

HARLEY CLARKE MANSION Condition Assessment

2603 Sheridan Road Evanston, Illinois 60201



Final Report September 11, 2019 WJE No. 2019.1266.4



Prepared for: **Ms. Lisa DiChiera** Landmarks Illinois 30 North Michigan Avenue, Suite 2020 Chicago, Illinois 60602

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BACKGROUND

At the request of Landmarks Illinois, Wiss, Janney, Elstner Associates, Inc. (WJE) performed a limited condition assessment of the Harley Clarke Mansion and Coach House, located at 2603 Sheridan Road in Evanston, Illinois. The purpose of the assessment was to gain a general sense of the condition of the building facade and to provide prioritized repair and maintenance recommendations.

The Harley Lyman Clarke Mansion is located at 2603 Sheridan Road in Evanston, Illinois, and was designed by architect Richard Powers. The landscaping was designed by landscape architect Jens Jensen. In 1949, the house was sold to Sigma Chi fraternity and in 1966, it was sold to the City of Evanston. The property consists of the mansion located at the east edge of the site and a coach house located at the southwest corner of the site (Figure 1).

The wood-framed residence contains exterior multi-wythe masonry bearing walls, clad primarily with dolomitic limestone, with some areas of oolitic limestone set on a cast-in-place concrete foundation. Stylistically, the building was designed as an English manor house with some French eclectic elements. The steeply pitched roof is covered with clay tile, and the roof incorporates six large chimneys. Windows are typically divided steel casements with some having leaded glass windows. There are also wood frame windows at various locations. The windows are set into punched openings in the masonry and have painted wood surrounds. The original home had sixteen rooms, including an iron and glass roofed conservatory on the south wing that has been subsequently replaced or covered with a copper standing seam roof. Its entranceways are flanked with elaborately carved oolitic limestone flower sheaves, with ornate copper scuppers and cisterns. A one-story sun room with an ornamental limestone railing at the second-floor deck above is approximately centered on the east facade. There are also ornate cast stone elements, including urns and capitals. The coach house with a garage was constructed in 1927 with similar design elements. A greenhouse was added to the west facade of the coach house in the 1980s. Schematic floor plans of the masion are shown in Figure 2 through Figure 5. Schematic floor plans of the coach house are shown in Figure 7.

A previous condition assessment report was completed by Gregory Dowell and Edward Gerns of WJE on August 3, 2016. On August 2, 2019, Nicole Declet and Joshua Freedland of WJE completed an exterior and interior visual inspection of the mansion and the coach house. This report updates the previously issued report.

OBSERVATIONS

Both assessments were performed by grade and accessible roofs. No inspections of concealed conditions were completed or close-up assessments of inaccessible areas. Overall views of various areas of the exterior of the mansion and coach house are shown in Figure 8 through Figure 15. The follow conditions were observed:



Exterior-Mansion

- 1. Loose and displaced masonry units with open joints on the site wall and retaining wall located on the west (Figure 16 and Figure 17).
- 2. Localized damage at the entry stairs, including cracked stone, spalled stone and missing mortar (Figure 18).
- 3. Vines are present on the majority of the exterior masonry. As a result, the condition assessment of the masonry was limited (Figure 19).
- 4. Cracked and missing mortar joints between the limestone units throughout the house at visible areas (Figure 20).
- 5. Localized displacement, and loose limestone units and cracked mortar joints at the wing wall on the northwest corner side (Figure 21).
- 6. Step cracks of mortar joints above the basement door at north facade (Figure 22).
- 7. Cracked limestone cladding at sun room on east facade (Figure 23).
- 8. Missing limestone balusters and spalled limestone balusters exposing corroded ferrous pins above the sun room on the east (Figure 24 and Figure 25).
- 9. Exfoliation of the limestone was evident at several locations, particularly at water shedding elements of the facade.
- 10. Limited exfoliated limestone and missing mortar on the west facade of the conservatory (Figure 26).
- 11. Isolated limestone spalls at the alcove on the west facade (Figure 27).
- 12. Areas of algae growth are evident on portions of the stone and mortar at areas of the vine covered facades.
- 13. Missing mortar and isolated cracks of the brick masonry near the tops of the chimneys (Figure 28).
- 14. Window wood jambs at west facade exhibited checks and isolated wood rot at the base. Window glazing was cracked, missing and replaced with plastic glazing at several locations (Figure 29).
- 15. Cracked, missing and debonded glazing putty and debonded perimeter window sealant at most windows.
- 16. Peeling paint and surface corrosion of the steel window frames. Surface corrosion on the steel sash and frames of the windows throughout the house (Figure 30). Window stops displaced at some window locations.
- 17. Peeling paint on areas of the wood frames and sills, as well as some localized damage from long term water exposure (Figure 31).
- 18. Localized cracking of the plaster at entrance porch ceiling and walls (Figure 32).
- 19. Surface corrosion of basement window lintel at north facade (Figure 33).
- 20. Cast iron Juliette balcony railing at south facade was cracked (Figure 34).
- 21. Bent sheet metal flashing between the cast stone urn and capital at the east facade (Figure 35).
- 22. Missing roof tiles were noted at one location at a valley and the ridge (Figure 36).
- 23. Decorative copper gutters and downspouts are generally intact with some areas of impact damage. Vines are growing in some of the gutters (Figure 37).
- 24. Peeling paint and areas of paint loss on the steel fire escape (rails, treads, and platforms) on the south facade. Surface corrosion was identified at the steel elements at areas of missing paint. (Figure 38).
- 25. A limited number of treads on the fire escape were buckled and displaced.
- 26. The wood trim of the door to the fire escape exhibited significant checking and rot (Figure 39).
- 27. Overgrown landscaping is present around the house.

