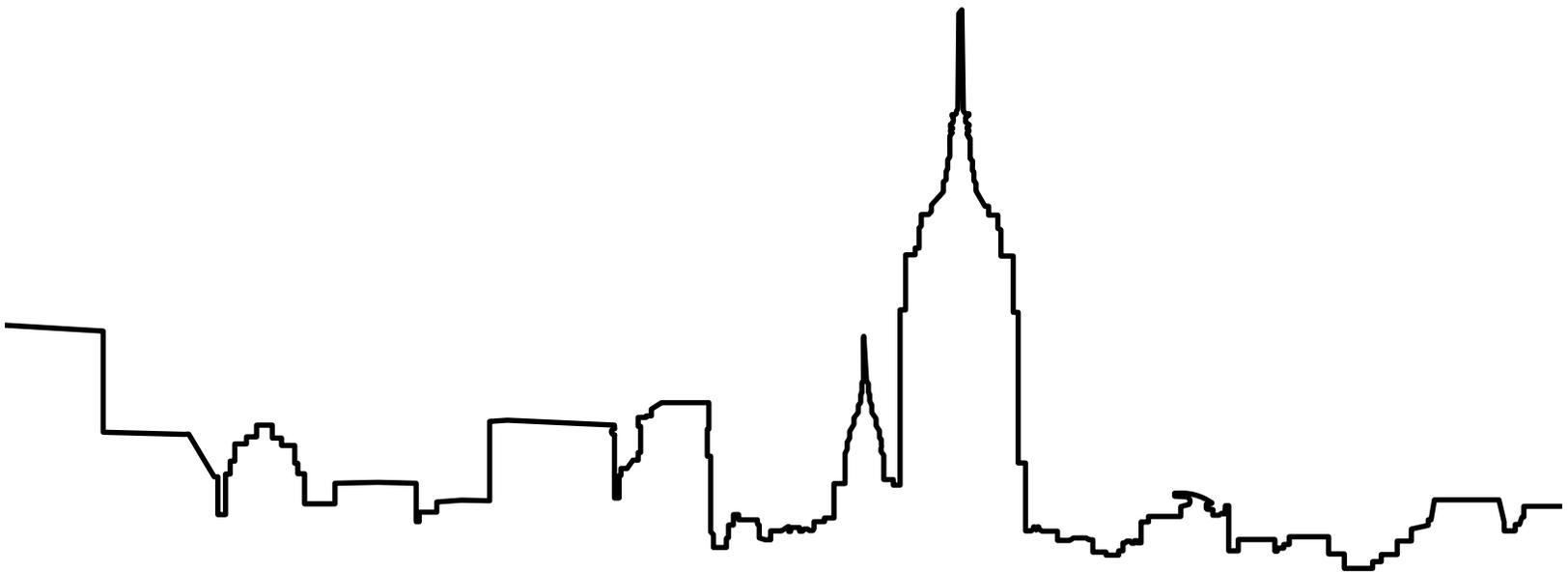


# WINDOWS

## Application Guidelines

Repair, Restoration and Rehabilitation  
Sash and Frame Replacement (including Master Plans )  
Storm Windows  
New or Modified Openings





The Landmarks Preservation Commission (LPC) is the Mayoral agency charged with designating and regulating individual landmarks and historic districts. The Commission is comprised of a professional staff, and 11 Commissioners who are appointed by the Mayor.

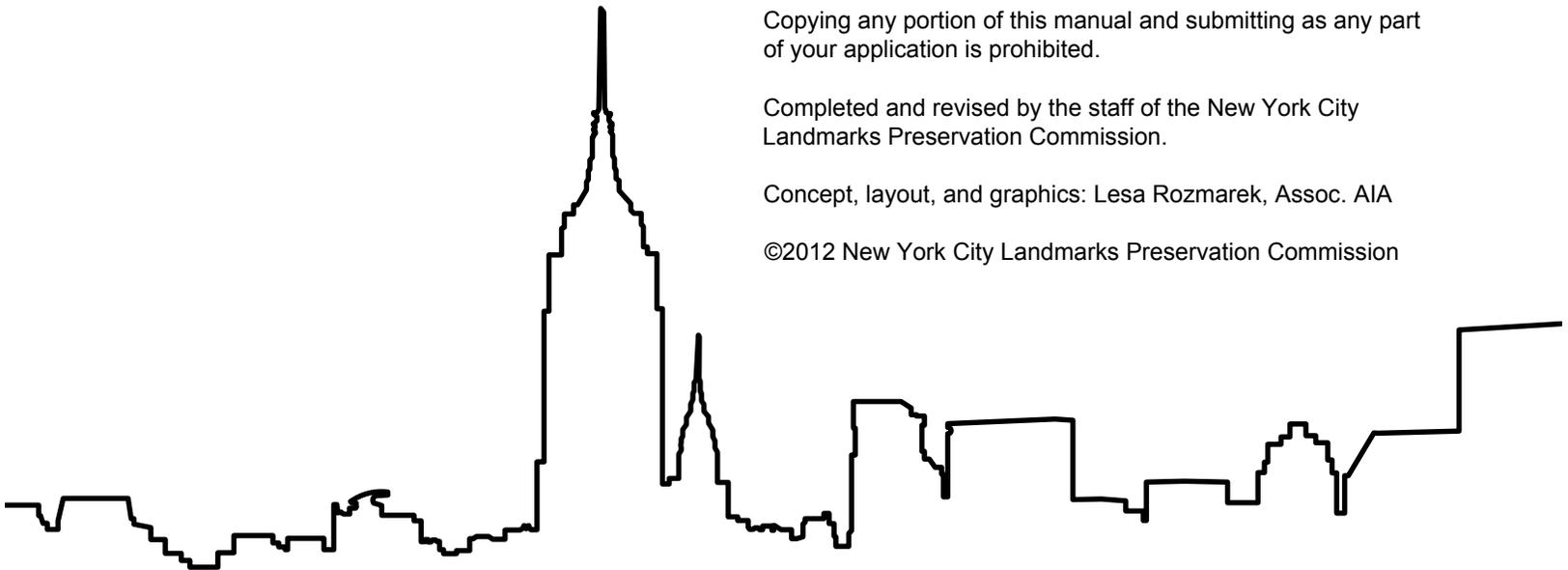
This manual is not a substitute for LPC's Rules and Regulations and does not release owners from obtaining a permit from the Commission. For more information about the permit application process, please visit our website, [www.nyc.gov/landmarks](http://www.nyc.gov/landmarks) or call 311.

Copying any portion of this manual and submitting as any part of your application is prohibited.

Completed and revised by the staff of the New York City Landmarks Preservation Commission.

Concept, layout, and graphics: Lesa Rozmarek, Assoc. AIA

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## Windows

- I. Repair, Restoration & Rehabilitation
- II. Sash and Frame Replacement (Including Master Plans)
- III. Storm Windows
- IV. New or Modified Openings

### Design Considerations

All applications for window repair, replacement and rehabilitation and new or modified window openings are evaluated according to the following principles:

- The distinguishing original character of the associated landmark site should not be destroyed
- Removing or altering any distinctive architectural feature should be avoided wherever possible
- Deteriorated windows should be repaired rather than replaced wherever possible
- If replacement is necessary, the new windows should match the original or historic window

#### No Permits Required

Permits are not required for routine maintenance, including:

- Replacement of broken glass, together with replacement of associated moldings, muntins, and glazing compound with material of matching characteristics
- Scraping, priming, and repainting of window sash and/or frame to recoat with same color and finish that exists at the time such work is undertaken
- Caulking around frames and sill
- Repair and replacement of window hardware, including pulley chains
- Installation of weatherstripping
- Straightening of metal window members
- Rebuilding of portions of sills, sash, and other window members, using the same material and the same configuration, size, and shape. Refer to LPC Rules for limitations
- Consolidating wood members

Windows typically comprise a majority of the surface area of a building's primary façade. In most historic buildings, the window sash, window framing and the architectural detail surrounding the windows were carefully designed as integral components of the style, scale and character of the building. Windows are among the most significant features of a landmark building, which is why it's important to retain the configuration, operation, details, material and finish of an original window, as well as maintain the size of the openings, sills, decorative moldings and the sash itself.

The historic appearance of windows and their relationship to a landmark building serve as the basis for [Section 2-15](#) and [Section 3-02](#) to [Section 3-07 of the Landmarks Preservation Commission's Rules](#), which govern and specify the criteria for new openings and modifications and the repair, replacement and rehabilitation of existing windows, respectively.

This chapter summarizes the criteria of Section 2-15 and Section 3-02 to Section 3-07, and offers guidance on how to submit an application that conforms to them so you can successfully obtain a staff-level permit.

Permit applications that do not conform to these rules will require a review before the full Commission at a public hearing. For a copy of the Commission's Rules, please visit our website: [www.nyc.gov/landmarks](http://www.nyc.gov/landmarks).

## I. Repair, Restoration and Rehabilitation

The repair, rehabilitation and restoration of deteriorated windows are governed by [Section 3-02](#) of the Landmarks Preservation Commission's Rules.

**A staff-level permit is required for:**

- Any work that is not included on the list of repairs on Page 1 of this chapter that do not require an LPC permit
- Changes in the configuration of a window
- Any change in the shape and size of any member

## II. Sash and Frame Replacement (including Master Plans)

The replacement of sash and frames is governed by [Section 3-04](#) of the Landmarks Preservation Commission's Rules. In general, replacement is permitted if original historic windows are beyond reasonable repair. To determine whether a sash or frame is beyond reasonable repair, a staff preservationist considers the percentage of the deteriorated window, the practicality of the repair and other factors. The new sash must match the existing sash in dimensions, configuration, operation details material and finish.

