

HISTORIC STRUCTURE REPORT

HERMIT'S REST GRAND CANYON NATIONAL PARK

> Preservation Studies Program College of Architecture & Landscape Architecture The University of Arizona

In conjunction with: Colorado Plateau/Cooperative Ecosystem Studies Unit (CP/CESU)

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MANAGEMENT SUMMARY

EXECUTIVE SUMMARY

Construction

A decade before it became a national park, the Santa Fe Railway (Santa Fe) planned the construction of a rest house eight miles west of their railroad terminus at Grand Canyon's South Rim. The rest house was part of a larger plan for tourist development which included the eight-mile road to its site, a trail descending into the canyon and a tourist camp on the trail to the river. After a lengthy legal delay waged by Ralph Cameron, an early Grand Canyon resident and advocate against what he saw as collusion between the federal government and the Santa Fe, construction of the Hermit's Rest began in 1914.

Designed by renowned architect Mary Colter, this one-story stone building had the appearance of a natural stone outcropping from the hill to the south, the effect of which was originally aided by an earth and stone roof covering. Composed of random rubble and hewn unfinished logs, the Hermit's Rest was well-suited to its environment, perched on the rim of Grand Canyon within a pinyon pine forest. Its porch helped both extend the building toward the canyon and provide a security buffer from its potential dangers.

The interior includes a central room with a prominent fireplace area to the rear, flanked by a caretaker's private room to the east, and a kitchen and women's restroom to the west. The fireplace area had a domed stone ceiling and was elevated a step above the floor area of the balance of the interior.

Attention to rustic detailing was carried out in the building's furniture and fixtures, most of which were made specifically for the Hermit's Rest by the Santa Fe. Most of these pieces, which include wood chairs, tables, benches and a clock as well as andirons, ornamental iron hinges, candelabras and lanterns, remain *in situ*.

Site features, including a stone corbel arch, lamppost and oven, were integrated in the original design. A stone staircase descending approximately 75 feet below the rim to a hidden overlook, as well as stone staircases on both sides of the hill surrounding the Hermit's Rest, provided further sources of exploration for visitors.

Visitor Use

Initially, most visitors to the Hermit's Rest arrived by Santa Fe stagecoach from El Tovar. Refreshments, prepared by a resident caretaker employed by the Fred Harvey Company, were provided at the Hermit's Rest free of charge.

After the National Park Service assumed management of the park in 1919, Hermit Rim Road was opened to private vehicular transportation. It is likely that the Santa Fe began offering motor coach transportation to the Hermit's Rest in lieu of horse-drawn carriage trips at that time.

In 1929, the Fred Harvey Company assumed all inner-park trips from the Santa Fe, including the Hermit Rim Road trip to the Hermit's Rest. They have offered guided trips to the Hermit's Rest ever since, except during modern road construction and World War II.¹ Today, most visitors arrive at the Hermit's Rest by public shuttle operated by a concessionaire for the National Park Service, which was implemented in 1974.

¹ In 1954, the Santa Fe sold all tourist facilities, including the Hermit's Rest, to the Fred Harvey Company for \$1.5 million. The Fred Harvey Company was sold to Amfac, Inc. in 1968. Amfac, Inc. has since undergone a number of name changes. It is now known as Xanterra Parks and Resorts (Xanterra).

Alterations

The Hermit's Rest originally functioned as a place of relaxation, and did not offer anything for sale. At some point, the Hermit's Rest was modified into a curio shop. By the mid-1990s, the building was far overshadowed by its modern function as a curio shop and the dense merchandise display impaired the character-defining features of the Hermit's Rest.

Modern alterations include the removal of the earth and stone roof covering, a porch addition to the west of the original porch, in-fill of the porch floor, painting of exterior wood members and the construction of nearby comfort stations. Additionally, the caretaker's room was converted into a public area, the women's restroom into a private office.

The lamppost and oven remain in their original locations, although the oven is no longer operational. The stone corbel arch was relocated in the 1930s when the main approach to the Hermit's Rest was altered from the original Hermit Rim Road on the south side of the building to the West Rim Drive parking loop on the east side of the building.

Other original site features have been removed, including stairs to a hidden overlook below the rim. The stairs that once ascended the hill on the east and west sides of the Hermit's Rest have been also been removed. It is presumed that these stairs were removed in conjunction with the removal of the earth and stone roof covering to discourage visitors from exploring the building's roof.

Improvements

The Hermit's Rest and other Mary Jane Colter buildings began to receive attention and praise after the publication of Virginia Grattan's book, *Mary Colter*, in 1980. Together with Colter's Indian Watchtower, Lookout Studio and Hopi House, the Hermit's Rest was listed as a National Historic Landmark on May 28, 1987.

By 1995, park staff recognized the aesthetic damage inflicted upon the Hermit's Rest by the extensive merchandise display. The *General Management Plan* (1995) specified that the Hermit's Rest be converted back to its original use and "will once again be a rest area with a small gift shop and limited food service in spaces that were historically used that way."²

Other improvements and work continued throughout the late 1990s. In 1997, park staff identified retailing themes for its historic facilities, presumably including the Hermit's Rest. In the following year, Grand Canyon National Park Lodges (now Xanterra), reduced the excessive merchandise displays and repaired modern alterations to the interior. Regular maintenance to the Hermit's Rest includes repairing heat and plumbing systems, painting the building exterior and porch steps, and patching the roof.

Current Condition

The Hermit's Rest continues to function as required by Xanterra Parks and Resorts, the owner and occupant of the building. Xanterra continues to display merchandise in the public areas of the Hermit's Rest and offers snacks and beverages for sale out of the kitchen.

² Grand Canyon National Park, General Management Plan (1995), 40.

The Hermit's Rest is generally in fair condition. Water damage is the most severe impact to the building and site, causing ground erosion that undermines the north stone wall and wood decay that is pervasive among vigas and horizontal porch beams. Other major deficiencies include impeded accessibility and alterations, which impact the historic character.

For the most part, the exterior retains all its original features. However, many of the porch's protruding log beam ends have been cut flush with the porch roof edge due to deterioration, significantly changing the expression of the porch. The original earth and stone roof covering helped the Hermit's Rest blend into the hillside and was a significant part of the visitor experience. The roof is now covered with a white elastomeric roofing material that is visually distracting.

Recommended Treatment

This report recommends rehabilitation of the Hermit's Rest, maintaining its existing form and materials where possible.³ To complete repair and/or replacement of the damaged components would elevate the condition of the Hermit's Rest to 'good,' and guarantee its continued functionality. Rehabilitation of the Hermit's Rest will allow its continued ability to function as a testament to early tourism development by the Santa Fe Railway, Mary Colter's site-specific romantic architecture and the Fred Harvey Company's renowned service.

Restoration of the porch to its original design intent is recommended to remedy both the severely damaged horizontal log beams and the confusion caused by muddled alterations. Executed properly, restoration of the porch will ensure the continued and enhanced enjoyment of this matchless architectural experience. Sufficient documentation, including original drawings and historic photographs, exists to restore the porch with a high degree of accuracy.

With only minor alteration, compliant access can be gained into the Hermit's Rest through the Secondary Room door. It is recommended that merchandise be removed from its current location on the interior side of this door and accessible hardware installed.

Other major treatment recommendations include re-roofing, site evaluation by a landscape architect and the general repair of damaged features.

³ The List of Classified Structures (2006) supports rehabilitation as the ultimate treatment.

