

c|d community design  
a|c assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



## Conceptual Designs for Space Planning at the Danville Museum of Fine Arts and History

Danville, Virginia  
May 2007

The Community Design Assistance Center (CDAC) is an outreach center of the College of Architecture and Urban Studies at Virginia Tech that assists communities, neighborhood groups and non-profit organizations in improving the natural and built environments through design, planning, policy, and research. Through the integration of the learning and working environment, the Center will execute projects that link instruction and research and share its knowledge base with the general public.

COMMUNITY DESIGN ASSISTANCE CENTER

101 South Main Street, Suite 2

Blacksburg, Virginia 24061

p: 540.231.5644

f: 540.231.6089

e: [cdac@vt.edu](mailto:cdac@vt.edu)

[cdac.arch.vt.edu](http://cdac.arch.vt.edu)



## **CDAC PROJECT TEAM**

Elizabeth Gilboy, CDAC Director

Terri Fisher, CDAC Outreach Coordinator

Meghan Grundy, Undergraduate Interior Design Student Designer

Brad Whitney, Associate Professor, Interior Design

## **ACKNOWLEDGEMENT**

The CDAC design team would like to thank Lynne Bjarnesen, Executive Director, Danville Museum of Fine Arts and History, for her help and support on this project.

# TABLE OF CONTENTS

I. Introduction.....	1
II. Project Description .....	2
III. Existing Conditions .....	4
IV. Client Description of Needs.....	9
V. Evaluation and Analysis .....	10
VI. Design .....	17
VII. Presentations .....	20
VIII. Conclusion .....	41
IX. References.....	42
Appendix A. Rehabilitating Historic Interiors	
Appendix B. Example Materials	



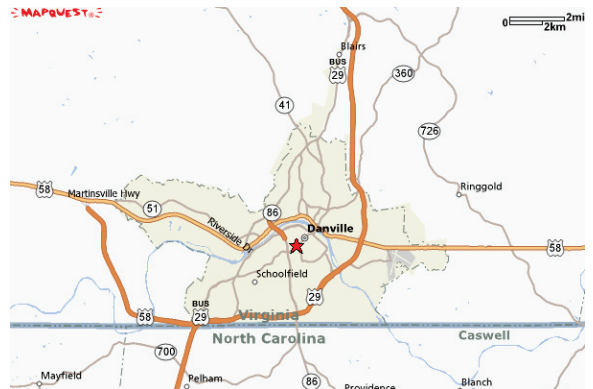
# I. INTRODUCTION

The Danville Museum of Fine Arts and History (DMFAH), located on “Millionaire’s Row” on Main Street in Danville, Virginia, occupies the 1856 Sutherlin house. Danville was “The Last Capital of the Confederacy” and the Sutherlin house is where Jefferson Davis signed the last official proclamation of the Confederate States in 1865. Throughout the years, the Museum building has evolved from being a residence to the City Library to today’s use as the DMFAH. Interior changes have occurred with these functional changes with walls, doors, windows, and stairs being added and removed to meet the needs of the current function.

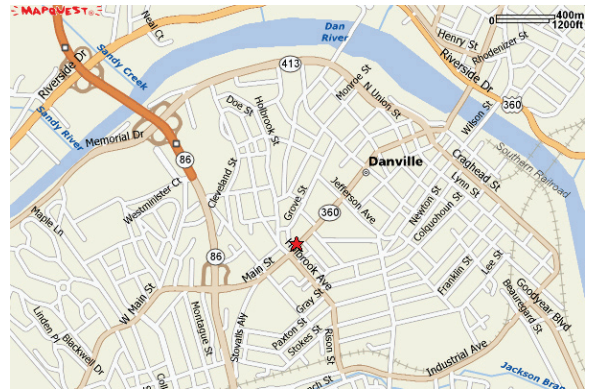
Today, the Museum has restored portions of the first and second floors of the building as a house museum representing the house as it would have looked during the Sutherlin’s residence of the 1850s and 1860s including period furnishings and interior finishes. The first floor also contains an art gallery, museum exhibits, a public auditorium space with caterer’s kitchen, and offices. The basement level contains office space, the Museum Store, restrooms, gallery space, and museum exhibits. The DMFAH requested aid from the Community Design Assistance Center (CDAC) to better design several interior spaces heavily used by Museum visitors. The strong historical ties of the Sutherlin house to the mid-19th century guided the decorative attributes for the proposed designs.



Map of Virginia showing location of Danville.



Map showing the Danville Museum of Fine Arts and History in the center of Danville City.



The DMFAH is located in the heart of Danville’s Old West End Historic District of Victorian and Edwardian homes.



View of the front of the Danville Museum from Main Street. (Image from danvillemuseum.org)



Rear entrance to the main floor of the DMFAH.



Rear accessible entrance to the basement level through the gift shop.



View from rear entrance through entry hall to front door facing Main Street.

## II. PROJECT DESCRIPTION

The DMFAH originally contacted the CDAC for conceptual design ideas to improve the Museum's first floor rear entry hall and the basement exhibit storage and preparation area. Between the time of CDAC's proposal and the beginning of the project, the Museum's storage issues were addressed. Therefore, the basement level design problem became one of improving the visitor experience between the museum shop and gallery spaces and between the first floor and the public spaces on the basement level.

### A. Rear Entry Hall

Museum parking is in the rear of the building. While there are plans to create a path from the rear to the front entrance, most people today use the rear entrance to enter the Museum at the first floor level. The handicap-accessible entry is through the Museum Store, also at the rear of the building, providing elevator access to the first floor in the same main entry hall as the rear entrance.

The Rear Entry Hall contains informational welcome messages including a list of exhibits and events, information about the annual fund drive, and plaques commemorating large donors. Also included in this entry hall is a coat rack and space for docents or a security guard. The Rear Entry Hall provides access to the auditorium space which is often rented for use by civic and community groups, as well as access to the elevator and a caterer's kitchen. Other building features currently contributing to the feeling of a lack of space in the entry hall include the stairs to the second floor and several doorways. The Museum may begin providing self-guided audio tours in the near future and will also need a secure place for keeping the tour electronics and for money collection.



The Museum asked CDAC to determine how to change the layout to create the feeling of more space and provide more functional use of the space within the existing building footprint. Possibilities include the design of a more visitor friendly coat rack, new seating areas, an informational kiosk to display brochures and pamphlets, and a secretarial desk space and storage area to better use the existing space while not blocking light or further narrowing traffic flow in the highly used Rear Entry Hall.

## B. Basement Level Visitor Experience

The basement of the Museum houses the public museum shop, permanent and rotating exhibit gallery space, restrooms, and an elevator as well as private office and curatorial spaces. The basement is modern and generally windowless with a potentially confusing circular hallway pattern for the visitor to navigate. The museum shop and art gallery are at opposite sides of the basement level and separated by non-public areas making wayfinding difficult.

The handicap-accessible entrance to the Museum is through the gift shop at the basement level. The elevator in the basement provides accessibility to the upper floors of the house. Located between the museum shop and rotating exhibit gallery space, the elevator is isolated. People returning to the basement from the upper floors may have difficulty finding their way once leaving the elevator.

Likewise, the two stairways connecting the main level with the basement level may cause people to miss part of the Museum if they are unaware of the exhibits on the other end of the floor.

The Museum asked CDAC to provide recommendations on how to improve the visitor experience between the gift shop and gallery spaces. This includes making a stronger distinction between public and private spaces and different public uses, and instituting methods of wayfinding in the space.



Basement level hallway leading to the Schoolfield Gallery.



Basement level museum space with Civil War artifacts.



A school group meets in the Schoolfield Gallery which can double as an education space.

### III. EXISTING CONDITIONS

During a November 2006 site visit, the CDAC team observed usage of the rear entry hallway, basement level, and temporary signage during an open house. The following images summarize the features and conditions found.

#### A. Rear Entry Hall

The rear entry hall is the main entrance to the house museum, exhibit spaces, and art galleries. It houses the Museum greeter, Danville and Museum information, a coatrack, and donor plaques.



1. The rear entrance to the first floor of the Museum is used most often. The door and its surrounding windows are an important architectural feature and provide natural light.



2. The staircase to the second floor is another defining architectural feature of the entry hallway. This view is from the front door towards the rear of the entry hall.



3. A view from near the elevator, shows the desk at the rear entry used by docents to greet visitors. The large window from the porch provides natural light in the entry hall.



4. A coatrack under the stairs blocks and unused door to a main exhibit room of the house museum portion of the DFMAH.



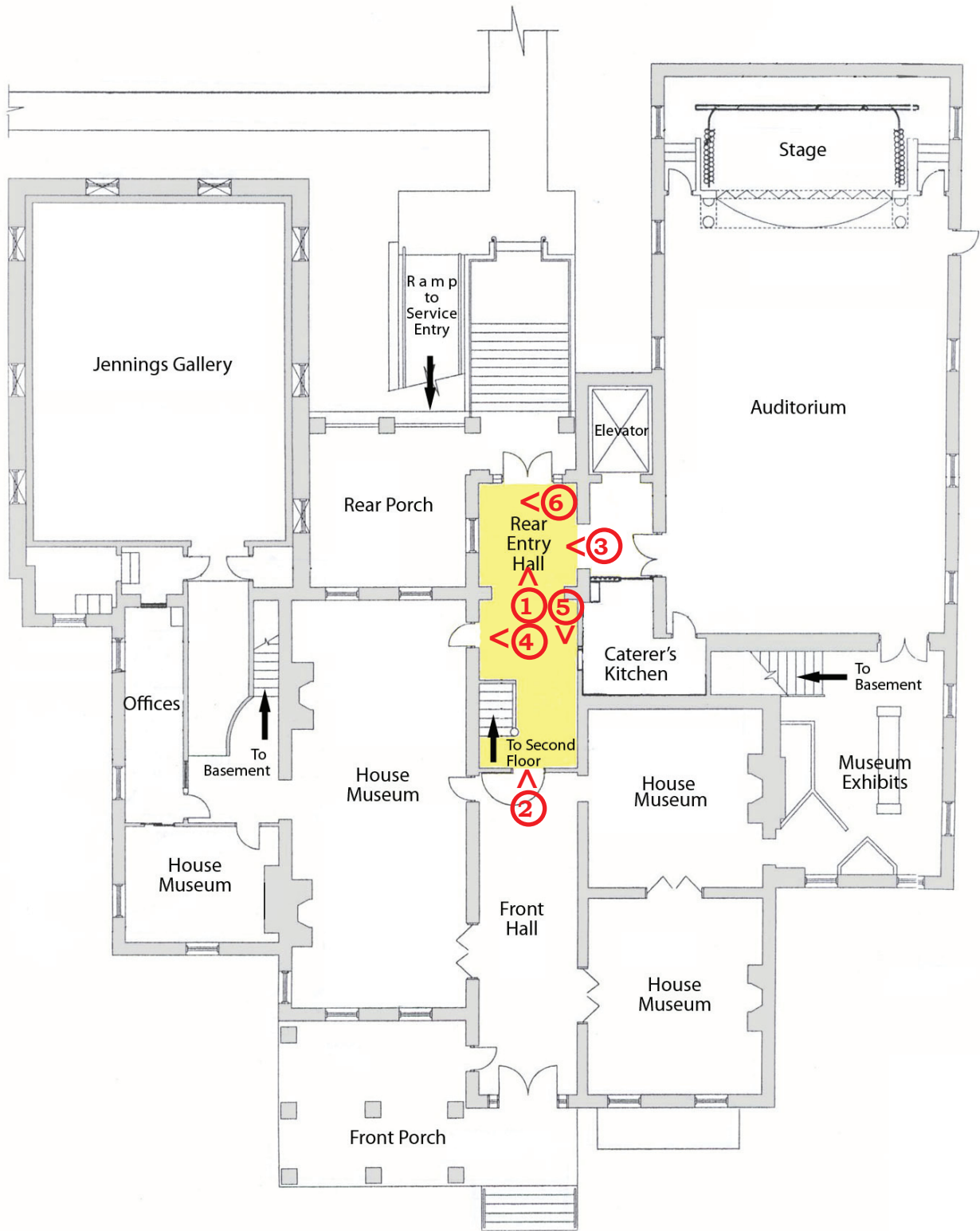
5. The current "information kiosk" is a table with flyers and brochures. A donation box with information about the Museum's programs is in the background.



6. More Danville visitor information is placed in newspaper racks. The plaques show awards and major donors.



Rear: Facing Pine Street



Front: Facing Main Street

The floor plan of the first floor level shows CDAC's focus area highlighted in yellow. The numbers correspond to the photographs on the previous page and show the location from which the photograph was taken. The Main Street facade is to the bottom of the plan as oriented. The rear entrance, where most parking is located, is to the top of the plan. All visitors to the Museum pass through the Rear Entry Hall.

## B. Basement Level Visitor Experience

The basement level of the Museum is more utilitarian than the upper levels which feature the historic interiors of the Sutherlin mansion. The basement has been modernized and does not give one the feeling of still being within the historic structure. The basement contains office space, the museum shop, museum exhibits, an art gallery, restrooms, storage, and exhibit preparation space. The locations of the public spaces on either end of the basement level combined with the central circular hallway flanked by blank walls and unmarked doors, make navigation of the basement level non-intuitive.



