

Docket Item # 6 & 7  
BAR CASE # 2009-0309 & BAR  
CASE # 2010-0002

BAR Meeting  
January 20, 2010

**ISSUE:** Addition, Alterations and Waiver of Rooftop HVAC Screening Requirement

**APPLICANT:** Harry & Maria Hopper by Scot McBroom for Robert Adams & Associates

**LOCATION:** 206 Duke Street

**ZONE:** RM/Residential

---

**STAFF RECOMMENDATION:** Staff recommends approval of the application with the following conditions:

1. That the synthetic trim be solid-through-the-core and paintable;
2. That the applicant meet the five foot side yard setback on the east property line for the proposed HVAC condenser unit or obtain a waiver of this requirement from the adjacent property owner at 202 Duke Street; and
3. That the following statements shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including Basement/Foundation Plans, Demolition, Erosion and Sediment Control, Grading, Landscaping, Utilities, and Sheeting and Shoring) so that on-site contractors are aware of the requirements:
  - A. The applicant/developer shall call Alexandria Archaeology (703/838-4399) two weeks before the starting date of any ground disturbance so that a monitoring and inspection schedule for city archaeologists can be arranged.
  - B. The applicant/developer shall call Alexandria Archaeology immediately (703-838-4399) 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.
  - C. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology.

**\*\*EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official 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.

**\*\*BUILDING PERMIT NOTE:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire 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, 703-838-4360 for further information.



**Note:** The Permit to Demolish/Encapsulate, BAR Case #2009-0308, must be approved before this item may be considered.

**I. ISSUE:**

The applicant is requesting approval of a Certificate of Appropriateness for a rear addition and tool shed at 206 Duke Street.

The proposed addition will have a two story component and a one story infill component. The two-story portion will project off of the east elevation of the ell and will measure 14 feet wide by 7 feet long and will have a height of 20 feet 4 inches. The east elevation will contain three multi-light windows on both the first and second floors, separated by pilasters. There will be a trim panel under each window. On the south elevation there will be two multi-light windows on the second floor. There will be a panel below the easternmost window; while below the other window there will be a paneled enclosure to screen the rooftop HVAC unit on the roof of the one story portion of the addition. The north elevation of the addition will contain two multi-light windows on each story, with a larger single panel below each window. The applicant has specified that the trim on the addition, including the pilasters and the trim panels, will be constructed of either Azek or wood. The low sloped roof of the addition will be clad with standing seam copper.

The one story portion of the addition will be created by infilling the space between the existing ell and the garage. This portion of the addition will contain the stairs down to the basement. The addition will measure approximately 4 feet wide by 16 feet deep, and contain a single multi-light window on the east elevation. The front half of the roof of the infill addition will be standing seam copper. The back half of the roof will have a "lean-to" style skylight. The skylight will have glazing and a copper colored metal frame and muntins. The east elevation of the addition will be clad with brick reused from the demolition of the east and south wall of the ell and garage.

Together the addition will provide approximately 251 gross square feet of additional living space in the house and take an additional 4% of the existing open space in the rear yard (from 55% to 51%).

The crawlspace under the ell will be dug out so that the basement can be used as living space. Five below grade windows will be added at the basement level to provide light and egress into the two proposed areaways. A "bridge" will be provided over one of the two areaways to provide continued access to the side door of the rear ell. The basement windows and areaways will be below grade and not visible from the right-of-way.

The proposed casement style windows on the addition will be custom manufactured by Amdega Conservatory Windows to match the windows on the existing one story kitchen addition constructed in 1998. The wood windows will be double-insulated with simulated divided lights and muntins measuring approximately 7/8 inches. The windows will be painted green.

The proposed one story brick tool shed will be located on the parking pad at the rear of the property, in the location of one of the existing HVAC condensers. The shed will measure

approximately 7 feet 4 inches feet by 6 feet and have a height of 7 feet. The shed roof structure will be constructed of brick to match the adjacent garden wall and will have a painted tongue-and-groove wood door and wood trim. The roof of the tool shed will be constructed of standing seam copper.

Iron bollards will be added adjacent to the corners of both the garage and tool shed to protect the structures from being accidentally hit by vehicles.

The applicant has also requested a Waiver of the Rooftop HVAC Screening Requirement for two additional HVAC units on the roof of the two story ell. The new units will be placed adjacent to the existing roof mounted condenser.

## **II. HISTORY:**

According to *Historic Alexandria, Virginia, Street by Street, A Survey of Early Historic Buildings* by Ethelyn Cox, the Greek Revival house at 206 Duke Street was probably built around 1850. It replaced a frame house built around 1794 by George Coryell. Staff believes that the 1794 house was never completely destroyed by fire and portions of the frame house were incorporated into the 1850 construction. The mass of the rear ell was constructed prior to 1885 because its basic form, including the offset footprint from the main historic block of the house, is evident on the 1885 Sanborn Fire Insurance Map of that date. By 1903, the rear ell assumed the form that is visible today as is evident from a building permit issued for the work (Building Permit #48, August 31, 1903, City of Alexandria, Code Administration files). The door with a transom on the east elevation of the ell was added in 1943 (Building Permit #5317, August 31, 1943, Code Administration files). The existing garage has a similar history to the rear ell. It is first shown on the 1907 Sanborn Fire Insurance Map, although with a front projection or overhang. The overhang is no longer present on the 1958 Sanborn Fire Insurance Map.

The house at 206 Duke Street has a lengthy history in front of the BAR. In 1998, after three deferrals, the Board ultimately denied the demolition of a portion of the east elevation of the main block of the house for the construction of a one story addition. That decision was appealed to City Council, which approved the one story addition on June 16, 1998 (BAR Case #1998-0015& 0016). Also in 1998, the BAR approved a new gas lantern on the front façade (BAR Case #1998-0101). On November 5, 2003, the BAR approved the enclosure of the rear porch on the 1998 one story addition (BAR Case #2003-0249).

The alley behind the house is private.

## **III. ANALYSIS:**

The proposed addition, alterations and storage shed, as well as the rooftop HVAC condenser units comply with the RM requirements of the Zoning Ordinance if the proposed HVAC condenser unit on the east property line is set back five feet or if the applicant obtains a waiver from the adjacent property owner at 202 Duke Street.

In the opinion of Staff, the design of the addition, particularly the conservatory-like style of the addition, is compatible with the Greek Revival townhouse at 210 North Alfred Street, as

recommended in the *Design Guidelines* for residential additions. The addition is relatively small in size and does not overwhelm the existing house or adjacent properties.

