

ISSUE: Permit to Demolish/Capsulate (partial) and Certificate of Appropriateness for alterations

APPLICANT: Curtis Property Management, represented by Jeremy Morrison and Laura Escobar

LOCATION: Old and Historic Alexandria District
115 South Union Street

ZONE: CD/Commercial downtown zone

STAFF RECOMMENDATION

Staff recommends approval of the Permit to Demolish/Capsulate (partial) and Certificate of Appropriateness for alterations with the recommendation that the Board approve Option 1.

Note that the minutes below have not yet been approved as final by the Board:

BOARD ACTION, January 17, 2024: On a motion by Mr. Scott, and seconded by Mr. Lyons, the Board of Architectural Review voted to accept the request for deferral of BAR#2023-00527 and BAR#2023-00528. The motion carried on a vote of 6-0.

REASON

The Board felt that lowering the proposed windows to align with the other windows would lead to necessary changes in design which they would like to review at a later hearing.

SPEAKERS

Laura Escobar, project architect, represented the applicant and was available to answer questions.

DISCUSSION

Mr. Scott asked why the architect didn't replicate the storefront windows on the primary elevation instead of replicating the upper floor windows. Ms. Escobar noted that they were making the proportions correct and adding sufficient lighting.

Mr. Spencer felt that the first-floor windows on the first level of the north elevation should be aligned at the top.

Ms. Zandian agreed with Mr. Spencer regarding the window heights on the north elevation.

Mr. Scott also agreed with that suggestion and felt that the fenestration/pattern of the glass should be altered to better go with the storefront windows on the east elevation. In general he supported the application to add windows.

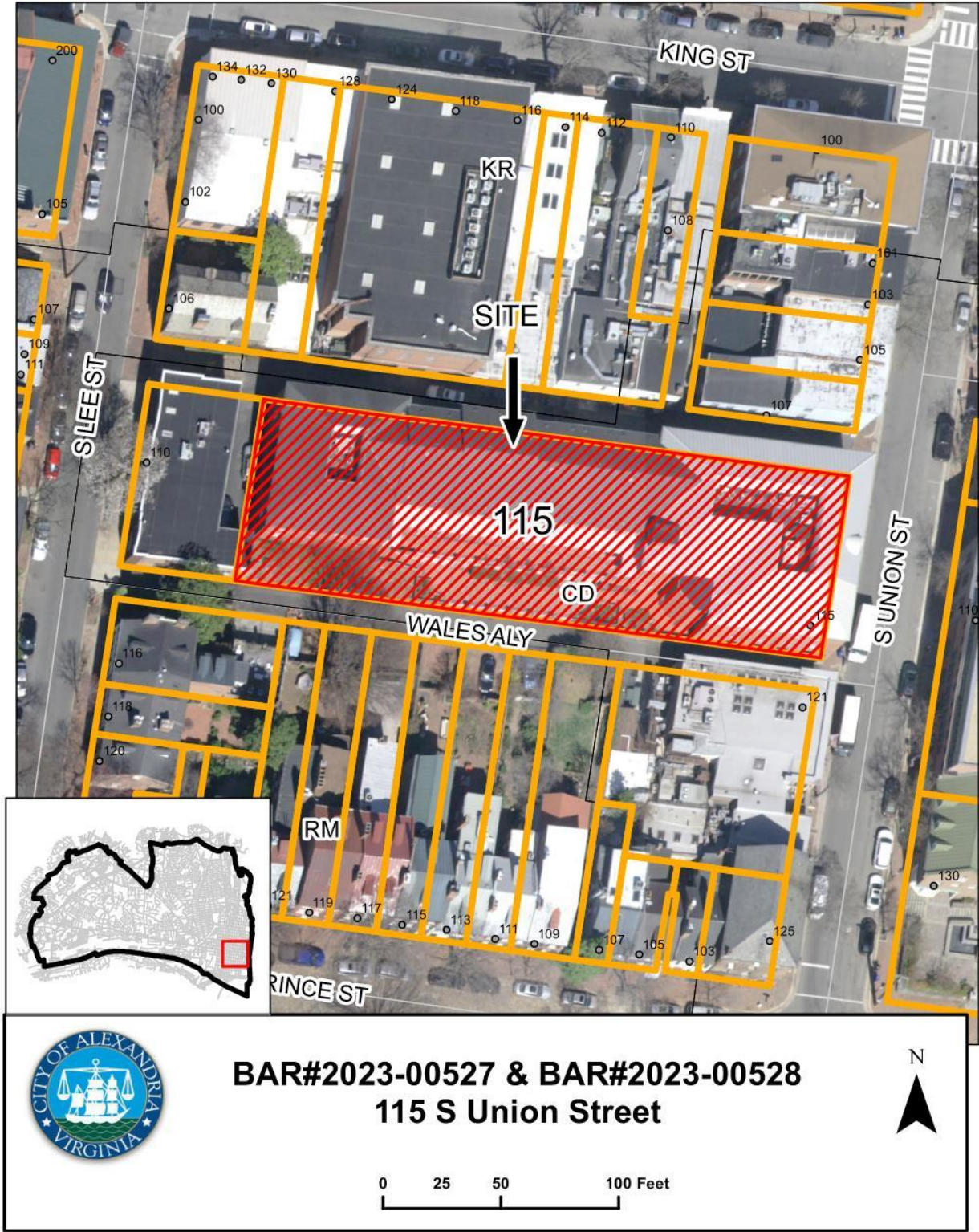
Mr. Adams agreed with the comment about alignment, felt the proposed windows weren't cohesive. He preferred that they match the eight windows above. He suggested a restudy.