**A staff-level permit is required for**

- The installation of new sash in existing frames
- The installation of new sash and frames in individual landmarks and buildings in historic districts

The criteria for new sash and frames vary according to the location on the building where they're going to be installed (i.e. primary facades, secondary facades and non visible facades) and the type of building in which they are going to be installed. The more prominent the location, the more criteria the replacement sash and frames must meet in order to be approved at staff-level.



Replacing window sashes on the principal facade of a landmarked building with replacements of the correct historic configuration. (Photo at left, before. Photo at right, after)

## Primary Facades

### Individual landmarks, small buildings in historic districts, small commercial and loft buildings

A staff-level permit may be issued for replacement sash and/or frames if they are beyond repair **and** if they match the historic windows in terms of **all** of the below criteria:

- Configuration  
The new windows, sash and/or frames must retain their original design, including the size of the openings, sills, lintels, decorative moldings.
- Operation  
The new windows, sash and/or frames must open the same way as the historic window.
- Details  
Construction details must be as dimensionally close to one another as possible. For example, it may be possible to install a new window within the existing frame by removing or partially removing the blind stop, stop bead or parting stop.
- Materials  
The new window, sash and/or frames must be made of material similar to that of the historic window.
- Finish  
The new window, sash and/or frames must be painted or stained in a manner similar to that of the historic window

### Large commercial and loft buildings in historic districts

A staff-level permit may be issued for the replacement sash and/or frames in large commercial and loft buildings that either have a street frontage of 41 feet or more, or are seven stories or more if they are beyond repair and match the historic windows in terms of all of the below criteria:

- Configuration  
The new windows, sash and/or frames must retain their original design, including the size of the openings, sills, lintels, decorative moldings.
- Operation  
The new windows, sash and/or frames must open the same way as the historic window.
- Details  
Construction details must be as dimensionally close to one another as possible. For example, it may be possible to install a new window within the existing frame by removing or partially removing the blind stop, stop bead or parting stop.
- Finish  
The new window, sash and/or frames must be painted or stained in a manner similar to that of the historic window

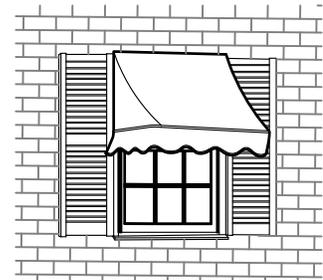
## Application Checklist for Window Replacement on Primary Facades

Below is a list of required descriptive materials for your window proposal. These materials will help the Commission evaluate the impact of your proposal on the associated landmark site. Examples of some of the required materials are available in the Sample Application Materials section of this chapter.

- Permit application form (signed by the owner of the building)
- Two sets of DOB drawings if the proposed work requires a DOB permit
- Color photos of the entire building and close up photos of each window
- Documentation of the historic window, including historic photographs (necessary for application where existing windows are not historic windows)
- Conditions statement describing the type and extent of deterioration of the windows to be replaced, if the windows to be replaced are historic windows
- Two sets of drawings for the historic, if existing, and the proposed windows (at a large scale, including dimensions) to show how closely the proposed windows will match the historic windows
  - Drawings should include elevations of each typical window, and
  - Large scale horizontal sections (jamb, mullions) and vertical sections (head, sill, meeting rail and muntins) if the window replacement is proposed for a **Primary Facade**.

Window Section Drawings

|                              | Existing                 | Proposed                 | N/A                      |
|------------------------------|--------------------------|--------------------------|--------------------------|
| Vertical (head through sill) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Horizontal jamb              | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Mullions                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Muntins                      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



- Floor plan or facade elevation indicating the location of the proposed window replacement if it is not clear from the photographs of the building
- Proposed color sample(s)
- Glazing diminution calculations, see page 183 (Chapter 9) for instructions

**\*A LPC staff member will contact you if additional materials are required.**

## Window Replacement on Visible Secondary Facades

A staff-level permit may be issued for replacement windows on secondary facades that are visible from a public thoroughfare if they match the historic windows in terms of the below criteria:

- Configuration  
The new windows, sash and/or frames must retain their original design, including the size of the openings, sills, lintels, decorative moldings.
- Finish  
The new window, sash and/or frames must be painted or stained in a manner similar to that of the historic window

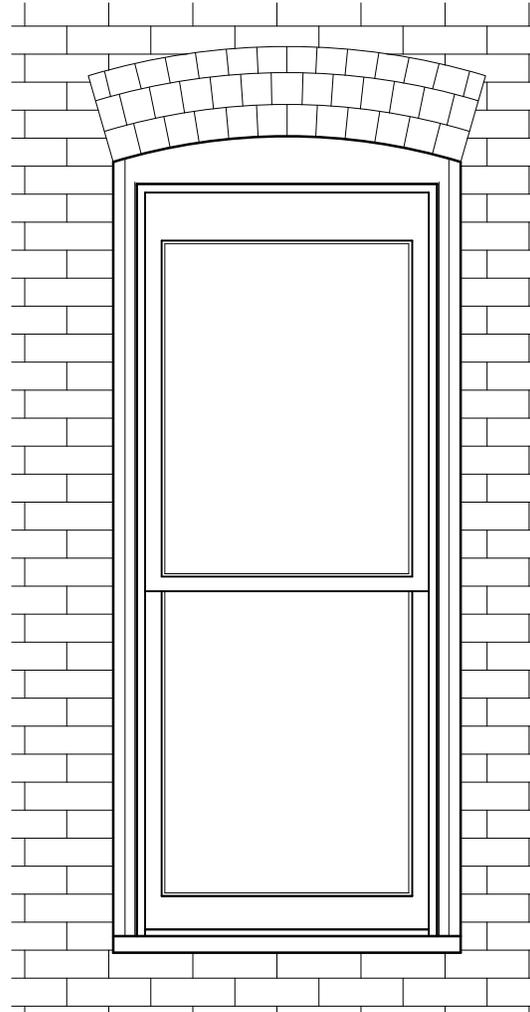
## Window Replacement on Non-Visible Facades

A staff-level permit may be issued for new windows in existing or modified window openings on secondary facades that are not visible or minimally visible from a public thoroughfare if:

- The proposed window and modified opening does not alter or destroy, alter or detract from other protected features on the building or adjacent buildings



Replacement windows on a visible and non-visible secondary facade



Elevation of a replacement window on a visible secondary facade

## Application Checklist for Window Replacement on Secondary Facades

Below is a list of required descriptive materials for your window replacement proposal on a non-visible facade. These materials will help the Commission evaluate the impact of your proposal on the associated landmark site. Examples of some of the required materials are available in the Sample Application Materials section of this chapter.

- Permit application form signed by the building owner
- Two sets of filings drawings signed and sealed by a licensed architect or engineer if the proposed work requires a Department of Buildings permit
- A block plan or site plan showing the windows will not be visible from any surrounding street
- Color photographs of existing window(s) to be replaced
- Typical elevation drawings of proposed windows or cut sheets of the proposed windows
- For altering masonry openings or creating new masonry openings, provide façade elevations showing the existing and proposed windows

**An LPC staff preservationist will contact you if additional materials are required. Please note that if you submit a complete application that includes the correct materials, meets LPC's rules and the associated landmark site has no outstanding LPC violations, your permit will be processed expeditiously.**

## Master Plans

### Master Plans for Window Replacement and Repair

“Master plans” are governed by [Section 3-05](#) of the Landmarks Preservation Commission's Rules. They establish standards and criteria for future window replacement and repairs so they can be approved by the Commission's staff, rather than the full Commission. However, master plans must first be reviewed and approval by the full Commission.

Applicants are encouraged to establish master plans for window repair and/or replacement that will occur over time. To be considered, a master plan must set standards for future changes and identify those standards by detailed drawings. Please talk with your staff preservationist if you would like to establish one for your landmark building.



Large Buildings with a uniform fenestration patterns can benefit from a window master plan. (Photo. 500 Fifth Avenue)

### Application Checklist for Buildings with Master Plans

Below is a list of required descriptive materials for your master plan proposal. These materials will help the Commission evaluate the impact of your proposal on the associated landmark site. Examples of some of the required materials are available in the Sample Application Materials section of this chapter.

- Permit application signed by the building owner
- Color photographs or elevation drawing of the building with circles around the windows to be replaced
- Written statement saying window work will conform to the Master Plan
- List all window types to have work performed on them

**An LPC staff preservationist will contact you if additional materials are required. If you have met all the requirements, and staff has confirmed you are able to receive a staff-level approval, you must submit two sets of filing drawings signed and sealed by a licensed engineer or architect if the proposed work requires a Department of Buildings permit before the LPC approval may be issued.**

### III. Storm Windows

No permits are required for:

- Interior storm windows that have no mullions, muntins or wide frames that are visible from the exterior of the building
- Interior storm windows with glazing that consists of clear glass or other transparent material

A staff-level permit is required for:

- Interior storm windows that do not meet the above standards
- The installation of exterior storm windows

A staff-level permit may be issued for exterior storm windows that:

- Fit tightly within window openings
- Are made of clear glass
- Have a frame color that match the frame of the primary window frame
- Are set as far back from the plane of the exterior wall surface as possible
- Do not have muntins

*Please note that meeting rails are permitted on exterior storm windows only if the primary window is a double-hung window and is placed in the same location as the primary sash.*



Exterior storm windows painted to match window sash

### Application Checklist for Installing Storm Windows

- Permit application signed by the building owner
- Color photographs of the building facade and windows
- Elevation drawing of the existing window showing existing locations meeting rails
- Elevation drawing of proposed storm window showing location of meeting rails
- Paint chip of the proposed color of storm windows

