# Fox Hall - Part 11, Second-Floor Assessment

By

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#### Introduction:

At this point in the Fox Hall restoration project, restoration of the first floor and the cellar is essentially complete. An overall discussion of Fox Hall and the various individual restoration projects have been presented in detail in *Parts 1* through *10* of this series of articles. Here, in *Part 11*, a detailed assessment of the second floor at Fox Hall will be presented along with planned additional restoration projects. Fox Hall faces north. The present configuration of the second floor is two chambers on either side of an upper passage.

Because of the COVID 19 pandemic, our researchers have not had access to the old Norfolk County records residing in the Chesapeake Clerk of Court's Office to research the ownership and other records pertaining to Fox Hall and its land. As a consequence of this restriction, the restoration team does not know the early construction and ownership history of Fox Hall. This research will be conducted once access is granted and will be published in this series.

We do, however, know the names of the more recent owners who have impacted the fabric of Fox Hall. From the latter part of the nineteenth century until circa 1920, the Roper family owned the property. The Ropers were active in the lumber and shipbuilding/repair businesses in the Norfolk area. The two additions/annexes to Fox Hall were added during the Roper period of ownership.

Around 1920, August Malmgren purchased Fox Hall and operated it as a dairy farm (Fig. 1, Son, Marius Malmgren, at Fox Hall Dairy). After World War II, the Malmgren family sold most of the Fox Hall property for a housing development. The present owner, Susan Sutherland, is a Malmgren descendant. She is responsible for the current major restoration project at Fox Hall.



## Observations:

The original roof was the same pitch as the current roof. This is based on a rake-board ghost on the west endwall (Fig. 2, Rake-board ghost).



Figure 2

The stair was completely replaced circa 1790-1820, based on its local, ubiquitous style (Fig. 3, Replaced stair). All stair framing is sash sawn and fastened with cut nails (Fig. 4, Framing of replaced stair).



Figure 3



Figure 4

Upper-passage balustrade - The banister ends in the west wall (Fig. 5, Upper-passage balustrade).



The banister was sawn, toe nailed to a stud, and is supported in the wall by circa 1900 plaster lath secured to studs with wire nails (Fig. 6, Sawn banister). The west newel post was cut below floor level, and its bottom section can be seen from the kitchen ceiling (Fig. 7, Bottom of newel post).





The west-chamber flooring, as seen from the kitchen, was replaced during the Roper period. This narrow-board flooring has circular-saw kerfs. The floorboards are chamfered over original second-floor joists. These joists have hewn edges and pit-sawn sides (Fig. 8, Flooring as seen from kitchen).



Figure 8

The joist between the west chamber and upper passage was headered off to accommodate the landing extension for the large Roper-period annex. This can be seen in the landing wall (Fig. 9, Headered joist).



Figure 9

South eave/knee wall - Several loose bricks are scattered along the top of the brick wall. These are likely the remains of nogging between the original joists and rafter tails.

East endwall at intersections with south and north walls - There is evidence of minor brickwork repair in these locations, likely removing corbelling originally associated with tilted false plates (Fig. 10, Brickwork repair, north side of endwall).



Figure 10

South eave/knee wall - Pit-sawn joist tails are cut back about half of the wall thickness. Several of these clipped joist tails exhibit rotting, and a few show charring. All of these clipped joists are sistered on both sides

with sash-sawn 2x stock to support a sash-sawn, flat, 5/4" x 5" false plate (Fig. 11, Clipped joist tails, joist rot, brick nogging remains).



### Figure 11

South eave/knee wall - Sash-sawn rafter tails are cut to land on the sashsawn, flat, false plate. The rafters are toe-nailed with cut nails into the false plate. The false plate is interrupted in places (See Fig. 11).

South eave/knee wall - Much roof sheathing is sash sawn and has cut nails penetrating inside of the knee wall, evidence from 19th century shingles (See Fig. 11).

