



### The Portland Building Landmarks Commission Briefing #2

January 11, 2016




- Building on and including information originally presented during Briefing #1 on November 26, 2012 by FFA Architecture and Interiors.
- Thank you to FFA Architecture & Interiors and DMF for providing additional photographs for this presentation.



**THE PORTLAND BUILDING RENOVATION**  
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### Background

- The City of Portland held a design competition in 1979 chaired by Philip Johnson.
- The project was awarded to up and coming architect Michael Graves. Richard Roth JR. and Edward C. Wundrum were also Architects on the project.
- Graves final design was based on his conceptual ideas, energy codes of the time, and the City's relatively low budget.
- The project proceeded as an early example of a design build partnership between a project management firm, architects, contractors, and engineers.
- Changes to the design and construction occurred, some documented at the time and others discovered during various investigations over the past 30 years.
- The building was officially listed on the National Register of Historic Places in 2011.
- It is cited as nationally significant as a notable work by master architect Michael Graves and as an early and influential work of Post-Modern Classicism.
- It is identified as "one of the first large-scale manifestations of a new architectural style coming on the heels of the Modern movement" qualifying for listing under special consideration for properties that have achieved significance in the past 50 years.
- The Portland Building has suffered from chronic systemic water infiltration since shortly after its completion and been the subject of many studies and repair efforts over the past 30 years.
- It has also received much criticism from citizens and employees regarding its lack of daylighting, indoor air quality, approach to the street, and other issues within the building.



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### The Portland Building Previous Study/Repair Timeline


**Studies**

- 1988 Commission Complete
- 1988 Effortiveness tested at base tile and study performed
- 1988 Leads noted at various walls and study performed
- 1988 Effortiveness tested at roof tile and study performed
- 2008 Leads noted at various locations on main facade and study performed
- 2012 Current envelope assessment

**Repairs**

- 1988 Tile tile repairs, cleaning, masonry grouting, parapet cap
- 1988 Curtain wall repairs, north elevation, Floors 4-10
- 1988 Window repair, north elevation, all windows, caulking, gaskets, clips
- 1988 Repair of 14<sup>th</sup> Floor
- 1988 Repair of 2<sup>nd</sup> and 3<sup>rd</sup> Floors
- 1988 Window repair, north
- 2008 Repair of 12<sup>th</sup> Floor roof and installation of new roof at 10<sup>th</sup> and 12<sup>th</sup> floor north roof
- 2010 Replacement of stone at penthouse and roof at 14<sup>th</sup> Floor roof

Briefing #1



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### Project at Briefing #1:

**Goals**

- Address water intrusion issues throughout envelope
- Reduce air infiltration and increase energy efficiency at glazing assemblies
- Address efforescence in tile grout joints
- Repair damaged interior finishes
- Full structural evaluation

**Status**

- Preliminary investigations of the building envelope completed
- Analysis of data collected in progress
- Formulation of possible solutions in progress
- Structural evaluation in progress



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### The Portland Building Previous Study/Repair Timeline


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- 1988 Leads noted at curtain walls and study performed
- 1988 Effortiveness tested at roof tile and study performed
- 2008 Leads noted at various locations on main facade and study performed
- 2012 Current envelope assessment
- 2013 Envelope and Structure Assessment
- 2015 Building Systems and Interior Assessment

**Repairs**

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Briefing #1



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### Additional deficiencies identified:

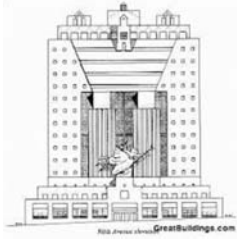
- Structural degradation
- Mechanical systems near the end of their life
- Insufficient IT infrastructure
- Not to current accessibility and seismic codes
- Inefficient work spaces





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## Directive to Preserve and Reconstruct the Historic Portland Building:



On October 21<sup>st</sup>, 2015, Portland City Council directed the Office of Management and Finance to move forward with a full reconstruction of the Portland Building. We are in the very beginning stages of planning and are engaging the Portland Landmarks Commission now to determine what you find most important to preserve and what improvement opportunities you support for the Portland Building. We appreciate this opportunity in the Early Assistance application to ask questions early and incorporate your group into the team.



