

**MONTGOMERY COUNTY HISTORIC PRESERVATION COMMISSION**  
**STAFF REPORT**

<b>Address:</b>	7107 Carroll Avenue, Takoma Park	<b>Meeting Date:</b>	2/7/2024
<b>Resource:</b>	Contributing Resource <b>Takoma Park Historic District</b>	<b>Report Date:</b>	1/31/2024
<b>Applicant:</b>	Barrett Colombo and Aimee Witteman (Richard J. Vitullo, Architect)	<b>Public Notice:</b>	1/24/2024
<b>Review:</b>	HAWP	<b>Tax Credit:</b>	Partial
		<b>Staff:</b>	Chris Berger

**Permit Number:** 1044477 REVISION

**PROPOSAL:** New fenestration, rear alterations, new patio, alterations to accessory structure, and fence removal.

**STAFF RECOMMENDATION**

Staff recommends that the Historic Preservation Commission (HPC) **approve with three conditions** the HAWP application with final approval of all details delegated to staff:

1. The applicants must submit specifications and final designs for each proposed window and door before the plans are stamped.
2. The applicants must submit specifications and detailed drawings for the proposed window wells and steel railings at the areaway before the plans are stamped.
3. The applicants must remove the proposed areaway and doorway from the plans before they are stamped.

Note: The original HAWP approval from Oct. 7, 2023, included seven conditions, all of which are still outstanding.<sup>1</sup>

**ARCHITECTURAL DESCRIPTION**

**SIGNIFICANCE:** Contributing Resource within the Takoma Park Historic District  
**STYLE:** Colonial Revival  
**DATE:** Ca. 1916

<sup>1</sup> Link to October 11, 2023, HPC meeting audio/video transcript:

[https://mncppc.granicus.com/MediaPlayer.php?publish\\_id=7054e819-6902-11ee-b4aa-0050569183fa](https://mncppc.granicus.com/MediaPlayer.php?publish_id=7054e819-6902-11ee-b4aa-0050569183fa)

Link to the staff report for HAWP #1044477: <https://montgomeryplanning.org/wp-content/uploads/2023/10/I.C-7107-Carroll-Avenue-Takoma-Park-1044477.pdf>

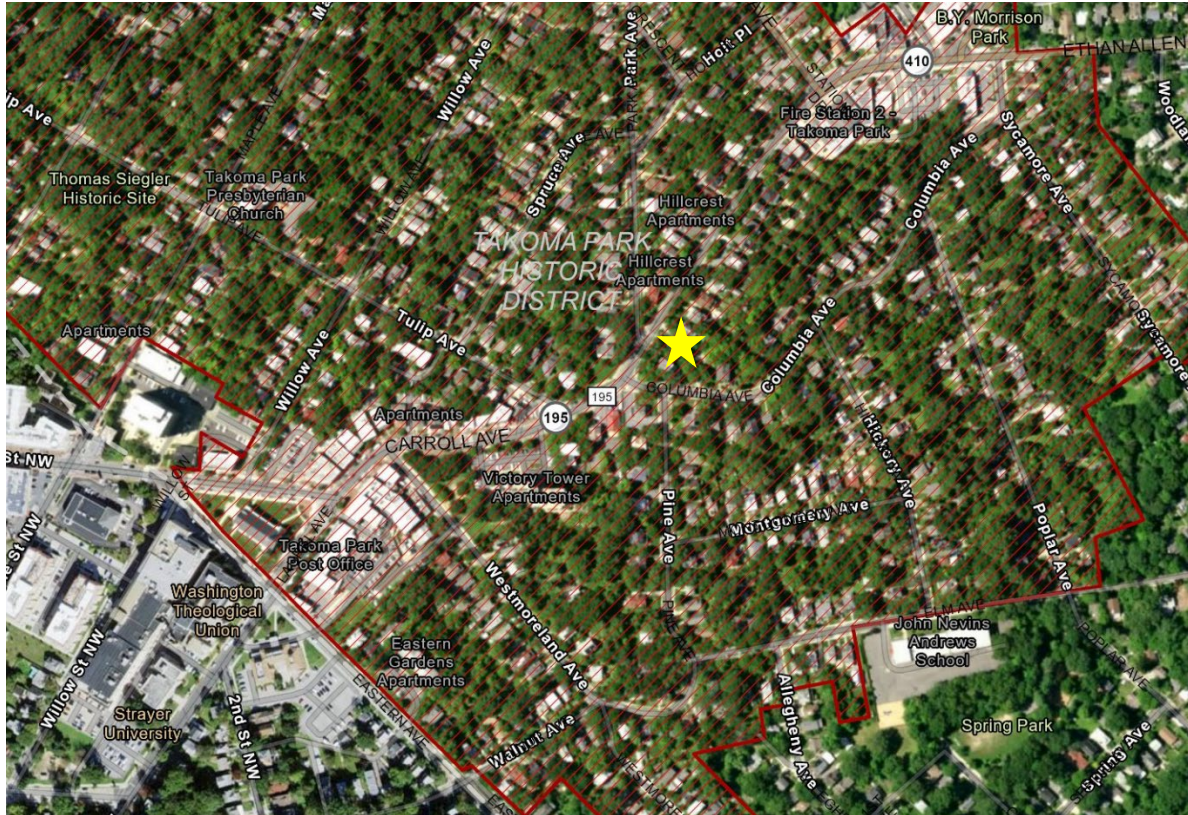


Figure 1: The subject property at 7107 Carroll Ave. is marked with a star. The Takoma Park Historic District is crosshatched.

## **BACKGROUND**

At the Oct. 11, 2023, HPC meeting, the Commission heard a presentation for HAWP #1044477. The HAWP included partial demolition; front porch alterations; fenestration alterations on the basement level; tree removal; and alterations to the rear enclosed porch including the roof, fenestration, and materials.

The HPC approved the application with seven conditions:

1. The applicant shall submit detailed drawings for the wood posts on the front porch.
2. The applicant shall contact staff during demolition of the front porch to review the three options for the front porch flooring. These options include:
  - a. restore the existing concrete floor;
  - b. restore or replace in-kind the existing wood porch floor if it remains; or
  - c. install a new 5/4 x 6", tongue-and-groove, IPE floor over a rubber membrane waterproof roofing layer on 3/4" plywood.
3. The applicant shall include a note that all window trim on the first story of the façade is wood.
4. The applicant shall submit specification and detailed drawings for the proposed window wells and steel railings at the egress windows.
5. The applicant shall submit specification sheets for all proposed doors (side and rear elevations).
6. The applicant shall submit a detailed description regarding the proposed pebble-dashed stucco infill installation method and how it will match the existing material.
7. The applicant shall contact the City of Takoma Park Urban Forester, follow all recommendations and requirements, and forward the correspondence to staff.

The applicants have yet to submit revised plans to meet the conditions.



## **PROPOSAL**

As part of this revised HAWP application, the applicants propose the following: 1) construct a basement entrance with an areaway; 2) install a window well; 3) install a canopy at the new rear entryway; 4) install two HVAC condenser units; 5) install a stone patio; 6) install fencing and a trellis and remove a fence section; 7) install replacement fenestration on the garage and infill two windows; and 8) reduce driveway size and add gravel or permeable pavers.

## **APPLICABLE GUIDELINES**

The Historic Preservation Office and HPC consults several documents when reviewing alterations and new construction within the Takoma Park Historic District. These documents include the historic preservation review guidelines in the approved and adopted amendment for the *Takoma Park Historic District (Guidelines)*, Montgomery County Code Chapter 24A (Chapter 24A), and the *Secretary of the Interior's Standards for Rehabilitation (Standards)*. The pertinent information in these three documents is outlined below.

### ***Takoma Park Historic District Guidelines***

There are two broad planning and design concepts which apply to all categories. These are:

- The design review emphasis will be restricted to changes that are all visible from the public right-of-way, irrespective of landscaping or vegetation (it is expected that the majority of new additions will be reviewed for their impact on the overall district), and
- The importance of assuring that additions and other changes to existing structures act to reinforce and continue existing streetscape, landscape, and building patterns rather than to impair the character of the historic district.

A majority of the buildings in the Takoma Park Historic District have been assessed as being “Contributing Resources.” While these buildings may not have the same level of architectural or historical significance as Outstanding Resources or may have lost some degree of integrity, collectively, they are the basic building blocks of the Takoma Park district. They are important to the overall character of the district and the streetscape due to their size, scale, and architectural qualities, rather than for their particular architectural features.

Contributing Resources should receive a more lenient level of design review than those structures that have been classified as Outstanding. This design review should emphasize the importance of the resource to the overall streetscape and its compatibility with existing patterns rather than focusing on a close scrutiny of architectural detailing. In general, however, changes to Contributing Resources should respect the predominant architectural style of the resource.

The following guidance which pertains to this project are as follows:

- All exterior alterations, including those to architectural features and details, should be generally consistent with the predominant architectural style and period of the resource and should preserve the predominant architectural features of the resource; exact replication of existing details and features is, however, not required.
- Minor alterations to areas that do not directly front on a public right-of-way -such as vents, metal

stovepipes, air conditioners, fences, skylights, etc. should be allowed as a matter of course; alterations to areas that do not directly front on a public right-of-way which involve the replacement of or damage to original ornamental or architectural features are discouraged but may be considered and approved on a case-by-case basis.

- Second-story additions or expansions should be generally consistent with the predominant architectural style and period of the resource (although structures that have been historically single story can be expanded) and should be appropriate to the surrounding streetscape in terms of scale and massing.
- Original size and shape of window and door openings should be maintained, where feasible.
- Some non-original building materials may be acceptable on a case-by-case basis; artificial siding on areas visible to the public right-of-way is discouraged where such materials would replace or damage original building materials that are in good condition.
- Alterations to features that are not visible at all from the public right-of-way should be allowed as a matter of course.
- All changes and additions should respect existing environmental settings, landscaping, and patterns of open space.

***Montgomery County Code, Chapter 24A-8***

The following guidance which pertains to this project are as follows:

- (b) The commission shall instruct the director to issue a permit, or issue a permit subject to such conditions as are found to be necessary to ensure conformity with the purposes and requirements of this chapter, if it finds that:
  - (1) The proposal will not substantially alter the exterior features of an historic site or historic resource within an historic district; or
  - (2) The proposal is compatible in character and nature with the historical, archeological, architectural or cultural features of the historic site or the historic district in which an historic resource is located and would not be detrimental thereto or to the achievement of the purposes of this chapter;
- (d) In the case of an application for work on an historic resource located within an historic district, the commission shall be lenient in its judgment of plans for structures of little historical or design significance or for plans involving new construction, unless such plans would seriously impair the historic or architectural value of surrounding historic resources or would impair the character of the historic district. (Ord. No. 9-4, § 1; Ord. No. 11-59.)

***Secretary of the Interior’s Standards for Rehabilitation***

The Secretary of the Interior defines rehabilitation as “the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features, which convey its historical, cultural, or architectural values.” The applicable *Standards* are as follows:



2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces and spatial relationships that characterize a property will be avoided.
5. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
9. New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

## **STAFF DISCUSSION**

### ***Property History***

The narrative from the October 2023 case remains unchanged and includes the following information. The subject property is located mid-block on Carroll Avenue is a Contributing Resource to the Takoma Park Historic District. The site features a Colonial Revival house constructed ca. 1916. In all likelihood, Herman C. Heffner built the residence when he purchased the property that year.<sup>2</sup> The two-story, three-bay, wood-frame, side-gable house rests on a brick foundation (*Figure 2*). The first and second stories are clad with pebble-dashed stucco and cedar shingles, respectively. The façade is adorned with an enclosed, wood-frame porch that rests on a concrete block foundation (probably installed at the time of its enclosure) and supports a flat roof. Between 1962 and 1977, previous owners enclosed the porch and created habitable space beneath it. On the first story, the original façade obscured by the porch retains the historic single-leaf, single-light, wood door and two window openings infilled with non-historic, single-light, fixed glass.

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<sup>2</sup> Montgomery County Circuit Court, “James Lansburgh to Herman C. Heffner,” April 21, 1916, Liber 254, Folio 482.



*Figure 2: From top left and continuing clockwise: the front and right-side elevations; the front and left-side elevations; the rear and left-side elevations; and the rear and right-side elevations.*

The rear elevation features a two-story enclosed sleeping porch with shed roof. Sanborn Fire Insurance Maps (*Figure 3*) suggest that the rear porch is original to the house, but the precise date of enclosure in the mid-to-late twentieth century is unknown. Typical fenestration consists of 4/1 and 6/1 double-hung, wood-sash windows.



*Figure 3: From left: View off the Sanborn Fire Insurance Maps showing the subject property from 1903-1916; 1927; and 1927-1962. Source: Library of Congress and Montgomery Planning.*



The two-car garage in the southeastern corner of the property was constructed between 1916 and 1927 based on Sanborn Fire Insurance Maps (*Figure 3*). The rusticated concrete block walls support an asphalt shingle, pyramidal roof. Fenestration consists of one-over-one, double-hung, wood-sash windows, a single-light, wood-sash casement window, and a single-leaf, four-panel, wood door (*Figure 4*). The building presently has no garage doors.



*Figure 4: The front and left elevations of the garage, left, and the right side elevation. The residence at 8 Columbia Ave. is visible in the background.*

### **1) Construct a Basement Entrance With an Areaway**

The work on the right-side elevation will require an existing sash window and corresponding corrugated window well at the basement to be removed and replaced with a single, aluminum-clad door. A light fixture will be installed above the new doorway. The concrete areaway will measure 4'8" wide and approximately 10' long and be 13' from the side property line with 7105 Carroll Ave. The top of the concrete areaway will protrude above ground, and a metal railing will extend around the perimeter of the areaway.

Staff's order of preference in regard to basement exterior access is as follows:

- 1) The existing entrance to the basement on the left side elevation is utilized.
- 2) The areaway is constructed on the rear elevation and not visible from the right of way.
- 3) The areaway is constructed on one of the side elevations toward the rear of the house.

The applicants have provided justification in the project narrative as to why each of staff's preferred options are not feasible and why the right-side elevation toward the front of house is the best option.

Staff is supportive of the proposal to add an accessory dwelling unit to the basement; however, staff does not support installation of the areaway in the proposed location. The HPC previously approved two new shallow window wells near on the right-side elevation under the porch and a deep well with railing on the left-side elevation, and the applicants propose another shallow well on the left-side elevation as part of this application. The proposal to add an approximately 50-square-foot areaway with railing toward the front of the house would be the largest alteration to the foundation yet.

The feature will be easily visible from the public right-of-way and, counter to the *Guidelines*, the major alteration will negatively affect the exiting streetscape, open space, and character of the property and wider district. Further, the areaway also does not meet Chapter 24A-(8)(b) and *Standards* # 2 and 9

because adding the concrete stairs and walls and metal railing in the location are not compatible with the character of the historic district and will affect the historic integrity of the property and its environment.

Staff is hopeful the applicants and architect will find an alternative solution that provides exterior access to the basement and is compatible with the home and broader historic district.

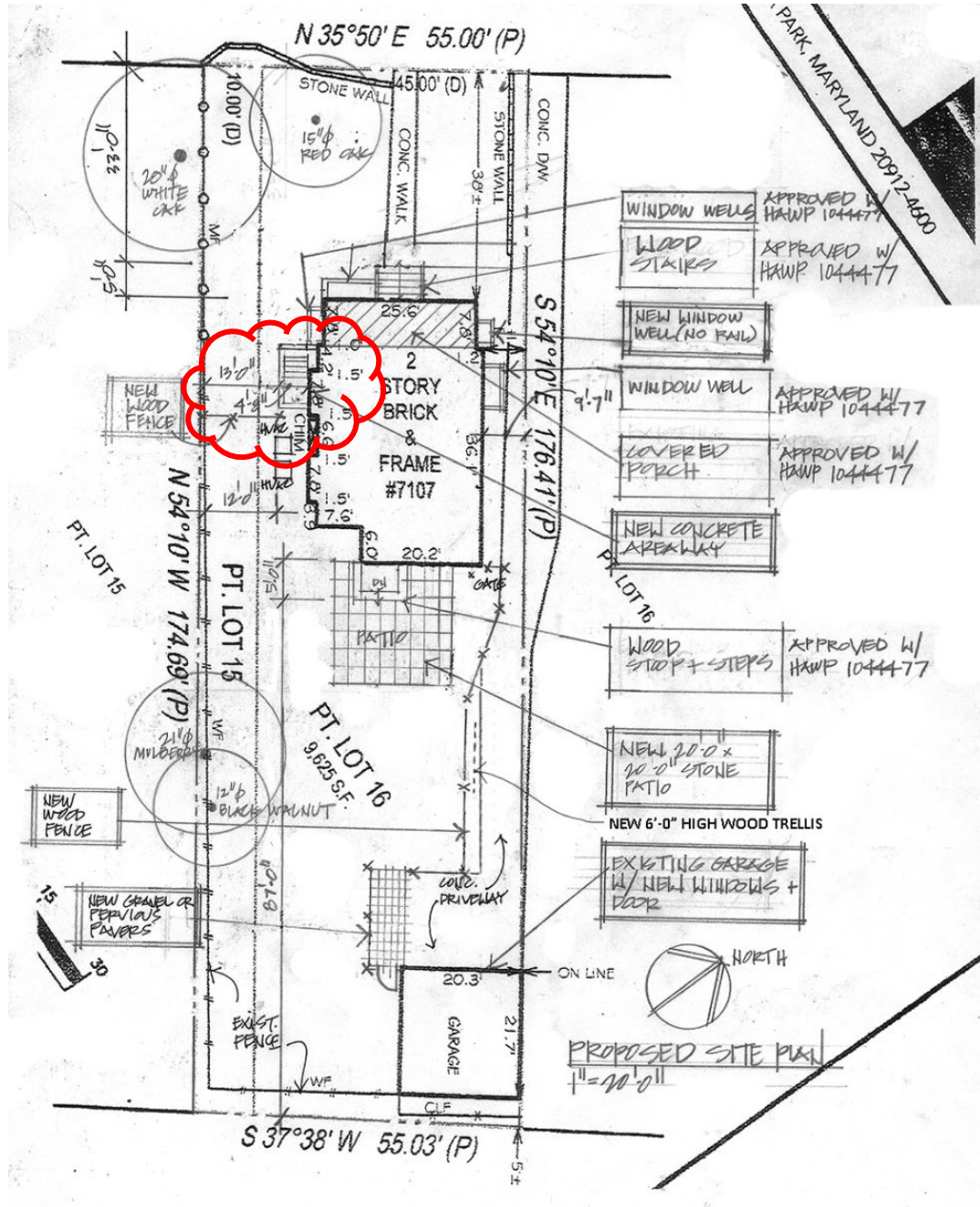


Figure 5: The proposed areaway location on the right-side elevation is clouded in red.



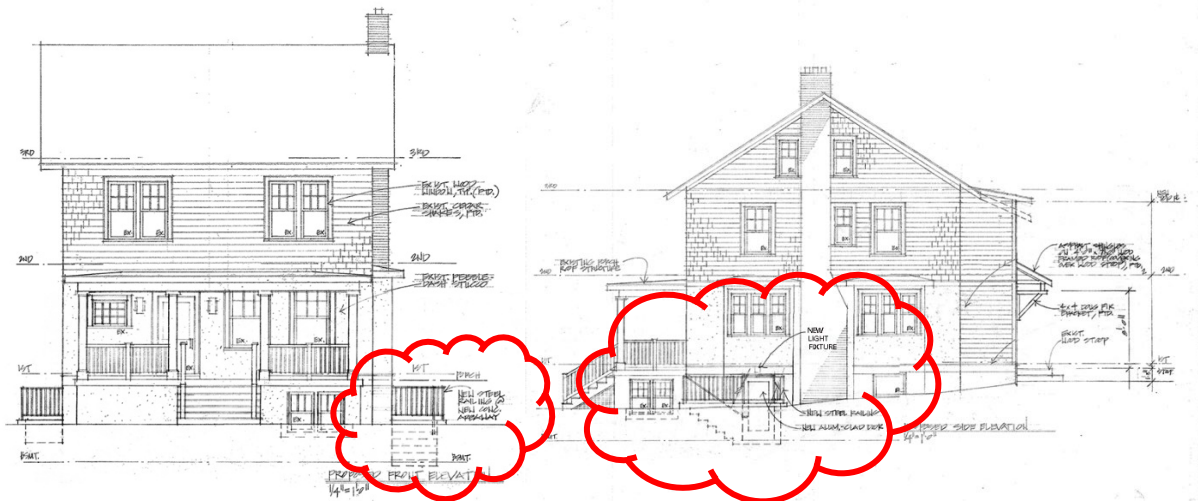


Figure 6: The proposed areaway and railing is shown on the front and right-side elevations.

## 2) Install a Window Well

Staff finds the proposal to install a window well with a sash window on the left-side elevation to be consistent with the applicable guidelines and recommends approval with a condition. The location is a later alteration completed in the 1960s or 1970s to add additional basement space under the porch. A window currently does not exist at the location.

According to the applicants, the proposed well will measure approximately 3' wide and be no more than 1' deep, so it will not require a railing. It will have pressure-treated wood at the perimeter of the well's interior and gravel at the base. Staff reminds the HPC that a window well requiring a railing was previously approved a few feet farther back on the elevation as part of HAWP #1044477, but the well proposed as part of this application is to bring natural light into a different basement room. It will be visible from the public right of way, but most of the window will be below grade and minimally visible. The proposed window appears to be an aluminum clad 4/1 wood sash window—the same design the HPC approved on the rear elevation at its Oct. 7 HPC meeting—but staff seeks confirmation from the applicants before the plans are stamped. The applicants did not provide specifications and detailed drawings for the wells, so staff seeks a condition that information is provided.

In accordance with Chapter 24A-8(b)(1) and (2), the proposed window well with conditions will not substantially alter the exterior features and is compatible with the character of the district. The proposal also meets # 2, 9, and 10 of the *Standards* as the character of the property will be retained by the well's addition; its construction will not destroy historic materials that characterize a property, and if the well is removed in the future the essential form and integrity of the property will be maintained.

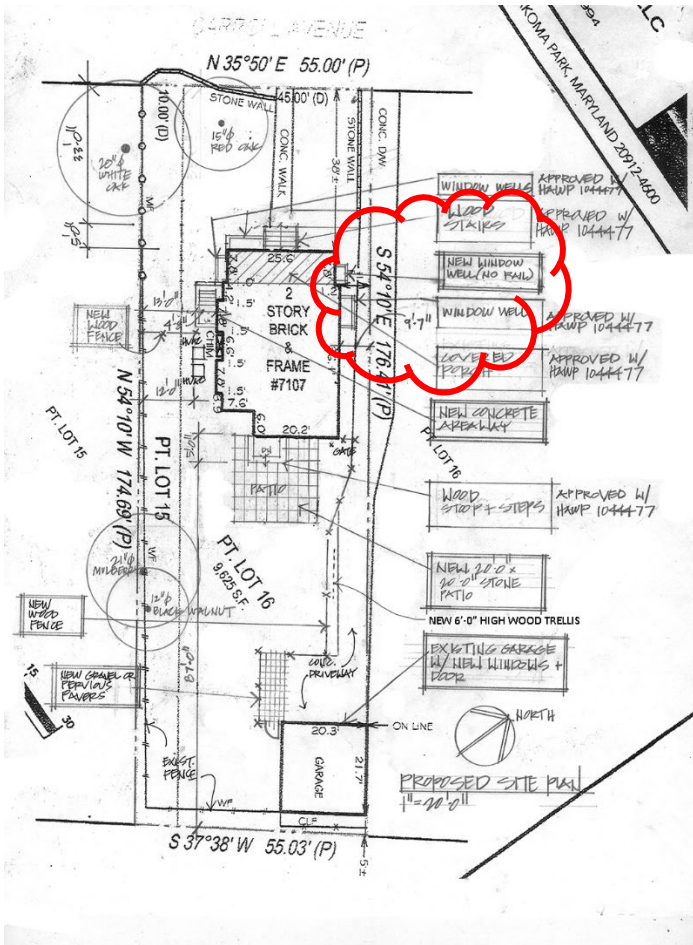


Figure 7: The proposed window well on the left-side elevation is clouded in red.