Interior- Mansion

1. Limited areas of water-damaged plaster were noted at various locations but primarily identified in the basement (Figure 40).



- 2. Limited areas of cracked plaster exist at various locations throughout the basement, first, second and third floor.
- 3. Water damage to the plaster ceiling of the sun room ceiling (Figure 41).
- 4. Historic fireplace mantel and wood trim was removed (Figure 42).
- 5. Non-original storm windows have been installed at many of the windows throughout the house (Figure 43 and Figure 44).
- 6. Non-historic interior aluminum-framed windows were installed at leaded windows (Figure 45).
- 7. Standing water found in basement mechanical room (Figure 46).
- 8. There was water dripping in the basement mechanical room. The source of the dripping water was not identified.
- 9. Indication of previous water leakage, at localized areas, was evident in the visible portions of the roof framing in the attic (Figure 47).
- 10. Surface checks in various structural wood frame members was present in the framing visible in the attic (Figure 48).
- 11. The observatory has exposed masonry on the interior, exposed steel roof framing and a concrete slab floor (Figure 49).
- 12. Peeling paint and areas of rot on the lower portion of the jambs and sills in the conservatory (Figure 50).
- 13. Limited areas of exfoliation of stone at the lower portions of the conservatory walls (Figure 51).

Exterior- Coach House

- 1. Vines are present on limited areas of the exterior masonry.
- 2. Isolated areas of cracked, debonded or missing mortar in joints between the limestone cladding.
- 3. Exfoliation of the limestone was evident at several locations, particularly at water shedding elements of the facade.
- 4. Efflorescence was present on the masonry.
- 5. Moss was present on the balcony roof, along with splits in the roof membrane.
- 6. Peeling paint on the exterior surface of the wood window surrounds, primarily on the lower portions of the jambs and sills (Figure 52).
- 7. Decorative copper gutters, conductors and downspouts are generally intact with some areas of impact damage on the leading edge of the gutter (Figure 53 and Figure 54).
- 8. Windows appear to be replacement aluminum or aluminum clad casement units set in the original wood window surround (Figure 55).
- 9. A few displaced roof tiles were noted.

Interior- Coach House

- 1. Overall peeling paint on the ceiling and interior walls of the coach house (Figure 56 and Figure 57.
- 2. Areas of water damage were noted at two window locations at north and south walls of the coach house (Figure 58 and Figure 59).
- 3. Open seams on second floor balcony floor (Figure 60 and Figure 61).

CONCLUSIONS AND DISCUSSION

While in need of maintenance, the Harley Clarke Mansion is generally in serviceable condition. The masonry damage, including missing mortar, debonded mortar, and cracked mortar joints and damaged masonry, is likely a result of seasonal movements, water infiltration into the masonry assembly, cyclic freeze-thaw damage, deferred maintenance, overgrown vegetation, and corrosion of embedded metals. The distress was generally consistent with a building of this age. The cracked and spalled limestone balusters above the sun room may create falling hazards and should be rebuilt. Rebuilding should include disassembly, removing, and replacing any ferrous pins with new stainless-steel pins. Cracked, missing or



damaged limestone elements will require replacement. The other exterior enclosure conditions are limited and can be incorporated into a maintenance plan for the Mansion and Coach House, including repointing, resetting masonry units and replacing select stone units.

