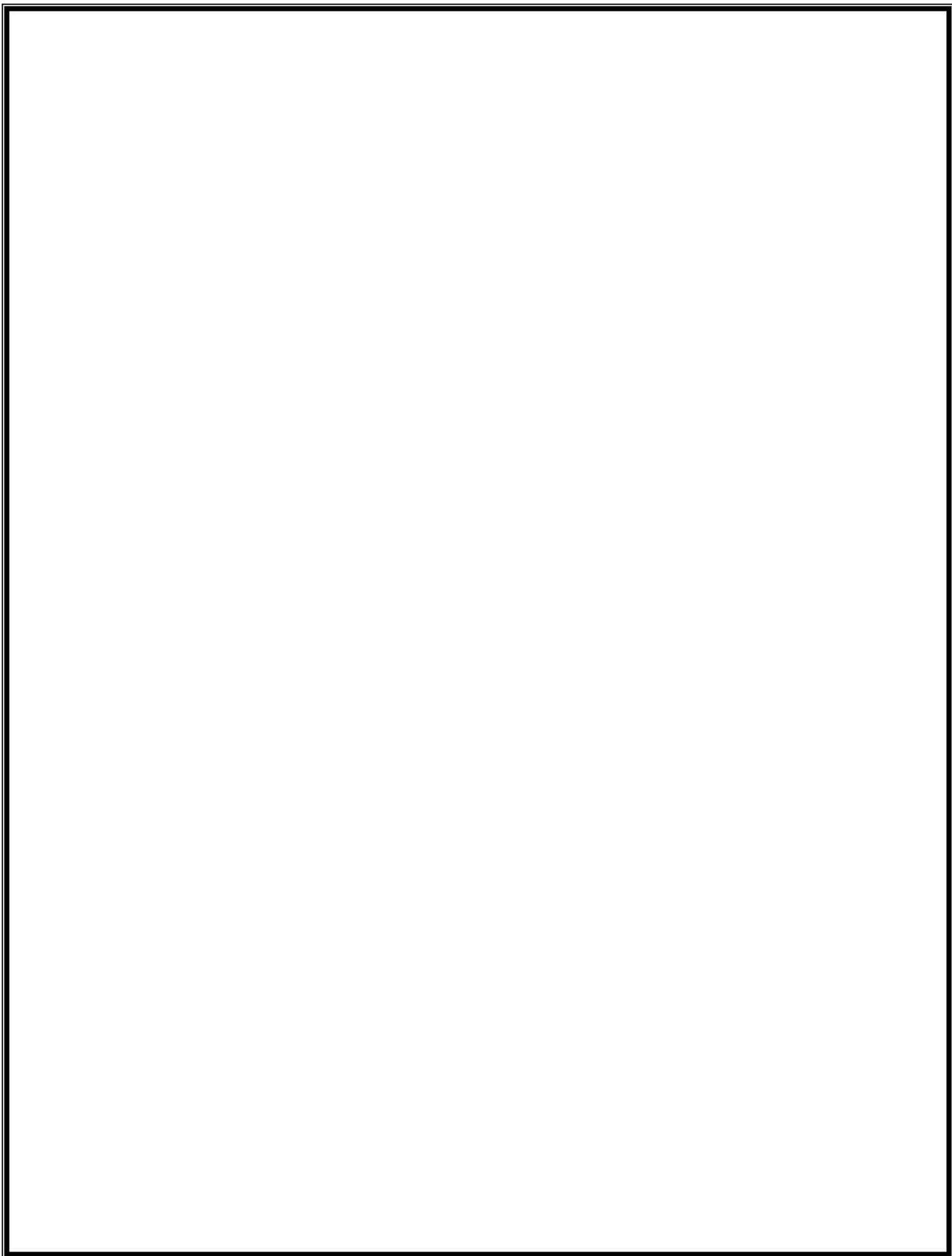


**PHYSICAL CONDITION ASSESSMENT**  
**and**  
**MAINTENANCE RECOMMENDATIONS**  
**for the**  
***SAM DAVIS HOME***



Photo: Michael Thomas Gavin, 1993

**Listed on the National Register of Historic Places**



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MAINTENANCE RECOMMENDATIONS  
for the  
*SAM DAVIS HOME***

**Prepared for the  
Sam Davis Memorial Association  
Smyrna, Tennessee**

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**A Professional Services Project of the  
Tennessee Civil War National Heritage Area\*  
Middle Tennessee State University**

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## Introduction

This assessment of the historic Sam Davis Home is provided at the request of John Lodl, Executive Director of the Sam Davis Home and Museum, in order to assess the current physical state of the building. The house underwent extensive restoration efforts in 1992 and 1993, and remains structurally sound and generally well-maintained. In September, 2005, the authors inspected the house and its surroundings and documented the conditions observed at that time. This research included examining the exterior facades of the building (from the ground) and each room inside for potential problems or existing damage. The following study is the result of that effort.