Ms. del Ninno agreed that lowering the head would change the window configuration and that it would be a good move to look at the first-floor storefront and tie the first floor together.

Mr. Lyons did not have an issue with the appearance but respected his colleagues' input. He could support the application if the windows were lowered.

GENERAL NOTES TO THE APPLICANT

1. **APPEAL OF DECISION:** In accordance with the Zoning Ordinance, if the Board of Architectural Review denies or approves an application in whole or in part, the applicant or opponent may appeal the Board's decision to City Council on or before 14 days after the decision of the Board.
2. **COMPLIANCE WITH BAR POLICIES:** All materials must comply with the BAR's adopted policies unless otherwise specifically approved.
3. **BUILDING PERMITS:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Department of Code Administration (including signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.
4. **ISSUANCE OF CERTIFICATES OF APPROPRIATENESS AND PERMITS TO DEMOLISH:** Applicants must obtain a copy of the Certificate of Appropriateness or Permit to Demolish PRIOR to applying for a building permit. Contact BAR Staff, Room 2100, City Hall, 703-746-3833, or preservation@alexandriava.gov for further information.
5. **EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B), 10-206(B) and 10-307 of the Zoning Ordinance, any Board of Architectural Review approval will expire 12 months from the date of issuance if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.
6. **HISTORIC PROPERTY TAX CREDITS:** Applicants performing extensive, certified rehabilitations of historic properties may separately be eligible for state and/or federal tax credits. Consult with the Virginia Department of Historic Resources (VDHR) prior to initiating any work to determine whether the proposed project may qualify for such credits.



BAR#2023-00527 & BAR#2023-00528
115 S Union Street

Note: Staff coupled the applications for a Permit to Demolish (BAR #2023-00528) and Certificate of Appropriateness (BAR #2023-00527) for clarity and brevity. The Permit to Demolish requires a roll call vote.

UPDATE

The Board approved adding two windows to this elevation at the July 20, 2022 hearing. That approval expired so the applicant returned on January 17, 2024 for reapproval of the same design. The Board declined to reapprove the resubmission and accepted the applicant's request for deferral.

I. APPLICANT'S PROPOSAL

The applicant requests a Permit to Demolish/Capsulate (partial) and Certificate of Appropriateness to add windows to the north, alley-facing, elevation of 115 South Union Street.

Site context

The alley to the north, adjacent to the elevation where the windows will be installed, is public. The entire elevation is visible from the alley and South Union Street.

II. HISTORY

With a vote of 5-0, the Board of Architectural Review approved working drawings for this three-story brick commercial building on September 2, 1987 (BAR87-154). Documents associated with the site plan, ST86-038, indicate that the building was completed and ready for inspection by January of 1990.

Previous BAR Approvals

BAR2022-00307 & BAR2022-00308, July 20, 2022: Add two windows to the north elevation. Because this 2022 approval expired, the applicant returned to the Board for reapproval of the same windows on January 17, 2024. The Board declined to reapprove them.

BAR2018-00503 & BAR2018-00504, December 19, 2018: Partially demolish and capsulate much of the front/east elevation and small areas on other elevation and construct a small addition on the south elevation. The BAR also approved a waiver of rooftop HVAC screening.

In January of 2020, staff approved a minor amendment to make changes to garage doors and some storefront windows.

See Figure 1 for the building prior to the alterations approved by the Board in 2018.



Figure 1: 115 S. Union prior to 2018 approved alterations

Due to the commercial nature of the building, the BAR has approved numerous sign permits since its 1990 construction.

