FINAL SITE PLAN

CLI ELBERT AVENUE RESIDENCES

3908 ELBERT AVENUE

AREA TABULATIONS

TOTAL SITE AREA =	0.8831 AC OR 38,467 SF (SURVEYED), 0.8636 AC OR 37,620 SF (RECORD)
TOTAL EXISTING IMPERVIOUS AREA =	0.4658 AC OR 20,291 SF
TOTAL PROPOSED IMPERVIOUS AREA =	0.7418 AC OR 32,313 SF
TOTAL DISTURBED AREA =	1.0208 AC OR 44,467 SF
TAX PARCEL IDENTIFICATION =	007.01-04-04 EXISTING/PROPOSED ZONE: RMF
ADDRESS:	3908 ELBERT AVENUE, ALEXANDRIA, VIRGINIA 22305

TRIP GENERATION ANALYSIS

PROVIDED BY GOROVE SLADE, DATED 06/01/2022

Trip Generation Summary

Land Use	Size	AM Peak Hour (veh/hr) In	Out	Total	PM Peak Hour (veh/hr) In	Out	Total
Existing							
Multifamily Housing (Mid-Rise) (LU 221)	28 Du	3	7	10	8	5	13
Total Existing Trips		3	7	10	8	5	13
Proposed Development							
Multifamily Housing (Mid-Rise) (LU 221)	91 DU	8	23	31	24	16	40
Total Proposed Development Trips		8	23	31	24	16	40
Net Trips		+5	+16	+21	+16	+11	+27

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS--PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY--ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO KNOWN TIDAL WETLANDS, TIDAL SHORES, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, OR WETLANDS LOCATED ON THIS SITE. THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. THE SITE IS LOCATED PARTIALLY WITHIN A MAPPED 100-YEAR FLOODPLAIN (SEE C-0401A).
2. THERE ARE NO KNOWN AREAS OF MARINE CLAY DEPOSITS ONSITE, ACCORDING TO THE CITY MARINE CLAYS MAP - SEE C-0202.
3. THERE ARE NO KNOWN RESOURCE PROTECTION AREAS (RPA) ONSITE, ACCORDING TO THE CITY RECORD MAPS.
4. THERE IS NO KNOWN SOIL CONTAMINATION ON THIS PROPERTY, TO THE BEST OF OUR KNOWLEDGE AND BELIEF, SEE PHASE 1 ESA ON C-1402.
5. THE SITE IS NOT WITHIN A COMBINED SEWER AREA.

BUILDING CODE ANALYSIS

USE GROUP:	S-2, B, R-2
CONSTRUCTION TYPE:	FLOOR 1 - IA FLOORS 2-6 - IIIA
SPRINKER SYSTEM:	NFPA 13
BUILDING HEIGHT:	68.96'
FLOOR AREA:	SEE FLOOR AREA TABLE C-1301

FIRE FLOW TEST

DATE: 07/03/2024

RESIDUAL HYDRANT #3068	
STATIC PRESSURE =	42 PSI
RESIDUAL PRESSURE =	21 PSI
FLOW HYDRANT #3067	
OBSERVED FLOW =	1,706 GPM
CALCULATED FLOW =	1,706 GPM @ 20 PSI
MAXIMUM CAP FLOW =	3,500 GPM @ 20 PSI

SEE SHEET C-1302 FOR ADDITIONAL INFORMATION

BIKE PARKING TABULATIONS

BIKE PARKING REQUIRED:

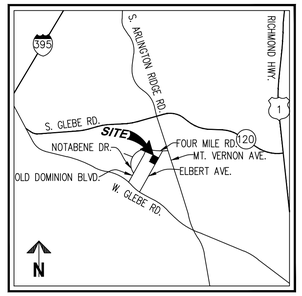
1 RES. SP/10 UNITS = 3 X 91/10 =	28 RESIDENTIAL SPACES
1 VISITOR SP/50 UNITS = 1 X 91/50 =	2 RES. VISITOR SPACE
	30 TOTAL SPACES
BIKE PARKING PROVIDED: 36 SPACES	(28 RESIDENT SPACES IN GARAGE) (8 VISITOR SPACES ON SITE FRONTAGE)

DEVELOPMENT TEAM INFORMATION

1. OWNER/DEVELOPER:
   CLI MULTIFAMILY PARTNERSHIP LP
   3908 ELBERT AVENUE
   ALEXANDRIA, VA 22305
2. DEVELOPMENT CONSULTANT:
   JOSEPH + BROWNE DEVELOPMENT ASSOCIATES
   1410 INGRAHAM STREET NW
   WASHINGTON, DC 20011
   ATTN: PAUL P. BROWNE
3. LAND USE ATTORNEY:
   WIRE GILL LLP
   700 N. FAIRFAX ST., SUITE 600
   ALEXANDRIA, VA 22314
   ATTN: MARY CATHERINE GIBBS
4. ARCHITECT:
   RUST | ORLING ARCHITECTURE
   1215 CAMERON STREET
   ALEXANDRIA, VA 22314
   ATTN: SCOTT FLEMING, AIA, LEED AP BD+C
5. CIVIL ENGINEER:
   WALTER L. PHILLIPS, INC.
   207 PARK AVENUE
   FALLS CHURCH, VA 22046
   ATTN: TRAVIS P. BROWN, P.E.
6. LANDSCAPE ARCHITECT:
   LANDDESIGN, INC.
   200 SOUTH PEYTON STREET
   ALEXANDRIA, VA 22314
   ATTN: GABRIELA CANAMAR CLARK, PLA

VICINITY MAP

SCALE: 1"=2000'



ADDRESS: 3908 ELBERT AVENUE, ALEXANDRIA, VIRGINIA 22305

PROJECT DESCRIPTION NARRATIVE

THE SITE CURRENTLY CONSISTS OF A THREE (3) STORY APARTMENT BUILDING. ONE CURB CUT, ON ELBERT AVENUE, PROVIDES ACCESS TO THE SURFACE PARKING LOT THAT CURRENTLY SERVES THE EXISTING BUILDING. THE PROPERTY RESIDES WITHIN THE ARLANDRIA-CHIRILAGUA SMALL AREA PLAN.

THE APPLICATION WILL DEMOLISH THE EXISTING APARTMENT BUILDING AND CONSTRUCT ONE (1) NEW MULTIFAMILY RESIDENTIAL BUILDING (HEIGHT UP TO 70 FEET) WITH A GROUND FLOOR PARKING GARAGE, EXTERIOR LOADING SPACE, SITE UTILITY INFRASTRUCTURE, AND STORMWATER MANAGEMENT FACILITIES.

THE SITE IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOODPLAIN - SEE C-0401A FOR ADDITIONAL INFORMATION.

THE SITE IS NOT WITHIN A HISTORIC DISTRICT AND THERE ARE NO 100-YEAR OLD BUILDINGS LOCATED ONSITE.

SPECIAL USE PERMITS/ZONING MODIFICATIONS/WAIVERS

1. REZONING FROM THE RA ZONING DISTRICT TO THE RMF ZONING DISTRICT, APPROVED FEBRUARY 25, 2023.
2. DEVELOPMENT SPECIAL USE PERMIT WITH PRELIMINARY SITE PLAN TO INCREASE FAR TO 3.00 PURSUANT TO Z.O. 3-1406(B), APPROVED FEBRUARY 25, 2023.
3. SPECIAL USE PERMIT FOR A TIER 1 TRANSPORTATION MANAGEMENT PLAN, APPROVED FEBRUARY 25, 2023.

COMPLETE STREETS TABULATION

COMPLETE STREETS POLICY TABLE	NEW	UPGRADED
CROSSWALKS (NUMBER)	-	-
STANDARD	-	-
HIGH VISIBILITY	-	-
CURB RAMPS	-	-
SIDEWALKS (LF)	-	209
BICYCLE PARKING (NUMBER OF SPACES)	30	-
PUBLIC/VISITOR	8	-
PRIVATE/GARAGE	28	-
BICYCLE PATHS (LF)	-	-
PEDESTRIAN SIGNALS	-	-

ZONING TABULATIONS

ZONING :	EXISTING ZONE/ PROPOSED ZONE: RMF
MASTER PLAN :	ARLANDRIA-CHIRILAGUA SMALL AREA PLAN
SITE AREA (SQ. FT) (ACRES):	0.8831 AC OR 38,467 SF (SURVEY), 0.8636 AC OR 37,620 SF (RECORD)
USE:	EXISTING: MULTIFAMILY RESIDENTIAL
	PROPOSED: MULTIFAMILY RESIDENTIAL

	REQUESTED, PERMITTED, AND REQUIRED	PROVIDED PER DSUP 2022-10022	PROVIDED
ZONE	RMF	RMF	RMF
FAR	3.0 W/ SUP*	3.00 (115,401 SF/38,467 SF)*	2.91 (111,970 SF/38,467 SF)*
DENSITY	N/A	103.05 UNITS/ACRE (91 UNITS)	103.05 UNITS/ACRE (91 UNITS)
GROSS FLOOR AREA (SF)	N/A	127,032 SF	127,642 SF
FLOOR AREA (SF)	115,401 SF W/ SUP*	115,401 SF*	111,970 SF*
LOT AREA (SF)	N/A	0.8831 AC OR 38,467 SF	0.8831 AC OR 38,467 SF
SETBACKS (FT)			
FRONT	0 FT	25.0 FT	25.0 FT
SIDE (NORTH)	8 FT	10.0 FT	10.0 FT
SIDE (SOUTH)	8 FT	22.7 FT	22.7 FT
REAR	8 FT	9.6 FT	9.6 FT
LOT FRONTAGE	N/A	209.0 FT	209.0 FT
LOT WIDTH	N/A	209.0 FT	209.0 FT
OPEN SPACE (SF)	25% (9,617 SF)	29.6% (11,400 SF) (PRIVATE)	29.6% (11,400 SF) (PRIVATE)
GROUND LEVEL	-	24.4% (9,400 SF) (PRIVATE)	24.2% (9,300 SF) (PRIVATE)
ABOVE GROUND	-	5.2% (2,000 SF) (PRIVATE)	5.4% (2,100 SF) (PRIVATE)
CROWN COVERAGE	25% (9,617 SF)	33.8% (13,000 SF)	33.8% (13,000 SF)
HEIGHT (FT)	MAX 45 FT (BASE), 70' (PLAN BONUS), 95' (PLAN BONUS + 7-700)	68.96'**	68.96'**
AVERAGE GRADE	N/A	15.37'	15.45'
PARKING TABULATIONS	60 SPACES MIN. - 164 SPACES MAX.	62 SPACES	60 SPACES
TRIP GENERATION	-	SEE TRIP GEN. - THIS SHEET	SEE TRIP GEN. - THIS SHEET

NOTES:
* A SPECIAL USE PERMIT TO INCREASE FAR HAS BEEN APPROVED WITH THIS DSUP APPLICATION.
** PROJECT WILL ACHIEVE SAP PLAN BONUS TO INCREASE BUILDING HEIGHT LIMIT TO 70' WITH THIS APPLICATION.

PARKING TABULATIONS

REQUIRED PARKING			
USE/RATE	UNITS	PARKING RATIO (SP/UNIT)*	MIN. REQUIRED SPACES
MULTIFAMILY (30% AMI)	6	0.450	3
MULTIFAMILY (40% AMI)	15	0.585	9
MULTIFAMILY (50% AMI)	6	0.585	4
MULTIFAMILY (60% AMI)	64	0.675	44
TOTAL	91		60

*5% REDUCTION TAKEN FOR PROJECT WITH WALKSCORE BETWEEN 80 - 89
5% REDUCTION TAKEN FOR PROJECT WITHIN 1/4 MILE OF FOUR (4) ACTIVE BUS ROUTES

PARKING PROVIDED
TOTAL PARKING PROVIDED = 60 SPACES* (10 ADA, 9 STANDARD, 41 COMPACT (68.3%) - ALL LOCATED INSIDE GARAGE (*50% OF SPACES TO BE EV READY) (2 STANDARD SPACES ARE EV EQUIPPED)
LOADING REQUIRED: N/A
LOADING PROVIDED: 0 SPACES

UNIT MIX

UNIT MIX	
1-BEDROOM	18
2-BEDROOM	55
3-BEDROOM	18
TOTAL	91

MAX. PARKING REQUIRED = 164 SPACES (1 SP/BEDROOM, MAX. 2 SP/UNIT)

DEVELOPMENT TABULATIONS

FLOOR	RESIDENTIAL	AMENITY	PARKING	GSF/FLOOR
1	2589	3000	19679	25268
2	21093			21093
3	21093			21093
4	21093			21093
5	21093			21093
6	16894	1108		18002
			TOTAL	127642

NET FLOOR AREA = 111,970 SF (SEE A1.1 FOR DEDUCTIONS)
TOTAL UNITS = 91 UNITS

SHEET INDEX

LANDSCAPE ARCHITECTURE

ARCHITECTURE

TOTAL SHEETS: 88

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
SCALE: AS NOTED | DATE: 02/25/2025

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

COVER SHEET

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-0101.dwg

DSUP CERTIFICATE

City of Alexandria, Virginia
Department of Planning & Zoning

DEVELOPMENT SPECIAL USE PERMIT CERTIFICATE

Development Special Use Permit#	2022-10022
Approved by City Council on:	February 25, 2023
Permission is hereby granted to:	Community Lodgings, Inc (CLI)
to use the premises located at:	3908 Elbert Avenue
for the following purpose:	see attached report

This certificate shall be integrated into the development site plan with the conditions of approval. It is the responsibility of the special use permit holder to adhere to the conditions approved by City Council. The Department of Planning and Zoning will periodically inspect the property to identify compliance with the approved conditions. If any condition is in violation, the permit holder will be cited and issued a ticket. The first violation carries a monetary fine. Continued violations will cause staff to docket the special use permit for review by City Council for possible revocation.

3/1/2023
Date

Karl Moritz, Director
Department of Planning and Zoning

ADMINISTRATIVE ACTION, JULY 11, 2025: Staff report amended with updated condition 1(a) to align with Virginia Housing (VH) lending requirements.

1. The Final Site Plan shall conform substantially with the preliminary plan dated November 22, 2022 and comply with the following conditions of approval.

   a. **If the Virginia Housing Development Authority or successor is the first lienholder of the permanent loan and if there is a foreclosure by the Virginia Housing Development Authority and it is the successful bidder and becomes the successor in interest, then the committed affordable housing units required may be reduced to no less than 20 percent of the originally approved units at 60 percent of the area median income for the Washington D.C. Metropolitan Statistical Area. Under no other circumstances will a reduction in the committed affordable units be allowed or considered. Refer to the letter/memo dated July 11, 2025 included with the site plan.**

CITY COUNCIL ACTION, FEBRUARY 25, 2023: City Council approved the Planning Commission recommendation.

PLANNING COMMISSION ACTION, FEBRUARY 7, 2023: On a motion by Commissioner Lyle, seconded by Vice Chair McMahon, the Planning Commission voted to recommend approval of Rezoning #2022-00008. The motion carried on a vote of 7 to 0.

On a motion by Commissioner Lyle, seconded by Vice Chair McMahon, the Planning Commission voted to approve Development Special Use Permit #2022-10022 and Special Use Permit #2022-00111, subject to all applicable codes and staff recommendations, and with revisions to Condition #101 as outlined in staff's February 7th memorandum to Planning Commission. The motion carried on a vote of 7 to 0.

Reason: The Planning Commission agreed with the staff analysis.

Commissioner Manor asked the applicant to further describe the objection to the Condition #101, including the revised version offered by staff. The applicant noted that the monetary contribution would contribute to a funding gap for the project. Commissioner Lyle expressed concern about requiring a developer contribution in advance of the adoption of the policy and considered whether she would support the inclusion of any version of the condition at all. She asked for developer contributions policies to be brought forward more quickly following adoption of a Small Area Plan.

Chair Macek expressed support for the project, including staff's recommended revisions to Condition #101. He noted that the revisions struck a good balance between the need for improved open space in the neighborhood (as expressed in the Small Area Plan) and the applicant's need for greater certainty about the contribution.

Vice-Chair McMahon also voiced her support for the project and for the revised Condition #101. She also stated that she had visited the site and noted the narrow width of Elbert Avenue and the presence of many vehicles on the street. Although not concerned about the provision of off-street parking as a part of this project, she encouraged staff to look into creative solutions to some of the existing vehicle-related issues neighbors have raised.

Commissioner Brown stressed the general importance of ensuring adequate public facilities, including schools, in connection with development projects.

Speakers:
Ingris Moran, representing Tenants and Workers United, spoke in support of the project and the provision of deeply-affordable housing units in general. She noted that the project represents an opportunity to live out the promise of the Arlandria-Chirilagua Small Area Plan.

Sandra Galeano, Elbert Avenue, expressed support for the proposal. She noted that she has lived in the neighborhood for 20 years and noted that everyone deserves an opportunity for affordable housing.

Mariela Raudales, Elbert Avenue, noted that she has lived in the City of Alexandria for 19 years and is currently a resident of the existing building at the site. She asked Planning Commission to support for the project, stating that she is looking forward to new housing given that the existing units have aged.

Lisa Lettieri, Community Lodgings Board member and resident of E. Nelson Avenue, spoke in support of the project.

Michael Dodson, Elbert Avenue, noted that he is one of the signatories of the August 2022 letter from neighbors expressing concerns about the project. He noted that he supports affordable housing and the Arlandria-Chirilagua Small Area Plan. He also expressed concern about the cumulative effect of development projects in the neighborhood. He appreciated the dialogue at community meetings and expressed disappointment that the neighborhood may not be eligible for some of the transportation-related solutions that have been discussed.

Mark Makary, Elbert Avenue, noted that he and other neighbors welcome new residents to the neighborhood but have traffic-related concerns. He asked for consideration of an extended "cut-back" or loading zone in front of the site to help prevent Elbert Avenue from being blocked by delivery vehicles.

Mary Catherine Gibbs, attorney representing the applicant, spoke in support. She stated that this project should be celebrated, particularly given its provision of deeply affordable housing. She noted that 16 emails of support have been forwarded to the Planning Commission and clarified that a loading zone is still being proposed along the frontage of the project site to help with delivery vehicles. She disagreed with the inclusion of Condition #101, noting that although the revised version contained in staff's February 7th memorandum is an improvement, her clients still object to the requirement of a developer contribution in advance of the adoption of a policy.

9. STAFF RECOMMENDATIONS

1. The Final Site Plan shall conform substantially with the preliminary plan dated November 22, 2022 and comply with the following conditions of approval.

   a. If the Virginia Housing Development Authority or successor is the first lienholder of the permanent loan and if there is a foreclosure by the Virginia Housing Development Authority and it is the successful bidder and becomes the successor in interest, then the committed affordable housing units required may be reduced to no less than 20 percent of the originally approved units at 60 percent of the area median income for the Washington D.C. Metropolitan Statistical Area. Under no other circumstances will a reduction in the committed affordable units be allowed or considered. Refer to the letter/memo dated July 11, 2025 included with the site plan.

I. SITE PLAN

2. Per Section 11-418 of the Zoning Ordinance, the Development Special Use Permit shall expire and become null and void, unless the applicant commences substantial construction of the project within 36 months after initial approval and the applicant thereafter pursues such construction with due diligence. The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status if they have not yet commenced substantial construction. The applicant may petition to extend the validity period after adequate notice and a public hearing. (P&Z)

3. Submit the plats and associated deeds for the consolidation of the existing lots and all applicable easements, including those shown on the preliminary plan, concurrent with submitting the first Final Site Plan. The applicant must obtain approval of the plat(s) prior to or concurrent with Final Site Plan release. (P&Z) (T&ES) (RP&CA) *

4. Emergency Vehicle Easement(s) (EVE) shall not be painted. When an EVE is shared with a pedestrian walkway or consists of grasscrete or a similar surface treatment, the EVE shall be defined in a manner that is compatible with the surrounding ground plane.

5. Record the plat and submit a copy of the recorded plat, dedications, and deeds with the first application for a building permit. (P&Z) (T&ES) **

6. Show site utilities compatibly with other site conditions on the site plan to the satisfaction of the Directors of P&Z and T&ES prior to Final Site Plan release, specifically: (P&Z) (T&ES) *
   a. Locating above grade service openings and required clearances for items such as transformers, telephone, HVAC units, and cable boxes.
   b. Minimizing conflicts with plantings, pedestrian areas, and major view sheds.
   c. Excluding above grade utilities from dedicated open space areas and tree wells.
   d. Screening all utilities from the public right-of-way.

7. Provide a lighting plan with the Final Site Plan, unless otherwise identified below, to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of P&Z and T&ES in consultation with the Chief of Police and Code administration shall include: (P&Z) (T&ES) (Code) *
   a. The location of all existing and proposed streetlights and site lights, shading back less relevant information.
   b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.

   c. A photometric plan with lighting calculations encompassing all existing and proposed streetlights and site light fixtures, including any existing streetlights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way.
   d. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s), and security lighting.
   e. The numeric summary for various areas (i.e., roadway, walkway/sidewalk, alley, and parking lot, etc.) in the proposed development.
   f. Full cut-off lighting as applicable to prevent light spill onto adjacent properties. Provide a plan distinguishing between the site with all streetlights and other pertinent off-site lighting and the site without streetlights and off-site lighting to demonstrate how the plan complies with light spill regulations.
   g. Additional lighting to achieve City standards if existing lighting within the City right-of-way adjacent to the site does not meet the minimum standards.
   h. Basic, approved Dominion LED light fixtures for all proposed light fixtures in the City right-of-way. Pedestrian scale light fixtures will be LED Carlyle acorn fixtures.
   i. All site lights designed to meet City of Alexandria photometric standards shall have photovoltaic switches.
   j. The location of conduit routing between site lighting fixtures to avoid conflicts with street trees.
   k. Details indicating proposed light pole and footings relative to the adjacent grade and pavement. All light pole foundations shall be concealed from view or light poles shall be direct bury.
   l. Light-colored concrete (painted or dyed) for walls and ceilings in all garages to increase reflectivity and improve night lighting levels. **
   m. A minimum of 5.0-foot candle-maintained lighting for underground/ structured parking garages. When unoccupied the lighting levels may be no less than 1.5-foot candles. **
   n. Light fixtures for the open canopies and underground/structured parking garages shall be recessed into the ceiling for any areas visible from the public right-of-way. **

8. Provide a unit numbering plan for each floor of a multi-unit building with the first Final Site Plan. The unit numbers shall comply with a scheme of 100 level numbers on the first floor, 200 level numbers on the second floor, and continue in this scheme for the remaining floors. Indicate the use of each unit (i.e., residential, retail, office). (GIS) *

9. Provide a georeferenced CAD file in AutoCAD 2018.dwg format that adheres to the National CAD Standards prior to Final Site Plan release. The file shall have the dimension plan including existing conditions, proposed conditions, and grading elements. (P&Z) (DPI) (GIS) *

10. Sheeting and shoring, support of excavation shall not extend beyond the property line, except when the applicant has obtained a written release or encroachment from adjacent property owners which has been reviewed prior to Final Site Plan release and recorded in the Land Records. (P&Z) (Code) *

A. BUILDING

11. Provide a building code analysis with these building code data prior to Final Site Plan release: (1) use group, (2) number of stories, (3) type of construction, (4) total floor area per floor, (5) height of structure, (6) non-separated or separated mixed use, and (7) fire protection system requirements. (P&Z) (Code) *

12. The building design, including the appearance, color, and quality of materials; final detailing; three-dimensional expression; and depth of all plane changes, shall be consistent with the elevations dated November 22, 2022 and the following conditions. Provide this information regarding materials and design to the satisfaction of the Director of P&Z prior to Final Site Plan release: (P&Z) (Code) *

   a. Samples of actual window glazing, frame, and sash components proposed for each area of the building in the color and material that will be provided (may reduce sample sizes for ease in handling).

      i. Window sizes and types.
      ii. Window mullion dimensions and projection in front of face of glass.
      iii. Window frame, sash, and mullion materials.

   b. Where fiber cement façade panels are permitted, they shall not use a wrap-around trim for mounting to the substructure. If surface fasteners are proposed as part of a rainscreen-type installation, they may be either concealed or if exposed, shall be finished to match the adjacent panels and their location integrated into the overall design.
   c. The underside of all balconies shall be finished and present a visually cohesive appearance.
   d. Coordinate the design, color, and materials of all penthouses, rooftop mechanical areas, and rooftop screening with the overall architecture of the building, as regards massing, materials, and detailing/expression.
   e. The recessed or projecting depth of brick rustication must be a minimum of 3/4 inches.
   f. Where plane changes in facades are proposed, they shall generally not be less than two feet.
   g. Where dissimilar materials meet, they must typically meet at an interior corner; where that is not possible, such transitions shall occur at a significant plane change or reveal.

13. Provide detailed drawings in realistic colors to permit evaluation of key building elements such as the building base, entrances, entry canopy, stoops, windows, balconies, railings, cornices, and other ornamental elements, and material details including the final detailing, finish, and color of these elements prior to Final Site Plan release. (P&Z) *

   a. The drawings shall be enlarged and coordinated plan-section-elevation studies, typically at ¼" =1'-0" scale, with shadows cast at 45 degrees from both left and above to show true depth of recesses and projections.
   b. Separate design drawings shall be submitted for each primary building typology, different wall, or bay type.

   c. When warranted by the three-dimensional complexity of the design, the applicant shall provide isometric vignettes of special conditions or building areas to the satisfaction of the Director of P&Z.
   d. All structures must remain within the property (e.g., balconies, railings, and canopies), unless permitted under the City of Alexandria Code or an encroachment has been obtained.

14. Provide the items listed below to allow Staff to review the materials, finishes, and architectural details. These materials shall conform substantially to the preliminary plan and the current Guidelines for Preparation of Mock-Up Panels, Memo to Industry effective at application submission.

   a. Prior to ordering final building materials, provide a materials board that includes all proposed materials and finishes at first Final Site Plan. The materials board shall remain with P&Z until the issuance of the final Certificate of Occupancy, when Staff will return all samples to the applicant. (P&Z) *, ***
   b. Staff may request more detailed/extensive materials relating to the proposed fenestration, such as samples of the glazing, frame, and sash components, and including whether the windows will be double-or-triple glazed and have simulated divided lights. *
   c. Drawings of mock-up panel(s) that depict all proposed materials, finishes, and relationships as part of the first Final Site Plan. *
   d. An on-site, mock-up panel using the approved materials, finishes, and relationships shall be constructed for Staff review and approval. Per VCC108.2 concrete or masonry mock-up panels exceeding 6-ft. require a building permit. The panel(s) shall be constructed and approved prior to vertical (above-grade) construction and before ordering building materials. Locate the panel so that it receives sunlight from the same predominant direction as will the finished structure. **
   e. The mock-up panel shall remain on-site, in the same location, and visible from the right-of-way without entering the site throughout construction until the issuance of the first Certificate of Occupancy. (P&Z) (Code) ***

B. OPEN SPACE/LANDSCAPING

15. Develop a palette of site furnishings for review and approval by Staff prior to Final Site Plan release. *

   a. Provide location, and specifications, and details for site furnishings that depict the installation, scale, massing, and character of site furnishings to the satisfaction of the Directors of P&Z and T&ES.
   b. Add moveable furniture to the front patio area as part of the final site plan submission for consistency with the recommendation in the Arlandria Small Area Plan to encourage informal gathering areas.
   c. Additional site furnishings may include benches, bicycle racks, trash bins, recycling receptacles, and other associated features City standard materials are mandatory in all public right-of-way. (P&Z) (T&ES)

16. Provide material, finishes, and architectural details for all retaining, seat, decorative, and screen walls prior to Final Site Plan release. Indicate methods for grade transitions, handrails, directional changes, and above and below-grade conditions. Coordinate with adjacent site and building conditions. Design and construction of all walls shall be to the satisfaction of the Directors of P&Z, T&ES, and Code. (P&Z) (T&ES) (Code) *

C. TREE PROTECTION AND PRESERVATION

17. Provide a Tree and Vegetation Protection Plan per the City of Alexandria's Landscape Guidelines for approval prior to Final Site Plan release and implement the plan for the duration of construction. (P&Z) (RP&CA) *

D. ARCHAEOLOGY

18. Call Alexandria Archaeology immediately at (703) 746-4399 if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of artifacts are discovered during development. Work must cease in the discovery area until a City archaeologist comes to the site and records the finds. The language noted above shall be included on all Final Site Plan sheets involving any ground disturbing activities. (Archaeology) *

19. The applicant shall not allow any metal detection and/or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. Failing to comply shall result in project delays. The language noted above shall be included on all Final Site Plan sheets involving any ground disturbing activities. (Archaeology) *

E. PEDESTRIAN/STREETSCAPE

20. Provide the pedestrian improvements listed below to the satisfaction of the Directors of P&Z and T&ES. Complete all pedestrian improvements prior to the issuance of the final Certificate of Occupancy. (P&Z) (T&ES) ***

   a. Install ADA accessible pedestrian improvements serving the site.
   b. Construct all concrete sidewalks to City standards. The minimum unobstructed width of newly constructed sidewalks shall be six feet in commercial, mixed-use, or other high-density areas and five feet in single-family or other lower density areas.
   c. Sidewalks shall be flush across all driveway crossings.
   d. All newly constructed curb ramps shall be concrete with detectable warning and shall conform to current VDOT standards.
   e. All below grade utilities placed within a City sidewalk shall be integrated with the adjacent paving materials and to minimize any visible impacts.

F. PARKING

21. All residential parking shall be unbundled (i.e., the cost to purchase or rent a parking space is separate from the cost to purchase or rent the residential unit). (T&ES)

22. Provide a Parking Management Plan with the Final Site Plan submission that complies with the requirements of the Parking Management Plan Template provided in Memo to Industry 01-19. To release the Final Site Plan, the Parking Management Plan shall be approved by the Departments of P&Z and T&ES. (P&Z) (T&ES) *

23. Share parking occupancy data for the facility with the City upon request no more than twice each year. (T&ES)

24. Parking spaces within the garage may be made available for public/off-site if excess parking can be demonstrated to the satisfaction of the Directors of P&Z and T&ES. (P&Z) (TE&S)

25. Show all existing and proposed on-street parking controls and restrictions on the Final Site Plan. The Traffic and Parking Board must approve any on-street parking changes desired after the Signature Set approval. (P&Z) (T&ES) *

26. Provide bicycle parking per current Bicycle Parking Standards. Bicycle parking standards, acceptable rack types for short- and long-term parking, and details for allowable locations are available at: www.alexandriava.gov/bicycleparking. (T&ES)

27. Provide details on the locations and types of bicycle parking on the Final Site Plan. Install bicycle parking prior to the issuance of the first Certificate of Occupancy. (T&ES) *, ***

28. Provide signage, striping, or other means to prevent parking in emergency vehicle easement(s) prior to Final Site Plan release, to the satisfaction of the Director of T&ES. (T&ES) *

29. Provide Level 2 electric vehicle chargers for at least two percent of the required parking spaces, rounded up to the next whole number parking space. (T&ES)

30. At least 50 percent of the required parking spaces shall be electric vehicle charger ready per these requirements: (T&ES)

   a. Size and install the conduit correctly based on the number and location of future Level 2 chargers.
   b. Label parking space location junction box for the future electric vehicle charger.
   c. Provide available physical space within the utility closet for future cabinetry required to add vehicle chargers to the electrical panel.
   d. Additional conduit does not need to account for transformer sizing.
   e. Parking space(s) can include the dimensions of the EV charger.

31. Update parking counts on the cover sheet to indicate the number of electric vehicle charger and electric vehicle charger ready parking spaces and show the location of these spaces prior to Final Site Plan release. (T&ES) *

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DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: NONE
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DEVELOPMENT CONDTIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

G. SUSTAINABILITY

32. The applicant may propose additional strategies to the sustainability conditions outlined below and these additional sustainability strategies may be incorporated administratively to the satisfaction of the Directors of T&ES and P&Z. (P&Z) (T&ES)

33. The project shall comply with the requirements of the current City of Alexandria Green Building Policy at the time of DSUP approval. Diligent pursuit and achievement of this certification shall be monitored through these requirements unless exempted by the certification rating systems and the Green Building Policy:

    a. Provide evidence of the project's registration with LEED, Green Globes, or Earthcraft (or equivalent) with the submission of the first Final Site Plan and provide a draft checklist from the P&Z website showing how the project plans to achieve the certification and clearly indicate that requirements for the priority performance points are being met as defined by the City of Alexandria's Green Building Policy. *
    b. Provide an updated copy of the draft certification scorecard/checklist prior building permit release for above-grade construction to show compliance with the Green Building Policy. **
    c. Provide updated building energy performance analysis and building energy use intensity (EUI) (energy use per sq. ft.) prior to release of the building permits for above-grade construction. **
    d. Provide a draft commissioning plan and verification, if required by the Green Building Rating System and the building code, from a certified third-party reviewer that includes items "i" through "v" below, prior to receiving building permits for above-grade construction. **

        i. A narrative describing the activities that will be accomplished during each phase of commissioning, including the personnel intended to accomplish each of the activities.
        ii. A listing of the specific equipment, appliances, or systems to be tested and a description of the tests to be performed.
        iii. Functions to be tested including, but not limited to, calibrations and economizer controls.
        iv. Conditions under which the test will be performed. Testing shall affirm winter and summer design conditions and full outside air conditions.
        v. Measurable criteria for performance.

    e. Provide updated water efficiency documentation for the priority performance points as defined by the City of Alexandria's Green Building Policy prior to building permit release for above-grade construction. **
    f. Provide updated documentation for the indoor environmental quality priority performance points as defined by the City of Alexandria's Green Building Policy prior to the release of building permits for above-grade construction. **
    g. Provide evidence that design phase credits (for the certifying party) have been submitted by the first Certificate of Occupancy. ***

    h. Provide evidence showing that the requirements for priority performance points for Energy Use Reduction, Water Efficiency and Indoor Environmental Quality are being met as defined by the City of Alexandria's Green Building Policy for Design Phase credits to the U.S. Green Building Council, Green Globes, or Earthcraft (or equivalent) prior to issuance of a Certificate of Occupancy. ***
    i. Provide documentation of applicable green building certification prior to release of the performance bond clearly indicating that the priority performance points requirement for Energy Use Reduction, Water Efficiency, and Indoor Environmental Quality have been achieved as defined by the City of Alexandria's Green Building Policy. ****
    j. Failure to achieve the certification level, as required by the City of Alexandria's Green Building Policy, will be evaluated by City Staff to determine whether a good faith, reasonable, and documented effort was made to achieve the certification level to the satisfaction of the Director of P&Z.

34. Post information on the City of Alexandria's Reuse Directory in a public place near trash collection area for residents of multifamily buildings that exceed 100 units and send proof to T&ES staff prior to the issuance of the first Certificate of Occupancy. The directory is available at: https://www.alexandriava.gov/tes/solidwaste/info/default.aspx?id=19202#NewCityofAlexandriasReuseDirectory (T&ES) ***

35. The building shall use electricity except for limited accessory elements of the building such as emergency generators and common areas systems/amenities. For these limited accessory elements, the buildings shall support low cost and easy conversion from fossil fuel to electricity in the future. (P&Z) (T&ES)

36. Demonstrate that the roof(s) are solar ready, with the necessary conduit and available electrical panel area to enable future solar panel installation, on the Final Site Plan. (T&ES) *

II. TRANSPORTATION

A. STREETS/TRAFFIC

37. Repair any of the City's existing public infrastructure that is damaged during construction per the most recent version of the T&ES Design and Construction Standards, or to the satisfaction of Director of T&ES, prior to Performance Bond release. (T&ES) ****

38. Conduct a pre-construction walk/survey of the site prior to any land disturbing activities with T&ES Construction & Inspection Staff and Code Administration Staff to document existing conditions prior to Final Site Plan release. (T&ES) (Code) *

39. Any wall mounted obstructions at the wall end of a parking space shall be limited to no more than 24 inches extended from the wall and at least 48 inches from the garage floor. Areas with obstructions that exceed this requirement will not count as parking spaces. (T&ES) ****

40. Provide full curb to curb restoration for any asphalt patches larger than 20 percent of the total asphalt surface, measured along the length of the road adjacent to the property frontage and/or extending to the centerline of the street prior to Performance Bond release. (T&ES) ****

41. Street names and addresses must be obtained for mail delivery (addressed per the front door) and for emergency services (addressed per street access) prior to Final Site Plan release. (P&Z) (T&ES) (GIS) *

42. Building management staff shall be physically present to assist delivery vehicles maneuver into and out of the off-street loading space. (T&ES)

B. TRANSPORTATION MANAGEMENT PLAN

43. According to Article XI, Section 11-700 of the City's Zoning Ordinance, a Transportation Management Plan (TMP) is required to implement strategies to encourage residents and employees to take public transportation, walk, bike, or share a ride instead of driving alone. Below are the basic conditions from which other details originate. (T&ES)

44. Designate a TMP Coordinator for the entire project prior to issuance of the first Certificate of Occupancy. Provide the name, location, email, and telephone number of the coordinator to the City's Transportation Demand Management Coordinator, updating this information as needed. This person will be responsible for assisting the City in implementing and facilitating the TMP on site. The coordinator must provide City staff access to the property and tenants/residents to implement TDM measures such as surveys, mailings, and hosting events to inform residents and tenants about benefits and alternatives to driving alone. (T&ES) ***

45. Contribute a TMP payment twice per year to the Citywide TDM Fund. TMP funds shall be deposited to the Citywide TDM Fund no later than January 15 and July 15. The annual base assessment rate for this development shall be determined as set forth in Section 11-708 (TMP Assessments Schedule and Adjustments) of the Zoning Ordinance. The base assessment rate will be adjusted on an annual basis on July 1 of each year in accordance with the Consumers Price Index (CPI-U) as reported by the United States Department of Labor, Bureau of Labor Statistics. The base assessment rate in effect at the time of the issuance of the project's first Certificate of Occupancy permit is the applicable rate when TMP reporting begins. (T&ES)

46. As set forth in Section 11-711(B) in the Ordinance, civil penalties shall be assessed to the governing entity for lack of timely compliance with the conditions of this TMP SUP. If after assessment of three civil penalties, any use continues to fail to comply with a condition of its approved TMP, the property may be subject to increased review and reporting requirements and may be subject to a staff recommendation for action by the City Council to revoke the TMP SUP pursuant to Section 11-205 of the Zoning Ordinance. (T&ES)

47. Inform tenants/owners of the transportation management plan special use permit and conditions therein as part of leasing and purchasing agreements with language subject to review and approval by the City's Transportation Demand Management Program. (T&ES)

III. PUBLIC WORKS

A. WASTEWATER/SANITARY SEWERS

48. **CONDITION AMENDED BY STAFF:** Pay the sewer connection fee ~~prior to Final Site Plan release~~ in accordance with City Code Sec. 5-6-25.1(a). (T&ES) *

B. UTILITIES

49. If a franchise agreement has not been entered into with the City, locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)

50. Underground all overhead power and communication lines fronting the development prior to the Performance Bond release. (T&ES)****

51. Do not locate transformer and switch gears in the public right-of-way. (T&ES)

52. All new fire hydrants on public streets shall be City owned and maintained. All hydrants on private streets shall be owned, inspected, tested, and maintained by the property owner or their representative. Hydrants must be installed and functional prior to issuance of the Certificate of Occupancy. (T&ES) ***

C. INFORMATION TECHNOLOGY

53. To the satisfaction of the Director of Planning & Zoning, construct a conduit grid per the specifications listed below that minimizes the need for post-development excavation and/or right-of-way impacts when installing fiber/cables for high-speed internet access. (ITS) (P&Z)

54. Construct all conduits using schedule 80 PVC or HDPE and install them to a depth of 3-feet. Install a pull line and tracer within each conduit. (ITS)

55. All conduit on private property will be owned and maintained by the property owner. Unless otherwise specified, conduit on public right-of-way will be owned and maintained by the City. (ITS) (T&ES)

56. Provide a minimum of two diverse entrance conduits for the building with a minimum of two, 2-inch conduits for each entrance drop. Terminate each conduit drop to a 36-inch by 48-inch installed hand hole within the public right-of-way or at a nearby accessible location. Include two, four-inch open access conduit risers for each floor. (ITS)

    a. Enable telecommunications providers to install cables in the conduit. Designating exclusive access to a single provider is not allowed.
    b. Provide a fiber optic installation plan that provides the required specifications prior to the Final Site Plan release. (ITS) *
    c. Submit a digital as built in CAD or GIS that details the fiber conduit installation prior to the issuance of the Certificate of Occupancy. (ITS) ***

D. SOLID WASTE

57. Provide $1,449 per receptacle to the Director of T&ES prior to Final Site Plan release to purchase and install one Victor Stanley Ironsites Series model SD-42 black receptacle with Dome Lid dedicated to trash collection. The receptacle(s) shall be placed in the public right of way to serve open space and park sites. Receptacles shall be generally located along the property frontage and at strategic locations in the vicinity of the site as approved by the Director of T&ES. To the extent that the receptacles cannot be located where accessible for public collection, the applicant may provide a contribution for receptacles to be installed in the vicinity or may agree to private hauling. (T&ES) *

58. Provide $1,685 per receptacle to the Director of T&ES prior to Final Site Plan release to purchase and install one Victor Stanley Ironsites Series Model SD-42 blue receptacle with Dome Lid, approved dome decals, and approved band dedicated to recycling collection. The receptacle(s) shall be placed in the public right of way to serve open space and park sites. Receptacles shall be generally located along the property frontage and at strategic locations in the vicinity of the site as approved by the Director of T&ES. To the extent that the receptacle cannot be located where accessible for public collection, the applicant may provide a contribution for receptacles to be installed in the vicinity or may agree to private hauling. (T&ES) *

IV. ENVIRONMENTAL

A. FLOODPLAIN MANAGEMENT

59. Demonstrate compliance with Zoning Ordinance flood plain ordinance Section 6-300 to Section 6-311 of Article VI (Special and Overlay Zones) prior to Final Site Plan release. (T&ES) *

60. Provide this minimum required information on the Final Site Plan to comply with the City of Alexandria Floodplain Ordinance:

    a. The base flood elevation (BFE);
    b. The elevation of the lowest floor (including basement); and
    c. Topographic information showing existing and proposed ground elevations. (T&ES) *

61. Provide detailed computations of the impact of fill in the floodplain on the 100-year Water Surface Elevation (WSE) to the satisfaction of the Director of T&ES. Include backwater calculations starting at a downstream cross section to an upstream cross section. Derive figures from modifying the existing HEC-RAS model, as prepared by the U.S. Army Corps of Engineers, Baltimore District. Proposed fill placement shall not raise the 100-year water surface level at any location along the channel reach more than a maximum of 6 inches as permitted under Floodplain Regulations. (T&ES) *

62. Provide Elevation Certificate (FEMA Form 086-0-33) certified by a Licensed Land Surveyor or Licensed Professional Engineer to the T&ES Development Coordinator after placing the

lowest floor (including basements and garages) before further vertical construction. (T&ES) **

B. STORMWATER MANAGEMENT

63. The City of Alexandria's stormwater management regulations regarding water quality are two-fold: (1) state phosphorus removal requirement and (2) Alexandria Water Quality Volume Default. Complying with the state phosphorus reduction requirement does not relieve the applicant from the Alexandria Water Quality Default requirement. The Alexandria Water Quality Volume Default, as determined by the site's post-development impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES) *

64. Provide a BMP narrative and complete pre- and post-development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Virginia Runoff Reduction Method (VRMM) worksheet showing project compliance prior to Final Site Plan release. The project must use hydrologic soil group "D" in the spreadsheet unless a soils report from a soil scientist or geotechnical engineer delineates onsite soils otherwise. (T&ES) *

65. Design all stormwater Best Management Practices (BMPs) to comply with the most recent standards and specifications published in the Virginia Stormwater BMP Clearinghouse. Provide complete design details for all BMPs, including site specific plan views, cross sections, planting plans, and complete design calculations for each BMP prior to Final Site Plan release. (T&ES) *

66. Provide a BMP table with a separate listing for each individual BMP that includes the name of the practice, total area treated (acres), pervious area treated (acres), impervious area treated (acres), phosphorous removal efficiency (percentage), phosphorous removal efficiency (percentage), phosphorous removed by the practice (lbs.), and latitude and longitude in decimal degrees, prior to Final Site Plan release. (T&ES) *

67. Complete construction inspection checklists and associated photographic documentation for each stormwater BMP and detention facility. Submit all documents required by The City of Alexandria As-Built Stormwater Requirements including as-built plans, CAD data, BMP certifications, and completed construction inspection checklists prior to Performance Bond release. (T&ES) ****

68. Construct and install the stormwater BMPs required for this project under the direct supervision of the design professional or their designated representative. Submit a written certification from the design professional to the Director of T&ES prior to Performance Bond release certifying that the BMPs are:

    a. Constructed and installed as designed and in accordance with the released Final Site Plan.
    b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. (T&ES) ****

69. Install descriptive signage for surface-installed stormwater BMPs (e.g., Bio-Retention Filters, Vegetated Swales) prior to the submission of As-Built Plans to the satisfaction of the Director of T&ES. (T&ES) ****

70. Submit two originals of the stormwater quality BMP and Stormwater Detention Facilities Maintenance Agreement to include the BMP Schedule and Guidelines Addendum with the Final Site Plan #2. Execute and record the agreement with the Land Records Division of Alexandria Circuit Court prior to Final Site Plan release. (T&ES) *

71. The applicant/owner shall be responsible for installing and maintaining stormwater Best Management Practices (BMPs). The applicant/owner shall execute a maintenance service contract with a qualified private contractor for a minimum of three years and develop an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) on the project. The manual shall include at a minimum:

    a. An explanation of the functions and operations of the BMP(s),
    b. Drawings and diagrams of the BMP(s) and any supporting utilities,
    c. Catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers,
    d. A copy of the executed maintenance service contract, and
    e. A copy of the maintenance agreement with the City. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Submit a copy of the maintenance agreement to the City prior to Performance Bond release. (T&ES) ****

72. Submit a copy of the Operation and Maintenance Manual to the T&ES Stormwater Management Division prior to Performance Bond release. (T&ES) ****

73. Submit a certification by a qualified professional that any existing stormwater management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations prior Performance Bond release to the satisfaction of the Director of T&ES. If maintenance of the facilities or systems were required to make this certification, provide a description of the maintenance measures performed. (T&ES) ****

C. WATERSHED, WETLANDS, & RPAs

74. Design stormwater quantity controls to demonstrate that post development stormwater runoff does not exceed the existing runoff quantities for the 2-year, 10-year. (T&ES)

75. Use standard city markers to mark all on-site stormwater curb inlets and public curb inlets within 50 feet of the property line to the satisfaction of the Director of T&ES. (T&ES)

76. Provide Environmental Site Assessment Notes that delineate, map, describe, and/or explain these environmental features (if located on site):

    a. Individual components of the RPA as well as the total geographic extent of the RPA, to include the appropriate buffer, intermittent streams, and associated buffers,

    b. Highly erodible and highly permeable soils,
    c. Steep slopes greater than 15 percent in grade,
    d. Known areas of contamination; springs, seeps, or related features, and
    e. A listing of all wetlands permits required by law. (T&ES)

D. CONTAMINATED LAND

77. Indicate on the plan whether any soil and groundwater contamination are present Submit supporting reports for associated environmental investigations or assessments performed to substantiate this determination. (T&ES) *

78. If environmental site assessments or investigations discover the presence of contamination on site, the Final Site Plan shall not be released, and no construction activity shall occur until these items have been submitted and approved by the Director of T&ES: (T&ES) *

    a. A Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
    b. A Risk Assessment indicating any risks associated with the contamination.
    c. A Remediation Plan detailing any contaminated soils and/or groundwater, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by two feet and backfilled with "clean" soil. Include description of environmentally sound methods of off-site transport and disposal of contaminated soils and debris (including, but not limited to types of vehicles appropriate for handling specific materials and ensuring vehicle loads are covered).
    d. A Health and Safety Plan with measures to take during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment. Initial Air Monitoring may be required during site activities to demonstrate acceptable levels of volatiles and/or airborne particles. Justify the air monitoring determination in the Health and Safety Plan submitted for review.
    e. Screen for PCBs as part of the site characterization if any of the past uses are within the identified high risk category sites for potential sources of residual PCBs, which includes these SICs: 26&27 (Paper and Allied Products), 30 (Rubber and Misc. Plastics), 33 (Primary Metal Industries), 34 (Fabricated Metal Products), 37 (Transportation Equipment), 49 (Electrical, Gas, and Sanitary Services), 5093 (Scrap Metal Recycling), and 1221 and 1222 (Bituminous Coal).

79. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site during construction, the applicant must notify T&ES, Office of Environmental Quality immediately. Should unanticipated conditions warrant, stop construction within the affected area until the appropriate environmental reports identified in "a" through "e" above are submitted and approved at the discretion of the Director of T&ES. This shall be included as a note on the Final Site Plan. (T&ES) (Code) *

80. If warranted by a Site Characterization report, design and install a vapor barrier and ventilation system for buildings and parking areas to prevent the migration or accumulation of methane or

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SCALE: NONE | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DEVELOPMENT CONDTIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
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DATE RECORDED _____
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0102.dwg

SHEET: C-0103

other gases or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. The vapor barrier and ventilation system must include a passive ventilation system that can be converted to an active ventilation system if warranted. (T&ES) (Code)

E. SOILS

81. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments prior to Final Site plan release. (T&ES) *

F. NOISE

82. If necessary, to comply with the City noise ordinance, equip all roof top HVAC and other mechanical equipment with noise reducing devices (e.g., silencers, acoustic plenums, louvers, or enclosures). Show the noise reducing specifications and locations prior to Final Site Plan release and install them prior to the issuance of the Certificate of Occupancy. (T&ES) (Code) *, ***

83. Supply deliveries, loading, and unloading activities shall not occur between the hours of 11 PM and 7 AM. (T&ES)

84. No vehicles, including construction vehicles, associated with this project shall be permitted to idle for more than 10 minutes when parked, including vehicles in the loading dock. Post at least two no idling for greater than 10 minutes signs in the loading dock area in plain view prior to the issuance of the Certificate of Occupancy. (T&ES) ***

G. AIR POLLUTION

85. If indoor fireplaces are provided, install electric fireplaces to reduce air pollution and improve indoor air quality, prior to issuance of the Certificate of Occupancy. (T&ES) ***

86. Control odors and any other air pollution sources resulting from construction/demolition activities at the site and prevent them from leaving the property or becoming a nuisance to neighboring properties, as determined by the Director of T&ES. (T&ES)

V. CONSTRUCTION MANAGEMENT

87. Submit a separate construction management plan to the Directors of P&Z, T&ES, and Code Administration prior to Final Site Plan release. The plan shall satisfy these requirements: (P&Z) (T&ES) (Code)

    a. No streetlights shall be removed without authorization from the City of Alexandria,
    b. If streetlights are to be removed from the public right-of-way, then temporary lights shall be provided until the installation and commissioning of new lights, *
    c. Include an analysis as to whether temporary street or site lighting is needed for safety during the construction on the site and how it is to be installed, *

    d. Provide a detailed sequence of demolition and construction of improvements in the public right of way along with an overall proposed schedule for demolition and construction, *
    e. Include an overall proposed schedule for construction, *
    f. Include a plan for temporary pedestrian circulation, *
    g. Include the location and size of proposed construction trailers, if any, *
    h. Include a preliminary Maintenance of Traffic Plan as part of the construction management plan for informational purposes only, to include proposed controls for traffic movement, lane closures, construction entrances and storage of materials, and *
    i. Post copies of the plan in the construction trailer and give to each subcontractor before they start work. ***

88. Provide off-street parking for all construction workers without charge and ensure that all workers use this parking. For workers who use Metro, DASH, or another form of mass transit, subsidize a minimum of 50 percent of the fees. Complying with this condition shall be a component of the construction management plan, which shall be submitted prior to Final Site Plan release and approved by the Departments of P&Z and T&ES prior to commencing any construction activities. This plan shall:

    a. Establish and provide verifiable details and/or agreements on the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit, *
    b. Post information on transit schedules and routes, *
    c. The community liaison must manage parking actively for all construction workers and ensure compliance with the off-street parking requirement, and
    d. If the off-street construction workers parking plan is found to be violated during construction, a correction notice will be issued to the applicant. If the violation is not corrected within five days, a "stop work order" will be issued, with construction halted until the violation has been corrected. (P&Z) (T&ES) *

89. Include a chapter on maintaining pedestrian access within the Construction Management Plan. Sidewalks adjacent to the site shall remain open during construction. If sidewalks must be closed, pedestrian access shall be maintained adjacent to the site per Memo to Industry #04-18 throughout the construction of the project. (T&ES) **

90. Include a chapter on the waste control program in the Construction Management Plan. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. Dispose of all wastes offsite per all applicable federal, state, and local laws. If program is implemented in coordination with green building certification, include documentation as appropriate per the City's Green Building Policy and conditions therein. (T&ES) (Code)

91. Discuss construction staging activities with T&ES prior to the release of any permits for ground disturbing activities. No major construction staging shall be allowed within the public right-of-way. (T&ES) **

92. Obtain additional City approvals for any structural elements that extend into the public right-of-way, including but not limited to footings, foundations, and tiebacks, from the Director of T&ES as a part of the Sheeting and Shoring permit. (T&ES) **

93. Identify a Certified Land Disturber (CLD) in a letter to the Division Chief of Infrastructure Right of Way prior to any land disturbing activities and include the name on the Phase I Erosion and Sediment Control sheets prior to Final Site Plan release. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. (T&ES) *

94. Conduct an in-person or virtual meeting to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction prior to commencing demolition, clearing, and grading of the site. Notice all adjoining property owners, civic associations, and the Departments of P&Z and T&ES at least 14 calendar days before the meeting. Hold the meeting before any permits are issued. (P&Z) (T&ES) **

95. Hold an in-person or virtual pre-installation/construction meeting to review the scope of landscaping installation procedures and processes with the P&Z project planner prior to starting work. (P&Z) (Code)

96. Identify a community liaison throughout the duration of construction. Provide their name and telephone number, including an emergency contact number, to residents, property managers, and business owners whose property abuts the site, to the satisfaction of the Directors of P&Z and T&ES. Install a temporary informational sign prior to Final Site Plan release with the community liaison's name and contact information. Display the sign until construction finishes. (P&Z) (T&ES) *, ***

97. Temporary construction and/or on-site sales trailer(s) are permitted and subject to the approval of the Directors of P&Z and Code Administration. Remove the trailer(s) prior to the issuance of the final Certificate of Occupancy. (P&Z) (Code) ***

98. Submit a stamped electronic copy of a wall check survey completed by a licensed, certified public land surveyor or professional engineer when below-grade construction reaches proposed finished grade. Ensure the wall check shows: (P&Z) **

    a. Key dimensions of the building as shown on the approved Final Site Plan,
    b. Key dimensions from future face of finished wall above to the property line and any adjacent structures on the property,
    c. Extent of any below-grade structures,
    d. Foundation wall in place, and
    e. Future face of finished wall above.

99. Submit an as-built development site plan survey, pursuant to the requirements outlined in the initial as-built submission for occupancy portion of the as-built development site plan survey checklist to the T&ES Site Plan Coordinator prior to applying for a Certificate of Occupancy permit. The as-built development site plan survey shall be prepared and sealed by a registered architect, engineer, or surveyor. Include a note stating that the height was calculated based on all applicable provisions of the Zoning Ordinance. (P&Z) (T&ES) ***

100. If outstanding performance, completion, or other bonds for the benefit of the City are in effect for the property at such time as it may be conveyed or sold to a party other than the applicant, a substitute bond and associated documents must be provided by that party or, in the alternative, an assignment or other documentation from the bonding company indicating that the existing bond remains in effect despite the change in ownership may be provided. The bond(s) shall be maintained until such time that all requirements are met, and the bond(s) released by the City. (T&ES) ****

VI. CONTRIBUTIONS

101. **CONDITION AMENDED BY PLANNING COMMISSION:** The applicant shall provide a developer contribution: a) consistent with applicable provisions of the Arlandria/Chirilagua developer contribution policy as adopted by City Council or b) in an amount equal to $5.00 for each net square foot of development above the pre-approval maximum FAR of 0.75, whichever is less. The contribution, which shall be adjusted for inflation annually each January 1st following approval of this request, shall be provided to the City prior to the release of the final site plan ~~or within 30 days of final City Council adoption of the policy, whichever occurs last~~. (P&Z) (PC) *

102. Contribute $15,000 to the City prior to Final Site Plan release for a Capital Bikeshare station and bicycles or system operations. (T&ES) *

VII. HOUSING

103. Comply with the approved Relocation Plan. Amendments to the approved Relocation Plan are subject to the review and approval of the Director of the Office of Housing. (Housing)

104. Provide up to 91 total committed affordable rental units consistent with the approved Affordable Housing Plan. (Housing)

105. Rents payable by households for the RMF Zone committed affordable units shall not, on average, exceed the maximum rents allowed under the Federal Low-Income Housing Tax Credit program for households with incomes at 40 percent of the area median income for the Washington D.C. Metropolitan Statistical Area. Average rents payable by households for the committed affordable units may be increased up to the maximum rents allowed under the Federal Low-Income Housing Tax Credit program for households with incomes at 50 percent of the area median income for the Washington D.C. Metropolitan Statistical Area subject to the submission of a revised Affordable Housing Plan. Rents shall remain at the established

affordable rates for a period of 40 years from the date of initial occupancy of each unit. (Housing)

106. Rents payable for non-RMF Zone affordable units shall not exceed the maximum rents (taking into account utility allowances) allowed under the federal Low Income Housing Tax Credit (LIHTC) program for households at 60 percent of the Washington DC Metropolitan Area Family Median Income. Rents shall remain at the established affordable rates for a period of 40 years from the date of initial occupancy of each unit. (Housing)

107. Households receiving Housing Choice Voucher assistance will not be denied admission on the basis of receiving such assistance. A household will be considered income qualified if the amount of rent it can pay based on income, together with the voucher payment, is sufficient to cover the applicable rent. (Housing)

108. List the units in www.VirginiaHousingSearch.com, an online housing search database sponsored by Virginia Housing, or an alternative search database as identified by the Office of Housing. (Housing)

109. Notify the Landlord-Tenant Relations Division Chief at the Office of Housing in writing a minimum of 90 days prior to leasing. At least 45 days prior to leasing, provide the Office of Housing with marketing information which shall include the affordable rents, utility information, fees, property amenities, and contact information for applications. The City shall notify interested parties of the availability of the affordable units. (Housing)

110. Provide the City with access to the necessary records and information to enable annual monitoring of compliance with the above conditions for the 40-year affordability period. (Housing)

111. If the development involves Community Development Block Grant (CBDG), Home Investment Partnership Program (HOME), Section 108 loan funds, federal Housing Trust Fund, or other monies provided by the Department of Housing and Urban Development, the applicant shall consult and coordinate with the City to ensure that the project complies with all federal environmental statutes, laws, and authorities. (Housing)

112. Minor amendments proposed to the approved Affordable Housing Plan shall be subject to review by the Alexandria Housing Affordability Advisory Committee and to final approval by the City Manager. (Housing)

VIII. SIGNAGE

113. Design building signs to relate in material, color, and scale to the building on which the sign is displayed to the satisfaction of the Director of P&Z. (P&Z) *

permit. Code Administration Staff will conduct a pre-demolition site survey to verify that the abatement plan is consistent with the field installation. **

C - 5 Submit a wall location plat prepared by a land surveyor to the Department of Code Administration prior to any building framing inspection. **

C. Federal Environmental Reviews

F - 1. Any project that is defined as a federal undertaking, in accordance with the National Historic Preservation Act of 1966 requires a § 106 review or other National Environmental Policy Act (NEPA) review. Projects that require federal review, approval or permitting, or projects that include federal funding are generally considered a federal undertaking. Coordinate with the Virginia Department of Historic Resources or the appropriate federal or state agency to determine the requirements and process and consult with City Staff.

    a. Information on the § 106 process is at www.achp.gov or www.dhr.virginia.gov/environmental-review/
    b. Information on the NEPA process is at www.epa.gov

D. Archaeology

C - 1 All archaeological preservation measures shall comply with § 11-411 of the Zoning Ordinance.

E. Transportation & Environmental Services (T&ES)

F - 1. Prepare the Final Site Plan per the Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at: http://alexandriava.gov/uploadedFiles/tes/info/Memo%20to%20Industry%20No.%2002-09%20December%203,%202009.pdf (T&ES) *

F - 2. Show and label the sanitary and storm sewer and water line in plan and profile in the first Final Site Plan, cross referencing sheets if plan and profile cannot be on the same sheet. Provide existing and proposed grade elevations plus the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES) *

F - 3. Provide a dimension plan with all proposed features, the final property lines, and associated property line annotation. When possible, show all annotation pertaining to the final property line configuration on the site layout sheet (also referred to as the site plan sheet). (T&ES) *

F - 4. Construct all storm sewers to the City of Alexandria standards and specifications. The minimum diameter for storm sewers is 18-inches in the public right-of-way and the

CITY DEPARTMENT CODE COMMENTS

Legend: C Code Requirement R Recommendation S Suggestion F Finding

A. Planning and Zoning (P&Z)

C - 1 Submit as-built documents for all landscape and irrigation installations with the as-built plan and request for Performance Bond release. Refer to City of Alexandria Landscape Guidelines. (P&Z) (T&ES) ****

C - 2 Identify all trees to remove and protect/preserve in the tree conservation and protection plans prior to Final Site Plan release. Detail construction methods to reduce disturbance within driplines. Schedule an on-site inspection of existing conditions with the City Arborist and Natural Resources Division Staff prior to preparing the Tree Conservation and Protection Plan. *

C - 3 The landscape elements of this development are subject to Performance and Maintenance bonds, based on criteria established by the City and available through T&ES. Performance and Maintenance Bond release are subject to inspections by City Staff per City Code requirements. A final inspection for landscaping must occur three years after completion. (P&Z) (T&ES) ****

C - 4 Any parking requirement may be adjusted within five percent of the requirement if the Director of P&Z determines that physical requirements of the building prevent complying with the specific number of required parking spaces per § 8-200(A)(2)(c)(i) of the Zoning Ordinance. (P&Z) (T&ES)

B. Code Administration (Building Code)

F - 1. The review by Code Administration is a preliminary review only. Once the applicant has filed for a building permit, code requirements will be based upon the building permit plans. A preconstruction conference is recommended for large projects. Contact the Code Administration Office, Plan Review Supervisor at (703) 746-4200 with any questions.

C - 1 New construction or alterations to existing structures must comply with the current Uniform Statewide Building Code (USBC) in effect when applying for building permit(s).

C - 2 Facilities shall be accessible for persons with disabilities per the current Virginia Uniform Statewide Building Code in effect when applying for building permit(s).

C - 3 Submit a soils report with the building permit application for all new and existing building structures. **

C - 4 Submit an abatement plan from a licensed Pest Control Company to prevent rodents from spreading from the construction site to the surrounding community and sewers to the Department of Code Administration prior to receiving a demolition or land disturbance

minimum size storm sewer catch basin lead is 15-inches Acceptable pipe materials are Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. Alternatively, the Director of T&ES may approve AWWA C-151 (ANSI A21.51) Class 52. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes are acceptable. The minimum and maximum velocities are 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public right-of-way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public right-of-way shall be owned and maintained privately). (T&ES) *, ****

F - 5. Construct all sanitary sewers to the City of Alexandria standards and specifications. The minimum diameter of sanitary sewers is 10-inches in the public right-of-way and sanitary lateral 6-inches for all commercial and institutional developments; however, a 4-inch sanitary lateral is acceptable for single family residences. Acceptable pipe materials are Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12-inches or larger diameters); Class III may be acceptable on private properties. Minimum and maximum velocities are 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES) *, ****

F - 6. Provide a horizontal separation of 10-feet (edge to edge) between a storm or sanitary sewer and a water line. However, if this horizontal separation cannot be achieved, then install the sewer and water main in separate trenches and set the bottom of the water main at least 18-inches above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved, then use Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for the sewer pipe material and pressure test it in place without leakage prior to install. (T&ES) *, ****

F - 7. Provide at least 18-inches of vertical separation for sanitary sewer and 12-inches for storm sewer when a water main over crosses or under crosses a sanitary/storm sewer. However, if this cannot be achieved, then construct both the water main and the sanitary/storm sewer using Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10-feet on each side of the point of crossing. Center a section of water main pipe at the point of crossing and pressure test the pipes in place without leakage prior to installation. Provide adequate structural support for sewers crossing over the water main (i.e., concrete pier support and/or concrete encasement) to prevent damage to the water main. Encase in concrete sanitary sewers under creeks and storm sewer pipe crossings with less than 6-inch clearance. (T&ES) *, ****

F - 8. No water main pipe shall pass through or touch any part of sanitary/storm sewer manhole. Place manholes at least 10-feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, ensure that the manhole is watertight and tested in place. (T&ES) *, ****

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DEVELOPMENT CONDTIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

F - 9. Maintain at least 12-inches of separation or clearance from water main, sanitary, or storm sewers when crossing underground telephone, cable TV, gas, and electrical duct banks. If this separation cannot be achieved, then use Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 material for the sewer pipe for a distance of 10-feet on each side of the point of crossing and pressure test it in place without leakage prior to installation. Provide adequate structural support for sanitary/storm sewers and water main crossing over the utilities (i.e., pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES) *, ****

F - 10. Design any rip rap per the requirements of Virginia Erosion and Sediment Control Handbook, Latest Edition. (T&ES) *, ****

F - 11. Provide the dimensions of parking spaces, aisle widths, etc. within the parking garage on the Final Site Plan. Exclude column widths from the dimensions. (T&ES) *, ****

F - 12. Show the drainage divide areas on the grading plan or on a sheet that includes topography and structures where each sub-area drains. (T&ES) *

F - 13. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES) *

F - 14. Show all existing and proposed public and private utilities and easements on the Final Site Plan with a narrative. (T&ES) *

F - 15. Provide a Maintenance of Traffic Plan with the Construction Management Plan prior to Final Site Plan release that replicates the existing vehicular, pedestrian, and bicycle routes as closely as practical. Maintain pedestrian and bike access adjacent to the site per Memo to Industry #04-18. (T&ES) *

F - 16. Include these notes on all Maintenance of Traffic Plan Sheets (MOT): (T&ES)

a. Include the statement: "FOR INFORMATION ONLY" on all MOT Sheets. *
b. No sidewalks can remain closed for the duration of the project. Temporary sidewalk closures are subject to separate approval from T&ES at the time of permit application.
c. Contractor shall apply for all necessary permits for uses of the City right-of-way and shall submit MOT Plans with the T&ES Application for final approval at that time.

F - 17. Add complete streets tabulation to the cover sheet with the Final Site Plan submission. (T&ES) *

F - 18. Parking for the residential use shall match the Zoning Ordinance requirements in effect at approval by the City Council and/or Planning Commission. (P&Z) (T&ES) *

F - 19. Maintain a separation of 150 feet between the beginning of street corner radius and any driveway apron radius on arterial and collector roadways, with a minimum of 100 feet permitted, subject to the approval of the Director of T&ES. (T&ES) *

F - 20. Maintain a minimum separation of 30 feet on residential streets between the beginning of the street corner radius and any driveway apron radius. (T&ES) *

C - 1 Complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site, per Article XI of the Zoning Ordinance. If the existing storm system is inadequate, design and build on-site or off-site improvements to discharge to an adequate outfall, even if post development stormwater flow from the site is less than pre-development flow. Demonstrate that a non-erosive stormwater outfall is present to the satisfaction of the Director of T&ES. (T&ES) *

C - 2 Comply with the stormwater quality requirements and provide channel and flood protection per the Article XIII of the Zoning Ordinance. Meet the peak flow requirements of the Zoning Ordinance if the development proposes combined uncontrolled and controlled stormwater outfall. If the project site is within the Braddock-West watershed or a known flooding area, provide an additional 10 percent storage of the pre-development flows in the watershed to meet detention requirements. (T&ES) *

C - 3 Design stormwater facilities that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and stormwater flow conveyance systems according to Article XIII of the Zoning Ordinance, § 13-114(F), as signed and sealed by a professional engineer registered in Virginia. Include the adequate outfall, inlet, and hydraulic grade line analyses to the satisfaction of the Director of T&ES. Provide the references and/or sources used to complete these analyses. (T&ES) *

C - 4 The proposed development shall conform to all requirements and restrictions set forth in § 6-300 (Flood plain District) of Article VI (Special and Overlay Zones) of the City of Alexandria Zoning Ordinance. (T&ES) *

C - 5 Provide additional improvements to adjust lighting levels if the site does not comply with § 13-1-3 of the City Code, to the satisfaction of the Director of T&ES to comply with the Code. (T&ES) *

C - 6 The location of customer utility services and installing transmission, distribution, and main lines in the public rights-of-way by any public service company shall be governed by franchise agreement with the City per Title 5, Ch. 3, § 5-3-2 and § 5-3-3, respectively. The transformers, switch gears, and boxes shall be outside of the public right-of-way. (T&ES)

a. All new customer utility services, extensions of existing customer utility services, and existing overhead customer utility services supplied by any existing overhead facilities must be installed underground below the surface of the ground unless exempted by City Code § 5-3-2, to the satisfaction of the Director of T&ES. *, ****

b. Install all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to transmit or distribute any service (electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam, or petroleum) whether or not on streets, alleys, or other public places of the City must be installed underground or below the surface of bridges and elevated highways unless exempted by City Code § 5-3-3, to the satisfaction of the Director of T&ES. *, ****

C - 7 Discharge flow from downspouts, foundation drains, and sump pumps to the storm sewer per the requirements of Memorandum to Industry 05-14. Pipe discharges from downspouts and sump pump to the storm sewer outfall, where applicable after treating for water quality per Article XIII of the Zoning Ordinance. (T&ES) *, ****

C - 8 Provide a total turning radius of 25-feet and show turning movements of standard vehicles in the parking lot per the latest AASHTO vehicular guidance per the requirements of Title 4, Ch. 2, Article B, § 4-2-21, Appendix A, § A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access to the satisfaction of the Directors of T&ES, Office of Building, and Fire Code Administration. (T&ES) *

C - 9 Provide storage space for both trash and recycling materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space Guidelines" to the satisfaction of the Director of Transportation & Environmental Services. Show the turning movements of the collection trucks, minimizing the need to reverse to perform trash or recycling collection. The City's storage space guidelines are at: https://www.alexandriava.gov/ResourceRecovery or by contacting the City's Resource Recovery Division at (703) 746-4410 or commercialrecycling@alexandriava.gov. (T&ES) *

C - 10 Include a note on the Final Site Plan that mandates delivering all solid waste, as defined by the City Charter and Code of the City of Alexandria, to the Covanta Energy Waste Facility located at 5301 Eisenhower Avenue. Stipulate in any future lease or property sales agreement that all tenants and/or property owners shall also comply with this requirement. (T&ES) *

C - 11 Submit a Recycling Implementation Plan to the Solid Waste Division, as outlined in Article H of Title 5 prior to Final Site Plan release. The form is available at: https://www.alexandriava.gov/ResourceRecovery or contact the Resource Recovery Division at (703) 746-4410 or CommercialRecycling@alexandriava.gov. (T&ES) *

C - 12 Satisfy the City's Minimum Standards for Private Streets and Alleys prior to Final Site Plan Release. (T&ES) *

C - 13 Post the bond for the public improvements before Final Site Plan release. (T&ES) *

C - 14 Provide plans and profiles of utilities and roads in public easements and/or public right-of-way for review and approval prior to Final Site Plan release. (T&ES) *

C - 15 Provide a phased erosion and sediment control plan consistent with the grading and construction plan prior to Final Site Plan release. (T&ES) *

C - 16 Provide as-built sewer data with the final as-built process per the Memorandum to Industry, dated July 20, 2005 prior to release of the Performance Bond. Prepare initial site survey work and plans using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Reference the control points/benchmarks used to establish these coordinates. (T&ES) ****

C - 17 Design the thickness of sub-base, base, and wearing course using "California Method" as set forth on page 3-76 of the second edition of a book entitled, "Data Book for Civil Engineers, Volume One, Design" written by Elwyn E. Seelye. Determine the values of California Bearing Ratios used in the design by field and/or laboratory tests. Using an alternate pavement section for Emergency Vehicle Easements to support H-20 loading designed using California Bearing Ratio determined through geotechnical investigation and using VDOT method (Vaswani Method) and standard material specifications is acceptable to the satisfaction of the Director of T&ES. (T&ES) *, ****

C - 18 Provide all pedestrian, traffic, and wayfinding signage per the Manual of Uniform Traffic Control Devices, latest edition to the satisfaction of the Director of T&ES. (T&ES) *

C - 19 No overhangs (decks, bays, columns, post, or other obstructions) shall protrude into public rights-of-ways, public easements, and the pedestrian or vehicular travel ways unless otherwise permitted by the City Code or additional City approvals are obtained. (T&ES) *

C - 20 Design all driveway entrances, curbing, etc. in or abutting public right-of-way per City standards. (T&ES) *

C - 21 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)

C - 22 Comply with the City of Alexandria's Noise Control Code, Title 11, Ch. 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)

C - 23 Comply with the Alexandria Noise Control Code Title 11, Ch. 5, § 11-5-4(b)(15), which permits construction activities to occur during these hours: (T&ES)

i. Monday Through Friday from 7 AM to 6 PM
ii. Saturdays from 9 AM to 6 PM
iii. No construction activities allowed on Sundays and holidays

a. § 11-5-4(b)(19) further restricts pile driving to these hours:
i. Monday through Friday from 9 AM to 6 PM
ii. Saturdays from 10 AM to 4 PM
iii. No pile driving is allowed Sundays and holidays

b. § 11-5-109 restricts excavating work in the right-of-way to:
i. Monday through Saturday 7 AM to 5 PM
ii. No excavation in the right-of-way allowed on Sundays, New Year's Day, Independence Day, Thanksgiving, and Christmas.

C - 24 Comply with the stormwater pollutant load reduction, treatment of the Alexandria Water Quality Volume Default, and stormwater quantity management per Article XIII of the Zoning Ordinance. (T&ES) *

C - 25 Comply with the City of Alexandria, Erosion, and Sediment Control Code, Title 5, Ch. 4. (T&ES) *

C - 26 Obtain all necessary permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, and/or Virginia Marine Resources for all project construction and mitigation work prior to Final Site Plan release. This condition includes the state requirement for a state General VPDES Permit for Discharges of Stormwater from Construction Activities (general permit) and associated Stormwater Pollution Prevention Plan for land disturbing activities equal to or greater than one acre. Refer to the Memo to Industry 08-14: http://alexandriava.gov/tes/info/default.aspx?id=3522. (T&ES) *

C - 27 Provide a Stormwater Pollution Prevention Plan (SWPPP) Book with the Final Site Plan. The project's stormwater management (SWM) plan and the erosion and sediment control (E&SC) plan must be approved prior to the SWPPP being deemed approved and processed to receive coverage under the VPDES Construction General Permit. Upon approval, provide an electronic copy of the SWPPP Book with the Signature Set submission and a copy of the coverage letter must be added to the plan sheet containing the stormwater management calculations. Include an electronic copy of the SWPPP Binder Book in the released site plans and include a hardcopy of the SWPPP Binder Book with the on-site construction drawings. Separate parcel owners must seek separate VPDES Construction General Permit Coverage unless a blanket entity incorporated in Virginia has control of the entire project. (T&ES) *

F. Information Technology

R - 1. Development cases should not use any addresses in their case name as existing site addresses may change during development. (GIS)

G. Fire Department

C - 1 Show the location of Fire Department Connections (FDC) prior to Final Site Plan release. (P&Z) (Code) *

R - 1. Consider letting the Alexandria Fire Department use buildings that will be razed for training exercises. The Fire Department will formulate conditions of use between the parties and provide a hold harmless agreement to the owner or their representative.

H. Police Department

R - 1. Control access by electronic means. This design helps prevent tampering with resident's vehicles and other crimes.

R - 2. Provide controlled access for doors in the garage (garage levels only) that lead to the stairwell. Controlled access must not interfere with the emergency push-bar release located on the inside of the stairwell.

R - 3. Choose benches middle armrests to deter unwanted sleeping and skateboarding.

R - 4. Use addresses numbers with contrasting colors to the background, at least 3 inches high, reflective, and visible from the street. Avoid using brass or gold numbers. This design aids emergency responders.

R - 5. Equip all ground floor windows with a device or hardware that enables securing them in a partially open position. This design prevents breaking and entering when the windows are open for air.

R - 6. Install "door-viewers" (commonly known as a peepholes) in all doors on the ground level that lead directly into an apartment to increase security for the occupant.

Asterisks denote:
* Condition must be fulfilled prior to release of the Final Site Plan
** Condition must be fulfilled prior to release of the building permit
*** Condition must be fulfilled prior to issuance of the Certificate of Occupancy
**** Condition must be fulfilled prior to release of the bond

COMMUNITY LODGINGS
Opening Doors to Independence

July 11, 2025

Stephanie Sample, Urban Planner III
City of Alexandria Department of Planning & Zoning
301 King Street, Suite 2100
Alexandria, VA 22314

Subject: Compliance with Virginia Housing Affordability Requirements – Elbert Avenue Residences (DSUP #2022-10022)

Dear Ms. Sample,

Virginia Housing (VH) has a lending requirement that limits the level of affordability at VH-financed projects following the event of an incurable default where VH, as senior lender, assumes ownership and operation of the property. Alexandria City Council approved a zoning text amendment to the RMF zone (ZTA #2025-00004), implementing this change on June 14, 2025.

To align with these requirements, changes are required to DSUP #2022-10022. As such, Community Lodgings (CLI) will include the revised condition as part of its next final site plan submission to align the project with these changes

The change to the RMF language will be memorialized through the resubmitted final site plan which will include the addition of the condition below.

If the Virginia Housing Development Authority or successor is the first lienholder of the permanent loan and if there is a foreclosure by the Virginia Housing Development Authority and it is the successful bidder and becomes the successor in interest, then the committed affordable housing units required may be reduced to no less than 20 percent of the originally approved units at 60 percent of the area median income for the Washington D.C. Metropolitan Statistical Area. Under no other circumstances will a reduction in the committed affordable units be allowed or considered. Refer to the letter dated July 11, 2025 included with the site plan.

The first chart below identifies the project units that would be required to remain affordable under zoning requirements if Virginia Housing were to take the actions discussed above. Furthermore, the second chart includes the affordable units that are related to non-zoning requirements (i.e. approved by City Council).

Entitled Affordable Units & Units to Remain Affordable After Uncurable Default

	Total Units	Residential Multi-Unit Zone (RMF)	7-700	Aff. Units Req'd by Entitlements	% Aff. Units Req'd by Entitlements	20% Aff. Units to Remain Following Default
Elbert Ave Residences	91	27	0	27	30%	18

Council As-approved Affordable Unit Mix

	30% AMI	40% AMI	50% AMI	60% AMI	80% AMI	Total Units	Total Aff. Units	Percent Affordable
Elbert Ave Residences	6	15	6	64	0	91	91	100%

Sincerely,

Lynn Thomas
Executive Director

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1

DATE	DESCRIPTION
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DEVELOPMENT CONDITIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

SURVEY NOTES

1. THE PROPERTY SHOWN HEREON IS DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBER 007.01-04-04, AND IS ZONED RMF.
2. THE PROPERTY IS NOW IN THE NAME OF C.L.I. MULTIFAMILY PARTNERSHIP, L.P., AS RECORDED IN DEED BOOK 1440 AT PAGE 1425, AMONG THE LAND RECORDS OF THE CITY OF ALEXANDRIA, VA.
3. THIS PLAT AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION.
4. TOTAL SURVEYED AREA OF THE PROPERTY IS 38,467 SQUARE FEET OR 0.8831 ACRES. TOTAL RECORD AREA OF THE PROPERTY IS 37,620 SQUARE FEET.
5. THIS PLAT IS BASED ON A FIELD SURVEY BY THIS FIRM, DATED 01/13/2022.
6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190029F, EFFECTIVE DATE JANUARY 11, 2024, DESIGNATES THE PROPERTY AS BEING IN ZONE X (OTHER AREAS OF FLOOD HAZARD), AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH OF LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE; AND ZONE AE SPECIAL FLOOD HAZARD AREAS WITH BASE FLOOD ELEVATION OR DEPTH.
7. EASEMENTS, CONDITIONS, COVENANTS AND RESTRICTIONS, SHOWN AND/OR NOTED, ARE PER THE COMMITMENT FOR TITLE INSURANCE PREPARED BY STEWART TITLE GUARANTY COMPANY, COMMITMENT NUMBER 2100240, COMMITMENT DATE NOVEMBER 15, 2021.
8. PROPERTY IS SUBJECT TO AN UNLOCATABLE C&P TELEPHONE COMPANY EASEMENT AS RECORDED IN DEED BOOK 191 AT PAGE 528.
9. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH:2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY AND THE BENCHMARK(S) SHOWN TO THE TOPCON GNSS RTK REFERENCE NETWORK. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99996050. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS TWO FEET.
10. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JANUARY 13, 2022; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

DEMOLITION NOTES

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

CITY STANDARD GENERAL NOTES

1. THE SUBJECT SITE IS LOCATED ON CITY OF ALEXANDRIA ASSESSMENT MAP NO. 007.01-04-04, AND IS ZONED RMF.
2. OWNER: C.L.I. MULTIFAMILY PARTNERSHIP, L.P.
3. RECORDED UNDER: DEED BOOK 1400 PAGE 1425
4. ADDRESS: 3908 ELBERT AVENUE, ALEXANDRIA, VA 22305
5. TOTAL DEVELOPMENT SITE AREA= 0.8831 AC OR 38,467 SF (SURVEYED), 0.8636 AC OR 37,620 SF (RECORD)

   DISTURBED AREA= 0.9919 AC OR 43,209 SF
6. THE NATURAL SOILS AT THE SITE CONSIST OF URBAN LAND AND URBAN LAND-KINGSTOWNE COMPLEX ACCORDING TO USDA WEB SOIL SURVEY SOIL MAP.
7. THE DEVELOPMENT SITE DRAINS TO THE FOUR MILE RUN (EAST) WATERSHED
8. CONSTRUCTION PERMITS ARE REQUIRED FOR THIS PROJECT. THE APPROVED SITE PLAN MUST BE ATTACHED TO THE PERMIT APPLICATION THAT FULLY DETAILS THE CONSTRUCTION AS WELL AS LAYOUTS AND SCHEMATICS OF THE MECHANICAL, ELECTRICAL, AND PLUMBING SYSTEMS.
9. ALL PUBLIC AND PRIVATE EASEMENTS OR ALL KNOWN PUBLIC AND PRIVATE EASEMENTS, INCLUDING ALL UTILITY, EGRESS, AND CONSERVATION RESTRICTIONS ARE SHOWN. THE APPLICANT SHALL NOT CONSTRUCT ANY PERMANENT STRUCTURES OVER ANY EXISTING OR PROPOSED PUBLIC AND/OR PRIVATE EASEMENTS UNLESS OTHERWISE APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
10. PLAT SUBJECT TO RESTRICTIONS OF RECORD.
11. BUILDING HEIGHT SHALL NOT EXCEED THE ALLOWABLE LIMIT BY CITY OF ALEXANDRIA ZONING ORDINANCE OR AS APPROVED BY THE PLANNING COMMISSION AND CITY OF ALEXANDRIA COUNCIL.
12. ALL NEW CONSTRUCTION SHALL CONFORM TO THE CURRENT STANDARDS AND SPECIFICATIONS OF THE CITY OF ALEXANDRIA AND TO THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC).
13. FLOOR AREA CALCULATIONS WITH ALLOWABLE LIMITS, AS APPROVED BY PLANNING COMMISSION AND CITY COUNCIL, ARE DEMONSTRATED HEREIN.
14. PRIOR TO COMMENCING NEW WORK, THE CONTRACTOR SHALL PROTECT FROM DAMAGE ALL EXISTING ADJACENT AREAS. IF CITY'S EXISTING PUBLIC INFRASTRUCTURE, INCLUDING BUT NOT LIMITED, TO STREETS, ALLEYWAYS, DRIVEWAY APRONS, SANITARY AND STORM SEWERS, STREET LIGHTING, TRAFFIC AND PEDESTRIAN SIGNALS, SIDEWALKS, CURB AND GUTTER, AND STORM WATER DROP INLET STRUCTURES ARE DAMAGED BY THE CONTRACTOR OR BY ACTIVITIES RELATING TO THE SITE CONSTRUCTION THEN THE APPLICANT SHALL REPAIR THE SAME TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). A PRE CONSTRUCTION WALK/SURVEY OF THE SITE SHALL OCCUR WITH CONSTRUCTION AND INSPECTION STAFF TO DOCUMENT EXISTING CONDITIONS PRIOR TO ANY LAND DISTURBING ACTIVITY.
15. ALL IMPROVEMENTS TO THE CITY'S RIGHT-OF-WAY SUCH AS CURB, GUTTER, SIDEWALK, AND DRIVEWAY APRONS, ETC., ARE DESIGNED PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS.
16. ALL STREET CUT AND PATCH WORK LOCATED IN PUBLIC RIGHT-OF-WAYS, REQUIRED FOR ANY UTILITY INSTALLATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (TE&S).
17. CONTRACTOR MUST ENSURE THAT THERE IS NO DISTURBANCE ON ADJACENT PROPERTIES WITHOUT RECORDED EASEMENT OR NOTARIZED LETTER OF PERMISSION FROM THE ADJACENT PROPERTY OWNERS.
18. ALL REQUIRED STATE AND FEDERAL PERMITS, WHICH COULD INCLUDE PERMITS FROM THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION (VDCR), VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ), VIRGINIA DEPARTMENT OF HISTORIC RESOURCES (VDHR), UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (USEPA), ARMY CORPS OF ENGINEERS AND VIRGINIA MARINE RESOURCES, MUST BE IN PLACE FOR ALL PROJECT CONSTRUCTION AND MITIGATION WORK PRIOR TO RELEASE OF THE GRADING PLAN, WHEN APPLICABLE. THIS INCLUDES THE STATE REQUIREMENT FOR A VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSMP) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM CONSTRUCTION ACTIVITIES FOR LAND DISTURBING ACTIVITIES GREATER THAN 2,500. INFORMATION REGARDING THE VSMP GENERAL PERMIT CAN BE FOUND ONLINE AT: http://www.deq.virginia.gov/Programs/Water/StormwaterManagement/VSMPPermits.aspx
19. PERMITS FROM THE CITY OF ALEXANDRIA OFFICE OF ENVIRONMENTAL QUALITY (OEQ), TRANSPORTATION AND ENVIRONMENTAL SERVICES (TE&S), AND BUILDING AND FIRE CODE ADMINISTRATION SHALL BE OBTAINED BY THE APPLICANT, AS REQUIRED AND DOCUMENTED HEREIN. THE CONTRACTOR CAN CONTACT ALEXANDRIA FIRE AND CODE ADMINISTRATION DEPARTMENT AT (703) 838-4644 OR (703) 746-4200 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
20. ANY WORK IN THE PUBLIC RIGHT OF WAY SHALL REQUIRE A SEPARATE PERMIT FROM THE DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES. THE CONTRACTOR CAN CONTACT THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES AT (703) 746-4035 FOR ANY QUESTIONS OR ADDITIONAL INFORMATION.
21. THE PROPERTY ADDRESS MUST BE CLEARLY MARKED IN THE FRONT AND BACK OF THE PROPOSED DEVELOPMENT SITE DURING CONSTRUCTION FOR EMERGENCY RESPONSE PURPOSE IN CONTRASTING COLORS FOR EASY IDENTIFICATION.
22. THE APPLICANT SHALL CONTACT THE CRIME PREVENTION UNIT OF THE ALEXANDRIA POLICE DEPARTMENT AT 703-838-4520 REGARDING SECURITY HARDWARE FOR NEW CONSTRUCTION. THIS SHALL BE COMPLETED PRIOR TO ISSUANCE OF BUILDING PERMIT.
23. ROOF DRAINAGE SYSTEM, SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEM MUST BE INSTALLED SO AS NEITHER TO ADVERSELY IMPACT UPON, NOR CAUSE EROSION DAMAGE TO ADJACENT PROPERTIES OR THE PUBLIC RIGHT-OF-WAY.
24. THE CONTRACTOR MUST ENSURE THAT POSITIVE DRAINAGE OCCURS ON SITE TO PREVENT PONDING OR DRAINAGE PROBLEMS ON ADJACENT PROPERTIES.
25. IN THE EVENT, THE PROPOSED ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE, AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING ADVERSELY IMPACTS AND/OR CREATES A NUISANCE ON PUBLIC RIGHT OF WAY OR PRIVATE PROPERTIES THEN THE APPLICANT SHALL BE RESPONSIBLE TO PROVIDE ADDITIONAL IMPROVEMENTS TO THE ROOF DRAINAGE AND/OR SUMP PUMP DISCHARGE AND FOUNDATION DRAIN SYSTEMS AND/OR GRADING TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.
26. PER THE REQUIREMENTS OF SECTION 8-1-12 OF THE CITY CHARTER AND CODE; WHEN THE BUILDING FOOTING HAS BEEN PLACED AND THE WALLS HAVE BEEN RAISED TO THE FIRST JOIST BEARING OR STORY HEIGHT ABOVE GRADE, A PLOT PLAN SHOWING THE EXACT LOCATION OF THE WALLS SHALL BE PREPARED BY A LICENSED, CERTIFIED PUBLIC LAND SURVEYOR OR PROFESSIONAL ENGINEER AND FILED WITH THE BUILDING OFFICIAL FOR APPROVAL BEFORE PROCEEDING FURTHER WITH THE CONSTRUCTION.
27. A SEPARATE DESIGN IS REQUIRED FOR ALL WALLS 24" AND OVER IN HEIGHT FROM THE GRADE AND SUBJECT TO SEPARATE PERMITS TO BE OBTAINED BY THE OWNERS. GEOTECHNICAL AND STRUCTURAL DESIGN IS TO BE COMPLETED BY OTHERS. THIS GRADING PLAN SHOWS LOCATION AND PROPOSED GRADING ONLY OF ALL THE WALLS.
28. SUBMIT A SURVEY, CONSISTENT WITH THE REQUIREMENTS FOR CERTIFICATE OF OCCUPANCY CHECKLIST, TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES PRIOR TO REQUESTING AN INSPECTION FOR A CERTIFICATE OF OCCUPANCY.
29. ALL SANITARY LATERALS AND/OR SEWERS NOT SHOWN IN AN EASEMENTS SHALL BE OWNED AND MAINTAINED PRIVATELY.
30. ALL STORM DRAINS NOT SHOWN WITHIN AN EASEMENT OR IN A PUBLIC RIGHT OF WAY SHALL BE OWNED AND MAINTAINED PRIVATELY.
31. ALL WATER FACILITY CONSTRUCTION SHALL CONFORM TO VIRGINIA AMERICAN WATER COMPANY STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL CONTACT VIRGINIA AMERICAN WATER COMPANY AT (703) 549-7080 TO COORDINATE CONSTRUCTION AND INSPECTION OF WATER FACILITIES.
32. SIDEWALKS SHALL REMAIN OPENED DURING CONSTRUCTION OR PEDESTRIAN ACCESS SHALL BE MAINTAINED TO THE SATISFACTION OF THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
33. PRIOR TO THE RELEASE OF THE FINAL SITE PLAN, A TRAFFIC CONTROL PLAN FOR CONSTRUCTION DETAILING PROPOSED CONTROLS TO TRAFFIC MOVEMENT, LANE CLOSURES, CONSTRUCTION ENTRANCES, HAUL ROUTES, AND STORAGE AND STAGING SHALL BE PROVIDED FOR INFORMATION PURPOSE; HOWEVER, AN AMENDED TRAFFIC CONTROL PLAN, IF REQUIRED BY THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES SHALL BE SUBMITTED TO THE DIRECTOR OF TRANSPORTATION AND ENVIRONMENTAL SERVICES ALONG WITH THE BUILDING PERMIT APPLICATION. THE FINAL SITE PLAN SHALL INCLUDE A STATEMENT "FOR INFORMATION ONLY" ON THE TRAFFIC CONTROL PLAN SHEETS.
34. A CERTIFICATE OF OCCUPANCY SHALL BE OBTAINED PRIOR TO ANY OCCUPANCY OF THE BUILDING OR PORTION THEREOF, IN ACCORDANCE WITH VIRGINIA USBC 115.0.