Vines on the exterior walls have the potential to reduce the rate of drying of the stone. This could increase deterioration related to freeze-thaw cycles. Further, the vines may lead to cracking of masonry. The overgrown landscaping may also be causing damage to the exterior enclosure. The vines and overgrown vegetation should be removed.

Corrosion of the steel window frames and sash are consistent with performance for windows of this vintage with deferred maintenance. Corrosion generally is limited to surface corrosion resulting in peeling and cracked paint with no significant section loss of the window components. The wood window components exhibit more deterioration with areas of cracked and peeling coatings, as well as checks and rot. Glazing putty and deteriorated sealant at the window perimeters is indicative of deferred maintenance. Isolated replacement elements or Dutchman can be installed and the wood elements prepared and recoated. Perimeter sealant should be removed and replaced at all windows.

There are limited indications of previous water infiltration on the interior of the mansion and coach house, most notably in limited areas of the basement, as well as at various windows and at the roof framing. The first and second floors and the attic of the mansion generally appeared dry; however, there was standing water at two locations in the basement of the mansion. The sources of the water in the basement should be identified and corrected.

There was some damage to the plaster finishes observed in the coach house, which are likely a result of ongoing water infiltration. The peeling paint on the interior finishes may also be due to stresses in the coating system, which has occurred as a result of thermal changes from inconsistent heating and cooling.

The peeling paint and surface corrosion of the metal elements is a result of deferred maintenance. These elements should be prepared and painted.

REPAIR RECOMMENDATIONS - PRIORITIZATION

The repair recommendations provided below have been developed from our visual inspections of the building components only. Priority 1 repairs are those that need to be addressed within the next year or two to manage potentially hazardous conditions. Priority 2 repairs are those needing to be addressed in the next three to five years to limit further deterioration and maintain the integrity of the structure. Priority 3 repairs should be anticipated within the next ten years and are generally considered maintenance items. As with all repair projections, these time frames are based on the development and execution of an ongoing facade maintenance program that includes performing some unanticipated repairs on an as-needed basis. Alternatively, more aggressive repair and maintenance programs could be developed to lengthen the time between repair and maintenance work on the building.

Based on our review of the facades at the Harley Clarke Mansion and Coach House, we offer the following repair recommendations for both the mansion and coach house:

Priority 1: \$45,000 to \$60,000

- 1. Remove and replace or salvage and rebuild balusters and railing above sun room.
 - Estimated cost: \$20,000
- 2. Replace balcony roof at coach house



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- Estimated cost: \$5,000
- 3. Identify and repair leaks in the basement
 - Estimated cost: \$5,000 allowance
- 4. Remove vines and overgrown landscaping
 - Estimated cost: \$5,000
- 5. Repair stone at main entrance
 - Estimated cost: \$10,000

Priority 2: \$250,000 to \$300,000

- 1. Repoint severely deteriorated mortar, including the sun room and the chimneys.
 - Estimated cost: \$50,000 allowance
- 2. Rebuild areas of displaced stone at wing wall.
 - Estimated cost: \$2,000 allowance
- 3. Scrape and paint the existing steel window frames and sash. Replace aged glazing putty as glass lites are replaced. Evaluate the leaded glass and perform in-situ repairs, when possible.
 - Estimated cost: \$100,000 allowance
- 4. Scrape and paint the existing wood window frames and sash in conservatory. Replace aged glazing putty as glass lites are replaced. Install wood Dutchman, as necessary, at sills and lower portions of jambs.
 - Estimated cost: \$30,000 allowance
- 5. Replace the sealant at all steel and wood window perimeters at the mansion and coach house.
 - Estimated cost: \$25,000 allowance
- 6. Repair cracked plaster and water damaged plaster on the interior of mansion.
 - Estimated cost: \$5,000 allowance
- 7. Repair cracked plaster at entrance.
 - Estimated cost: \$2,500 allowance
- 8. Repair cracked plaster and water-damaged plaster on the interior of coach house.
 - Estimated cost: \$10,000 allowance
- 9. Monitor the attic framing and interior plaster for signs of water infiltration and cracking. Perform additional evaluation if these conditions are observed.
 - Estimated cost: \$2,000 allowance
- 10. Inspect the tile roof and perform repairs, as needed, to include resetting or replacing tile.
 - Estimated cost: \$15,000 allowance
- 11. Scrape, clean, and paint the fire escape. Replace buckled treads.
 - Estimated cost: \$10,000
- 12. Rebuild site walls.
 - Estimated cost: \$15,000