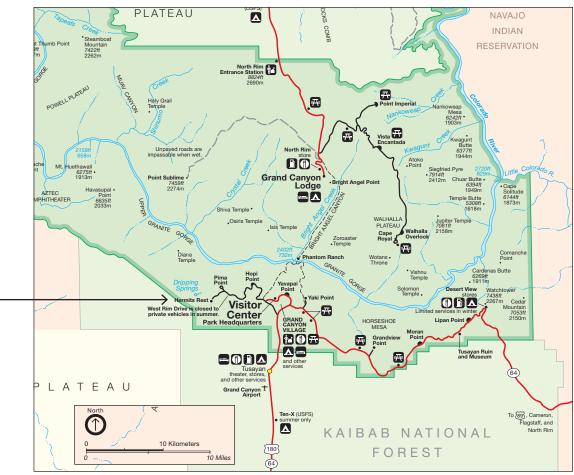


FIG. ES1: Map showing Hermit's Rest at arrow, 1999 (Source: NPS, Harper's Ferry).

ADMINISTRATIVE DATA

HERMIT'S REST

Building Number: 863

List of Classified Structures: 55555

Proposed Treatment1

Rehabilitation - the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values²

Cultural Resource Data³

National Register of Historic Places, Hermits Rest Concession Building, 8/7/1974

Period of Significance: 1914

Criteria A: Associated with events that have made a significant contribution to the broad patterns of our history

Criteria C: Embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components may lack individual distinction

National Historic Landmark, Mary Jane Colter Buildings, 5/28/1987

Period of Significance: 1914-19864

Criteria: A and C

Period of Significance: 1914 - present⁵

A separate disk containing photographic documentation of the Hermit's Rest was provided to Grand Canyon National Park with this report. Contemporary photographs were taken by The University of Arizona project team in October 2006 and April - June 2007. They show both character-defining features and deficiencies. Additionally, historic photographs of the Hermit's Rest contained in the park's museum collection and maintenance files, as well as Northern Arizona University's Cline Library, were scanned and saved to disk.

All known historic drawings of the Hermit's Rest were scanned and saved to disk. This disk was provided to Grand Canyon National Park with this report.

¹ The proposed treatment is supported by the List of Classified Structures (2006).

² National Park Service. The Secretary of the Interior's Standard for Rehabilitation: http://www.cr.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm (accessed 7 September 2006).

³ Neither the National Register of Historic Places nomination nor the National Historic Landmark nomination mention criteria. The List of Classified Structures specifies Criteria A and C.

⁴ The period of significance is listed as 1914-present. The nomination was written in 1986.

⁵ For the purposes of this report, the period of significance should include the dates in which the building maintained its original design and materials.

DEVELOPMENTAL HISTORY

HISTORICAL BACKGROUND AND CONTEXT

In the 1880s, Grand Canyon became home to its first white pioneers and John Hance and P.D. Berry were the first to file homestead claims. Although the creation of Grand Canyon Reserve by President Benjamin Harrison in 1893 precluded the filing of additional homestead claims, it did nothing to prevent the proliferation of mining claims.

Railroad to Grand Canyon

In 1897, Buckey O'Neill, a pioneer prospector, proposed the construction of a spur railroad from Williams, Arizona to Grand Canyon, to be financially supported by shipments of mineral ore from the canyon. His attempts to interest the Santa Fe Railway (Santa Fe), which had run its first train on its own exclusive tracks from Chicago to Los Angeles in 1887, were to no avail as they were recovering from bankruptcy and reluctant to invest in a new spur line. In the following year, O'Neill was able to convince a buyer, Lombard, Goode and Company of Chicago, of his proposal and sold his interest in what was thought to be a rich copper mine near Anita, Arizona.

Lombard, Goode and Company then formed the Santa Fe and Grand Canyon Railroad to transport ore from the mine. The railroad was granted the right-of-way through the Grand Canyon Forest Reserve in May 1898. Work began on the railroad simultaneous with the development of the copper mine, but the mine failed to produce as much ore as expected. Before declaring bankruptcy in 1900, the Santa Fe and Grand Canyon Railroad had laid all but the last eight miles of track to Grand Canyon, the materials for which were advanced by the Santa Fe, who remained unpaid.¹

On July 18, 1901, the Santa Fe purchased the Santa Fe and Grand Canyon Railroad in bankruptcy court for \$150,000. The Santa Fe then formed a subsidiary, Grand Canyon Railway, to complete the line to Grand Canyon. The first train arrived at Grand Canyon from Williams on September 17, 1901, forever changing tourism to the rim.

The Santa Fe and Ralph Cameron

At Grand Canyon, the Santa Fe encountered Ralph Cameron, an early pioneer whose mining claims reeked havoc on Santa Fe's development plans for decades to come.

In 1883, Ralph Cameron left his home in the east for Flagstaff where he made his living transporting wealthy eastern tourists to Grand Canyon. In 1901, he obtained control of the Bright Angel Trail at Grand Canyon, which was operated as a toll road and located in close proximity to the railroad terminus. This posed a problem for the Santa Fe who operated a mule service for tourists and were forced to pay a fee for each person brought down the trail on horseback.

But the real conflict was with Cameron's mining claims, the first of which were located at the site where the Santa Fe planned to construct its resort lodge, the El Tovar. Under the law, a prospector could claim land as a safeguard until the actual value of the ore within could be verified. If the claim was determined valuable, the prospector could apply for a patent, giving him fee simple ownership in perpetuity. When Cameron applied for patents on his claims, the Santa Fe objected on the grounds that "the claims had no mineral value and were located not for mining purposes but for permanent access to the tourist business coming in on the railroad." The Santa Fe brought legal action against Cameron, a battle that Cameron finally lost ten years later.

¹ Gordon Chappell. "A Grand Canyon Railway: Project for a New Century – the 20th." *Cultural Resource Management (CRM)* 10-1999, 15. 2 Robert Shankland, *Steve Mather of the National Parks* (New York: Alfred A. Knopf, 1951), 227.

In 1908, President Theodore Roosevelt proclaimed the Grand Canyon a national monument, which prevented any additional mineral claims. By that time, Ralph Cameron had located 45 mining claims totaling 7,000 contiguous acres, mostly at strategic locations for future tourism development, which caused ongoing conflict with the Santa Fe.

The monument was placed under management of the Forest Service, who were likely to oppose "exploitative private enterprise." The Forest Service management had a preference for partnering with national, successful businesses over local pioneers like Cameron. The Forest Service and Santa Fe created a mutually beneficial alliance, as Grand Canyon boosted the Santa Fe's business, and the Santa Fe provided comfort and reliability to monument visitors.

The Santa Fe's Hermit Improvements

No longer willing to pay a toll to Ralph Cameron for every visitor brought down the Bright Angel Trail, the Santa Fe developed plans for an inner-canyon trail of its own. Located within Hermit Basin, the trail was approximately eight miles west of the Santa Fe's resort hotel at the rim, El Tovar (1905) and presumably a safe distance away from Cameron and his interests.

On May 3, 1909, the Forest Service issued the Santa Fe Land Improvement Company a special use permit for the development of this trail as well as inner-canyon lodging, a rest house at the rim and a wagon road connecting these improvements to Grand Canyon Village.