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## Briefing #2



### Goals:

- Update Landmarks Commission with current findings.
- Get initial feedback from Commission on ideas for improvements. Improvements are based on deficiencies and also on opportunities presented by having a full reconstruction project.
- Determine what the commission finds most historically significant to ensure preservation.

The following pages contain preliminary considerations for improvements and modifications to the building based on Briefing #1 and subsequent findings. Additional information will be provided at future meetings.



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## Windows

### Deficiencies:

- Water intrusion from:
  - Perimeter Sealant Deterioration
  - Frame Separation
  - Glazing Gasket Deterioration
  - Corrosion and etching of finish
  - Lack of flashing
  - Incorrect installation
  - Failed thermal expansion joints
- Single glazing:
  - Temperature differential causing condensation (measured at 20-25 degree difference from room temperature)
  - Energy efficiency
  - Mold spores previously noted
- Incorrect use of storefront system:
  - Ribbon windows are built with a storefront system, which is not designed for the wind and weather conditions at the heights they are installed at.



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## Windows

### Deficiencies continued:

- Tinted glass further reduces available daylight:
  - The original building was designed during the energy crisis of the late seventies and early eighties. As such, Michael Graves was instructed to install the dark tinted glass we are familiar with today. This has led to much criticism due to the lack of daylighting afforded to the tenants of the building.
- Spandrel glass vs. view glass:
  - Much of the glass we perceive on the exterior of the building are actually spandrel panels with interior walls built in front of them. This was never Graves' intent and he stated when he was here that this occurred primarily due to original budget issues and the fact he was not the interior architect for floors 3-15.



### THE PORTLAND BUILDING RENOVATION

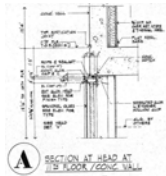
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## Windows

### Possible Solutions:

- Remove and replace all windows to:
  - Allow for appropriate product selections
  - Provide proper detailing
  - Improve energy efficiency
  - Improve daylighting
- Improve daylighting and energy efficiency by providing current glazing and frame options with higher u-values, thermally broken frames, and clearer views.
- Remove any interior non-structural walls built in front of spandrel panels and replace panels with glazing to allow for increased daylighting.



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## Wall Assemblies

### Deficiencies:

- Tile:
  - Moisture damage to windows and interior finishes from moisture migration through unprotected tile mortar joints and un-flashed transitions to adjacent materials
  - Efflorescence causing discoloration and permanent etching on window frames, glass, and ceramic tile
  - Damaged tiles have been repaired and replaced with poor matches and short term fixes.
- Concrete and Stucco:
  - Generally in good condition.
  - Some cracking and spalling.



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## Wall Assemblies

**Possible Solutions:**

- Remove and replace tile with proper rain drain and detailing to prevent recurrence of current deficiencies.
  - It is assumed that during removal, the majority of the tile will be destroyed due to its brittle nature.
  - The material originally chosen was done so due to budget constraints, as stated by Michael Graves.
  - Original tiles were made in West Germany and are no longer available in the United States.
- There may be more sophisticated options available to us today which may have a longer lifespan and less maintenance requirements, resulting in a better outcome for the building long-term.
- Repair existing concrete and stucco
- Replace stucco to match existing where impacted by window replacements and other work.



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## Loggia

**Deficiencies:**

- Dark and uninviting.
- No connection to the street.
- Out of human scale.
- Unusable space.



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## Loggia

**Possible Solutions:**

- Push the first floor out to the edge of the loggia and eliminate the loggia completely for usable space. This was supported by Graves.
- Upgrade lighting.
- Provide human scale features such as planters, seating, or additional more interesting bicycle parking.



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## 4<sup>th</sup> Avenue Façade

**Deficiencies:**

- No connection to the street.
- Out of human scale.

Originally, Graves designed an entrance on the 4<sup>th</sup> avenue side to correspond with City Hall and the Courthouse. Due to pressures of the city at the time to include a parking garage, the 4<sup>th</sup> avenue entrance had to be abandoned to place the parking garage entrance, as that was the only location suitable due to the slope of land and the limitations of 5<sup>th</sup> avenue.