Priority 3: \$100,000 to \$150,000

- 1. Repoint deteriorated mortar.
 - Estimated cost: \$100,000 allowance
- 2. Inspect the tile roof and perform repairs, as needed, to include resetting or replacing tile.
 Estimated cost: \$3,000 annually
- 3. Repair damaged gutters and downspout.
 - Estimated cost: \$10,000
- 4. Clean algae from masonry.
 - Estimated cost: \$3,000



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LIMITATIONS

Because of the limitations in detecting concealed internal distress in many components, this investigation may not identify all distress conditions that are not readily visible. WJE shall not be responsible for latent or hidden defects that may exist, nor shall it be inferred that all defects have been either observed or recorded. WJE has performed this inspection and prepared this report in accordance with the applicable standard of care for architects and engineers performing such services.



FIGURES



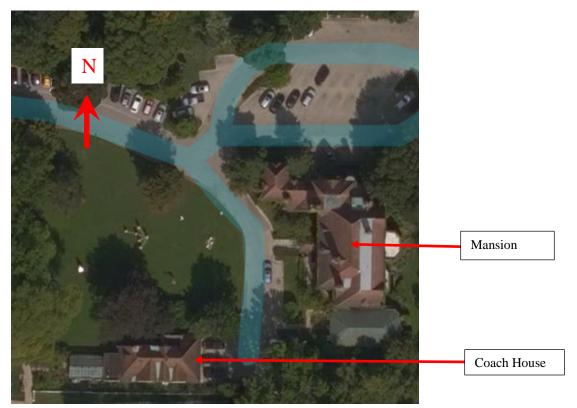
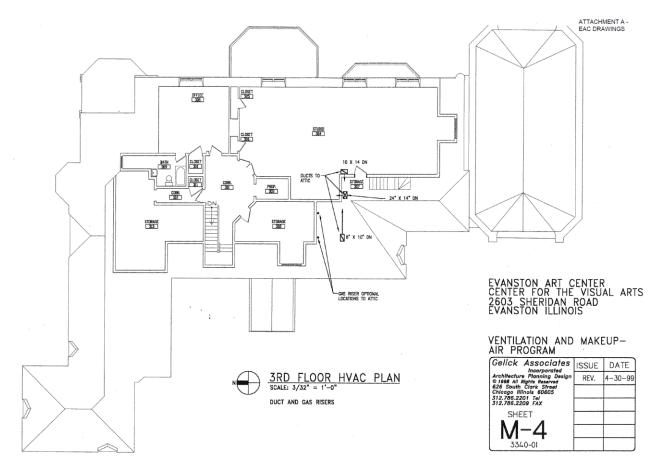