The proposed developments were indeed located over some of Cameron's mining claims, which were declared invalid by Forest Service mineral examiners in 1909. Despite their findings, Cameron filed an injunction against construction. Construction did not begin until 1911, when Cameron finally settled for a payment of \$40,000 from the Santa Fe.⁴

The "Hermit" Louis Boucher

The development permit referred to the new trail as "Santa Maria Trail" and all other improvements were unnamed. It is unknown when the improvements were given the names of Hermit Creek Trail, Hermit Camp, Hermit's Rest and Hermit Rim Road but it is likely after May 1914, the date of the original drawings for Hermit's Rest, which refer to the building only as a "rest house at Hermit Rim." The improvements were likely named for their location.⁵

But as legend has it, these improvements were named for an actual hermit: local prospector and trail builder, Louis D. Boucher. Boucher came to Grand Canyon from French-speaking Sherbrooke, Quebec in 1891. He found a home at Grand Canyon's Dripping Springs, located at the head of Hermit Canyon, where he built two tents and a corral. To connect his home at Dripping Springs to the canyon's rim and his mining operation in Long Canyon, he constructed the Silver Bell Trail. There he had a copper mine, extensive orchards and gardens, and tourist cabins.

³ Hall Rothman, America's National Monuments: The Politics of Preservation (Lawrence, Kansas: The University Press of Kansas, 1989), 66.

4 Michael F. Anderson, Polishing the Jewel: An Administrative History of Grand Canyon National Park (Grand Canyon: Grand Canyon)

⁴ Michael F. Anderson, Polishing the Jewel: An Administrative History of Grand Canyon National Park (Grand Canyon: Grand Canyon Association, 2000), 9.

⁵ The earliest instance found by the project team of the Hermit name is on a map published in 1904, which includes reference to Hermit Creek, Hermit Point and Hermit Basin. It is likely that these names were in use prior to publication of the 1904 map. Underwood & Underwood, *Grand Canyon of the Colorado: Grand Canyon Tour Map No. 2*, (New York, 1904). http://memory.loc.gov/ammem/gmdhtml/nphtml/gchome.html, accessed August 27, 2007.

Boucher operated tourist cabins and occasionally worked with others, making himself less of a hermit than the legend romanticizes. In fact, Boucher assisted the Santa Fe and Forest Service in locating existing mining claims in the area where the Santa Fe planned their Hermit improvements.⁶ By 1912, Boucher had left Grand Canyon for Mohrland, Utah where he worked in a coal mine.

Hermit Rim Road

In 1909, the Santa Fe, Forest Service and landscape architect George E. Keeler surveyed Hermit Rim Road. This road was oriented to take advantage of the best scenic viewpoints and be of higher quality than other Grand Canyon roads. At the time, all other Grand Canyon roads were built by pioneers to suit their individual needs. These narrow roads were continuously in disrepair and marred by wagon tracks, gullies and limestone outcroppings.

After the Santa Fe's legal settlement with Ralph Cameron, the L.J. Smith Company of Kansas City began grading the 7.9 mile Hermit Rim Road. It was paved by O.O. Farmer of Phoenix with a macadam surface of volcanic cinders and oiled in 1912-1913. When the road was completed, the Santa Fe had expended over \$185,000, more than the cost of any earlier development at Grand Canyon.

In its *Grand Canyon Working Plan*, the U.S. Forest Service called Hermit Rim Road "a beautiful piece of road" which "has done more to open up the Canyon than any other improvement except the railroad itself." Extolling the road's virtues to the public, the Santa Fe Railway publicity magazine *Titan of Chasms: The Grand Canyon of Arizona* claimed:

Hermit Rim Road will be the most unique highway in the West. Other roads are longer. Other roads may be higher up in the sky. But no other roadway is built along the brink of such a tremendous gorge. In places there is a sheer drop of half a mile within a rod of the traveled track. Yet you are as safe as in an easy chair at home, -- so carefully have the engineers planned their lines. All along the route the gigantic panorama of El Grande Canyon stretches for miles and miles, a world of beauty unspeakable.⁸

Wagon trips to the Hermit's Rest were exclusively provided by the Santa Fe and began at the El Tovar. The stagecoach then traveled west through the forest and up Hopi Hill to Hopi Point, where the first canyon views were offered. Beyond these scenic viewpoints, the road followed the rim westward and terminated at the Hermit Creek Trailhead, approximately 1/8 mile west of the Hermit's Rest. The round-trip generally took three hours.

Hermit Creek Trail & Hermit Camp

In 1911, the L.J. Smith Construction Company completed the 7.5 mile Hermit Creek Trail for the Santa Fe at a cost of over \$14,000. Hermit Trailhead was located at the termination of Hermit Road, west of the Hermit's Rest. In some sections, the trail was paved with sandstone, and stone walls protected tourists from the outer trail edge. Upon completion, Hermit Creek Trail was the best constructed and most regularly maintained trail into the canyon. Superintendent

⁶ Louisa Ferrall to Ralph Cameron, 23 February 1909. The Fred Harvey Hotels Collection, 1896-1945, The University of Arizona, Special Collections.

⁷ Forest Service, *Grand Canyon Working Plan: Uses, Information, Recreational Development*, Par. 51-A, December 1916 and revised March 1917. GRCA 28343, Museum Collection, Grand Canyon National Park.

⁸ Santa Fe Railway, Titan of Chasms: The Grand Canyon of Arizona.

⁹ J. Donald Hughes, In the House of Stone and Light: A Human History of the Grand Canyon (Grand Canyon Arizona: Grand Canyon Natural History Association, 1978), 70.

¹⁰ Forest Service, *Grand Canyon Working Plan: Uses, Information, Recreational Development*, Par. 53-A, December 1916 and revised March 1917. GRCA 28343, Museum Collection, Grand Canyon National Park.

Walter Wilson Crosby said Hermit Creek Trail was maintained in such excellent condition as to "warrant general praise from its users and to furnish a model for other trail maintenance."

Hermit Camp was constructed approximately 9 miles from the Hermit Trailhead and ¼ mile from Hermit Creek, and was reached by guided mule trips down the trail. The Camp could host 30 guests in its 14 buildings. Guests were lodged in tent frame cabins, which featured wood frame floors and double-cloth walls. The larger tent frames were finely appointed with Navajo rugs and could sleep 12. Stoves were provided to the guests on cold nights. Initially, all supplies were packed by mule; a tramway was later constructed to transport food and other supplies from Pima Point.

Hermit's Rest

Beginning in 1909, a number of rest house design sketches and construction drawings were submitted by various architects. It is unknown why none of these buildings were constructed, but it is presumed that it had to do with the delay caused by Cameron's injunction against the Santa Fe improvements.

The Hermit's Rest was designed by architect Mary Colter and constructed in 1914 at a cost of \$13,000. Its design is discussed in detail in the following chapters of this report. Visitors to the Hermit's Rest were hospitably served a cool beverage in the summer and hot tea in the winter by the Fred Harvey Company management. The Hermit's Rest was considered an accommodation to the public and not a commercial enterprise.¹²

Visitors' remarks from the Hermit's Rest guest register (1924) reveal the special experience created at this unique building:¹³

- "Just like reading a wonderful story."
- "True to its name."
- "Enchanted feeling."
- "The finest rustic place in the world."
- "Sublime beauty! Warm hospitality!"

Fred Harvey Company

Although the Santa Fe paid for the construction of its Hermit improvements and owned the actual buildings, its partner, the Fred Harvey Company, provided direct visitor contact at the Hermit's Rest and Hermit Camp. The Fred Harvey Company was renowned for its hospitality and service, and has been referred to as "the civilizer of the west."