Although the *Design Guidelines* state that “The predominant building materials for residential buildings in the historic districts are wood and brick. The choice of building materials for residential additions should reflect these traditional materials”, the Board has typically approved the use of synthetic materials on new additions. The submission materials indicate that either Azek synthetic trim or wood will be used; however, the applicant has expressed a preference to use Azek trim due to its durability. While Staff would not recommend the use of synthetic trim on a historic building, Staff does not object to the use of Azek on those portions of the new addition. The addition is also sufficiently set back so that Staff does not believe that synthetic material would be decipherable. However, Staff does recommend that the synthetic trim be solid-through-the-core and paintable.

While single-glazed, true-divided-light wood windows are preferable, the *Design Guidelines* and the Board generally allow for double-insulated, simulated divided light wood windows and doors on new construction or in areas with limited visibility, both of which apply in this case.

Staff notes the conditions of Alexandria Archaeology and recommends that they be included as a condition of approval.

**IV. STAFF RECOMMENDATION:** Staff recommends approval of the application with the following conditions:

1. That the synthetic trim be solid-through-the-core and paintable;
2. That the applicant meet the five foot side yard setback on the east property line for the proposed HVAC condenser unit or obtain a waiver of this requirement from the adjacent property owner at 202 Duke Street; and
3. That the following statements shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including Basement/Foundation Plans, Demolition, Erosion and Sediment Control, Grading, Landscaping, Utilities, and Sheeting and Shoring) so that on-site contractors are aware of the requirements:
  - A. The applicant/developer shall call Alexandria Archaeology (703/838-4399) two weeks before the starting date of any ground disturbance so that a monitoring and inspection schedule for city archaeologists can be arranged.
  - B. The applicant/developer shall call Alexandria Archaeology immediately (703-838-4399) 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.
  - C. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology.

**BAR CASE #2009-0309 &  
BAR CASE #2010-0002  
January 20, 2010**

## **V. CITY DEPARTMENT COMMENTS**

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

### Code Administration:

- C-1 All exterior walls within 5 feet from an interior property line shall have a fire resistance rating of 1 hour, from both sides of the wall. As alternative, a 2 hour fire wall may be provided. This condition is also applicable to skylights within setback distance. Openings in exterior walls between 3 and 5 feet shall not exceed 25% of the area of the entire wall surface (This shall include bay windows). Openings shall not be permitted in exterior walls within 3 feet of an interior lot line.
- C-2 Prior to the issuance of a demolition permit or land disturbance permit, a rodent abatement plan shall be submitted to Code Enforcement that will outline the steps that will taken to prevent the spread of rodents from the construction site to the surrounding community and sewers.
- C-3 Roof drainage systems must be installed so as neither to impact upon, nor cause erosion/damage to adjacent property.
- C-4 A soils report must be submitted with the building permit application.
- C-5 Additions and Alterations to the existing structure must comply with the 2006 edition of the Uniform Statewide Building Code (USBC).
- C-6 Additions and Alterations to the existing structure and/or installation and/or altering of equipment therein requires a building permit. Five sets of plans, bearing the signature and seal of a design professional registered in the Commonwealth of Virginia, must accompany the written application. The plans must include all dimensions, construction alterations details, kitchen equipment, electrical, plumbing, and mechanical layouts and schematics.
- C-7 Construction permits are required for this project. Plans shall accompany the permit application that fully details the construction as well as layouts and schematics of the mechanical, electrical, and plumbing systems.
- C-8 Permission from adjacent property owners is required if access to the adjacent properties is required to complete the proposed construction. Otherwise, a plan shall be submitted to demonstrate the construction techniques utilized to keep construction solely on the referenced property.
- C-9 A wall location plat prepared by a land surveyor is required to be submitted to this office prior to requesting any framing inspection.
- C-10 Emergency escape and rescue openings shall comply with section R310 of the 2006 edition of the Uniform Statewide building code (USBC).



Transportation and Environmental Services:

- R1. The building permit plans shall comply with requirements of City Code Section 8-1-22 regarding the location of downspouts, foundation drains and sump pumps. Refer to Memorandum to Industry dated June 18, 2004. [Memorandum is available online at the City web site under Transportation\Engineering and Design\Memos to Industry.]. (T&ES)
- R2. Applicant shall be responsible for repairs to the adjacent city right-of-way if damaged during construction activity. (T&ES)
- R3. All improvements to the city right-of-way such as curbing, sidewalk, driveway aprons, etc. must be city standard design. (T&ES)
- R4. 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)
- R5. An erosion and sediment control plan must be approved by T&ES prior to any land disturbing activity greater than 2,500 square feet. (T&ES)
- R6. Compliance with the provisions of Article XIII of the City's zoning ordinance for stormwater quality control is required for any land disturbing activity greater than 2,500 square feet. (T&ES)
- F1. An approved grading plan may be required at the time of building permit application. Insufficient information has been provided to make that determination at this time. In summary, City Code Section 8-1-22(d) requires that a grading plan be submitted to and approved by T&ES prior to the issuance of building permits for improvements involving:
- the construction of a new home;
  - construction of an addition to an existing home where either
    - the addition exceeds the area of the existing building footprint by 100% or more;
    - or, the construction of the addition results in less than 50% of the existing first floor exterior walls, in their entirety, remaining;
  - changes to existing grade elevation of 1-foot or greater;
  - changes to existing drainage patterns;
  - land disturbance of 2,500 square feet or greater.
- Questions regarding the processing of grading plans should be directed to the T&ES Site Plan Coordinator at (703) 838-4318. Memorandum to Industry No. 02-08 was issued on April 28, 2008 and can be viewed online via the following link.  
**<http://alexandriava.gov/uploadedFiles/tes/info/gradingPlanRequirements.pdf>**

Historic Alexandria:

No comments received.

Alexandria Archaeology:

- F-1. According to *Historic Alexandria, Virginia, Street by Street, A survey of Existing Early Buildings* by Ethelyn Cox, the existing structure on this lot was probably built around 1850. It replaced a frame house built around 1794 by George Coryell. The property therefore has the potential to yield archaeological resources that could provide insight into residential life in Alexandria during the late 18<sup>th</sup> and 19<sup>th</sup> centuries.
- \*R-1. The applicant/developer shall call Alexandria Archaeology (703/838-4399) two weeks before the starting date of any ground disturbance so that a monitoring and inspection schedule for city archaeologists can be arranged.
- \*R-2. The applicant/developer shall call Alexandria Archaeology immediately (703-838-4399) 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.
- \*R-3. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology.
- R-4. The statements in archaeology conditions above marked with an asterisk "\*" shall appear in the General Notes of all site plans and on all site plan sheets that involve demolition or ground disturbance (including Basement/Foundation Plans, Demolition, Erosion and Sediment Control, Grading, Landscaping, Utilities, and Sheeting and Shoring) so that on-site contractors are aware of the requirements.