1. The elevator opens to a rather stark space on the basement level.



2. A view of the hallway in the service entry area. The elevator is just out of view at the end of the hall on the left. The feeling is institutional and does not provide navigation cues.



3. A view from the Schoolfield Gallery to the service entry area. The art gallery walls are painted frequently, the red here providing an obvious cue to the gallery's location.



4. The sculpture on the wall near the restrooms is a fun addition that engages visitors and helps them locate the space.



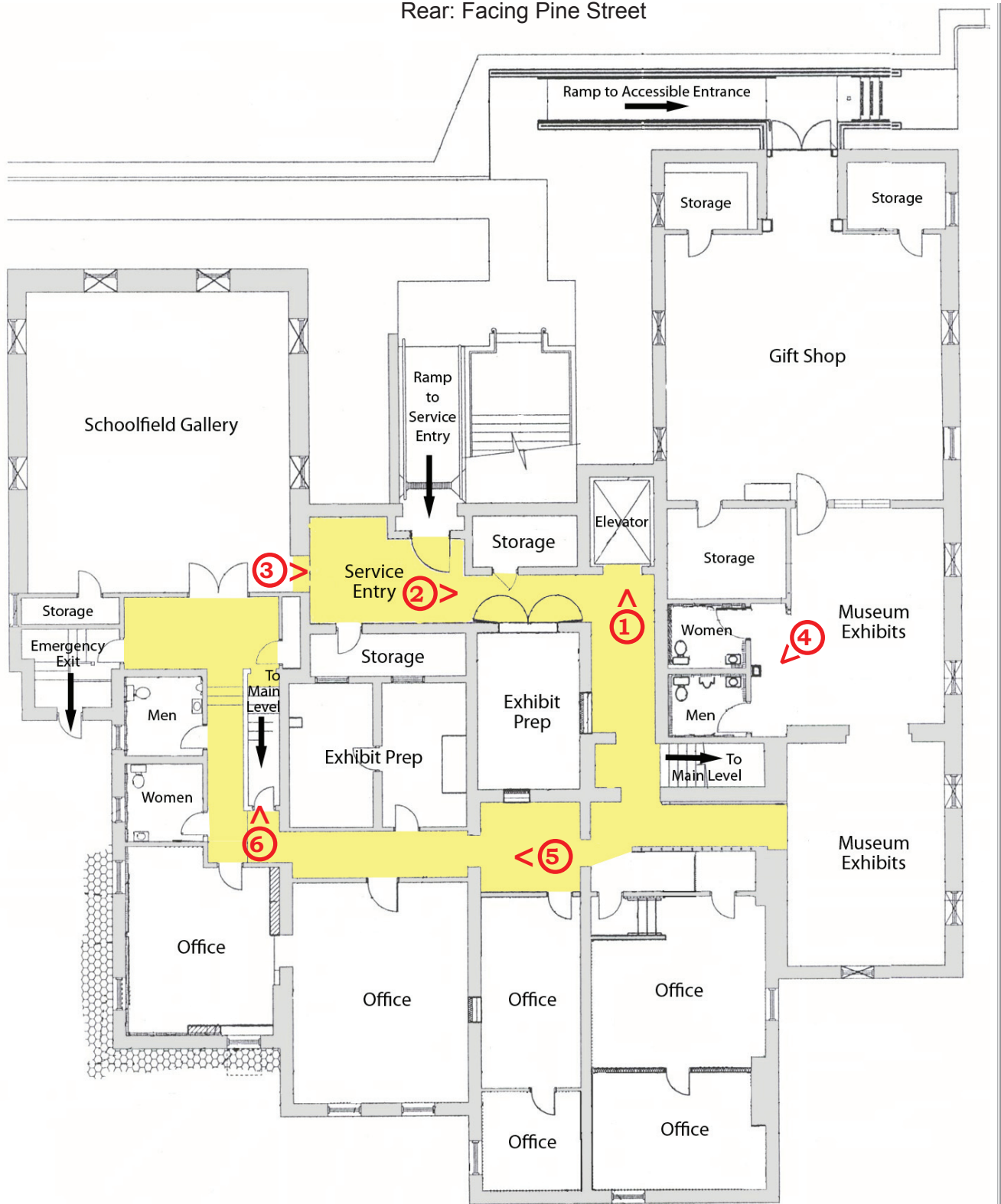
5. View through the office hallway. The door at the end of the hall is the woman's bathroom near the Schoolfield Gallery.



6. Children's art space tucked out of the way in an unused hallway corner in the basement.



Rear: Facing Pine Street



Front: Facing Main Street

The floor plan of the basement floor level shows CDAC's focus area highlighted in yellow. The numbers correspond to the photographs on the previous page and show the location from which the photograph was taken. The Main Street facade is to the bottom of the plan as oriented. The rear entrance, where most parking is located, is to the top of the plan. Visitors have a number of different ways to enter the basement: from the gift shop which is handicapped accessible via a ramp from the outside, or from the first floor via the elevator or one of two sets of stairs. A number of different floor levels within the basement require steps and ramps within the space.

## C. Temporary Signage

Signs are important for identifying spaces as well as for visitor wayfinding. Permanent signs are those such as the one for the Schoolfield Gallery or the signs within the museum exhibits. Temporary signs are those that have usually been created for a particular exhibit or as an attempt to identify a danger or reduce visitor confusion. Temporary signs often are less uniform in design or material than permanent signs.



This sign points visitors down stairs to the Schoolfield Gallery for the exhibit below.



At the basement level, a sign points the way to the exhibition in the Boatwright Gallery.



A sign on the first floor in the house museum section of the building announces the tripping hazard at the threshold.



An example of a permanent sign marking the location of the Schoolfield Gallery.



The primary entrance to the Schoolfield Gallery has permanent signs describing the significance of the gallery. A temporary sign has been placed below.



A temporary sign at the top of the stairs on the first floor, guides visitors to the basement level to view the rest of the exhibit.

## IV. CLIENT DESCRIPTION OF NEEDS

The client provided the following handout describing their needs for the rear entry hall, entitled "Projected Visitor Kiosk Needs." The client also provided a description for storage needs on the ground floor, however these needs had been addressed before CDAC began the project.

*SPACE: Back Central Hall*

*FUNCTION: Initial welcome of visitors*

- 1. All visitors to enter Museum from rear entrance unless only going to the Museum Shop*
- 2. Tours of the historic rooms and permanent exhibit will be on the hour and last 45 minutes (including introductory film)*
- 3. Hope to charge admission fee in the future*
- 4. Some visitors are coming only to visit the changing art galleries*

*NEEDS:*

- 1. Racks for Museum brochures, maps, etc. Area magazine racks*
- 2. Desk for two volunteers:*
  - a. Standard height but with raised counter area to hide clutter*
  - b. Room for laptop computer*
  - c. Room for cash drawer*
  - d. Room for telephone*
  - e. Guest book to be on raised area?*
  - f. Two comfortable chairs*
  - g. Secure storage for audio cassettes*
- 3. Seating for visitors while waiting for tour*
- 4. Coat rack*
- 5. Display case for 'object of the month'*
- 6. Space to highlight exhibits and programs*
- 7. Space for volunteer recognition plaque and picture*
- 8. Where to put donation box?*

*OTHER ISSUES:*

- 1. Lighting*
- 2. Paint color*
- 3. How to keep visitors to art galleries from wandering through rest of museum*



CDAC team member Meghan Grundy points out a display in the rear entry hall during a site visit.

## V. EVALUATION AND ANALYSIS

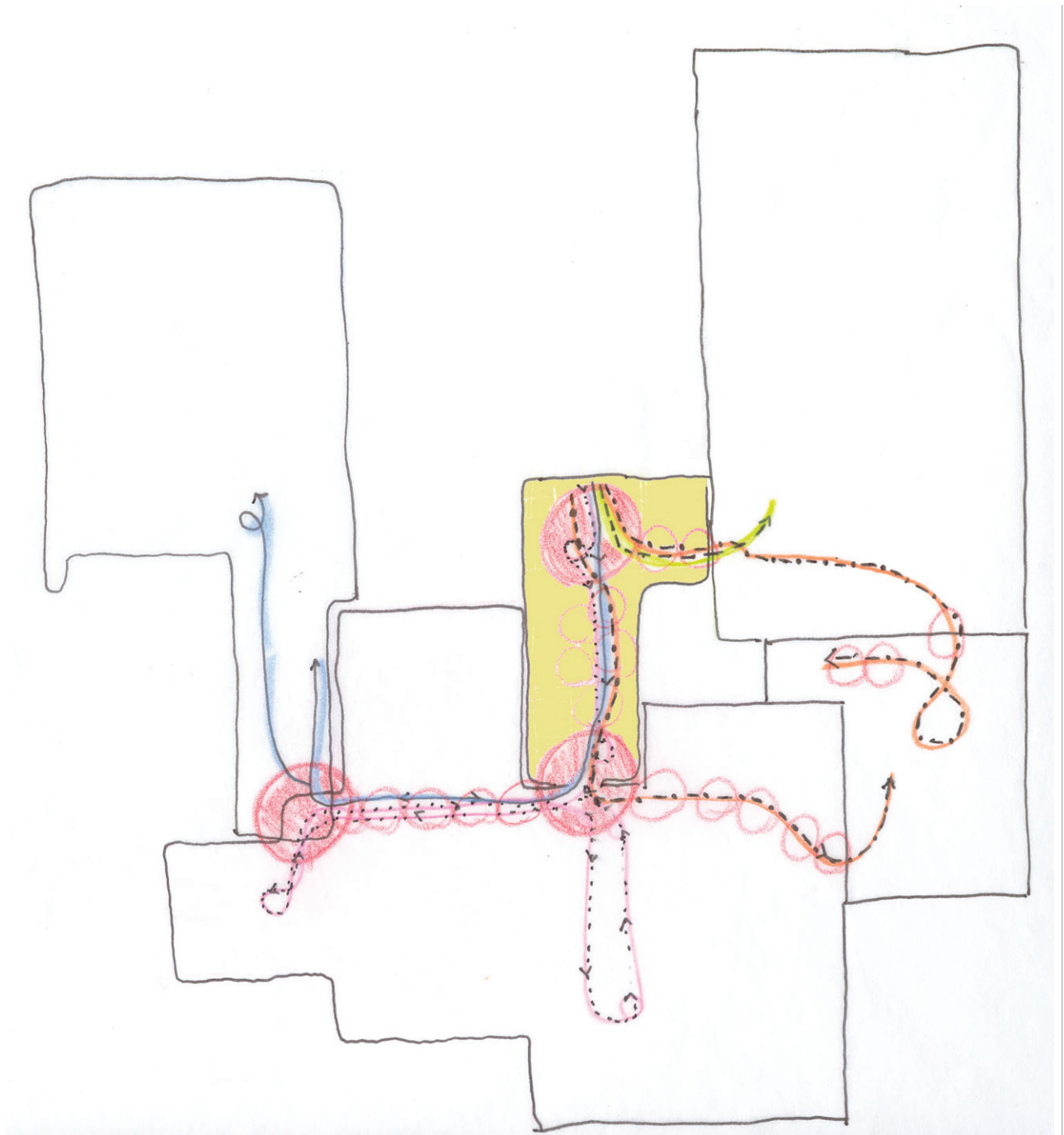
A site visit, evaluation of the spatial needs to accommodate the needs of the client, and research into furnishings and finishes of the time period comprised the site evaluation and analysis phase of the project. Floor plans depicting traffic flow and uses on the first floor and basement level are on the following pages.

### A. Contemporary Usage

The design team's initial site visit took place during a DMFAH open house. There were many visitors to the Museum that day, providing an opportunity to observe contemporary usage of the space during a high traffic event. Traffic flow and usage of the spaces on the first floor and basement levels were observed and photographs and measurements of building features in the entrance lobby recorded.

Using information recorded at the initial site visit, site diagrams of the egress paths within the space were assessed along with mapping a layout that divided the museum into smaller segmented areas with different focuses. Areas were divided according to the different museum and gallery focuses. It was noted that there was a strong need for an indirect way of articulating a sense of location along with establishing a separation between public and private space in the basement level.





### 1. TRAFFIC FLOW

The above diagram showing the traffic flow on the first floor of the Danville Museum. All traffic flows through the rear entry hall (shaded in yellow.) Some traffic (yellow) moves to the auditorium which is used for larger programs and can be used after hours. Some traffic (lavender) moves through the house museum and up the stairs to the second floor. Some traffic (blue) moves through the house museum to the art galleries on the first and basement levels. Some traffic (orange) moves to the museum exhibits on the first and basement levels.



Key:

- CDAC Focus Area
- House Museum
- Museum Exhibits
- Art Gallery
- Other Public Space
- Restrooms
- Egress
- Employees Only

**First Floor Plan**

## 2. REAR ENTRY HALL

The rear entry hall is a long narrow space punctured by a number of window and door openings which bring in some natural light, but limit the wall space available. The area under the stairs is open, but has generally been unused because of its oddly-shaped volume of space. The door under the stairs, leading into the parlor, is seldom used and can be blocked, though should not be removed or otherwise changed.