## IV. New or Modified Openings

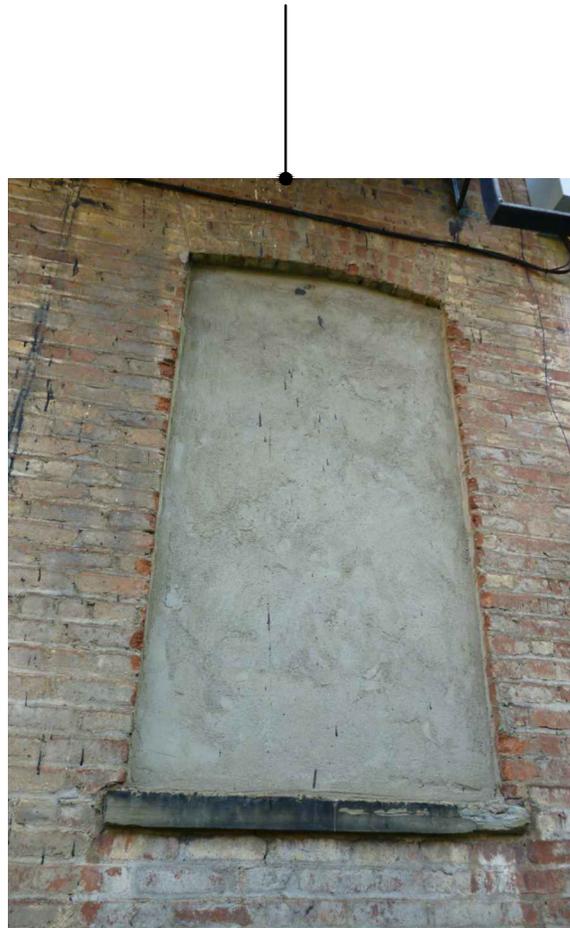
### Window or Door Opening Modifications on Non-Visible Facades

A staff-level permit can be issued for existing window and/or door openings on facades that are not visible from any public thoroughfare if:

- The alterations have no effect on the building's significant features or decorative masonry
- The alterations do not involve replacing "special windows" or the top floor windows of the rear façade of rowhouses
- Modifications can include enlarging the opening in height or width, reducing the opening in height or width, and combining two or more horizontally adjacent window openings provided that the new window opening is in the same room and is not enlarged more than 10 percent in height.



Modified window openings on a non-visible facade



## New Window Openings

The installation of new openings is governed by [Section 2-15](#) of the Landmarks Preservation Commission's Rules.

### Primary Facades

In general, proposed new or modified window openings on the primary façade of a landmark building require a review by the full Commission.

### Visible Secondary Facades

A staff-level permit may be issued for new or modified window openings on secondary facades that are visible from a public thoroughfare if:

- The new window opening and sash retain the general shape and pattern as the existing windows on the same façade
- The location of the new window openings is consistent and regular
- The new window opening and sash do not detract from the significant architectural features of the building or adjacent buildings
- There are no openings, then the new window opening must be located in a place and be of a size and shape where it can form the basis for a regular and consistent pattern and the new sash does not detract from the sash on the primary façade

### Non Visible or Minimally Visible Secondary Facades

A staff-level permit may be issued for new or modified window openings on secondary facades that are not visible or minimally visible from a public thoroughfare if:

- The proposed window opening does not alter or destroy, alter or detract from other protected features on the building or adjacent buildings

## Application Checklist for New Window Openings

- Permit application form signed by the building owner
- Two sets of filings drawings signed and sealed by a licensed architect or engineer if the proposed work requires a Department of Buildings permit
- Color photographs of the window/door opening proposed to be modified
- Catalogue cut sheet or elevation drawing of new window or door to be installed in modified window opening

**An LPC staff preservationist will contact you if additional materials are required. Please note that if you submit a complete application that includes the correct materials, meets LPC's rules and the associated landmark site has no outstanding LPC violations, your permit will be processed expeditiously.**

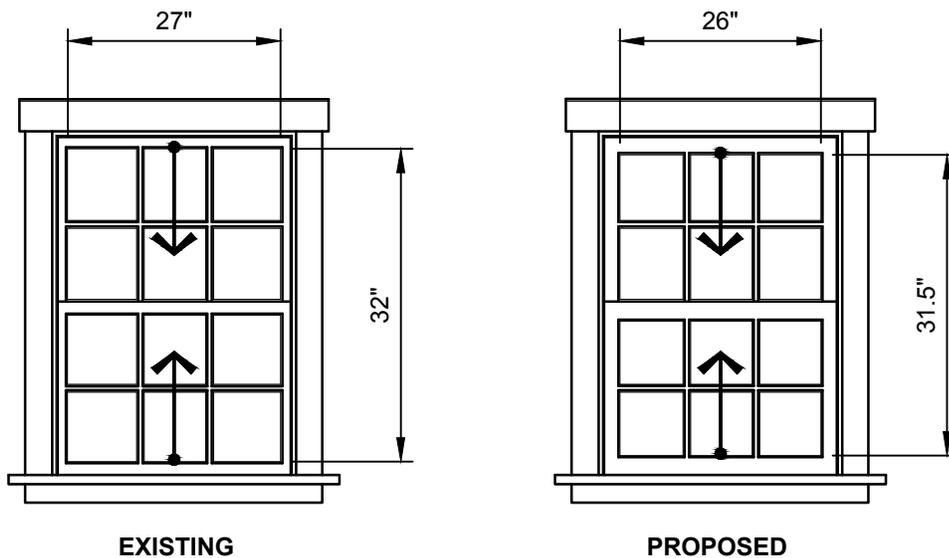
## Step-by-Step: How to Calculate Glazing Area Diminution

As a portion of your application, you may be required to provide calculations proving that the proposed replacement windows fall within the LPC Rules criterion. It is your responsibility to review The New York City Landmarks Preservation Commission Rules for Window Repair and Replacement, as posted on the Commission's website.

Here are step-by-step instructions on how to calculate the percentage of glazing area reduced or increased by a proposed window replacement.

### Step 1

Obtain the measurements (in inches) of the height and width of the glass in one sash of the existing and the proposed windows. You will be measuring the daylight opening only, that is, the portion of the sash that is transparent (where the glass is).



### Step 2

Multiply the height by the width of each sash.

$$32\text{-inches} \times 27\text{-inches} = 864 \text{ square inches}$$

$$31.5\text{-inches} \times 26\text{-inches} = 819 \text{ square inches}$$

### Step 3

Subtract the lesser number from the greater number to obtain the difference in glazed area. This difference can be either a decrease or an increase in glazed area.

$$864 \text{ square inches} - 819 \text{ square inches} = 45 \text{ square inches}$$

### Step 4

To obtain the percentage that this difference represents with regard to the existing sash, divide the difference by the glazed area of the existing sash.

$$45 \text{ square inches} / 864 \text{ square inches} = .052$$

### Step 5

To convert this decimal figure into a percentage multiply by 100.

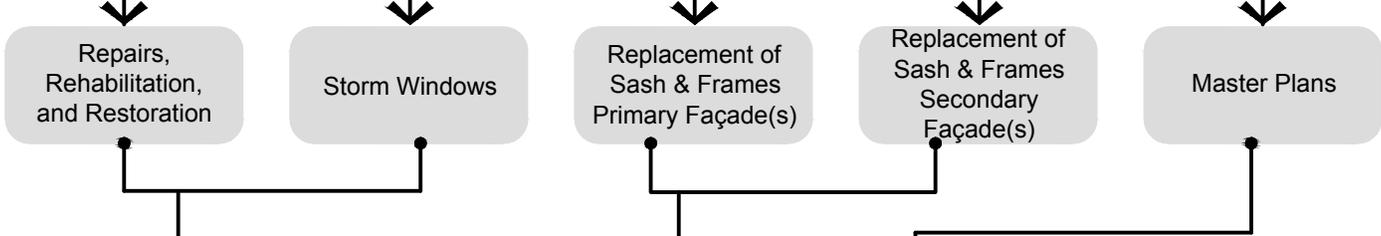
$$.052 \times 100 = 5.2\% \text{ (decrease)}$$

# Window Application Review Process

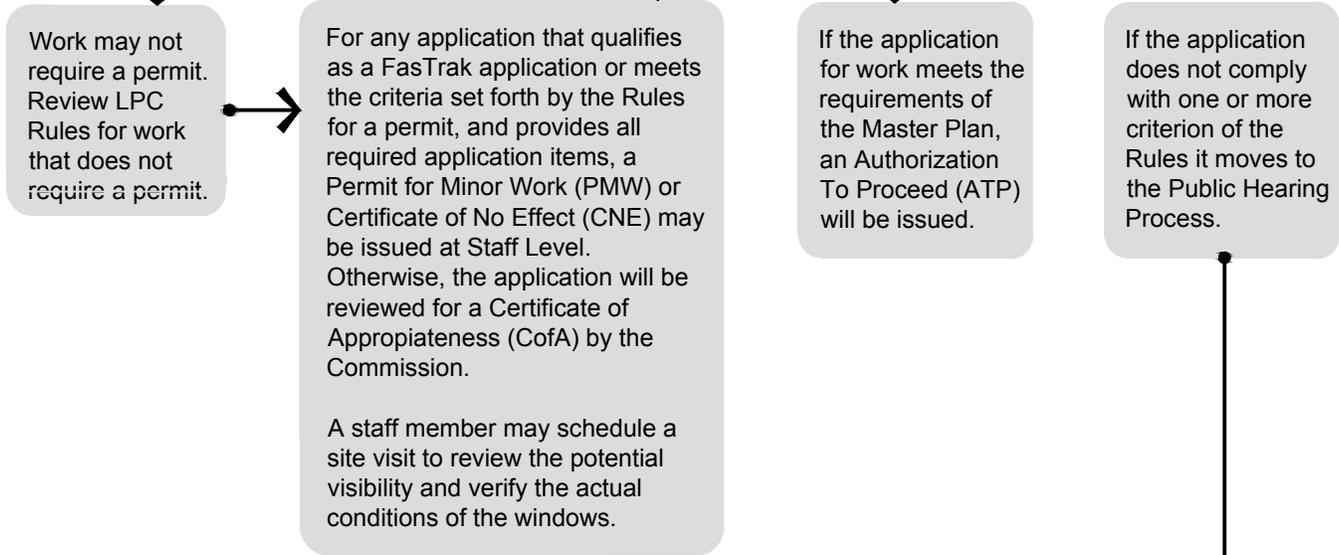
## LPC Rule Applied

LPC Rules, Chapter 3: Repair and Replacement of Windows on Landmark and Historic District Buildings