Fred Harvey arrived in the United States from England in 1850. He held various jobs that began with kitchen help and led to his purchase of the Ellsworth Hotel in Ellsworth, Kansas in 1872. There he established a reputation for quality food. By 1875, together with his partner Jeff P. Rice, Harvey had expanded his restaurant operation into two eating houses located along the Kansas Pacific Railroad. Harvey successfully offered an alternative to the poor food and service common to eating houses located along the railroad line.

^{11 1922} Annual Report, Museum Collection, Grand Canyon National Park.

¹² Forest Service, *Grand Canyon Working Plan: Uses, Information, Recreational Development*, December 1916 and revised March 1917. GRCA 28343, Museum Collection, Grand Canyon National Park.

¹³ Fred Harvey Hotels Collection, 1896-1945, The University of Arizona, Special Collections.

With his existing eating houses gaining reputation, Harvey proposed the establishment of a chain of others along the Chicago, Burlington and Quincy Railroad. Although the Chicago, Burlington and Quincy Railroad was not interested, they suggested that Harvey propose his idea to the Atchison, Topeka & Santa Fe Railroad. Its President Thomas Nickerson was enthusiastic about the proposal, and the first eating house along the Atchison, Topeka & Santa Fe Railroad line opened in Topeka, Kansas in 1876. With this eating house, called a Harvey House, popular with both passengers and locals, Harvey was given permission to operate Harvey Houses in any Atchison, Topeka & Santa Fe Railroad building. By 1883, there were 17 Harvey Houses along the line. In 1889, the Fred Harvey Company expanded its service to railroad dining cars.

The Fred Harvey Company headquarters were located in Kansas City. Here, menus were centrally planned so as to not duplicate other Harvey House menus along the railroad line. Food was generally transported to the Harvey Houses from Kansas City on refrigerated train cars, which brought luxurious food to remote western locations for the first time.

Harvey Houses were known just as much for their waitresses, called Harvey Girls, as they were for the quality of food. Harvey Girls were young women of good character from the east and mid-west who provided excellent service. Dressed in the conservative Harvey Girl uniform, they represented propriety in the uncivilized West.

At the time of Fred Harvey's death in 1901, the Fred Harvey Company operated 47 restaurants, 15 hotels and 30 dining cars. His sons, Ford and Byron, assumed control of the Company.

In 1902, the Fred Harvey Company established the Indian Department, influenced by Fred Harvey's daughter Minnie Huckel and her husband John Frederick Huckel. The Indian Department sought to collect and sell art and artifacts by native people of the southwest to those traveling through the region. In some locations, native people demonstrated their craft directly. Architect Mary Colter was instrumental in designing authenticity into these retail areas.

As the speed of trains increased in the 20th century, many passengers preferred not to stop and depart at eating houses, and the Fred Harvey Company shifted to expanded dining car service. Most Harvey Houses closed during the Depression from a lack of use. Harvey Houses were no longer popular as automobiles became the preferred method of transportation and quality food became available in other restaurants.

After World War II, Byron Harvey's sons, Stewart and Daggett, took over the family business and expanded into scenic attractions, airports and downtown restaurants. By 1960, the Fred Harvey Company was the sixth largest food retailer in the United States. In 1968, it was sold to Amfac, Inc.

Mary Elizabeth Jane Colter

After several decades of relative obscurity, Mary Colter is now recognized as a pioneering architect whose distinctive and powerful architecture played a significant role in shaping the perception of the southwest. There is no better place to experience her work than at Grand Canyon National Park where, along the majestic South Rim, her buildings bookend the visitor's experience at Desert View and Hermit's Rest, contribute to the Grand Canyon Village's distinct architectural character and welcome the weary traveler at the end of their long journey deep in the canyon at Phantom

Ranch. Over a hundred years after her first work at Grand Canyon, Mary Colter's presence is still strongly felt in the park through the timeless buildings she created.

Early History

In 1869, Mary Elizabeth Jane Colter was born in Pittsburg, Pennsylvania to Irish immigrant parents who worked as clothiers. After several moves back and forth across the country during her childhood, the family settled in bustling St. Paul, Minnesota in 1880 where Colter was encouraged to explore her artistic talents.¹⁴

When Colter's father unexpectedly died in 1886, she convinced her mother to allow her to attend college in order to support the family as an art teacher. In 1887, Colter moved with her mother and her older sister to Oakland to attend the California School of Design. Colter remained at the school through its standard four-year curriculum, taking an apprenticeship with a San Francisco architect in order to support herself and provide training in a field that she was likely interested in pursuing, despite the extreme rarity of female architects at the time.¹⁵

Upon completion of the California School of Design's curriculum, Colter and her family returned to St. Paul. After working at smaller institutions, Colter took a job teaching freehand and mechanical drawing at the Mechanic Arts High School in 1892, where she would remain off and on until 1907.¹⁶ Always active, during these years Colter served as the literary editor for the St. Paul *Globe*. She was also a member of several clubs and organizations including the Art Worker's Guild of St. Paul and the progressive women's New Century Club. She often lectured to these organizations and others, and during this period began to gain recognition for her decorative work.¹⁷

Design Influences and Ideals

During the late-mid 19th century in England, several prominent aesthetes, exemplified by William Morris, wrote of their dissatisfaction with the "impact of the Industrial Revolution on the social organization, the methods of building, and the very moral basis of culture" as part of the Arts and Crafts Movement.¹⁸ This movement stressed the virtue of careful hand-craft over machine production and the use of materials and their joinery in such a way as to highlight and heighten their natural beauty. They advocated simplicity over excess in design and beauty in the creation of everyday objects. The Arts and Crafts Movement manifested itself in the design of nearly all objects, from the smallest utensil, to entire buildings. As an artist and craftsperson, Colter was exposed to these ideas in her training at the California School of Design and passed them on through her work and teaching when she returned to St. Paul.¹⁹ As her career as an architect and designer developed, her work continued to demonstrate a deep commitment to the Arts and Crafts Movement.

While many architects of the day, both in Europe and in America, adopted Arts and Craft ideals and incorporated them into their work, architectural education was still primarily influenced by the pedagogy of the *Ecole des Beaux Arts* in

¹⁴ Virginia L. Grattan, Mary Colter: Builder Upon the Red Earth (Flagstaff, Arizona: Northland Press, 1980), 4.

¹⁵ The architect with whom Colter apprenticed is unknown by her biographers. Arnold Berke, Mary Colter: Architect of the Southwest (New York: Princeton Architectural Press, 2002), 28.

¹⁶ Ibid, 31-32.

¹⁷ Grattan, 6.

¹⁸ William J. Curtis, Modern Architecture Since 1900 (London: Phaidon Press, 1997), 87.

¹⁹ Berke, Mary Colter: Architect of the Southwest, 30.