SOLID WASTE

THE APPLICANT SHALL BE RESPONSIBLE TO DELIVER THE SOLID WASTE, AS DEFINED BY THE CITY CHARTER AND CODE OF THE CITY OF ALEXANDRIA, TO THE COVANTA ENERGY WASTE FACILITY LOCATED AT 5301 EISENHOWER AVENUE. THE DEVELOPER FURTHER AGREES TO STIPULATE IN ANY FUTURE LEASE OR PROPERTY SALES AGREEMENT THAT ALL TENANTS AND/OR PROPERTY OWNERS SHALL ALSO COMPLY WITH THIS REQUIREMENT.

ENVIRONMENTAL SITE ASSESSMENT

1. THERE ARE NO TIDAL WETLANDS, TIDAL SHORES, TRIBUTARY STREAMS, CONNECTED TIDAL WETLANDS, ISOLATED WETLANDS, HIGHLY ERODIBLE/PERMEABLE SOILS OR BUFFER AREAS ASSOCIATED WITH SHORES, STREAMS OR WETLANDS LOCATED ON THIS SITE. FURTHER, THERE ARE NO WETLAND PERMITS REQUIRED FOR THIS DEVELOPMENT PROJECT. ADDITIONALLY, THERE ARE NO KNOWN UNDERGROUND STORAGE TANKS OR AREAS OF SOIL OR GROUNDWATER CONTAMINATION OF THE SITE.
2. THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASE TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.
3. ALL WELLS TO BE DEMOLISHED ON THIS PROJECT, INCLUDING MONITORING WELLS, MUST BE CLOSED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD (VSWCB) REQUIREMENTS. CONTACT ENVIRONMENTAL HEALTH SPECIALIST AND AND COORDINATE WITH THE ALEXANDRIA HEALTH DEPARTMENT AT 703-746-4400 EXT. 267/255.
4. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
   - MONDAY THROUGH FRIDAY FROM 7AM TO 6PM AND
   - SATURDAYS FROM 9AM TO 6PM
   - NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS.

   PILE DRIVING IS FURTHER RESTRICTED TO THE FOLLOWING HOURS:

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

STORMWATER BEST MANAGEMENT PRACTICES (BMP) NOTES

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

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

ARTICLE XIII COMPLIANCE

THIS PROJECT WILL MEET THE REQUIREMENTS OF ARTICLE XIII OF THE CITY OF ALEXANDRIA ZONING ORDINANCE FOR WATER QUALITY AND QUANTITY. SEE SHEETS C-0701 – C-0711 FOR ADDITIONAL INFORMATION.

ARCHAEOLOGY NOTES

1. THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

CODE NOTES

1. REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING OR ALTERATIONS AND ADDITIONS TO ANY BUILDING.
2. WASTE MATERIALS SHALL BE REMOVED IN A MANNER WHICH PREVENTS INJURY OR DAMAGE TO PERSONS, ADJOINING PROPERTIES AND PUBLIC RIGHTS-OF-WAY.
3. SERVICE UTILITY CONNECTIONS SHALL BE DISCONTINUED AND CAPPED IN ACCORDANCE WITH THE APPROVED RULES AND THE REQUIREMENTS OF THE APPLICABLE GOVERNING AUTHORITY.
4. PROVISIONS SHALL BE MADE TO PREVENT THE ACCUMULATION OF WATER OR DAMAGE TO ANY FOUNDATION ON THE PREMISES OR ADJOINING PROPERTY.
5. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED AND PLACED SO AS NOT TO ENDANGER THE PUBLIC, THE WORKERS OR ADJOINING PROPERTY FOR THE DURATION OF THE CONSTRUCTION PROJECT, MATERIALS AND EQUIPMENT SHALL NOT BE PLACED OR STORED SO AS TO OBSTRUCT ACCESS TO FIRE HYDRANTS, STANDPIPES, FIRE OR POLICE ALARM BOXES, CATCH BASINS OR MANHOLES.
6. DURING CONSTRUCTION, DWELLINGS SHALL HAVE APPROVED ADDRESS NUMBERS, BUILDING NUMBERS OR APPROVED BUILDING IDENTIFICATION PLACED IN A POSITION THAT IS PLAINLY LEGIBLE AND VISIBLE FOR THE STREET OR ROAD FRONTING THE PROPERTY.
7. ADJOINING PUBLIC AND PRIVATE PROPERTY SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION, REMODELING AND DEMOLITION WORK. PROTECTION SHALL BE PROVIDED FOR FOOTINGS, FOUNDATIONS, PARTY WALLS, CHIMNEYS, SKYLIGHTS AND ROOFS. PROVISIONS SHALL BE MADE TO CONTROL WATER RUNOFF AND EROSION DURING CONSTRUCTION OR DEMOLITION ACTIVITIES. THE PERSON MAKING OR CAUSING AN EXCAVATION TO BE MADE SHALL PROVIDE WRITTEN NOTICE TO THE OWNERS OF ADJOINING BUILDINGS ADVISING THEM THAT THE EXCAVATION IS TO BE MADE AND THAT THE ADJOINING BUILDINGS SHOULD BE PROTECTED. SAID NOTIFICATION SHALL BE DELIVERED NOT LESS THAN 10 DAYS PRIOR TO THE SCHEDULED STARTING DATE OF THE EXCAVATION.

UTILITY WORKS

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

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

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

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

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

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

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

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

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

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

J. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

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

L. GRADING CAN BE PERFORMED ON INSTALLATION OF UTILITIES.

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

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

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

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

RODENT ABATEMENT NOTE

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

MOSQUITO CONTROL NOTES

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

ESI
Peer Review

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(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: AS NOTED
DATE: 02/25/2025
DRAWN: SC/TB
CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

AARON M. VINSON
Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

NOTES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

CONSTRUCTION NOTES

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

GENERAL AND SITE SPECIFIC NOTES

1. A VSMP PERMIT IS REQUIRED FROM THE CITY OF ALEXANDRIA FOR THIS DEVELOPMENT, BUT STATE REGISTRATION IS NOT. CONTRACTOR RESPONSIBLE FOR ENSURING PERMIT IS OBTAINED AND CURRENT THROUGHOUT THE DURATION OF THE PROJECT.
2. CONTRACTOR RESPONSIBLE FOR OBTAINING POTW PERMIT IF REQUIRED. A COPY OF THE POTW PERMIT MUST BE FILED WITH THE CITY OF ALEXANDRIA.
3. THE PROPERTY ADDRESS MUST BE CLEARLY MARKED IN THE FRONT AND BACK OF THE PROPOSED DEVELOPMENT SITE DURING CONSTRUCTION FOR EMERGENCY RESPONSE PURPOSES IN CONTRASTING COLORS FOR EASY IDENTIFICATION.
4. THERE ARE NO KNOWN AREAS OF MARINE CLAY ON THIS SITE.
5. THIS PROJECT IS NOT LOCATED IN A COMBINED SEWER AREA.
6. ALL SOLID WASTE SHALL BE DELIVERED TO A REFUSE DISPOSAL FACILITY DESIGNATED BY THE DIRECTOR OF T&ES. ALL FUTURE LEASE OR PROPERTY SALES SHALL STIPULATE THIS REQUIREMENT.
7. NO EVIDENCE OF GRAVES OR BURIAL SITES HAS BEEN FOUND ON THIS PROPERTY.
8. DAMAGE TO ANY EXISTING ENTRANCES, CURB AND GUTTER, PAVEMENT OR OTHER EXISTING STRUCTURES NOT PROPOSED TO BE DISTURBED WITH THIS DEVELOPMENT , WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE REPAIRED TO THE SATISFACTION OF THE CITY OF ALEXANDRIA AND ANY ADJOINING OWNERS THAT MAY BE AFFECTED.

8A. IF THE CITY'S EXISTING PUBLIC INFRASTRUCTURE IS DAMAGED DURING CONSTRUCTION, OR PATCH WORK REQUIRED FOR UTILITY INSTALLATION THEN THE APPLICANT SHALL BE RESPONSIBLE FOR CONSTRUCTION/ INSTALLATION OR REPAIR OF THE SAME AS PER THE CITY OF ALEXANDRIA STANDARDS AND SPECIFICATIONS AND TO THE SATISFACTION OF DIRECTOR, TRANSPORTATION AND ENVIRONMENTAL SERVICES.

9. NO PLANTING RELOCATION IS PROPOSED WITH THIS PLAN. ALL PROPOSED VEGETATION WILL BE NEW PLANTINGS PER THE LANDSCAPE PLAN.
10. THERE ARE NO MAPPED RESOURCE PROTECTION AREAS ON SITE.
11. ALL ON-SITE RETAINING WALLS ARE SUBJECT TO SEPARATE PERMITS TO BE OBTAINED BY THE OWNERS. THIS PLAN IS FOR LOCATION AND PROPOSED GRADING ONLY. GEOTECHNICAL AND STRUCTURAL DESIGN IS TO BE ACCOMPLISHED BY OTHERS.
12. THERE WILL BE AN INCREASE IN SANITARY SEWER DISCHARGE ASSOCIATED WITH THIS DEVELOPMENT. SEE SHEET C-0901 FOR ADDITIONAL INFORMATION.
13. A SEPARATE PERMIT IS REQUIRED FOR SIGN CONSTRUCTION, IF NECESSARY.
14. EXISTING WELLS SHALL BE PERMANENTLY ABANDONED IN ACCORDANCE WITH VIRGINIA STATE WATER CONTROL BOARD REQUIREMENTS.
15. PROPOSED PAVEMENT SECTION DEPTH(S) ARE BASED ON A CBR VALUE OF 10. LABORATORY TESTS OF SUBGRADE SOIL SHALL BE PERFORMED FOR ACTUAL DETERMINATION OF REQUIRED SUBGRADE THICKNESS PRIOR TO PAVING. IN THE CASE OF PAVEMENT PATCHES, PAVEMENT SECTION MUST MEET OR EXCEED EXISTING SECTION. SEE SOILS REPORT, BY OTHERS, FOR ADDITIONAL INFORMATION.
16. ALL EROSION CONTROLS SHALL CONFORM TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (LATEST VERSION OF) AND MUST BE SUBMITTED AND APPROVED BY T&ES.
17. ALL EMERGENCY VEHICLE EASEMENTS MUST BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH CITY STANDARDS (CSAP-1A).
18. PROVIDE ALL PEDESTRIAN AND TRAFFIC SIGNAGE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) TO THE SATISFACTION OF THE DIRECTOR OF T&ES.
19. ALL PRIVATE UTILITIES ARE TO BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND PUBLIC UTILITY EASEMENTS UNLESS SPECIFICALLY ALLOWED UNDER APPLICABLE SITE PLAN CONDITIONS.
20. THE STORMWATER COLLECTION SYSTEM IS LOCATED WITHIN THE FOUR MILE RUN (EAST) WATERSHED. ALL ON-SITE STORMWATER CURB INLETS AND PUBLIC CURB INLETS WITHIN 50 FT OF THE PROPERTY LINE SHALL BE DULY MARKED USING STANDARD CITY MARKERS, OR TO THE SATISFACTION OF THE DIRECTOR OF TE&S.
21. PRIOR TO RELEASE OF THE PERFORMANCE BOND, A COPY OF THE OPERATION AND MAINTENANCE MANUAL SHALL BE SUBMITTED TO THE DIVISION OF ENVIRONMENTAL QUALITY ON DIGITAL MEDIA.
22. EXISTING SEPTIC FIELDS, IF APPLICABLE, SHALL BE ABANDONED IN ACCORDANCE WITH VIRGINIA HEALTH DEPARTMENT STANDARDS AND SPECIFICATIONS.
23. THE APPLICANT AND CONTRACTOR TO WORK WITH THE CITY OF ALEXANDRIA FOR RECYCLING AND /OR REUSE OF THE LEFTOVER, UNUSED, AND/OR DISCARDED BUILDING MATERIALS.
24. THE APPLICANT SHALL BE RESPONSIBLE TO DELIVER THE SOLID WASTE, AS DEFINED BY THE CITY CHARTER AND CODE OF THE CITY OF ALEXANDRIA, TO THE COVANTA ENERGY WASTE FACILITY LOCATED AT 5301 EISENHOWER AVENUE.
25. THE SITE IS NOT LOCATED WITHIN 1000 FT OF A FORMER SANITARY LANDFILL, DUMP OR DISPOSAL AREA.
26. THE APPLICANT MUST OBTAIN ALL APPLICABLE VPDES PERMIT(S) FOR DISCHARGE PRIOR TO ANY DEWATERING AND MUST ALSO OBTAIN PERMISSION FROM ALEXRENEW FOR DISCHARGE INTO THE PUBLIC STORM SEWER.

RESOURCE PROTECTION AREA NOTE

THE SUBJECT PROPERTY DOES NOT LIE WITHIN THE CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA) AND THERE ARE NO MAPPED RPA'S ON THIS PROPERTY.

FLOOD PLAIN NOTE

THE SITE IS LOCATED WITHIN 100-YEAR FLOOD PLAIN WATER SURFACE ELEVATION (WSE) PER THE DEMARCATION OF THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) PUBLISHED BY FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA). SEE C-0401A FOR FLOODPLAIN COMPLIANCE NARRATIVE.

CEMETERY AND/OR BURIAL GROUNDS

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

UTILITY CONTACTS

ELECTRIC:
VIRGINIA DOMINION POWER
C/O YONAH SORIN
907 WEST GLEBE ROAD
ALEXANDRIA, VA 22305
(703) 838-2437

NATURAL GAS:
WASHINGTON GAS
C/O MICHAEL GOFFUS
6801 INDUSTRIAL ROAD
SPRINGFIELD, VA 22151
(703) 750-4881

WATER:
VIRGINIA AMERICAN WATER COMPANY
C/O CHRIS LONG
2223 DUKE STREET
ALEXANDRIA, VA 22314
(703) 549-7080

TELEPHONE:
VERIZON
C/O VAL FISHER
2980 FAIRVIEW PARK N., 6TH FLOOR
FALLS CHURCH, VA 22042
(703) 204-5068

CATV/HS INTERNET:
COMCAST
C/O BRIAN SHADE
3900 WHEELER AVENUE
ALEXANDRIA, VA 22304
(703) 567-4449

STORM/SANITARY:
CITY OF ALEXANDRIA
DEVELOPMENT AND RIGHT-OF-WAY SERVICES
C/O BRIAN DOFFLEMYER
301 KING STREET
ALEXANDRIA, VA 22314
(703) 746-4008

COMBINED SEWER NARRATIVE

THIS PROPERTY IS NOT LOCATED WITHIN A COMBINED SEWER DISTRICT.

FEDERAL FUNDING NOTE

IF FEDERAL FUNDING IS OBTAINED FOR THE PROJECT, ALL REQUIRED FEDERAL PERMITS WILL BE OBTAINED BY THE APPLICANT PRIOR TO CONSTRUCTION.

GEOTECHNICAL REPORT NOTE

A SITE SPECIFIC GEOTECHNICAL REPORT WILL BE PREPARED FOR THIS PROPERTY AND WILL BE PROVIDED UNDER SEPARATE COVER.

SANITARY SEWER OUTFALL NARRATIVE

THE SUBJECT SITE IS CURRENTLY SERVED BY A SEPARATE SANITARY SEWER SYSTEM ACCORDING TO THE CITY OF ALEXANDRIA GIS SEWER VIEWER. THE SANITARY FLOW FROM THIS DEVELOPMENT SHALL CONNECT TO THE EXISTING SEWER NETWORK IN ELBERT AVENUE.

IT IS ANTICIPATED THAT THE SANITARY FLOW RESULTING FROM THIS DEVELOPMENT WILL BE APPROXIMATELY:

MULTIFAMILY RESIDENTIAL: 300 GPD x 91 UNITS = 27,300 GPD

27,300 GPD x 4 (PEAK FACTOR) = 109,200 GPD

THE EXISTING SANITARY FLOW FROM THIS SITE:

MULTIFAMILY RESIDENTIAL: 300 GPD X 29 UNITS = 8,700 GPD

8,700 GPD X 4 (PEAK FACTOR) = 34,800 GPD

NET: =74,400 GPD

BECAUSE THE PROPOSED DEVELOPMENT WILL RESULT IN AN INCREASE IN EXPECTED SANITARY SEWER FLOW MORE THAN 10,000 GPD, SANITARY SEWER OUTFALL ANALYSIS IS PROVIDED ON SHEET C-0901 IN ACCORDANCE WITH MEMO TO INDUSTRY NO. 06-14.

SANITARY TAP FEE CALCULATION

MULTIFAMILY DWELLING UNITS	91 UNITS X $9,773/UNIT =	$889,343
TEAR DOWN CREDIT (EX. UNITS)	29 UNITX X -$9,773/UNIT =	-$283,417
TOTAL SANITARY TAP FEE =		$605,926

(MEMO TO INDUSTRY 25-01, DUE AT TIME OF FIRST CERTIFICATE OF OCCUPANCY)

MARINE CLAY SOILS MAP

SCALE: 1"=1,000'

ACCORDING TO CITY RECORDS, THERE ARE NO MARINE CLAYS PRESENT ON THE SUBJECT PROPERTY (SEE MAP-THIS SHEET).

NOISE NOTE

ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE ALEXANDRIA NOISE CONTROL CODE TITLE 11, CHAPTER 5, WHICH PERMITS CONSTRUCTION ACTIVITIES TO OCCUR BETWEEN THE FOLLOWING HOURS:
MONDAY THROUGH FRIDAY FROM 7AM TO 6PM AND
SATURDAYS FROM 9AM TO 6PM

NO CONSTRUCTION ACTIVITIES ARE PERMITTED ON SUNDAYS.

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

CONTAMINATION NOTE

THERE ARE NO KNOWN SOIL CONTAMINANTS ON THIS SITE TO THE BEST OF OUR KNOWLEDGE AND BELIEF. A PHASE 1 ENVIRONMENTAL STUDY IS PROVIDED ON SHEETS C-1402 - #####.

ELECTRONIC FILES

CONTRACTOR AND DEVELOPER ARE ADVISED THAT ANY ELECTRONIC FILES ASSOCIATED WITH THE PREPARATION OF THESE PLANS WILL NOT BE RELEASED TO OTHERS FOR USE IN CONSTRUCTION STAKEOUT OR RELATED SERVICES.

ALEXRENEW NOTES

1. CONTRACTOR SHALL ENSURE ALL DISCHARGES ARE IN ACCORDANCE WITH CITY OF ALEXANDRIA CODE TITLE 5, CHAPTER 6, ARTICLE B.
2. DEWATERING AND OTHER CONSTRUCTION RELATED DISCHARGE LIMITS TO THE SEWER SYSTEM ARE REGULATED BY ALEXRENEW PRETREATMENT. CONTRACTOR IS REQUIRED TO CONTACT ALEXRENEW'S PRETREATMENT COORDINATOR AT 703-721-3500 X2020.

CONCERNING UTILITY WORK

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

ALL EXCAVATED MATERIAL TO BE REPLACED INTO THE TRENCH SHALL BE STOCKPILED ON THE HIGH SIDE OF THE TRENCH.

IF ANY TRENCH WORK WILL REMAIN OPEN AFTER THE END OF THE WORKDAY, ALL NEEDED EROSION AND SEDIMENT CONTROLS SHALL BE EMPLOYED. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.

THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AND AS DETERMINED BY THE CITY OF ALEXANDRIA.

EMERGENCY VEHICLE EASEMENTS NOTE

THE PROPOSED DRIVE AISLE TO THE GARAGE WILL HAVE A 22' EMERGENCY VEHICLE EASEMENT WHICH WILL BE INSTALLED IN CONFORMANCE WITH THE CITY OF ALEXANDRIA FIRE CODE. SEE C-0401 AND C-0404 FOR LOCATION OF EVE EASEMENT.

CONSTRUCTION WORKER PARKING

OFF-STREET PARKING WILL BE PROVIDED TO CONSTRUCTION WORKERS PER SITE PLAN CONDITION 88 AND MASS TRANSIT WILL BE SUBSIDIZED PER THE CONDITION. THE OFF-STREET PARKING LOCATION(S) IS PROVIDED WITHIN THE CONSTRUCTION MANAGEMENT PLAN SUBMITTED UNDER A SEPARATE COVER.

AFFORDABLE HOUSING NARRATIVE

1. PROVIDE UP TO 91 TOTAL COMMITTED AFFORDABLE RENTAL UNITS CONSISTENT WITH THE APPROVED AFFORDABLE HOUSING PLAN. (HOUSING)
2. RENTS PAYABLE BY HOUSEHOLDS FOR THE RMF ZONE COMMITTED AFFORDABLE UNITS SHALL NOT, ON AVERAGE, EXCEED THE MAXIMUM RENTS ALLOWED UNDER THE FEDERAL LOW-INCOME HOUSING TAX CREDIT PROGRAM FOR HOUSEHOLDS WITH INCOMES AT 40 PERCENT OF THE AREA MEDIAN INCOME FOR THE WASHINGTON D.C. METROPOLITAN STATISTICAL AREA. AVERAGE RENTS PAYABLE BY HOUSEHOLDS FOR THE COMMITTED AFFORDABLE UNITS MAY BE INCREASED UP TO THE MAXIMUM RENTS ALLOWED UNDER THE FEDERAL LOW-INCOME HOUSING TAX CREDIT PROGRAM FOR HOUSEHOLDS WITH INCOMES AT 50 PERCENT OF THE AREA MEDIAN INCOME FOR THE WASHINGTON D.C. METROPOLITAN STATISTICAL AREA SUBJECT TO THE SUBMISSION OF A REVISED AFFORDABLE HOUSING PLAN. RENTS SHALL REMAIN AT THE ESTABLISHED AFFORDABLE RATES FOR A PERIOD OF 40 YEARS FROM THE DATE OF INITIAL OCCUPANCY OF EACH UNIT. (HOUSING)
3. RENTS PAYABLE FOR NON-RMF ZONE AFFORDABLE UNITS SHALL NOT EXCEED THE MAXIMUM RENTS (TAKING INTO ACCOUNT UTILITY ALLOWANCES) ALLOWED UNDER THE FEDERAL LOW INCOME HOUSING TAX CREDIT (LIHTC) PROGRAM FOR HOUSEHOLDS AT 60 PERCENT OF THE WASHINGTON DC METROPOLITAN AREA FAMILY MEDIAN INCOME. RENTS SHALL REMAIN AT THE ESTABLISHED AFFORDABLE RATES FOR A PERIOD OF 40 YEARS FROM THE DATE OF INITIAL OCCUPANCY OF EACH UNIT. (HOUSING)
4. HOUSEHOLDS RECEIVING HOUSING CHOICE VOUCHER ASSISTANCE WILL NOT BE DENIED ADMISSION ON THE BASIS OF RECEIVING SUCH ASSISTANCE. A HOUSEHOLD WILL BE CONSIDERED INCOME QUALIFIED IF THE AMOUNT OF RENT IT CAN PAY BASED ON INCOME, TOGETHER WITH THE VOUCHER PAYMENT, IS SUFFICIENT TO COVER THE APPLICABLE RENT. (HOUSING)
5. LIST THE UNITS IN WWW.VIRGINIAHOUSINGSEARCH.COM, AN ONLINE HOUSING SEARCH DATABASE SPONSORED BY VIRGINIA HOUSING, OR AN ALTERNATIVE SEARCH DATABASE AS IDENTIFIED BY THE OFFICE OF HOUSING. (HOUSING)

GREEN BUILDING NARRATIVE

IT IS THE INTENT OF THE APPLICANT TO MEET THE REQUIREMENTS OF THE CITY OF ALEXANDRIA 2019 GREEN BUILDING POLICY. A GREEN BUILDING NARRATIVE HAS BEEN SUBMITTED UNDER SEPARATE COVER.

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WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
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SCALE: AS NOTED | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCVL BY	APPROVED	DATE

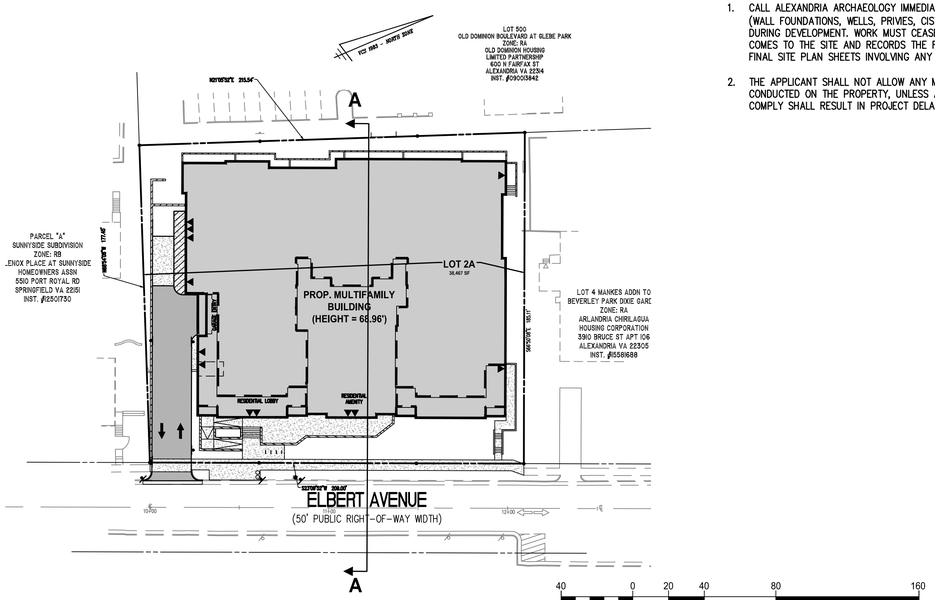
COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

NOTES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

KEY MAP



SCALE: 1"=40'

40 0 20 40 80 160
(IN FEET)
1 INCH = 40'

ARCHAEOLOGY NOTES

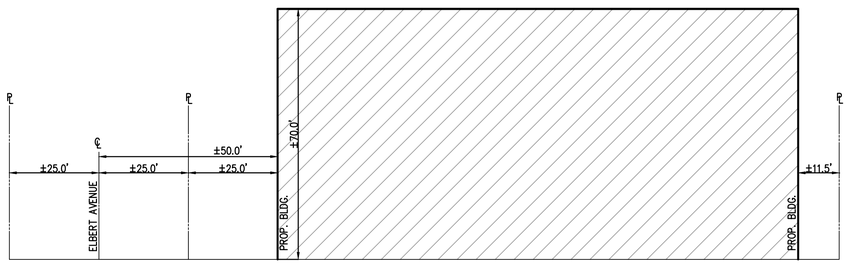
1. CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS. THE LANGUAGE NOTED ABOVE SHALL BE INCLUDED ON ALL FINAL SITE PLAN SHEETS INVOLVING ANY GROUND DISTURBING ACTIVITIES.

2. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY THE ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAY.

MASTER LEGEND

PROPOSED	DESCRIPTION	EXISTING
EP	EDGE OF PAVEMENT	EP.
MH	MANHOLE	MH
WV	WATER VALVE	WV
WM	WATER METER	WM
GM	GAS METER	GM
GV	GAS VALVE	GV
RD	ROOF DRAIN	RD
TCB	TRAFFIC CONTROL BOX	TCB
LP	LIGHT POLE	LP
TRLP	LIGHT POLE WITH SIGNALS	TRLP
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
C.O.	CLEAN OUT	C.O.
	STORM SEWER	
	COMBINED SEWER	
	FLOW DIRECTION	
W	WATER MAIN	W

PROPOSED	DESCRIPTION	EXISTING
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
T	COMMUNICATION	T
G	GAS MAIN	G
E	UNDERGROUND ELECTRIC	E
T	TRANSFORMER	
	HANDICAP RAMP	
	GUARDRAIL	
	FENCE	
	TRAFFIC FLOW	
	TEST PIT	
	LIGHT	
	DOOR	
	TREES	
	LIMITS OF CLEARING AND GRADING	
40 44	CONTOURS	40 44
+44 50	SPOT ELEVATION	+44 50
	DRAINAGE FLOW DIRECTION	
	BUILDING	

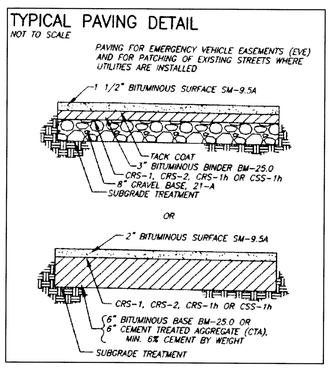


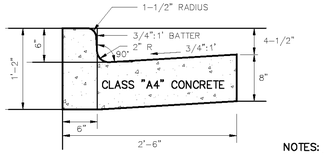
SECTION A-A
NOT TO SCALE

PER SECTION 6-403A MAXIMUM HEIGHT BASED ON 50' CENTERLINE SETBACK IS 100' (ELBERT AVE). THEREFORE, AT THE PROPOSED HEIGHT OF 70', THE PROPOSED DEVELOPMENT IS IN CONFORMANCE WITH THE REQUIREMENTS OF 6-403A.

TYPICAL PAVING DETAIL
NOT TO SCALE

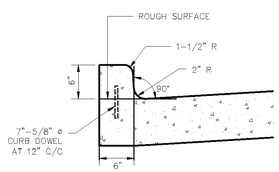
PAVING FOR EMERGENCY VEHICLE EASEMENTS (EVE) AND FOR PATCHING OF EXISTING STREETS WHERE UTILITIES ARE INSTALLED



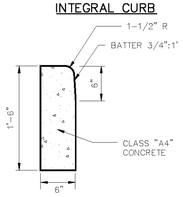


COMBINATION CURB AND GUTTER

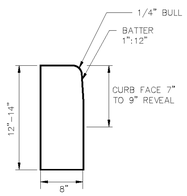
NOTES:
1. MATERIAL, FINISH AND TOLERANCE WILL BE IN ACCORDANCE WITH SECTION 404 - HYDRAULIC CEMENT CONCRETE OPERATIONS OF THE LATEST VDOT ROAD & BRIDGE SPECIFICATIONS.
2. ALL CURB AND GUTTER SHALL HAVE MIN. 6" THICK 21A AGGREGATE BASE AND MUST BE COMPACTED TO 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY OR 90% OF THE MAXIMUM MODIFIED PROCTOR DENSITY.



INTEGRAL CURB

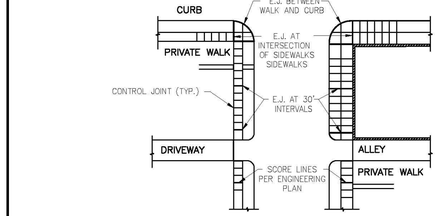


COPING CURB

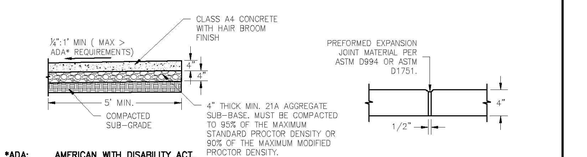


GRANITE CURB

CURB AND GUTTER, COPING CURB AND GRANITE CURB	06/03/2022 REVISION DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES ALEXANDRIA, VIRGINIA	CSCG-1
	PAGE 43



EXPANSION JOINT PLACEMENT



*ADA: AMERICAN WITH DISABILITY ACT.

SIDEWALK SECTION 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, FULL DEPTH, 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	06/03/2022 REVISION DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES ALEXANDRIA, VIRGINIA	CSSW- 1
	PAGE 46

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COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

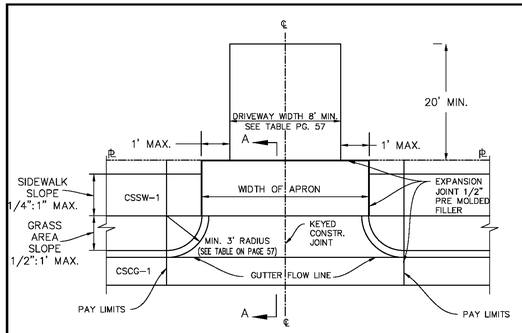
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

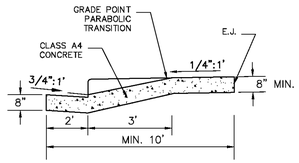
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



PLAN VIEW



SECTION A-A

NOTES:
1. DEPRESS SLAB 1 1/2" AT CENTERLINE AND BLEND INTO FLOW LINE.
2. PAY QUANTITIES SQ. YD. COMPLETE.
3. CLASS "A4" CONCRETE.
4. THE MAXIMUM DIFFERENCE BETWEEN THE APPROACH GRADE AND THE ENTRANCE CROSS SLOPE SHALL NOT EXCEED 8%.
5. MAINTAIN A MINIMUM SEPARATION OF 30 FEET ON RESIDENTIAL STREETS BETWEEN THE BEGINNING OF THE STREET CORNER RADIUS AND ANY DRIVEWAY APRON RADIUS.

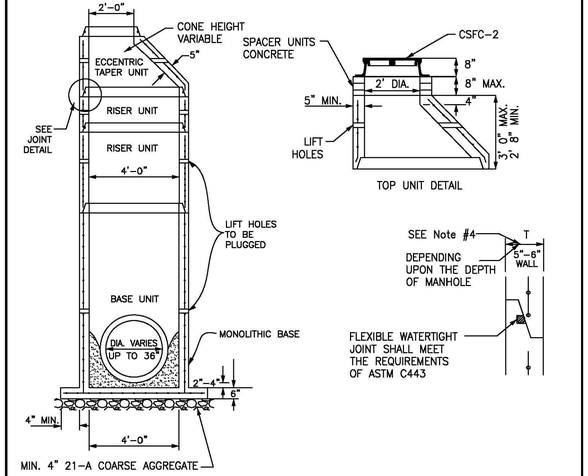
RESIDENTIAL ENTRANCE

06/03/2022
REVISION DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

CSRE-1

PAGE 56



TOP UNIT DETAIL

N.T.S.

NOTE:
FOR REINFORCEMENT SCHEDULE SEE CSMH-2, PAGE 11.

PRECAST MANHOLE

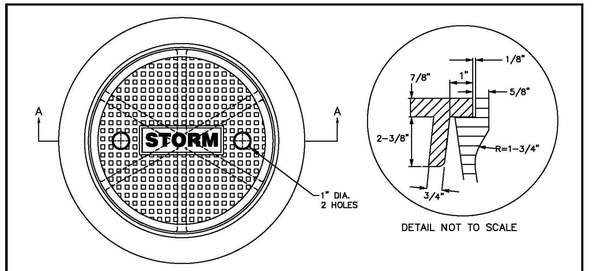
4' INSIDE DIAMETER; FOR PIPES UP TO 36" IN DIAMETER

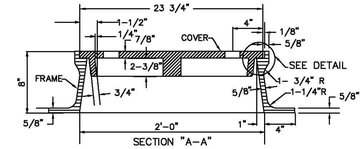
01/16/2021
REVISION DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

CSMH-1

PAGE 10





NOTE :
TOP AND CASTING TO BE MACHINED.
FRAME WEIGHT 200 LBS.
COVER WEIGHT 125 LBS.
TOTAL WEIGHT 325 LBS.

MANHOLE FRAME & COVER

01/16/2021
REVISION DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

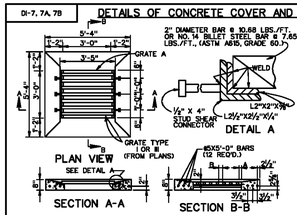
CSFC-2

PAGE 16

2016 ROAD & BRIDGE STANDARDS

DI-7, 7A, 7B

DETAILS OF CONCRETE COVER AND GRATE



APPROXIMATE QUANTITIES	
CONCRETE CLASS A3	REINFORCING STEEL
0.423 C. Y.	63 LBS.

BAR SPACING CHART		
GRATE TYPE	MAXIMUM DIMENSION A	B
I	5/8"	3"
II	1"	1"

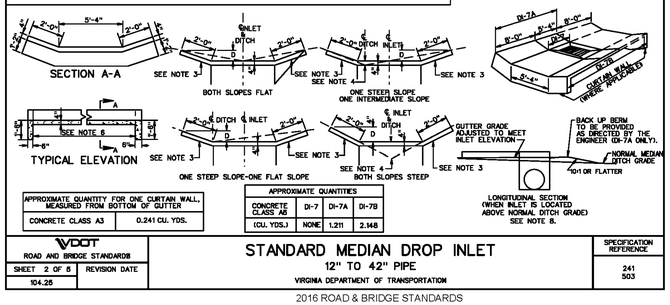
NOTES

1. GRATE A IS TO BE UTILIZED IN LOCATIONS NOT NORMALLY SUBJECT TO TRAFFIC.
2. GRATE B IS TO BE UTILIZED IN LOCATIONS NORMALLY SUBJECT TO TRAFFIC.
3. FOR DETAILS OF LOAD CARRYING GRATE (GRATE B), SEE T-DI-7, SHEET 103.08.
4. CONCRETE COVER AND GRATE ARE TO BE FURNISHED AS A SINGLE UNIT. OUTSIDE DIMENSIONS OF GRATE TO BE 3'-4" X 2'-11½" (GRATE A) OR 3'-4" X 2'-11½" (GRATE B).
5. ALTERNATE METHODS OF ANCHORING ANGLE IRON WILL BE ACCEPTABLE IF APPROVED BY THE ENGINEER.
6. GRATE AND COLLAR ARE TO BE GALVANIZED.
7. CONCRETE COVER MAY BE PRECAST OR CAST IN PLACE.
8. CONCRETE TO BE CLASS A3 IF CAST IN PLACE. 4000 PSI IF PRECAST.
9. GRATE BARS TO BE PARALLEL TO DITCH FLOW.

DETAILS OF GUTTER AND METHOD OF PLACEMENT

NOTES

1. DI-7 NO GUTTERS.
   DI-7A NO GUTTER IN ONE DIRECTION.
   DI-7B GUTTER IN BOTH DIRECTIONS.
2. JOINTS BETWEEN GUTTERS AND CONCRETE COVER ARE TO BE DOWELED WITH #4 X 8" SMOOTH RODS @ APPROX. 12" C-C TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2" X 4" NOTCH MAY BE PROVIDED.
   SEE STANDARD T-DI-3, 4 ALTERNATE DESIGN.
3. VARIABLE 2:1 OR FLATTER.
4. DITCH GRADE MUST BE ADJUSTED TO MEET DIFFERENCE IN ELEVATION. SEE LONGITUDINAL SECTION.
5. IF DEPTH (D) BECOMES LESS THEN 4", LENGTH OF WINGS ARE TO BE EXTENDED AS DIRECTED BY THE ENGINEER.
6. CURTAIN WALL TO BE LOCATED AT THE END OF THE PAVED DITCH SECTIONS OF THE DI-7A & DI-7B THAT ARE NOT ABUTTED BY OTHER DRAINAGE.
7. IF NORMAL DITCH GRADE IS TOO FLAT TO ALLOW FOR ADJUSTED GRADE TO INLET, A SPECIAL GUTTER DETAIL WILL BE REQUIRED ON PLANS.



APPROXIMATE QUANTITY FOR ONE CURTAIN WALL, MEASURED FROM BOTTOM OF GUTTER	
CONCRETE CLASS A3	0.241 CU. YDS.

APPROXIMATE QUANTITIES			
CONCRETE CLASS A3	DI-7	DI-7A	DI-7B
(CU. YDS.)	NONE	1.211	2.148

VDOT
ROAD AND BRIDGE STANDARDS
SHEET 2 OF 8 | REVISION DATE
104.26

STANDARD MEDIAN DROP INLET

12" TO 42" PIPE

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
241
503

2016 ROAD & BRIDGE STANDARDS

NOTES:
1. THE MANHOLE SHALL BE DESIGNED TO MEET HS-20 LOADING CAPACITY.
2. JOINTS BETWEEN UNITS SHALL BE TONGUE & GROOVE.
3. PIPE MUST BE FLUSH WITH INSIDE WALL OF MANHOLE.
4. WALLS TO DEPTH OF 12' TO BE 5" THICK. WALLS DEEPER THAN 12' TO BE 6".
5. LOSS FOR STRAIGHT RUN MANHOLE SHALL BE 0.05 FEET. IN NO CASE SHALL LOSS LESS THAN 0.05 FEET BE ALLOWED.
6. FOR RETROFIT PROJECTS:

   A. PROVIDE CONCRETE BENCH (FOR TERMINAL USE BRICKS WITH SLOPE TOWARD OUTLET) UP TO CROWN OF PIPE INVERT. (IF REQUIRED)

   B. GRADE AND SLOPE ADJUSTMENT SHALL BE PROVIDED IN THE FIELD BY CONTRACTOR PER APPROVED PLANS REQUIREMENTS.

   IF THE STRUCTURE IS NOT PRECAST OR HAS ANGLE BETWEEN THE RCP PIPE AND STRUCTURE'S

   C. PROVIDE ARCH BRICK ADJUSTMENT AROUND RCP PIPE

   D. PROVIDE RAILS (IF REQUIRED)

7. THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR IN ACCORDANCE WITH CSIS-1 TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE.

PRECAST MANHOLE

GENERAL NOTES

01/16/2021
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DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

CSMH-1 & CSMH-2

PAGE 12

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ESI
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06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

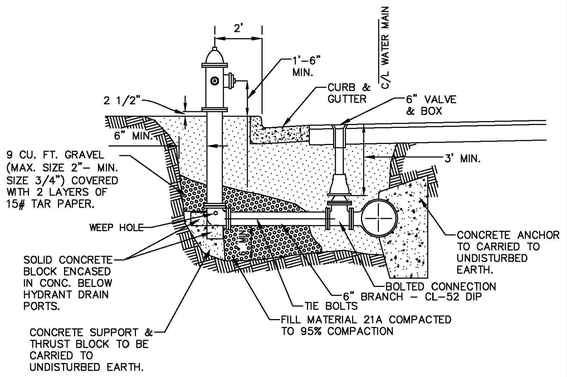
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



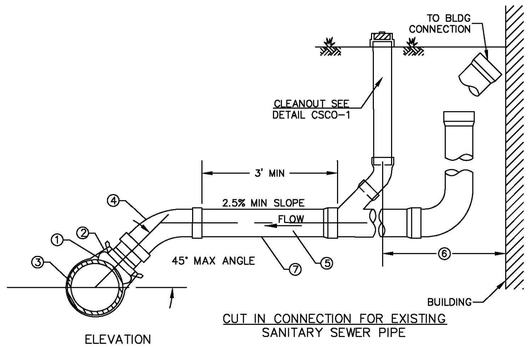
FIRE HYDRANT INSTALLATION

06/21/2021
REVISION DATE
CSFH–1
PAGE 18

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

Pipe Type	Pipe Cutting Method	Connection Type	Applicable Detail
PVC (SDR–26) or Schedule 40	Tapping Machine	Romac CB Sewer Saddle or approved equal	CSLC–1A
Concrete	Coring	Romac CB Sewer Saddle or approved equal	CSLC–1A
Cast Iron/ Ductile Iron	Tapping Machine	Romac CB Sewer Saddle or approved equal	CSLC–1A
Vitrified Clay Pipe (VCP)	Saw Cut	Manufactured Y or T connection	CSLC–1B
Brick	Special design		
Non–circular pipe			
Other Material			

NOTE:
1. ROMAC CB SEWER SADDLE OR CITY APPROVED EQUAL
2. ROMAC CB STRAPS 304 STAINLESS STEEL
3. EXISTING SEWER MAIN
4. 45° ELBOW/ BEND
5. PVC LATERAL SDR 26 OR SCHEDULE 40.
6. MINIMUM AND MAXIMUM SLOPE IN ACCORDANCE WITH THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
7. INVERT OF HOUSE CONNECTION MUST BE AT CROWN OF SEWER OR HIGHER.



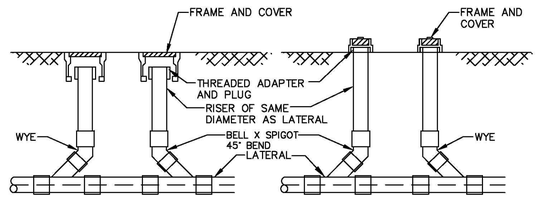
ELEVATION

CUT IN CONNECTION FOR EXISTING SANITARY SEWER PIPE

SANITARY SEWER LATERAL CONNECTION

8/30/2022
REVISION DATE
CSLC–1A
PAGE 22

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA



WITHIN PAVEMENT NOT IN PAVEMENT

NOTE:
1. TERMINATE TRACER WIRE WITH CLEANOUT THAT IS WITHIN 5" OF BUILDING'S EXTERIOR. TERMINATE TRACER WIRE ABOVE GRADE IN AN ACCESSIBLE LOCATION. WHERE PROJECTED FROM DAMAGE. IF NOT USING IRON FRAME AND COVER.
2. TRACER WIRE TO BE #12 AWG SOLID COPPER WITH 45 MIL POLYETHYLENE INSULATION. AT TEMPORARY TERMINATION OF LATERAL BY UTILITY CONTRACTOR, MAKE SPLICE WITH BUTT CONNECTOR AND SHRINK SLEEVE. NO OTHER SPLICES PERMITTED.
3. EXPOSED CONCRETE TO HAVE CHAMFERED EDGES.

SANITARY SEWER CLEANOUT

06/21/2021
REVISION DATE
CSCO–1
PAGE 25

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

NOTES:
1. FIRE HYDRANT: MUELLER CENTURION – CATALOG # A423 WITH 1 1/2 INCH PENTAGON OPERATING NUT; LEFT TURN TO OPEN TWO 2 1/2" HOSE NOZZLES AND ONE 4" HOSE NOZZLE.
2. VALVE: MUELLER GATE VALVE – CATALOG # A2380–20, WITH 6 INCH MECHANICAL JOINTS. 2 INCH SQUARE NUT, LEFT TURN TO OPEN. VALVES AND FITTINGS SHALL BE WRAPPED IN 10MIL. OR THICKER POLYETHYLENE.
3. ALL FITTINGS SHALL BE DUCTILE IRON. ALL FITTINGS TO BE RESTRAINED.
4. LOCATIONS TO BE AS SHOWN ON PLANS. VARIANCE OF THE 2' MIN. FROM THE FACE OF THE CURB SHALL BE REVIEWED ON AN INDIVIDUAL BASIS BY THE TRANSPORTATION AND ENVIRONMENTAL SERVICES ENGINEER.
5. FIRE HYDRANTS TO BE INSTALLED AND TESTED IN ACCORDANCE WITH CURRENT VERSION OF AWWA M17 MANUAL.
6. VALVES AND SERVICE LINES ARE TO BE INSTALLED AND TESTED IN ACCORDANCE WITH THE CURRENT VERSION OF AWWA G200–09 DISTRIBUTION SYSTEMS AND M44 DISTRIBUTION VALVES; SELECTION, INSTALLATION, FIELD TESTING, AND MAINTENANCE, 3RD ED.
7. PRIOR TO ACCEPTANCE BY THE CITY OF ALEXANDRIA, FIELD TESTING AND PRESSURE READINGS SHALL BE PROVIDED BY THE CONTRACTOR.
8. FIRE HYDRANTS SHALL BE LOCATED AT EACH STREET INTERSECTION. THERE SHALL BE AT LEAST ONE FIRE HYDRANT LOCATED AT EACH INTERSECTION. THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS IN BUSINESS DISTRICTS, MEASURING ALONG STREET CENTERLINES, SHALL BE 300 FEET. ALL PARTS OF EACH BUILDING SHALL BE WITHIN 500 FEET OF HOSE RUN FROM A FIRE HYDRANT. THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS IN RESIDENTIAL DISTRICTS, MEASURED ALONG STREET CENTERLINES, SHALL NOT EXCEED 500 FEET.
9. PRIOR TO INSTALLATION OF PRIVATE HYDRANTS, AMERICAN WATER IS TO SIGN OFF ON THE HYDRANT LOCATION.
10. HYDRANTS SHALL NOT BE USED AS TEMPORARY BLOW–OFFS DURING CONSTRUCTION.
11. NO VERTICAL OBSTRUCTIONS SHALL BE WITHIN 10' OF EITHER SIDE OR REAR OF HYDRANT.
12. SPECIFY BOLLARDS WHERE HYDRANTS ARE UNPROTECTED BY CURB AND GUTTER, PLACED IN OPEN SPACE OR AT THE REAR OF COMMERCIAL BUILDINGS.
13. FIRE HYDRANTS SHALL BE PLACED AT SIGNIFICANT HIGH POINTS OF MAINS TO RELEASE AIR.
14. TO ENABLE THE DRAINING AND FLUSHING OF ALL MAINS, SPECIFY FIRE HYDRANTS AT SIGNIFICANT LOW POINTS.
15. LANDSCAPING, TREES, BMP'S, SIGNS, SIGNALS, LIGHT POLES, AND/OR OTHER UTILITIES ARE NOT PERMITTED TO BE WITHIN 5 FEET OF A HYDRANT.
16. WHEN INSTALLED IN PARKING AREA, FIRE HYDRANT SHALL BE PROTECTED BY BARRIERS THAT WILL PREVENT PHYSICAL DAMAGE BY VEHICLES.
17. IN THE CITY OF ALEXANDRIA, PUBLIC AND PRIVATE FIRE HYDRANTS ARE LOCATED AND MAINTAINED TO ASSURE THE APPROPRIATE SUPPLY OF WATER IS AVAILABLE FOR FIREFIGHTING PURPOSES. ALL PUBLIC FIRE HYDRANTS ARE THE PROPERTY OF THE CITY OF ALEXANDRIA. ALL FIRE HYDRANTS LOCATED ON PRIVATE PROPERTY ARE THE OWNERSHIP AND MAINTENANCE RESPONSIBILITY OF THE PROPERTY OWNER. IN ORDER TO PROVIDE FOR FIREFIGHTING PURPOSES, IT IS NECESSARY THAT ALL FIRE HYDRANTS BE EASILY RECOGNIZABLE TO AVOID BEING BLOCKED OR OBSTRUCTED. TO AID IN MAINTAINING THE IDENTIFIABLE APPEARANCE AND BY ORDER OF THE FIRE CHIEF, ALL FIRE HYDRANTS SHALL BE PAINTED AS DIRECTED;
   A. ALL PUBLIC AND PRIVATE HYDRANT BARRELS AND EXTENSIONS SHALL BE PAINTED WITH THE APPROVED: SHERWIN WILLIAMS "SAFETY YELLOW" #B54YZ437
   B. ALL PUBLIC HYDRANT BONNETS AND CAPS SHALL BE PAINTED WITH AN APPROVED REFLECTIVE WHITE: SHERWIN WILLIAMS "PURE WHITE" # B54WZ401
   C. ALL PRIVATE HYDRANT BONNETS SHALL BE PAINTED WITH THE APPROVED: SHERWIN WILLIAMS "SAFETY YELLOW" #B54YZ437
   D. ALL PRIVATE HYDRANT CAPS SHALL BE PAINTED WITH THE APPROVED: SHERWIN WILLIAMS "PURE WHITE" #B54WZ401
   E. HYDRANT BARRELS AND EXTENSIONS MAY BE PAINTED WITH AN APPROVED FLAT BLACK IN THE HISTORIC AND OLD TOWN AREAS OF THE CITY WHEN SPECIFICALLY APPROVED IN WRITING BY THE FIRE CHIEF.

FIRE HYDRANT INSTALLATION NOTES

06/21/2021
REVISION DATE
CSFH–1A
PAGE 19

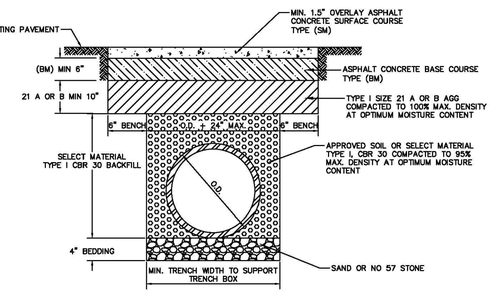
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

NOTES:
A. CONNECTION TO A PUBLIC SANITARY SEWER SHALL REQUIRE A SEWER LATERAL CONNECTION PERMIT FROM THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES). IF THE SANITARY SEWER IS LOCATED WITHIN THE PUBLIC RIGHT OF WAY AN EXCAVATION PERMIT SHALL ALSO BE REQUIRED.
B. THE CONNECTION SHALL BE MADE PER THE RECOMMENDATIONS OF THE MANUFACTURER, AND IN THE PRESENCE OR WITH THE APPROVAL OF THE T&ES, CONSTRUCTION AND INSPECTION (C&I) INSPECTOR.
C. THE SADDLE SHALL PROPERLY MATCH THE SANITARY SEWER MAIN PIPE.
D. THE CUT ON THE EXISTING PIPE MUST BE NO LARGER THAN NECESSARY TO INSTALL SADDLE.
E. ROUGH EDGES LEFT BY SAW CUT OR CORING SHALL BE SMOOTHED WITH A FILE OR SAND PAPER DEPENDING UPON THE MATERIAL OF THE SANITARY SEWER PIPE.
F. OVER CUTTING THE HOLE OR DAMAGING THE SEWER MAIN WILL WARRANT REPLACEMENT OF THE DAMAGED MAIN LINE SEGMENT AND INSTALLATION OF A FACTORY MANUFACTURED WYE OR TEE CONNECTION PER DETAIL CSLC–1B.
G. THE SADDLE CONNECTION MAY BE REPLACED WITH COMPRESSION SLEEVE CONNECTION WITH APPROVAL OF T&ES ENGINEER.
H. THE TAP MUST BE OFFSET MINIMUM 2' FROM THE JOINTS.
I. THE MANUFACTURED WYE OR TEE CONNECTION SHALL BE INSTALLED BY CUTTING OUT A SECTION OF VCP SEWER MAIN, MAINTAINING SQUARE ENDS, AND INSERTING THE MANUFACTURED WYE OR TEE SECTION. THE JOINTS ON BOTH SIDES SHALL BE SEALED USING HYMAX COUPLERS OR HYMAX FLANGED ADAPTERS OR CITY APPROVED EQUAL.
J. T&ES INSPECTOR MUST INSPECT THE TAP PRIOR TO BACKFILL.
K. ALL NEW INSTALLATIONS AND/OR REINSTALLATIONS OF SANITARY LINES AND SEWER LATERALS BOTH ON PRIVATE PROPERTY AND IN THE PUBLIC RIGHT OF WAY IN THE CITY OF ALEXANDRIA SHALL BE PROVIDED WITH 3" AND 6" WIDE 5 ML OVERALL THICKNESS DETECTABLE UNDERGROUND WARNING TAPES (DUWT).THE 3" DUWT SHALL BE INSTALLED AT DEPTHS OF 12" TO 18" AND 6" WIDE AT A DEPTH OF 24" SO AS TO MAKE UNDERGROUND INSTALLATIONS EASY TO FIND USING A NON–FERROUS LOCATOR. THE DUWT SHALL BE WITH ALUMINUM BACKING OR SOLID ALUMINUM CORE LAMINATED WITH A PROTECTIVE CLEAR FILM ON BOTH SIDES SEALING AND PROTECTING THE GRAPHICS FROM UNDERGROUND MOISTURE ACIDS, ALKALIS, AND OTHER SOIL SUBSTANCES. ALL DUWT TAPES SHALL BE PRINTED IN BLACK INK ON AMERICAN PUBLIC WORKS ASSOCIATION (APWA) APPROVED COLORS TO MEET OR EXCEED INDUSTRY STANDARDS. THE APPROVED COLOR FOR SANITARY SEWER LINES AND LATERALS IS GREEN.
L. BEDDING SHOULD BE AS PER (CSTB–1).
M. SEE CSCO–1 FOR CLEANOUT DETAIL.
N. FOR PIPE MATERIAL TABLE SEE DETAIL CSLC–1A.

SANITARY SEWER LATERAL CONNECTION NOTES

06/21/2021
REVISION DATE
CSLC–1C
PAGE 24

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA



DETAIL NOT TO SCALE

NOTES:
1. BACKFILL MATERIAL SHALL BE COMPACTED AT A MAXIMUM DEPTH OF EVERY SIX INCHES (6") THROUGH THE USE OF MECHANICAL TAMPING THROUGHOUT THE TRENCH TO ENSURE THAT ADEQUATE SUPPORT IS PROVIDED.
2. PAVEMENT RESTORATION IS 12 INCHES MINIMUM BEYOND THE EDGE OF THE TRENCH ON LONGITUDINAL OPEN CUTS, OR 25 FEET MINIMUM BEYOND THE TRENCH CENTERLINE ON PERPENDICULAR OPEN CUTS, OR AS DETERMINED BY THE T&ES DIRECTOR.
3. PAVEMENT RESTORATION ALSO INCLUDES THE REPLACEMENT OF ANY TRAFFIC CONTROL DEVICES AND/OR MARKINGS.
4. PAVEMENT THAT HAS BEEN RESURFACED WITHIN THE LAST FIVE (5) YEARS; PAVEMENT RESTORATION SHALL BE AT A MINIMUM WIDTH FROM CURB TO CURB AND LONGITUDINALLY PER NOTE #2. ADDITIONAL PAVING AND RESTORATION MAY BE REQUIRED, AS DETERMINED BY THE T&ES DIRECTOR.

BEDDING FOR PIPE & TRENCH SECTIONS

01/16/2021
REVISION DATE
CSJT–1
PAGE 17

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
ALEXANDRIA, VIRGINIA

NOTE:
ALL DETAILS PROVIDED ON THIS SHEET ARE CURRENT AT TIME OF PLAN PREPARATION. CONTRACTOR IS RESPONSIBLE FOR USING CURRENT DETAILS AT TIME OF CONSTRUCTION.

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
SCALE: AS NOTED | DATE: 02/25/2025

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

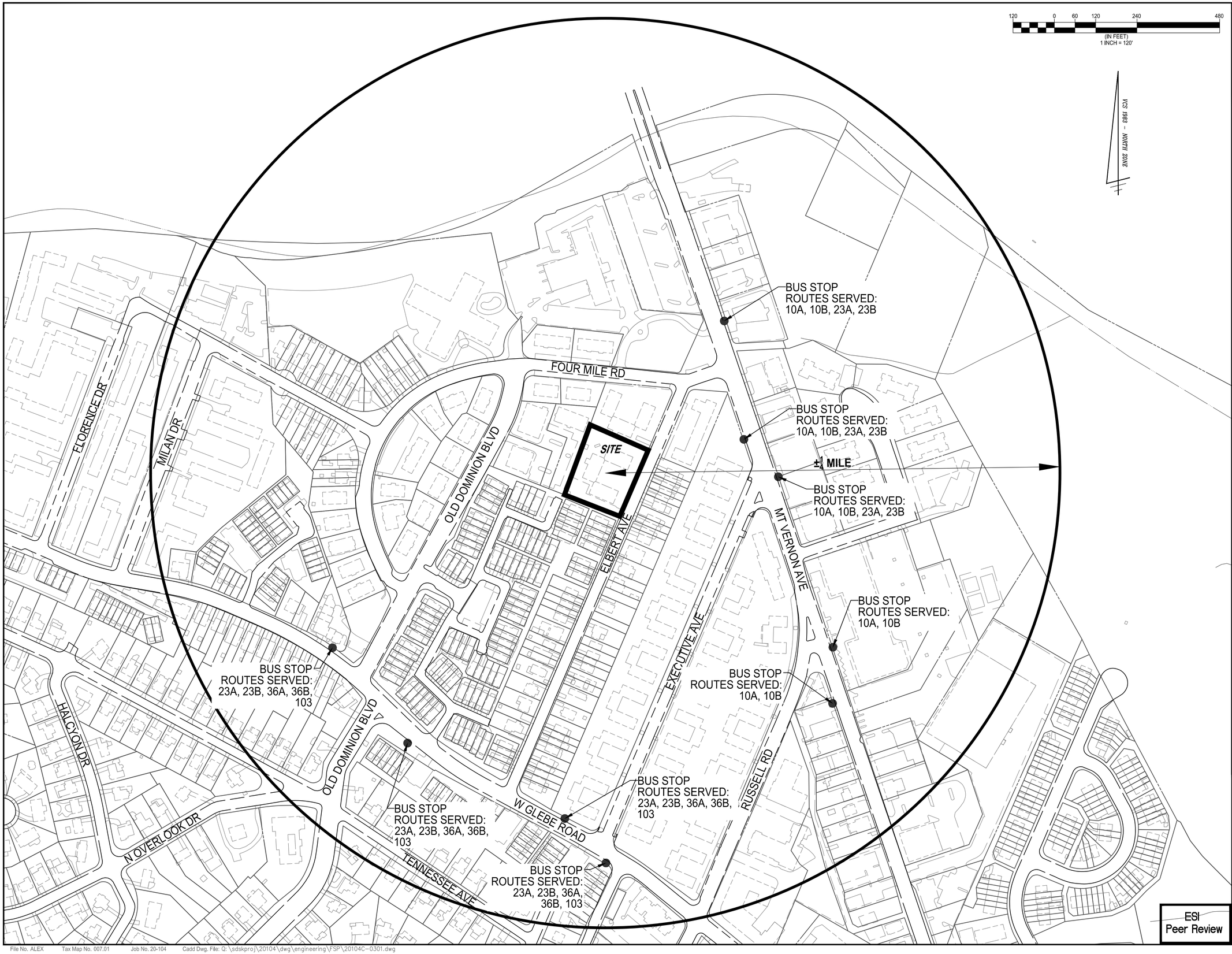
CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C–0201.dwg

SHEET: C-0205



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SCALE: 1" = 120' | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
09/03/25
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

CONTEXTUAL PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-0301.dwg

SHEET: C-0301

LEGEND

AC..... AIR CONDITIONER
APPROX.LOC..... APPROXIMATE LOCATION
BR..... BIKERACK
BRL..... BUILDING RESTRICTION LINE
BSW..... BRICK SIDEWALK
CLF..... CHAINLINK FENCE
CH..... CHIMNEY
CO..... CLEANOUT
COL..... COLUMN
CONC..... CONCRETE
CS..... CONCRETE STOOP
CSW..... CONCRETE SIDEWALK
DB..... DEED BOOK
DE..... DUMPSTER ENCLOSURE
DK..... DECK
EG..... EDGE OF GRAVEL
EM..... ELECTRIC METER
EP..... EDGE OF PAVEMENT
ESMT..... EASEMENT
FC..... HEADER CURB
FF..... FIRST/FINISH FLOOR ELEVATION
GM..... GAS METER
INSTR..... INSTRUMENT NUMBER
INV..... INVERT
IPF..... IRON PIN FOUND (PROPERTY CORNER)
IPS..... IRON PIN SET (PROPERTY CORNER)
LSW..... LANDSCAPING WALL
MB..... MAILBOX
PG..... PAGE
RCP..... REINFORCED CONCRETE PIPE
RET..... RETAINING WALL
SD.(123)..... STORM SEWER STRUCTURE
SMH.(123)..... SANITARY SEWER STRUCTURE
SQ.FT..... SQUARE FEET
TD..... TRACK DRAIN
WDF..... WOODEN FENCE
WIF..... WROUGHT IRON FENCE
WV..... WATER VALVE
..... DOORWAY/ENTRANCE
..... UTILITY POLE
..... LIGHT POLE
T ..... TELECOMMUNICATIONS PEDESTAL
X ..... FENCE
..... GUY WIRE
..... OVERHEAD WIRES
E ..... UNDERGROUND ELECTRIC LINE
S ..... UNDERGROUND SANITARY LINE
SL ..... UNDERGROUND SANITARY LATERAL LINE
..... UNDERGROUND STORM SEWER LINE
T ..... UNDERGROUND TELECOMMUNICATIONS LINE
W ..... UNDERGROUND WATER LINE
..... TREE
..... LIMITS OF TREE CANOPY/VEGETATION
..... CURB AND GUTTER
..... BOLLARD
E ..... ELECTRIC TRANSFORMER
123/4 ..... SPOT ELEVATION
..... SIGN
E ..... ELECTRIC MANHOLE

STORM SEWER AS-BUILT

SD 1103	
YARD INLET TOP =	17.60
COULD NOT FIND LID STRUCTURE I:	
MOSTLY BURIED	
SD 1126	
CURB INLET TOP =	19.71
15"RCP OUT (NORTH	14.13
SD 1431	
MANHOLE TOP =	18.48
CL INV =	7.03
COULD NOT ACCESS STRUCTURE	
SD 1454	
CURB INLET TOP =	9.96
BOTTOM OF STRUCTURE =	5.76
12"RCP OUT (SD 1455	7.16
SD 1455	
CURB INLET TOP =	9.86
BOTTOM OF STRUCTURE =	3.41
12"RCP IN (SD 1466	5.54
12"RCP IN (SD 1454	5.46
12"RCP OUT (SD 1459	4.73

SANITARY SEWER AS-BUILT

SMH 897	
MANHOLE TOP =	20.57
LAT INV IN (WEST)=	12.37
10"INV IN (SOUTH)=	11.97
10"INV OUT (SMH 890)=	11.87
SMH 890	
MANHOLE TOP =	12.98
10"INV IN (SMH 897)=	7.26
10"INV OUT (SMH 878)=	7.22
SMH 878	
MANHOLE TOP =	9.93
10"INV IN (SMH 890)=	5.93
18"INV IN (WEST)=	5.53
18"INV OUT (EAST)=	5.45

PIPE SIZES ARE PER RECORD INFORMATION

NOTES:

1. THE SUBJECT PROPERTY DOES NOT LIE WITHIN THE CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA) AND THERE ARE NO KNOWN MAPPED RPA'S ON THIS PROPERTY.
2. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
3. SEE C-1201 FOR TREE SURVEY.

POSTED SPEED LIMIT

ELBERT AVENUE, ADJACENT TO THE SITE, HAS A UNPOSTED SPEED LIMIT OF 25 MPH.

NOTE

1. EXISTING SITE FEATURES ARE FROM A FIELD RUN SURVEY DATED 01/13/2022.
2. STATIONING SHOWN ON THIS PLAN IS SITE SPECIFIC AND NOT REFERENCED TO ANY OTHER SITE PLAN OR ROAD PLAN.

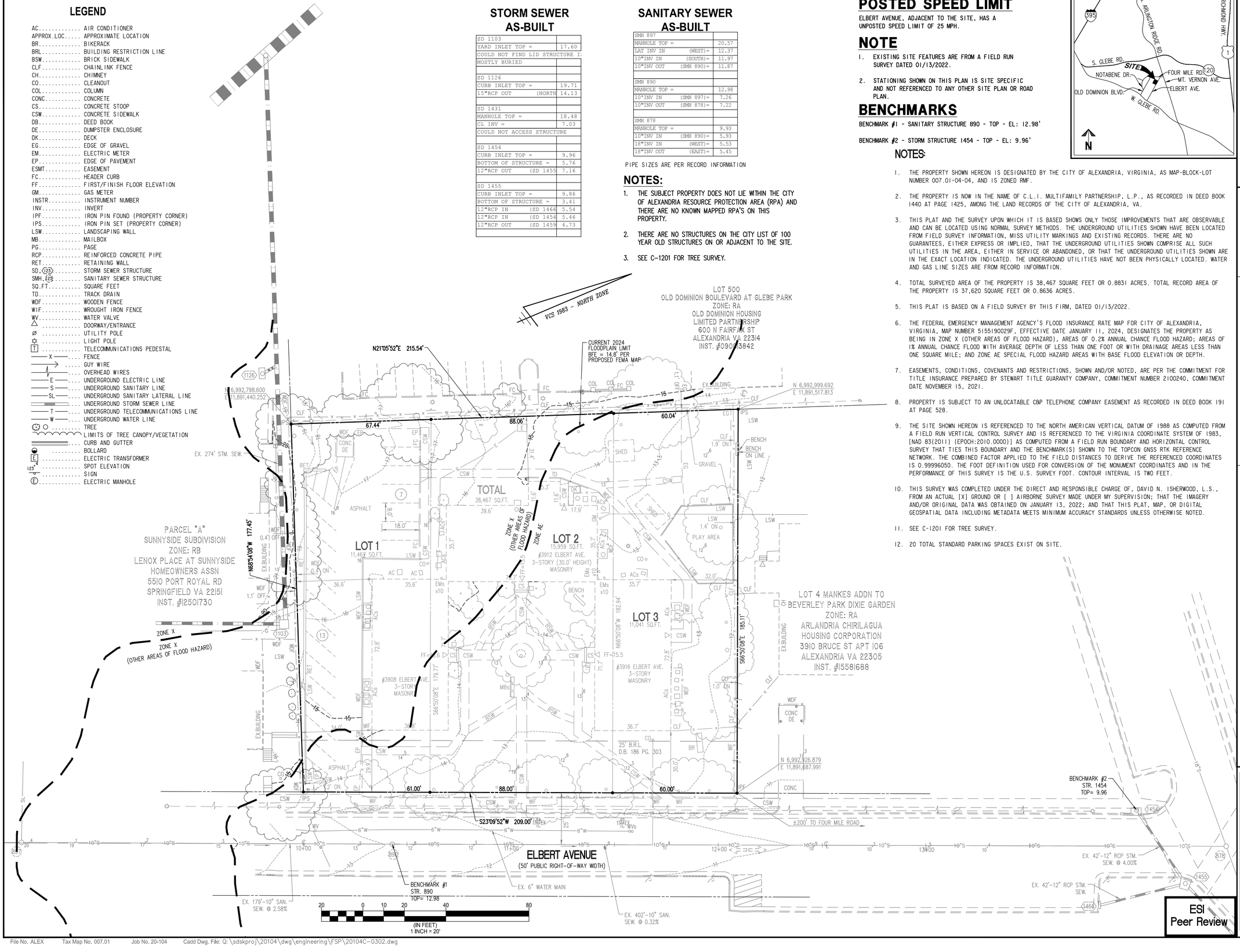
BENCHMARKS

BENCHMARK #1 - SANITARY STRUCTURE 890 - TOP - EL: 12.98'

BENCHMARK #2 - STORM STRUCTURE 1454 - TOP - EL: 9.96'

NOTES:

1. THE PROPERTY SHOWN HEREON IS DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBER 007.01-04-04, AND IS ZONED RMF.
2. THE PROPERTY IS NOW IN THE NAME OF C.L.I. MULTIFAMILY PARTNERSHIP, L.P., AS RECORDED IN DEED BOOK 1440 AT PAGE 1425, AMONG THE LAND RECORDS OF THE CITY OF ALEXANDRIA, VA.
3. THIS PLAT AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION.
4. TOTAL SURVEYED AREA OF THE PROPERTY IS 38,467 SQUARE FEET OR 0.8831 ACRES. TOTAL RECORD AREA OF THE PROPERTY IS 37,620 SQUARE FEET OR 0.8636 ACRES.
5. THIS PLAT IS BASED ON A FIELD SURVEY BY THIS FIRM, DATED 01/13/2022.
6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190029F, EFFECTIVE DATE JANUARY 11, 2024, DESIGNATES THE PROPERTY AS BEING IN ZONE X (OTHER AREAS OF FLOOD HAZARD), AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH OF LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE; AND ZONE AE SPECIAL FLOOD HAZARD AREAS WITH BASE FLOOD ELEVATION OR DEPTH.
7. EASEMENTS, CONDITIONS, COVENANTS AND RESTRICTIONS, SHOWN AND/OR NOTED, ARE PER THE COMMITMENT FOR TITLE INSURANCE PREPARED BY STEWART TITLE GUARANTY COMPANY, COMMITMENT NUMBER 2100240, COMMITMENT DATE NOVEMBER 15, 2021.
8. PROPERTY IS SUBJECT TO AN UNLOCATABLE C&P TELEPHONE COMPANY EASEMENT AS RECORDED IN DEED BOOK 191 AT PAGE 528.
9. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH:2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY AND THE BENCHMARK(S) SHOWN TO THE TOPCON GNSS RTK REFERENCE NETWORK. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99996050. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS TWO FEET.
10. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JANUARY 13, 2022; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
11. SEE C-1201 FOR TREE SURVEY.
12. 20 TOTAL STANDARD PARKING SPACES EXIST ON SITE.



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DRAWN: SCTB | CHECKED: TBW
SCALE: 1" = 20' | DATE: 02/25/2025
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING CONDITIONS PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

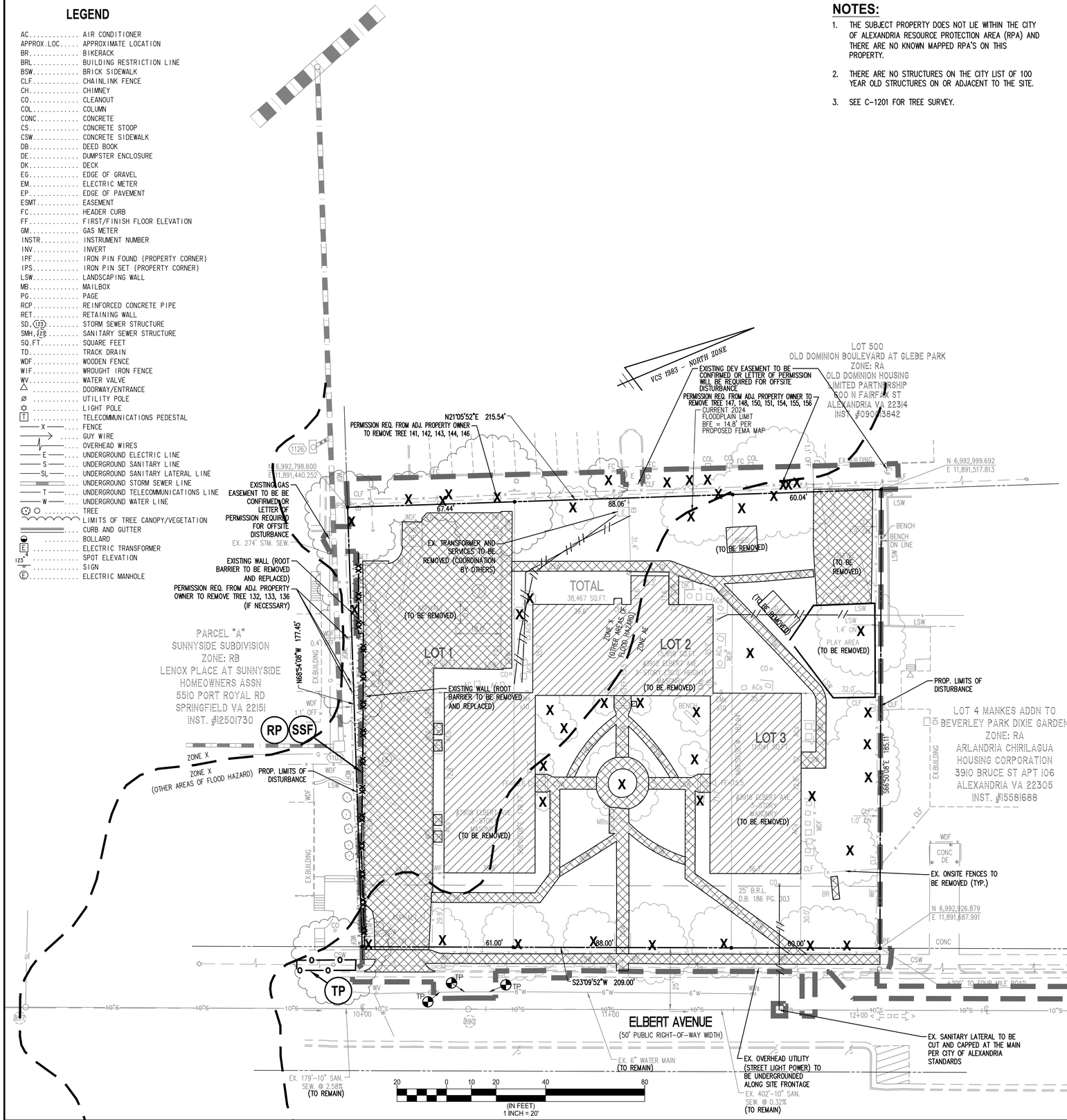
ESI Peer Review

LEGEND

AC..... AIR CONDITIONER
APPROX.LOC..... APPROXIMATE LOCATION
BR..... BIKERACK
BRL..... BUILDING RESTRICTION LINE
BSW..... BRICK SIDEWALK
CLF..... CHAINLINK FENCE
CH..... CHIMNEY
CO..... CLEANOUT
COL..... COLUMN
CONC..... CONCRETE
CS..... CONCRETE STOOP
CSW..... CONCRETE SIDEWALK
DB..... DEED BOOK
DE..... DUMPSTER ENCLOSURE
DK..... DECK
EG..... EDGE OF GRAVEL
EM..... ELECTRIC METER
EP..... EDGE OF PAVEMENT
ESMT..... EASEMENT
FC..... HEADER CURB
FF..... FIRST/FINISH FLOOR ELEVATION
GM..... GAS METER
INSTR..... INSTRUMENT NUMBER
INV..... INVERT
IPF..... IRON PIN FOUND (PROPERTY CORNER)
IPS..... IRON PIN SET (PROPERTY CORNER)
LSW..... LANDSCAPING WALL
MB..... MAILBOX
PG..... PAGE
RCP..... REINFORCED CONCRETE PIPE
RET..... RETAINING WALL
SD..... STORM SEWER STRUCTURE
SMH..... SANITARY SEWER STRUCTURE
SQ.FT..... SQUARE FEET
TD..... TRACK DRAIN
WDF..... WOODEN FENCE
WIF..... WROUGHT IRON FENCE
WV..... WATER VALVE
..... DOORWAY/ENTRANCE
..... UTILITY POLE
..... LIGHT POLE
..... TELECOMMUNICATIONS PEDESTAL
X..... FENCE
..... GUY WIRE
..... OVERHEAD WIRES
E..... UNDERGROUND ELECTRIC LINE
S..... UNDERGROUND SANITARY LINE
SL..... UNDERGROUND SANITARY LATERAL LINE
..... UNDERGROUND STORM SEWER LINE
T..... UNDERGROUND TELECOMMUNICATIONS LINE
W..... UNDERGROUND WATER LINE
..... TREE
..... LIMITS OF TREE CANOPY/VEGETATION
..... CURB AND GUTTER
..... BOLLARD
E..... ELECTRIC TRANSFORMER
..... SPOT ELEVATION
..... SIGN
E..... ELECTRIC MANHOLE

NOTES:

1. THE SUBJECT PROPERTY DOES NOT LIE WITHIN THE CITY OF ALEXANDRIA RESOURCE PROTECTION AREA (RPA) AND THERE ARE NO KNOWN MAPPED RPA'S ON THIS PROPERTY.
2. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
3. SEE C-1201 FOR TREE SURVEY.



DEMOLITION LEGEND

BUILDING TO BE DEMOLISHED
CONCRETE/ASHPALT/GRAVEL TO BE DEMOLISHED
X TREE TO BE REMOVED
//— UTILITY TO BE DEMOLISHED/ABANDONED
— X — LIMITS OF CURB TO BE REMOVED/REPLACED
TEST PITS
ROOT PRUNING (RP)
—XX— SUPER SILT FENCE (INCLUDES TP) (SSF) (TP)
— O — TREE PROTECTION FENCING (TP)

NOTES

1. SEE SHEET C-0201 FOR DEMOLITION NOTES.
2. CONTRACTOR RESPONSIBLE FOR ENSURING EXISTING UTILITIES TO REMAIN AND/OR BE RE-USED ARE PROTECTED THROUGHOUT CONSTRUCTION. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDERS IF SERVICE LINES REQUIRE REMOVAL OR RELOCATION. DISRUPTIONS ARE NOT PERMITTED UNLESS AUTHORIZED BY OWNER.
3. SEE SURVEY NOTES AND SANITARY/STORM STRUCTURE TABLE ON SHEET C-0302.
4. SEE CONSTRUCTION NOTES ON SHEETS C-0201/C-0202.
5. ALL ITEMS WITHIN LIMITS OF DISTURBANCE ARE TO BE DEMOLISHED UNLESS OTHERWISE NOTED.
6. PHASE 1 EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO DEMOLITION (SHEET C-0601).
7. TEST PITS MUST BE PERFORMED AT LEAST 4 WEEKS PRIOR TO CONSTRUCTION.
8. SEE TREE PRESERVATION PLAN SHEET C-1202 FOR ADDITIONAL TREE REMOVAL AND PROTECTION INFORMATION.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY PAVEMENT, CURB AND GUTTER, OR OTHER SITE FEATURES SHOWN AS "TO REMAIN" IF THEY ARE DAMAGED OR DESTROYED DURING CONSTRUCTION.
10. ALL PAVEMENT TO BE REMOVED OR MILLED AS NECESSARY TO ADJUST GRADES AND INSTALL DRIVEWAY APRONS, UNLESS OTHERWISE NOTED ON THIS PLAN.
11. SEE EROSION AND SEDIMENT CONTROL DETAILS ON C-0604.
12. EXISTING WATER SERVICE(S) TO BE LOCATED AND CUT AND CAPPED AT THE MAIN PER VAWC STANDARDS. OWNER OR GENERAL CONTRACTOR TO CONTACT VAWC FOR UTILITY DISCONNECT AND CUT AND CAP.

ARCHAEOLOGY NOTES

1. THE APPLICANT SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS ARE DISCOVERED DURING DEVELOPMENT. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT SHALL NOT ALLOW ANY METAL DETECTION AND/OR ARTIFACT COLLECTION TO BE CONDUCTED THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY. FAILURE TO COMPLY SHALL RESULT IN PROJECT DELAYS.