## Scope of Work



## LPC Staff Level Approvals



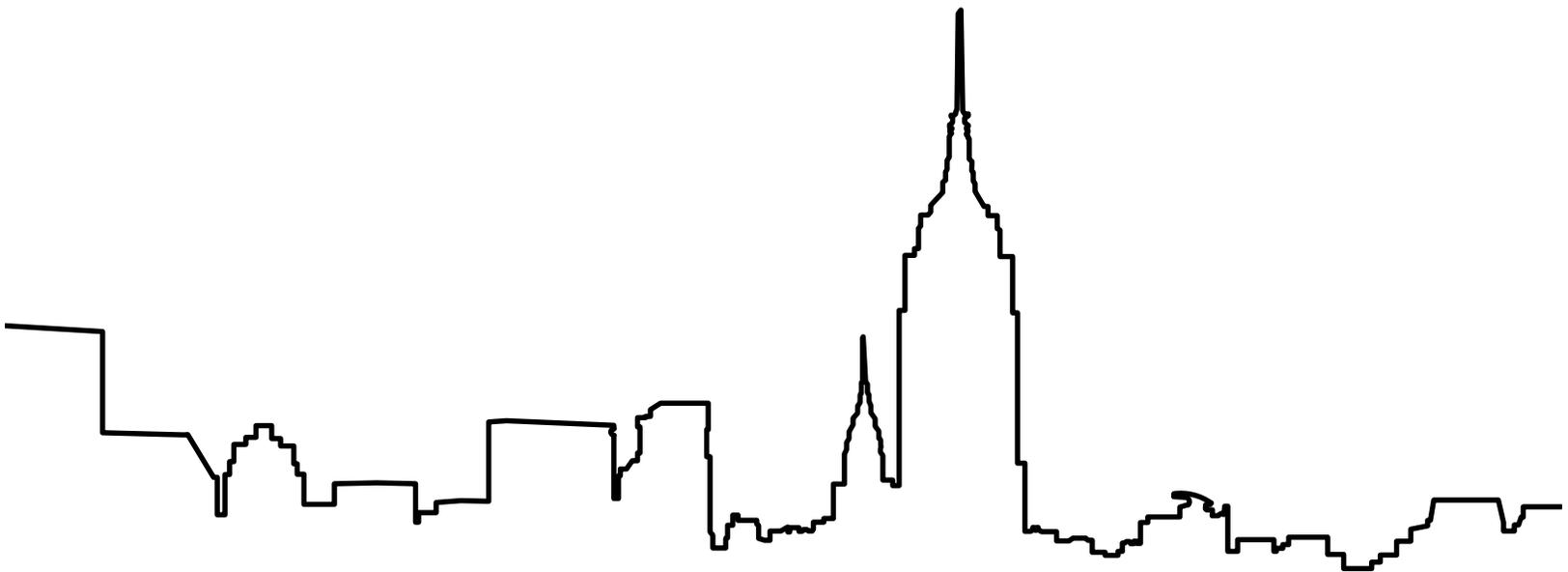
## Public Hearing Approvals

Applications that come before the Commission for review and approval, may be granted a Certificate of Appropriateness (CofA).

These applications must be complete and include historic photographs of the site and building, color photographs of the existing building, color renderings of proposal and dimensioned drawings. Your staff preservationist will notify you of any missing pieces of information. Please follow the recommendations and guidance of your staff preservationist. See Appendix C for details on the public hearing process.

# REPAIR AND REPLACEMENT OF WINDOWS

Sample Application Materials





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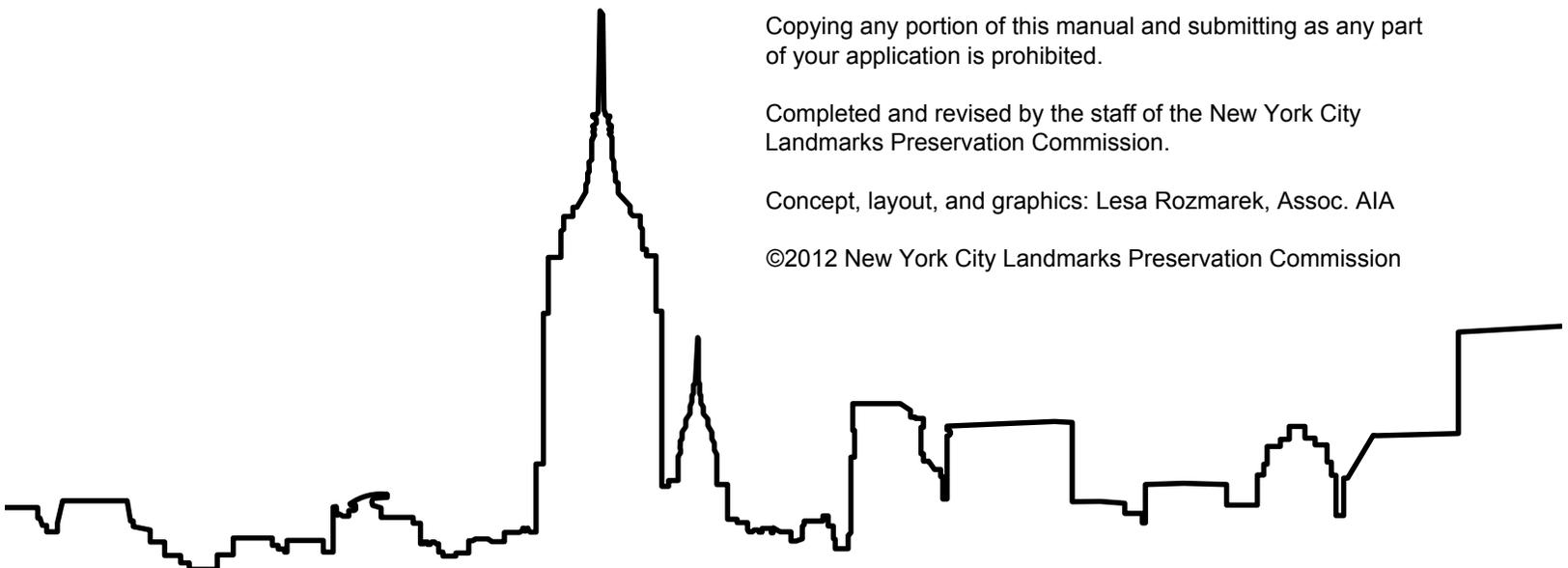
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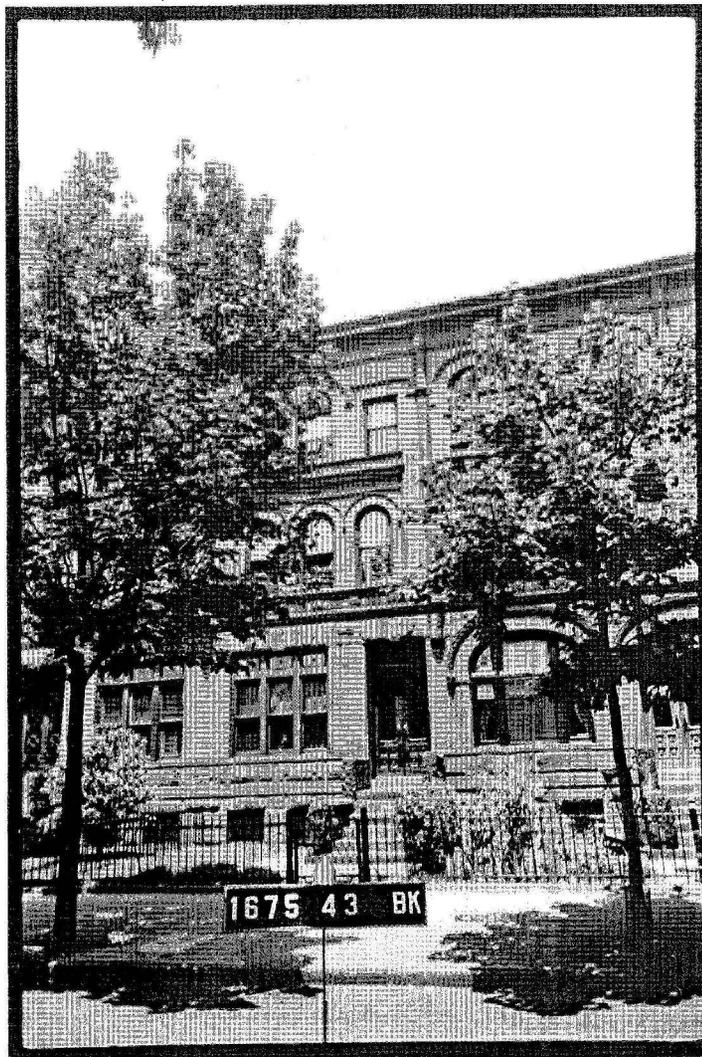
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Completed and revised by the staff of the New York City Landmarks Preservation Commission.

Concept, layout, and graphics: Lesa Rozmarek, Assoc. AIA

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This is a photo of 295 Decatur Street from 1939. It shows the original configuration of the windows, front doors and fence. The photograph is a tax photo.