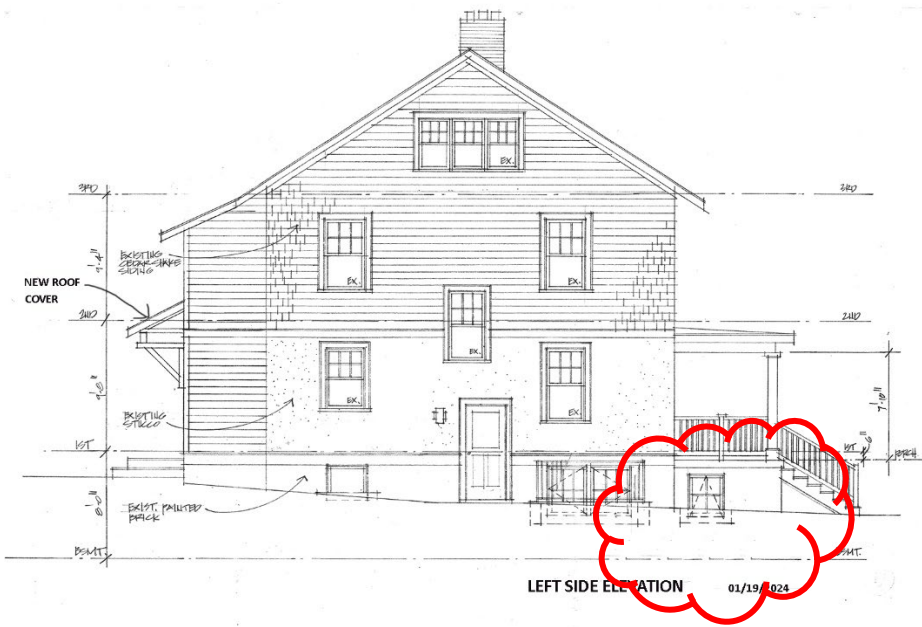


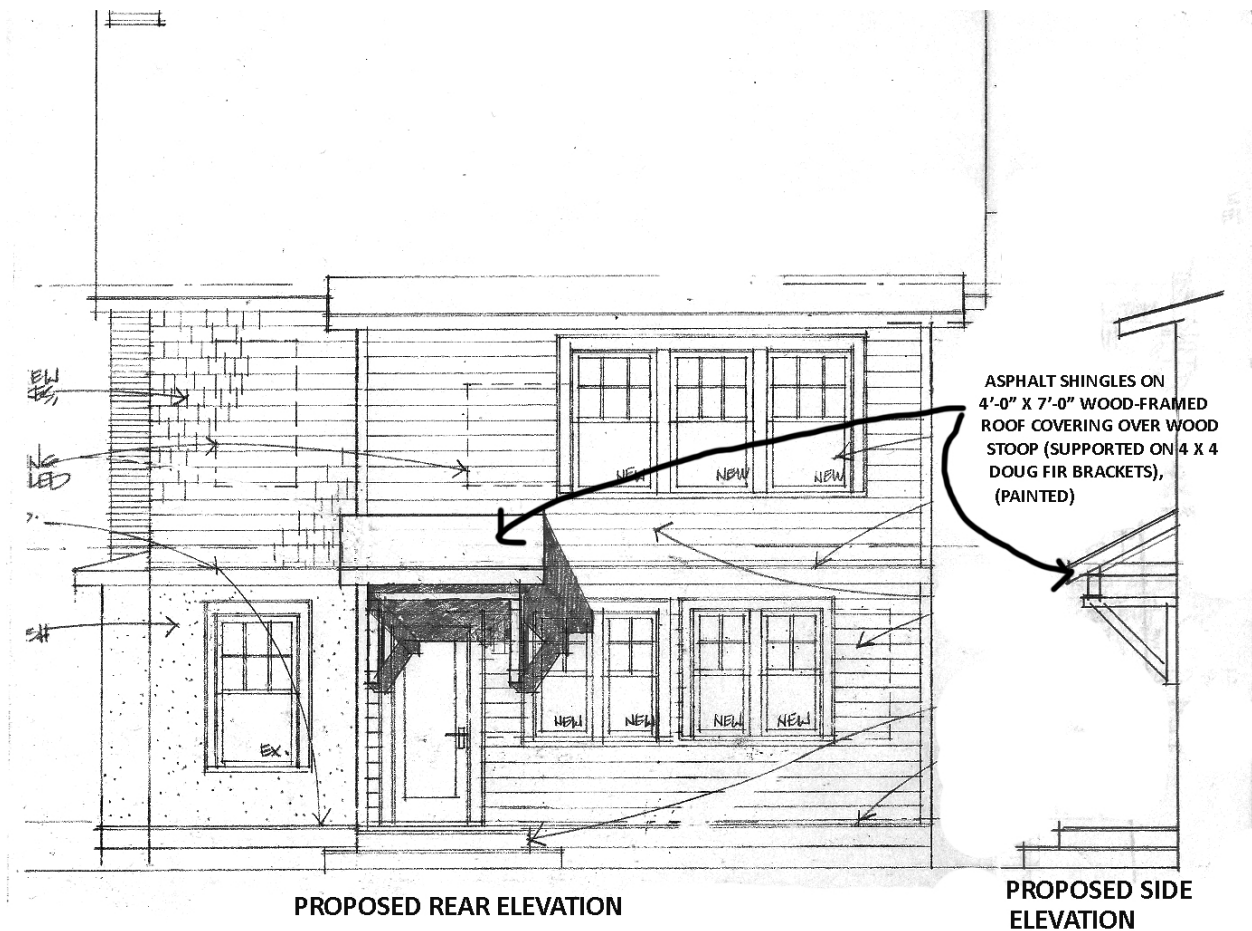
Figure 8: The proposed window well on the left-side elevation is clouded in red.



### 3) *Install a Canopy at the New Rear Entryway*

Staff finds the proposal to install a canopy over the doorway on the rear elevation to be consistent with the applicable guidelines and recommends approval. The HPC previously approved the reconfiguration of the elevation and new location of the doorway at its Oct. 7 hearing. The canopy will measure 4' by 7' and have a shed roof covered in asphalt shingles. It will be supported by 4'-by-4' Douglas Fir brackets.

The canopy will not be visible from Carroll Avenue, and the *Takoma Park Historic District Design Guidelines* are only limited to changes visible from the public right of way. In accordance with Chapter 24A-8(b)(1) and (2), the proposed canopy will not substantially alter the exterior features and is compatible with the character of the district. The proposal also meets #2, 9, and 10 of the *Standards* as the character of the property will be retained by the canopy's construction; it will not destroy historic materials that characterize a property, and if removed in the future the essential form and integrity of the property will be maintained.



**Figure 9: The proposed canopy on the rear.**

### 4) *Install Two HVAC Condenser Units*

Staff finds the proposal to install a pair of HVAC units along the right-side elevation to be consistent with the applicable guidelines and recommends approval. The units will be situated toward the back of the residence, approximately 60 feet from the right of way at their closest and behind the proposed 4' tall picket fence.

The *Takoma Park Historic District Design Guidelines* state that minor alterations to areas that do not directly front a public right of way such as the installation of air conditioners should be allowed as a matter of course. In accordance with Chapter 24A-8(b)(1) and (2), the units will not alter the exterior features and are compatible with the character of the district where units are found at each residence. The proposal also meets # 2, 9, and 10 of the *Standards* as the character of the property will be maintained after installation of the units; they will not destroy historic materials that characterize a property, and if removed in the future the essential form and integrity of the property will be maintained.

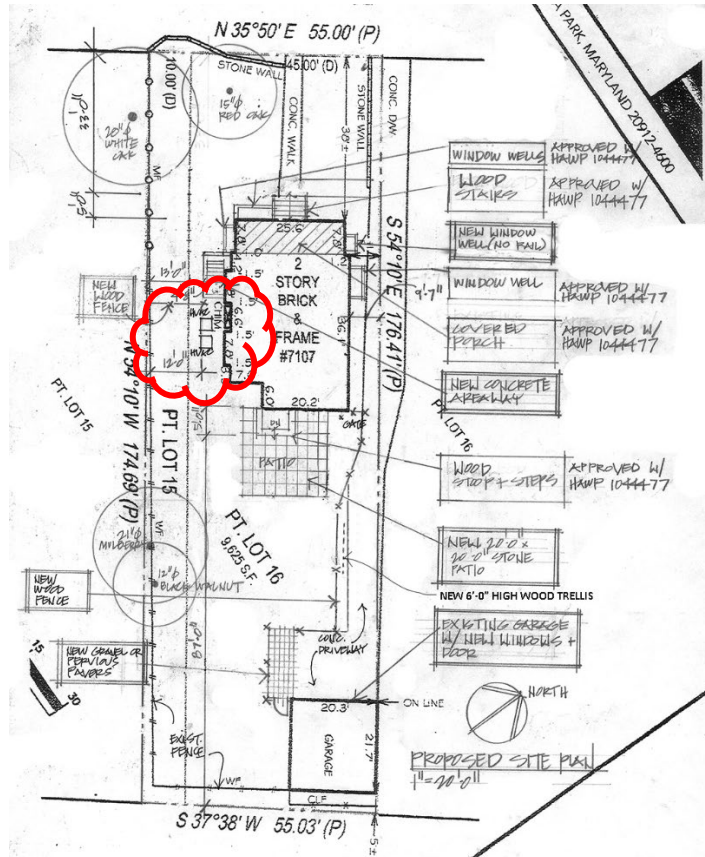


Figure 10: The proposed HVAC locations are clouded in red.

**5) Install a Stone Patio**

Staff finds the proposal to install a stone patio in the rear yard to be consistent with the applicable guidelines and recommends approval. The patio will be located just off the rear of the house and measure 20'-by-20'.

The patio will not be visible from Carroll Avenue, and the *Takoma Park Historic District Design Guidelines* are only limited to changes visible from the public right of way. In accordance with Chapter 24A-8(b)(1) and (2), the patio will not alter the exterior features and is compatible with the character of the district. The proposal also meets # 2, 9, and 10 of the *Standards* as the character of the property will be retained by the patio's construction; it will not destroy historic materials that characterize a property, and if removed in the future the essential form and integrity of the property will be maintained.

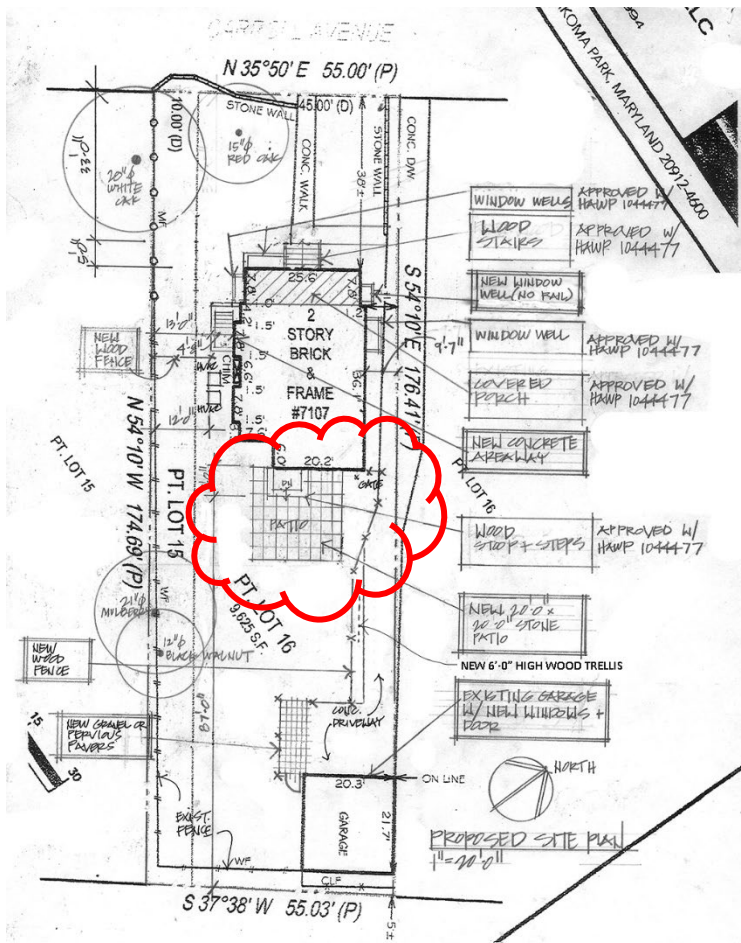


Figure 11: The proposed patio location is clouded in red.



Figure 12: A representative photo of the stone to be installed at the patio.

6) *Install Fencing and a Trellis and Remove Fence Section*

Staff finds the proposal to install fencing and a trellis in the rear and side yards to be consistent with the applicable guidelines and recommends approval. The applicants propose to install a 4' tall cedar picket fence with gates in the side yard off the left side elevation and in the rear yard along the driveway. A cedar trellis fence measuring 6' high and 10' long will be installed in the rear yard along the driveway near the proposed 4' tall picket fence. The 6' tall lattice fence that encloses a portion of the rear yard to the south of the garage will be removed.

Only the fence in the side yard will be visible from the right of way. It will have a minimal visual presence because of its open design and height and held screen the HVAC units to be installed just beyond. The *Takoma Park Historic District Design Guidelines* state that minor alterations to areas that do not directly front a public right of way such as the installation of fences should be allowed as a matter of course. In accordance with Chapter 24A-8(b)(1) and (2), the fencing will not alter the exterior features of the residence and is compatible with the character of the district where similar fences are common. The proposal also meets # 2, 9, and 10 of the *Standards* as the character of the property will be retained; the fencing will not destroy historic materials that characterize a property, and if removed in the future the essential form and integrity of the property will be maintained. Both fences meet the county's height limits.

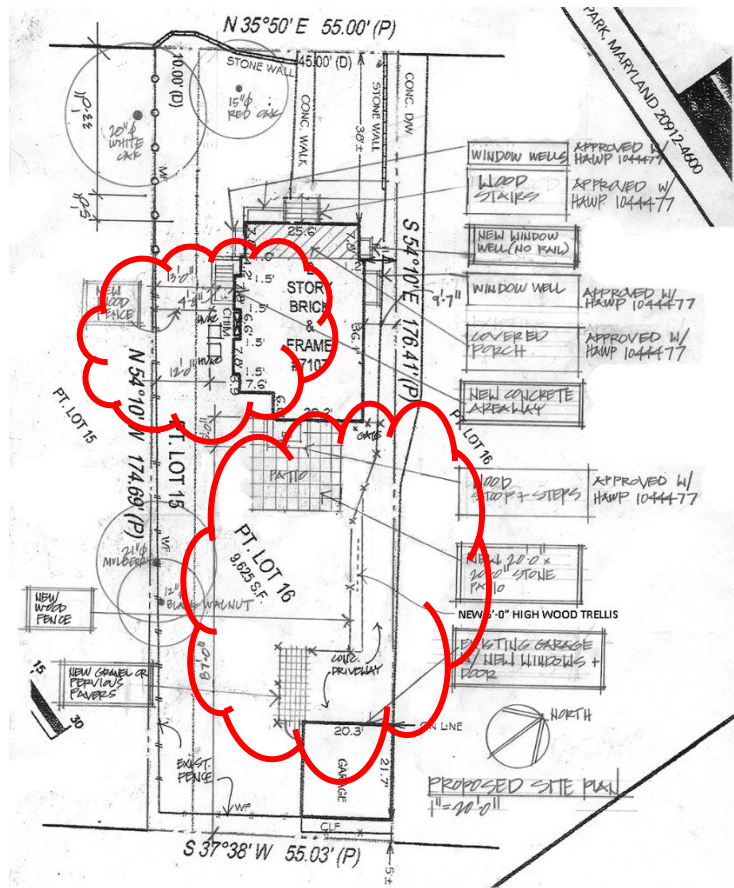


Figure 13: The proposed fence and trellis locations are clouded in red in the side and rear yards.



2in Square Spindle Spaced Picket - Cedar Wood Fence



Figure 14: A representative photo of the proposed 4' tall picket fence, left, and the proposed 6' tall trellis.



Figure 15: The existing lattice fence in the rear yard proposed for removal.

#### 7) *Install Replacement Fenestration and Infill Two Windows on Garage*

Staff finds the proposal to replace the fenestration on the garage and enclose two windows to be consistent with the applicable guidelines and recommends approval with conditions. The applicants propose to convert half the garage into an office. They propose to install two new upward-swing painted wood garage door with 12-lites garage doors on the front elevation where garage doors do not currently exist. At the right-side elevation where the office will be located, the applicants propose to replace the existing window with a 1/1 aluminum-clad wood double hung windows and replace the existing wood-paneled door with a standard-sized aluminum clad door because the existing door is too small. The applicants have not indicated which door will be installed on the provided specifications, so staff seeks a condition that this information is provided before the plans are stamped. At the rear of the garage, two existing wood casement windows will be removed, and the openings will be infilled with a Hardie panels. On the left-side elevation, the applicants propose the replacement of the existing 1/1 wood sash windows with 1/1 aluminum-clad wood sash windows. A skylight will be installed on the roof over the new office space.



Staff supports all the proposed garage alterations. Since the property is classified as a contributing resource—and not an outstanding resource—in the Takoma Park Historic District, alterations to features that are not visible from the right of way should be allowed as a matter of course. The garage itself is not mentioned in the *Takoma Park Historic District Guidelines*.

The garage is set back 150 feet from the right of way, so of the proposed changes only the garage doors will be visible from the right of way. Staff finds the garage door designs to be a contemporary take on a traditional garage door design with panels and lights toward the top and constructed of wood.

Staff supports replacement of the windows with aluminum-clad sash windows and egress door on the right-side elevation with a larger door. Staff inspected the existing windows and found them to be in poor condition, and the replacement windows will closely match the existing in compliance with the *Secretary of the Interior Standards*.

Staff finds the removal of the two casement windows on the rear elevation and infill of the openings with Hardie siding is acceptable under the guidance from the *Design Guidelines* for this accessory structure. The garage is a few feet away from the residence at 8 Columbia Avenue, so enclosing the windows will provide privacy.

Staff also is supportive of the skylight to be installed over the office. It will not affect as it will improve the functionality of the space.

The subject property is a contributing resource in the historic district, so the HPC is to be lenient in its design review so long as the proposals do not affect the streetscape and compatibility with existing patterns rather than a close scrutiny of architectural detailing. In accordance with Chapter 24A-8(b)(1) and (2), the garage alterations will not substantially alter the exterior features of the structure and are compatible with the character of the district. The proposal also meets # 2, 6, 9, and 10 of the *Standards* as the character of the property will be retained; the changes will not destroy historic materials that characterize the garage, and if removed in the future the essential form and integrity of the garage will be maintained.

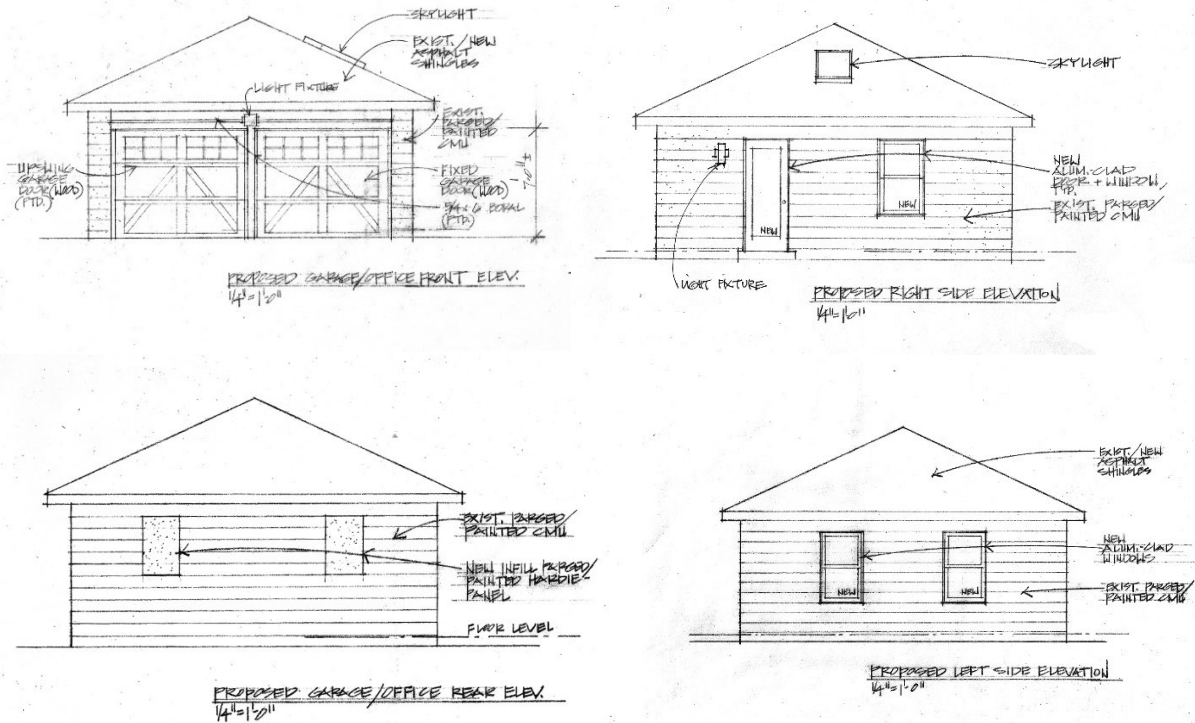


Figure 16: The proposed elevations for the garage.

8) Reduce Driveway Size and Add Gravel or Permeable Pavers

Staff finds the proposal to reduce the driveway in size and install permeable pavers or gravel to be consistent with the applicable guidelines and recommends approval. The work item will add greenspace and provide better on-site drainage.

The driveway is minimally visible from the right of way, and the *Takoma Park Historic District Design Guidelines* state that minor alterations to areas that do not directly front a public right of way should be allowed as a matter of course. In accordance with Chapter 24A-8(b)(1) and (2), the driveway alterations will not alter the exterior features of the residence and are compatible with the character of the district. The proposal also meets # 2, 9, and 10 of the *Standards* as the character of the property will be retained; the changes will not destroy historic materials that characterize the yard, and if removed in the future the essential form and integrity of the yard will be maintained.

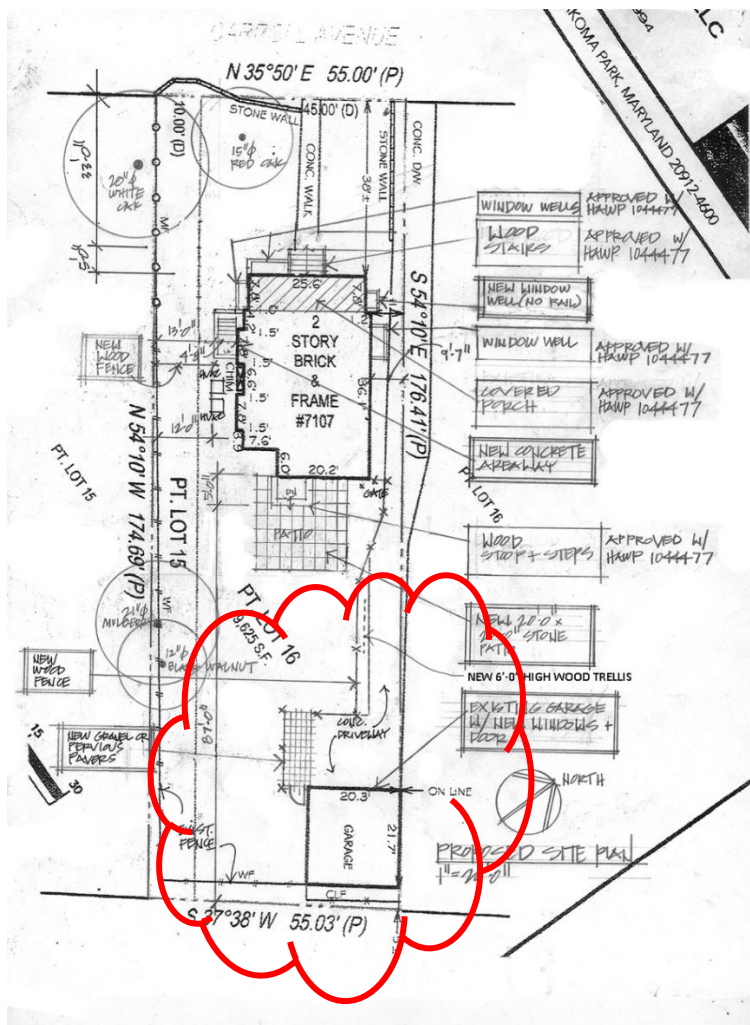


Figure 17: The locations where the driveway will be reduced in size and permeable pavers or gravel added are clouded in red.

