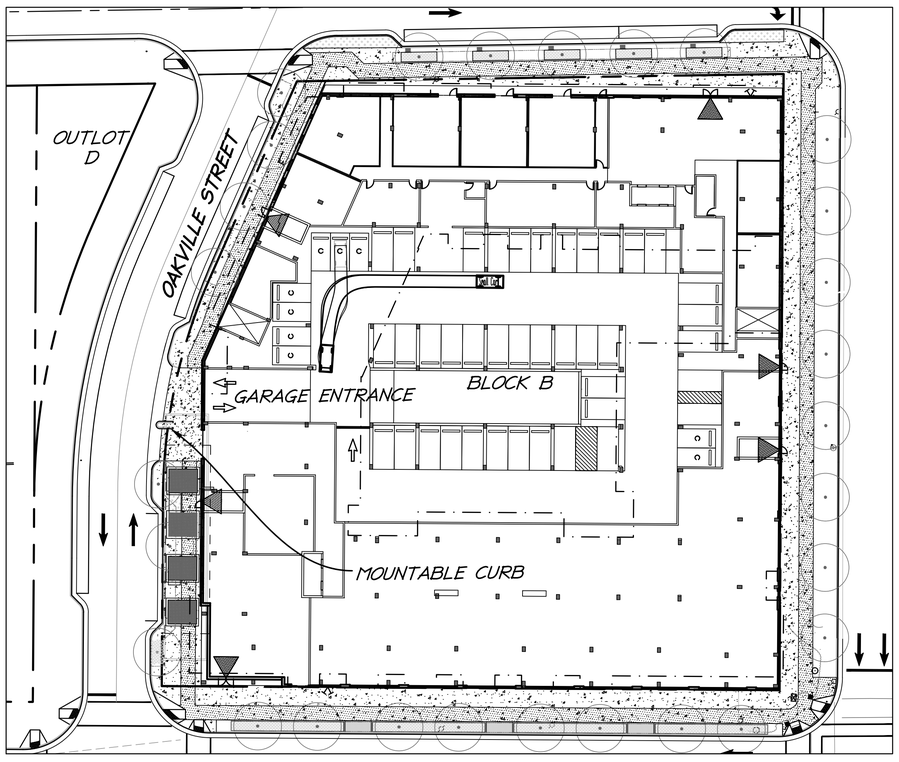


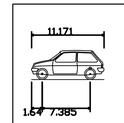
P - Passenger Car	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°

PASSENGER CAR MANEUVER INTO PARKING SPACES:



COMPACT CAR MANEUVER INTO PARKING SPACES:





Small Car	
Overall Length	11.171ft
Overall Width	5.098ft
Overall Body Height	4.499ft
Min Body Ground Clearance	0.697ft
Track Width	4.921ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	16.732ft

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

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

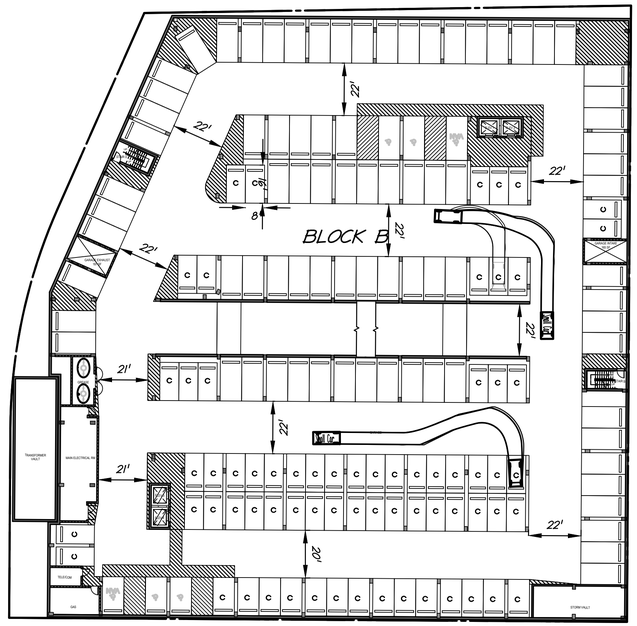
TURNING MOVEMENT ANALYSIS

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

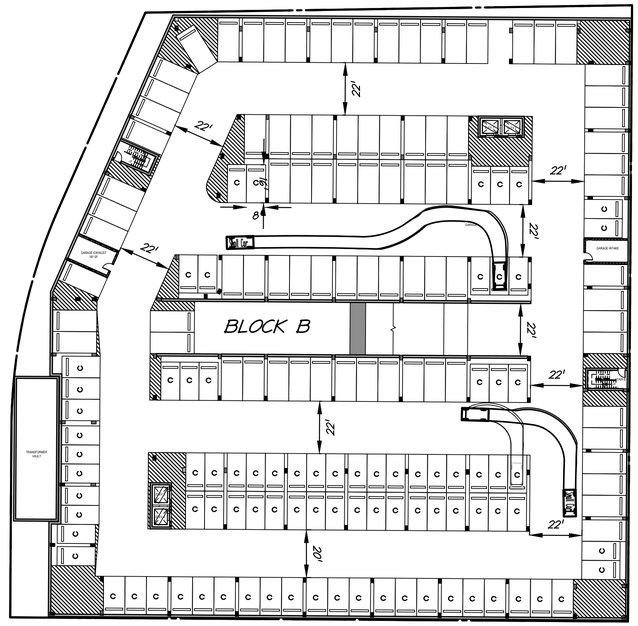
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SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C901
1101149

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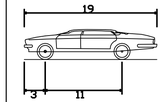
PASSENGER CAR MANEUVER INTO PARKING SPACES (P1 LEVEL):



PASSENGER CAR MANEUVER INTO PARKING SPACES (P2 LEVEL):



Virginia State Grid North (NAD 83/93)



P - Passenger Car	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°



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Min Body Ground Clearance	0.697ft
Track Width	4.921ft
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	16.732ft

30 15 0 30 60

GRAPHIC SCALE
1" = 30'

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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO. —

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

DATE RECORDED

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

christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

TURNING MOVEMENT ANALYSIS

OAKVILLE BLOCK B
PRELIMINARY DSUP

THE CITY OF ALEXANDRIA, VIRGINIA

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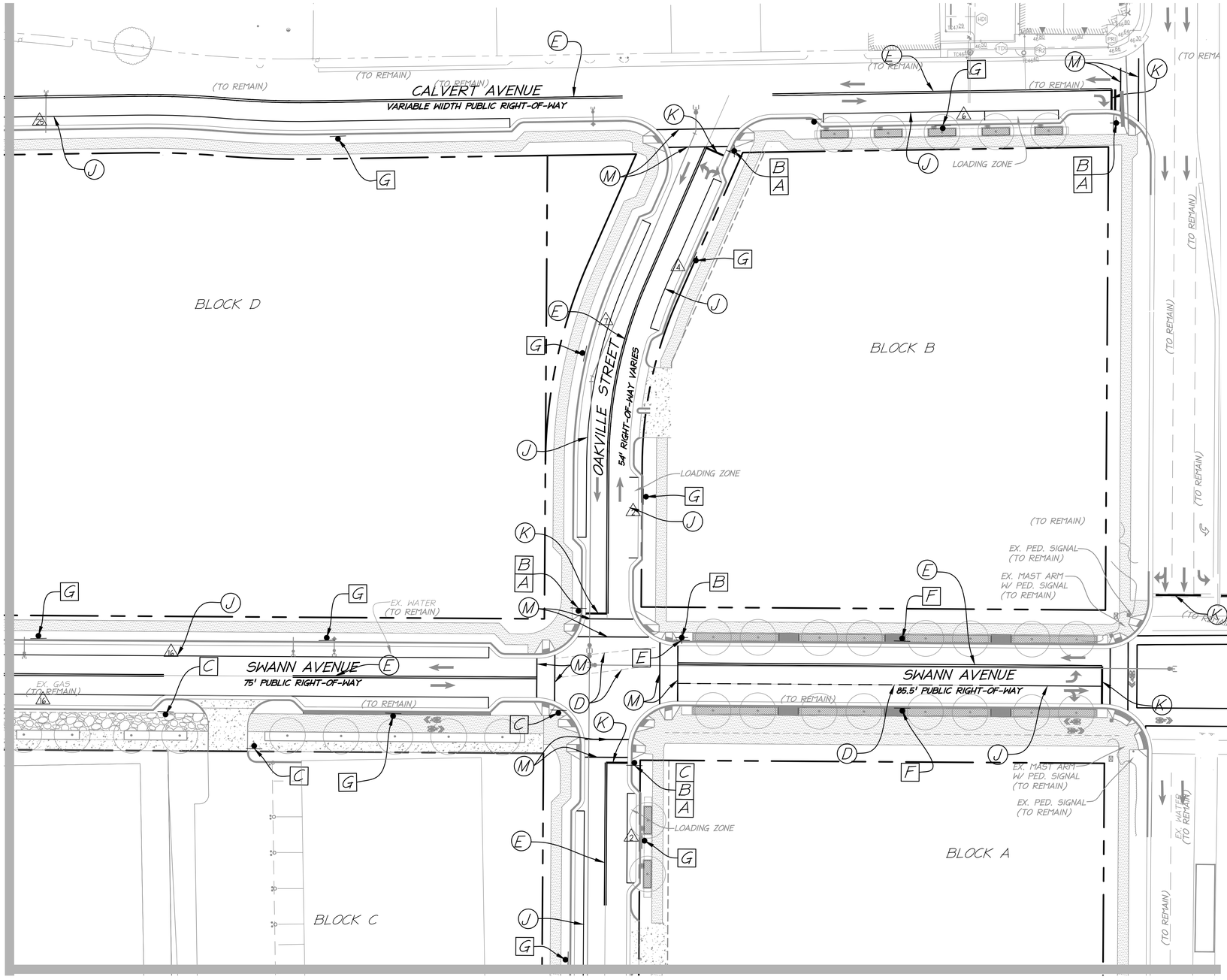
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SIGN LEGEND

SIGN	A	B	C	D	E	F	G
SYMBOL	STOP	CENTER ST. NAME ON SIGN; Port St; ST. SUFFIX; XXX; BLOCK #		NO PARKING ANY TIME ←	NO PARKING ANY TIME →	NO PARKING ANY TIME ↔	2 HR PARKING MONDAY THRU FRIDAY 8 AM - 9 PM
SIGN	R1-1 24"x24"	30"(MIN)X9"	W11-15 24"x24"	R7-1L 18"x24"	R7-1R 18"x24"	R7-1D 18"x24"	R7-108 12"x18"

VIRGINIA STATE GRID NORTH (NAD 83/93)



SIGNING & PAVEMENT MARKING NOTES:

PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO AVOID CONFLICT WITH THE UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS AND TO COMPLY WITH STANDARDS REFERENCED IN NOTE 1.
FOR COLOR COMBINATION AND/OR LETTERING SIZE, REFER TO THE VIRGINIA SUPPLEMENT TO THE MUTCD.

1. ALL PROPOSED SIGNING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF EACH OF THE FOLLOWING AND ANY REVISION THERETO:
   A. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
   B. THE VIRGINIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
   C. THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
2. ANY EXISTING PAVEMENT MARKINGS WHICH WILL CONFLICT WITH PROPOSED PAVEMENT MARKINGS SHALL BE ERADICATED.
3. LIMITS SHOWN OF PROPOSED MARKINGS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO INSURE THAT PROPOSED PAVEMENT MARKINGS CONTINUE UNTIL EXISTING PAVEMENT MARKINGS CAN BE MATCHED.
4. ALL CROSSWALKS SHALL BE 10' WIDE MEASURED FROM THE INSIDE EDGE OF THE PAINT STRIPES.
5. ON A PUBLIC STREET ALL NO PARKING SIGNS, EXCEPT THOSE DEMARKING AN EVE, SHALL HAVE THEIR FACE PLACED AT A 45 DEGREE ANGLE TOWARD TRAFFIC.
6. THE POST FOR SIGNS SHALL BE A 2" SQUARE TUBE POST. THE POSTS AS WELL AS THE BACK OF THE SIGNS SHALL HAVE A MATTE BLACK FINISH.
7. ALL ON STREET PARKING SHALL BE 8' X 22' AS SHOWN UNLESS OTHERWISE NOTED.
8. MARK ALL PRIVATE STREET SIGNS THAT INTERSECT A PUBLIC STREET WITH A FLOURESCENT GREEN STRIP TO NOTIFY THE PLOWING CREWS, BOTH CITY AND CONTRACTOR, THAT THEY ARE NOT TO PLOW THOSE STREETS.
9. ALL CROSSWALKS SHALL BE THERMO PLASTIC PEDESTRIAN CROSSWALKS.

PAVEMENT MARKING LEGEND

- (J) TYPE B, CLASS I, WHITE, 4" WIDTH
- (K) TYPE B, CLASS I, WHITE, 12" WIDTH
- (M) TYPE B, CLASS I, WHITE, 6" WIDTH
- (D) TYPE B, CLASS I, SINGLE BROKEN WHITE, 4" WIDTH
- (E) TYPE B, CLASS I, YELLOW, 4" WIDTH DOUBLE LINE SEPARATED BY 4" SPACE

NOTES:

1. ALL EXISTING SIGNS WITHIN THE PROJECT LIMITS ARE TO BE REMOVED.
2. SEE SHEET C310 FOR FIRE LANE AND FIRE SIGNAGE.

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

THIS SHEET IS FOR PAVEMENT STRIPING AND MARKING PURPOSES ONLY!

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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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christopher consultants
9900 main street (suite 400) · fairfax, va 22031
phone 703.273.6820 · fax 703.273.6820

COMMONWEALTH OF VIRGINIA
ELI GOLDMAN
Lic. No.55868
10/20/2020
PROFESSIONAL ENGINEER

STRIPING AND SIGNAGE PLAN

OAKVILLE BLOCK B
PRELIMINARY DSUP
THE CITY OF ALEXANDRIA, VIRGINIA

PROJECT NO:14007.011.00
SCALE: 1"=30'
DATE: 09/04/20
DESIGN: EG
DRAWN: HA
CHECKED: KMW
SHEET No.
C910
1101149

P:\FX\Projects\14007\01100\110149 Block B Prelim DSUP\C910 STRIPING AND SIGNAGE PLAN.dwg, 10/20/2020 12:47:37 PM, _AutoCAD PDF (General Documentation).pc3

meridian consulting llc

12301 Old Columbia Pike, Suite 100A
Silver Spring, MD 20904
P: 301.490.7400 | F: 301.490.7401

October 19, 2020

City of Alexandria
Department of Planning and Zoning
301 King Street, Room 2100 Alexandria, VA 22314
Alexandria, Virginia 22035

re: LEED Silver Certification for Oakville Triangle Block B

To Whom it May Concern,

The Alexandria Green Building Policy contains sustainable design requirements for privately developed projects. The Green Building Policy describes a number of sustainable design program options. Of these compliance options, the project is pursuing LEED for New Construction v4 certification at the Silver level.

The project's LEED scorecard totals 52 anticipated points, with 2 additional potential points. The project's LEED scorecard is attached to this letter for reference.

In addition, the project has been designed with the below sustainable design features:

- Low Impact Development. Bioretention and green roof areas reduce runoff from the site. A central courtyard includes bioretention and provides open space. Green roof areas and tree pits will also contribute to stormwater retention. Tree pits will treat runoff in the public right of way. The project's stormwater management design will result in reduced runoff for the 10-year 24-hour design storm compared to the site's impervious pre-development condition.
- Open Space. Landscaping will include a large central courtyard and plantings that focus on native plants and biodiversity.
- Site Cleanup. The redevelopment will involve cleanup of environmentally impacted property through the Virginia DEQ's Voluntary Remediation Program (VRP).
- Water Efficiency. The design will include low-flow plumbing fixtures (faucets, toilets, showerheads, urinals) to reduce water use compared to the LEED baseline by at least 35%. Site landscaping will be designed to reduce irrigation by at least 50% compared to the LEED baseline.
- Energy Use Reduction. The building will be designed to reduce energy use by at least 14% compared to the ASHRAE 90.1-2010 baseline. This is equivalent to 5 LEED Optimize Energy Performance points.
    - Massing and Orientation. The project has a flat roof which will facilitate the building's solar-ready design. Furthermore, the partially open courtyard design allows for airflow through the courtyard and building thereby enabling natural ventilation through operable windows. Ground floor retail and amenities are South-facing which will create opportunities for enhanced daylighting in those spaces.
    - Envelope Attributes. Exterior walls will have primarily R-21 batt insulation in the stud wall. Roof insulation will be R-30 above deck rigid insulation. The 1st Floor will have rigid insulation pinned to the underside of the slab. Residential windows will be efficient vinyl windows. Exterior walls will be designed with advanced framing techniques including insulated window headers, insulated corners and interior/exterior wall intersections. These measures increase the amount of insulation in the exterior wall.
    - Lighting. Lighting will be 100% LED lighting for both interior and exterior fixtures. Common areas will be designed to reduce lighting power compared to the LEED-referenced ASHRAE 90.1-2010 standard. In addition, lighting occupancy sensors will be used to control lighting in the parking garage and common areas of the building. Daylight sensors will be used in amenity areas to control lighting zones near glazing.
    - Plug and Process Loads. Plug loads will be reduced by specifying ENERGY STAR appliances in dwelling units and common areas. ENERGY STAR clothes washers, dishwashers and refrigerators will be installed.
- Indoor Environmental Quality. Low emitting materials (paints, adhesives, sealants, flooring) will be specified. In addition, a Construction IAQ Management Plan will be implemented during construction. Finally, the building will be designed to meet requirements of the LEED Thermal Comfort Credit.

Please do not hesitate to contact me (703-459-7579, alal@meridian-consult.net) if you have any questions regarding the project's LEED status and sustainable design, or if you require additional information.

Sincerely,

Abhishek Lal
Meridian Consulting, LLC
LEED AP

meridian consulting llc

Oakville Triangle Block B
LEED for New Construction v4
10/19/2020

Y	?	N	
52	2	56	**Total Project Score** — **Possible Points 110**

Certified: 40 pts Silver: 50 pts Gold: 60 pts Platinum: 80 pts

Y	?	N	Integrative Process
		1	Integrative Process

Y	?	N	Location and Transportation
13	0	3	Location and Transportation
		16	Credit, LEED for Neighborhood Development Location
1			Credit, Sensitive Land Protection
2			Credit, High Priority Site
4		1	Credit, Surrounding Density and Diverse Uses
4		1	Credit, Access to Quality Transit
1			Credit, Bicycle Facilities
		1	Credit, Reduced Parking Footprint
1			Credit, Green Vehicles

Y	?	N	Sustainable Sites
1	0	9	Sustainable Sites
Y			Prereq, Construction Activity Pollution Prevention
		1	Credit, Site Assessment
		2	Credit, Site Development - Protect or Restore Habitat
		1	Credit, Open Space
		3	Credit, Rainwater Management
1		1	Credit, Heat Island Reduction
		1	Credit, Light Pollution Reduction

Y	?	N	Water Efficiency
7	0	4	Water Efficiency
Y			Prereq, Outdoor Water Use Reduction, 30%
Y			Prereq, Indoor Water Use Reduction, 20%
Y			Prereq, Building-Level Water Metering
2			Credit, Outdoor Water Use Reduction, 50%, 100%
4		2	Credit, Indoor Water Use Reduction, 25%-50%
		2	Credit, Cooling Tower Water Use
1			Credit, Water Metering

Y	?	N	Energy and Atmosphere
11	2	20	Energy and Atmosphere
Y			Prereq, Fundamental Commissioning and Verification
Y			Prereq, Minimum Energy Performance, 5%
Y			Prereq, Building-Level Energy Metering
Y			Prereq, Fundamental Refrigerant Management
3		3	Credit, Enhanced Cx: Enhanced Systems Cx, Bldg Envelope Cx, MBCx
6	2	10	Credit, Optimize Energy Performance, 6%-50%
		1	Credit, Advanced Energy Metering
		2	Credit, Demand Response

Y	?	N	Energy and Atmosphere
11	2	20	Energy and Atmosphere
		3	Credit, Renewable Energy Production
		1	Credit, Enhanced Refrigerant Management
2			Credit, Green Power and Carbon Offsets

Y	?	N	Materials and Resources
6	0	7	Materials and Resources
Y			Prereq, Storage and Collection of Recyclables
Y			Prereq, Construction and Demolition Waste Management Planning
1		4	Credit, Bldg Life-Cycle Impact Reduction
1		1	Credit, Bldg Product Disclosure and Optimization - EPDs
1		1	Credit, Bldg Product Disclosure and Optimization - Sourcing of Raw Materials
1		1	Credit, Bldg Product Disclosure and Optimization - Material Ingredients
2			Credit, Construction and Demolition Waste Management

Y	?	N	Indoor Environmental Quality
6	0	10	Indoor Environmental Quality
Y			Prereq, Minimum Indoor Air Quality Performance
Y			Prereq, Environmental Tobacco Smoke Control
		1	Credit, Enhanced Indoor Air Quality Strategies, Option 1
1			Credit, Enhanced Indoor Air Quality Strategies, Option 2
2		1	Credit, Low-Emitting Materials
1			Credit, Construction Indoor Air Quality Management Plan
		2	Credit, Indoor Air Quality Assessment
1			Credit, Thermal Comfort
		2	Credit, Interior Lighting
		3	Credit, Daylight
1			Credit, Quality Views
		1	Credit, Acoustic Performance

Y	?	N	Innovation
6	0	0	Innovation
1			Credit, Innovation, Building Education
1			Credit, Innovation, Low Mercury Lighting
1			Credit, Innovation, Occupant Comfort Survey
1			Credit, Innovation, EPDs, Exemplary Performance
1			Credit, Innovation, Indoor Integrated Pest Management
1			Credit, LEED Accredited Professional

Y	?	N	Regional Priority
2	0	2	Regional Priority
2			Credit, Green Vehicles, Quality Transit (4)
		2	Credit, Reduced Parking Footprint, Protect or Restore Habitat

Note: The above targeted credits may vary over the course of the project, but the project will achieve Silver certification.

SK+I ARCHITECTURE

4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

MARK	DATE	DESCRIPTION
	2020.10.20	DSUP Submission #2

SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOB
No. 011557
ARCHITECT

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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DIRECTOR DATE
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DRAWING TITLE
LEED SCORECARD AND NARRATIVE

DATE 2020.07.24

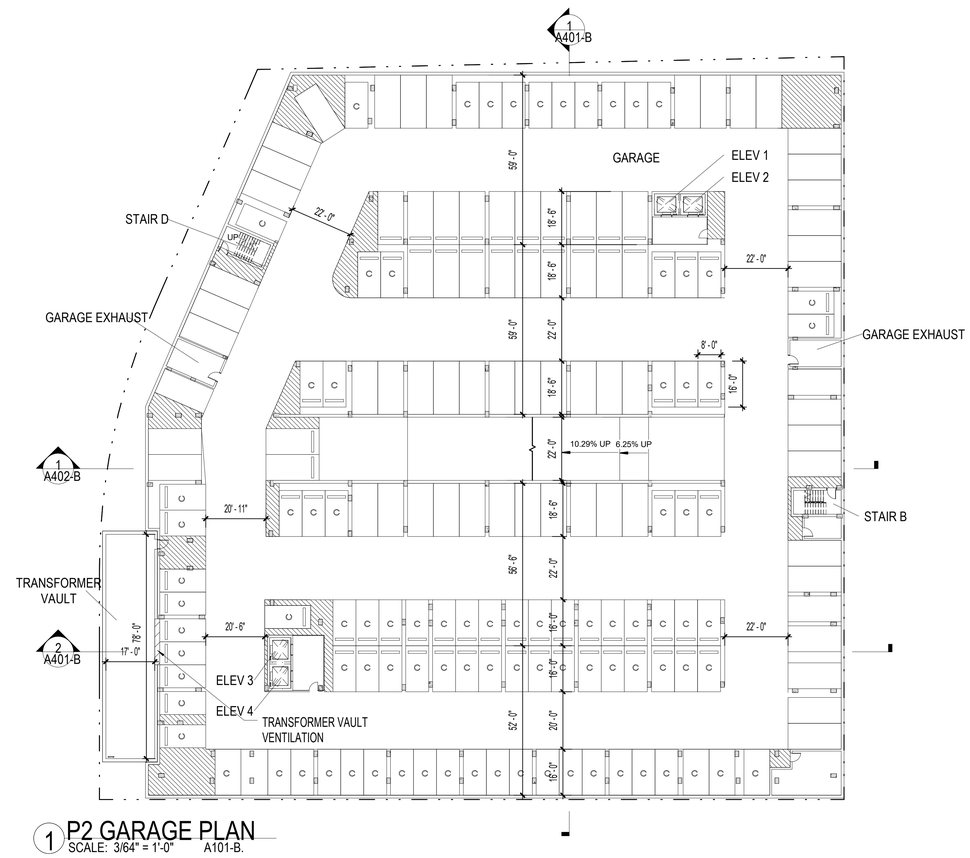
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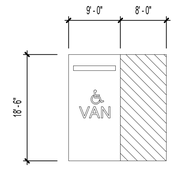


2 P1 GARAGE PLAN
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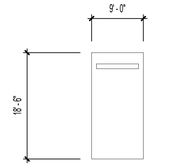


1 P2 GARAGE PLAN
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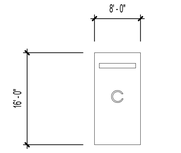
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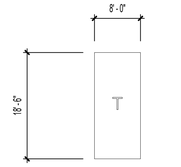
ACCESSIBLE PARKING SPACE / VAN ACCESSIBLE



STANDARD PARKING SPACE



COMPACT PARKING SPACE



TANDEM PARKING SPACE

SK+I ARCHITECTURE

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OWNER
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7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

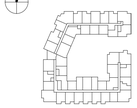
ISSUE

MARK	DATE	DESCRIPTION
	2020.10.20	DSUP Submission #2

SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOB
No. 011597
ARCHITECT

KEYPLAN



APPROVED
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DRAWING TITLE

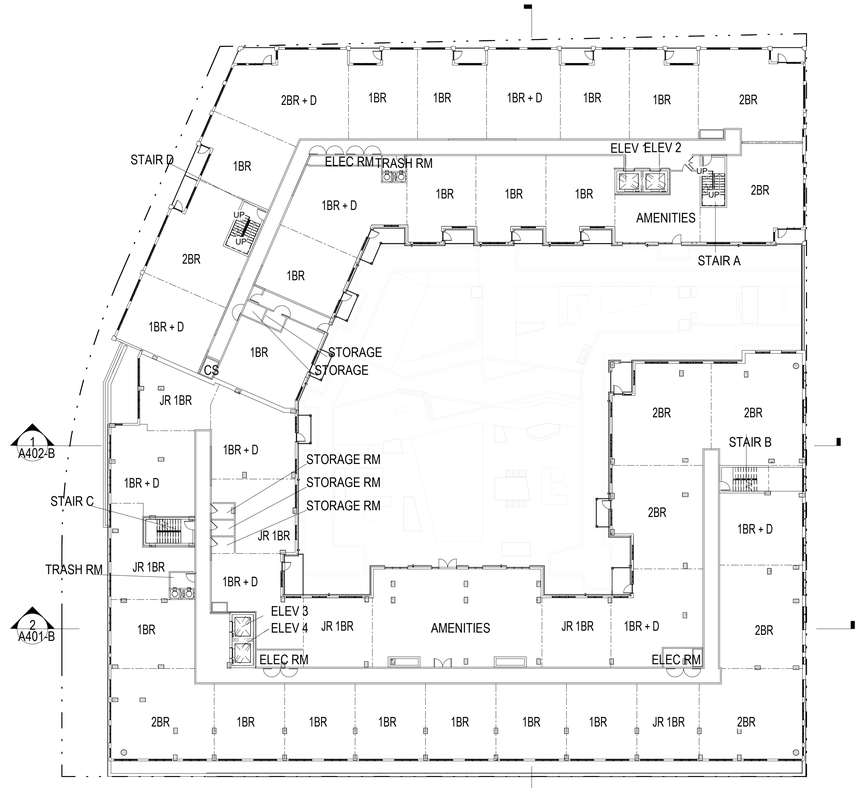
BUILDING PLANS

DATE 2020.07.24

SCALE As indicated

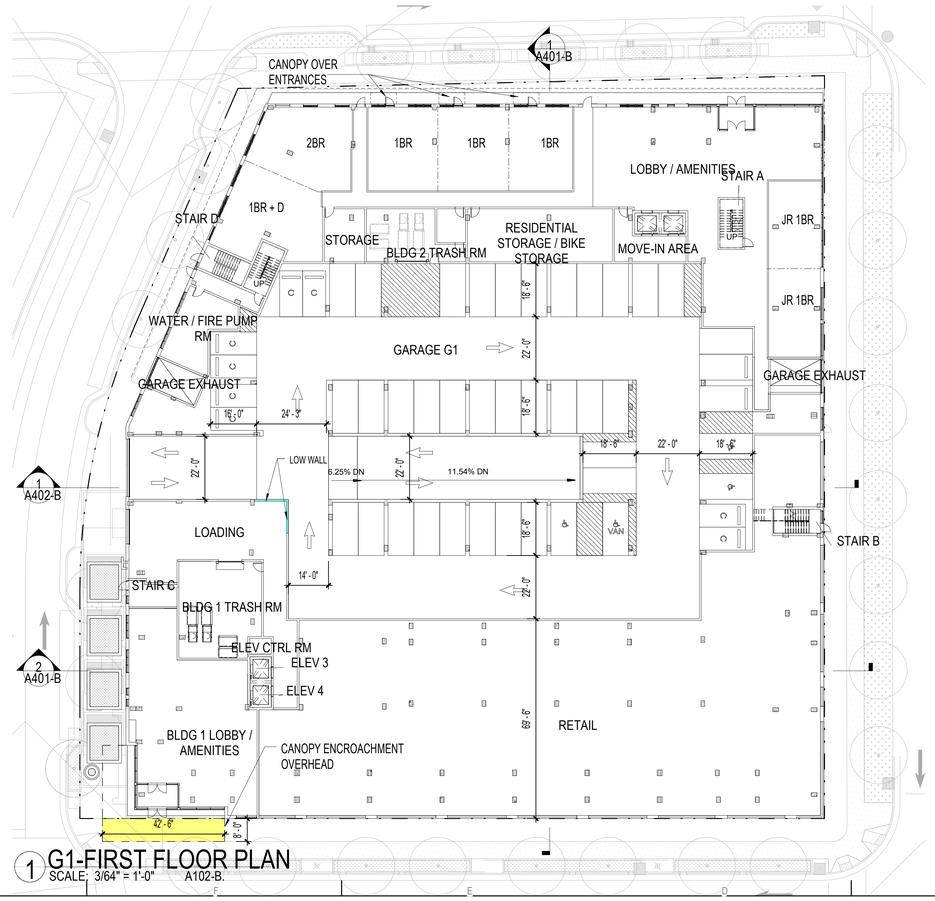
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2 SECOND FLOOR PLAN
SCALE: 3/64" = 1'-0" A102-B.