Figure 1. Aerial view of mansion and coach house





*Figure 2. Mansion third floor plan*¹

¹http://www.cityofevanston.org/arts-culture/harley-clarke-mansion/



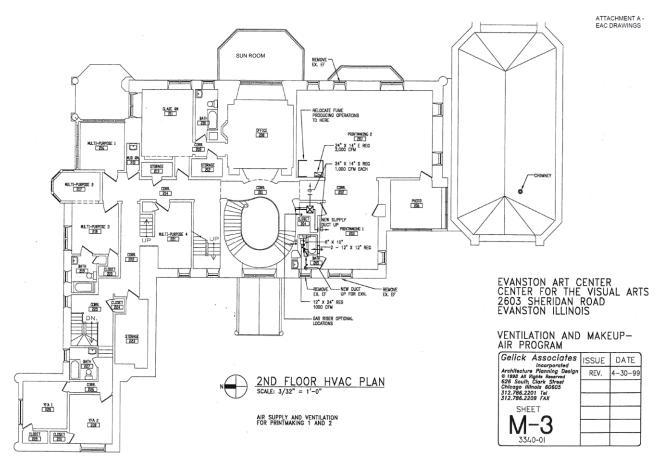


Figure 3. Mansion second floor plan²

²http://www.cityofevanston.org/arts-culture/harley-clarke-mansion/



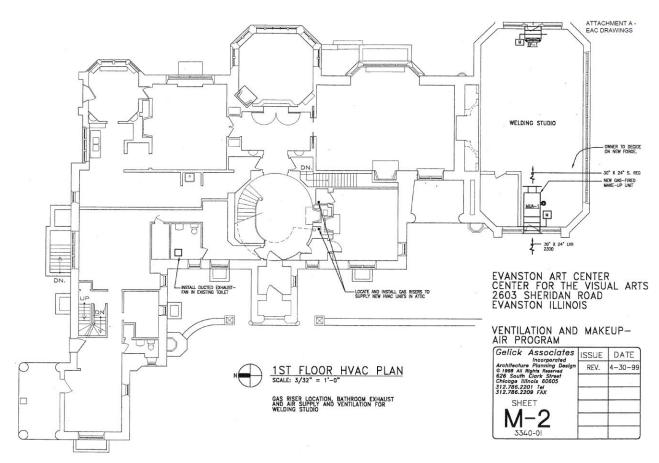


Figure 4. Mansion first floor plan³

³http://www.cityofevanston.org/arts-culture/harley-clarke-mansion/



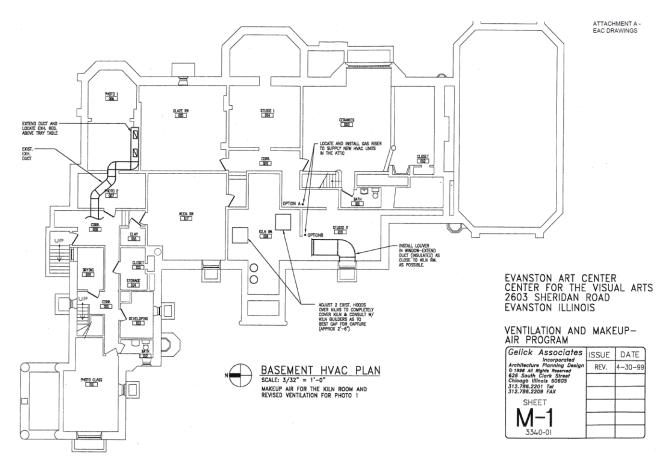
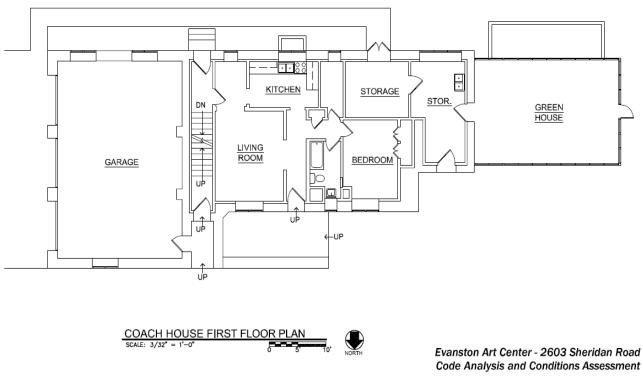


Figure 5. Mansion basement plan⁴

⁴http://www.cityofevanston.org/arts-culture/harley-clarke-mansion/



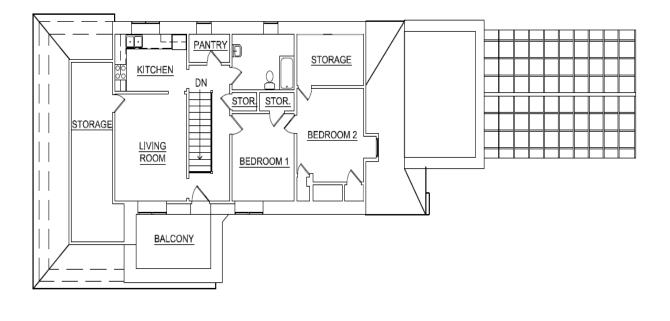


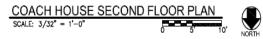
McGuire Igleski & Associates, Inc. June 2012

Figure 6. Coach house first floor plan⁵

⁵http://www.cityofevanston.org/arts-culture/harley-clarke-mansion/







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> McGuire Igleski & Associates, Inc. June 2012

Figure 7. Coach house second floor plan



Figure 8. West facade (2016)





Figure 9. Portion of west facade (2016)



Figure 10. East facade (2016)





Figure 11. Southeast corner of mansion (2016)



Figure 12. Portion of east facade with conservatory visible (2016)





Figure 13. South facade of conservatory (2016)