*Below the photograph write a description of the historic photograph, including the date when the photograph was taken. Please indicate where you got the photograph from. Tax photos are available from the City of New York, <http://www.nyc.gov/html/records/html/taxphotos/home.shtml>*

*With much appreciation, drawings and photographs courtesy of Kaitzen Woo Architect, P.C.*

**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

**Historic Window Documentation**

**NYC** Landmarks Preservation  
Commission

295 Decatur St



Streetscape - Facing Decatur St



Bottom Half of Front Facade - Facing Decatur St

Proposed (3) double-hung windows to be replaced / same window, different views. Window Type: A

Front Elevation - First Floor



Front Elevation - Second Floor



Front Elevation - Top Floor



Provide photographs of all elevations of your buildings. Label each elevation, clearly denoting the Front or Street elevations. You can mark on these photographs the location(s) of the proposed area of work



Top Half of Front Facade - Facing Decatur St



Front Elevation - Facing Decatur St

With much appreciation, drawings and photographs courtesy of Kaitsen Woo Architect, P.C.

**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

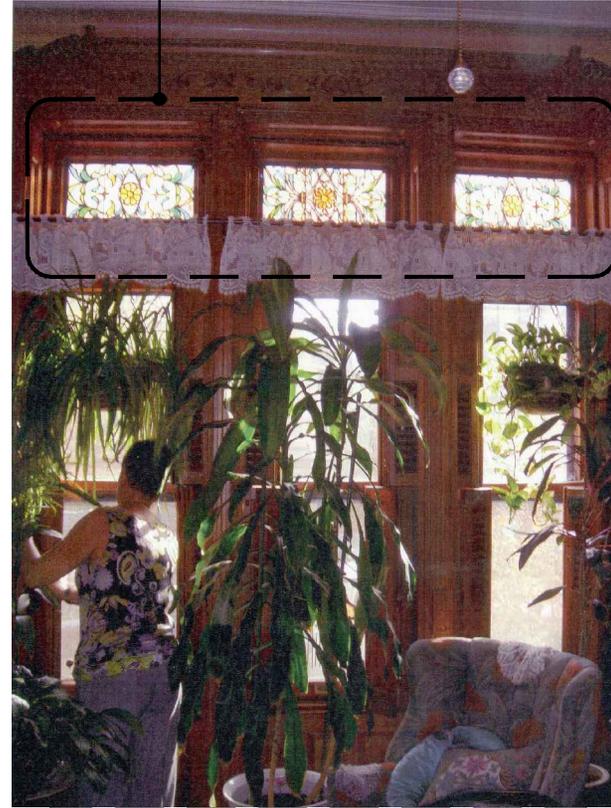
Exterior Elevation Photographs

**NYC** Landmarks Preservation Commission

TRANSOM  
WINDOWS NOT  
INCLUDED IN  
SCOPE OF WORK.  
TO REMAIN AS IS.



Exterior Elevation



Interior Elevation

*Provide overall photographs of the interior and exterior of the proposed replaced windows. Be sure to show the entire window configuration, i.e., two double-hung windows with a center mullion. Label the photographs to correspond to the windows denoted for work on the Exterior Overall Building Photographs.*

*This is the Window Number or Type Indicator, it relates to the Critical Measurements Worksheet for your window. Window Number(s), typically are used when each window has its own number and each window is documented individually. Type Indicator(s), are typically used when there are a large amount of windows that are all the same in configuration and dimensions. If Type Indicator(s) are used, the applicant should photo document each window's condition and submit a wide variety of conditions. The LPC may contact you for additional documentation.*

## WINDOW TYPE: A

*With much appreciation, drawings and photographs courtesy of Kaitsen Woo Architect, P.C.*

**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

Existing Conditions Photographs

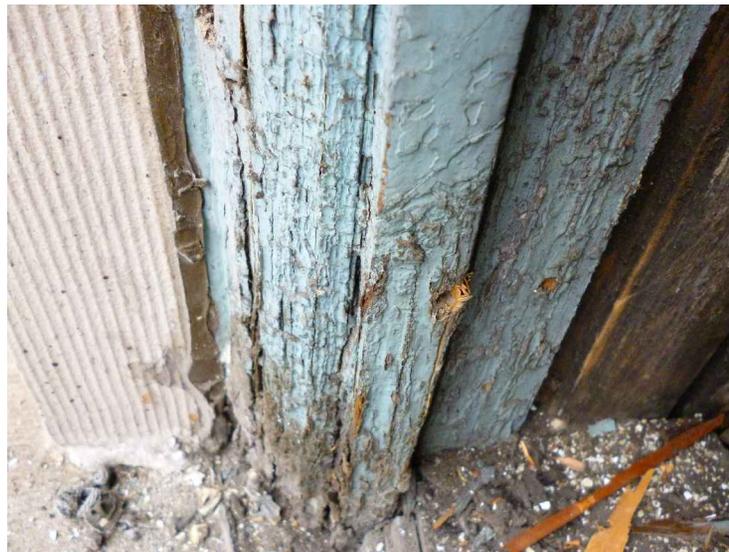
## Jamb Condition:

*(describe the condition of the Jamb)*



## Brickmold Condition:

*(describe the condition of the  
Brickmold)*



## WINDOW TYPE: A

*With much appreciation, drawings and photographs  
courtesy of Kaitesen Woo Architect, P.C.*

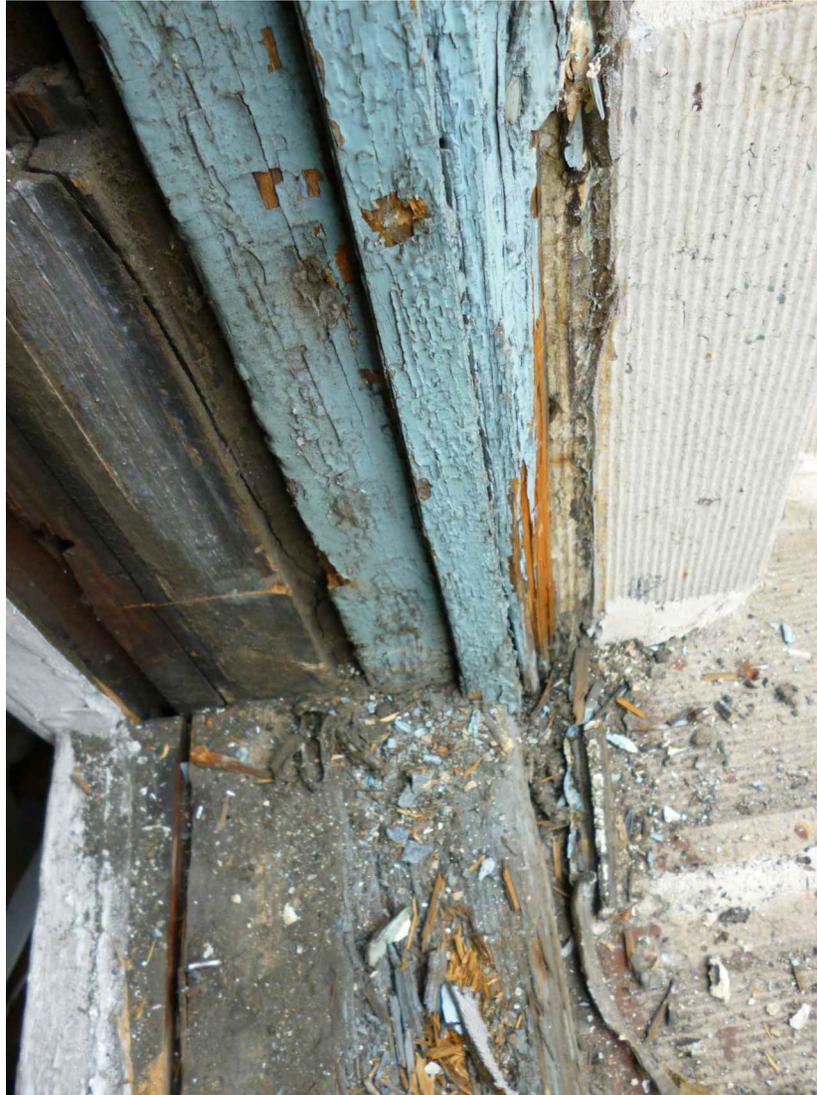
**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

**Existing Conditions Photographs**

*Provide supporting photographs of the  
condition(s) of your window(s). Label the  
photographs to correspond to the windows  
denoted for work on the Exterior Overall  
Building Photographs.*

## Sill & Jamb Condition:

*(describe the condition of the Sill & Jamb)*



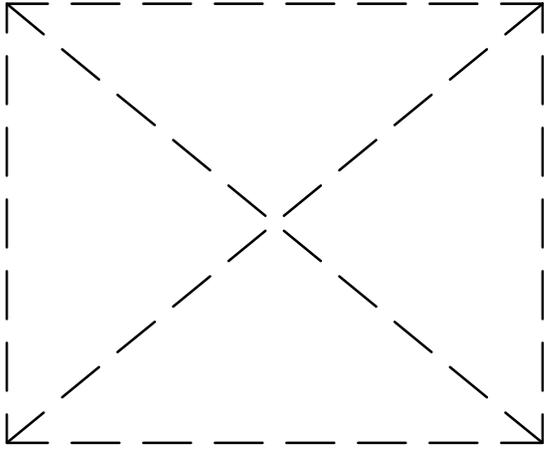
## WINDOW TYPE: A

*With much appreciation, drawings and photographs courtesy of Kaitsen Woo Architect, P.C.*