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
SCALE: AS NOTED | DATE: 02/25/2025
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

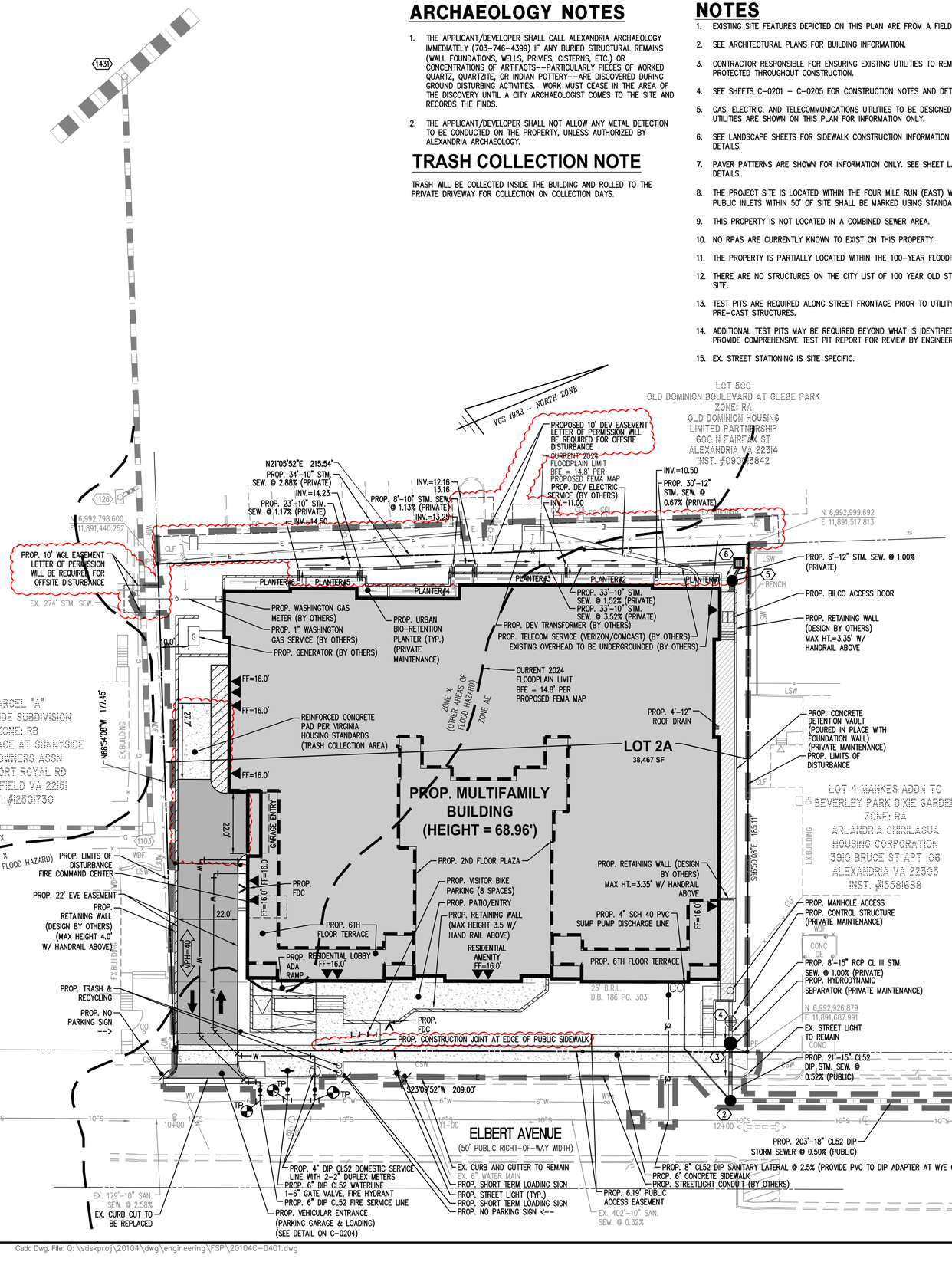
CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DEMOLITION PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-0303.dwg



ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703–746–4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS––PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY––ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

TRASH COLLECTION NOTE

TRASH WILL BE COLLECTED INSIDE THE BUILDING AND ROLLED TO THE PRIVATE DRIVEWAY FOR COLLECTION ON COLLECTION DAYS.

NOTES

1. EXISTING SITE FEATURES DEPICTED ON THIS PLAN ARE FROM A FIELD RUN SURVEY DATED 01/13/2022.
2. SEE ARCHITECTURAL PLANS FOR BUILDING INFORMATION.
3. CONTRACTOR RESPONSIBLE FOR ENSURING EXISTING UTILITIES TO REMAIN AND/OR BE RE–USED ARE PROTECTED THROUGHOUT CONSTRUCTION.
4. SEE SHEETS C–0201 – C–0205 FOR CONSTRUCTION NOTES AND DETAILS.
5. GAS, ELECTRIC, AND TELECOMMUNICATIONS UTILITIES TO BE DESIGNED AND SPECIFIED BY OTHERS. DRY UTILITIES ARE SHOWN ON THIS PLAN FOR INFORMATION ONLY.
6. SEE LANDSCAPE SHEETS FOR SIDEWALK CONSTRUCTION INFORMATION INCLUDING MATERIALS PLAN AND DETAILS.
7. PAVER PATTERNS ARE SHOWN FOR INFORMATION ONLY. SEE SHEET LANDSCAPE PLANS FOR PATTERNS AND DETAILS.
8. THE PROJECT SITE IS LOCATED WITHIN THE FOUR MILE RUN (EAST) WATERSHED. ALL ONSITE INLETS AND PUBLIC INLETS WITHIN 50' OF SITE SHALL BE MARKED USING STANDARD CITY MARKERS.
9. THIS PROPERTY IS NOT LOCATED IN A COMBINED SEWER AREA.
10. NO RPAS ARE CURRENTLY KNOWN TO EXIST ON THIS PROPERTY.
11. THE PROPERTY IS PARTIALLY LOCATED WITHIN THE 100–YEAR FLOODPLAIN.
12. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
13. TEST PITS ARE REQUIRED ALONG STREET FRONTAGE PRIOR TO UTILITY INSTALLATION AND ORDERING PRE–CAST STRUCTURES.
14. ADDITIONAL TEST PITS MAY BE REQUIRED BEYOND WHAT IS IDENTIFIED IN THIS PLAN. CONTRACTOR TO PROVIDE COMPREHENSIVE TEST PIT REPORT FOR REVIEW BY ENGINEER OF RECORD PRIOR TO CONSTRUCTION.
15. EX. STREET STATIONING IS SITE SPECIFIC.

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG–2	
CG–6R CG–6	TRANSITION FROM CG–6 TO CG–6R	CG–6 CG–6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
T	TRANSFORMER	T
	HANDICAP RAMP (CG–12)	
	GUARDRAIL	
	FENCE	
	TRAFFIC FLOW	
	LIGHT	
▼	DOOR	▽
	TREES	
260 264	CONTOURS	260 264
+264 50	SPOT ELEVATION	+264 50
⟹	DRAINAGE FLOW DIRECTION	⟹
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: 1" = 20'
DATE: 02/25/2025
DRAWN: SC/TB
CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
09/03/25
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

LAYOUT PLAN

ESI
Peer Review

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
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.

3908 Elbert Avenue Floodplain Compliance Overview

Alexandria, Virginia
WSSI Project Number: 3Z020.01

Prepared for:
Community Lodgings, Inc.
3912 Elbert Avenue
Alexandria, VA 22305

October 13, 2022

Prepared by:

Michael S. Marsala, P.E., C.F.M.

Wetland Studies and Solutions, Inc.
a DAVEY company
5300 Wellington Branch Drive, Suite 100
Gainesville, Virginia 20155
Tel: 703-679-5600 Email: contactus@wetlands.com
www.wetlandstudies.com

FLOODPLAIN COMPLIANCE

3908 ELBERT AVENUE
ALEXANDRIA, VA

INTRODUCTION

Wetland Studies and Solutions, Inc. (WSSI) provides this floodplain compliance summary regarding the property located at 3908 Elbert Avenue ("Site") located in the City of Alexandria ("City") (refer to Exhibit 1 for a Vicinity Map) to assist Community Lodgings, Inc. ("Client") in understanding floodplain compliance requirements for development in a regulatory floodplain. The Site conceptually involves the renovation of an existing building into a multi-level multi-unit residential building with associated multi-level parking.

SITE DESCRIPTION

The Site generally consists of one parcel with frontage along Elbert Avenue and bordered by surrounding developed parcels. The entire parcel is located partially within the 100-year regulatory floodplain associated with Four Mile Run, which is mapped as a Zone AE Special Flood Hazard Area (SFHA) on the FEMA Preliminary Flood Insurance Rate Maps[1] (FIRMs). The 100-year or base flood elevation (BFE) along Four Mile Run at the Site is listed as elevation 14.8 feet on the FIRM (Exhibit 2). The BFE at this location is dictated by a backwater condition controlled by the Alexandria East Levee. All flood elevation data provided on the effective FIRM and within the FIS are referenced to the North American Vertical Datum of 1988 (NAVD 88).

FLOODPLAIN REGULATIONS

The National Flood Insurance Program (NFIP) is a federal program created by Congress to mitigate future flood loses nationwide through sound, community-enforced building and zoning ordinances and to provide access to affordable, federally backed flood insurance protection for property owners. As a volunteer program, communities must elect to participate in the NFIP in order for the community and its residents to receive the benefits of the program. As a participant in the program, the community must develop and maintain their FIRMs, must adopt and enforce floodplain management ordinances and, ultimately, must ensure that all development, whether located within a regulatory floodplain or not, is reasonably safe from flooding. Minimum floodplain management requirements for participation in the NFIP are set forth in the Code of Federal Regulations at Title 44 CFR, Part 60.3. The City has elected to participate in the NFIP and has adopted more stringent floodplain regulations which are established by Section 6-300 ("Regulations") of their zoning ordinance.

[1] *FEMA Flood Insurance Rate Map, City of Alexandria, Virginia, Independent City, September 30, 2022.*

In accordance with the Regulations, proposed structures that meet the definition of new construction or substantial improvement that are located wholly or partially within the regulatory (100-year) floodplain must comply with the City's floodplain regulations. Substantial improvement is defined as the following:

> *Substantial improvement. Any repair, reconstruction, rehabilitation, addition or other improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure immediately before construction of the improvement is commenced, or any restoration of a building or structure which has incurred substantial damage.*

In addition, the regulations are further based on whether the structure is residential or non-residential, as residential properties carry a greater risk when located within a flood hazard zone. While both residential and non-residential structures are allowed to be constructed within the regulatory floodplain, Section 6-306 of the Regulations state the following:

> *6-306 Special Regulations*
>
> *Within the boundaries of any A or AE Zones in any floodplain district as shown on the Flood Insurance Rate Map, buildings or structures and their extensions and accessory buildings or structures may be constructed or substantially improved only in accordance with the following requirements of this Section 6-300 and all other applicable provisions of law.*
>
> *(A) The elevation of the lowest floor, including the basement, for any new residential building or any extension to a residential building shall be at least one foot above the base flood elevation.*
>
> *(B) The elevation of the lowest floor, including the basement for any new nonresidential building or structure and any extension or accessory to a nonresidential building shall be at least one foot above the base flood elevation. Nonresidential buildings located in all A or AE zones may be floodproofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the base flood elevation plus one foot are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. In no event shall any floor below at least one foot above the base flood elevation be used for human or animal habitation, food storage or food preparation.*

For mixed-use buildings, Section 6-303(U) of the City's Regulations define the term mixed-use as the following:

> *Mixed-use building. Any building or structure that is used or intended for use for a mixture of nonresidential and residential uses in the same building or structure. For floodplain management purposes, a mixed-use building is subject to the same rules and conditions as a residential building unless all of the provisions set forth more specifically herein are met.*

Section 6-306 (K) of the Regulations provides conditions that must be met in order for a mixed use building to be considered as nonresidential by the City, as follows:

> *Any mixed-use building may be considered a nonresidential building for purposes of this Section 6-306 if all of the following conditions are met; otherwise, the building shall be considered a residential building:*
>
> *(1) No more than twenty percent of the development site is within the boundaries of any A or AE Zones in any floodplain district as shown on the Flood Insurance Rate Map;*
> *(2) At least 20,000 square feet of finished floor area of the proposed mixed-use building is devoted to nonresidential use;*
> *(3) Basement areas (including below grade parking) must be located outside the boundaries of any A or AE Zones in any floodplain district; and,*
> *(4) All floodproofing requirements specified in this Section 6-300 and as specified in FEMA Technical Bulletin 3-93 Non-Residential Floodproofing – Requirements and Certification must be met.*

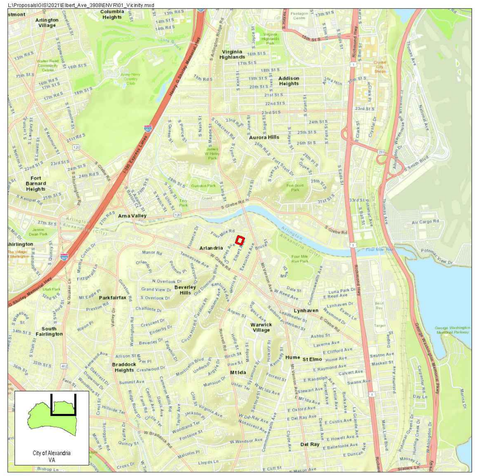
Because the site has more than 20% within the regulatory floodplain, the regulations treat any type of building on this site as residential. The following summarizes regulations that pertain to residential buildings constructed within a regulatory floodplain:

Design Flood Elevation (DFE):
The Design Flood Elevation (DFE) for any site required to comply with floodplain regulations is the 100-year flood elevation as obtained from the Flood Insurance Study (FIS) for the City of Alexandria with a 1-foot vertical buffer. For this site, the BFE is elevation 14.8 feet (NAVD 88) and therefore the DFE is 15.8 feet (NAVD 88).

Lowest Residential Floor Elevation: The elevation of the lowest floor, including basements and below grade parking garages, for any new residential building or any extension to a residential building shall be at or above the DFE. The only exception is for parking, storage or access with at least one side at or above ground elevation to allow flood waters to freely drain from those areas. Such areas must be Wet Floodproofed.

Floodproofing: Dry-Floodproofing is not permitted for residential buildings (such buildings must be elevated, except for parking, storage or access). Wet-Floodproofing must be provided for parking, storage or access located below the DFE for any residential structure and generally involve the following:

- all portions of the building below the DFE shall be constructed entirely of flood resistant materials



Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 1

- parking, storage or access enclosures below the lowest residential floor must be designed to meet specific requirements to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. This generally requires the ground floor portion of the building to be open or, if enclosed, be fitted with sufficient flood vents to allow passage of water through the walls.

Utilities: All new and replacement public utilities, water mains and sanitary sewers shall be designed to minimize or eliminate infiltration and exfiltration and to ensure their structural integrity under flood conditions to the satisfaction of the Director. Water heaters, furnaces, electrical distribution panels and other critical mechanical or electrical installations shall not be installed below the base flood elevation and shall be dropped from above.

Structural Design: All of the building's structural components must be designed to resist flood related forces associated with a flood level up to the DFE. The building's foundation and walls will be designed to resist reasonably expected hydrostatic, buoyancy, hydrodynamic and debris impact forces associated with the flood levels up to the DFE. Any elevators servicing floors below the DFE must be designed in accordance with FEMA Technical Bulletin 4 – Elevator Installation.

SUMMARY

Due to the Site having greater than 20 percent located within the regulatory floodplain, it is anticipated that any substantial improvement associated with the existing building will be considered residential. As such, the lowest floor, except for parking, storage or access, must be elevated to at least the DFE or elevation 15.8 feet (NAVD 88). Any areas associated with parking, storage or access located below elevation 15.8 feet must be wet floodproofed. The building will need to be designed structurally to account for flood related forces associated with flooding up to elevation 15.8 feet and will need to meet requirements for protecting utilities.

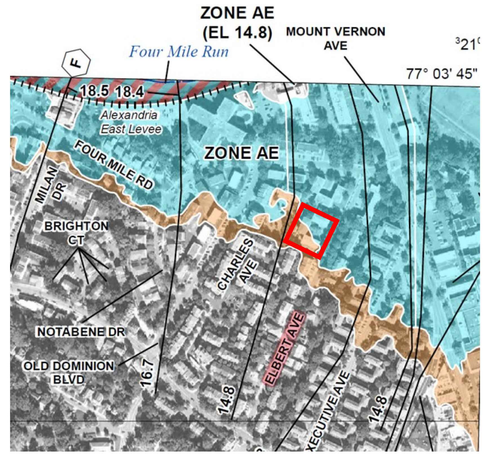
If you have any questions or would like to discuss this in any further detail, please feel free to contact me at 703-679-5656 or via email at mmarsala@wetlands.com.

WETLAND STUDIES AND SOLUTIONS, INC.

Michael S. Marsala, P.E., C.F.M.
Engineering Department Manger – Gainesville Branch

Attachments

L:\32000s\32000\32020.01\Admin\04-ENGR\02-Narratives\2022-10-13_3908 Elbert Ave_Floodplain Compliance.docx



PRELIMINARY FEMA FIRM
3908 Elbert Avenue
Alexandria, Virginia

Panel: 5155190029F

Wetland Studies and Solutions, Inc.
a DAVEY company

Exhibit 2

INFORMATION ON THIS SHEET PROVIDED BY OTHERS

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBHW
SCALE: NONE | DATE: 02/25/2025

PLAN STATUS

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCVL BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

FLOODPLAIN NARRATIVE

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

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

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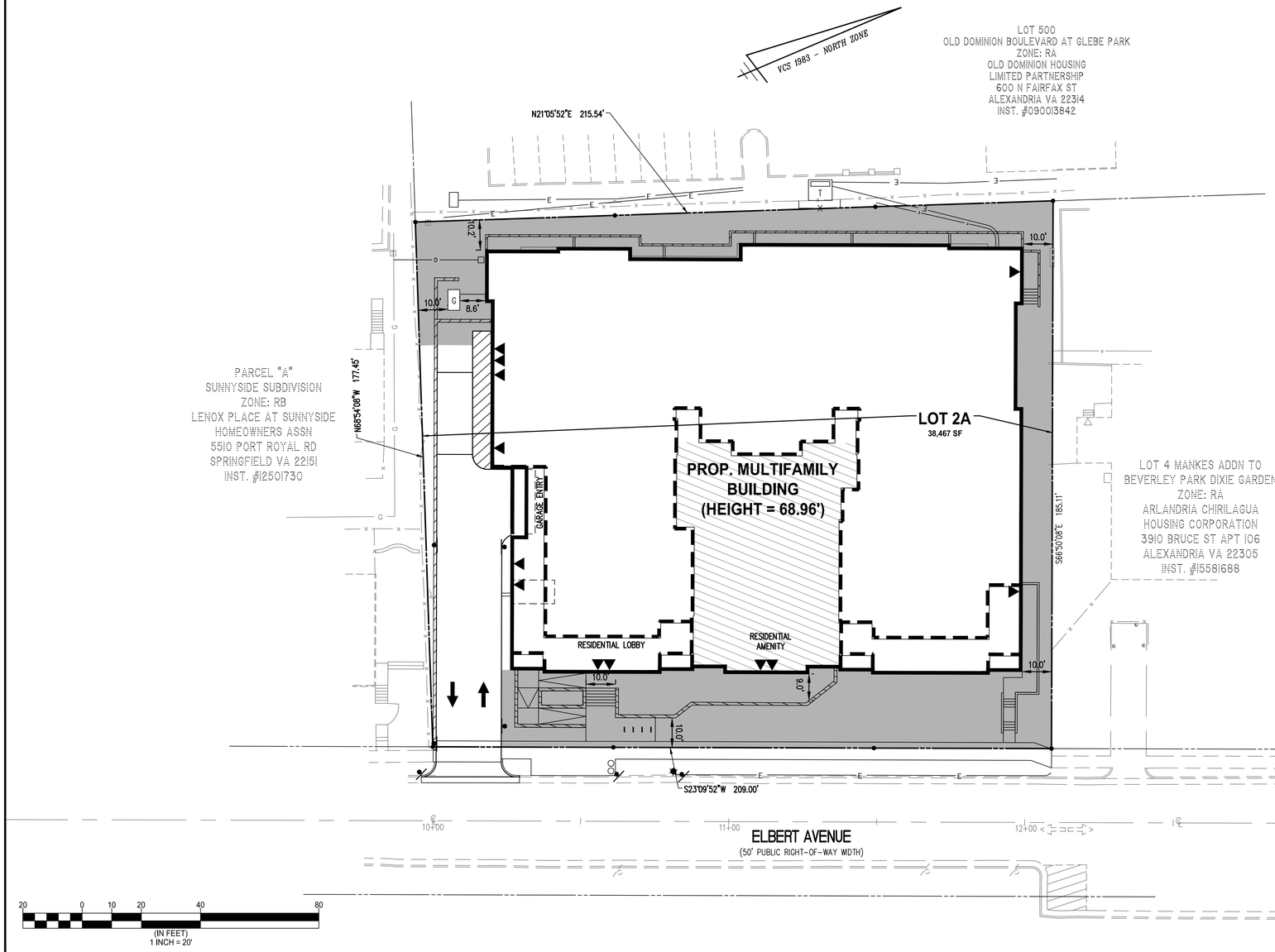
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0401A.dwg

SHEET:**C-0401A**



LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6 CG-6R	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
C.O.	CLEAN OUT	C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

GROUND LEVEL OPEN SPACE
9,300 SF

ABOVE GROUND OPEN SPACE
2,100 SF

TOTAL SITE AREA = 38,467 SF

TOTAL OPEN SPACE PROVIDED 11,400 SF OR 29.6%

NOTE: ALL OPEN SPACE IS PRIVATE.

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Peer Review

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Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: 1" = 20'

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

OPEN SPACE PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0402.dwg

SHEET: C-0402

NOTES

1. THIS PLAN IS BASED ON A FIELD SURVEY PERFORMED BY WALTER L. PHILLIPS, INC, DATED 01/13/2022.
2. THIS PROPERTY IS NOT LOCATED IN A COMBINED SEWER AREA.
3. NO RPAS OR EXISTING SWM FACILITIES ARE CURRENTLY KNOWN TO EXIST ON THIS PROPERTY.
4. THE PROPERTY IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOODPLAIN.
5. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
6. SEE COVER SHEET FOR PROPOSED ZONING AND PARKING TABULATIONS.
7. ALL PROPOSED BMPS ARE TO BE PRIVATELY MAINTAINED BY THE OWNER/HOA.
8. EXISTING LOTS TO BE CONSOLIDATED INTO A SINGLE PARCEL AS PART OF THIS DEVELOPMENT.

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS---PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY---ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

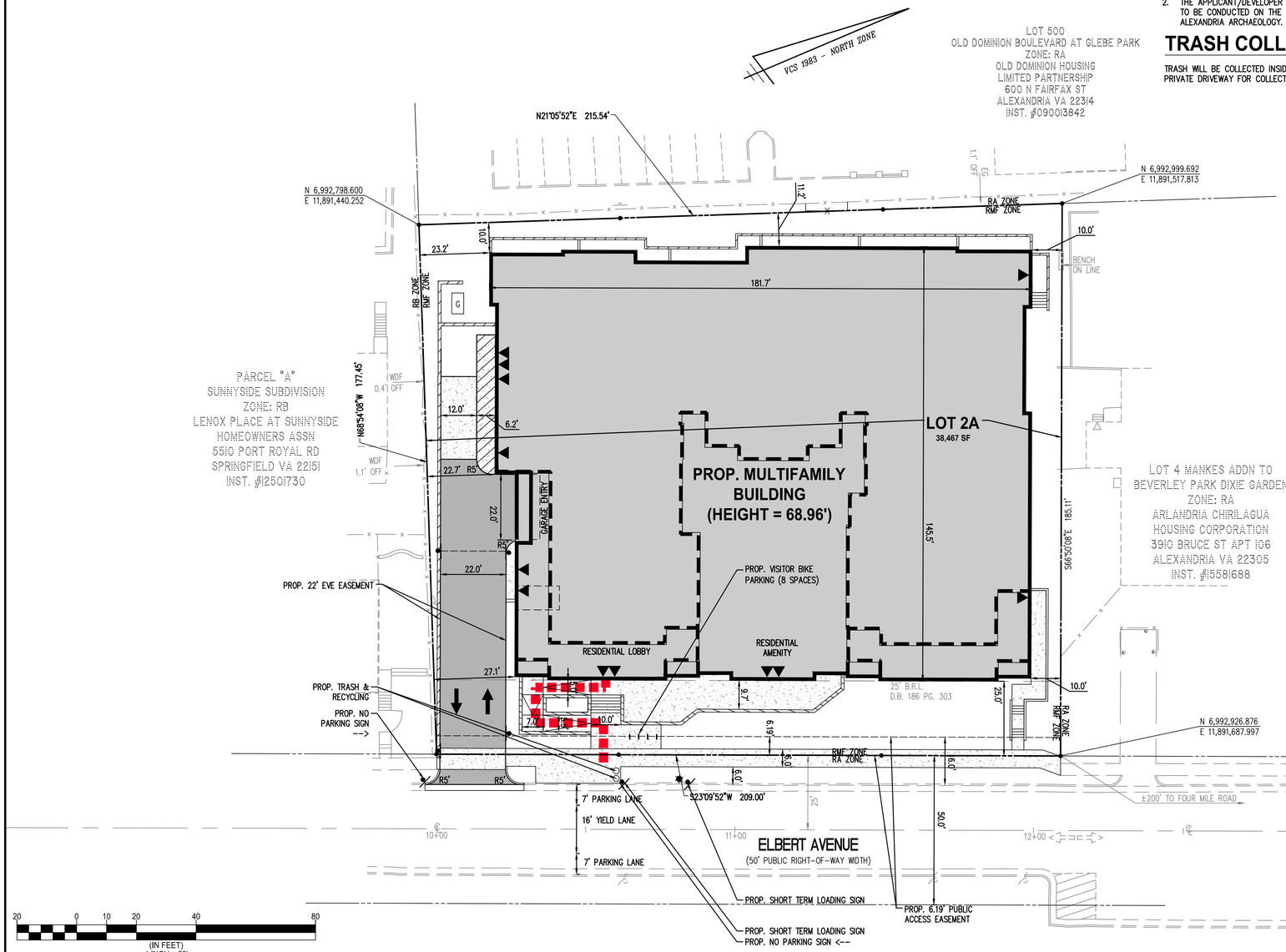
TRASH COLLECTION NOTE

TRASH WILL BE COLLECTED INSIDE THE BUILDING AND ROLLED TO THE PRIVATE DRIVEWAY FOR COLLECTION ON COLLECTION DAYS.

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

ACCESSIBLE ROUTE



ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 09/03/25

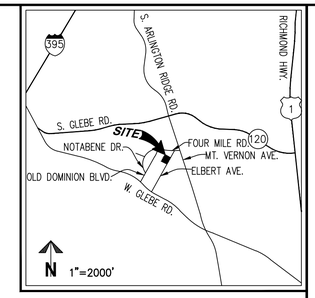
REVISION APPROVED BY

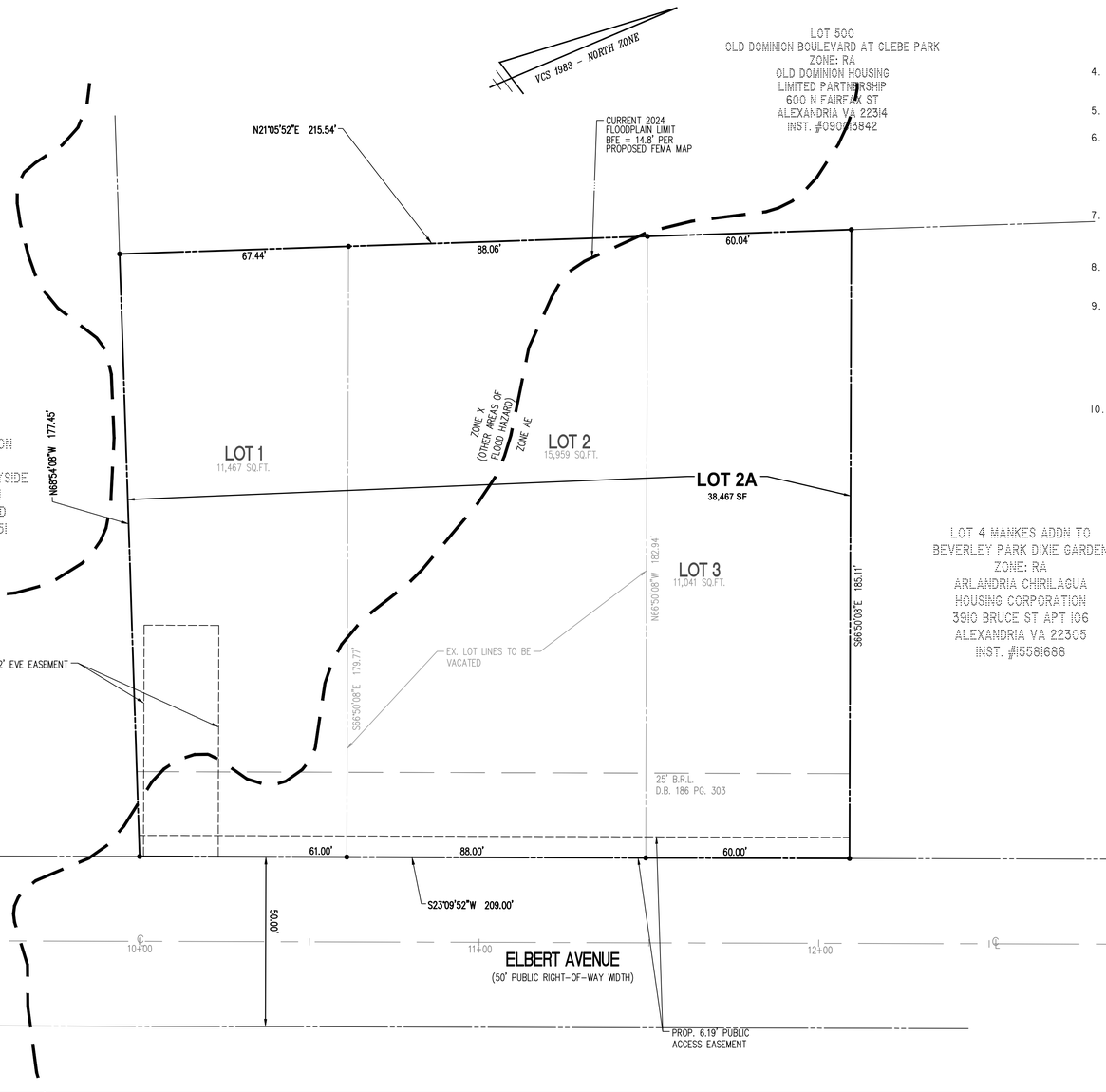
NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GEOMETRIC PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.





NOTES:

1. THE PROPERTY SHOWN HEREON IS DESIGNATED BY THE CITY OF ALEXANDRIA, VIRGINIA, AS MAP-BLOCK-LOT NUMBER 007.01-04-04, AND IS ZONED RMF.
2. THE PROPERTY IS NOW IN THE NAME OF C.L.I. MULTIFAMILY PARTNERSHIP, L.P., AS RECORDED IN DEED BOOK 1440 AT PAGE 1425, AMONG THE LAND RECORDS OF THE CITY OF ALEXANDRIA, VA.
3. THIS PLAT AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION.
4. TOTAL SURVEYED AREA OF THE PROPERTY IS 38,467 SQUARE FEET OR 0.8831 ACRES. TOTAL RECORD AREA OF THE PROPERTY IS 37,620 SQUARE FEET.
5. THIS PLAT IS BASED ON A FIELD SURVEY BY THIS FIRM, DATED 01/13/2022.
6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR CITY OF ALEXANDRIA, VIRGINIA, MAP NUMBER 5155190029F, EFFECTIVE DATE JANUARY 11, 2024, DESIGNATES THE PROPERTY AS BEING IN ZONE X (OTHER AREAS OF FLOOD HAZARD), AREAS OF 0.2% ANNUAL CHANCE FLOOD HAZARD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH OF LESS THAN ONE FOOT OR WITH DRAINAGE AREAS LESS THAN ONE SQUARE MILE; AND ZONE AE SPECIAL FLOOD HAZARD AREAS WITH BASE FLOOD ELEVATION OR DEPTH.
7. EASEMENTS, CONDITIONS, COVENANTS AND RESTRICTIONS, SHOWN AND/OR NOTED, ARE PER THE COMMITMENT FOR TITLE INSURANCE PREPARED BY STEWART TITLE GUARANTY COMPANY, COMMITMENT NUMBER 2100240, COMMITMENT DATE NOVEMBER 15, 2021.
8. PROPERTY IS SUBJECT TO AN UNLOCATABLE C&P TELEPHONE COMPANY EASEMENT AS RECORDED IN DEED BOOK 191 AT PAGE 528.
9. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH:2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS BOUNDARY AND THE BENCHMARK(S) SHOWN TO THE TOPCON GNSS RTK REFERENCE NETWORK. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99996050. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS TWO FEET.
10. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JANUARY 13, 2022; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

EXISTING AREA TABULATIONS:

LOT	OWNER	EXISTING AREAS		EXISTING ZONE
		SQ. FT.	ACRES	
1	CLI MULTIFAMILY PARTNERSHIP LP	11467	0.2632	RA
2	CLI MULTIFAMILY PARTNERSHIP LP	15959	0.3664	RA
3	CLI MULTIFAMILY PARTNERSHIP LP	11041	0.2535	RA
TOTAL		38467	0.8831	

PROPOSED AREA TABULATIONS:

LOT	OWNER	PROPOSED AREAS		PROPOSED ZONE*
2A	CLI MULTIFAMILY PARTNERSHIP LP	38467	0.8831	RMF
TOTAL		38467	0.8831	

*REZONING APPROVED FEBRUARY 25,2023

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

FSL
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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SCALE: 1" = 20' | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING AND PROPOSED EASEMENT PLAN

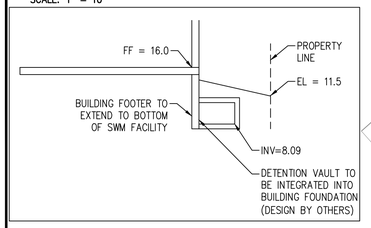
APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0404.dwg

SHEET: C-0404

LOAD PLANE DIAGRAM X-X

SCALE: 1" = 10'



VIRGINIA HOUSING NOTE

AREAS AROUND BUILDINGS ARE TO BE GRADED TO HAVE A MINIMUM 5% SLOPE AWAY FROM FOUNDATION WALLS FOR A MINIMUM DISTANCE OF 10 FEET, PER IBC. INSTALL YARD DRAINS, STORM INLETS, OR DRAINAGE PIPES UNDER CONCRETE WALKS TO DRAIN PROPERLY IF THE SPACE BETWEEN FOUNDATION WALLS AND CONCRETE WALKS IS LESS THAN 10 FEET. DRAINAGE SYSTEMS ARE TO BE DESIGNED TO AVOID WATER FLOWING OVER SIDEWALKS. PROVIDE AN ALTERNATE DRAINAGE SOLUTION ACCEPTABLE TO

VIRGINIA HOUSING:
A. WHEN BUILDINGS ARE CLOSER THAN 10 FEET TO CONCRETE WALKS.
B. WHEN A MINIMUM 5% SLOPE IS NOT FEASIBLE.
C. TO AVOID WATER DRAINING OVER SIDEWALKS.
D. AT ACCESSIBLE ENTRANCES, WHEN APPLICABLE.

GRADE TO AVOID STANDING WATER. PROVIDE A SMOOTHLY GRADED TRANSITION FROM DISTURBED TO UNDISTURBED AREAS. FINISH GRADE WITH CLEAN TOPSOIL. SEED AND STRAW, AND/OR LANDSCAPE ALL BARE AND DISTURBED AREAS. PROVIDE GROUND COVER MATERIALS OR SOD FOR SLOPES STEEPER THAN 20% PROVIDE FOUNDATION PLANTINGS IN THE FRONT OF ALL BUILDINGS. CLEAN SITE AND DISPOSE OF ALL CONSTRUCTION DEBRIS. GRASS MUST BE ESTABLISHED PRIOR TO PROJECT CLOSEOUT.

NOTES

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4. THE PROPERTY IS PARTIALLY LOCATED INSIDE OF THE 100-YEAR FLOODPLAIN.
5. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
6. SEE COVER SHEET FOR PROPOSED ZONING AND PARKING TABULATIONS.
7. ALL PROPOSED BMPS ARE TO BE PRIVATELY MAINTAINED BY THE OWNER/HOA.

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS--PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY--ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
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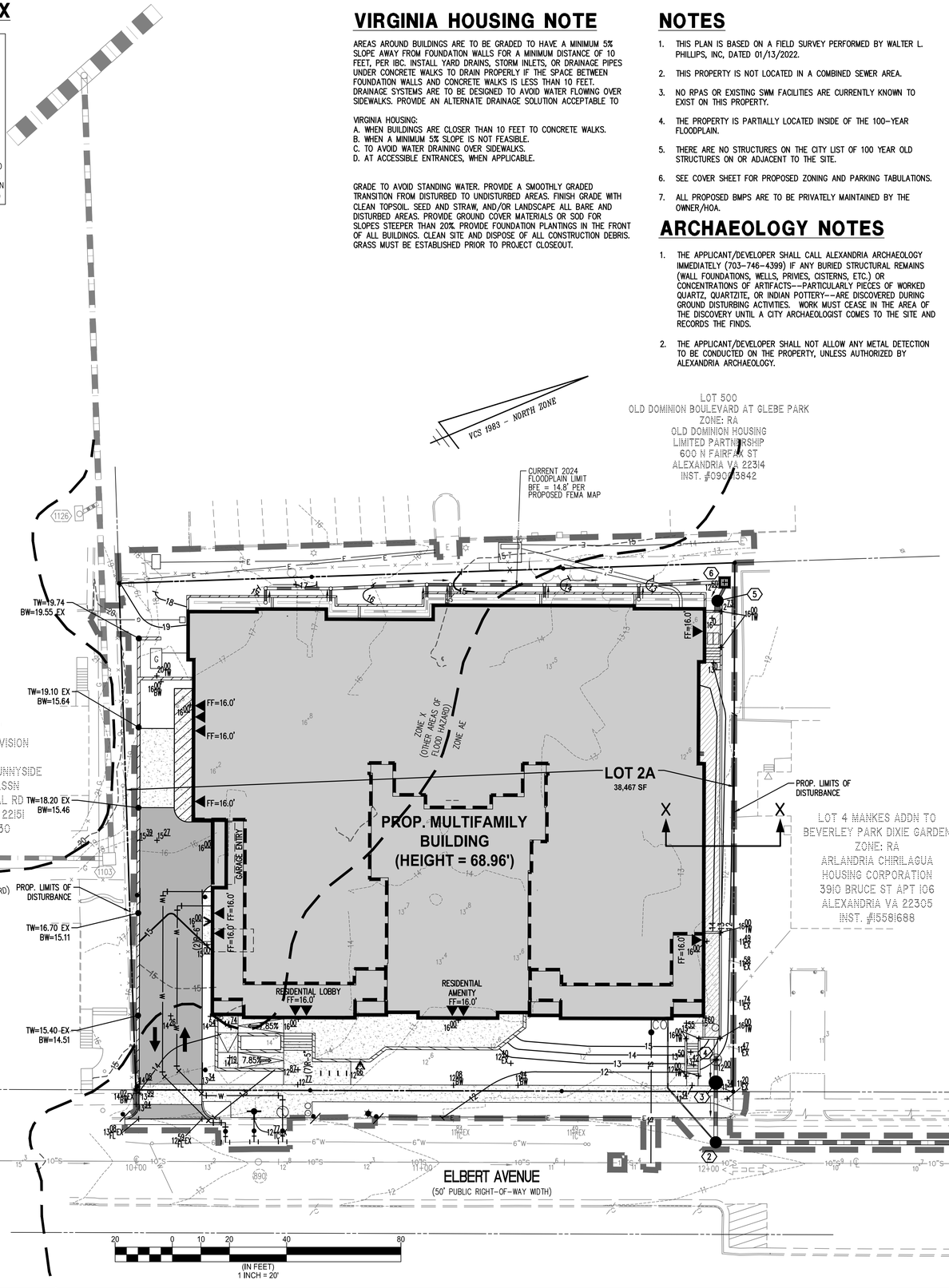
LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	



ESI Peer Review

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GRADING PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

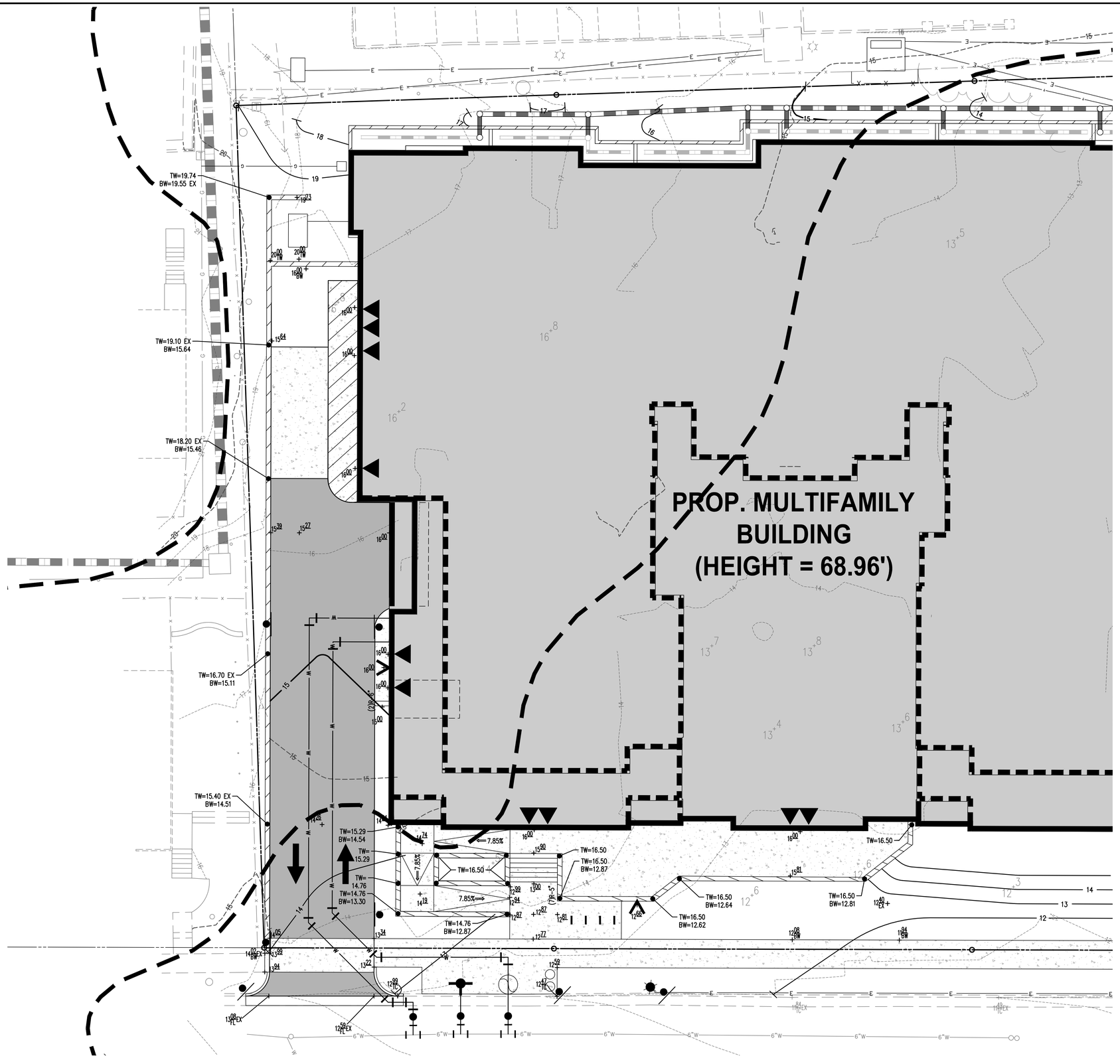
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



LEGEND

PROPOSED	DESCRIPTION	EXISTING
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CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
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W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
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G	GAS MAIN	G
E	ELECTRICAL	E
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	HANDICAP RAMP (CG-12)	
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	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
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HP	HIGH POINT	H.P.
TP	TEST PIT	
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YCS 1983 - NORTH ZONE

10 0 5 10 20 40
(IN FEET)
1 INCH = 10'

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GRADING ENLARGEMENTS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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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VIRGINIA HOUSING NOTE

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NOTES

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3. NO RPAS OR EXISTING SWM FACILITIES ARE CURRENTLY KNOWN TO EXIST ON THIS PROPERTY.
4. THE PROPERTY IS PARTIALLY LOCATED OUTSIDE OF THE 100-YEAR FLOODPLAIN.
5. THERE ARE NO STRUCTURES ON THE CITY LIST OF 100 YEAR OLD STRUCTURES ON OR ADJACENT TO THE SITE.
6. SEE COVER SHEET FOR PROPOSED ZONING AND PARKING TABULATIONS.
7. ALL PROPOSED BMPS ARE TO BE PRIVATELY MAINTAINED BY THE OWNER/HOA.

ARCHAEOLOGY NOTES

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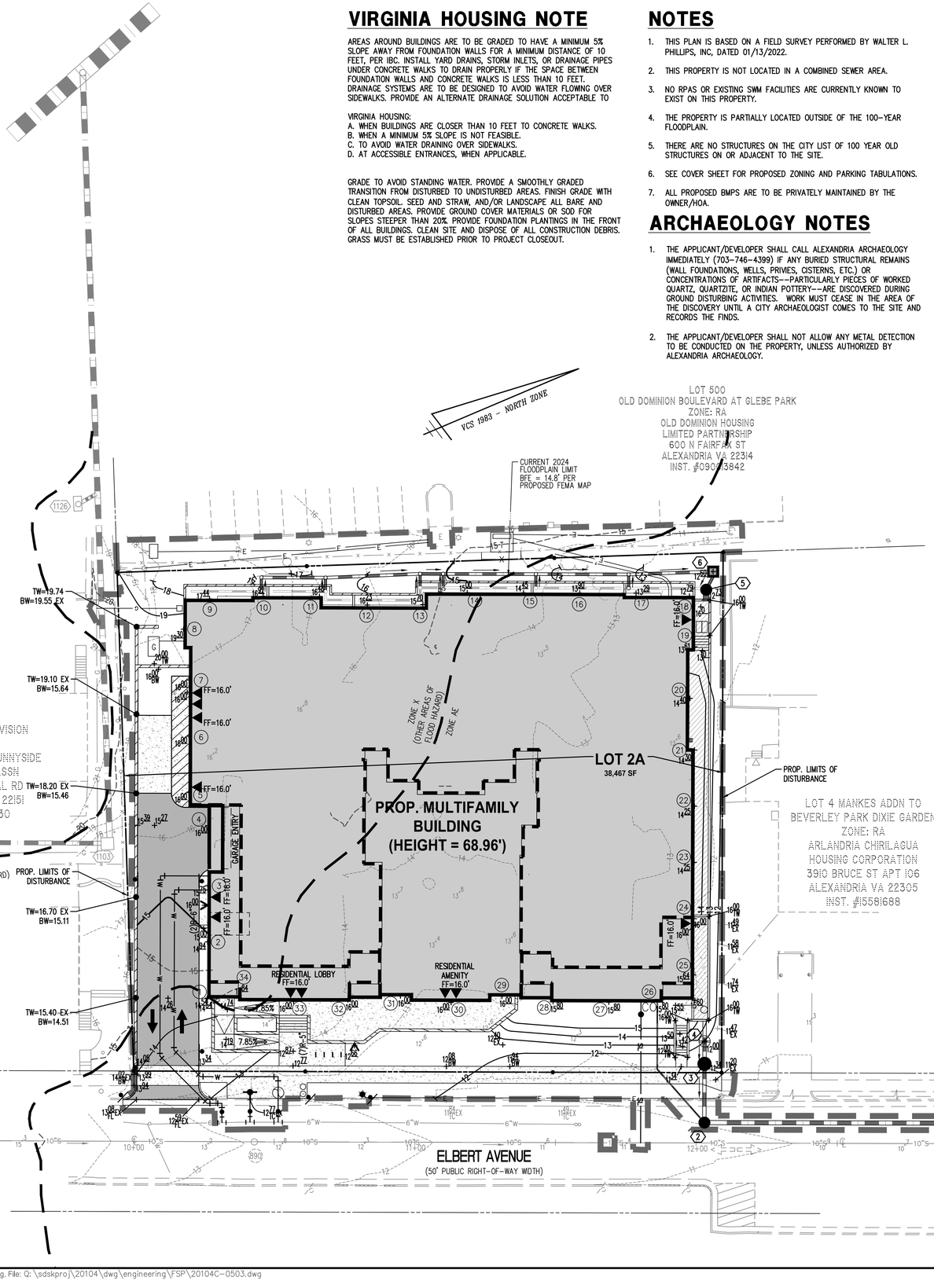
AVERAGE FINISHED GRADE

#	FINISHED GRADE
1	14.54
2	14.94
3	15.75
4	16.00
5	16.00
6	16.00
7	16.00
8	19.30
9	17.44
10	16.92
11	16.48
12	16.23
13	15.70
14	15.00
15	14.45
16	13.90
17	13.29
18	12.79
19	13.61
20	14.40
21	14.30
22	14.25
23	14.25
24	16.00
25	15.64
26	15.80
27	15.80
28	15.80
29	16.00
30	16.00
31	16.00
32	16.00
33	16.00
34	14.84
AVERAGE	15.45

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'



ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: 1" = 20'

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

AVERAGE FINISHED GRADE EXHIBITS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS---PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY---ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

TOTAL DISTURBED AREA = 44,467 SF (1.0208 AC)

THIS SHEET IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY

CONSTRUCTION STAGING

NO MAJOR CONSTRUCTION STAGING SHALL BE ALLOWED WITHIN THE PUBLIC RIGHT-OF-WAY ON ELBERT AVENUE. THE APPLICANT SHALL MEET WITH T&ES TO DISCUSS CONSTRUCTION STAGING ACTIVITIES PRIOR TO RELEASE OF ANY PERMITS FOR GROUND DISTURBING ACTIVITIES.

E&S PHASE I NOTES

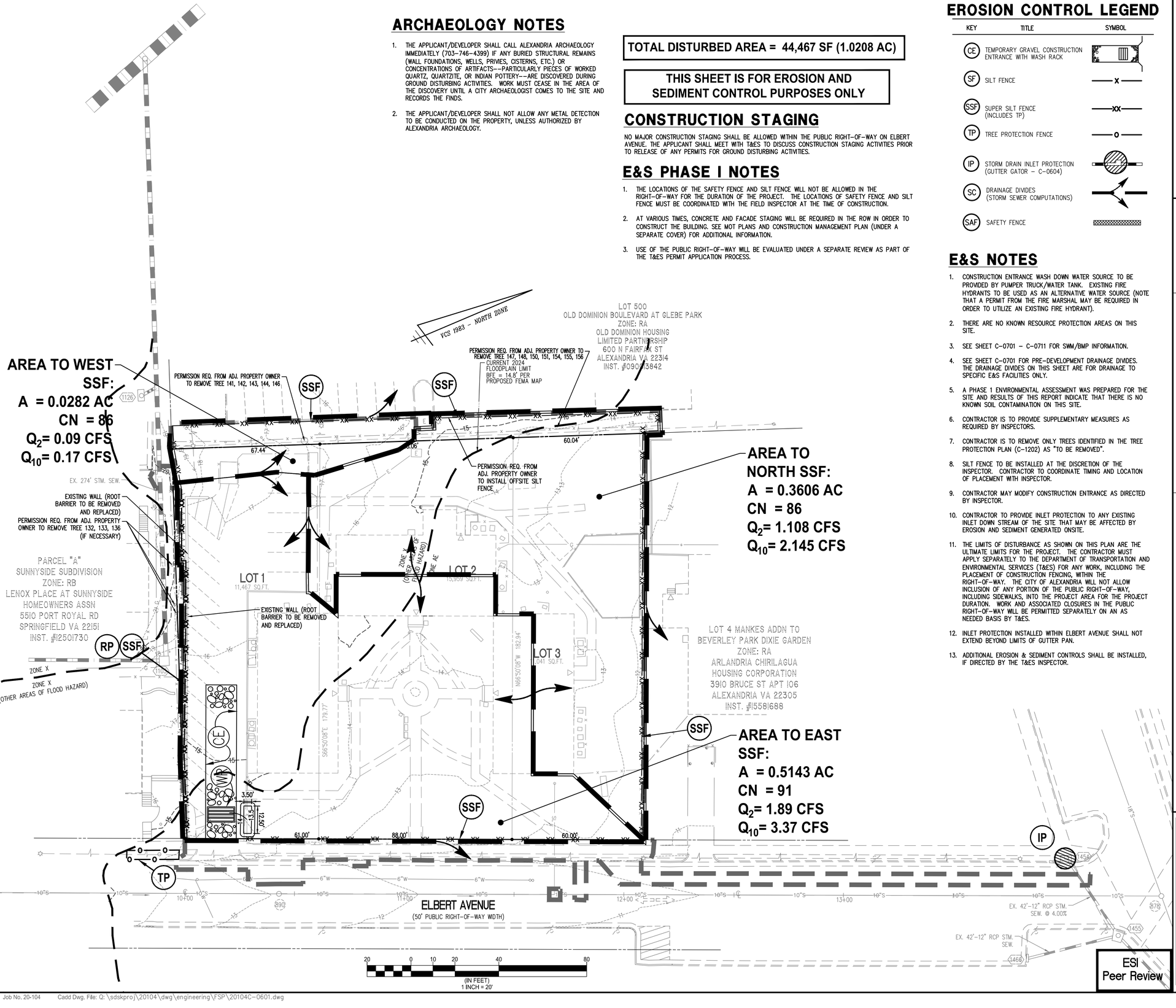
1. THE LOCATIONS OF THE SAFETY FENCE AND SILT FENCE WILL NOT BE ALLOWED IN THE RIGHT-OF-WAY FOR THE DURATION OF THE PROJECT. THE LOCATIONS OF SAFETY FENCE AND SILT FENCE MUST BE COORDINATED WITH THE FIELD INSPECTOR AT THE TIME OF CONSTRUCTION.
2. AT VARIOUS TIMES, CONCRETE AND FACADE STAGING WILL BE REQUIRED IN THE ROW IN ORDER TO CONSTRUCT THE BUILDING. SEE MOT PLANS AND CONSTRUCTION MANAGEMENT PLAN (UNDER A SEPARATE COVER) FOR ADDITIONAL INFORMATION.
3. USE OF THE PUBLIC RIGHT-OF-WAY WILL BE EVALUATED UNDER A SEPARATE REVIEW AS PART OF THE T&ES PERMIT APPLICATION PROCESS.

EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL
CE	TEMPORARY GRAVEL CONSTRUCTION ENTRANCE WITH WASH RACK	
SF	SILT FENCE	
SSF	SUPER SILT FENCE (INCLUDES TP)	
TP	TREE PROTECTION FENCE	
IP	STORM DRAIN INLET PROTECTION (GUTTER GATOR – C-0604)	
SC	DRAINAGE DIVIDES (STORM SEWER COMPUTATIONS)	
SAF	SAFETY FENCE	

E&S NOTES

1. CONSTRUCTION ENTRANCE WASH DOWN WATER SOURCE TO BE PROVIDED BY PUMPER TRUCK/WATER TANK. EXISTING FIRE HYDRANTS TO BE USED AS AN ALTERNATIVE WATER SOURCE (NOTE THAT A PERMIT FROM THE FIRE MARSHAL MAY BE REQUIRED IN ORDER TO UTILIZE AN EXISTING FIRE HYDRANT).
2. THERE ARE NO KNOWN RESOURCE PROTECTION AREAS ON THIS SITE.
3. SEE SHEET C-0701 – C-0711 FOR SWM/BMP INFORMATION.
4. SEE SHEET C-0701 FOR PRE-DEVELOPMENT DRAINAGE DIVIDES. THE DRAINAGE DIVIDES ON THIS SHEET ARE FOR DRAINAGE TO SPECIFIC E&S FACILITIES ONLY.
5. A PHASE 1 ENVIRONMENTAL ASSESSMENT WAS PREPARED FOR THE SITE AND RESULTS OF THIS REPORT INDICATE THAT THERE IS NO KNOWN SOIL CONTAMINATION ON THIS SITE.
6. CONTRACTOR IS TO PROVIDE SUPPLEMENTARY MEASURES AS REQUIRED BY INSPECTORS.
7. CONTRACTOR IS TO REMOVE ONLY TREES IDENTIFIED IN THE TREE PROTECTION PLAN (C-1202) AS "TO BE REMOVED".
8. SILT FENCE TO BE INSTALLED AT THE DISCRETION OF THE INSPECTOR. CONTRACTOR TO COORDINATE TIMING AND LOCATION OF PLACEMENT WITH INSPECTOR.
9. CONTRACTOR MAY MODIFY CONSTRUCTION ENTRANCE AS DIRECTED BY INSPECTOR.
10. CONTRACTOR TO PROVIDE INLET PROTECTION TO ANY EXISTING INLET DOWN STREAM OF THE SITE THAT MAY BE AFFECTED BY EROSION AND SEDIMENT GENERATED ONSITE.
11. THE LIMITS OF DISTURBANCE AS SHOWN ON THIS PLAN ARE THE ULTIMATE LIMITS FOR THE PROJECT. THE CONTRACTOR MUST APPLY SEPARATELY TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES) FOR ANY WORK, INCLUDING THE PLACEMENT OF CONSTRUCTION FENCING, WITHIN THE RIGHT-OF-WAY. THE CITY OF ALEXANDRIA WILL NOT ALLOW INCLUSION OF ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, INCLUDING SIDEWALKS, INTO THE PROJECT AREA FOR THE PROJECT DURATION. WORK AND ASSOCIATED CLOSURES IN THE PUBLIC RIGHT-OF-WAY WILL BE PERMITTED SEPARATELY ON AN AS NEEDED BASIS BY T&ES.
12. INLET PROTECTION INSTALLED WITHIN ELBERT AVENUE SHALL NOT EXTEND BEYOND LIMITS OF GUTTER PAN.
13. ADDITIONAL EROSION & SEDIMENT CONTROLS SHALL BE INSTALLED, IF DIRECTED BY THE T&ES INSPECTOR.



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SCALE: 1" = 20' | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED LANDSCAPE ARCHITECT AARON M. VINSON Lic. No.041851 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - PHASE 1

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0601.dwg

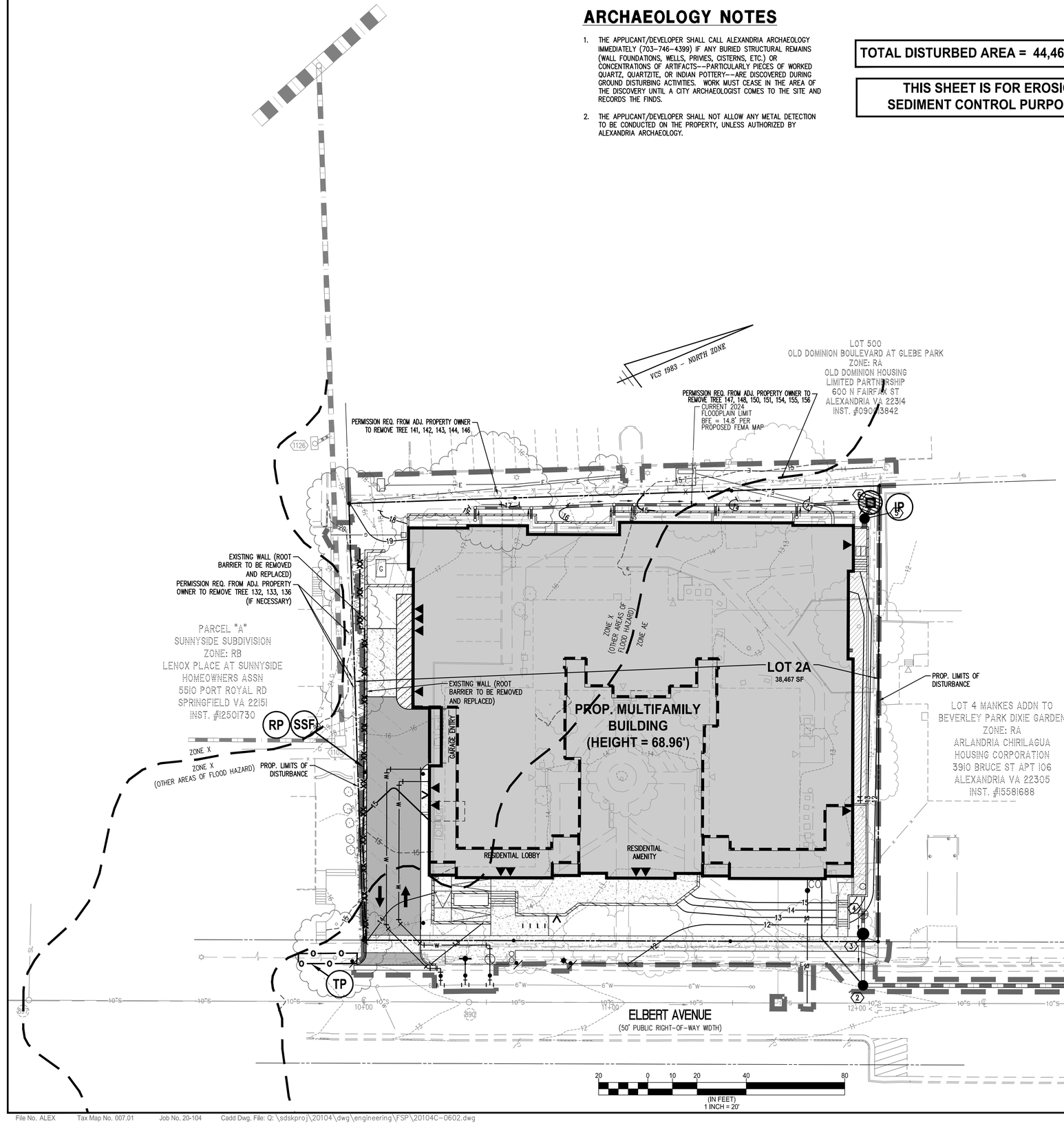
SHEET: C-0601

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS--PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY--ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

TOTAL DISTURBED AREA = 44,467 SF (1.0208 AC)

THIS SHEET IS FOR EROSION AND SEDIMENT CONTROL PURPOSES ONLY



EROSION CONTROL LEGEND

KEY	TITLE	SYMBOL
IP	STORM DRAIN INLET PROTECTION (GUTTER GATOR - C-0604)	
SSF	SUPER SILT FENCE (INCLUDES TP)	-XX-
TP	TREE PROTECTION FENCE	-O-

E&S PHASE II NOTES

1. THE LOCATIONS OF THE SAFETY FENCE AND SILT FENCE WILL NOT BE ALLOWED IN THE RIGHT-OF-WAY FOR THE DURATION OF THE PROJECT. THE LOCATIONS OF SAFETY FENCE AND SILT FENCE MUST BE COORDINATED WITH THE FIELD INSPECTOR AT THE TIME OF CONSTRUCTION.
2. AT VARIOUS TIMES, CONCRETE AND FACADE STAGING WILL BE REQUIRED IN THE ROW IN ORDER TO CONSTRUCT THE BUILDING. SEE MOT PLANS AND CONSTRUCTION MANAGEMENT PLAN (UNDER A SEPARATE COVER) FOR ADDITIONAL INFORMATION.
3. USE OF THE PUBLIC RIGHT-OF-WAY WILL BE EVALUATED UNDER A SEPARATE REVIEW AS PART OF THE T&ES PERMIT APPLICATION PROCESS.
4. SEE SHEET C-0702 FOR POST DEVELOPMENT DRAINAGE DIVIDES.

E&S NOTES

1. CONSTRUCTION ENTRANCE WASH DOWN WATER SOURCE TO BE PROVIDED BY PUMPER TRUCK/WATER TANK. EXISTING FIRE HYDRANTS TO BE USED AS AN ALTERNATIVE WATER SOURCE (NOTE THAT A PERMIT FROM THE FIRE MARSHAL MAY BE REQUIRED IN ORDER TO UTILIZE AN EXISTING FIRE HYDRANT).
2. THERE ARE NO KNOWN RESOURCE PROTECTION AREAS ON THIS SITE.
3. SEE SHEET C-0701 - C-0711 FOR SWM/BMP INFORMATION.
4. SEE SHEET C-0701 FOR PRE-DEVELOPMENT DRAINAGE DIVIDES. THE DRAINAGE DIVIDES ON THIS SHEET ARE FOR DRAINAGE TO SPECIFIC E&S FACILITIES ONLY.
5. A PHASE 1 ENVIRONMENTAL ASSESSMENT WAS PREPARED FOR THE SITE AND RESULTS OF THIS REPORT INDICATE THAT THERE IS NO KNOWN SOIL CONTAMINATION ON THIS SITE.
6. CONTRACTOR IS TO PROVIDE SUPPLEMENTARY MEASURES AS REQUIRED BY INSPECTORS.
7. CONTRACTOR IS TO REMOVE ONLY TREES IDENTIFIED IN THE TREE PROTECTION PLAN (C-1202) AS "TO BE REMOVED".
8. SILT FENCE TO BE INSTALLED AT THE DISCRETION OF THE INSPECTOR. CONTRACTOR TO COORDINATE TIMING AND LOCATION OF PLACEMENT WITH INSPECTOR.
9. CONTRACTOR MAY MODIFY CONSTRUCTION ENTRANCE AS DIRECTED BY INSPECTOR.
10. CONTRACTOR TO PROVIDE INLET PROTECTION TO ANY EXISTING INLET DOWN STREAM OF THE SITE THAT MAY BE AFFECTED BY EROSION AND SEDIMENT GENERATED ONSITE.
11. THE LIMITS OF DISTURBANCE AS SHOWN ON THIS PLAN ARE THE ULTIMATE LIMITS FOR THE PROJECT. THE CONTRACTOR MUST APPLY SEPARATELY TO THE DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES (T&ES) FOR ANY WORK, INCLUDING THE PLACEMENT OF CONSTRUCTION FENCING, WITHIN THE RIGHT-OF-WAY. THE CITY OF ALEXANDRIA WILL NOT ALLOW INCLUSION OF ANY PORTION OF THE PUBLIC RIGHT-OF-WAY, INCLUDING SIDEWALKS, INTO THE PROJECT AREA FOR THE PROJECT DURATION. WORK AND ASSOCIATED CLOSURES IN THE PUBLIC RIGHT-OF-WAY WILL BE PERMITTED SEPARATELY ON AN AS NEEDED BASIS BY T&ES.
12. INLET PROTECTION INSTALLED WITHIN ELBERT AVENUE SHALL NOT EXTEND BEYOND LIMITS OF GUTTER PAN.
13. ADDITIONAL EROSION & SEDIMENT CONTROLS SHALL BE INSTALLED, IF DIRECTED BY THE T&ES INSPECTOR.

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SCALE: 1" = 20' | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1
03/18/2025	FINAL SITE PLAN #1
DATE	DESCRIPTION
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - PHASE 2

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

EROSION - SILTATION CONTROL NARRATIVE

PROJECT DESCRIPTION:
THE PROJECT PROPOSES TO CONSTRUCT ONE (1) MULTIFAMILY RESIDENTIAL BUILDING WITH GROUND FLOOR PARKING GARAGE, AND EXTERIOR LOADING SPACE. ADDITIONALLY, STREETSCAPE AND SUPPORT UTILITIES ARE PROPOSED. THE LIMITS OF DISTURBANCE ARE APPROXIMATELY 44,467 SQUARE FEET OR 1.020B ACRES.

EXISTING SITE CONDITIONS:
THE SITE IS CURRENTLY COMPRISED OF A THREE (3) STORY APARTMENT BUILDING, SURFACE PARKING, AND LANDSCAPE AREAS. THE SITE DRAINS AWAY FROM SOUTHWEST TO NORTHEAST AND STORMWATER FLOWS OVERLAND TO THE ADJACENT PROPERTY OR ELBERT AVENUE WHERE IT ENTERS THE MUNICIPAL STORM SYSTEM INLETS WITHIN THE PUBLIC ROW.

CRITICAL AREAS:
THIS SITE IS LOCATED PARTIALLY WITHIN A 100-YEAR FLOODPLAIN.

ADJACENT PROPERTIES:
NORTH: MULTIFAMILY RESIDENTIAL BUILDING

EAST: ELBERT AVENUE & TOWNHOMES

SOUTH: TOWNHOMES

WEST: MULTIFAMILY RESIDENTIAL BUILDING

OFFSITE AREAS:
UTILITY SERVICE INSTALLATION.

EROSION AND SEDIMENT CONTROL MEASURES:

1. SEDIMENT AND EROSION CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO GRADING.
2. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL ALL GROUND DISTURBING ACTIVITY CEASES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS IS COMPLETE.
3. ALL STANDARDS AND SPECIFICATIONS REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
4. TOPSOIL SHALL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE. THE CONTRACTOR TO PROVIDE APPROPRIATE EROSION CONTROL MEASURES FOR ANY STOCKPILED AREA.
5. ALL AREAS DISTURBED BY CONSTRUCTION THAT ARE NOT TO BE CONSTRUCTED UPON SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISH GRADING BY SEEDING AND MULCHING PER STD. AND SPEC. NO. 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
6. BARE SOIL SURFACES NOT AT FINISH GRADE, WHICH WILL BE EXPOSED MORE THAN 7 DAYS, SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCHING PER STD. AND SPEC. NO.3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

EROSION CONTROL PROGRAM:
SOIL DISTURBANCE (DENUDED AREA) FROM THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS IS ANTICIPATED TO BE MINOR. WE HEREBY REQUEST THAT EROSION CONTROL MEASURES FOR THIS PROJECT BE ACCOMPLISHED IN ONE PHASE.
INSTALLATION OF THE PERIMETER CONTROLS SHOWN ON SHEET C-0601 IS TO OCCUR PRIOR TO ANY LAND DISTURBING ACTIVITIES AND SHALL REMAIN IN PLACE UNTIL FINAL SITE STABILIZATION AND GRADING IS ACHIEVED.

TEMPORARY SEEDING AND MULCHING ARE TO BE APPLIED TO ANY DISTURBED AREA NOT WORKED FOR 7 DAYS.

RESPONSIBLE LAND DISTURBER WILL BE DESIGNATED PRIOR TO THE ISSUANCE OF A GRADING PERMIT.

1. PRIOR TO INSTALLATION OF THE E&S CONTROL MEASURES, CONTRACTOR IS TO COORDINATE WITH THE CITY INSPECTORS AND BUILDING MANAGEMENT TO MANAGE CONSTRUCTION IN ORDER TO NOT DISRUPT MALL VEHICULAR AND PEDESTRIAN TRAFFIC. MAKE NECESSARY ADJUSTMENTS TO THE E&S CONTROL PLAN AS COORDINATED.
2. E&S CONTROL DEVICES SUCH AS TREE PROTECTION, SILT FENCE AND INLET PROTECTIONS AROUND THE SITE AREA, AS SHOWN ON SHEET C-0601 ARE TO BE INSTALLED PRIOR TO ANY LAND DISTURBANCE ACTIVITIES.
3. ALL E&S CONTROLS ARE TO REMAIN IN PLACE FOR THE DURATION OF LAND DISTURBING ACTIVITIES. SUPPLEMENTAL CONTROLS ARE TO BE PROVIDED AS COORDINATED WITH THE CITY INSPECTORS. E&S CONTROLS SHALL BE REMOVED, FOLLOWING FINE GRADING, TO FACILITATE LANDSCAPING.

EROSION AND SEDIMENT CONTROL PRACTICES:

1. TEMPORARY CONSTRUCTION ENTRANCE – VESCH SPECIFICATION 3.02.
2. SILT FENCE AND SUPER SILT FENCE– VESCH SPECIFICATION 3.05.
3. STORM DRAIN INLET PROTECTION – VESCH SPECIFICATION 3.07 (USE GUTTER GATOR OR SIMILAR).
4. TREE PROTECTION – VESCH SPECIFICATION 3.38 AND CITY OF ALEXANDRIA TREE PROTECTION STANDARDS.
5. ALL TEMPORARY SEEDING SHALL CONFORM TO VESCH. SPECIFICATION 3.31.
6. ALL PERMANENT SEEDING SHALL CONFORM TO VESCH. SPECIFICATION 3.32.
7. ALL SODDING SHALL CONFORM TO VESCH. SPECIFICATION SPECIFICATION. 3.33.

MAINTENANCE PROGRAM:
THE SITE SUPERINTENDENT, OR REPRESENTATIVE, SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREAS (I.E. SEEDED AND MULCHED AREAS) ON A DAILY BASIS. ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO INSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING IF NECESSARY.

MAINTENANCE NOTES

1. PERIMETER CONTROLS SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS OR REPLACEMENTS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS WILL BE REMOVED AFTER EACH RAINFALL AND AT ANY TIME THE DEPOSITS REACH APPROXIMATELY ½ THE HEIGHT OF THE BARRIER.
2. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN PLACE UNTIL GROUND DISTURBING CONSTRUCTION AND PERMANENT STABILIZATION IS COMPLETE AND SHALL BE REMOVED BY PERMISSION OF THE CITY INSPECTOR.
3. EROSION AND SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED IN PLACE UNTIL GROUND DISTURBING CONSTRUCTION AND PERMANENT STABILIZATION IS COMPLETE AND SHALL BE REMOVED BY PERMISSION OF THE CITY OF ALEXANDRIA INSPECTOR.

SEQUENCE OF CONSTRUCTION FOR INSTALLATION OF EROSION AND SEDIMENT CONTROL DEVICES

EROSION AND SEDIMENT CONTROL – PHASE I

1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS; AND STABILIZE CONSTRUCTION ENTRANCE AS SHOWN ON C-0601.
2. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED/VERIFIED IN FIELD BY THE CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
3. INSTALL INLET PROTECTION AT EXISTING STORM DRAIN INLETS AS NECESSARY AND AS SHOWN ON C-0601.
4. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES AS NECESSARY AND AS DIRECTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR.
5. CONDUCT DEMOLITION AND CONSTRUCTION ACTIVITIES ACCORDING TO THE APPLICABLE PLANS.
6. AS CONTRIBUTORY DRAINAGE AREAS ARE STABILIZED AND WITH THE PERMISSION OF THE EROSION AND SEDIMENT CONTROL INSPECTOR, REMOVE INDIVIDUAL EROSION AND SEDIMENT CONTROL PRACTICES.
7. UPON COMPLETION OF DEMOLITION, CONSTRUCTION AND LAND DISTURBING ACTIVITIES; PROVIDE PERMANENT STABILIZATION ACCORDING TO APPROVED METHODS AND REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES NOT BEING UTILIZED IN PHASE II WITH THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.

EROSION AND SEDIMENT CONTROL – PHASE II

1. INSTALL PERIMETER EROSION AND SEDIMENT CONTROLS; AS SHOWN ON C-0602.
2. ALL VEGETATION PRESERVATION AND PROTECTION METHODS SHALL BE APPROVED/VERIFIED IN FIELD BY THE CITY ARBORIST PRIOR TO COMMENCEMENT OF ANY GROUND DISTURBING ACTIVITY.
3. INSTALL INLET PROTECTION AT EXISTING AND PROPOSED STORM DRAIN INLETS AS NECESSARY AND AS SHOWN ON C-0602.
4. INSTALL ADDITIONAL EROSION AND SEDIMENT CONTROL PRACTICES AS NECESSARY AND AS DIRECTED BY THE EROSION AND SEDIMENT CONTROL INSPECTOR.
5. AS CONTRIBUTORY DRAINAGE AREAS ARE STABILIZED AND WITH THE PERMISSION OF THE EROSION AND SEDIMENT CONTROL INSPECTOR, REMOVE INDIVIDUAL EROSION AND SEDIMENT CONTROL PRACTICES.
6. UPON COMPLETION OF CONSTRUCTION ACTIVITIES; PROVIDE PERMANENT STABILIZATION ACCORDING TO APPROVED METHODS AND REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROL MEASURES WITH THE APPROVAL OF THE EROSION AND SEDIMENT CONTROL INSPECTOR.

SOILS DESCRIPTION
THE NATURAL SOILS AT THE SITE CONSIST OF URBAN LAND & URBAN LAND – KINGSTOWNE COMPLEX ACCORDING TO USDA WEB SOIL SURVEY SOIL MAP.

STOCKPILE PROCEDURES

1. STOCKPILES ARE TO BE WRAPPED IN SILT FENCE AT THE LOCATION SHOWN ON SHEET C-0601 OR IN A LOCATION COORDINATED WITH THE SITE INSPECTOR.
2. TEMPORARY SOIL STABILIZATION (SUCH AS PLASTIC COVERS, ETC.) SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED STOCKPILES THAT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS.
3. THE STOCK PILE AREA(S) SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS OR REPLACEMENTS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS WILL BE REMOVED AFTER EACH RAINFALL AND AT ANY TIME THE DEPOSITS REACH APPROXIMATELY 1/2 THE HEIGHT OF THE BARRIER.

TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

SEED		
APPLICATION DATES	**SPECIES**	**APPLICATION RATES**
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

FERTILIZER & LIME

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.32-D
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA

SEED[1]		
LAND USE	**SPECIES**	**APPLICATION PER ACRE**
Minimum Care Lawn (Commercial or Residential)	Tall Fescue[1] Perennial Ryegrass Kentucky Bluegrass[1]	95-100% 0-5% 0-5% TOTAL: 175-200 lbs.
High-Maintenance Lawn	Tall Fescue[1]	TOTAL: 200-250 lbs.
General Slope (3:1 or less)	Tall Fescue[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2]	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2] Crownvetch[3]	108 lbs. 2 lbs 20 lbs 20 lbs. TOTAL: 150 lbs.

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html

2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

February 16th - April	Annual Rye
May 1st - August 15th	Foxtail Millet
August 16th - October	Annual Rye
November - February 15th	Winter Rye

3 - Substitute Sericea lespedeza for Crownvetch east of Farmville, VA (May through September use hulled seed, all other periods, use unhulled Sericea). If Flatpea is used, increase rate to 30 lbs./acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40

FERTILIZER & LIME

- Apply 10-20-10 **fertilizer** at a rate of **500** lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

GENERAL EROSION AND SEDIMENT CONTROL NOTES

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

GENERAL LAND CONSERVATION NOTES

1. NO DISTURBED AREA WILL BE DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS AGENT.
2. ALL EROSION AND SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
3. ALL STORM AND SANITARY LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE, AND GAS SUPPLY TRENCHES AREA TO BE COMPACTED, SEEDED, AND MULCHED WITHIN 5 DAYS AFTER BACKFILL.
5. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICES, MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
6. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, IS TO BE MULCHED WITH HAY OR STRAW MULCH AT THE RATE OF TWO TONS PER ACRE AND OVERSEEDED NO LATER THAN MARCH 15TH.
7. AT THE COMPLETION OF CONSTRUCTION PROJECTS, AND PRIOR TO THE RELEASE OF THE BOND, ALL TEMPORARY SILTATION AND EROSION CONTROLS SHALL BE REMOVED AND DISTURBED AREAS SHALL BE STABILIZED.
8. IF THE MAXIMUM PERIOD FOR DENUDATION IS EXCEEDED AND ANY AREAS REMAIN EXPOSED WITHOUT COVER OR SURFACE, THE CITY MAY (IN THE EVENT THE DEVELOPER DOES NOT) INSTALL SUCH GROUND COVER OR OTHER STABILIZING DEVICES AND/OR MATERIAL TO THE MINIMUM EXTENT NECESSARY TO ACHIEVE EROSION AND SEDIMENT CONTROL EQUAL TO THAT WHICH WOULD HAVE BEEN FURNISHED BY THE PERMANENT COVER SHOWN ON THE APPROVED PLANS. THE COST OF ANY SUCH TEMPORARY MEASURES TAKEN BY THE CITY SHALL BE BORNE BY THE DEVELOPER AND SHALL BE A CHARGE AGAINST THE CONSERVATION DEPOSIT.
9. TEMPORARY DIVERSIONS, SEEDED, AND MULCHED OR SILT FENCE AND OTHER CONTROL MEASURES AS NECESSARY ARE TO BE PLACED AS INDICATED ON THE DRAWINGS PRIOR TO OR AS THE FIRST STEP IN EXCAVATION.
10. WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL IS TO BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL IS TO BE PLACED IN STREAMBEDS. NO STOCKPILE IS PERMITTED. WHERE SOIL IS PLACED ON DOWNHILL SIDE OF TRENCHES, IT IS TO BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCHES, THE PUMP DISCHARGE HOSES MUST OUTLET IN A STABILIZED AREA TO AN EXISTING STORM INLET.
11. ANY SOIL REMOVED FROM THE SITE SHALL BE PLACED IN A PERMITTED SITE, ANY SOIL THAT IS BROUGHT ONTO THE SITE WILL BE OBTAINED FROM A PERMITTED SITE.

CONTAMINATED SOILS

THE CITY OF ALEXANDRIA DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES, OFFICE OF ENVIRONMENTAL QUALITY MUST BE NOTIFIED IF UNUSUAL OR UNANTICIPATED CONTAMINATION OR UNDERGROUND STORAGE TANKS, DRUMS AND CONTAINERS ARE ENCOUNTERED AT THE SITE. IF THERE IS ANY DOUBT ABOUT PUBLIC SAFETY OR A RELEASE TO THE ENVIRONMENT, THE ALEXANDRIA FIRE DEPARTMENT MUST BE CONTACTED IMMEDIATELY BY CALLING 911. THE TANK OR CONTAINER'S REMOVAL, ITS CONTENTS, ANY SOIL CONTAMINATION AND RELEASE TO THE ENVIRONMENT WILL BE HANDLED IN ACCORDANCE WITH FEDERAL, STATE, AND CITY REGULATIONS.

RESPONSIBLE LAND DISTURBER

A "CERTIFIED LAND DISTURBER" (CLD) SHALL BE NAMED IN A LETTER TO THE DIVISION CHIEF OF C&I PRIOR TO ANY LAND DISTURBING ACTIVITIES. IF THE CLD CHANGES DURING THE PROJECT, THAT CHANG MUST BE NOTED IN A LETTER TO THE DIVISION CHIEF AND THE SITE INSPECTOR.

VSMP/POTW PERMIT NOTES

1. A VSMP PERMIT FROM THE CITY OF ALEXANDRIA IS REQUIRED FOR THIS DEVELOPMENT, BUT STATE REGISTRATION IS NOT. CONTRACTOR RESPONSIBLE FOR ENSURING PERMIT IS OBTAINED AND CURRENT THROUGHOUT THE DURATION OF THE PROJECT.
2. CONTRACTOR RESPONSIBLE FOR OBTAINING POTW PERMIT IF REQUIRED. A COPY OF THE POTW PERMIT MUST BE FILED WITH THE CITY OF ALEXANDRIA.

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
SCALE: NONE | DATE: 02/25/2025
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - NOTES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

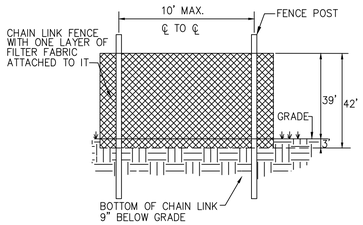
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

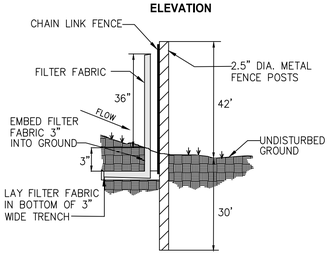
DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

ESI Peer Review



ELEVATION

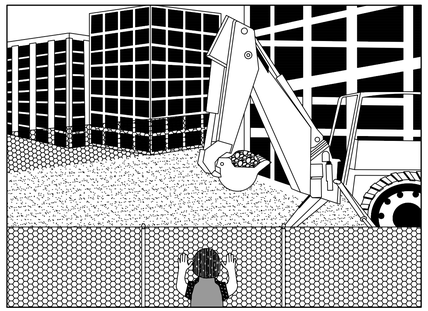


SECTION

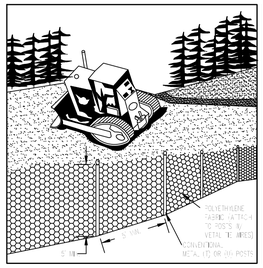
FENCING: CHAIN LINK FENCE SHALL BE 39" ABOVE GRADE WITH 3" EMBEDDED FOR A TOTAL FABRIC WIDTH OF 42". THE POST SHALL BE 42" ABOVE GRADE WITH 30" PLACED BELOW GRADE (WITHOUT CONCRETE) FOR A TOTAL LENGTH OF 72".

NOTES:
1. CHAIN LINK FENCES TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. PHYSICAL PROPERTIES OF THE FILTER FABRIC SHALL CONFORM TO THE LATEST EDITION OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
4. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6".
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN SEDIMENT BUILD–UP REACHES 50% OF THE HEIGHT OF THE SUPER SILT FENCE.

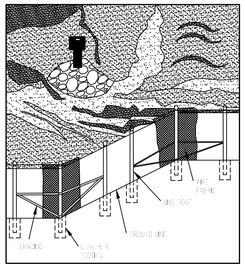
SUPER SILT FENCE DETAIL
NOT TO SCALE



PERSPECTIVE VIEW



PERSPECTIVE VIEW
PLASTIC FENCE

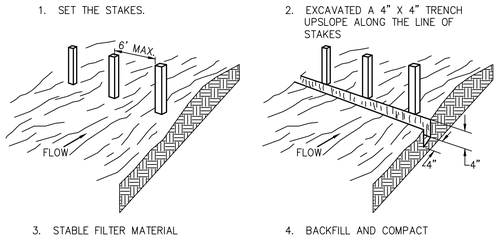


PERSPECTIVE VIEW
METAL FENCE

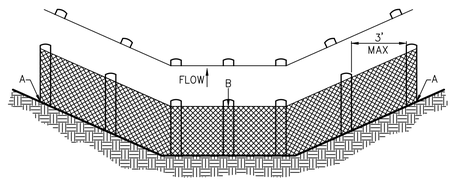
SAFETY FENCE

SOURCE: ADAPTED FROM CONWED PLASTICS AND VDOT ROAD AND BRIDGE STANDARDS PLATE 3.01–1

DETAIL FROM VESCH PLATE 3.01–1



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)



POINTS A SHOULD BE HIGHER THAN POINT B.
DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

CONSTRUCTION OF SILT FENCE (WITHOUT WIRE SUPPORT)
NOT TO SCALE

GUTTER GATOR™

Sediment Containment

GutterGator™
Curb Inlet Filter

GutterGator™ Advantages
- *7" Tall - allows for overflow*
- *Unique design - ships in 4' box*
- *Easy to transport and install*
- *Easy to assemble*
- *Keeps sediment, trash, and debris out of storm sewers*
- *Easy to clean and reuse*
- *Weight pocket holds unit in place*
- *Unique multi-dimensional outer filter with rigid inner frame allows high flow rates*
- *Low profile to curb helps prevent damage from vehicles*
- *Tie back straps for additional support*
- *Custom sizes available*

GutterGator™
The GutterGator™ is the latest inlet filter technology available from ACF Environmental.

Designed for curb inlets, GutterGator™ is designed for high flow volumes while maintaining maximum sediment retention.

With its unique multi-dimensional outer filter combined with a rigid inner frame, the GutterGator™ maintains a low profile to the curb preventing damage.