The museum building houses many different functions, creating a difficult layout for visitors. While the auditorium, Museum Shop, and house museum are easily accessible without requiring access to the entire building, reaching the art galleries, museum exhibit space, or the stairs to the basement level requires passing through the House Museum or museum exhibit space. Access control becomes difficult when visitors are required to pass through the “do not touch” portion of the house museum with its precious and expensive objects.

## 3. BASEMENT LEVEL VISITOR’S EXPERIENCE

For visitors, the basement level is reached by one of two stairways or the elevator from the first floor or via the Museum Store at the basement level. Preferable access is from the first floor.

The art galleries are stacked in one corner of the building. A stairway is nearby so that visitors to the Jennings Gallery on the first floor have easy access to the Schoolfield Gallery on the basement level. Similarly, the museum exhibits are stacked in an opposite corner of the building with a stairway providing access between the floors.

For visitors with disabilities who access the basement via the elevator or visitors interested in seeing the entire museum complex rather than just the art galleries, house museum, or museum exhibits, the basement visitor’s experience is less straightforward. While a jailed man marks the entry to the museum



The main stairway to the basement level is located within the museum exhibit area and continues the exhibits on the wall of the stairway.



The narrower staircase connecting the galleries on the first and basement levels is a less obvious connection between the spaces.





**Basement Level Plan**

exhibits, the entry to the Schoolfield Gallery is less obvious. A long empty hallway separates the elevator from each of these entrances.

If the visitor has reached the basement level via a stairway, there are two ways to navigate the square hallway in the center of the basement: one is to pass through private office space while the other passes the elevator and service entrance. Neither is an intuitive pathway through the building. The main entrance to the Schoolfield Gallery requires passage through the private hall of office doors and the navigation of several steps and level changes. The secondary, handicapped-accessible entrance to the gallery passes the service entry which at times contains items for storage such as exhibit crates, tables, pedestals, and wine glasses. Neither path gives the visitor a sense of location or a distinction between the public and private spaces of the basement level.

#### 4. TEMPORARY SIGNAGE

While the permanent signs in the building are of consistent professional quality, temporary signs, such as those directing visitors to exhibits, are often printed on regular white copy paper and taped to the wall. While they serve their purpose, a strategy could be developed for making and hanging temporary signs that would be more in keeping with the design of the museum.

### B. Historical Design

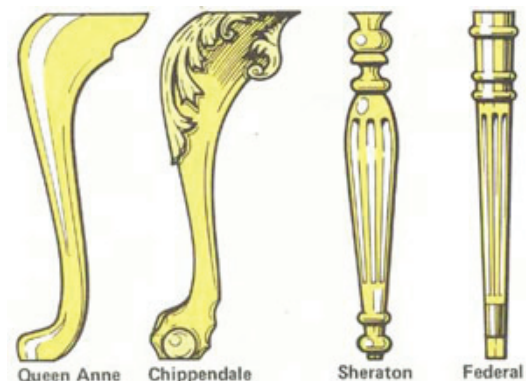
The DFMAH building is rooted in the Italianate style of architecture. This style came about in the United States during a time period when the South was trying to establish a sense of hierarchy and wealth. During the middle to late 1800s the southern states were experiencing great financial hardship and only the most prominent figures in society could afford to build such a style of home. The Italianate style represented wealth with an abundance of intricate detail and ostentatious decorative art. The



One of a number of level changes in the floor at the basement level is marked with a yellow line for safety.



A professional quality permanent sign marks the entrance to the Schoolfield Gallery.



Highly ornamented furniture legs such as Queen Anne and Chippendale style show the influence of Rococo on furniture of the period.

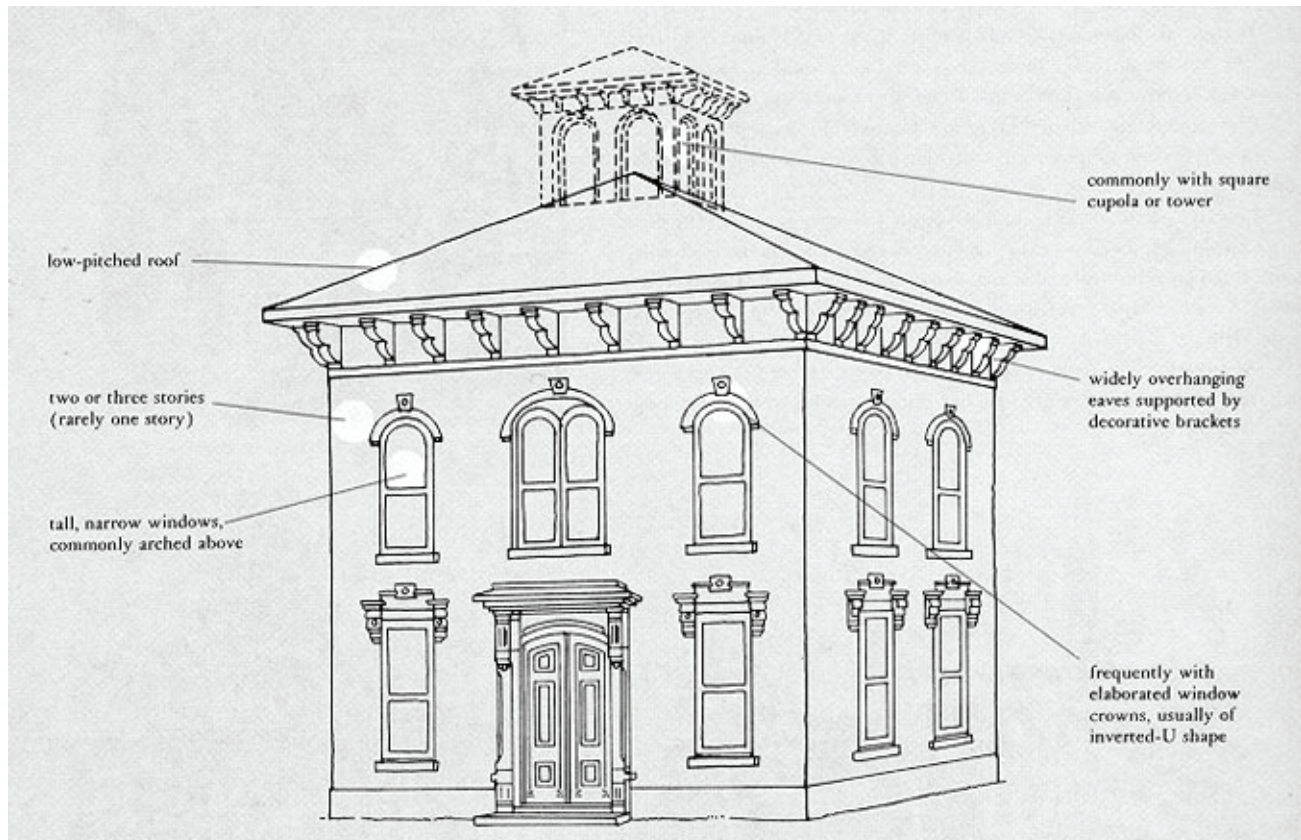




In the house museum portion of DFMAH, the parlor of the Sutherland House exhibits the Rococo design elements of the period.

architectural elements were highly adorned with decorative elaboration and excessive ornamentation. Materials and furnishes often displayed an array of finishes and details. Curved surfaces were highly favored and few details remained unimportant.

Andrew Jackson Downing was a philanthropist who mastered the art of architecture, gardening and interior design during the mid-1800s. He wrote many books with complete illustrated diagrams of what the ideal American revival Italianate country home should be. His plans and ideas were implemented as a guide for the design of the Danville Museum lobby to incorporate his old ideas with new innovations to establish a better functioning environment.



Andrew Jackson Downing's drawing shows the features of an Italianate house very similar to the Sutherland House where DMFAH is housed.



## VI. DESIGN

Two designs were developed for this project: one for the rear entry hall, and a second for the basement level. Ideas were also developed for temporary signage.

### A. Rear Entry Hall

The design for the lobby evokes a tie to the historical period by building on an energetic play of representative materials and furnishings coupled with a controlled color palette. The cool wall color palette is a bluish grey reminiscent of the mansion's historical time period.

The requirements and the needs of the entrance lobby space were developed further with a constant underlying tie to the historical references. Rough conceptual sketches of historically accurate furnishings and architecture were made and eventually refined and incorporated into the final design.

The space required necessary seating for visitors and closet storage for coats and other guest items as well as office supplies. The existing underside of the stair provided the design with a perfect opportunity to integrate closet storage and work spaces. A curvilinear front desk allows for easy egress and established work space.

One long bench or possibly two small benches align the far wall for maximized space saving seating. The wall above the bench is used to display period or gallery art. It was also necessary to create a space to display gallery pieces in a protected, secure environment. The use of a traditional corner cabinet refurbished with a glass locking front hinged door accomplishes this need.



The view of the newly designed entry hall is more functional, yet still retains historical elements.



Space under the stairs becomes a pull-out coat closet and also an additional work area.



The curved front desk provides work space, while not blocking circulation in the entry hall.



A long bench provides a place for visitors to sit while awaiting a tour while the corner cabinet displays an "object of the month."



The blue color used on the chair rail and mouldings subtly make visitors aware of their location within the exhibit section of the museum. The diamond pattern in the carpeting helps guide visitors through the museum while the use of the same blue in the carpeting as in the trim leads visitors to other exhibits within the museum.



The red paint used on the door frames and baseboards are the visual cue to lead visitors to the art galleries. Only those door frames that lead to the galleries are painted to show that the offices are private space. Gallery quality lighting as well as mirrors and artwork in the hallway help define the public path to the gallery.

## B. Basement Level Visitor Experience

The basement level design problem was to design a connection between separate environments rather than designing the actual environments themselves. These connections are the hallways and corridors joining the gallery and museum spaces. The hallways circle the basement.

There was a need to establish a sense of location and direction. This was accomplished through economical and effective decorative changes using color. These changes included the use of carpet floor tiles that are placed as visual cues for the eye. The tiles also are user friendly due to the lack of time, energy, and cost it takes to replace a single tile that becomes worn out as compared to an entire wall-to-wall carpet that must endure years of wear and tear before it can be sensibly replaced.

Another use of color is chair rails and molding painted according to the hallway's associative environment. When the color changes, a visitor can understand where they are entering into a new space.

Final touches to the hallways, including lighting fixtures and wall adornment, were integrated to allow the hallways to appear as though they are part of the public space.



### C. Temporary Signage

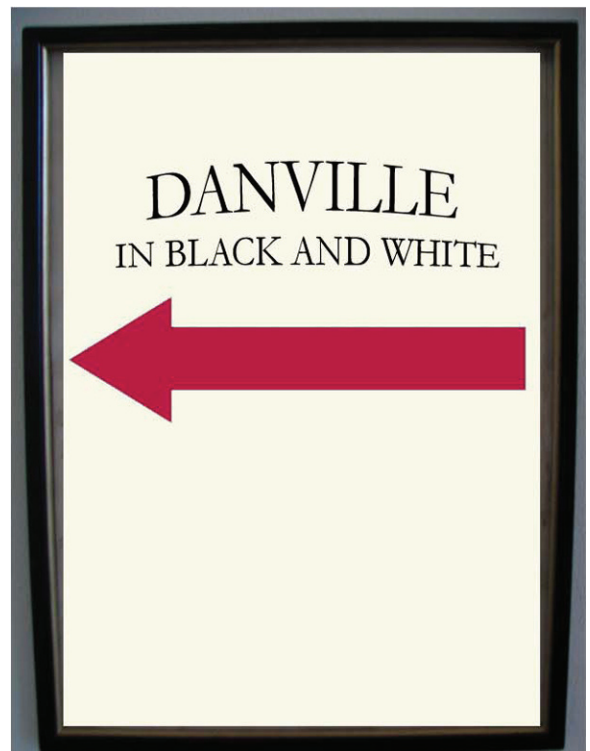
Temporary signage can look more permanent and better aid with wayfinding using a few simple techniques. Though the contents of the signs change with changing exhibits, the location of the temporary signs remains the same. Frames allowing easy interchange of signs can be mounted in the sign locations. This simple change makes the temporary signs a design feature rather than an afterthought, creating a more tidy environment.

Temporary signage should also have color coding matching the color coding of the gallery, museum exhibit, or other spaces to aid visitors in wayfinding, particularly when the exhibit continues on another floor. In the examples here, the directional arrow is color-coded to let visitors know at a glance, without reading the sign, that the sign points the way to an art gallery.

Another method of maintaining consistency and creating a design feature from the temporary signs is to define the font (or type face), style (bold, italic, upper case, etc.), and size of the type used in the signs. A template can be created with these design features so that each sign has a similar style that can be easily recreated on a computer. The signs would have a neater presentation while also being recognizable as Danville Museum directional signs to aid in wayfinding.