### STAFF RECOMMENDATION

Staff recommends that the HPC **approve with three conditions** the HAWP application with final approval of all details delegated to staff:

1. The applicants must submit specifications and final designs for each proposed window and door before the plans are stamped.
2. The applicants must submit specifications and detailed drawings for the proposed window wells and steel railings at the areaway before the plans are stamped.
3. The applicants must remove the proposed areaway and doorway from the plans before they are stamped.

Note: The original HAWP approval from Oct. 7, 2023, included seven conditions, all of which are still outstanding.<sup>3</sup>

<sup>3</sup> Link to October 11, 2023, HPC meeting audio/video transcript:

[https://mncppc.granicus.com/MediaPlayer.php?publish\\_id=7054e819-6902-11ee-b4aa-0050569183fa](https://mncppc.granicus.com/MediaPlayer.php?publish_id=7054e819-6902-11ee-b4aa-0050569183fa)

Link to the staff report for HAWP #1044477: <https://montgomeryplanning.org/wp-content/uploads/2023/10/I.C-7107-Carroll-Avenue-Takoma-Park-1044477.pdf>



under the Criteria for Issuance in Chapter 24A-8(b), (1), (2), and (d), having found that the proposal, as modified by the condition, is consistent with the *Takoma Park Historic District Guidelines*, and therefore will not substantially alter the exterior features of the historic resource and is compatible in character with the district and the purposes of Chapter 24A;

and with the *Secretary of the Interior's Standards for Rehabilitation* # 2, 5, 6, 9, and 10.

and with the general condition that the applicant shall present an electronic set of drawings, if applicable, to Historic Preservation Commission (HPC) staff for review and stamping prior to submission for the Montgomery County Department of Permitting Services (DPS) building permits;

and with the general condition that final project design details, not specifically delineated by the Commission, shall be approved by HPC staff or brought back to the Commission as a revised HAWP application at staff's discretion;

and with the general condition that the applicant shall notify the Historic Preservation Staff if they propose to make any alterations to the approved plans. Once the work is completed the applicant will contact the staff person assigned to this application at 301-495-4571 or [chris.berger@montgomeryplanning.org](mailto:chris.berger@montgomeryplanning.org) to schedule a follow-up site visit.



APPLICATION FOR HISTORIC AREA WORK PERMIT HISTORIC PRESERVATION COMMISSION 301.563.3400

FOR STAFF ONLY: HAWP# DATE ASSIGNED

APPLICANT:

Name: Barrett Colombo & Aimee Witteman Address: 7107 Carroll Avenue Daytime Phone: 301-806-6447

E-mail: bwcolombo@gmail.com City: Takoma Park Zip: 20912 Tax Account No.: 01062281

AGENT/CONTACT (if applicable):

Name: Richard J. Vitullo AIA Address: 7016 Woodland Avenue Daytime Phone: 301-806-6447

E-mail: rjv@vitullostudio.com City: Takoma Park Zip: 20912 Contractor Registration No.:

LOCATION OF BUILDING/PREMISE: MIHP # of Historic Property

Is the Property Located within an Historic District? Yes/District Name Takoma Park No/Individual Site Name

Is there an Historic Preservation/Land Trust/Environmental Easement on the Property? If YES, include a map of the easement, and documentation from the Easement Holder supporting this application.

Are other Planning and/or Hearing Examiner Approvals /Reviews Required as part of this Application? (Conditional Use, Variance, Record Plat, etc.?) If YES, include information on these reviews as supplemental information.

Building Number: 7107 Street: Carroll Avenue Town/City: Takoma Park Nearest Cross Street: Columbia Avenue Lot: P15 Block: 19 Subdivision: Parcel:

TYPE OF WORK PROPOSED: See the checklist on Page 4 to verify that all supporting items for proposed work are submitted with this application. Incomplete Applications will not be accepted for review. Check all that apply:

- Checklist of work types: New Construction, Addition, Demolition, Grading/Excavation, Deck/Porch, Fence, Hardscape/Landscape, Roof, Shed/Garage/Accessory Structure, Solar, Tree removal/planting, Window/Door, Other: areaway

I hereby certify that I have the authority to make the foregoing application, that the application is correct and accurate and that the construction will comply with plans reviewed and approved by all necessary agencies and hereby acknowledge and accept this to be a condition for the issuance of this permit.

Richard J. Vitullo AIA 1/16/2024 Signature of owner or authorized agent Date

**Owners:**

**Aimee Witteman**

**Barrett Colombo**

7107 Carroll Ave.

Takoma Park, MD 20912

**Adjoining Property Owners**

**HAWP**

---

**William Sims**

7109 Carroll Ave.

Takoma Park, MD 20912

**Jaime & Brittany Marschalk**

7105 Carroll Ave.

Takoma Park, MD 20912

**Adriana & Pascal Echeverri**

101 Park Ave.

Takoma Park, MD 20912

8 Columbia Avenue

Takoma Park, MD 20912



**Description of Property:** Please describe the building and surrounding environment. Include information on significant structures, landscape features, or other significant features of the property:

**see attached**

**Description of Work Proposed:** Please give an overview of the work to be undertaken:

**see attached**

Work Item 1: \_\_\_\_\_

Description of Current Condition:

Proposed Work:

Work Item 2: \_\_\_\_\_

Description of Current Condition:

Proposed Work:

Work Item 3: \_\_\_\_\_

Description of Current Condition:

Proposed Work:

**HISTORIC AREA WORK PERMIT  
CHECKLIST OF  
APPLICATION REQUIREMENTS**

	Required Attachments						
Proposed Work	I. Written Description	2. Site Plan	3. Plans/ Elevations	4. Material Specifications	5. Photographs	6. Tree Survey	7. Property Owner Addresses
New Construction	*	*	*	*	*	*	*
Additions/ Alterations	*	*	*	*	*	*	*
Demolition	*	*	*		*		*
Deck/Porch	*	*	*	*	*	*	*
Fence/Wall	*	*	*	*	*	*	*
Driveway/ Parking Area	*	*		*	*	*	*
Grading/Excavation/ Landscaping	*	*		*	*	*	*
Tree Removal	*	*		*	*	*	*
Siding/ Roof Changes	*	*	*	*	*		*
Window/ Door Changes	*	*	*	*	*		*
Masonry Repair/ Repoint	*	*	*	*	*		*
Signs	*	*	*	*	*		*



DESCRIPTION OF ***EXISTING*** STRUCTURE,  
ENVIRONMENTAL SETTING AND HISTORICAL FEATURES  
AT:  
7107 Carroll Ave., Takoma Park, MD 20912

*This is an "Contributing Resource" 2 ½ -story Colonial Revival-style house with full basement, built in 1918, and it is located in the Takoma Park Historic District, and is near the corner at Columbia Avenue.*

*It is rectangular in shape; the original house is 27'-0" wide x 30'-0" long, with a 6'-0" x 20'-0" 2-story addition (probably a sleeping porch) at the rear.*

- a. Original House Structure:** *The main house structure is wood framed and is gabled (8:12 slope), with the ridge parallel to Carroll Ave.. There is a newer shed roof over the later rear addition (2.5:12 slope).*
- b. Original Garage:** *The 20'-3" wide x 21'-8" garage structure at rear of property has a CMU wall structure with a wood-framed hip roof (5.5:12 slope).*
- c. Foundation:** *The foundation is a combination of brick and parged CMU, painted.*
- d. Exterior Finish:** *The exterior finish of the **original house**, at the 1<sup>st</sup> floor level is pebble-dash stucco with a 1 x 8 water table with a wood drip cap on top. The exterior finish of 2<sup>nd</sup> and 3<sup>rd</sup> floors is a 6" exposure cedar shake siding; there is a 1 x 6 bandboard, with a bed mould cap, separating the 1<sup>st</sup> and 2<sup>nd</sup> floor finishes. The exterior finish at the **sleeping porch addition at the rear** is 6" exposure smooth fiber cement siding.*
- e. Windows and Doors:** **Original house-***There are original painted wood windows, predominantly 6-over-1 and 4-over-1 double hung. The newer windows and doors are aluminum-clad wood.*
- f. Wood Stoop:** *There is a small wood stoop with 3 steps to grade at rear entry door.*

DESCRIPTION OF THE ***PROPOSED*** PROJECT AND ITS  
EFFECT ON THE HISTORIC RESOURCE:  
**7107 Carroll Avenue., Takoma Park, MD 20912**

**House:**

- a. **Basement level:** At the front of the basement area (south side of house), a new side entry and concrete areaway will be added leading into an accessory apartment. The entry door will be placed in the same opening area as the existing window.

**NOTE: The south side of the house, towards the front, is the only logical and logistically possible location for the areaway into the basement apartment. The west side (front of house) and the east side (rear of house) are both primary entrances from the street and from the driveway/garage for the main house. The rear half of the basement is also the existing area that is devoted to storage, laundry and furnace room for the main house. The area at the north side of the house, along the driveway, is too narrow a space (9'-7") from the house to the side property line for an adequate areaway. It would also enter into an existing bedroom and bathroom area. (See document labeled "7107 carroll prop bsmt area functions")**

- b. **Basement level:** At the north side of the front porch foundation wall will be a new shallow (8-12" +/- deep) window well; no railing is needed for this well.
- c. **First Floor, Rear:** A new painted wood bracket-supported roof covering (4'-9" x 7'-0") will be added over the new rear entry door.
- d. **Ground level:** Two new HVAC condenser units will be installed at south side of house towards the rear. (See photo labeled: "hvac exterior condenser unit") A new 20'-0" x 20'-0" bluestone covered patio will be installed at rear entry. (See photo labeled "bluestone patio material 2").

**Existing Garage:** The existing 1-story 2-bay Garage will be renovated:

- a. **At the east side of the garage,** it will be renovated and restored as a functional garage, with a new shop-built upward-swing painted wood garage door with 12-lites. New aluminum-clad wood double hung windows will replace the dilapidated wood windows within the existing masonry openings.
- b. **At the west side of the garage,** the area will be enclosed as an office, with new aluminum-clad wood windows and side door (all within existing masonry openings). The existing exterior will be repaired, restored and painted CMU, and at the new wall in front will be a new shop-built fixed painted wood garage door with 12-lites to match the operating door to the east; behind the garage door will be an insulated wall with a glass section at the top to allow the garage door lites to allow light into the space from the front.
- c. **At the rear of the garage,** two existing dilapidated wood windows in the rear wall will be removed and the openings will be infilled with a Hardiepanel exterior finish.
- d. **Driveway:** The existing concrete/asphalt driveway will be reduced in size. An area of pervious pavers will be added to the south of driveway for a turn-around area. (See photo labeled: "pervious paver material 2")

**The following materials/details will be used in the house and garage renovation/restoration:**

1. **Exterior Finish:**

**Garage:** Painted HardiePanel (fiber cement) will be the exterior finish for the infill window openings at the rear. The existing rusticated CMU will be repaired, restored and painted.

2. **New Basement Areaway:** The new areaway will be cast-in-place concrete with a steel railing around.
3. **New Basement Window Wells:** The new shallow window well will be defined by pressure-treated wood at their perimeter with gravel on the bottom.
4. **House Rear Entry Roof Cover:** Painted wood frame with asphalt shingles.
5. **Wood Fence and Trellis:** A 4'-0" high cedar (open-type) fence with gates will be used at the side and rear of house. A 6'-0" high x 10'-0" long cedar trellis will be installed in the rear yard along the driveway near fence. (See document labeled: "wood fence profile 2", "wood trellis", and "proposed site plan")
6. **Windows and Doors:**

**House & Garage:** All new windows to be Kolbe Ultra Series (not Marvin).

**Garage:** The new windows and entry door at the garage will be aluminum-clad wood; windows to be double-hung sash windows (1-over-1SDL); they will have a beveled profile. Skylight: 2'-0" x 4'-0" on west side of roof.

The new garage doors will be one (1) upward-swing and one (1) fixed painted wood garage shop-built door with 12-lites.

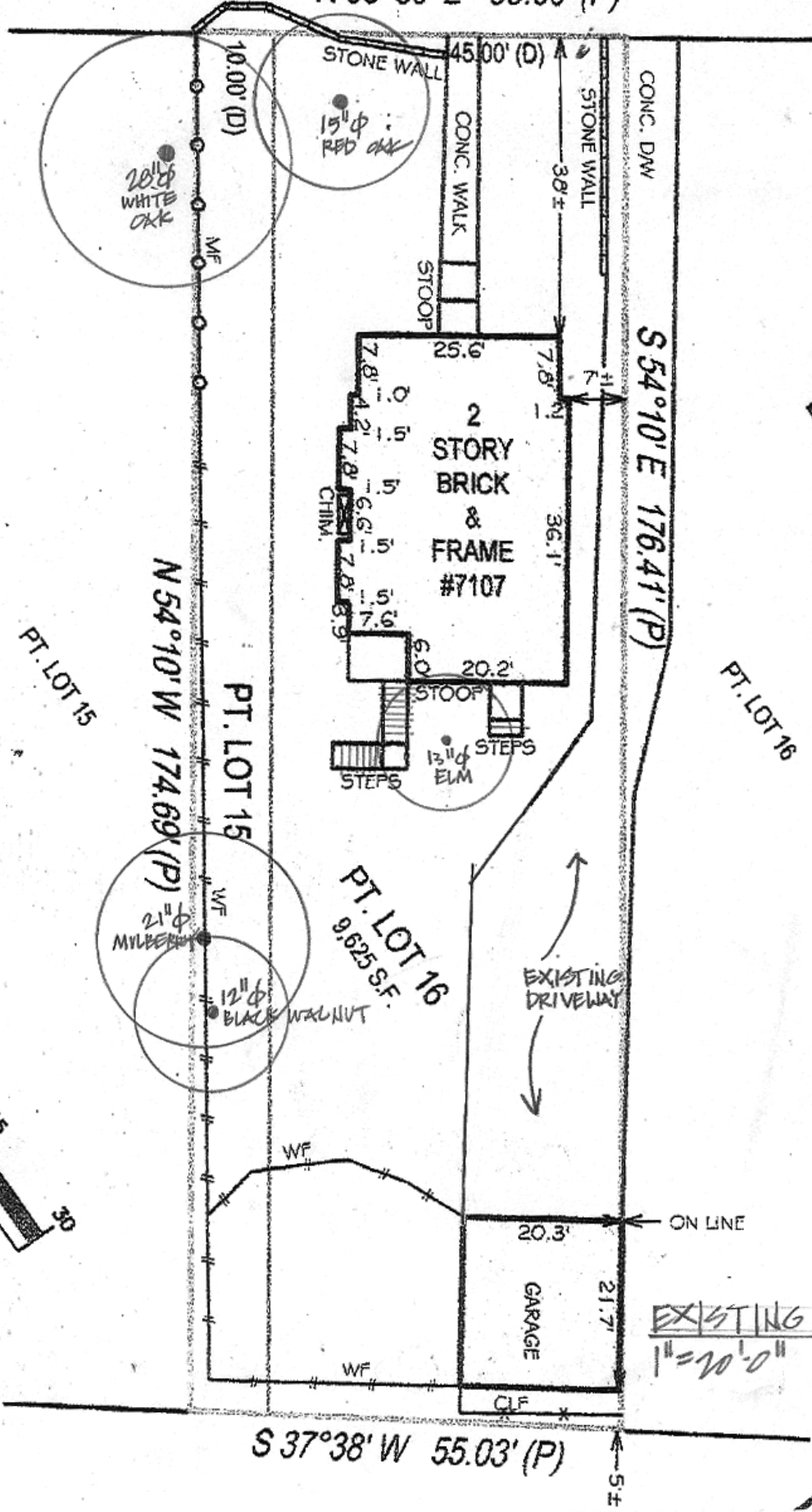
**House Areaway Entry:** The new entry door will be aluminum-clad ½ lite wood with a single-lite.

**House Storm Windows:** All existing windows will have new storm windows added. See documents labeled "allied historic storm window.pdf" and "allied historic storm window photo.pdf"

CARROLL AVENUE

N 35°50' E 55.00' (P)

AKOMA PARK, MARYLAND 20912-4600  
1994 LLC



PT. LOT 15

PT. LOT 15

PT. LOT 16

PT. LOT 16  
9.625 S.F.

EXISTING DRIVEWAY

ON LINE

EXISTING SITE PLAN

1" = 20'-0"

S 37°38' W 55.03' (P)

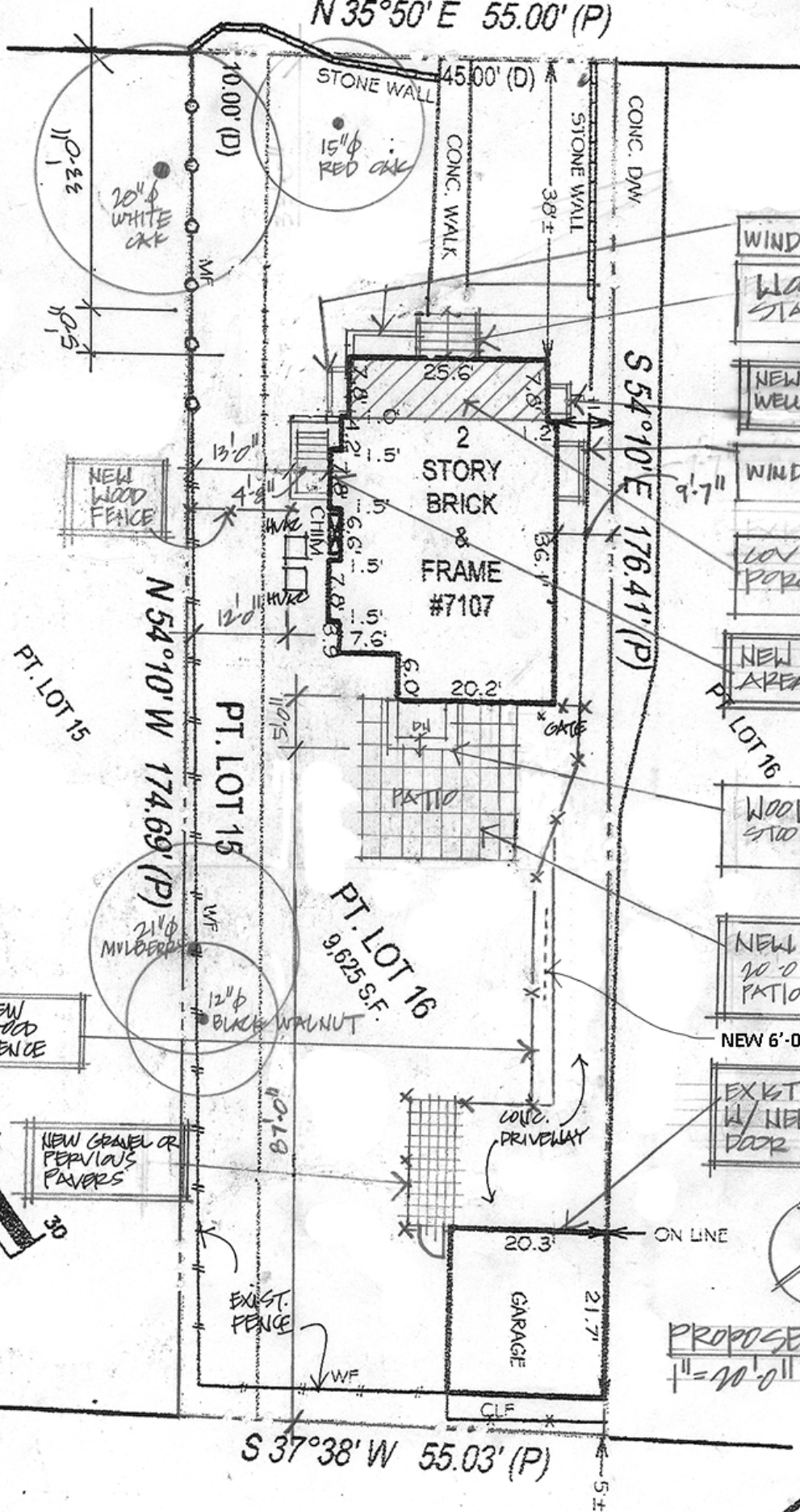




44701 AVENUE

394  
KOMA PARK, MARYLAND 20912-4500  
LLC

N 35°50' E 55.00' (P)



- WINDOW WELLS APPROVED W/ HAWP 1044477
- WOOD STAIRS APPROVED W/ HAWP 1044477
- NEW WINDOW WELL (NO RAIL)
- WINDOW WELL APPROVED W/ HAWP 1044477
- COVERED PORCH APPROVED W/ HAWP 1044477
- NEW CONCRETE AREAWAY
- WOOD STOOP + STEPS APPROVED W/ HAWP 1044477
- NEW 20'-0" x 20'-0" STONE PATIO
- NEW 6'-0" HIGH WOOD TRELLIS
- EXISTING GARAGE W/ NEW WINDOWS + DOOR

S 54°10' E 176.41' (P)

N 54°10' W 174.69' (P)

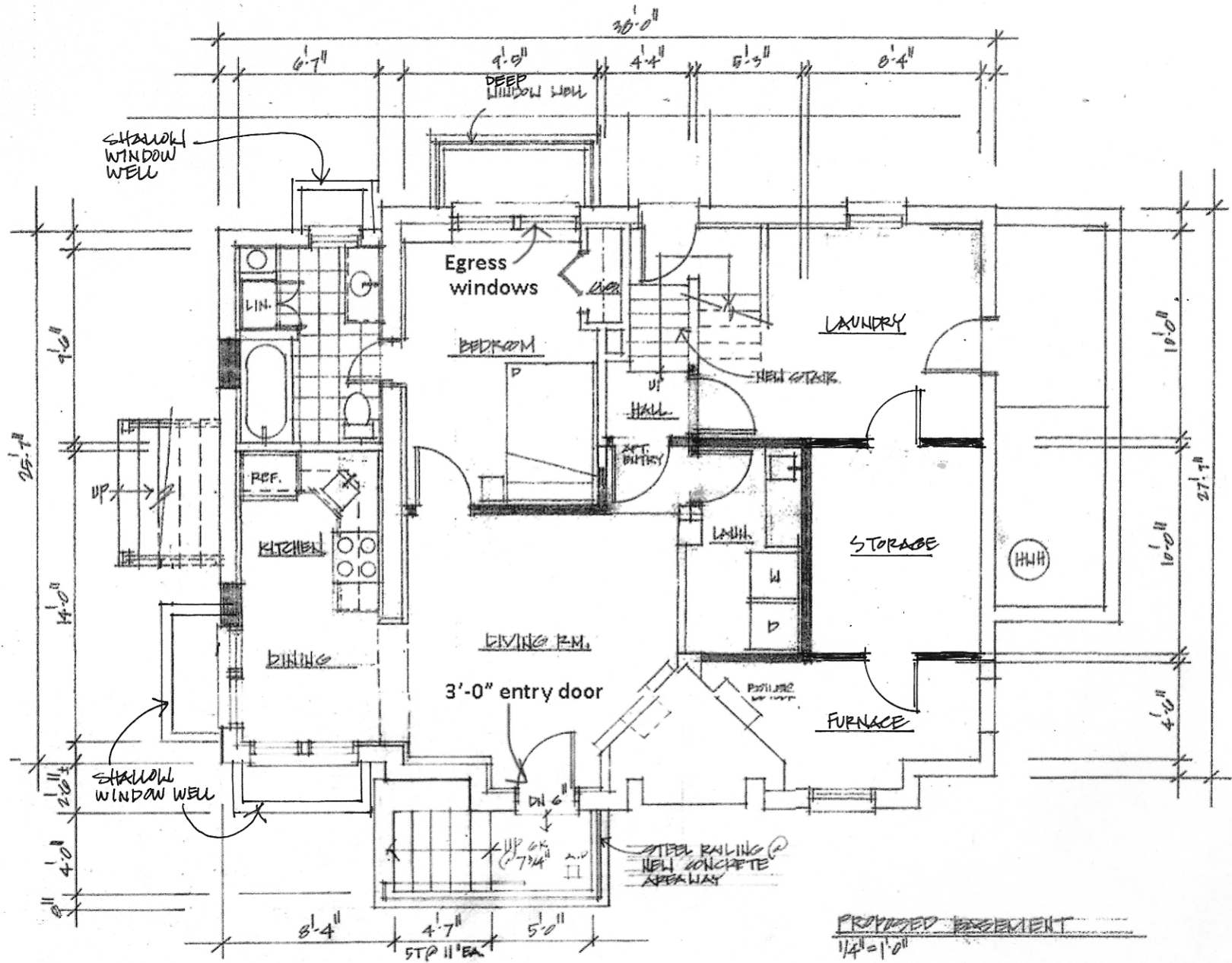
PT. LOT 15

PT. LOT 16  
9,925 S.F.