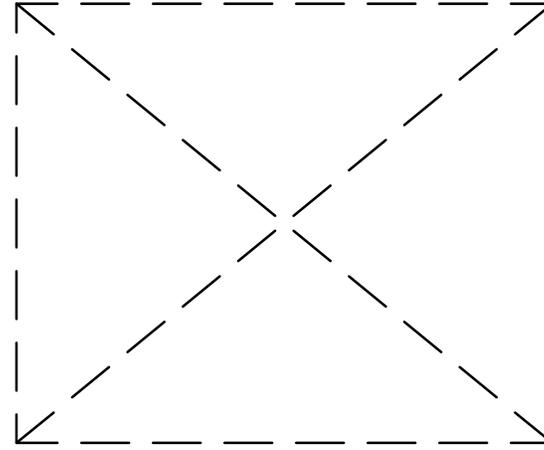
**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

Existing Conditions Photographs

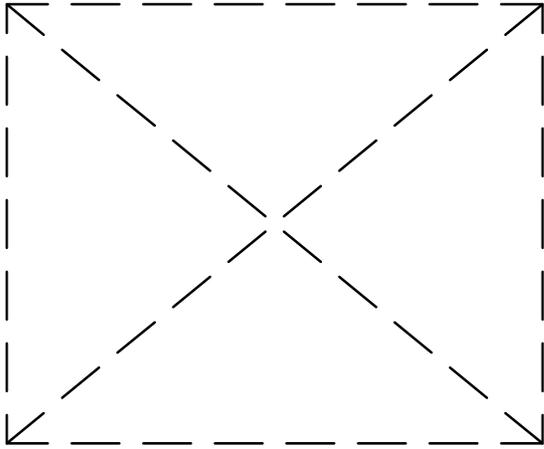
*Provide supporting photographs of the condition(s) of your window(s). Label the photographs to correspond to the windows denoted for work on the Exterior Overall Building Photographs.*



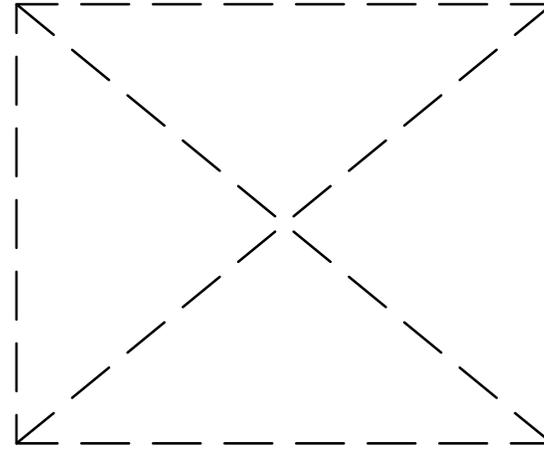
**Special Condition**



**Special Condition**



**Special Condition**



**Special Condition**

*Provide supporting photographs of the condition(s) of your window(s). Label the photographs to correspond to the windows denoted for work on the Exterior Overall Building Photographs.*

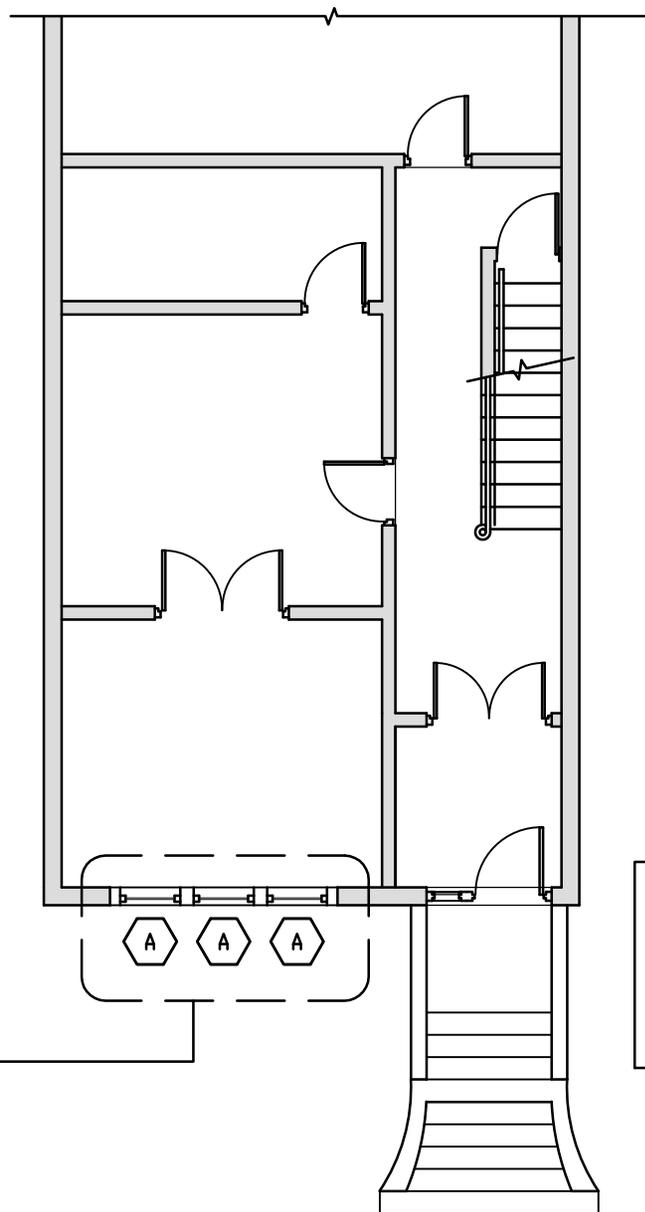
*With much appreciation, drawings and photographs  
courtesy of Kaitsen Woo Architect, P.C.*

**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

**Special Conditions Photographs**

**NYC** Landmarks Preservation  
Commission

With much appreciation, drawings  
and photographs courtesy of  
Kaitsen Woo Architect, P.C.

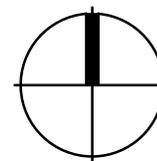


REPLACE THREE WOOD  
DOUBLE-HUNG WINDOWS  
WITH ALUMINUM  
DOUBLE-HUNG WINDOWS

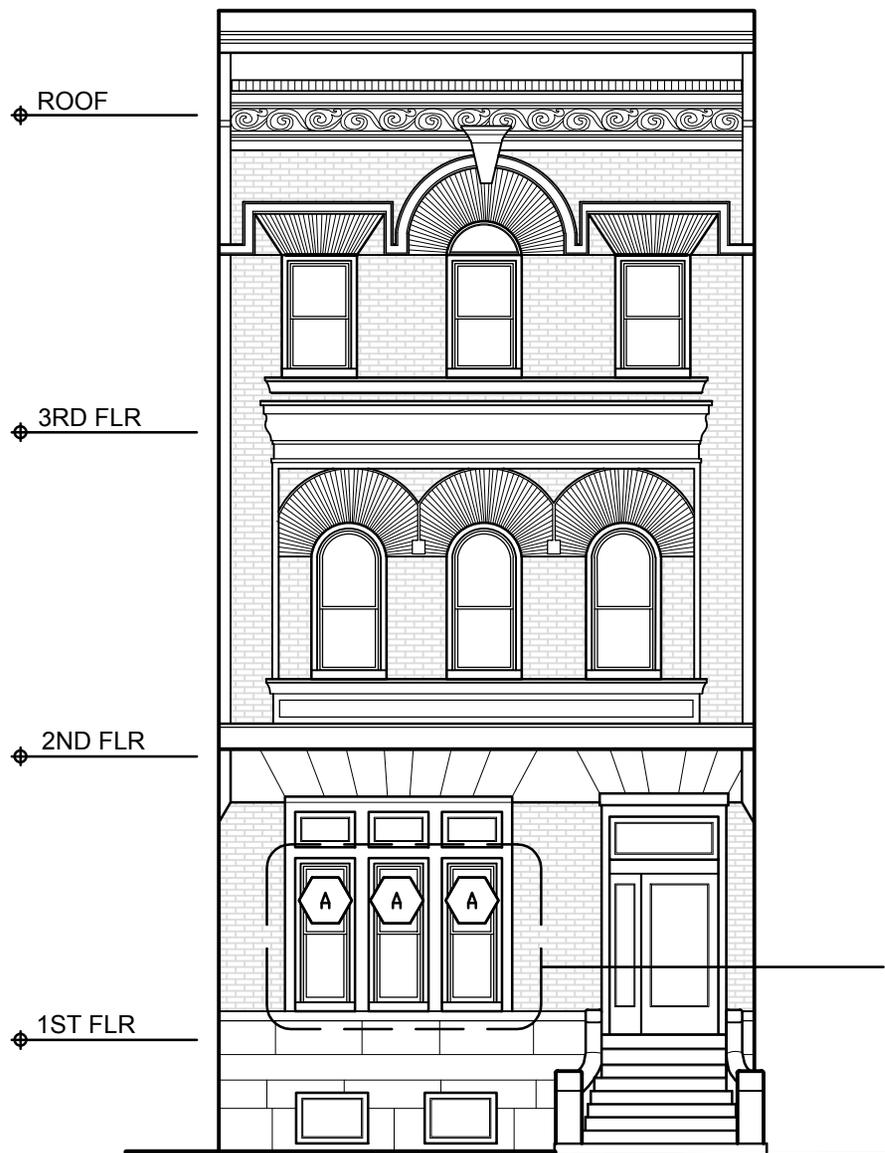
Legible hand drawn and computer generated  
drawings are acceptable for submission.

Floor Plan may be required if proposed work location  
is not clear on provided Overall Exterior  
Photographs. LPC will contact you if required.