South eave/knee wall - There are several sections of short, circularsawn, 2x stock nailed to the roof sheathing. These served as false rafter extensions to support a late-nineteenth or early-twentieth century box cornice. Our team carpenter replaced the need for these by sistering rafter extensions to the actual rafters. He then rebuilt the box cornice on these. Short modern blocking has been placed by the team carpenter to shift rafter load from the false plate onto the joists (Fig. 12, Rebuilding of roof framing).



Figure 12

South and north knee walls - The dormer framing is Roper period.

The three remaining dormers are entirely Roper period, complete with a Roper-labeled shingle (Fig. 13, South dormer) (Fig. 14, 6" cedar Roper shingle).



Figure 13



Figure 14

The west-chamber fireplace was boarded over with cut nails fastening the tongue and groove cover boards. This fireplace is now open. The firebox needs tuck pointing. The fireplace surround is Roper era (Fig. 15, West-chamber fireplace).





The fireplace in the east chamber is bricked in and plastered over.

Attic - Extending from the west upper-passage wall to the east end of house, the sash-sawn, mortise and tenon-joined and pegged rafters are charred and sistered with 2x circular-sawn stock (Fig. 16, East chamber looking east). Beyond the west upper-passage wall to the west end of the building, there are no charred rafters, only newer 2x circular-sawn stock rafters (Fig. 17, East chamber looking west).



Figure 16

Figure 17

Attic to knee walls - Above the attic joists, the rafters are charred, but the rafters generally are not charred into the knee walls. There are a few exceptions.

The attic joists and rafters are sash sawn (Fig. 18, Sash-sawn attic joists and rafters).



Figure 18

Attic - There are several 2x stock, circular-sawn rafters in the vicinity of front gable. There is circular- sawn roof sheathing with penetrating wire nails high on the rafters as seen in the attic (See Fig. 17).

#### Assessment:

The original roof was the same pitch as the current roof line.

The original eave structure was likely tilted false plates. This is based on the extension of the clipped joist tails, brickwork repair, and brick nogging evidence.

Fire destroyed the entire second floor above the second-floor floor joists. Based on sash-sawn stock and the style and construction of the replaced stair and balustrade, this fire and subsequent in-kind rebuilding of the second floor, attic, and roof took place somewhere between 1790 and 1820.

The late-eighteenth-early-nineteenth-century stair was installed at this time replacing the fire-damaged or destroyed original stair and balustrade. As discussed in *Part 1* of this series, the original stair likely would have been similar to the closed-string, board and batten stair at Lynnhaven House (Fig. 19, Lynnhaven House stair) or the closed-string stair at Linden Farm in Richmond County, Virginia (Fig. 20, Linden Farm stair).



Figure 19



Figure 20

As part of this rebuilding, the original second-floor joist tails were cut back, likely due to rot and/or the desire to update the eave to a box cornice. The original joists were sistered to the wall edge, a flat false plate was added to the top of the sistering timbers, and the rafter tails were toe-nailed to this false plate.

Late in the nineteenth century or early in the twentieth century, subsequent to the extensive second-floor fire, a second fire damaged portions of the attic and the west chamber. This is evidenced by the charred and sistered, sash-sawn rafters in the attic and the circular-sawn flooring in the west chamber. Roper apparently repaired this damage by sistering the charred rafters, replacing three dormers (one on the back and two on the front), adding the north gable on the front of the house where the third front dormer was, replacing the second-floor flooring, closing the west-chamber fireplace, and adding the fireplace surround to it.

Roper built or rebuilt the west-chamber wall and truncated the upperpassage banister in this wall. Likely, the original first-period balustrade and possibly the second-period balustrade extended into an open west chamber. The east-chamber/upper-passage wall also was constructed or reconstructed by Roper and has circa 1900 lath attached with wire nails as can be seen in the south eave/knee wall. We do not know if there were walls in either of these locations in the first or second periods. We do not know if the large annex was added to Fox Hall by Roper at this time or if it already existed. The current owner reported that there was a third fire in this annex. However, this fire was minor and has no bearing on the restoration of Fox Hall.

#### Additional Restoration Projects at Fox Hall:

Since the entire second floor above the floor joists, except for the endwalls and chimneys, has been rebuilt at least once, very little restoration work will be undertaken in this area. As work is completed on the below listed restoration projects at Fox Hall, additional articles will be prepared for this series for the major projects, and **Updates** for the minor projects will be appended to the new articles.

