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6/9/2020

Bedrock
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Job Name: Fowler Building
Job Location: Detroit, MI

Historic Window Site Review: Addendum 6.9.20

The following is the written Addendum to the Historic Window Site Review of 3/19/2020 for the windows on the Fowler Building at 1225 Woodward Ave, Detroit, MI. This information is based on an additional visit to the site on 5/18/2020, which included the use of a lift on the front and rear facades, as well and a full walk thru on the interior going to each window opening. Our recommendations are based on following the guidelines for restoration and replication for Wood Window Preservation NPS Brief #9; as well as for Steel Window Preservation NPS Brief #13. Likewise, every attempt is made to adhere to the guidelines provided by the National Park Service, the State Historic Preservation Office, and local historic district as well as experience we have gained on projects, we have participated on over the past 30 years.

1. Existing Conditions: (54) Wood Window Double Hung Windows (2,200 Sq. ft.)

The wood double hung windows are all located on the East Elevation front facade. All windows are true double hung with the original white pine frames and sash. Our previous report concluded the windows were in poor condition, but we want to add more information based on this most recent visit to the site with better access to the interior and exterior locations of the window openings. The key concerns and areas of window deterioration are:

- **All wood window sashes are using "Williams Pivot Hardware", this hardware was popular in the 1920's thru 1930"s in high rise buildings in major urban areas. The assembly and hardware allowed both the upper and lower sash to**

rotate on a horizontal axis to be washed from the interior. All jambs have a split side stile that allows a portion of the sash to separate from main body of the sash, staying in place in the jamb pocket. See Figures 1- 4. From inspection the majority of the upper and lower sashes do not have functioning pivot hardware and the portion of the jambs that stay stationary are broken, split, and not functioning. All these would have to be replaced and no tooling is available nor replacement hardware since the product has not been manufactured since after WWII. The condition really eliminates any option for any sash restoration. Replacement sashes can be manufactured without this feature as proposed and fixed in place to provide a restoration/replication scenario.

- All sashes are wood, but a unique element to the window design we have documented, is that all other exterior components were originally clad with copper break metal. This includes sills, all exterior ornamental spandrel panels, mullions, blind stops, and parting beads. The material no longer has a patina finish but has been painted green multiple times over the years. Most of the material is in good condition and tightly fit; however, there is some repair work needed to replace some parts in various locations including parting bead, sills, trim components. This will need to be done by a metal façade contractor in coordination with the window work. See Figures 5-10.
- We have documented the sash condition on the exterior side, see Figures 11-15.
  Most of the sashes have a combination of joinery breakdown, bowed rails or stiles, and cracked or broken sash stiles or rails.
- In conclusion, there is no question from my review of these windows that the sashes need to be replaced; especially know we can use the existing master frames and only replace the sash with replica exterior clad material to match the rest of the exterior metal cladding.

2. Existing Conditions: (74) Cold Rolled Steel Double Hung Windows (1,450 Sq. ft.)

These windows are located on the West Elevation, rear façade on the alley side of the building. The windows are in poor condition with heavy corrosion and rust on all exterior components. These windows are notoriously difficult to restore since there is no way to arrest the corrosion in the tubular profiles. Even when the exterior surfaces are in good condition the joinery will show rust deposits soon after full restoration. The key concerns and areas of deterioration are as follows:

- One of the greatest concerns is the fact that we counted 13 sashes are missing from the site. This being the case there are no sources available to provide replica cold rolled steel sashes. This is not a product that is available, as is the

case for replica wood window components from a variety of millworks. This fact alone deters the ability to restore the alley side steel window. See Figures 16-19.

- **These windows appear to not have been maintained for decades without any exterior painting or caulking. Sashes are rusted shut with no signs of galvanized material remaining. Many of the sill and frame corner joinery location are failed or failing with metal twisted or material is missing by corrosion. See Figures 20-23.**
- **It is difficult to provide photos because the majority of the openings are covered by heavy metal bars or metal fire escape sections. Likewise, the alley is only about 12' wide so getting photos showing the entire rear façade was not possible, even with a lift. Without reservation these windows need to be removed and replicated with a thermally broken aluminum historic replication. See Figures 24-25.**

Sincerely,

_____MKS_____ 6/9/2020

Michael K. Shields
President
BlackBerry Systems, Inc.