The same red used to paint the trim is used in the arrow of the directional signage to point to art gallery space. A table with information about the art exhibit sports the same color. While creating a more uniform look to DMFAH, these signs also aid with wayfinding.



A close up view of the directional sign shows the frame that gives the sign an air of permanence as well as a "Danville Museum style." The sign then becomes an element of the design within the museum.



## VII. PRESENTATIONS

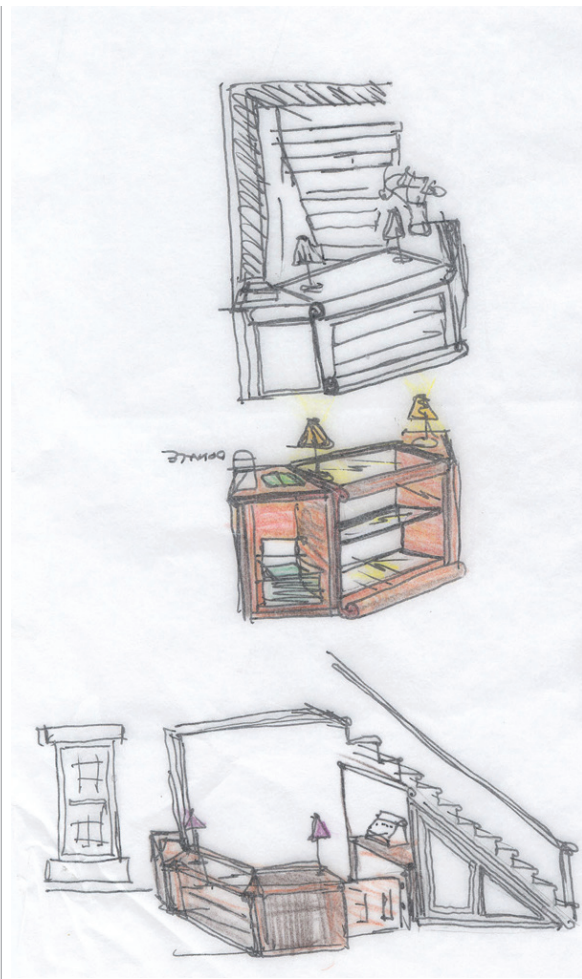
The CDAC team presented a preliminary conceptual design for the rear entry hall and basement level visitor experience in February 2007. Comments and requests for additional features were evaluated and included in the final conceptual design presented in April 2007.

### A. Preliminary Conceptual Design

The preliminary conceptual design is shown on the following pages. The client requested the following additions to the plan: a secure location in the lobby to display gallery pieces, one long bench or two smaller benches along the entry wall to maximize available seating space, and to close in the underside of the stair wall above the hidden desk in order to minimize the feel of open office space and maximize space to display gallery or period art. Measurements in the entry hall were verified to be sure the proposed design would fit.

### B. Final Conceptual Design

The final conceptual design is shown on the following pages. The corner cupboard was converted into a hinged glass front door with a lock closure. Its location takes full advantage of visibility to entering visitors and in close proximity and view of the secretarial space for security purposes. A long pew style bench was placed along the opposing stair wall for maximum visitor seating and the underside of the stair was closed in to extend wall space. A wingback chair that was once part of the front seating area was removed when measurements of the space verified that it would not fit. Small changes to the lower level were made including slight color changes and additions to the floor detail and chair rail.



Early sketches of the rear entry hall desk and understair area that led to the preliminary conceptual design.



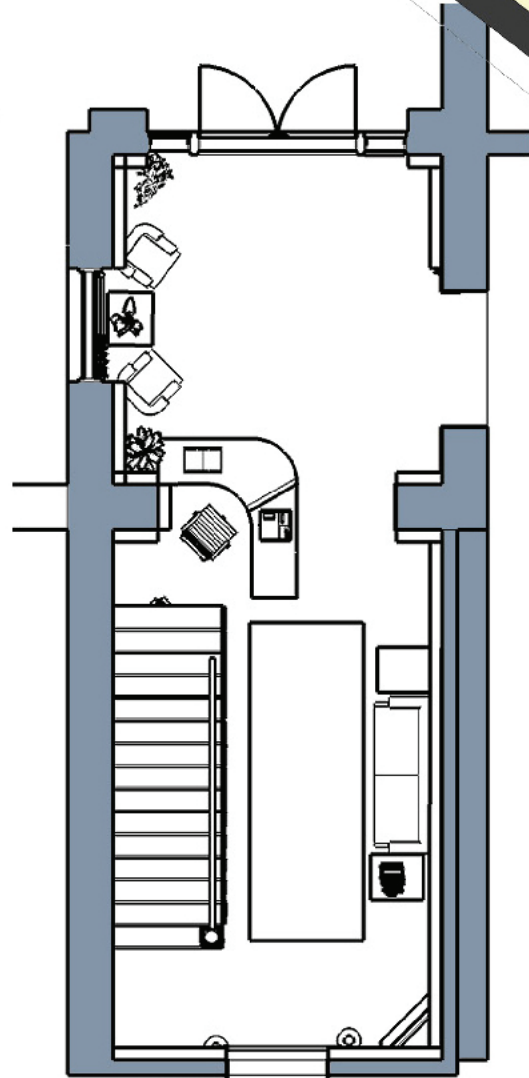
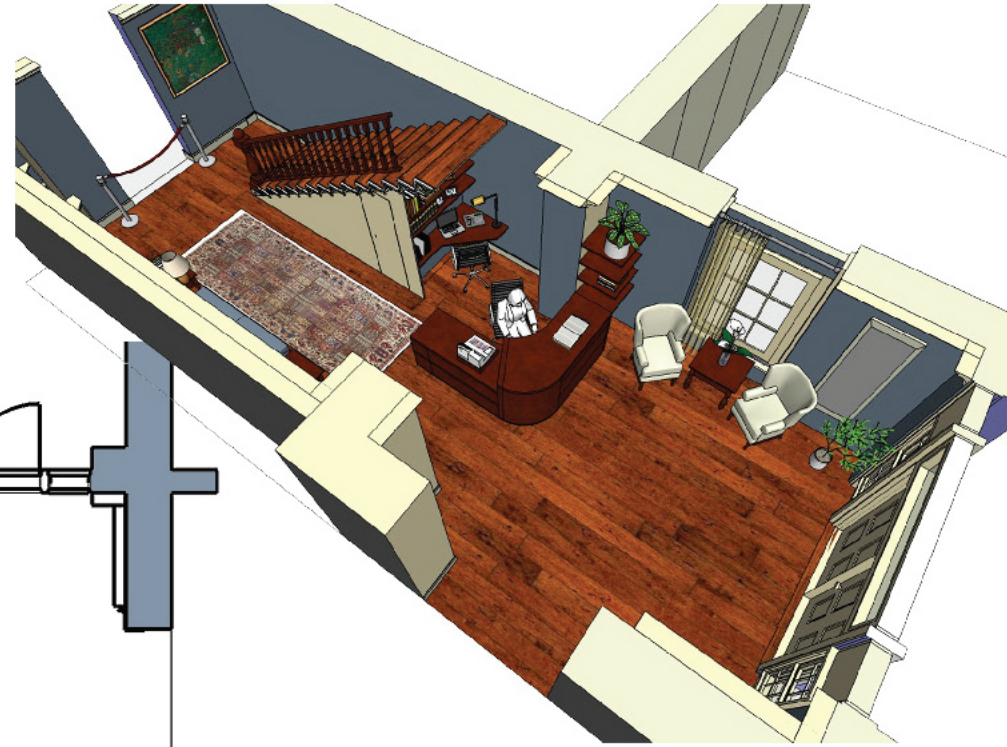
VISITORS SEATING AREA  
 BUILT IN SHELVING  
 DISPLAY  
 MEMBERS SIGN-IN BOOK  
 HANGING MIRROR TO  
 ENHANCE SPACIAL  
 APPEARANCE



FRONT DESK WITH  
 RAISED PLATFORM FOR  
 ADDED STORAGE  
 CAPACITY AND  
 MEMBER SIGN-IN,  
 DONATION SPACE  
 BUILT-IN SHELVING  
 DESK UNIT AND SIDE  
 ROLLING PULL OUT  
 STORAGE CLOSET FOR  
 GUEST'S OUTERWEAR  
 AND SECRETARIAL  
 STORAGE



REAR ENTRY HALL



PLAN SCALE 1/8"=1'0



This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Rear Entry Hall  
 Preliminary Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia



**Rear Entry Hall**  
**Preliminary Conceptual  
Design**

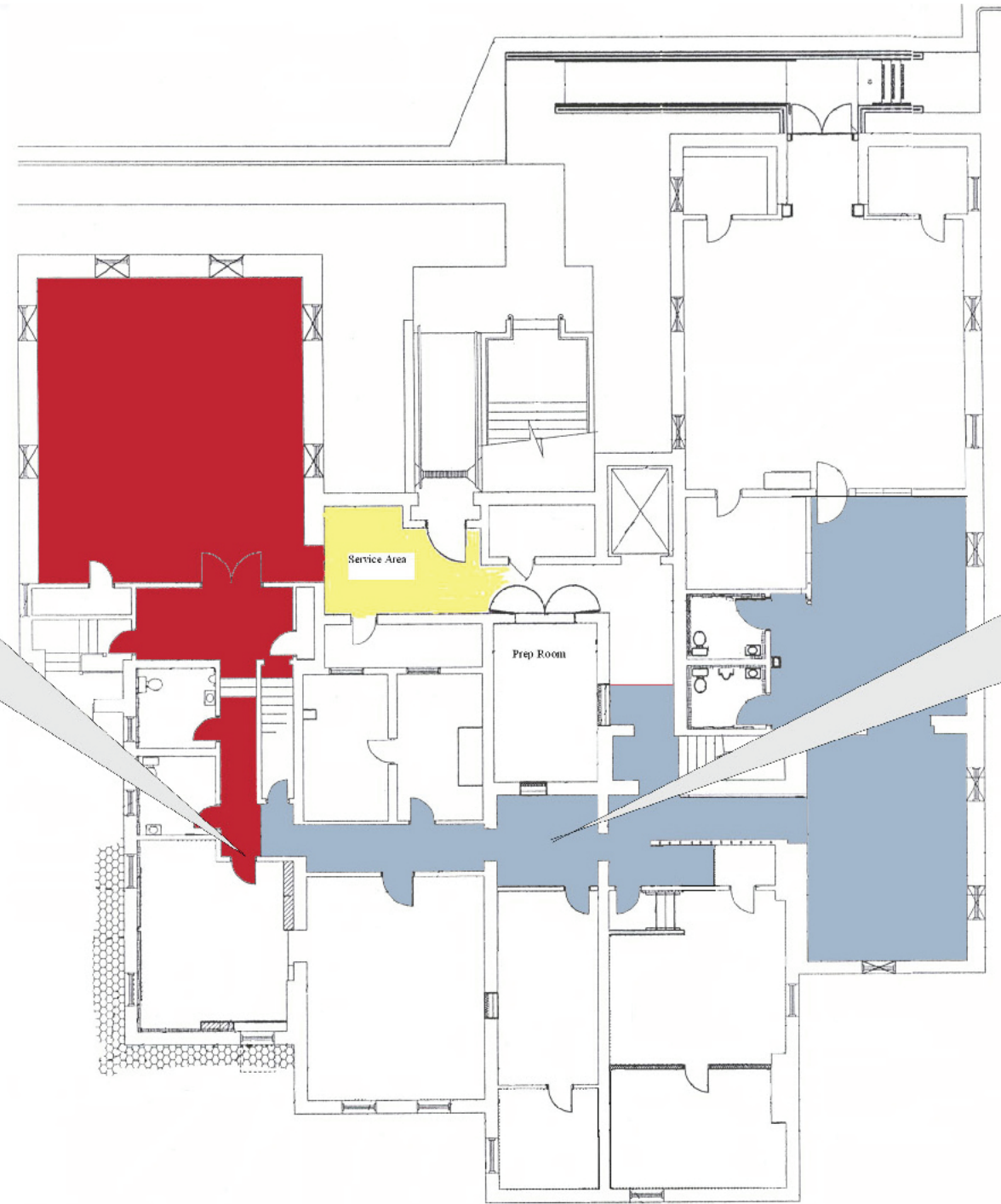
Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University





This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Basement Level Visitor Experience  
 Preliminary Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia

**cd** community design  
**ac** assistance center  
 College of Architecture and Urban Studies  
 Virginia Polytechnic Institute and State University

## **Basement Level Visitor Experience**

## **Preliminary Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

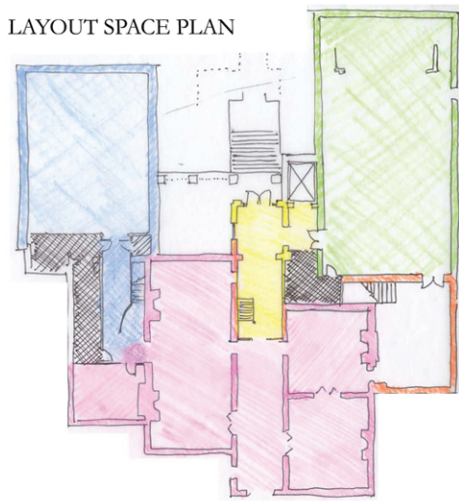
This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University