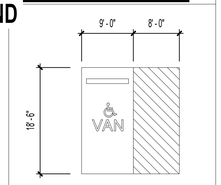
1 A401-B



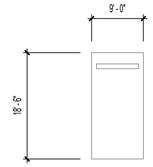
1 G1-FIRST FLOOR PLAN
SCALE: 3/64" = 1'-0" A102-B.

EXACT UNIT MIX, DEMISING WALLS, AND UNIT LAYOUTS TBD

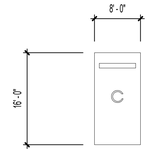
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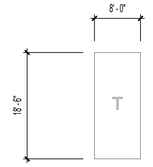
ACCESSIBLE PARKING SPACE / VAN ACCESSIBLE



STANDARD PARKING SPACE



COMPACT PARKING SPACE



TANDEM PARKING SPACE

SK+I ARCHITECTURE

4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

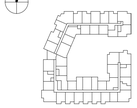
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COMMONWEALTH OF VIRGINIA
SAMI M KOKOR
No. 011597
ARCHITECT

KEYPLAN



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SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
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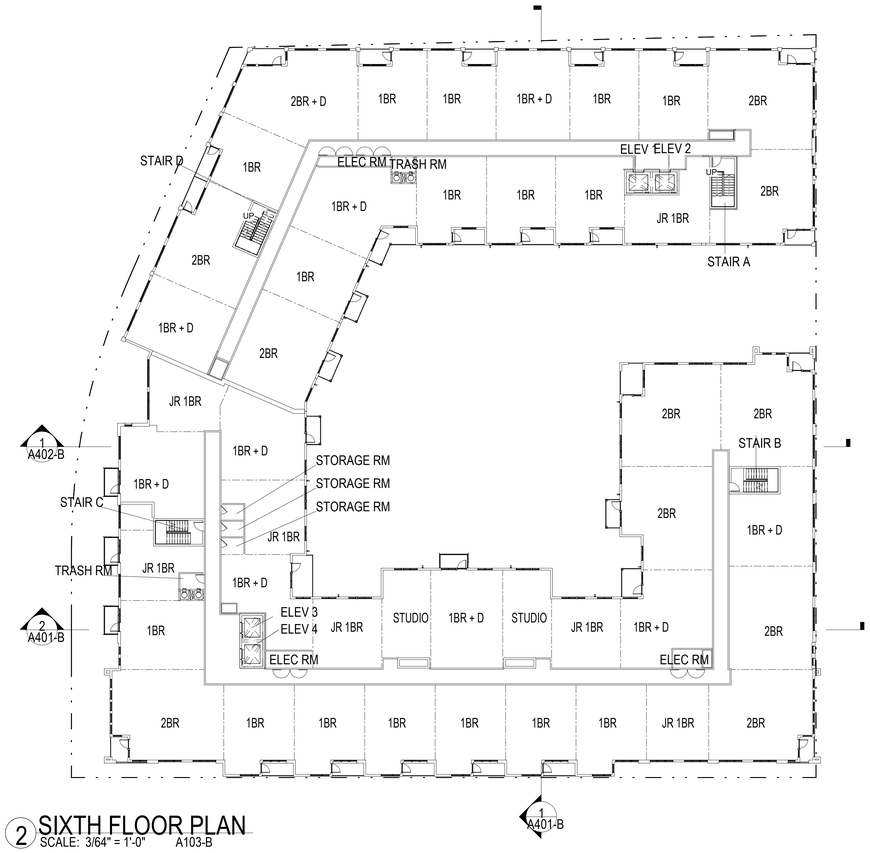
DATE 2020.07.24

SCALE As indicated

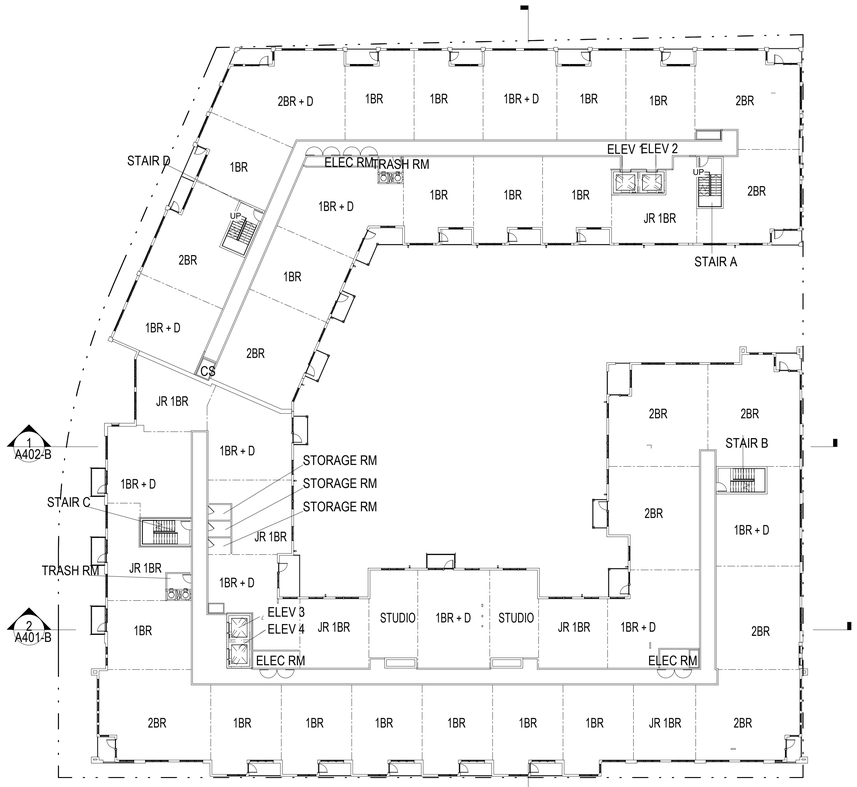
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EXACT UNIT MIX, DEMISING WALLS, AND UNIT LAYOUTS TBD



2 SIXTH FLOOR PLAN
SCALE: 3/64" = 1'-0" A103-B



1 THIRD - FIFTH FLOOR PLAN (FOURTH SHOWN)
SCALE: 3/64" = 1'-0" A103-B

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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

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Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

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LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
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111 Rockville Pike, Suite 425
Rockville, MD 20850

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PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

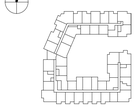
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SAMI M KOKOS
No. 011557
REGISTERED
ARCHITECT

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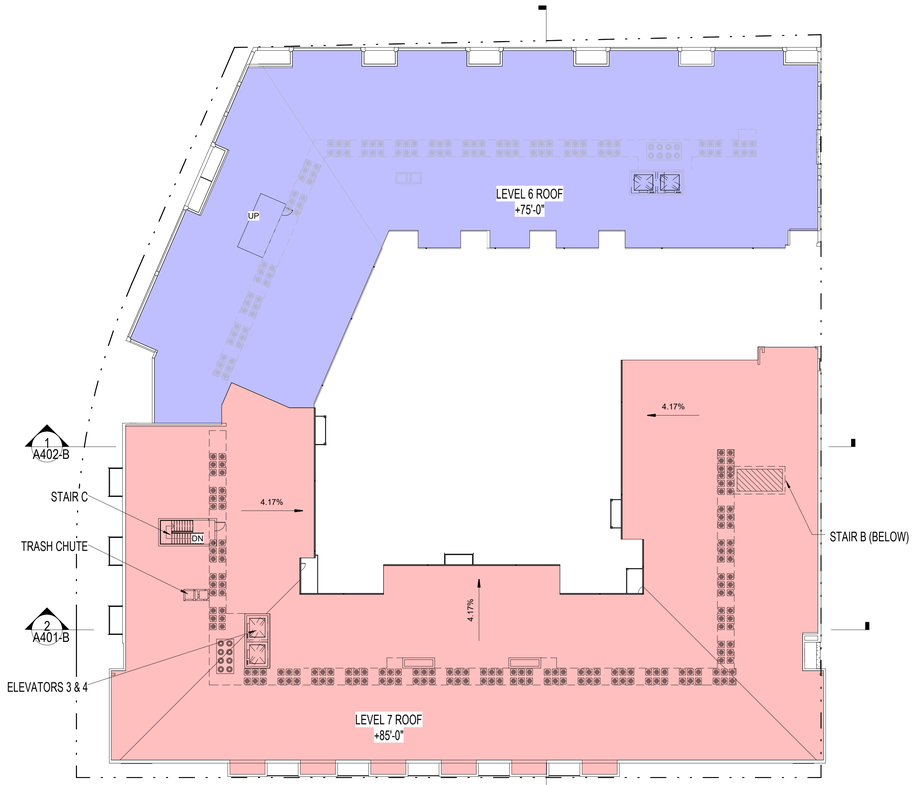
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A103-B

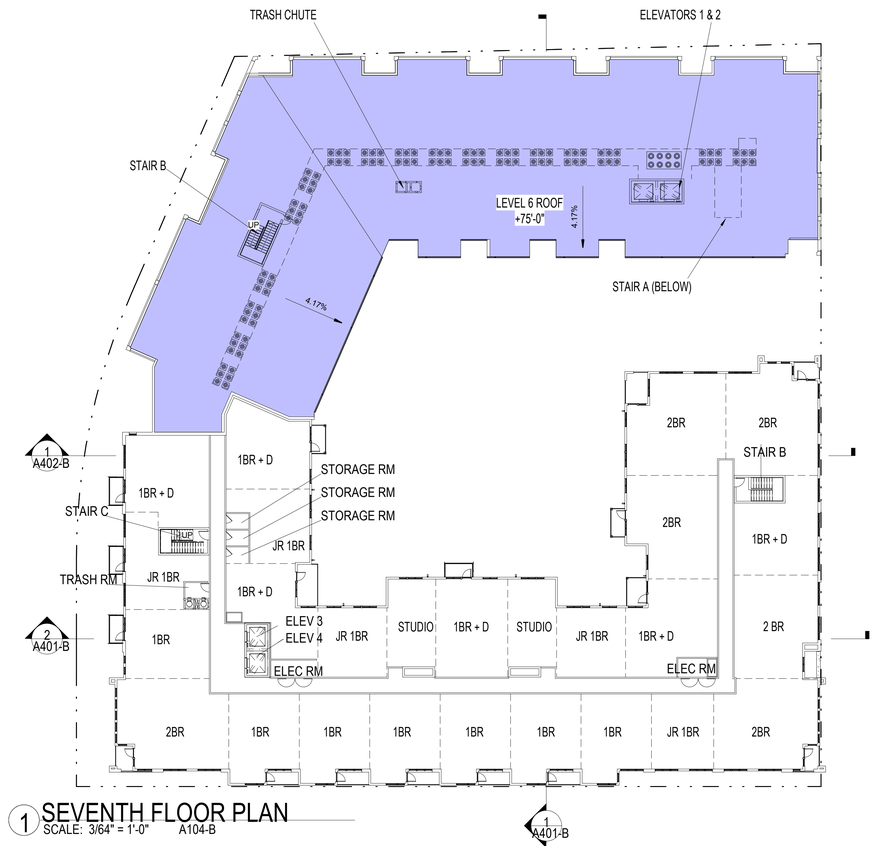
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EXACT UNIT MIX, DEMISING WALLS, AND UNIT LAYOUTS TBD

MECHANICAL EQUIPMENT ON ROOF TO BE SCREENED



2 SEVENTH FLOOR ROOF PLAN
SCALE: 3/64" = 1'-0" A104-B



1 SEVENTH FLOOR PLAN
SCALE: 3/64" = 1'-0" A104-B

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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

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PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

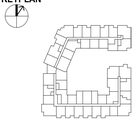
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COMMONWEALTH OF VIRGINIA
SAMI M KOKOS
No. 011557
ARCHITECT

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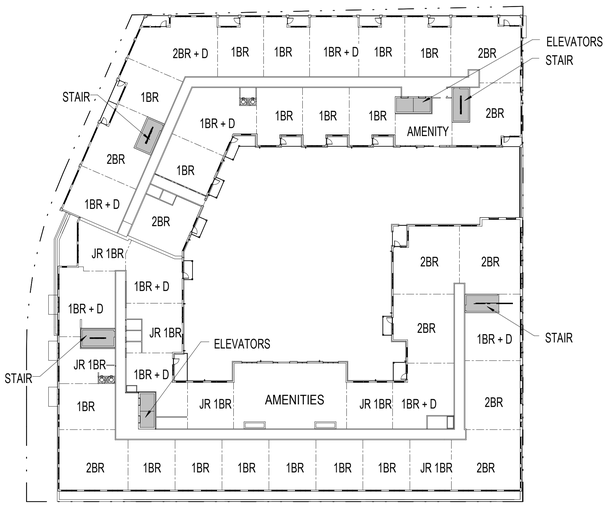
BUILDING PLANS

DATE 2020.07.24

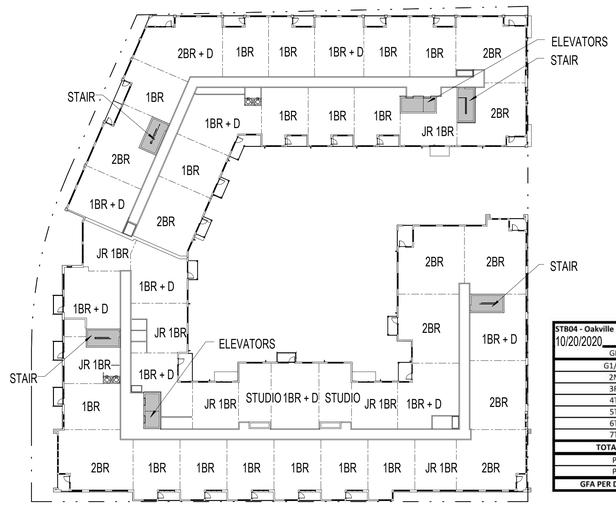
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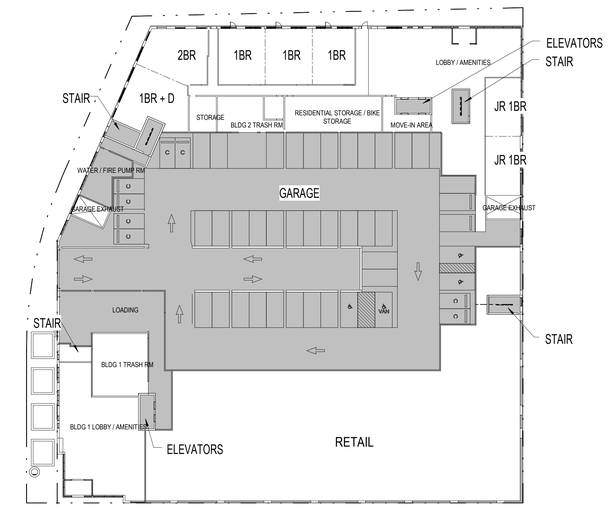
2 2ND FLOOR
SCALE: 1/32" = 1'-0" A106-B



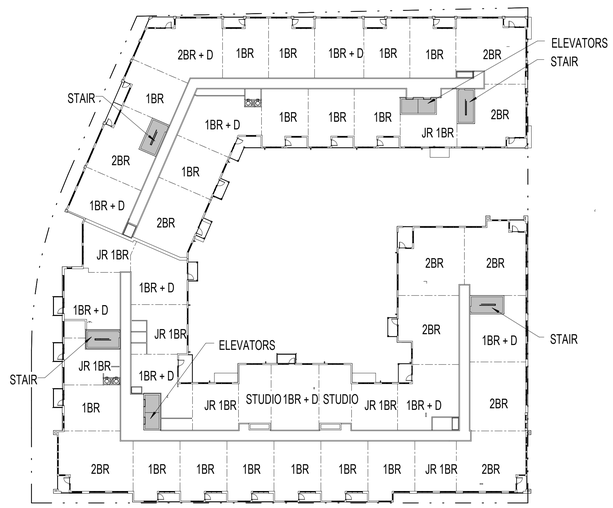
4 6TH FLOOR
SCALE: 1/32" = 1'-0" A106-B

STB04 - Oakville Block B
10/20/2020

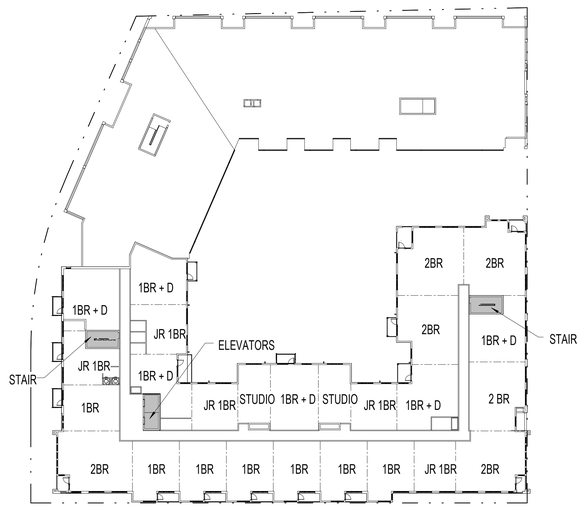
GFA	RETAIL	RES.	BOH	ABOVE GRADE GAR.	BELOW GRADE GAR.	TOTAL W/O GARAGE AND BOH	OPEN SPACE	STAIRS	ELEVATORS	VOLUME SPACE	GFA PER DEFINITION
G1/1ST	15,000	16,735	3,000	23,000		31,735		619	342	0	30,774
2ND		43,117				43,117	12,000	340	335	0	42,442
3RD		44,098				44,098		340	328	0	43,430
4TH		44,098				44,098		340	328	0	43,430
5TH		44,098				44,098		340	328	0	43,430
6TH		43,099				43,099		340	328	0	42,431
7TH		24,567				24,567		340	164	0	24,063
TOTAL GFA	**15,000**	**259,812**	**3,000**	**23,000**		**274,812**		**2659**	**2153**	**0**	**270,000**
P1					57,500						
P2					57,500						
GFA PER DEFINITON	**15,000**	**255,000**									**270,000**



1 G1-1ST FLOOR
SCALE: 1/32" = 1'-0" A106-B



3 TYP FLOOR
SCALE: 1/32" = 1'-0" A106-B



5 7TH FLOOR
SCALE: 1/32" = 1'-0" A106-B

SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

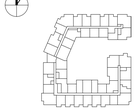
ISSUE

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SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOS
No. 011027
REGISTERED
ARCHITECT

KEYPLAN



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SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
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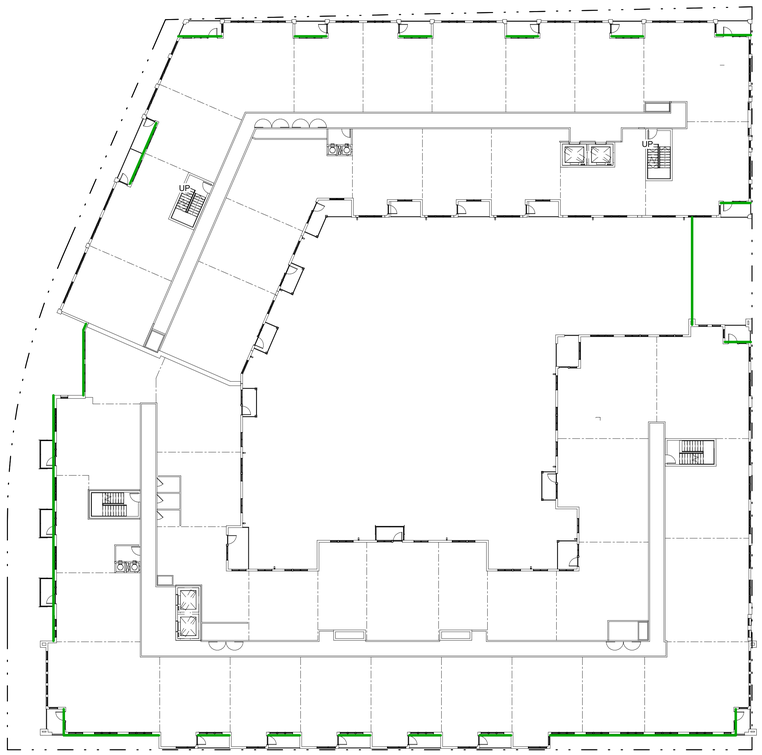
GFA DIAGRAMS

DATE 2020.07.24

SCALE 1/32" = 1'-0"

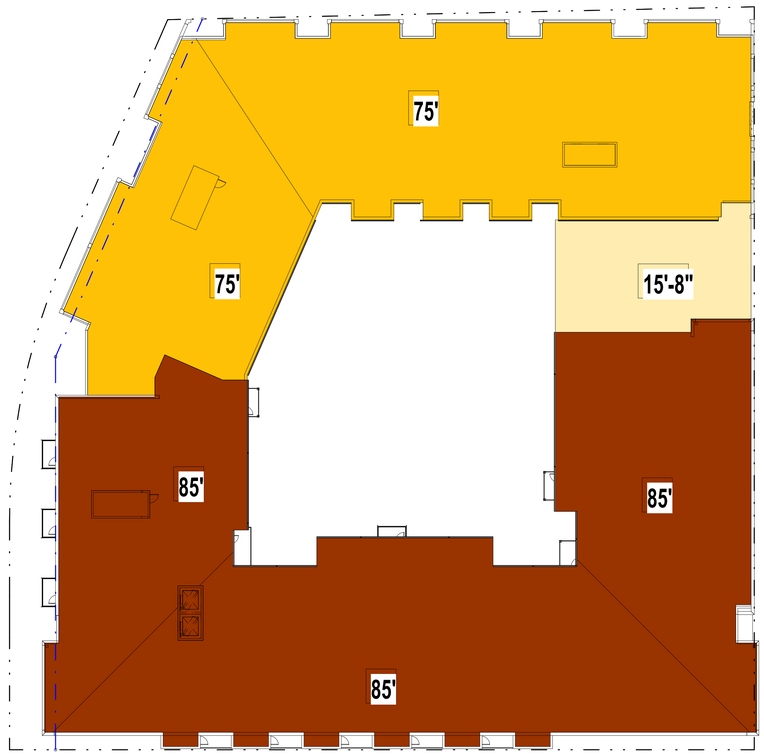
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TOTAL PERIMETER = 954' 4 1/2" (25% = 239')
TOTAL SET BACKS = 431' 2 3/4" (45%)

1 BUILDING MASSING DIAGRAM
SCALE: 3/64" = 1'-0" A107-B.



2 BUILDING HEIGHT VARIETY DIAGRAM
SCALE: 3/64" = 1'-0" A107-B.

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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

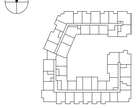
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No. 011507
COMMONWEALTH OF VIRGINIA
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ARCHITECT

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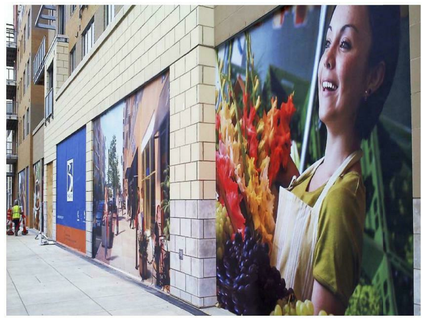
SCALE 3/64" = 1'-0"

A107-B.

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Retail storefront shown in elevations at tenant openings are example of potential final condition. Openings will be temporarily enclosed with painted plywood cladding with graphics, or similar, as required by code for certificate of occupancy. See precedent images on this sheet for possible temporary storefront treatment. Prior to construction bond release, permanent storefront will be constructed in retail bays which have not yet submitted for building permits for tenant fit out.

RETAIL STOREFRONT





TEMPORARY RETAIL ENCLOSURE PRECEDENT IMAGES

MATERIALS LEGEND	
Key Value	Keynote Text
4.01	Brick #01 (Dark gray ironspot with a purple tint)
4.02	Brick #02 (Medium gray ironspot with a rust tint)
4.03	Granite
4.04	Precast Coping
4.05	Precast Sill
5.01	Concealed Fastener Flat Metal Wall Panel #01 (Dark Grey)
5.02	Metal Coping
5.03	Aluminum Picket Railing System
5.04	Prefabricated Aluminum Hung Balcony System
5.05	Aluminum Perforated Panel Railing System
5.06	Concealed Fastener Flat Metal Wall Panel #02 (Rust)
6.01	Post-Supported Balcony System
7.01	Fiber Cement Panel #01 (Hardie Reveal - Medium Grey) *Hardie Panel at courtyard
7.02	Fiber Cement Panel #02 (Hardie Reveal - Dark Gray) *Hardie Panel at courtyard
7.03	Fiber Cement Panel #03 (Hardie Reveal - Rust) *Hardie Panel at courtyard
7.04	Nichiha Panel - Illumination Series (Light Grey)
7.05	Nichiha Panel - Illumination Series (Dark Grey)
7.06	Nichiha Panel - Illumination Series (Rust)
7.07	Fiber Cement Lap Board 4" #01 (Hardie Artisan - Dark Grey) *Hardie Plank at courtyard
7.08	Fiber Cement Lap Board 4" #02 (Hardie Artisan - Medium Grey) *Hardie Plank at courtyard
7.09	Fiber Cement Lap Board 4" #03 (Hardie Artisan - Rust) *Hardie Plank at courtyard
8.02	Window System (Bronze - Heat-Applied Finish)
8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy



1 ROUTE 1 EAST ELEVATION VIEW
SCALE: 1/8" = 1'-0" A501-B.

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SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

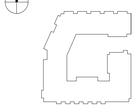
ISSUE

MARK	DATE	DESCRIPTION
	2020.10.20	DSUP Submission #2

SEAL

SAMI M KOKOR
No. 011697
COMMONWEALTH OF VIRGINIA
ARCHITECT

KEYPLAN



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DRAWING TITLE
BUILDING ELEVATIONS

DATE 2020.07.24
SCALE As indicated

A501-B.