PT. LOT 16



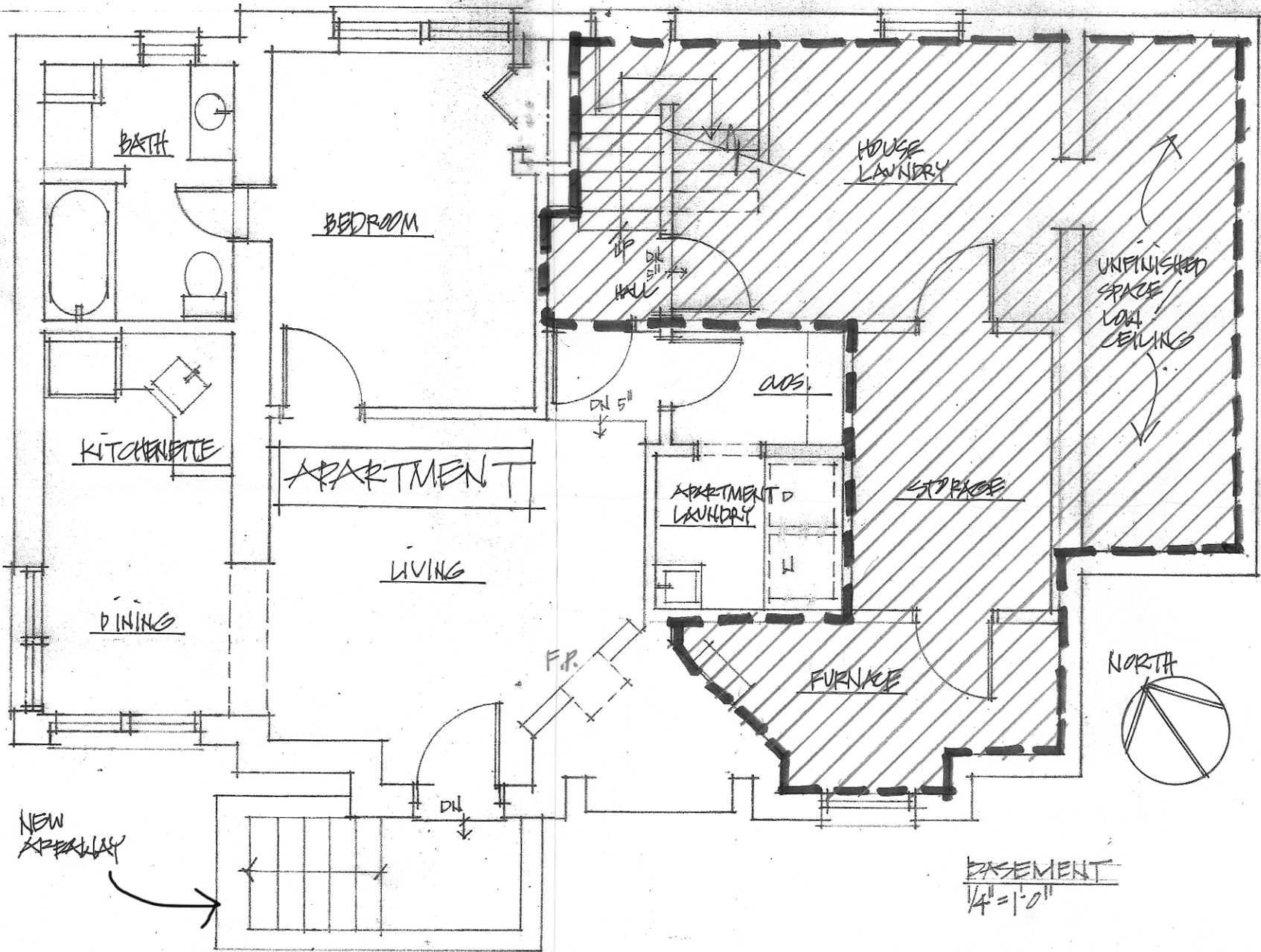
PROPOSED SITE PLAN  
1" = 20'-0"



DRIVEWAY

HOUSE  
ENTRY  
ABOVE

HOUSE  
ENTRY  
ABOVE



NEW  
APRIL



BASEMENT AREA DEVOTED  
TO AUXILIARY FUNCTIONS  
FOR MAIN HOUSE

BASEMENT  
1/4" = 1'-0"



EXIST. WOOD WINDOW, TR. (R.T.D.)  
 EXIST. CEDAR SHAKES, F.T.D.

EXIST. PEBBLE-DASH STUCCO

NEW STEEL RAILING &  
 NEW CONC. AREAWAY

PROPOSED FRONT ELEVATION

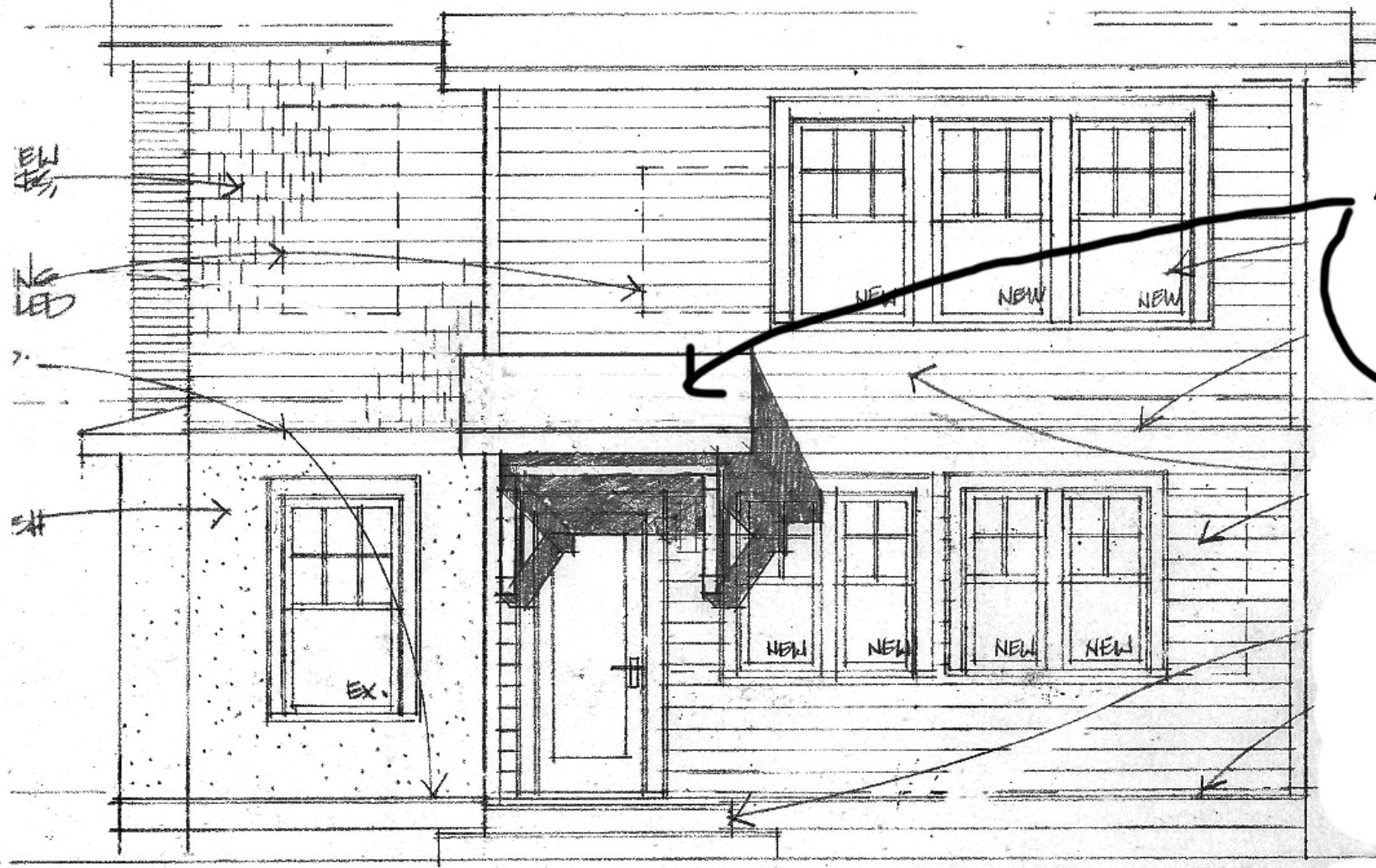
1/4" = 1'-0"





LEFT SIDE ELEVATION

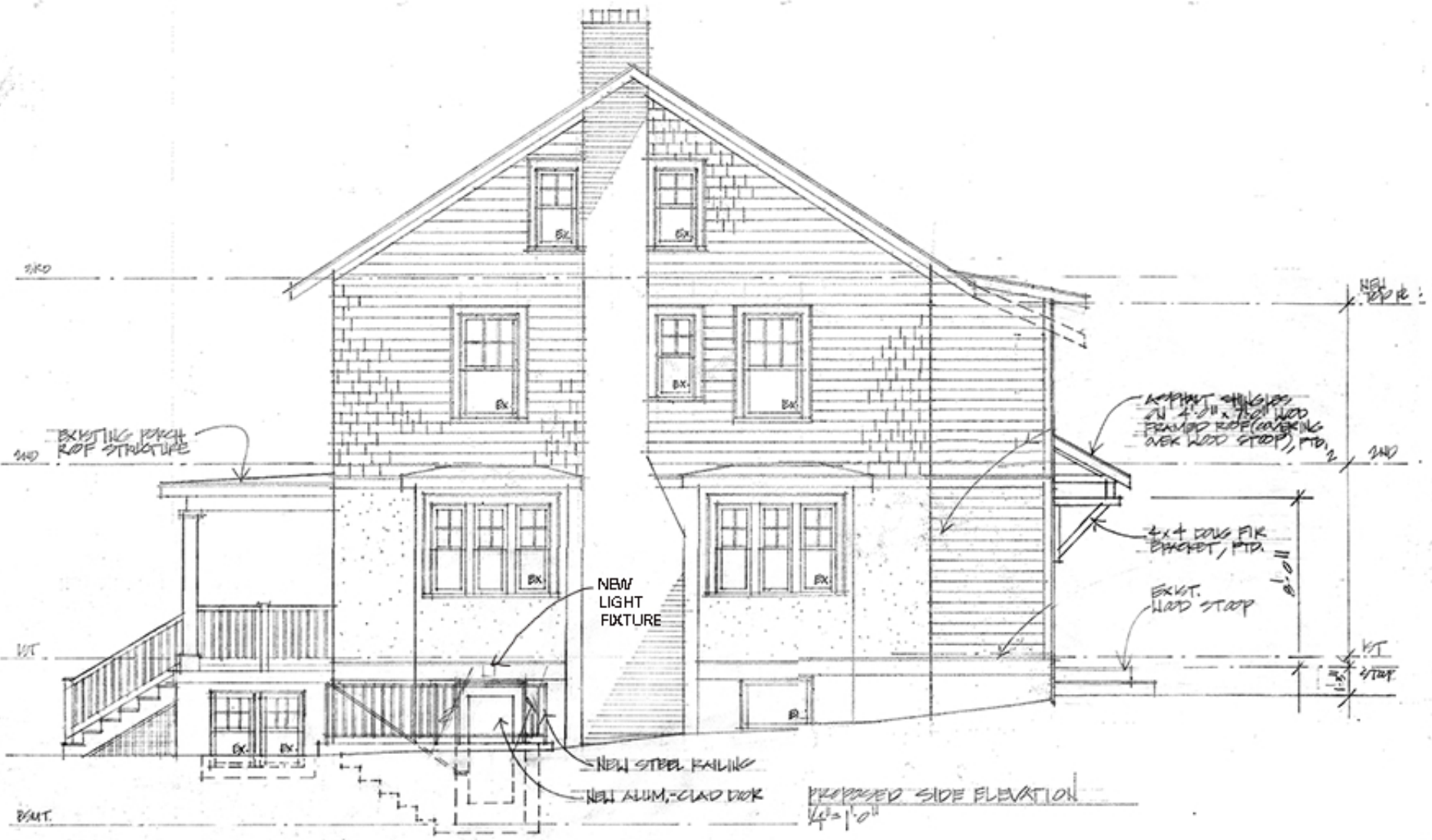
01/19/2024

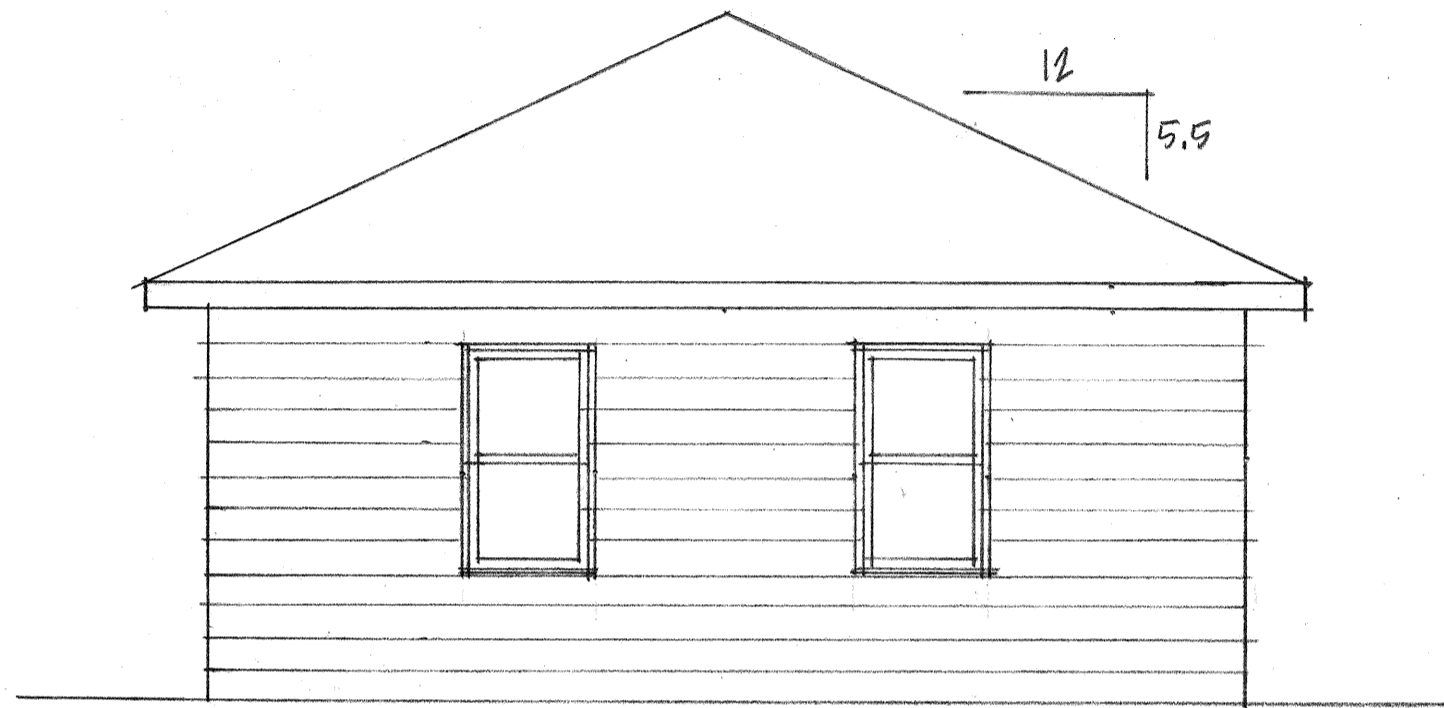


PROPOSED REAR ELEVATION

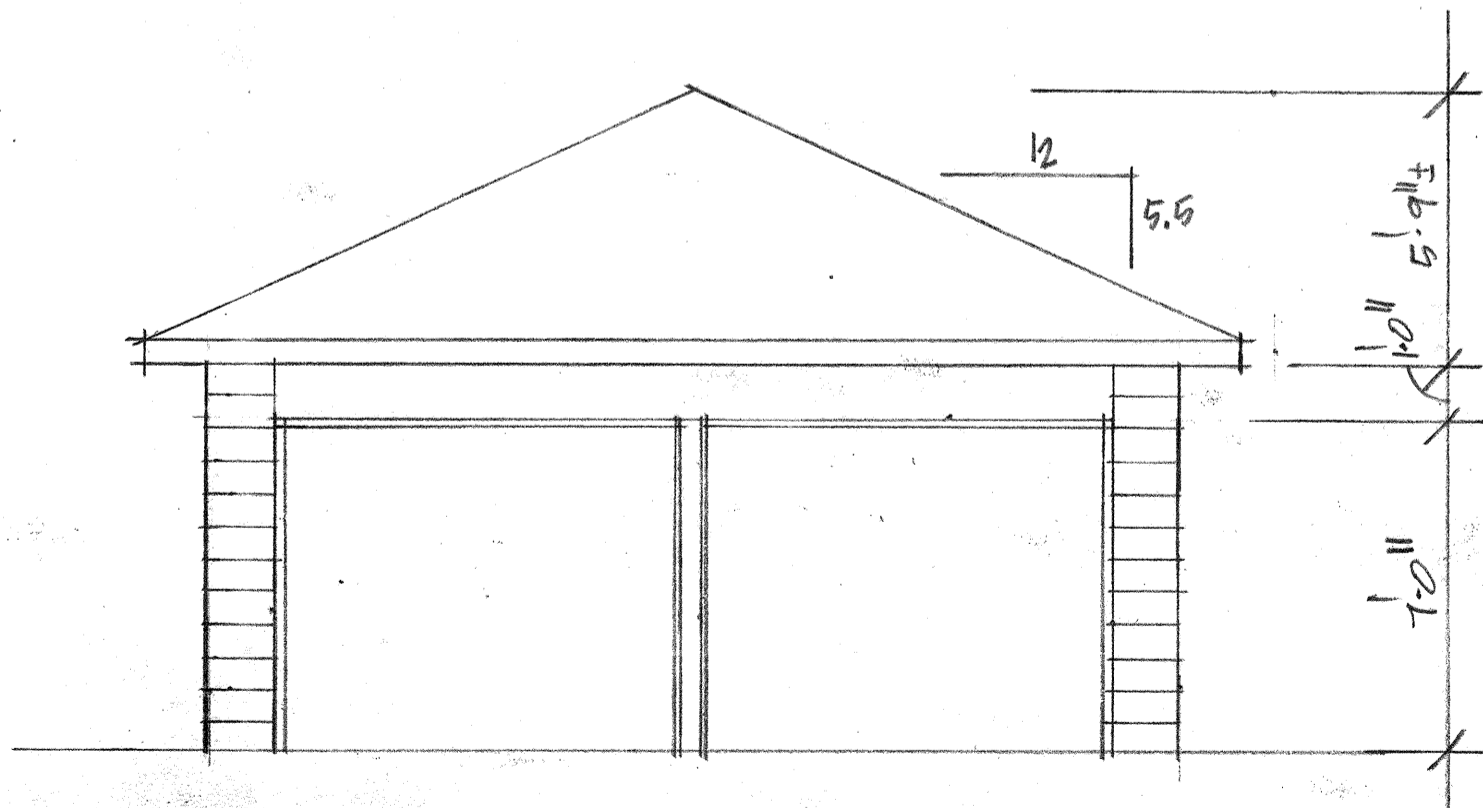
ASPHALT SHINGLES ON  
4'-0" X 7'-0" WOOD-FRAMED  
ROOF COVERING OVER WOOD  
STOOP (SUPPORTED ON 4 X 4  
DOUG FIR BRACKETS),  
(PAINTED)