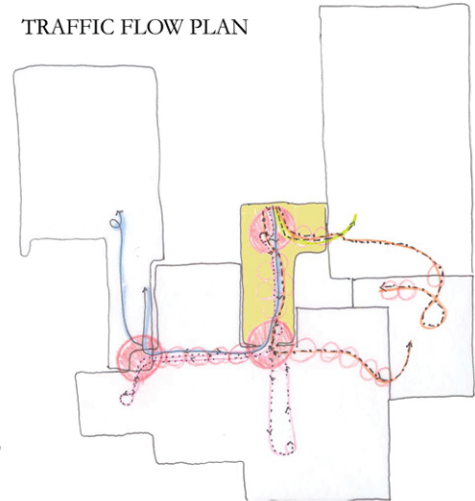


LAYOUT SPACE PLAN

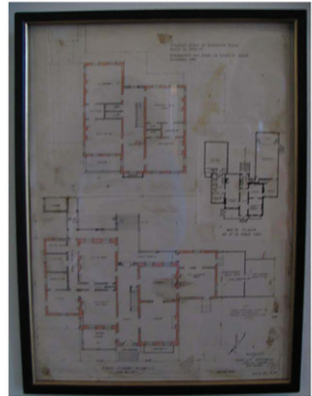
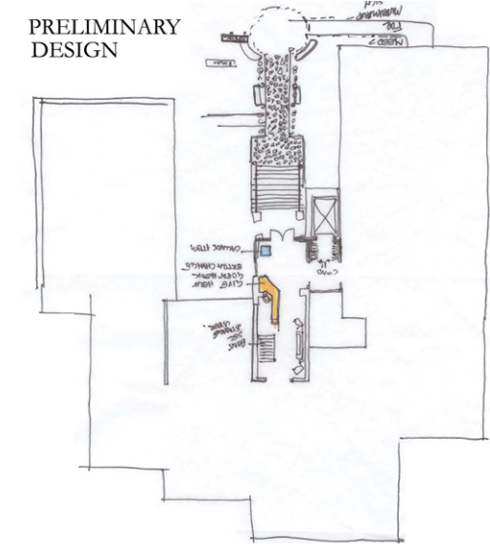


-  STAFF AREA
-  GALLERY
-  CIVIL WAR MUSEUM
-  AUDITORIUM
-  REAR ENTRY
-  HISTORICAL RESIDENCE

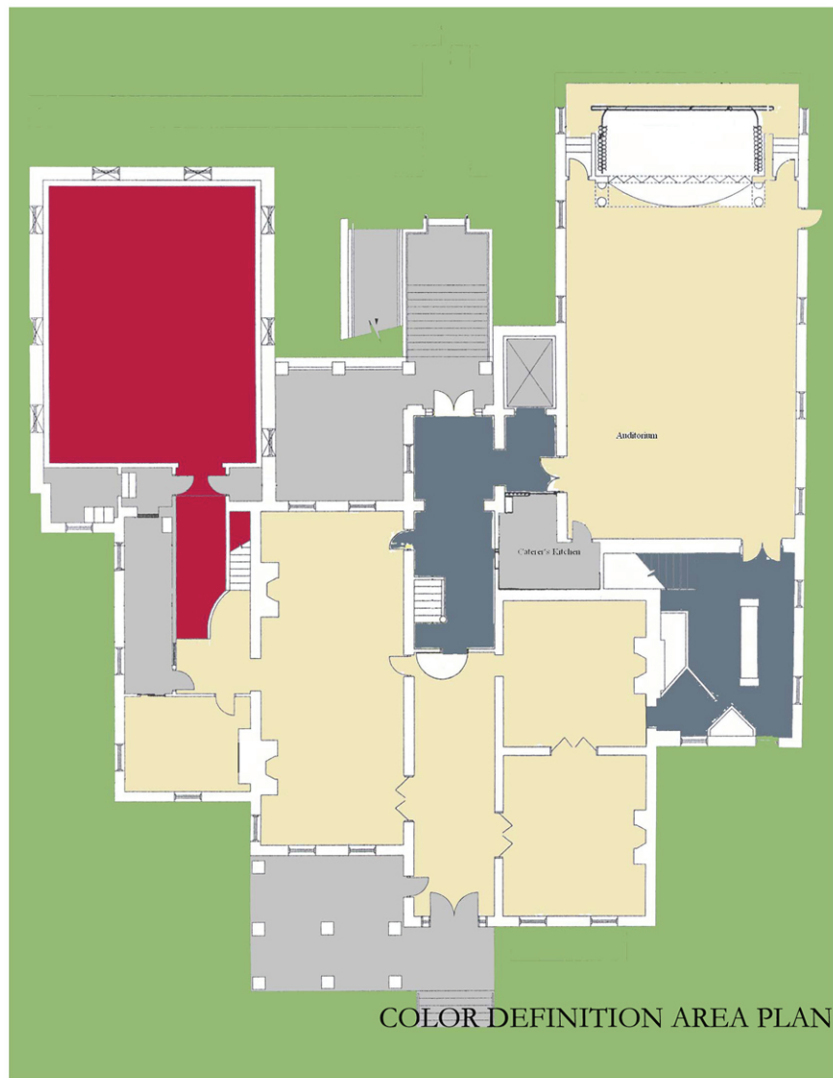
TRAFFIC FLOW PLAN



PRELIMINARY DESIGN



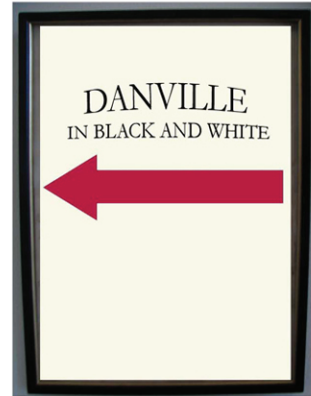
BEFORE



COLOR DEFINITION AREA PLAN



AFTER



This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Temporary Signage  
 Preliminary Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia



**Temporary Signage**  
**Preliminary Conceptual  
Design**

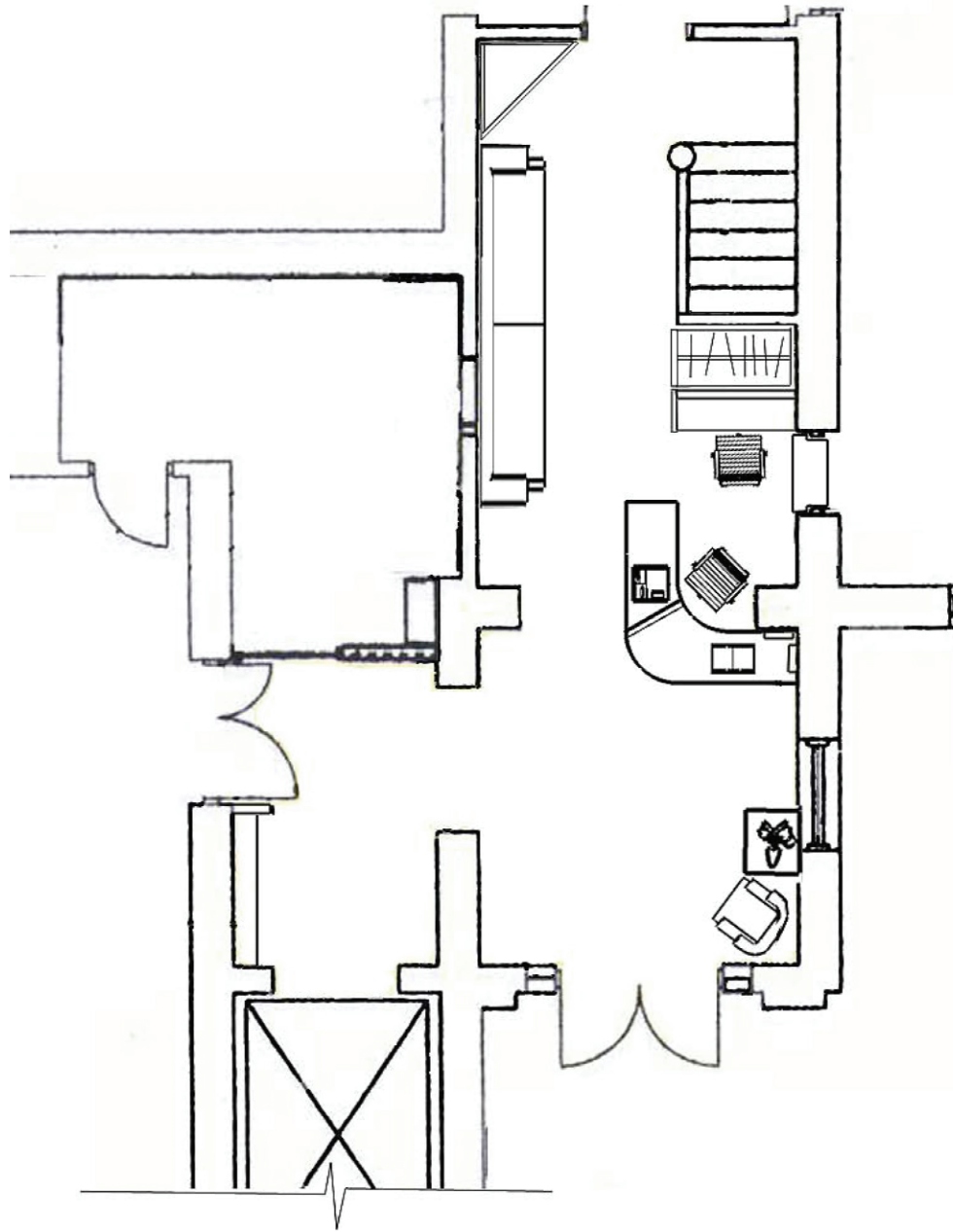
Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University





ENTRANCE LOBBY PLAN



Rear Entry Hall: Bird's Eye View from Entrance  
 Final Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**cd** community design  
**ac** assistance center

College of Architecture and Urban Studies  
 Virginia Polytechnic Institute and State University



**Rear Entry Hall:  
Bird's Eye View from  
Entrance**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



TEMPORARY WALL UNIT INSERTED  
UNDER STAIRWELL

SLIDING COAT CLOSET FOR EMPLOYEES  
LOCATED BELOW STAIRWELL

BUILT-IN COMPUTER DESK FOR  
ADDITIONAL SECRETARIAL SEATING

EXISTING DOOR IS REPLACED WITH  
TEMPORARY WALL-UNIT



This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Rear Entry Hall: Understair Storage and Work Space  
Final Conceptual Design  
Danville Museum of Fine Arts and History  
Danville, Virginia