VI. IMAGES

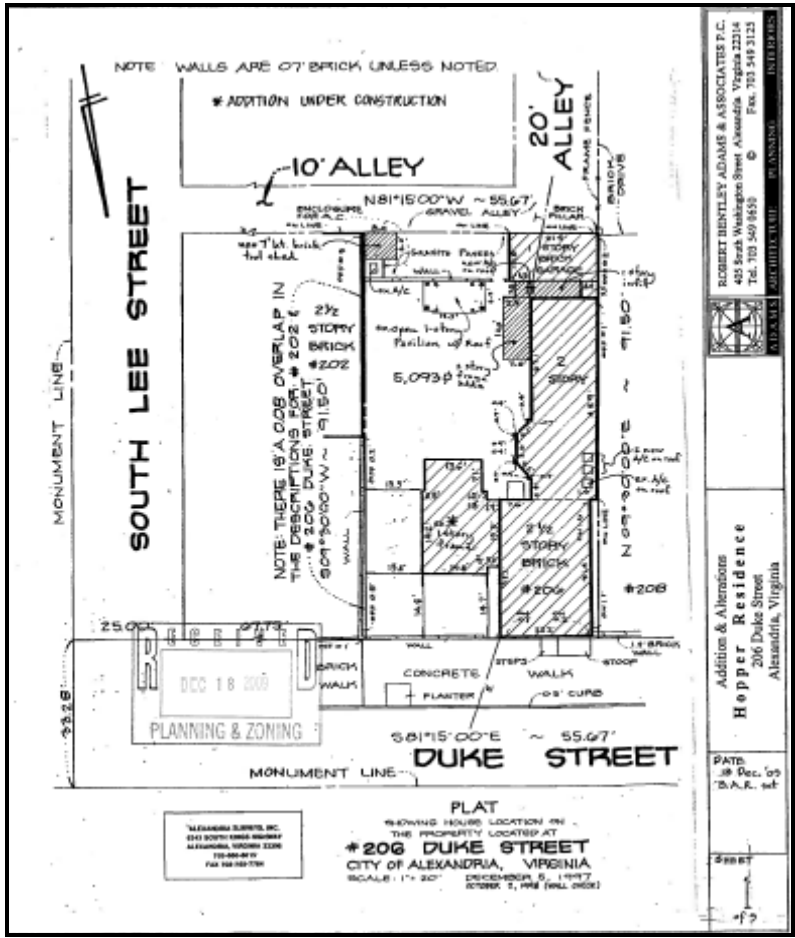


Figure 1. Plat showing proposed addition and shed.

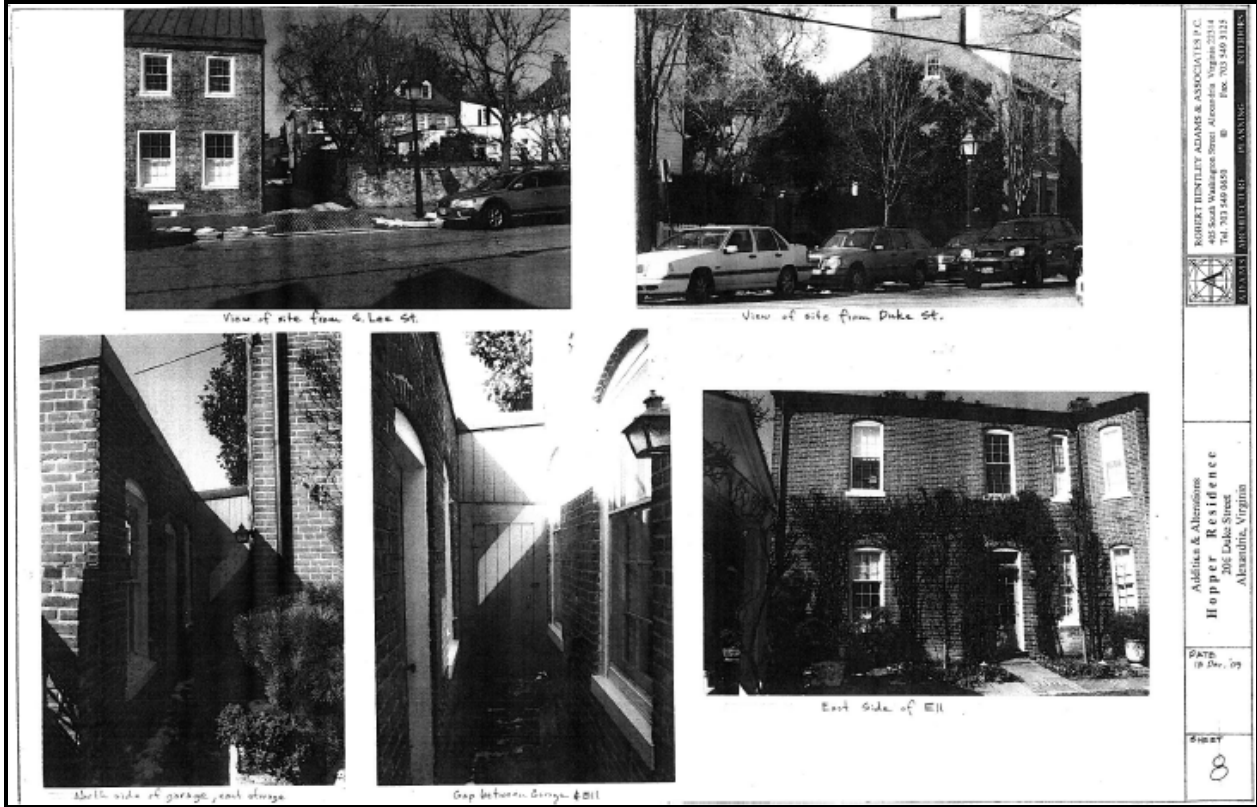


Figure 2. Site photos.