III. ANALYSIS

Permit to Demolish/Capsulate

In considering a Permit to Demolish/Capsulate, the Board must consider the following criteria set forth in the Zoning Ordinance, §10-105(B), which relate only to the subject property and not to neighboring properties. The Board has purview of the proposed demolition/capsulation regardless of visibility.

Standard	Description of Standard	Standard Met?
(1)	Is the building or structure of such architectural or historical interest that its moving, removing, capsulating or razing would be to the detriment of the public interest?	No
(2)	Is the building or structure of such interest that it could be made into a historic shrine?	No
(3)	Is the building or structure of such old and unusual or uncommon design, texture and material that it could not be reproduced or be reproduced only with great difficulty?	No

(4)	Would retention of the building or structure help preserve the memorial character of the George Washington Memorial Parkway?	N/A
(5)	Would retention of the building or structure help preserve and protect an historic place or area of historic interest in the city?	No
(6)	Would retention of the building or structure promote the general welfare by maintaining and increasing real estate values, generating business, creating new positions, attracting tourists, students, writers, historians, artists and artisans, attracting new residents, encouraging study and interest in American history, stimulating interest and study in architecture and design, educating citizens in American culture and heritage, and making the city a more attractive and desirable place in which to live?	No

The analysis of the standards indicated above relate only to the specific portions of the building proposed for demolition/capsulation, not the overall building. The select portions of the building proposed for demolition are not themselves of unusual or uncommon design and could easily be reproduced. Because the building dates to the late 20th century and has been significantly altered, the proposed demolition/capsulation does not impact any historic material. This commercial building is without individual historic interest and/or uncommon architectural elements. In the opinion of staff, none of the criteria for demolition and capsulation are met and the Permit to Demolish/Capsulate should be granted.

Certificate of Appropriateness

The *Design Guidelines* note that “Windows are a principal character defining feature of a building and serve both functional and aesthetic purposes.” As noted above, this is not an historic building and it has been significantly altered. The primary concern of the Board should therefore be whether or not these proposed windows are appropriate to the building and its surroundings. See Figures 2 – 5 for the existing north elevation, the previously approved north elevation, and the current options 1 and 2.

Staff finds that while both options are appropriate and comply with the *Design Guidelines*, Option 1 better suits the building overall. It will provide more light to the interior spaces and will harmonize better with the horizontal nature of the storefront windows on the primary/east elevation, which the Board specifically requested at the January 17 hearing. Staff finds Option 2 to be too repetitive and monotonous and without any relation to the primary/east elevation. Option 2 therefore does not tie the elevations together, resulting in the lack of a cohesive design. The very visible nature of the two elevations confers a need for some level of correlation between the two, which Option 1 best provides.



Figure 2: Existing



Figure 3: Previously approved



Figure 4: Option 1



Figure 5: Option 2

With the recommendation that the Board select Option1, staff recommends approval of the project.

STAFF

Susan Hellman, Historic Preservation Planner, Planning & Zoning
Tony LaColla, AICP, Land Use Services Division Chief, Planning & Zoning

III. CITY DEPARTMENT COMMENTS

Legend: C- code requirement R- recommendation S- suggestion F- finding

Zoning

C-1 Proposed removal of windows and window replacement will comply with zoning.

Code Administration

C-1 Window openings shall comply with VCC 705.8. A building permit is required for review.

Transportation and Environmental Services

- R-1 The building permit must be approved and issued prior to the issuance of any permit for demolition, if a separate demolition permit is required. (T&ES)
- R-2 Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R-3 No permanent structure may be constructed over any existing private and/or public utility easements. It is the responsibility of the applicant to identify any and all existing easements on the plan. (T&ES)
- F-1 After review of the information provided, an approved grading plan is not required at this time. Please note that if any changes are made to the plan it is suggested that T&ES be included in the review. (T&ES)
- F-2 If the alley located at the rear of the parcel is to be used at any point of the construction process the following will be required:
For a Public Alley - The applicant shall contact T&ES, Construction Permitting & Inspections at (703) 746-4035 to discuss any permits and accommodation requirements that will be required.
For a Private Alley - The applicant must provide proof, in the form of an affidavit at a minimum, from owner of the alley granting permission of use. (T&ES)
- C-1 The applicant shall comply with the City of Alexandria's Solid Waste Control, Title 5, Chapter 1, which sets forth the requirements for the recycling of materials (Sec. 5-1-99). (T&ES)
- C-2 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C-3 Roof, surface and sub-surface drains be connected to the public storm sewer system, if available, by continuous underground pipe. Where storm sewer is not available applicant must provide a design to mitigate impact of stormwater drainage onto adjacent properties and to the satisfaction of the Director of Transportation & Environmental Services. (Sec.5-6-224) (T&ES)
- C-4 All secondary utilities serving this site shall be placed underground. (Sec. 5-3-3) (T&ES)
- C-5 Any work within the right-of-way requires a separate permit from T&ES. (Sec. 5-2) (T&ES)
- C-6 All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (Sec. 5-2-1) (T&ES)

Alexandria Archaeology

- F-1 No archaeological oversight is required for this project.