**cd** community design  
**ac** assistance center  
College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



**Rear Entry Hall:  
Understair Storage and  
Work Space**

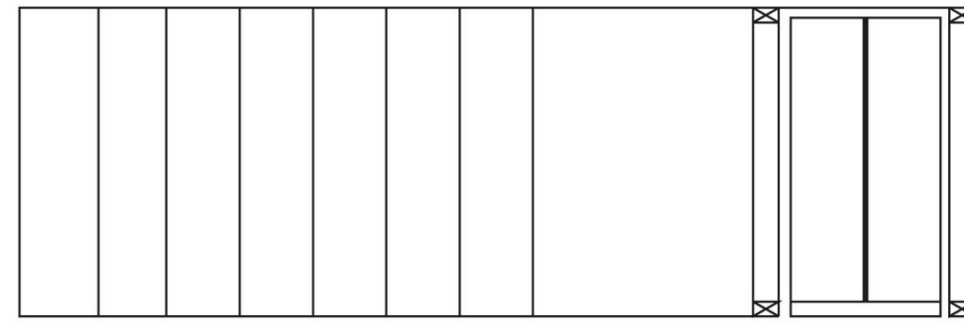
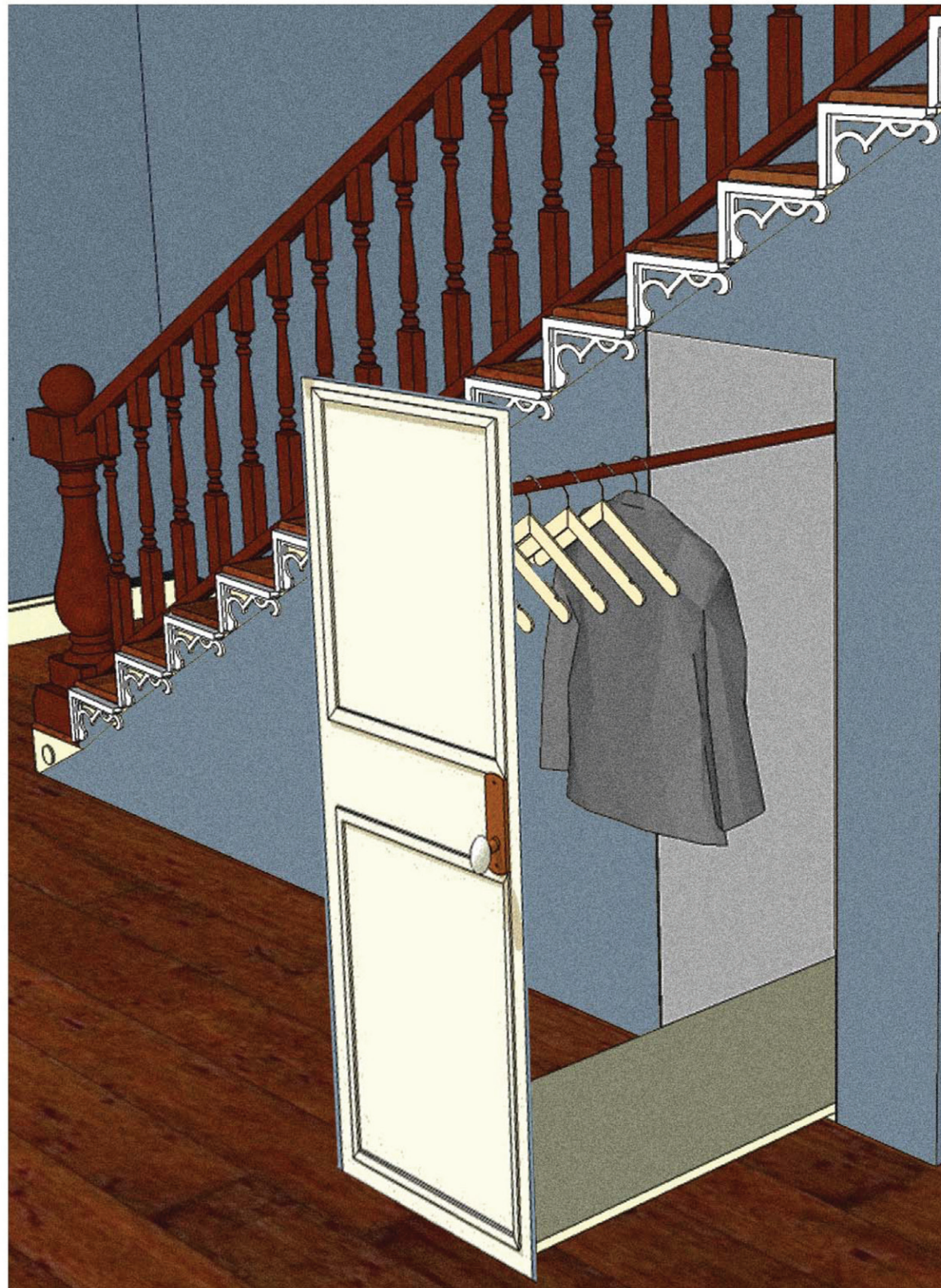
**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

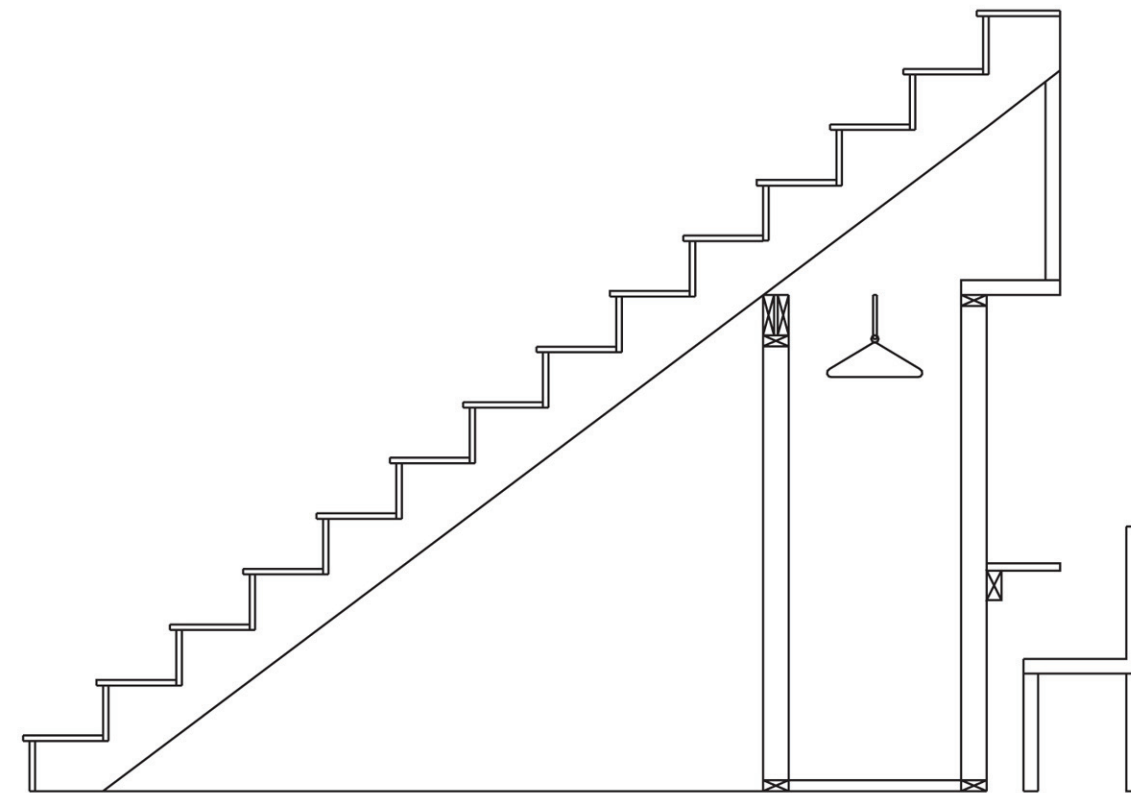
This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



STAIR PLAN



STAIR SECTION/ ELEVATION



SCALE

BUILT-IN STAIR COMPONENT

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Rear Entry Hall: Understair Closet  
 Final Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia



**Rear Entry Hall:  
Understair Closet**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University





FRONT DESK VIEW

GUEST SIGN-IN BOOK

PLACED BELOW BROCHURE

RACK TO MAXIMIZE

ACCESSIBILITY.

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Rear Entry Hall: Front Desk  
Final Conceptual Design  
Danville Museum of Fine Arts and History  
Danville, Virginia

**cd** community design  
**ac** assistance center  
College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



**Rear Entry Hall:  
Front Desk**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University





CORNER DISPLAY CASE WITH LOCK AND LOWER STORAGE COMPARTMENT

LONG PEW STYLE BENCH FOR MAXIMIZED SEATING SPACE

PICTURE DISPLAY AND MIRROR WALL. MIRROR REFLECTS LIGHT AND ALLOWS THE SPACE APPEAR LARGER.

CIVIL WAR BLUE WALL PAINT CORRESPONDS WITH THE SUTHERLAND MANSION'S ORIGINAL ERA OF CONSTRUCTION.

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Rear Entry Hall: Bench and Corner Cabinet  
 Final Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia

**cd** community design  
**ac** assistance center  
 College of Architecture and Urban Studies  
 Virginia Polytechnic Institute and State University



**Rear Entry Hall:  
Bench and Corner Cabinet**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



GREEN FLOORS  
 Product Name: Affection CT Falls 20  
 Product ID: GFCCTYBAFFELE20  
 Price per Sq Ft: \$4.83

TILE CARPET FOR EASY REPLACEMENT  
 IN HIGH TRAFFIC FLOW AREAS.

PAINTED TRIM AND CARPET TILE  
 ACT AS A VISUAL QUE TO DIRECT AND  
 GUIDE MUSEUM VISITORS.

GREEN FLOORS IS A :



This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Basement Level Visitor Experience: Color and Flooring  
 Final Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia

**cd** community design  
**ac** assistance center  
 College of Architecture and Urban Studies  
 Virginia Polytechnic Institute and State University



**Basement Level Visitor  
Experience:  
Color and Flooring**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University



INDIRECT TRACK LIGHTING EXTENDS THE GALLERY DISPLAY AREA WHILE SERVING AS A BRIDGE TO CONNECT THE CIVIL WAR DISPLAY WITH THE GALLERY.

THE SPACE BECOMES AN INVITING HALLWAY WITH AN ACCESSIBLE REST ROOM

PAINTED TRIM MATCHES THE WALL COLORS WITHIN THE GALLERY SPACE TO VISUALLY CONNECT THE TWO SPACES

THE MIRROR ALONG THE RIGHT HAND WALL SERVES TO EXPAND THE APPEARANCE OF THE COMPACT HALLWAY

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

Basement Level Visitor Experience: Color and Lighting  
 Final Conceptual Design  
 Danville Museum of Fine Arts and History  
 Danville, Virginia



**Basement Level Visitor  
Experience:  
Color and Lighting**

**Final Conceptual Design**

Danville Museum  
of Fine Arts and History  
Danville, Virginia

This drawing is conceptual and was prepared to show approximate location and arrangement of building features and approximate building measurements. It is not intended to replace the use of construction documents by a licensed professional. Appropriate professionals should be consulted before any construction or site work is undertaken. The Community Design Assistance Center is not responsible for the inappropriate use of this drawing.

**c|d** community design  
**a|c** assistance center

College of Architecture and Urban Studies  
Virginia Polytechnic Institute and State University

## **VIII. CONCLUSION**

Interior conceptual designs were developed for the Danville Museum of Fine Arts and History including the rear entry hall, basement level visitor experience, and temporary signage. The designs take into account the architectural style of the historic Sutherlin House while improving the visitor experience. Implementing such ideas should help the DMFAH create a more functional, cohesive, and visually appealing environment for both visitors and museum staff.



## IX. REFERENCES

Cahill, Mary and Gary Grant. *Victorian Danville, Fifty-two Landmarks: Their Architecture and History*. Danville, VA: URE Press, 1977. Second edition 1996.

Downing, Andrew Jackson. *The Architecture of Country Houses; Including Designs for Cottages, and Farmhouses, and Villas, with Remarks on Interiors, Furniture, and the Best Modes of Warming and Ventilating*. New York: Dover Publications, 1969.

"FLOR." Flor is Modular Carpet Tile. May. 2007 <[www.florcatalog.com](http://www.florcatalog.com)>

Gloag, John. *The Victorian Cabinet-Maker's Assistant; 417 Original Designs with Descriptions and Details of Construction*. New York: Dover Publications, 1970.

"History." Danville Museum of Fine Arts and History. December 2006. <[www.danvillemuseum.org](http://www.danvillemuseum.org)>.

Jandl, H. Ward. "Identifying and Preserving Character-Defining Elements." *Preservation Brief 18*. Washington, DC: U.S. Department of the Interior, 1988. <<http://www.nps.gov/history/hps/tps/briefs/brief18.htm>>.

Loudoun, J. C. *An Encyclopaedia of Cottage, Farm, and Villa Architecture and Furniture*. 1833

Trulove, James G. and Connie Sprague. *This Way: Signage Design for Public Spaces*. Beverly, MA: Rockport, 2001.

# APPENDIX A. REHABILITATING HISTORIC INTERIORS

## 18 Preservation Briefs

Technical Preservation Services

National Park Service  
U.S. Department of the Interior



### Rehabilitating Interiors in Historic Buildings Identifying and Preserving Character-Defining Elements

**H. Ward Jandl**

- » [Identifying and Evaluating...](#)
- » [Recommended Approaches...](#)
- » [Meeting Building, Life Safety and Fire Codes](#)
- » [Sources of Assistance](#)
- » [Protecting Interior Elements...](#)
- » [Summary](#)
- » [Selected Reading List](#)



**A NOTE TO OUR USERS:** The web versions of the **Preservation Briefs** differ somewhat from the printed versions. Many illustrations are new, captions are simplified, illustrations are typically in color rather than black and white, and some complex charts have been omitted.

**A floor plan, the arrangement of spaces, and features** and applied finishes may be individually or collectively important in defining the historic character of the building and the purpose for which it was constructed. Thus, their identification, retention, protection, and repair should be given prime consideration in every preservation project. Caution should be exercised in developing plans that would radically change character-defining spaces or that would obscure, damage or destroy interior features or finishes.





**The interiors of mills and industrial buildings are frequently open, unadorned spaces with exposed structural elements. While these spaces can serve many new uses, the floor to ceiling height and exposed truss system are character-defining features that should be retained in rehabilitation. Photo: NPS files.**

While the exterior of a building may be its most prominent visible aspect, or its "public face," its interior can be even more important in conveying the building's history and development over time. Rehabilitation within the context of the Secretary of the Interior's Standards for Rehabilitation calls for the preservation of exterior and interior portions or features of the building that are significant to its historic, architectural and cultural values.

Interior components worthy of preservation may include the building's plan (sequence of spaces and circulation patterns), the building's spaces (rooms and volumes), individual architectural features, and the various finishes and materials that make up the walls, floors, and ceilings. A theater auditorium or sequences of rooms such as double parlors or a lobby leading to a stairway that ascends to a mezzanine may comprise a building's most

important spaces. Individual rooms may contain notable features such as plaster cornices, millwork, parquet wood floors, and hardware. Paints, wall coverings, and finishing techniques such as graining, may provide color, texture, and patterns which add to a building's unique character.