PROPOSED SIDE  
ELEVATION

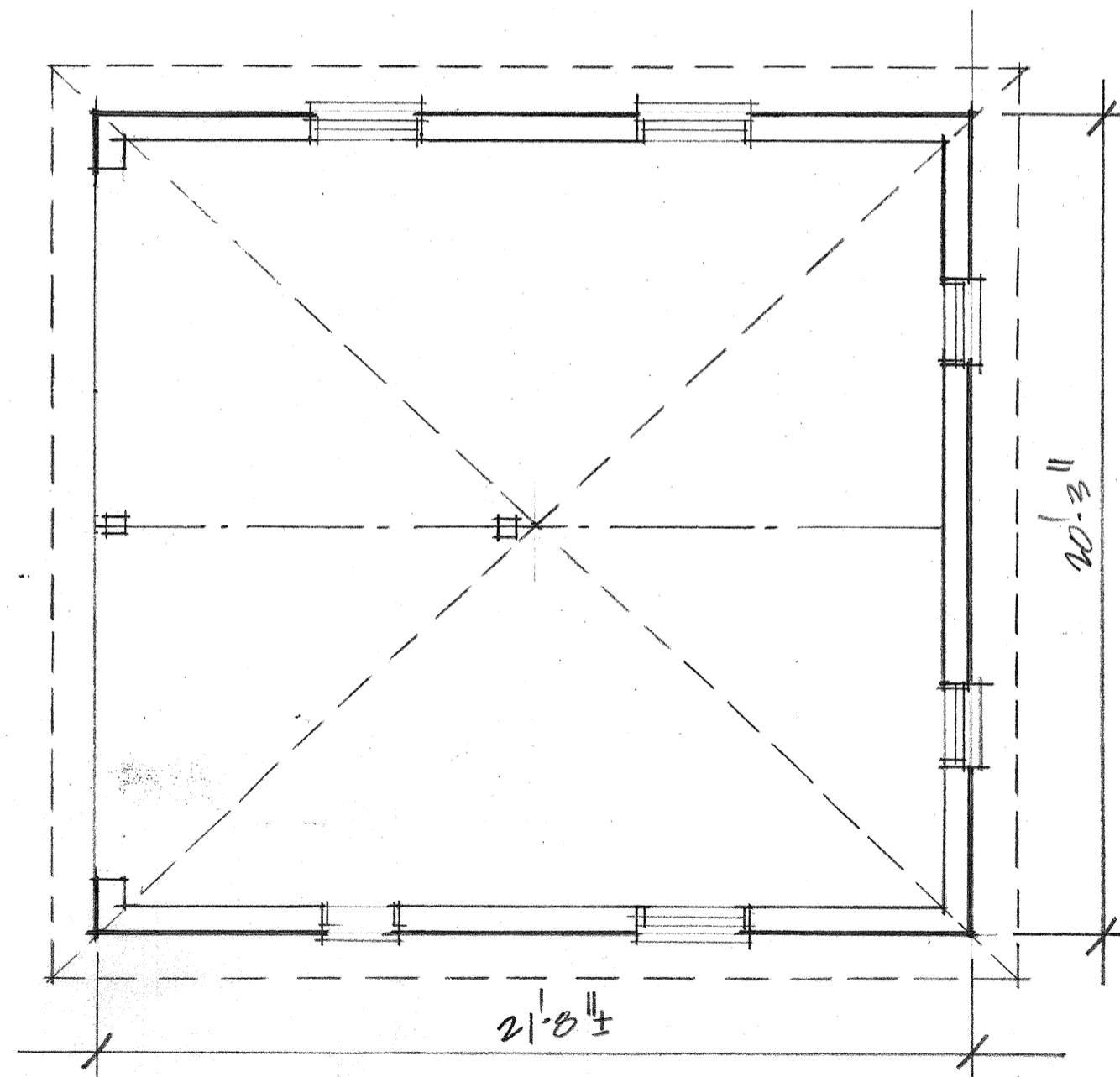




EXISTING SIDE ELEVATION

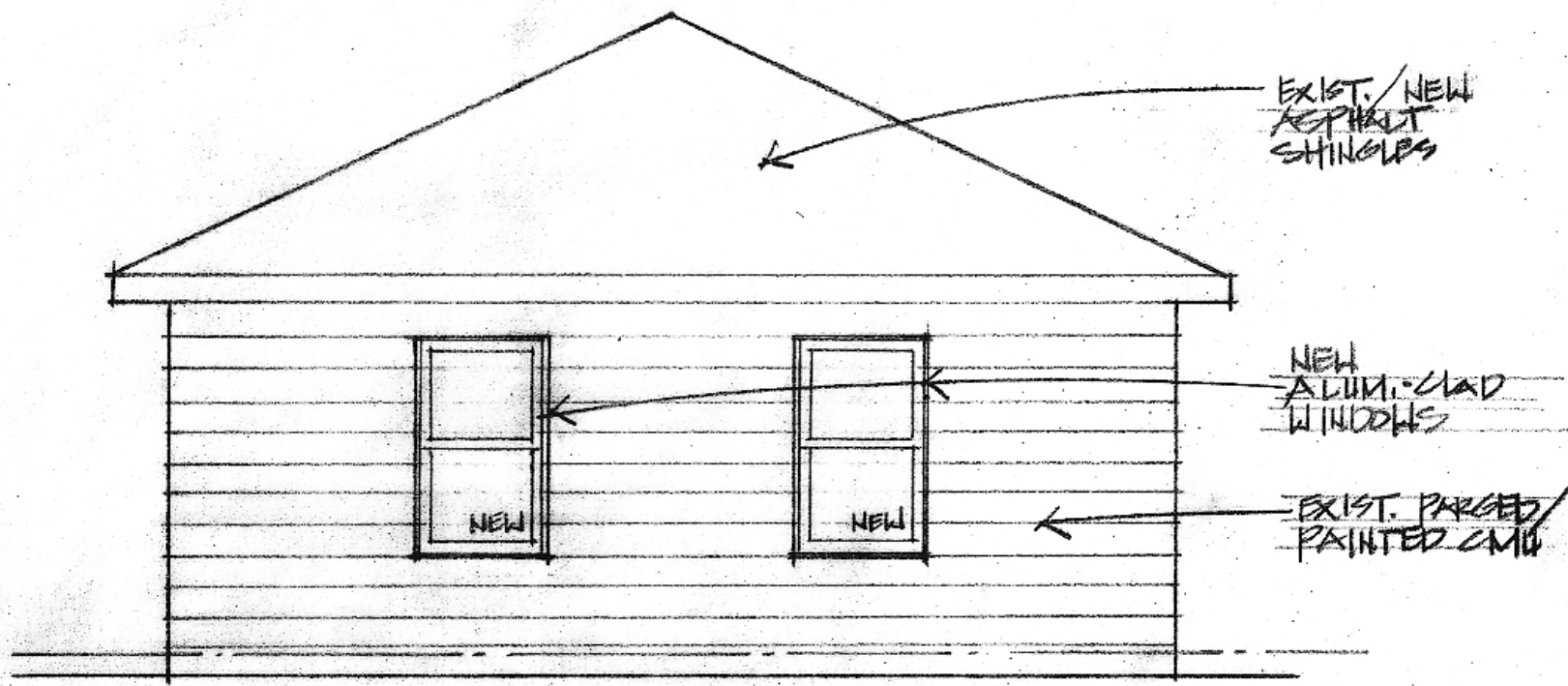


EXISTING FRONT ELEVATION  
1/4" = 1'-0"



EXISTING GARAGE PLAN  
1/4" = 1'-0"



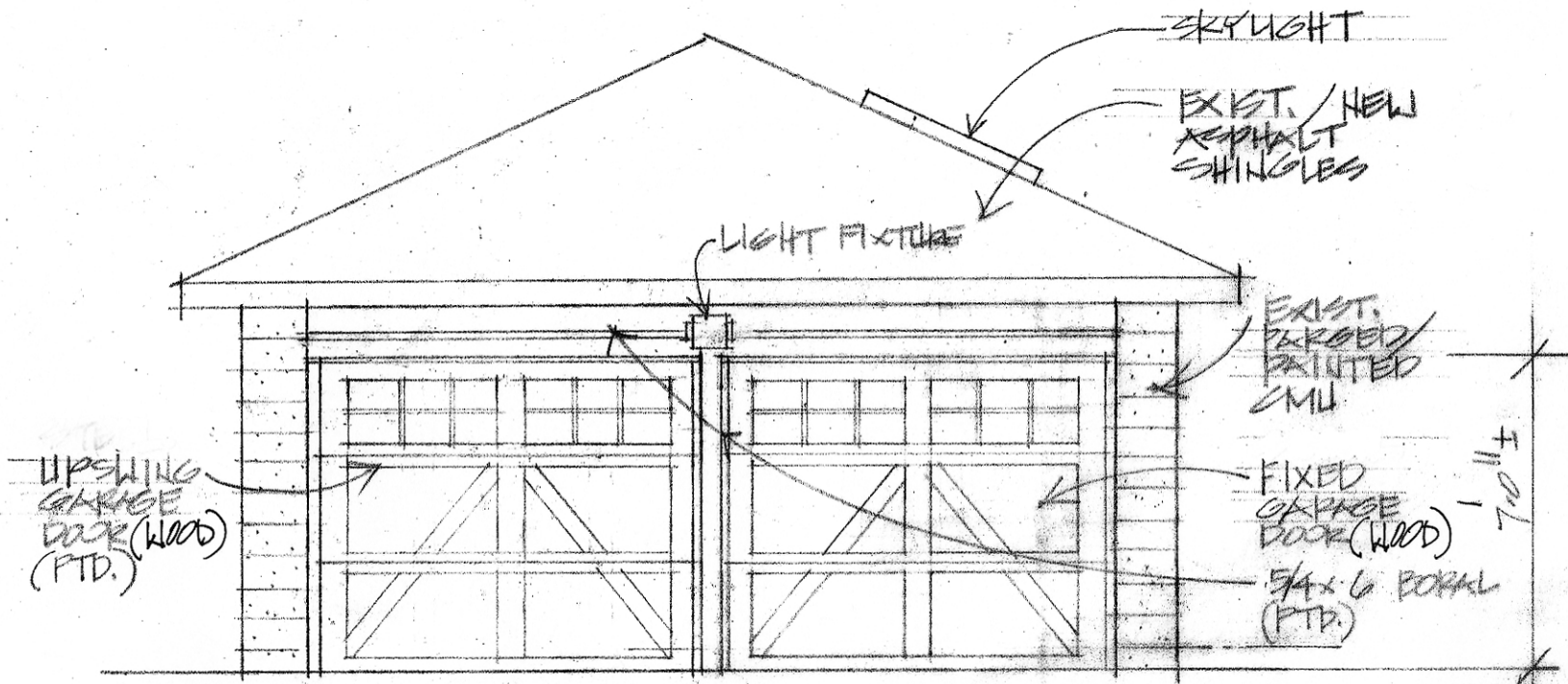


EXIST. / NEW  
ASPHALT  
SHINGLES

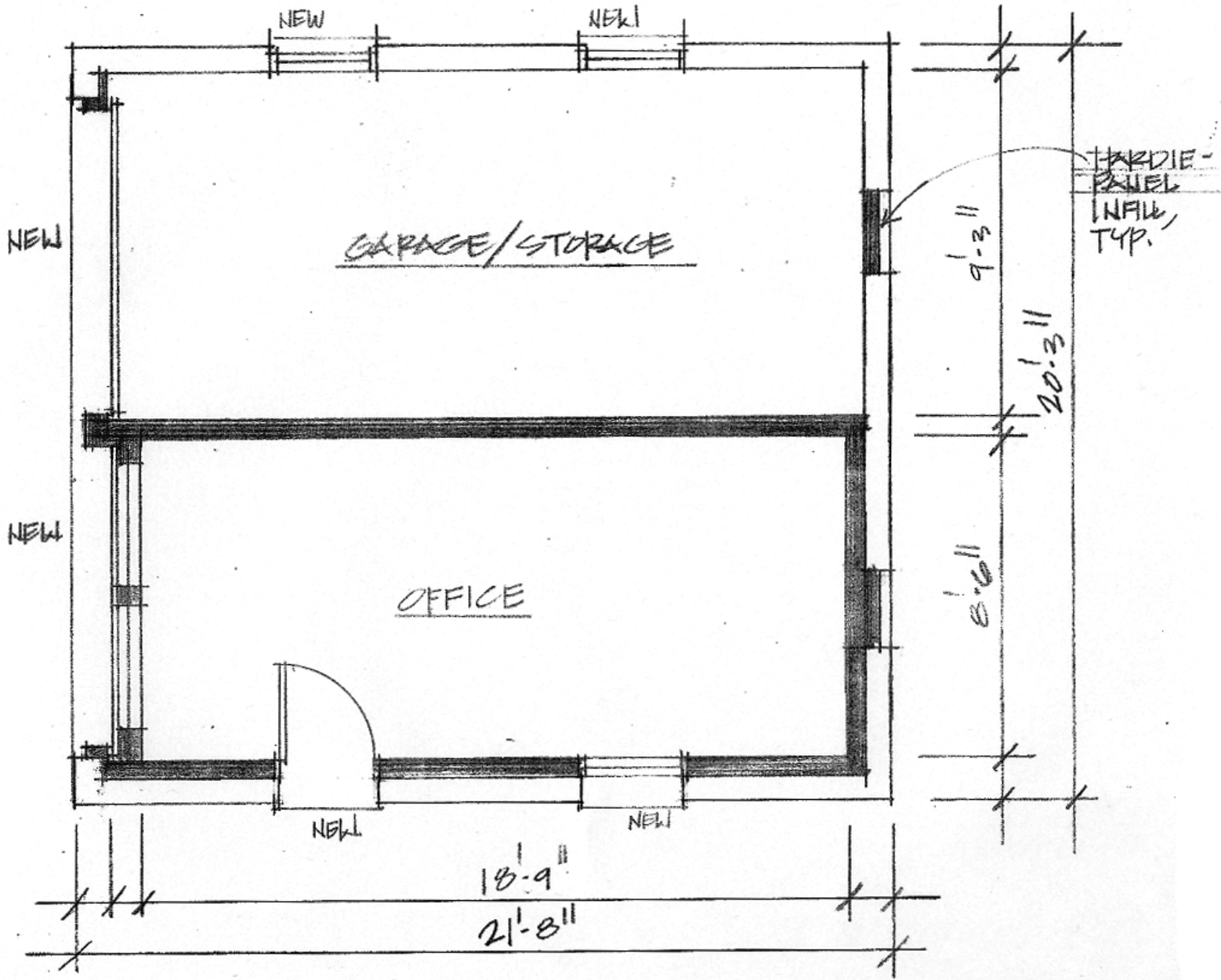
NEW  
ALUM. CLAD  
WINDOWS

EXIST. PAINTED /  
PAINTED CMU

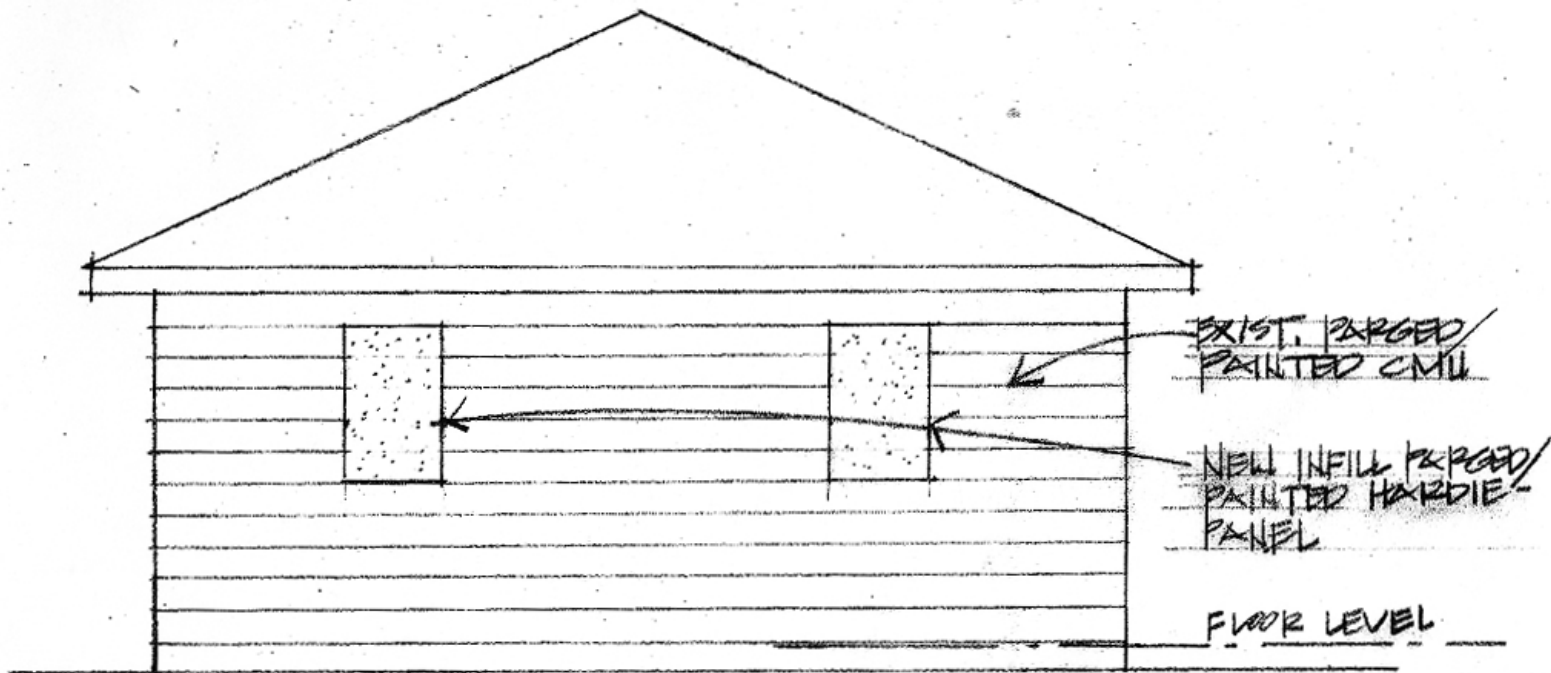
PROPOSED LEFT SIDE ELEVATION  
 $\frac{1}{4}'' = 1'-0''$



PROPOSED GARAGE/OFFICE FRONT ELEV.  
 $\frac{1}{4}'' = 1'-0''$



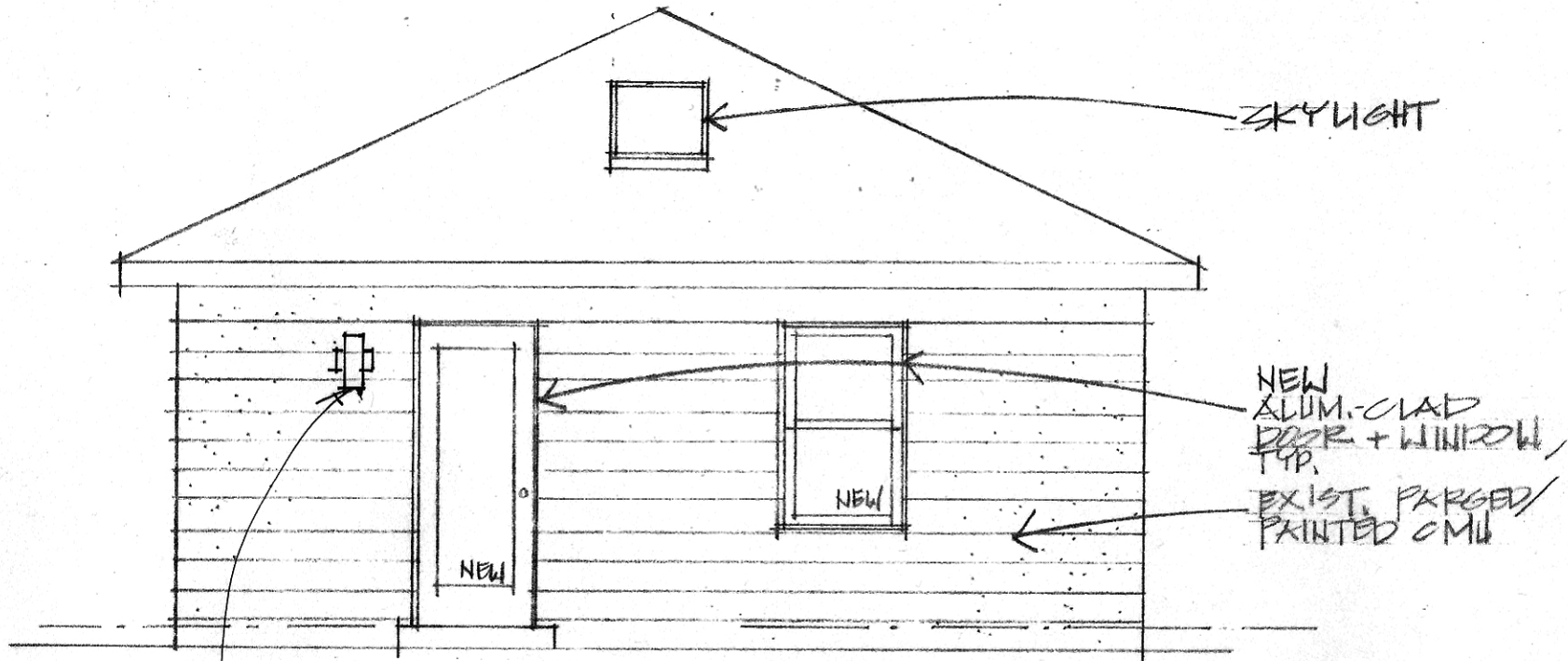
PROPOSED GARAGE/OFFICE  
 1/4" = 1'-0"



PROPOSED GARAGE/OFFICE REAR ELEV.

$\frac{1}{4}'' = 1'-0''$





SKYLIGHT

NEW  
ALUM.-CLAD  
DOOR + WINDOW,  
TYP.

EXIST. PARGED/  
PAINTED CMU

LIGHT FIXTURE

PROPOSED RIGHT SIDE ELEVATION

4/11/2011



FRONT DOOR- 2 QTY  
14"W X 15"H

AREAWAY- ENTRY CEILING  
14"SQ X 4.3"H



GARAGE ABOVE DOORS  
12"DIA SHADE- 19"PROJECTION  
15"H



REAR PORCH- ABOVE DOOR  
LED-  
14"W X 25"D



GARAGE SERVICE DOOR  
9.5"DIA X 12"D  
\*OTHER COLORS AVAILABLE



\*OTHER COLORS  
AVAILABLE

# VISUAL COMFORT & Co.

## CO1182HTCP: Large Outdoor Flush Mount



### Dimensions:

**Length:** 14.5"      **Wire:** 8" (color;Black/White)  
**Width:** 14.5"      **Mounting Proc.:** Set Screw(s)  
**Height:** 4.38"      **Connection:** Mounted To Box  
**Weight:** 13.86 lbs.

### Bulbs:

2 - Medium T10 40.0w Max. 120v Not included

### Material List:

1 Body - Stainless Steel - Heritage Copper  
 1 Reflector - Stainless Steel - Painted Antique Brass

### Safety Listing:

Safety Listed for Damp Locations

### Instruction Sheets:

Trilingual (English, Spanish, and French) (CO1172)

### Collection: Freeport

Frame of stainless steel with glass rectangular shade

2 T10 Medium 40 watt light bulb (not included)

Available in Heritage Copper finish

Assortment includes: small, medium, large and extra-large wall lanterns; one-light pocket lantern, small, medium and large pendant; four-light linear; medium and large flush mounts; and medium and large outdoor post

Damp Rated

UPC #:014817604634

Finish: Heritage Copper (HTCP)

### Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Clear	4		13.38	0.12	3.25					
Panel	Glass	Clear	1		13.38	0.12	13.38					

### Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Fr. Class	UPS Ship
Individual	CO1182HTCP	1	014817604634	18.0	18.0	12.25	2.3	17.0	0	No
Master Pack	CO1182HTCP	0	10014817604631							No
NJ Pallet		32		48.0	40.0	77.0	85.56	544.0		No
NV Pallet		32		48.0	40.0	77.0	85.56	544.0		No

# TEAR SHEET



## Linear Lantern Short

Item # CHO 2908BZ

Designer: Chapman & Myers

Height: 15"

Width: 9"

Extension: 5"

Backplate: 9" x 13" Rectangle

Finishes: AB, BZ, WZ

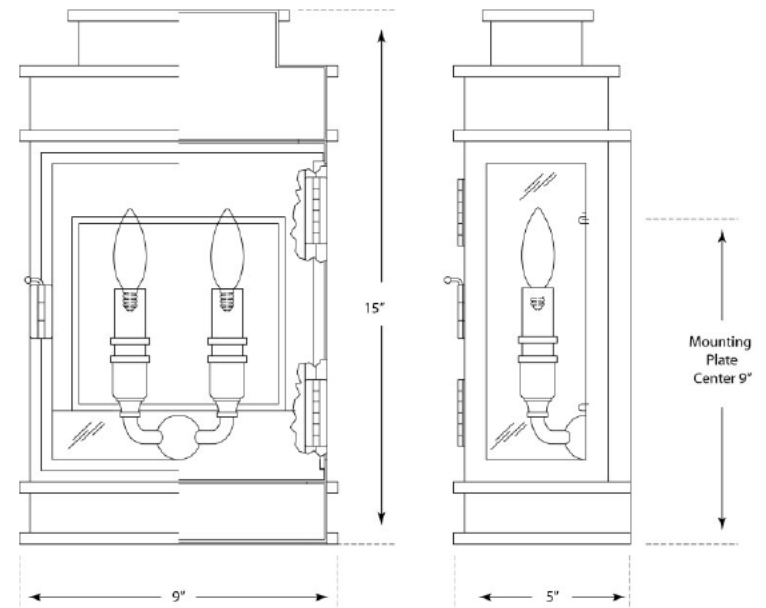
Glass Options: CG

Socket: 2 - E12 Candelabra

Wattage: 2 - 60 C11

Weight: 11 Pounds

©EFC DESIGNS





# SCHOOLHOUSE

## Factory 6 Sconce

**Application:** Wall Sconce

**Product Origin:** Processed and assembled in Portland, Oregon using ethically-sourced domestic and global components.

**UL Listed:** Yes

**Max Wattage:** 100 W

**Voltage:** 120/220V

**Location Rating:** Wet

**Dimensions:**

Overall: 15.75" H x 12" W x 19.5" D

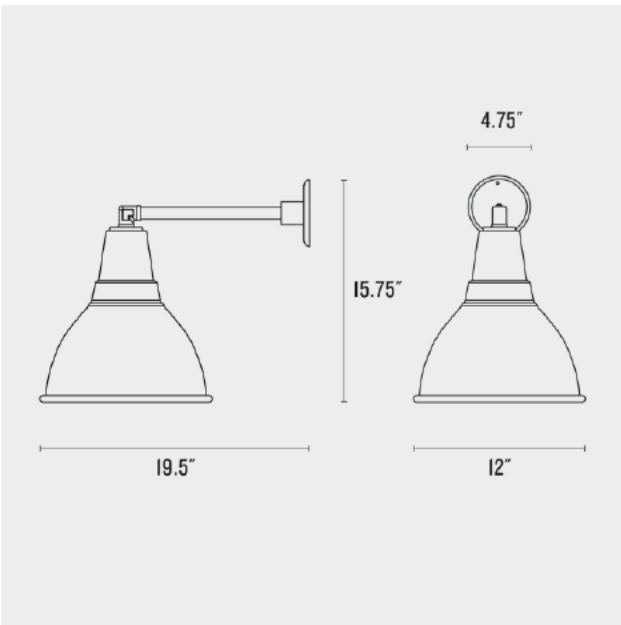
Canopy: 4.75" H x 4.75" W x 1.75" D

**Materials:** Aluminum, Steel

**Details:**

- All shade options feature a white interior
- Cage option adds 3.25" in overall height