10/20/2020 9:56:41 AM
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MATERIALS LEGEND	
Key Value	Keynote Text
4.01	Brick #01 (Dark gray ironspot with a purple tint)
4.02	Brick #02 (Medium gray ironspot with a rust tint)
4.03	Granite
4.04	Precast Coping
4.05	Precast Sill
5.01	Concealed Fastener Flat Metal Wall Panel #01 (Dark Grey)
5.02	Metal Coping
5.03	Aluminum Picket Railing System
5.04	Prefabricated Aluminum Hung Balcony System
5.05	Aluminum Perforated Panel Railing System
5.06	Concealed Fastener Flat Metal Wall Panel #02 (Rust)
6.01	Post-Supported Balcony System
7.01	Fiber Cement Panel #01 (Hardie Reveal - Medium Grey) *Hardie Panel at courtyard
7.02	Fiber Cement Panel #02 (Hardie Reveal - Dark Gray) *Hardie Panel at courtyard
7.03	Fiber Cement Panel #03 (Hardie Reveal - Rust) *Hardie Panel at courtyard
7.04	Nichiha Panel - Illumination Series (Light Grey)
7.05	Nichiha Panel - Illumination Series (Dark Grey)
7.06	Nichiha Panel - Illumination Series (Rust)
7.07	Fiber Cement Lap Board 4" #01 (Hardie Artisan - Dark Grey) *Hardie Plank at courtyard
7.08	Fiber Cement Lap Board 4" #02 (Hardie Artisan - Medium Grey) *Hardie Plank at courtyard
7.09	Fiber Cement Lap Board 4" #03 (Hardie Artisan - Rust) *Hardie Plank at courtyard
8.02	Window System (Bronze - Heat-Applied Finish)
8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy



1 CALVERT AVE. NORTH ELEVATION VIEW
SCALE: 1/8" = 1'-0" A502-B.

SEE SHEET A501-B FOR STOREFRONT NOTES

APPROVED
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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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CHAIRMAN, PLANNING COMMISSION DATE
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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

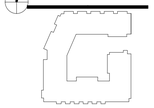
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COMMONWEALTH OF VIRGINIA
SAMI M KOKOR
No. 011597
ARCHITECT

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BUILDING ELEVATIONS

DATE 2020.07.24
SCALE 1/8" = 1'-0"

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1 OAKVILLE ST. NORTHWEST ELEVATION VIEW
SCALE: 1/8" = 1'-0" A503-B.



2 OAKVILLE ST. WEST ELEVATION VIEW
SCALE: 1/8" = 1'-0" A503-B.

MATERIALS LEGEND	
Key Value	Keynote Text
4.01	Brick #01 (Dark gray ironspot with a purple tint)
4.02	Brick #02 (Medium gray ironspot with a rust tint)
4.03	Granite
4.04	Precast Coping
4.05	Precast Sill
5.01	Concealed Fastener Flat Metal Wall Panel #01 (Dark Grey)
5.02	Metal Coping
5.03	Aluminum Picket Railing System
5.04	Prefabricated Aluminum Hung Balcony System
5.05	Aluminum Perforated Panel Railing System
5.06	Concealed Fastener Flat Metal Wall Panel #02 (Rust)
6.01	Post-Supported Balcony System
7.01	Fiber Cement Panel #01 (Hardie Reveal - Medium Grey) *Hardie Panel at courtyard
7.02	Fiber Cement Panel #02 (Hardie Reveal - Dark Gray) *Hardie Panel at courtyard
7.03	Fiber Cement Panel #03 (Hardie Reveal - Rust) *Hardie Panel at courtyard
7.04	Nichiha Panel - Illumination Series (Light Grey)
7.05	Nichiha Panel - Illumination Series (Dark Grey)
7.06	Nichiha Panel - Illumination Series (Rust)
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8.02	Window System (Bronze - Heat-Applied Finish)
8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy

SEE SHEET A501-B FOR STOREFRONT NOTES

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SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
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111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

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STB04 BLOCK B

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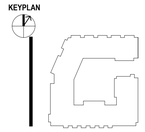
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8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy



1 SWANN AVE. SOUTH ELEVATION VIEW
SCALE: 1/8" = 1'-0" A504-B.

SEE SHEET A501-B FOR STOREFRONT NOTES

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SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

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OWNER CONTACT DAVID CERNIGLIA

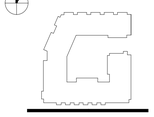
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COMMONWEALTH OF VIRGINIA
SAMI M KOKOR
No. 011697
ARCHITECT

KEYPLAN



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SCALE 1/8" = 1'-0"

A504-B.

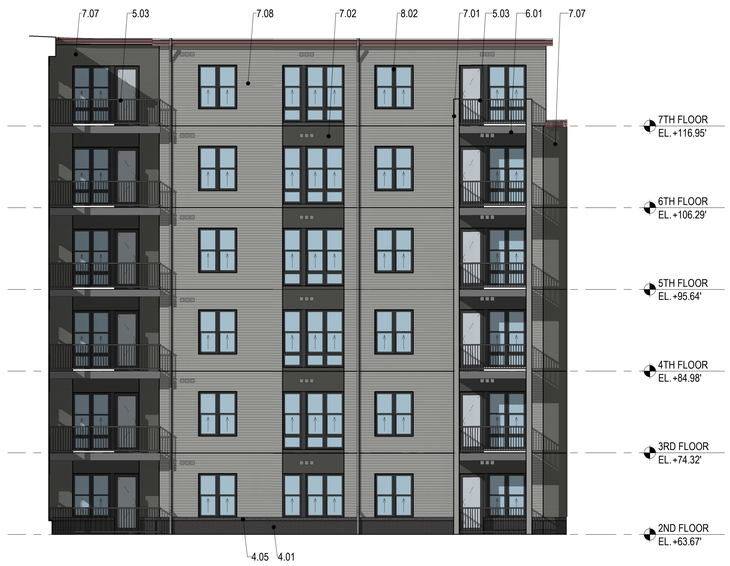
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4 WEST ELEVATION VIEW @COURTYARD
SCALE: 1/8" = 1'-0" A505-B.



3 SOUTH ELEVATION VIEW @COURTYARD
SCALE: 1/8" = 1'-0" A505-B.



1 EAST ELEVATION VIEW @COURTYARD
SCALE: 1/8" = 1'-0" A505-B.



2 SOUTHEAST ELEVATION VIEW @ COURTYARD
SCALE: 1/8" = 1'-0" A505-B.

MATERIALS LEGEND	
Key Value	Keynote Text
4.01	Brick #01 (Dark gray ironspot with a purple tint)
4.02	Brick #02 (Medium gray ironspot with a rust tint)
4.03	Granite
4.04	Precast Coping
4.05	Precast Sill
5.01	Concealed Fastener Flat Metal Wall Panel #01 (Dark Grey)
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7.07	Fiber Cement Lap Board 4" #01 (Hardie Artisan - Dark Grey) *Hardie Plank at courtyard
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8.02	Window System (Bronze - Heat-Applied Finish)
8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy

SEE SHEET A501-B FOR STOREFRONT NOTES

APPROVED
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SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

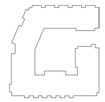
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BUILDING ELEVATIONS

DATE 2020.07.24

SCALE 1/8" = 1'-0"

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MATERIALS LEGEND	
Key Value	Keynote Text
4.01	Brick #01 (Dark gray ironspot with a purple tint)
4.02	Brick #02 (Medium gray ironspot with a rust tint)
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7.09	Fiber Cement Lap Board 4" #03 (Hardie Artisan - Rust) *Hardie Plank at courtyard
8.02	Window System (Bronze - Heat-Applied Finish)
8.04	Storefront System
8.05	Garage Door
8.06	Aluminum Louver System
8.07	Canopy



2 NORTH ELEVATION VIEW 1 @COURTYARD
SCALE: 1/8" = 1'-0" A506-B.



3 NORTH ELEVATION VIEW 2 @COURTYARD
SCALE: 1/8" = 1'-0" A506-B.

SEE SHEET A501-B FOR STOREFRONT NOTES

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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
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SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KONDR
No. 011027
ARCHITECT

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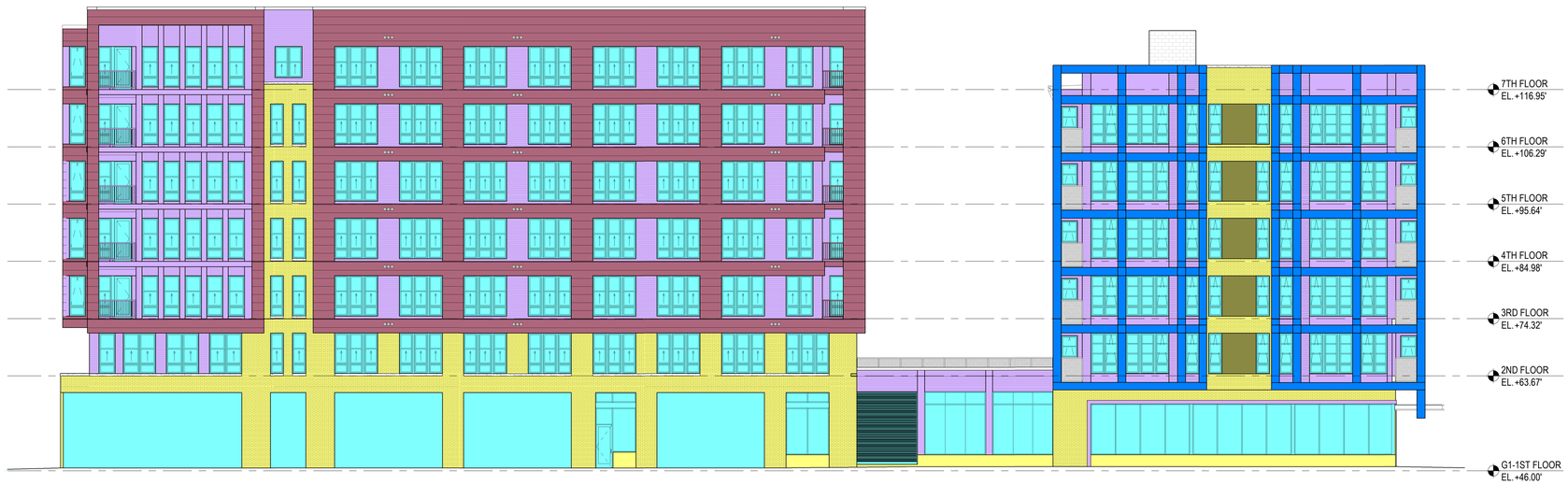
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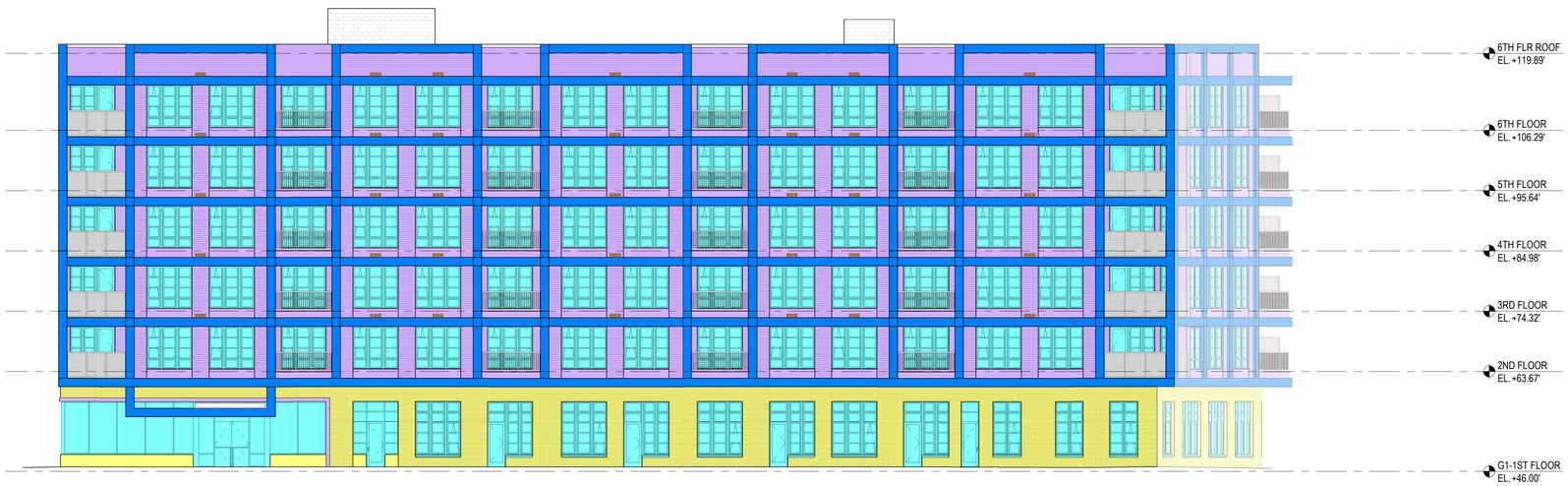
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ROUTE 1 TOTAL	FIBER CEMENT (HARDIE)	NICHIHA PANEL	% FIBER CEMENT (HARDIE)	% NICHIHA PANEL
18,502 SF	3,049 SF	3,353 SF	16%	18%

1 MATERIAL TAKEOFFS - ROUTE 1
SCALE: 3/32" = 1'-0" A507-B.



FIBER CEMENT (HARDIE)
NICHIHA PANEL
METAL PANEL
BRICK
GLAZING

CALVERT TOTAL	FIBER CEMENT (HARDIE)	NICHIHA (PANEL)	% FIBER CEMENT (HARDIE)	% NICHIHA PANEL
14,700 SF	4,230 SF	0 SF	29%	0%

2 MATERIAL TAKEOFFS - CALVERT AVE.
SCALE: 3/32" = 1'-0" A507-B.

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Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

MARK	DATE	DESCRIPTION
	2020.10.20	DSUP Submission #2

SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOS
No. 011557
REGISTERED
ARCHITECT

KEYPLAN

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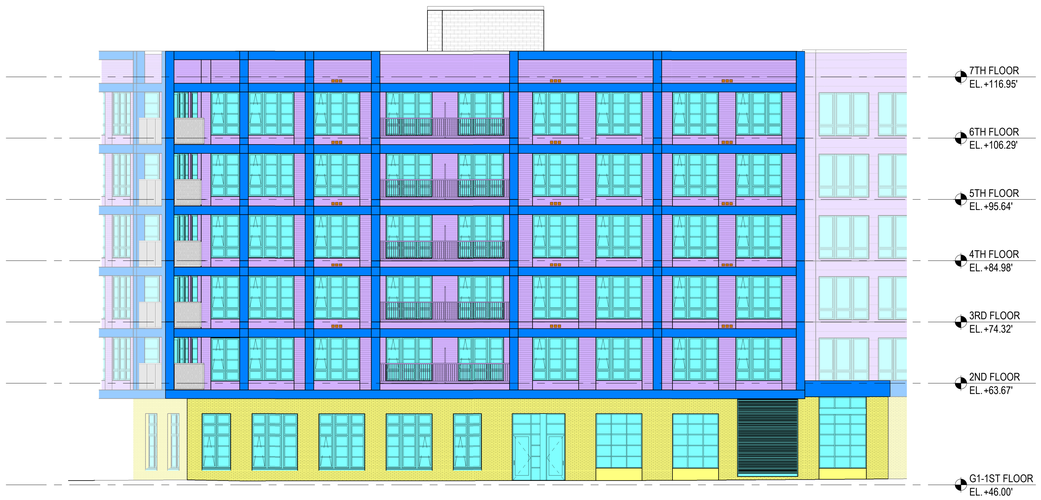
DRAWING TITLE
BUILDING ELEVATIONS - MATERIALS

DATE 2020.07.24

SCALE As indicated

A507-B.

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1 MATERIAL TAKEOFFS - OAKVILLE ST. NW
SCALE: 3/32" = 1'-0" A508-B.



2 MATERIAL TAKEOFFS - OAKVILLE ST. WEST
SCALE: 3/32" = 1'-0" A508-B.

OAKVILLE TOTAL	FIBER CEMENT (HARDIE)	NICHIHA PANEL	% FIBER CEMENT (HARDIE)	% NICHIHA PANEL
20,371 SF	4,016 SF	3,587 SF	20%	18%



FIBER CEMENT (HARDIE)
NICHIHA PANEL
METAL PANEL
BRICK
GLAZING

SWANN TOTAL	FIBER CEMENT (HARDIE)	NICHIHA PANEL	% FIBER CEMENT (HARDIE)	% NICHIHA PANEL
21,151 SF	2,230 SF	4,971 SF	11%	24%

3 MATERIAL TAKEOFFS - SWANN AVE.
SCALE: 3/32" = 1'-0" A508-B.

BUILDING TOTAL	FIBER CEMENT (HARDIE)	NICHIHA PANEL	% FIBER CEMENT (HARDIE)	% NICHIHA PANEL
74,724 SF	13,525 SF	11,911 SF	18%	16%

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
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.

SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814
OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

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SAMI M KOKOIL
No. 011557
COMMONWEALTH OF VIRGINIA
ARCHITECT

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DRAWING TITLE
BUILDING ELEVATIONS - MATERIALS

DATE 2020.07.24

SCALE As indicated

A508-B.

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1 - PERSPECTIVE VIEW LOOKING NORTHWEST



2 - PERSPECTIVE VIEW LOOKING EAST

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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

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LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

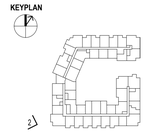
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DRAWING TITLE

BUILDING MASSING

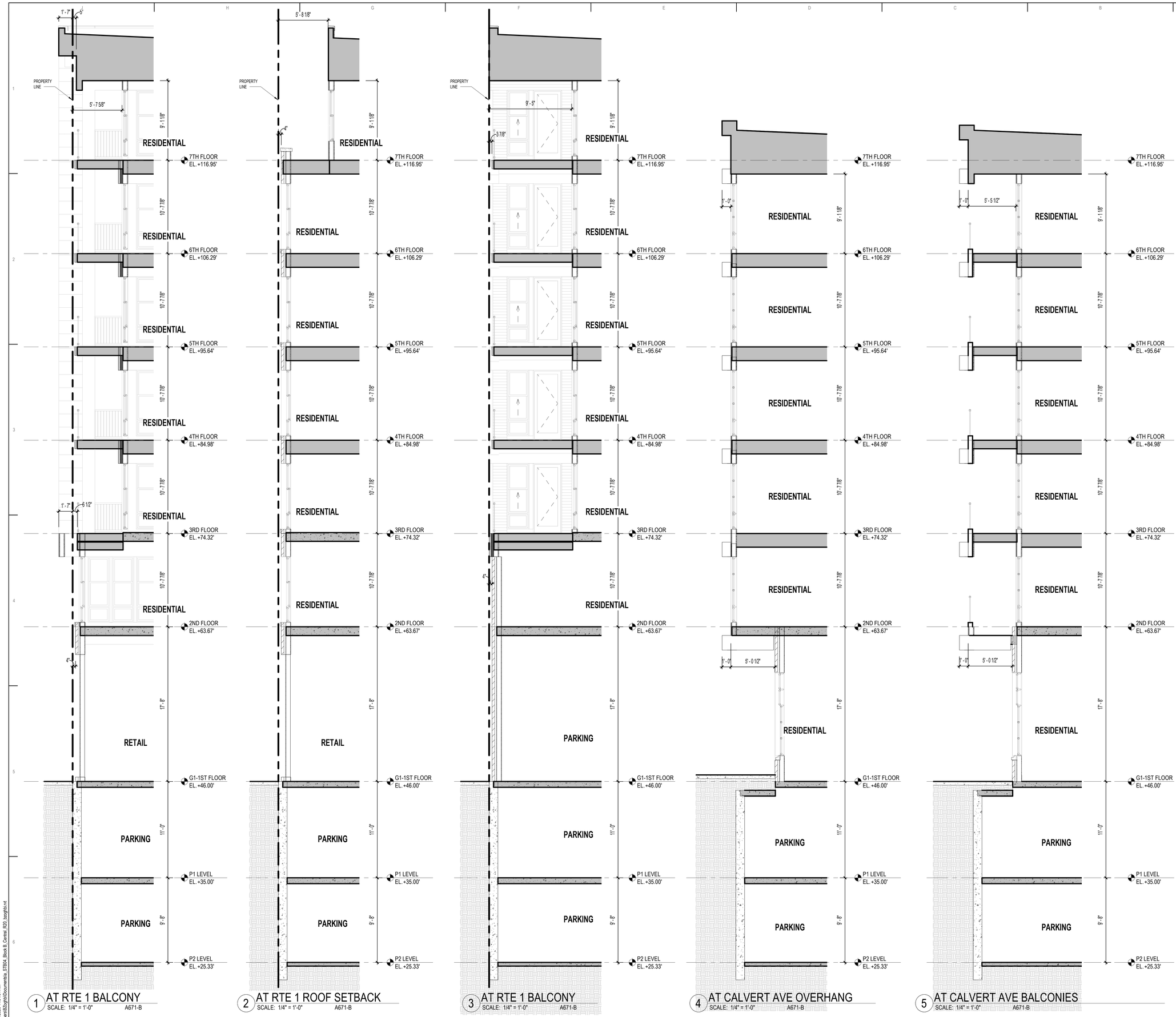
DATE 2020.07.24

SCALE

A510-B

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DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
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4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

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SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOB
No. 011697
ARCHITECT

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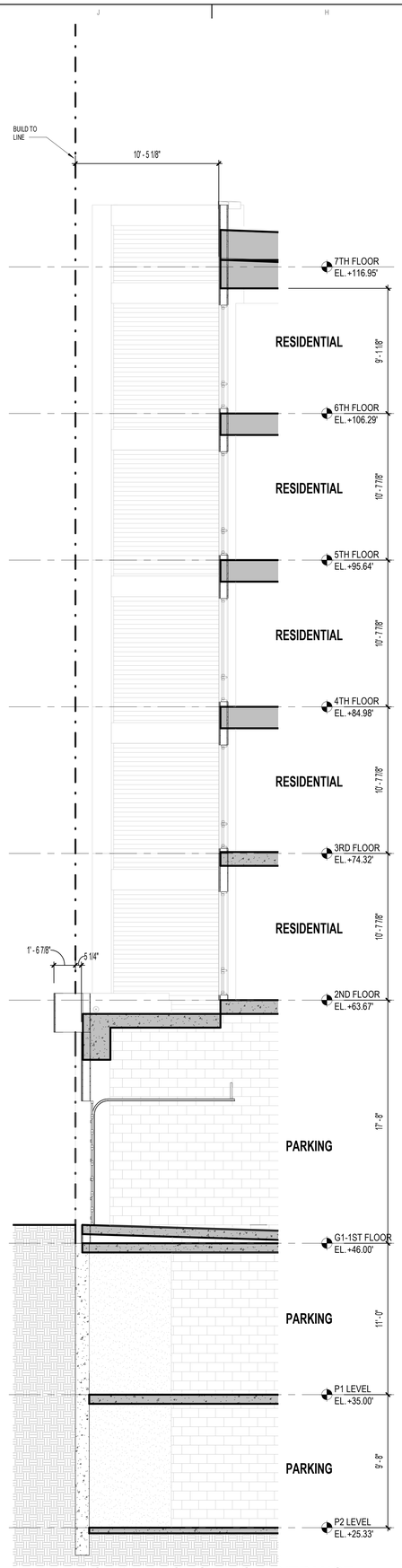
WALL SECTIONS

DATE 2020.07.24

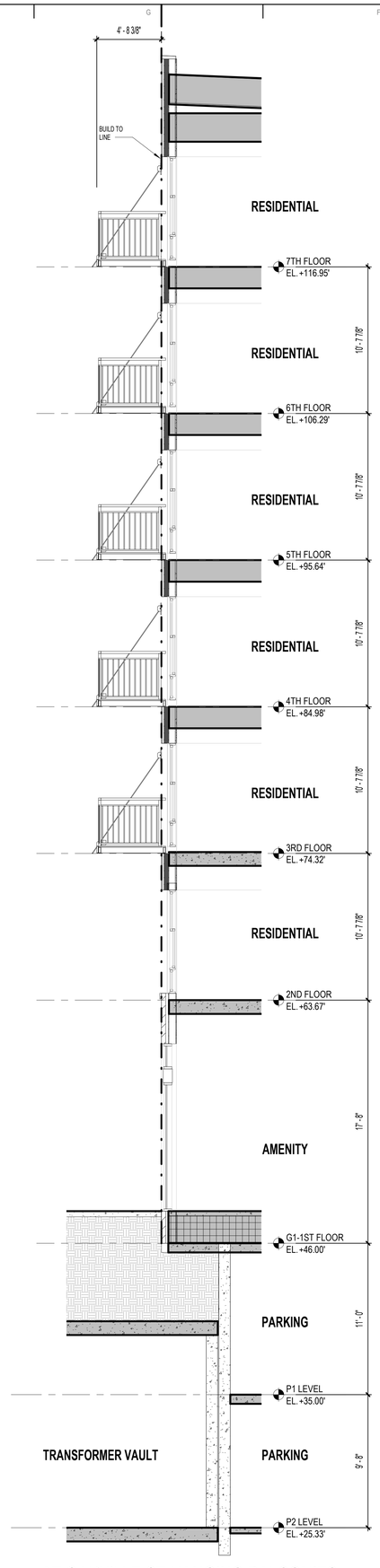
SCALE 1/4" = 1'-0"

A671-B

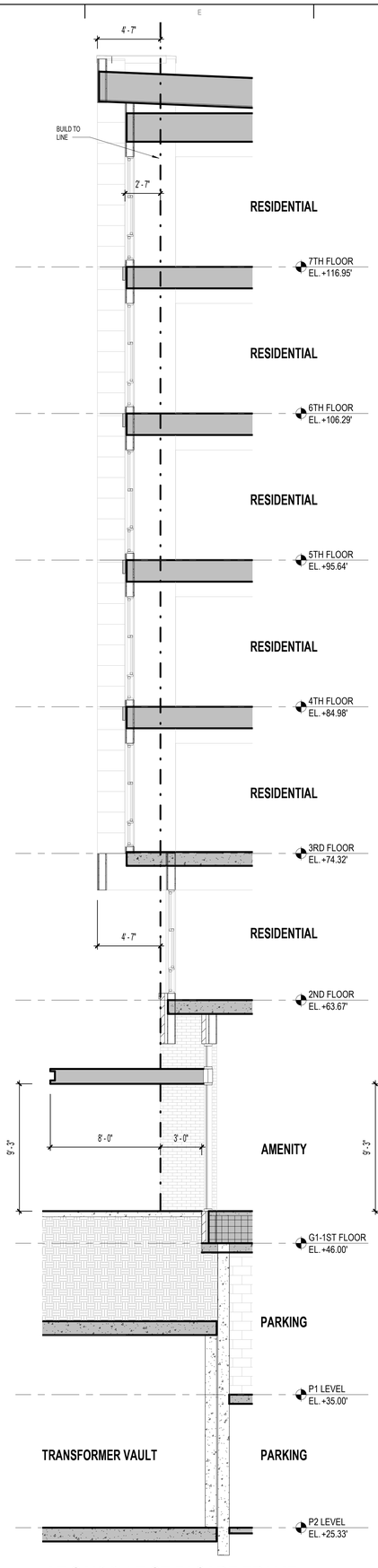
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SPECIAL USE PERMIT NO. 2020-10030
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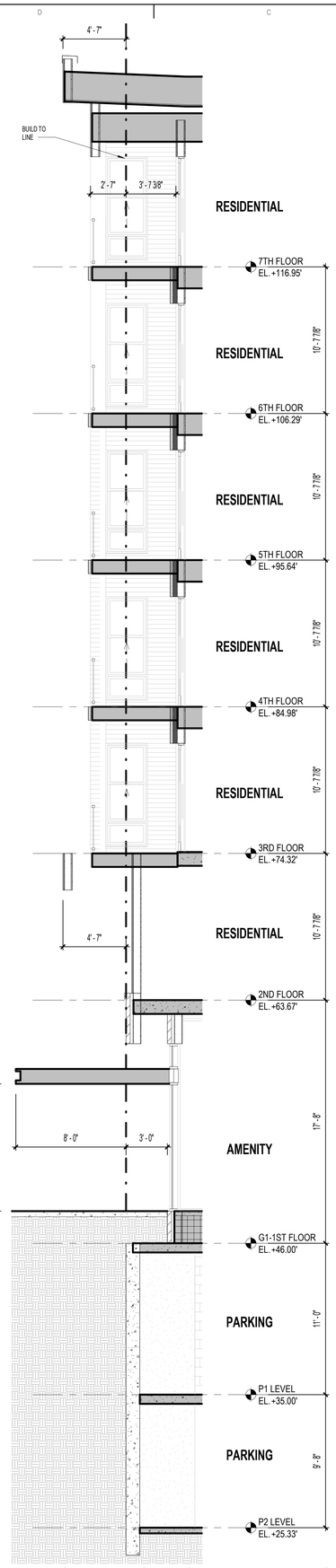
1 AT OAKVILLE ST GARAGE ENTRANCE
SCALE: 1/4" = 1'-0" A672-B