Virtually all rehabilitations of historic buildings involve some degree of interior alteration, even if the buildings are to be used for their original purpose. Interior rehabilitation proposals may range from preservation of existing features and spaces to total reconfigurations. In some cases, depending on the building, restoration may be warranted to preserve historic character adequately; in other cases, extensive alterations may be perfectly acceptable.

This Preservation Brief has been developed to assist building owners and architects in identifying and evaluating those elements of a building's interior that contribute to its historic character and in planning for the preservation of those elements in the process of rehabilitation. The guidance applies to all building types and styles, from 18th century churches to 20th century office buildings. The Brief does not attempt to provide specific advice on preservation techniques and treatments, given the vast range of buildings, but rather suggests general preservation approaches to guide construction work.



**Not only are the features of this early 20th century interior worthy of preservation, the planned sequence of spaces impart a grandeur that is characteristic of high style residences of the period. Photo: Jack E. Boucher, HABS collection.**

---

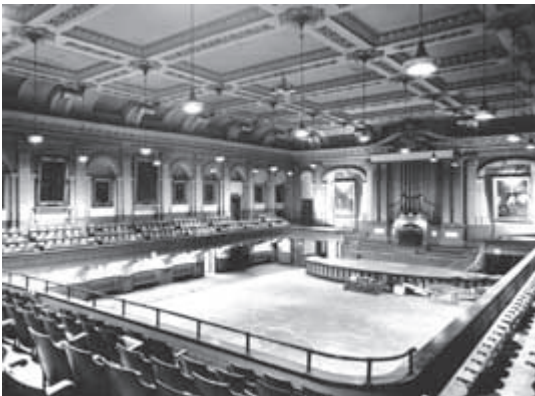
## **Identifying and Evaluating the Importance of Interior Elements Prior to Rehabilitation**

Before determining what uses might be appropriate and before drawing up plans, a thorough professional assessment should be undertaken to identify those tangible architectural components that, prior to rehabilitation, convey the building's sense of time and place--that is, its "historic character." Such an assessment, accomplished by walking through and taking account of each element that makes up the interior, can help ensure that a truly compatible use for the building, one that requires minimal alteration to the building, is selected.

### **Researching The Building's History**

A review of the building's history will reveal why and when the building achieved significance or how it contributes to the significance of the district. This information helps to evaluate whether a particular rehabilitation treatment will be appropriate to the building and whether it will preserve those tangible components of the building that convey its significance for association with specific events or persons along with its architectural importance. In this regard, National Register files may prove useful in explaining why and for what period of time the building is significant. In some cases research may show that later alterations are significant to the building; in other cases, the alterations may be without historical or architectural merit, and may be removed in the rehabilitation.

### **Identifying Interior Elements**



**Many institutional buildings possess distinctive spaces or floor plans that are important in conveying the significance of the property. This grand hall, which occupies the entire floor of the building, could not be subdivided without destroying the integrity of the space. Photo: NPS files.**

Interiors of buildings can be seen as a series of primary and secondary spaces. The goal of the assessment is to identify which elements contribute to the building's character and which do not. Sometimes it will be the sequence and flow of spaces, and not just the individual rooms themselves, that contribute to the building's character. This is particularly evident in buildings that have strong central axes or those that are consciously asymmetrical in design. In other cases, it may be the size or shape of the space that is distinctive.

The importance of some interiors may not be readily apparent based on a visual inspection; sometimes rooms that do not appear to be architecturally distinguished are associated

with important persons and events that occurred within the building.

Primary spaces, are found in all buildings, both monumental and modest. Examples may include foyers, corridors, elevator lobbies, assembly rooms, stairhalls, and parlors. Often they are the places in the building that the public uses and sees; sometimes they are the most architecturally detailed spaces in the building, carefully proportioned and finished with costly materials. They may be functionally and architecturally related to the building's external appearance. In a simpler building, a primary space may be distinguishable only by its location, size, proportions, or use. Primary spaces are always important to the character of the building and should be preserved.



Secondary spaces are generally more utilitarian in appearance and size than primary spaces. They may include areas and rooms that service the building, such as bathrooms, and kitchens. Examples of secondary spaces in a commercial or office structure may include storerooms, service corridors, and in some cases, the offices themselves. Secondary spaces tend to be of less importance to the building and may accept greater change in the course of work without compromising the building's historic character.



**The interior of this 19th worker's house has not been properly maintained, but it may be as important historically as a richly ornamented interior. Its wide baseboards, flat window trim, and four-panel door should be carefully preserved in a rehabilitation project. Photo: NPS files.**

Spaces are often designed to interrelate both visually and functionally. The sequence of spaces, such as vestibule-hall-parlor or foyer-lobby-stair-auditorium or stairhall-corridor-classroom, can define and express the building's historic function and unique character. Important sequences of spaces should be identified and retained in the rehabilitation project.

Floor plans may also be distinctive and characteristic of a style of architecture or a region. Examples include Greek Revival and shotgun houses. Floor plans may also reflect social, educational, and medical theories of the period. Many 19th century psychiatric institutions, for example, had plans based on the ideas of Thomas Kirkbride, a Philadelphia doctor who authored a book on asylum design.

In addition to evaluating the relative importance of the various spaces, the assessment should identify architectural features and finishes that are part of the interior's history and character. Marble or wood wainscoting in corridors, elevator cabs, crown molding, baseboards, mantels, ceiling medallions, window and door trim, tile and parquet floors, and staircases are among those features that can be found in historic buildings. Architectural finishes of note may include grained woodwork, marbleized columns, and plastered walls. Those features that are characteristic of the building's style and period of construction should, again, be retained in the rehabilitation.

Features and finishes, even if machine-made and not exhibiting particularly fine craftsmanship, may be character defining; these would include pressed metal ceilings and millwork around windows and doors. The interior of a plain, simple detailed worker's house of the 19th century may be as important historically as a richly ornamented, high-style townhouse of the same period. Both resources, if equally intact, convey important information about the early inhabitants and deserve the same careful attention to detail in the preservation process.

The location and condition of the building's existing heating, plumbing, and electrical systems also need to be noted in the assessment. The visible features of historic systems--radiators, grilles, light fixtures, switchplates, bathtubs, etc.--can contribute to the overall character of the building, even if the systems themselves need upgrading.

### **Assessing Alterations and Deterioration**

In assessing a building's interior, it is important to ascertain the extent of alteration and deterioration that may have taken place over the years; these factors help determine what degree of change is appropriate in the project. Close examination of existing fabric

and original floorplans, where available, can reveal which alterations have been additive, such as new partitions inserted for functional or structural reasons and historic features covered up rather than destroyed. It can also reveal which have been subtractive, such as key walls removed and architectural features destroyed. If an interior has been modified by additive changes and if these changes have not acquired significance, it may be relatively easy to remove the alterations and return the interior to its historic appearance. If an interior has been greatly altered through subtractive changes, there may be more latitude in making further alterations in the process of rehabilitation because the integrity of the interior has been compromised. At the same time, if the interior had been exceptionally significant, and solid documentation on its historic condition is available, reconstruction of the missing features may be the preferred option.



**This corridor has glazed walls, oak trim, and marble wainscoting, typical of those found in the late 19th and early 20th century office buildings. Corridors such as this, displaying simple detailing, should be a priority in rehabilitation projects involving commercial buildings. Photo: NPS files.**

It is always a recommended practice to photograph interior spaces and features thoroughly prior to rehabilitation. Measured floor plans showing the existing conditions are extremely useful. This documentation is invaluable in drawing up rehabilitation plans and specifications and in assessing the impact of changes to the property for historic preservation certification purposes.

### **Drawing Up Plans and Executing Work**

If the historic building is to be rehabilitated, it is critical that the new use not require substantial alteration of distinctive spaces or removal of character-defining architectural features or finishes. If an interior loses the physical vestiges of its past as well as its historic function, the sense of time and place associated both with the building and the district in which it is located is lost.

The recommended approaches that follow address common problems associated with the rehabilitation of historic interiors and have been adapted from the Secretary of the Interior's Standards for Rehabilitation

and Guidelines for Rehabilitating Historic Buildings. Adherence to these suggestions can help ensure that character-defining interior elements are preserved in the process of rehabilitation. The checklist covers a range of situations and is not intended to be all-inclusive. Readers are strongly encouraged to review the full set of guidelines before undertaking any rehabilitation project.

---

## **Recommended Approaches for Rehabilitating Historic Interiors**

**1. Retain and preserve floor plans and interior spaces that are important in defining the overall historic character of the building.** This includes the size, configuration, proportion, and relationship of rooms and corridors; the relationship of features to spaces; and the spaces themselves such as lobbies, reception halls, entrance

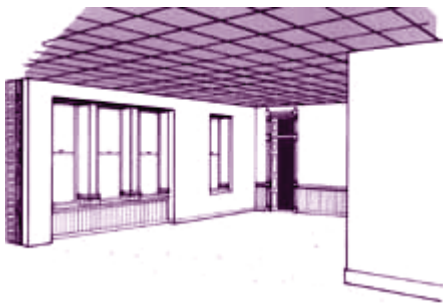


halls, double parlors, theaters, auditoriums, and important industrial or commercial use spaces. Put service functions required by the building's new use, such as bathrooms, mechanical equipment, and office machines, in secondary spaces.

**2. Avoid subdividing spaces that are characteristic of a building type or style or that are directly associated with specific persons or patterns of events.** Space may be subdivided both vertically through the insertion of new partitions or horizontally through insertion of new floors or mezzanines. The insertion of new additional floors should be considered only when they will not damage or destroy the structural system or obscure, damage, or destroy character-defining spaces, features, or finishes. If rooms have already been subdivided through an earlier insensitive renovation, consider removing the partitions and restoring the room to its original proportions and size.

**3. Avoid making new cuts in floors and ceilings where such cuts would change character-defining spaces and the historic configuration of such spaces.**

Inserting of a new atrium or a lightwell is appropriate only in very limited situations where the existing interiors are not historically or architecturally distinguished.



Furring out exterior walls to add insulation and suspending new ceilings to hide ductwork can change a room's proportions and cause interior features to appear fragmented. The interior character of this school classroom that was converted to apartment use has been destroyed. Drawing: Neal A. Vogel

**4. Avoid installing dropped ceilings below ornamental ceilings or in rooms where high ceilings are part of the building's character.** In addition to obscuring or destroying significant details, such treatments will also change the space's proportions. If dropped ceilings are installed in buildings that lack character-defining spaces, such as mills and factories, they should be well set back from the windows so they are not visible from the exterior.

**5. Retain and preserve interior features and finishes that are important in defining the overall historic character of the building.** This might include columns, doors, cornices, baseboards, fireplaces and mantels, paneling, light fixtures, elevator cabs, hardware, and flooring; and

wallpaper, plaster, paint, and finishes such as stenciling, marbleizing, and graining; and other decorative materials that accent interior features and provide color, texture, and patterning to walls, floors, and ceilings.

**6. Retain stairs in their historic configuration and to location.** If a second means of egress is required, consider constructing new stairs in secondary spaces. The application of fire-retardant coatings, such as intumescent paints; the installation of fire suppression systems, such as sprinklers; and the construction of glass enclosures can in many cases permit retention of stairs and other character-defining features.

**7. Retain and preserve visible features of early mechanical systems that are important in defining the overall historic character of the building, such as radiators, vents, fans, grilles, plumbing fixtures, switchplates, and lights.** If new heating, air conditioning, lighting and plumbing systems are installed, they should be done in a way that does not destroy character-defining spaces, features and finishes. Ducts, pipes, and wiring should be installed as inconspicuously as possible: in secondary spaces, in the attic or basement if possible, or in closets.

**8. Avoid "furring out" perimeter walls for insulation purposes.** This requires unnecessary removal of window trim and can change a room's proportions. Consider alternative means of improving thermal performance, such as installing insulation in attics and basements and adding storm windows.

**9. Avoid removing paint and plaster from traditionally finished surfaces, to expose masonry and wood.** Conversely, avoid painting previously unpainted millwork. Repairing deteriorated plasterwork is encouraged. If the plaster is too deteriorated to save, and the walls and ceilings are not highly ornamented, gypsum board may be an acceptable replacement material. The use of paint colors appropriate to the period of the building's construction is encouraged.



**Plaster has been removed from perimeter walls, leaving brick exposed. The plaster should have been retained and repaired, as necessary. Photo: NPS files.**

**10. Avoid using destructive methods--propane and butane torches or sandblasting--to remove paint or other coatings from historic features.** Avoid harsh cleaning agents that can change the appearance of wood.

---

## Meeting Building, Life Safety and Fire Codes

Buildings undergoing rehabilitation must comply with existing building, life safety and fire codes. The application of codes to specific projects varies from building to building, and town to town. Code requirements may make some reuse proposals impractical; in other cases, only minor changes may be needed to bring the project into compliance. In some situations, it may be possible to obtain a code variance to preserve distinctive interior features. (It should be noted that the Secretary's Standards for Rehabilitation take precedence over other regulations and codes in determining whether a rehabilitation project qualifies for Federal tax benefits.) A thorough understanding of the applicable regulations and close coordination with code officials, building inspectors, and fire marshals can prevent the alteration of significant historic interiors.