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## 4<sup>th</sup> Avenue Façade

**Possible Solutions:**

The current scope and budget does not include modifications to this façade. However, if budget does allow for it, possible ideas include:

- Add an entrance to the 4<sup>th</sup> Avenue side
- Add artwork or additional openings

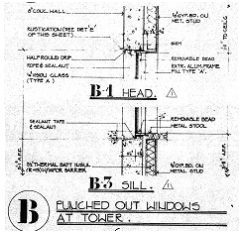


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## Design Parameters

In all work we do, we will:

- Consider original details when detailing the renovation work
- Consider original design intent in all proposed work
- Consider original nomination in all proposed work to preserve the historic integrity
- Further research precedence for other similar renovation work.



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## Windows

**Questions:**

- Product type: If the profile remains similar, is it acceptable to change product type to allow for appropriate selections (i.e. replace storefront with curtain wall systems at ribbon windows)?
- Glazing options: When Graves spoke here, he recommended replacing the glazing with a clear glass to improve the daylighting. This will also meet energy and sustainability requirements of LEED. Glazing technology has improved greatly over the years and higher energy values can be achieved today with glazing that is not tinted as the original windows are. The City also has to conform to a "Bird Friendly" policy. This may impact the reflectivity or tint level chosen in order prevent bird strikes. Will a more clear, energy efficient glazing be acceptable?




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## Windows

**Questions:**

- Expose more windows: Is it acceptable to replace spandrel panels with glazing and remove the adjacent interior walls where the structure allows for it?



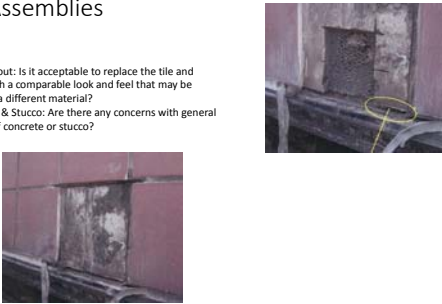


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## Wall Assemblies

**Questions:**

- Tile & Grout: Is it acceptable to replace the tile and grout with a comparable look and feel that may be made of a different material?
- Concrete & Stucco: Are there any concerns with general repairs of concrete or stucco?



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## Loggia

**Questions:**

- Build out loggia: If budget and scope allows, would it be acceptable to eliminate the loggia and recapture that space, to provide a street presence?
- Loggia improvements: If loggia remains, we would like to improve it to be a more welcoming space and better address the urban streetscape. Some ideas include: upgrade lighting to better illuminate the space; add seating; add plant-life; and/or increase and improve the bicycle parking to help us meet the city bicycle parking codes. Are there any concerns or limitations to these ideas?

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## 4<sup>th</sup> Avenue Façade

**Questions:**

- Is the addition of a 4<sup>th</sup> avenue façade entrance acceptable and if so, what specific considerations would the Commission like us to consider?

\* Note: If budget allows for us to make modifications to this façade, we will return with specific proposal(s) for consideration.




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## Interior Modifications

Our understanding is that the historic interior spaces are outside the jurisdiction of the Landmarks Commission and therefore SHPO would need to be consulted regarding those spaces. We are contacting SHPO concurrent to this application to start that process.

**Question:**  
Is this a correct understanding and procedure?



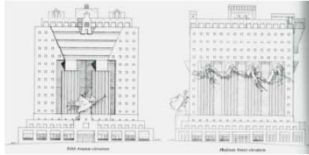

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## Next Steps

The City of Portland, Office of Management and Finance is looking forward to work with the Landmarks Commission on these and future considerations for the renovation of The Portland Building.

- Determine full scope of the project
- Return to Commission with design options



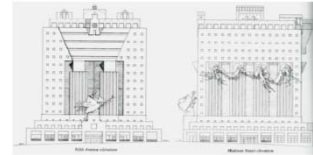
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## Wrap Up

### Questions:

- What does the commission find most historically significant about the building?
- What additional questions and topics would the Commission like to discuss (now or in the future)?



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