2 AT OAKVILLE ST HANGING BALCONIES
SCALE: 1/4" = 1'-0" A672-B



3 AT OAKVILLE ST FACADE FRAME
SCALE: 1/4" = 1'-0" A672-B



4 AT OAKVILLE ST FACADE FRAME BALCONIES
SCALE: 1/4" = 1'-0" A672-B

SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

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	2020.10.20	DSUP Submission #2

SEAL

COMMONWEALTH OF VIRGINIA
SAMI M.KOKOB
No. 011027
REGISTERED ARCHITECT

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
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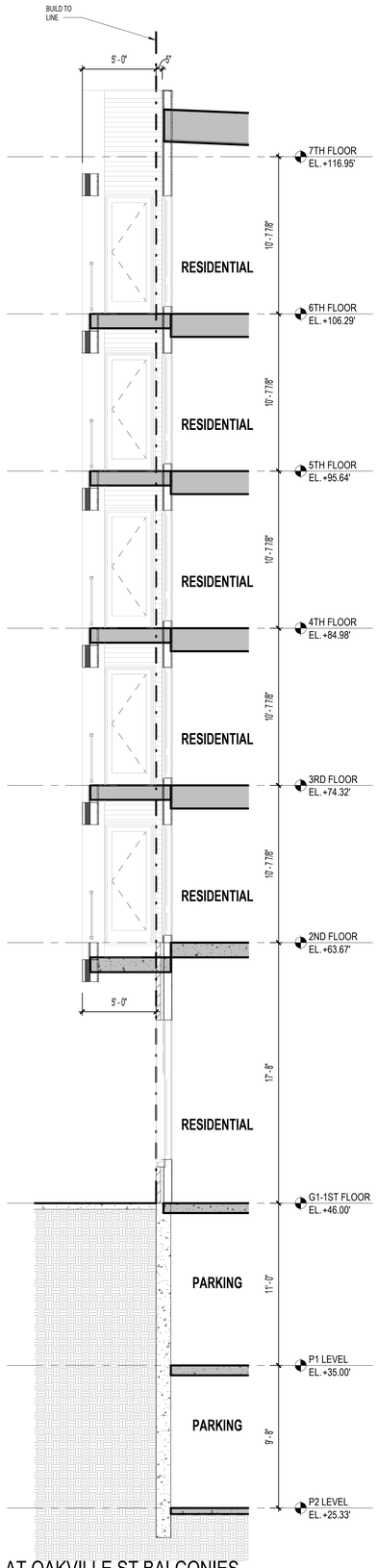
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DRAWING TITLE
WALL SECTIONS

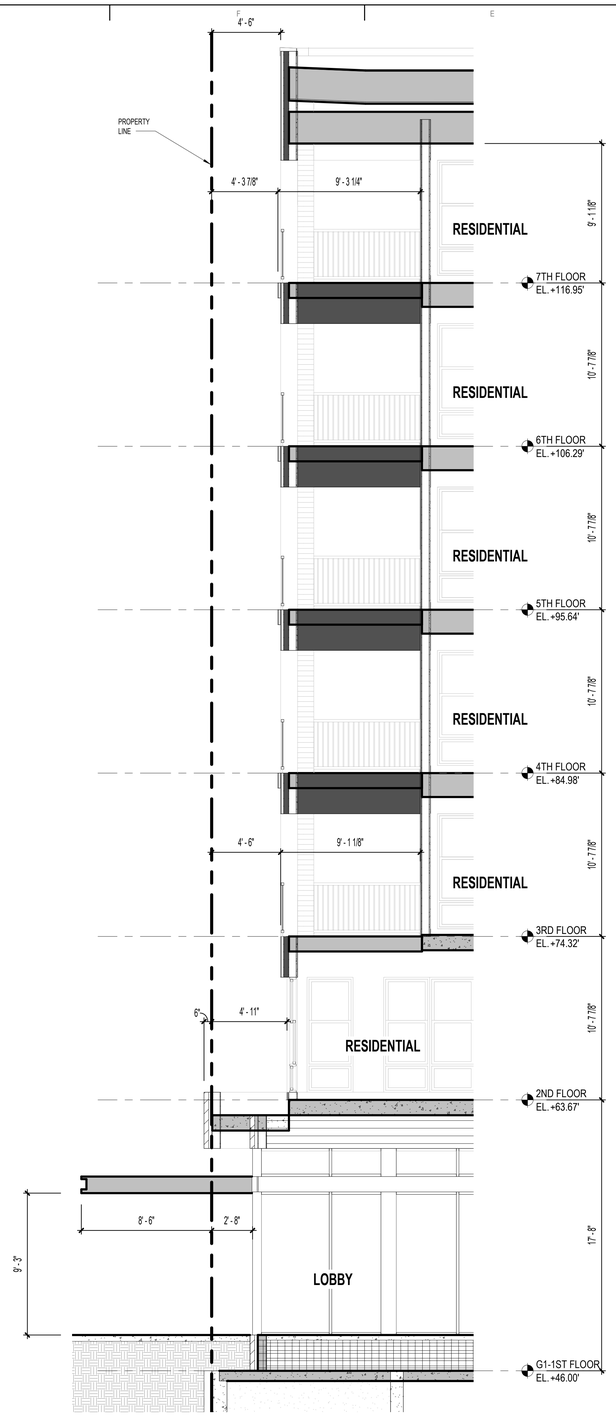
DATE 2020.07.24
SCALE 1/4" = 1'-0"

A672-B

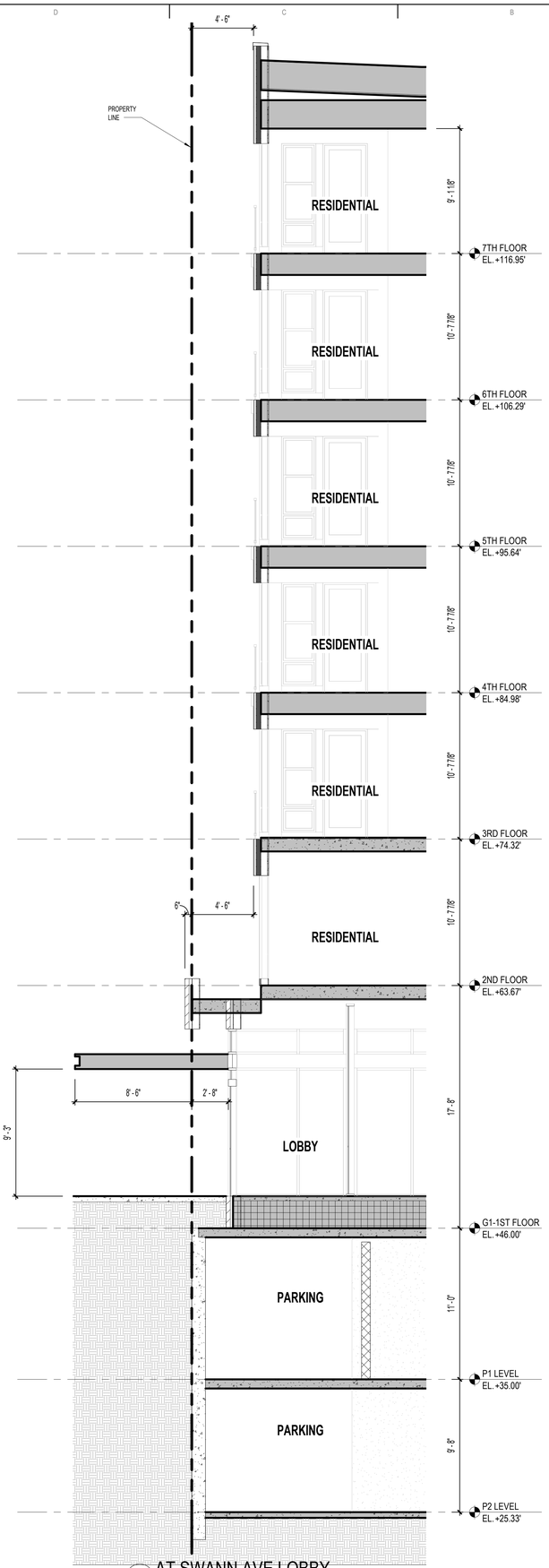
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1 AT OAKVILLE ST BALCONIES
SCALE: 1/4" = 1'-0" A673-B



2 AT SWANN AVE BALCONIES
SCALE: 1/4" = 1'-0" A673-B



3 AT SWANN AVE LOBBY
SCALE: 1/4" = 1'-0" A673-B

SK+I ARCHITECTURE
4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

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Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
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Bethesda, MD 20814

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Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME
STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

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SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOR
No. 011557
ARCHITECT

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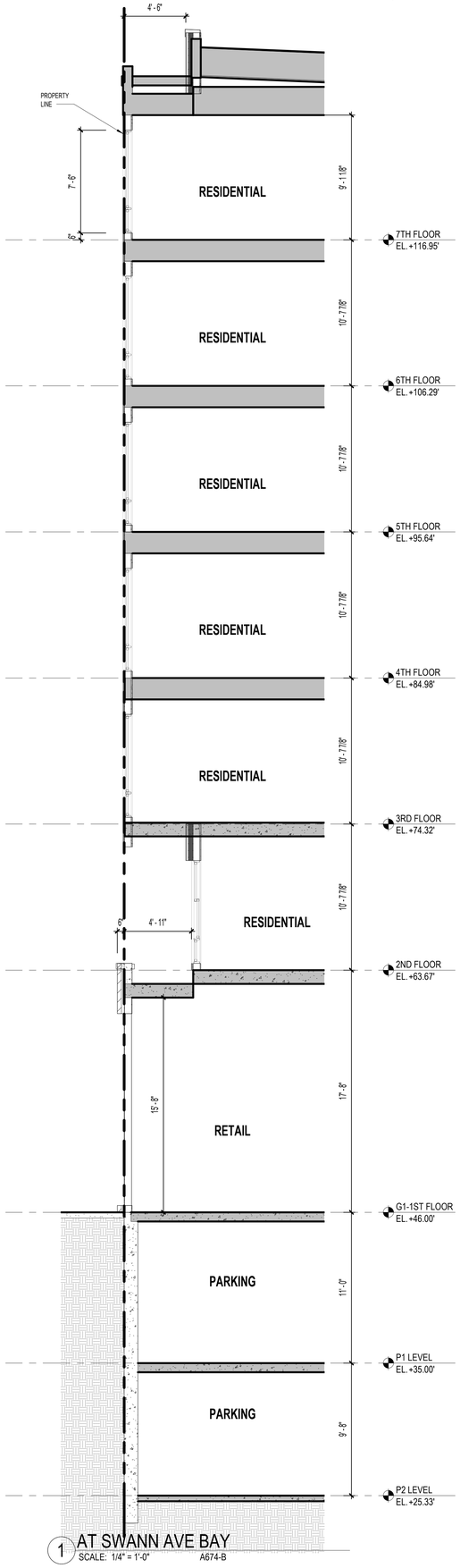
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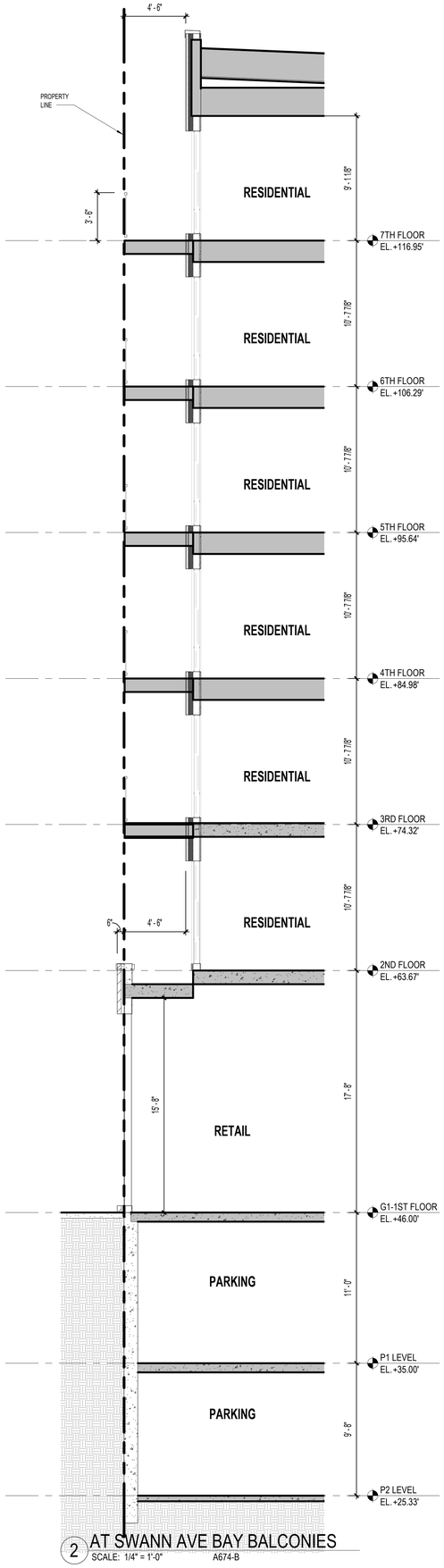
DATE 2020.07.24
SCALE 1/4" = 1'-0"

A673-B

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1 AT SWANN AVE BAY
SCALE: 1/4" = 1'-0" A674-B



2 AT SWANN AVE BAY BALCONIES
SCALE: 1/4" = 1'-0" A674-B

SK+I ARCHITECTURE

4600 EAST WEST HIGHWAY SUITE 700
Bethesda MD 20814
T 301.654.9300 / F 301.654.7211
info@skiarch.com

STRUCTURAL ENGINEER
Ehlert-Bryan
8609 Westwood Center Dr #800
Tysons, VA 22182

MEP ENGINEER
Schwartz Sievers Anoia
7979 Old Georgetown Rd Suite 510
Bethesda, MD 20814

CIVIL ENGINEER
Christopher Consultants
9900 Main St Suite 400
Fairfax, VA 22031

LANDSCAPE ARCHITECTS
LandDesign
200 South Peyton St
Alexandria, VA 22314

INTERIOR DESIGNERS
Hartman Design Group, Inc.
111 Rockville Pike, Suite 425
Rockville, MD 20850

DSUP SUBMISSION #2

PROJECT NAME

STB04 BLOCK B

ALEXANDRIA, VA

PROJECT NUMBER STB04

OWNER
STONEBRIDGE ASSOCIATES, INC.
7200 Wisconsin Ave, Suite 700
Bethesda, MD 20814

OWNER'S PHONE 301.913.9610
OWNER CONTACT DAVID CERNIGLIA

ISSUE

MARK	DATE	DESCRIPTION
	2020.10.20	DSUP Submission #2

SEAL

COMMONWEALTH OF VIRGINIA
SAMI M KOKOB
No. 031057
ARCHITECT

APPROVED
SPECIAL USE PERMIT NO. 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN NO.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
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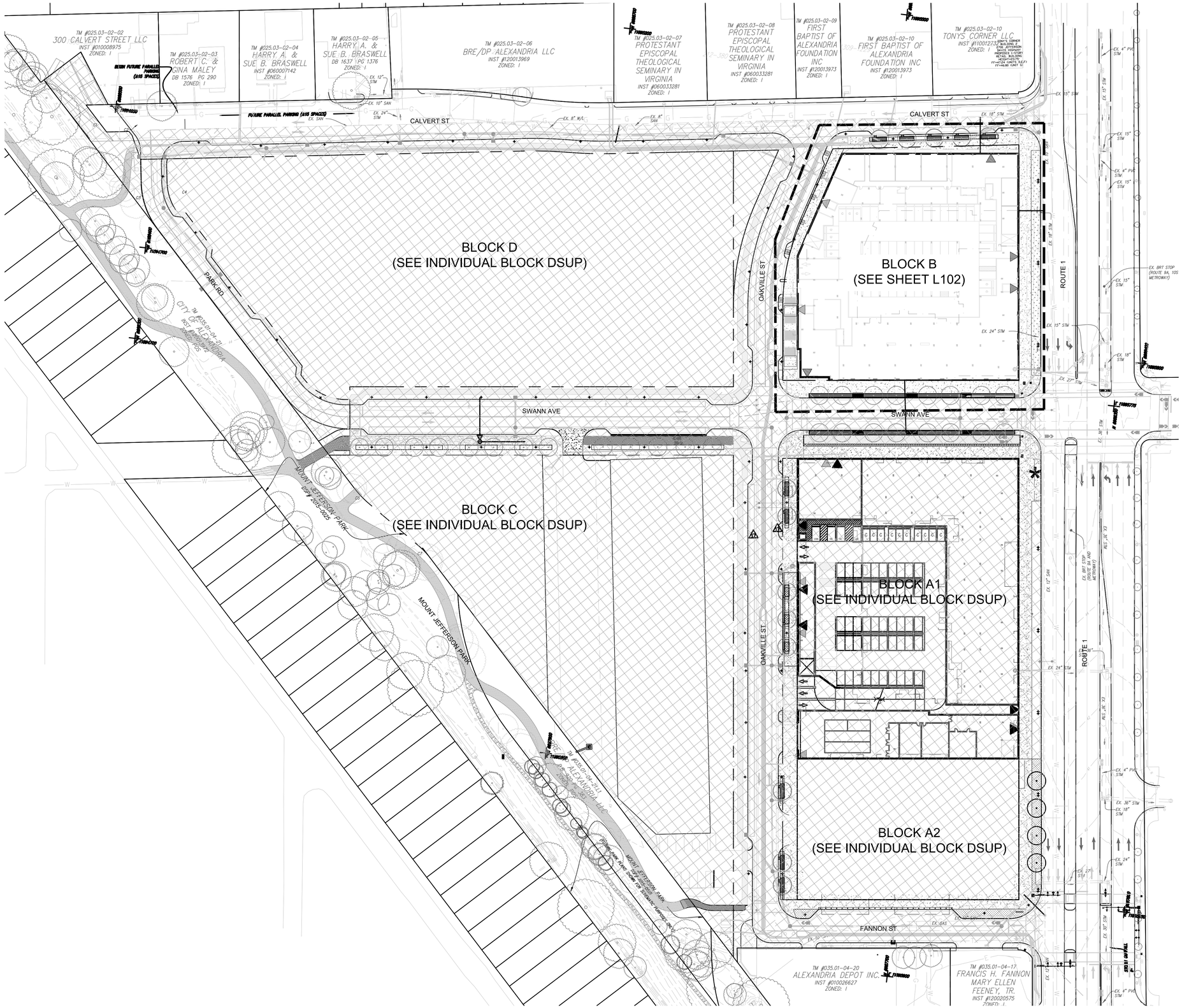
WALL SECTIONS

DATE 2020.07.24

SCALE 1/4" = 1'-0"

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SPECIAL USE PERMIT NO. DSUP 2020-10030

DEPARTMENT OF PLANNING & ZONING

DIRECTOR — DATE

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SITE PLAN NO. _____

DIRECTOR — DATE

CHAIRMAN, PLANNING COMMISSION — DATE

DATE RECORDED _____

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LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
703.549.7784
WWW.LANDDESIGN.COM

KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

BLOCK B

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.#

2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE

VERT: N/A
HORZ: 1"=50'

0 25' 50' 100'

NORTH

SHEET TITLE

REFERENCE PLAN

SHEET NUMBER

L001

PLANTING NOTES:

1. ALL QUANTITIES LISTED IN THE DRAWINGS ARE FOR INFORMATION ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL QUANTITIES AND TO PROVIDE ALL MATERIALS NECESSARY FOR FULL COVERAGE IN ALL PLANTING AREAS AS SPECIFIED ON THE DRAWINGS. ANY DISCREPANCY SHOULD BE REPORTED TO THE OWNER.
2. ALL PLANTS SHOULD BE IN ACCORDANCE WITH ANSI Z60.1 -2014, AMERICAN STANDARD FOR NURSERY STOCK PUBLICATION, APPROVED APRIL 14, 2014.
3. CALIPER SIZE OF CANOPY TREES ARE TO BE MEASURED PER LOCAL CITY LANDSCAPE ORDINANCE.
4. ALL PLANT MATERIAL SHALL CONFORM TO THE SIZE SPECIFICATIONS (CALIPER, HEIGHT AND SPREAD) GIVEN IN THE PLANT SCHEDULE AND SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE.
5. ANY PLANT SUBSTITUTION SHALL BE APPROVED BY LANDDESIGN PRIOR TO PURCHASE.
6. SIZES LISTED ARE MIN. AND REFER TO HEIGHT, UNLESS OTHERWISE SPECIFIED.
7. LANDSCAPE CONTRACTOR SHALL STAKE OUT LOCATIONS OF ALL TREES TO BE PLANTED FOR REVIEW BY LANDDESIGN PRIOR TO INSTALLING. LANDDESIGN RESERVES THE RIGHT TO ADJUST TREE LOCATIONS IN THE FIELD AS NECESSARY.
8. SHRUB/GROUNDCOVER BEDS SHALL BE STAKED FOR REVIEW BY LANDDESIGN/OWNER'S REPRESENTATIVE PRIOR TO EXCAVATION AND OR BED PREPARATION.
9. LANDSCAPE CONTRACTOR SHALL INSTALL STEEL EDGING BETWEEN PLANTING BEDS AND LAWNS, OR AS SHOWN IN DETAILS.
10. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND UTILITIES. PIPES, STRUCTURES, AND LINE RUNS IN THE FIELD PRIOR TO THE INSTALLATION OF ANY PLANT MATERIAL.
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADVISE LANDDESIGN OF ANY CONDITION FOUND ON THE SITE WHICH PROHIBITS INSTALLATION AS SHOWN ON THE DRAWINGS.
12. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION WITH OTHER CONTRACTORS ON SITE AS REQUIRED TO ACCOMPLISH ALL PLANTING OPERATIONS.
13. ALL PROPOSED PLANT MATERIAL SHALL BE MAINTAINED IN A HEALTHY GROWING CONDITION AND MUST BE REPLACED WITH PLANT OF SAME VARIETY AND SIZE IF DAMAGED, DESTROYED, DEAD AND /OR REMOVED.
14. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING AND REMOVAL OF DEBRIS PRIOR TO PLANTING IN ALL AREAS.
15. FINAL FINISHED GRADING SHALL BE REVIEWED BY LANDDESIGN. CONTRACTOR IS RESPONSIBLE FOR ANY ADDITIONAL TOPSOIL REQUIRED TO CREATE A SMOOTH CONDITION SUITABLE FOR PLANTING.
16. TREES OVERHANGING INTO THE PUBLIC R.O.W. SHALL HAVE A MINIMUM CLEAR TRUNK HEIGHT OF FOURTEEN(14) FEET OVER STREETS, DRIVE AISLES, ALLEYS AND FIRE LANES. TREES OVERHANGING PRIVATE STREETS, WALKS, AND /OR PARKING LOTS SHALL HAVE A MINIMUM CLEAR TRUNK HEIGHT OF SEVEN (7) FEET.
17. LANDSCAPE CONTRACTOR IS REQUIRED TO PERFORM A TREE PIT PERCOLATION TEST FOR EACH TREE PIT PRIOR TO INSTALLATION. IF TREE PIT DOES NOT DRAIN WITHIN A 24-HOUR PERIOD, THE CONTRACTOR WILL BE REQUIRED TO PROVIDE A GRAVEL SUMP, FILTER FABRIC AND STAND PIPE. ALL TREE PIT SUMPS SHALL BE INCLUDED IN IN THE CONTRACTOR'S BASE BID AS A UNIT PRICE AND PROVIDE AS A DEDUCT ALTERNATE PER TREE PIT SUMPS NOT REQUIRED TO BE INSTALLED.
18. LANDSCAPE CONTRACTOR IS RESPONSIBLE TO REVIEW SITE ENVIRONMENTAL CONDITIONS PRIOR TO AND DURING INSTALLATION OF PLANT MATERIAL. ANY DISCREPANCIES OR CONCERNS BETWEEN THE ENVIRONMENTAL SITE CONDITIONS (I.E., SOIL TYPE, WATER, CLIMATE, WIND, SUN EXPOSURE ETC.) AND THE PLANT MATERIAL SPECIFIED WITHIN THE DRAWING SHALL BE BROUGHT TO THE ATTENTION OF LANDDESIGN AND/OR OWNER, AND SHALL BE DONE SO IN WRITING. CONTRACTOR SHALL PROVIDE SUGGESTED SOLUTIONS FOR ALTERNATIVE PLANT MATERIAL PROPOSED FOR SUBSTITUTION. LANDDESIGN TO REVIEW CONDITIONS AND INFORMATION SUBMITTED BY CONTRACTOR AND WILL ISSUE DIRECTIVE. SHOULD PLANT MATERIAL DIE BECAUSE OF ENVIRONMENTAL CONDITIONS DESCRIBED ABOVE, THE LANDSCAPE CONTRACTOR ASSUMES ALL WARRANTY AND GUARANTEE OF THE PLANT MATERIAL INSTALLED.
19. ALL NEW PLANTING AREAS SHALL BE BACKFILLED WITH PLANTING SOIL THAT IS A MIXTURE OF 40-50% IMPORTED UNSCREENED TOPSOIL, 40-45% COARSE SAND, AND 10% COMPOST. FINAL TESTED ORGANIC MATTER SHALL BE BETWEEN 2.75 AND 4% (BY DRY WEIGHT). BACKFILL SHALL BE TO A DEPTH OF 18" FOR SHRUB AND GROUNDCOVER ZONES AND 36" FOR TREE PITS.
20. AFTER PLANTING SOIL MIXES ARE INSTALLED IN PLANTING BED AREAS AND JUST PRIOR TO THE INSTALLATION OF SHRUB OR GROUNDCOVER PLANTINGS, SPREAD 3-4 INCHES OF COMPOST OVER THE BEDS AND ROTO TILL INTO THE TOP 8 INCHES OF THE PLANTING SOIL. THIS WILL RAISE GRADES SLIGHTLY ABOVE THE FINISHED GRADES, IN ANTICIPATION GRADES WILL SETTLE WITHIN A FEW MONTHS AFTER INSTALLATION AS COMPOST BREAKS DOWN.
21. IN ALL EXISTING PLANTING AREAS DESIGNATED TO RECEIVE NEW PLANTINGS, SPREAD 3-4 INCHES OF COMPOST OVER THE BEDS AND ROTO TILL INTO THE TOP 8 INCHES OF THE PLANTING SOIL. THIS WILL RAISE THE GRADES SLIGHTLY ABOVE THE FINISHED GRADES, IN ANTICIPATION GRADES WILL SETTLE WITHIN A FEW MONTHS AFTER INSTALLATION AS COMPOST BREAKS DOWN. IN NO CASE WILL THIS BE PERFORMED WHERE IT MAY NEGATIVELY IMPACT THE HEALTH OF ADJACENT, EXISTING PLANT MATERIALS WHICH ARE DESIGNATED TO REMAIN.
22. LANDSCAPE CONTRACTOR TO WARRANTY ALL PLANT MATERIALS FOR A PERIOD OF ONE YEAR. THE CONTRACTOR AGREES TO REPLACE DEFECTIVE WORK AND DEFECTIVE PLANTS, AND THAT THE OWNER'S REPRESENTATIVE SHALL MAKE THE FINAL DETERMINATION IF PLANTS MEET THE REQUIRED SPECIFICATIONS OR THAT PLANTS ARE DEFECTIVE. PLANTS DETERMINED TO BE DEFECTIVE SHALL BE REMOVED IMMEDIATELY UPON NOTIFICATION BY THE OWNER'S REPRESENTATIVE AND REPLACED WITHOUT COST TO THE OWNER, AS SOON AS WEATHER CONDITIONS PERMIT AND WITHIN THE SPECIFIED PLANTING PERIOD. THE REPLACED MATERIALS SHALL ALSO RECEIVE A WARRANTY PERIOD OF ONE YEAR WHICH STARTS AT THE DATE OF INSTALLATION. BULBS, ANNUAL FLOWERS, AND SEASONAL COLOR PLANTS SHALL ONLY BE WARRANTED FOR THE PERIOD OF THE EXPECTED BLOOM OR PRIMARY DISPLAY.