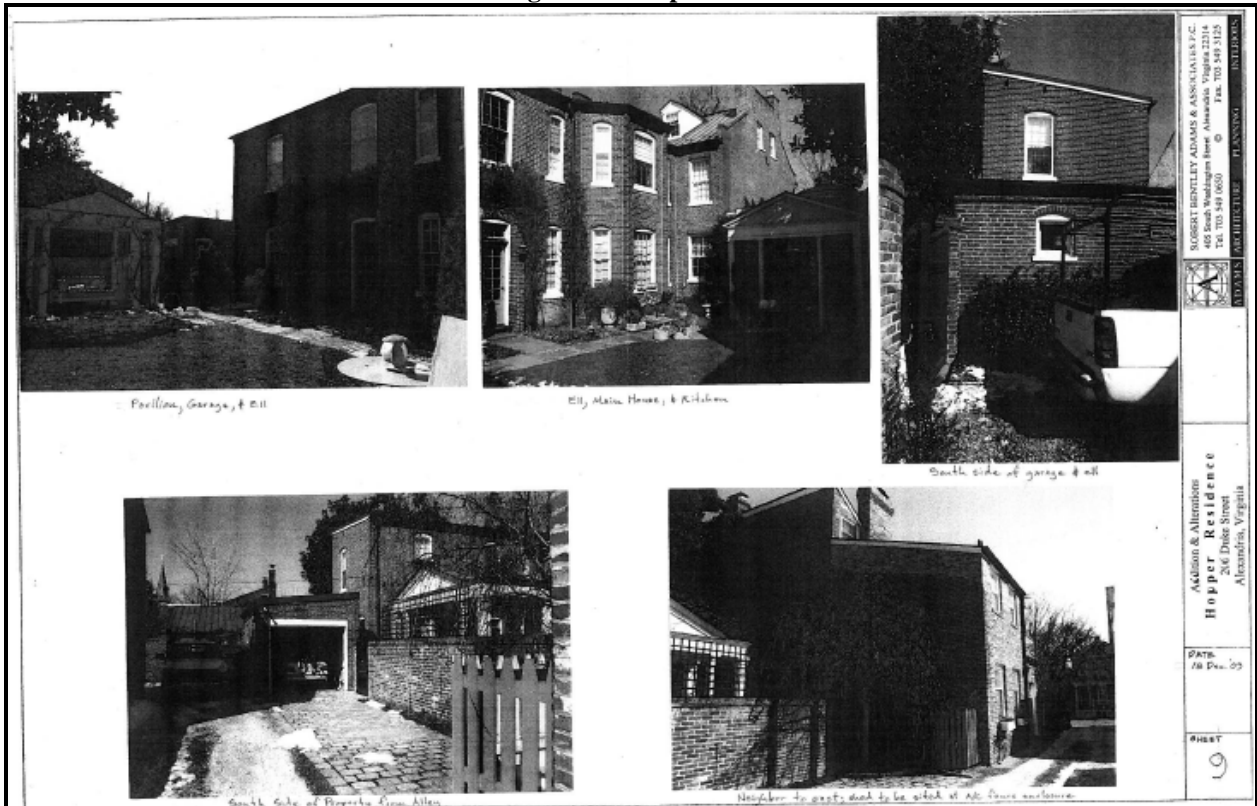


Figure 3. Site photos.

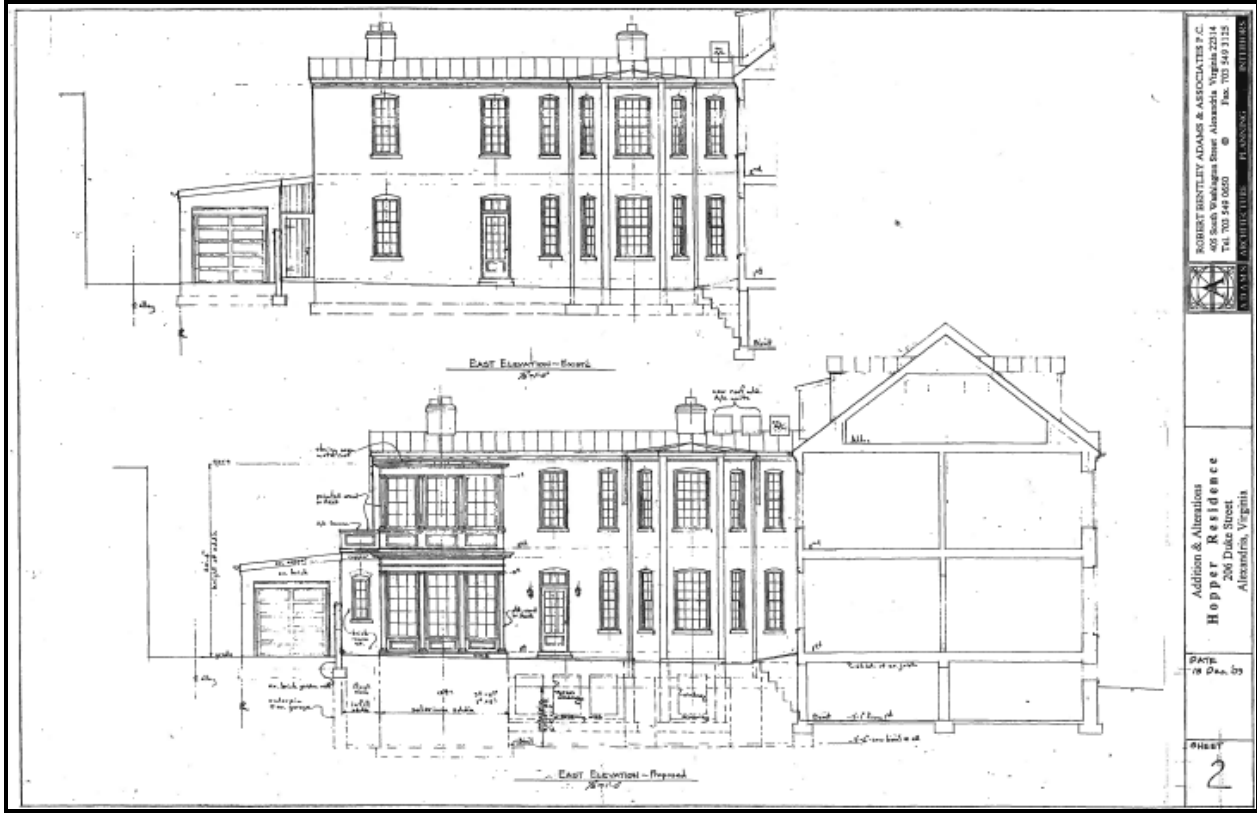


Figure 4. East elevation – existing and proposed.