V. **ATTACHMENTS**

1 – Application Materials

2 – Supplemental Materials

BAR CASE# _____
(OFFICE USE ONLY)

ADDRESS OF PROJECT: _____

DISTRICT: Old & Historic Alexandria Parker – Gray 100 Year Old Building

TAX MAP AND PARCEL: _____ **ZONING:** _____

APPLICATION FOR: *(Please check all that apply)*

- CERTIFICATE OF APPROPRIATENESS
- PERMIT TO MOVE, REMOVE, ENCAPSULATE OR DEMOLISH
(Required if more than 25 square feet of a structure is to be demolished/impacted)
- WAIVER OF VISION CLEARANCE REQUIREMENT and/or YARD REQUIREMENTS IN A VISION CLEARANCE AREA *(Section 7-802, Alexandria 1992 Zoning Ordinance)*
- WAIVER OF ROOFTOP HVAC SCREENING REQUIREMENT
(Section 6-403(B)(3), Alexandria 1992 Zoning Ordinance)

Applicant: Property Owner Business *(Please provide business name & contact person)*

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ E-mail: _____

Authorized Agent *(if applicable):* Attorney Architect _____

Name: _____ Phone: _____

E-mail: _____

Legal Property Owner:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ E-mail: _____

NATURE OF PROPOSED WORK: *Please check all that apply*

- NEW CONSTRUCTION
- EXTERIOR ALTERATION: *Please check all that apply.*
 - awning fence, gate or garden wall HVAC equipment shutters
 - doors windows siding shed
 - lighting pergola/trellis painting unpainted masonry
 - other _____
- ADDITION
- DEMOLITION/ENCAPSULATION
- SIGNAGE

DESCRIPTION OF PROPOSED WORK: *Please describe the proposed work in detail (Additional pages may be attached).*

SUBMITTAL REQUIREMENTS:

Check this box if there is a homeowner’s association for this property. If so, you must attach a copy of the letter approving the project.

Items listed below comprise the **minimum supporting materials** for BAR applications. Staff may request additional information during application review. Please refer to the relevant section of the *Design Guidelines* for further information on appropriate treatments.

Applicants must use the checklist below to ensure the application is complete. Include all information and material that are necessary to thoroughly describe the project. Incomplete applications will delay the docketing of the application for review. Pre-application meetings are required for all proposed additions. All applicants are encouraged to meet with staff prior to submission of a completed application.

Demolition/Encapsulation : *All applicants requesting 25 square feet or more of demolition/encapsulation must complete this section. Check N/A if an item in this section does not apply to your project.*

- N/A
- Survey plat showing the extent of the proposed demolition/encapsulation.
- Existing elevation drawings clearly showing all elements proposed for demolition/encapsulation.
- Clear and labeled photographs of all elevations of the building if the entire structure is proposed to be demolished.
- Description of the reason for demolition/encapsulation.
- Description of the alternatives to demolition/encapsulation and why such alternatives are not considered feasible.

Additions & New Construction: Drawings must be to scale and should not exceed 11" x 17" unless approved by staff. Check N/A if an item in this section does not apply to your project.

- ^{N/A} Scaled survey plat showing dimensions of lot and location of existing building and other structures on the lot, location of proposed structure or addition, dimensions of existing structure(s), proposed addition or new construction, and all exterior, ground and roof mounted equipment.
- FAR & Open Space calculation form.
- Clear and labeled photographs of the site, surrounding properties and existing structures, if applicable.
- Existing elevations must be scaled and include dimensions.
- Proposed elevations must be scaled and include dimensions. Include the relationship to adjacent structures in plan and elevations.
- Materials and colors to be used must be specified and delineated on the drawings. Actual samples may be provided or required.
- Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- For development site plan projects, a model showing mass relationships to adjacent properties and structures.

Signs & Awnings: One sign per building under one square foot does not require BAR approval unless illuminated. All other signs including window signs require BAR approval. Check N/A if an item in this section does not apply to your project.