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IRRIGATION NOTES:

1. A FULLY AUTOMATED IRRIGATION SYSTEM PROVIDING 100% COVERAGE SHALL BE PROVIDED FOR ALL PLANTING AREAS, UNLESS NOTED OTHERWISE ON IRRIGATED AREAS PLANS. SYSTEM SHALL BE IN OPERATION PRIOR TO INSTALLATION OF ANY PLANT MATERIAL OTHER THAN CANOPY TREES.
2. ALL PLANTING BEDS/ SHRUB AND GROUNDCOVER AREAS TO BE IRRIGATED WITH EITHER 12" SPRAY POP-UPS AND/OR A LANDSCAPE DRIP-LINE SYSTEM, UNLESS NOTED OTHERWISE.
3. ALL PLANTER POTS AND RAISED PLANTERS TO BE IRRIGATED WITH MICRO SPRAY SPRINKLER HEADS.
4. IRRIGATION SYSTEM IS DESIGN/BUILD. CONTRACTOR TO PROVIDE DRAWINGS AND CUT SHEETS OF ALL COMPONENTS.
5. PROVIDE AS-BUILT DRAWINGS OF IRRIGATION AFTER INSTALLATION.

MATERIALS + PAVING NOTES:

1. ALL MATERIALS, CONSTRUCTION METHODS, WORKMANSHIP, EQUIPMENT SERVICES AND TESTING FOR ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE PROJECT DOCUMENTS AND THE GOVERNING AUTHORITIES' REQUIREMENTS. IN THE EVENT OF A CONFLICT BETWEEN THE PROJECT DOCUMENTS AND THE GOVERNING AUTHORITIES' REQUIREMENTS, THE MORE STRINGENT SHALL APPLY.
2. SUBGRADE PREPARATION, PAVEMENT STRENGTH AND THICKNESS SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT.
   - 2.1. PROOF-ROLL SUBGRADE: PRIOR TO PREPARATION OF THE SUBBASE, THE SUBGRADE SHALL BE PROOF-ROLLED WITH HEAVY PNEUMATIC EQUIPMENT. ANY SOFT OR PUMPING AREAS SHALL BE EXCAVATED TO FIRM SUBGRADE AND BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.
   - 2.2. PAVEMENT SUBGRADE SHALL BE GRADED TO PREVENT PONDING AND INFILTRATION OF EXCESSIVE MOISTURE ON OR ADJACENT TO THE PAVEMENT SUBGRADE.
3. THE USE OF "LEVEL UP" SAND UNDER PAVEMENT WILL NOT BE ACCEPTED, UNLESS NOTED OTHERWISE..
4. CONCRETE SHALL NOT BE PLACED WHEN THE TEMPERATURE IS BELOW 40 DEGREES FAHRENHEIT AND FALLING, BUT MAY BE PLACED WHEN THE TEMPERATURE IS ABOVE 35 DEGREES FAHRENHEIT AND RISING. THE TEMPERATURE READING SHALL BE TAKEN IN THE SHADE AWAY FROM ARTIFICIAL HEAT.
   - 4.1. DO NOT PLACE CONCRETE WHILE IT IS RAINING OR WHEN RAIN IS IMMINENT.
5. CAST IN PLACE CONCRETE SHALL MEET THE FOLLOWING REQUIREMENTS:
   - 5.1. MINIMUM 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS, UNLESS NOTED OTHERWISE.
   - 5.2. AGGREGATES: ASTM C33 MAX 3/4" IN SIZE, UNLESS NOTED OTHERWISE
   - 5.3. SLUMP: 3 TO 5 INCHES
   - 5.4. AIR CONTENT: 4 TO 6 PERCENT BY VOLUME
6. CONCRETE THICKNESS:
   - 6.1. PEDESTRIAN AREA: 4" THICK, UNLESS NOTED OTHERWISE.
   - 6.2. ALL OTHER CONCRETE COMPONENTS INSTALL PER SIZE SPECIFIED IN DRAWINGS
7. CONCRETE REINFORCING:
   - 7.1. 4" THICK PAVING: #3's AT 24" SPACING UNLESS NOTED OTHERWISE IN DRAWINGS
   - 7.2. 6" THICK PAVING: #4s AT 24" SPACING UNLESS NOTED OTHERWISE IN DRAWINGS
   - 7.3. 8" THICK PAVING: #5's AT 24" SPACING UNLESS NOTED OTHERWISE IN DRAWINGS
   - 7.4. ALL PAVEMENT REINFORCING BARS SHALL BE GRADE 60 KSI DEFORMED BILLET STEEL BARS, UNCOATED FINISH. SIZE AND SPACING SHALL BE IN ACCORDANCE WITH THE PAVING PLAN AND DETAILS.
   - 7.5. ALL REINFORCING STEEL AND DOWEL BARS IN PAVEMENT SHALL BE SUPPORTED AND MAINTAINED AT THE CORRECT CLEARANCES BY THE USE OF BAR CHAIRS.
8. CONTROL JOINTS (TROWEL OR SAW CUT)
   - 8.1. TO BE PLACED AS INDICATED ON PLANS AND DETAILS TO A MINIMUM DEPTH OF 1/8 OF CONCRETE THICKNESS.
   - 8.2. SAW CUT JOINTS TO BE EXECUTED WITHIN 12 HOURS OF CONCRETE PLACEMENT.
   - 8.3. SAWN JOINTS ARE TO BE TRUE IN ALIGNMENT AND SHALL CONTINUE THROUGH ADJACENT CURBS. RADIAL JOINTS SHALL BE NO SHORTER THAN 18".
   - 8.4. SAWN JOINTS TO BE CLEANED OF DEBRIS, DIRT, DUST, SCALE, CURING COMPOUND AND CONCRETE, BLOWN DRY AND IMMEDIATELY SEALED. SEALANT MATERIAL SHALL BE SONNEBORN SONOLASTIC SL2 MULTI-COMPONENT, SELF-LEVELING, ELASTOMERIC POLYURETHANE OR EQUIVALENT. SEALANT COLOR SHALL MATCH PAVEMENT.
9. EXPANSION JOINTS
   - 9.1. PLACE AT A MAXIMUM SPACING OF 30' O.C. AND COORDINATE WITH OVERALL PAVING PATTERN AND COLOR.
   - 9.2. PROVIDE DOWELS AS SPECIFIED IN DRAWING DETAILS.
   - 9.3. CONTRACTOR SHALL PREPARE A JOINT LAYOUT AND PROVIDE IT TO THE ENGINEER FOR REVIEW. THE JOINT LAYOUT SHALL BE PROVIDED A MINIMUM OF ONE WEEK PRIOR TO PLACING CONCRETE. PATTERN SHALL BE CAREFULLY DESIGNED BY THE CONTRACTOR TO AVOID IRREGULAR SHAPES. EXPANSION JOINTS SHALL NOT BE LOCATED ALONG VALLEYS IN PAVEMENT.
10. ALL CONSTRUCTION JOINTS SHALL BE SAWN, CONCRETE FINISHES TO BE PER DRAWING DETAILS AND SPECIFICATIONS.
11. CONCRETE SHALL BE BROOM FINISHED AND CURED FOR A MINIMUM OF 72 HOURS UNLESS NOTED OTHERWISE.
12. BREAKOUTS FOR REMOVAL OF EXISTING PAVEMENT AND CURBS SHALL BE MADE BY FULL DEPTH SAW CUT WHEN ADJACENT TO PROPOSED PAVEMENT AND/OR CURBS.
13. PROPOSED PAVEMENT AND/OR CURBS INTENDED TO TIE INTO EXISTING SHALL MATCH SHALL MATCH THE ELEVATION OF EXISTING PAVEMENT AND/OR CURBS.
14. PAVEMENT MARKINGS
   - 14.1. PAVEMENT MARKINGS SHALL BE PROVIDED IN ACCORDANCE WITH THE ALEXANDRIA LANDSCAPE GUIDELINES "UNIFORM TRAFFIC MANUAL FOR PAVEMENT MARKINGS."
   - 14.2. FIRE LANES SHALL BE STRIPED AND/OR SIGNED IN ACCORDANCE WITH THE GOVERNING AUTHORITIES' REGULATIONS.
   - 14.3. ALL ACCESSIBLE PAVEMENT MARKINGS SHALL COMPLY WITH ADAAG STANDARDS AND STATE AND LOCAL CODES.
   - 14.4. PARKING SPACE STRIPES, ACCESSIBLE SPACES, PEDESTRIAN STRIPING, DIRECTIONAL ARROWS AND LETTERING SHALL BE SOLID WHITE, UNLESS A SPECIFIC COLOR IS REQUIRED BY LOCAL CODE. TWO (2) COATS OF VOC COMPLIANT, LOCAL DOT APPROVED, UNDILUTED, SOLVENT BASED OR LATEX TRAFFIC PAINT SHALL BE APPLIED. USE MANUFACTURER'S RECOMMENDED APPLICATION RATE, WITHOUT ADDITION OF A THINNER, WITH A MAXIMUM OF 100 SQUARE FEET PER GALLON OR AS REQUIRED. PROVIDING MINIMUM 15 MILS WET FILM THICKNESS AND 7 MILS DRY FILM THICKNESS PER COAT WITH A MINIMUM OF 30 DAYS BETWEEN APPLICATIONS. PAINT SHALL BE CRISP, STRAIGHT AND APPLIED UNIFORMLY ACROSS THE WIDTH OF THE LINE FOR A MINIMUM TOTAL DRY FILM THICKNESS OF 15 MILS.
15. CONTRACTOR SHALL REFER TO THE SITE CIVIL, MEP AND IRRIGATION PLANS FOR CONDUIT TO BE INSTALLED UNDER PAVEMENT PRIOR TO COMMENCING PAVEMENT SUBGRADE PREPARATION.
16. ALL TESTING SHALL BE PERFORMED BY A QUALIFIED TESTING LABORATORY, EMPLOYED AND PAID DIRECTLY BY THE OWNER. TESTING SHALL BE PERFORMED, AT A MINIMUM, IN ACCORDANCE WITH THE RECOMMENDATIONS IN THE GEOTECHNICAL REPORT. IN THE EVENT THE RESULTS OF THE INITIAL TESTING DO NOT COMPLY WITH THE PLANS AND THE SPECIFICATIONS, SUBSEQUENT TEST NECESSARY TO DETERMINE THE ACCEPTABILITY OF CONSTRUCTION SHALL BE AT THE CONTRACTOR'S EXPENSE. PAVEMENT FOUND TO BE DEFICIENT IN STRENGTH OR THICKNESS SHALL BE REMOVED AND REPLACED SOLELY AT THE EXPENSE OF THE CONTRACTOR.

ACCESSIBILITY NOTES:

1. MAX CROSS SLOPE ON PAVED SURFACES SHALL BE 2% MAXIMUM, UNLESS NOTED OTHERWISE.
2. MAX RUNNING SLOPE ON PAVED SURFACES SHALL BE 5% MAXIMUM, UNLESS NOTED OTHERWISE.
3. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM, AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". CONTRACTOR SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.
4. ALL CURB RAMPS SHALL BE BROOM FINISHED PERPENDICULAR TO SLOPE.
5. ALL CURB RAMPS SHALL HAVE A 1:12 MAX SLOPE IN THE DIRECTION OF TRAVEL, 2% MAX CROSS SLOPE.
6. IT IS THE INTENT OF THE CONTRACT DOCUMENTS TO COMPLY WITH ALL APPROPRIATE FAIR HOUSING ACCESSIBILITY GUIDELINES AND GENERAL NOTES FOR PUBLIC AND COMMON USE FACILITIES. REPORT ANY DISCREPANCIES TO LANDDESIGN.

JURISDICTION NOTES:

1. SEE SHEET L202 FOR CITY OF ALEXANDRIA STANDARD LANDSCAPE PLAN NOTES.

GENERAL NOTES:

1. BASE INFORMATION, INCLUDING EXISTING CONDITIONS, TOPOGRAPHY, EXISTING UTILITIES, AND BOUNDARY INFORMATION IS FROM PLANS BY: CHRISTOPHER CONSULTANTS
2. ARCHITECTURAL INFORMATION IS FROM PLANS BY: SK+I
3. WRITTEN DIMENSIONS PREVAIL OVER SCALED DIMENSIONS. NOTIFY LANDDESIGN OF ANY DISCREPANCIES.
4. DIMENSIONS ARE TO FACE OF OBJECT, UNLESS NOTED OTHERWISE.
5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL UNDERGROUND UTILITIES, PIPES, STRUCTURES, AND LINE RUNS IN THE FIELD PRIOR TO CONSTRUCTION. ANY DAMAGE TO NEW AND EXISTING UTILITIES ARE TO BE REPAIRED IMMEDIATELY AT NO ADDITIONAL EXPENSE TO THE OWNER. LANDDESIGN ASSUMES NO RESPONSIBILITY FOR ANY UTILITIES NOT SHOWN ON PLANS.
6. ALL PROPOSED FINISHED GRADES ARE BASED ON INFORMATION PROVIDED BY THE OWNER'S SURVEY AND OR CIVIL ENGINEER. ANY DISCREPANCIES IN ACTUAL FIELD MEASUREMENTS ARE TO BE REPORTED TO LANDDESIGN IMMEDIATELY.
7. PRIOR TO COMMENCEMENT OF HARDSCAPE CONSTRUCTION, ALL PIERS, FOOTINGS, AND WALLS ARE TO BE SURVEYED, LAID OUT, AND STAKED IN THE FIELD FOR REVIEW BY LANDDESIGN. CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY DEMOLITION, ADJUSTMENTS, OR RECONSTRUCTION OF HARDSCAPE CONSTRUCTION RESULTING FROM UNAUTHORIZED CONSTRUCTION.
8. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL ITEMS PER DRAWINGS AND SPECIFICATION. NOTIFY LANDDESIGN OF ANY MAJOR DISCREPANCIES BETWEEN CONTRACTOR'S VERIFIED QUANTITIES, BID BOOK, AND INTENT OF DRAWING.
9. CONTRACTOR IS RESPONSIBLE FOR ALL FINAL QUANTITIES PER DRAWINGS AND SPECIFICATIONS ANY QUANTITIES PROVIDE BY LANDDESIGN ARE PROVIDED FOR CONVENIENCE ONLY AND SHALL NOT BE CONSIDERED ABSOLUTE. LANDDESIGN SHOULD BE NOTIFIED OF ANY GRADING DISCREPANCIES.
10. THE CONTRACTOR SHALL EXAMINE AND BECOME FAMILIAR WITH ALL CONTRACT DOCUMENTS IN THEIR ENTIRETY. SURVEY THE PROJECT AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS AND SCOPE OF WORK. ALL COSTS SUBMITTED SHALL BE BASED ON THOROUGH KNOWLEDGE OF ALL WORK AND MATERIALS REQUIRED ANY DISCREPANCY AND/ OR UNCERTAINTY AS TO WHAT MATERIAL OR PRODUCT IS TO BE USED, SHALL BE VERIFIED WITH THE OWNER OR LANDDESIGN PRIOR TO BIDDING.
11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES REQUIRED FOR SAFE EXECUTION AND COMPLETION OF WORK, AND FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK.
12. IN THE EVENT A DISCREPANCY IS FOUND IN THE CONTRACT DOCUMENTS, THE OWNER & LANDDESIGN SHALL BE NOTIFIED IMMEDIATELY.
13. CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD AND NOTIFY LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
14. CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AT THIS SITE AND AND BE RESPONSIBLE FOR ACCURACY AND CORRECTNESS OF SAME.
15. CONTRACTOR SHALL COORDINATE WORK WITH ALL OTHER TRADES AND NOTIFY OWNER & LANDDESIGN OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
16. THE CONTRACTOR SHALL EMPLOY, AS REQUIRED BY GOVERNING AUTHORITIES, AN APPROVED TESTING LABORATORY TO MAKE ALL TESTS FROM CONCRETE, SOIL COMPACTION AND WELDING TO INSURE COMPLIANCE WITH PLANS, STANDARDS AND CODES. COST SHALL BE INCLUDED AS INCIDENTAL TO THE CONTRACT.
17. ALL EXISTING WORK OR LANDSCAPING NOT SHOWN TO BE ALTERED OR REMOVED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. THE CONTRACTOR(S) SHALL BEAR THE TOTAL EXPENSE FOR, AND SHALL REPAIR ANY DAMAGE TO EXISTING CONDITIONS, OR IMPROVEMENTS NOT INDICATED IN THE DRAWINGS OR SPECIFICATIONS TO RECEIVE ALTERATION, ADDITIONS OR REMOVAL.

LAYOUT NOTES:

1. ALL MATERIALS AND CONSTRUCTION WITHIN RIGHT OF WAYS SHALL BE IN ACCORDANCE WITH THE ALEXANDRIA STANDARD SPECIFICATIONS AND CONSTRUCTION STANDARDS, AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION PREPARED BY THE .(LATEST REVISION)
2. EXISTING UTILITIES ARE SHOWN SCHEMATICALLY AND ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING IMPROVEMENTS IN THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING IMPROVEMENTS DURING CONSTRUCTION. REPAIRS SHALL BE EQUAL TO OR BETTER THAN CONDITION PRIOR TO CONSTRUCTION.
4. ALL ONSITE PAVING DIMENSIONS ARE TO THE FACE OF CURB, WHERE APPLICABLE, UNLESS NOTED OTHERWISE.
5. ALL CURB RADII AND SIDEWALK RETURNS ARE 2' UNLESS NOTED OTHERWISE.
6. ALL PAVING AND EARTHWORK OPERATIONS SHALL CONFORM TO THE PROJECT GEOTECHNICAL REPORT.
7. BOUNDARY SURVEY: BOUNDARY SURVEY INFORMATION IS BASED ON THE BOUNDARY SURVEY PREPARED BY CIVL ENGINEERS. REFER TO THE BOUNDARY SURVEY AND PLAT TO VERIFY PROPERTY LINES AND EASEMENT LOCATIONS.
8. BUILDING DIMENSIONS: THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO VERIFY THE EXACT BUILDING DIMENSIONS.
9. LAY PAVERS IN PATTERN(S) SHOWN ON DRAWINGS. PLACE UNITS HAND TIGHT WITHOUT USING HAMMERS. MAKE HORIZONTAL ADJUSTMENTS TO PLACEMENT OF LAID PAVERS WITH RUBBER HAMMERS AS REQUIRED.
10. PROVIDE JOINTS BETWEEN PAVERS BETWEEN 1/16 IN. AND 3/16 IN. (2 AND 5 MM) WIDE. NO MORE THAN 5% OF THE JOINTS SHALL EXCEED 1/4" WIDE TO ACHIEVE STRAIGHT BOND LINES.
11. JOINT (BOND) LINES SHALL NOT DEVIATE MORE THAN ±1/2 IN. (±15 MM) OVER 50 FT. (15 M) FROM STRING LINES.
12. FILL GAPS AT THE EDGES OF THE PAVED AREA WITH CUT PAVERS OR EDGE UNITS.
13. CUT PAVERS TO BE PLACED ALONG THE EDGE WITH A MASONRY SAW.
14. ADJUST BOND PATTERN AT PAVEMENT EDGES SUCH THAT CUTTING OF EDGE PAVERS IS MINIMIZED.
15. IN NO CASE SHALL A CUT PAVER BE LESS THAN 1/3 FULL PAVER SIZE.
16. PAVER DIMENSIONS ARE NOMINAL. PRIOR TO POURING SLABS, BANDING, OR OTHERWISE SETTING PAVER FIELDS, VERIFY ACTUAL PAVER SIZES AND LAYOUT OF THE PAVER FIELDS. MAKE MINOR ADJUSTMENTS TO EDGE CONSTRAINTS AS REQUIRED TO ACCOMMODATE ACTUAL PAVER SIZES. NOTIFY LANDDESIGN IMMEDIATELY OF DISCREPANCIES AND/OR ADJUSTMENTS.

GRADING NOTES:

1. STAKE PER SPOT ELEVATIONS AND NOTED SLOPES. CONTOURS ARE PROVIDED FOR MASS GRADING/INTENT ONLY.
2. WRITTEN DIMENSIONS AND GRADES PREVAIL OVER SCALED DIMENSIONS. NOTIFY LANDDESIGN OF ANY DISCREPANCIES.
3. ALL SPOT ELEVATIONS SHOWN ON GRADING PLAN ARE TO BOTTOM OF CURB/TOP OF PAVEMENT UNLESS OTHERWISE NOTED. ALL RIM ELEVATIONS ARE TO EDGE OF PAVEMENT.
4. REFER TO GEOTECHNICAL ENGINEER AND GEOTECH REPORT FOR INFORMATION ON SUBSURFACE MATERIALS, TOPSOIL, STRUCTURAL MATERIAL, DEEP FILLS, EXCAVATION, AND FOUNDATIONS.
5. APPROVAL OF THIS PLAN IS NOT AN AUTHORIZATION TO GRADE ADJACENT PROPERTIES. WHEN FIELD CONDITIONS WARRANT OFF-SITE GRADING, PERMISSION MUST BE OBTAINED FROM THE AFFECTED PROPERTY OWNERS.
6. IN ORDER TO ASSURE PROPER DRAINAGE, KEEP A MINIMUM OF .5% SLOPE ON THE CURB.
7. ALL PLANTING ISLANDS SHALL BE GRADED TO MOUND TO PROVIDE POSITIVE DRAINAGE.
8. CONTRACTOR TO VERIFY 2% MAX. CROSS-SLOPE ON ALL SIDEWALKS.
9. CONTRACTOR TO VERIFY THAT ALL SIDEWALK SLOPES, HANDICAP RAMPS, AND HANDICAP PARKING SPACES MEET ADA REQUIREMENTS.
10. CONCRETE SIDEWALKS ADJACENT TO TREE SAVE LOCATIONS SHOULD BE POURED ON TOP OF EXISTING GRADE.
11. REFER TO LANDSCAPE PLAN FOR ALL TREE PROTECTION FENCE LOCATIONS AND INSTALLATION PROCEDURES. BEFORE GRADING/CONSTRUCTION BEGINS, CALL FOR INSPECTION OF TREE PROTECTION BARRICADES. NO SOIL DISTURBANCE OR COMPACTION, CONSTRUCTION MATERIALS, TRAFFIC, BURIAL PITS, TRENCHING, OR OTHER LAND DISTURBING ACTIVITY ALLOWED IN THE TREE PROTECTION ZONE.
12. DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY AND ARE NOT TO BE USED TO LAYOUT FOOTINGS.
13. GRADING CONTRACTORS SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTORS SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERATION OF OR RELOCATION OF THE FACILITIES. CONTRACTORS SHALL RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES.
14. GRADING CONTRACTOR SHALL COOPERATE AND WORK WITH ALL OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER AND TIMELY COMPLETION OF THIS PROJECT.

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030

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. _____ DATE _____

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
703.549.7784
WWW.LANDDESIGN.COM

KEY MAP

SEAL

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

PROJECT

OAKVILLE

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.#
2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE
VERT: N/A
HORZ: NTS
(NOT TO SCALE)

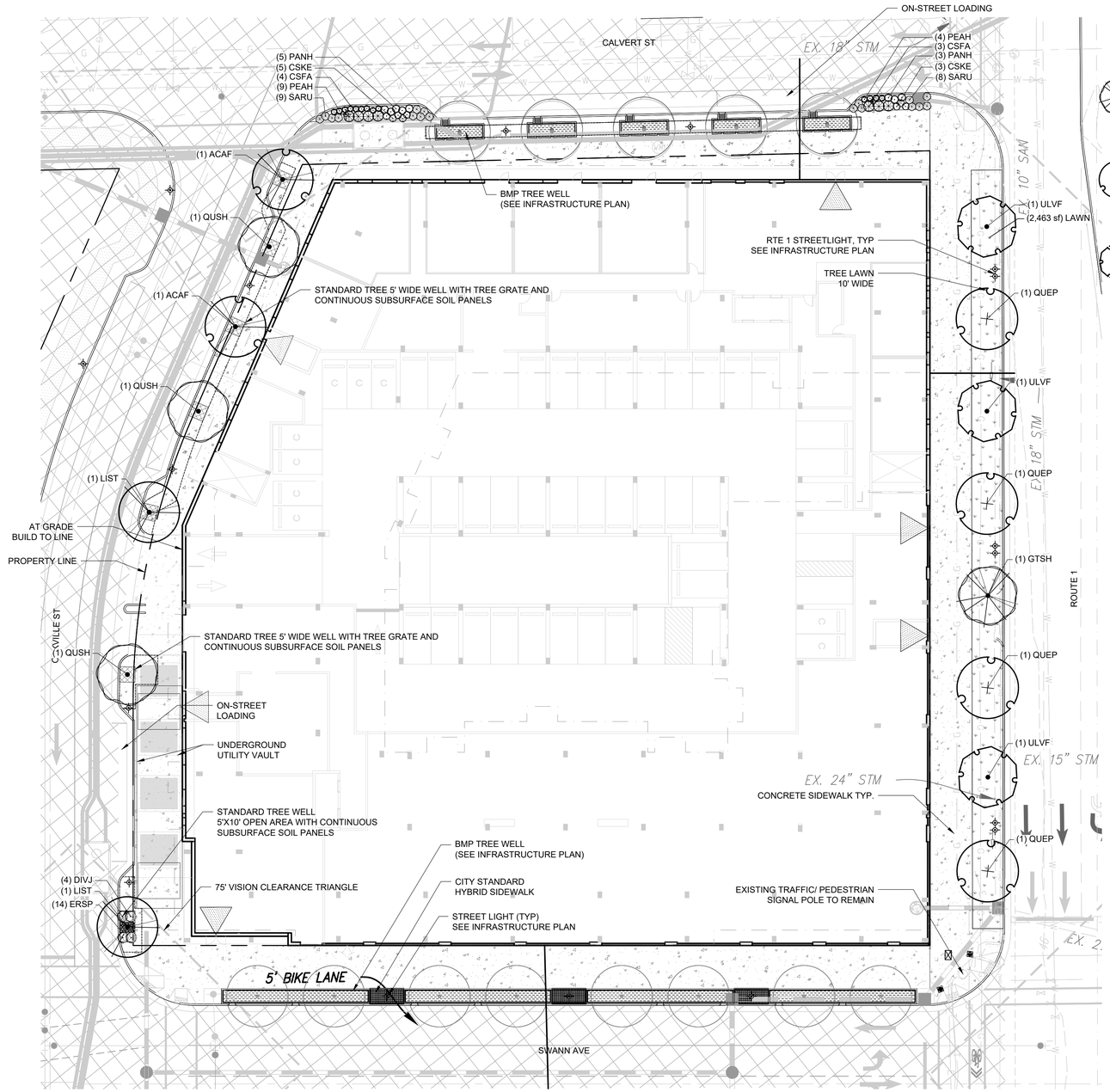
NORTH

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

L002



1 L101 STREETSCAPE MATERIALS AND PLANTING PLAN

PLAN

SCALE 1" = 20'

PLANT SCHEDULE - BLOCK B STREETSCAPE

STREET TREES	CODE	QTY	BOTANICAL / COMMON NAME	CONT	CAL	HT.	REMARKS
	ACAF	2	ACER RUBRUM `AUTUMN FLAME` AUTUMN FLAME RED MAPLE	B & B	2"-2.5"	12`-14`	CCA: 0 SF.
	GTSH	1	GLEDITSIA TRIACANTHOS INERMIS `SHADEMASTER` TM SHADEMASTER LOCUST	B & B	2"-2.5" CAL	12` - 14`	CCA: N/A
	LIST	2	LIQUIDAMBAR STYRACIFLUA `ROTUNDILOBA` AMERICAN SWEETGUM	B & B	2"-2.5"	12`-14`	CCA: 0 SF.
	QUEP	4	QUERCUS PHELLOS WILLOW OAK	B & B	2"-2.5" CAL	12` - 14`	C.C.A. = N/A
	QUSH	3	QUERCUS SHUMARDII SHUMARDII OAK	B & B	2"-2.5"	12`-14`	CCA: 0 SF.
	ULVF	3	ULMUS AMERICANA `VALLEY FORGE` AMERICAN ELM	B & B	2"-2.5" CAL	12` - 14`	C.C.A. = N/A

DECIDUOUS SHRUB	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD	REMARKS
	CSFA	7	CORNUS SERICEA `FARROW` TM ARCTIC FIRE RED TWIG DOGWOOD	#5	24" - 30"		
	CSKE	8	CORNUS SERICEA `KELSEYI` KELSEY`S DWARF RED-OSIER DOGWOOD	CONTAINER	18" - 24"		REGIONALLY NATIVE CCA : 10 SF

EVERGREEN SHRUB	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD	REMARKS
	DIVJ	4	DISTYLIUM X `VINTAGE JADE` VINTAGE JADE DISTYLIUM	#3		18" - 24"	
	SARU	17	SARCOCOCCA HUMILIS SWEETBOX	#3		12" - 18"	

ORNAMENTAL GRASSES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD	REMARKS
	ERSP	14	ERAGROSTIS SPECTABILIS PURPLE LOVE GRASS	1 GAL			LOCALLY NATIVE
	PANH	8	PANICUM VIRGATUM `RUBY RIBBONS` SWITCH GRASS	1 GAL			LOCALLY NATIVE
	PEAH	13	PENNISETUM ALOPECUROIDES `HAMELN` HAMELN DWARF FOUNTAIN GRASS	1 GAL			ADAPTIVE

GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	COLOR	BLOOMS	SPACING	REMARKS
	OPJN	52	OPHIOPOGON JAPONICUS `NANA` DWARF MONDO GRASS	CONTAINER			12" o.c.	