One year guarantee



# SCHOOLHOUSE

---

### Color Option(s)



Sergeant Green  
(SG)



Lichen-Gloss  
(LN-G)



Persimmon-Gloss  
(PS-G)



Shell White-Gloss  
(SWT-G)



Ecru-Gloss  
(EC-G)



Butterscotch-Gloss  
(BU-G)



Dune-Gloss  
(DU-G)



Navy-Gloss  
(NV-G)



Industrial Yellow-Gloss  
(INY-G)



Chamomile-Gloss  
(CE-G)



Paprika, Gloss  
(PPA-G)



Pebble-Gloss  
(PEB-G)



Juniper-Gloss  
(JPR-G)



Black  
(BK)

### Cage Option(s)



Black  
(BK)

# SCHOOLHOUSE

## Factory 6 LED Sconce



**Application:** Wall Sconce

**Product Origin:** Processed and assembled in Portland, Oregon using ethically-sourced domestic and global components.

**UL Listed:** Yes

**Wattage:** 13 W

**Voltage:** 120 Volts

**Location Rating:** Wet

**Dimensions:**

Overall: 15.75" H x 12" W x 19.5" D

Canopy: 4.75" H x 4.75" W x 1.75" D

**Materials:** Aluminum, Steel

**Details:**

- No bulb required - Includes a self-contained LED module
- All shade options feature a white interior
- Cage option adds 3.25" in overall height

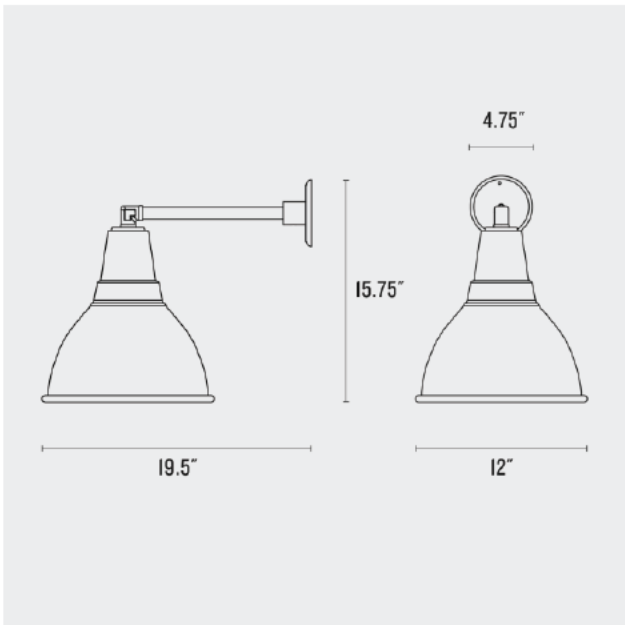
**Brightness:** 910 Lumens

**Hour Life:** 50,000 hrs

**Color Temperature:** 3000K

**Color Rendering Index:** 80 CRI

One year guarantee



# SCHOOLHOUSE

## Color Option(s)



Ecrú-Gloss  
(EC-G)



Industrial  
Yellow-Gloss  
(INY-G)



Navy-Gloss  
(NV-G)



Pebble-Gloss  
(PEB-G)



Chamomile-  
Gloss  
(CE-G)



Juniper-Gloss  
(JPR-G)



Shell White-  
Gloss  
(SWT-G)



Dune-Gloss  
(DU-G)



Persimmon-  
Gloss  
(PS-G)



Lichen-Gloss  
(LN-G)



Black  
(BK)



Sergeant Green  
(SG)



Paprika, Gloss  
(PPA-G)



Butterscotch-  
Gloss  
(BU-G)

## Cage Option(s)



Black  
(BK)

# SCHOOLHOUSE

## Factory 2 Sconce



**Application:** Wall Sconce

**Product Origin:** Processed and assembled in Portland, Oregon using ethically-sourced domestic and global components.

**UL Listed:** Yes

**Max Wattage:** 60 W

**Voltage:** 120/220 Volts

**Location Rating:** Wet

**Dimensions:**

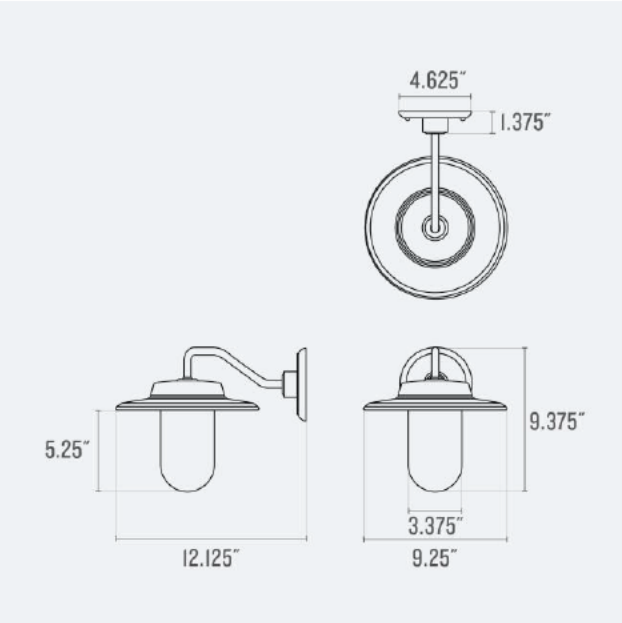
Overall: 9.375" H x 9.25" W x 12.125" D

Shade: 5.25" H x 3.375" W x 3.375" D

Canopy: 4.625" H x 4.625" W x 1.375" D

**Materials:** Aluminum, Steel, Glass

One year guarantee





# SCHOOLHOUSE

## Color Option(s)



Paprika, Gloss  
(PPA-G)



Juniper-Gloss  
(JPR-G)



Shell White-Gloss  
(SWT-G)



Sergeant Green  
(SG)



Chamomile-Gloss  
(CE-G)



Butterscotch-Gloss  
(BU-G)



Ecrú-Gloss  
(EC-G)



Lichen-Gloss  
(LN-G)



Industrial Yellow-Gloss  
(INY-G)



Black-Gloss  
(BK-G)



Persimmon-Gloss  
(PS-G)



White  
(WT)



Navy-Gloss  
(NV-G)



Pebble-Gloss  
(PEB-G)



Dune-Gloss  
(DU-G)

## Shade Option(s)



Clear Glass  
(CL)

# VISUAL COMFORT & Co.

## 8736701EN3-12: Large One Light Outdoor Wall Lantern Dimensions:



**Diameter:** 14.0"  
**Width:** 14.0"  
**Height:** 25.0"

**Extends:** 26.5'  
**Extends Max:** 32.5'  
**Wire:** 6.5" (color,Black/White)  
**Mounting Proc.:** Cap Nuts  
**Connection:** Mounted To Box  
**Watts:** 9  
**Lumens:** 800

### Bulbs:

1 - LED Medium A19 9.0w Max. 120v included

### Features:

- ENERGY STAR® Qualified
- LED Bulbs are an efficient, versatile and durable light source that deliver exceptional performance.
- Meets Title 24 energy efficiency standards
- Title 24 compliant when used with included Joint Appendix (JA8) approved lamp.

### Material List:

1 Body - Aluminum - Black

### Safety Listing:

Safety Listed for Wet Locations

### Instruction Sheets:

Trilingual (English, Spanish, and French) (990W873\_01-BRN)

**Collection:** Barn Light

Featured in the decorative Barn Light collection

1 A19 Medium 75 watt light bulb

Dark sky friendly. Designed to emit no light above the 90° horizontal plane. Photometry unavailable.

Easily converts to LED with optional replacement lamps

Meets Title 24 energy efficiency standards

**UPC #:**785652098086

**Finish:** Black (12)

### Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate			1.25	5.0	9.25	15.75

### Replacement Bulb Data:

Product #	Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp (°K)	CRI

### Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Fr. Class	UPS Ship
Individual	8736701EN3-12	1	785652098086	26.9	16.1	10.0	2.51	5.4	0	Yes
Master Pack	8736701EN3-12	0	10785652098083							No
NJ Pallet		24		48.0	40.0	78.0	86.67	130.0		No
NV Pallet		24		48.0	40.0	78.0	86.67	130.0		No

















































**Applied Products:**



Glass	Obscured	
Windows	Carriage House Collection	12 Window Square 7'
Oak Stain		
Hardware	Hinge	Aspen 8' x 7'
Garage Door	Carriage House Collection	Model 303 8' x 7'



## Endeavor® Line Achiever® Series iM Heat Pumps



### RP14AZ

Cooling Efficiencies up to: 14.3 SEER2/10.4 EER2

Heating Efficiencies up to: 7.6 HSPF

Nominal Sizes: 1.5 to 5 Tons [5.3 to 17.6 kW]

Cooling & Heating Capacities: 17.1 kBTU to 55.5 kBTU





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## Features and Benefits

- **Swept Wing Fan Technology<sup>1</sup>:** Features quieter operation and improved unit acoustics
- **Two-Stage Scroll Compressor<sup>2</sup>:** Features two speeds (high and low) of cooling and heating, providing more precise temperature control, lower humidity and greater efficiency when compared to single stage compressors
- **Inverted Reversing Valve:** Allows for faster heat transfer with gravity assist shifting and reduced joint stress for increased reliability
- **PlusOne® Expanded Valve Space:** 3 in. – 4 in. – 5 in. service valve space—provides a minimum working area of 27-square inches for easier access
- **PlusOne® Triple Service Access:** 15 in. wide, industry leading corner service access, two fastener, removeable corner and individual louver panels—makes repairs easier and faster

<sup>1</sup>Does not apply to the 3.5 and 4 Ton

<sup>2</sup>Does not apply to the 1.5 Ton 1-stage model

# Heat Pumps

<u>R</u>	<u>P</u>	<u>14</u>	<u>A</u>	<u>Z</u>	<u>18</u>	<u>A</u>	<u>J</u>	<u>1</u>	<u>N</u>	<u>A</u>
Brand	Product Category	SEER2	Region	Refrigerant	Capacity	Major Series	Voltage	Type	Controls	Minor Series
R - Ruud	P - Heat Pump	14 - 14.3 SEER2	A - All Regions	Z - R-410A	18 - 18,000 [5.28 kW] 24 - 24,000 [7.03 kW] 30 - 30,000 [8.79 kW] 36 - 36,000 [10.55 kW] 42 - 42,000 [12.31 kW] 48 - 48,000 [14.07 kW] 60 - 60,000 [17.58 kW]	A - 1st Design	J - 208/230/1/60	1 - 1-Stage 2 - 2-Stage	N - Non-Comm.	A - 1st Design

[ ] Designates Metric Conversions

AVAILABLE MODELS	DESCRIPTION
RP14AZ18AJ1NA	Endeavor® Line Achiever® Series 1 1/2 ton 14.3 SEER2 1-Stage iM Heat Pump-208/230/1/60
RP14AZ18AJ2NA	Endeavor® Line Achiever® Series 1 1/2 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60
RP14AZ24AJ2NA	Endeavor® Line Achiever® Series 2 ton 14.3 SEER2 2-Stage Heat iM Pump-208/230/1/60
RP14AZ30AJ2NA	Endeavor® Line Achiever® Series 2 1/2 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60
RP14AZ36AJ2NA	Endeavor® Line Achiever® Series 3 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60
RP14AZ42AJ2NA	Endeavor® Line Achiever® Series 3 1/2 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60
RP14AZ48AJ2NA	Endeavor® Line Achiever® Series 4 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60
RP14AZ60AJ2NA	Endeavor® Line Achiever® Series 5 ton 14.3 SEER2 2-Stage iM Heat Pump-208/230/1/60

STANDARD EQUIPMENT
R-410A Refrigerant
Scroll Compressor
Field Installed Filter Drier
Front Seating Service Valves
Internal Pressure Relief Valve
Internal Thermal Overload
Long Line capability
Low Ambient capability with Kit
3-4-5 Expanded Valve Space
Composite Basepan
2 Screw Control Box Access
15" Access to Internal Components
Quick release louver panel design
No fasteners to remove along bottom
Optimized Venturi Airflow
Single row condenser coil
Powder coated paint
Rust resistant screws
QR code
External gauge ports
Service trays

<b>General Data</b>								
<b>MODEL NO.</b>	<b>RP14AZ18**1</b>	<b>RP14AZ18**2</b>	<b>RP14AZ24</b>	<b>RP14AZ30</b>	<b>RP14AZ36</b>	<b>RP14AZ42</b>	<b>RP14AZ48</b>	<b>RP14AZ60</b>
<b>Nominal Tonnage</b>	1.5	1.5	2.0	2.5	3.0	3.5	4.0	5.0
<b>Valve Connections</b>								
Liquid Line O.D. – in.	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Suction Line O.D. – in.	3/4	3/4	3/4	3/4	3/4	7/8	7/8	7/8
<b>Refrigerant (R410A) furnished oz.<sup>1</sup></b>	84	88	88	108	118	148	148	247
<b>Compressor Type</b>	Scroll							
<b>Outdoor Coil</b>								
Net face area – Outer Coil	10.9	10.9	10.9	14.4	19.5	19.5	19.5	28.4
Net face area – Inner Coil								
Tube diameter – in.	0.276	0.276	0.276	0.276	0.276	0.276	0.276	0.375
Number of rows	1	1	1	1	1	1	1	1
Fins per inch	22	22	22	22	22	22	24	20
<b>Outdoor Fan</b>								
Diameter – in.	20	20	20	24	24	24	24	26
Number of blades	3	3	3	3	3	3	3	3
Motor hp	1/7	1/7	1/6	1/5	1/5	1/5	1/5	1/5
CFM	2401	2401	2620	3391	4077	4077	4096	4686
RPM	1075	1075	1075	850	850	850	850	850
Watts	146	141	145	175	234	222	236	239
<b>Shipping weight – lbs.</b>	157	157	158	196	209	239	245	285
<b>Operating weight – lbs.</b>	150	150	151	189	202	232	238	278

<b>Electrical Data</b>								
<b>Line Voltage Data (Volts-Phase-Hz)</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>	<b>208/230-1-60</b>
<b>Maximum overcurrent protection (amps)<sup>2</sup></b>	20	20	25	25	35	45	50	50
<b>Minimum circuit ampacity<sup>3</sup></b>	11	12	15	18	21	26	29	31
<b>Compressor</b>								
Rated load amps	10	8	11	13	15	20	22	24
Locked rotor amps	46	49	66	71	78	151	127	118
<b>Condenser Fan Motor</b>								
Full load amps	0.75	0.75	0.75	1.0	1.0	1.0	1.0	1.0
Locked rotor amps	1.4	1.4	1.5	2.6	2.56	2.56	2.56	2.6

<sup>1</sup>Refrigerant charge sufficient for 15 ft. length of refrigerant lines. For longer line set requirements see the installation instructions for information about set length and additional refrigerant charge required.

<sup>2</sup>HACR type circuit breaker or fuse.

<sup>3</sup>Refer to National Electrical Code manual to determine wire, fuse and disconnect size requirements.

## Accessories

MODEL NO.	RP14AZ18**1	RP14AZ18**2	RP14AZ24	RP14AZ30	RP14AZ36	RP14AZ42	RP14AZ48	RP14AZ60	
Compressor crankcase heater*	44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-44	44-17402-45	44-17402-45	Factory Standard	
Low ambient control	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	RXAD-A08	
Compressor sound cover	68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-26	68-23427-25	68-23427-25	68-23427-25	
Compressor hard start kit	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	SK-A1	
Low pressure control	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	
High pressure control	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	Factory Standard	
Liquid Line Solenoid (24 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V	61-AMG24V
Liquid Line Solenoid (120/240 VAC, 50/60 Hz)	Solenoid Valve	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD2T3TVLC	200RD3T3TVLC	200RD3T3TVLC
	Solenoid Coil	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V	61-AMG120/240V
Classic Top Cap w/Label	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	91-101123-21	

\*Bi-flow kits are required when installing a liquid line solenoid on a heat pump.

## Weighted Sound Power Level (dBA)

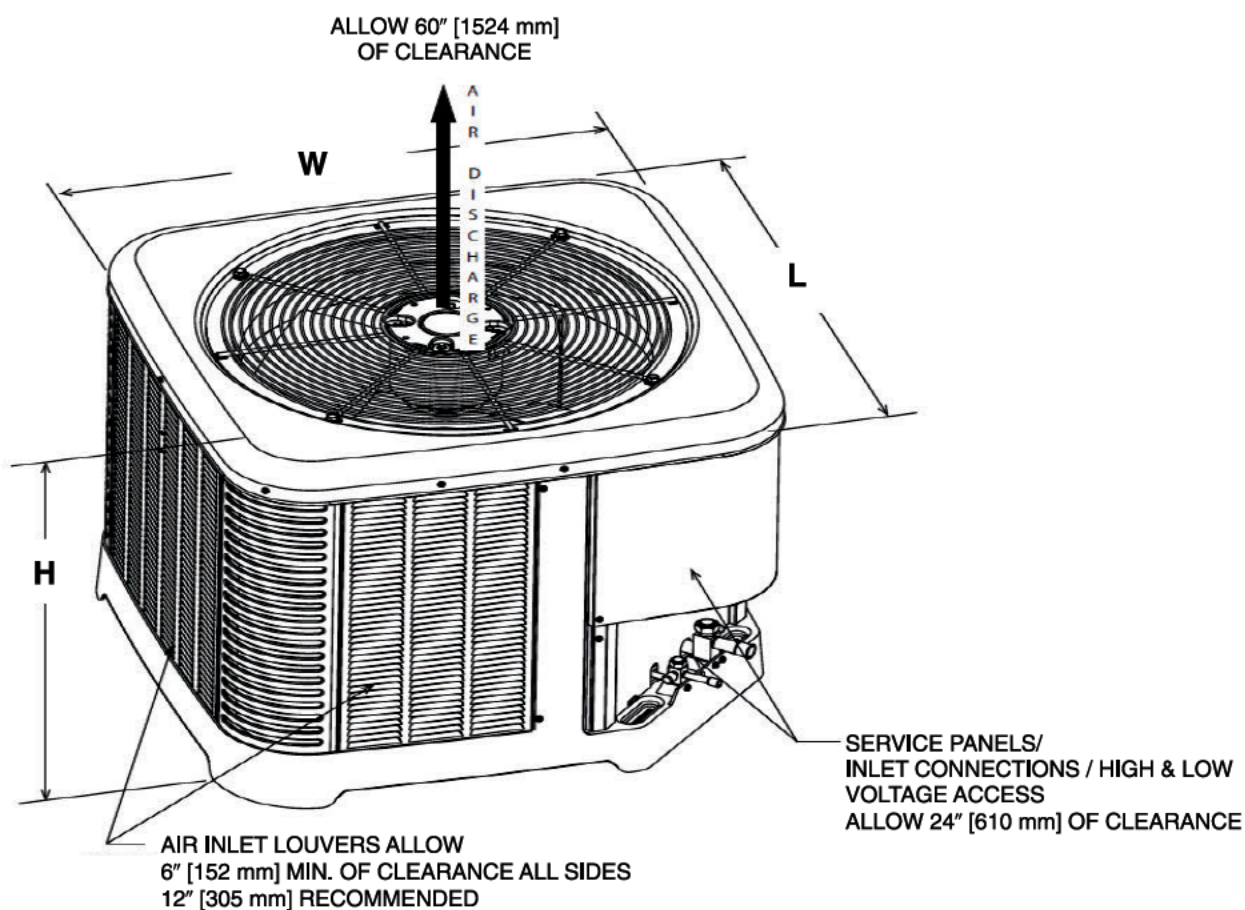
UNIT SIZE - VOLTAGE, SERIES	STANDARD RATING (DBA)	TYPICAL OCTAVE BAND SPECTRUM (dBA without tone adjustment)						
		125	250	500	1000	2000	4000	8000
RP14AZ18A	73	39.8	55.0	62.1	67.0	60.0	57.4	51.2
RP14AZ24A	73	40.4	55.4	62.5	65.9	58.7	56.4	48.9
RP14AZ30A	72	48.9	55.3	63.6	61.0	59.1	56.5	48.7
RP14AZ36A	72	50.1	55.8	64.4	61.5	58.7	55.1	50.9
RP14AZ42A	72	48.6	56.2	63.1	61.7	60.0	56.0	50.0
RP14AZ48A	74	49.3	56.0	64.5	64.5	60.1	54.9	47.7
RP14AZ60A	74	43.9	55.2	63.4	65.8	61.7	57.9	52.9

NOTE: Tested in accordance with AHRI Standard 270-08 (not listed in AHRI)



## Unit Dimensions

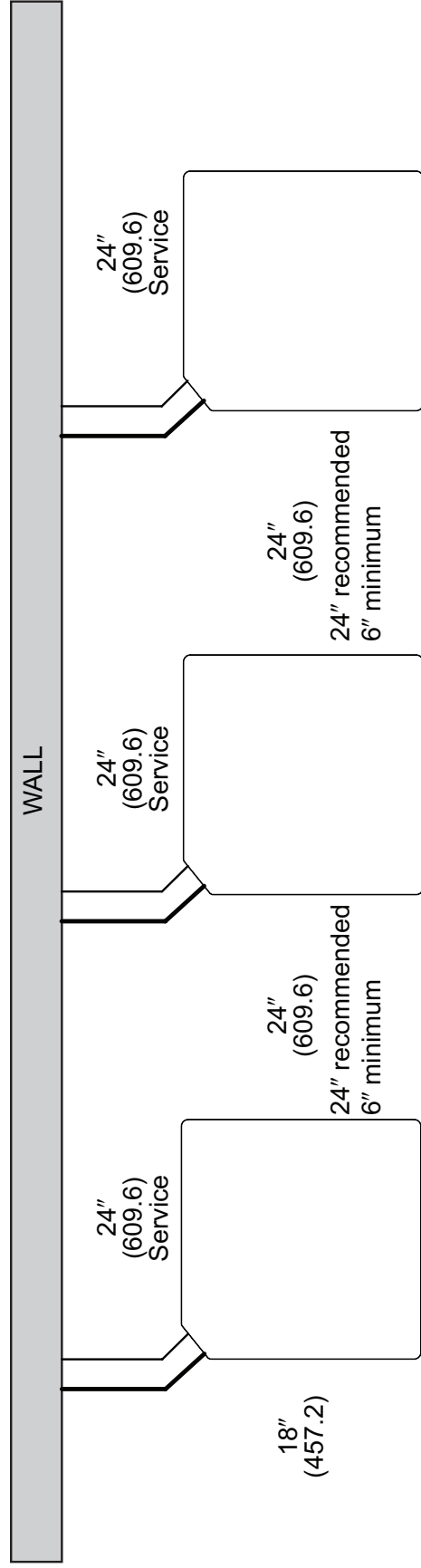
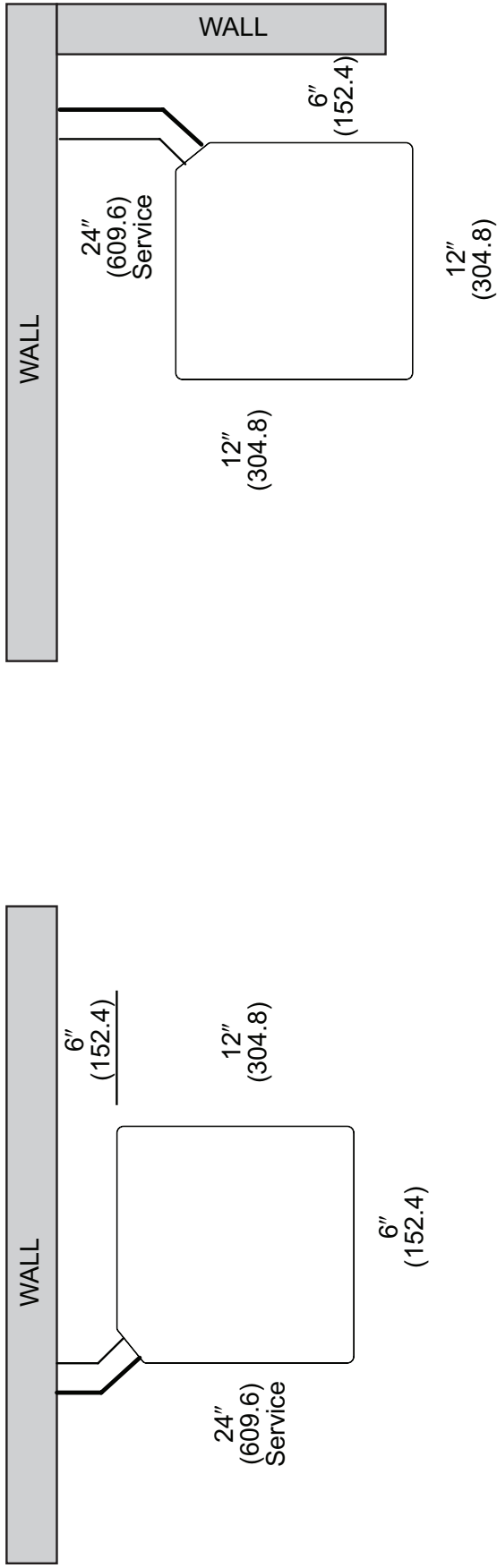
MODEL NO.	OPERATING						SHIPPING					
	H (Height)		L (Length)		W (Width)		H (Height)		L (Length)		W (Width)	
	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm	INCHES	mm
RP14AZ18**1	25.00	635	29.75	756	29.75	756	27.90	709	33.25	845	33.25	845
RP14AZ18**2	25.00	635	29.75	756	29.75	756	27.90	709	33.25	845	33.25	845
RP14AZ24	25.00	635	29.75	756	29.75	756	27.90	709	33.25	845	33.25	845
RP14AZ30	27.00	686	33.75	857	33.75	857	30.08	764	37.64	956	37.64	956
RP14AZ36	35.00	889	33.75	857	33.75	857	38.35	974	37.64	956	37.64	956
RP14AZ42	35.00	889	33.75	857	33.75	857	38.35	974	37.64	956	37.64	956
RP14AZ48	35.00	889	33.75	857	33.75	857	38.35	974	37.64	956	37.64	956
RP14AZ60	45.00	1143	35.75	908	35.75	908	48.50	1232	39.37	1000	39.37	1000



[ ] Designates Metric Conversions

ST-A1226-02-00

# CLEARANCES



**NOTE: NUMBERS IN ( ) = mm**

**IMPORTANT:** When installing multiple units in an alcove, roof well or partially enclosed area, ensure there is adequate ventilation to prevent re-circulation of discharge air.