**1** Floor Plan  
**A906** Scale: 1/4"=1'-0"



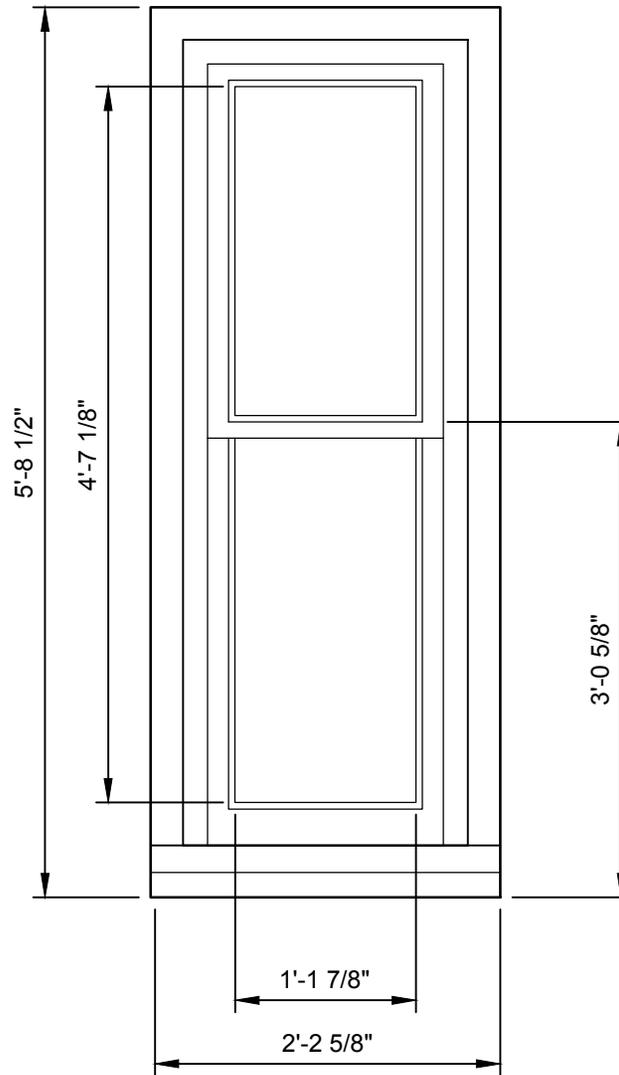
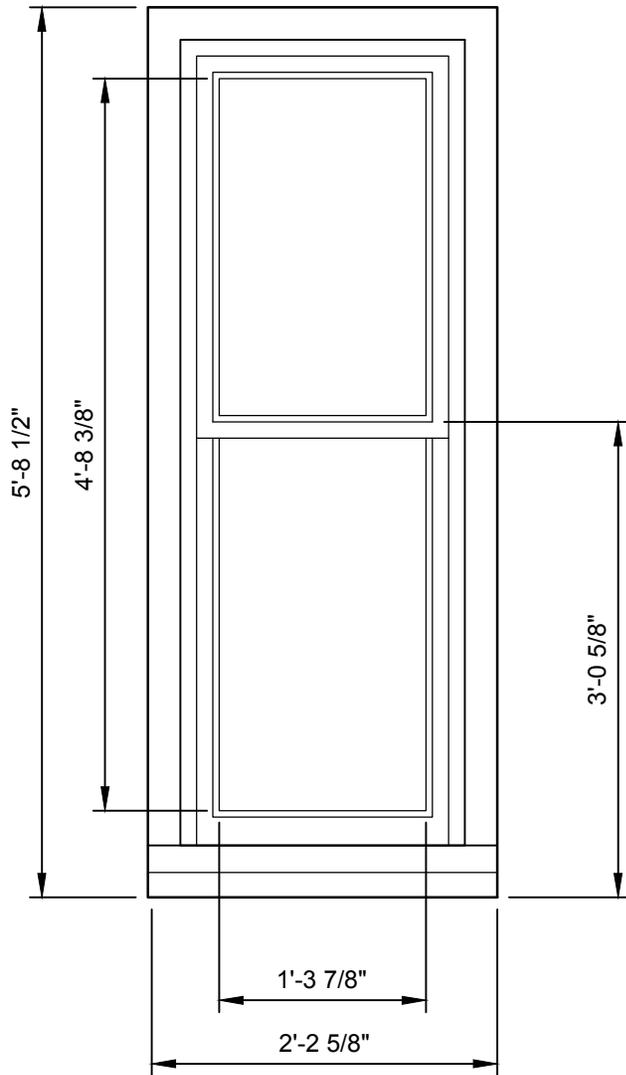
With much appreciation, drawings  
and photographs courtesy of  
Kaitsen Woo Architect, P.C.



Full Building Elevation may be  
required if proposed work location  
is not clear on provided Overall  
Exterior Photographs. LPC will  
contact you if required.

REPLACE THREE WOOD  
DOUBLE-HUNG WINDOWS  
WITH ALUMINUM  
DOUBLE-HUNG WINDOW

**1** Front Elevation  
**A907** Scale: 1/4"=1'-0"



With much appreciation,  
 drawings and photographs  
 courtesy of Kaitsen Woo  
 Architect, P.C.

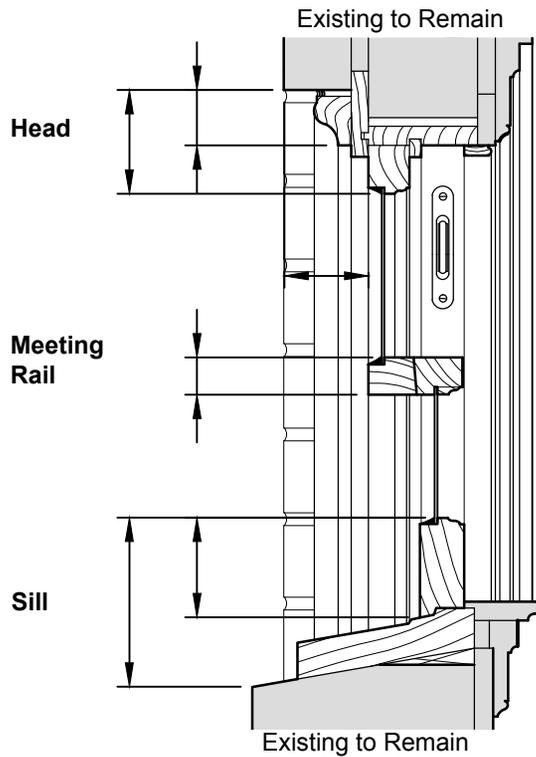
**1** Existing Window 'A'  
**A908** Scale: 3/4"=1'-0"

**2** Proposed Window 'A'  
**A908** Scale: 3/4"=1'-0"

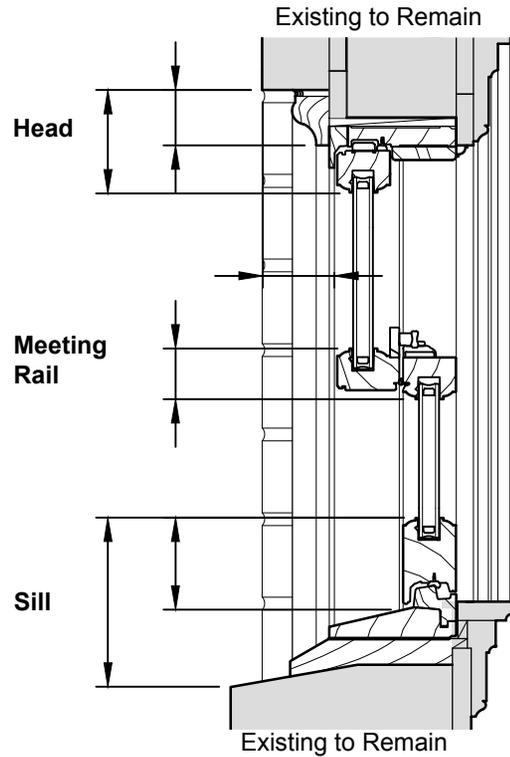
**WINDOW REPLACEMENT**  
 295 DECATUR ST, BROOKLYN, NEW YORK

Window Elevations

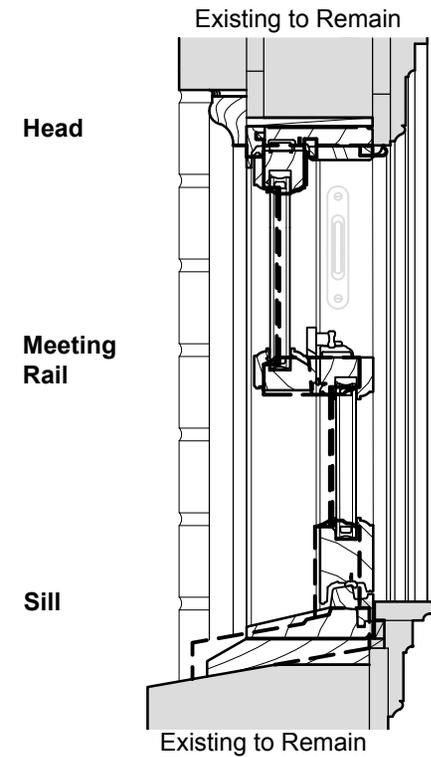
**NYC** Landmarks Preservation  
 Commission



Existing Window Section and Jamb Detail

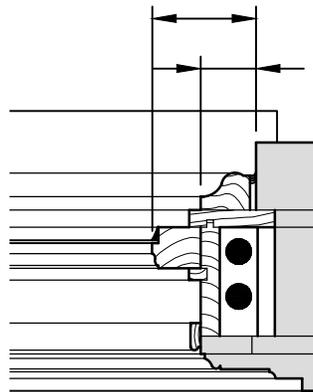


Proposed Window Section and Jamb Detail

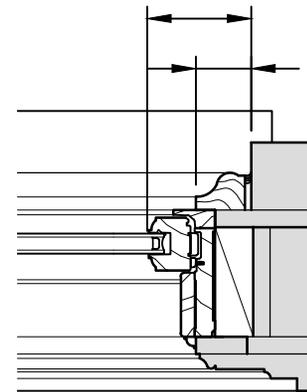


Overlay of the Existing and Proposed

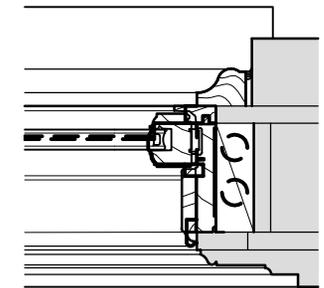
*Dimension lines have been purposely left blank on this sheet. They demonstrate the dimensions that the Applicant is required to provide.*