SOD/SEED	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	COLOR	BLOOMS	SPACING	REMARKS
	LAWN	2,463 SF	LAWN LAWN	--				

NOTES:

1. FINAL PLANT SPECIES SELECTIONS TO BE AS SHOWN OR OWNER AND CITY ALTERNATE APPROVED ALTERNATE.
2. TREE SPECIES LISTED AS "C.C.A. = N/A" ARE LOCATED WITHIN PUBLIC ROW, AND DO NOT COUNT TOWARD CROWN COVERAGE ALLOWANCE (C.C.A.) REQUIREMENTS.
3. SEE SHEET L202A FOR TRACKING OF PLANTINGS WITHIN THE PUBLIC RIGHT-OF-WAY, PUBLIC ACCESS EASEMENTS, AND PUBLICLY ACCESSIBLE OPEN SPACE.

AREA OF OAKVILLE THAT IS NOT INCLUDED WITH THIS APPLICATION

NOTES:

1. ALL PLANS AND GRAPHICS AS SHOWN ARE CONCEPTUAL IN NATURE AND ARE SUBJECT TO CHANGE DURING THE DSUP PROCESS.
2. PAVING PATTERNS ARE PRELIMINARY AND ARE INTENDED TO SHOW CHANGES IN MATERIALS. PATTERNS DO NOT DEPICT FINAL PAVING PATTERN OR LAYOUT.
3. PRELIMINARY LIGHT LOCATIONS SHOWN. FINAL LIGHT LOCATIONS MAY SHIFT WITH FINAL PHOTOMETRICS AND INDIVIDUAL BLOCK ENGINEERING
4. BMP TREE WELLS ARE PROPOSED AS PART OF THE INFRASTRUCTURE PLAN FOR THE SITE, SEE DSUP2020-10029

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030
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. DATE

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
703.549.7784
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KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

BLOCK B

STONEBRIDGE

ALEXANDRIA, VA

-

LANDDESIGN PROJ.# 2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE
VERT: N/A
HORZ: 1"=30'
0 15' 30' 60'

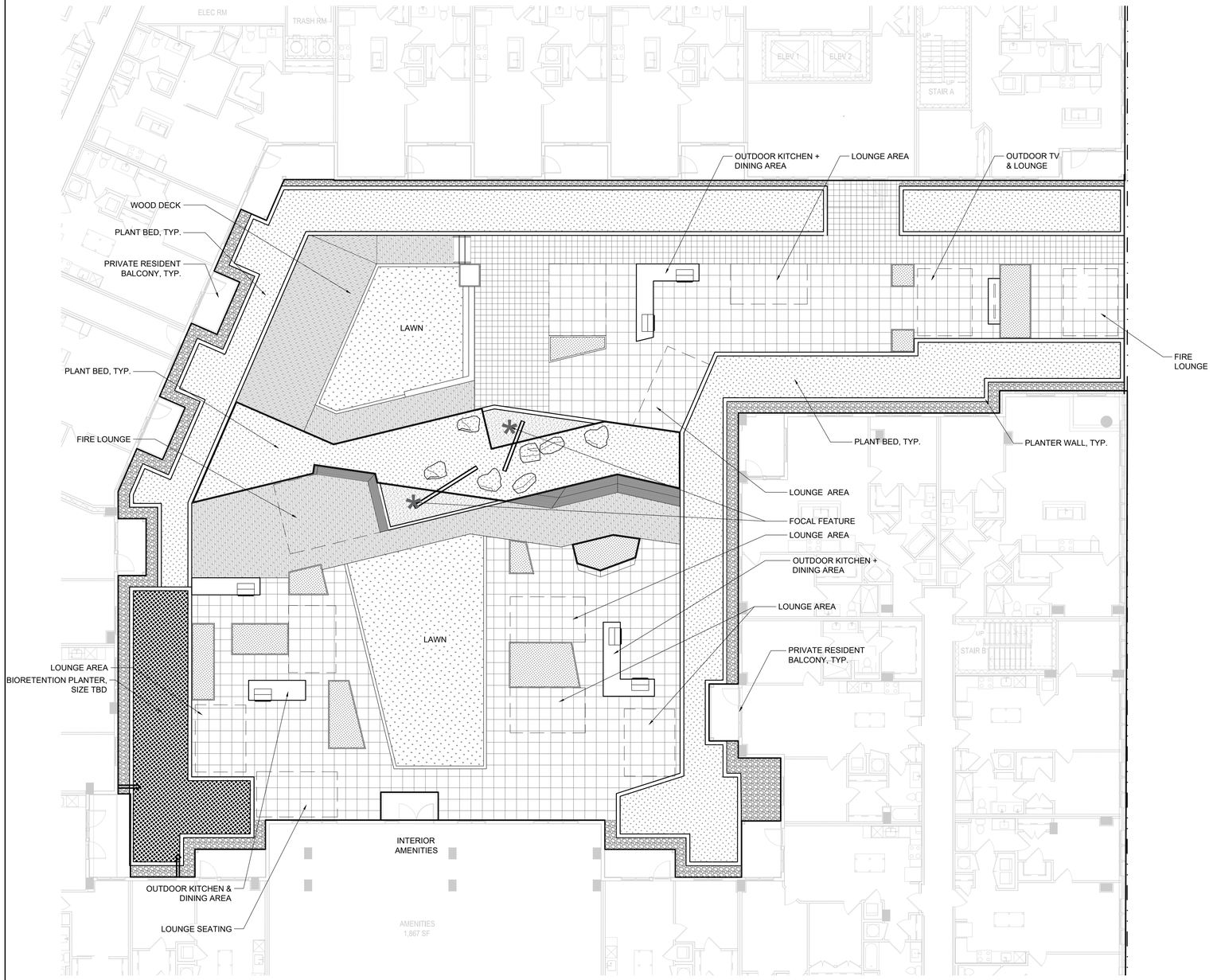
NORTH

SHEET TITLE

STREETSCAPE MATERIALS + PLANTING PLAN

SHEET NUMBER

L101



2 L102 COURTYARD MATERIALS PLAN

PLAN

1" = 10'

NOTE:

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APPROVED

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SCALE

VERT: N/A
HORZ: 1"=10'

0 5' 10' 20'

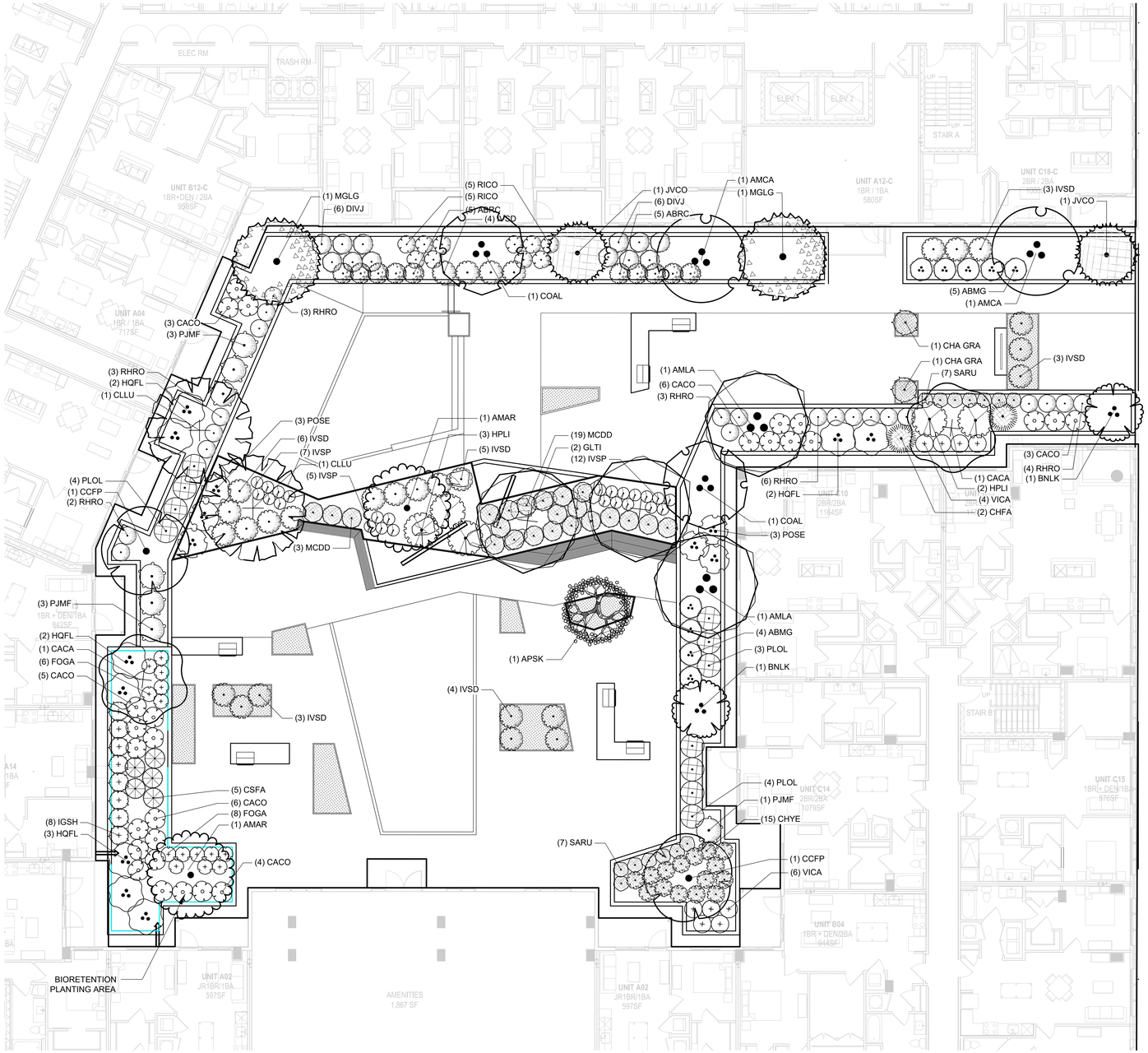
NORTH

SHEET TITLE

COURTYARD MATERIALS PLAN

SHEET NUMBER

L102



1 L201 COURTYARD PLANTING PLAN

PLAN

1" = 10'

PLANT SCHEDULE BLOCK B PLANTING

EVERGREEN	CODE	QTY	BOTANICAL / COMMON NAME
	JVCO	2	JUNIPERUS VIRGINIANA `CORCORCOR` TM / EMERALD SENTINAL JUNIPER
	MGLG	2	MAGNOLIA GRANDIFLORA `LITTLE GEM` / DWARF SOUTHERN MAGNOLIA
ORNAMENTAL TREES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	APSK	1	ACER PALMATUM `SANGO KAKU` / SANGO KAKU JAPANESE MAPLE
	AMAR	2	AMELANCHIER ARBOREA / DOWNY SERVICEBERRY
	AMCA	2	AMELANCHIER CANADENSIS / CANADIAN SERVICEBERRY
	AMLA	2	AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY
	BNLK	2	BETULA NIGRA `LITTLE KING` TM / FOX VALLEY BIRCH
	CCFP	2	CERCIS CANADENSIS `FOREST PANSY` / FOREST PANSY REDBUD
	CLLU	2	CLADRASTIS LUTEA / AMERICAN YELLOWWOOD
	COAL	2	CORNUS ALTERNIFOLIA / PAGODA DOGWOOD
DECIDUOUS TREES	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	CACA	2	CARPINUS CAROLINIANA / AMERICAN HORNBEAM
	GLTI	2	GLEDITSIA TRIACANTHOS INERMIS `SKYCOLE` TM / SKYLINE THORNLESS HONEY LOCUST
DECIDUOUS SHRUB	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	CACO	27	CLETHRA ALNIFOLIA `COMPACTA` / COMPACT SUMMERSWEET
	CSFA	5	CORNUS SERICEA `FARROW` TM / ARCTIC FIRE RED TWIG DOGWOOD
	FOGA	14	FOTHERGILLA GARDENII / DWARF FOTHERGILLA
	HPLI	5	HYDRANGEA PANICULATA `LIMELIGHT` / LIMELIGHT HYDRANGEA
	HQFL	9	HYDRANGEA QUERCIFOLIA `FLEMYGEA` / SNOW QUEEN OAKLEAF HYDRANGEA
	IVSP	24	ITEA VIRGINICA `SPRICH` TM / LITTLE HENRY VIRGINIA SWEETSPIRE
	POSE	6	PHYSOCARPUS OPULIFOLIUS `SEWARD` TM / SUMMER WINE SEWARD NINEBARK
	VICA	10	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM
EVERGREEN SHRUB	**CODE**	**QTY**	**BOTANICAL / COMMON NAME**
	ABMG	9	ABELIA X `MARDI GRAS` / MARDI GRAS ABELIA
	ABRC	10	ABELIA X `ROSE CREEK` / ROSE CREEK ABELIA
	CHFA	2	CEPHALOTAXUS HARRINGTONIA `FASTIGIATA` / PLUM YEW
	CHYE	15	CEPHALOTAXUS HARRINGTONIA `PLANIA` TM / YEWTOPIA PLUM YEW
	CHA GRA	2	CHAMAECYPARIS OBTUSA `GRACILIS` / SLENDER HINOKI CYPRESS
	DIVJ	12	DISTYLIUM X `VINTAGE JADE` / VINTAGE JADE DISTYLIUM
	IGSH	8	ILEX GLABRA `SHAMROCK` / SHAMROCK INKBERRY HOLLY
	IVSD	28	ILEX VOMITORIA `STOKES DWARF` / STOKES DWARF YAUPON HOLLY
	MCDD	22	MORELLA CERIFERA `DON`S DWARF` / DON`S DWARF WAX MYRTLE
	PJMF	7	PIERIS JAPONICA `MOUNTAIN FIRE` / MOUNTAIN FIRE PIERIS
	PLOL	11	PRUNUS LAUROCERASUS `OTTO LUYKEN` / OTTO LUYKEN LAUREL
	RICO	10	RHAPHIOLEPIS INDICA `CONOR` TM / ELEANOR TABER INDIAN HAWTHORN
	RHRO	21	RHODODENDRON X `ROBLEV` TM / AUTUMN IVORY ENCORE AZALEA
	SARU	14	SARCOCOCCA HUMILIS / SWEETBOX

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OAKVILLE

BLOCK B

STONEBRIDGE

ALEXANDRIA, VA

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LANDDESIGN PROJ.#
2020069

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SCALE
VERT: N/A
HORZ: 1"=30'
0 15' 30' 60'

NORTH

SHEET TITLE
COURTYARD PLANTING PLAN

SHEET NUMBER
L201

PLANT SCHEDULE October 20, 2020

PLANT TYPE	PLAN INFORMATION		BOTANIC/COMMON NAME				SIZE	NOTES	CROWN COVER ALLOWANCE (CCA)		NATIVE PLANTS PROVIDED		
	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
URBAN TREES	JVCO	2	Juniperus	virginiana	Corcorcor	Emerald Sentinal Juniper	6'-8'ft. ht.	B&B	250	500	2	2	2
	MGLG	2	Magnolia	grandifolia	Little Gem	Dwarf Sourthern Magnolia	6'-8' ft. ht.	B&B	500	1,000	0	2	2
	APSK	1	Acer	palmatum	Sango Kaku	Japanese Maple	2"-2.5" cal.	B&B	500	500	0	0	0
	AMAR	2	Amelanchier	arborea		Downy Serviceberry	1.5"-1.75" cal./6'-8' ft. ht.	B&B Multistem, 3 Stem min.	500	1,000	2	2	2
	AMCA	2	Amelanchier	canadensis		Canadian Serviceberry	1.5"-1.75" cal./6'-8' ft. ht.	B&B Multistem, 3 Stem min.	500	1,000	2	2	2
	AMLA	2	Amelanchier	laevis		Allegheny Serviceberry	1.5"-1.75" cal./6'-8' ft. ht.	B&B Multistem, 3 Stem min.	750	1,500	2	2	2
	BNLK	2	Betula	nigra	Little King	Fox Valley Birch	1.5"-1.75"cal.	B&B Multistem, 3 Stem min.	750	1,500	2	2	2
	CCFP	2	Cercis	canadensis	Forest Pansy	Forest Pansy Redbud	1.5"-1.75" cal./6'-10' ft. ht.	B&B	500	1,000	2	2	2
	CLLU	2	Cladrastis	lutea		American Yellowwood	2"-2.5" cal./12'-14' ft. ht.	B&B	750	1,500	0	0	2
	COAL	2	Cornus	alternifolia		Pagoda Dogwood	1.5"-1.75" cal./6'-10' ft. ht.	B&B	500	1,000	0	2	2
	CACA	2	Carpinus	caroliniana		American Hornbeam	1.5"-1.75" cal./6'-10' ft. ht.	B&B	500	1,000	2	2	2
	GLTI	2	Gleditsia	tricanthos inermis	Skycole	Skyline Thornless Honey Locust	2"-2.5" cal./12'-14' ft. ht.	B&B	750	1,500	2	2	2
	TOTALS	**23**							**URBAN TREE CCA:**	**13,000**	**16**	**20**	**22**
											69.6%	**87.0%**	**95.7%**
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	HEIGHT/SPREAD		CCA PER SHRUB (SF)	TOTAL CROWN COVER (SF)	REGIONAL (#)	EASTERN U.S. (#)	TOTAL
EVERGREEN SHRUBS	ABMG	9	Abelia	x	Mardi Gras	Mardi Gras Abelia	18"-24" W	#3 Container	10	90	0	0	0
	ABRC	10	Abelia	x	Rose Creek	Rose Creek Abelia	18"-24" W	#3 Container	10	100	0	0	0
	CHFA	2	Cephalotaxus	harringtonia	Fasrigiata	Plum Yew	4'-5' ft. ht.	#5 Container	25	50	0	0	0
	CHYE	15	Cephalotaxus	harringtonia	Plania	Yewtopia Plum Yew	18"-24"W	#3 Container	25	375	0	0	0
	CHA GRA	2	Chamaecyparis	obtusa	Gracilis	Slender Hinoki Cypress	4'-5' ft. ht.	B&B or Container	50	100	0	0	0
	DIVJ	12	Distylium	x		Vintage Jade Distylium	18"-24" W	#3 Container	25	300	0	0	0
	IGSH	8	Ilex	glabra	Shamrock	Shamrock Inkberry Holly	18"-24" ft. ht.	#3 Container	25	200	0	8	8
	IVSD	28	Ilex	vomitoria	Stokes Dwarf	Stokes Dwarf Yaupon Holly	18"-24" W	#3 Container	25	700	28	28	28
	MCDD	22	Morella	cerifera	Don's Dwarf	Don's Dwarf Wax Myrtle	18"-24" ft. ht.	#3 Container	25	550	22	22	22
	PJMF	7	Pieris	japonica	Mountain Fire	Mountain Fire Pieris	30"-36" ft. ht.	#5 Container	25	175	0	0	0
	PLOL	11	Prunus	laurocerasus	otto luyken	Otto Luyken Laurel	18"-24" W	#3 Container	25	275	0	0	0
	RICO	10	Rhaphiolepis	indica	Conor	Eleanor taber indian Hawthorn	18"-24" ft. ht.	#3 Container	10	100	0	0	0
	RHRO	21	Rhododendron	x	Roblev	Autumn ivory encore Azalea	18"-24" W	#3 Container	10	210	21	21	21
	SARU	14	Sarcococca	humilis		Sweetbox	12"-18"W	#3 Container	10	140	0	0	0
	TOTALS	**171**							**EVERGREEN SHRUB CCA:**	**3,365**	71	79	79
											41.5%	**46.2%**	**46.2%**
	PLAN KEY	QUANTITY	GENUS	SPECIES	VAR./CULTIVAR/HYBRID	COMMON NAME	HEIGHT		CCA PER SHRUB (SF)	TOTAL CROWN COVER (SF)	LOCAL/ REGIONAL (#)	EASTERN U.S. (#)	TOTAL
DECIDUOUS SHRUBS	CACO	27	Clethra	alnifolia	Compacta	Compact Summersweet	18"-24" H	#3 Container	10	270	27	27	27
	CSFA	5	Cornus	Sericea	Farrow	Artic Fire Red Twig Dogwood	18"-24" W	#3 Container	25	125	5	5	5
	FOGA	14	Fothergilla	gardenii		Dwarf Fothergilla	18"-24" H	#3 Container	2	28	0	0	14
	HPLI	5	Hydrangea	paniculata	Limelight	Limelight Hydrangea	18"-24" H	#3 Container	25	125	0	0	0
	HQFL	9	Hydrangea	quercifolia	Flemygea	Snow Queen Oakleaf Hydrangea	18"-24" W	#3 Container	25	225	0	9	9
	IVSP	24	Itea	Virginica	Sprich	Little Henry Virginia Sweetspire	18"-24"W	#3 Container	10	240	24	24	24
	POSE	6	Physocarpus	opulifolius	Seward	Summer Wine Seward Ninebark	18"-24"H	#3 Container	10	60	6	6	6
	VICA	10	Viburnum	acerifolium		Mapleleaf Viburnum	18"-24"H	#3 Container	10	100	10	10	10
	TOTALS	**100**							**DECIDUOUS SHRUB CCA:**	**1,173**	72	81	95
											72.0%	**81.0%**	**95.0%**
									TOTAL PROPOSED CCA (SF):	**17,538**			

BIODIVERSITY TABULATIONS

TREES (URBAN AND STANDARD)

TOTAL NUMBER OF TREES PROPOSED:

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Juniperus	2	8.7%	33%	virginiana	2	8.7%	10%
Magnolia	2	8.7%	33%	grandifolia	2	8.7%	10%
Acer	1	4.3%	33%	palmatum	1	4.3%	10%
Amelanchier	2	8.7%	33%	arborea	2	8.7%	10%
Amelanchier	2	8.7%	33%	canadensis	2	8.7%	10%
Amelanchier	2	8.7%	33%	laevis	2	8.7%	10%
Betula	2	8.7%	33%	nigra	2	8.7%	10%
Cercis	2	8.7%	33%	canadensis	2	8.7%	10%
Cladrastis	2	8.7%	33%	lutea	2	8.7%	10%
Cornus	2	8.7%	33%	alternifolia	2	8.7%	10%
Carpinus	2	8.7%	33%	caroliniana	2	8.7%	10%
Gleditsia	2	8.7%	33%	tricanthos inermis	2	8.7%	10%
TOTAL	**23**						

SHRUBS

TOTAL NUMBER OF SHRUBS PROPOSED:

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Abelia	9	3%	33%	x	9	3%	10%
Abelia	10	4%	33%	x	10	4%	10%
Cephalotaxus	2	1%	33%	harringtonia	2	1%	10%
Cephalotaxus	15	6%	33%	harringtonia	15	6%	10%
Chamaecyparis	2	1%	33%	obtusa	2	1%	10%
Distylium	12	4%	33%	x	12	4%	10%
Ilex	8	3%	33%	glabra	8	3%	10%
Ilex	28	10%	33%	vomitoria	28	10%	10%
Morella	22	8%	33%	cerifera	22	8%	10%
Pieris	7	3%	33%	japonica	7	3%	10%
Prunus	11	4%	33%	laurocerasus	11	4%	10%
Rhaphiolepis	10	4%	33%	indica	10	4%	10%
Rhododendron	21	8%	33%	x	21	8%	10%
Sarcococca	14	5%	33%	humilis	14	5%	10%
Clethra	27	10%	33%	alnifolia	27	10%	10%
Cornus	5	2%	33%	Sericea	5	2%	10%
Fothergilla	14	5%	33%	gardenii	14	5%	10%
Hydrangea	5	2%	33%	paniculata	5	2%	10%
Hydrangea	9	3%	33%	quercifolia	9	3%	10%
Itea	24	9%	33%	Virginica	24	9%	10%
Physocarpus	6	2%	33%	opulifolius	6	2%	10%
Viburnum	10	4%	33%	acerifolium	10	4%	10%
TOTAL	**271**						

URBAN TREE TABULATIONS

PLAN KEY	QUANTITY	PLAN LOCATION	PROJECTED 20 YR. CANOPY* (PER TREE)	IMPERVIOUS AREA UNDER CANOPY (PER TREE)	IMPERVIOUS AREA GREATER THAN 50% OF PROJECTED 20 YR. CANOPY? (Y/N)
JVCO	2	ON-STRUCTURE	250	165	Y
MGLG	2	ON-STRUCTURE	500	415	Y
APSK	1	ON-STRUCTURE	X	X	Y
AMAR	2	ON-STRUCTURE	500	415	Y
AMCA	2	ON-STRUCTURE	500	415	Y
AMLA	2	ON-STRUCTURE	750	495	Y
BNLK	2	ON-STRUCTURE	750	665	Y
CCFP	2	ON-STRUCTURE	500	415	Y
CLLU	2	ON-STRUCTURE	750	495	Y
COAL	2	ON-STRUCTURE	500	330	Y
CACA	2	ON-STRUCTURE	500	415	Y
GLTI	2	ON-STRUCTURE	750	665	Y
TOTAL URBAN TREES					
23					

CROWN COVER TABULATIONS	
TOTAL SITE AREA (SF) - BLOCK B	63,751
25% CROWN COVER REQUIRED (SF)	15,938
EXISTING CROWN COVER (SF)	2,717
REMOVED CROWN COVER (SF)	2,717
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	4,530
TOTAL CROWN COVER PROVIDED (%)	27.5%
TOTAL CROWN COVER PROVIDED (SF)	17,530