- ^{N/A} Linear feet of building: Front: _____ Secondary front (if corner lot): _____.
- Square feet of existing signs to remain: _____.
- Photograph of building showing existing conditions.
- Dimensioned drawings of proposed sign identifying materials, color, lettering style and text.
- Location of sign (show exact location on building including the height above sidewalk).
- Means of attachment (drawing or manufacturer's cut sheet of bracket if applicable).
- Description of lighting (if applicable). Include manufacturer's cut sheet for any new lighting fixtures and information detailing how it will be attached to the building's facade.

Alterations: Check N/A if an item in this section does not apply to your project.

- ^{N/A} Clear and labeled photographs of the site, especially the area being impacted by the alterations, all sides of the building and any pertinent details.
- Manufacturer's specifications for materials to include, but not limited to: roofing, siding, windows, doors, lighting, fencing, HVAC equipment and walls.
- Drawings accurately representing the changes to the proposed structure, including materials and overall dimensions. Drawings must be to scale.
- An official survey plat showing the proposed locations of HVAC units, fences, and sheds.
- Historic elevations or photographs should accompany any request to return a structure to an earlier appearance.

ALL APPLICATIONS: *Please read and check that you have read and understand the following items:*

- I understand that after reviewing the proposed alterations, BAR staff will invoice the appropriate filing fee in APEX. The application will not be processed until the fee is paid online.
- I understand the notice requirements and will return a copy of the three respective notice forms to BAR staff at least five days prior to the hearing. If I am unsure to whom I should send notice I will contact Planning and Zoning staff for assistance in identifying adjacent parcels.
- I, the applicant, or an authorized representative will be present at the public hearing.
- I understand that any revisions to this initial application submission (including applications deferred for restudy) must be accompanied by the BAR Supplemental form and revised materials.

The undersigned hereby attests that all of the information herein provided including the site plan, building elevations, prospective drawings of the project, and written descriptive information are true, correct and accurate. The undersigned further understands that, should such information be found incorrect, any action taken by the Board based on such information may be invalidated. The undersigned also hereby grants the City of Alexandria permission to post placard notice as required by Article XI, Division A, Section 11-301(B) of the 1992 Alexandria City Zoning Ordinance, on the property which is the subject of this application. The undersigned also hereby authorizes the City staff and members of the BAR to inspect this site as necessary in the course of research and evaluating the application. The applicant, if other than the property owner, also attests that he/she has obtained permission from the property owner to make this application.

APPLICANT OR AUTHORIZED AGENT:

Signature:  _____

Printed Name: _____

Date: _____

OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1.		
2.		
3.		

2. Property. State the name, address and percent of ownership of any person or entity owning an interest in the property located at _____ (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1.		
2.		
3.		

3. Business or Financial Relationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose **any** business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the 12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1.		
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest to the best of my ability that the information provided above is true and correct.