Save time and money! GutterGator™ installs in seconds, removes in minutes and is reusable. Stop sediment in its tracks with GutterGator!

Call ACF Environmental for more information.

GutterGator Specification:
For Curb Gutter Storm Drains

1.0 Description

1.1 This work shall consist of furnishing, placing, maintaining and removing the GutterGator sediment control device as directed by the engineer and as shown on the contract drawings. The GutterGator sediment control system manufactured by:

ACF Environmental, Inc.
2831 Cardwell Road
Richmond, Virginia 23234
Phone: 800-448-3636 • Fax: 804-743-7779
www.acfenvironmental.com

2.0 Materials

2.1 GUTTERGATOR

2.1.1 The GutterGator will be manufactured to 3' molds in 3', 6', 9', 12', 15' and 18' lengths and a minimum of twenty-four (24) inches longer than the curb inlet opening. This will allow for sufficient length to cover the inlet with twelve (12) inches beyond the inlet on both ends.

3.0 Construction Sequence

3.1 General

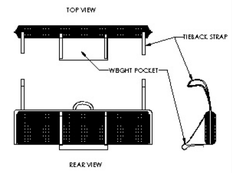
3.1.1 Install the GutterGator in front of the curb inlet opening. Drop 7lb weight sock into inlet opening, secure tie back straps, if applicable. Each end of the GutterGator should overlap the curb inlet approximately 12".

3.1.2 The GutterGator should be cleaned if a visual inspection shows sediment and debris build up around the GutterGator.

3.1.3 To remove the GutterGator, lift out of curb opening with provided carrying handle.

3.1.4 Clean as needed. Store out of direct sunlight.

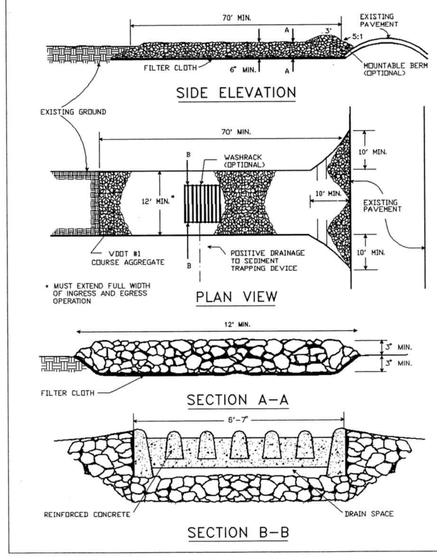
3.1.5 Ponding is likely if sediment is not removed regularly. Inspection of GutterGator should be on a regular basis and immediately after wet weather events.



INLET PROTECTION DETAIL
NOT TO SCALE

NOTE: SEE SHEET C-1203 FOR TREE PROTECTION FENCING DETAILS

STONE CONSTRUCTION ENTRANCE



Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC Plate 3.02-1

CONSTRUCTION ENTRANCE DETAIL
NOT TO SCALE

NOTE: SUBJECT TO ADJUSTMENT IN COORDINATION W/ FIELD INSPECTOR.

SIZING COMPUTATIONS FOR SEDIMENT SETTLEMENT AREA ADJACENT TO CE:.
DRAINAGE AREA (A) = 6'–7" X 6'–7" = 43 SF
TRAP DEPTH (D) = 0.5 FT

REQUIRED WET STORAGE VOLUME:
V1 = 0.85 X A X D/2
V1 = 0.85 X 43 X 0.25 = 9 CU

REQUIRED DRY STORAGE VOLUME:
V2 = A X D/2
V2 = 43 X 0.25 = 10.75 CU

TOTAL REQUIRED VOLUME = 19.75 CU

PROVIDED VOLUME:
V = 12.5' X 3.5' X 0.5' = 21.88 CU (> 19.75 CU, REQUIREMENT MET)

ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
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DRAWN: SCTB | CHECKED: TBW
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PLAN STATUS

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COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EROSION AND SEDIMENT CONTROL PLAN - DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
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.

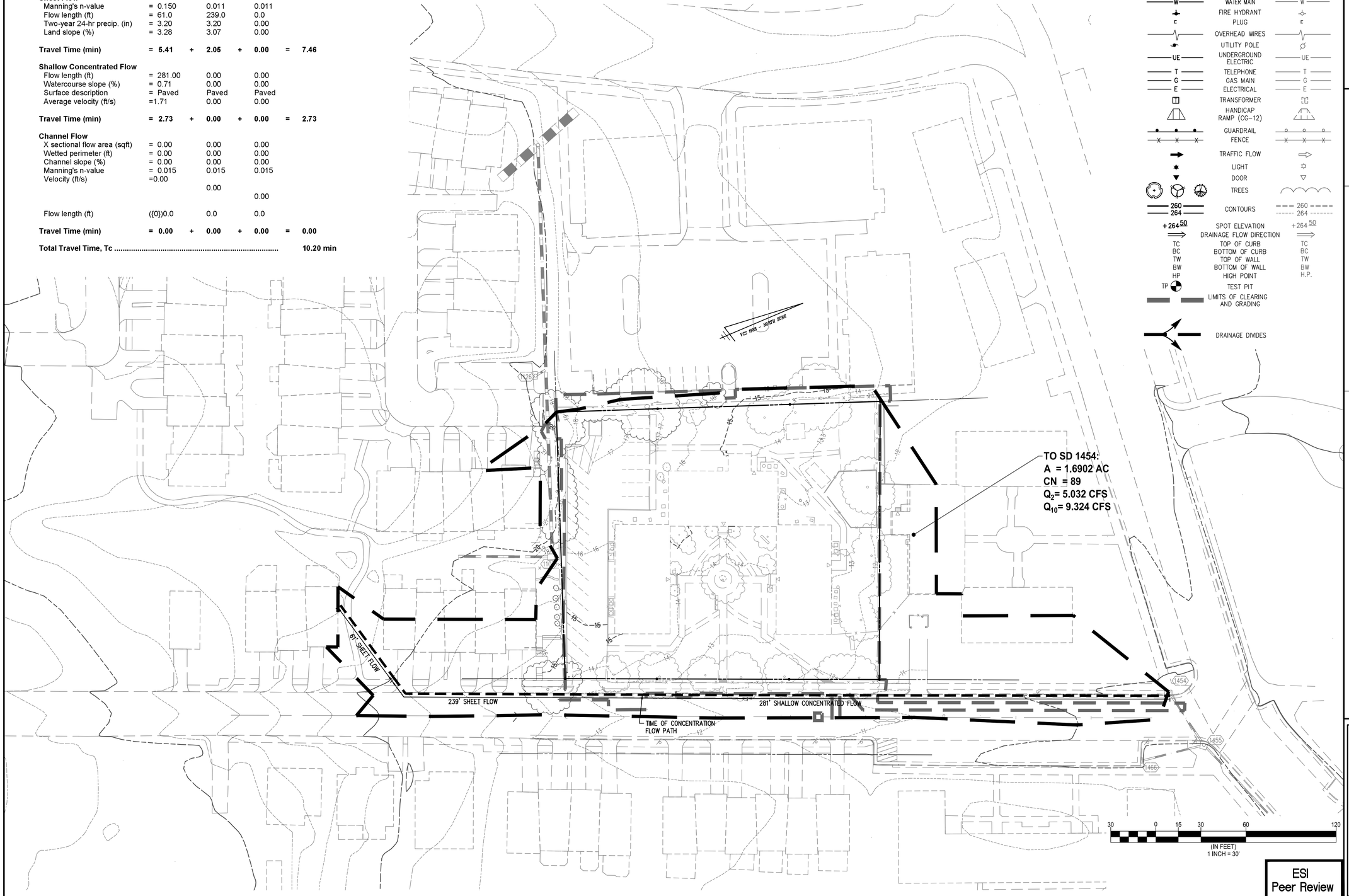
TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No. 21

TR 55 EX 1454

Description	A		B		C		Totals
Sheet Flow							
Manning's n-value	= 0.150		0.011		0.011		
Flow length (ft)	= 61.0		239.0		0.0		
Two-year 24-hr precip. (in)	= 3.20		3.20		0.00		
Land slope (%)	= 3.28		3.07		0.00		
Travel Time (min)	**= 5.41**	**+**	**2.05**	**+**	**0.00**	**=**	**7.46**
Shallow Concentrated Flow							
Flow length (ft)	= 281.00		0.00		0.00		
Watercourse slope (%)	= 0.71		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	=1.71		0.00		0.00		
Travel Time (min)	**= 2.73**	**+**	**0.00**	**+**	**0.00**	**=**	**2.73**
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00		0.00		0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	**= 0.00**	**+**	**0.00**	**+**	**0.00**	**=**	**0.00**
Total Travel Time, Tc							**10.20 min**



LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
C.O.	CLEAN OUT	C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
P	PLUG	P
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	
	DRAINAGE DIVIDES	

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DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: 1" = 30'
PLAN STATUS

DATE	DESCRIPTION
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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EXISTING DRAINAGE DIVIDE PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0701.dwg

SHEET: **C-0701**

TR55 Tc Worksheet

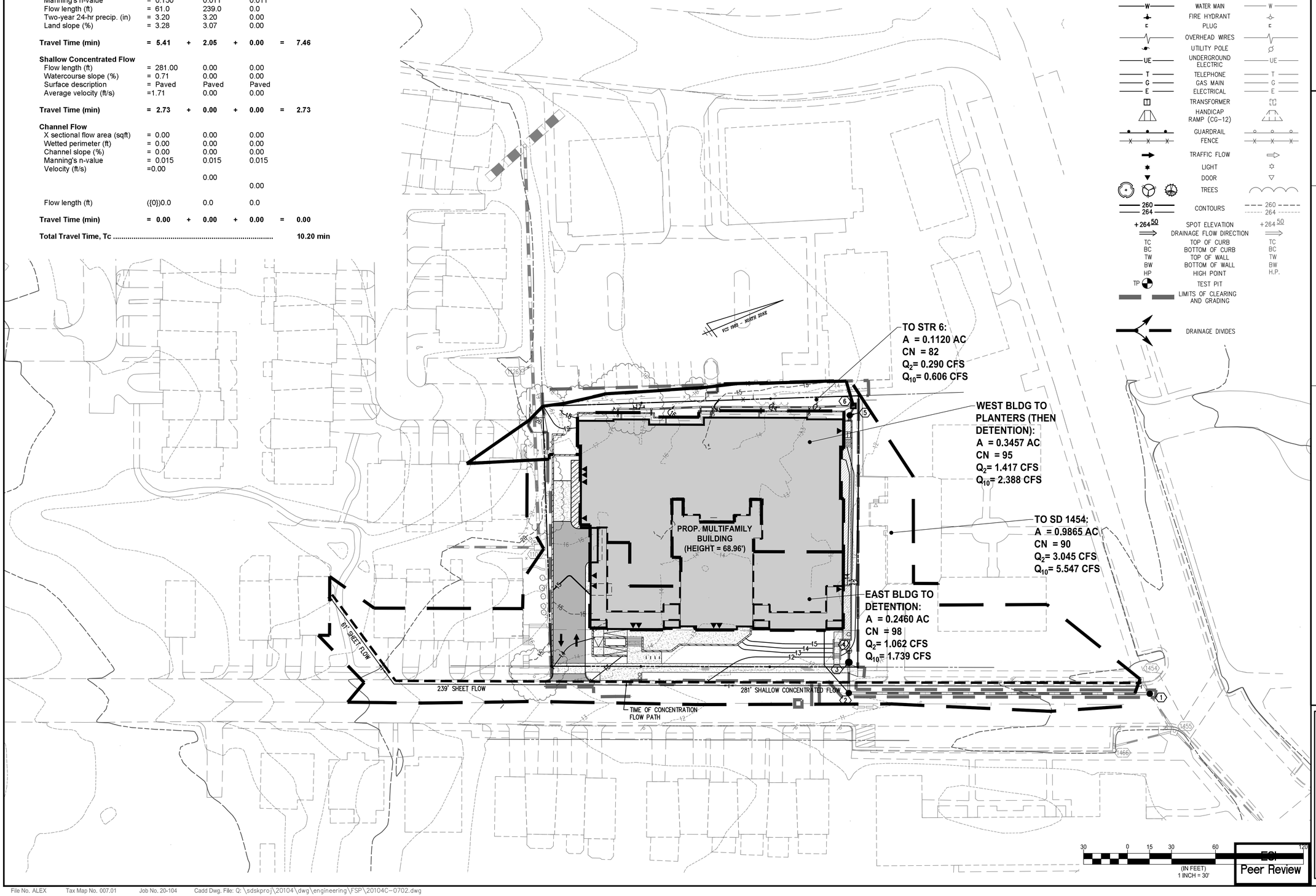
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No. 20

test tr 55 sd 1454

Description	A	B	C	Totals
Sheet Flow				
Manning's n-value	= 0.150	0.011	0.011	
Flow length (ft)	= 61.0	239.0	0.0	
Two-year 24-hr precip. (in)	= 3.20	3.20	0.00	
Land slope (%)	= 3.28	3.07	0.00	
Travel Time (min)	**= 5.41 +**	**2.05 +**	**0.00 =**	**7.46**
Shallow Concentrated Flow				
Flow length (ft)	= 281.00	0.00	0.00	
Watercourse slope (%)	= 0.71	0.00	0.00	
Surface description	= Paved	Paved	Paved	
Average velocity (ft/s)	=1.71	0.00	0.00	
Travel Time (min)	**= 2.73 +**	**0.00 +**	**0.00 =**	**2.73**
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00			
		0.00		
			0.00	
Flow length (ft)	({0})0.0	0.0	0.0	
Travel Time (min)	**= 0.00 +**	**0.00 +**	**0.00 =**	**0.00**

Total Travel Time, Tc ..... 10.20 min



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CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
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SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	
	DRAINAGE DIVIDES	

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3908 ELBERT AVENUE
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CITY OF ALEXANDRIA, VIRGINIA

PROPOSED DRAINAGE DIVIDE PLAN

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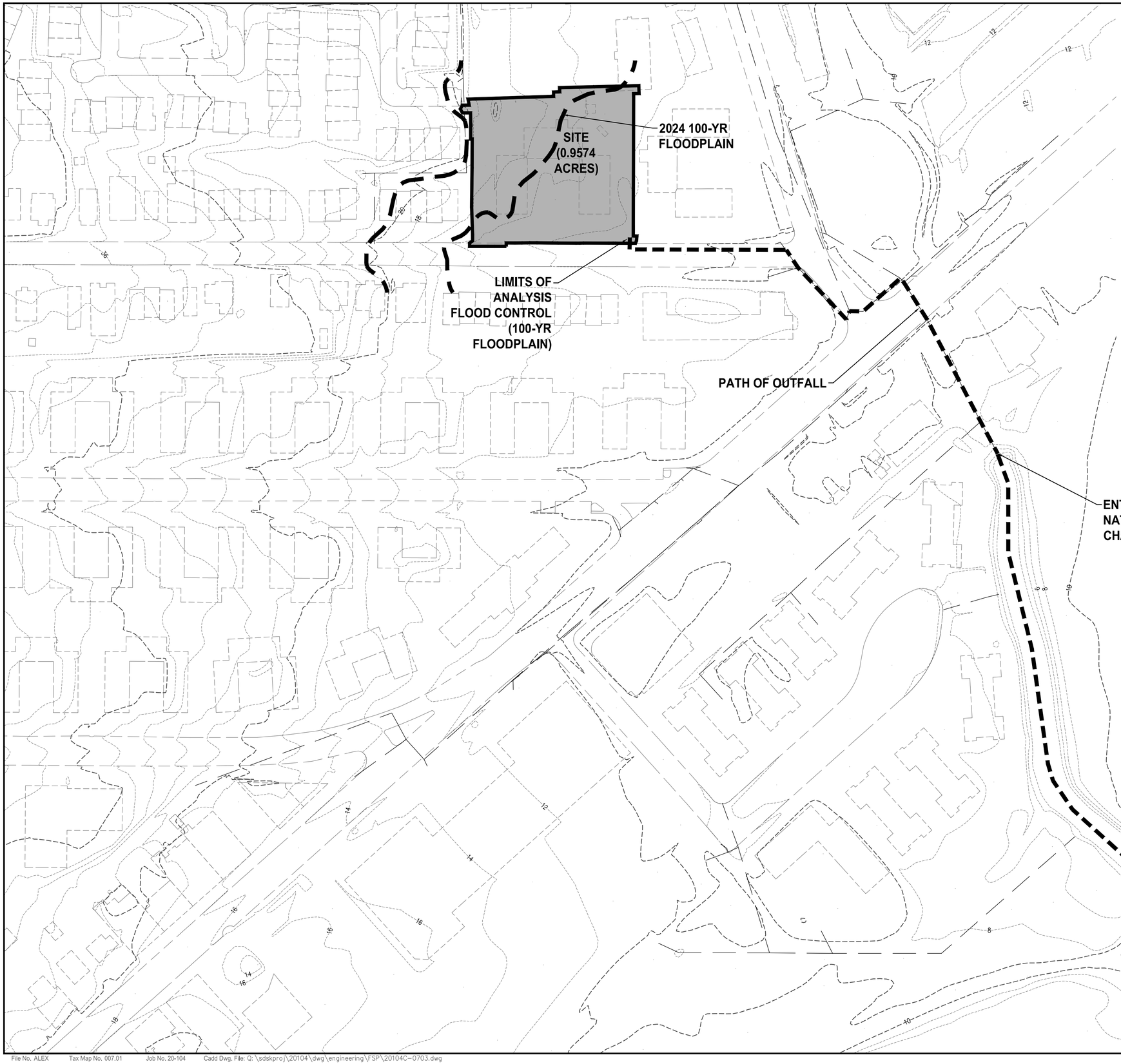
File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg, File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0702.dwg

SHEET: C-0702



ADEQUATE OUTFALL ANALYSIS

CHANNEL PROTECTION:
THE SITE STORMWATER OUTFALLS INTO THE MUNICIPAL STORM SEWER SYSTEM WHERE IT IS ROUTED TO SUNNYSIDE STREAM, A NATURAL STREAM, AND THEN ULTIMATELY TO FOUR MILE RUN. SINCE A NATURAL CHANNEL IS WITHIN THE LIMITS OF ANALYSIS FOR CHANNEL PROTECTION (100X SITE AREA AS SHOWN ON THIS SHEET), THE DESIGN PARAMETERS OF Z.O. 13-109(F)(1)(C) FOR NATURAL STORMWATER CONVEYANCE SYSTEM HAVE BEEN UTILIZED IN ORDER TO COMPLY WITH THE CHANNEL PROTECTION REQUIREMENTS FOR EACH OUTFALL.

THE ALLOWABLE PEAK RELEASE FOR THE 1-YR, 24-HR STORM FOR THE SITE UNDER POST-DEVELOPMENT CONDITIONS HAS BEEN CALCULATED WITH THE FOLLOWING METHODOLOGY:

$$Q1\ POST \leq \frac{0.9\ (Q1\ PRE \times V1\ PRE)}{V1\ POST}$$

BASED ON THIS ANALYSIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE CHANNEL PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66) AND ARTICLE XIII OF CITY OF ALEXANDRIA ZONING ORDINANCE.

FLOOD CONTROL:
THE STORMWATER CONVEYANCE SYSTEM FOR THE SITE ENTERS A MAPPED FLOODPLAIN WITHIN THE PROPERTY BOUNDARY, Z.O. 13-109(F)(2)(C)(III), AS THE PROPERTY PARTIALLY RESIDES WITHIN THE 100-YEAR FLOODPLAIN (SEE C-0401). PIPES WITHIN THE FLOOD CONTROL OUTFALL LIMITS ARE ADEQUATE FOR THE 10-YEAR 24 HOURS STORM. ADDITIONALLY, DETENTION WILL BE PROVIDED TO BRING THE POST-DEVELOPMENT FLOW RATES FOR THE 10-YEAR STORM TO PRE-DEVELOPMENT LEVELS.

BASED ON THIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE FLOOD PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66) AND ARTICLE XIII OF CITY OF ALEXANDRIA ZONING ORDINANCE.

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CITY OF ALEXANDRIA, VIRGINIA

ADEQUATE OUTFALL ANALYSIS

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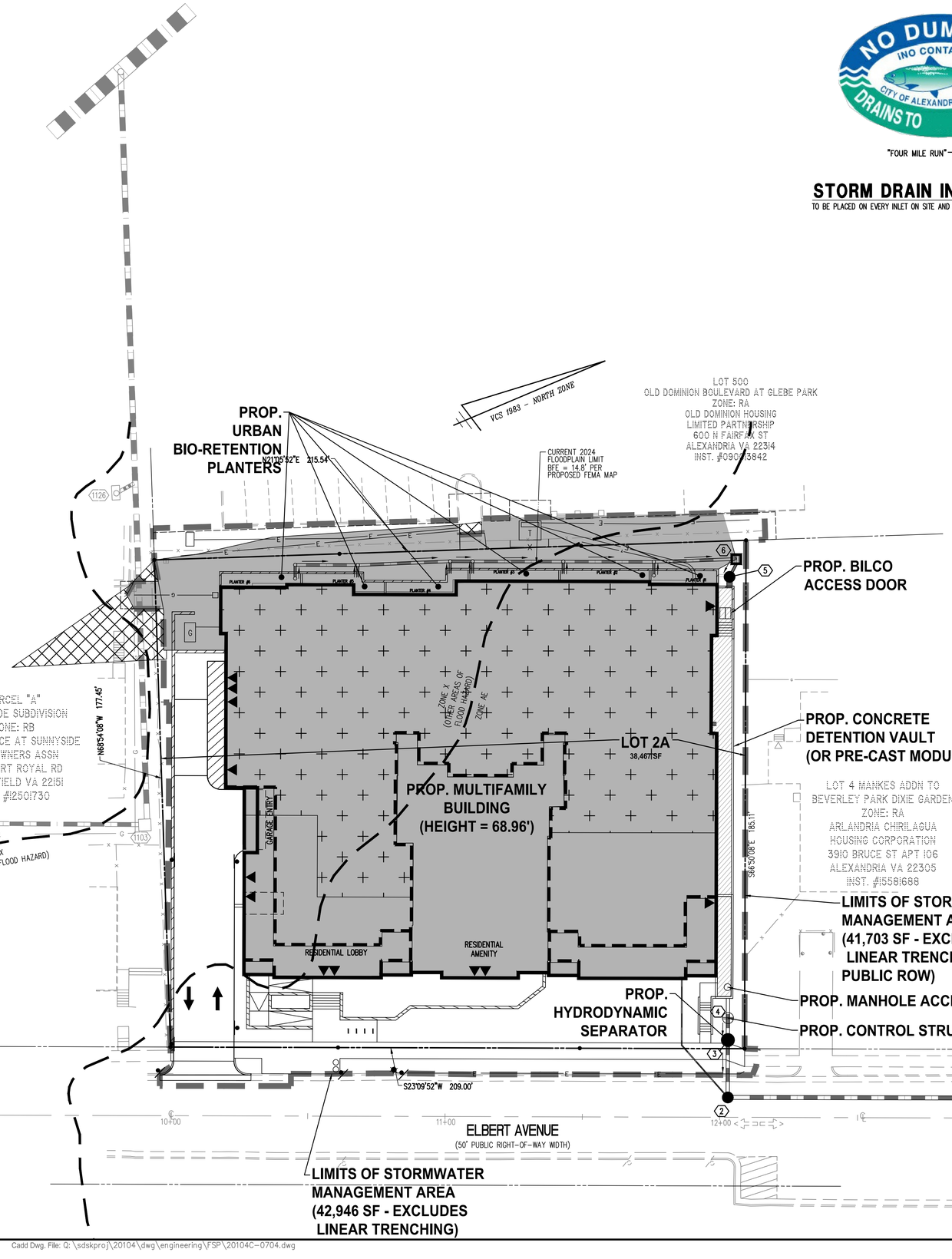
SHEET: C-0703



STORM DRAIN INLET MARKER

TO BE PLACED ON EVERY INLET ON SITE AND WITHIN 50 FT OF SUBJECT PROPERTY

STORMWATER MANAGEMENT & BEST MANAGEMENT PRACTICES NARRATIVE

EXISTING CONDITIONS:
THE SITE CURRENTLY CONSISTS OF AN EXISTING MULTIFAMILY BUILDING, CONCRETE WALKS, SHEDS, ASPHALT PAVEMENT, STREET TREES, AND ASSOCIATED UTILITY SERVICES. THE 38,467 SF (0.8831 AC.) SITE DRAINS FROM SOUTHWEST TO NORTHEAST TOWARD ELBERT AVENUE. STORMWATER THEN FLOW IN THE GUTTER PAN UNTIL IT ENTERS THE MUNICIPAL STORM SEWER SYSTEM VIA CURB INLETS LOCATED IN THE PUBLIC ROW. CURRENTLY, NO KNOWN STORMWATER CONTROLS EXIST ON-SITE. THE EXISTING DRAINAGE DIVIDES FOR THE SITE WILL GENERALLY BE MAINTAINED IN THE PROPOSED CONDITION. FOR THE PURPOSES OF STORMWATER MANAGEMENT, THE SITE AREA WILL BE THE LIMITS OF DISTURBANCE, EXCLUDING LINEAR UTILITY TRENCHING IN THE PUBLIC ROW, 42,946 SF OR 0.9859 ACRES.

PROPOSED CONDITIONS:
THE APPLICANT PROPOSES TO DEMOLISH THE EXISTING MULTIFAMILY BUILDING AND CONSTRUCT ONE (1) NEW MULTIFAMILY RESIDENTIAL BUILDING (HEIGHT UP TO 70 FEET) WITH A GROUND FLOOR PARKING GARAGE, EXTERIOR LOADING SPACE, SITE UTILITY INFRASTRUCTURE, AND STORMWATER MANAGEMENT FACILITIES.

STORMWATER QUALITY (SEE BMP SCHEMATIC – THIS SHEET):
IN ORDER TO COMPLY WITH ARTICLE 13 OF THE CITY OF ALEXANDRIA ZONING ORDINANCE AND THE VIRGINIA STATE WATER QUALITY REQUIREMENTS (9VAC25-870-63), THE SITE WILL INCLUDE LEVEL 1 BIO-RETENTION PLANTERS LOCATED IN THE REAR OF THE PROPOSED BUILDING AND A HYDRODYNAMIC SEPARATOR LOCATED IN THE NORTH SIDE YARD. THE PROPOSED BMPS WILL REDUCE PHOSPHORUS LEVELS AND COMPLY WITH ALL STATE AND CITY REQUIREMENTS. APPROXIMATELY 5,437 SF (18%) OF IMPERVIOUS AREA WITHIN THE PROPERTY BOUNDARY CANNOT BE CAPTURED AND TREATED DUE TO SITE AND GRADING CONSTRAINTS AND STRUCTURAL CONCERNS. THE WQV TREATMENT VOLUME FOR THIS IMPERVIOUS AREA WILL BE MITIGATED THROUGH PAYMENT INTO THE CITY OF ALEXANDRIA WATER QUALITY IMPACT FUND.

CHANNEL PROTECTION:
THE SITE STORMWATER OUTFALLS INTO THE MUNICIPAL STORM SEWER SYSTEM WHERE IT IS ROUTED TO SUNNYSIDE STREAM, A NATURAL STREAM, AND THEN ULTIMATELY TO FOUR MILE RUN. SINCE A NATURAL CHANNEL IS WITHIN THE LIMITS OF ANALYSIS FOR CHANNEL PROTECTION (100X SITE AREA AS SHOWN ON C-0703), DETENTION WILL BE PROVIDED FOR THE 1-YEAR 24-HOUR STORM BASED ON THE STATE ENERGY BALANCE EQUATION.

BASED ON THIS ANALYSIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE CHANNEL PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66) AND ARTICLE XIII OF CITY OF ALEXANDRIA ZONING ORDINANCE.

FLOOD CONTROL:
THE STORMWATER CONVEYANCE SYSTEM FOR THE SITE ENTERS A MAPPED FLOODPLAIN WITHIN THE PROPERTY BOUNDARY, AS THE PROPERTY PARTIALLY RESIDES WITHIN THE 100-YEAR FLOODPLAIN (SEE C-0401). PIPES WITHIN THE OUTFALL LIMITS ARE ADEQUATE FOR THE 10-YEAR 24 HOURS STORM. ADDITIONALLY, DETENTION WILL BE PROVIDED TO BRING THE POST-DEVELOPMENT FLOW RATES FOR THE 10-YEAR STORM TO PRE-DEVELOPMENT LEVELS.

BASED ON THIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE FLOOD PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66) AND ARTICLE XIII OF CITY OF ALEXANDRIA ZONING ORDINANCE.

ADJACENT PROPERTIES:
ALL UNCONTROLLED SHEET FLOW WILL BE NON-EROSIVE AND DIRECTED TOWARD ELBERT AVENUE RIGHT-OF-WAY AND INTO THE MUNICIPAL SEWER SYSTEM. THERE WILL NOT BE ANY ADVERSE IMPACT TO ADJACENT PROPERTIES AS A RESULT OF THIS PROJECT AND THE PROPOSED IMPROVEMENTS.

FLOODPLAIN BOUNDARY:
THIS SITE IS PARTIALLY LOCATED WITHIN THE 100-YEAR FLOODPLAIN BOUNDARY PER FEMA MAPS (SEE NARRATIVE ON C-0401A).

RESOURCE PROTECTION AREAS:
THERE ARE NO RESOURCE PROTECTION AREAS KNOWN TO EXIST ON THE SITE.

THE SITE RESIDES IN THE FOUR MILE RUN WATERSHED.

THE BMP FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED BY THE BUILDING OWNER/OPERATOR.

IMPERVIOUS AREA TO BIORETENTION (14,550 SQ. FT.)

AREA WITHIN LOD TO HYDRODYNAMIC SEPARATOR (INCLUDES REMAINING RUNOFF FROM BIO-RETENTION FACILITIES) (30,110 SQ. FT.)

AREA OUTSIDE LOD TO HYDRODYNAMIC SEPARATOR (NO CREDIT IN VRRM) (893 SQ. FT.)

LIMITS OF STORMWATER MANAGEMENT AREA (42,946 SQ. FT.)

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No. 041851 — 09/03/25 — PROFESSIONAL ENGINEER

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3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

STORMWATER MANAGEMENT PLAN AND NARRATIVE

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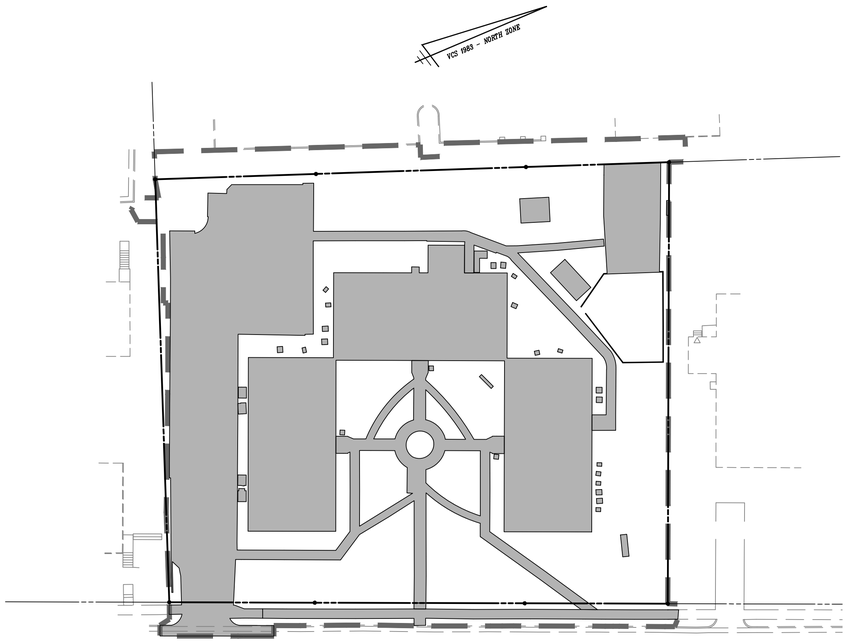
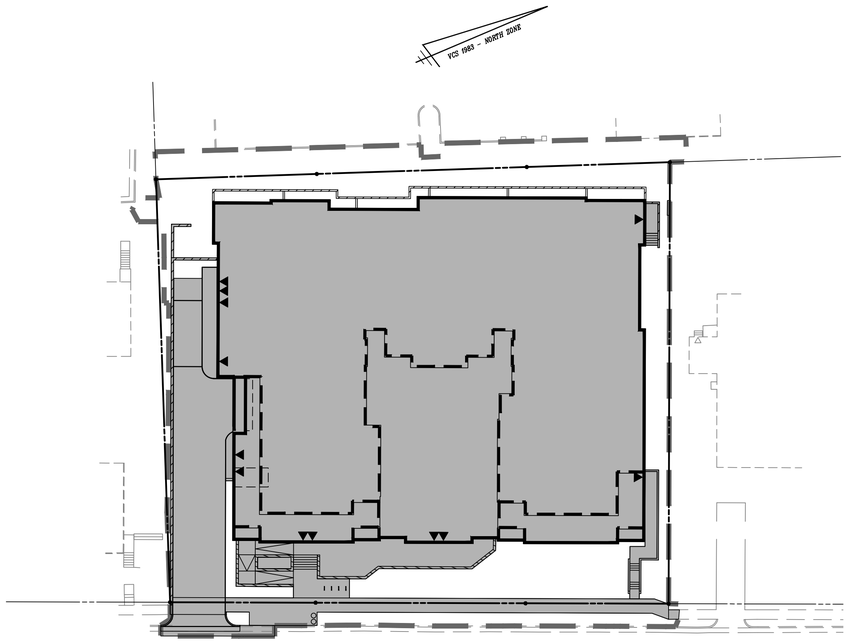
SHEET: C-0704





30 0 15 30 60 120
(IN FEET)
1 INCH = 30'

IMPERVIOUS AREA

LIMITS OF CLEARING (SWM AREA)

PRE-DEVELOPMENT IMPERVIOUS AREA MAP

SCALE: 1" = 30'

PRE-DEVELOPMENT CURVE NUMBER

LIMITS OF DISTURBANCE (SWM AREA): 42,946 SQ. FT. OR 0.9859 ACRES

EXISTING PERVIOUS AREA: 22,655 SQ. FT. OR 0.5201 ACRES

EXISTING IMPERVIOUS AREA: 20,291 SQ. FT. OR 0.4658 ACRES

CURVE NUMBER: [(20,291 X 98) + (22,655 X 80)] / 42,946 = 89

PRE-DEVELOPMENT

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 2.679 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 5,472 cuft
Drainage area	= 0.986 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 3.387 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 6,984 cuft
Drainage area	= 0.986 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 6.231 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 13,299 cuft
Drainage area	= 0.986 ac	Curve number	= 89
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

ALLOWABLE DISCHARGE RATES

1-YEAR STORM

AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION:
Q1= 0.046 CFS
Q2= 0.060 CFS
Q10= 0.119 CFS

1-YEAR STORM ENERGY BALANCE EQUATION:

Q(ALLOWABLE) =0.9* (Q(PRE) X RV(PRE))/RV(POST) + Q1(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION

Q(ALLOWABLE) = 0.9 * (2.679 CFS X 5,472 CF/ 6,604 CF) = 2.00 CFS + 0.046 CFS = 2.04 CFS

2-YEAR STORM

Q(ALLOWABLE) = Q(PRE) + Q2(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION= 3.387 CFS + 0.06 CFS = 3.44 CFS

10-YEAR STORM

Q(ALLOWABLE) = Q(PRE) + Q10(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION= 6.231 CFS + 0.119 CFS = 6.35 CFS

POST-DEVELOPMENT IMPERVIOUS AREA MAP

SCALE: 1" = 30'

POST-DEVELOPMENT CURVE NUMBER

LIMITS OF DISTURBANCE (SWM AREA): 42,946 SQ. FT. OR 0.9859 ACRES

PROPOSED PERVIOUS AREA: 10,633 SQ. FT. OR 0.2441 ACRES

PROPOSED IMPERVIOUS AREA: 32,313 SQ. FT. OR 0.7418 ACRES

ADJ. CURVE NUMBER: 92/93/93 (SEE VRRM SPREADSHEET - C-0706)

POST-DEVELOPMENT

POST-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 3.132 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 6,604 cuft
Drainage area	= 0.986 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

POST-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 3.842 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 8,206 cuft
Drainage area	= 0.986 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

POST-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 6.647 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 14,744 cuft
Drainage area	= 0.986 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

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DATE	DESCRIPTION
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03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

STORMWATER QUANTITY COMPUTATIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-0704.dwg

SHEET: C-0705

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - **Version 4.1**

CLEAR ALL (Ctrl+Shift+R)

Project Name: **CLI ELBERT AVENUE RESIDENCES**
Date: **2/4/2025**
Linear Development Project? No

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 0.99

Maximum reduction required:	*10%*
The site's net increase in impervious cover (acres) is:	*0.275987144*
Post-Development TP Load Reduction for Site (lb/yr):	*0.23*

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/infrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.52	0.52
Impervious Cover (acres)				0.47	0.47
					0.99

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest or reforested land					0.00
Mixed Open (acres) -- undisturbed/infrequently maintained grass or shrub land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed				0.24	0.24
Impervious Cover (acres)				0.74	0.74
Area Check	**OK.**	**OK.**	**OK.**	**OK.**	0.99

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**0.23**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	10.43
Final Post-Development TN Load	11.35

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv	Composite Loading P
Forest (acres)					0.00	0.00	0.00
Mixed Open (acres)					0.00	0.00	0.00
Managed Turf (acres)				0.24	0.24	0.25	0.85
Impervious Cover (acres)				0.74	0.74	0.95	0.86
				Total	0.99		

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr) 0.84
Post Development Treatment Volume in D.A. A (ft³) 2,780

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Mixed Open Credit Area (acres)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	Runoff Reduction (ft³)	Remaining Runoff Volume (ft³)	Total BMP Treatment Volume (ft³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
2.i. To Stormwater Planter, Urban Bioretention (P-FIL-05)	40			0.33	0	461	691	1,152	25	0.00	0.29	0.16	0.13	16.a. MTD - Hydrodynamic
16.a. Manufactured Treatment Device-Hydrodynamic	0		0.11	0.25	691	0	1,641	1,641	20	0.13	0.31	0.09	0.35	

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
40	0.00	4.12	2.64	1.48
0	1.48	4.04	0.00	5.52

VRRM 4.1, 2024

Composite Loading N
0.00
0.00
9.01
12.33

Site Results (Water Quality Compliance) VRRM 4.1, 2024

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN (ac)	0.00	0.00	0.00	0.00	0.00	OK.
MIXED OPEN AREA TREATED(ac)	0.00	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.24	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.11	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.74	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.58	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) 2,780

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft³)	461	0	0	0	0	461
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.84	0.00	0.00	0.00	0.00	0.84
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.24	0.00	0.00	0.00	0.00	0.24
TP LOAD REMAINING (lb/yr)	0.60	0.00	0.00	0.00	0.00	0.60
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	2.64	0.00	0.00	0.00	0.00	2.64

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	0.84
TP LOAD REDUCTION REQUIRED (lb/yr)	0.23
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.24
TP LOAD REMAINING (lb/yr)	0.60
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.02 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	11.35
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	2.64
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	8.71

Runoff Volume and Curve Number Calculations, VRRM 4.1, 2024

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
2.70	3.20	5.20

Use NOAA Atlas 14 (http://hdsc.nws.noaa.gov/hdsc/pfds/)

***Notes (see below):**

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water quantity requirements. See VRRM User's Guide and Documentation for additional information.

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in watershed-inches and shown in the spreadsheet as RV(watershed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal. Otherwise RV(watershed-inch) must be multiplied by the drainage area.

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

Drainage Area Curve Numbers and Runoff Depths*

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest -- undisturbed, protected forest or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Mixed Open -- undisturbed/infrequently maintained grass or shrub land	Area (acres)	0.00	0.00	0.00	0.00
	CN	34	59	72	79
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.24
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.74
	CN	98	98	98	98
					$CN_{(D.A. A)}$ 94

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.06	2.54	4.51
$RV_{developed}$ *(watershed-inch)* with Runoff Reduction*	1.93	2.42	4.38
Adjusted CN*	92	93	93

Total Area (acres):	0.99
Runoff Reduction Volume (ft³):	461

See Notes above

LAND COVER SUMMARY – PRE-REDEVELOPMENT

Land Cover Summary-Pre Pre-ReDevelopment	Listed	Adjusted[1]
Forest Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
Weighted Loading Rate(forest)	0.00	0.00
% Forest	0%	0%
Mixed Open Cover (acres)	0.00	0.00
Weighted Rv(mixed)	0.00	0.00
Weighted Loading Rate(mixed)	0.00	0.00
% Mixed Open	0%	0%
Managed Turf Cover (acres)	0.52	0.24
Weighted Rv(turf)	0.25	0.25
Weighted Loading Rate(turf)	0.85	0.85
% Managed Turf	53%	34%
Impervious Cover (acres)	0.47	0.47
Rv(impervious)	0.95	0.95
Weighted Loading Rate(impervious)	0.86	0.86
% Impervious	47%	66%
Total Site Area (acres)	**0.99**	**0.71**
Site Rv	**0.58**	**0.71**
Treatment Volume and Nutrient Load		
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0477	0.0420
Pre-ReDevelopment Treatment Volume (cubic feet)	2,078	1,828
Pre-ReDevelopment TP Load (lb/yr)	**0.84**	**0.61**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.85	0.85
Baseline TP Load (lb/yr) (0.26 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.18*

LAND COVER SUMMARY – POST DEVELOPMENT

Land Cover Summary-Post (Final) Post ReDev. & New Impervious	
Forest Cover (acres)	0.00
Weighted Rv(forest)	0.00
Wgt. Ld. Rate(forest)	0.00
% Forest	0%
Mixed Open Cover (acres)	0.00
Weighted Rv(mixed)	0.00
Wgt. Ld. Rate(mixed)	0.00
% Mixed Open	0%
Managed Turf Cover (acres)	0.24
Weighted Rv (turf)	0.25
Wgt. Ld. Rate(turf)	0.85
% Managed Turf	25%
Impervious Cover (acres)	0.74
Rv(impervious)	0.95
Wgt. Ld. Rate(imperv.)	0.86
% Impervious	75%
Final Site Area (acres)	**0.99**
Final Post Dev Site Rv	**0.78**
Treatment Volume and Nutrient Load	
Final Post-Development Treatment Volume (acre-ft)	0.0638
Final Post-Development Treatment Volume (cubic feet)	2,780
Final Post-Development TP Load (lb/yr)	**0.84**
Final Post-Development TP Load per acre (lb/acre/yr)	0.86

Land Cover Summary-Post Post-ReDevelopment	
Forest Cover (acres)	0.00
Weighted Rv(forest)	0.00
Wgt. Ld. Rate(forest)	0.00
% Forest	0%
Mixed Open Cover (acres)	0.00
Weighted Rv(mixed)	0.00
Wgt. Ld. Rate(mixed)	0.00
% Mixed Open	0%
Managed Turf Cover (acres)	0.24
Weighted Rv (turf)	0.25
Wgt. Ld. Rate(turf)	0.85
% Managed Turf	34%
ReDev. Impervious Cover (acres)	0.47
Rv(impervious)	0.95
Wgt. Ld. Rate(imperv.)	0.86
% Impervious	66%
Total ReDev. Site Area (acres)	**0.71**
ReDev Site Rv	**0.71**
Treatment Volume and Nutrient Load	
Post-ReDevelopment Treatment Volume (acre-ft)	0.0420
Post-ReDevelopment Treatment Volume (cubic feet)	1,828
Post-ReDevelopment TP Load (TP) (lb/yr)*	**0.61**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	0.85
Max. Reduction Required (Below Pre-ReDevelopment Load)	10%
TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.06**

Land Cover Summary-Post Post-Development New Impervious	
New Impervious Cover (acres)	0.28
Rv(impervious)	0.95
Post-Development Treatment Volume (acre-ft)	0.0218
Post-Development Treatment Volume (cubic feet)	952
Post-Development TP Load (lb/yr)	**0.24**
TP Load Reduction Required for New Impervious Area (lb/yr)	**0.17**

Adjusted Land Cover Summary:
Pre ReDevelopment land cover minus pervious land cover (forest, mixed open 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, 0.26 lbs/acre/year).

NAME OF PRACTICE	DESCRIPTION	TOTAL AREA TREATED (ACRES)	PERVIOUS AREA TREATED (ACRES)	IMPERVIOUS AREA TREATED (ACRES)	PHOSPHOROUS REMOVAL EFFICIENCY (%)	PHOSPHOROUS REMOVED BY PRACTICE (LBS)	LATITUDE (DECIMAL DEGREES)	LONGITUDE (DECIMAL DEGREES)
BIORETENTION PLANTER	PLANTER #1	0.05	0.00	0.05	55	0.085	38.841862	-77.065573
BIORETENTION PLANTER	PLANTER #2	0.06	0.00	0.06	55	0.103	38.806399	-77.077734
BIORETENTION PLANTER	PLANTER #3	0.06	0.00	0.06	55	0.103	38.806399	-77.077734
BIORETENTION PLANTER	PLANTER #4	0.06	0.00	0.06	55	0.103	38.842096	-77.065448
BIORETENTION PLANTER	PLANTER #5	0.06	0.00	0.06	55	0.103	38.842188	-77.065396
BIORETENTION PLANTER	PLANTER #6	0.06	0.00	0.06	55	0.103	38.842253	-77.065356
HYDRODYNAMIC SEPARATOR	HYDRODYNAMIC SEPARATOR	0.67	0.08	0.58	20	0.08	38.842103	-77.064793

PROJECT DESCRIPTION

DEVELOPMENT: REDEVELOPMENT

DRAINAGE AREA	IMPERVIOUS AREA	PERVIOUS AREA	TOTAL
SITE AREA	0.7103	0.1728	0.8831
ON-SITE TREATED	0.5804	0.0638	0.6442
OFF-SITE TREATED	0.0000	0.0000	0.0000
TOTAL TREATED/DETAINED	0.5804	0.0638	0.6442
TOTAL UNDETAINED	0.1298	0.1090	0.2388

WATER TREATMENT ON/OFF-SITE

BMP TYPE	AREA TREATED BY BMP (AC)	IMPERVIOUS AREA TREATED BY BMP (AC)	BMP TREATED EFFICIENCY (%)
LEVEL 1 URBAN BIO-* RETENTION	0.3340	0.3340	25%
HYDRODYNAMIC** SEPARATOR	0.6442	0.5804	20%
TOTAL	**0.6442**	**0.5804**	

MISCELLANEOUS

TOTAL WQV TREATED YES [NO]
DETENTION ON SITE [YES] NO
PROJECT IS WITHIN WHICH WATERSHED? FOUR MILE RUN (EAST) WATERSHED
PROJECT DISCHARGES TO WHICH BODY OF WATER? FOUR MILE RUN TO POTOMAC RIVER
WQV TREATMENT REQUIRED = 1,816 CF/AC OF IMPERVIOUS AREA = 1,816 CF/AC X 0.7103 AC = 1,290 CF (0.0296 AC-FT)
WQV TREATMENT PROVIDED = 1,816 CF/AC OF IMPERVIOUS AREA = 1,816 CF/AC X 0.5805 AC = 1,054 CF (0.0242 AC-FT)--> 1,054/ 1,290 X 100% = 82% WQV PROVIDED*

*DRAINS TO HYDRODYNAMIC SEPARATOR
**INCLUDING AREA TO URBAN BIORETENTION

*A MONETARY CONTRIBUTION IS PROPOSED TO BE MADE TO THE WATER QUALITY EQIVALENY FUND IN ORDER TO MEET THE REMAINING REQUIREMENT. SEE SHEET C-1501 FOR REQUEST LETTER

RUNOFF REDUCTION NARRATIVE

69.6% OF THE PHOSPHORUS REMOVAL REQUIREMENT IS PROVIDED THROUGH THE USE OF RUNOFF REDUCTION PRACTICES AS SHOWN ON THE VRRM SPREADSHEET PROVIDED ON THIS SHEET.

TOTAL PHOSPHORUS REMOVAL REQUIREMENT: 0.23 LB/YR

BIO-RETENTION PHOSPHORUS REMOVAL: 0.16 LBS/YR

% REMOVED WITH RUNOFF REDUCTION PRACTICES: 0.16 / 0.23 X 100% = 69.6%

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: NONE
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

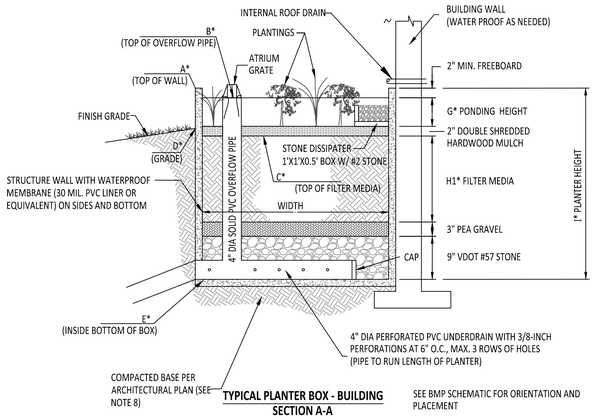
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCVL BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

STORMWATER QUALITY COMPUTATIONS

SHEET: C-0706



TYPICAL PLANTER BOX - BUILDING SECTION A-A

SEE BMP SCHEMATIC FOR ORIENTATION AND PLACEMENT

*SEE CHARTS BELOW FOR DIMENSION AND ELEVATION REFERENCES.

NOTES:

1. LENGTH (L) AND WIDTH (W) DIMENSIONS MUST BE A MINIMUM OF 2 FEET EACH.
2. NO STORAGE VOLUME CREDIT IS GIVEN FOR THE MULCH LAYER.
3. SEE VIRGINIA DEQ STORMWATER DESIGN SPECIFICATION NO. 9 FOR ADDITIONAL DESIGN AND CONSTRUCTION INFORMATION.
4. THE PLANTER BOX MAY BE CONTAINED IN A PRECAST CONCRETE, CAST-IN-PLACE CONCRETE OR 6"X6" PRESSURE TREATED WOOD VAULT. OTHER MATERIALS MAY INCLUDE MOLDED POLYPROPYLENE CELLS AND PRECAST MODULAR BLOCK SYSTEMS (VIRGINIA DEQ DESIGN SPECIFICATION NO. 9, SECTION 9-A-1).
5. SINCE PLANTER BOXES ARE LOCATED NEAR THE BUILDING FOUNDATION, WATERPROOFING BY USING A WATERTIGHT CONCRETE SHELL OR AN IMPERMEABLE LINER IS REQUIRED TO PREVENT SEEPAGE.
6. AN ATRIUM GRATE OR EQUIVALENT MAY BE USED FOR THE OVERFLOW ON TOP OF THE PVC STANDPIPE.
7. CONTRACTOR TO ENSURE THAT THE PROPER DOWNSPOUTS DISCHARGE INTO THE PLANTER BOX. A 1' X 1' X 0.5' (DEPTH) CONCRETE BOX (INTERIOR DIMENSIONS) FILLED WITH #2 STONE IS TO BE PROVIDED BELOW DOWNSPOUT DISCHARGE POINT FOR ENERGY DISSIPATION SHALL BE USED WHERE DOWNSPOUTS TIE INTO THE PLANTER BOX.
8. FOR PLANTER BOXES ATTACHED TO THE FOUNDATION AND/OR A RETAINING WALL, SEE ARCHITECTURAL PLANS FOR STRUCTURAL DETAILS/REQUIREMENTS.

URBAN BIORETENTION - PLANTER BOX DETAIL

PLANTER BOX ID	ELEVATIONS						PLANTER DIMENSIONS					
	A	B	C	D	E	F	G (IN)	H1 (IN)	I (FT)	WIDTH (FT)	LENGTH (FT)	SURFACE AREA (SF)
1	14.52	14.36	13.19	VARIES	10.69	0	12"	18"	3.83'	4.50'	23.90'	107.60
2	14.90	14.74	13.57	VARIES	11.07	0	12"	18"	3.83'	3.50'	32.30'	113.10
3	16.13	15.97	14.80	VARIES	12.30	0	12"	18"	3.83'	3.50'	32.30'	113.10
4	17.20	17.04	15.87	VARIES	13.37	0	12"	18"	3.83'			129.00
5	18.16	18.00	16.83	VARIES	14.33	0	12"	18"	3.83'			117.30
6	18.59	18.43	17.26	VARIES	14.76	0	12"	18"	3.83'			124.50

Planter # 1
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2050 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2050 SF x 0.0833' = 163 CF
SIZE OF THE PLANTER = 107.6 SF
V1 (PONDING DEPTH) = 107.6 SF X 1' = 107 CF
V2 (SOIL MEDIA) = 107.6 SF X 1.5' X 0.25 (VOIE = 40 CF
V3 (#57 & PEA GRAVEL) = 107.6 SF X 1' X 0.4 (VOIDS) = 43 CF
TOTAL VOLUME = 190 CF PROVIDED

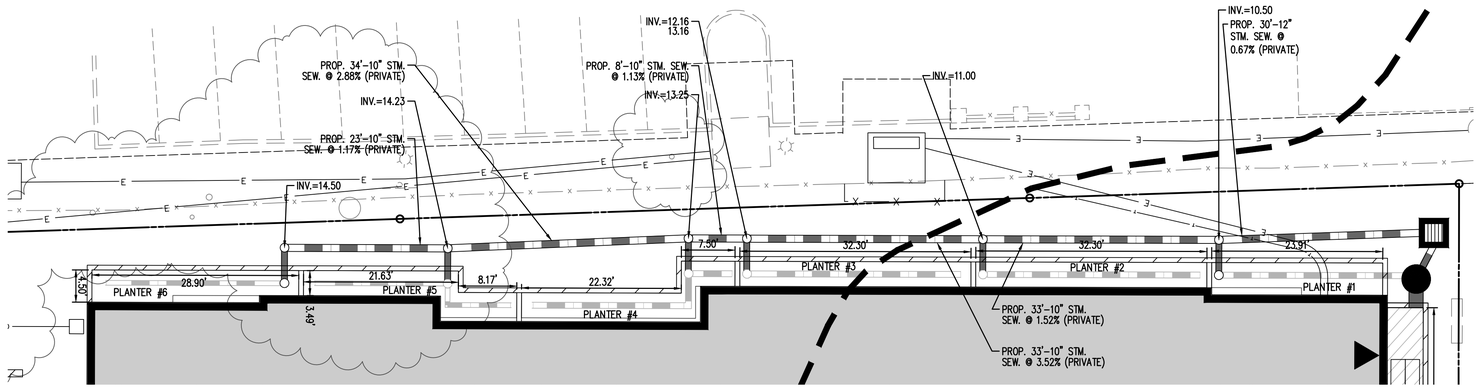
Planter # 2
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2500 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2500 SF x 0.0833' = 198 CF
SIZE OF THE PLANTER = 113.1 SF
V1 (PONDING DEPTH) = 113.1 SF X 1' = 113 CF
V2 (SOIL MEDIA) = 113.1 SF X 1.5' X 0.25 (VOIE = 42 CF
V3 (#57 & PEA GRAVEL) = 113.1 SF X 1' X 0.4 (VOIDS) = 45 CF
TOTAL VOLUME = 200 CF PROVIDED

Planter # 3
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2500 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2500 SF x 0.0833' = 198 CF
SIZE OF THE PLANTER = 113.1 SF
V1 (PONDING DEPTH) = 113.1 SF X 1' = 113 CF
V2 (SOIL MEDIA) = 113.1 SF X 1.5' X 0.25 (VOIE = 42 CF
V3 (#57 & PEA GRAVEL) = 113.1 SF X 1' X 0.4 (VOIDS) = 45 CF
TOTAL VOLUME = 200 CF PROVIDED

Planter # 4
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2500 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2500 SF x 0.0833' = 198 CF
SIZE OF THE PLANTER = 129 SF
V1 (PONDING DEPTH) = 129 SF X 1' = 129 CF
V2 (SOIL MEDIA) = 129 SF X 1.5' X 0.25 (VOIDS = 48 CF
V3 (#57 & PEA GRAVEL) = 129 SF X 1' X 0.4 (VOIDS) = 51 CF
TOTAL VOLUME = 228 CF PROVIDED

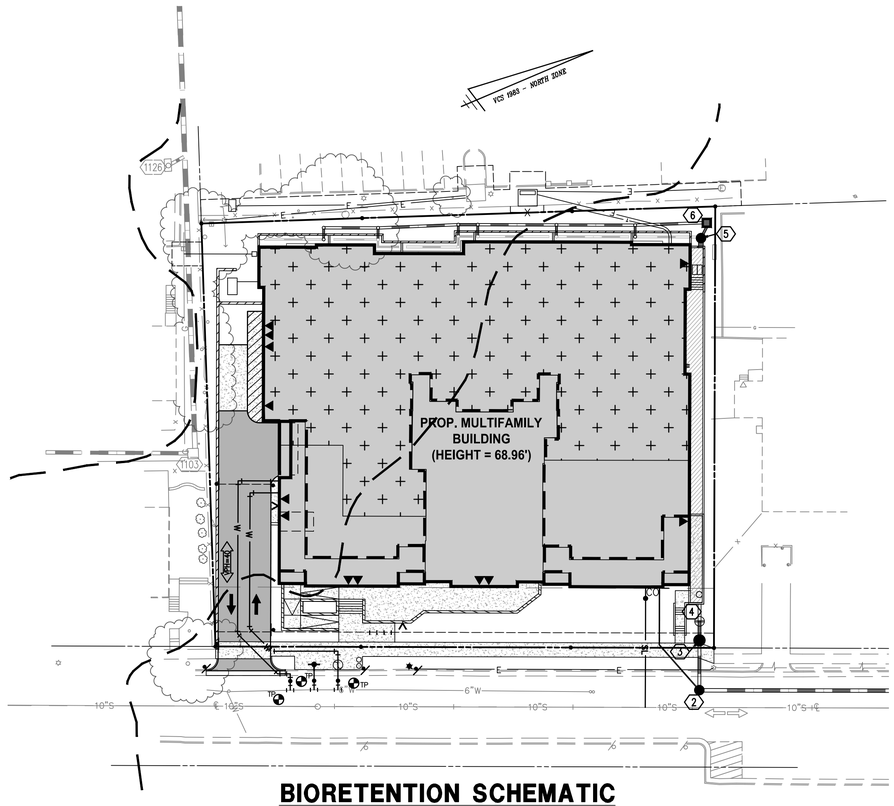
Planter # 5
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2500 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2500 SF x 0.0833' = 198 CF
SIZE OF THE PLANTER = 117.3 SF
V1 (PONDING DEPTH) = 117.3 SF X 1' = 117 CF
V2 (SOIL MEDIA) = 117.3 SF X 1.5' X 0.25 (VOIE = 43 CF
V3 (#57 & PEA GRAVEL) = 117.3 SF X 1' X 0.4 (VOIDS) = 46 CF
TOTAL VOLUME = 206 CF PROVIDED

Planter # 6
AREA TO URBAN BIORETENTION STORMWATER PLANTER — 2500 SF
TREAT 1" STORM RUNOFF PER DEQ SPEC. #9
TvBMP = 0.95 x 2500 SF x 0.0833' = 198 CF
SIZE OF THE PLANTER = 124.5 SF
V1 (PONDING DEPTH) = 124.5 SF X 1' = 124 CF
V2 (SOIL MEDIA) = 124.5 SF X 1.5' X 0.25 (VOIE = 46 CF
V3 (#57 & PEA GRAVEL) = 124.5 SF X 1' X 0.4 (VOIDS) = 49 CF
TOTAL VOLUME = 219 CF PROVIDED



PLANTER DETAILS

SCALE: 1" = 10'



BIORETENTION SCHEMATIC

SCALE: 1" = 20'

TYPICAL 12"X18" SURFACE BMP SIGNAGE DETAIL

STORMWATER MANAGEMENT FACILITY

This Best Management Practice (BMP) facility helps to maintain the health of our streams, the Potomac River, and the Chesapeake Bay. It also helps to prevent flooding and stream erosion, promotes improved water quality, and protects aquatic life.

You are in the

Four Mile Run

Watershed

Report Problems to: (703) 746-6499

CITY OF ALEXANDRIA

Department of Transportation & Environmental Services

NOTE: SIGNAGE TO BE INSTALLED ON THE FRONT OF PLANTER BOX OR MOUNTED WITHIN THE VICINITY OF THE FACILITY.

PLANTER BOX MAINTENANCE

Planter Box Maintenance Schedule

Maintenance	Frequency
• Spot weeding, erosion repair, trash removal, and mulch raking	Twice during growing season
• Add reinforcement planting to maintain the desired vegetation density • Remove invasive plants using recommended control methods • Stabilize the contributing drainage area to prevent erosion	As needed
• Spring inspection and cleanup • Supplement mulch to maintain a 2-3 inch layer • Prune trees and shrubs • Examine for the ponding depth and adjust accordingly • Inspect inflows and overflow for erosion • Inspect for structural deficiencies and repair	Annually
• Remove sediment in pre-treatment cells and inflow points	Once every 2 to 3 years
• Replace the mulch layer	Every 3 years
• Inspected and certified by a professional licensed in the State of Virginia	Once every 5 years

NOTES

1. NOTE LEAF SCREENS TO BE INSTALLED AT ALL DOWNSPOUTS FOR PRETREATMENT PURPOSES.
2. ALL PROPOSED BMPS TO BE PRIVATELY OWNED AND MAINTAINED.
3. WALTER L. PHILLIPS, INC. DOES NOT PROVIDE BMP CERTIFICATIONS FOR NON-PROPRIETARY BMPS. A 3RD PARTY INSPECTOR MUST PREPARE AND CERTIFY A BMP CERTIFICATION FOR EACH URBAN BIO-RETENTION FACILITY PRIOR TO PROJECT CLOSEOUT.

PLANTER BOX MATERIAL SPECS

Planter Box Material Specifications

Material	Specification	Notes
Waterproofing	Watertight shell or impermeable liner	Use a thirty mil (minimum) PVC Geomembrane liner or equivalent.
Filter Media Composition	Filter Media to contain: • 80%-90% sand with >75% being coarse to very coarse • 10%-20% soil fines • 3%-5% organic matter in the form of plant based compost meeting Clearinghouse Design Specification #4, Section 6.5	The volume of filter media based on 110% of the plan volume, to account for settling or compaction.
Filter Media Testing	Plant available P within Low+ (L+) to Medium (M) per DCR 2014 Nutrient Management Criteria (18-40 mg/kg P for the Mehlich III procedure) and CEC >5	The media must be procured from approved filter media vendors.
Mulch Layer	Use aged, shredded hardwood bark mulch	Lay a 2 to 3 inch layer on the surface of the filter bed.
Choking Layer	3 inch layer of pea gravel or VDOT #8 stone which is laid over the underdrain stone.	
Stone Jacket for Underdrain and/or Storage Layer	1 inch stone should be double-washed and clean and free of all fines (e.g., VDOT #57 stone).	12 inches for the underdrain
Underdrains and Overflows	Use 4 inch rigid schedule 40 PVC pipe with 3/8-inch perforations at 6 inches on center, maximum of 3 rows of perforations; position each underdrain on a 1% or 2% slope.	Lay the perforated pipe under the length of the planter box, and install non-perforated pipe as needed to connect with the storm drain system. Install T's and Y's as needed, depending on the underdrain configuration. Extend overflow pipes to the surface with vented caps.
Plant Materials	1 quart-sized perennial installed per 1-2 sf and/or 1 3-gallon shrub installed per 7.5 sf over entire ponding area from DEQ Specification 9: Table 9.5	Choose either herbaceous and/or shrubs

WATER PROOFING NOTES

NOTE: WALTER L. PHILLIPS, INC. IS NOT RESPONSIBLE FOR WATER PROOFING DESIGN REQUIRED AT BUILDING FOUNDATION. CONTRACTOR AND OWNER TO PROVIDE PROPER WATERPROOFING ESPECIALLY NEAR PROPOSED BMP FACILITIES.

ESI Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
SCALE: AS NOTED | DATE: 02/25/2025
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

BMP DETAILS - URBAN BIO-RETENTION

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

HYDRODYNAMIC SEPARATOR DETAIL

CONTECH® ENGINEERED SOLUTIONS — **CASCADE separator™**
Flow-Based Sizing per VADEQ Regulations

Project Name:	3908 Elbert Avenue		
Site Designation:	Str. 3	**Date:**	2/28/25
County or Independent City:	Alexandria	**Design Engineer:**	MJS
State:	VA		

Annual Rainfall (inches)	43	
Target Rainfall Event, P (inches)	1.00	

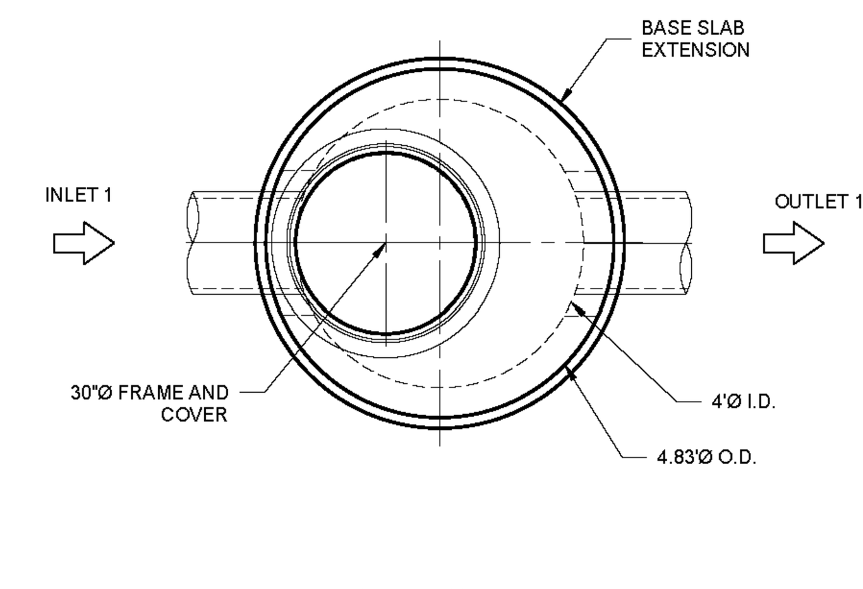
Volume from Upstream Runoff Reduction Practice to BMP:

	Remaining Volume from Upstream RR Practice (cf)	Runoff Coefficient (R_v)	Effective Area (ac)
Managed Turf	0	0	0.00
Impervious Cover	0	0.95	0.00

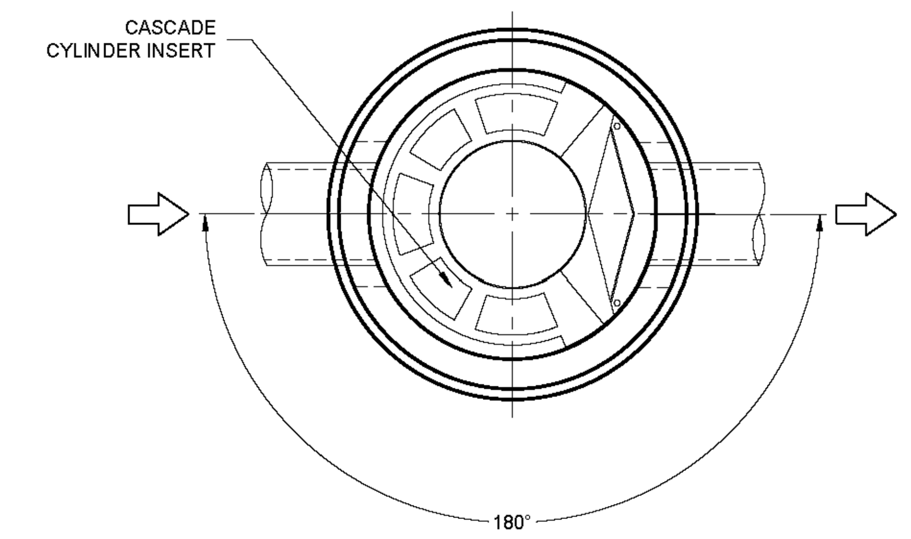
Volume from Additional Credit Area to BMP:

	Treatment Volume from Untreated Credit Area (cf)	Runoff Coefficient (R_v)	Effective Area (ac)
Managed Turf	103	0.25	0.11
Impervious Cover	2036	0.95	0.59

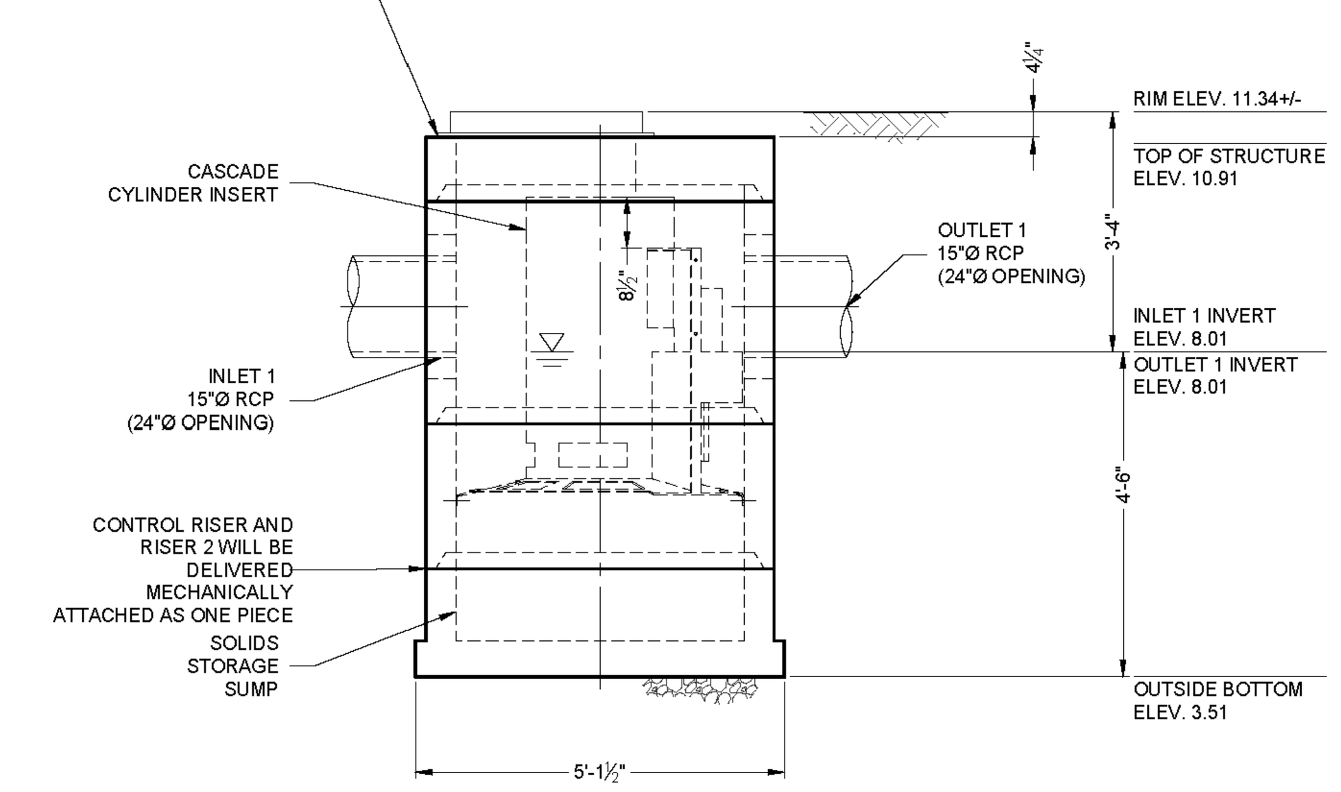
Total Volume to be Treated	2139	cf
Total Effective Area to be Treated	0.70	ac
Composite Rv	0.84	
Time of Concentration (Tc)	6.00	min
Unit Peak Discharge (qu)	1000	cfs/mi2/in
Treatment Volume Peak Discharge	0.92	cfs
Model Name	CS-4	



PLAN VIEW
INTERNALS NOT SHOWN



PLAN VIEW FOR PIPE ORIENTATION
TOP SLAB NOT SHOWN



ELEVATION VIEW

MATERIAL LIST - PROVIDED BY CONTECH

COUNT	DESCRIPTION	INSTALLED BY
1	CS-4 CYLINDER INSERT, STD.	CONTECH
4	CS-4 ALUMINUM INSTALLATION BRACKETS	CONTECH
1	CS-4 HARDWARE KIT	CONTECH
1 PLC	GRADE RINGS/RISERS	CONTRACTOR
1	30"Ø X 4" FRAME AND COVER, EJ #41600483, OR EQUIV.	CONTRACTOR

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH REPRESENTATIVE. www.ContechES.com
3. CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 AND BE CAST WITH THE CONTECH LOGO.
5. CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

STRUCTURE WEIGHT
APPROXIMATE HEAVIEST PICK = 4500 LBS.
OF 3 PIECES

MAXIMUM FOOTPRINT = 5.13'Ø

CONTECH PROPOSAL DRAWING

GILL LAYOUT 1A

CS-4 - 841888-10
3908 ELBERT AVENUE
ALEXANDRIA, VA
SITE DESIGNATION: STR. 3

CONTECH ENGINEERED SOLUTIONS LLC — CASCADE separator

DATE: 02/28/25 — DESIGNED: MJS — DRAWN: MJS — CHECKED: MJS — APPROVED: MJS — PROJECT No.: 841888 — SEQUENCE No.: 10 — SHEET: 1 OF 1

CONTECH® ENGINEERED SOLUTIONS

Cascade Separator® Inspection and Maintenance Guide

CASCADE separator®

Maintenance

The Cascade Separator® system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects sediment and debris will depend upon on-site activities and site pollutant characteristics. For example, unstable soils or heavy winter sanding will cause the sediment storage sump to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

Inspection

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the appropriate time. At a minimum, inspections should be performed twice per year (i.e. spring and fall). However, more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment wash-down areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

A visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet chamber, flumes or outlet channel. The inspection should also quantify the accumulation of hydrocarbons, trash and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided in this Inspection and Maintenance Guide.

Access to the Cascade Separator unit is typically achieved through one manhole access cover. The opening allows for inspection and cleanout of the center chamber (cylinder) and sediment storage sump, as well as inspection of the inlet chamber and slanted skirt. For large units, multiple manhole covers allow access to the chambers and sump.

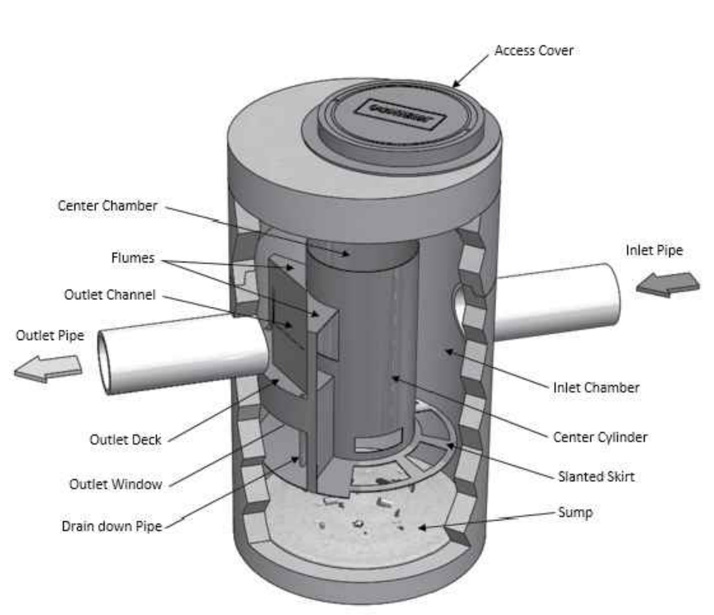
The Cascade Separator system should be cleaned before the level of sediment in the sump reaches the maximum sediment depth and/or when an appreciable level of hydrocarbons and trash has accumulated. If sorbent material is used, it must be replaced when significant discoloration has occurred. Performance may be impacted when maximum sediment storage capacity is exceeded. Contech recommends maintaining the system when sediment level reaches 50% of maximum storage volume. The level of sediment is easily determined by measuring the distance from the system outlet invert (standing water level) to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Finer, silty particles at the top of the pile typically offer less resistance to the end of the rod than larger particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the chart in this document to determine if the height of the sediment pile off the bottom of the sump floor exceeds 50% of the maximum sediment storage.

Cleaning

Cleaning of a Cascade Separator system should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole cover and insert the vacuum tube down through the center chamber and into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The areas outside the center chamber and the slanted skirt should also be washed off if pollutant build-up exists in these areas.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. Then the system should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and to ensure proper safety precautions. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the Cascade Separator system must be done in accordance with local regulations. In many locations, disposal of evacuated sediments may be handled in the same manner as disposal of sediments removed from catch basins or deep sump manholes. Check your local regulations for specific requirements on disposal. If any components are damaged, replacement parts can be ordered from the manufacturer.

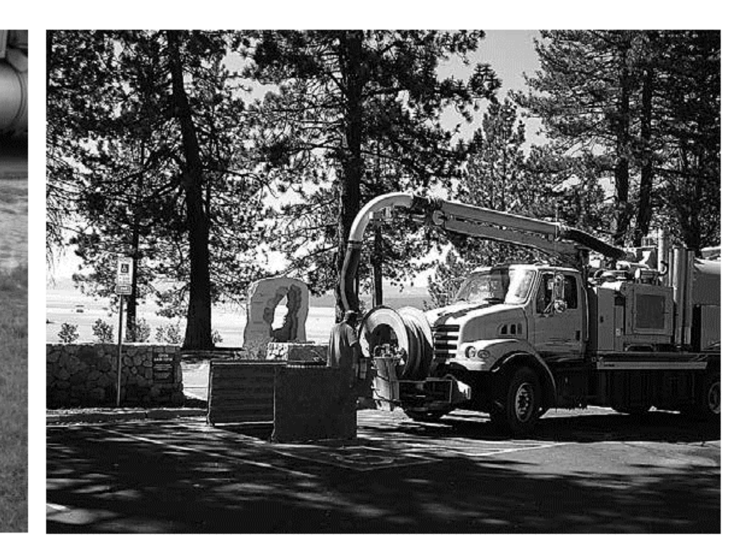


Cascade Separator® Maintenance Indicators and Sediment Storage Capacities

Model Number	Diameter		Distance from Water Surface to Top of Sediment Pile		Sediment Storage Capacity	
	ft	m	ft	m	y^3	m^3
CS-3	3	0.9	1.5	0.5	0.4	0.3
CS-4	4	1.2	2.5	0.8	0.7	0.5
CS-5	5	1.3	3	0.9	1.1	0.8
CS-6	6	1.8	3.5	1	1.6	1.2
CS-8	8	2.4	4.8	1.4	2.8	2.1
CS-10	10	3.0	6.2	1.9	4.4	3.3
CS-12	12	3.6	7.5	2.3	6.3	4.8

Note: The information in the chart is for standard units. Units may have been designed with non-standard sediment storage depth.

A Cascade Separator unit can be easily cleaned in less than 30 minutes.



A vacuum truck excavates pollutants from the systems.

Cascade Separator® Inspection & Maintenance Log

Cascade Model: Location:

Date	Depth Below Invert to Top of Sediment[1]	Floatable Layer Thickness[2]	Describe Maintenance Performed	Maintenance Personnel	Comments

1. The depth to sediment is determined by taking a measurement from the manhole outlet invert (standing water level) to the top of the sediment pile. Once this measurement is recorded, it should be compared to the chart in the maintenance guide to determine if the height of the sediment pile off the bottom of the sump floor exceeds 50% of the maximum sediment storage. Note: to avoid underestimating the volume of sediment in the chamber, the measuring device must be carefully lowered to the top of the sediment pile.
2. For optimum performance, the system should be cleaned out when the floating hydrocarbon layer accumulates to an appreciable thickness. In the event of an oil spill, the system should be cleaned immediately.

NOTE
1. ALL PROPOSED BMPS TO BE PRIVATELY OWNED AND MAINTAINED.

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SCALE: N.T.S. — DATE: 02/25/2025 — DRAWN: SC/TB — CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
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03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

BMP DETAILS - HYDRODYNAMIC SEPARATOR

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

LOD TO DETENTION - 1-YEAR STORM

1

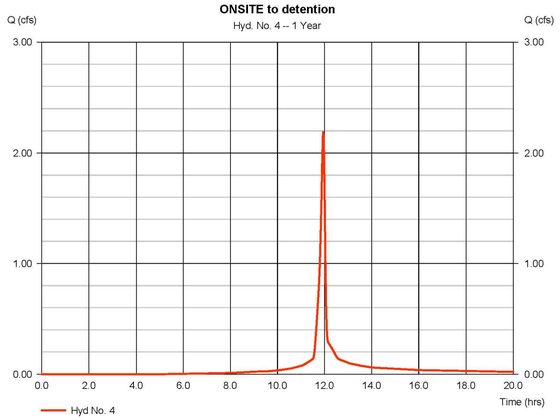
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 4

ONSITE to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 2.196 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 4,630 cuft
Drainage area	= 0.691 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



LOD TO DETENTION - 2-YEAR STORM

2

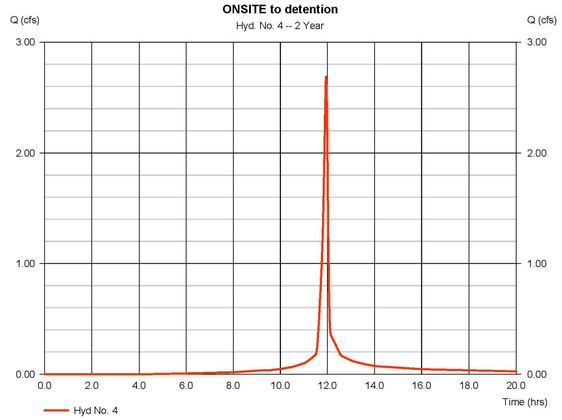
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 4

ONSITE to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 2.693 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 5,753 cuft
Drainage area	= 0.691 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



LOD TO DETENTION - 10-YEAR STORM

3

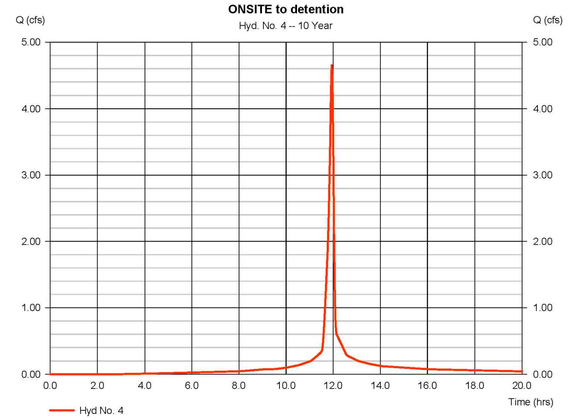
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 4

ONSITE to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 4.660 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 10,337 cuft
Drainage area	= 0.691 ac	Curve number	= 93
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



OUTSIDE LOD TO DETENTION - 1-YEAR STORM

1

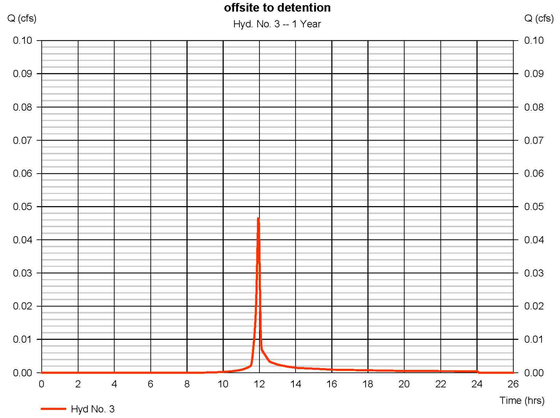
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 3

offsite to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 0.046 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 93 cuft
Drainage area	= 0.021 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



OUTSIDE LOD TO DETENTION - 2-YEAR STORM

2

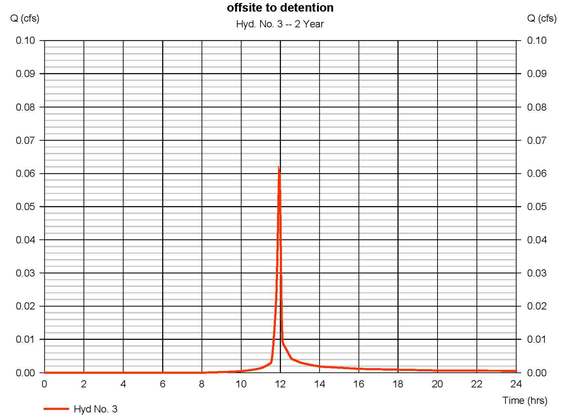
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 3

offsite to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 0.060 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 123 cuft
Drainage area	= 0.021 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



OUTSIDE LOD TO DETENTION - 10-YEAR STORM

3

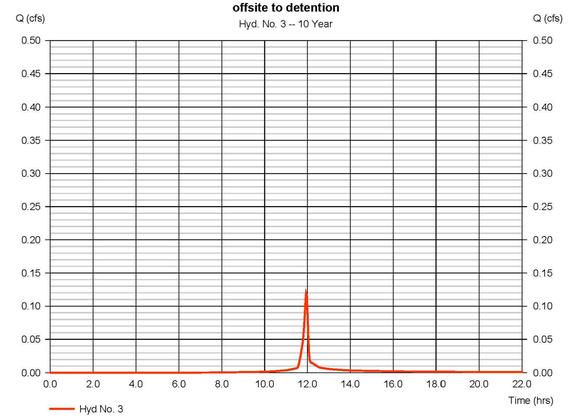
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 3

offsite to detention

Hydrograph type	= SCS Runoff	Peak discharge	= 0.119 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 248 cuft
Drainage area	= 0.021 ac	Curve number	= 85
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



ESI
Peer Review

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DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: NONE
PLAN STATUS

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COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No. 041851 — PROFESSIONAL ENGINEER — 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

HYDROGRAPHS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg, File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0704.dwg

SHEET: C-0709

UNDETAINED - 1-YEAR STORM

1

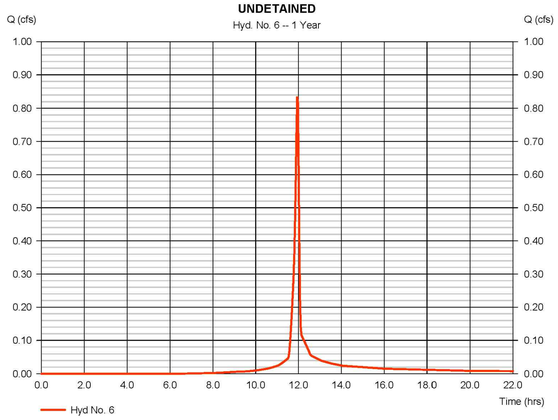
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 6

UNDETAINED

Hydrograph type	= SCS Runoff	Peak discharge	= 0.835 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 1,716 cuft
Drainage area	= 0.295 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



UNDETAINED - 2-YEAR STORM

2

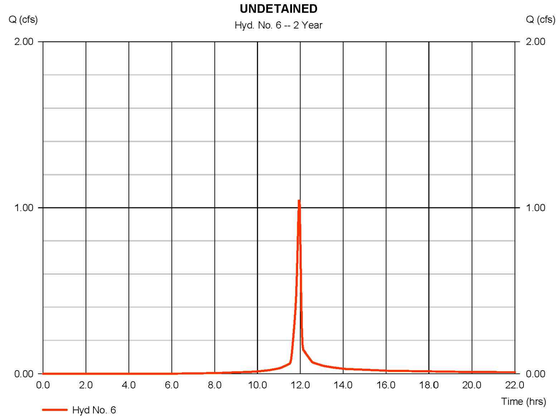
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 6

UNDETAINED

Hydrograph type	= SCS Runoff	Peak discharge	= 1.048 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 2,175 cuft
Drainage area	= 0.295 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



UNDETAINED - 10-YEAR STORM

3

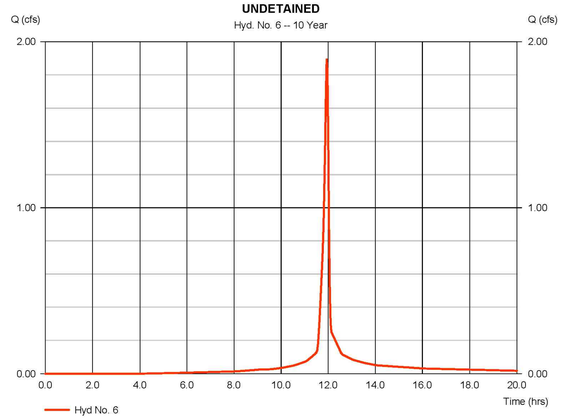
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 6

UNDETAINED

Hydrograph type	= SCS Runoff	Peak discharge	= 1.896 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 4,081 cuft
Drainage area	= 0.295 ac	Curve number	= 90
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.20 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TOTAL TO DETENTION - 1-YEAR STORM

1

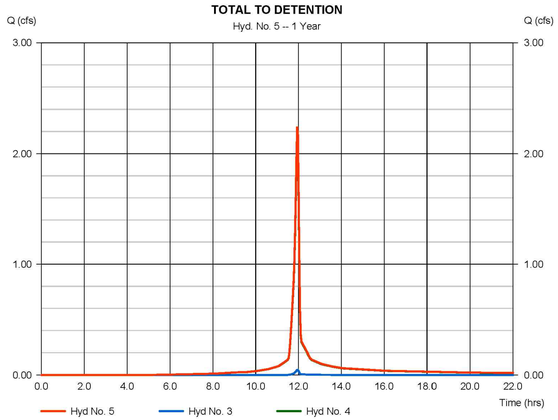
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 5

TOTAL TO DETENTION

Hydrograph type	= Combine	Peak discharge	= 2.242 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 4,723 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 0.712 ac



TOTAL TO DETENTION - 2-YEAR STORM

2

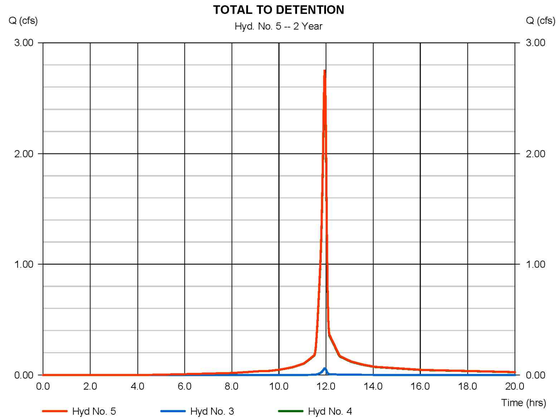
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 5

TOTAL TO DETENTION

Hydrograph type	= Combine	Peak discharge	= 2.754 cfs
Storm frequency	= 2 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 5,876 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 0.712 ac



TOTAL TO DETENTION - 10-YEAR STORM

3

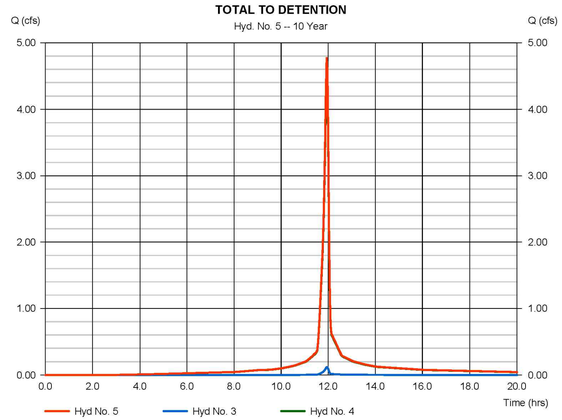
Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 5

TOTAL TO DETENTION

Hydrograph type	= Combine	Peak discharge	= 4.779 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 10,585 cuft
Inflow hyds.	= 3, 4	Contrib. drain. area	= 0.712 ac



ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: NONE
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1
03/18/2025	FINAL SITE PLAN #1

DATE	DESCRIPTION
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON Lic. No.041851 — PROFESSIONAL ENGINEER — 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

HYDROGRAPHS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg, File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0704.dwg

SHEET: C-0710

DETENTION ROUTING - 1-YEAR STORM

Hydrograph Report

1

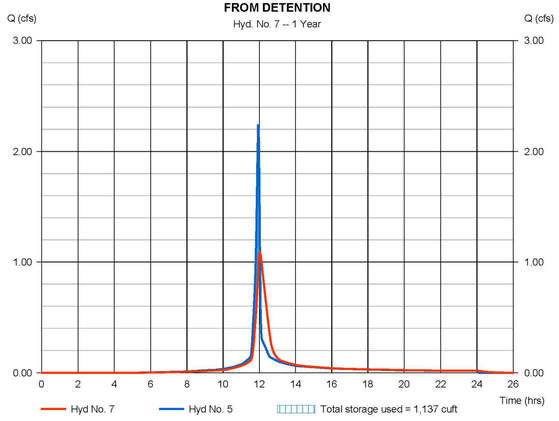
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 7

FROM DETENTION

Hydrograph type	= Reservoir	Peak discharge	= 1.083 cfs
Storm frequency	= 1 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 4,721 cuft
Inflow hyd. No.	= 5 - TOTAL TO DETENTION	Max. Elevation	= 9.65 ft
Reservoir name	= VAULT	Max. Storage	= 1,137 cuft

Storage Indication method used.