NATIVE PLANT TABULATIONS

PLANT TYPE	QUANTITY	NATIVE TYPE	MARCH 2, 2019 – JANUARY 1, 2020 REQUIRED %	MARCH 2, 2019 – JANUARY 1, 2020 PROVIDED QTY.	MARCH 2, 2019 – JANUARY 1, 2020 PROVIDED %	JANUARY 2, 2020 – JANUARY 1, 2024 REQUIRED %	JANUARY 2, 2020 – JANUARY 1, 2024 PROVIDED QTY.	JANUARY 2, 2020 – JANUARY 1, 2024 PROVIDED %	BEGINNING JANUARY 2, 2024 REQUIRED %	BEGINNING JANUARY 2, 2024 PROVIDED QTY.	BEGINNING JANUARY 2, 2024 PROVIDED %
Urban Trees	23	Regional/Local	10%			15%	16	69.6%	20%		
		Total Natives	25%			25%	22	95.7%	50%		
Standard Trees	0	Regional/Local	15%			25%			40%		
		Total Natives	40%			60%			80%		
Evergreen Shrubs	171	Regional/Local	5%			8%	71	41.52%	10%		
		Total Natives	20%			30%	79	46.20%	40%		
Deciduous Shrubs	100	Regional/Local	10%			15%	72	72.00%	20%		
		Total Natives	40%			60%	95	95.00%	80%		
Groundcovers	0	Regional/Local	5%			10%			10%		
		Total Natives	10%			20%			20%		
Perennials, Ferns, Ornamental Grasses	0	Regional/Local	10%			15%			25% (perennials) 30% (ferns & grasses)		
		Total Natives	25%			40%			60% (perennials) 80% (ferns & grasses)		
Vines		Total Natives	80%			100%			100%		

TOTALS

TOTAL PLANTS SPECIFIED	TOTAL SUM OF REGIONAL/LOCAL NATIVE PLANTS	TOTAL SUM OF NATIVE PLANTS
294	159	196
	54.1%	66.7%

THIS SHEET IS FOR PLANTINGS WITHIN THE PROPERTY LINE ONLY.
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STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.# 2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE NORTH

VERT: N/A
HORZ: N/A

SHEET TITLE

PLANTING SCHEDULE + TABULATIONS

SHEET NUMBER

L202

INFRASTRUCTURE - DSUP2020-10029

DECIDUOUS TREES	QTY	BOTANICAL / COMMON NAME
ACER	3	ACER RUBRUM / RED MAPLE
AMEG	3	AMELANCHIER X GRANDIFLORA `AUTUMN BRILLIANCE` / `AUTUMN BRILLIANCE` SERVICEBERRY
CALA	1	CARYA LACINIOSA / SHELLBARK HICKORY
CERC	2	CERCIS CANADENSIS / EASTERN REDBUD
CFCP	3	CORNUS FLORIDA `CHEROKEE PRINCESS` / CHEROKEE PRINCESS DOGWOOD
FAGR	1	FAGUS GRANDIFOLIA / AMERICAN BEECH
JUNI	2	JUGLANS NIGRA / BLACK WALNUT

EVERGREEN TREES	QTY	BOTANICAL / COMMON NAME
ILEO	2	ILEX OPACA / AMERICAN HOLLY
INRS	2	ILEX X `NELLIE R STEVENS` / NELLIE STEVENS HOLLY
MAGG	1	MAGNOLIA GRANDIFLORA / SOUTHERN MAGNOLIA
TOEG	11	THUJA OCCIDENTALIS `EMERALD GREEN` / EMERALD GREEN ARBORVITAE

STREET TREES	QTY	BOTANICAL / COMMON NAME
ACAF	5	ACER RUBRUM `AUTUMN FLAME` / AUTUMN FLAME RED MAPLE
GIBI	8	GINKGO BILOBA `AUTUMN GOLD` / AUTUMN GOLD GINKGO
LIST	8	LIQUIDAMBAR STYRACIFLUA `ROTUNDILOBA` / AMERICAN SWEETGUM
PLAB	4	PLATANUS X ACERIFOLIA `BLOODGOOD` / BLOODGOOD LONDON PLANE TREE
QUCO	6	QUERCUS COCCINEA / SCARLET OAK
QURU	6	QUERCUS RUBRA / RED OAK
QUSH	5	QUERCUS SHUMARDII / SHUMARDII OAK

EVERGREEN SHRUB	QTY	BOTANICAL / COMMON NAME
ABGR	32	ABELIA X GRANDIFLORA / GLOSSY ABELIA
CHYE	32	CEPHALOTAXUS HARRINGTONIA `PLANIA` TM / YEWTOPIA PLUM YEW
CHOB	3	CHAMAECYPARIS OBTUSA `GRACILIS` / SLENDER HINOKI CYPRESS
ILGG	136	ILEX GLABRA `NIGRA` / NIGRA INKBERRY HOLLY
IGSH	20	ILEX GLABRA `SHAMROCK` / SHAMROCK INKBERRY HOLLY

ORNAMENTAL GRASSES	QTY	BOTANICAL / COMMON NAME
DCNL	160	DESCHAMPSIA CESPITOSA `NORTHERN LIGHTS` / NORTHERN LIGHTS TUFTED HAIR GRASS
ERSP	64	ERAGROSTIS SPECTABILIS / PURPLE LOVE GRASS
MUCA	56	MUHLENBERGIA CAPILLARIS `REGAL MIST` / PINK MUHLYGRASS
MUHL	72	MUHLENBERGIA LINDHEIMERI `LENI` / AUTUMN GLOW MUHLY GRASS
PANH	72	PANICUM VIRGATUM `RUBY RIBBONS` / SWITCH GRASS
PEAH	107	PENNISETUM ALOPECUROIDES `HAMELN` / HAMELN DWARF FOUNTAIN GRASS

DECIDUOUS SHRUB	QTY	BOTANICAL / COMMON NAME
CSKE	80	CORNUS SERICEA `KELSEYI` / KELSEY`S DWARF RED-OSIER DOGWOOD
ITVI	48	ITEA VIRGINICA `LITTLE HENRY` / VIRGINIA SWEETSPIRE

GROUND COVERS	QTY	BOTANICAL / COMMON NAME
CARB	12	CAREX BUCHANANII `RED ROOSTER` / RED ROOSTER SEDGE
CARP	348	CAREX PENSYLVANICA / PENNSYLVANIA SEDGE
CARS	64	CAREX STRICTA / TUSSOCK SEDGE
JUEF	44	JUNCUS EFFUSUS / SOFT RUSH

BLOCK A1 - DSUP2020-10028

STREET TREES	QTY	BOTANICAL / COMMON NAME
GTSH	3	GLEDITSIA TRIACANTHOS INERMIS `SHADEMASTER` TM / SHADEMASTER LOCUST
GYMD	2	GYMNOCLADUS DIOICA `EXPREESO` / EXPRESSO KENTUCKY COFFEE TREE
QUEP	2	QUERCUS PHELLOS / WILLOW OAK
ULVF	3	ULMUS AMERICANA `VALLEY FORGE` / AMERICAN ELM

SOD/SEED	QTY	BOTANICAL / COMMON NAME
LAWN	2,827 SF	LAWN / LAWN

BLOCK B - DSUP2020-10030

STREET TREES	QTY	BOTANICAL / COMMON NAME
ACAF	2	ACER RUBRUM `AUTUMN FLAME` / AUTUMN FLAME RED MAPLE
GTSH	1	GLEDITSIA TRIACANTHOS INERMIS `SHADEMASTER` TM / SHADEMASTER LOCUST
LIST	2	LIQUIDAMBAR STYRACIFLUA `ROTUNDILOBA` / AMERICAN SWEETGUM
QUEP	4	QUERCUS PHELLOS / WILLOW OAK
QUSH	3	QUERCUS SHUMARDII / SHUMARDII OAK
ULVF	3	ULMUS AMERICANA `VALLEY FORGE` / AMERICAN ELM

DECIDUOUS SHRUB	QTY	BOTANICAL / COMMON NAME
CSFA	7	CORNUS SERICEA `FARROW` TM / ARCTIC FIRE RED TWIG DOGWOOD
CSKE	8	CORNUS SERICEA `KELSEYI` / KELSEY`S DWARF RED-OSIER DOGWOOD

EVERGREEN SHRUB	QTY	BOTANICAL / COMMON NAME
DIVJ	4	DISTYLIUM X `VINTAGE JADE` / VINTAGE JADE DISTYLIUM
SARU	17	SARCOCOCCA HUMILIS / SWEETBOX

ORNAMENTAL GRASSES	QTY	BOTANICAL / COMMON NAME
ERSP	14	ERAGROSTIS SPECTABILIS / PURPLE LOVE GRASS
PANH	8	PANICUM VIRGATUM `RUBY RIBBONS` / SWITCH GRASS
PEAH	13	PENNISETUM ALOPECUROIDES `HAMELN` / HAMELN DWARF FOUNTAIN GRASS

GROUND COVERS	QTY	BOTANICAL / COMMON NAME
OPJN	52	OPHIOPOGON JAPONICUS `NANA` / DWARF MONDO GRASS

SOD/SEED	QTY	BOTANICAL / COMMON NAME
LAWN	2,463 SF	LAWN / LAWN

BLOCK A2

STREET TREES	QTY	BOTANICAL / COMMON NAME
GIBI	2	GINKGO BILOBA `AUTUMN GOLD` / AUTUMN GOLD GINKGO
GTSH	2	GLEDITSIA TRIACANTHOS INERMIS `SHADEMASTER` TM / SHADEMASTER LOCUST
ULVF2	2	ULMUS AMERICANA `VALLEY FORGE` / AMERICAN ELM

DECIDUOUS SHRUB	QTY	BOTANICAL / COMMON NAME
CACO	9	CLETHRA ALNIFOLIA `COMPACTA` / COMPACT SUMMERSWEET
CLAH	6	CLETHRA ALNIFOLIA `HUMMINGBIRD` / SUMMERSWEET
FOTB	3	FOTHERGILLA GARDENII `BLUE MIST` / BLUE MIST FOTHERGILLA
HYAR	7	HYDRANGEA ARBORESCENS `ANNABELLE` / WILD HYDRANGEA
HPLI	1	HYDRANGEA PANICULATA `LIMELIGHT` / LIMELIGHT HYDRANGEA
RAGL	2	RHUS AROMATICA `GRO-LOW` / GRO-LOW FRAGRANT SUMAC

EVERGREEN SHRUB	QTY	BOTANICAL / COMMON NAME
DIVJ	5	DISTYLIUM X `VINTAGE JADE` / VINTAGE JADE DISTYLIUM
ILGG	5	ILEX GLABRA `NIGRA` / NIGRA INKBERRY HOLLY
ILSH	3	ILEX GLABRA `SHAMROCK` / INKBERRY

ORNAMENTAL GRASSES	QTY	BOTANICAL / COMMON NAME
CAKF	4	CALAMAGROSTIS X ACUTIFLORA `KARL FOERSTER` / FEATHER REED GRASS
MUHL	22	MUHLENBERGIA LINDHEIMERI `LENI` / AUTUMN GLOW MUHLY GRASS
PANH	17	PANICUM VIRGATUM `RUBY RIBBONS` / SWITCH GRASS
PEAH	34	PENNISETUM ALOPECUROIDES `HAMELN` / HAMELN DWARF FOUNTAIN GRASS

GROUND COVERS	QTY	BOTANICAL / COMMON NAME
CARB	25	CAREX BUCHANANII `RED ROOSTER` / RED ROOSTER SEDGE
JUHH	26	JUNIPERUS HORIZONTALIS `HUGHES` / HUGHES JUNIPER

SOD/SEED	QTY	BOTANICAL / COMMON NAME
LAWN	1,359 SF	LAWN / LAWN

BIODIVERSITY TABULATIONS - OAKVILLE RIGHT OF WAY PLANTING

TREES (URBAN AND STANDARD)
TOTAL NUMBER OF TREES PROPOSED

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Acer	3	3%	33%	rubrum	3	3%	10%
Amelanchier	3	3%	33%	grandiflora	3	3%	10%
Carya	1	1%	33%	laciniosa	1	1%	10%
Cercis	2	2%	33%	canadensis	2	2%	10%
Cornus	3	3%	33%	florida	3	3%	10%
Fagus	1	1%	33%	grandifolia	1	1%	10%
Juglans	2	2%	33%	nigra	2	2%	10%
Ilex	2	2%	33%	opaca	2	2%	10%
Ilex	2	2%	33%	X 'Nellie R Stevens'	2	2%	10%
Magnolia	1	1%	33%	grandifolia	1	1%	10%
Thuja	11	11%	33%	occidentalis	11	11%	10%
Acer	7	7%	33%	rubrum 'Autumn Flame'	7	7%	10%
Ginko	10	10%	33%	bilboa 'Autumn Gold"	10	10%	10%
Liguidambar	10	10%	33%	styraciflua	10	10%	10%
Platanus	4	4%	33%	acerifolia	4	4%	10%
Quercus	6	6%	33%	coccinea	6	6%	10%
Quercus	6	6%	33%	rubra	6	6%	10%
Quercus	8	8%	33%	shumardii	8	8%	10%
Gleditsia	6	6%	33%	tricanthos	6	6%	10%
Gymnocladus	2	2%	33%	dioica	2	2%	10%
Quercus	6	6%	33%	phellos	6	6%	10%
Ulmus	8	8%	33%	americana	8	8%	10%
TOTAL	**104**						

SHRUBS
TOTAL NUMBER OF SHRUBS PROPOSED:

GENUS	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED	SPECIES	QTY.	PERCENT OF TOTAL PROPOSED	MAXIMUM PERCENT ALLOWED
Abelia	32	7%	33%	grandifolia	32	7%	10%
Cephalotaxus	32	7%	33%	harringtonia	32	7%	10%
Chamaecyparis	3	1%	33%	obtusa	3	1%	10%
Ilex	141	33%	33%	glabra 'Nigra'	141	33%	10%
Ilex	23	5%	33%	glabra 'Shamrock'	23	5%	10%
Cornus	88	21%	33%	sericea 'Kelseyi"	88	21%	10%
Cornus	7	2%	33%	sericea 'Farrow"	7	2%	10%
Itea	48	11%	33%	cespitosa	48	11%	10%
Dystylium	9	2%	33%	x ' vintage jade'	9	2%	10%
Sarcococca	17	4%	33%	humilis	17	4%	10%
Clethra	9	2%	33%	alnifolia ' compacta'	9	2%	10%
Clethra	6	1%	33%	alnifolia 'hummingbird'	6	1%	10%
Fothergilla	3	1%	33%	gardenii	3	1%	10%
Hydrangea	7	2%	33%	arborescens	7	2%	10%
Hydrangea	1	0%	33%	paniculata 'limelight'	1	0%	10%
Rhus	2	0%	33%	aromatica	2	0%	10%
TOTAL	**428**						

URBAN TREE TABULATIONS

PLAN KEY	QUANTITY	PLAN LOCATION	PROJECTED 20 YR. CANOPY* (PER TREE)	IMPERVIOUS AREA UNDER CANOPY (PER TREE)	IMPERVIOUS AREA GREATER THAN 50% OF PROJECTED 20 YR. CANOPY? (Y/N)
ACAF	7	STREET TREE	1,250 SF	625 SF	Y
GIBI	10	STREET TREE	1,250 SF	625 SF	Y
LIST	10	STREET TREE	1,250 SF	625 SF	Y
PLAB	4	STREET TREE	1,250 SF	625 SF	Y
QUCO	6	STREET TREE	1,250 SF	625 SF	Y
QURU	6	STREET TREE	1,250 SF	625 SF	Y
QUSH	8	STREET TREE	1,250 SF	625 SF	Y
GTSH	6	STREET TREE	1,250 SF	625 SF	Y
GYMD	2	STREET TREE	1,250 SF	625 SF	Y
QUEP	4	STREET TREE	1,250 SF	625 SF	Y
ULVF	6	STREET TREE	1,250 SF	625 SF	Y
ULVF2	2	STREET TREE	1,250 SF	625 SF	Y
TOTAL URBAN TREES					
71					

NATIVE PLANT TABULATIONS

PLANT TYPE	QUANTITY	NATIVE TYPE	MARCH 2, 2019 – JANUARY 1, 2020 REQUIRED %	MARCH 2, 2019 – JANUARY 1, 2020 PROVIDED QTY.	MARCH 2, 2019 – JANUARY 1, 2020 PROVIDED %	JANUARY 2, 2020 – JANUARY 1, 2024 REQUIRED %	JANUARY 2, 2020 – JANUARY 1, 2024 PROVIDED QTY.	JANUARY 2, 2020 – JANUARY 1, 2024 PROVIDED %	BEGINNING JANUARY 2, 2024 REQUIRED %	BEGINNING JANUARY 2, 2024 PROVIDED QTY.	BEGINNING JANUARY 2, 2024 PROVIDED %
Urban Trees	71	Regional/Local	10%			15%	63	89%	20%		
		Total Natives	25%			25%	71	100%	50%		
Standard Trees	31	Regional/Local	15%			25%	30	97%	40%		
		Total Natives	40%			60%	31	100%	80%		
Evergreen Shrubs	257	Regional/Local	5%			8%	222	86%	10%		
		Total Natives	20%			30%	222	86%	40%		
Deciduous Shrubs	171	Regional/Local	10%			15%	171	100%	20%		
		Total Natives	40%			60%	171	100%	80%		
Groundcovers	643	Regional/Local	5%			10%	574	89%	10%		
		Total Natives	10%			20%	574	89%	20%		
Perennials, Ferns, Ornamental Grasses	571	Regional/Local	10%			15%	491	86%	25% (perennials) 30% (ferns & grasses)		
		Total Natives	25%			40%	571	100%	60% (perennials) 80% (ferns & grasses)		
Vines		Total Natives	80%			100%			100%		

TOTALS

TOTAL PLANTS SPECIFIED	TOTAL SUM OF REGIONAL/LOCAL NATIVE PLANTS	TOTAL SUM OF NATIVE PLANTS
1744	1551	1640
	88.9%	94.0%

NOTES:
1) Percentages apply to the total quantity of each plant type specifed on Completeness/Preliminary Plans and Final #1 Grading Plans submitted during the listed time frames.
2) Total Natives is the sum of Eastern U.S. Native, Regionally Native, and Locally Native vegetation specifed on the plans for each plant type.
3) Non-native vegetation for the purposes of providing edible fruits, seeds, or nuts may be planted and shall not be calculated in the above-stated requirements for native species regardless of plant type.

SHEET FOR INFORMATION AND TRACKING ONLY!

SHEET SHOWS TRACKING INFORMATION FOR BIODIVERSITY AND NATIVE REQUIRMENTS FOR PLANTINGS WITHIN IN THE RIGHT-OF-WAY, PUBLIC ACCESS EASEMENTS, AND PUBLICLY ACCESSIBLE OPEN SPACE. OAKVILLE SITE TO CUMULATIVELY MEET BIODIVERSITY STANDARDS FOR PLANTINGS IN THIS AREA, BUT MAY NOT MEET IT AT EVERY STAGE OF DEVELOPMENT.

BLOCKS WILL INDIVIDUALLY MEET BIODIVERSITY STANDARDS FOR PLANTING AREAS WITHIN THEIR RESPECTIVE PROPERTY LINES, TABULATIONS TO BE PROVIDED SEPERATELY.

THIS TRACKING SHEET TO BE UPDATED AS DSUPS FOR NEW BLOCKS ARE SUBMITTED.

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030
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. DATE

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
703.549.7784
WWW.LANDDESIGN.COM

KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
Matthew V. Clark
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT
OAKVILLE

LANDDESIGN PROJ.#
2020069

REVISION / ISSUANCE

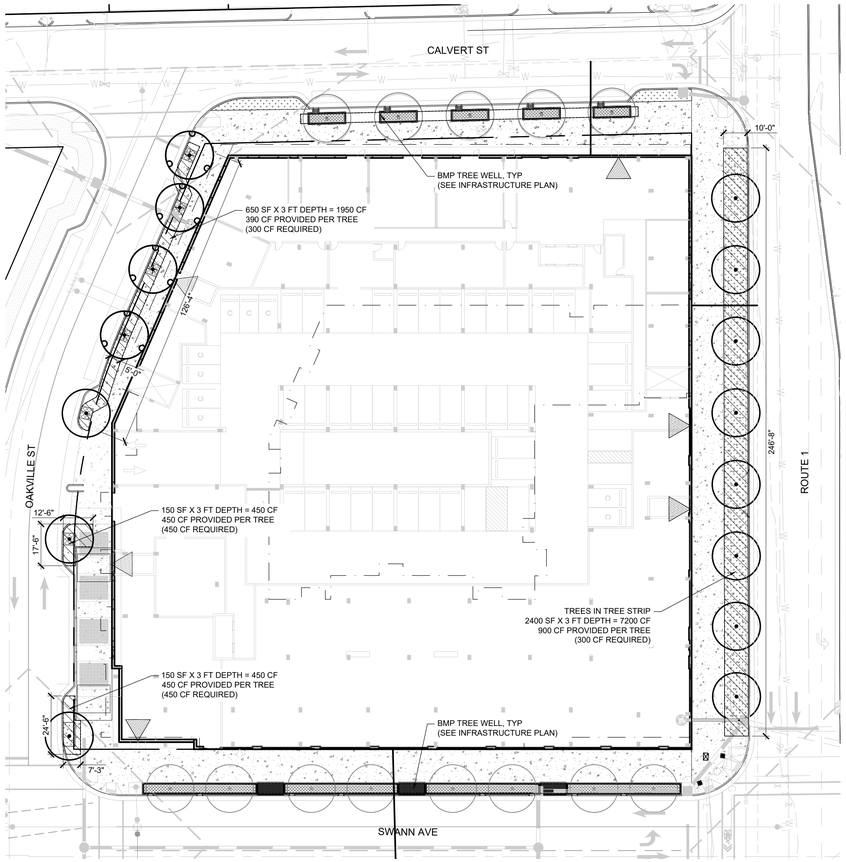
NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
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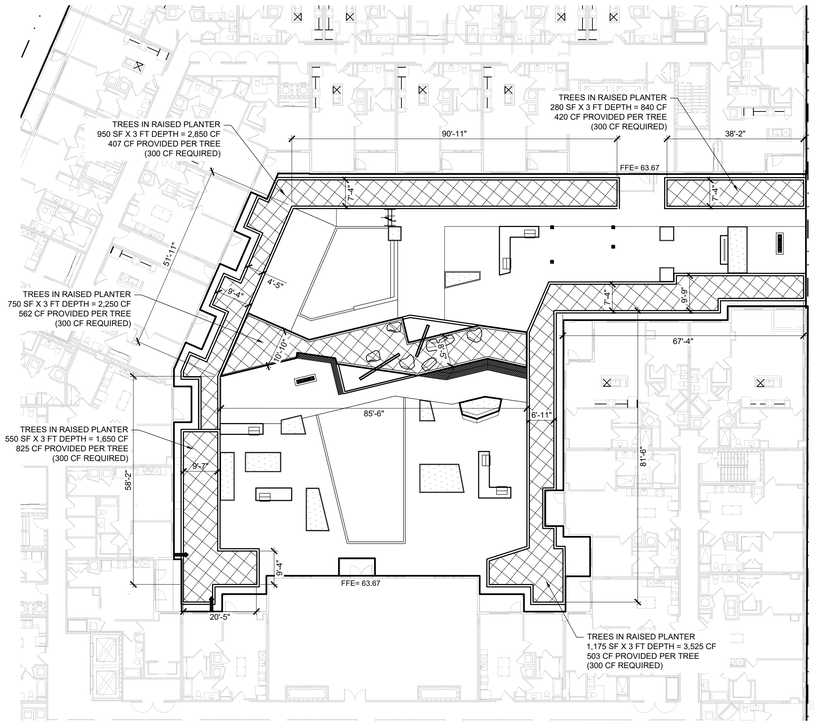
DESIGNED BY:
DRAWN BY:
CHECKED BY:

SCALE NORTH
VERT:
HORZ: N/A

SHEET TITLE
SITEWIDE BIODIVERSITY TRACKING

SHEET NUMBER
L202A





1 STREETSCAPE SOIL VOLUME PLAN

L301 PLAN

SCALE 1" = 30'

2 COURTYARD SOIL VOLUME PLAN

L301 PLAN

SCALE 1" = 20'

STREETSCAPE SOIL VOLUME

EXTENTS OF UNCOMPACTED SOIL VOLUME IN TREE WELLS

COURTYARD (ABOVE GRADE) SOIL VOLUME

EXTENTS OF UNCOMPACTED SOIL IN RAISED PLANTERS

EXTENTS OF UNCOMPACTED SOIL IN RAISED PLANTERS NOT COUNTING TOWARDS CANOPY COVERAGE

NOTES:
1. THIS SHEET IS FOR SOIL VOLUME REFERENCE ONLY.
2. SOIL DEPTHS SHOWN ARE APPROXIMATE AND SUBJECT TO FINAL ENGINEERING.

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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DIRECTOR DATE
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KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

BLOCK B

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.#
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SCALE
VERT: N/A
HORZ: 1"=30'
0 15' 30' 60'

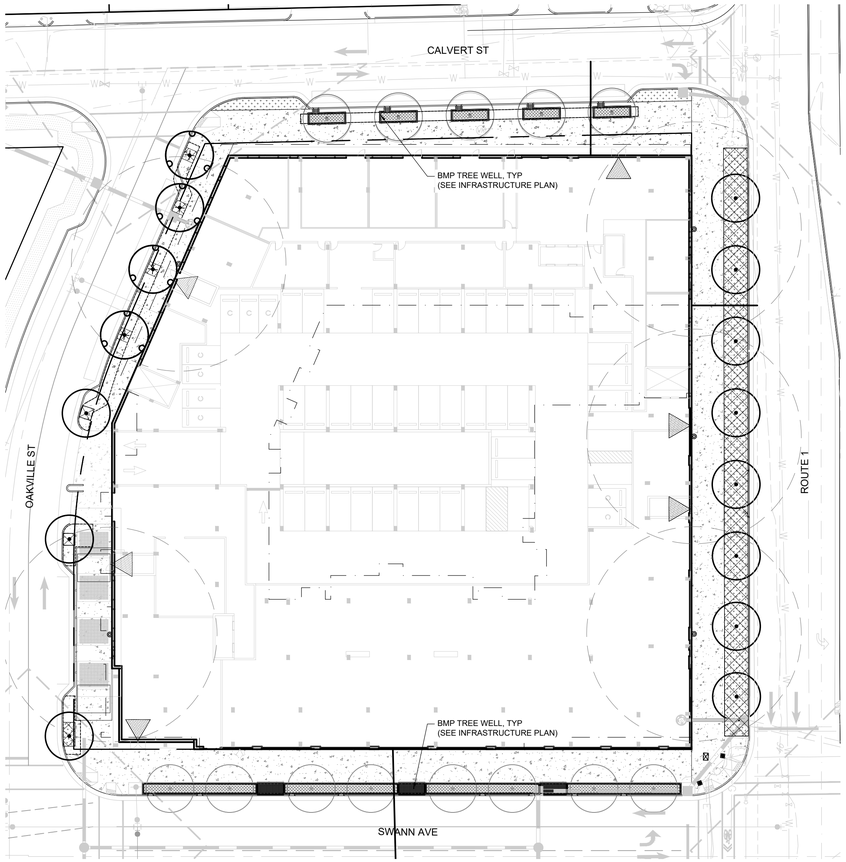
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SHEET TITLE

SOIL VOLUME PLAN

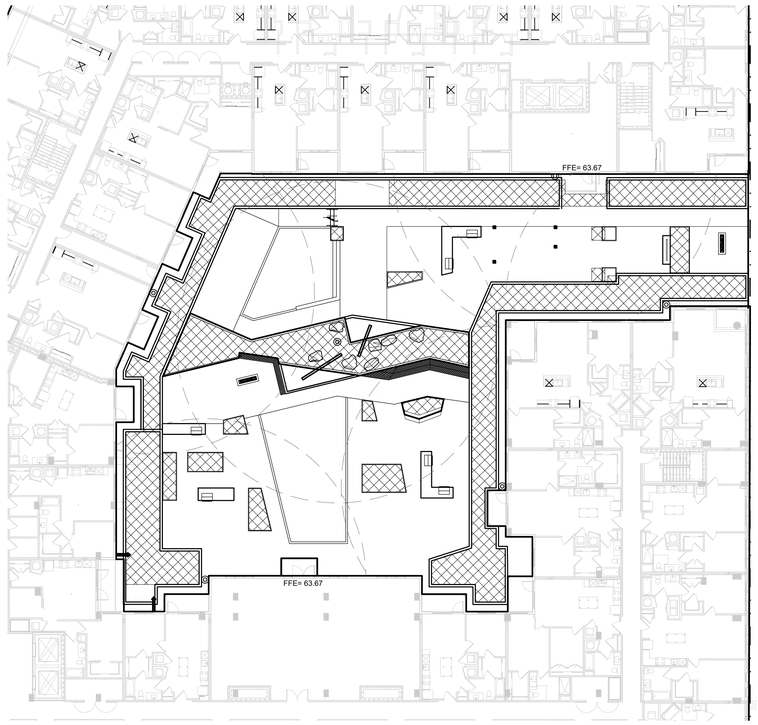
SHEET NUMBER

L301



1 L302 STREETSCAPE LIMITS OF IRRIGATION PLAN

PLAN — SCALE 1" = 30'



2 L302 COURTYARD LIMITS OF IRRIGATION PLAN

PLAN — SCALE 1" = 20'

STREETSCAPE LIMITS OF IRRIGATION

LIMITS OF AREA WITH NO PERMANENT IRRIGATION (TO BE HAND-WATERED)

HOSE BIB

45' RADIUS

COURTYARD LIMITS OF IRRIGATION

LIMITS OF AREA WITH NO PERMANENT IRRIGATION (TO BE HAND-WATERED)

HOSE BIB

45' RADIUS

NOTES:

1. PROPOSED LIMITS OF IRRIGATION ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING AND LEED APPROVALS. HAND IRRIGATED AREAS MAY BE UPGRADED TO A PERMANENT IRRIGATION SYSTEM IN THE FUTURE WITHOUT AMENDMENT TO THIS SITE PLAN. FULL IRRIGATION SYSTEM PLANS TO BE PROVIDED BY OTHERS AT A LATER DATE.
2. SOIL SURVEY TO BE PERFORMED AT A LATER DATE CLOSER TO INSTALLATION OF PLANT MATERIAL. SOIL SAMPLE TEST REPORT WILL DOCUMENT THE EXISTING SOIL PH.
3. HOSE BIB LOCATIONS SHOWN ARE PRELIMINARY AND TO BE FINALIZED WITH FINAL BUILDING ARCHITECTURE.