Paris. What architectural education Colter received would have been influenced by the teaching of the *Ecole*, which stressed:

maintaining continuity with the past; of balancing tradition and innovation; of studying the best historical examples from all periods in order to learn the principles of good design; of achieving unity, order, and simplicity through careful, rigorous compositional techniques; of striving for a rational synthesis of beauty and utility; and of the architect's role as an artist.²⁰

The *Ecole* served as the model for architecture schools that were just beginning to form across the United States. However, at the time that Colter was beginning to learn the trade of architecture in California, debate had begun about the appropriateness of the *Ecole*'s model for American schools and architects. While American architects recognized the merits of the general principles taught by the *Ecole*, there was considerable discussion as to what traditions were appropriate to follow in a place as seemingly new and diverse as America, and much talk was made of forging a distinctively American architecture.²¹

Inspired by the cultural and natural diversity of the United States, architects developed regionally-appropriate styles of American architecture. In the well-established east coast, McKim, Mead, & White and H.H. Richardson produced staid and stately architecture, primarily influenced by classical traditions. In the Midwest, lead by Frank Lloyd Wright, architects looked to the vast open spaces of the rapidly disappearing prairie for inspiration. And in places with rich Spanish pasts, such as California and Florida, architects such as Shepley, Rutan and Coolidge at Stanford and Carrère and Hasting at St. Augustine incorporated Spanish traditions into their architecture.²² While these examples represent an aesthetically diverse body of architecture, the underlying idea, that architectural traditions be appropriated to create place-specific, distinctly American architecture, represents the design spirit of the period.

Under these circumstances it is not surprising that, once introduced to the southwest by her association with the Fred Harvey Company, Colter identified with and admired the fine hand-craft of the native peoples and sought to create architecture that reflected the culture and landscape of the region in which she worked.

One of the most unique aspects of Colter's architecture is her deliberate infusion of new construction with details that suggest age and the creation of fascinating back-stories to the buildings that she herself wrote. The most common examples are the lonely hermit of the Hermit's Rest, the mysterious ancient master builders of the Watchtower and the eccentric Spanish *Don* and his family of La Posada in Winslow, Arizona. Having never been written down, these "histories" are present in the architecture of the buildings, and are passed along through their interpreters, adding as much to each building's character as the stones and wood with which they are constructed. While these romantic details and back-stories could be cynically viewed as part of a marketing technique advocated by the Fred Harvey Company, they are executed with such careful detail and nuance that they transcend mere commercialism.

Mary Colter and the Fred Harvey Company

It is no surprise that Colter eventually rose to prominence within the Fred Harvey Company. However, it is surprising that, in an era when women architects did not exceed 100 in the entire country, one of the most important companies

²⁰ Richard Longstreth, On the Edge of the World: Four Architects in San Francisco at the Turn of the Century (Cambridge, Massachusetts: MIT Press, 1983), 15.

²¹ Ibid, 16.

²² Ibid, 29.

in the nation gave her the opportunity to demonstrate her abilities.²³ There are several theories as to how Colter gained the attention of the Fred Harvey Company. In her biography of Colter, Virginia Grattan relates:

On vacation in San Francisco one year, [Colter] spent time with a friend who worked in a Fred Harvey gift shop. Mary became acquainted with the manager of the gift shop and indicated that she would be interested in working for Fred Harvey. Nothing came of that initial contact at the time, but she must have made a favorable impression. In the summer while at her cabin in the Minnesota woods, she was up on the roof making repairs when a Western Union boy from town appeared with a telegram. She was surprised at the length of the message—more than a hundred words. She was even more surprised to read that the Fred Harvey Company was offering her a job.²⁴

Another story, from in an article in Cañon Journal offers a variation:

Herman Schweitzer, manager of the Fred Harvey Company Indian Department, admired an arrangement of basketry in a northern California home and wrote to the owner of the home offering to hire her as a decorator. When he learned that Colter, rather than the collector, was responsible for the basketry arrangement, Schweitzer telegraphed Colter to offer her employment.²⁵

Karen Bartlett, in her documentary "A House Made of Dawn," hypothesizes that Minnie Huckel (nee Harvey), who assisted her husband, John Frederick Huckel in establishing the Fred Harvey Company's Indian Department, and having perhaps met Colter through Midwestern art circles, convinced her husband to hire Colter for one of the Indian Department's first important jobs.²⁶

However it came to be, the Fred Harvey Company hired Colter in 1902 to oversee the merchandise display design for their new Indian Building at the Alvarado Hotel in Albuquerque, New Mexico. The Indian Building featured a museum, demonstrations by Native American craftspeople and merchandise display. Inside the Indian Building, Colter successfully created a warm and inviting environment in which tourists could view Native American crafts.²⁷ Referring to the sales room, historian Leah Dilworth writes: "The room was a textbook lesson in a Southwest rendering of an arts and crafts interior."²⁸

After the completion of her work at the Indian Building, Colter returned to St. Paul. However, two years later she returned to the Company's employ. On the rim of the Grand Canyon, Colter, assisted by Hopi ethnographer H.R. Voth, took her knowledge of design, merchandise display and Native American craft and applied it to her first free-standing

²³ Mary N. Woods, From Craft to Profession, the Practice of Architecture in Nineteenth-Century America (Berkeley: The University of California Press, 1999), 99.

²⁴ Grattan, 6.

²⁵ Kathleen L. Howard and Diana F. Pardue, "Mary Jane Colter: Designing the Dreams of the West," *Cañon Journal* 2, no. 1 (Spring/Summer 1996): 32.

²⁶ Karen Bartlett, "In a House Made of Dawn: The Mary Colter Storey," *Craftsman Home Owner* 9, no. 1 (1997). Matilda McQuaid with Karen Bartlett, "Building an Image of the Southwest, Mary Colter, Fred Harvey Architect," in Weigle and Babcock, eds., *The Great Southwest of the Fred Harvey Company and the Santa Fe Railway*, 25 34n. Howard and Pardue, *Inventing the Southwest: The Fred Harvey Company and Native American Art*, 103.

²⁷ Berke, Mary Colter: Architect of the Southwest, 56.

²⁸ Leah Dilworth, *Imagining Indians in the Southwest: Presistent Visions of a Primitive Past* (Washington, D.C.: Smithsonian Institution Press, 1996), 87.

building, the Hopi House. The wares were presented in much the same fashion as they were at the Indian Building. Through meticulous research, including the study of a similar structure at Oraibi, a Hopi village in northern Arizona, the employment of Native American builders and the on-site housing of Native American craftspeople, Colter was able to create something resembling an authentic pueblo on the rim of the Grand Canyon, less than 100 yards away from the Fred Harvey Company's new luxury hotel, the El Tovar.²⁹

In 1910, after a stint as head of merchandise display at a Seattle department store,³⁰ Colter was hired permanently by the Fred Harvey Company as its architect and interior designer and relocated to St. Louis, where company headquarters was located.³¹

After several well-received interiors projects, Colter returned to the Grand Canyon where her first free-standing buildings in 10 years were constructed in 1914. While the Hopi House was a meticulously researched and exquisitely executed representation of a Hopi dwelling, her next projects at the Grand Canyon were intensely original and fantastic in nature. While the Hopi House offered little evidence that it rested on the brink of one of the most impressive chasms known to mankind, the Hermit's Rest and the Lookout Studio used their proximity to the Canyon as their primary design impetus. Where the Hermit's Rest is designed to slowly appear—first a chimney, then a rough stone wall, then a porch—from a pile of rocks as one approaches, the Lookout Studio is designed to be viewed from afar. Taken in all at once from the area around the El Tovar, the Lookout Studio seems to grow, partially formed, out of the cliffs that support it. Both are rustic and appear to be as much an ancient part of the landscape as the impressive scenes they frame.