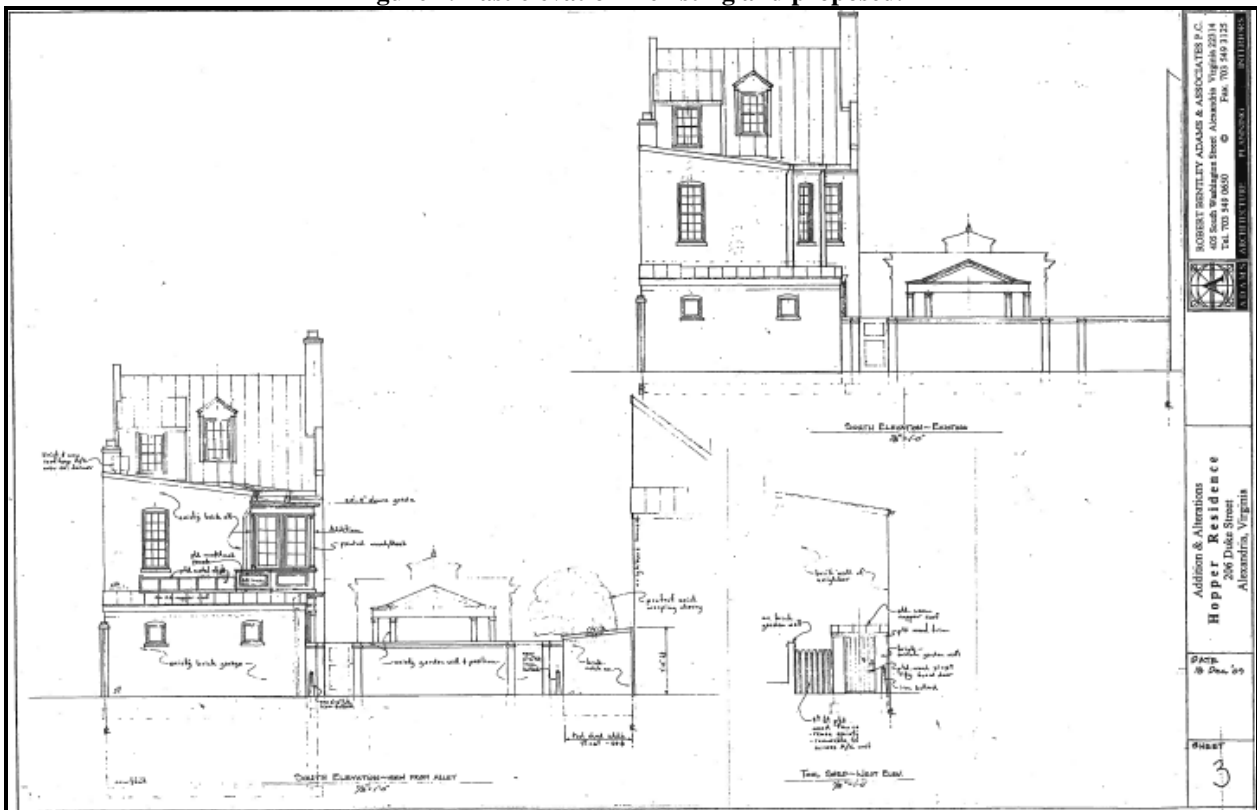


Figure 5. South elevation – existing and proposed.

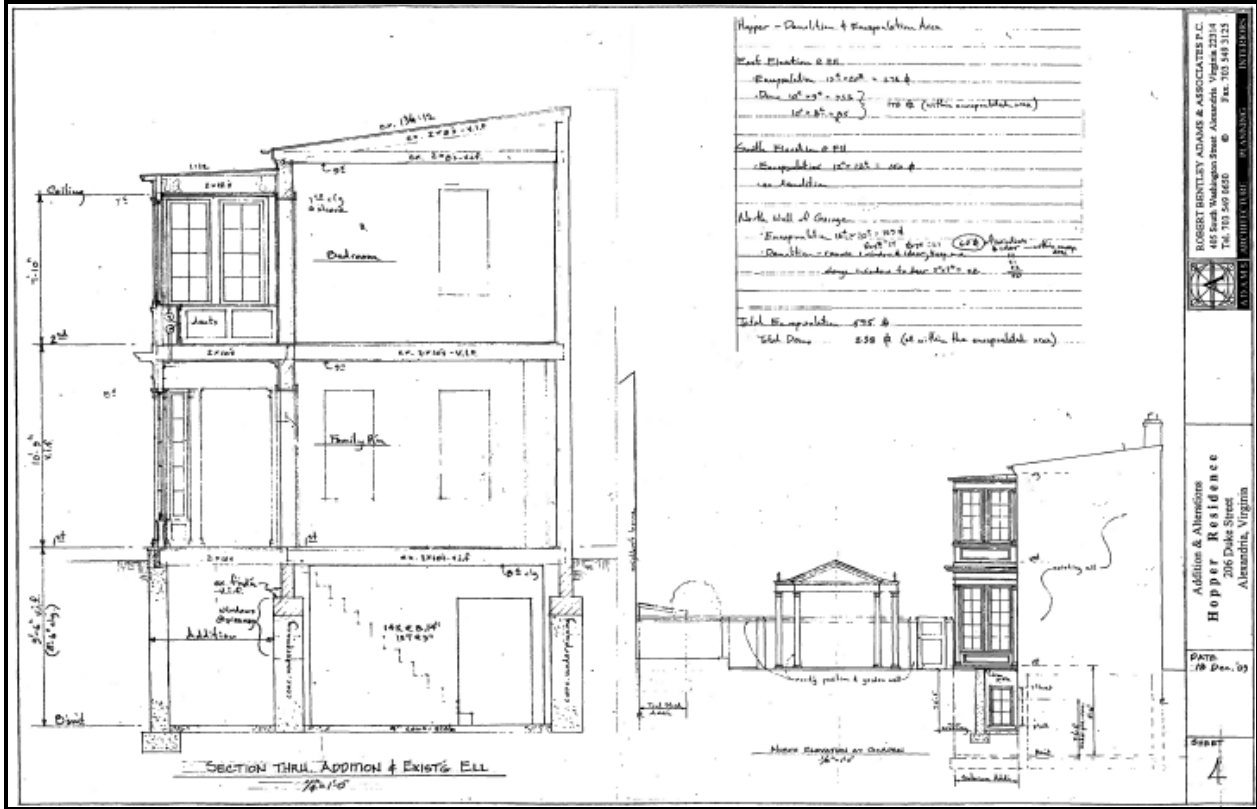


Figure 6. Section and encapsulation/demolition summary.