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030

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. — DATE

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KEY MAP

SEAL

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COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

BLOCK B

STONEBRIDGE

ALEXANDRIA, VA

–

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2020069

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SCALE — NORTH

VERT: N/A
HORZ: 1"=30'

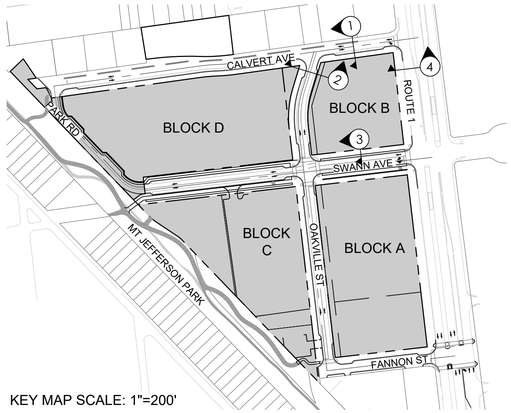
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SHEET TITLE

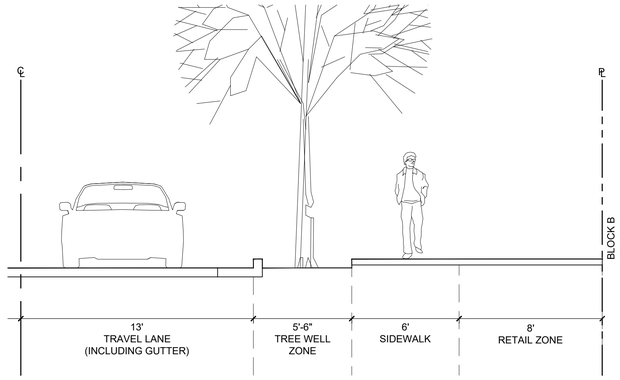
LIMITS OF IRRIGATION PLAN

SHEET NUMBER

L302

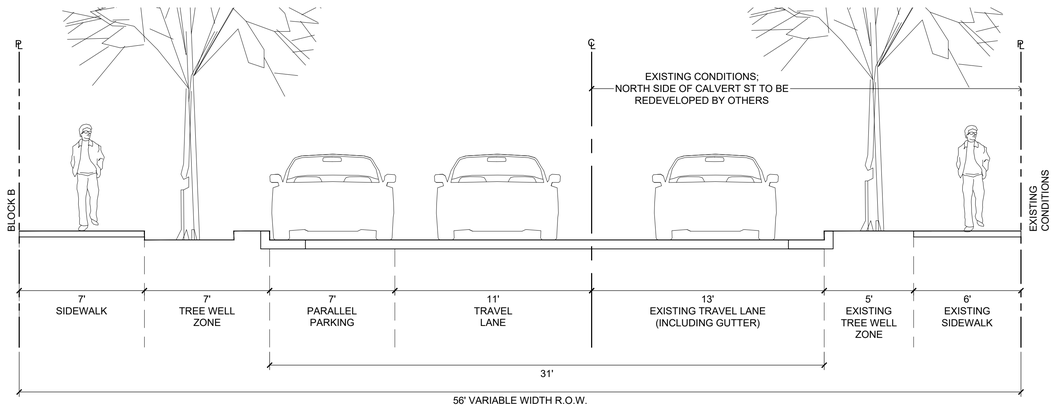


KEY MAP SCALE: 1"=200'



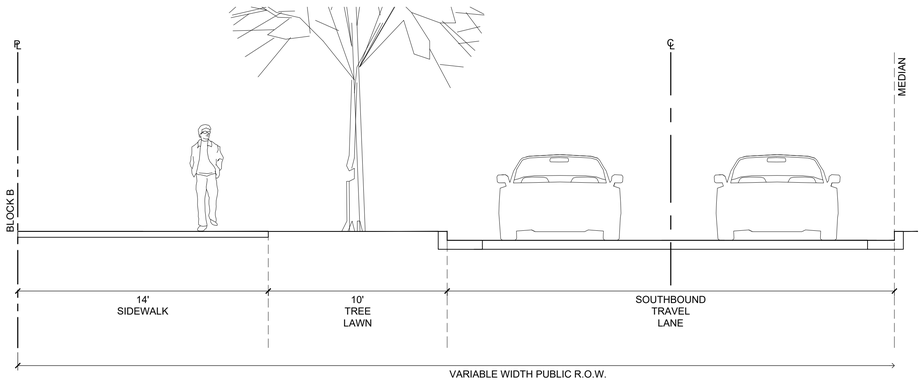
3 SWANN AVENUE - EAST

SECTION 1/4" = 1'-0"



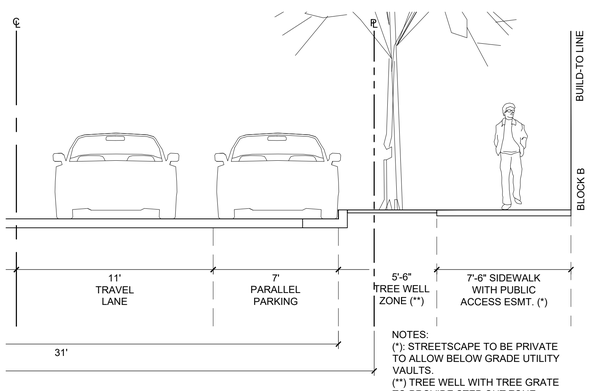
1 CALVERT STREET - EAST (INTERIM)

SECTION 1/4" = 1'-0"



4 ROUTE 1 - RESIDENTIAL FRONTAGE

SECTION 1/4" = 1'-0"



NOTES:
(*): STREETSCAPE TO BE PRIVATE TO ALLOW BELOW GRADE UTILITY VAULTS.
(**) TREE WELL WITH TREE GRATE TO PROVIDE STEP OUT ZONE.

2 OAKVILLE STREET - NORTH (PARKING ONE SIDE)

SECTION 1/4" = 1'-0"

NOTES:

1. PUBLIC ACCESS EASEMENT TO BE PROVIDED WHEN STREETSCAPE FALLS ON PRIVATE PROPERTY.

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

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KEY MAP

SEAL

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

NOT FOR CONSTRUCTION

PROJECT

OAKVILLE

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.#
2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY:
DRAWN BY:
CHECKED BY:

SCALE NORTH

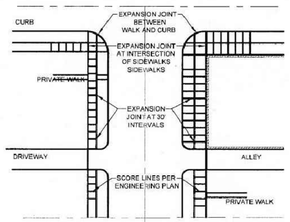
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HORZ: AS NOTED

SHEET TITLE

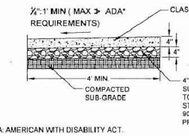
DETAILS - SECTIONS

SHEET NUMBER

L501

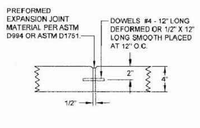


EXPANSION JOINT PLACEMENT



*ADA: AMERICAN WITH DISABILITY ACT.

SIDEWALK SECTION (N.T.S.)



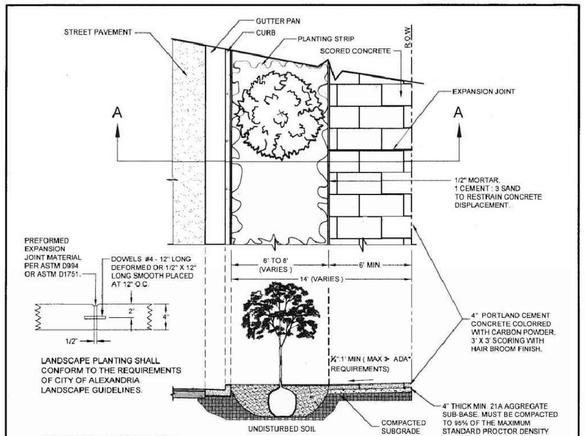
EXPANSION JOINT

NOTES:

1. SCORING OF CONCRETE SLAB SHALL BE SAW CUT NOT MORE THAN 3/16" IN WIDTH AND NOT MORE THAN ¼" DEEP.
2. THE EXPANSION JOINTS SHALL BE ½" WIDE AND SHALL BE THE FULL THICKNESS OF THE CONCRETE SLAB, AND SHALL BE OF PRE-FORMED EXPANSION JOINT MATERIAL CONFORMING TO THE REQUIREMENTS OF ASTM D994 ASPHALT OR ASTM D1751 FIBRE. EXPANSION MATERIAL SHALL BE SECURED IN A MANNER THAT WILL PREVENT MOVEMENT OR DISPLACEMENT OF CONCRETE DURING PLACEMENT.
3. THE EXPANSION JOINTS SHALL BE PLACED PERPENDICULAR TO CONCRETE CURB AT A DISTANCE OF 30' OR COINCIDING WITH THE SCORING.
4. DOWELS SHALL BE PLACED AT THE END OF A SIDEWALK PLACEMENT, AT INTERRUPTIONS FOR A DRIVEWAY, OR IF SIDEWALK SLABS ARE POURED AT DIFFERENT TIMES.
5. SAWING OF JOINTS SHALL BE CONDUCTED AS SOON AS THE CONDITION OF THE CONCRETE PERMITS AND BEFORE ANY RANDOM CRACKING APPEARS.
6. ALL STRUCTURAL ITEMS TO CONFORM TO THE LATEST EDITION OF UNIFORM STATEWIDE BUILDING CODE (USBC) REQUIREMENTS.
7. PRIOR TO CONSTRUCTION, ALL STRUCTURAL CROSS SECTIONS SHALL BE REVIEWED BY A QUALIFIED STRUCTURAL AND/OR GEOTECHNICAL ENGINEER, AND MODIFIED AS NECESSARY BASED ON THE SITE SPECIFIC GEOTECHNICAL REPORT.

STANDARD CONCRETE SIDEWALK		DATE
	DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	CSSW- 1
APPROVED DATE	ALEXANDRIA VIRGINIA	PAGE X

1 L501 SECTION NTS



*ADA: AMERICAN WITH DISABILITY ACT.

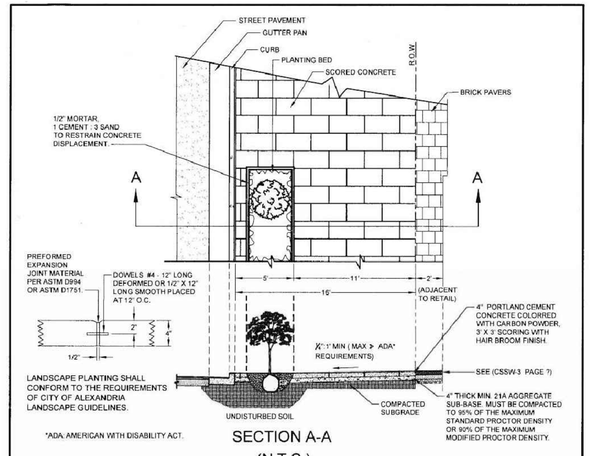
SECTION A-A (N.T.S.)

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CONCRETE SIDEWALK SCORING		DATE
	DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	CSSW- 4
APPROVED DATE	ALEXANDRIA VIRGINIA	PAGE X

2 L501 SECTION NTS



*ADA: AMERICAN WITH DISABILITY ACT.

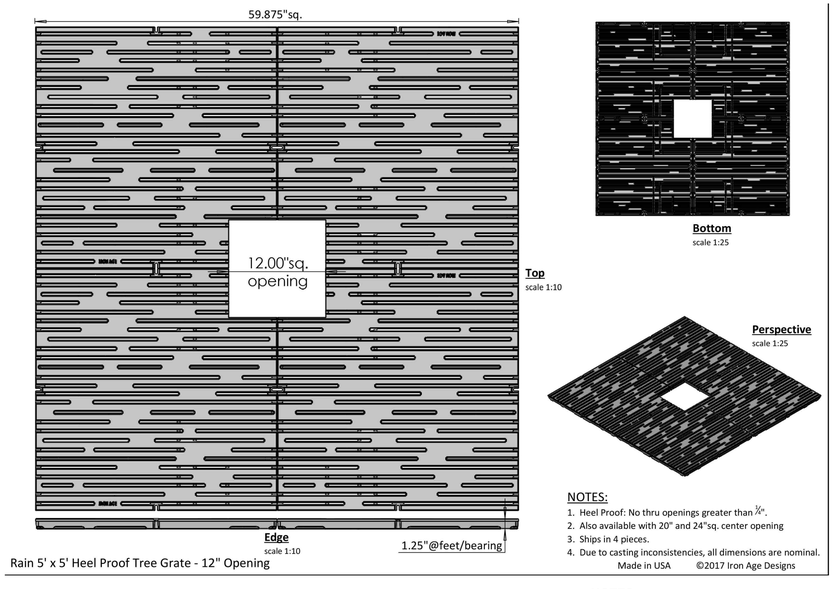
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CONCRETE SIDEWALK SCORING WITH TREE WELL		DATE
	DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES	CSSW- 5
APPROVED DATE	ALEXANDRIA VIRGINIA	PAGE X

3 L501 SECTION NTS



NOTES:

1. SEE PLAN FOR QUANTITY AND LOCATIONS.
2. TREE GRATE SHOWN FOR DESIGN INTENT ONLY. DESIGN AND FINAL SELECTION OF THE TREE GRATE TO BE FINALIZED IN THE DSUP PROCESS.
3. OR OWNER AND CITY APPROVED EQUAL.

4 L511 TREE GRATE SECTION

1/4" = 1'-0"

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
MATTHEW V. CLARK
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10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.#
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REVISION / ISSUANCE

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	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE NORTH

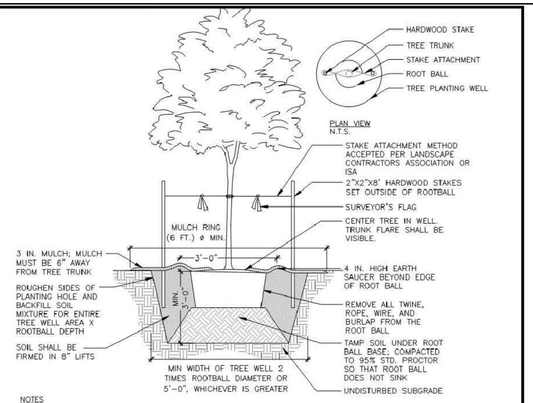
VERT: N/A
HORZ: N/A

SHEET TITLE

DETAILS - HARDSCAPE

SHEET NUMBER

L511



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:

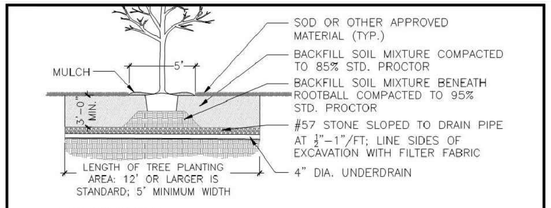
CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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.

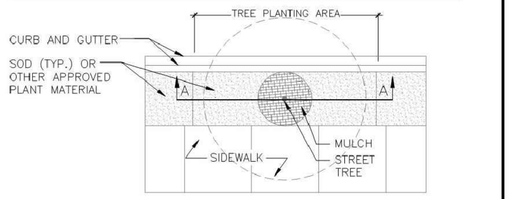
Source: CITY OF ALEXANDRIA
Approved by: COA
Date drawn: 01/01/19
1 OF 1

DECIDUOUS TREE PLANTING
LD 001

1 / L601 SECTION NTS



A. CROSS SECTION



PLAN

NOTES

1. REFER TO LANDSCAPE GUIDELINES FOR TREE STRIP PLANTING AREA INFORMATION.
2. REFER TO LANDSCAPE GUIDELINES FOR GENERAL TREE PLANTING NOTES.
3. SEE STAKING DETAIL FOR MORE INFORMATION.
4. SITE CONDITIONS MAY REQUIRE INSTALLATION OF GRANITE BLOCK IN LIEU OF SOD AND BRICK EDGE. SEE TREE WELL WITH GRANITE BLOCK DETAIL.
5. REFER TO STREET TREE WELL DETAIL FOR CROSS-SECTION.

A TREE PLANTING STRIP
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

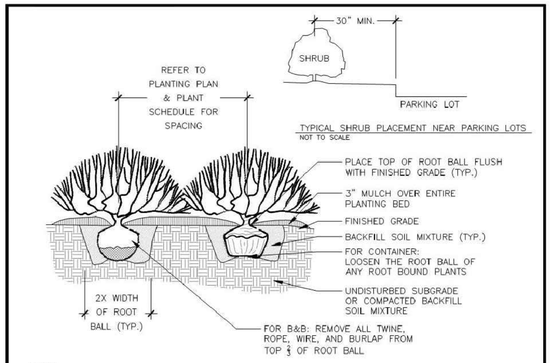
CITY OF ALEXANDRIA, VIRGINIA
STANDARD LANDSCAPE DETAILS
CITY OF ALEXANDRIA, VIRGINIA

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Approved by: COA
Date drawn: 01/01/19
1 OF 1

TREE PLANTING STRIP
LD 006

2 / L601 SECTION NTS



TYPICAL SHRUB PLACEMENT NEAR PARKING LOTS
NOT TO SCALE

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:

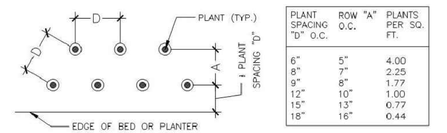
CITY OF ALEXANDRIA, VIRGINIA
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CITY OF ALEXANDRIA, VIRGINIA

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Approved by: COA
Date drawn: 01/01/19
1 OF 1

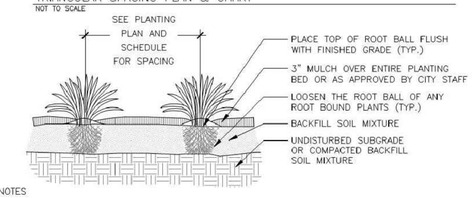
SHRUB PLANTING
LD 009

3 / L601 SECTION NTS



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
Approved by: COA
Date drawn: 01/01/19
1 OF 1

GROUNDCOVER & PERENNIAL PLANTING
LD 011

4 / L601 SECTION NTS

A) STANDARD LANDSCAPE PLAN NOTES FOR ALL PLANS REQUIRING APPROVAL:

THE FOLLOWING NOTES SHALL BE PROVIDED ON LANDSCAPE PLAN SUBMISSIONS FOR ALL PROJECTS THAT REQUIRE APPROVAL BY THE CITY AS OUTLINED IN CHAPTER 3 OF THE CITY'S 2019 LANDSCAPE GUIDELINES:

1) THE PROPERTY OWNER AND/OR APPLICANT, SPECIFIER, CONTRACTOR AND INSTALLER OF PLANT MATERIAL ARE RESPONSIBLE FOR UNDERSTANDING AND ADHERING TO THE STANDARDS SET FORTH IN THE MOST RECENT VERSION OF THE CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND APPLICABLE CONDITIONS OF APPROVAL. ALL QUESTIONS REGARDING APPLICATION OF, OR ADHERENCE TO, THE STANDARDS AND/OR CONDITIONS OF APPROVAL SHALL BE DIRECTED TO THE CITY PRIOR TO COMMENCEMENT OF DEMOLITION, CONSTRUCTION, OR ANY LAND DISTURBING ACTIVITY.

2) THE CITY-APPROVED LANDSCAPE PLAN SUBMISSION, INCLUDING PLANT SCHEDULE, NOTES AND DETAILS SHALL BE THE DOCUMENT USED FOR INSTALLATION PURPOSES AND ALL PROCEDURES SET FORTH IN THE LANDSCAPE GUIDELINES MUST BE FOLLOWED.

3) THE CONTRACTOR SHALL NOT INTERFERE WITH ANY TREE PROTECTION MEASURES OR IMPACT ANY EXISTING VEGETATION IDENTIFIED TO BE PRESERVED PER THE APPROVED TREE AND VEGETATION PROTECTION PLAN.

4) ANY CHANGES, ALTERATIONS OR MODIFICATIONS TO THE SITE CONDITIONS THAT AFFECT VEGETATION PROTECTION ZONES WILL REQUIRE AN AMENDMENT TO THE APPROVED TREE AND VEGETATION PROTECTION PLAN AND/OR DETAILS.

5) INSTALLATION OF PLANT MATERIAL MAY ONLY OCCUR DURING THE PLANTING SEASONS IDENTIFIED IN THE LANDSCAPE GUIDELINES.

6) IN LIEU OF MORE STRENUOUS SPECIFICATIONS, ALL LANDSCAPE RELATED WORK SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT AND MOST UP-TO-DATE EDITION (AT TIME OF CONSTRUCTION) OF LANDSCAPE SPECIFICATION GUIDELINES AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF MARYLAND, DISTRICT OF COLUMBIA AND VIRGINIA; GAITHERSBURG, MARYLAND.

7) SUBSTITUTIONS TO THE APPROVED PLANT MATERIAL SHALL NOT OCCUR UNTIL WRITTEN APPROVAL IS PROVIDED BY THE CITY.

8) MAINTENANCE FOR THIS PROJECT SHALL BE PERFORMED BY THE OWNER, APPLICANT, SUCCESSOR(S) AND/OR ASSIGN(S) IN PERPETUITY AND IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES AND AS CONDITIONED BY PROJECT APPROVAL, AS APPLICABLE.

B) STANDARD LANDSCAPE PLAN NOTES FOR DEVELOPMENT SITE PLANS:

IN ADDITION TO THE NOTES PROVIDED ABOVE, THE FOLLOWING NOTES SHALL BE PROVIDED ON LANDSCAPE PLAN SUBMISSIONS FOR ALL DSP/DSUP PROJECTS:

1) THE APPROVED METHOD(S) OF PROTECTION MUST BE IN PLACE FOR ALL VEGETATION TO BE PRESERVED ON-SITE AND ADJACENT TO THE PROJECT SITE PURSUANT TO THE APPROVED TREE AND VEGETATION PROTECTION PLAN AND DETAILS PRIOR TO COMMENCEMENT OF DEMOLITION, CONSTRUCTION, OR ANY LAND DISTURBANCE. THE APPLICANT SHALL NOTIFY THE PLANNING & ZONING (P&Z) PROJECT MANAGER ONCE THE TREE PROTECTION METHODS ARE IN PLACE. NO DEMOLITION, CONSTRUCTION, OR LAND DISTURBANCE MAY OCCUR UNTIL AN INSPECTION IS PERFORMED BY THE CITY AND WRITTEN CONFIRMATION IS PROVIDED BY THE CITY WHICH VERIFIES CORRECT INSTALLATION OF THE TREE PROTECTION MEASURES.

2) THE APPLICANT MUST CONTACT THE P&Z PROJECT MANAGER PRIOR TO COMMENCEMENT OF LANDSCAPE INSTALLATION/PLANTING OPERATION TO SCHEDULE A PRE-INSTALLATION MEETING. THE MEETING SHOULD BE HELD BETWEEN THE APPLICANT'S GENERAL CONTRACTOR, LANDSCAPE CONTRACTOR, LANDSCAPE ARCHITECT, THE P&Z PROJECT MANAGER AND THE CITY ARBORIST (AS APPLICABLE) TO REVIEW THE SCOPE OF INSTALLATION PROCEDURES AND PROCESSES DURING AND AFTER INSTALLATION.

3) THE FOLLOWING INFORMATION SHALL BE PROVIDED TO THE P&Z PROJECT MANAGER AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO THE LANDSCAPE PRE-INSTALLATION MEETING: 1) A LETTER THAT CERTIFIES THAT THE PROJECT LANDSCAPE ARCHITECT PERFORMED PRE-SELECTION TAGGING FOR ALL TREES PROPOSED WITHIN THE PUBLIC RIGHT OF WAY AND ON PUBLIC LAND PRIOR TO INSTALLATION. THIS LETTER MUST BE SIGNED AND SEALED BY THE PROJECT LANDSCAPE ARCHITECT, AND 2) A COPY OF THE SOIL BULK DENSITY TEST REPORT VERIFYING THAT MAXIMUM COMPRESSION RATES ARE MET.

4) ALL CONSTRUCTION WASTE SHALL BE REMOVED PRIOR TO PLANTING.

5) AS-BUILT DRAWINGS FOR THIS LANDSCAPE AND/OR IRRIGATION/WATER MANAGEMENT SYSTEM WILL BE PROVIDED IN COMPLIANCE WITH CITY OF ALEXANDRIA LANDSCAPE GUIDELINES, THE CITY CODE OF ORDINANCES, AND ALL APPLICABLE PLAN PREPARATION CHECKLISTS. AS-BUILT DRAWINGS SHALL INCLUDE CLEAR IDENTIFICATION OF ALL VARIATION(S) AND CHANGES FROM APPROVED DRAWINGS INCLUDING LOCATION, QUANTITY AND SPECIFICATION OF ALL PROJECT ELEMENTS.

6) AREAS OF BARE SOIL WILL NOT BE ACCEPTED. MULCHED AREAS AND PLANTING AREAS SHALL BE WEED FREE UPON ACCEPTANCE OF THE PROJECT BY THE CITY.

A STANDARD LANDSCAPE PLAN NOTES
NOT TO SCALE

OF UPDATES: 01 LAST UPDATED: 12/02/2019

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

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Source: CITY OF ALEXANDRIA
Approved by: COA
Date drawn: 01/01/19
1 OF 1

STANDARD LANDSCAPE PLAN NOTES
LD 016

APPROVED
SPECIAL USE PERMIT NO. DSUP 2020-10030

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. DATE

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
703.549.7784
WWW.LANDDESIGN.COM

KEY MAP

SEAL

NOT FOR CONSTRUCTION

COMMONWEALTH OF VIRGINIA
Matthew V. Clark
MATTHEW V. CLARK
Lic. No. 952
10-20-2020
LANDSCAPE ARCHITECT

PROJECT

OAKVILLE

STONEBRIDGE

ALEXANDRIA, VA

–

LANDDESIGN PROJ.# 2020069

REVISION / ISSUANCE

NO.	DESCRIPTION	DATE
	CONCEPT II SUBMISSION	06-22-2020
	PDSUP SUBMISSION #1	09-04-2020
	PDSUP SUBMISSION #2	10-20-2020

DESIGNED BY: MC/GC
DRAWN BY: WT/LB
CHECKED BY: LB/TW

SCALE NORTH

VERT: N/A
HORZ: N/A

SHEET TITLE

DETAILS - PLANTING

SHEET NUMBER

L601