DETENTION ROUTING - 2-YEAR STORM

Hydrograph Report

3

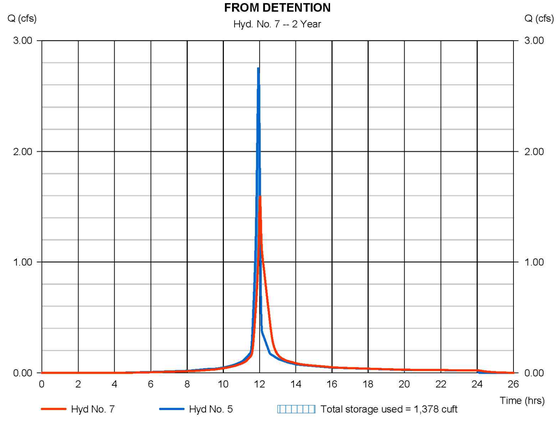
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 7

FROM DETENTION

Hydrograph type	= Reservoir	Peak discharge	= 1.598 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.03 hrs
Time interval	= 2 min	Hyd. volume	= 5,873 cuft
Inflow hyd. No.	= 5 - TOTAL TO DETENTION	Max. Elevation	= 9.99 ft
Reservoir name	= VAULT	Max. Storage	= 1,378 cuft

Storage Indication method used.



POND REPORT

Pond Report

2

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Pond No. 2 - VAULT

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 8.09 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	8.09	727	0	0
1.00	9.09	727	727	727
2.00	10.09	727	727	1,454
3.00	11.09	727	727	2,181

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 6.00	12.00	0.00	0.00
Span (in)	= 6.00	12.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 8.09	9.68	0.00	0.00
Length (ft)	= 0.00	0.00	0.00	0.00
Slope (%)	= 0.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

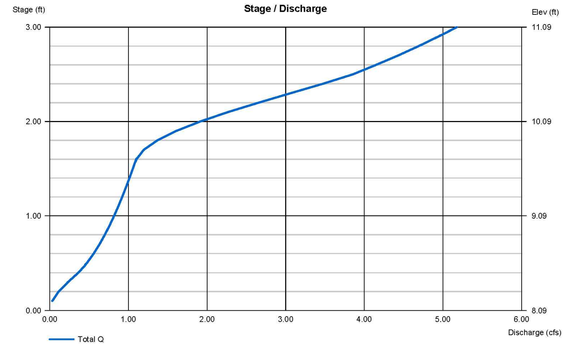
Weir Structures

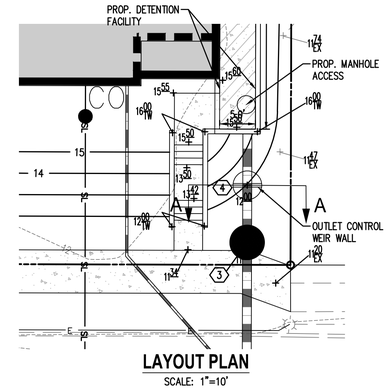
	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.00	0.00	0.00	0.00
Crest El. (ft)	= 0.00	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= ---	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

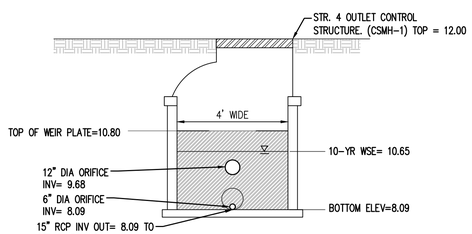
TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).





LAYOUT PLAN
SCALE: 1"=10'



OUTLET CONTROL STRUCTURE #4
NTS
(PRIVATELY OWNED AND MAINTAINED)

DETENTION ROUTING - 10-YEAR STORM

Hydrograph Report

4

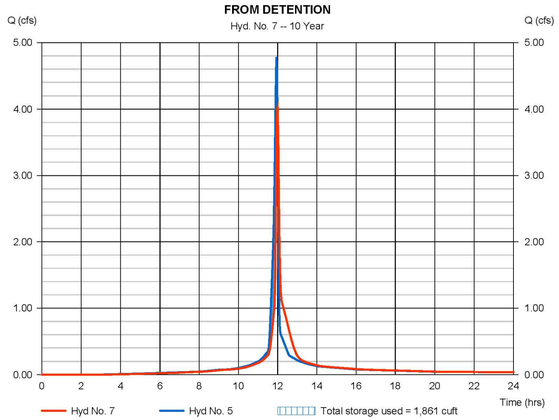
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025 — Friday, 09 / 5 / 2025

Hyd. No. 7

FROM DETENTION

Hydrograph type	= Reservoir	Peak discharge	= 4,031 cfs
Storm frequency	= 10 yrs	Time to peak	= 12.00 hrs
Time interval	= 2 min	Hyd. volume	= 10,582 cuft
Inflow hyd. No.	= 5 - TOTAL TO DETENTION	Max. Elevation	= 10.65 ft
Reservoir name	= VAULT	Max. Storage	= 1,861 cuft

Storage Indication method used.



ALLOWABLE DISCHARGE RATES

1-YEAR STORM

AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION:
Q1= 0.046 CFS
Q2= 0.060 CFS
Q10= 0.119 CFS

1-YEAR STORM ENERGY BALANCE EQUATION:

Q(ALLOWABLE) =0.9* (Q(PRE) X RV(PRE))/RV(POST) + Q1(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION

Q(ALLOWABLE) = 0.9 * (2.679 CFS X 5,472 CF/ 6,604 CF) = 2.00 CFS + 0.046 CFS = 2.04 CFS

2-YEAR STORM

Q(ALLOWABLE) = Q(PRE) + Q2(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION=
3.387 CFS + 0.06 CFS = 3.44 CFS

10-YEAR STORM

Q(ALLOWABLE) = Q(PRE) + Q10(AREA OUTSIDE LIMITS OF DISTURBANCE TO DETENTION=
6.231 CFS + 0.119 CFS = 6.35 CFS

DETENTION SUMMARY

1-YEAR STORM

UNDETAINED =	0.835 CFS
TOTAL TO DETENTION =	2.242 CFS
FROM DETENTION =	1.083 CFS
TOTAL FLOW FROM SITE AFTER DETENTION =	1.918 CFS (LESS THAN 2.04 CFS ALLOWABLE)

2-YEAR STORM

UNDETAINED =	1.048 CFS
TO DETENTION =	2.754 CFS
FROM DETENTION =	1.598 CFS
TOTAL FLOW FROM SITE AFTER DETENTION =	2.646 CFS (LESS THAN 3.44 CFS ALLOWABLE)

10-YEAR STORM

UNDETAINED =	1.896 CFS
TO DETENTION =	4.779 CFS
FROM DETENTION =	4.031 CFS
TOTAL FLOW FROM SITE AFTER DETENTION =	5.927 CFS (LESS THAN 6.35 CFS ALLOWABLE)

ESI Peer Review

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DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: NONE
PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — PROFESSIONAL ENGINEER — 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

HYDROGRAPHS

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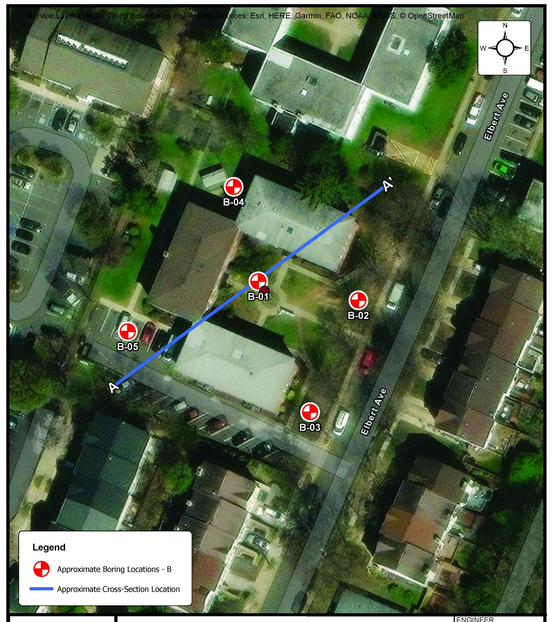


BORING LOCATION DIAGRAM
CLI Elbert Avenue Residences
3908 Elbert Avenue, Alexandria, Virginia

Joseph Browne Development Associates, LLC

ENGINEER: ABZ2
SCALE: 1" = 50'
PROJECT NO.: 01:33945
SHEET:
DATE: 3/27/2025

DETENTION VAULTS TO BE STRUCTURALLY DESIGNED BY OTHERS. DETAILS SHOWN FOR DIMENSIONAL PURPOSES ONLY.

CLIENT: Joseph Browne Development Associates, LLC	PROJECT NO.: 01:33945	BORING NO.: B-04	SHEET: 1 of 2
PROJECT NAME: CLI Elbert Avenue Residences	DRILLER/CONTRACTOR: Connelly and Associates, Inc.		
SITE LOCATION: 3908 Elbert Avenue, Alexandria, Virginia, 22305			LOSS OF CIRCULATION
LATITUDE: 46.472220	LONGITUDE: -76.899318	STATION:	SURFACE ELEVATION: 13.0
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6" (TOP/MC/SPT-N value)*
					Topsoil Thickness[2.00"]			4-4-3 (7)
	S-1	SS	18	18	(CL FILL) FILL, LEAN CLAY WITH GRAVEL, trace organics, black, brown, moist, firm			3-5-4 (9)
	S-2	SS	18	16	(GC FILL) FILL, CLAYEY GRAVEL WITH SAND, yellowish brown, moist, loose, trace organics			6-7-6 (13)
5	S-3	SS	18	14	(CL) LEAN CLAY, light brown, brown, moist, stiff		8	8-6-6 (12)
	S-4	SS	18	12				
10							3	
	S-5	SS	18	12	(CL) LEAN CLAY WITH GRAVEL, trace organics, contains slight roots, dark brown, brown, moist, very stiff			10-12-13 (25)
15							-2	
	S-6	SS	18	4	(SP) SAND WITH GRAVEL, light brown, moist, medium dense			13-14-13 (27)
20							-7	
	S-7	SS	18	6				16-14-13 (27)
25							-12	
	S-8	SS	18	8	(CL) LEAN CLAY WITH GRAVEL, brown, moist, very stiff			14-14-14 (28)
30							-17	

CONT'D ON NEXT PAGE

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	N/A	BORING STARTED:	Feb 12 2025	CAVE IN DEPTH:	40.00
WL (Completion)	N/A	BORING COMPLETED:	Feb 12 2025	HAMMER TYPE:	Automatic
WL (Seasonal High Water)	Not Determined	EQUIPMENT: CME 55	LOGGED BY:	DRILLING METHOD:	Hollow Stem Auger
WL (Stabilized)	31.00				

GEOTECHNICAL BOREHOLE LOG

CLIENT: Joseph Browne Development Associates, LLC	PROJECT NO.: 01:33945	BORING NO.: B-04	SHEET: 2 of 2
PROJECT NAME: CLI Elbert Avenue Residences	DRILLER/CONTRACTOR: Connelly and Associates, Inc.		
SITE LOCATION: 3908 Elbert Avenue, Alexandria, Virginia, 22305			LOSS OF CIRCULATION
LATITUDE: 46.472220	LONGITUDE: -76.899318	STATION:	SURFACE ELEVATION: 13.0
			BOTTOM OF CASING

DEPTH (FT)	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DIST. (IN)	RECOVERY (IN)	DESCRIPTION OF MATERIAL	WATER LEVELS	ELEVATION (FT)	BLOWS/6" (TOP/MC/SPT-N value)*
					(CL) LEAN CLAY WITH GRAVEL, brown, moist, very stiff			15-10-12 (22)
35	S-9	SS	18	8	(SM) SILTY SAND, light brown, gray, moist, medium dense		-22	
	S-10	SS	18	8	(SC) CLAYEY SAND WITH GRAVEL, gray, brown, moist, medium dense to dense			10-15-12 (27)
40							-27	
	S-11	SS	18	8				12-16-15 (31)
45							-32	
	S-12	SS	18	18				13-14-17 (31)
50					END OF BORING AT 50.0 FT		-37	
55							-42	
60							-47	

THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY LINES BETWEEN SOIL TYPES. IN-SITU THE TRANSITION MAY BE GRADUAL

WL (First Encountered)	N/A	BORING STARTED:	Feb 12 2025	CAVE IN DEPTH:	40.00
WL (Completion)	N/A	BORING COMPLETED:	Feb 12 2025	HAMMER TYPE:	Automatic
WL (Seasonal High Water)	Not Determined	EQUIPMENT: CME 55	LOGGED BY:	DRILLING METHOD:	Hollow Stem Auger
WL (Stabilized)	31.00				

GEOTECHNICAL BOREHOLE LOG

STORMWATER FACILITY INSPECTION CONSTRUCTION NOTES:

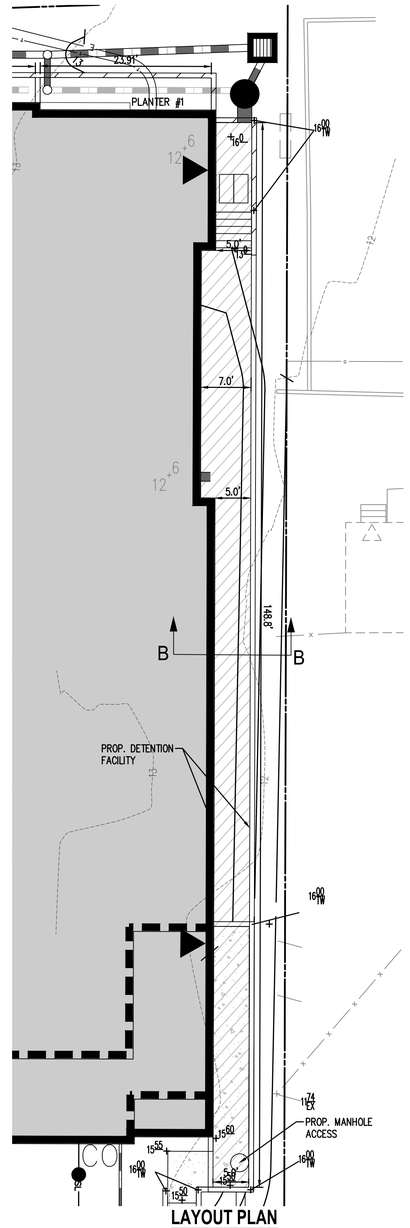
1. THE OWNER SHOULD BE AWARE THAT THE STORMWATER DETENTION AND WATER QUALITY FACILITIES ARE SUBJECT TO A MAINTENANCE AGREEMENT WITH THE LOCAL JURISDICTION COMMITTING THE OWNER TO PROPERLY CONSTRUCTING, INSPECTING, AND MAINTAINING THE FACILITIES. THE AGREEMENT DETAILS THE SPECIFIC INSPECTION AND MAINTENANCE REQUIREMENTS WHICH THE OWNER SHOULD BECOME FAMILIAR WITH.
2. THE OWNER IS REQUIRED TO OR SHOULD HAVE THE FACILITIES INSPECTED AND MAINTAINED ON AN ANNUAL BASIS. THE JURISDICTION MAY REQUIRE THE SUBMISSION OF REPORTS ON ALL INSPECTIONS AND MAINTENANCE ACTIVITIES.
3. THE LOCAL JURISDICTION IS REQUIRED UNDER VIRIGINIA REGULATIONS TO PERFORM THEIR OWN INSPECTION OF STORMWATER FACILITIES AT LEAST ONCE EVERY FIVE YEARS. THE JURISDICTION WILL NOTIFY THE OWNER OF ANY NOTED DEFICIENCIES, WHAT ACTIONS ARE REQUIRED, AND BY WHEN. THE MAINTENANCE AGREEMENT ALLOWS THE JURISDICTION TO CORRECT DEFICIENCIES, AT THE OWNER'S EXPENSE, IF THE OWNER FAILS TO DO SO WITHIN THE SPECIFIED TIMEFRAME.
4. THE OWNER SHOULD BE AWARE THAT NO ALTERATIONS ARE ALLOWED TO THE FACILITY WITHOUT PROCESSING A PLAN AND CONSTRUCTION PERMIT THROUGH THE JURISDICTION.

MAINTENANCE NOTES

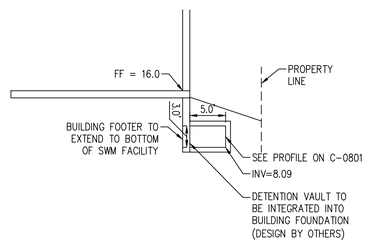
1. ALL STORMWATER FACILITIES – INCLUDING CASCADE, DETENTION SYSTEM, AND PLANTER BOXES – ARE TO BE PRIVATELY OWNED AND MAINTAINED BY THE BUILDING OWNER/OPERATOR OR HOMEOWNER'S ASSOCIATION.

STORMWATER FACILITY CONSTRUCTION NOTES:

1. ALL STORMWATER MANAGEMENT AND WATER QUALITY FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
2. ALL STORMWATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE VIRGINIA DEQ SPECIFICATIONS AND LOCAL JURISDICTION'S REGULATIONS AND MANUALS. THIS INCLUDES MATERIALS, CONSTRUCTION METHODS AND SEQUENCE. IN THE EVENT OF A CONFLICT BETWEEN THE PLANS, DEQ OR LOCAL JURISDICTION, THE LOCAL JURISDICTION'S REQUIREMENTS SHALL GOVERN.
3. THE DETAILS FROM THE MANUFACTURER OF THE STORMWATER FACILITIES SHOWN ARE CURRENT AT THE TIME OF PLAN PREPARATION. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING THE LATEST DETAILS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CONSTRUCT THE FACILITIES IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
4. A PRE-CONSTRUCTION MEETING IS REQUIRED BETWEEN THE CONTRACTOR, STORMWATER FACILITY MANUFACTURER IF ANY, AND GEOTECHNICAL ENGINEER OF RECORD.
5. THE CONTRACTOR SHALL PROVIDE MATERIAL CERTIFICATIONS AND DELIVERY SLIPS AND A SIGNED CERTIFICATION THAT THE FACILITY WAS CONSTRUCTED IN ACCORDANCE WITH THESE PLANS.
6. THE INSTALLATION OF ALL STORMWATER DETENTION AND WATER QUALITY FACILITIES SHALL BE INSPECTED BY A LICENSED PROFESSIONAL IN ACCORDANCE WITH THE DEQ SPECIFICATIONS IF APPLICABLE AS WELL AS THE JURISDICTION'S REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE LICENSED PROFESSIONAL SELECTED BY THE OWNER TO ARRANGE FOR THE NECESSARY INSPECTIONS.
7. IF BEDROCK IS ENCOUNTERED, THE EXCAVATION FOR THE FACILITY SHALL EXTEND A MINIMUM OF 2' BELOW THE STORMWATER FACILITY INTO UNDERLYING BEDROCK OR AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER OF RECORD.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND MAINTENANCE OF THE STORMWATER FACILITIES AT LEAST UNTIL THE PROJECT IS SUBSTANTIALLY COMPLETE (UNLESS OTHERWISE SPECIFIED BY THE CONTRACTOR'S CONTRACT WITH THE OWNER).



LAYOUT PLAN
SCALE: 1"=10'



SECTION B-B
NTS
(PRIVATELY OWNED AND MAINTAINED)

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WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETENTION SCHEMATICS & BORING DATA

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

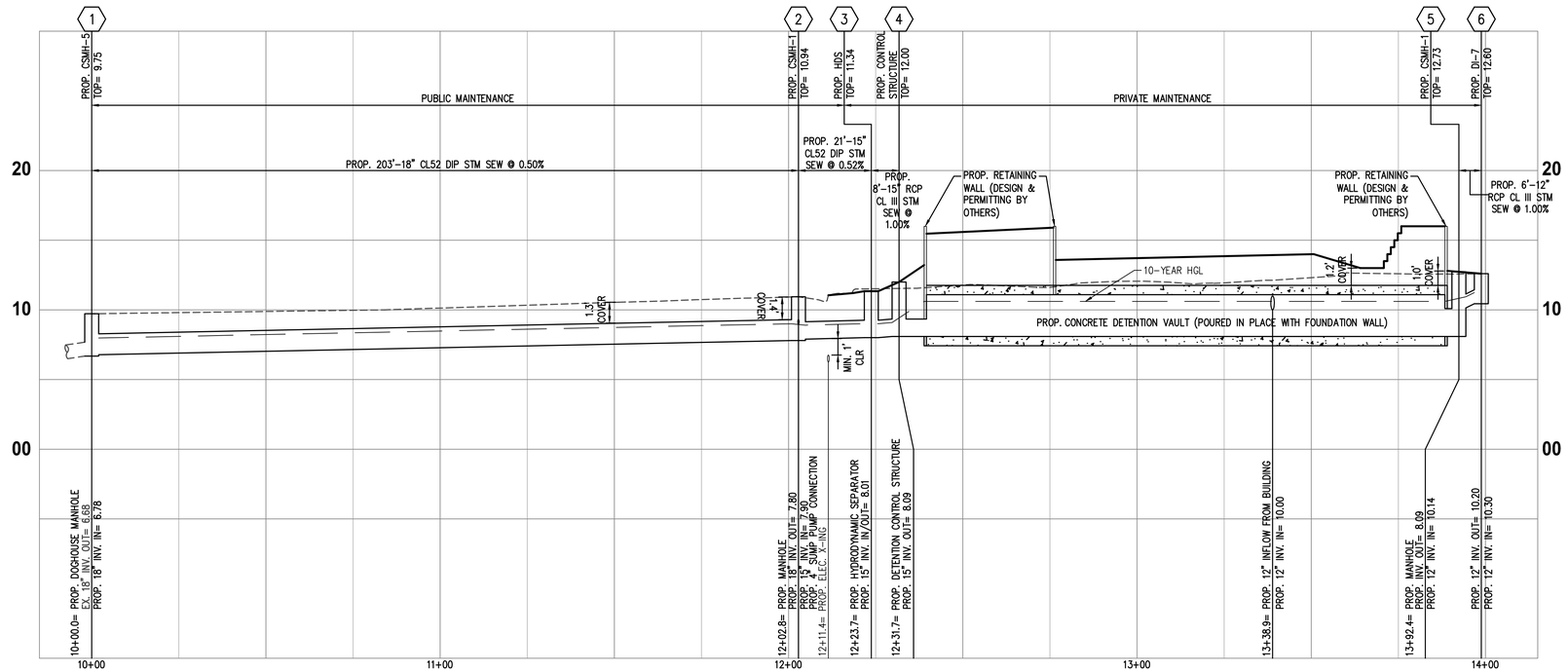
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



SCALE: HOR. 1" = 20'
VERT. 1" = 5'

STORM SEWER COMPS

FROM POINT	TO POINT	AREA "A" ACRES	CURVE NUMBER CN	RUNOFF Q INCRE-MENT C.F.S.	RUNOFF Q10 C.F.S.	INVERT ELEV'S UPPER END	INVERT ELEV'S LOWER END	LENGTH FT.	SLOPE FT./FT.	MANNING'S 'n'	DIA. IN.	CAPA-* CITY C.F.S.	VEL. F.P.S.	FLOW TIME SEC.	NORMAL DEPTH IN.	%FULL AT PEAK FLOW
6	5	0.11	82	0.61	2.94	10.20	10.14	6	0.0100	0.015	12	3.32	4.49	1.34	9.33	89%
building	DET	0.25	98	1.74	1.74	10.50	10.30	4	0.0500	0.015	12	7.43	7.34	0.55	4.10	23%
4	3	0.00		0.00	4.01	8.09	8.01	8	0.0100	0.015	15	6.02	4.97	1.61	9.37	67%
3	2	0.00		0.00	4.01	8.01	7.90	21	0.0052	0.013	15	5.01	4.29	4.89	10.68	80%
2	1	0.00		0.00	4.01	7.80	6.78	203	0.0056	0.013	18	7.99	4.30	47.21	9.39	50%

*CAPACITY AT 0.94D

HGL COMPS

Inlet Station	Structure Type (M,I)	Outlet Water Surface Elevation	D_o (in)	Q_o	L_o	Sf_o	H_f	Junction Loss V_c	H_c	D_c (in)	Q_c	V_c	Q_cV_c	$V_c^2/2g$	H_i	Angle (°)	H_{bend}	H_t	1.3H_t	.5(H_t)	Final H	Inlet Water Surface Elevation	Max Water Surface Elevation	Difference
1*	*	2*	3*	4*	5*	6	7	8	9	*	10*	11	12		13	14*	15	16	17	18	19	20	*	
2	M	7.98	18	4.01	203	0.001	0.30	2.27	0.02	15	4.01	3.27	13.11	0.17	0.06	90	0.12	0.19	---	0.10	0.39	8.37	10.94	2.57
3	M	8.37	15	4.01	21	0.004	0.08	3.27	0.04	15	4.01	3.27	13.11	0.17	0.06	0	0.00	0.10	---	0.05	0.13	8.50	11.34	2.84
4	M	8.50	15	4.01	8	0.004	0.03	3.27	0.04	#N/A	#N/A	---	---	---	---	0	####	0.04	---	0.02	0.05	8.56	12.00	3.44
5	M	10.61	#N/A	#N/A	#N/A	---	---	---	---	12	2.94	3.75	11.01	0.22	0.08	90	0.15	0.23	---	0.11	0.11	10.72	12.73	2.01
6	I	10.94	12	2.94	6	0.007	0.04	3.75	0.05	12	2.33	2.97	6.92	0.14	0.05		---	0.10	0.13	0.07	0.11	11.05	12.60	1.55

INLET COMPS

GRATE INLET DESIGN COMPUTATIONS

					GRATE DESIGN			
Structure #	Type	Area (Ac.)	"CN"	FLOW (CFS)	GRATE	PERIM	AREA	DEPTH
6	DI-7	0.112	82	0.61	36"	6.417	2.563	0.100

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

NOTE: SEE PLAN VIEW C-0401/C-0501.

ESI Peer Review

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

STORM SEWER PROFILES AND COMPUTATIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

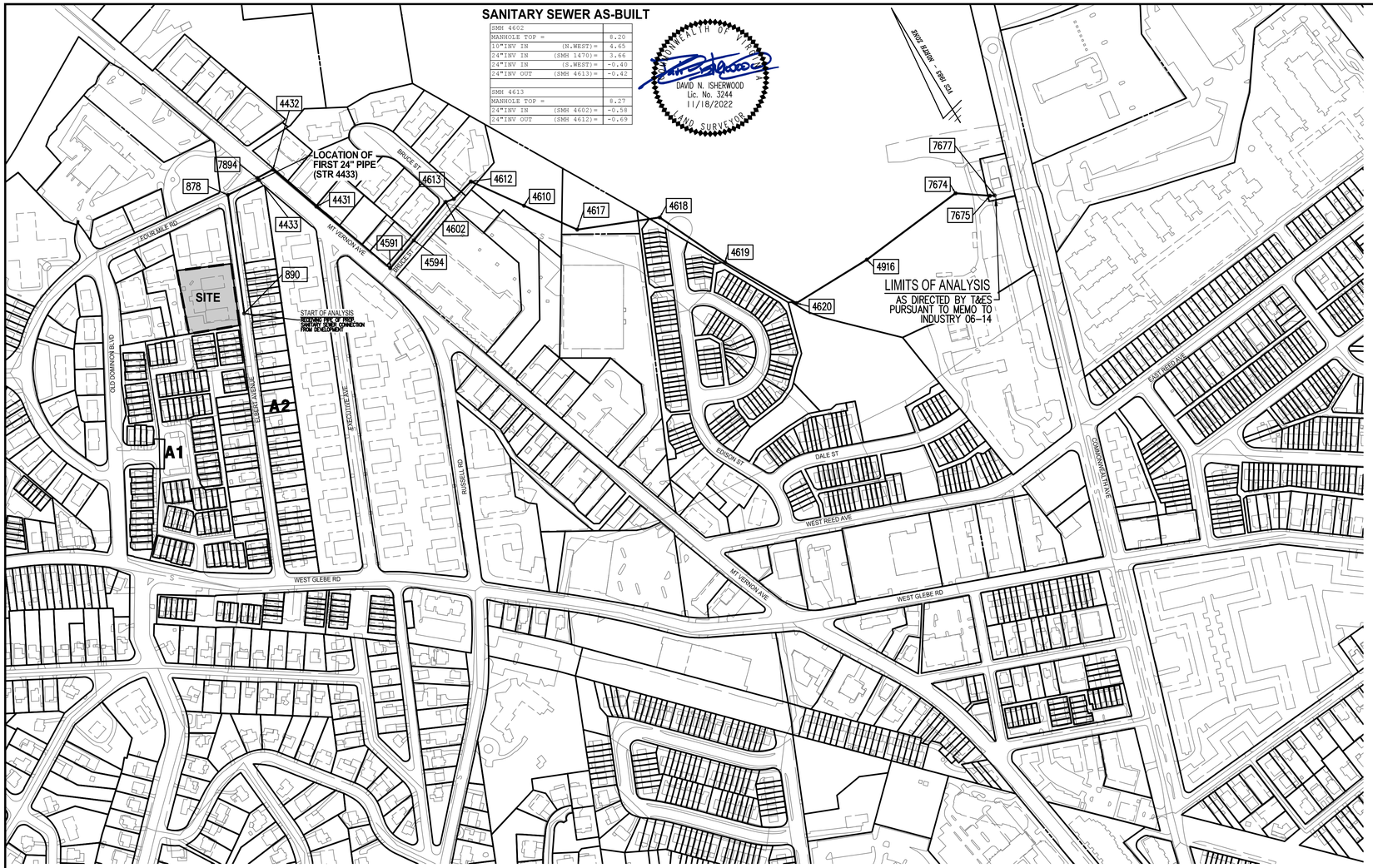
File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-0801.dwg

SHEET: C-0801

SANITARY SEWER AS-BUILT

SMH 4602		
MANHOLE TOP =		8.20
10"INV IN	(N.WEST)=	4.65
24"INV IN	(SMH 1470)=	3.66
24"INV IN	(S.WEST)=	-0.40
24"INV OUT	(SMH 4613)=	-0.42
SMH 4613		
MANHOLE TOP =		8.27
24"INV IN	(SMH 4602)=	-0.58
24"INV OUT	(SMH 4612)=	-0.69

COMMONWEALTH OF VIRGINIA
DAVID N. ISHERWOOD
Lic. No. 3244
11/18/2022
LAND SURVEYOR



LEGEND

- EX. SEWER SYSTEM (NOT INCLUDED IN ANALYSIS)
- EX. SEWER SYSTEM SUBJECT TO OUTFALL ANALYSIS
- SITE AREA
- SUBSHEDS CONTRIBUTING TO SANITARY SEWER OUTFALL ANALYSIS
- # STRUCTURE NUMBER

NOTES

1. PIPE NETWORK OBTAINED FROM A MIX OF FIELD VERIFIED SURVEY BY WALTER L. PHILLIPS, INC. AND CITY OF ALEXANDRIA GIS/RECORD INFORMATION AND IS DEPICTED TO THE BEST OF THE ENGINEER'S KNOWLEDGE.
2. SEE THIS SHEET FOR PRELIMINARY SANITARY SEWER ADEQUATE OUTFALL NARRATIVE.
3. PIPE SIZE, LENGTH, SLOPE AND MATERIAL LISTED BASED ON A MIX OF FIELD SURVEY AND AVAILABLE CITY RECORDS.
4. THIS ANALYSIS IS PRELIMINARY AND WAS PREPARED USING A COMBINATION OF FIELD SURVEY, RECORD INFORMATION, AND CITY OF ALEXANDRIA GIS. ADDITIONAL ANALYSIS AND VERIFICATION OF DOWNSTREAM SEWER WITHIN THE LIMITS OF THIS STUDY WILL BE NECESSARY PRIOR TO THE TIME OF PRELIMINARY SITE PLAN SUBMISSION.
5. FOR THE PURPOSES OF THIS PRELIMINARY ANALYSIS, ASSUMPTIONS WERE MADE FOR SANITARY LATERAL CONNECTION LOCATION AND UNIT MIX IS BASED ON INFORMATION PROVIDED TO US AT THIS TIME.

SANITARY SEWER OUTFALL NARRATIVE

THE SUBJECT SITE IS CURRENTLY SERVED BY A SEPARATE SANITARY SEWER SYSTEM ACCORDING TO THE CITY OF ALEXANDRIA GIS SEWER VIEWER. THE SANITARY FLOW FROM THIS DEVELOPMENT SHALL CONNECT TO THE EXISTING SEWER NETWORK IN ELBERT AVENUE.

IT IS ANTICIPATED THAT THE SANITARY FLOW RESULTING FROM THIS DEVELOPMENT WILL BE APPROXIMATELY:

MULTIFAMILY RESIDENTIAL: 300 GPD x 91 UNITS = 27,300 GPD

27,300 GPD x 4 (PEAK FACTOR) = 109,200 GPD

THE EXISTING SANITARY FLOW FROM THIS STE:

MULTIFAMILY RESIDENTIAL: 300 GPD X 29 UNITS = 8,700 GPD

8,700 GPD X 4 (PEAK FACTOR) = 34,800 GPD

NET: =74,400 GPD

BECAUSE THE PROPOSED DEVELOPMENT WILL RESULT IN AN INCREASE IN EXPECTED SANITARY SEWER FLOW MORE THAN 10,000 GPD, SANITARY SEWER OUTFALL ANALYSIS IS REQUIRED IN ACCORDANCE WITH MEMO TO INDUSTRY NO. 06-14 WITH THE FUTURE DSUP APPLICATION.

Subshed A1

STR	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
890	SINGLE FAMILY RESIDENTIAL	350	90	31,500
	MULTIFAMILY RESIDENTIAL*	300	91	27,300
			TOTAL SUBSHED A1 =	58,800

*PROPOSED WITH THIS DEVELOPMENT. DELINEATION PER EX. SAN. LATERAL LOCATIONS

Subshed A2

STR	USE	DESIGN FLOW (GPD)	UNITS	TOTAL FLOW (GPD)
890	SINGLE FAMILY RESIDENTIAL	350	33	11,550
	MULTIFAMILY RESIDENTIAL	300	24	7,200
			TOTAL SUBSHED A2 =	18,750

TOTAL SUBSHED A= 77,550

SANITARY SEWER FLOW COMPUTATIONS

Sewer ID	From MH ID	To MH ID	Diameter (in)	Area (sf)	Length (ft)	Upstream Invert (ft)	Downstream Invert (ft)	PIPE SLOPE (FT)	Pipe Material	Manning's n	Existing Cumulative Peak Flow From City (gpm)	Existing Cumulative Non-Peak Flow From City (gpm)	Existing Cumulative Non-Peak Flow From City (GPD)	INCREMENTAL CONTRIBUTING FLOW (GPM)	INCREMENTAL FLOW NON-PEAK (GPD)	Site Flow non-peak (GPD)	CUMULATIVE (GPD)	PEAK FLOW FACTOR	CUMULATIVE PEAK FLOW (GPD)	CUMULATIVE PEAK FLOW (CFS)	Capacity (cfs)	Velocity at Peak (fps)	Flow Depth (in)	
008413SEWP	890	878	10	0.55	401.8	7.22**	5.93**	0.0032	PVC	0.010	0	0	0	35	50250	27300	77550	4	310200	0.48	1.60	2.60	3.72	ANALYSIS TO FIRST 24" PIPE PER MEMO TO INDUSTRY 06-14
009641SEWP	878	004433SSMH	18	1.77	116.6	5.45**	4.91	0.0046	Reinforced Concrete	0.015	0	0	0	346	498001	27300	525301	4	2101205	3.25	6.17	3.56	9.24	
008428SEWP	004433SSMH	007894SSMH	24	3.14	9.9	4.81	4.73	0.0081	Reinforced Concrete	0.015	1523***	381	548251	0	0	27300	575551	4	2302205	3.56	17.60	4.41	7.30	
008427SEWP	007894SSMH	004432SSMH	24	3.14	60.1	4.63	4.32	0.0052	Reinforced Concrete (CIPP)	0.015	1523	381	548251	0	0	27300	575551	4	2302205	3.56	14.04	3.75	8.22	
008426SEWP	004432SSMH	004431SSMH	24	3.14	191.4	4.05	3.06	0.0052	Reinforced Concrete	0.015	1523	381	548251	0	0	27300	575551	4	2302205	3.56	14.06	3.75	8.21	
008434SEWP	004431SSMH	004591SSMH	24	3.14	323.5	2.90	0.91	0.0062	Reinforced Concrete (CIPP)	0.015	1530	382	550721	0	0	27300	578021	4	2312083	3.58	15.33	4.00	7.86	
008433SEWP	004591SSMH	004594SSMH	24	3.14	122.5	0.77	0.41	0.0029	Reinforced Concrete (CIPP)	0.015	1533	383	551956	0	0	27300	579256	4	2317022	3.58	10.60	3.06	9.59	
008438SEWP	004594SSMH	004602SSMH	24	3.14	167.9	0.25	-0.40**	0.0039	Reinforced Concrete	0.015	1550	388	558130	0	0	27300	585430	4	2341718	3.62	12.16	3.39	8.95	
008446SEWP	004602SSMH	004613SSMH	24	3.14	29.3	-0.42**	-0.58**	0.0055	Reinforced Concrete (CIPP)	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	14.46	3.88	8.30	ANALYSIS PERFORMED BEYOND MINIMUM DIAMETER OF 24-INCHES TO A POINT AS DIRECTED BY T&ES STAFF PURSUANT TO MEMO TO INDUSTRY 06-14
009347SEWP	004613SSMH	004612SSMH	24	3.14	81.6	-0.69**	-1.01	0.0039	N/A	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	12.18	3.43	9.09	
009348SEWP	004612SSMH	004610SSMH	30	4.91	196.0	-1.01	-1.14	0.0007	N/A	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	9.38	1.81	13.13	
009355SEWP	004610SSMH	004617SSMH	36	7.07	195.6	-1.14	-1.28	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.28	1.79	12.10	
009356SEWP	004617SSMH	004618SSMH	36	7.07	280.3	-1.28	-1.48	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.26	1.79	12.11	
009357SEWP	004618SSMH	004619SSMH	36	7.07	265.5	-1.48	-1.66	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.28	1.79	12.10	
009349SEWP	004619SSMH	004620SSMH	36	7.07	276.3	-1.66	-1.86	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.29	1.79	12.09	
009350SEWP	004620SSMH	004916SSMH	36	7.07	277.8	-1.86	-2.05	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.25	1.79	12.11	
009351SEWP	004916SSMH	007674SSMH	36	7.07	371.9	-2.05	-2.31	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	15.26	1.79	12.11	
009352SEWP	007674SSMH	007675SSMH	30	4.91	115.6	-2.31	-2.39	0.0007	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	9.45	1.82	13.08	
009358SEWP	007675SSMH	007677SSMH	30	4.91	16.2	-2.39	-2.40	0.0006	Reinforced Concrete	0.015	1602	400	576652	0	0	27300	603952	4	2415806	3.74	8.82	1.73	13.59	

* CONFIRMATION OF PIPE MATERIAL NOT AVAILABLE FOR ALL SECTIONS THROUGH STANDARD SURVEYING METHODS. WHEN MATERIAL INFORMATION IS UNAVAILABLE, A MANNING'S N FACTOR OF 0.015 WAS USED.
**INVERTS OBTAINED BY WALTER L. PHILLIPS, INC.
***THE EXISTING CUMULATIVE PEAK FLOW AT 008428SEWP WAS ASSUMED EQUAL TO THE EXISTING CUMULATIVE PEAK FLOW AT 008427SEWP PROVIDED BY THE CITY.

NOTE: PLAN INFORMATION SHOULD BE CONSIDERED AS APPROXIMATE AS IT HAS BEEN TAKEN FROM RECORD INFORMATION AND IS NOT BASED ON A SURVEY.

200 0 100 200 400 800
(IN FEET)
1 INCH = 200'

ESI Peer Review

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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
09/03/25
PROFESSIONAL ENGINEER

REVISION APPROVED BY

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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SANITARY SEWER OUTFALL ANALYSIS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

NOTE: SEE PLAN VIEW C-0401/C-0501.

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HOR. 1" = 5'

DATE: 02/25/2025

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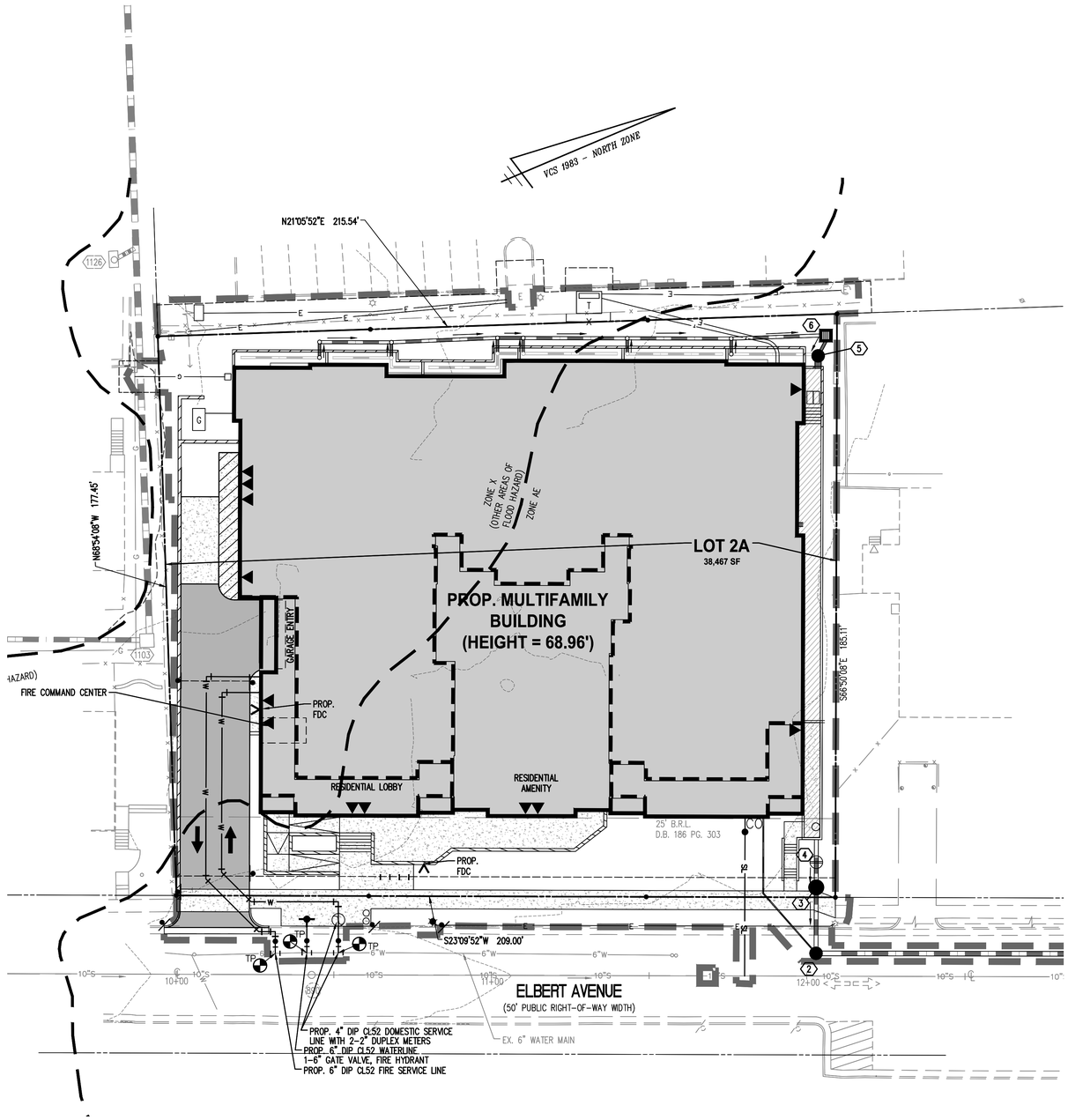
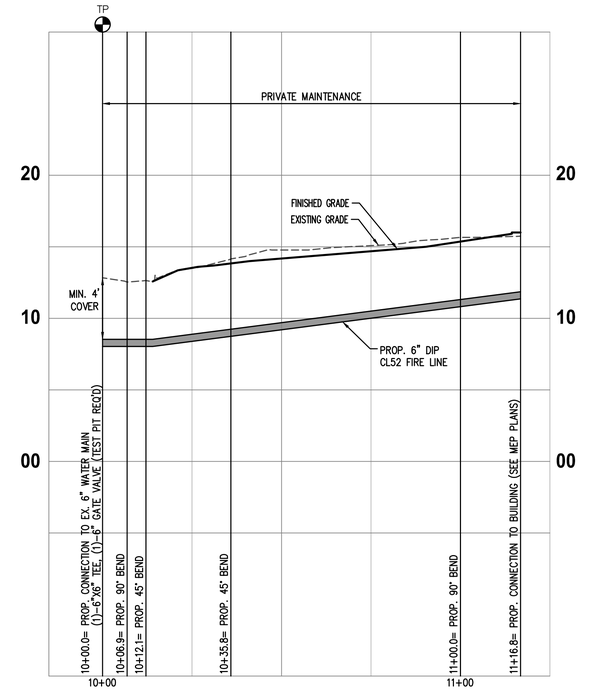


20 0 10 20 40 80
(IN FEET)
1 INCH = 20'



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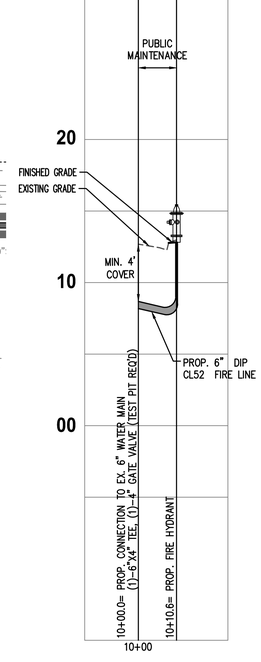

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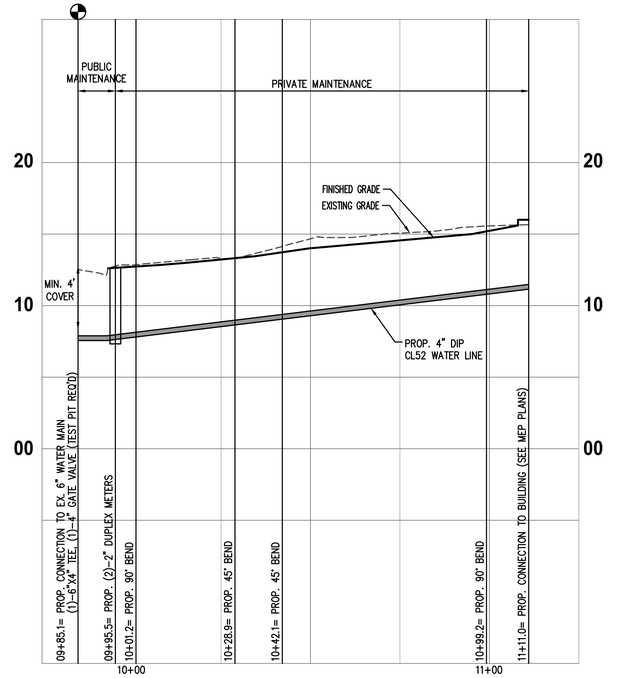

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HOR. 1" = 5'
DATE: 02/25/2025
DRAWN: SCTB
CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON LIC. NO. 041851 PROFESSIONAL ENGINEER
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

WATERLINE PROFILES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

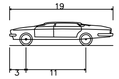
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-1001.dwg



P – Passenger Car

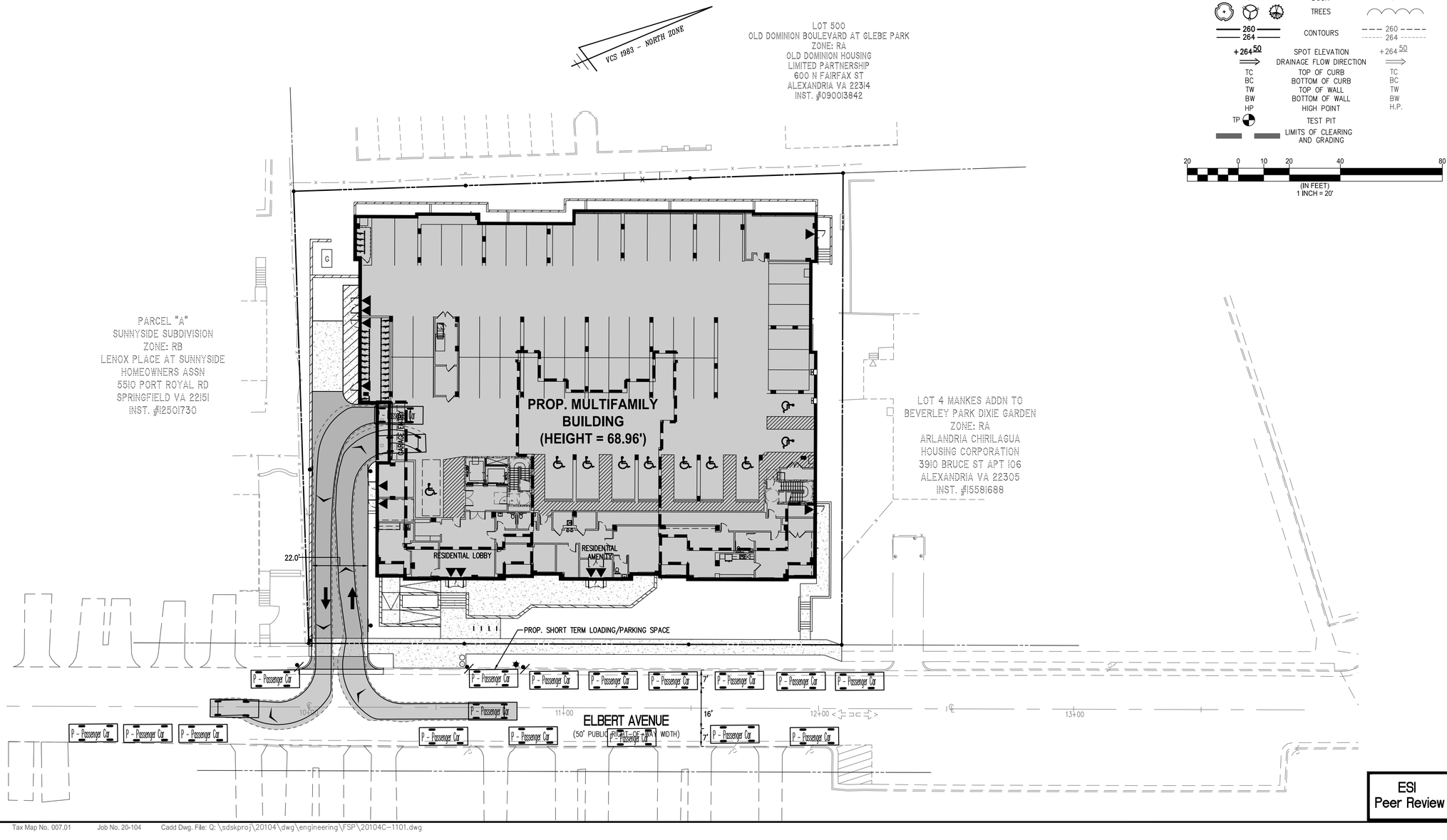
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

20 0 10 20 40 80

(IN FEET)
1 INCH = 20'



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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
09/03/25
PROFESSIONAL ENGINEER

REVISION APPROVED BY

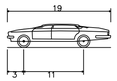
NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

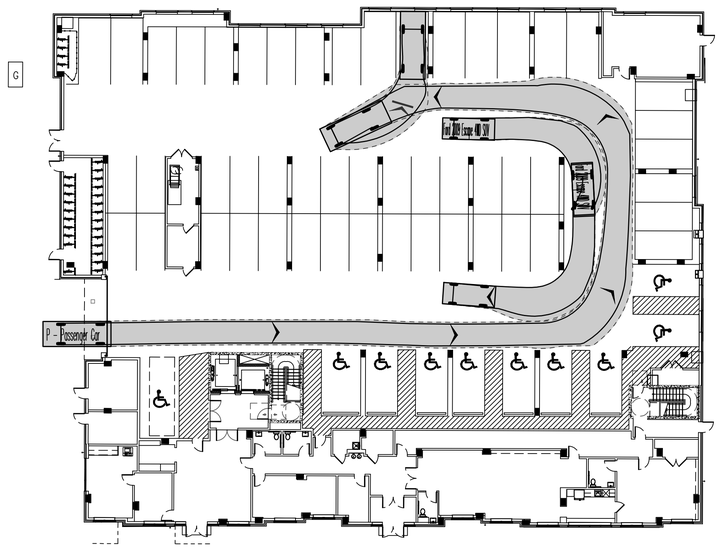
CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

VEHICLE TRACKING MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ENLARGEMENT #1 - ENTERING STANDARD SPACE

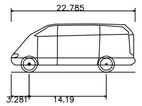


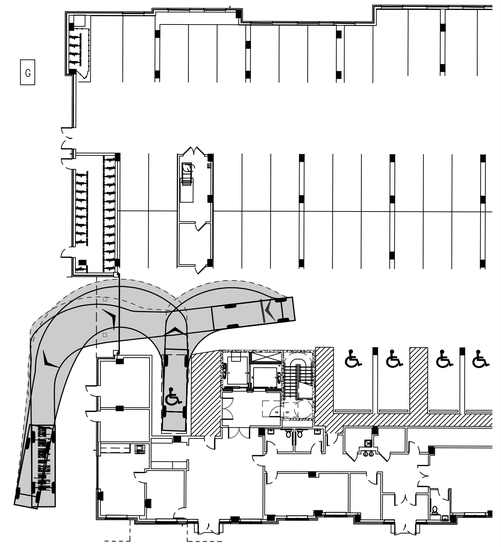


P – Passenger Car

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°

ENLARGEMENT #3 - ENTERING VAN SPACE

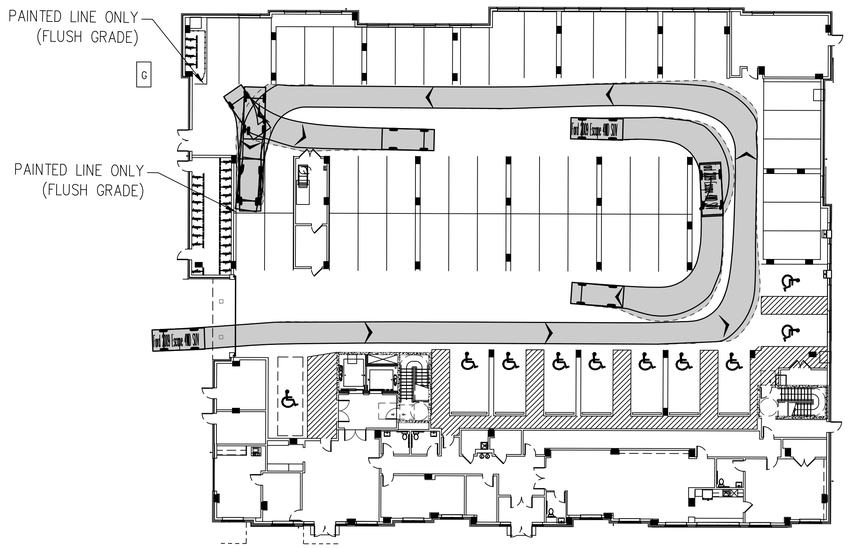


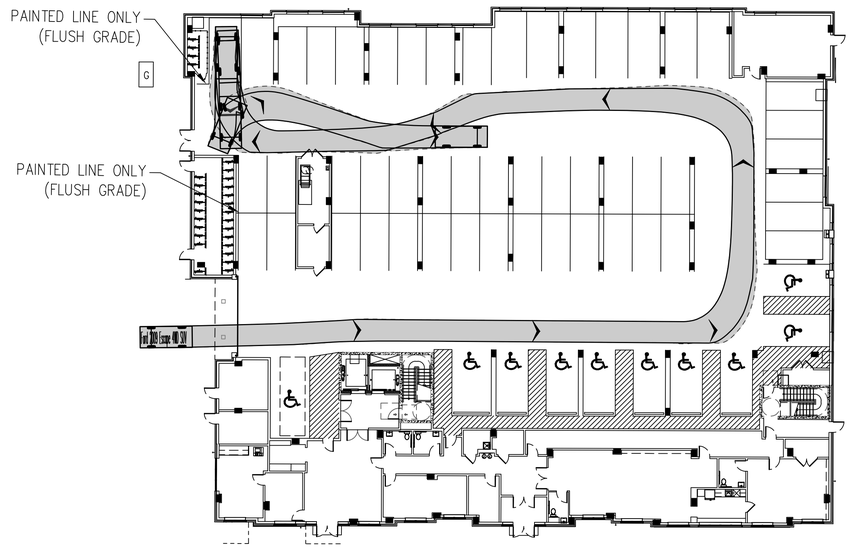


Mercedes Sprinter Traveliner Van 315CDI Long High Roof

Overall Length	22.785ft
Overall Width	6.539ft
Overall Body Height	8.909ft
Min Body Ground Clearance	1.312ft
Track Width	6.539ft
Lock–to–lock time	5.00s
Wall to Wall Turning Radius	25.591ft

ENLARGEMENT #2 - ENTERING COMPACT SPACE





Ford 2009 Escape 4WD SUV

Overall Length	14.558ft
Overall Width	5.925ft
Overall Body Height	5.649ft
Min Body Ground Clearance	0.675ft
Track Width	5.925ft
Lock–to–lock time	4.00s
Curb to Curb Turning Radius	18.350ft

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

VEHICLE TRACKING MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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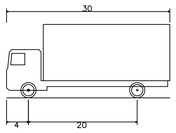
File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-1101.dwg

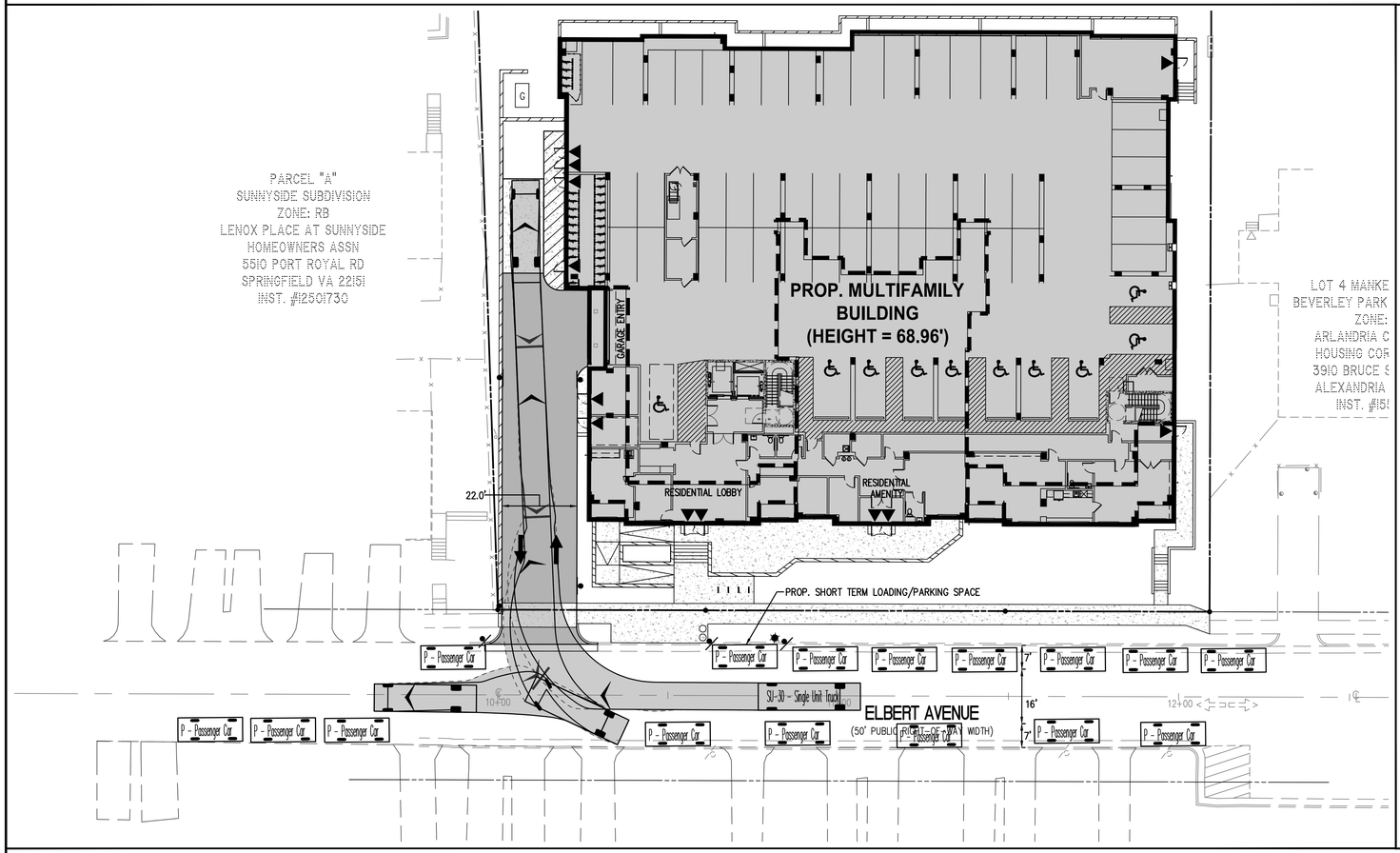
SHEET: C-1102



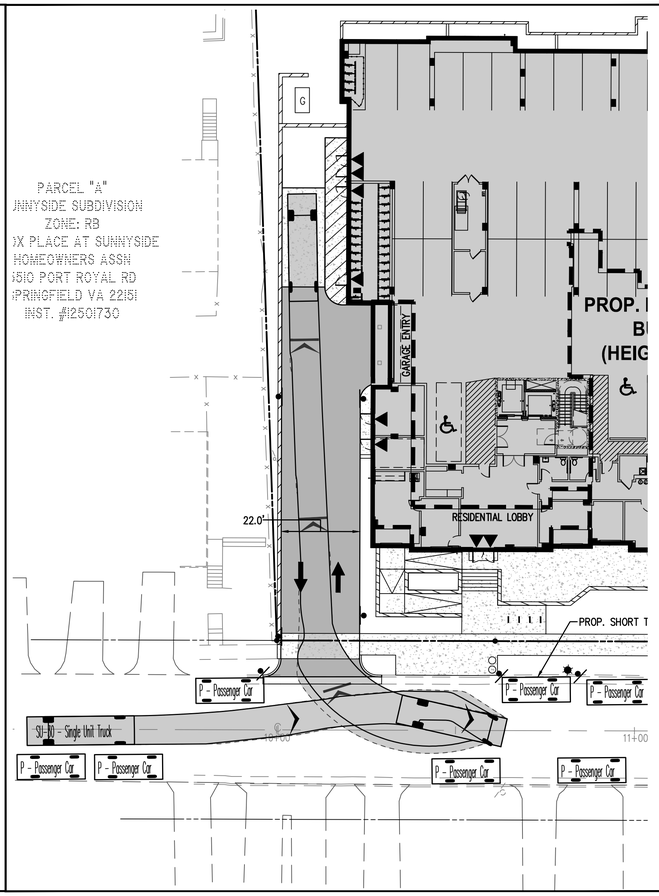
SU-30 – Single Unit Truck

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	6.00s
Max Steering Angle (Virtual)	31.80°

FRONT-IN ENTRY MOVEMENT



REVERSE /BACK-UP ENTRY MOVEMENT



VCS 1983 – NORTH ZONE

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

VEHICLE TRACKING MOVEMENT PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
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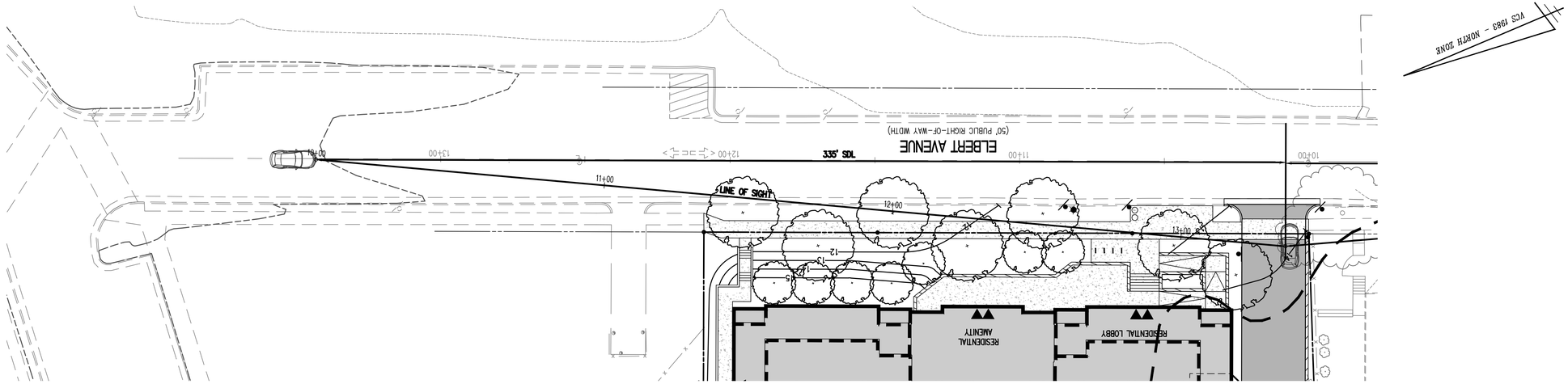
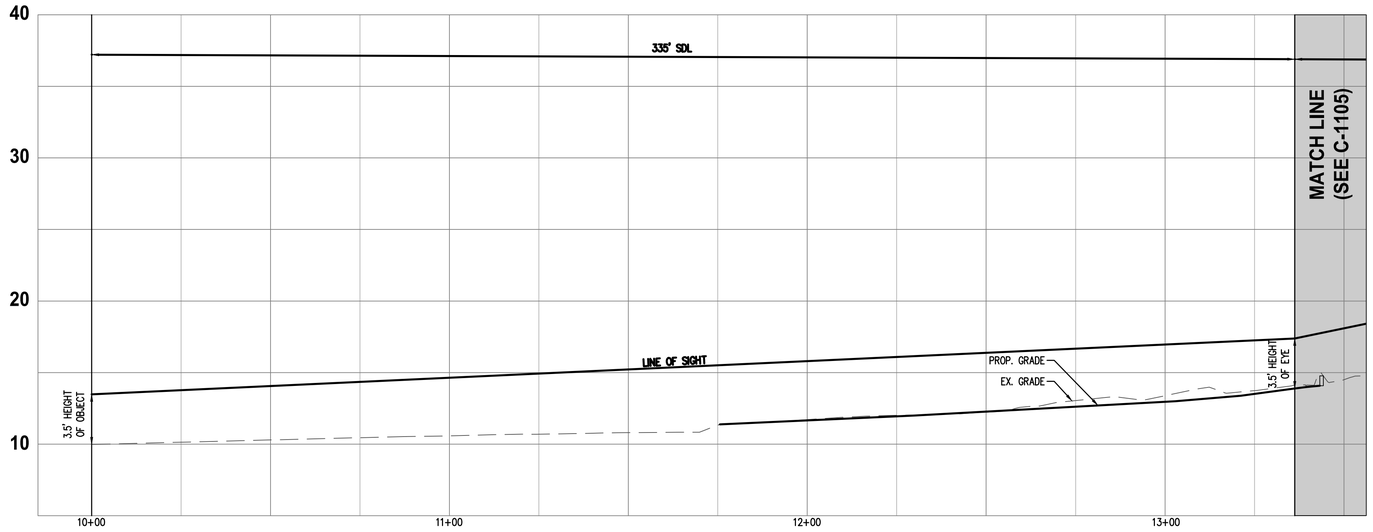
File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-1101.dwg

SHEET: C-1103



SIGHT DISTANCE PLAN VIEW

SCALE: 1" = 20'
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH



SCALE: HOR. 1" = 20'
VERT. 1" = 5'

SIGHT DISTANCE PROFILE

SCALE: HOR. 1" = 20' VERT 1" = 5'
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
T	TRANSFORMER	

PROPOSED	DESCRIPTION	EXISTING
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260	CONTOURS	260
264		264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SIGHT DISTANCE PLAN AND PROFILE

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
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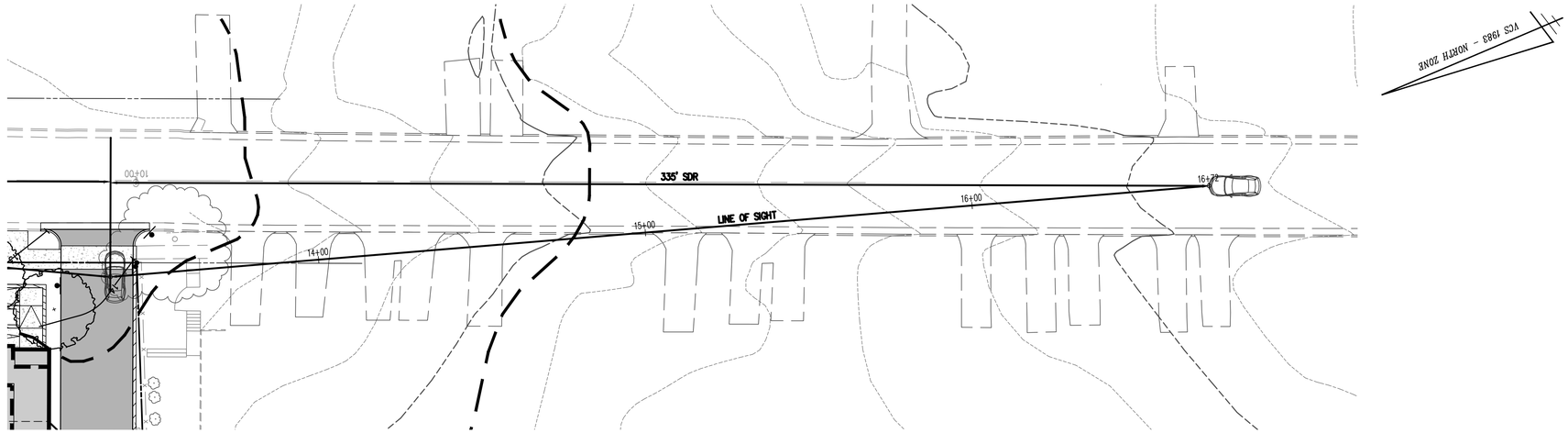
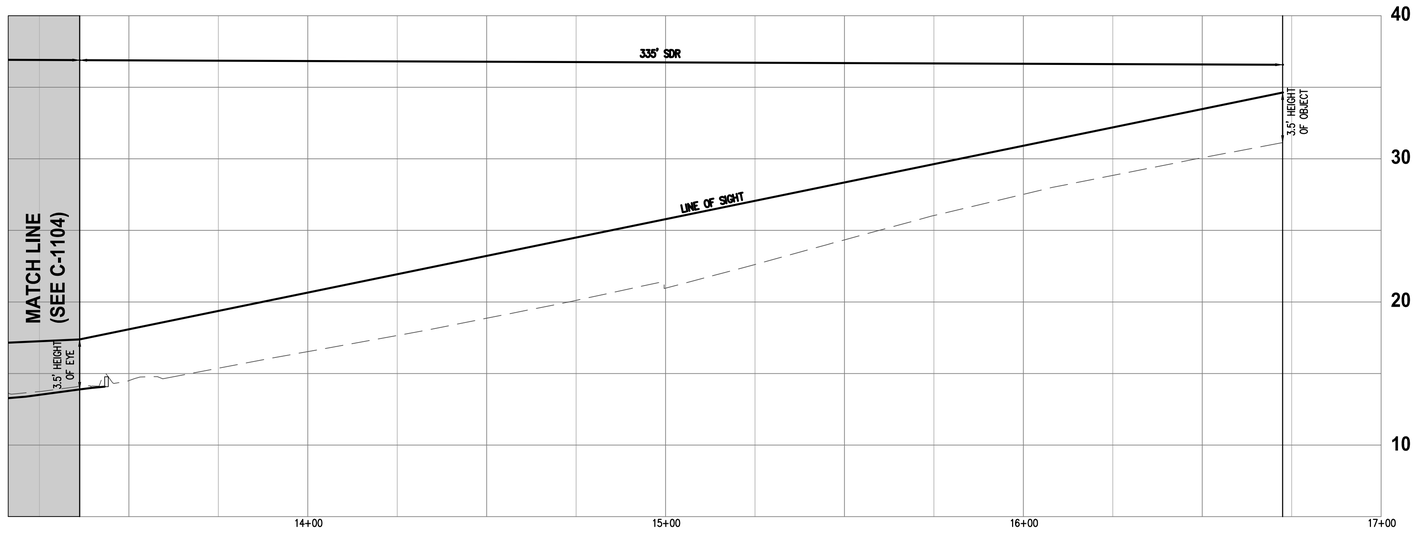


SIGHT DISTANCE PLAN VIEW

SCALE: 1" = 20'
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH



SIGHT DISTANCE PROFILE

SCALE: HOR. 1" = 20' VERT 1" = 5'
DESIGN SPEED = 30 MPH
POSTED SPEED = 25 MPH

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R / CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 / CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	

PROPOSED	DESCRIPTION	EXISTING
	HANDICAP RAMP (CG-12)	
X X X	GUARDRAIL FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 / 264	CONTOURS	260 / 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SIGHT DISTANCE PLAN AND PROFILE

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SIGNAGE AND STRIPING NOTES

1. SIGN POSTS SHALL BE 2" DIAMETER GALVANIZED SQUARE TUBE POSTS AND PAINTED BLACK. SIGNS SHALL BE HIGHWAY C ALUMINUM, 0.080 GAUGE BLANKS, WITH 3M VIP SHEETING.
2. SIGNS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGN 7 FEET ABOVE THE ROADWAY.
3. PROVIDE THERMOPLASTIC FOR ALL PAVEMENT MARKINGS.
4. ALL PRIVATE STREET SIGNS THAT INTERSECT A PUBLIC STREET SHALL BE MARKED WITH A FLUORESCENT GREEN STRIP.
5. ALL EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH PROPOSED PAVEMENT MARKINGS ON THIS PLAN SHEET SHALL BE ERADICATED VIA GRINDING BEFORE PROPOSED MARKINGS ARE INSTALLED.
6. SIGN POSTS SHALL NOT BE LOCATED IN TREE WELLS OR BRICK BAND EDGING.
7. ALL PROPOSED CROSSWALKS SHALL BE STANDARD, 6 INCH WIDE, WHITE THERMOPLASTIC PARALLEL LINES WITH REFLECTIVE MATERIAL. CROSSWALKS TO BE A MINIMUM 10 FEET IN WIDTH (OR AS SHOWN ON THIS PLAN) BETWEEN INTERIOR LINES. ALL PROPOSED CROSSWALKS ARE TO BE HIGH VISIBILITY.
8. ALL EXISTING SIGNS SPECIFIED ON THIS PLAN AS "TO REMAIN" MAY BE REMOVED BY THE CONTRACTOR FOR CONSTRUCTION PURPOSES AND REINSTALLED AT THEIR APPROXIMATE EXISTING LOCATION ONCE CONSTRUCTION IS COMPLETE.

SIGN LEGEND

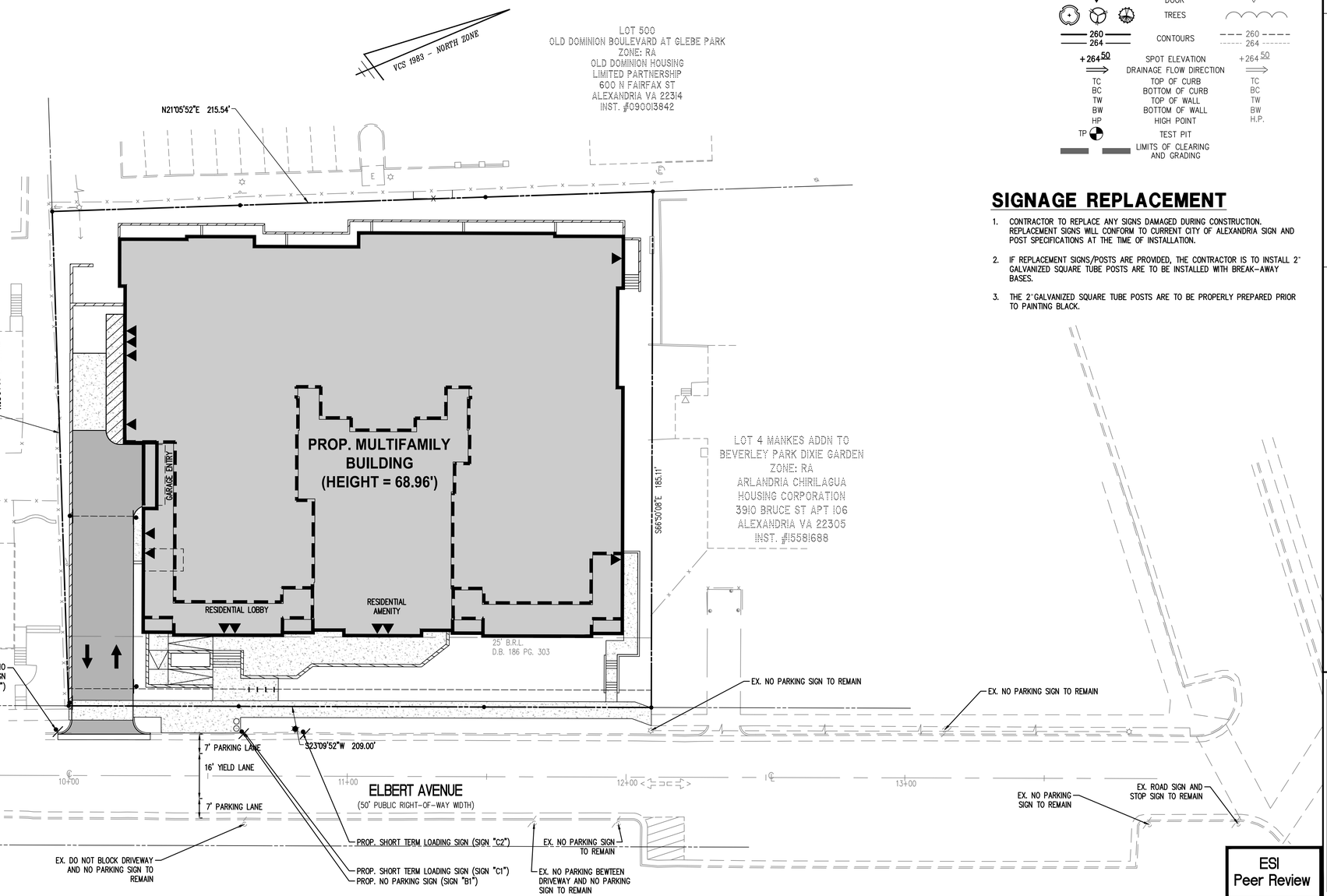
SIGN "B1"	SIGN "B2"	SIGN "C1"	SIGN "C2"
			
12"X18" R8-3A(L)	12"X18" R8-3A(R)	12"X18"	12"X18"

LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

SIGNAGE REPLACEMENT

1. CONTRACTOR TO REPLACE ANY SIGNS DAMAGED DURING CONSTRUCTION. REPLACEMENT SIGNS WILL CONFORM TO CURRENT CITY OF ALEXANDRIA SIGN AND POST SPECIFICATIONS AT THE TIME OF INSTALLATION.
2. IF REPLACEMENT SIGNS/POSTS ARE PROVIDED, THE CONTRACTOR IS TO INSTALL 2" GALVANIZED SQUARE TUBE POSTS ARE TO BE INSTALLED WITH BREAK-AWAY BASES.
3. THE 2"GALVANIZED SQUARE TUBE POSTS ARE TO BE PROPERLY PREPARED PRIOR TO PAINTING BLACK.