Arnold Berke suggests that the design of these buildings may have been influenced by follies, once popular with landscape architects. He states:

Both Hermit's Rest and Lookout Studio are suggestive of follies, buildings that were popular in eighteenth-and nineteenth-century Europe, one-of-a-kind structures that adorned estates or parks with their eccentric shapes, materials, and placement. Follies were intended to enhance a view or create a picturesque effect. Some exhibit tricks of scale and materials, effects that Colter also employed. At times, they were designed purposely as ruins, usually gothic or classical, a description not inappropriate for the two Colter buildings with their built-in age and somewhat tumble-down demeanor. The imaginative observer might even see them as reduced—or ruined—versions of structures that were once more formal. One difference stands out, however, Follies were rarely planned with specific uses in mind. The Colter buildings were.³²

In 1922, the Colter-designed Phantom Ranch opened to accommodate weary travelers who made the long trip to the Colorado River deep inside the Grand Canyon. While this collection of buildings is not as fantastic in nature as either the Hermit's Rest or the Lookout Studio, the rustic structures fit seamlessly into their surroundings and are a testament to Colter's ability to create site-appropriate architecture.

²⁹ Arnold Berke, "Drawing from the Desert," *Preservation*, (July/August 1997): 40-41.

³⁰ Berke, Mary Colter: Architect of the Southwest, 70.

³¹ Ibid, 73.

³² Ibid, 103.

In 1923, the El Navajo, Colter's first hotel, opened in Gallup, New Mexico. The distinctive building combined the streamlined aesthetics of modern design with regional Native American motifs. The building also incorporated several Navajo sand paintings made exclusively for the building. Sand paintings were considered a sacred art by the Navajo people and unseen by most Americans at the time causing a controversy over their display.

The late 1920s brought Colter to Winslow, Arizona, where she worked on what she considered her finest building.³³ La Posada, one of Fred Harvey's most ambitious hotels, represents Colter's most holistic design. She conceived of everything from the building's history to its ashtrays. La Posada was envisioned as the sprawling home of a Spanish *Don* and his family that had been added on to over generations.³⁴ Thus the building contains an eclectic mix of Spanish motifs, juxtaposed in a way that suggests additions over several decades. At La Posada, Colter produced her only complete landscape plan,³⁵ and even set up a workshop on-site to produce the furniture that she designed specifically for the hotel.³⁶ What little that Colter did not design, she painstakingly collected from across the globe.³⁷ The hotel opened to much fanfare in 1930.

Shortly thereafter, Colter returned to the rim of the Grand Canyon to design an observation building for the park's Desert View area. In preparation, Colter spent six months traveling the southwest studying Native American constructs, particularly tower structures like the one found at Hovenweep.³⁸ These towers were the inspiration for Colter's building at Desert View, known as the Watchtower.

The Watchtower combines the meticulous anthropological research that went into the design of the Hopi House with the eclectic and eccentric detailing that imbued the Hermit's Rest and the Lookout Studio with their fantastical qualities. Unlike the Hermit's Rest and the Lookout Studio, which recede into their environs, the Watchtower soars over the surrounding landscape and can be seen for miles. Such a visually dominant structure required uncompromising design, which Colter fulfilled admirably. By using more rusticated masonry near the base, along with carefully placed "ruins," all constructed out of stones collected nearby, the Watchtower transitions seamlessly into the craggy rim of the canyon. From a distance, it is undeterminable whether the building is a ruin or a modern construct. The strange and unmistakably human-made details, such as unusual masonry patterns found throughout the tower, are not visible until one is near the building. Famed Hopi artist Fred Kabotie painted murals on the interior. Colter wrote a lengthy handbook for guides with the onerous task of explaining her complex building to visitors.³⁹ In November of 1932, the building was opened with a celebration involving an elaborate Hopi blessing, dancing and other rites performed by Hopi and Navajo peoples.⁴⁰

In 1935 and 1936, Colter rehabilitated the dilapidated Bright Angel Camp into the Bright Angel Lodge in Grand Canyon Village. Instead of creating one large, imposing structure on the rim of the canyon, Colter constructed smaller

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33 Grattan, 59.
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³⁴ Grattan, 60.

³⁵ Berke, Mary Colter: Architect of the Southwest, 176.

³⁶ Grattan, 60.

³⁷ Berke, Mary Colter: Architect of the Southwest, 168.

³⁸ Ibid, 69.

³⁹ Mary Colter, Manual for Drivers and Guides Descriptive of the Indian Watchtower at Desert View and Its Relation, Architecturally, to the Prehistoric Ruins of the Southwest.

⁴⁰ Berke, Mary Colter: Architect of the Southwest, 206.

structures to tie together existing buildings and extend the available accommodations. As part of the complex, she created a village of cabins, each unique in layout and construction. One of the highlights of the main building is a "geological" fireplace that Colter designed, with the help of park naturalist Edwin McKee, to accurately represent the geological stratification of the canyon.⁴¹

In 1937, Colter reportedly completed her final free-standing buildings, although her involvement with these utilitarian buildings is questionable. The Men's and Women's Dormitories at the Grand Canyon, for Fred Harvey employees, are the only buildings Colter is associated with whose use was not directly related to tourism. The only "Colter-like" elements of these buildings are the wavy edges to the clapboards in the gables.⁴²

While the above summary focuses on buildings designed by Colter, she was involved with dozens of building additions and interior projects that she dedicated herself to as fully as her own buildings. Following the completion of the dormitories at the Grand Canyon, Colter continued her work for the Fred Harvey Company on several renovation and interior design projects. In 1948, she retired in Santa Fe, where she spent a good portion of her time finding appropriate archives and museums to donate her extensive collections of Native American wares, rare books and other artifacts. After a long and thoroughly productive life, Mary Elizabeth Jane Colter died in Santa Fe in 1958.

Mary Colter's Legacy

The power, wonder and appropriateness of Colter's work can be attributed to a true fascination with the culture, traditions and natural beauty of the region where it was produced, a dedication to the design ideals of the time and likely, encouragement from the Fred Harvey Company to produce architecture that instilled that fascination in their customers.

Colter's buildings at the Grand Canyon are some of the most visible structures in the National Park Service system and helped influence the agency's style of architecture. Berke states:

Colter helped pioneer and reinforce the approach to design that later came to be called 'National Park Service Rustic.' This idiom—which emphasized simplicity, ruggedness, and the use of native materials—dominated architecture in the national parks nationwide from the 1920s into the early 1940s, producing a diverse body of highly original buildings and other improvements that attempted, above all, to fit in to the natural environment.⁴³

With the publication of Virginia Grattan's biography *Mary Colter* in 1980, she began to receive the recognition that her work merits. Since then her work has become one of the most interpreted elements at the Grand Canyon and it continues to fill visitors with the same sense of wonder and awe that it did 100 years ago. With the exception of the El Navajo Hotel in Gallup, New Mexico, which was partially demolished, nearly all of her free-standing structures remain in their original uses.⁴⁴ All of her extant buildings are listed in the National Register of Historic Places, and five of her structures: Hopi House, Hermit's Rest, Lookout Studio, Watchtower and Bright Angel Lodge are National Historic Landmarks.

⁴¹ Ibid, 215.

⁴² Ibid, 222.

⁴³ Ibid, 219.

⁴⁴ Nearly all of Colter's interiors projects have been extensively modified or destroyed.

Statement of Significance

The Hermit's Rest is significant as an early tourism development by the Santa Fe, a superb example of Mary Colter's site-specific romantic architecture and a site of Fred Harvey's renowned hospitality.

For the purposes of this report, the period of significance should include the dates in which the building maintained its original design and materials.

The Hermit's Rest was completed in 1914. With the exception of only limited features, the Hermit's Rest retains its original design and materials. Thus, the period of significance is 1914-present.