Figure 14. Roof of mansion (2016)



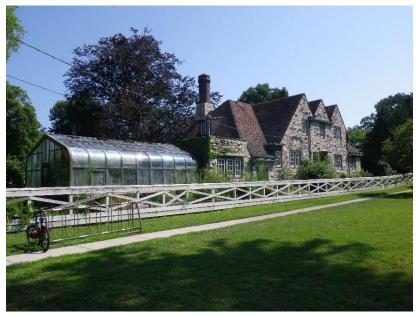


Figure 15. South facade and greenhouse at coach house (2016)



Figure 16. Site wall





Figure 17. Retaining wall



Figure 18. Front entry steps (2016)





Figure 19. Vines on limestone (2016)



Figure 20. Detail of cracked mortar joints limestone cladding (2016)





Figure 21. Wing wall at northwest corner of mansion (2016)

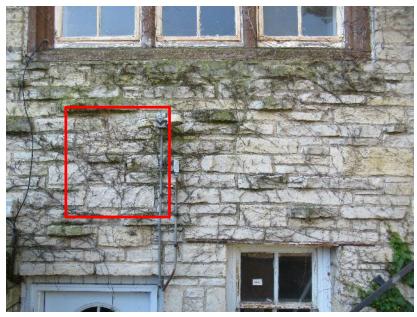


Figure 22. Step cracking of mortar joints above basement door





Figure 23. Cracking of limestone cladding at sun room and algae staining



Figure 24. Spalled balusters above sun room





Figure 25. Limestone balusters at second floor balcony above sun room



Figure 26. West facade of conservatory (2016)





Figure 27. Spalling limestone (2016)



Figure 28. Isolated cracking in chimney (2016)





Figure 29. Window wood jambs and glazing at west facade



Figure 30. Surface corrosion on steel window mullions (2016)





Figure 31. Deterioration wood sill in basement (2016)



Figure 32. Cracked ceiling at entrance porch



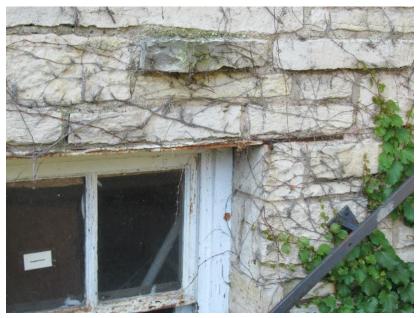


Figure 33. Surface corrosion of window lintel



Figure 34. View of Juliette balcony (left) and cracked cast iron (right)





Figure 35. Flashing between urn and ornamental cast stone capital east facade



Figure 36. An area of missing roof tiles (2016)





Figure 37. Vines growing in the gutter (2016)



Figure 38. Surface corrosion and peeling paint and areas at the fire escape (2016)





Figure 39. Checks at wood door trim at fire escape (2016)



Figure 40. Basement (2016)





Figure 41. Sun room ceiling



Figure 42. Fireplace with trim and tile missing





Figure 43. Steel windows with storm windows installed on interior (2016)



Figure 44. Non-historic interior storm window (2016)





Figure 45. Leaded windows (2016)



Figure 46. Basement mechanical room with standing water





Figure 47. Water staining on wood framing members (2016)



Figure 48. Checks in wood framing members (2016)



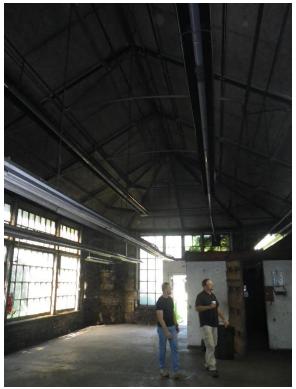


Figure 49. Interior view of conservatory (2016)



Figure 50. Deteriorated window sill and jamb in conservatory (2016)





Figure 51. Deterioration of stone on interior of conservatory (2016)



Figure 52. View of window on coach house (2016)





Figure 53. Gutter on coach house (2016)



Figure 54. Conductor and downspout on coach house (2016)





Figure 55. Second floor window on south facade of coach house. Windows appear to be replacement aluminum or aluminum clad casement units set in the original wood window surround (2016)



Figure 56. Peeling paint throughout interior of coach house





Figure 57. Peeling paint throughout interior of coach house



Figure 58. Water damage plaster adjacent to windows





Figure 59. Water damage plaster adjacent to windows



Figure 60. Coach house balcony





Figure 61. Coach house balcony