## **Condition and Recommendations**

Overall, the physical state of the historic Sam Davis Home is fairly good, both inside and out. There were few conditions observed that posed any immediate health or safety concerns, with the exception of the loose bricks on the front walkway. Evidently, the periodic maintenance of the house and grounds has prevented serious problems from developing.

Although the majority of the deficiencies that were noticed are aesthetic, they tend to negatively influence a visitor's perception of the house. Most of the situations that need correction are relatively minor (except the painting and the repair of the back porch) and can be remedied with a minimum of materials and labor as time and resources allow. The following is a breakdown of the present condition of the structure, and recommendations for appropriate corrective actions.

## 1. Exterior.

- a. The nosing moulding nailed to the front porch steps is pulling away from the treads. This is due to continuous use. As a result, small stones have fallen into the gap between the nosing and the rest of the tread. The stones need to be removed and then the nosing reattached using woodscrews of sufficient length that are then countersunk and filled.



- b. The decking boards of the front porch have not been sealed. This is allowing rain water to damage the wood, and it will result in the continued deterioration of the front porch. This wood needs to be thoroughly cleaned and then coated with an appropriate sealer as soon as possible.
- c. Paint is peeling in numerous locations on the south facade of the house. This is primarily due to the fact that there is more direct

weather exposure on this wall than any of the others. This side of the house needs to be scraped and repainted. It is important to remember that under hot and humid conditions a coat of paint only lasts for about five years on the exposed exterior walls of a building.

- d. A number bricks are coming loose in the walkway on the southeast corner of the house and a few are missing entirely. Grass and weeds growing in the joints are partially responsible. This situation



can be controlled by manual means or by the use of herbicide. The affected area of the walkway should be re-laid and the missing bricks replaced.

- e. The blind on the right side of one of the first floor windows on the southeast wall presents an unsightly appearance This is due to the



fact that the lower hinge of the blind has worked loose, causing the blind to sag slightly. This blind should be removed and repaired before reattaching it to the building.

- f. On the back porch on the east side of the house, a number of the decking boards are beginning to rot near the outer edges. This too is due to continuous weather exposure. In addition, some of the framing members underneath the porch are also deteriorating. This deterioration prevents the nails in the decking boards from holding properly. The affected boards should be removed and replaced; the deteriorated framing members should be repaired. The situation in this area is similar to that of the front porch. The wood should be protected with a sealer so that it does not rot.



- g. In various areas around the house, the weatherboards are rotted, primarily near the ground, and specifically to the left of the chimney on the west side of the house. The deteriorated weatherboards need to be replaced with similar material and attached with historically appropriate fasteners.



- h. On the east side of the house, a small shed protects the entrance to the basement. The bottom of the door has a large opening at the bottom evidently made by a small animal. This hole should be repaired with appropriate materials.



## 2. Formal Parlor

- a. This room has two main problems. First, some bricks and debris have fallen down the chimney. The chimney needs to be inspected to see what kind of material has fallen and whether or not the mortar is sound. The metal caps on the chimney should be checked to see if it is allowing birds or objects in from outside. Any missing bricks need to be replaced.
- b. The other problem in this room is that the walls appear to bow inward in some areas. This is not a major structural concern because there are solid log walls behind the plaster. However, some cracks in the paper and plaster on these walls have appeared.



This may be due to severe vibrations caused by the flights of large military aircraft at low altitude over the historic site. The proximity, intensity, and frequency of these flyovers quite likely have a deleterious impact on these fragile surfaces. It may be possible to

convince the officials at the nearby air base to redirect their flight paths away from the house. In any case, the wallpaper needs to be repaired in order to eliminate the visible cracks. It may be possible to fill these cracks carefully with putty tinted to match the color of the paper.