\* West-chamber fireplace - Stabilize the firebox by tuck pointing bricks.

\* Upper-passage banister - A view window will be fabricated to cover the truncated banister.

\* Knee walls and attic - Lay flooring in the knee walls and fabricate and install doors in the exploratory penetrations in the knee walls to convert space into storage cubbies. Also, install an access door in the ceiling penetration in the east chamber.

\* Eaves - No effort will be made to restore tilted false plates, if, indeed, they existed originally. The present eave construction dates to after the

first fire. We will repair this structure as needed and will install simple box cornices.

\* Roof - As can be seen in Fig. 21, Fox Hall presently has two dormers and a large gable across the front of the house and a third dormer on the back, all Roper period. It also has a front porch constructed by the current owner, replacing a similar Roper porch. The roof has been extended about one foot over both endwalls and fitted with heavy rake trim, again by Roper.



Figure 21

There is no remaining evidence of the locations of the original dormers or of the dormers replaced after the first fire. Based on the configuration of the dormers at Lynnhaven House, three across the front and two on the back, it is reasonable to believe that the original dormer configuration at Fox Hall was essentially the same. The location of the two Roper dormers on the front and the one on the back is correct, considering the five-dormer scheme.

The location of the second dormer on the back was obliterated by the construction of the two annexes. The fifth dormer would have been where the gable is now located.

The three Roper dormers appear to be structurally sound, and the owner would like to retain them if possible, even though the pitch of their roofs does not match that of the main roof. If retained, the trim on these dormers would be redone to lighten their appearances. The restoration manager and team architect prefer to rebuild these dormers in the proper form to match the house roof. A final decision will be made after the dormers are stripped of their siding, trim, and roofing, and they are examined in detail.

The major change to the roof will be the removal of the gable and the attached front porch. Once these excrescences are demolished, the roof will be reframed in the gable location with a new dormer, and the front eave will be repaired as noted in the above section.

When the current asphalt roofing material requires replacing, the excessive roof overhangs at the endwalls will be cut back, the heavy Roper trim will be removed, and new rake boards will be installed. No decision has yet been made on the roofing material. Possible choices are: riven and treated cypress or cedar shingles, composite shingles resembling riven ones, standing-seam metal, or textured asphalt/fiberglass shingles.

\* Second-floor windows - On the second floor, there are four small windows, two in each endwall, plus three larger windows in the dormers. The sash in these seven windows will be replaced with sash and restoration glass matching the restored first-floor windows. The same will be fabricated for the planned new dormer window replacing the existing gable.

#### Update

In Fox Hall - *Part 4*, Chimneys and Fireplaces, the decision was made to leave the interior brickwork of the west fireplace wall exposed and to plaster the original mantel tree. This decision has since been reversed. The wall has now been plastered, and the original mantel tree with its hatching for plaster is now exposed for study purposes.



Plastered west wall and exposed original mantel tree

## Update

In Fox Hall - *Part 8*, Windows, the restoration of the first-floor windows was discussed. This work required masonry repairs inside and out and trim work around the windows inside. The team plasterer and his crew, who did extensive plaster restoration in the hall and passage after the restoration of the fireplaces in the hall and kitchen, returned to finish plastering in these two rooms.



Sample of area in hall before finish plastering



Team plasterer, Jesse Banks (right) & crew plasterers, Mark Harmon (center) & "Hotsy" Lloyd (left) in same area of hall as above after plastering

# Update

In Fox Hall - *Part 9*, Brickwork Finish, the procedure for visually blending in the restoration brickwork with the original was presented. This work has now been completed.



Team painter, Randy Creef, visually blending new with old



Blending done in above area



Before blending

After blending

# Update

In Fox Hall - *Part 10*, Jack Arch Segment "8L" on page 25, we indicated that masonry repair was needed to stabilize the free-standing column of brick to the left of the doorway into the kitchen (See Figure 20 in *Part 10*). The loose bricks under the doorway and column have been reset.



Completed masonry repair