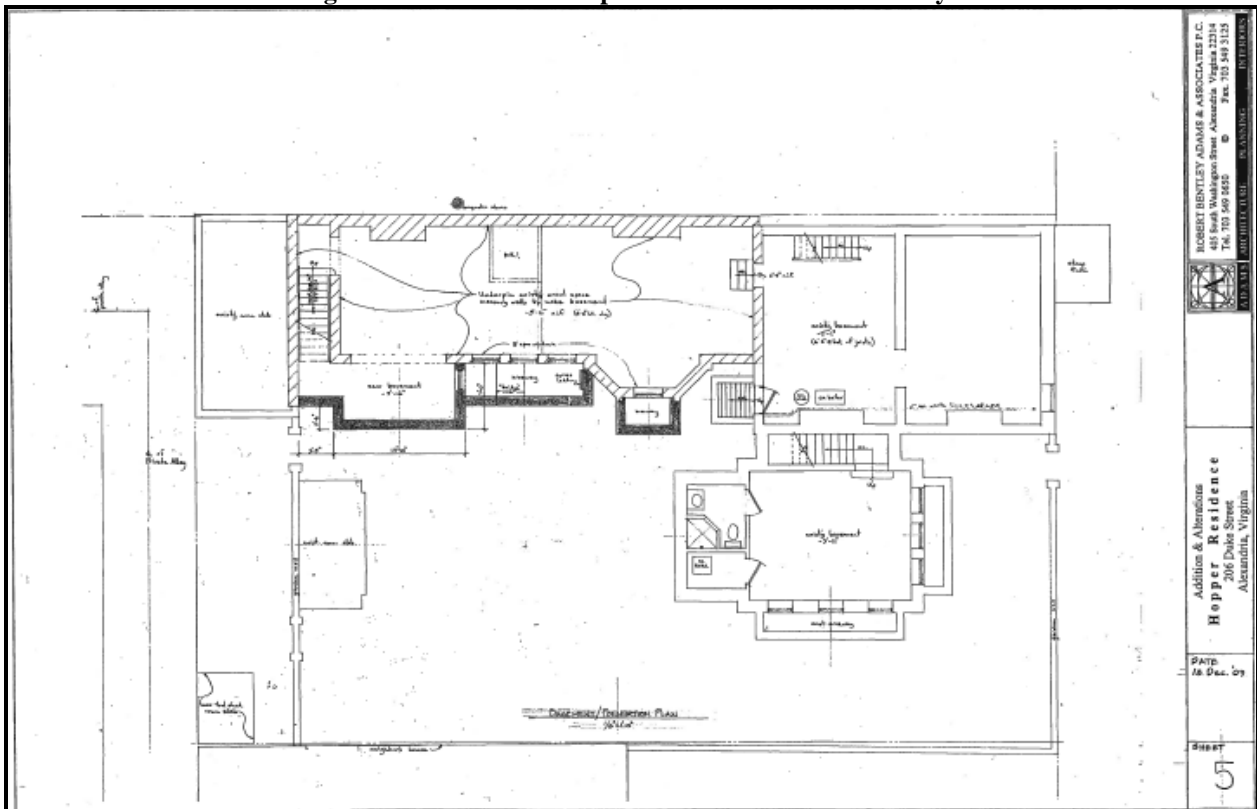


Figure 7. Basement floor plan.

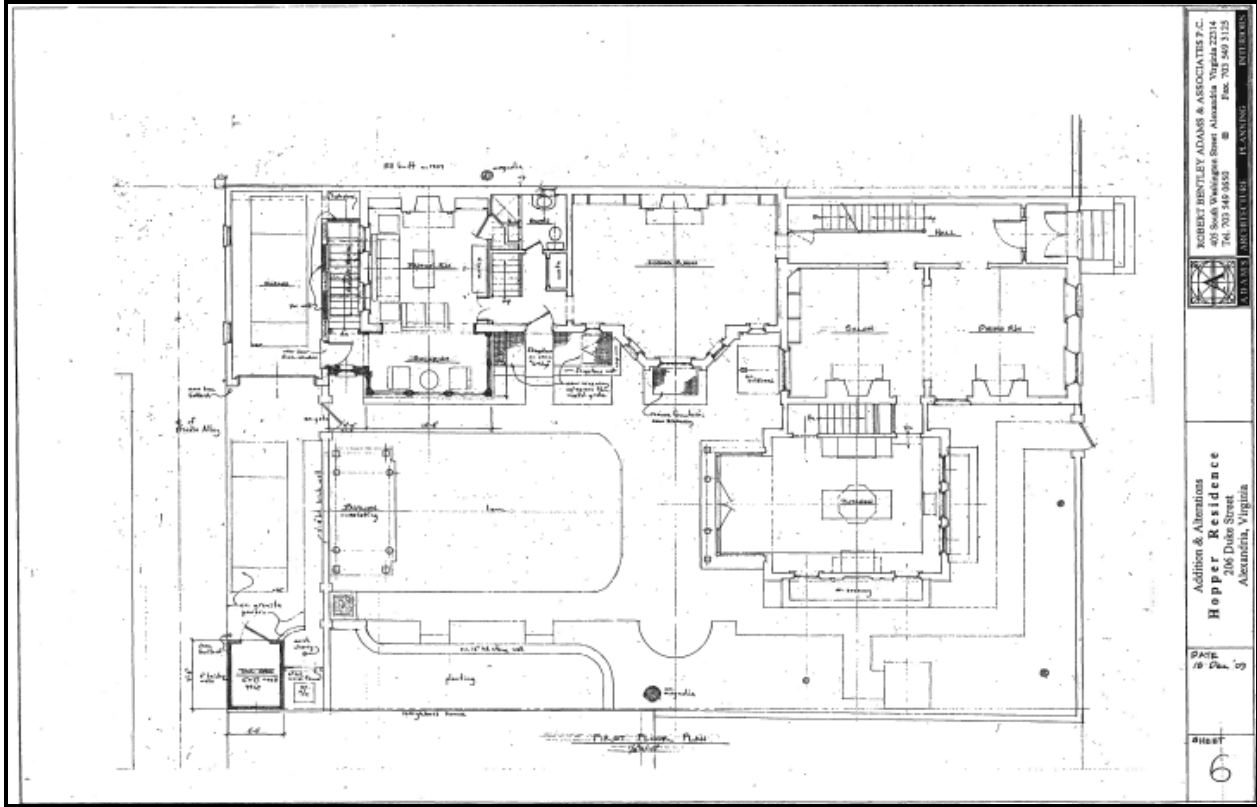


Figure 8. First floor plan.