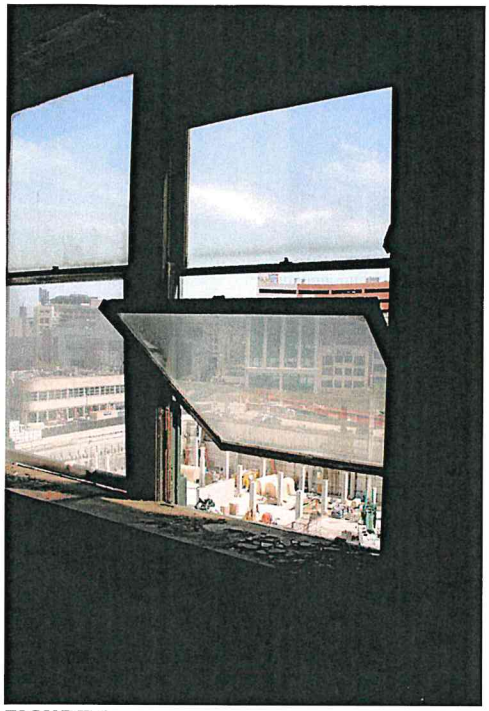

FIGURE 1

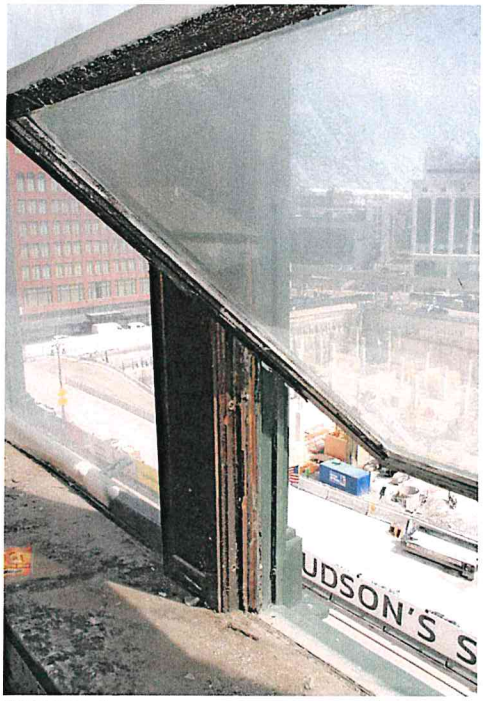

FIGURE 2

FIGURE 3

FIGURE 4

FIGURE 5

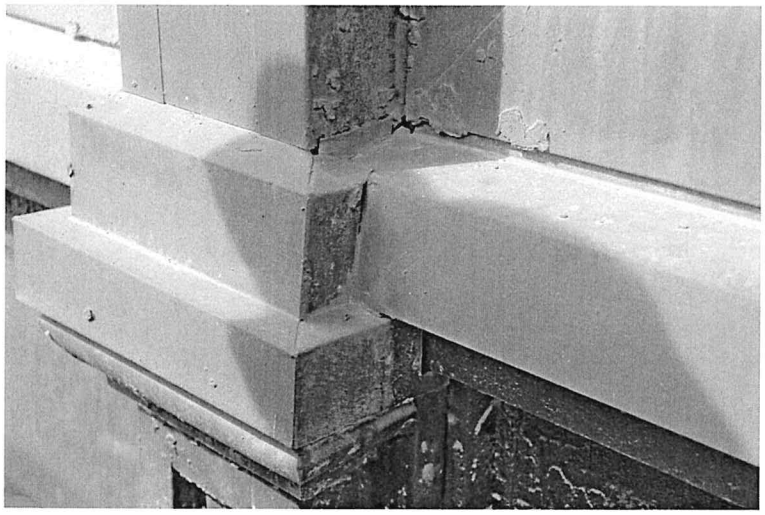

FIGURE 6

FIGURE 7

FIGURE 8

FIGURE 9

FIGURE 10

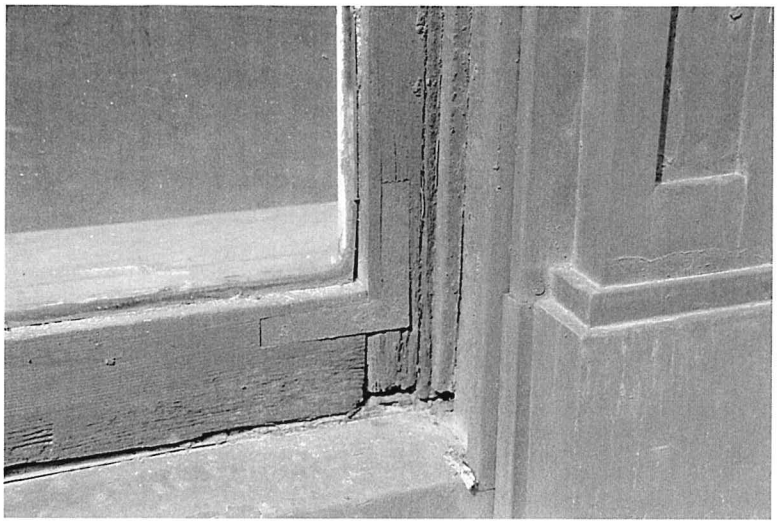

FIGURE 11

FIGURE 12

FIGURE 13

FIGURE 14

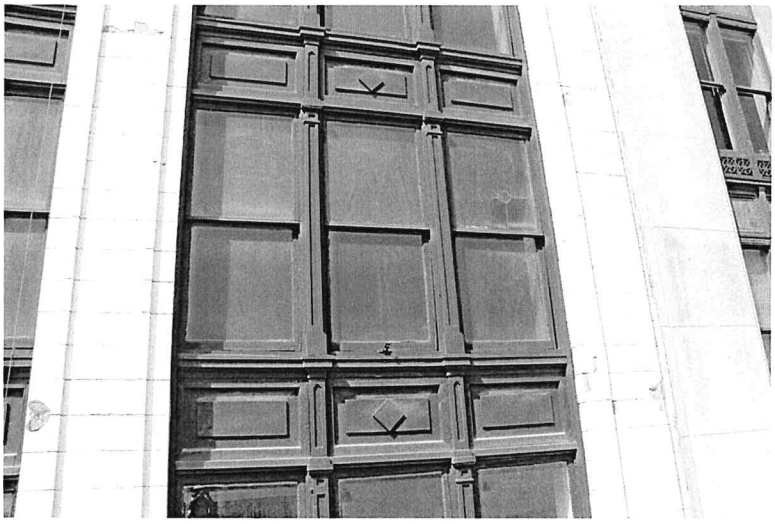

FIGURE 15

FIGURE 16

FIGURE 17

FIGURE 18

FIGURE 19

FIGURE 20

FIGURE 21

FIGURE 22

FIGURE 23

FIGURE 24

FIGURE 25