FIG. HB1: Louis Boucher, circa 1910 (Source: GRCA, Museum Collection, Photograph 5972).



FIG. HB2: Mary Colter, circa 1919 (Source: GRCA, Museum Collection, Photograph 16951).



FIG. HB3: Wagon train on Hermit Rim Road, circa 1914-1919 (GRCA 26365).



FIG. HB4: Residence and stables at Hermit Trailhead, circa 1926 (Source: GRCA, Museum Collection, Photograph 17717).

CHRONOLOGY OF DEVELOPMENT AND USE

The Santa Fe Railway planned the construction of a rest house at the termination of the proposed Hermit Rim Road as early as 1909. Before Mary Colter's design for the Hermit's Rest, numerous proposals were formalized on the drafting table, some signed by architects and others unspecified. Designs ran the gamut in style and size, and included a two-story Swiss chalet style building; a long, narrow open-air stone and log pavilion with multiple fireplaces; a one-room clapboard-sided building with a fireplace and veranda; and a one-story stone building with a semi-enclosed pavilion. Five alternate designs were located by the project team and are included in Appendix A.

Construction

The final construction drawings are titled "Plans of Rest House at Hermit Rim" and dated May 9, 1914. The set of six drawing sheets include floor and roof plans, elevations, sections and details. They are unsigned and the architect unspecified, but the design is widely acknowledged as Mary Colter's. The drawings were made for the Fred Harvey Company. The original drawings are contained in Appendix B.

It is presumed that construction began soon after, but documentation does not exist as to the specific dates of construction. Furniture and fixtures, some made specifically for the Hermit's Rest, were invoiced and received by March 31, 1915. The first dated photograph of the Hermit's Rest is from April 1915 and it is presumed that the building was completed and furnished before this date. The Hermit's Rest was constructed at a cost of \$13,000.45

Mary Colter infused the building with the sense that it was constructed by a lonely and eccentric hermit from materials that would have been available nearby. Through intentionally naïve details, such as the structurally excessive lintels over the exterior doors, Colter strengthened the appearance that the building was built by one with good intuition, but little conventional training.⁴⁶

This one-story stone building had the appearance of a natural stone outcropping from the hill to the south, aided by its earth and stone covered roof. Composed of random rubble and hewn, unfinished logs, the Hermit's Rest was well-suited to its environment, perched on the rim of Grand Canyon within a pinyon pine forest. Its porch helped both extend the building toward the canyon's rim and provide a security buffer from its dangers.

The interior included a central room with a prominent fireplace area to the rear (heretofore referred to as the Great Room), flanked by a caretaker's private room to the east (heretofore referred to as the Secondary Room), and a kitchen (Kitchen) and women's restroom to the west (heretofore referred to as the Office for its current use). The fireplace area had a domed stone ceiling and was elevated a step above the rest of the interior.

Attention to rustic detailing was carried out in the building's materials as well as its furniture and fixtures. Although some furniture was ordered from manufacturers, most Great Room furniture was made by the Santa Fe Railway. These pieces, which included wood chairs, tables, benches and a clock, were made to appear much older than they actually were. Much of the iron work was also made by the Santa Fe, including andirons, ornamental hinges, candelabras and lanterns. Other decorations included a bear trap, mounted eagle and various animal skins.

⁴⁵ Forest Service, *Grand Canyon Working Plan: Uses, Information, Recreational Development*, December 1916 and revised March 1917. GRCA 28343, Museum Collection, Grand Canyon National Park.

⁴⁶ Berke, Mary Colter: Architect of the Southwest, 93.

The Hermit's Rest was constructed as specified on the original drawings except for some minor alterations. Concrete scored with a flagstone pattern was laid for the Great Room floor instead of the specified flagstone (except in the fireplace area where flagstone was used). Rough stones were installed around the Great Room fireplace instead of smooth stones incised with designs. A bench between the Great and Secondary Rooms was not built. Instead of setting the finished floor of the Secondary Room lower than the Great Room, they were built at the same floor level. The closet configuration in the Secondary Room was modified from the southwest corner to the southeast corner. Lastly, the location of a concrete cistern may have been moved from the west side of the building to the north side, and located under the protruding semicircular porch floor area.

Although the Hermit's Rest was designed to appear as a rustic structure of older vintage, it is stabilized by modern building materials effectively masked. Hidden within the two wood posts in the Great Room are 6" pipes filled with concrete. Hidden within the ceiling is a concrete one-way joist slab that provided extra support for the stone veneers at the clerestory and the stone infill on the roof.

Original Site Features

A stone corbel arch welcoming visitors to the Hermit's Rest was constructed contemporaneously with the building, and was a popular feature. The corbel arch was sited adjacent to Hermit Rim Road. The bell, cracked at the time of installation, was brought by Colter from New Mexico. It was suspended by chain hung on a log between the stones over the corbel arch. Reportedly, it was good luck to throw a rock over one's shoulder at the bell. Iron lettering spelling out "Hermits Rest" was forged by the Santa Fe Railway and installed on the stone.

A stone lamppost and stone oven were constructed nearby; it is presumed that they were constructed at the same time as the building and corbel arch. The Great Room chimney and lamppost have the same general shape and top configuration. These features are cylindrical in shape and composed of random rubble. Near the top, long, narrow stones were placed on their ends leaving openings between them. Narrow stones were placed horizontally above them. Originally, the lamppost would have housed a candle. Because the oven has since been altered and no historic photographs of it exist, it is unknown if the oven once shared the same detailing as the chimney and lamppost.

Other site features included stone stairs to a hidden overlook approximately 75 feet below the rim and stone stairs up the hill on both sides of the Hermit's Rest, encouraging visitors to experience the earth and stone covered roof.

Original Use

Initially, Hermit Rim Road was open to stage coach travel only. Most visitors to the Hermit's Rest arrived by Santa Fe stagecoach from El Tovar, at a rate of \$3 roundtrip. After their 8-mile west-bound journey, they would stop at the Hermit's Rest for cold beverages in the summer and hot bouillon in the winter. Refreshments were provided at the Hermit's Rest free of charge to these patrons and at a nominal fee to others.⁴⁷ Refreshments were prepared by a resident caretaker who was employed by the Fred Harvey Company. The Hermit's Rest originally functioned as a place of relaxation and did not offer anything for sale.

Some visitors stopped at the Hermit's Rest on their way to Hermit Trail where the Santa Fe offered guided mule trips. Visitors had the option of staying the night at Hermit Creek Camp and returning up the Hermit Trail, or continuing to

⁴⁷ Those who arrived at the Hermit's Rest on their own paid an entrance fee that included beverage service.

the Bright Angel Trail by way of the Tonto Trail. To support this mule operation, the Santa Fe had constructed a corral, stock shed, bunkhouse, shed and toilets at Hermit Trailhead by 1921. This configuration can be seen on a platt drawing contained in Appendix B.

Alterations under Santa Fe Ownership

In 1919, management of Grand Canyon National Park shifted from the U.S. Forest Service to the National Park Service. Soon after, the National Park Service opened Hermit Rim Road to private vehicular transportation. It is likely that visitation to the Hermit's Rest increased at that time. At some point, the Santa Fe began offering vehicular transportation to the Hermit's Rest in lieu of carriage trips. This change may have coincided with the opening of the road to other vehicles.