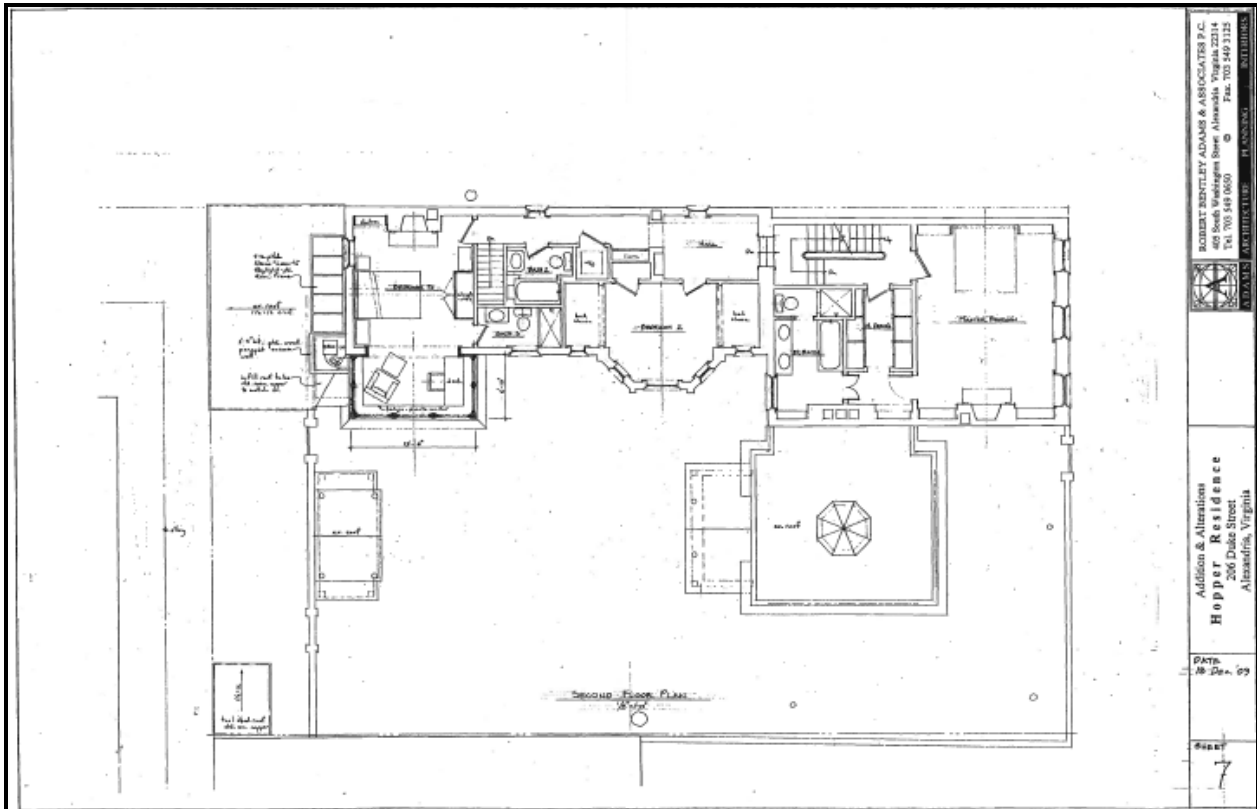


Figure 9. Second floor plan.

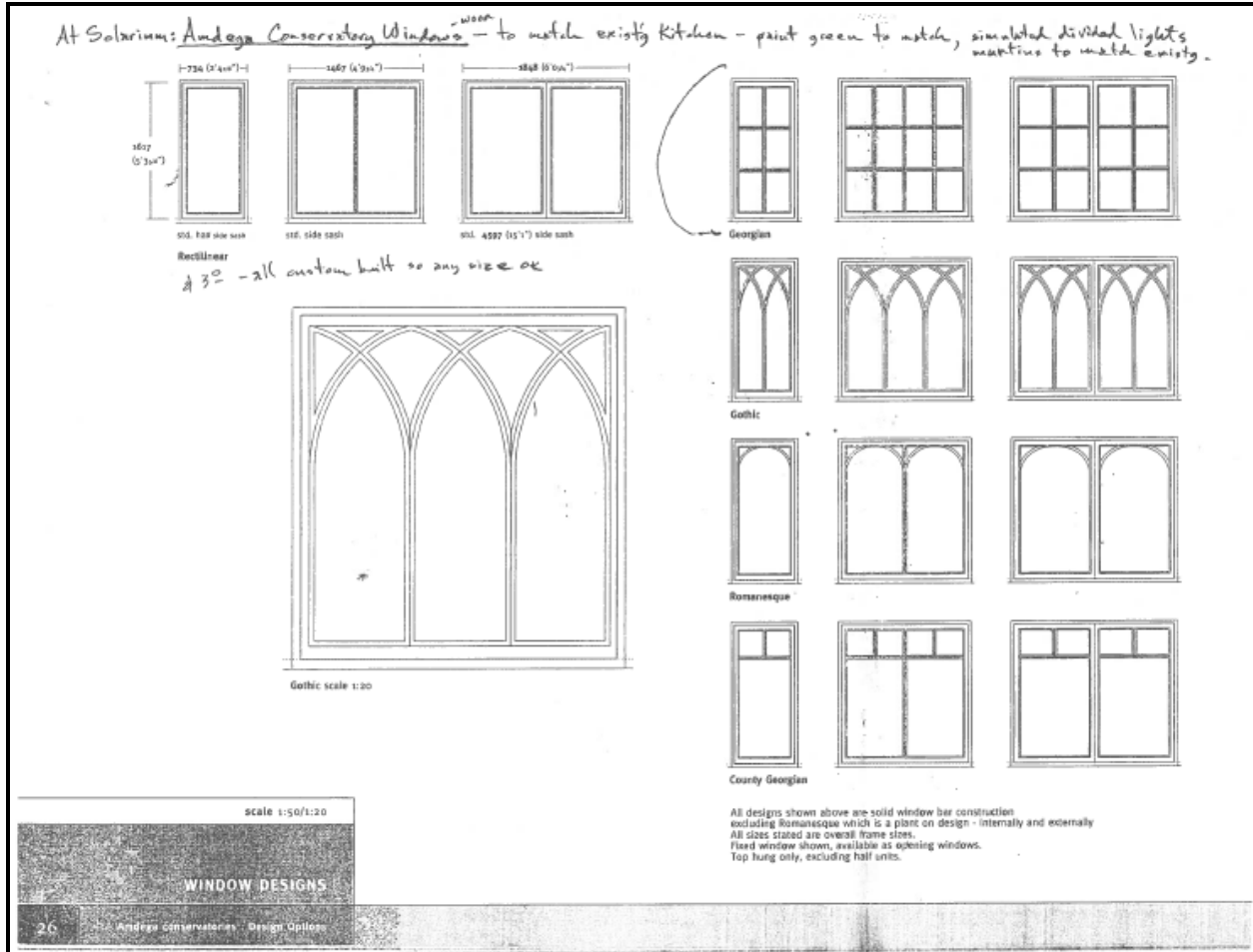



Figure 10. Window specifications.