## Refrigerant Line Size Information

14.3 SEER2 HEAT PUMPS									
UNIT SIZE	LIQUID LINE SIZE	SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH (FEET)						
			0-15	16-25	26-50	51-80	81-100	101-125	126-150
			MAXIMUM VERTICAL RISE (OUTDOOR UNIT BELOW INDOOR UNIT) * / CAPACITY MULTIPLIERER						
1.5 Ton	1/4"	1/2"	15 / 1	25 / 0.99	50 / 0.98	75 / 0.97	60 / 0.94	40 / 0.93	20 / 0.91
	5/16"	1/2"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	100 / 0.94	110 / 0.93	115 / 0.91
	3/8"	1/2"	15 / 1	25 / 1	50 / 0.99	80 / 0.97	100 / 0.97	115 / 0.96	115 / 0.95
	1/4"	5/8"	15 / 1	25 / 1	50 / 0.99	75 / 0.99	60 / 0.98	40 / 0.98	20 / 0.98
	5/16"	5/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	100 / 0.98	110 / 0.98	115 / 0.98
	3/8"	5/8"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	115 / 0.99	115 / 0.98
	1/4"	3/4"	15 / 1	25 / 1	50 / 1	75 / 0.99	60 / 0.99	40 / 0.99	20 / 0.99
	5/16"	3/4"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	110 / 0.99	115 / 0.99
	3/8"	3/4"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	115 / 0.99	115 / 0.98
2 Ton	1/4"	5/8"	15 / 1	25 / 0.99	50 / 0.99	40 / 0.98	15 / 0.97	0 / 0.96	0 / 0.95
	5/16"	5/8"	15 / 1	25 / 0.99	50 / 0.99	80 / 0.98	100 / 0.97	95 / 0.96	85 / 0.95
	3/8"	5/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.98	100 / 0.97	100 / 0.96	95 / 0.95
	1/4"	3/4"	15 / 1	25 / 1	50 / 0.99	40 / 0.99	15 / 0.99	0 / 0.99	0 / 0.98
	5/16"	3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	100 / 0.99	95 / 0.99	85 / 0.98
	3/8"	3/4"	15 / 1	25 / 1	50 / 1	80 / 0.99	100 / 0.99	100 / 0.99	95 / 0.98
2.5 Ton	1/4"	5/8"	15 / 1	25 / 0.99	50 / 0.98	0 / 0.97	0 / 0.96	0 / 0.94	0 / 0.93
	5/16"	5/8"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	85 / 0.96	75 / 0.94	60 / 0.93
	3/8"	5/8"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	95 / 0.96	90 / 0.94	85 / 0.93
	1/4"	3/4"	15 / 1	25 / 1	50 / 0.99	0 / 0.99	0 / 0.98	0 / 0.98	0 / 0.97
	5/16"	3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	85 / 0.98	75 / 0.98	60 / 0.97
	3/8"	3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	95 / 0.98	90 / 0.98	85 / 0.97
3 Ton	5/16"	5/8"	15 / 1	25 / 0.99	50 / 0.97	75 / 0.95	65 / 0.94	45 / 0.92	30 / 0.9
	5/16"	3/4"	15 / 1	25 / 1	50 / 0.99	75 / 0.98	65 / 0.98	45 / 0.97	30 / 0.96
	3/8"	5/8"	15 / 1	25 / 0.99	50 / 0.97	80 / 0.95	85 / 0.94	80 / 0.92	75 / 0.9
	3/8"	3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.98	85 / 0.98	80 / 0.97	75 / 0.96
	3/8"	7/8"	15 / 1	25 / 1	50 / 1	80 / 0.99	85 / 0.99	80 / 0.99	75 / 0.98
	1/2"	3/4"	15 / 1	25 / 1	50 / 0.99	80 / 0.98	100 / 0.98	125 / 0.97	130 / 0.96
	1/2"	7/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	100 / 0.99	125 / 0.99	130 / 0.99
3.5 Ton	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	80 / 0.97	70 / 0.96	65 / 0.95
	3/8"	7/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	80 / 0.99	70 / 0.98	65 / 0.98
	1/2"	3/4"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	100 / 0.97	125 / 0.96	125 / 0.94
	1/2"	7/8"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	100 / 0.97	125 / 0.96	125 / 0.94
4 Ton	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.98	75 / 0.97	70 / 0.96	60 / 0.95	50 / 0.94
	3/8"	7/8"	15 / 1	25 / 1	50 / 0.99	75 / 0.99	70 / 0.98	60 / 0.98	50 / 0.97
	1/2"	3/4"	15 / 1	25 / 0.99	50 / 0.98	80 / 0.97	100 / 0.96	125 / 0.95	125 / 0.94
	1/2"	7/8"	15 / 1	25 / 1	50 / 0.99	80 / 0.99	100 / 0.98	125 / 0.98	125 / 0.97
5 Ton	3/8"	3/4"	15 / 1	25 / 0.99	50 / 0.97	65 / 0.95	45 / 0.94	30 / 0.92	15 / 0.9
	3/8"	7/8"	15 / 1	25 / 0.99	50 / 0.99	65 / 0.98	45 / 0.97	30 / 0.96	15 / 0.96
	1/2"	3/4"	15 / 0.99	25 / 0.99	50 / 0.97	80 / 0.95	100 / 0.94	120 / 0.92	115 / 0.9
	1/2"	7/8"	15 / 1	25 / 0.99	50 / 0.99	80 / 0.98	100 / 0.97	120 / 0.96	115 / 0.96

**NOTES:**

- 1) Maximum Equivalent Line Length may not exceed 250'.
- 2) Maximum Actual Line Length may not exceed 200'.
- 3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
- 4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.

## Refrigerant Line Size Information (Con't.)

14.3 SEER2 HEAT PUMPS									
UNIT SIZE	LIQUID LINE SIZE	SUCTION LINE SIZE	OUTDOOR UNIT ABOVE OR BELOW INDOOR UNIT EQUIVALENT LENGTH (METERS)						
			0-5	5.5-8	8.5-15	15.5-24	24.5-30	30.5-38	38.5-46
			MAXIMUM VERTICAL RISE (OUTDOOR UNIT BELOW INDOOR UNIT) * / CAPACITY MULTIPLIERER						
1.5 Ton	1/4"	1/2"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	18 / 0.94	12 / 0.93	6 / 0.91
	5/16"	1/2"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	30 / 0.94	34 / 0.93	35 / 0.91
	3/8"	1/2"	5 / 1	8 / 1	15 / 0.99	24 / 0.97	30 / 0.97	35 / 0.96	35 / 0.95
	1/4"	5/8"	5 / 1	8 / 1	15 / 0.99	23 / 0.99	18 / 0.98	12 / 0.98	6 / 0.98
	5/16"	5/8"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	30 / 0.98	34 / 0.98	35 / 0.98
	3/8"	5/8"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	35 / 0.99	35 / 0.98
	1/4"	3/4"	5 / 1	8 / 1	15 / 1	23 / 0.99	18 / 0.99	12 / 0.99	6 / 0.99
	5/16"	3/4"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	34 / 0.99	35 / 0.99
	3/8"	3/4"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	35 / 0.99	35 / 0.98
2 Ton	1/4"	5/8"	5 / 1	8 / 0.99	15 / 0.99	12 / 0.98	5 / 0.97	0 / 0.96	0 / 0.95
	5/16"	5/8"	5 / 1	8 / 0.99	15 / 0.99	24 / 0.98	30 / 0.97	29 / 0.96	26 / 0.95
	3/8"	5/8"	5 / 1	8 / 1	15 / 0.99	24 / 0.98	30 / 0.97	30 / 0.96	29 / 0.95
	1/4"	3/4"	5 / 1	8 / 1	15 / 0.99	12 / 0.99	5 / 0.99	0 / 0.99	0 / 0.98
	5/16"	3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	30 / 0.99	29 / 0.99	26 / 0.98
	3/8"	3/4"	5 / 1	8 / 1	15 / 1	24 / 0.99	30 / 0.99	30 / 0.99	29 / 0.98
2.5 Ton	1/4"	5/8"	5 / 1	8 / 0.99	15 / 0.98	0 / 0.97	0 / 0.96	0 / 0.94	0 / 0.93
	5/16"	5/8"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	26 / 0.96	23 / 0.94	18 / 0.93
	3/8"	5/8"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	29 / 0.96	27 / 0.94	26 / 0.93
	1/4"	3/4"	5 / 1	8 / 1	15 / 0.99	0 / 0.99	0 / 0.98	0 / 0.98	0 / 0.97
	5/16"	3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	26 / 0.98	23 / 0.98	18 / 0.97
	3/8"	3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	29 / 0.98	27 / 0.98	26 / 0.97
3 Ton	5/16"	5/8"	5 / 1	8 / 0.99	15 / 0.97	23 / 0.95	20 / 0.94	14 / 0.92	9 / 0.9
	5/16"	3/4"	5 / 1	8 / 1	15 / 0.99	23 / 0.98	20 / 0.98	14 / 0.97	9 / 0.96
	3/8"	5/8"	5 / 1	8 / 0.99	15 / 0.97	24 / 0.95	26 / 0.94	24 / 0.92	23 / 0.9
	3/8"	3/4"	5 / 1	8 / 1	15 / 0.99	24 / 0.98	26 / 0.98	24 / 0.97	23 / 0.96
	3/8"	7/8"	5 / 1	8 / 1	15 / 1	24 / 0.99	26 / 0.99	24 / 0.99	23 / 0.98
	1/2"	3/4"	5 / 1	8 / 1	15 / 0.99	23 / 0.98	30 / 0.98	38 / 0.97	40 / 0.96
	1/2"	7/8"	5 / 1	8 / 1	15 / 0.99	23 / 0.99	30 / 0.99	38 / 0.99	40 / 0.99
3.5 Ton	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.98	24 / 0.97	24 / 0.97	21 / 0.96	20 / 0.95
	3/8"	7/8"	5 / 1	8 / 1	15 / 0.99	24 / 0.99	24 / 0.99	21 / 0.98	20 / 0.98
	1/2"	3/4"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	30 / 0.97	38 / 0.96	38 / 0.94
	1/2"	7/8"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	30 / 0.97	38 / 0.96	38 / 0.94
4 Ton	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	21 / 0.96	18 / 0.95	15 / 0.94
	3/8"	7/8"	5 / 1	8 / 1	15 / 0.99	23 / 0.99	21 / 0.98	18 / 0.98	15 / 0.97
	1/2"	3/4"	5 / 1	8 / 0.99	15 / 0.98	23 / 0.97	30 / 0.96	38 / 0.95	38 / 0.94
	1/2"	7/8"	5 / 1	8 / 1	15 / 0.99	23 / 0.99	30 / 0.98	38 / 0.98	38 / 0.97
5 Ton	3/8"	3/4"	5 / 1	8 / 0.99	15 / 0.97	20 / 0.95	14 / 0.94	9 / 0.92	5 / 0.9
	3/8"	7/8"	5 / 1	8 / 0.99	15 / 0.99	20 / 0.98	14 / 0.97	9 / 0.96	5 / 0.96
	1/2"	3/4"	5 / 0.99	8 / 0.99	15 / 0.97	23 / 0.95	30 / 0.94	37 / 0.92	35 / 0.9
	1/2"	7/8"	5 / 1	8 / 0.99	15 / 0.99	23 / 0.98	30 / 0.97	37 / 0.96	35 / 0.96

**NOTES:**

- 1) Maximum Equivalent Line Length may not exceed 76 Meters.
- 2) Maximum Actual Line Length may not exceed 61 Meters.
- 3) Light Grey shaded areas are considered long line and may require accessories as recommended in Long Line Set Guide.
- 4) **DO NOT** use suction line traps in the suction riser as this adds additional unwanted pressure drop in the system.



## Performance Data @ AHRI Standard Conditions – Cooling

DESIGNATED TESTED COMBINATION (DTC)												
OUTDOOR UNIT	AIR HANDLER	TOTAL CAPACITY BTU/H [kW]	NET SENSIBLE BTU/H [kW]	NET LATENT BTU/H [kW]	SEER2	EER2	INDOOR CFM [L/S]	47 DEGREE HEATING CAPACITY BTU/H [kW]	47 DEGREE COP	17 DEGREE HEATING CAPACITY BTU/H [kW]	17 DEGREE COP	REGION IV HSPF2
RP14AZ18AJ1	RH2TZ2417STANN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	9.0	575 [271.4]	17,100 [5.0]	3.78	11,100 [3.3]	2.56	7.5
RP14AZ18AJ2	RH2TZ2417STANN	17,100 [5.0]	13,100 [3.8]	4,000 [1.2]	14.3	9.0	550 [259.6]	17,100 [5.0]	3.58	11,000 [3.2]	2.52	7.5
RP14AZ24AJ2	RH2TZ2417STANN	22,800 [6.7]	17,500 [5.1]	5,300 [1.6]	14.3	9.0	775 [365.8]	22,800 [6.7]	3.51	14,600 [4.3]	2.55	7.5
RP14AZ30AJ2	RH2TZ3617STANN	28,600 [8.4]	21,900 [6.4]	6,700 [2.0]	14.3	9.0	950 [448.4]	28,600 [8.4]	3.56	18,200 [5.3]	2.57	7.5
RP14AZ36AJ2	RH2TZ3617STANN	34,200 [10.0]	26,200 [7.7]	8,000 [2.3]	14.3	9.0	1,050 [495.5]	34,200 [10.0]	3.27	23,600 [6.9]	2.49	7.5
RP14AZ42AJ2	RH2TZ4821STANN	39,500 [11.6]	30,300 [8.9]	9,200 [2.7]	14.3	9.0	1,275 [601.7]	39,500 [11.6]	3.69	25,500 [7.5]	2.67	7.5
RP14AZ48AJ2	RH2TZ4821STANN	45,500 [13.3]	34,900 [10.2]	10,600 [3.1]	14.3	9.0	1,450 [684.3]	45,500 [13.0]	3.65	27,500 [8.1]	2.54	7.5
RP14AZ60AJ2	RH2TZ6024STANN	55,500 [16.3]	42,600 [12.5]	12,900 [3.8]	14.3	9.0	1,800 [849.5]	55,500 [16.3]	2.66	34,000 [10.0]	2.56	7.5

**NOTE:** This data includes DTC (Designated Test Combination) ratings and is for reference purposes only. A full listing of official ratings and system match-ups, along with downloadable certificates, will be accessible from the AHRI website: [www.ahridirectory.org](http://www.ahridirectory.org) later this year.

[ ] Designates Metric Conversions



**GENERAL TERMS OF LIMITED WARRANTY\***

Ruud will furnish a replacement for any part of this product which fails in normal use and service within the applicable period stated, in accordance with the terms of the limited warranty.

**\*For complete details of the Limited and Conditional Warranties, including applicable terms and conditions, contact your local contractor or the Manufacturer for a copy of the product warranty certificate.**

Conditional Parts  
(Registration Required)..... Ten (10) Years

**Before proceeding with installation, refer to installation instructions packaged with each model, as well as complying with all Federal, State, Provincial, and Local codes, regulations, and practices.**

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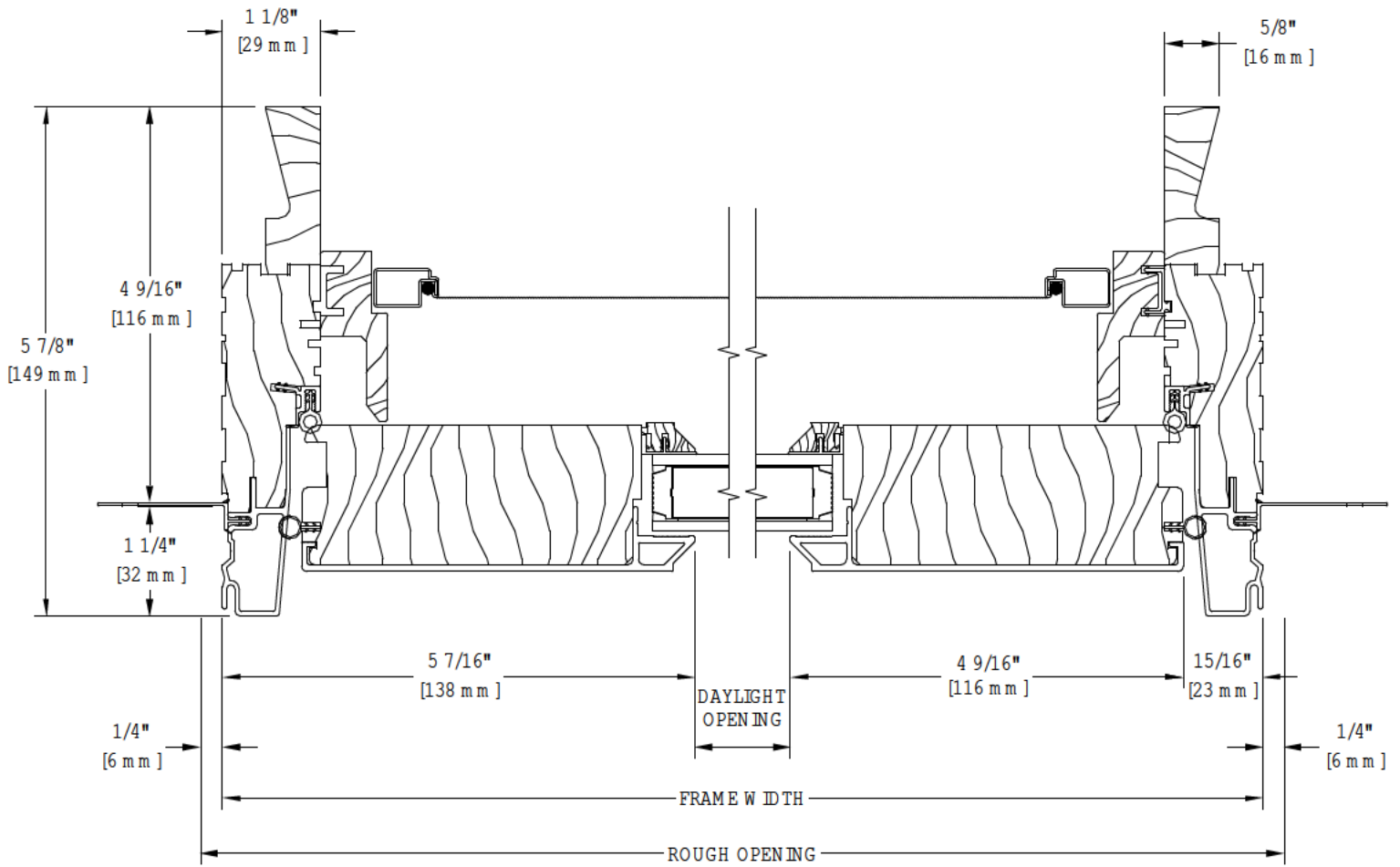
*In keeping with its policy of continuous progress and product improvement, Ruud reserves the right to make changes without notice.*