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06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

SIGNAGE AND STRIPING PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-1106.dwg

SHEET: C-1106

TREE INVENTORY

Alexandria		Tree Inventory							Activities					
Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Species Rating (%)	Condition (%)	Condition	Offsite /Shared/ ROW	Removal	Hand Removal/ Selective Removal	Tree Protection Fence	Root Prune	Root Padding	Notes
Tree Survey Information Completed by Walter Phillips, Inc - Arborist Ben Schitter- ISA # MA-5385A #(20-104) 06/08/2022														
101	Quercus palustris	Pin oak	20"	20'	70%	63%	GOOD	ROW			X			
102	Acer rubrum	Red maple	11"	11'	70%	66%	GOOD		X					
103	Acer rubrum	Red maple	13"	13'	70%	66%	GOOD		X					
104	Acer rubrum	Red maple	15"	15'	70%	66%	GOOD		X					
105	Acer rubrum	Red maple	14"	14'	70%	63%	GOOD		X					
106	Quercus palustris	Pin oak	21"	21'	70%	66%	GOOD		X					
107	Acer rubrum	Red maple	14"	14'	70%	63%	GOOD		X					
108	Acer rubrum	Red maple	14"	14'	70%	66%	GOOD		X					
109	Acer rubrum	Red maple	16"	16'	70%	66%	GOOD		X					
110	Pinus strobus	Eastern white pine	13"	13'	55%	59%	FAIR		X					
111	Acer rubrum	Red maple	14"	14'	70%	50%	FAIR		X					
112	Pinus strobus	Eastern white pine	18"	18'	55%	63%	GOOD		X					
113	Fraxinus pennsylvanica	Green ash	13"	13'	53%	50%	FAIR		X					
114	Pinus strobus	Eastern white pine	8"	8'	55%	63%	GOOD		X					
115	Picea abies	Norway spruce	23"	23'	55%	59%	FAIR		X					
116	Platanus hybrida x acerifolia	London planetree	14"	14'	65%	66%	GOOD		X					
117	Ilex spp.	Holly	4"	8'	70%	56%	FAIR		X					
118	Acer palmatum	Japanese maple	4"	8'	80%	66%	GOOD		X					
119	Lagerstroemia indica	Crape Myrtle	8"	8'	78%	63%	GOOD		X					
120	Ilex spp.	Holly	4"	8'	70%	56%	FAIR		X					
121	Ilex spp.	Holly	5"	8'	70%	56%	FAIR		X					
122	Lagerstroemia indica	Crape Myrtle	6"	8'	78%	63%	GOOD		X					
123	Cupressocyparis leylandii	Leyland cypress	2"	8'	60%	63%	GOOD		X					
124	Ilex spp.	Holly	4"	8'	70%	56%	FAIR		X					
125	Ilex spp.	Holly	4"	8'	70%	56%	FAIR		X					
126	Thuja occidentalis	Northern white-cedar	3"	8'	60%	69%	GOOD	O				X	X	
127	Thuja occidentalis	Northern white-cedar	3"	8'	60%	69%	GOOD	O				X	X	
128	Thuja occidentalis	Northern white-cedar	3"	8'	60%	69%	GOOD	O				X	X	
129	Thuja occidentalis	Northern white-cedar	3"	8'	60%	69%	GOOD	O				X	X	
130	Thuja occidentalis	Northern white-cedar	3"	8'	60%	69%	GOOD	O				X	X	
131	Ilex spp.	Holly	6"	8'	70%	66%	GOOD	O				X	X	
132	Robinia pseudoacacia	Black locust	12"	12'	55%	63%	GOOD	O				X	X	
133	Robinia pseudoacacia	Black locust	14"	14'	55%	63%	GOOD	O				X	X	
134	Ilex spp.	Holly	4"	8'	70%	66%	GOOD	O				X	X	
135	Ilex spp.	Holly	4"	8'	70%	66%	GOOD	O				X	X	
136	Robinia pseudoacacia	Black locust	14"	14'	55%	63%	GOOD	O				X	X	
137	Ilex spp.	Holly	4"	8'	70%	66%	GOOD	O				X	X	
138	Fraxinus pennsylvanica	Green ash	9"	9'	53%	41%	FAIR		X					
139	Morus alba	White mulberry	6"	8'	30%	66%	GOOD	O				X	X	
140	Robinia pseudoacacia	Black locust	25"	25'	55%	56%	FAIR		X					
141	Robinia pseudoacacia	Black locust	8"	8'	55%	59%	FAIR	O	X					Power lines
142	Platanus hybrida x acerifolia	London planetree	5"	8'	65%	56%	FAIR	O	X					Power lines
143	Ulmus americana	American elm	10"	10'	53%	56%	FAIR	O	X					Power lines
144	Ulmus americana	American elm	20"	20'	53%	50%	FAIR	O	X					Power lines
145	Acer rubrum	Red maple	9"	9'	70%	63%	GOOD		X					Power lines
146	Zelkova serrata	Japanese zelkova	8"	8'	75%	63%	GOOD	O	X					Power lines
147	Magnolia grandiflora	Southern magnolia	3"	8'	70%	56%	FAIR		X					Power lines
148	Magnolia grandiflora	Southern magnolia	3"	8'	70%	63%	GOOD		X					Power lines
149	Pinus strobus	Eastern white pine	15"	15'	55%	63%	GOOD		X					Power lines
150	Magnolia grandiflora	Southern magnolia	3"	8'	70%	63%	GOOD		X					Power lines
151	Pinus strobus	Eastern white pine	8"	8'	55%	66%	GOOD		X					Power lines
152	Platanus hybrida x acerifolia	London planetree	18"	18'	65%	66%	GOOD		X					Power lines
153	Pinus strobus	Eastern white pine	5"	8'	55%	63%	GOOD		X					
154	Robinia pseudoacacia	Black locust	16"	16'	55%	50%	FAIR		X					
155	Robinia pseudoacacia	Black locust	8"	8'	55%	50%	FAIR		X					
156	Robinia pseudoacacia	Black locust	10"	10'	55%	50%	FAIR		X					
157	Fraxinus pennsylvanica	Green ash	20"	20'	53%	63%	GOOD		X					
158	Ilex spp.	Holly	5"	8'	70%	63%	GOOD		X					
159	Ilex spp.	Holly	5"	8'	70%	63%	GOOD		X					

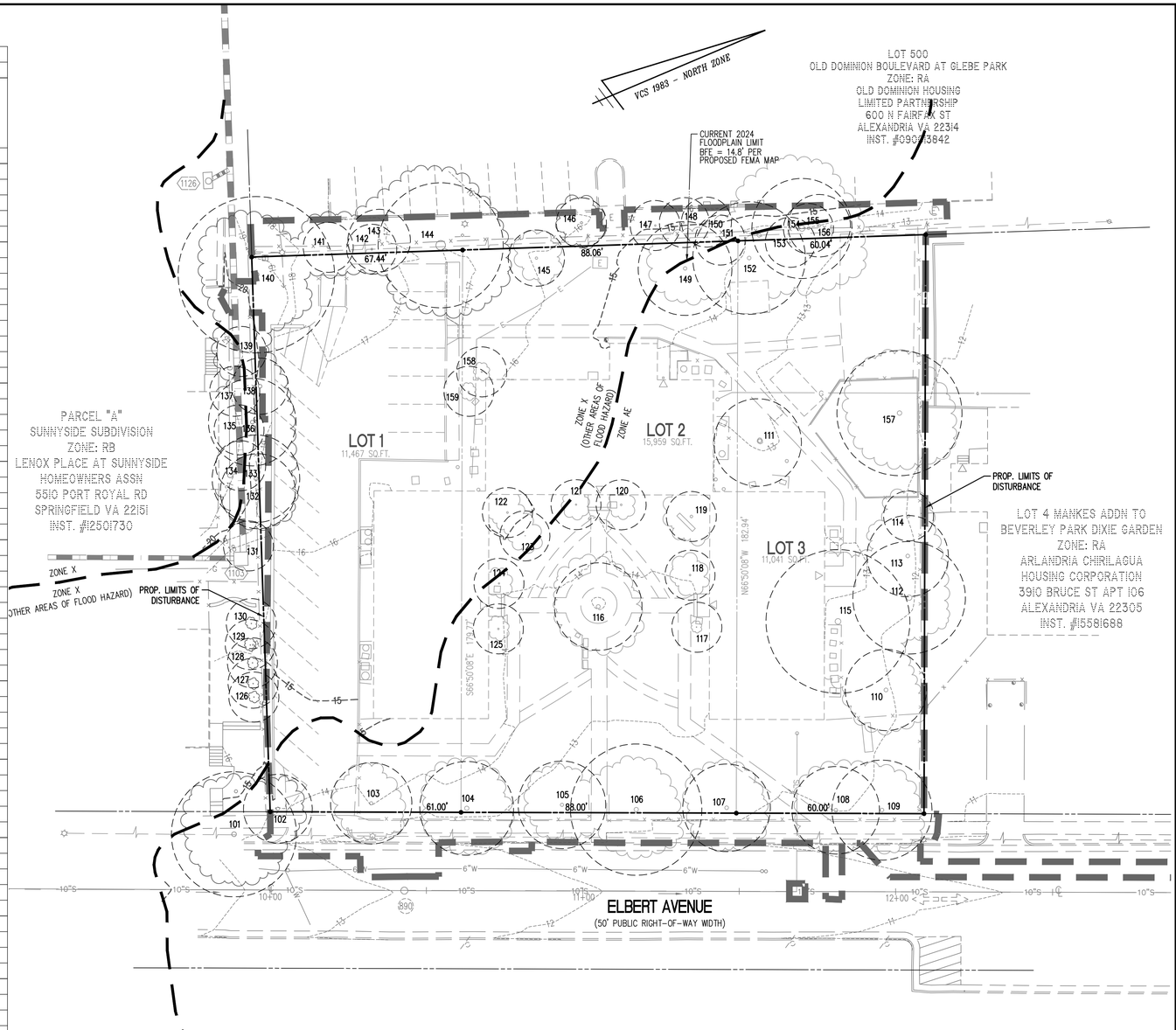
DBH = Diameter at Breast Height (measured 4.5 feet above ground)

CRZ = Critical Root Zone - As determined by the corresponding jurisdiction

CRZ values for trees with multiple stems were calculated based on methods outlined in the 9th edition of the Guide for Plant Appraisal, published by the I.S.A.

Shared trees shall not be removed without written permission from adjacent property owners.

Offsite trees were assesd without trespassing. Measurements are approximate.



20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS--PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY--ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

NOTES:

1. THERE ARE NO RPAs, INTERMITTENT STREAMS, WETLANDS, OR EXISTING STORMWATER FACILITIES PRESENT.
2. SOILS: SEE SHEETS C-0101, C-0201, AND C-0202 FOR SOIL INFORMATION. NO KNOWN MARINE CLAY, ENVIRONMENTAL ISSUES, OR CONTAMINATION.
3. THERE ARE NO KNOWN EXISTING CULTURAL/HISTORIC RESOURCES.

PERMISSION REQUIRED FROM ADJACENT PROPERTY OWNER FOR REMOVAL OF OFFSITE AND SHARED TREES.

ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED
ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: 1" = 20' | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
DATE	DESCRIPTION
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 09/03/25

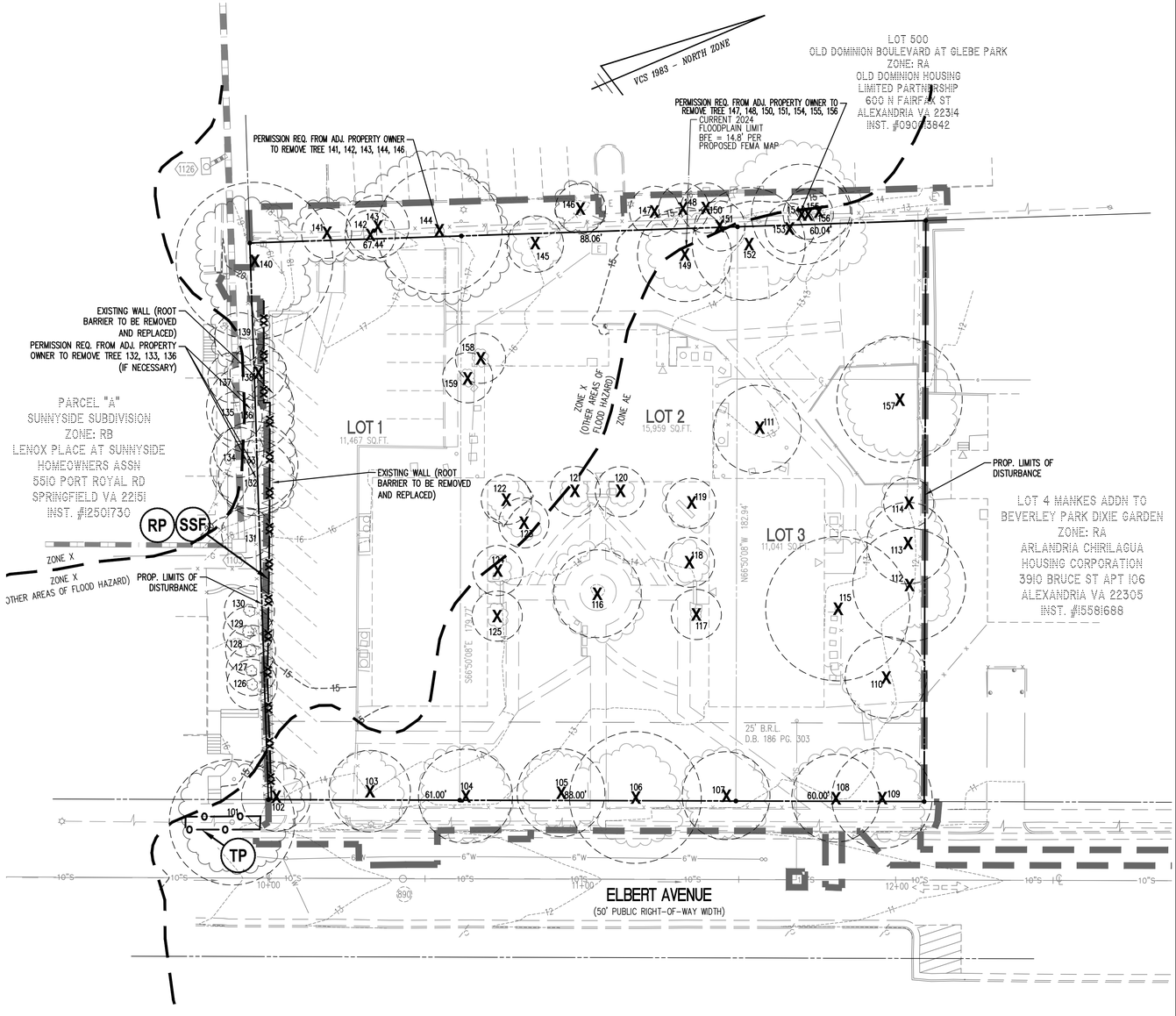
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

TREE INVENTORY

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.



TREE PROTECTION LEGEND

- TREE TO BE REMOVED — X
- (TP) TREE PROTECTION FENCE — —o—o—
- (RP) ROOT PRUNING — /\/\/\/\/\
- LIMITS OF DISTURBANCE — — —

ARCHAEOLOGY NOTES

1. THE APPLICANT/DEVELOPER SHALL CALL ALEXANDRIA ARCHAEOLOGY IMMEDIATELY (703-746-4399) IF ANY BURIED STRUCTURAL REMAINS (WALL FOUNDATIONS, WELLS, PRIVIES, CISTERNS, ETC.) OR CONCENTRATIONS OF ARTIFACTS--PARTICULARLY PIECES OF WORKED QUARTZ, QUARTZITE, OR INDIAN POTTERY--ARE DISCOVERED DURING GROUND DISTURBING ACTIVITIES. WORK MUST CEASE IN THE AREA OF THE DISCOVERY UNTIL A CITY ARCHAEOLOGIST COMES TO THE SITE AND RECORDS THE FINDS.
2. THE APPLICANT/DEVELOPER SHALL NOT ALLOW ANY METAL DETECTION TO BE CONDUCTED ON THE PROPERTY, UNLESS AUTHORIZED BY ALEXANDRIA ARCHAEOLOGY.

NOTES:

1. THERE ARE NO RPAs, INTERMITTENT STREAMS, WETLANDS, OR EXISTING STORMWATER FACILITIES PRESENT.
2. SOILS: SEE SHEETS C-0101, C-0201, AND C-0202 FOR SOIL INFORMATION. NO KNOWN MARINE CLAY, ENVIRONMENTAL ISSUES, OR CONTAMINATION.
3. THERE ARE NO KNOWN EXISTING CULTURAL/HISTORIC RESOURCES.

PERMISSION REQUIRED FROM ADJACENT PROPERTY OWNER FOR REMOVAL OF OFFSITE AND SHARED TREES.

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

ESI
Peer Review

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SCALE: 1" = 20' | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 09/03/25

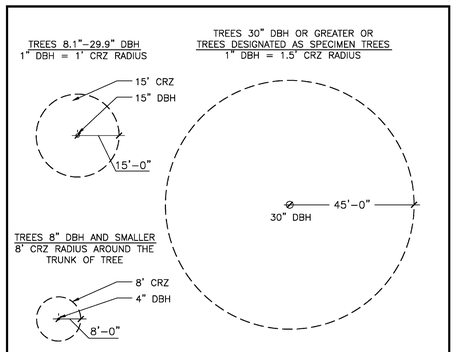
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

TREE PRESERVATION PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.



NOTES:

1. GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.
2. PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 2" DIAMETER AT 54" ABOVE GRADE AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.
3. PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

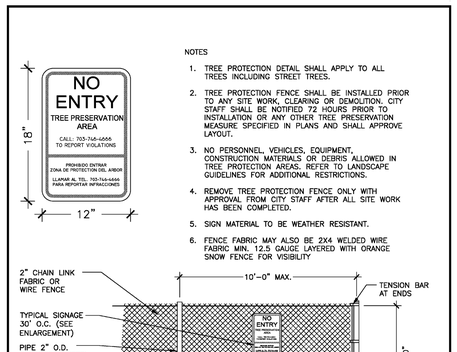
A TREE PROTECTION DETAIL FOR DETERMINING CRITICAL ROOT ZONE
NOT TO SCALE

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
CRITICAL ROOT ZONE
1 OF 1
LD 013



NOTES

1. TREE PROTECTION DETAIL SHALL APPLY TO ALL TREES INCLUDING STREET TREES.
2. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION. CITY STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO INSTALLATION OR ANY OTHER TREE PRESERVATION MEASURE SPECIFIED IN PLANS AND SHALL APPROVE LAYOUT.
3. NO PERSONNEL, VEHICLES, EQUIPMENT, CONSTRUCTION MATERIALS OR DEBRIS ALLOWED IN TREE PROTECTION AREAS. REFER TO LANDSCAPE GUIDELINES FOR ADDITIONAL RESTRICTIONS.
4. REMOVE TREE PROTECTION FENCE ONLY WITH APPROVAL FROM CITY STAFF AFTER ALL SITE WORK HAS BEEN COMPLETED.
5. SIGN MATERIAL TO BE WEATHER RESISTANT.
6. FENCE FABRIC MAY ALSO BE 2X4 WELDED WIRE FABRIC MIN. 12.5 GAUGE LAYERED WITH ORANGE SNOW FENCE FOR VISIBILITY

A TREE PROTECTION FENCE
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

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

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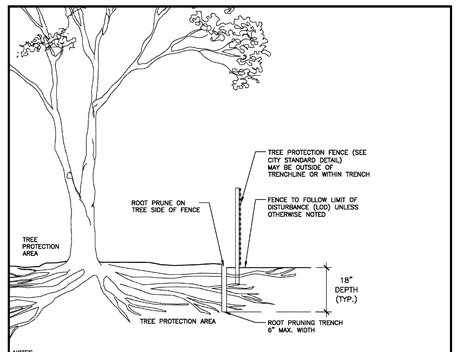
Source: CITY OF ALEXANDRIA
Approved by: COA
Date drawn: 01/01/19
TREE PROTECTION FENCE
1 OF 1
LD 014



NOTES

1. ROOT PRUNING SHALL BE DONE WITH TRENCHER OR VIBRATORYPLOW TO DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.
2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY CITY STAFF.
3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST. CERTIFICATION SHALL BE PROVIDED TO THE CITY UPON COMPLETION.
4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.
5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.
6. CITY OF ALEXANDRIA STAFF SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

A ROOT PRUNING
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
ROOT PRUNING
1 OF 1
LD 015

A) STANDARD TREE PRESERVATION NOTES FOR ALL PLANS REQUIRING APPROVAL:

THE FOLLOWING NOTES SHALL BE PROVIDED ON LANDSCAPE PLAN SUBMISSIONS FOR ALL PROJECTS WITH PRESERVATION AREAS

1) VEGETATION DESIGNATED FOR PROTECTION AND/OR PRESERVATION SHALL CONTINUOUSLY RECEIVE AN ENHANCED LEVEL OF MAINTENANCE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD.

A. MAINTENANCE SHALL BE PRO-ACTIVE.

B. MAINTENANCE OPERATIONS SHALL AGGRESSIVELY MONITOR THE HEALTH, GROWTH AND VIGOR OF VEGETATION AND PRESCRIBE SELECTIVE PRUNING, REMOVAL OF VOLUNTEER AND/OR INVASIVE SPECIES, WATERING, FERTILIZATION AND INSTALLATION OF MULCH/TOPDRESSING.

C. WHEN PRESERVED VEGETATION IS LOCATED ON CITY PROPERTY, MAINTENANCE SHALL BE PERFORMED TO THE SATISFACTION OF THE CITY.

2) AREAS DESIGNATED FOR PROTECTION AND/OR PRESERVATION OF VEGETATION SHALL NOT BE ENTERED OR UTILIZED (APPROVED MAINTENANCE PROCEDURES AND WATERING EXCEPTED) THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD. PROHIBITED ITEMS/ ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO:

A. MODIFYING SITE TOPOGRAPHY IN A MANNER THAT DIRECTLY OR INDIRECTLY ALTERS EXISTING SITE DRAINAGE WITHIN PROTECTION ZONE INCLUDING TRENCHING OR GRADING OPERATIONS AND PLACING, STORING OR STOCKPILING SOIL OR CONSTRUCTION RELATED SUPPLIES.

B. FELLING AND STORING VEGETATION. III. INCINERATING MATERIALS WITHIN OR IN CLOSE PROXIMITY.

C. OPERATING MACHINERY OR EQUIPMENT, INCLUDING VEHICLE/EQUIPMENT PARKING OR STORAGE.

D. TEMPORARY OR PERMANENT UTILITY CONSTRUCTION, PAVING OR IMPERVIOUS SURFACE INSTALLATION.

E. DISPOSAL OF DEBRIS OR CHEMICALS. VII. TEMPORARY FACILITIES OR OCCUPATION BY WORK FORCE.

F. STORAGE OF CONSTRUCTION MATERIALS OR WASTE.

A STANDARD TREE PRESERVATION NOTES
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: 12/02/2019
STANDARD TREE PRESERVATION PLAN NOTES
1 OF 1
LD 017

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: N.T.S. | DATE: 02/25/2025 | DRAWN: SCTB | CHECKED: TBW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA — AARON M. VINSON — Lic. No.041851 — 09/03/25 — PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

TREE PRESERVATION DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
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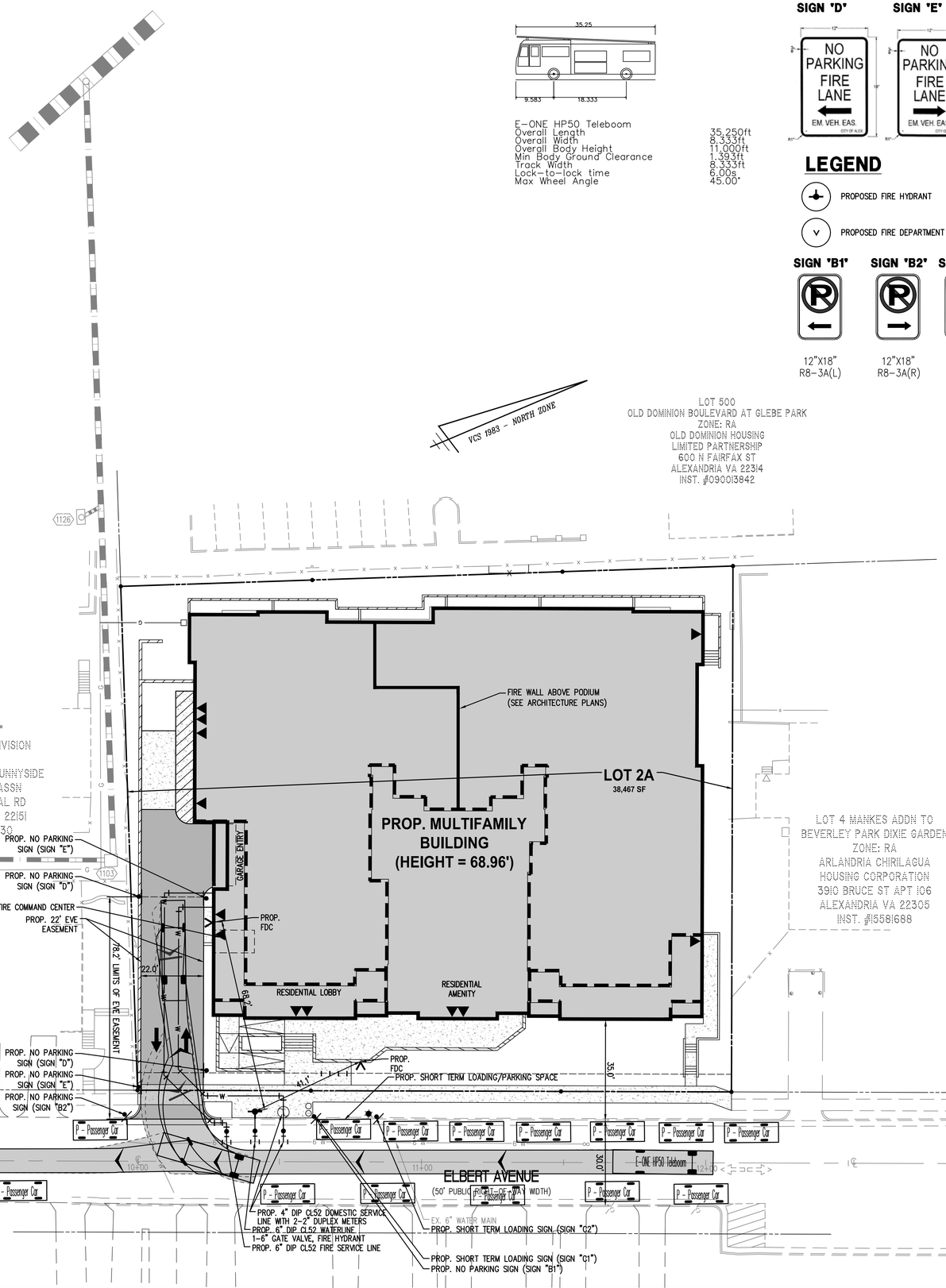
ESI
Peer Review



LEGEND

PROPOSED	DESCRIPTION	EXISTING
	CURB & GUTTER CG-2	
CG-6R CG-6	TRANSITION FROM CG-6 TO CG-6R	CG-6 CG-6R
S	SANITARY SEWER	S
SL	SANITARY LATERAL	SL
● C.O.	CLEAN OUT	○ C.O.
	STORM SEWER	
W	WATER MAIN	W
	FIRE HYDRANT	
	PLUG	
	OVERHEAD WIRES	
	UTILITY POLE	
UE	UNDERGROUND ELECTRIC	UE
T	TELEPHONE	T
G	GAS MAIN	G
E	ELECTRICAL	E
	TRANSFORMER	
	HANDICAP RAMP (CG-12)	
	GUARDRAIL	
X X X	FENCE	X X X
	TRAFFIC FLOW	
	LIGHT	
	DOOR	
	TREES	
260 264	CONTOURS	260 264
+264.50	SPOT ELEVATION	+264.50
	DRAINAGE FLOW DIRECTION	
TC	TOP OF CURB	TC
BC	BOTTOM OF CURB	BC
TW	TOP OF WALL	TW
BW	BOTTOM OF WALL	BW
HP	HIGH POINT	H.P.
TP	TEST PIT	
	LIMITS OF CLEARING AND GRADING	

NOTES

1. EXISTING FIRE HYDRANTS SHALL REMAIN IN-SERVICE AND UNOBSTRUCTED DURING CONSTRUCTION.

BUILDING CODE ANALYSIS

USE GROUP: S-2, B, R-2

CONSTRUCTION TYPE: FLOOR 1 – IA
FLOORS 2-6 – IIIA

SPRINKER SYSTEM: NFPA 13

BUILDING HEIGHT: 68.96' (6 STORIES)

FLOOR AREA:

TYPE OF CONSTRUCTION		CONST TYPE / GSF BY FLOORS		
		IA	IIIA (SOUTH WING)	IIIA (NORTH WING)
		FLOOR 1	FLOOR 2-6	FLOOR 2-6
FLOOR	GSF TOTALS			
1	25,268 SF	25,268		
2	21,093 SF		10,108	10,985
3	21,093 SF		10,108	10,985
4	21,093 SF		10,108	10,985
5	21,093 SF		10,108	10,985
6	18,002 SF		8,430	9,572
TOTAL	127,642 SF	25,268	48,862	53,512

FIRE ACCESS NARRATIVE

THIS NARRATIVE IS PROVIDED TO DETAIL COMPLIANCE WITH CITY CODE, TITLE 4 CHAPTER 2, APPENDIX D, D101.1 (ITEM 4). AS COORDINATED WITH CITY OF ALEXANDRIA STAFF, THE ITEMS BELOW WILL BE PROVIDED IN LIEU OF MEETING LADDER TRUCK ACCESS REQUIREMENTS, AND A CODE MODIFICATION IS NOT REQUIRED.

1. FIRE SERVICE ACCESS ELEVATOR
2. STANDBY POWER
3. A FIRE COMMAND CENTER SHALL BE PROVIDED IN LIEU OF STAIRWAY COMMUNICATION AS DETERMINED BY ALEXANDRIA FIRE DEPARTMENT
4. SMOKE PROOF EXIT ENCLOSURES (STAIR PRESSURIZATION SYSTEM)

FIRE FLOW TEST

DATE: 07/03/2024

RESIDUAL HYDRANT #3068
STATIC PRESSURE = 42 PSI
RESIDUAL PRESSURE = 21 PSI

FLOW HYDRANT #3067
OBSERVED FLOW = 1,706 GPM
CALCULATED FLOW = 1,706 GPM @ 20 PSI
MAXIMUM CAP FLOW = 3,500 GPM @ 20 PSI

SEE SHEET C-1302 FOR ADDITIONAL INFORMATION

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

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DRAWN: SCTB | CHECKED: TBW
DATE: 02/25/2025
SCALE: 1" = 20'

PLAN STATUS

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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV'L BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

FIRE SERVICE PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

NEEDED FIRE FLOW (NFF)

PREPARED BY CAPITOL FPE LLC, DATED 07/29/2025

CAPITOL FPE LLC

NEEDED FIRE FLOW
FOR
3908 Elbert Ave
ALEXANDRIA, VA

Prepared for:

Community Lodgings, Inc.
3912 Elbert Avenue
Alexandria, VA 22305

Prepared By:

Capitol FPE, LLC
8230 Boone Blvd, Suite 355
Vienna, VA 22182
(703) 717-5628

July 29, 2025

COMMONWEALTH OF VIRGINIA
ROCK SHI MENG
Lic. No. 0402038573
7/29/25
PROFESSIONAL ENGINEER

8230 Boone Blvd, Suite 355, Vienna, VA 22182 Tel: 703-717-5628 Fax: 703-459-9069 www.capitolfpe.com
HOUSTON, TEXAS | WASHINGTON D.C.

TABLE OF CONTENTS

I. GENERAL

A. Purpose

City of Alexandria, Code of Ordinances requires minimum fire flow that should be available for municipal firefighting. The fire flow requirements for buildings or portions of buildings and facilities to be determined in accordance with ISO Guide for Determination of Needed Fire Flow, 2014.

The purpose of the analysis is to provide the required Needed Fire Flow (NFF) calculations per ISO Guide and determine if the current public water supply is adequate.

B. Summary

Based on the required Needed Fire Water calculations, the public water supply is adequate for supplying the water required for firefighting.

II. APPLICABLE CODES

A. Fire Protection and Life Safety

1. 2021 Virginia Uniform Statewide Building Code – Amended International Building Code (IBC), 2021 Edition.
2. ISO Guide for Determination of Needed Fire Flow, 2014 Edition.
3. City of Alexandria, Code of Ordinances

III. BUILDING DESCRIPTION

A. General

The existing site is located at 3908 Elbert in Alexandria, Virginia. The proposed multifamily building consists of 6 stories including a parking garage included on the first floor. The lot faces Elbert Avenue on the east side and is neighbored by surrounding townhouses. The building will be equipped throughout with an automatic fire sprinkler system in accordance with NFPA 13. The building is proposed to be divided horizontally using a 3-hour rated fire wall separating the garage from the rest of the building. Furthermore, the residential building above will be divided into two sections by a fire wall. In accordance with 2021 Virginia Uniform Statewide Building Code, each portion of a building separated by one or more fire walls shall be considered a separate building. A public water supply including hydrants is available onsite.

B. Building Construction Type

In accordance with the development preliminary plan, the building(s) construction is classified as Type IIIA per IBC for the above residential building and Type IA for the parking garage.

Type IIIA construction consists of building elements of any material permitted by code including combustibles. The fire resistance rating is listed below:

	IA	IIIA
Building Elements:	Ratings (hr)	Ratings (hr)
Structural Frame	3	1
Bearing Walls Exterior	3	2
Bearing Walls Interior	3	1
Non-Bearing Walls Exterior	Based on building separation	Based on building separation
Floor	2	1
Roof	1.5	1

IV. NEEDED FIRE FLOW

A. Construction Factor (C)

To determine the portion of the NFF attributed to the construction and area of the selected building, ISO uses the formula:

$$C = 18F(\sqrt{A})$$

Where

A = effective area
F = Coefficient related to the class of construction:
F = 1.5 for Construction Class 1 (Frame)
F = 1.0 for Construction Class 2 (Joisted Masonry)
F = 0.8 for Construction Class 3 (Non-Combustible)
F = 0.8 for Construction Class 4 (Masonry Non-Combustible)
F = 0.6 for Construction Class 5 (Modified Fire Resistive)
F = 0.6 for Construction Class 6 (Fire Resistive)

The "F" coefficient is determined based on exterior walls, floors, and roof construction material and fire resistance rating. The residential buildings

above are classified as class IIIA construction in which the exterior walls are of noncombustible materials and the interior building elements are combustible. The exterior walls are 2-hour fire rated due to being bearing walls. The Coefficient related to the class of construction (F) is 1.

The parking garage is Type IA construction which is constructed with only noncombustible materials. The Coefficient to the class of construction (F) is 1.

The effective area includes the total square foot area of the largest floor in the building plus 50% of all other floors for buildings classified as Construction Class 1-4. For buildings classified as Construction Classes 5 or 6, calculate 25% of the area of not exceeding the two other largest floors if all vertical openings in the building are protected. Tally of effective area of the building is below:

Building 1	Largest Undivided (ft2)	50%
2	9202	9202
3	9202	4601
4	9202	4601
5	9202	4601
6	7594	3797
	Total	26802

Building 2	Largest Undivided (ft2)	50%
2	11889	11889
3	11889	5945
4	11889	5945
5	11889	5945
6	10467	5234
	Total	34956

Garage	Largest Undivided (ft2)	50%
garage	25268	25268
	Total	25268

The Construction Factor is calculated:

Buildings	F	A	Construction Factor C
Building 1	1	26802	2947
Building 2	1	34956	3365
Garage	0.8	25268	2289

B. Occupancy Factor (O)

The factors below reflect the influence of the occupancy in the subject building on the need fire flow:

Occupancy Combustibility Class	Occupancy Factor (O)
C-1 (Noncombustible)	0.75
C-2 (Limited Combustibility)	0.85
C-3 (Combustible)	1.00
C-4 (Free Burning)	1.15
C-5 (Rapid Burning)	1.25

Occupancies in the building are considered residential. It is not anticipated that merchandise or materials stored burn freely in the building. So, it is reasonable to classify the Occupancy Factor as C-2 Limited Combustible (**C=0.85**) due to residential occupancy.

C. Exposure and Communication Factors (X+P)

The factors developed in this item reflect the influence of adjoining and connected buildings on the needed fire flow.

The lot faces Elbert Ave to the east. No buildings are within 40 feet of the townhouse exterior walls on the sides facing the street.

The proposed construction is divided into 3 adjacent buildings, however the exposure factor is ruled out from adjacent buildings if the subject buildings are rated as habitational. The exposure factor is also excluded when subject buildings are rated as sprinklered. As such, the exposure factor is 0 for the 3 buildings.

D. Calculations

NFF = (C)(O)(1+(X+P))

Building 1	
Construction Factor C	2947
Occupancy Factor O	0.85
Exposure Factor (X+P)	0.000
NFF	2505

Building 2	
Construction Factor C	3365
Occupancy Factor O	0.85
Exposure Factor (X+P)	0.000
NFF	2861

Garage	
Construction Factor C	2289
Occupancy Factor O	0.85
Exposure Factor (X+P)	0.000
NFF	1946

INFORMATION PROVIDED BY OTHERS

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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
09/03/25
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

NEEDED FIRE FLOW REPORT

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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NEEDED FIRE FLOW (NFF) CONTINUED

PREPARED BY CAPITOL FPE LLC, DATED 07/29/2025

E. Sprinkler Reduction

City of Alexandria, Code of Ordinances permits the NFF to be reduced to 50% if the building is protected with automatic sprinkler system in accordance with NFPA 13, and a reduction of 33% for NFPA 13R sprinkler systems. Due to the building height, occupancy type, and areas, Virginia Uniform Statewide Building Code mandates the sprinkler protection per NFPA 13. As a result, the largest reduced NFF is listed below:

3908 Elbert Ave	13 (50%)
NFF (Sprinkler Reduction) BLDG 1	1252
NFF (Sprinkler Reduction) BLDG 2	1430
NFF (Sprinkler Reduction) Garage	973

V. CONCLUSION

Hydrant flow test was performed on July 3rd, 2024. The residual hydrant (#3068 is located at the corner of Elbert Avenue and W Glebe Rd. The flow hydrant (#3067) recorded 1706 GPM at residual pressure of 20 PSI.

The maximum calculated NFF is 1,430 GPM, and the available public water supply is 1706 GPM. Based on the calculation result of 1,430 GPM NFF, the public water supply is adequate for firefighting purposes.

Appendix – Hydrant Flow

Virginia American Water
Fire Hydrant Flow Test Summary

Location:	3908 Elbert Ave		
Date:	7/3/2024	**Main Size**	6 inch
Time:	11am	**Flow Hydrant #**	
Total Flow	1664 gpm	3067	
		Residual Hydrant #	
Static pressure	42 psi	**3068**	
Residual pressure	21 psi		

Contact Person
Hao (Steven) Chen
Sr. Project Engineer
Virginia American Water
2225 Duke St.
Alexandria, VA 22314
Office 703-706-3889
Email: Hao.Chen@amwater.com

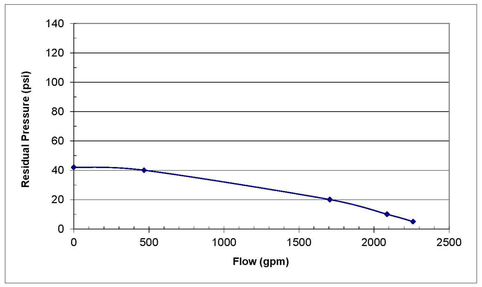
Calculated Flow gpm	Residual psi
2259	5
2089	10
1706	**20**
467	40
0	42
#N/A	80
#N/A	100
#N/A	120
#N/A	140

Notes:
1. Table calculation is for reference only. Virginia American Water will not guarantee the calculated flow.

2. 3500 gpm is the limit of available fire flow.

3. Individual (Non-public water supply) fire suppression systems shall be designed by the property owner to meet needed fire flow in excess of 3,500 gpm.

4. VAW does not provide hydrant elevations.



REQUEST FOR FIRE FLOW TEST INFORMATION

Requested by: Travis Brown <tbrown@wlpinc.com>
Phone:
Email:
Project Name: 3908 Elbert Ave
Request Reason: Fire sprinkler system design
Project address: 3908 Elbert Ave

Flow Hydrant# 3067 w/d.ffuser.
Residual Hydrant # 3068
Main size 6 inches

Note: Before running this flow test, check all surroundings to avoid any potential damage to nearby residents landscaping, grounds, etc.

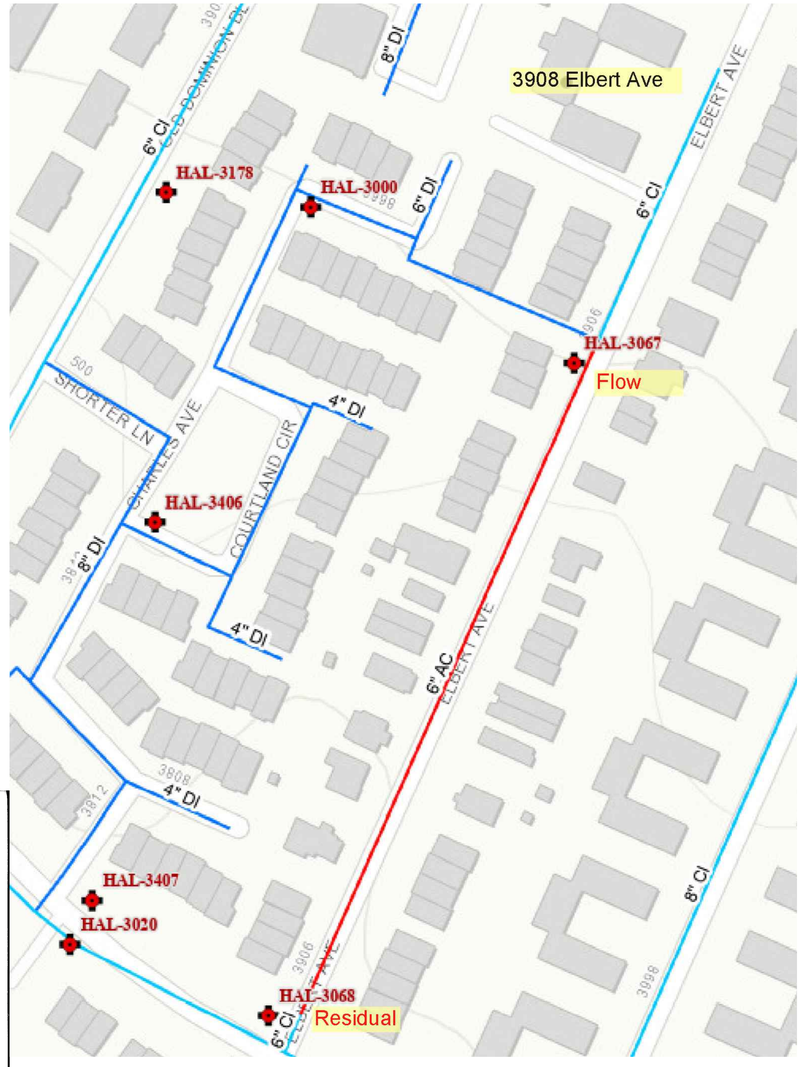
Flow duration 3-5 minutes

Tester D. Kirkemp
Date 7/3/24
Time 11:00 a

Residual Hyd# 3068
Make mueller
Static Pressure (PSI) 42
Residual Pressure (PSI) 21

Flow Hydrants	1	2	3	4
Hydrant#	3067			
Hydrant make	mueller			
Nozzle Diameter (inch)	4			
Flow reading (PSI)	15			
Static Reading (PSI)	53			

Engineering Department
Requested by Hao S. Chen Date 6/26/2024



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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

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GEOTECHNICAL REPORT SUMMARY

BELOW IS AN EXCERPT SUMMARY OF THE GEOTECHNICAL ENGINEERING REPORT; PREPARED BY ECS MID-ATLANTIC, LLC AND DATED MARCH 27, 2025. (SUBMITTED TO SATISFY THE GEOTECHNICAL REPORT REQUIREMENT OF THE SITE PLAN CONDITIONS). PLEASE REVIEW THE ENTIRE REPORT AS PROVIDED TO THE CITY OF ALEXANDRIA.

ECS MID-ATLANTIC, LLC

Geotechnical • Construction Materials • Environmental • Facilities

March 27, 2025

Mr. Paul Browne
Joseph Browne Development Associates, LLC
1410 Ingraham Street NW
Washington, D.C. 20011

ECS Project No. 01:33945

Reference: Geotechnical Engineering Report
CLI Elbert Avenue Residences
3908, 3912, and 3916 Elbert Avenue
City of Alexandria, Virginia 22305

Dear Mr. Browne:

ECS Mid-Atlantic, LLC (ECS) has completed the subsurface exploration, laboratory testing, and geotechnical engineering analyses for the above-referenced project. Our services were performed in general accordance with our Proposal No. 01:70919-GP dated August 23, 2024. This report presents our understanding of the geotechnical aspects of the project along, the results of the field exploration and laboratory testing conducted, and our design and construction recommendations.

It has been our pleasure to be of service to Community Lodgings, Inc during the design phase of this project. We would welcome the opportunity to remain involved during the continuation of the design phase, and we would like to provide our services during construction phase operations as well to verify the assumptions of subsurface conditions made for this report. Should you have any questions concerning the information contained in this report, or if we can be of further assistance to you, please contact us.

Respectfully submitted,

ECS Mid-Atlantic, LLC

Hayley M. Edwards, E.I.T.
Project Manager
HEdwards1@ecslimited.com

Paul D. Agutter Digitally signed by Paul D Agutter Date: 2025.03.27 17:26:20 -04'00'
COMMONWEALTH OF VIRGINIA PAUL D. AGUTTER Lic. No. 38105 PROFESSIONAL ENGINEER
Paul D. Agutter, P.E.
Principal Engineer
PAgutter@ecslimited.com

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EXECUTIVE SUMMARY

The following summarizes the main findings of the exploration, particularly those that may have a cost impact on the planned development. Further, our principal foundation recommendations are summarized. This Executive Summary is intended as a very brief overview of the primary geotechnical conditions that are expected to affect design and construction. Information gleaned from the executive summary should not be utilized in lieu of reading the entire geotechnical report.

- Based on our geotechnical exploration, the proposed residential building can be supported by conventional shallow foundations consisting of spread/wall footings bearing on natural soils (Stratum II or verified Stratum I soils) with an allowable capacity of 4,000 psf.
- Most of the soils at the foundation bearing elevation appear to be undocumented fill material placed during previous site development and local construction activities. Although this material is old fill that was placed, previous structures have been constructed on this material. However, the consistency of this fill soil cannot be quantified and there may be some localized areas that are loose or may encounter some previous trace organics and/or construction debris. Therefore, during construction there could be localized areas that will require undercutting and replacement
- Most of the on-site materials may be reused as engineered fill provided that they do not contain organics or foreign debris, are not highly plastic, are not environmentally impacted, and conform to the criteria outlined herein.
- For pavement sections, we recommend a preliminary design CBR value of 4.

4.0 DESIGN RECOMMENDATIONS

4.1 FOUNDATIONS

Provided subgrades are prepared as recommended in this report, the proposed structure can be supported by shallow foundations including column footings and continuous wall footings. We recommend the foundation design use the following parameters:

Table 4.1.1 Foundation Re commendations

Design Parameter	Column Footing	Wall Footing
Net Allowable Bearing Pressure(1)	4,000 psf	4,000 psf
Acceptable Bearing Soil Material	Stratum II (or Verified Stratum I) – Loose to Medium Dense Soil	
Minimum Footing Embedment Depth (below slab or finished grade)(2)	**36 inches**	**36 inches**
Minimum Footing Width	36 inches	24 inches
Estimated Total Settlement(3)	Less than 1 inch	Less than 1 inch
Estimated Differential Settlement(4)	Less than 0.5 inches	Less than 0.5 inches
Provided Estimated Column Loads	700 kips	10 klf

Notes:
(1) Net allowable bearing pressure is the applied pressure in excess of the surrounding overburden soils above the base of the foundation.
(2) Minimum embedment required for soil bearing considerations.
(3) Based on assumed structural loads. If final loads are different, ECS must be contacted to update foundation recommendations and settlement calculations.
(4) Based on maximum column/wall loads and variability in borings. Differential settlement can be re-evaluated once the foundation plans are more complete.

Please note that approximately 4.5 feet to 8 feet of old fill soils were encountered within the borings, with the majority being around 4.5 feet below existing grades. This area of the site has been previously developed with existing buildings and the topography has been raised in this part of Alexandria over hundreds of years. Although this material is old fill that was placed, previous structures have been constructed on this material. However, the consistency of this fill soil cannot be quantified and there may be some localized areas that are loose or may encounter some previous trace organics and/or construction debris. Therefore, during construction there could be localized areas that will require undercutting and replacement as detailed in the Potential Undercuts section below. An allowance for up to 3 feet undercut and replacement should be considered in the final construction budget.

During construction, the bearing capacity at the final footing elevations should be tested in the field by the Geotechnical Engineer of Record (GER) or their authorized representative to document that the in-situ bearing capacity at the bottom of each footing excavation is adequate for the design loads and confirm that any undocumented fill material is suitable for the allowable bearing capacity or has been removed and replaced as noted below.

Potential Undercuts: Most of the soils at the foundation bearing elevation appear to be undocumented fill material placed during previous construction activities. These fill materials are not suitable for the support of the proposed foundations as the manor of placement and compaction is unknown. These materials should be undercut and replaced. If soft or unsuitable soils are observed at the footing bearing elevations, the unsuitable soils should be undercut and removed. Any undercut should be lean cut and backfilled with lean concrete ($f'_c \geq 1,000$ psi at 28 days) up to the original design bottom of footing elevation; the original footing shall be constructed on top of the hardened lean concrete.

4.2 SLABS ON GRADE

Structural fill material will need to be compacted in order to reach the proposed finished floor elevation of EL. +16.0 feet. In some areas across the site, fill areas will extend up to ±4 feet. We recommend heavy proofrolling of the subgrade soils with a loaded dump truck in order to identify any soft areas.

The on-site natural soils are considered suitable for support of the lowest floor slabs when compacted, although moisture control during earthwork operations, including the use of discing or appropriate drying equipment, may be necessary. Any areas of soft or yielding soils should be removed and replaced with compacted structural fill in accordance with the recommendations included in this report. The following graphic depicts our soil-supported slab recommendations:

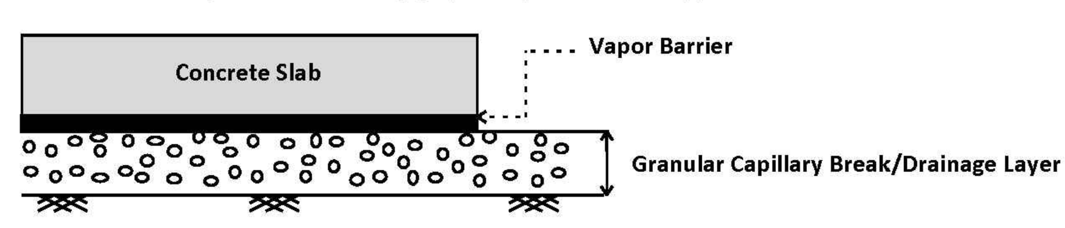


Figure 4.2.1

1. Drainage Layer Thickness (Below Grade Parking): 6 inches
2. Drainage Layer Thickness (At Grade Footprint): 6 inches
3. Drainage Layer Material: VDOT #57 stone
4. Subgrade proofrolled or compacted to 95% maximum dry density per ASTM D698

Subgrade Modulus: Provided the placement of Structural Fill and Granular Drainage Layer per the recommendations discussed herein, the slab may be designed assuming a modulus of subgrade reaction, k_1 of 100 pci (lbs/cu. inch). The modulus of subgrade reaction value is based on a 1 ft by 1 ft plate load test basis.

Vapor Barrier: Before the placement of concrete, a vapor barrier may be placed on top of the granular drainage layer to provide additional protection against moisture penetration through the floor slab. When a vapor barrier is used, special attention should be given to surface curing of the slab to reduce the potential for uneven drying, curling and/or cracking of the slab. Depending on

proposed flooring material types, the structural engineer and/or the architect may choose to eliminate the vapor barrier.

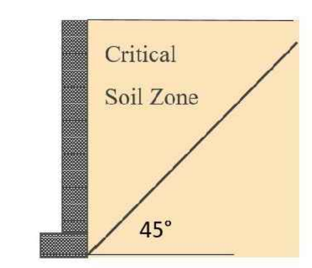
Slab Isolation: Soil-supported slabs should be isolated from the foundations and foundation-supported elements of the structure so that differential movement between the foundations and slab will not induce excessive shear and bending stresses in the floor slab. Where the structural configuration prevents the use of a free-floating slab such as in a drop-down footing/monolithic slab configuration, the slab should be designed with suitable reinforcement and load transfer devices to preclude overstressing of the slab.

4.3 SITE RETAINING WALLS

Site retaining walls are free to rotate at the top (not restrained). For these walls the "Active" (k_a) soil condition should be used along with a triangular distribution of earth pressures. In addition, site retaining walls should be designed to withstand lateral earth pressures exerted by the backfill and any surcharge loads within the "Critical Soil Zone". The Critical Zone is defined as the area between the back of the retaining wall footing and an imaginary line projected upward and rearward at a 45-degree angle (see figure below).

The lateral earth pressures developed behind site retaining walls are a function of the backfill soil type, backfill slope angle, and any surcharge loads. For the design of site retaining walls, we recommend the soil parameters provided below.

RETAINING WALL BACKFILL IN THE CRITICAL SOIL ZONE	
Soil Parameter	**Estimated Value**
Soil Classification	Silt (ML) or more granular
Coefficient of Active Earth Pressure (K_a)	0.33
Retained Soil Moist Unit Weight (γ)	115 pcf
Cohesion (C)	0 psf
Angle of Internal Friction (ϕ)	30°
Active Equivalent Fluid Pressure	38H (psf)



Soil Parameter	Estimated value
Allowable Net Soil Bearing Pressure	2,000 psf
Soil Moist Unit Weight (γ)	115 pcf
Cohesion (C)	0 psf
Sliding Friction Coefficient [Concrete on Soil] (μ)	0.33

It is critical that the soils used for backfilling of the retaining walls meet the soil parameters recommended above. If the soils available do not meet those parameters, then ECS should be contacted to provide revised values, and to confirm that only suitable soils will be used for wall backfill.

Care should be used to avoid the operation of heavy equipment to compact the wall backfill since it may overload and damage the wall. In addition, such loads are not typically considered in the design of site retaining walls and are not provided for in our recommendations.

Wall Drains: Retaining walls should be provided with a wall and foundation drainage system so that hydrostatic pressures do not build up behind the walls. This system should consist of weepholes through the wall and/or a 4-inch perforated, closed joint drain line located along the backside of the walls above the top of the footing. The drain line should be surrounded by a minimum of 6 inches of AASHTO #57 Stone wrapped with an approved non-woven geotextile, such as Mirafi 140-N or equivalent. Wall drains can consist of a 12-inch-wide zone of free draining gravel, such as AASHTO #57 Stone, employed directly behind the wall and separated from the soils beyond with a non-woven geotextile. Alternatively, the wall drain can consist of a suitable geocomposite drainage board material. The wall drain should be hydraulically connected to the foundation drain.

4.4 STORMWATER MANAGEMENT FACILITIES

A stormwater management detention vault with approximate dimensions of 145 feet in length and 6 feet in width, is proposed along the northern side of the site and bio-planters are proposed along the eastern side of the proposed building. We have not been provided with invert elevations for the various stormwater facilities. However, we understand that these facilities are not anticipated to infiltrate.

The below grade structure for the water storage vault should be designed to withstand lateral earth pressures and surcharge loads. We recommend that walls that are restrained from movement at the top be designed for a linearly increasing "at rest" lateral earth pressure of 60H. The wall design should also account for any surcharge loads imposed within a 45-degree slope of the base of the wall. The influence of these surcharge loads on the below grade walls should be based on an at-rest pressure coefficient, k_0, of 0.33 in the case of restrained walls.

4.5 SEISMIC DESIGN CONSIDERATIONS

The Commonwealth of Virginia has adopted Virginia Construction Code 2021 (VCC) via the Virginia Uniform Statewide Building Code (USBC). The current version of VCC incorporates ASCE 7-22, Minimum design Loads and Associated Criteria for Building and Other Structures into the building code. This adoption supersedes Section 16 of IBC 2021, in respect to seismic site classification.

ASCE 7-22, Chapter 20 has updated the procedure for determining Site Classification. This chapter requires that site classification be conducted based on the average shear wave velocity of the top 100 feet of the site. The shear velocity can either be measured or estimated based on established correlations. If site classification is based on estimated values of shear wave velocity (v_s) the site class shall be derived using V_s, $V_s/1.3$ and $V_s(1.3)$. The seismic site class definitions for the weighted average shear wave velocities in the upper 100 feet of the soil profile are presented in Chapter 20 of ASCE 7-22 and in the table below.

Table 4.4.1: Seismic Site Classification

Site Class	Soil Profile Name	Shear Wave Velocity, Vs, (ft./s)
A	Hard Rock	Vs > 5,000 ft./s
B	Rock	>3,000 to 5,000 ft./s
BC	Soft Rock	>2,100 to 3,000 ft./s
C	Very Dense Sand or Hard Clay	>1,450 to 2,100 ft./s
CD	Dense Sand or Very Stiff Clay	>1,000 to 1,450 ft./s
D	Medium Dense Sand or Stiff Clay	>700 to 1,000 ft./s
DE	Loose Sand or Medium Stiff Clay	>500 to 700 ft./s
E	Very Loose Sand of Soft Clay	Vs < 500 ft./s

In this project, shear wave velocity of the soil profile was estimated based on the soil densities and type observed. Based upon our estimate and assumed proposed bearing elevations of the structures we recommend that a **Site Classification of D** be used for the structures. This site Classification is based on a Risk Category of II for the building. This recommendation is in accordance with the procedure outlined in ASCE 7-22. It is worth noting that if this project is submitted under a different code year an alternate soil site classification may be appropriate. We should be notified if this project is being submitted for design under VCC 2018 (IBC-2018 or ASCE 7-16).

4.6 PAVEMENTS

For the design and construction of exterior pavements, we recommend that topsoil and any other soft or unsuitable materials be removed from the area to be paved extending to a limit 5 feet beyond the back of curb or edge of shoulder. The stripped surface should be proofrolled and carefully observed at the time of construction in order to aid in identifying the localized soft or unsuitable materials, which should be removed.

Based on the soils encountered during our borings performed across the site we recommend a preliminary design CBR value of 4 where CBR samples will be required within the upper 12 inches of the subgrade soils during construction. This value should be used in the design of the pavements and the CBR results obtained either prior to or during construction should be used to evaluate this design. If the results of the CBR tests taken prior to or during construction differ from the recommended value mentioned above, the pavement design should be modified as necessary. Please note the silt soils in the area of the site are weak and degrade easily when wet. Typical CBR values are generally lower than similar soils in other parts of the City of Alexandria.

5.0 CONSTRUCTION RECOMMENDATIONS

5.1 SUPPORT OF EXCAVATION

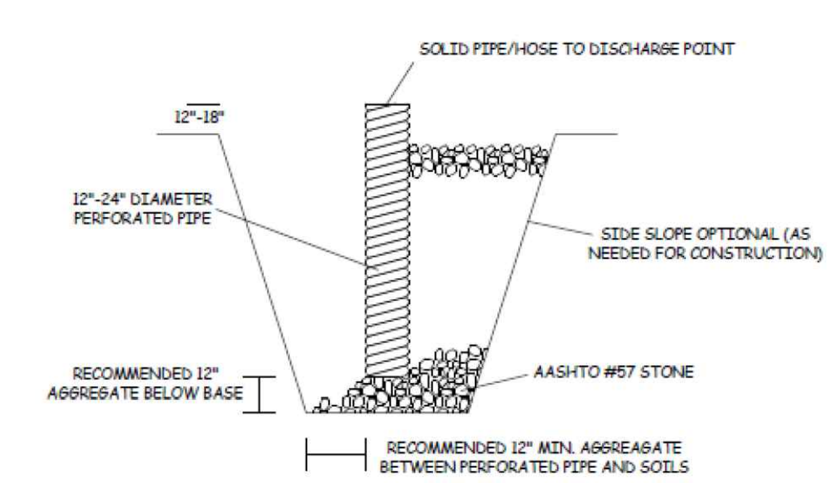
5.1 TEMPORARY DEWATERING

The contractor shall make their own assessment of temporary dewatering needs based upon the limited subsurface groundwater information presented in this report. Soil sampling is not continuous, and thus soil and groundwater conditions may vary between sampling intervals (typically 5 feet). If the contractor believes additional subsurface information is needed to assess dewatering needs, they should obtain such information at their own expense. ECS makes no warranties or guarantees regarding the adequacy of the provided information to determine dewatering requirements; such recommendations are beyond our scope of services.

Dewatering systems are a critical component of many construction projects. Dewatering systems must be selected, designed, and maintained by a qualified and experienced (specialty or other) contractor familiar with the succinct geotechnical and other aspects of the project. The failure to properly design and maintain a dewatering system for a given project can result in delayed construction, unnecessary foundation subgrade undercuts, detrimental phenomena such as 'running sand' conditions, internal erosion (i.e., 'piping'), the migration of 'fines' down-gradient towards the dewatering system, localized settlement of nearby infrastructure, foundations, slabs-on-grade and pavements, etc. Water discharged from any site dewatering system shall be discharged in accordance with all local, state and federal requirements.

Strategies for Addressing Perched Groundwater:

The typical primary strategy for addressing perched groundwater seeping into excavations is pumping from trench (or French) and sump pits with sump pumps. A typical sump pump drain (found in a sump pit or along a French drain) is depicted below. The inlet of the sump pump is placed at the bottom of the corrugated pipe and the discharge end of the sump is directed to an appropriate stormwater drain.



Sump Pit/Pump Diagram

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SCALE: NONE | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GEOTECHNICAL REPORT SUMMARY

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
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.

ESI
Peer Review

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q:\sdskproj\20104\dwg\engineering\FSP\20104C-1401.dwg

SHEET: **C-1401**

GEOTECHNICAL REPORT SUMMARY

BELOW IS AN EXCERPT SUMMARY OF THE GEOTECHNICAL ENGINEERING REPORT; PREPARED BY ECS MID-ATLANTIC, LLC AND DATED MARCH 27, 2025. (SUBMITTED TO SATISFY THE GEOTECHNICAL REPORT REQUIREMENT OF THE SITE PLAN CONDITIONS). PLEASE REVIEW THE ENTIRE REPORT AS PROVIDED TO THE CITY OF ALEXANDRIA.

Details of a typical French drainage installation are included in Appendix D. A typical French drain consists of an 18 to 24-inch wide by 18 to 24-inch deep bed of AASHTO #57 (or similar open graded aggregate) aggregate wrapped in a medium duty, non-woven geotextile and (sometimes) containing a 6-inch diameter, Schedule 40 PVC perforated or slotted pipe. Actual dimensions should be as determined necessary by ECS during construction. After the installation has been completed, the geotextile should be wrapped over the top of the aggregate and pipe followed by placement of backfill. The top of the drain should be positioned at least 18 inches below the design subgrade elevations. Drains should not be routed within the expanded building limits.

5.2 SUBGRADE PREPARATION

5.2.1 Demolition

Initial preparation of the site should consist of complete removal of the existing foundations, pavements, sidewalks, and utilities that will not be part of the new construction. Demolition of the existing building should include the complete removal of all foundations and slabs.

5.2.2 Stripping and Grubbing

After stripping to the desired grade and performing all necessary removal of any existing fills, the exposed soils should be carefully examined to identify any localized loose, yielding or otherwise unsuitable materials by an experienced geotechnical engineer or his authorized representative. Any soft or unsuitable materials encountered during this proofrolling should be removed and replaced with an approved backfill compacted to the criteria given below in the section entitled Fill Placement.

The preparation of fill subgrades should be observed on a full-time basis. These observations should be performed by an experienced geotechnical engineer, or his representative, to document that all unsuitable materials have been removed, and that the subgrade is suitable for support of the proposed construction and/or fills. In some areas, excessively soft and/or wet soils may be encountered for fill subgrades, especially in the winter or early spring months. Soil bridging lifts should not be used to span over soft fill subgrade soils within the expanded building limits. All soft areas shall be excavated and removed.

5.2.3 Proofrolling

Prior to fill placement or other construction on subgrades, the subgrades should be evaluated by a qualified testing agency. The exposed subgrade should be thoroughly proofrolled with construction equipment having a minimum axle load of 10 tons [e.g. fully loaded tandem-axle dump truck] or heavy wheeled equipment if not accessible for a dump truck. Proofrolling should be traversed in two perpendicular directions with overlapping passes of the vehicle under the observation of a qualified representative. This procedure is intended to assist in identifying any localized yielding materials.

Where proofrolling identifies areas that are unstable or "pumping" subgrade those areas should be repaired prior to the placement of any subsequent Structural Fill or other construction materials. Methods of stabilization include undercutting, moisture conditioning, or chemical

stabilization. The situation should be discussed with ECS to determine the appropriate procedure. Test pits may be excavated to explore the shallow subsurface materials to help in determining the cause of the observed unstable materials, and to assist in the evaluation of appropriate remedial actions to stabilize the subgrade.

5.3 EARTHWORK OPERATIONS

5.3.1 Structural Fill Materials

Fill Content: Existing fill was encountered in some borings with the deepest areas of fill up to 7+ feet below existing site grades. Deleterious materials such as brick was encountered in some of the existing fill soils. Granular fill (Silty SAND (SM)), that is free of man-made material and organic debris may be suitable for re-use as Structural Fill; however, further testing will be required. Highly plastic soils are not suitable for use as structural fill at the site.

Product Submittals: Prior to placement of Structural Fill, representative bulk samples (about 50 pounds) of on-site and off-site borrow should be submitted to ECS for laboratory testing, which will include Atterberg limits, natural moisture content, grain-size distribution, and moisture-density relationships for compaction. Import materials should be tested prior to being hauled to the site to determine if they meet project specifications.

Satisfactory Structural Fill Materials: Materials satisfactory for use as Structural Fill should consist of inorganic soils with the following engineering properties and compaction requirements.

STRUCTURAL FILL INDEX PROPERTIES	
Subject	**Property**
Building and Pavement Areas	LL < 40, PI<20
Max. Particle Size	4 inches
Max. organic content	5% by dry weight

STRUCTURAL FILL COMPACTION REQUIREMENTS	
Subject	**Requirement**
Compaction Standard	Standard Proctor, ASTM D698
Required Compaction	-95% of Max. Dry Density -98% of Max. Dry Density for fills greater than 8'
Moisture Content	-2 to +3 % points of the soil's optimum value
Loose Thickness	8 inches prior to compaction (4 inches if utilizing hand operated compaction equipment)

Unsatisfactory Materials: Unsatisfactory fill materials include materials which to not satisfy the requirements for suitable materials, as well as topsoil and organic materials (OH, OL), elastic Silt (MH), and high plasticity Clay (CH). Such materials, if encountered during grading operations,

should be removed and either stockpiled for later use in landscape fills, or placed in approved disposal areas either on site or off site.

On-Site Soils: Most of the on-site materials may be reused as engineered fill if they do not contain organics or foreign debris, are not highly plastic, are not environmentally impacted, and conform to the criteria outlined above. Based on observations made during the subsurface exploration program and following visual observation of the recovered soil samples, most of the natural soils underlying the existing fill are expected to be suitable for reuse as engineered fill materials. During excavation operations localized layers of highly plastic soils may be encountered. These soils are not suitable for use as structural fill on site. Moisture adjustment is anticipated to be required to condition any suitable on-site material before its placement in new structural fill areas. The suitability of the existing fill soils for reuse as engineered fill should be further evaluated in the field at the time of construction. Any fill placed beneath proposed footings designed for greater than 3,000 psf should only consist of lean concrete.

5.4 FOUNDATION AND SLAB OBSERVATIONS

Protection of Foundation Excavations: Exposure to the environment may weaken the soils at the footing bearing level if the foundation excavations remain open for too long a time. Therefore, foundation concrete should be placed the same day that excavations are made. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the foundation excavation bottom immediately prior to placement of concrete. If the excavation must remain open overnight, or if rainfall becomes imminent while the bearing soils are exposed, a 1 to 3-inch thick "mud mat" of "lean" concrete should be placed on the bearing soils before the placement of reinforcing steel.

Footing Subgrade Observations: Most of the soils at the foundation bearing elevation are anticipated to be suitable for support of the proposed structure. It is important to have ECS observe the foundation subgrade prior to placing foundation concrete, to confirm the bearing soils are what was anticipated.

Slab Subgrade Verification: Prior to placement of a drainage layer, the subgrade should be prepared in accordance with the recommendations found in **Section 5.2.3 Proofrolling**.

5.5 UTILITY INSTALLATIONS

Utility Subgrades: The soils encountered in our exploration are expected to be generally suitable for support of utility pipes. The pipe subgrades should be observed and probed for stability by ECS. Any loose or unsuitable materials encountered should be removed and replaced with suitable compacted Structural Fill, or pipe stone bedding material.

Utility Backfilling: The granular bedding material (often AASHTO #57 stone) should be at least 4 inches thick, but not less than that specified by the civil engineer's project drawings and specifications. We recommend that the bedding materials be placed up to the spring line of the pipe. Fill placed for support of the utilities, as well as backfill over the utilities, should satisfy the requirements for Structural Fill and Fill Placement.

Excavation Safety: All excavations and slopes should be constructed and maintained in accordance with OSHA excavation safety standards. The contractor is solely responsible for designing, constructing, and maintaining stable temporary excavations and slopes. The contractor's responsible person, as defined in 29 CFR Part 1926, should evaluate the soil exposed in the excavations as part of the contractor's safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. ECS is providing this information solely as a service to our client. ECS is not assuming responsibility for construction site safety or the contractor's activities; such responsibility is not being implied and should not be inferred.

6.0 CLOSING

ECS has prepared this report to guide the geotechnical-related design and construction aspects of the project. We performed these services in accordance with the standard of care expected of professionals in the industry performing similar services on projects of like size and complexity at this time in the region. No other representation expressed or implied, and no warranty or guarantee is included or intended in this report.

The description of the proposed project is based on information provided to ECS by Joseph Browne Development Associates. If any of this information is inaccurate or changes, either because of our interpretation of the documents provided or site or design changes that may occur later, ECS should be contacted so we can review our recommendations and provide additional or alternate recommendations that reflect the proposed construction.

We recommend that ECS review the project plans and specifications so we can confirm that those plans/specifications are in accordance with the recommendations of this geotechnical report.

Field observations, and quality assurance testing during earthwork and foundation installation are an extension of, and integral to, the geotechnical design. We recommend that ECS be retained to apply our expertise throughout the geotechnical phases of construction, and to provide consultation and recommendation should issues arise.

ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data in this report.

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PLAN STATUS

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 PROFESSIONAL ENGINEER 09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV'D BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GEOTECHNICAL REPORT SUMMARY

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

PHASE 1 ESA

BELOW IS AN EXCERPT SUMMARY OF THE PHASE 1 ENVIRONMENTAL SITE ASSESSMENT; PREPARED BY ECS MID-ATLANTIC, LLC AND DATED MAY 10, 2023. (SUBMITTED TO SATISFY THE ENVIRONMENTAL REPORT REQUIREMENTS OF THE SITE PLAN CONDITIONS). PLEASE REVIEW THE ENTIRE REPORT AS PROVIDED TO THE CITY OF ALEXANDRIA.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

ELBERT APARTMENTS PROPERTY

3908-3916 ELBERT AVENUE
ALEXANDRIA, VIRGINIA 22305

ECS PROJECT NO. 47:16653

FOR: COMMUNITY LODGINGS, INC.

MAY 10, 2023

ECS Mid-Atlantic, LLC "One Firm. One Mission."
Geotechnical • Construction Materials • Environmental • Facilities

May 10, 2023

Lynn Thomas
Community Lodgings, Inc.
3912 Elbert Avenue, Suite 108
Alexandria, Virginia 22305

ECS Project No. 47: 16653

Reference: Phase I Environmental Site Assessment Report, Elbert Apartments Property, 3908-3916 Elbert Avenue, Alexandria, City of Alexandria, Virginia 22305

Dear Ms. Thomas:

ECS Mid-Atlantic, LLC (ECS) is pleased to provide you with the results of our Phase I Environmental Site Assessment (ESA) for the referenced site. ECS's services were provided in general accordance with ECS Proposal No. 47:28067-EP authorized on April 19, 2023 and generally meet the requirements of ASTM E1527-21, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, and in accordance with EPA Standards and Practices for All Appropriate Inquiries contained in 40 CFR Part 312.

If there are questions regarding this report, or a need for further information, please contact the undersigned.

Sincerely,

ECS Mid-Atlantic, LLC

Andrew R. Geraci
Environmental Senior Project Manager
ageraci@ecslimited.com
703-471-8400

Christopher M. Elliott, CHMM
Environmental Principal
celliott@ecslimited.com
703-471-8400

Project Summary

Elbert Apartments Property
3908-3916 Elbert Avenue
Alexandria, Virginia 22305

Report Section		No Further Action	REC	CREC	HREC	BER	Comment
4.0	User Provided Information	✔					
5.1	Federal ASTM Databases	✔					
5.2	State ASTM Databases	✔					
5.3	Additional Environmental Record Sources	✔					
6.0	Historical Use Information	✔					
7.0	Site and Area Reconnaissance	✔					
8.0	Additional Services	✔					
9.0	Interviews	✔					

ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in § 312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Andrew R. Geraci
Environmental Senior Project Manager
May 10, 2023

Christopher M. Elliott, CHMM
Environmental Principal
May 10, 2023

10.0 FINDINGS AND CONCLUSIONS

10.1 Findings and Opinions

ECS Mid-Atlantic, LLC (ECS) was contracted by Community Lodgings, Inc. to perform an ASTM E1527-21, Phase I Environmental Site Assessment (ESA) of the Elbert Apartments Property located at 3908-3916 Elbert Avenue in Alexandria, City of Alexandria, Virginia (i.e. subject property).

The subject property is identified by the City of Alexandria as Map-Block-Lot Number 007.01-04-04 and owned by CLI Multifamily Partnership LP. The 0.86-acre subject property is developed with three apartment buildings containing 28 residential units. The apartment buildings were constructed in 1940 and contain 23,652 square feet of space. A maintenance shop is located in the 3912 Elbert Avenue building. The maintenance shop contains a natural gas water heater and maintenance chemicals. The buildings are heated with electricity and are provided with water and sanitary sewer services by Virginia American Water.

The exterior of the subject property consists of asphalt-paved parking areas, landscaped areas, storage sheds, and a playground area. The subject property gently slopes to the northeast. The storage sheds contain property files, maintenance parts, and some landscaping equipment. Two one-gallon containers of gasoline and oil were observed within one of the sheds, and staining was not observed in the vicinity of the containers. Several solid waste dumpsters are located in the vicinity of the apartment buildings. One pad-mounted transformer was observed at the subject property. The transformer is owned and maintained by Dominion Energy. We did not observe evidence of leakage or staining in the vicinity of the transformer.

The subject property is located in a residential area of Alexandria, Virginia. Based on our review of site topography and conditions observed during the site reconnaissance, it is our professional opinion that properties to the south are presumed to be hydrogeologically up-gradient of the subject property. The adjoining properties to the north of the subject property consist of apartment buildings; and townhomes to the east, south, and west. ECS did not identify environmental issues associated with current occupants or activities at adjoining or nearby properties that are believed to present a recognized environmental condition (REC) at the subject property.

According to historical research, the subject property was agricultural land from at least 1936 until the subject property was developed with the current improvements in 1940. The surrounding area has developed slowly from primarily undeveloped agricultural land to residential land over time. A residence was located to the west of the subject property in the 1920s and 1930s until apartments were developed to the north, east, and west in the 1940s. Additional apartments were developed to the south and east in the 1980s. No obvious indications of RECs were identified in the historical data review.

A regulatory database search report was provided by Environmental Data Resources, Inc. (EDR). The database search involves researching a series of Federal, State, Local, and other databases for facilities and properties that are located within specified minimum search distances from the subject property. The subject property was identified on the Facility Index System (FINDS) database as Alexandria Apartments at 3908 Elbert Avenue. The subject property was listed on the FINDS database due to its listing on the Aerometric Information Retrieval System database. According to

the EPA Compliance and Online History database, the subject property is not listed with any related violations. Based on the absence of reported violations, ECS does not consider issues associated with this listing likely to result in a REC for the subject property.

The EDR report identified several off-site properties within the minimum ASTM search distances. Based on our review of reasonably ascertainable public records, ECS does not consider the offsite listings to be potential sources of soil, groundwater, or vapor impact to the subject property. Therefore, ECS does not believe that the off-site listings would have issues that result in RECs for the subject property.

10.2 Significant Data Gaps

ASTM E1527-21 defines a "*data gap*" as: "a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information." A "*significant data gap*" is "a data gap that affects the ability of the environmental professional to identify a recognized environmental condition." Significant data gaps that would be expected to impact our ability to render a professional opinion concerning the subject property were not identified.

10.3 De Minimis Conditions

ECS did not identify *de minimis* conditions associated with the subject property during this assessment.

10.4 Conclusions

We have performed a Phase I Environmental Site Assessment in general conformance with the scope and limitations of ASTM E1527-21 of the Elbert Apartments Property located at 3908-3916 Elbert Avenue in Alexandria, City of Alexandria, Virginia, the subject property. Any exceptions to, or deletions from, this practice are described in Section 2.6 of this report. This assessment has revealed no evidence of recognized environmental conditions, controlled recognized environmental conditions, or significant data gaps in connection with the property.

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SCALE: NONE | DATE: 02/25/2025

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COMMONWEALTH OF VIRGINIA AARON M. VINSON Lic. No.041851 09/03/25 PROFESSIONAL ENGINEER

REVISION APPROVED BY

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PHASE 1 ESA SUMMARY

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ESI Peer Review

File No. ALEX Tax Map No. 007.01 Job No. 20-104 Cadd Dwg. File: Q: \sdskproj\20104\dwg\engineering\FSP\20104C-1402.dwg

SHEET: C-1402

WQIF APPROVAL LETTER*

*PENDING UPDATED WQIF REQUEST

DEPARTMENT OF TRANSPORTATION AND ENVIRONMENTAL SERVICES
Infrastructure and Environmental Quality
P.O. Box 178 – City Hall
Alexandria, Virginia 22313
www.alexandriava.gov

03/28/2025

Walter L. Phillips
Attn: Travis P. Brown, P.E.
207 Park Ave
Falls Church, VA 22406

RE: CLI Elbert Avenue Residences

Dear Travis:

This is in regard to your letter dated February 23, 2025 requesting to meet the Alexandria Water Quality Volume Default (WQVD) in a Resource Management Area per Article XIII, Section 13-109(E)(6) by treating 82 percent of the WQVD in the project area(s) through stormwater quality controls (structural BMPs) and by participating in the City's Water Quality Improvement Fund (WQIF). You have requested to pay a fee in lieu of providing an onsite BMP as outlined in Article XIII, Section 13-110(A)(2). You have agreed to provide a total monetary contribution of $10,874 (5,437 square feet of impervious surface x $2/square foot). This represents 100 percent of the overall WQVD left untreated.

Your request has been approved. The procedure now is to scan your request letter onto your final plan on a sheet that is labeled Stormwater Facility BMP Details or something similar. Your final plan will be eligible for approval when you have paid the fee ($10,874). The approval of the plan (with your request therein) will act as the approval of your request.

Sincerely,

Gavin Pellitteri
Stormwater Principal Planner
T&ES Stormwater Management

WQIF REQUEST LETTER

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945

June 06, 2025

Via delivery

Gavin Pellitteri
Stormwater Principal Planner
Stormwater Management
Transportation & Environmental Services
City of Alexandria, VA
301 King Street, Room 3000
Alexandria, VA 22314

Re: CLI Elbert Avenue Residences

Dear Mr. Pellitteri,

This letter shall serve to request an equivalency option under section 13-110(A)(2) of the municipal zoning ordinance to provide a monetary contribution to the Alexandria Water Quality Improvement Fund in lieu of treating the default water quality volume on site.

Due to site constraints a small amount of impervious area for the site cannot be captured and treated. The post development impervious area for the site is 30,939 sq. ft. and 25,288 sq. ft. will be captured and treated and the site will comply with all requirements for phosphorus removal. However, 5,651 sq. ft. (approximately 18%) of the post-development impervious area cannot be captured. The applicant therefore requests to pay into the Alexandria Water Quality Improvement Fund for this untreatable area.

The uncaptured area includes 5,651 square feet of impervious surface and equates to a required fee of $11,302 ($2/sq. ft.).

Should you have any questions or require additional information, please feel free to contact me at 703-532-6163 or via email at tbrown@wlpinc.com.

Sincerely,

Travis P. Brown, P.E.
Project Manager

CIVIL ENGINEERS
LAND SURVEYORS
PLANNERS
LANDSCAPE ARCHITECTS
ARBORISTS

207 PARK AVENUE
FALLS CHURCH, VA 22046
PHONE: (703) 532-6163
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ESI
Peer Review

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners • Landscape Architects • Arborists
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301 www.WLPINC.com

SCALE: NONE | DATE: 02/25/2025 | DRAWN: SC/TB | CHECKED: TB/AV

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA LICENSED PROFESSIONAL ENGINEER
AARON M. VINSON
Lic. No.041851
09/03/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	RCV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

CORRESPONDENCE

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

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".
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. EXPANSION JOINTS TO BE CLEANED OF DEBRIS, DIRT, DUST, SCALE, CURING COMPOUND AND CONCRETE, BLOWN DRY AND IMMEDIATELY SEALED WITH A SELF-LEVELING, ELASTOMERIC POLYURETHANE OR EQUIVALENT. SEALANT COLOR SHALL MATCH PAVEMENT.
    - 9.4. 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. UNLESS NOTED OTHERWISE, 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.

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 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.
23. MAINTENANCE OF ALL TREES AND LANDSCAPE MATERIALS SHALL CONFORM TO ACCEPTED INDUSTRY STANDARDS SET FORTH BY THE LANDSCAPE CONTRACTORS ASSOCIATION, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, THE INTERNATIONAL SOCIETY OF ARBORICULTURE, AND THE AMERICAN NATIONAL STANDARDS INSTITUTE.
24. ALL MATERIALS' SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE INDUSTRY STANDARD FOR GRADING PLANT MATERIAL - THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1).

PLANTERS/POTS/SEASONAL PLANTING NOTES:

1. SOIL SHOULD BE NUTRIENT-RICH, MOISTURE CONTAINING PLANTING MEDIUM AND BE A MINIMUM 18" DEPTH FOR SEASONALS, PERENNIALS AND SMALL SHRUBS; MINIMUM 36" DEPTH FOR ALL TREES.
2. A LAYER OF RIVER ROCK SHALL BE PLACED IN THE BASE OF EACH PLANTER POT TO A MINIMUM 6" DEPTH OR AS ALLOWABLE BY REQUIRED SOIL DEPTH. PLACE FILTER FABRIC BETWEEN SOIL MEDIUM AND RIVER ROCK AND SOIL MEDIUM AND PLANTER EDGES. OVERLAP FABRIC 6" MINIMUM TO MINIMIZE SOIL WASH.
3. PLANTERS POTS WHICH DO NOT RECEIVE IRRIGATION SHALL BE HAND-WATERED. HAND WATERING SHOULD OCCUR MINIMUM 2 TIMES PER WEEK DURING COOLER AND RAINY SEASONS AND INCREASED TO EVERY 2-3 DAYS DURING HOT/DRY WEATHER. ALWAYS CHECK SOIL 6" BELOW SURFACE FOR SATURATION PRIOR TO WATERING TO PREVENT OVERWATERING/DROWNING OF PLANT MATERIAL.
4. WHEN APPLICABLE, PLANTS TO REMAIN IN CONTAINERS FOR DURATION OF SEASON ARE SHOWN IN THE "PERMANENT" LAYOUT. EACH SEASON WILL HAVE ITS OWN PLANT MATERIAL, SOME OF WHICH MAY LAST ALL YEAR. ROTATE IN THE PLANTS NOTED FOR EACH SEASON.
5. IF PLANT MATERIAL DIES DURING A SEASON AND IS EXPECTED TO REMAIN FOR AN ADDITIONAL SEASON, CONTRACTOR IS TO REPLACE AT TIME OF NEXT SEASONAL ROTATION.
6. CONTACT LANDDESIGN FOR ANY REQUIRED SUBSTITUTIONS.
7. ALL PLANTS SHOULD BE FULL AT TIME OF INSTALLATION AND COVER 75% OF POT SURFACE AREA.
8. AVOID PLANTING IN THE ROOT ZONE OF ANY PERMANENT TREES, SHRUBS, OR PERENNIALS.
9. SEASONAL PLANTS SHOULD BE REMOVED FOLLOWING THE FIRST MAJOR FROST DIEBACK AND REPLACED WITH EVERGREEN BOUGHS OR OTHER OWNER APPROVED WINTER DECOR. TREES, SHRUBS AND PERENNIALS SHOULD REMAIN IN THE CONTAINERS YEAR ROUND AND REPLACED ONLY AS NECESSARY.

IRRIGATION NOTES:

1. A FULLY AUTOMATED IRRIGATION SYSTEM PROVIDING 100% COVERAGE SHALL BE PROVIDED FOR ALL PLANTING AREAS, UNLESS NOTED OTHERWISE. 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.

GENERAL NOTES:

1. BASE INFORMATION, INCLUDING EXISTING CONDITIONS, TOPOGRAPHY, EXISTING UTILITIES, AND BOUNDARY INFORMATION IS FROM PLANS BY: WALTER L. PHILLIPS, INC.
2. ARCHITECTURAL INFORMATION IS FROM PLANS BY: RUST | ORLING ARCHITECTURE
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 SPECIFIC TO THE SCOPE OF THIS DRAWING PACKAGE 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 INACCURATE 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. 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.
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. BUILDING DIMENSIONS: THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO VERIFY THE EXACT BUILDING DIMENSIONS.
8. 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.
9. 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.
10. JOINT (BOND) LINES SHALL NOT DEVIATE MORE THAN ±1/2 IN. (±15 MM) OVER 50 FT. (15 M) FROM STRING LINES.
11. FILL GAPS AT THE EDGES OF THE PAVED AREA WITH CUT PAVERS OR EDGE UNITS.
12. CUT PAVERS TO BE PLACED ALONG THE EDGE WITH A MASONRY SAW.
13. ADJUST BOND PATTERN AT PAVEMENT EDGES SUCH THAT CUTTING OF EDGE PAVERS IS MINIMIZED.
14. IN NO CASE SHALL A CUT PAVER BE LESS THAN 1/3 FULL PAVER SIZE.
15. 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.

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SCALE:
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CHECKED: JVW

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GENERAL NOTES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. ____________
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ____________
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: L0001

PROPERTY LINE, TYP.

LIMIT OF DISTURBANCE, TYP.