Glass Glazed Lean-to Skylight, Light Natural Skylight, Custom Skylight... [http://www.wascoskylights.com/commercial/configurations\\_glass\\_7.php](http://www.wascoskylights.com/commercial/configurations_glass_7.php)

CONFIGURATIONS

**Lean-To Skylights** Photos



**CHOOSE YOUR FRAMING SYSTEM**

**Natural Light Skylights -- Pinnacle ....** specs below [more info](#)

**For spectacular large-scale custom structures spanning up to 40 feet, and at any pitch you desire between 15° and 60°.**

With its variable-pitch hinge design, the Pinnacle offers you the versatility of a custom configured structural skylight system with the reliability and cost savings of standardized engineering, construction and installation. Quickest turnaround time for custom built orders. Fast on-site assembly and installation.

**Seeking Natural Light? View Specifications for Custom Quality Prismatic Skylights**

**Pinnacle 300:** supports spans up to 14' wide. 3" aluminum rafter tube depth, (in a double pitch configuration).

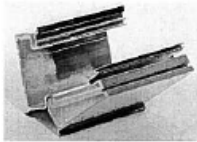
**Pinnacle 350:** supports spans up to 18' wide. 3.5" aluminum rafter tube depth,

**Pinnacle 600:** supports spans up to 30' wide (in a double pitch configuration). 6" aluminum rafter tube depth,

**Pinnacle 900:** supports spans up to 40' wide. 9" aluminum rafter tube depth,

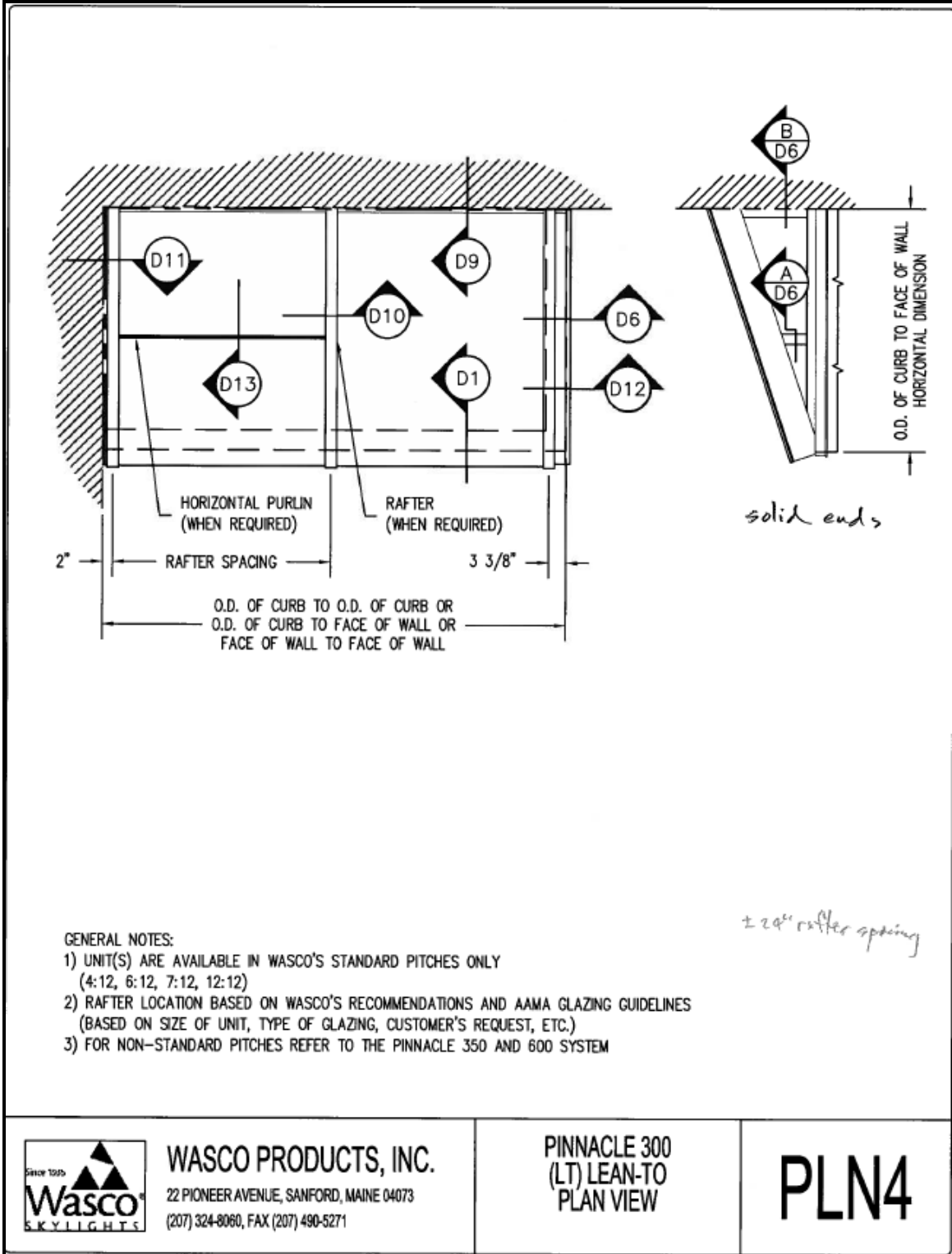
**Pinnacle PSEG:** Text to come.

**Pinnacle Hurricane Resistant:** 3.5" or 6" aluminum rafter, tested to meet 80 psf design pressure, and small and large missile impact. Available with laminated or insulated glazing.



Hinge design with infinitely variable pitch angles between 15° and 60°

Figure 11. Skylight specifications.



**WASCO PRODUCTS, INC.**  
 22 PIONEER AVENUE, SANFORD, MAINE 04073  
 (207) 324-8060, FAX (207) 490-5271

**PINNACLE 300  
 (LT) LEAN-TO  
 PLAN VIEW**

**PLN4**

Figure 12. Skylight detail.