Jamb



Jamb



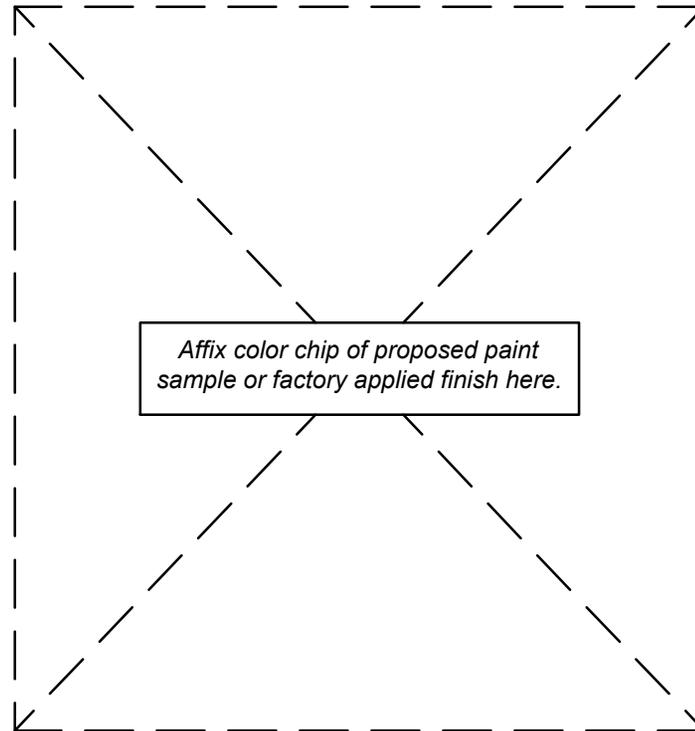
Jamb

*With much appreciation, drawings and photographs courtesy of Kaitsen Woo Architect, P.C.*

**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

**Window Details: Window Type A**

**NYC** Landmarks Preservation Commission



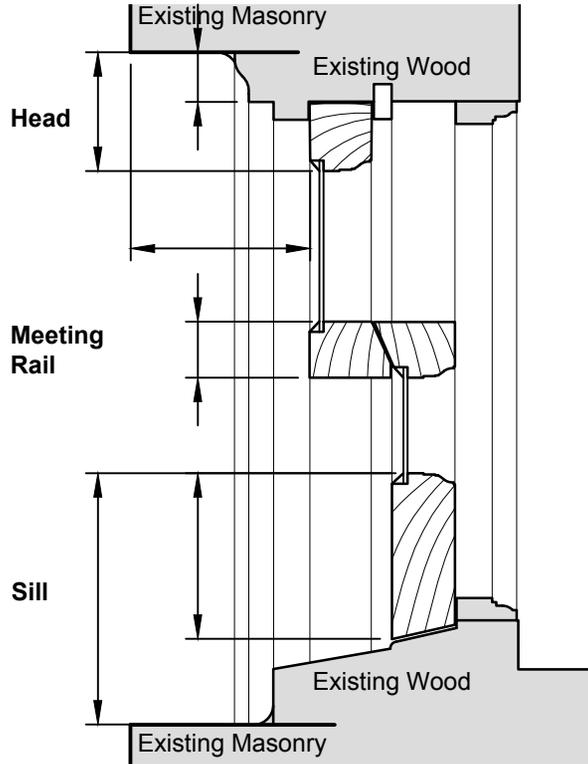
Exterior Sash and Frame Color: Paint Company X, Color: Darkest Ocean Blue, BG-1066.

*With much appreciation, drawings and photographs  
courtesy of Kaitsen Woo Architect, P.C.*

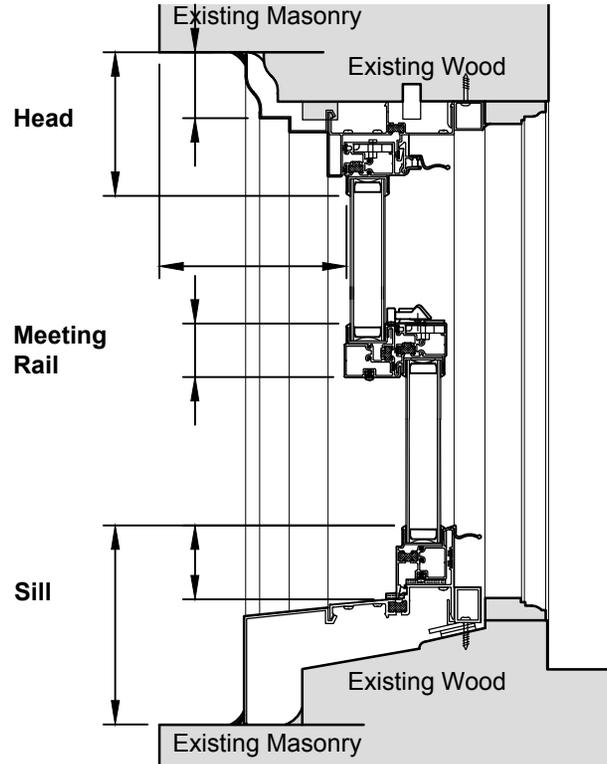
**WINDOW REPLACEMENT**  
295 DECATUR ST, BROOKLYN, NEW YORK

**Proposed Color Samples**

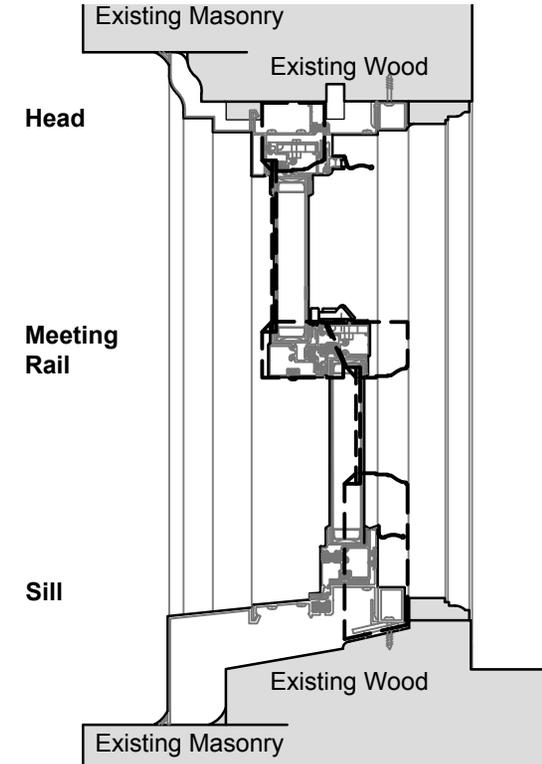
**NOTE: THIS TREATMENT IS NOT APPROPRIATE FOR ALL PROJECTS AND ONLY DEMONSTRATES REQUESTED INFORMATION.**



**Existing Window Section and Jamb Detail**

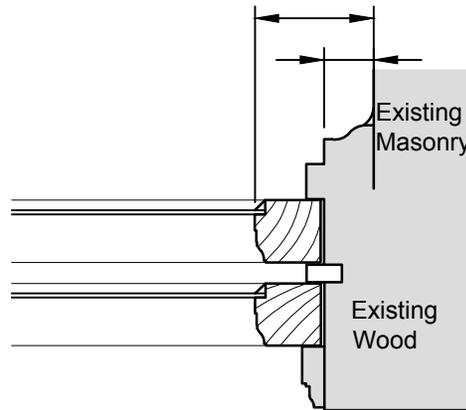


**Proposed Window Section and Jamb Detail**

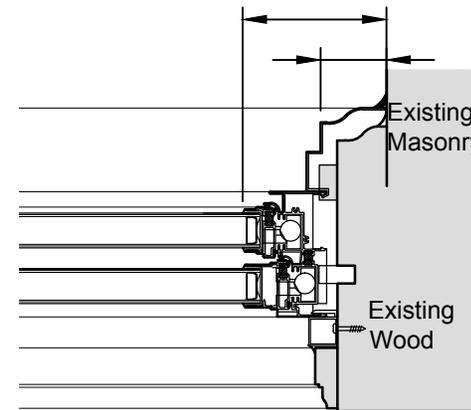


**Overlay of the Existing and Proposed**

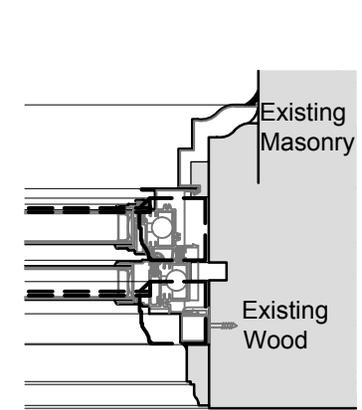
*Dimension lines have been purposely left blank on this sheet. They demonstrate the dimensions that the Applicant is required to provide.*



**Jamb**



**Jamb**



**Jamb**

*With much appreciation, drawings and photographs courtesy of Kaitsen Woo Architect, P.C.*

**WINDOW REPLACEMENT**  
EXAMPLE FOR A LARGE BUILDING PROJECT

**Window Details: Window Type A**

**NYC** Landmarks Preservation Commission