---

## Sources of Assistance

Rehabilitation and restoration work should be undertaken by professionals who have an established reputation in the field.

Given the wide range of interior work items, from ornamental plaster repair to marble cleaning and the application of graining, it is possible that a number of specialists and subcontractors will need to be brought in to bring the project to completion. State Historic Preservation Officers and local preservation organizations may be a useful source of information in this regard. Good sources of information on appropriate preservation techniques for specific interior features and finishes include the Bulletin of the Association for Preservation Technology and The Old-House Journal; other useful publications are listed in the bibliography.



---

## Protecting Interior Elements During Rehabilitation

Architectural features and finishes to be preserved in the process of rehabilitation should be clearly marked on plans and at the site. This step, along with careful supervision of the interior demolition work and protection against arson and vandalism, can prevent the unintended destruction of architectural elements that contribute to the building's historic character.

Protective coverings should be installed around architectural features and finishes to avoid damage in the course of construction work and to protect workers. Staircases and floors, in particular, are subjected to dirt and heavy wear, and the risk exists of incurring costly or irreparable damage. In most cases, the best, and least costly, preservation approach is to design and construct a protective system that enables stairs and floors to be used yet protects them from damage. Other architectural features such as mantels, doors, wainscoting, and decorative finishes may be protected by using heavy canvas or plastic sheets.

---

## Summary



**After rehabilitation, this severely deteriorated space was returned to its original elegance. Plaster was repaired and repainted; scagliola columns were restored to match marble; and missing decorative metalwork was re-installed in front of the windows. Photo: Carol M. Highsmith.**

In many cases, the interior of a historic building is as important as its exterior. The careful identification and evaluation of interior architectural elements, after undertaking research on the building's history and use, is critically important before changes to the building are contemplated. Only after this evaluation should new uses be decided and plans be drawn up. The best rehabilitation is one that preserves and protects those rooms, sequences of spaces, features and finishes that define and shape the overall historic character of the building.

---

## Selected Reading List

There are few books written exclusively on preserving historic interiors, and most of these tend to focus on residential interiors. Articles on the subject appear regularly in *The Old-House Journal*, the *Bulletin of the Association for Preservation Technology*, and *Historic Preservation Magazine*.

Ferro, Maximilian L., and Melissa L. Cook. *Electric Wiring and Lighting in Historic American Buildings*. New Bedford, Massachusetts: AFC/A Nortek Company, 1984.

Fisher, Charles E. "Temporary Protection of Historic Stairways During Rehabilitation Work." *Preservation Tech Note*. Washington, D.C.: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, 1985.

Jennings, Jan, and Herbert Gottfried. *American Vernacular Interior Architecture 1870-1940*. New York: Van Nostrand Reinhold Company, 1988.

Johnson, Ed. *Old House Woodwork Restoration: How to Restore Doors, Windows, Walls, Stairs and Decorative Trim to Their Original Beauty*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1983.

Labine, Clem, and Carolyn Flaherty (editors). *The Old-House Journal Compendium*. Woodstock, New York: The Overlook Press, 1980.

*The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*. Washington, D.C.: Preservation Assistance Division, National Park Service, U.S. Department of the Interior, rev. 1983.

U.S. Department of Housing and Urban Development. *Rehabilitation Guidelines, volume 111*. Washington, D.C.: U.S. Department of Housing and Urban Development, 1980-84.

Winkler, Gail Caskey, and Roger W. Moss. *Victorian Interior Decoration: American Interiors 1830-1900*. New York: Henry Holt and Company, 1986.

---

## Acknowledgements

This Preservation Brief is based on a discussion paper prepared by the author for a National Park Service regional workshop held in March, 1987, and on a paper written by Gary Hume, "Interior Spaces in Historic Buildings," October, 1987. Appreciation is extended to the staff of Technical Preservation Services Branch and to the staff of NPS regional offices who reviewed the manuscript and provided many useful suggestions.

**Washington, D.C. October, 1988**

**Home page logo: Detail of carving on interior shutter. Hammond-Harwood House, Annapolis, Maryland. Photo: NPS files.**

---

*This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), Heritage Preservation Services Division, National Park Service prepares standards, guidelines, and other educational materials on responsible historic preservation treatments for a broad public.*

---

[Order Brief](#) | [Technical Preservation Services](#) | [Preservation Briefs](#) | [Search](#) | [Questions/Answers](#)

KDW





## APPENDIX B. EXAMPLE MATERIALS

Following are some examples of materials for walls and furniture that could be used to implement the conceptual designs in this report. These are examples and are in no way meant to be an endorsement of the products.



**maharam**

<b>Pattern</b>	<b>Program 458220</b> <i>Ready to Wear™</i>
<b>Color</b>	002 Blink
<b>Application</b>	Upholstery
<b>Contents</b>	53% Nylon, 47% Cotton
<b>Finish/Backing</b>	Stain resistant, Polyester knit
<b>Width</b>	56"
<b>Durability</b>	100,000+ cycles, Martindale method

☒ ☑ ☎ ☪ ☩ ☬

**maharam** 800.645.3943 maharam.com



458220002



# BOLTA®

## Georgette Type II

### Physical Properties

Finished Total Weight: 20.0 oz. per lin. yd. (620 g/lin. m) / 13.3 oz. per sq. yd. (451 g/m<sup>2</sup>)  
Backing: Non-woven  
Tensile Breaking Strength: 86 x 69 pounds (387 x 310 newtons)  
Tear Strength (Scale Reading): 44 x 46

### Product Features

- **LOW VOC EMITTING**  
Meets State of Washington Purchase Specification and EPA Headquarter Specification for indoor air quality seven days after installation. Contact your distributor for information regarding availability of a low VOC certification for this product.
- **CLASSIFIED BY UNDERWRITERS' LABORATORIES, INC.**
- **MANUFACTURED IN AN ISO9001 CERTIFIED FACILITY**
- **CADMIUM, MERCURY and PFOA FREE**  
Does not contain, nor will it degrade to, Perfluoro Octanoic Acid (PFOA).

**Light Reflective Value (LRV)** The measured amount of incident or reflected light from the wallcovering. The higher the LRV, the less lighting required, resulting in reduced energy use. The LRV value provided herein may change in actual reading  $\pm$  5% depending on the location on the sample used for the reading and texture of the sample.

### The following optional product features can be specified with minimum order requirements:

- Custom color and weight

### Specifications

- G.S.A. Federal Specification CCC-W-408A, B, C, and D
- Canadian General Standard Board 41-GP-30M
- MEA Approved, N.Y. Department of Buildings

### Fire Classification

- NFPA and IBC Class A interior wall and finish rating when tested using the ASTM E-84 method on reinforced cement board and Type X gypsum board and when tested in accordance with NFPA 286.

### Warranty

BOLTA wallcoverings are provided with a 5-year limited warranty subject to certain conditions and limitations. For complete warranty terms, visit [www.omnova.com/dbp\\_site/bolta.htm](http://www.omnova.com/dbp_site/bolta.htm).

### Permeability, Moisture, and Mold

Vinyl wallcovering has little or no moisture permeability. If the design, construction or maintenance of a building and/or other circumstances allow moisture to accumulate in a wall or wall cavity, vinyl wallcovering can act as a vapor barrier restricting the escape of moisture and increasing the risk of mold growth. Vinyl wallcovering permeability can be increased through alternative product constructions and perforation with varying results depending on the method used, but it is important to keep in mind that no wall surfacing material, including perforated wallcovering or paint, will prevent mold growth if moisture accumulation and moisture sources are not eliminated. An experienced professional who is familiar with building conditions and circumstances should be consulted concerning the benefits and limitations of vinyl wallcovering. For more information on wallcovering permeability and mold, OMNOVA recommends that you visit [www.omnova.com/dbp\\_site/permeability.htm](http://www.omnova.com/dbp_site/permeability.htm) and [www.wallcoverings.org](http://www.wallcoverings.org).

BOLTA wallcoverings contain additives to resist mold and other micro-biological growth on the product. These additives, however, will not prevent mold growth if moisture is allowed to accumulate in or behind the wall.

### Exclusive National Distributor:

**MDC** Wallcoverings

MDC Wallcoverings | 1200 Arthur Avenue | Elk Grove Village, Illinois 60007  
tel 800.621.4006 | fax 847.437.4017 | [www.mdwall.com](http://www.mdwall.com)



Agate BB-ET-13

LRV 56.00



Garnet BB-ET-17

LRV 27.39



Sapphire BB-ET-16

LRV 32.94

OMNOVA Solutions Inc. • Fairlawn, OH 44333 • [www.omnova.com](http://www.omnova.com)

BOLTA is a registered trademark of OMNOVA Solutions Inc.


© MMV OMNOVA Solutions Inc. SW/SA





## Sequenza

*creation baumann*

COLOR	306
USES	Windows
PRODUCT LINE	Creation Baumann
WIDTH	118 inches Fabric shown railroaded
CONTENT	100% Trevira CS 
REPEAT	84 1/2" length
FLAME RETARDANCY	Passes NFPA 701
ECO INFO	Manufactured in an ISO 14001 certified facility



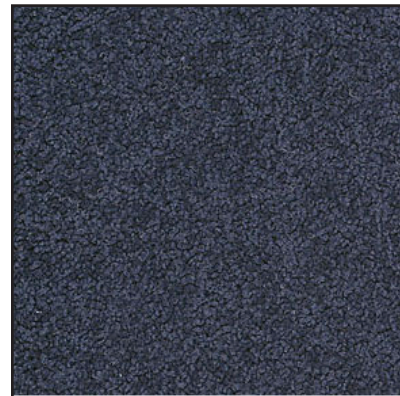
Carnegie

(800) 727-6770 [carnegiefabrics.com](http://carnegiefabrics.com)



**All of Greenfloors Commercial Carpet Tiles meet EPA's environmental guidelines.**

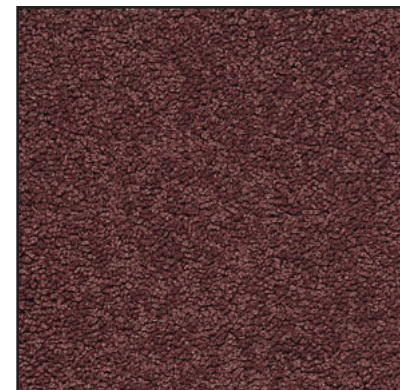
- Greenfloors Carpet Tiles has the same industry performance standards as carpet tiles lacking recycled content. We back our Carpet Tiles with the same warranties for high traffic wear, fire rating, stain resistance, and color fade, given similar appropriate uses.
- By purchasing Greenfloors environmentally friendly Commercial Carpet Tiles you are taking an active role in reducing the volume and toxicity of waste entering landfills as well as the amount of resources necessary to produce new carpet tiles, thereby reducing the effect on the environment.
- Greenfloors Commercial Carpet Tiles provide modular flooring for environments needing flexible design and installation. Imagine creating various patterns framed by a border with ease. Functionality, Color, and durability are the highlights of carpet tiles. If a tile is scoured during a desk move just replace it with a new one. By rotating carpet tiles out of heavy traffic areas they can be put back to work instead of in a landfill. Carpet tiles can be easily recycled.



Green Floors  
Affection CT - Falls 20

**Carpet tiles offer a carpet surface that features the benefits of a tile application:**

- Lower Life Cycle Costs - Vinyl backed carpet tile products last longer than any other carpet products. Receive optimal performance from carpet tiles supported with vinyl backing.
- Save Costly Replacements - If a carpet tile gets worn, soiled or permanently damaged, just replace or swap it with one from a less visible area.
- Faster Installation - Save approximately 20% of installation time with carpet tiles vs. broadloom carpet.
- Unlimited Underfloor Access - Access underfloor power, data and telephone wiring without cutting or patching carpet. No need for a costly carpet replacement crew.
- Minimize Disruption During Installation - Save office downtime during installation or repairs. Renovation of occupied space can be reduced by approximately 50%. There is no need for the breaking down of systems, furniture or rewiring of the office.
- Easier Handling of Carpet - With greater mobility and efficiency, carpet tile is simply more convenient to handle than 12-foot rolls. Enjoy the benefits when climbing stairs and turning corners.
- Improved Acoustics/Energy Conservation - Receive better sound absorption and insulation with vinyl backed tiles compared to traditional carpet backings.
- Greater Interior Design Flexibility - Enjoy a custom-look with carpet tile patterns without the custom price. By incorporating a contrasting color as a border or employing angled tile patterns, achieve a designer look for less!
- Lower Replacement Costs - Save on your next installation because tile removal requires less labor than traditional carpet installations.
- Movable Floor System - Benefit from the mobility of carpet tile if your business relocates. Take your investment with you!



Green Floors  
Affection CT - Mahogany 16

Green Floors  
3170 Draper Dr.  
Fairfax, VA 22031  
  
p: 703-352-8300  
f: 703-691-3935  
info@greenfloors.com