Date Printed Name Signature

Proposed Window Changes

115 S. Union St, Alexandria, VA 22314

12/12/2023



EXISTING

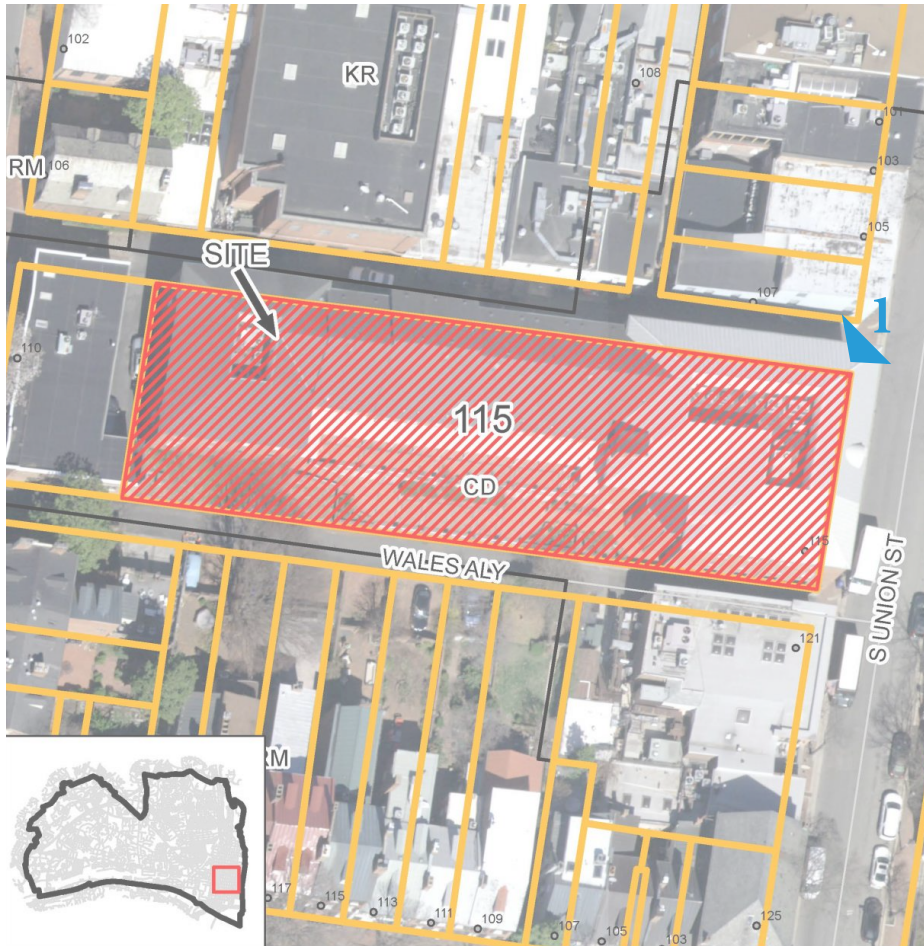


PROPOSED WINDOW CHANGES

Existing Conditions

115 S. Union St, Alexandria, VA 22314

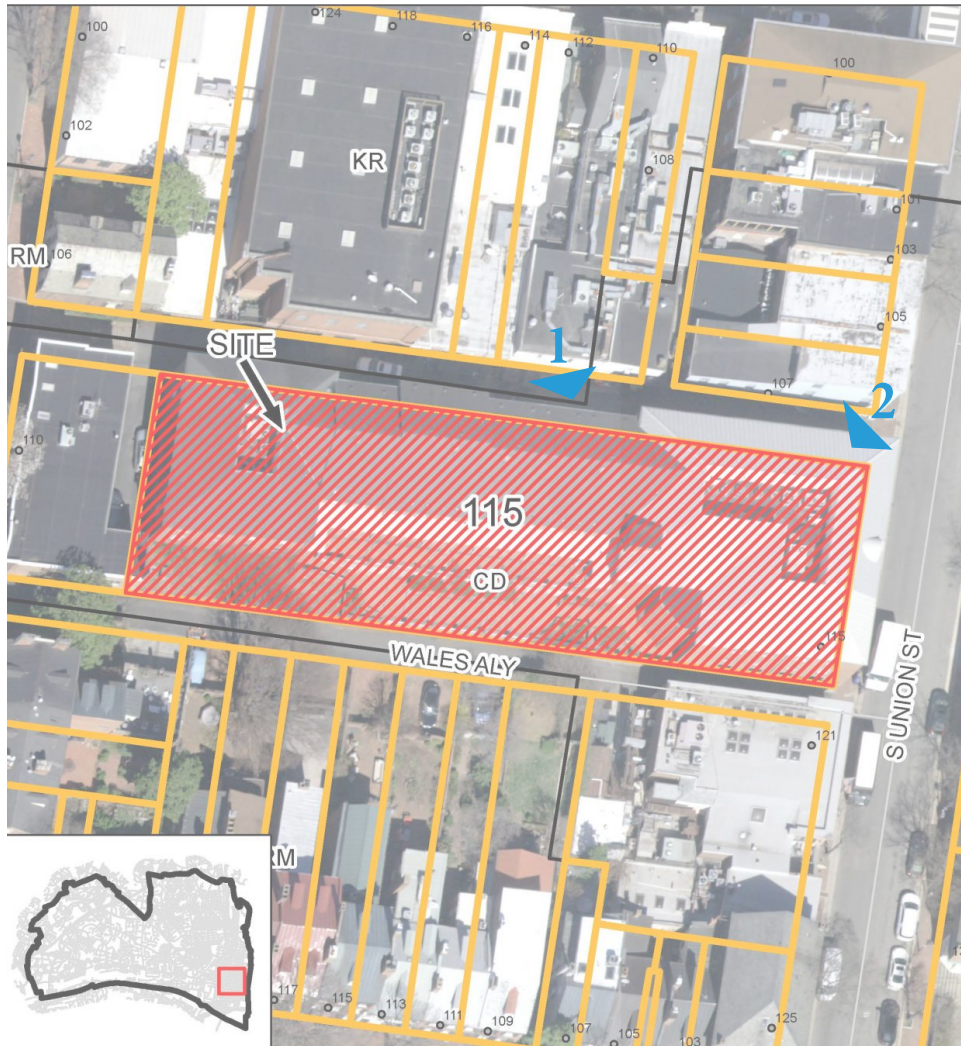
12/12/2023



Existing Conditions

115 S. Union St, Alexandria, VA 22314

12/12/2023



Proposed Window Changes

115 S. Union St, Alexandria, VA 22314

12/12/2023



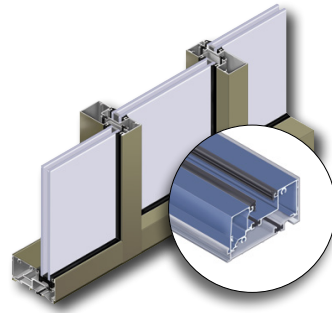
EXISTING



PROPOSED WINDOW CHANGES

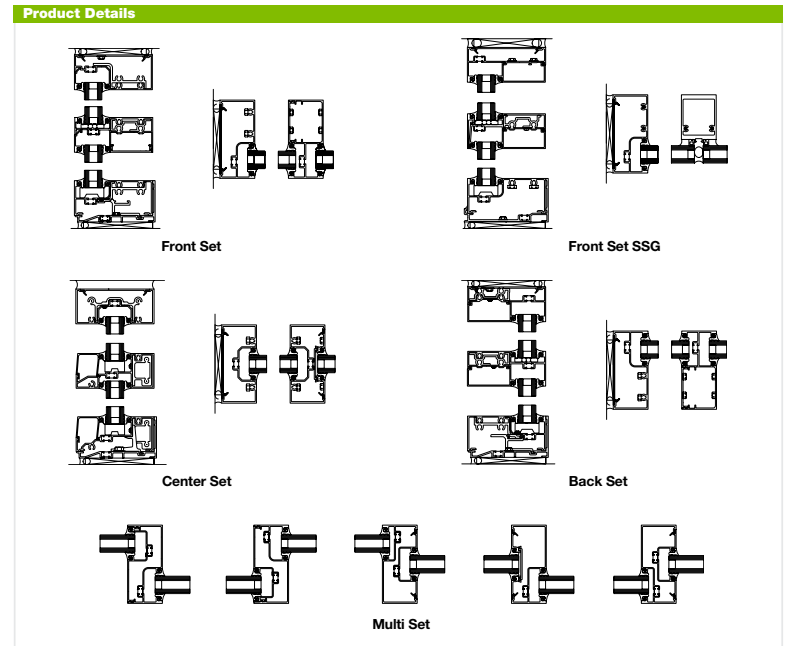
Series 3000 Thermal Multiplane—
the versatility of standard storefront systems
with improved thermal performance

The Series 3000 Thermal Multiplane extends the versatility of standard storefront systems by offering **improved thermal performance** and multiple glass plane options. The Series 3000 Thermal Multiplane provides more options for head and sill anchorage, **structural silicone glazing** and a front set installation option utilizing continuous head and sill members. Designed for 1" infill, the Series 3000 Thermal Multiplane has available glazing adapters and gasket options for infills ranging from 1/4" to 1-1/8".



SERIES 3000 THERMAL MULTIPLANE

SERIES 3000 THERMAL MULTIPLANE



First Community Credit Union, St. Louis, MO
Architect: TRJ Architects

Features

- Overall system dimensions: 2" x 4-1/2"