ELEVATED
PRIVATE TERRACE
SEE SHEETS
L0102
L0201
L0301
L0402
L0502

STREET LEVEL
SEE SHEETS

L0102 L0201
L0301 L0401 L0501

ELBERT AVENUE
(50' PUBLIC RIGHT OF WAY WIDTH)

FOUR MILE ROAD

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COMMONWEALTH OF VIRGINIA
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REFERENCE PLAN

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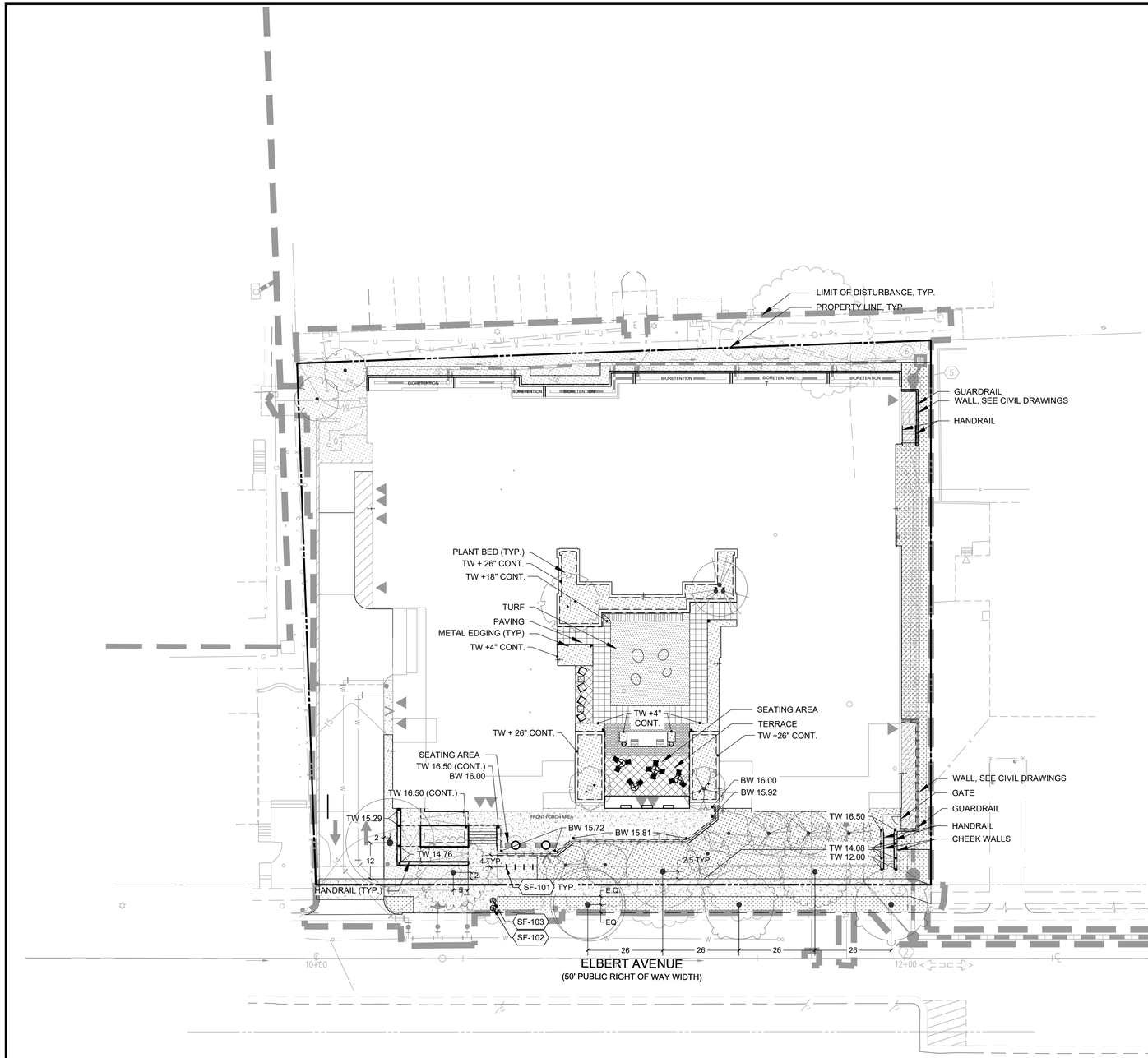
SHEET: L0101



REFERENCE NOTES SCHEDULE

CODE	DESCRIPTION	DETAIL
FURNISHINGS		
SF-101	BIKE RACKS	3/L0602
SF-102	WASTE RECEPTACLE	1/L0602
SF-103	RECYCLING RECEPTACLE	2/L0602

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

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MATERIALS AND GRADING PLAN

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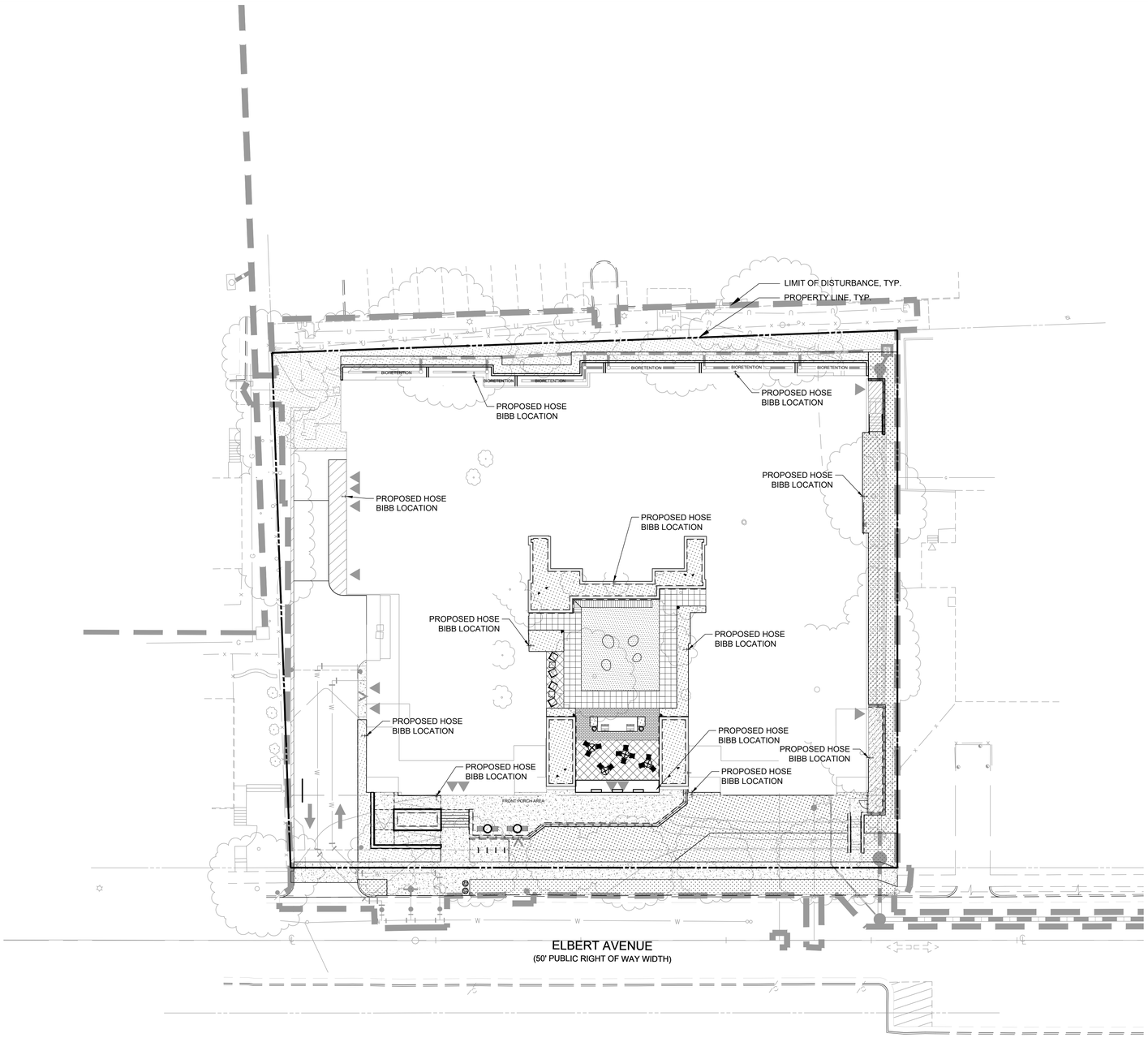

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[MSR]	
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IRRIGATION PLAN

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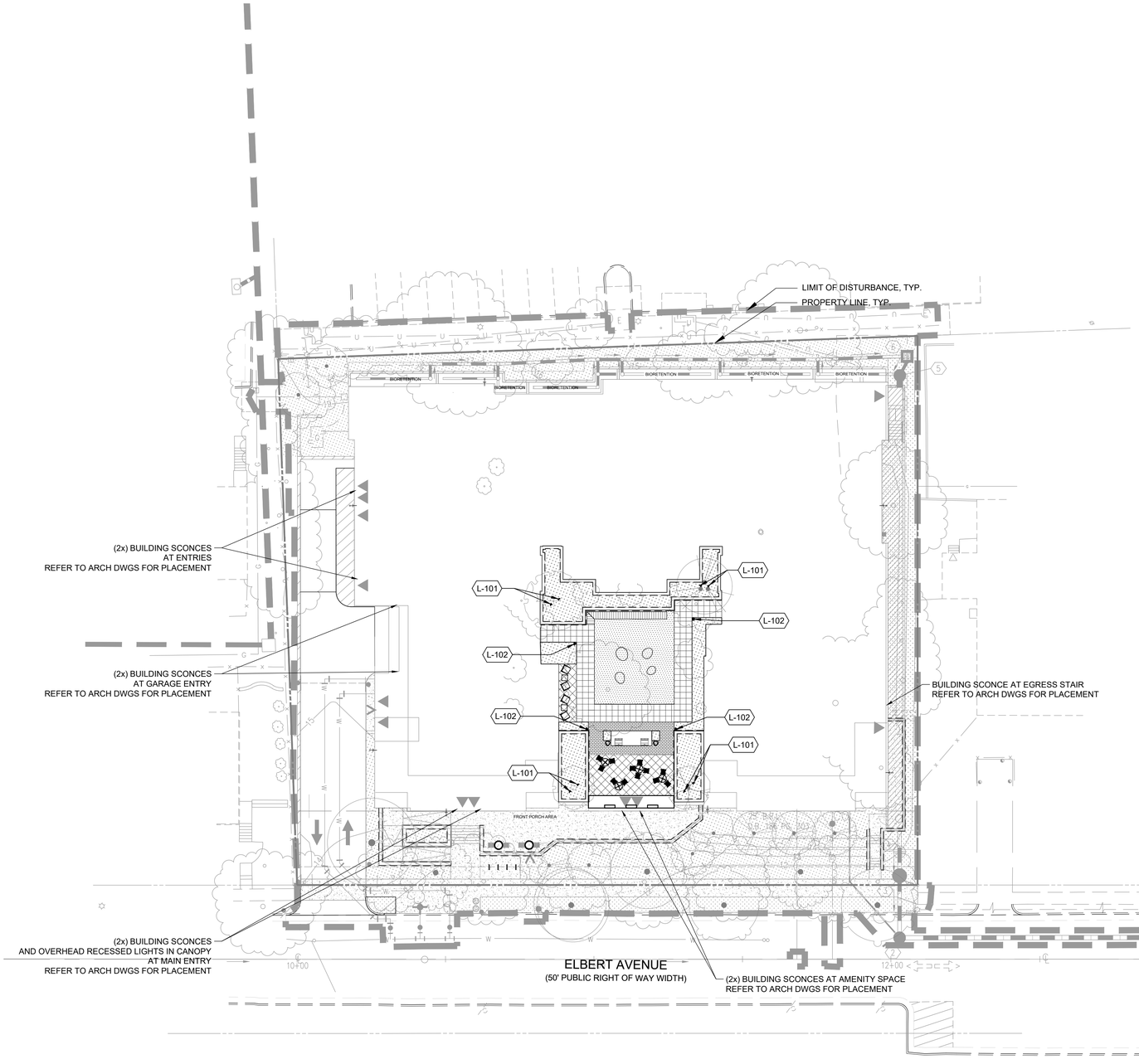

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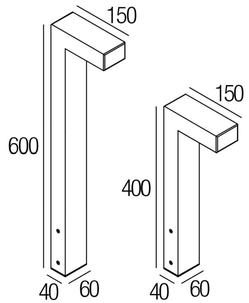
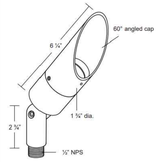
REFERENCE NOTES SCHEDULE

SYMBOL	LIGHTING & ELECTRICAL DESCRIPTION	QTY	DETAIL
L-101	TREE UPLIGHT		
L-102	LIGHT BOLLARD		



LIGHT BOLLARD
MANUFACTURER: FLEXALIGHTING
MODEL: ELLE 6



TREE UPLIGHT
MANUFACTURER: EXCELSIOR
MODEL: FD-7, GROUND MOUNT

Shaper

DESCRIPTION

673-W and 673-WP Luminous wall sconce features 6 standard finishes, 3 decorative trim bar options and is ADA compliant.

- Wall Luminous Vanity Luminaire
- Painted solid aluminum w/ extruded white acrylic panel
- Universal circular strap for a standard 4" J-box or plaster ring
- UL and CUL approved for interior and damp locations

		Type
Catalog #		
Project		Date
Comments		
Prepared by		

SPECIFICATION FEATURES

Material
Painted or plated solid aluminum with a 1/8" matte white extruded acrylic panel, open top and bottom end caps, with acrylic inserts. Luminous top and bottom for LED.

Finishes
ALP (Aluminum Paint)
MW (Matte White)
MB (Matte Black)
GRM (Graphite Metallic)
DP (Dark Platinum)
BM (Bronze Metallic)
CC (Custom Color – Specify)

For Custom Color contact factory for quotation.

LED
16": L3:2000 nominal lumens at max 20W
25": L3:2000 nominal lumens at max 20W
37": L4:3000 nominal lumens at max 29W

Driver
LED system coupled with electronic driver to deliver optimal performance. Electronic drivers are available for 120-277V applications. A 0-10V dimming control is standard on all models. Standard integral class 2 driver 29W max., 0-10V dimming.

Installation
Supplied with a universal circle strap for a standard 4" J-box or round or octagonal plaster ring. Horizontal or vertical mount. Shaper 673-W luminaires are designed for interior installations only. Shaper 673-WP are listed for wet location. Battery must be remote mounted in an interior location at a 5ft max distance.

Compliance
Shaper 673-W is U.L. and C.U.L approved for indoor and damp location. Shaper 673-WP is listed for wet location. ADA compliant, except with proud trim options.

Warranty
5 year limited warranty on LED components.

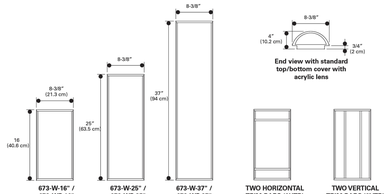
673-W SERIES
673-WP SERIES

Height: 16"
- Lumen Output Source Lumens: L3:2000
- Wattage: 20W
- Color Rendering: CRI 83+
- Correlated Color Temperature: 4000K, 3500K, 3000K, 2700K
- Rated Life of Lamp (hrs): 50,000
- Dimming: 0-10V

Height: 25"
- Lumen Output Source Lumens: L3:2000
- Wattage: 20W
- Color Rendering: CRI 83+
- Correlated Color Temperature: 4000K, 3500K, 3000K, 2700K
- Rated Life of Lamp (hrs): 50,000
- Dimming: 0-10V

Height: 37"
- Lumen Output Source Lumens: L4:3000
- Wattage: 29W
- Color Rendering: CRI 83+
- Correlated Color Temperature: 4000K, 3500K, 3000K, 2700K
- Rated Life of Lamp (hrs): 50,000
- Dimming: 0-10V

DIMENSIONS



ORDERING INFORMATION

Sample Number: **673-16-W-L3/827-UNV-ALP-RBP**

Series	Size	Mounting Type	LED Lamp			LED Voltage	Finish	Options
			16"	25"	37"			
673 = Luminous Hall Cylinder	**16**=16" **25**=25" **37**=37"	**W** = Interior Wall **WP** = Exterior Wall	**L3/827** **L3/830** **L3/835** **L3/840**	**L3/827** **L3/830** **L3/835** **L3/840**	**L4/827** **L4/830** **L4/835** **L4/840**	**UNV** = (120-277V)	**ALP**=Aluminum Paint **MW**=Matte White **MB** = Matte Black **DP** = Dark Platinum **GRM**=Graphite Metallic **BM**=Bronze Metallic **CC**=Custom Color - Contact factory for quotation	**2VTB**=Two Vertical Trim Bars **2HTB**=Two Horizontal Trim Bars **2VTB/2HTB**=Two Vertical Trim Bars/ Two Horizontal Trim Bars **2VTB/PC**=Two Vertical Trim Bars with Perforated Center **BC** = Closed Bottom Cover **RBP** =Remote Battery Pack

COOPER Lighting Solutions

Cooper Lighting Solutions
1800 E. Colfax Avenue
Aurora, CO 80011
P: 303-893-5122
www.cooperlighting.com

Specifications and dimensions subject to change without notice.

673 SERIES WALL LUMINAIRE
PS525084EN
06-23-19
1 of 1

ARCHITECTURAL SCONCE

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COMMONWEALTH OF VIRGINIA
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Lic. No. 958
LANDSCAPE ARCHITECT

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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

LIGHTING PLAN

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

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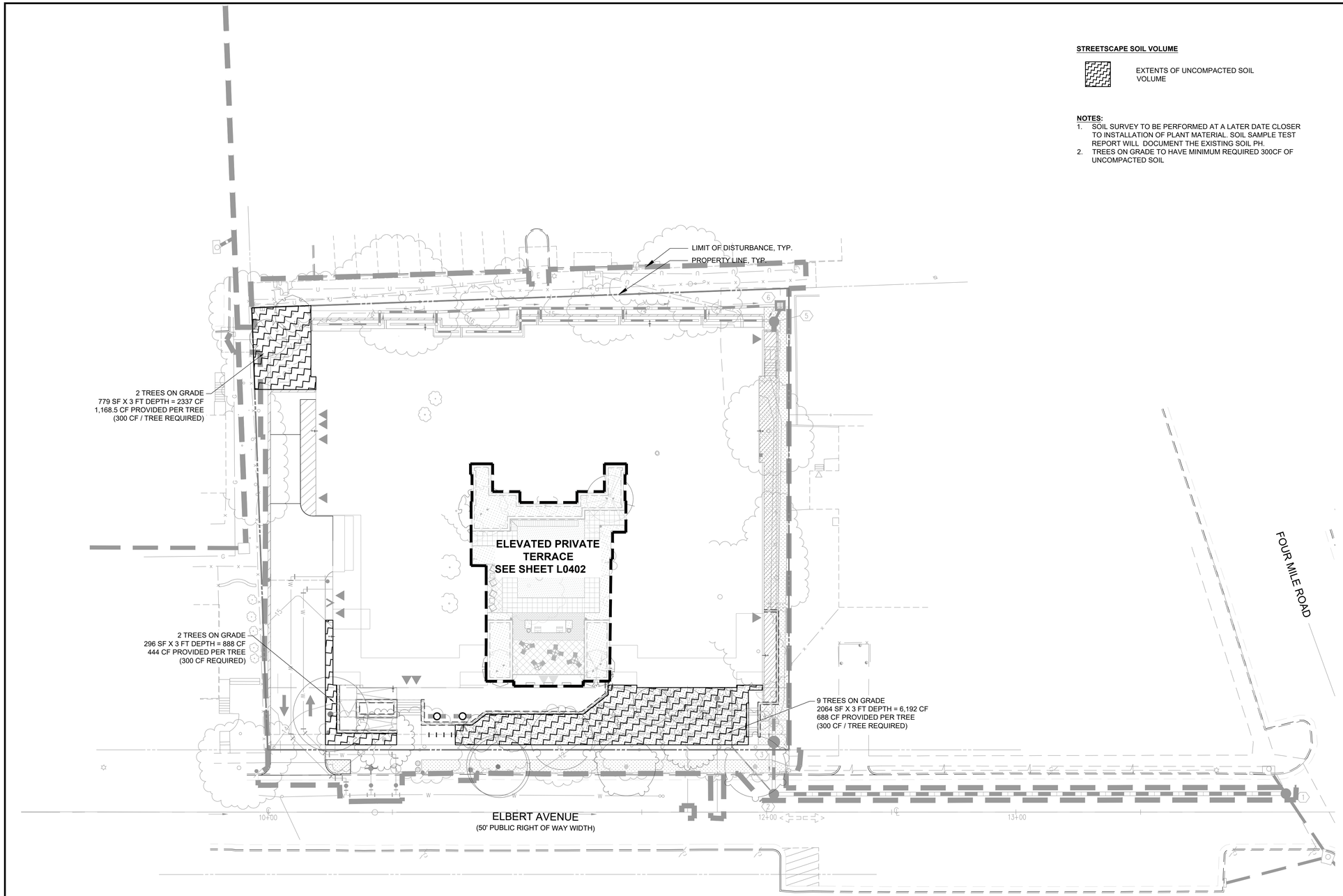
SHEET: L0301



STREETSCAPE SOIL VOLUME

EXTENTS OF UNCOMPACTED SOIL VOLUME

NOTES:

1. 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.
2. TREES ON GRADE TO HAVE MINIMUM REQUIRED 300CF OF UNCOMPACTED SOIL

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

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SOIL VOLUME PLAN - STREET LEVEL

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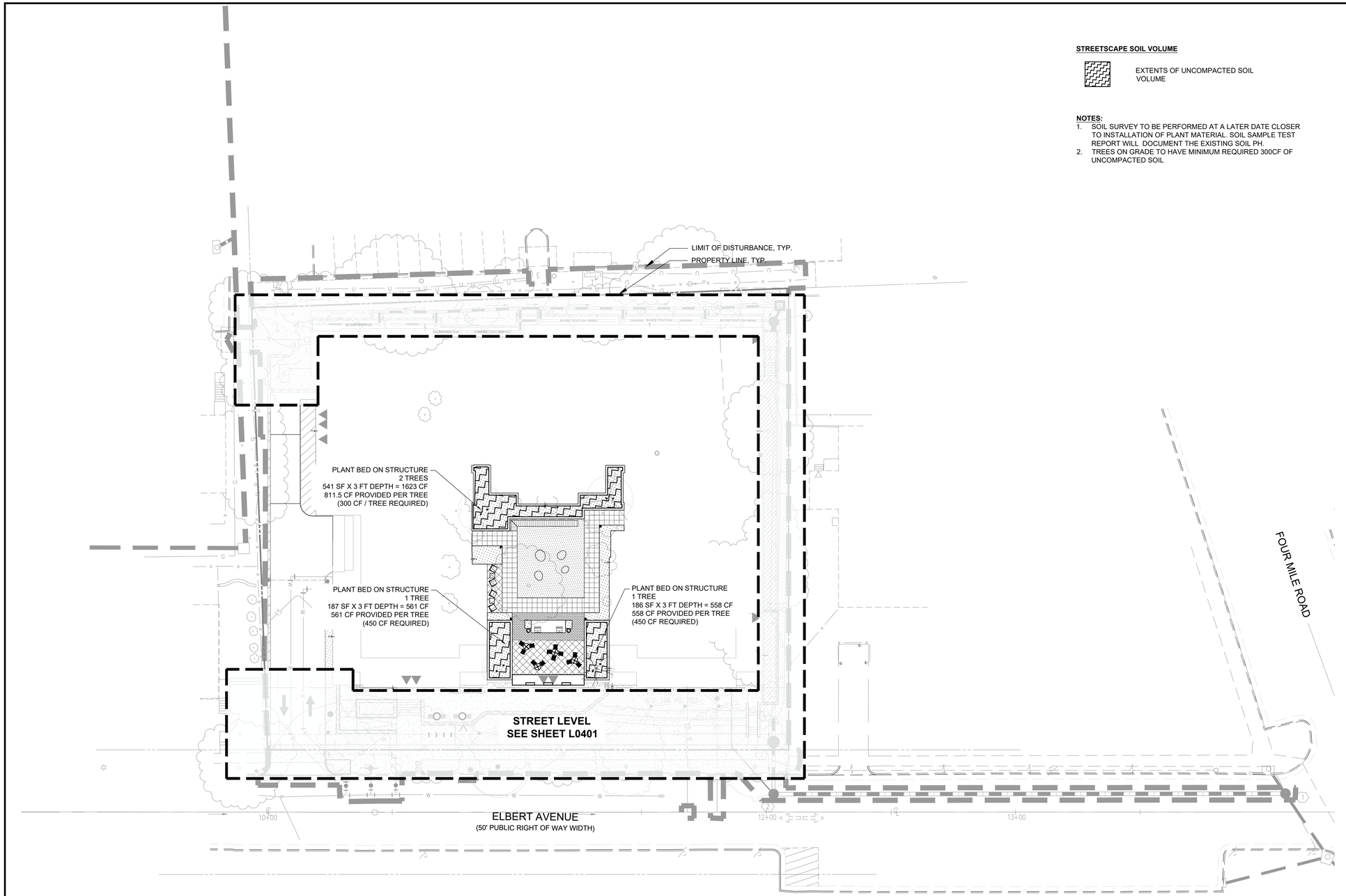

STREETSCAPE SOIL VOLUME

EXTENTS OF UNCOMPACTED SOIL VOLUME

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CITY OF ALEXANDRIA, VIRGINIA

SOIL VOLUME PLAN - ELEVATED PRIVATE TERRACE

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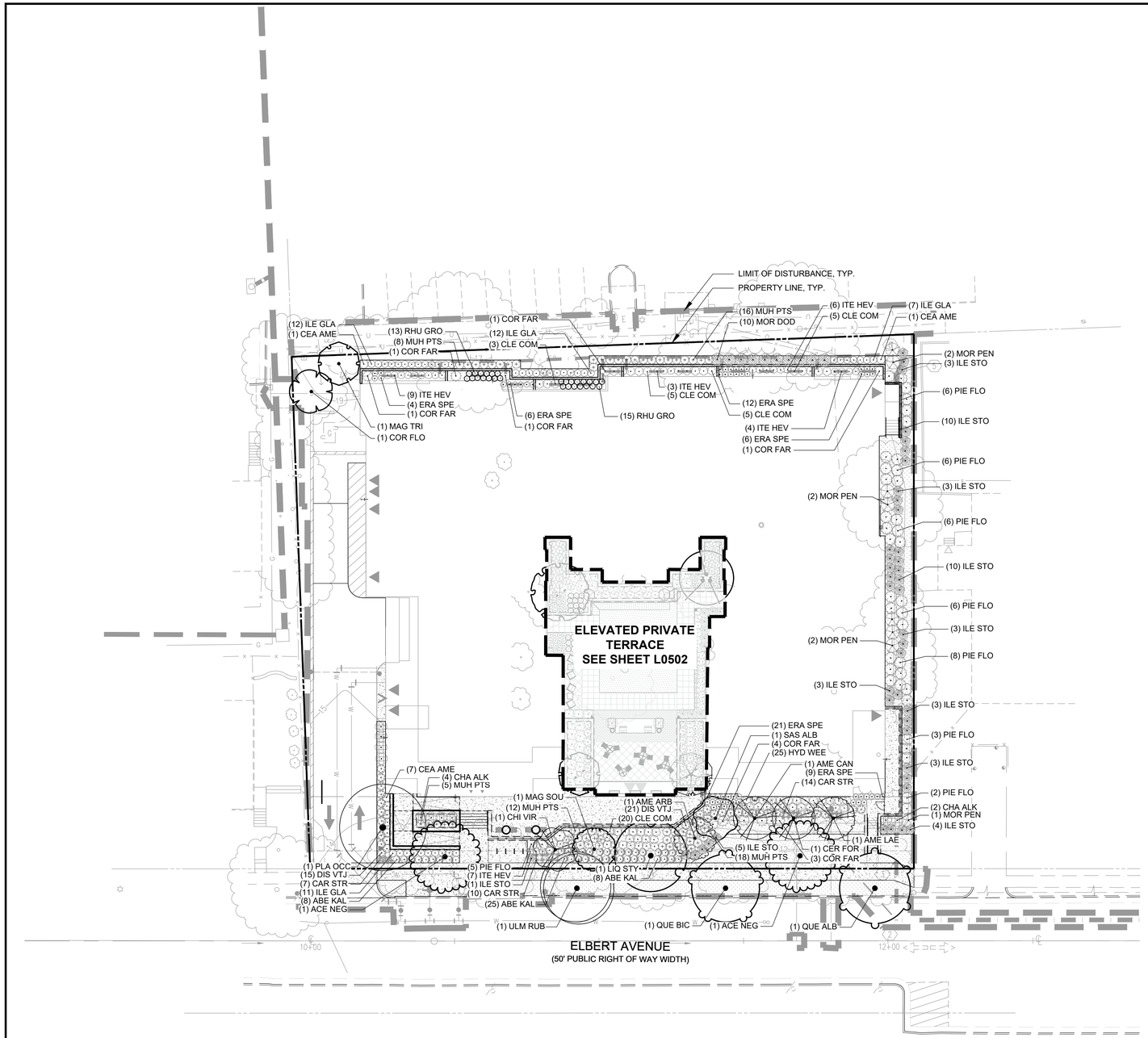

1"=20'
0 10' 20' 40'

PLANT LEGEND - STREET LEVEL

SYMBOL	CODE	BOTANICAL / COMMON NAME
ORNAMENTAL TREES		
	AME ARB	AMELANCHIER ARBOREA / DOWNY SERVICEBERRY
	AME CAN	AMELANCHIER CANADENSIS / CANADIAN SERVICEBERRY
	AME LAE	AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY
	CER FOR	CERCIS CANADENSIS 'FOREST PANSY' / FOREST PANSY EASTERN REDBUD
	CHI VIR	CHIONANTHUS VIRGINICUS / WHITE FRINGETREE
	COR FLO	CORNUS FLORIDA / FLOWERING DOGWOOD
	MAG TRI	MAGNOLIA TRIPETALA / UMBRELLA MAGNOLIA
	MAG SOU	MAGNOLIA X SOULANGEANA / SAUCER MAGNOLIA
	SAS ALB	SASSAFRAS ALBIDUM / SASSAFRAS
URBAN TREES		
	ACE NEG	ACER NEGUNDO / BOX ELDER
	LIQ STY	LIQUIDAMBAR STYRACIFLUA / SWEET GUM
	PLA OCC	PLATANUS OCCIDENTALIS / AMERICAN SYCAMORE
	QUE ALB	QUERCUS ALBA / WHITE OAK
	QUE BIC	QUERCUS BICOLOR / SWAMP WHITE OAK
	ULM RUB	ULMUS RUBRA / SLIPPERY ELM
DECIDUOUS SHRUBS		
	CEA AME	CEANOTHUS AMERICANUS / NEW JERSEY TEA
	CLE COM	CLETHRA ALNIFOLIA 'COMPACTA' / COMPACT SUMMERSWEET
	COR FAR	CORNUS SERICEA 'FARROW' / ARCTIC FIRE® RED TWIG DOGWOOD
	HYD WEE	HYDRANGEA QUERCIFOLIA 'PEE WEE' / PEE WEE OAKLEAF HYDRANGEA
	ITE HEV	ITEA VIRGINICA 'LITTLE HENRY' / LITTLE HENRY SWEETSPIRE
	RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC
EVERGREEN SHRUB		
	ABE KAL	ABELIA X GRANDIFLORA 'KALEIDOSCOPE' / KALEIDOSCOPE GLOSSY ABELIA
	CHA ALK	CHAMAECYPARIS OBTUSA 'ALASKA' / ALASKA HINOKI FALSE CYPRESS
	DIS VTJ	DISTYLIUM X 'VINTAGE JADE' / VINTAGE JADE DISTYLIUM
	ILE GLA	ILEX GLABRA / INKBERRY HOLLY
	ILE STO	ILEX VOMITORIA 'STOKES DWARF' / STOKES DWARF YAUPON HOLLY
	MOR DOD	MORELLA CERIFERA 'DON'S DWARF' / DON'S DWARF WAX MYRTLE
	MOR PEN	MORELLA PENSYLVANICA / NORTHERN BAYBERRY
	PIE FLO	PIERIS FLORIBUNDA / MOUNTAIN PIERIS
GRASSES		
	CAR STR	CAREX STRICTA / TUSSOCK SEDGE
	ERA SPE	ERAGROSTIS SPECTABILIS / PURPLE LOVEGRASS
	MUH PTS	MUHLENBERGIA CAPILLARIS 'REGAL MIST' / PINK MUHLY GRASS

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PLANTING PLAN - STREET LEVEL

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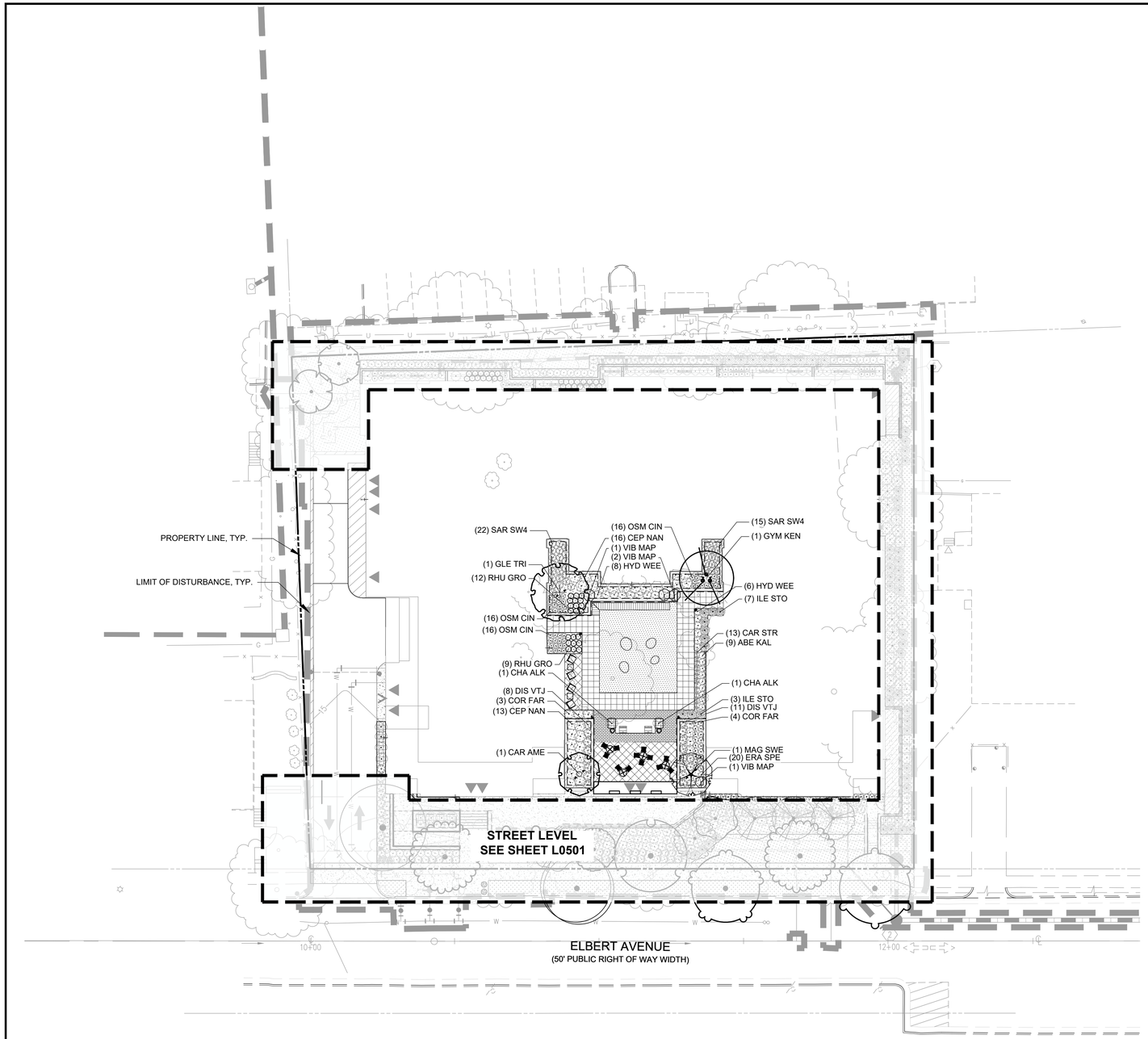

1"=20'
0 10' 20' 40'

PLANT LEGEND - ELEVATED PRIVATE TERRACE

SYMBOL	CODE	BOTANICAL / COMMON NAME
ORNAMENTAL TREES		
	CAR AME	CARPINUS CAROLINIANA / AMERICAN HORNBEAM
	MAG SWE	MAGNOLIA VIRGINIANA / SWEETBAY MAGNOLIA
URBAN TREES		
	GLE TRI	GLEDITSIA TRIACANTHOS / HONEY LOCUST
	GYM KEN	GYMNOCLADUS DIOICA / KENTUCKY COFFEETREE
DECIDUOUS SHRUBS		
	COR FAR	CORNUS SERICEA 'FARROW' / ARCTIC FIRE® RED TWIG DOGWOOD
	HYD WEE	HYDRANGEA QUERCIFOLIA 'PEE WEE' / PEE WEE OAKLEAF HYDRANGEA
	OSM CIN	OSMUNDA CINNAMOMEA / CINNAMON FERN
	RHU GRO	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC
	VIB MAP	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM
EVERGREEN SHRUB		
	ABE KAL	ABELIA X GRANDIFLORA 'KALEIDOSCOPE' / KALEIDOSCOPE GLOSSY ABELIA
	CEP NAN	CEPHALOTAXUS HARRINGTONIA 'NANA' / DWARF JAPANESE PLUM YEW
	CHA ALK	CHAMAECYPARIS OBTUSA 'ALASKA' / ALASKA HINOKI FALSE CYPRESS
	DIS VTJ	DISTYLIUM X 'VINTAGE JADE' / VINTAGE JADE DISTYLIUM
	ILE STO	ILEX VOMITORIA 'STOKES DWARF' / STOKES DWARF YAUPON HOLLY
	SAR SW4	SARCOCOCCA HUMILIS / SWEETBOX
GRASSES		
	CAR STR	CAREX STRICTA / TUSSOCK SEDGE
	ERA SPE	ERAGROSTIS SPECTABILIS / PURPLE LOVEGRASS

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SCALE:
DATE: 08/03/2025
DRAWN: JM, MAK | CHECKED: JVV

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1
03/18/2025	FINAL SITE PLAN #1

DATE	DESCRIPTION
[MSR]	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING PLAN - ELEVATED PRIVATE TERRACE

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

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PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CONTAINER	CAL	HT.	REMARKS
ORNAMENTAL TREES							
	AME ARB	1	AMELANCHIER ARBOREA / DOWNY SERVICEBERRY	B & B	1 1/2" - 2"	6` - 8`	CCA: 500 LOCAL, REGIONAL AND EASTERN US NATIVE
	AME CAN	1	AMELANCHIER CANADENSIS / CANADIAN SERVICEBERRY	B & B	1 1/2" - 2"	6` - 8`	CCA: 500 MULTI-STEM, 3 STEMS MIN, FULL SUN TO PART SHADE, LOCAL, REGIONAL, EASTERN US NATIVE
	AME LAE	1	AMELANCHIER LAEVIS / ALLEGHENY SERVICEBERRY	B & B	1 1/2"-2"	6` - 8`	CCA: 750 MULTI-STEM, 3 STEMS MIN, FULL SUN TO PART SHADE, LOCAL, REGIONAL, EASTERN US NATIVE
	CAR AME	1	CARPINUS CAROLINIANA / AMERICAN HORNBEAM	B & B	1 1/2" - 2"	6` - 8`	CCA: 500 LOCAL, REGIONAL, EASTERN US NATIVE
	CER FOR	1	CERCIS CANADENSIS 'FOREST PANSY' / FOREST PANSY EASTERN REDBUD	3 GAL.	1 1/2" - 2"	6` - 8`	CCA: 500 SINGLE LEADER, LOCAL, REGIONAL AND EASTERN US NATIVE
	CHI VIR	1	CHIONANTHUS VIRGINICUS / WHITE FRINGETREE	B & B	1 1/2" - 2"	8` - 10`	CCA: 500 LOCAL, REGIONAL AND EASTERN US NATIVE, SINGLE STEM
	COR FLO	1	CORNUS FLORIDA / FLOWERING DOGWOOD	B & B	1 1/2" - 2"	6` - 8`	CCA: 250 FULL SUN TO PART SHADE, MEDIUM WATER, LOCAL, REGIONAL, EASTERN US NATIVE, SINGLE LEADER
	MAG TRI	1	MAGNOLIA TRIPETALA / UMBRELLA MAGNOLIA	B & B	1 1/2" - 2"	6` - 8`	CCA: 500 MULTI STEM, 3 STEMS MIN, REGIONAL AND EASTERN US NATIVE,
	MAG SWE	1	MAGNOLIA VIRGINIANA / SWEETBAY MAGNOLIA	B & B	2"-3"	6` - 8`	CCA: 250 MULTI STEM. LOCAL, REGIONAL, EASTERN US NATIVE
	MAG SOU	1	MAGNOLIA X SOULANGEANA / SAUCER MAGNOLIA	B & B	1 1/2" - 2"	6` - 8`	CCA: 500 MULTI - STEM, 3 STEMS MIN, NON NATIVE
	SAS ALB	1	SASSAFRAS ALBIDUM / SASSAFRAS	B & B	1 1/2"-2"	6` - 8`	CCA: 1250 LOCAL, REGIONAL AND EASTERN U.S NATIVE
URBAN TREES							
	ACE NEG	2	ACER NEGUNDO / BOX ELDER	B & B	2"-3"	12`-14`	CCA: 2500 LOCAL, REGIONAL AND EASTERN US NATIVE,
	GLE TRI	1	GLEDITSIA TRIACANTHOS / HONEY LOCUST	B & B	2"-3"	12` - 14`	CCA: 750 LOCAL, REGIONAL, EASTERN US NATIVE
	GYM KEN	1	GYMNOCLADUS DIOICA / KENTUCKY COFFEETREE	B & B	2"-3"		CCA: 1250 LOCAL, REGIONAL, EASTERN US NATIVE
	LIQ STY	1	LIQUIDAMBAR STYRACIFLUA / SWEET GUM	B & B	2"-3"	12` - 14`	CCA: 1250 LOCAL, REGIONAL AND EASTERN US NATIVE
	PLA OCC	1	PLATANUS OCCIDENTALIS / AMERICAN SYCAMORE	B & B	2"-3"	12`-14`	CCA: 1250CCA: FULL SUN, LOCAL, REGIONAL, EASTERN US NATIVE
	QUE ALB	1	QUERCUS ALBA / WHITE OAK	B & B	2"-3"	12` - 14`	CCA: 1250 (NOT COUNTED FOR SITE) LOCAL, REGIONAL AND EASTERN US NATIVE,
	QUE BIC	1	QUERCUS BICOLOR / SWAMP WHITE OAK	B & B	2"-3"	12` - 14`	CCA: 1250 (NOT COUNTED FOR SITE) LOCAL, REGIONAL AND EASTERN US NATIVE,
	ULM RUB	1	ULMUS RUBRA / SLIPPERY ELM	B & B	2"-3"	12` - 14`	CCA: 1250 (NOT COUNTED FOR SITE) LOCAL,REGIONAL AND EASTERN US NATIVE
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	HEIGHT	SPREAD	REMARKS
DECIDUOUS SHRUBS							
	CEA AME	9	CEANOTHUS AMERICANUS / NEW JERSEY TEA	-	18" - 24"		CCA: 10 LOCAL, REGIONAL AND EASTERN U.S NATIVE
	CLE COM	38	CLETHRA ALNIFOLIA 'COMPACTA' / COMPACT SUMMERSWEET	-	18" - 24"		CCA: 10 FULL SUN TO PART SHADE, REGIONAL AND EASTERN US NATIVE
	COR FAR	19	CORNUS SERICEA 'FARROW' / ARCTIC FIRE® RED TWIG DOGWOOD	#5	24" - 30"		CCA: 25 FULL SUN TO PART SHADE, REGIONAL, EASTERN US NATIVE. PERFERS PART SHADE AND CONSISTENTLY MOIST, ACIDIC, SANDY SOILS, SOILS SHOULD NOT BE ALLOWED TO DRY OUT
	HYD WEE	39	HYDRANGEA QUERCIFOLIA 'PEE WEE' / PEE WEE OAKLEAF HYDRANGEA	-	18" - 24"		CCA: 25 FULL SUN TO PART SHADE, EASTERN US NATIVE
	ITE HEV	29	ITEA VIRGINICA 'LITTLE HENRY' / LITTLE HENRY SWEETSPIRE	-	18" - 24"		CCA: 10 FULL SUN TO PART SHADE, LOCAL, REGIONAL, EASTERN US NATIVE
	OSM CIN	48	OSMUNDA CINNAMOMEA / CINNAMON FERN	2 GAL			LOCALLY NATIVE
	RHU GRO	49	RHUS AROMATICA 'GRO-LOW' / GRO-LOW FRAGRANT SUMAC	-	18" - 24"		CCA: 25 LOCAL, REGIONAL AND EASTERN U.S NATIVE
	VIB MAP	4	VIBURNUM ACERIFOLIUM / MAPLELEAF VIBURNUM	-	24" - 30"		CCA: 10 FULL SUN TO PART SHADE, LOCAL, REGIONAL, EASTERN US NATIVE
EVERGREEN SHRUB							
	ABE KAL	50	ABELIA X GRANDIFLORA 'KALEIDOSCOPE' / KALEIDOSCOPE GLOSSY ABELIA	-			CCA: 10 FULL SUN TO PART SHADE, SEMI EVERGREEN, NOT NATIVE
	CEP NAN	29	CEPHALOTAXUS HARRINGTONIA 'NANA' / DWARF JAPANESE PLUM YEW	-			CCA: 25 PART SHADE TO FULL SHADE, NOT ON CITY OF ALEXANDRIA LIST AND NOT NATIVE
	CHA ALK	12	CHAMAECYPARIS OBTUSA 'ALASKA' / ALASKA HINOKI FALSE CYPRESS	-	24" - 36"		NOT ON CITY LIST
	DIS VTJ	50	DISTYLIUM X 'VINTAGE JADE' / VINTAGE JADE DISTYLIUM	-	18" - 24"		FULL SUN, NOT ON CITY OF ALEXANDRIA PLANT LIST
	ILE GLA	43	ILEX GLABRA / INKBERRY HOLLY	-	18" - 24"		CCA: 25 REGIONAL AND EASTERN US NATIVE
	ILE STO	52	ILEX VOMITORIA 'STOKES DWARF' / STOKES DWARF YAUPON HOLLY	-	18" - 24"		CCA: 25 REGIONAL AND EASTERN U.S NATIVE
	MOR DOD	10	MORELLA CERIFERA 'DON'S DWARF' / DON'S DWARF WAX MYRTLE	#3	24" - 30"		CCA: 25 FULL SUN TO PART SHADE, REGIONAL, EASTERN US NATIVE
	MOR PEN	8	MORELLA PENSYLVANICA / NORTHERN BAYBERRY	-	24" - 30"		CCA: 25 REGIONAL AND ESTERN US NATIVE
	PIE FLO	41	PIERIS FLORIBUNDA / MOUNTAIN PIERIS	-	24" - 30"		CCA: 25 REGIONAL AND EASTERN US NATIVE
	SAR SW4	37	SARCOCOCCA HUMILIS / SWEETBOX	#3	18" - 24"		CCA: 10 PART SHADE TO FULL SHADE, ON CITY OF ALEXANDRIA BUT NOT NATIVE
GRASSES							
	CAR STR	44	CAREX STRICTA / TUSSOCK SEDGE	1 GAL			CCA: 0 FULL SUN TO PART SHADE, LOCAL, REGIONAL, EASTERN US NATIVE
	ERA SPE	78	ERAGROSTIS SPECTABILIS / PURPLE LOVEGRASS	2 GAL			CCA: 0 LOCAL, REGIONAL AND EASTERN U.S NATIVE
	MUH PTS	59	MUHLENBERGIA CAPILLARIS 'REGAL MIST' / PINK MUHLY GRASS	2 GAL			CCA: 0 REGIONAL AND EASTERN US NATIVE

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

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
STANDARD LANDSCAPE PLAN NOTES
1 OF 1
Date drawn: 01/01/19
LD 016

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SCALE:
DATE: 09/03/2025
DRAWN: JM, MAK | CHECKED: JVW

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1
03/18/2025	FINAL SITE PLAN #1

DATE	DESCRIPTION
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING SCHEDULE

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
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.

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
Acer	2	10%	33%	negundo	2	10%	10%
Amelanchier	3	15%	33%	arborea	1	5%	10%
Amelanchier		0%	33%	canadensis	1	5%	10%
Amelanchier		0%	33%	laevis	1	5%	10%
Carpinus	1	5%	33%	caroliniana	1	5%	10%
Cercis	1	5%	33%	canadensis 'Forest Pansy'	1	5%	10%
Chionanthus	1	5%	33%	virginicus	1	5%	10%
Cornus	1	5%	33%	florida	1	5%	10%
Gleditsia	1	5%	33%	triacanthos	1	5%	10%
Gymnocladus	1	5%	33%	dioica	1	5%	10%
Liquidambar	1	5%	33%	styraciflua	1	5%	10%
Magnolia	3	15%	33%	tripetala	1	5%	10%
Magnolia		0%	33%	x soulangeana	1	5%	10%
Magnolia		0%	33%	virginiana	1	5%	10%
Platanus	1	5%	33%	occidentalis	1	5%	10%
Quercus	2	10%	33%	bicolor	1	5%	10%
Quercus		0%	33%	alba	1	5%	10%
Sassafras	1	5%	33%	albidum	1	5%	10%
Ulmus	1	5%	33%	rubra	1	5%	10%
TOTAL	**20**						

BIODIVERSITY - 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	50	9%	33%	x grandiflora 'Kaleidoscope'	50	9%	10%
Ceanothus	9	2%	33%	americanus	9	2%	10%
Cephalotaxus	29	5%	33%	harringtonia 'nana'	29	5%	10%
Chamaecyparis	12	2%	33%	obtuse 'Alaska'	12	2%	10%
Clethra	38	7%	33%	alnifolia 'compacta'	38	7%	10%
Cornus	19	3%	33%	sericea 'Farrow'	19	3%	10%
Distylium	50	9%	33%	x 'Vintage Jade'	50	9%	10%
Hydrangea	39	7%	33%	quercifolia 'Pee Wee'	39	7%	10%
Ilex	95	17%	33%	glabra	43	8%	10%
Ilex			33%	vomitoria 'stokes dwarf'	52	9%	10%
Itea	29	5%	33%	virginica 'Little Henry'	29	5%	10%
Morella	18	3%	33%	cerifera 'Don's Dwarf'	10	2%	10%
Morella			33%	pensylvanica	8	1%	10%
Osmunda	48	8%	33%	cinnamomea	44	8%	10%
Pieris	41	7%	33%	floribunda	41	7%	10%
Rhus	49	9%	33%	aromatica	49	9%	10%
Sarcococca	37	7%	33%	humilis	37	7%	10%
Viburnum	4	1%	33%	acerifolium	4	1%	10%
TOTAL	**567**						

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	9	Regional/Local	10%			15%	9	100%	20%		
		Total Natives	25%			25%	9	100%	50%		
Standard Trees	11	Regional/Local	15%			25%	10	91%	40%		
		Total Natives	40%			60%	10	91%	80%		
Evergreen Shrubs	333	Regional/Local	5%			8%	154	46%	10%		
		Total Natives	20%			30%	154	46%	40%		
Deciduous Shrubs	242	Regional/Local	10%			15%	209	86%	20%		
		Total Natives	40%			60%	242	100%	80%		
Groundcovers	0	Regional/Local	5%			10%	0	-	10%		
		Total Natives	10%			20%	0	-	20%		
Perennials, Ferns, Ornamental Grasses	176	Regional/Local	10%			15%	176	100%	25% (perennials) 30% (ferns & grasses)		
		Total Natives	25%			40%	176	100%	60% (perennials) 80% (ferns & grasses)		
Vines	n/a	Total Natives	80%			100%	n/a	n/a	100%		

TOTALS

TOTAL PLANTS SPECIFIED	TOTAL SUM OF REGIONAL/LOCAL NATIVE PLANTS	TOTAL SUM OF NATIVE PLANTS
771	558	591
	72.4%	76.7%

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.

**Note to Applicant: The figures in this template are provided as an example to demonstrate compliance with the Native Plant Standards as outlined in the 2019 Landscape Guidelines. The Native Plant Tabulations must be poplulated by the applicant with project-specific information. The Native Plant Tabulations must be completed and included on all plans requiring approval in accordance with the 2019 Landscape Guidelines. Refer to subsequent tabs for additional required charts and schedules.*

CROWN COVER TABULATIONS

TOTAL SITE AREA (SF)	38,467
25% CROWN COVER REQUIRED (SF)	9,617
EXISTING CROWN COVER (SF)	N/A
REMOVED CROWN COVER (SF)	N/A
PRESERVED CROWN COVER (SF)	
Crown Cover from Preserved Trees	0
PROPOSED CROWN COVER (SF)	
Crown Cover from Proposed Trees	13,000
TOTAL CROWN COVER PROVIDED (%)	33.8%
TOTAL CROWN COVER PROVIDED (SF)	13,000

Note to Applicant: Crown Cover Tabulations shall be provided on all plans requiring approval in accordance with the 2019 Landscape Guidelines. Refer to subsequent tabs for additional required charts

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DATE: 09/03/2025
SCALE:

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

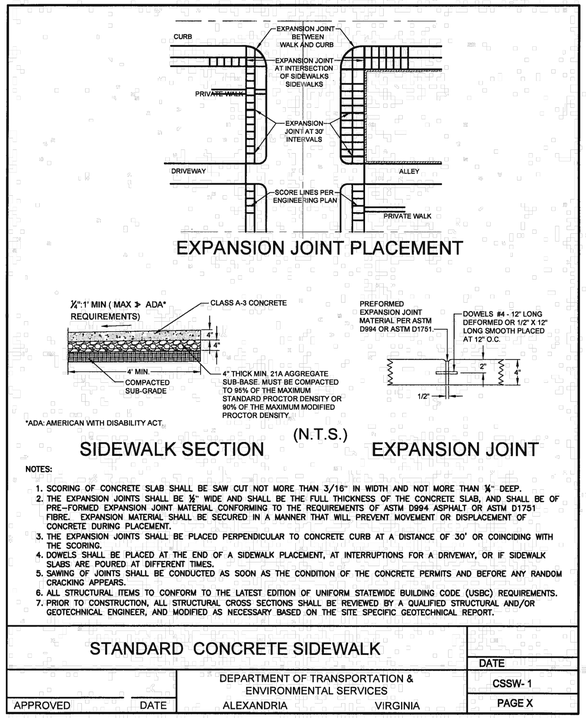
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING TABULATION

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.



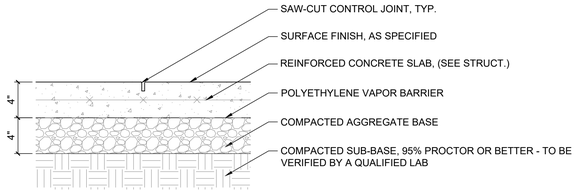
NOTES:

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 FIBRC. 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 L0601 CONCRETE SIDEWALK - CITY STANDARD

SECTION — 1-1/2" = 1'-0"_1

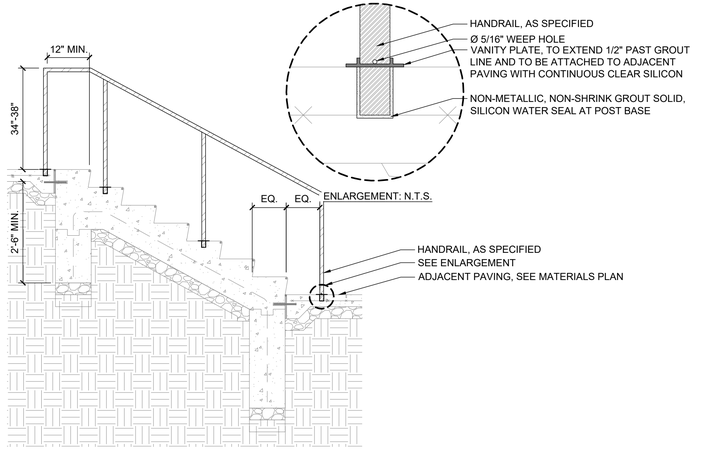


NOTES:

1. FOR PRELIMINARY DESIGN ONLY, FINAL DESIGN TO BE PROVIDED AT FSP
2. OR OWNER APPROVED EQUAL
3. DETAIL FOR REFERENCE ONLY FINAL TO BE DESIGNED BY QUALIFIED ENGINEER AND PROVIDE STAMPED DRAWINGS

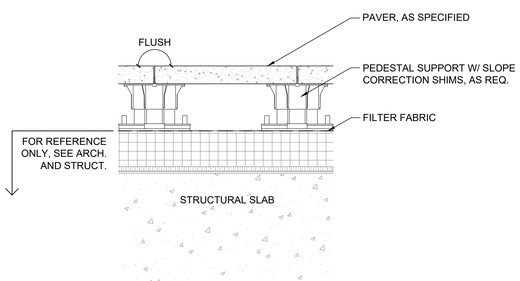
3 L0601 CONCRETE PAVING - PEDESTRIAN

SECTION — 1-1/2" = 1'-0"_1



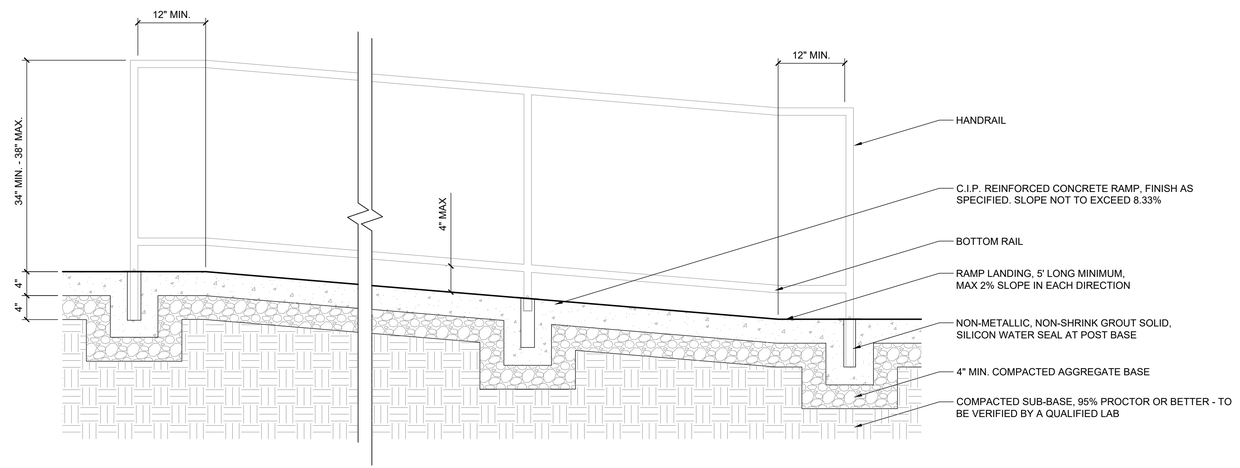
5 L0601 HANDRAIL

SECTION — 1/2" = 1'



2 L0601 PEDESTAL PAVING

SECTION — 1-1/2" = 1'-0"_1



4 L0601 RAMP

SECTION — 1" = 1' -0"

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DATE: 09/03/2025
SCALE:

PLAN STATUS

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COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS - HARDSCAPE

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

WASTE RECEPTACLE,
AS SPECIFIED

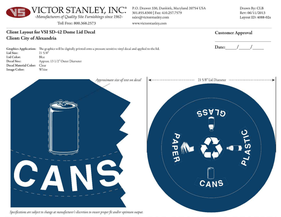
NOTES:
1. RECEPTACLE TO BE MOUNTED IN GROUND PER MANUFACTURERS INSTRUCTIONS.
2. SEE PLAN FOR QUANTITY AND LOCATIONS.
3. USE TAMPER RESISTANT HARDWARE.
4. TRASH RECEPTACLE PER CITY OF ALEXANDRIA, EISENHOWER EAST DESIGN GUIDELINES.
5. OR CITY AND OWNER APPROVED EQUAL.

1 L0602 WASTE RECEPTACLE - CITY STANDARD

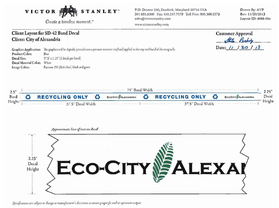
SECTION 1" = 1'

RECYCLING RECEPTACLE,
AS SPECIFIED

NOTES:
1. RECEPTACLE TO BE MOUNTED IN GROUND PER MANUFACTURERS INSTRUCTIONS.
2. SEE PLAN FOR QUANTITY AND LOCATIONS.
3. USE TAMPER RESISTANT HARDWARE.
4. RECYCLING RECEPTACLES TO INCLUDE CITY OF ALEXANDRIA STANDARD DECALS AS NOTED.
5. RECYCLING RECEPTACLE PER CITY OF ALEXANDRIA, EISENHOWER EAST DESIGN GUIDELINES.
6. OR CITY AND OWNER APPROVED EQUAL.



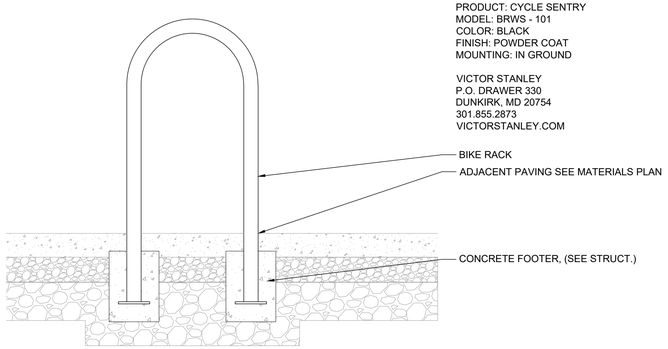
REQUIRED DOME LID DECAL FOR RECYCLING RECEPTACLE



REQUIRED BAND DECAL FOR RECYCLING RECEPTACLE

2 L0602 RECYCLING RECEPTACLE - CITY STANDARD

SECTION 1" = 1'



PRODUCT: CYCLE SENTRY
MODEL: BRWS - 101
COLOR: BLACK
FINISH: POWDER COAT
MOUNTING: IN GROUND

VICTOR STANLEY
P.O. DRAWER 330
DUNKIRK, MD 20754
301.855.2873
VICTORSTANLEY.COM

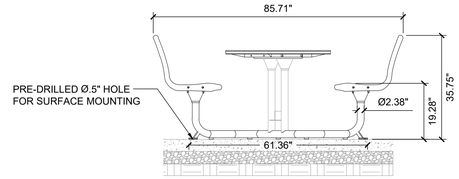
BIKE RACK

ADJACENT PAVING SEE MATERIALS PLAN

CONCRETE FOOTER, (SEE STRUCT.)

3 L0602 BIKE RACK - CITY STANDARD

SECTION 1" = 1'-0"



4 L0602 BISTRO STYLE SEATING

SECTION 1/2" = 1'

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COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
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LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS - SITE FURNISHINGS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

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

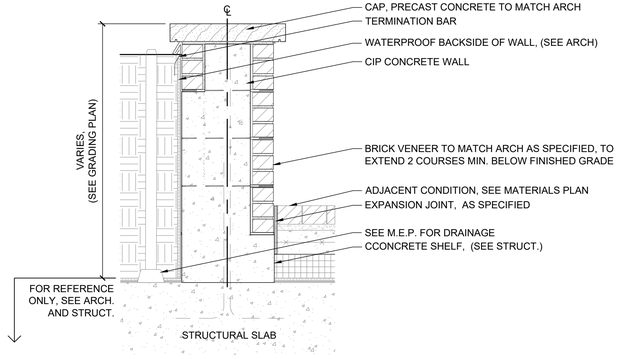
DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

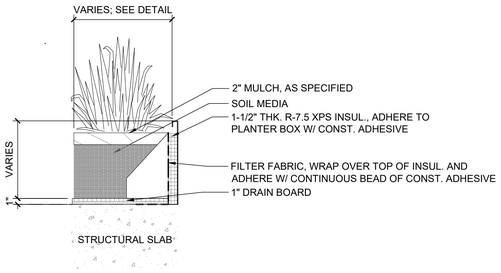
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: L0602



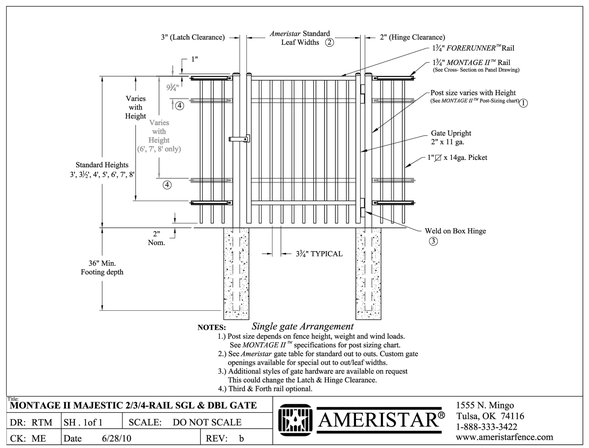
1 L0603 PLANTER WALL TYPE 1

SECTION 1" = 1' -0"



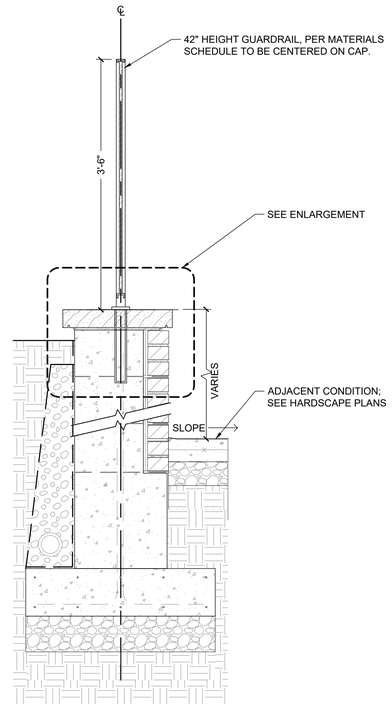
2 L0603 PLANTER WALL TYPE 2

SECTION 1" = 1' -0"



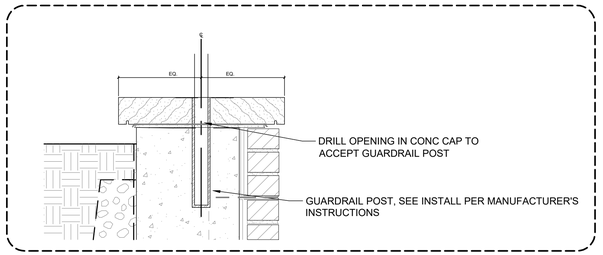
3 L0603 GATE

SECTION 1" = 1' -0"



4 L0603 GUARD RAIL

SECTION 1" = 1' -0"



ENLARGEMENT: CIP CONC. RETAINING WALL WITH STONE VENEER AND GUARDRAIL SCALE: 1 ½" = 1'-0"

NOTE:
1. TO BE REVIEWED BY STRUCTURAL ENGINEER.NOTES:
2. STRUCTURAL ENGINEER TO REVIEW AND APPROVE.
3. CONCRETE REINFORCING AND FOOTERS SHOWN FOR REFERENCE ONLY -- REFER TO STRUCTURAL ENGINEER'S DRAWINGS FOR MORE INFORMATION.

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PLAN STATUS
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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

DETAILS - WALLS

APPROVED
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DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
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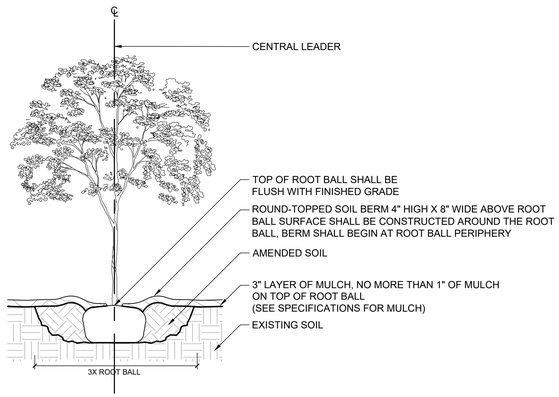
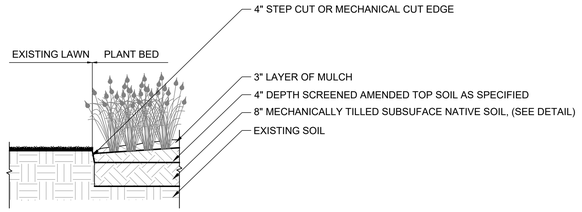
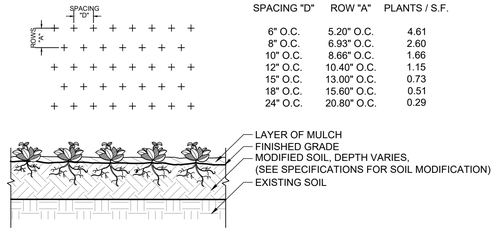


1 TREE PLANTING
L0661 SECTION 3/8" = 1'-0"

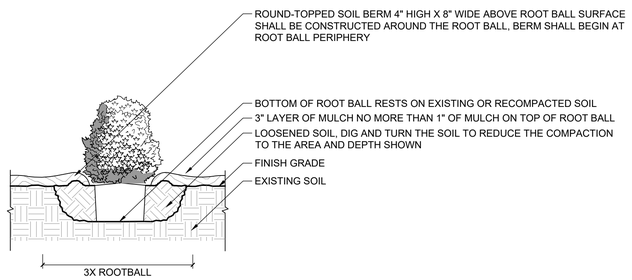


4 STEEL CUT EDGE
L0661 SECTION 1/2" = 1'-0"



2 GROUNDCOVER SPACING - TRIANGULAR
L0661 SECTION 1/2" = 1'-0"

5 BED PREP
L0661 SECTION 1/2" = 1'-0"



3 SHRUB PLANTING
L0661 SECTION 1/2" = 1'-0"

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COMMONWEALTH OF VIRGINIA
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LANDSCAPE ARCHITECT

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3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING DETAILS

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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

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SHEET: L0661

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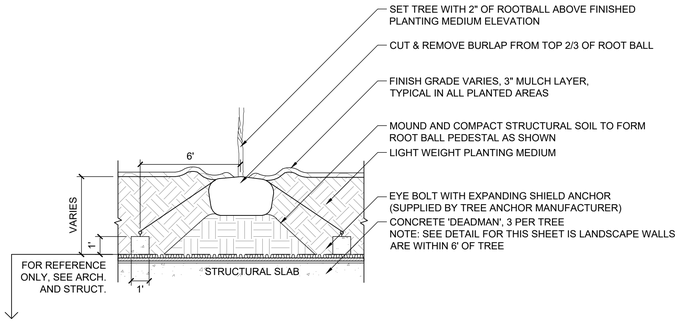
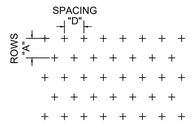


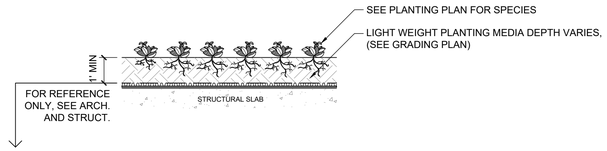
1 L0662 TREE PLANTING ON STRUCTURE

SECTION 1/4" = 1'-0"



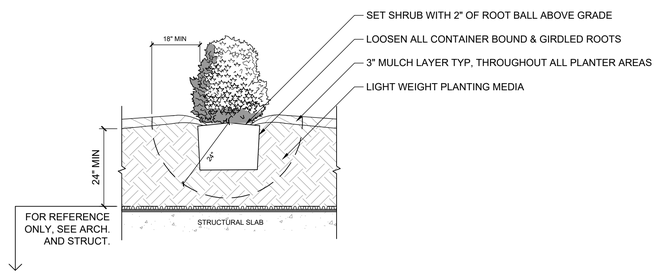
PLANT SPACING CHART

SPACING "D"	ROW "A"	PLANTS / S.F.
6" O.C.	5.20" O.C.	4.61
8" O.C.	6.93" O.C.	2.60
10" O.C.	8.66" O.C.	1.66
12" O.C.	10.40" O.C.	1.15
15" O.C.	13.00" O.C.	0.73
18" O.C.	15.60" O.C.	0.51
24" O.C.	20.80" O.C.	0.29



2 L0662 GROUNDCOVER ON STRUCTURE

SECTION 1/2" = 1'-0"



3 L0662 SHRUB PLANTING ON STRUCTURE

SECTION 1/2" = 1'-0"

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CITY OF ALEXANDRIA, VIRGINIA

PLANTING DETAILS

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SHEET: L0662

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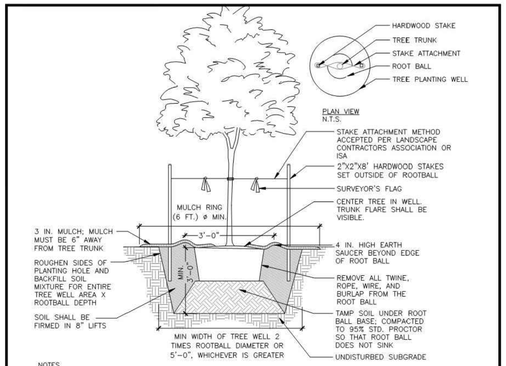


NOTES

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

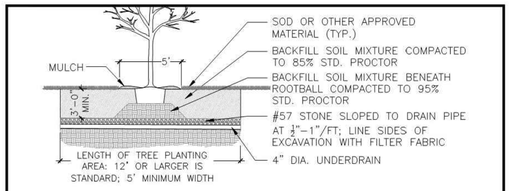
OF UPDATES: 00 LAST UPDATED:

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

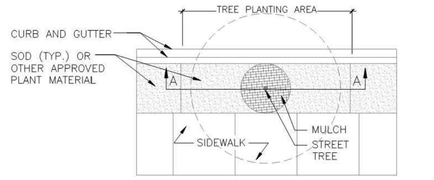
NOTE: THE INFORMATION SHOWN HEREIN THIS DOCUMENT IS FOR GENERAL GUIDANCE ONLY AND IS NOT INTENTED FOR CONSTRUCTION PURPOSES. ITS USE SHALL NOT RELIEVE THE DESIGN PROFESSIONAL OR CONTRACTOR OF ANY LEGAL RESPONSIBILITY.

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

1 L0663 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

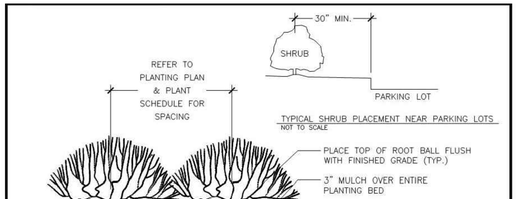
OF UPDATES: 00 LAST UPDATED:

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

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 | TREE PLANTING STRIP | I OF I | LD 006

2 L0663 SECTION/PLAN 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

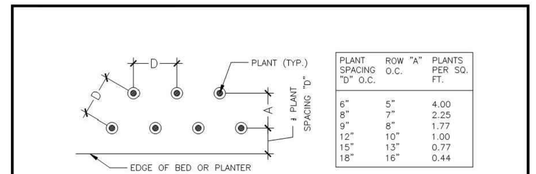
OF UPDATES: 00 LAST UPDATED:

CITY OF ALEXANDRIA, VIRGINIA 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.

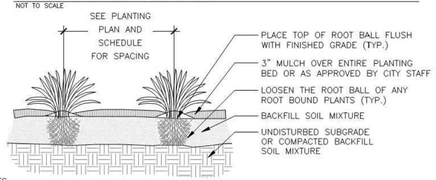
Source: CITY OF ALEXANDRIA | Approved by: COA | Date drawn: 01/01/19 | SHRUB PLANTING | I OF I | LD 009

3 L0663 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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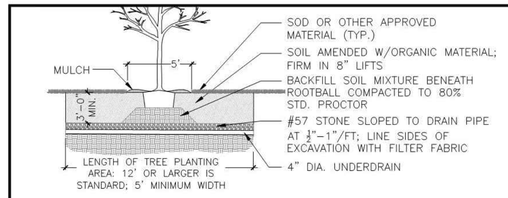
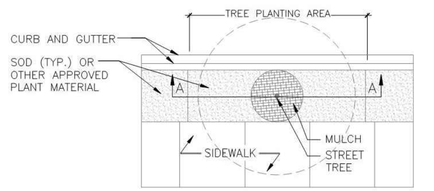
Source: CITY OF ALEXANDRIA | Approved by: COA | Date drawn: 01/01/19 | GROUNDCOVER & PERENNIAL PLANTING | I OF I | LD 011

4 L0663 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: 01 LAST UPDATED: 12/02/2019

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

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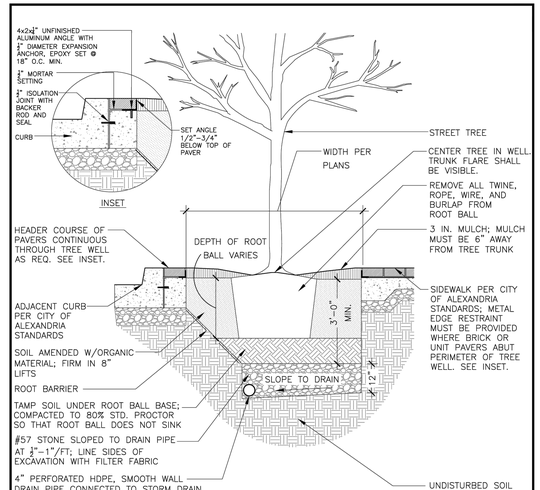
Source: CITY OF ALEXANDRIA | Approved by: COA. | Date drawn: 01/01/19 | TREE PLANTING STRIP | I OF I | LD 006

5 L0663 SECTION NTS



NOTES

1. THIS CROSS-SECTION APPLIES TO BOTH TREE PLANTING STRIPS AND TREE PLANTING WELLS.
2. REFER TO LANDSCAPE GUIDELINES FOR GENERAL STREET TREE PLANTING NOTES.

A STREET TREE PLANTING WELL
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 | STREET TREE PLANTING WELL | I OF I | LD 005

6 L0663 SECTION NTS

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
(703) 549-7784
WWW.LANDDESIGN.COM

DRAWN: JM, MAK | CHECKED: JVW

SCALE:

DATE: 09/03/2025

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

ESI Peer Review

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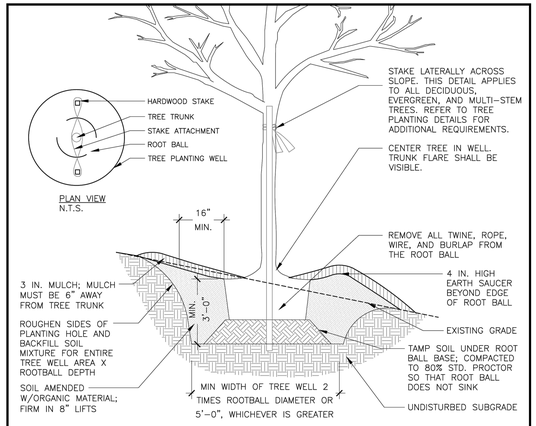


NOTES

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. REFER TO STAKING DETAILS.
7. 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 TREE PLANTING ON SLOPE
NOT TO SCALE

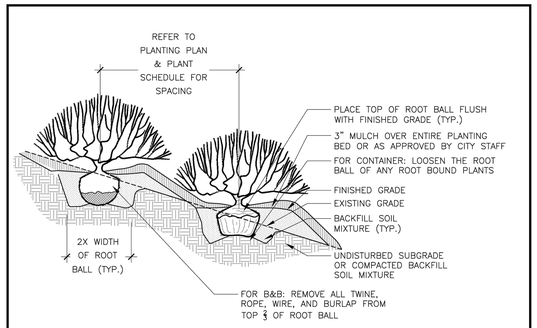
OF UPDATES: 01 LAST UPDATED: 12/02/2019

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	TREE PLANTING ON SLOPE
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 004

1 L0664 SECTION NTS



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 ON SLOPE
NOT TO SCALE

OF UPDATES: 00 LAST UPDATED:

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

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Source: CITY OF ALEXANDRIA	SHRUB PLANTING ON SLOPE
Approved by: COA	
1 OF 1	Date drawn: 01/01/19
	LD 010

2 L0664 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

ESI Peer Review

LandDesign.
200 S. PEYTON STREET
ALEXANDRIA, VA 22314
(703) 549-7784
WWW.LANDDESIGN.COM

DRAWN: JM, MAK | CHECKED: JVW

SCALE:

DATE: 09/03/2025

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
GABRIELA CAÑAMAR CLARK
Lic. No. 958
LANDSCAPE ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PLANTING DETAILS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

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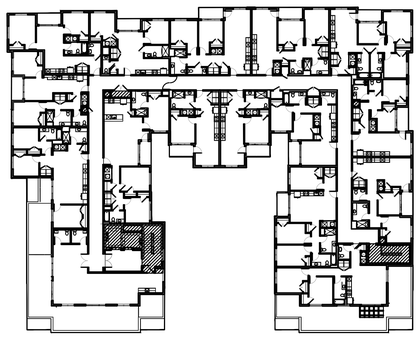
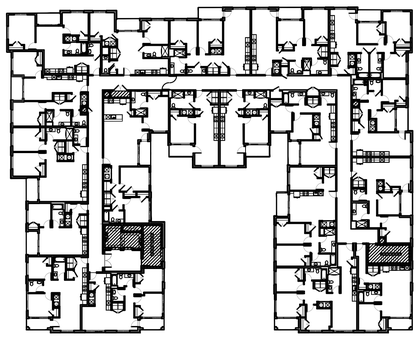
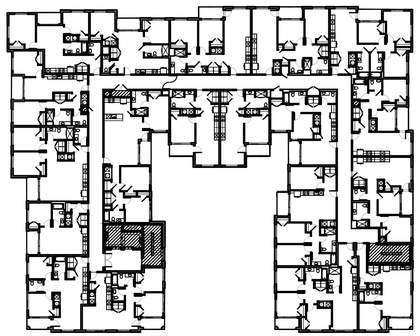


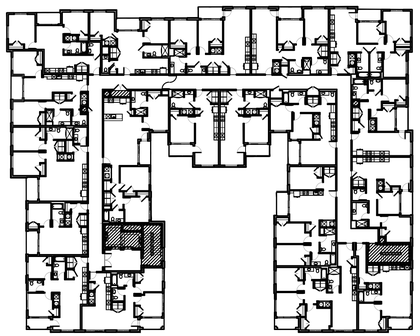
F SIXTH FLOOR PLAN
1/32"=1'-0"



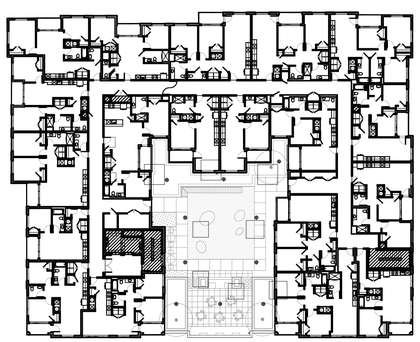
E FIFTH FLOOR PLAN
1/32"=1'-0"



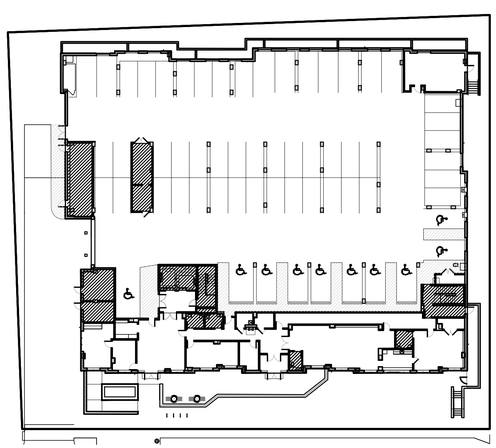
D FOURTH FLOOR PLAN
1/32"=1'-0"



C THIRD FLOOR PLAN
1/32"=1'-0"



B SECOND FLOOR PLAN
1/32"=1'-0"



A GROUND FLOOR PLAN
1/32"=1'-0"

6TH FLOOR

PROPOSED GROSS FLOOR AREA @ 6TH FLOOR:	18,002 SF
TYPICAL UNIT DEDUCTIONS (SEE NOTE #1):	1,235 SF
STAIR/CIRCULATION FLOOR AREA DEDUCTION:	555 SF
BALCONY/TERRACE DEDUCTIONS (SEE NOTE #2):	0 SF
PROPOSED FLOOR AREA @ 6TH FLOOR:	16,212 SF

3RD - 5TH FLOOR

PROPOSED GROSS FLOOR AREA (TYP. FLOORS 3-5):	21,093 SF
TYPICAL UNIT DEDUCTIONS (SEE NOTE #1):	1,503 SF
COMMON SPACE DEDUCTIONS (SEE NOTE #2):	555 SF
BALCONY/TERRACE DEDUCTIONS (SEE NOTE #2):	1,060 SF
PROPOSED FLOOR AREA (TYP. FLOORS 3-5):	17,975 SF

2ND FLOOR

PROPOSED GROSS FLOOR AREA (FLOOR 2):	21,093 SF
TYPICAL UNIT DEDUCTIONS (SEE NOTE #1):	1,473 SF
COMMON SPACE DEDUCTIONS (SEE NOTE #2):	555 SF
BALCONY/TERRACE DEDUCTIONS (SEE NOTE #2):	1,060 SF
PROPOSED FLOOR AREA (FLOORS 2):	18,005 SF

GROUND FLOOR

PROPOSED GROSS FLOOR AREA @ GROUND FLOOR:	25,268 SF
TYPICAL UNIT DEDUCTIONS (SEE NOTE #1):	0 SF
COMMON SPACE DEDUCTIONS (SEE NOTE #2):	1,440 SF
POTENTIAL BALCONY DEDUCTIONS (SEE NOTE #2):	0 SF
PROPOSED FLOOR AREA @ GROUND FLOOR:	23,828 SF

NOTE #1:
DEDUCTION FOR TYPICAL BATHROOM(S) AND MECHANICAL CLOSET FOUND IN EACH UNIT AS FOLLOWS:
1 BEDROOM W/1 BATH: 57 SF
2 BEDROOM W/ 1.5 BATH: 77 SF
3 BEDROOM W/ 2 BATH: 107 SF

NOTE #2:
DEDUCTIONS FOR STAIRS, ELEVATORS, SPACES FOR UTILITIES/MECHANICAL EQUIPMENT, AND SPACES UNDER BALCONIES PROJECTING LESS THAN 8'.

KEY

GROSS FLOOR AREA

AREAS DEDUCTED FROM GROSS SQ. FT.

GRAPHIC SCALE

16' 0 32' 64'
1/32" =1'-0"

RUST | ORLING ARCHITECTURE
1215 CAMERON STREET
ALEXANDRIA, VA 22314
T - 703.836.3205
admin@rustorling.com
www.rustorling.com

SCALE: SEE DETAIL FOR SCALE | DATE: 02/25/2025 | DRAWN: LAL | CHECKED: LAL

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
SCOTT FLEMING
Lic. No. 13094
9/3/25
ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

FAR DIAGRAMS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
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.

GREEN BUILDING NARRATIVE:

GREEN BUILDING CERTIFICATION CONSIDERED: EARTHCRAFT MULTI-FAMILY GOLD PER CITY OF ALEXANDRIA 2019 GREEN BUILDING POLICY. MINIMUM PERFORMANCE POINTS FOR CERTIFICATION IN THE AREAS REQUIRED BY THE CITY'S GREEN BUILDING POLICY WILL BE PROVIDED.