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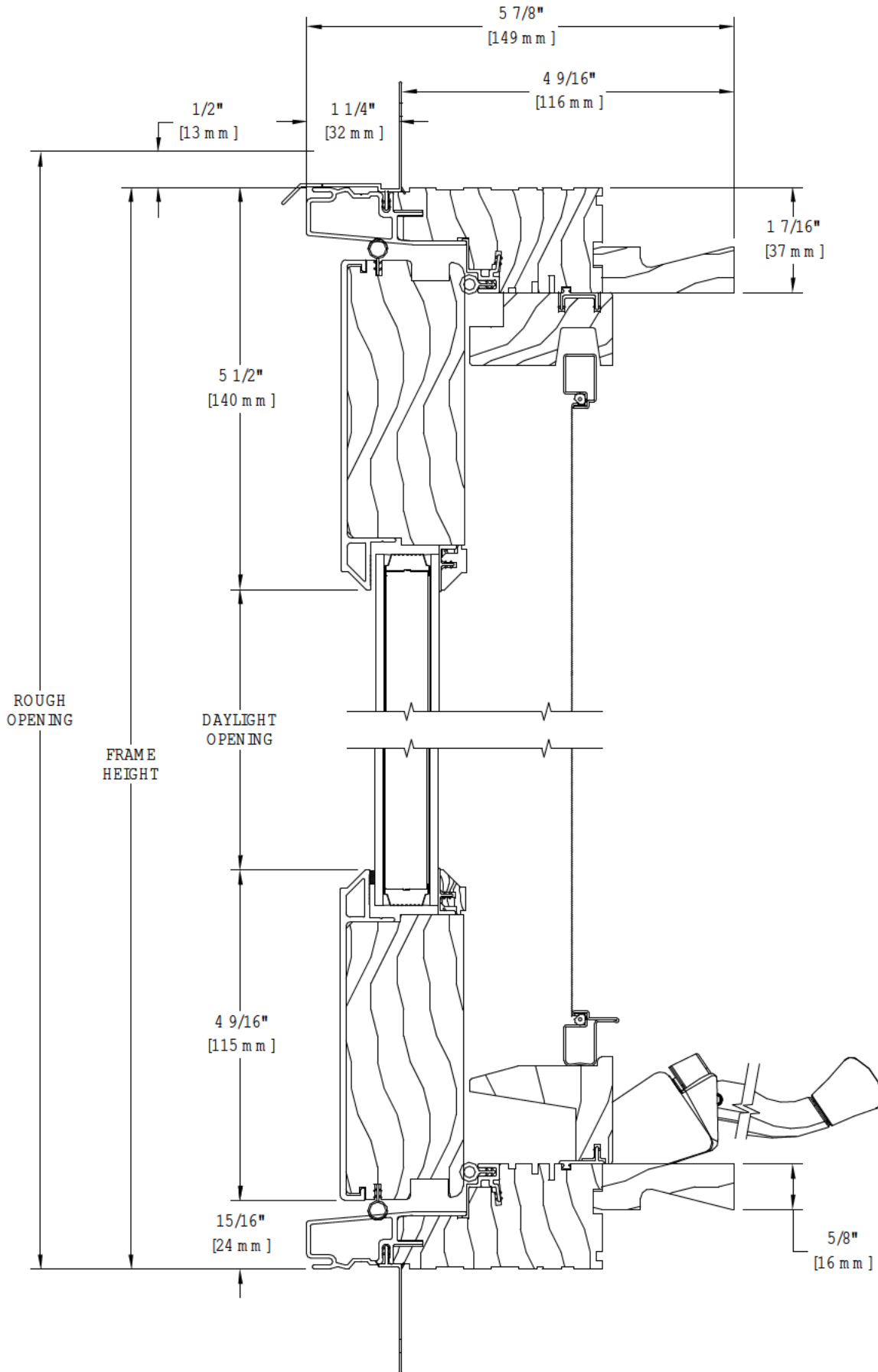
125 Edgeware Road, Unit 1  
Brampton, Ontario • L6Y 0P5 • [ruud-canada.ca](http://ruud-canada.ca)



ULTRA SERIES  
CRANK-OUT CASEMENT/AWNING - 4-17/32" STILES - OPERATING  
4-9/16" JAMB - SCREEN  
DOUBLE PANE GLASS  
HORIZONTAL CROSS SECTION

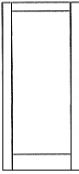
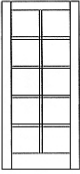
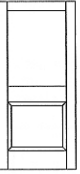
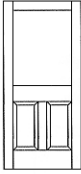
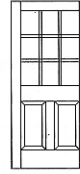


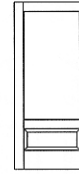
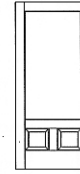


ULTRA SERIES  
CRANK-OUT CASEMENT/AWNING - 417/32" RAILS - OPERATING  
49/16" JAMB - SCREEN  
DOUBLE PANE GLASS  
VERTICAL CROSS SECTION





# Inswing Entrance Doors | Panel Designs

									
Sash Design#:	UP810	UP825	UP8110	UP8210	UP8233	UP8110-30	UP8210-30	UP8110-24	UP8210-24
	Full Lite	2W5H Pattern	1 Lite over 1 Panel, 8" Cross Rail at 40"	1 Lite over 2 Panels, 8" Cross Rail at 40"	1 Lite over 2 Panels, 8" Cross Rail at 40" with 3W3H Pattern	1 Lite over 1 Panel, 4-5/8" Cross Rail at 30"	1 Lite over 2 Panels, 4-5/8" Cross Rail at 30"	1 Lite over 1 Panel, 4-5/8" Cross Rail at 24"	1 Lite over 2 Panels, 4-5/8" Cross Rail at 24"

## Dimension Calculations

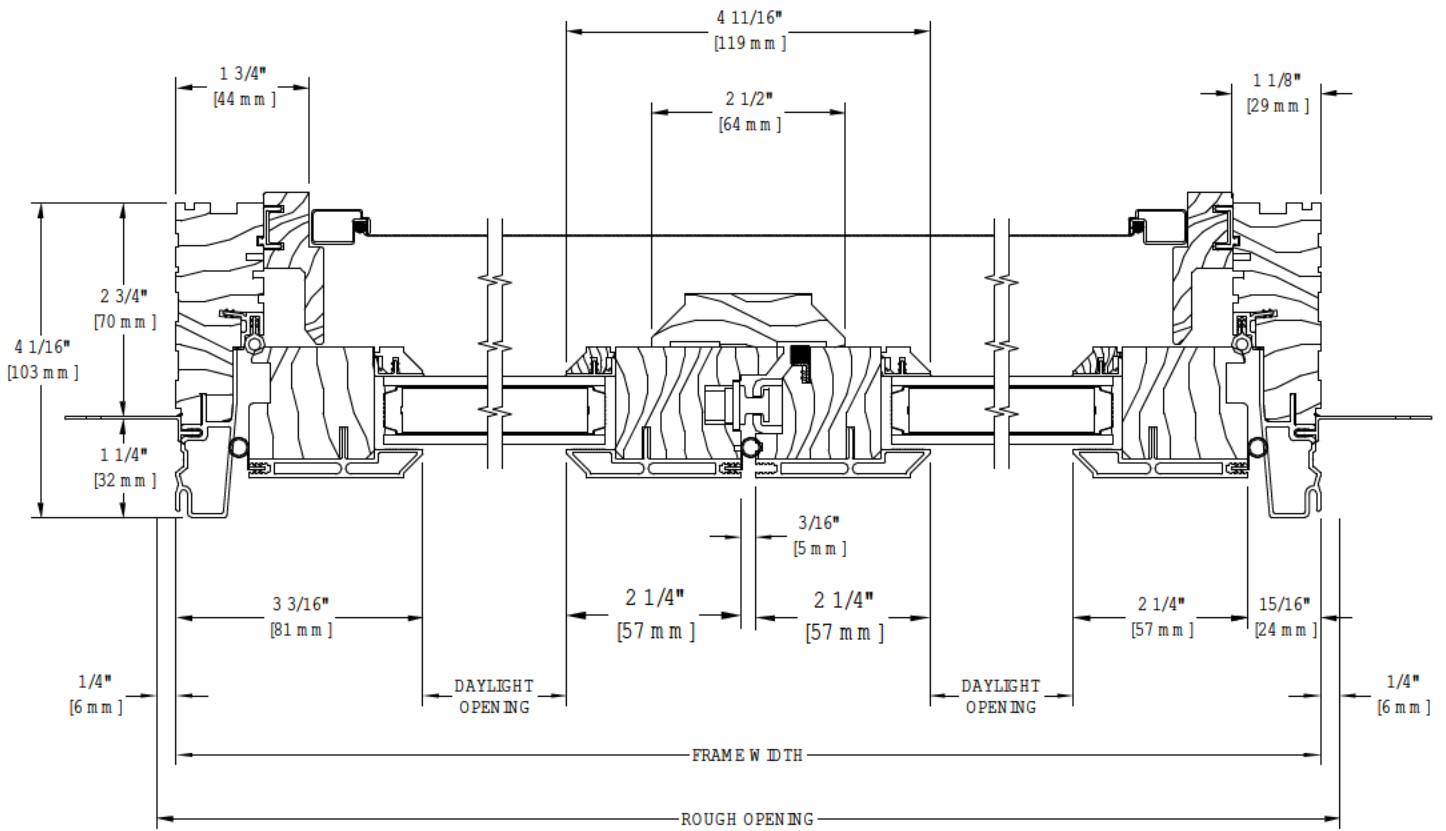
	Width	Height
F.S. to Panel O.S.M. (1-wide, active)	-1 13/16"	-2 23/32"
(1-wide, stationary)	-1 3/4"	-2 23/32"
(2-wide)	-2 9/16"÷2-	2 23/32"
(3-wide)	-3 15/16"÷3-	2 23/32"
Panel O.S.M. to G.S. (wood 6-8 ht.)	-8 1/8"	-11 3/32"
G.S. to D.L.O.	-1"	-1"

Note: Dimension calculations for sidelites and transoms may be obtained from your Kolbe dealer. Clear opening dimensions can be found on pgs. 219-220.

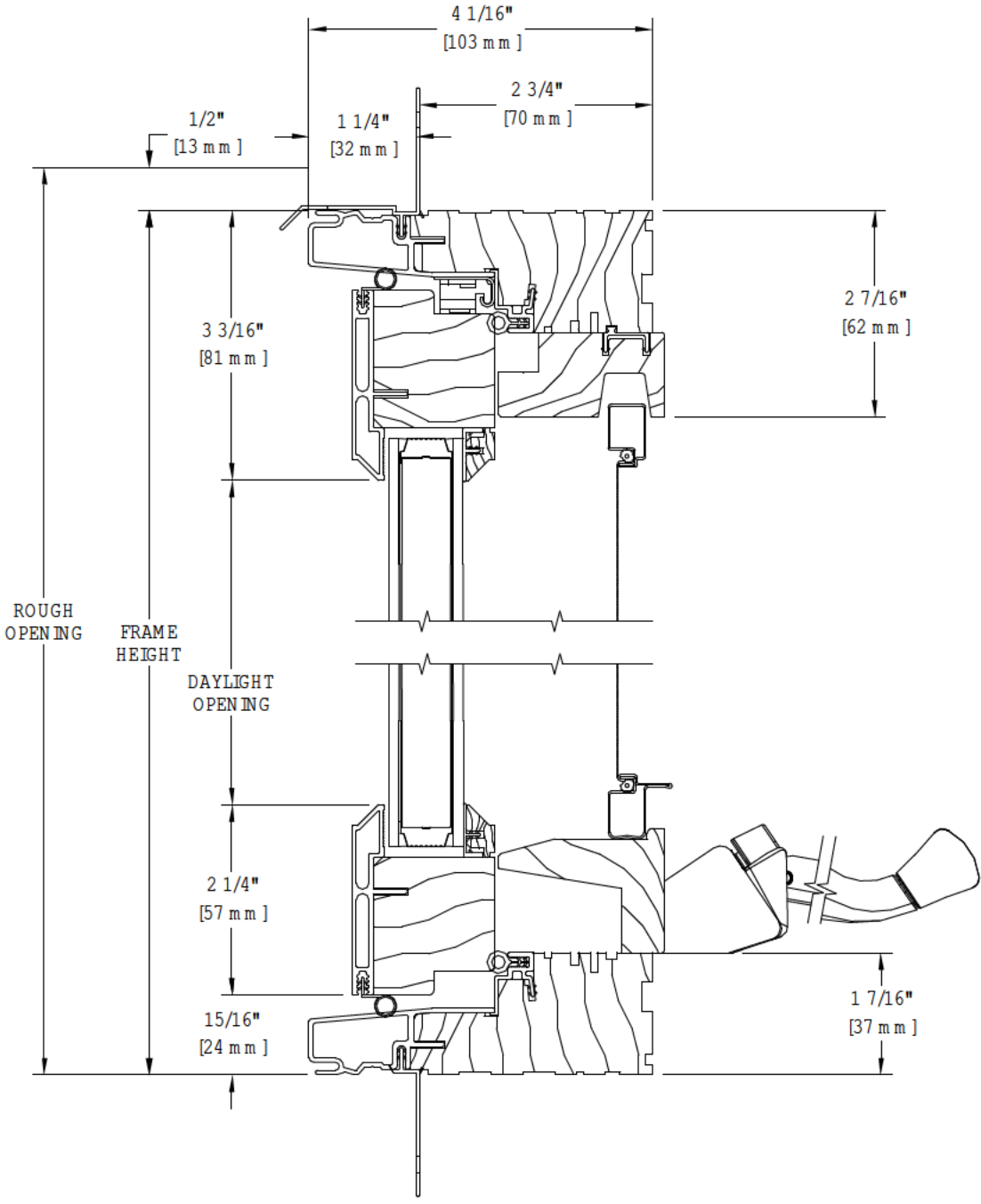
F.S. = Frame Size • G.S. = Glass Size • O.S.M. = Outside Measurement  
D.L.O. = Daylight Opening • U.D. = Unit Dimension

NOTE: Not all panel designs are available in all sizes; not all panel designs are shown. 3" cross rails are also available. See your local Kolbe dealer for assistance.

**KOLBE** ULTRA SERIES  
CRANK-OUT FRENCH CASEMENT - OPERATING  
2-3/4" JAMB - SCREEN  
DOUBLE PANE GLASS  
WINDOWS & DOORS HORIZONTAL CROSS SECTION

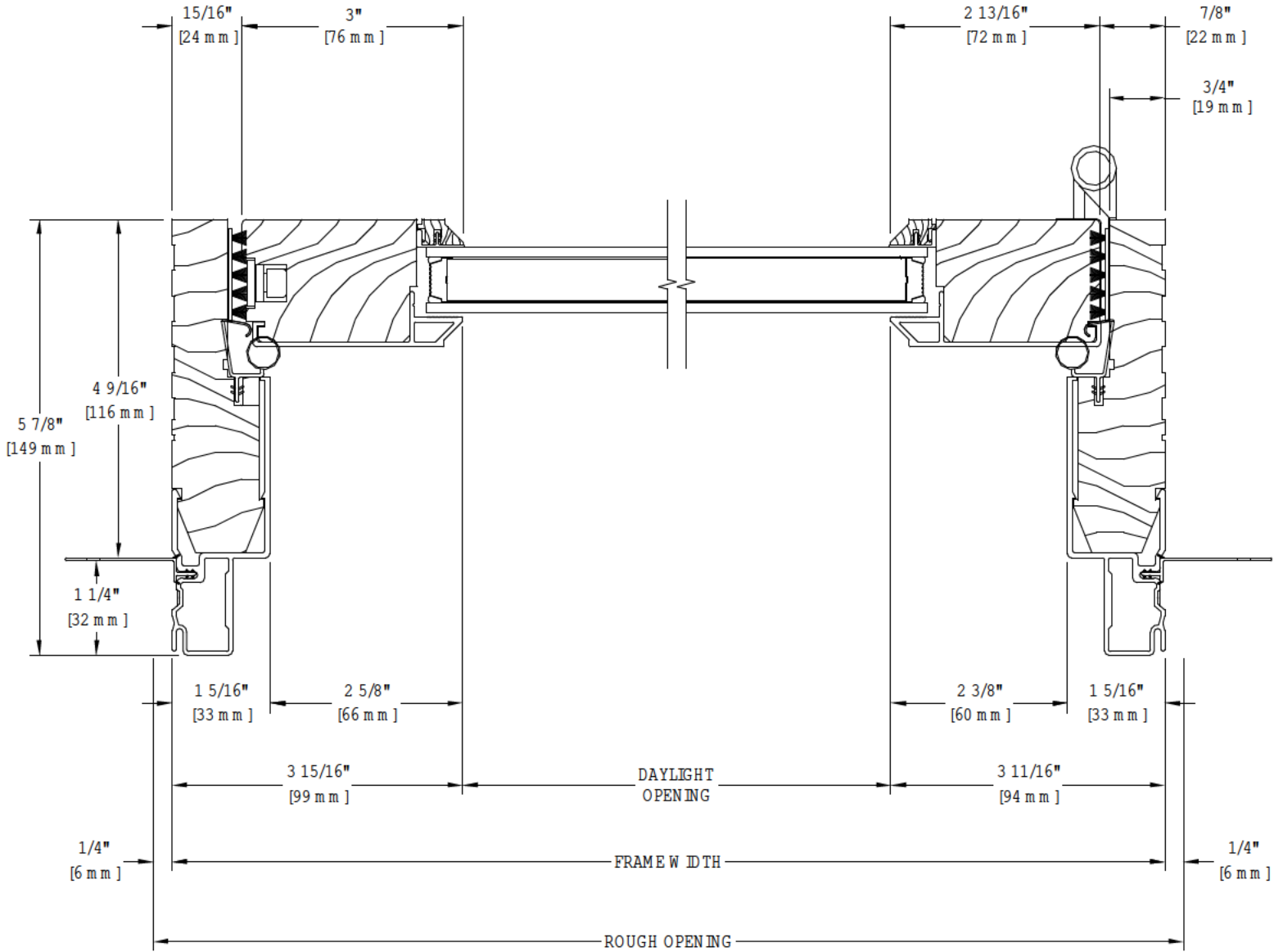


ULTRA SERIES  
CRANK-OUT FRENCH CASEMENT - OPERATING  
2-3/4" JAMB - SCREEN  
DOUBLE PANE GLASS  
VERTICAL CROSS SECTION

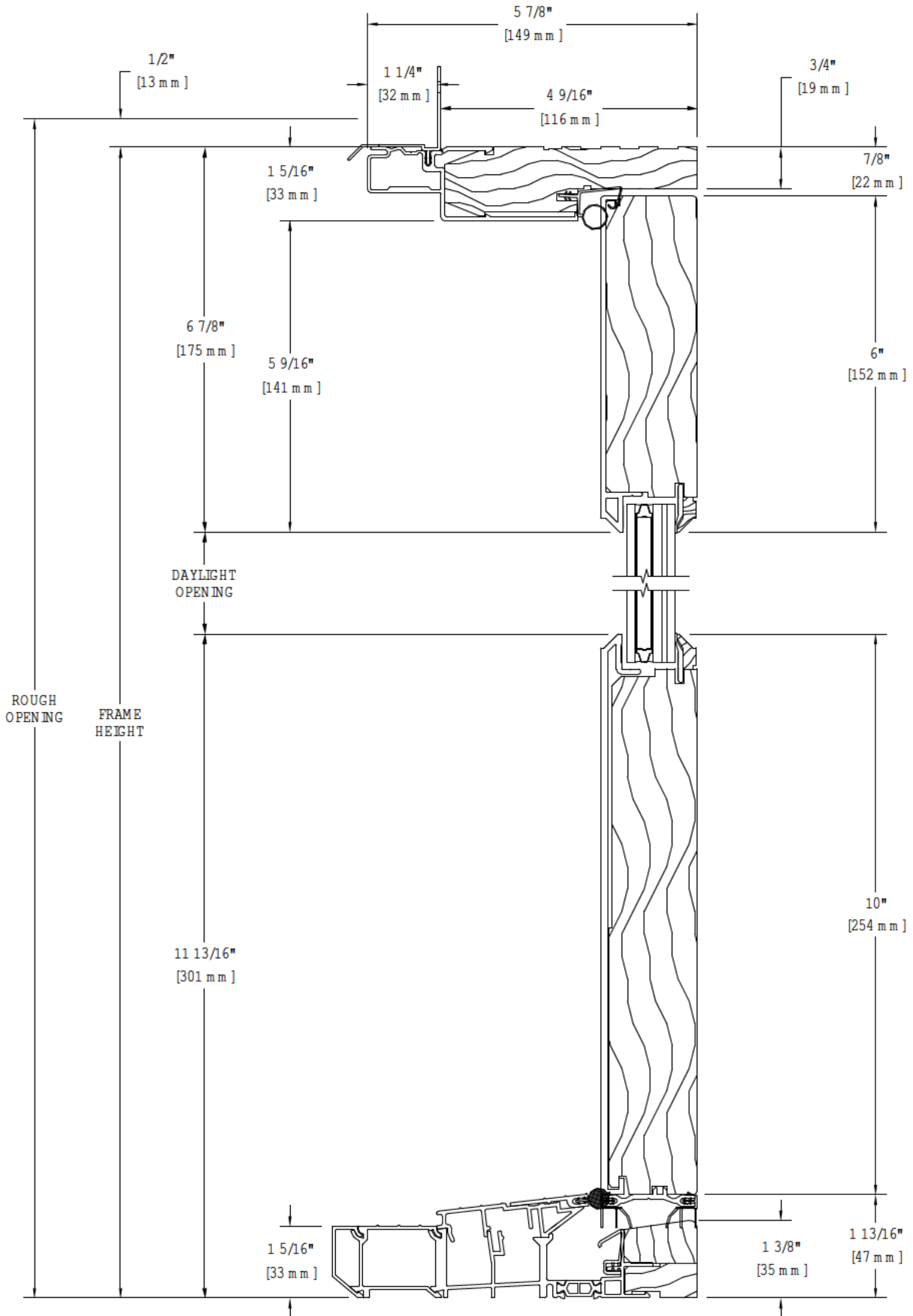




ULTRA SERIES  
INSWING DOOR - 1-3/4" PANEL - 3" STILES - 1-PANEL - ACTIVE - HINGED LEFT  
4-9/16" JAMB - MULTI-POINT LOCK - NO SCREEN  
DOUBLE PANE GLASS  
HORIZONTAL CROSS SECTION

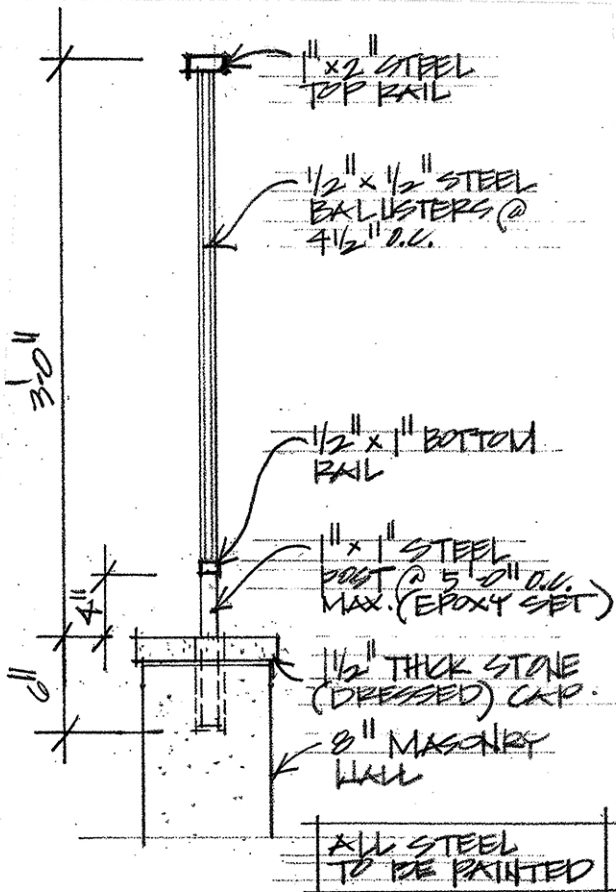


ULTRA SERIES  
INSWING DOOR - 1-3/4" PANEL - 6" TOP, 10" BOTTOM RAILS - ACTIVE  
IMPACT PERFORMANCE - 4-9/16" JAMB - NO SCREEN - WEEP SILL  
INSULATED IMPACT GLASS  
VERTICAL CROSS SECTION









## STEEL RAILING DETAIL

$1'' = 1'-0''$

## 2in Square Spindle Spaced Picket - Cedar Wood Fence







Chris Berger Site Visit 1.10.24  
Front and Right Elevations





Chris Berger Site Visit 1.10.24  
Front Elevation





Chris Berger Site Visit 1.10.24  
Front and Left Elevations





Chris Berger Site Visit 1.10.24  
Right Elevation





Chris Berger Site Visit 1.10.24  
Right Elevation





Chris Berger Site Visit 1.10.24  
Rear and Right Elevations





Chris Berger Site Visit 1.10.24  
Left Elevation





Chris Berger Site Visit 1.10.24  
Left Elevation





Chris Berger Site Visit 1.10.24  
Left Elevation Side Entrance





Chris Berger Site Visit 1.10.24  
Rear and Left Elevations





Chris Berger Site Visit 1.10.24  
Garage Left and Front Elevations





Chris Berger Site Visit 1.10.24  
Garage Front and Right Elevations





Chris Berger Site Visit 1.10.24  
Garage Left Elevation





Chris Berger Site Visit 1.10.24  
Garage Rear Windows





Chris Berger Site Visit 1.10.24  
Garage Left Window and Door





Chris Berger Site Visit 1.10.24  
Garage Left Windows





Chris Berger Site Visit 1.10.24  
Fence in Rear Yard