### **3. Informal Parlor**

- a. Similarly in the informal parlor, the walls appear to bow and thin cracks appear in the wallpaper. The vibrations from low-flying aircraft probably are to blame. Again, the paper needs to be repaired at an appropriate time.
- b. The ceiling paint is also peeling in this room. In this case, the ceiling will need to be scraped, sanded, and repainted in certain areas.
- c. The floor in this room shakes when walked upon. It can be stabilized by installing a support beam (held up by screw jacks) under the floor joists.

### **4. Front (Southeast) Stairway**

- a. Cracks appear in the walls along the front stairway leading upstairs. This may also be due to vibrations from low-flying aircraft. The paper will need to be repaired.
- b. A pane of glass is broken in the window above the north wall of the stairway. As with the other broken panes of glass in the house, this pane needs to be replaced. All of this breakage may be due to

vibrations from low-flying aircraft. One solution may be to use tempered glass panes as replacements.

## 5. Grandmother's Room

- a. There is also a broken pane of glass in the grandmother's room on the second floor of the north side of the house. The glass needs to be replaced.
- b. Bricks and debris have also fallen from the chimney in this room. Like the one in the formal parlor, this chimney should be inspected and the missing bricks replaced.

## 6. Little Girl's Room

- a. There is serious water damage underneath the windows on the north and east walls of the little girl's room.



Water may be splattering in through cracks when it rains or there may be a small gap between the window sash and the frame that

water could leak through. A combination of caulking and flashing can prevent most leaks. Possibly the panes need to be reglazed. Another idea to consider would be to add an unobtrusive storm window. A few panes of glass are also cracked in this room. These panes need to be replaced.

## **7. Upstairs Hallway**

- a. The windows in the hallway on the second floor of the north side of the house also have cracked panes of glass. These panes need to be replaced.



## 8. Dining Room

- a. In the dining room, the paint on the ceiling is cracking and peeling, and the drywall tape beneath the paint is failing in spots. At this point, the ceiling should be retaped, filled, sanded, and repainted. This condition is probably due to excess humidity in the room. A dehumidifier would help control moisture. There is a place next to the door in the southwest corner, where a dehumidifier could be installed out of sight of any visitors. Also, the ground in the crawlspace below this room should be checked for signs of wetness. If so, the installation of a sheet plastic ground cover, coupled with proper drainage on the exterior, would aid in mitigating this situation.



## **9. Fire Prevention**

- a. The electrical wires, connections, and circuits that are in the house should be inspected by a licensed electrician to minimize the danger of an electrical fire.
- b. The prohibition against smoking should always be enforced in the house.
- c. The batteries in the smoke detectors that are in the house should be checked on a semiannual basis. Smoke detectors should be added to the rooms that do not have any. Management should consider the fact that if no one is in the house during periods of the day and the alarm system is turned off, a fire in the house could occur undetected.

## 10. Surrounding Buildings

- a. Any ivy or other plant growth should be pulled off the buildings. The roots can compromise the fabric of the outer walls and chimneys.
- b. Bushes and branches should be trimmed or removed from proximity to the buildings. Any plant life close to a structure can accelerate damage from moisture to the roof, cornice, walls and adjacent parts.
- c. The wood on the east side of the former gift shop is rotting badly and needs to be replaced. The affected area should be checked for evidence of termite infestation.
- d. Care should be taken that surface rain water runs away from the buildings. The ground next to the structures should slant away at a 1 in 12 slope.



## 11. Resources

It is important to note that any modifications to a historic structure must meet the Secretary of the Interior's **Standards for Rehabilitation** in order for the building to remain on the National Register of Historic Places.

These **Standards** can be found online at

<http://www2.cr.nps.gov/tps/tax/rehabstandards.htm>. The online version of

the Secretary's **Illustrated Guidelines for Rehabilitating Historic**

**Buildings** is available at <http://www2.cr.nps.gov/tps/tax/rhb/index.htm>.

For over 25 years, the Technical Preservation Services for Historic Buildings division of the National Park Service has produced a series of

**Preservation Briefs** that deal with common restoration issues. Each

Brief deals with a single topic and provides a detailed overview of the

subject at hand, as well as a list of selected readings to consult for further

research. These **Briefs** are available online at

<http://www2.cr.nps.gov/tps/briefs/presbhom.htm> or in hard copy from the

Government Printing Office in Washington, D.C.

For additional questions or advice regarding historic preservation issues on properties listed on the National Register of Historic Places,

contact Stephen T. Rogers at the Tennessee Historical Commission in

Nashville. His e-mail address is [Steve.Rogers@state.tn.us](mailto:Steve.Rogers@state.tn.us).