- Front Set, Center Set, Back Set or Multi Set glazing configurations
- Optional sill receptor requires no additional anchoring of sill member
- Optional thermally broken head anchor clip
- SSG glazing with patented funnel bridge option for Front Set
- Continuous head and sill assembly option for Front Set
- Screw spline and shear block assembly
- Outside and inside glazing options Complete
- 90° and 135° corners
- High sidelite base
- Thermally broken members with polyurethane thermal breaks
- Accommodates projected and casement vents
- Factory painted Kynar 500®/Hylar 5000® finishes, meeting all provisions of AAMA 2605
- Factory anodized finishing

Performance

- Air Infiltration: <.06 CFM/SQ FT @ 6.24 PSF per ASTM E283
- Static Water: 10 PSF per ASTM E331
- Deflection Load: 40 PSF per ASTM E330
- Structural Load: 60 PSF per ASTM E330
- STC per ASTM E90:
32 with clear glass (Center and Front Set)
37 with laminated glass (Center Set)
38 with laminated glass (Front Set)
- OITC per ASTM E90:
26 with clear glass (Center and Front Set)
30 with laminated glass (Center and Front Set)
- Thermal Performance per AAMA 1503 for Low-E 1" insulating glass:
U-factor = 0.33, CRF = 68 Captured (Front Set)
U-factor = 0.31, CRF = 72 Captured (Front Set SSG)
U-factor = 0.32, CRF = 63 Captured (Center Set)
- NFRC Certified and Thermal Performance Characteristics per AAMA 507