ENVIRONMENTAL SITE DESIGN: SEE CIVIL DRAWINGS FOR ADDITIONAL INFORMATION. IN SHORT, WE ARE EXPLORING THE USE OF VARIOUS BIORETENTION STRATEGIES THROUGHOUT THE PROJECT:

- DRAINAGE FROM A PORTION OF THE ROOF WILL BE COLLECTED BY AN URBAN BIORETENTION FILTER (PLANTER BOX)
- A PORTION OF THE ROOF WILL BE PROVIDED WITH "GREEN SCAPE" PLANTERS OR SIMILAR
- UNDERGROUND FILTERING AND DETENTION STORAGE SYSTEMS (BMP) WILL BE PROVIDED
- SITE AND BUILDING DESIGN HAVE BEEN ADAPTED TO PRESERVE EXISTING TREES ALONG ELBERT AVE.

BUILDING MASSING AND ORIENTATION: THE PROPOSED BUILDING IS ORIENTED AND MASSED TO MAKE THE MOST EFFICIENT USE OF THE SITE AND MINIMUM BUILDING VOLUME. THE EXISTING AT-GRADE PARKING HAS BEEN REDUCED AND MOVED UNDER THE BUILDING FOOTPRINT REDUCING ITS IMPACT ON THE OVERALL IMPERVIOUS AREA. THIS CENTRAL COVERED PARKING AREA PROVIDES A SECOND FLOOR COURTYARD THAT REDUCES THE IMPERVIOUS AREA, CONTRIBUTES TO OPEN SPACE, AND PROVIDES AN AMENITY FOR RESIDENTS.

ENERGY USE: ENERGY STAR QUALIFIED COOLING EQUIPMENT, BATH FANS, AND OTHER HIGH EFFICIENCY EQUIPMENT WILL BE USED TO REDUCE ENERGY USAGE. LED LIGHTING WILL BE UTILIZED TO THE EXTENT POSSIBLE TO REDUCE ENERGY USE. ELECTRIC VEHICLE CHARGERS WILL BE PROVIDED IN THE PARKING AREA TO INCENTIVIZE EV USAGE. COVERED BIKE STORAGE WILL BE PROVIDED TO INCENTIVIZE BIKE USAGE. AT THIS TIME, THE PROJECT TEAM IS NOT CONSIDERING PROVIDING SUPPLEMENTAL RENEWABLE ENERGY SOURCES DUE TO COST AND THE LIMITED ROOF AREA AVAILABLE, BUT THESE TECHNOLOGIES MAY BE CONSIDERED IN THE FUTURE.

COMMISSIONING: COMMISSIONING IS NOT REQUIRED PER EARTHCRAFT MULTI-FAMILY GOLD. REQUIRED COMMISSIONING PER CURRENT VIRGINIA BUILDING CODE WILL BE PROVIDED.

METERING STRATEGY: ELECTRIC METERS WILL BE PROVIDED FOR EACH UNIT. ADVANCED METERING IS OPTIONAL PER ALEXANDRIA 2019 GREEN BUILDING POLICY.

WATER:SEE LANDSCAPE DRAWINGS FOR PROPOSED PLANTS. NATIVE PLANTINGS WILL BE PROVIDED TO THE LARGEST EXTENT POSSIBLE TO MINIMIZE OR ELIMINATE THE NEED FOR IRRIGATION. AS NOTED PREVIOUSLY, RAINWATER FROM A PORTION OF THE ROOF IS PROPOSED TO BE DIRECTED TO BIORETENTION FACILITIES. WATERSENSE QUALIFIED FIXTURES AND OTHER LOW FLOW FIXTURES WILL BE USED TO REDUCE INDOOR WATER CONSUMPTION.

INDOOR ENVIRONMENTAL QUALITY: IN ORDER TO INCREASE DAYLIGHTING, WE HAVE MAXIMIZING WINDOW AREA FOR NATURAL LIGHT. WE ARE ALSO EXPLORING VARIOUS INSULATION MATERIALS AND DETAILS TO IMPROVE THE BUILDING ENVELOPE AND OVERALL INDOOR ENVIRONMENTAL QUALITY. MINIMUM MERV 8 FILTERS WILL BE PROVIDED TO FILTER INDOOR AIR. LOW VOC PAINT AND MATERIALS WILL BE UTILIZED.

INDOOR ENVIRONMENTAL QUALITY:

- THERE ARE NO REQUIREMENTS FOR A DAYLIGHT ANALYSIS REGARDING THIS PROJECT ACCORDING TO ALEXANDRIA'S 2019 GREEN BUILDING POLICY.
- THE PROJECT WILL BE MONITORED AT ALL KEY STAGES OF CONSTRUCTION TO VERIFY THAT BEST MANAGEMENT PRACTICES ARE PRESENT IN THE FOLLOWING AREAS:
  - INSTALLATION OF CLEAN, UNCONTAMINATED PRODUCTS
  - APPROPRIATE MOISTURE CONTENT IN ASSEMBLIES AND COMPONENTS ACCORDING TO INDUSTRY STANDARDS
  - ALL INSTALLED STRUCTURAL PLYWOOD MADE WITH MOISTURE-RESISTANT ADHESIVES
  - HVAC BOOTS, GRILLES AND ROUGH-INS WILL BE COVERED TO PREVENT POLLUTANTS FROM ENTERING SYSTEM
- LOW/NON-EMITTING COMPOSITE WOOD, INTERIOR FINISHES, ADHESIVES AND INSULATION MATERIALS WILL BE UTILIZED.
- THERMAL COMFORT WILL BE CONSIDERED IN THE PERFORMANCE OF ACCA MANUAL J/S SIZING AND EQUIPMENT SELECTION BASED UPON ASHRAE 62.2 STANDARD.

PASSIVE DESIGN STRATEGIES: SEE LANDSCAPE DRAWINGS FOR PROPOSED PLANTS. PROPOSED PLANTS INCLUDE DECIDUOUS TREES TO PROVIDE SHADE IN THE SUMMER AND ALLOW SOLAR HEAT GAIN IN THE WINTER. ALL UNITS WILL INCLUDE OPERABLE WINDOWS TO ALLOW FOR PASSIVE VENTILATION.

GENERAL NOTES:

1. DRAFT EARTHCRAFT CHECKLIST INCLUDED IN THIS SUBMISSION. ENERGY PERFORMANCE ANALYSIS AND UPDATED CHECKLIST TO BE PROVIDED WITH BUILDING PERMIT.
2. EARTHCRAFT REGISTRATION REQUIRES GC INFORMATION. OWNER IS IN THE PROCESS OF SECURING A GC AND WILL PROVIDE THE NECESSARY CERTIFICATION DOCUMENTATION UPON COMPLETION.

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SCALE: SEE DETAIL FOR SCALE | DATE: 02/25/2025 | DRAWN: LAL | CHECKED: LAL

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
SCOTT FLEMING
Lic. No. 13094
9/3/25
ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EARTHCRAFT CHECKLIST

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
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CHAIRMAN, PLANNING COMMISSION DATE

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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: A002

	5. Exhaust fans to drywall	-	-			
	6. Attic pull-down stairs, scuttle holes and kneewall doors	-	-			
	7. Chases	-	-			
BE 1.7	Seal seams and gaps in:	All must comply:				
	1. Band joist sheathing	-	-			
	2. Exterior wall sheathing	-	-			
	3. All seams in SIP's	-	-			
BE 1.8	Install rigid air barriers:	All must comply:				
	1. Behind tubs and showers on insulated walls	-	-			
	2. At attic kneewall on attic-side (including skylight shafts)	-	-			
	3. At chases in contact with the building envelope (including fireplace chases)	-	-			
	4. Along staircases on insulated walls	-	-			
	5. Along porch roofs	-	-			
	6. At dropped ceiling/soffit	-	-			
	7. At all band joists above unit separation walls	-	-			
BE 1.9	Install weather-stripping at:	All must comply:				
	1. All exterior doors (if not included in door assembly)	-	-			
	2. Attic kneewall doors, scuttle holes and pull down stairs	-	-			
BE 1.10	All recessed can lights must be air tight, gasketed at all floors and also IC-rated in insulated ceilings; in Climate Zone 4, insulate exterior surface of fixture to ≥R-10	-	-			
BE 1.11	Fire rated assemblies that do not use draft block in band areas must comply with Air Tight Drywall approa	-	-			
BE 1.12	Units adjacent to CMU walls: framing and sub-floor at unit envelope, including interstitial space, must be s	-	-			
BE 1.13	Seal top plate to drywall at the attic level	-	-			
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
BE 1.14	Seal top plate to drywall at all levels	2	2	AD		
OPTIONAL AT ALL LEVELS						
BE 1.15	Comply with Air tight drywall approach (required if band area draft blocking is not used)	4				
BE 1.16	Gypcrete on all framed floors separating unit envelopes	1				
BE 1.17	Two pour application of gypcrete to include areas blocked by drywall	1				
BE 1.18	Firewalls/party walls that eliminate air gap (UL-U370 or equivalent)	2				
BE 2: BLOWER DOOR TEST						
REQUIRED AT ALL LEVELS						
BE 2.0	Air Changes per Hour ≤ 5 ACH50	-	-			
OPTIONAL AT ALL LEVELS						
BE 2.1	Air Changes per Hour ≤ 4 ACH50	7				
BE 2.2	Air Changes per Hour ≤ 3 ACH50	10				
BE 3: INSULATION						
REQUIRED AT ALL LEVELS						
BE 3.0	Floors:	All must comply:				
	1. Framed ≥ R-19	-	-			
	2. Cantilevered ≥ R-30	-	-			
	3. Podium/Elevated Slab ≥ R-19	-	-			
BE 3.1	Walls:	All must comply:				
	1. Exterior walls and band joists ≥ R-15	-	-			
	2. Elevator walls adjacent to dwelling units ≥ R-13	-	-			
	3. Foundation walls ≥ R-10 continuous or ≥ R-13 cavity	-	-			
BE 3.2	Ceilings/Roof:	All must comply:				
	1. Vented: Climate Zone 4 ≥ R-49	-	-			
	2. Continuous Roof Deck: Climate Zone 4 ≥ R-30	-	-			
	3. Cathedral: Climate Zone 4 ≥ R-38	-	-			
BE 3.3	Attic/Roof:	All must comply:				
	1. Install wind baffles at eaves in every vented bay, or equivalent air barrier at edge of ceiling	-	-			
	2. Energy heel trusses or raised top plate	-	-			
	3. Attic platforms allow for full-depth insulation below	-	-			
BE 3.4	Attic kneewall:	All must comply:				
	1. Doors ≥ R-19	-	-			
	2. Insulation and attic-side air barrier ≥ R-19	-	-			
BE 3.5	Attic pull-down/scuttle hole ≥ R-49	-	-			
BE 3.6	When installing loose-fill attic insulation, card and rulers must be installed	-	-			
BE 3.7	Steel framed buildings require thermal break ≥ R-7.5	-	-			
BE 3.8	Grade II insulation quality at all building envelope locations	-	-			
BE 3.9	Slab edge insulation ≥ R-10	-	-			
BE 3.10	Insulation installation quality (floors, walls and ceilings):	Select one:				
	A. Grade I	-	-			
	B. Grade II with insulated sheathing ≥ R-3 (100%)	-	-			
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
BE 3.11	Corners ≥ R-6	1	1	AD		
BE 3.12	Headers ≥ R-3	1	1	AD		
BE 3.13	Fiberglass batts are unfaced/friction fit	1	1	AD		
OPTIONAL AT ALL LEVELS						
BE 3.14	Insulate with foam:	Select all that apply:				
	1. Exterior walls	2				
	2. Exterior band areas	2				
	3. Floor system over crawlspace, basement, or parking garage	2				
BE 3.15	Walls:	Select all that apply:				
	1. Seal and insulate crawlspace walls ≥ R-10 continuous	2				
	2. Insulate unfinished basement walls instead of ceiling	1				
	3. Insulate basement walls with continuous insulation	2				
	4. Insulate exterior walls and band joist ≥ R-19	2	2	AD		
	5. Insulate with spray foam insulation: Flash and batt insulation including band area	2				
	6. Insulate exterior walls and band joist ≥ R-20 or ≥ R-13 cavity plus R-5 insulated sheathing	3	3	AD		
BE 3.16	Continuous exterior insulation:	Select one:				
	1. ≥R-3	5	5	AD		
	2. ≥R-5	7				
BE 3.17	Ceilings:	Select one:				
	1. Flat Vented: Climate Zone 4 ≥ R-60	2	2	AD		
	2. Continuous Roof Deck: Climate Zone 4 ≥ R-35	2				
	3. Sloped: Climate Zone 4 ≥ R-49	2				
BE 3.18	Attic kneewall insulated ≥ R-22	2				
BE 4: WINDOWS						
REQUIRED AT ALL LEVELS						
BE 4.0	Door U-factors and SHGC:	All must comply:				
	1. U-factor ≤0.35	-	-			
	2. SHGC ≤ 0.30	-	-			
BE 4.1	Window U-factor and SHGC:	All must comply:				
	1. U-factor ≤0.30	-	-			
	2. SHGC ≤ 0.30	-	-			
BE 4.2	Skylight U-factor and SHGC:	All must comply:				
	1. U-factor ≤0.55	-	-			
	2. SHGC ≤ 0.30	-	-			
BE 4.3	NFRC certified doors, windows and skylights with label	-	-			
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
BE 4.4	Door U-factor:	Select all that apply:				
	1. Opaque door: U factor≤ 0.17	2				
	2. Door with ≤ 50% glass: U-factor ≤ 0.23	1				
	3. Door with > 50% glass: U-factor ≤ 0.26	1				
BE 4.5	Window U-factor and SHGC:	Select all that apply:				
	1. U-factor ≤0.25 or ENERGY STAR labeled window	1	1	AD		
	2. SHGC ≤0.27	2	2	AD		
BE 4.6	Skylight U-factor and SHGC:	Select all that apply:				
	1. U-factor ≤0.50	1				
	2. SHGC ≤0.25	2				
OPTIONAL AT ALL LEVELS						
BE 4.7	Window U-factor and SHGC:	Select all that apply:				
	1. U-factor ≤0.20	2				
	2. SHGC ≤0.24	3				
BE 4.8	Skylight U-factor and SHGC:	Select all that apply:				
	1. U-factor ≤0.43	2				
	2. SHGC ≤0.24	3				
BE 4.9	Glazing facing:	Select all that apply:				
	1. West ≤ 2% of floor area	1				[redacted]
	2. East ≤ 3% of floor area	1				[redacted]
BE 4.10	Solar shade screens (min all east and west windows)	2				
BE 4.11	Modeled passive solar design (25% load reduction)	4				[redacted]
BE 4.12	Window area is ≤15% of conditioned floor area (all units)	2				[redacted]
BE 5: ROOF						
REQUIRED AT GOLD, OPTIONAL AT CERTIFIED						
BE 5.0	If ducts located in unconditioned attic:	Select one:				
	A. Bury ducts in R-49 insulation	2	[redacted]		Product Literature	
	B. Ducts with R-8 insulation encapsulated in 1.5" of closed cell foam and buried under at least 2" of blown insulation	2				
OPTIONAL AT ALL LEVELS						
BE 5.1	Install green roof system:	Select one:				
	A. ≥ 20% of roof area	2				
	B. ≥ 40% of roof area	3				
	C. ≥ 60% or above	4				
HIGH PERFORMANCE BUILDING ENVELOPE TOTAL			25	0		
ENERGY EFFICIENT SYSTEMS (ES)						
ES 1: HEATING AND COOLING EQUIPMENT						
REQUIRED AT ALL LEVELS						
ES 1.0	Size and select all HVAC equipment in accordance with ACCA Manuals J and S:	All must comply:				
	1. Complete Room by Room load calculation utilizing ACCA Manual J 8th Edition Software or later or current ASHRAE based software (Trane Trace or Carrier HAP) and submit to EarthCraft for review prior to issuing construction drawings. Loads must include detailed inputs.	-	-		Load Calculations	[redacted]
	2. Based on worst case unit orientation per unit type	-	-			[redacted]
	3. Use 2009 ASHRAE Handbook of Fundamentals Climate Design Information or later for outdoor design temperatures	-	-			[redacted]
	4. Indoor temperatures 70˚F for heating and 75˚ for cooling	-	-			[redacted]
	5. Base infiltration on project team selected infiltration goal	-	-			[redacted]
	6. Use actual area, U-factor and SHGC for windows and doors, actual area and R-values of floors, walls, and ceilings	-	-			[redacted]
	7. Base mechanical ventilation on ASHRAE 62.2- 2010 standard	-	-			[redacted]
	8. Cooling equipment and/or single-stage heat pump between 95%-125%	-	-			[redacted]
	9. Provide OEM data for each unique system type	-	-			[redacted]
	10. Internal loads that reflect design and occupancy ≤2400 Btu/h	-	-			[redacted]
ES 1.1	If programmable thermostat installed for heat pump, include adaptive recovery technology	-	-		Product literature	
ES 1.2	AHRI performance match all indoor/outdoor coils	-	-		AHRI Certificate	
ES 1.3	Non-CFC and non-HCFC refrigerant	-	-			
ES 1.4	No electric resistant heat as primary heat source or reheat	-	-			
ES 1.5	Heat pump efficiency ≥ 7.5 HSPF2 or equivalent COP	-	-			
ES 1.6	Furnace efficiency ≥ 90 AFUE	-	-			
ES 1.7	Cooling equipment ≥ 14.3 SEER2 or 11 EER	-	-			
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
ES 1.8	Heating equipment efficiency:	Select one:				
	A. Furnace(s) ≥95 AFUE and within 40% of load calculation	1	[redacted]	AD	AHRI match	
	B. Heat pump(s) ≥7.8 HSPF2 and within 25% of load calculation	1				
ES 1.9	Verification of proper refrigerant charge with subcooling deviation ±3°F or superheat deviation ±5°F	1	1	AD	Test results	
ES 1.10	Cooling equipment ≥SEER2 15.2	1	1	AD		
ES 1.11	HVAC equipment is ENERGY STAR qualified (for split systems, the pairing must be qualified)	1	1	AD		
OPTIONAL AT ALL LEVELS						
ES 1.12	Use ACCA Approved Residential Load Calculation Software to produce loads	2	2	AD	ACCA Approved Software	[redacted]
ES 1.13	Load Calculations comply with ES 1.0 at first submission (no revision required)	2	2	AD		[redacted]
ES 1.14	Variable speed blower	2	2	AD		
ES 1.15	Ground-source heat pump(s) ≥ EER 17.1	3				
ES 1.16	ENERGY STAR qualified cooling equipment ≥ SEER2 16	3	3	AD		
ES 1.17	Heat pump efficiency ≥9.0 HSPF2	2				
ES 1.18	Dual-stage compressors	3				
ES 1.19	Condenser units are spaced 2 feet apart	2	2	AD		
ES 1.20	Variable Refrigerant/Mini-Split system utilized for primary heating and cooling	6	6	AD		
ES 1.21	Set all air handlers to design air flow	1				
ES 2: DUCTWORK / AIR HANDLER						
REQUIRED AT ALL LEVELS						
ES 2.0	Seal air handlers and duct systems with mastic	-	-			
ES 2.1	Code approved solid connector for all flex-to-flex connections	-	-			
ES 2.2	Fully duct all supply and return ducts	-	-			
ES 2.3	Duct insulation:	All must comply:				
	1. ≥ R-6: Ducts in conditioned and interstitial spaces (between floors)	-	-			
	2. ≥ R-8: Ducts in unconditioned space	-	-			
ES 2.4	No ducts in exterior walls or vaulted ceilings and no plenum within 2' of roofline.	-	-			
ES 2.5	Locate all air handlers within conditioned space	-	-			
ES 2.6	Indoor coil protected until finished floor installed	-	-			
ES 2.7	Minimize pressure imbalance within units ≤ 6 Pa between bedroom and return	-	-			
ES 2.8	No duct take-offs within 6" of supply plenum or supply trunk cap	-	-			
ES 2.9	Design and construct mechanical closets accessible for service and maintenance requirements	-	-			
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
ES 2.10	Install ducts per ACCA Manual D duct design	3	3		Manual D	
ES 2.11	Minimize pressure imbalance within units:	Select all that apply:				
	1. Install fully ducted jumper ducts, transfer grills, or dedicated return for each bedroom	2	2			
	2. Measured pressure differential ≤ 3 Pa between bedroom and return	3	3		Test results	
ES 2.12	Install rigid duct work or pull all flex ducts with no pinches and support at intervals ≤ 5'	2				
ES 2.13	Measure and balance airflow for each duct run (±20% of design)	3			TAB report	
ES 2.14	Verify supply and return duct static pressure	1	1			
ES 2.15	HVAC system and ductwork is dry and clean	1				
REQUIRED AT PLATINUM, OPTIONAL AT GOLD AND CERTIFIED						
ES 2.16	Locate entire duct system within conditioned space	5	5			
OPTIONAL AT ALL LEVELS						
ES 2.17	Duct design and installation:	Select all that apply:				
	1. Rigid metal supply trunk	2	2			
	2. Space all supply duct take-offs ≥6" apart	1				
	3. Install rigid circular duct as supply plenum	2				
ES 2.18	Duct insulation in unconditioned spaces ≥R-10	1				
ES 2.19	Return plenum duct take-off free area is 120% of supply plenum duct take-off free area	2				
ES 2.20	Verified static pressure does not exceed static pressure of AHRI efficiency test conditions	2				
ES 3: DUCT LEAKAGE TEST RESULTS						
REQUIRED AT ALL LEVELS						
ES 3.0	Test duct leakage based on conditioned floor area (CFA):	All must comply:				
	1. Leakage to outside ≤ 4%	-	-		Test results	
	2. Total leakage ≤ 6%	-	-			
REQUIRED AT PLATINUM, OPTIONAL AT GOLD AND CERTIFIED						
ES 3.1	Test duct leakage based on conditioned floor area (CFA):	Select all that apply:				
	1. Leakage to outside ≤ 2%	8			Test results	
	2. Total leakage ≤ 4%	8				
ES 4: VENTILATION						
REQUIRED AT ALL LEVELS						
ES 4.0	Install exhaust fans in all bathrooms and duct to outside	-	-			
ES 4.1	Gas kitchen range vented to exterior ≥100 cfm fan	-	-		Test results	
ES 4.2	Outside air ventilation strategy complies with ASHRAE 62.2-2010	-	-			
ES 4.3	When installed to achieve ES 4.2, design and install fresh air intakes:	All must comply:				
	1. ≥10' away from exhaust outlets , vehicle idling zones, parking garages	-	-			
	2. ≥ 2' above grade	-	-			
	3. When run to soffit the duct must be extended and affixed through the soffit vent	-	-			
	4. Fresh air duct may not be run to the roof	-	-			
	5. Fresh air shutoff may not be controlled by humidistat	-	-			
	6. Install rigid duct with insulation	-	-			
	7. All intakes must be ducted to exterior of building	-	-			
ES 4.4	Seal seams of all intake and exhaust ducts with mastic	-	-			
ES 4.5	Duct clothes dryers to outside	-	-			
ES 4.6	No power roof vents	-	-			
ES 4.7	Back-draft dampers for kitchen and bathroom exhaust	-	-			
ES 4.8	Electric kitchen range vented to exterior ≥ 100 cfm fan	-	-		Test results	
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
ES 4.9	If installed, ceiling fans must be ENERGY STAR qualified (1/bedroom and 1 in living room)	1			Product literature	
ES 4.10	ENERGY STAR bath fans with properly sized ductwork and measured airflow ≥50 cfm	2	2		Test results	
ES 4.11	Verify outdoor air supply ventilation airflow test within +/- 20% of design values	2	2		Test results	
ES 4.12	Install and label accessible ventilation controls, with override controls for continuously operating ventilation fans	1				
ES 4.13	Supply/exhaust fans rated at ≤3 sones (intermittent) and ≤1 sone (continuous)	1				
REQUIRED AT PLATINUM, OPTIONAL AT GOLD AND CERTIFIED						
ES 4.14	Radon resistant construction:	Select all that apply:				
	1. Passive, radon/soil gas vent system labeled on each floor	1				
	2. Radon test of building prior to occupancy	1				
ES 4.15	Exhaust fan wired with light in bathroom	1				
ES 4.16	Duct all exhaust fans with rigid duct	1				
OPTIONAL AT ALL LEVELS						
ES 4.17	Automatic (timer and/or humidistat) bathroom exhaust fan controls	2				
ES 4.18	Energy recovery ventilator	3				
ES 4.19	DOAS	3	3	AD		
ES 4.20	Vent storage room to outside	1				
ES 5: WATER HEATER						
REQUIRED AT ALL LEVELS						
ES 5.0	Water Heater must be installed in conditioned space. If gas, direct vent	-	-			
ES 5.1	Heat trap on all storage water heaters	-	-			
ES 5.2	Water heater efficiencies: Tank Size / Gas EF / Electric EF / Gas UEF / Electric UEF 20- 55 gal / 0.65 / 0.95 / 0.61 / 0.92 55- 100 gal / 0.75 / 1.97 / 0.76 / 2.03 < 2 gal / 0.82 / 0.93 / 0.81 / 0.91	-	-		AHRI Certificate	
ES 5.3	Pipe insulation on first 2'	-	-			
REQUIRED AT PLATINUM, OPTIONAL AT GOLD AND CERTIFIED						
ES 5.4	High efficiency storage water heater: Tank Size / Gas EF / Electric EF / Gas UEF / Electric UEF ≤55 gallon / ≥0.67 / ≥2.00 / ≥0.64 / ≥2.00 >55 gallon / ≥0.77 / ≥2.20 / ≥0.78 / ≥2.20	Select one from chart: 2	2	AD	AHRI Certificate	
ES 5.5	Tankless gas water heater ≥ .90 EF or ≥ .87 UEF	4				
OPTIONAL AT ALL LEVELS						
ES 5.6	Type of water heater:	Select one:				
	A. Solar domestic (≥40% annual load based on unit demand)	6	4	AD	Product literature	
	B. High efficiency tankless water heater (≥ .92 EF) with insulated buffer tank	4			AHRI Certificate	
	C. ENERGY STAR qualified heat pump hot water heater	4				
ES 5.7	Hot water piping insulation ≥R-4 (100%)	2				
ES 6: LIGHTING/APPLIANCES						
REQUIRED AT ALL LEVELS						
ES 6.0	High-efficacy lighting in 100% of all permanent fixtures	-	-			
ES 6.1	If installed, ENERGY STAR dishwasher	-	-		Product Literature	
ES 6.2	If installed, ENERGY STAR refrigerator	-	-		Product Literature	
REQUIRED AT PLATINUM AND GOLD, OPTIONAL AT CERTIFIED						
ES 6.3	If installed, ENERGY STAR qualified clothes washer	2	2	AD	Product literature	
ES 6.4	If installed, high efficiency clothes dryer with moisture sensor (not applicable to commercial dryers)	2	2	AD	Product literature	
ES 7: COMMON AREA LIGHTING/APPLIANCES						
REQUIRED AT ALL LEVELS						
ES 7.0	100% LED bulbs in all corridor/breezeway and all common spaces	-	-			
OPTIONAL AT ALL LEVELS						
ES 7.1	Control systems:	Select all that apply:				
	1. Automatic indoor lighting controls	2	2	AD		
	2. Automatic outdoor lighting controls	2	2	AD		
ES 7.2	High Efficiency Exterior Lighting:	Select all that apply:				
	1. Design to Reach IES guidelines: Lighting For Exterior Environments	2				
	2. Achieve 50% reduction based on Advanced Energy Design Guide (ASHRAE/IES)	1				
	3. High efficiency exterior lighting using 100% LED bulbs	2	2	AD		
ES 7.3	High efficiency elevators	2				
ENERGY EFFICIENT SYSTEMS TOTAL			60	0		
WATER EFFICIENCY (WE)						
WE 1: INDOOR WATER USE						
REQUIRED AT ALL LEVELS						
WE 1.0	Meet National Energy Policy Act low flow standards for all fixtures	-	-			
WE 1.1	Detect no leaks at any water-using fixture, appliance or equipment	-	-			
WE 1.2	Low-flow fixtures (units and common facilities):	Select all that apply:				
	1. WaterSense labeled toilet (≤1.28 avg. gal/flush)	-	-		Product literature	
	2. WaterSense labeled urinal (≤0.5 gal/flush)	-	-			
	3. WaterSense lavatory faucet and accessories (≤1.5 gpm at 60 psi)	-	-			
	4. WaterSense labeled Showerhead (≤2.0 gpm)	-	-			
WE 1.3	Hot water recirculation system uses manual demand or presence sensor controls	-	-			
REQUIRED AT PLATINUM , OPTIONAL AT GOLD AND CERTIFIED						
WE 1.4	If installed, water treatment system NSF certified, ≥85% efficient	2				
WE 1.5	If installed, water softeners certified to NSF/ANSI Standard 44	2				
WE 1.6	Store ≤0.5 gal of water between water heater and fixture (not applicable to central systems)	2			Test results	
WE 1.7	WaterSense labeled Showerhead (1.75 gpm)	1	1	AD	Product literature	
OPTIONAL AT ALL LEVELS						
WE 1.8	Toilet (≤1.1 avg. gal/flush)	2				
WE 1.9	Waterless urinals in common areas	2				
WE 1.10	Greywater system for toilet flushing	4				
WE 1.11	Rainwater harvest system for indoor water use	4				
WE 1.12	Unit water pressure ≤60 psi	2				
WE 1.13	Hot water demand ≤0.13 gal of water between loop and fixture and ≤2 gal of water in loop between water heater and furthest fixture (not applicable to central systems)	2			Test results	
WE 2: OUTDOOR WATER USE						
REQUIRED AT ALL LEVELS						
WE 2.0	Cover all exposed soil with 2"-3" mulch layer	-	-			
WE 2.1	Irrigation system:	All must comply:				
	1. Must have rain sensor shutoff switch	-	-			
	2. Provide operating manual to property management	-	-			
	3. Provide irrigation system layout to property management	-	-			
WE 2.2	If installed, ornamental water features must recirculate water and serve beneficial use	-	-			
WE 2.3	Install plants to maintain distance ≥2' from home at maturity	-	-		Landscape plan	
REQUIRED AT PLATINUM, OPTIONAL AT GOLD AND CERTIFIED						
WE 2.4	Landscape design:	Select one:				
	A. Turf ≤ 40% of landscaped area	2			Landscape plan	
	B. Use WaterSense water budget tool to design landscape	2			Calculator	
WE 2.5	Vegetate slopes exceeding 4:1	1			Landscape plan	
WE 2.6	If installed, irrigation system is: (Max 4 points)	Select all that apply:				
	1. Design, install, and audit irrigation system by WaterSense Irrigation Partner with no leaks	2				
	2. Micro-irrigation system (e.g., drip irrigation) includes pressure regulator, filter and flush end assemblies	2				
	3. Distribution uniformity ≥65% lower quarter	2				
	4. Install sprinklers only on turfgrass, pop-up height ≥4"	1				
	5. Establish grow-in phase and post landscape seasonal water schedules at irrigation controller	2				
WE 2.7	Drought-tolerant/native landscaping turf and plants	1			Plant list	
OPTIONAL AT ALL LEVELS						
WE 2.8	Test and amend soil	1			Test results	
WE 2.9	Irrigation: (Max 5 points)	Select all that apply:				
	1. Greywater irrigation system	3				
	2. Rainwater irrigation system	3				
	3. Zone irrigation system for specific water needs in each planting area	2				
	4. Provide weather station or soil moisture sensor on irrigation system	2				
WE 2.10	Timer on exterior water spigots	1				
WATER EFFICIENCY TOTAL			1	0		
EDUCATION AND OPERATIONS (EO)						
EO 1: EDUCATION						
REQUIRED AT ALL LEVELS						
EO 1.0	Provide property manager with project-specific owner's manual	-	-		Copy	
EO 1.1	Provide tenant with information on operation of HVAC systems	-	-			
OPTIONAL AT ALL LEVELS						
EO 1.1	Local recycling contact	1			Contact	
EO 1.2	Community Recycling Facility	2			Picture	
EO 1.3	Household hazardous waste resources	1				
EO 1.4	Member of the project team has attended Building Professional Training within last 3 years	Select all that apply:				
	1. Architect	1				
	2. Developer	1				
	3. Site Superintendant	1				
EO 2: OPERATIONS AND MANAGEMENT						
REQUIRED AT ALL LEVELS						
EO 2.0	Provide all subcontractors with EarthCraft Multifamily worksheet	-	-			
OPTIONAL AT ALL LEVELS						
EO 2.1	Property Maintenance Staff representative attends design review and/or kick off meeting	1	1	AD		
EO 2.2	Market EarthCraft Multifamily program	1	1	AD	Signage	
EO 2.3	Provide pre-occupancy briefing for tenant	2	2	AD		
EO 2.4	Project participates in post occupancy project debriefing	2	2	AD		
EO 2.5	Environmental management and building maintenance guidelines for staff	2	2	AD	Copy	
EO 2.6	Landscape maintenance guide for maintenance and management personnel	2	2	AD		
EO 3: THIRD PARTY PROGRAMS						
OPTIONAL AT ALL LEVELS						
EO 3.0	ENERGY STAR Multifamily New Construction	2	2	AD		[redacted]
EO 3.1	Indoor airPLUS	2	2	AD		[redacted]
EO 3.2	Qualify for WaterSense New Homes	1				[redacted]
EO 3.3	EarthCraft Community Certification	3				[redacted]
EO 3.4	EarthCraft Light Commercial for Community Center	2				[redacted]
EO 3.5	EarthCraft Light Commercial Ready Spaces	1				[redacted]
EO 3.6	Zero Energy Ready Home Certification	1	1	AD		[redacted]
EDUCATION AND OPERATIONS TOTAL			15	0		
INNOVATION (INV)						
OPTIONAL AT ALL LEVELS						
IN 1.0	On-site fuel cell or co-generation system	4			System design	[redacted]
IN 1.1	Solar-ready design	2	2		System design	[redacted]
IN 1.2	Wind and/or Solar electric system (10% of project requirements)	5			System design	[redacted]
IN 1.3	100% of stormwater kept on site and used for development operations	4			System design	[redacted]
IN 1.4	Common areas use solar and/or wind electric system (80% of demand)	4			System design	[redacted]
IN 1.5	Housing Affordability:	Select one:				[redacted]
	A. ≥20% total units	1	2			[redacted]
	B. ≥50% total units	2				[redacted]
IN 1.6	Developer contracts for at least 12 months post construction energy monitoring	4			Unit Level Utility Data	[redacted]
IN 1.7	Incorporate measures to address at least 2 of the top risks identified in SP 0.1 (natural hazards)	2				
IN 1.8	Project specific innovation points: builder submits specifications for innovative products or design features to EarthCraft prior to construction completion	TBD				
INNOVATION TOTAL			4	0		
WORKSHEET TOTAL			156	0		

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SCALE: SEE DETAIL FOR SCALE
DATE: 02/25/2025
DRAWN: LAL
CHECKED: LAL

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

SCOTT FLEMING
Lic. No. 13094
9/3/25

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

EARTHCRAFT CHECKLIST

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: A003

Square downlight · Wide beam

BEGA

Application
Recessed ceiling luminaire with symmetric wide beam light distribution. The patented (US 2016/0327243) BEGA Vortex Optics® rotates a parabolic reflector around the vertical axis to form a complex vortex shape. This vortex balances maximum efficiency with optimal glare control while eliminating shadows and artifacts in a uniquely sharp square distribution.

Materials
Clear safety glass
Marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Stainless steel screw clamps
Pure anodized aluminum reflector surface

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65

Weight: 4.9 lbs.

Electrical

LED module wattage	56.0 W
System wattage	64.0 W
Color rendering index	Ra > 80
Luminaire lumens	6168 lm
LED service life (L70)	60000 hrs

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA Unidure® finish provides superior fade protection in Black, Bronze, and Silver. BEGA standard White is a super durable polyester powder. Optionally available RAL and custom color finishes provided in either polyester powder or liquid paint.

Available colors
- ☐ Black (BLK)
- ☐ Silver (SLV)
- ☐ RAL:
- ☐ Bronze (BRZ)
- ☐ White (WHT)
- ☐ CUS:

Type:
BEGA Product:
Project:
Modified:

Available options

CUS	Custom finish
DALI	DALI dimming
FSC	Fusing
MGU	Marine grade undercoat
RAL	RAL finish

Included (available for pre-shipment)

CP24145	Ceiling pan

Square downlight · Wide beam

	LED	LI	A	B	C
B24146	56.0 W	40°	10 1/8"	2 1/2"	25

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

E

EL-104

Wall luminaire · Symmetric

BEGA

Application
Wall luminaire with symmetric light distribution designed for general illumination of pathways, plazas and building entrances.

Materials
Clear safety glass with matte finish
Marine grade, copper free (≤ 0.3% copper content) A360.0 aluminum alloy
High temperature silicone gasket
Mechanically captive stainless steel fasteners
Silicone applied robotically to casting, plasma treated for increased adhesion
Galvanized zinc-plated mounting bracket
Pure anodized aluminum reflector

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65

Weight: 4.4 lbs.

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	17.9 W
System wattage	23.0 W
Controllability	0-10V dimming down to 1%
Color rendering index	Ra > 90
Luminaire lumens	1893 lm
LED service life (L70)	60000 hrs

LED color temperature
- ☐ 4000K (K4)
- ☐ 3500K (K35)
- ☐ 3000K (K3)
- ☐ 2700K (K27)

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish
All BEGA standard finishes are matte, textured powder coat with minimum 3 mil thickness. BEGA Unidure® finish provides superior fade protection in Black, Bronze, and Silver. BEGA standard White is a super durable polyester powder. Optionally available RAL and custom color finishes provided in either polyester powder or liquid paint.

Available colors
- ☐ Black (BLK)
- ☐ Silver (SLV)
- ☐ RAL:
- ☐ Bronze (BRZ)
- ☐ White (WHT)
- ☐ CUS:

Type:
BEGA Product:
Project:
Modified:

Available options

CUS	Custom finish
FSC	Fusing
MGU	Marine grade undercoat
RAL	RAL finish

Wall luminaire · Symmetric

	LED	A	B	C
B33242	17.9 W	8	8	3 1/2"

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

D

EL-103

FLEXA LIGHTING
NORTH AMERICA

ELLE 2
Bollard

IP65 Class 2 made in Canada

design Roberto Mantovani

The Elle range proposes IP65-rated, double powder-coated aluminium bollards with light emission completely confined to the lower hemisphere in full compliance with the most stringent anti-light pollution standards. With minimal design, Elle is ideal for the lighting of pathways in residential environments and hotel grounds.

La gamme Elle propose des bollards IP65 en aluminium traité avec double peinture en poudre, avec émission lumineuse complètement contenue dans l'hémisphère inférieur, en totale conformité avec les réglementations anti-pollution lumineuse les plus strictes. Avec un design minimaliste, Elle se prête à des éclairages de parcours dans des milieux résidentiels et de réception.

La gama Elle ofrece bolardos IP65 de aluminio tratado con doble barnizado en polvo, con emisión luminosa totalmente contenida en el hemisferio inferior, conforme con las más estrictas normas anticontaminación lumínica. De diseño minimalista, Elle es ideal para iluminar itinerarios en áreas residenciales y hosteleras.

Supply current
Courant d'alimentation
Corriente de alimentación
500mA (V_2,9V)

Power
Puissance
Potencia
1,5W

Series wiring
Câblage en série
Cableado en serie

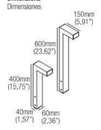
LED selection
Sélection des LED
Selección del LED
3-Step MacAdam

CRI
90

Lumens

2700K	500mA — 128 lm
3000K	133 lm
3500K	146 lm
4000K	154 lm

Dimensions
Dimensions



Photometric diagrams
Diagrammes photométriques
Diagramas fotométricos

Code construction
Construction du code produit
Construcción del código de producto

BLS X X X

L	S	C
White	Black	Custom

27	30	35	40
2700K	3000K	3500K	4000K

4	6
40cm (14.17")	60cm (23.62")

Accessories
Accessoires
Accesorios

ZC001
Anchor bolt for concrete plinth
Zanca per plinto cementizio

CP0022
Earth spike

500mA drivers
Alimentateurs 500mA
Alimentadores 500mA

CCPR010A-500 (1..6) IP20
Dimming PHNB - 0-10V

CCPR040A-500 (1..18) IP20
Dimming PHNE - 0-10V

FLEXALIGHTING NORTH AMERICA Inc. Unit 22 - 15531 24th Avenue, Surrey, BC, Canada. V4A 2J4 ph. +1.604.385.4311 info@flexalighting-na.com

C

EL-102

SQUARE DELTA STAR LED (REMOTE) — IP66 RATED

DATE: PROJECT: TYPE:

CATALOG NUMBER LOGIC:

*Designed for use with LED transformer. Requires magnetic low voltage dimmer.

**Please see Adjust-e-Lume photometry to determine desired intensity.

CATALOG NUMBER LOGIC
Example: B - SQ - DS - LED - e64 - SP - A7 - BZP - 12 - 11 - A - TE
MATERIAL
(Blank) - Aluminum B - Brass S - Stainless Steel
SERIES
SQ - DS - Square Delta Star
SOURCE
LED - with Integral Dimming Driver (25W min. load when dimmed)*
LED TYPE
e64 - 7W LED/2700K e79 - 7W LED/2700K 90CRI
e65 - 7W LED/3000K e80 - 7W LED/3000K 90CRI
e66 - 7W LED/4000K e81 - 7W LED/3500K 80CRI
e74 - 7W LED/Amber
OPTICS
NSP - Narrow Spot (13°) MFL - Medium Flood (23°)
SP - Spot (16°) WFL - Wide Flood (31°)
ADJUST-E-LUME® OUTPUT INTENSITY**
A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1
FINISH (See page 2 for full-color swatches)
Standard Finishes (BZP, BZW, BLP, BLW, WHP, WHW, SAP, VER)
Premium Finish (ABP, AMG, AQW, BCM, BGE, BPP, CAP, CMG, CRM, HUG, NBP, OCP, RMG, SDS, SMG, TXF, WCP, WIR)
Also available in RAL Finishes
LENS TYPE
12 - Soft Focus 13 - Rectilinear
SHIELDING
11 - Honeycomb Baffle
CAP STYLE
A - 45°
B - 90°
C - Flush Lens
D - 45° Less Weep Hole (Downward Aiming Only)
E - 90° Less Weep Hole (Downward Aiming Only)
F - 90° with Flush Lens
OPTION
TE - Tamper Resistant
MOD OPTIONS
5 - 5 Ft Leads
25 - 25 Ft Leads

B-K LIGHTING MADE IN THE USA 559.438.5800 | INFO@BKLIGHTING.COM | BKLIGHTING.COM

03/03/2023 SKU-1392
SUB-2821-00

B

EL-101

HADCO

Urban
TownView
TVPC/TVPR
Post top and arm mount luminaire

Hadco TownView LED post top luminaires were designed to eliminate the compromises of performance, comfort, style options and value when choosing the right lighting solution for residential street and pedestrian area. The horizontal lens option reduces glare to enhance a sense of security with increased visual comfort. TownView offers design flexibility with a variety of style options, lumen packages, a range of control options and more at exceptional value.

Project:
Location:
Cat. No.
Type:
Lamps: Qty:
Notes:

Ordering guide: Luminaire

Example: TVPC-S3-S-32-G1-7-35-730-A-N-R7-N-SP1-T-N-N-BKS

Series	Mounting	Roof option	LED module	Generation G1	Drive current	Distribution	Color temp.	Voltage	Driver Option [1]
TVPC TownView with visual comfort panels TVPR TownView with vertical ribbed panels	A [1] Arm Mt L4 Large Post Top Fitter 4" (tool less entry) L3 Large Post Top Fitter 3" (tool less entry) 52 Small Post Fitter 2-3/8" 53 Small Post Fitter 3" 54 Small Post Fitter 4"	S Square Roof C Curved Roof	16 16 LEDs 32 32 LEDs 48 48 LEDs	G1 Gen 1	5 530 mA 7 700 mA 9 900 mA 1 1050 mA 5 530 mA 7 700 mA 8 800 mA 1 1050 mA 5 530 mA 7 700 mA	2SH Type 2 Short House-side shield 2S Type 2 Short 3S Type 3 Short 3SH Type 3 Short House-side shield 3W Type 3 Wide 3WH Type 3 Wide House-side shield 5 Type 5	730 3000K (70 CRI) 740 4000K (70 CRI) 827 [1] 2700K (80 CRI)	A 120-277V J 480V K 347V	DA [1] 4 Hrs 25% Reduction DB [1] 4 Hrs 50% Reduction DC [1] 4 Hrs 75% Reduction DD [1] 6 Hrs 25% Reduction DE [1] 6 Hrs 50% Reduction DF [1] 6 Hrs 75% Reduction DG [1] 8 Hrs 25% Reduction DH [1] 8 Hrs 50% Reduction DJ [1] 8 Hrs 75% Reduction DL [1] DALI (default: logarithmic) CLO [1] Constant light output AST [1] Adjustable startup time OTL [1] Over the life (default: L70 hrs) S [1] FAWS Field adjustable wattage selector SRD [1] Sensor ready driver (standard configuration) N None

Photo Control Receptacle	Sensor Receptacle [1]	Surge Protection	Term Block	Decorative Option	Bird Guard	Finish [1]
R7 7 Pin tooless rotatable standard - no photocell PH8 [1] 7 Pin tooless rotatable standard - with photocell PH9 [1] 7 Pin tooless rotatable standard - with shorting cap PHX [1] 7 Pin tooless rotatable standard - with long life photocell	N None	SP1 10kV/10kA Surge Protector SP2 20kV/10kA Surge Protector	T Terminal Block N None	L [1] Ladder Rest N None	N None	BKS Black Smooth WHS White Smooth BZS Bronze Smooth GNS Green Smooth BK Black Texture WH White Texture BZ Bronze Texture GN Green Texture

Footnotes see page 2.

BAA DLC LISTED DLC LISTED PREMIUM

A

EL-100

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www.rustorling.com

SCALE: SEE DETAIL FOR SCALE | DATE: 02/25/2025 | DRAWN: LAL | CHECKED: LAL

PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1
03/18/2025	FINAL SITE PLAN #1

DESCRIPTION	DATE
FINAL SITE PLAN #1 (MSR)	06/27/2025
FINAL SITE PLAN #2	09/03/2025
FINAL SITE PLAN #3	

COMMONWEALTH OF VIRGINIA
SCOTT FLEMING
Lic. No. 13094
9/3/25
ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

LIGHT FIXTURES

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

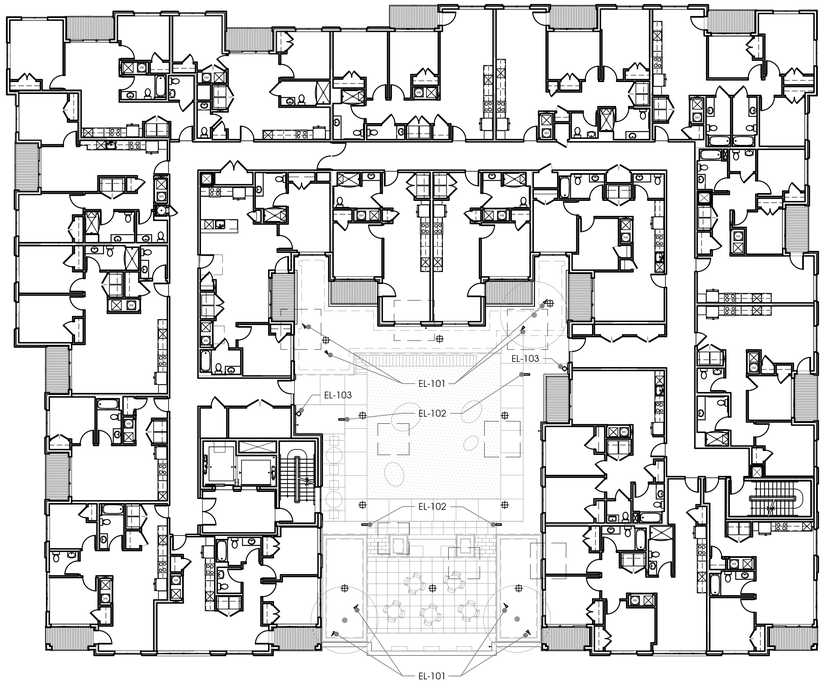
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No.

DIRECTOR DATE

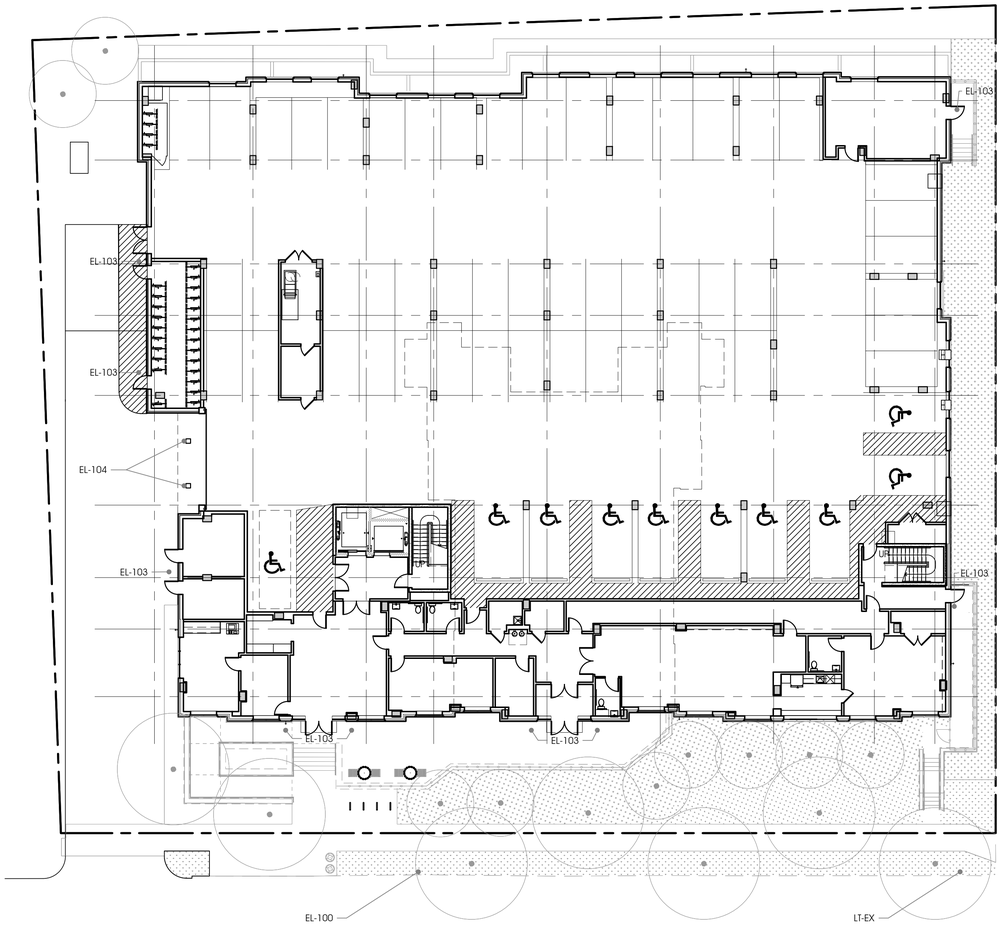
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED

INSTRUMENT NO. DEED BOOK NO. PAGE NO.

SHEET: **A004**



B 2ND FLOOR PLAN
1/16"=1'-0"



A GROUND FLOOR PLAN
1/16"=1'-0"

PROPOSED LIGHT FIXTURE SCHEDULE			
MARK	TYPE	MANUFACTURER	NOTES
EL-100	STREET LIGHT	HADCO OR APPROVED EQUAL	PER CITY OF ALEXANDRIA STANDARDS
EL-101	FLOOD LIGHT	B-K LIGHTING	
EL-102	LIGHT BOLLARD	FLEXA LIGHTING	
EL-103	WALL MOUNTED LED	BEGA	BOTTOM OF LIGHT @ 7 FEET
EL-104	CEILING MOUNTED LED	BEGA	
LT-EX	EXG COBRA STREET LIGHT		LIGHT @ 20 FEET

GENERAL NOTE:
STREET LIGHTING & EXTERIOR BUILDING LIGHTING SHALL COMPLY WITH CLI ELBERT RESIDENCES - CDSP #2022-00010, DSUP #2022-10022, CONDITION 7.

NOTE:
1. ALL SITE LIGHTS DESIGNED TO MEET CITY OF ALEXANDRIA PHOTOMETRIC STANDARDS SHALL HAVE PHOTOVOLTAIC SWITCHES, SEE CONDITION 7i.

GRAPHIC SCALE
8' 0 16' 32'
1/16" = 1'-0"

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SCALE: SEE DETAIL FOR SCALE | DATE: 02/25/2025 | DRAWN: LAL | CHECKED: LAL

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09/03/2025	FINAL SITE PLAN #3

COMMONWEALTH OF VIRGINIA
SCOTT FLEMING
Lic. No. 13094
9/3/25
ARCHITECT

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

LIGHT FIXTURE LOCATIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

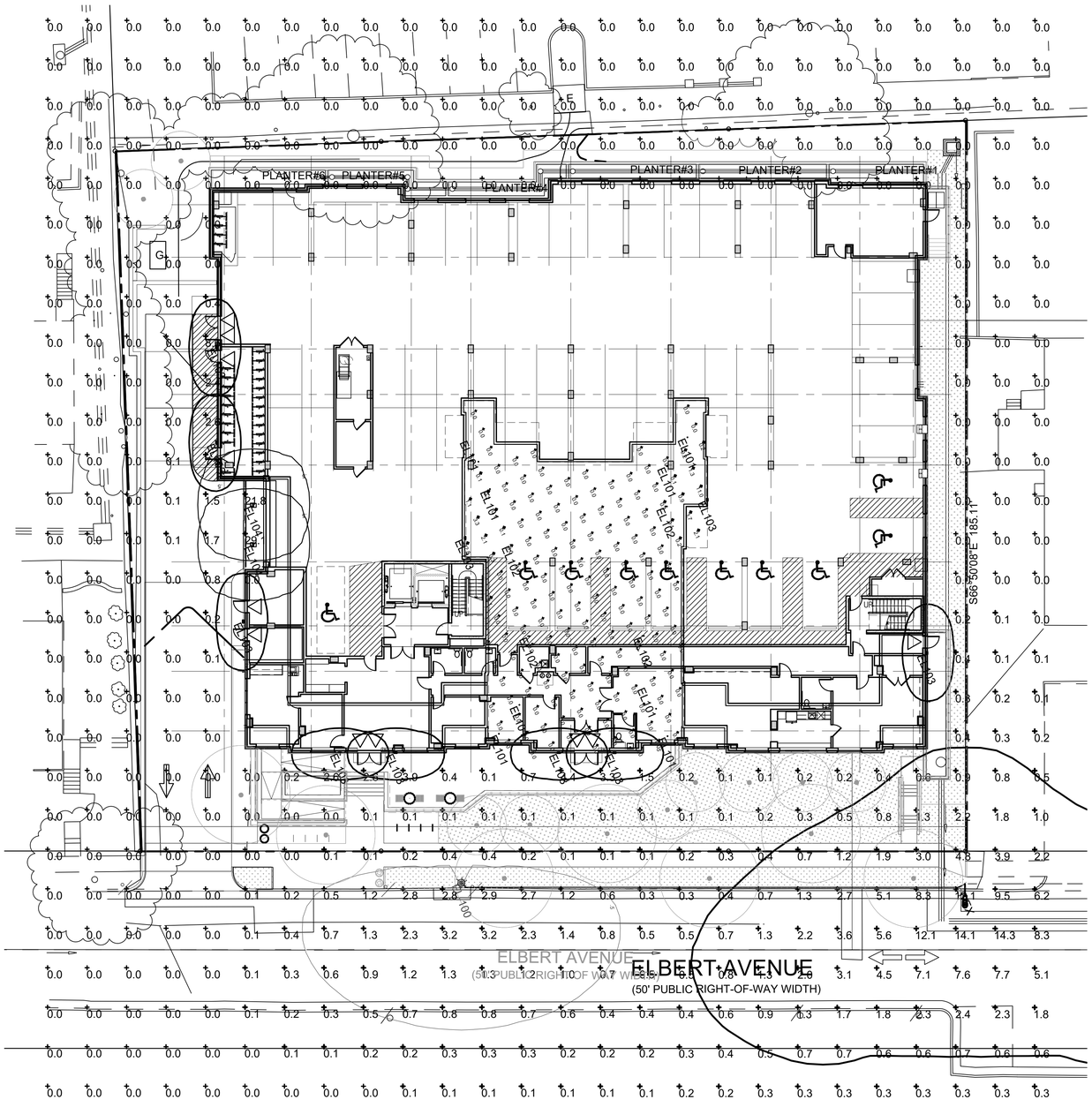
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

INSTRUMENT NO. DEED BOOK NO. PAGE NO.



A

GROUND FLOOR & 2ND FLOOR COURTYARD

1/16"=1'-0"

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Lum. Lumens	Lum. Watts	LLF	Description	MOUNT HEIGHT	[MANUFAC]	Filename
⊠	1	EL-100	Single	7027	80.8	0.720	TVPR-48-G1-5-3SH-730, 14ft Pole	LIGHT @ 14 FEET	SIGNIFY HADCO	EL-100_TVPR-48-G1-5-3SH-730.ies
⊕	8	EL101	Single	394	6.95	0.720	Square Delta Star LED Tree Uplight, MFL, Ground Mounted, Aimed up	TREE UPLIGHT	B-K LIGHTING, INC.	LED-e66-MFL-13-ITL85924.IES
⇸	4	EL102	Single	107	1.5	0.720	Elle 2 Bollard, 2ft Tall, 3000K, Ground Mounted	2 FEET TALL	Flexalighting NA	3000K Elle 2.ies
⊣	10	EL103	Single	1791	22.9	0.720	33242 Wall Sconce, 3000K, Wall Mounted 7ft to LC	BOTTOM OF LIGHT @ 7 FEET	BEGA	33242K3_BEGA_IES.ies
□	2	EL104	Single	6094	64	0.720	24146 Square Downlight, Wide Beam, 3000K, Ceiling Mounted	CLG MOUNT @ ≈10 FEET	BEGA	24146K3_BEGA_IES.IES
—⊏	1	LT-EX	Single	39096	457	0.720	Existing Cobra Head, Pole Mounted 20ft	LIGHT @ 20 FEET	American Electric Lighting	115_40S_R3_DG.ies

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
Bldg_2nd Floor	Illuminance	Fc	0.30	22.8	0.0	N.A.	N.A.	5ft Spacing

NOTE:
INFORMATION FOR THE EXISTING LIGHT FIXTURE IS UNKNOWN.
THE AREA IS OVERLIT USING A 400W FIXTURE @ 20ft.

GRAPHIC SCALE
8' 0 16' 32'
1/16" =1'-0"

⚠1 GENERAL NOTE:
STREET LIGHTING & EXTERIOR BUILDING LIGHTING SHALL COMPLY WITH CLI ELBERT RESIDENCES - CDSP #2022-00010, DSUP #2022-10022, CONDITION 7.

NOTE:
1. ALL SITE LIGHTS DESIGNED TO MEET CITY OF ALEXANDRIA PHOTOMETRIC STANDARDS SHALL HAVE PHOTOVOLTAIC SWITCHES, SEE CONDITION 7i.

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SCALE: SEE DETAIL FOR SCALE
DATE: 02/25/2025

PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

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Lic. No. 13094
9/3/25

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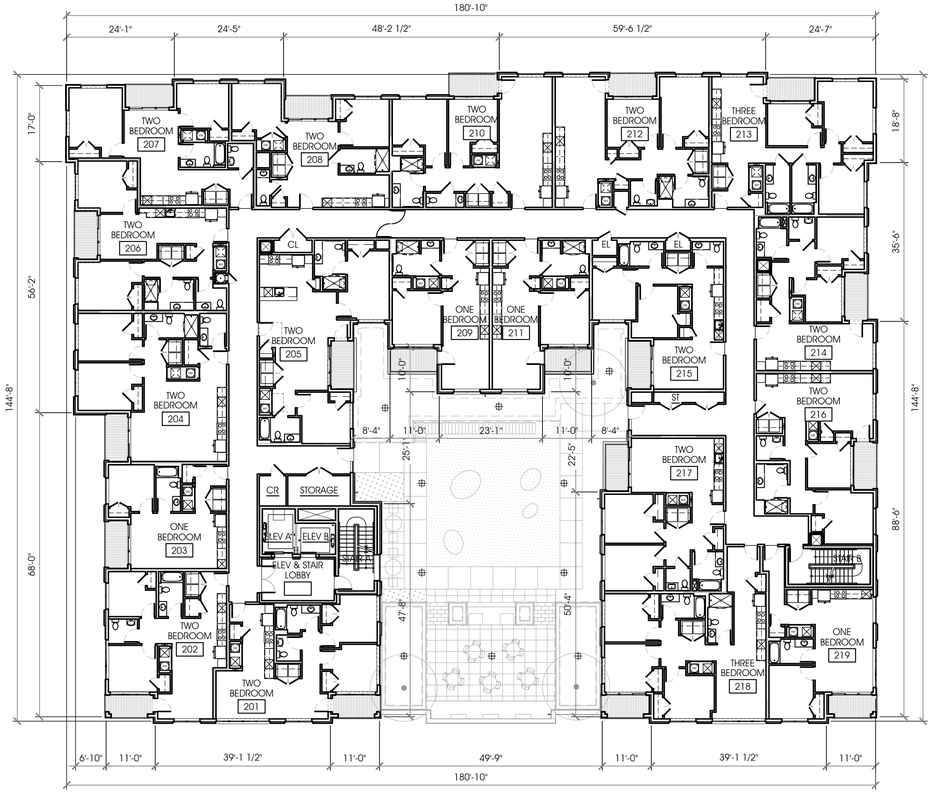
NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

PHOTOMETRICS

APPROVED
SPECIAL USE PERMIT NO. 2022–10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. ____________
DIRECTOR DATE
CHAIRMAN, PLANNING COMMISSION DATE
DATE RECORDED ____________
INSTRUMENT NO. DEED BOOK NO. PAGE NO.

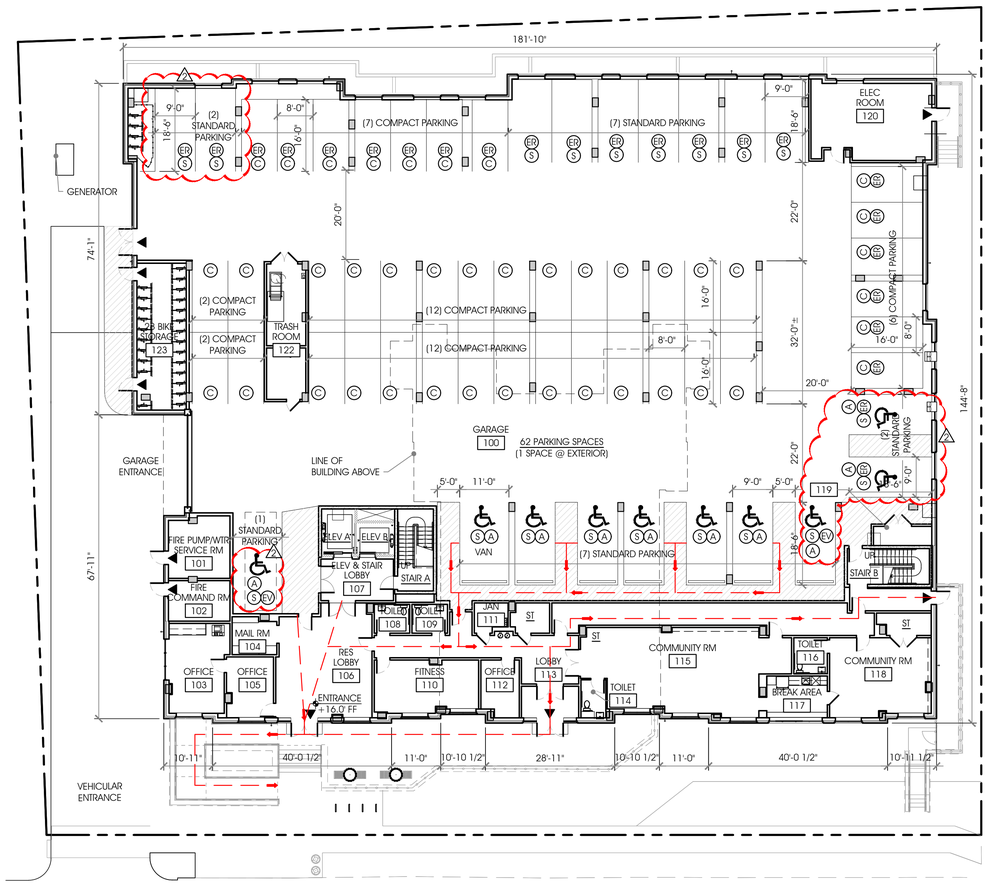
SHEET: **A006**



B

2ND FLOOR PLAN

1/16"=1'-0"



ELBERT AVENUE

A

GROUND FLOOR PLAN

1/16"=1'-0"

Unit Plan	2	3	4	5	6	Total by Type	% BY TYPE	AVG SF PER BR TYPE
ONE BEDROOM	1	1	1	1	0	4		
ONE BEDROOM - UD	1	1	1	1	0	4		
ONE BEDROOM - ADA	2	2	2	2	2	10		
ONE BR TOTAL						18	20%	610
TWO BEDROOM	1	1	1	1	0	4		
TWO BEDROOM - UD	8	8	8	8	6	38		
TWO BEDROOM - ADA	4	2	2	2	3	13		
TWO BR TOTAL						55	60%	864
THREE BEDROOM	1	1	1	1	0	4		
THREE BEDROOM - UD	1	2	2	2	2	9		
THREE BEDROOM - ADA	0	1	1	1	2	5		
THREE BR TOTAL						18	20%	1,090
Total	19	19	19	19	15	91	100%	

FLOOR	Residential	Amenity	Parking	GSF/Floor
1	2,589	3,000	19,679	25,268 SF
2	21,093			21,093 SF
3	21,093			21,093 SF
4	21,093			21,093 SF
5	21,093			21,093 SF
6	16,894	1,108		18,002 SF
			TOTAL	127,642 SF

TOTAL RESIDENTIAL UNIT DEDUCTIONS	7,217 SF
TOTAL COMMON SPACE DEDUCTIONS	4,215 SF
TOTAL BALCONY DEDUCTIONS	4,240 SF
TOTAL POTENTIAL DEDUCTIONS	15,672 SF

TOTAL REQUIRED DEDUCTIONS	(11,631) SF
REDUCTION FACTOR	9% SF
ALLOWABLE FAR	3.00

NET FLOOR AREA	111,970 SF
FAR PROVIDED (NET FLOOR AREA / LOT AREA)	2.91 SF

BUILDING CODE ANALYSIS				
USE GROUP	S2, B, R2			
NUMBER OF STORIES	6			
TYPE OF CONSTRUCTION		CONST TYPE / GSF BY FLOORS		
		IA	IIIA (SOUTH WING)	IIIA (NORTH WING)
FLOOR	GSF TOTALS	FLOOR 1	FLOOR 2-6	FLOOR 2-6
1	25,268 SF	25,268		
2	21,093 SF		10,108	10,985
3	21,093 SF		10,108	10,985
4	21,093 SF		10,108	10,985
5	21,093 SF		10,108	10,985
6	18,002 SF		8,430	9,572
TOTAL	127,642 SF	25,268	48,862	53,512
SPRINKLERED	NFPA13			

GENERAL NOTES:

1. BUILDING IS LOCATED IN THE 100 YEAR FLOOR PLAIN. RESIDENTIAL BUILDING LOBBY, COMMUNITY ROOM, AND OFFICES TO BE CONSTRUCTED 1'-0" ABOVE BFE (BASE FLOOD ELEVATION). PARKING AREA AT OR BELOW 1'-0" ABOVE BFE TO BE CONSTRUCTED OF FLOOD RESISTANT MATERIALS AND DESIGNED TO ALLOW THE ENTRANCE AND EXIT OF FLOODWATERS PER ALEXANDRIA AND FEMA REQUIREMENTS.
2. PER DISCUSSIONS WITH ALEXANDRIA CODE ENFORCEMENT AND ALEXANDRIA FIRE DEPARTMENT AND PER CITY CODE, TITLE 4 CHAPTER 3, APPENDIX D, D101.1 (ITEM 4), IN LIEU OF MEETING LADDER TRUCK ACCESS REQUIREMENTS, THE FOLLOWING BUILDING SAFETY ENHANCEMENTS WILL BE PROVIDED:
   - STANDBY POWER PER VAUSBC 403.4.8
   - SMOKEPROOF STAIR ENCLOSURES PER VAUSBC 403.5.4
   - TWO FIRE SERVICE ACCESS ELEVATORS PER VAUSBC 403.6.1
   - A FIRE COMMAND CENTER PER VA VAUSBC 403.4.6
3. RACKS FOR 28 BIKES WILL BE PROVIDED IN THE BUILDING.

PARKING KEY

- (S) STANDARD SIZE PARKING SPACE (9'-0" x 18'-6" CLEAR MIN.)
- (C) COMPACT SIZE PARKING SPACE (8'-0" x 16'-0" CLEAR MIN.)
- (A) ACCESSIBLE PARKING SPACE
- (EV) LEVEL 2 ELECTRIC VEHICLE CHARGERS
- (ER) CONDUIT FOR ELECTRIC VEHICLE CHARGER READY

PARKING PROVIDED

STANDARD	9
COMPACT	41
ACCESSIBLE	10
TOTAL	60

VEHICLE CHARGER PROVIDED

LEVEL 2 ELECTRIC VEHICLE CHARGERS (2%)	2
CONDUIT FOR ELECTRIC VEHICLE CHARGER READY	30

BIKE RACK NOTES:

1. SEE LANDSCAPE SHTS FOR BIKE RACK LOCATIONS AT EXTERIOR
2. SEE LANDSCAPE SHTS FOR BIKE RACK DETAILS FOR RACKS ALONG SIDEWALK & INSIDE GARAGE

GRAPHIC SCALE

8' 0 16' 32'

1/16" = 1'-0"

ACCESSIBILITY LEGEND

ADA ROUTE

ADA PARKING

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PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1
06/27/2025	FINAL SITE PLAN #2
09/03/2025	FINAL SITE PLAN #3

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SCOTT FLEMING
Lic. No. 13094
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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

GROUND & 2ND FLOOR PLANS

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DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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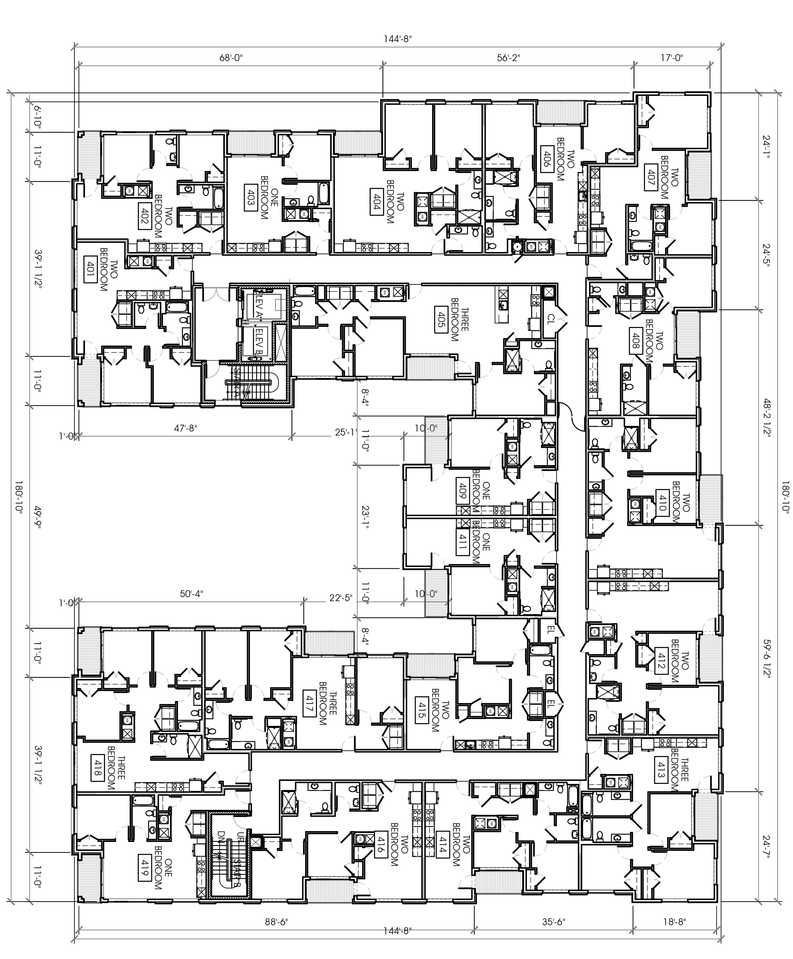
SHEET: A101



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3RD & 4TH FLOOR PLANS

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DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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INSTRUMENT NO. DEED BOOK NO. PAGE NO.

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PLAN STATUS

DATE	DESCRIPTION	DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)	06/27/2025	FINAL SITE PLAN #2
03/18/2025	FINAL SITE PLAN #1	09/03/2025	FINAL SITE PLAN #3

SHEET: A102

B

6TH FLOOR PLAN

1/16"=1'-0"

A

5TH FLOOR PLAN

1/16"=1'-0"

GRAPHIC SCALE

8' 0 16' 32'

1/16" =1'-0"

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03/18/2025	FINAL SITE PLAN #1
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09/03/2025	FINAL SITE PLAN #3

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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

5TH & 6TH FLOOR PLANS

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DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

DATE RECORDED _____

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A — ROOF PLAN
1/8"=1'-0"

GRAPHIC SCALE
8' 0 16' 32'
1/16" = 1'-0"

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PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1

	DATE	DESCRIPTION
	06/27/2025	FINAL SITE PLAN #2
	09/03/2025	FINAL SITE PLAN #3

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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

ROOF PLAN

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DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

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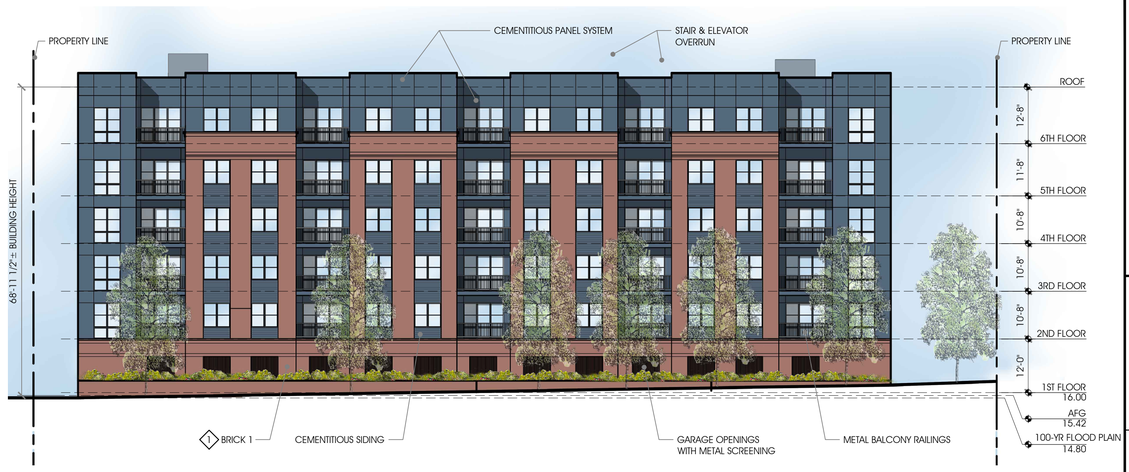
E NORTH ELEVATION
1/16"=1'-0"

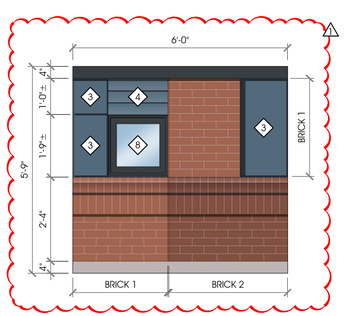


D WEST ELEVATION
1/16"=1'-0"

C SOUTH ELEVATION
1/16"=1'-0"

B ELBERT AVE / EAST ELEVATION
1/16"=1'-0"

NOTE:
1. MOCK-PANEL SHALL BE CONSTRUCTED AT THE PROJECT SITE IN A LOCATION WHERE IT CAN REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION, AND THAT LOCATION WILL BE DETERMINED DURING FINAL SITE PLAN REVIEW.
2. MOCK-UP PANELS OVER SIX FEET (6') IN HEIGHT MAY ALSO REQUIRE A BUILDING PERMIT.
3. SEE CITY OF ALEXANDRIA MOCK-UP PANEL MEMO DATED 12.23.2023 FOR ADDITIONAL INFORMATION.



A MOCK-UP PANEL
1/2"=1'-0"

GENERAL NOTE:
BUILDING ELEVATIONS SHALL COMPLY WITH CLI ELBERT RESIDENCES - CDSP #2022-00010, DSUP #2022-10022, CONDITION 12

NOTE:
1. FIBER CEMENT PANELS SHALL BE INSTALLED W/ TRIM TO MATCH COLOR OF FIBER CEMENT BOARD PANEL & PROVIDE CONTEMPORARY PROFILE W/ MINIMAL EXTRUSION EXPOSED TO COMPLY W/ CONDITION 12b.
2. MOCK-UP PANEL TO BE INSTALLED W/ COMPONENTS FOR STAFF APPROVAL.

ELEVATION KEY

1. BRICK 1, DISTRIBUTOR PVR., STD. 455, MOD.; WORKRITE MORTAR, WR2055-GRAVEL
2. BRICK 2, DISTRIBUTOR PVR., STD. 424, MOD.; WORKRITE MORTAR, WR2368-CHESTNUT
3. CEMENTITOUS PANEL SYSTEM, COLOR-DEEP OCEAN
4. CEMENTITOUS HORIZONTAL SIDING, COLOR-DEEP OCEAN
5. BALCONY RAILINGS, COLOR - BLACK
6. STOREFRONT SYSTEM
7. SINGLE HUNG WINDOWS
8. FIXED WINDOWS

GRAPHIC SCALE

8' 0 16' 32'
1/16" = 1'-0"

1' 0 1' 2' 4'
1/2" = 1'-0"

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PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
03/18/2025	FINAL SITE PLAN #1

DESCRIPTION	DATE
FINAL SITE PLAN #2	06/27/2025
FINAL SITE PLAN #3	09/03/2025

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1	RESPONSE TO FSP #1	04.30.25			

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FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

BUILDING ELEVATIONS

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING
DIRECTOR DATE
DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES
SITE PLAN No. _____
DIRECTOR DATE
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DATE RECORDED _____
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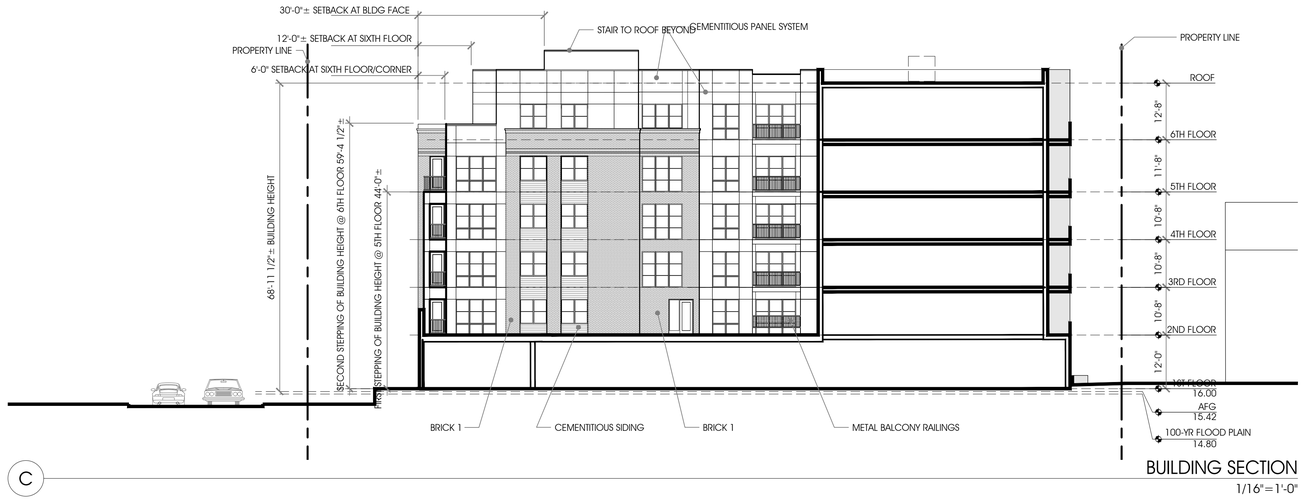
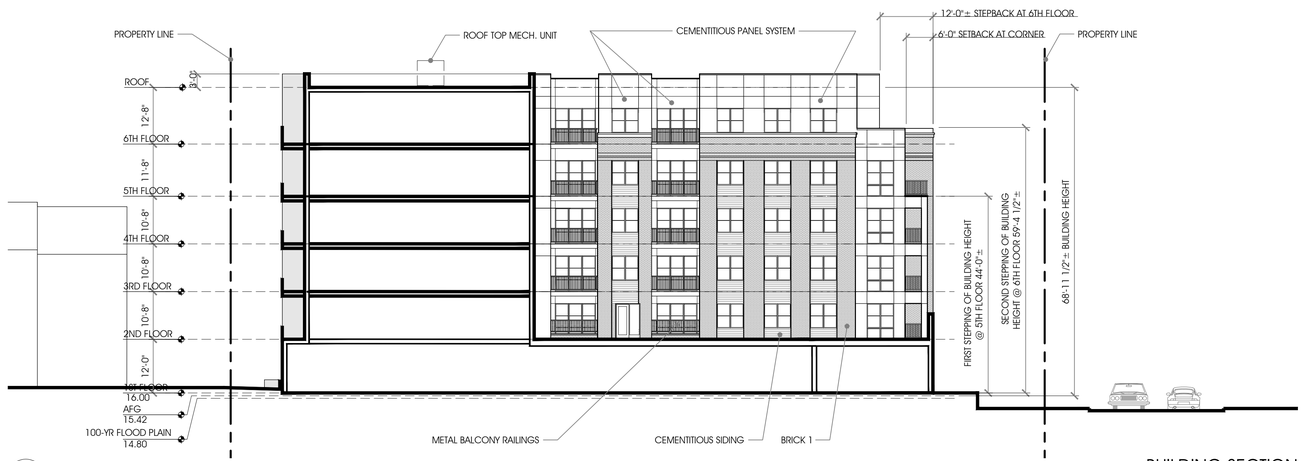


C

BUILDING SECTION

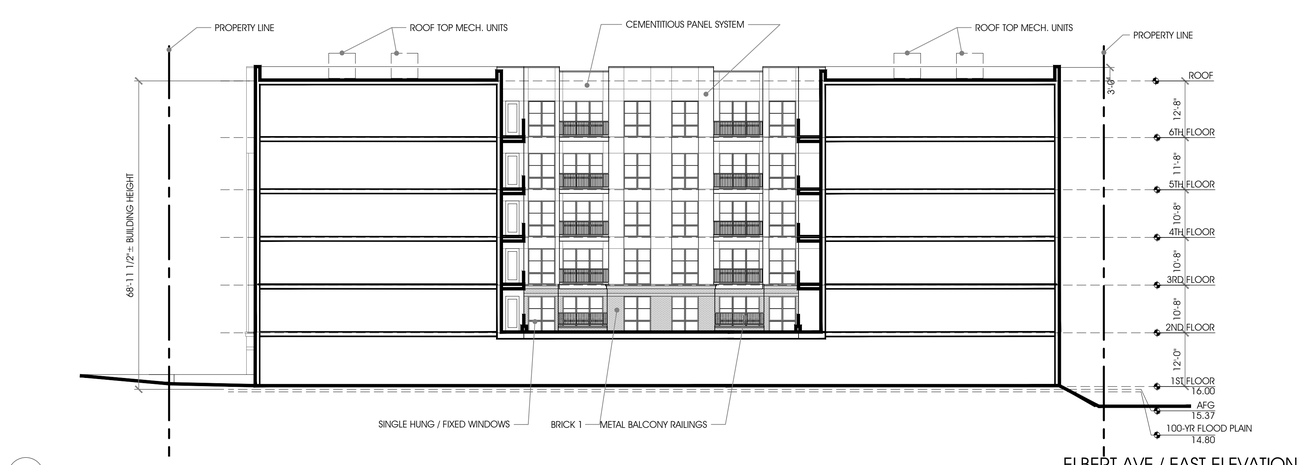
1/16"=1'-0"



B

BUILDING SECTION

1/16"=1'-0"



A

ELBERT AVE / EAST ELEVATION

1/16"=1'-0"

GRAPHIC SCALE

8' 0 16' 32'

1/16"=1'-0"

APPROVED

SPECIAL USE PERMIT NO. 2022-10022

DEPARTMENT OF PLANNING & ZONING

DIRECTOR DATE

DEPARTMENT OF TRANSPORTATION & ENVIRONMENTAL SERVICES

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DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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PLAN STATUS

DATE	DESCRIPTION
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09/03/2025	FINAL SITE PLAN #3

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CLI ELBERT AVENUE RESIDENCES
3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

BUILDING SECTIONS

SHEET: **A202**

C ENLARGED PARTIAL ELEVATION
1/4"=1'-0"

B ENLARGED PARTIAL ELEVATION
1/4"=1'-0"

A ENLARGED PARTIAL ELEVATION
1/4"=1'-0"

ELEVATION KEY

1. BRICK 1, DISTRIBUTOR PVB, STD. 455, MOD. WORKRITE MORTAR, WR2055-GRAVEL
2. BRICK 2, DISTRIBUTOR PVB, STD. 494, MOD. WORKRITE MORTAR, WR2368-CHESTNUT
3. CEMENTITOUS PANEL SYSTEM, COLOR-DEEP OCEAN
4. CEMENTITOUS HORIZONTAL SIDING, COLOR-DEEP OCEAN
5. BALCONY RAILINGS, COLOR - BLACK
6. STOREFRONT SYSTEM
7. SINGLE HUNG WINDOWS
8. FIXED WINDOWS

GRAPHIC SCALE

2' 0 4' 8'
1/4" = 1'-0"

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PLAN STATUS

DATE	DESCRIPTION
03/04/2025	FINAL SITE PLAN #1 (MSR)
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COMMONWEALTH OF VIRGINIA
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3908 ELBERT AVENUE
FINAL SITE PLAN
CITY OF ALEXANDRIA, VIRGINIA

ENLARGED PARTIAL ELEVATION

APPROVED
SPECIAL USE PERMIT NO. 2022-10022
DEPARTMENT OF PLANNING & ZONING

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

DIRECTOR DATE

CHAIRMAN, PLANNING COMMISSION DATE

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SHEET: **A203**