SystemSelect™ **Glass Product Builder**
Performance Datasheet

SystemSelect™ **Glass Product Builder**
Performance Datasheet

Designed by/for: Date: 6/2/2022

Sealed Insulating Glass (IG)
Vision Glass (Vertical)

ARCHITECTURAL GUIDE SPECIFICATION
SECTION 088000 GLAZING

Note to Specifiers:
The specifications below are suggested as desirable inclusions in glass and glazing specifications (section 088000), but are not intended to be complete. An appropriate and qualified Architect or Engineer must verify suitability of a particular product for use in a particular application as well as review final specifications. Oldcastle BuildingEnvelope® assumes no responsibility or liability for the information included or not included in these specifications.

- IG units consist of glass lites separated by a dehydrated airspace that is hermetically dual sealed with a primary seal of polyisobutylene (PIB) or Thermoplastic Spacer (TPS) and a secondary seal of silicone or an organic sealant depending on the application.
- USA - Insulating glass units are certified through the Insulating Glass Certification Council (IGCC) to ASTM E2190. Canada - Insulating Glass units are certified through the Insulating Glass Manufacturers Alliance (IGMA) to either the IGMAC certification program to CAN/CGSB-12.8, or through the IGMA program to ASTM E2190.

APPROVED GLASS FABRICATOR **Oldcastle BuildingEnvelope®**

IG VISION UNIT PERFORMANCE CHARACTERISTICS

GLAZING PRODUCTS

- Exterior Lite: 6mm (1/4") Pilkington Clear
- Cavity: 1/2" (Air Fill)
- Interior Lite: 6mm (1/4") Pilkington Energy Advantage™ on Clear Low-E #3
- Performance Characteristics

Glass Standards

- USA - Annealed float glass shall comply with ASTM C1036, Type I, Class 1 (clear), Class 2 (tinted), Quality-Q3. Canada - Annealed float glass shall comply with CAN/CGSB-12.3-M, Quality-Glazing.
- USA - Heat-strengthened float glass shall comply with ASTM C1048, Type I, Class 1 (clear), Class 2 (tinted), Quality Q3, Kind HS. Canada - Heat-strengthened float glass shall comply with CAN/CGSB-12.9-M, Type 2-Heat-Strengthened Glass, Class A-Float Glass.
- USA - Tempered float glass shall comply with ASTM C1048, Type I, Class 1 (clear), Class 2 (tinted), Quality Q3, Kind FT. Canada - Tempered float glass shall comply with CAN/CGSB-12.1M, Type 2-Tempered Glass, Class B-Float Glass.
- USA - Laminated glass to comply with ASTM C1172. Canada - Laminated glass to comply with CAN/CGSB-12.1-M, Type 1-Laminated glass, Class B-Float Glass.
- USA & Canada - Glass shall be annealed, heat-strengthened or tempered as required by codes, or as required to meet thermal stress and wind loads.

Thermal		Optical	
Winter U-factor (Btu/h-ft ² -F):	0.33	Visible Light Transmittance:	73%
Winter U-factor (W/m ² -K):	1.88	Visible Light Reflectance (outside):	17%
Solar Heat Gain Coefficient:	0.67	Visible Light Reflectance (inside):	16%
Shading Coefficient:	0.77	Total Solar Transmittance:	52%
Light to Solar Gain:	1.09	Total Solar Reflectance (outside):	14%
		Ultraviolet Transmittance:	37%

www.obe.com/systemselect



Contact Oldcastle BuildingEnvelope® at 866-OLDCASTLE (653-2278) for samples or additional information. SystemSelect® calculates center of glass data using the Lawrence Berkeley National Laboratory (LBNL) Berkeley Lab WINDOW Calc Engine (CalcEngine) with thermal performance per NFRC 100, 200 & 500. Glass data is from following sources: 1. LBNL International Glazing Database (IGDB) v70.0; 2. Vendor supplied data; 3. LBNL Optics 6; 4. Based on vendor testing, clear acid-etched glass performance data is estimated using regular clear glass of equivalent thickness. Framing system values and glass spacer values determined per LBNL THERM 7.4. Thermal values are in both Imperial (IP) and Metric (SI) units.

www.obe.com/systemselect



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