In 1924-5, a house was constructed for the caretaker of the Hermit's Rest. This three-bedroom house had a stone foundation and vertical board and batten siding. The plans, modified by the Santa Fe from their standard Five Room Section House, are dated July 3, 1924. The caretaker's house was situated on the hillside to the southwest of the Hermit's Rest, on the opposite side of the Hermit Rim Road. It is presumed that the caretaker's room at the Hermit's Rest was vacated and opened to the public at this time.

The use of the Hermit's Rest likely changed in the last half of the 1920s as visitor facilities were centralized in Grand Canyon Village. With the completion of the Kaibab Trail by the National Park Service in 1925, visitors had an alternative to both the distant Hermit Trail and the Bright Angel Trail, which required a toll. In 1928, the National Park Service obtained the Bright Angel Trail from Coconino County and quickly lifted the toll charge, further expanding trail options. The Kaibab and Bright Angel Trails were located in close proximity to the park entrances, railroad depot and lodging, limiting the utility of the Hermit Trail. In 1930, the Fred Harvey Company abandoned Hermit Creek Camp and all but the top two miles of Hermit Trail.⁴⁸ It is presumed that the developments at Hermit Trailhead, including stables and a residence, were removed soon after.⁴⁹ The Hermit's Rest, the last privately-owned development of the Hermit improvements, remained opened to visitors on both guided trips and in private automobiles.

In 1929, the Fred Harvey Company assumed all inner-park trips from the Santa Fe, including the Hermit Rim Road trip to the Hermit's Rest. They have offered guided trips to the Hermit's Rest ever since, except during modern road construction and World War II.

Hermit Rim Road, once the most modern of all park roads, was in poor condition and required replacement by the early 1930s. Planned by the National Park Service and the Bureau of Public Roads, the new road closely followed Hermit Rim Road with some alignment changes. Whereas Hermit Rim Road passed to the south of the Hermit's Rest and terminated at the Hermit Trailhead, the West Rim Drive terminated in a loop parking lot before reaching the Hermit's Rest.⁵⁰ This alteration left the stone corbel arch off to the left and not in the proper location for visitors to pass

 $^{48\} The\ Hermit\ Creek\ Camp\ was\ dismantled\ and\ burned\ in\ 1936.$

⁴⁹ According to correspondence between the Grand Canyon Railway Company and the Fred Harvey Company, the Grand Canyon Railway owned the following buildings at the Hermit's Rest in 1935: rest house, women's toilets (wood with shingle roof); concrete water tank; caretaker's house (wood with shingle roof); men's toilets (wood with shingle roof); store house (log slabs); ice house (add., log slabs); garage (wood); and platform (mas., concrete). Grand Canyon Railway Company to Fred Harvey Company, 31 January 1935, Atchison, Topeka & Santa Fe Collection, Kansas State Historical Society.

⁵⁰ Colter was consulted over changes to the road and parking area during the planning stage.

through on their approach to the Hermit's Rest.⁵¹ Construction on the new West Rim Drive began in October 1934 and was completed in July 1937.⁵² The corbel arch was either moved or reconstructed at some point between December 1935 and July 1936.⁵³ It retained its original form in this new location. Once relocated, a paved walkway was constructed through the corbel arch.

In 1942, the Office of Defense Transportation ordered all sightseeing busses to discontinue service in order to conserve resources needed for the war effort. With limited visitation, the Hermit's Rest closed in June 1942 and did not reopen until April 1946 when bus service resumed. By the time the Hermit's Rest reopened, the Hermit Trail was nearly obliterated and the nearby chemical toilets were deteriorated beyond repair.⁵⁴ It is unknown if the Hermit's Rest received any maintenance upon reopening.⁵⁵

Fred Harvey Company Ownership and National Park Service Site Work

In 1954, the Santa Fe donated all water, power, road and trail system interests and easements to the National Park Service for \$1. In the same year, they sold all tourist facilities, including the Hermit's Rest, to the Fred Harvey Company for \$1.5 million.⁵⁶

In 1960, the National Park service rehabilitated the paths to the Hermit's Rest to meet a Mission 66 goal. Paths were constructed with a bituminous surface and bordered by rocks. Other site work included 978 linear feet of masonry curbing, 80 square feet of masonry walls and general cleaning of the area. The stone stairs down the canyon to the hidden overlook were likely removed as part of this project. Asphalt overlays were applied to the paths in 1979.

Mass-Transit Service

With increased automobile usage on the narrow West Rim Drive causing hazardous and inefficient conditions, the National Park Service proposed a mass-transit system as early as 1971. A public bus system was instated in 1974. It was hoped that controlling the visitation to the Hermit's Rest would limit the likelihood of damage to the building due to visitor activities.⁵⁸

Public busses were available free of charge during the summer season and private automobile usage was limited to the winter season. Busses traveled between the junction of Village Loop and West Rim Drives, and the Hermit's Rest. Free shuttle bus services are still offered to the Hermit's Rest.

⁵¹ Report on Inspection of Survey of the Hermit Rim Road and the Hermit Rim Supai Connection, dated August 14, 15 and 17, and 19, 1931, GRCA 75291. Report on Survey and Proposed Construction on all of Route 8, Hermit Rest, Grand Canyon National Park, dated 1934, GRCA 34279a. Museum Collection, Grand Canyon National Park.

⁵² Monthly Narrative Report for July 1937, Museum Collection, Grand Canyon National Park.

⁵³ Monthly Narrative Report for July 1936 to Chief Architect by Alfred Kuehl, Resident Landscape Architect. GRCA 71322, Museum Collection, Grand Canyon National Park. Chief Engineer F.A. Kittredge to National Park Service Director, 23 December 1935, GRCA 75213, Museum Collection, Grand Canyon National Park.

⁵⁴ It is unknown when toilets were first constructed near Hermit's Rest. Toilets are included on a 1921 site plan. It is presumed that these toilets were constructed and maintained by the Santa Fe. The National Park Service discussed constructing and maintaining comfort stations at Hermit's Rest after the completion of the West Rim Drive. It is presumed that they were constructed at that time.

⁵⁵ Santa Fe maintenance crews were in the park to complete maintenance on facilities closed during the war. It is unknown if work included the Hermit's Rest.

⁵⁶ The Santa Fe retained all railroad-related buildings, including the depot and site, employee housing on Avenues A, B, and C, and the railroad right-of-way.

⁵⁷ Obliteration of the stairs is specified on the drawing titled Hermit's Rest Rehabilitation (NP GC-2285a), dated 5 October 1960.

⁵⁸ Grand Canyon National Park, *Draft Environmental Statement, Proposed Development Concept Plan, Grand Canyon Village* (Unpublished, 1974). It is unknown if visitor use threatened the building or if visitors had caused actual damage to the building or site before that time.

Legal Protection

In an attempt to organize the Grand Canyon Village into usage zones, the *Proposed Development Concept Plan* (1974) specified the removal of many buildings. But the Hermit's Rest was spared from the theoretical wrecking ball because it "was designed for its setting and could not be moved without destroying the historic environment." ⁵⁹

The Hermit's Rest was individually listed in the National Register of Historic Places on August 7, 1974. It was listed as significant for its unusual architectural features and its long-standing use as a concession building.

Undated Alterations

Little photographic and written documentation exists for maintenance and alterations to the Hermit's Rest before the 1980s. The project team has uncovered earlier alterations by comparing photographs from various time periods but the date of alteration is unknown in many instances. These alterations are grouped according to site, exterior and interior modifications. Dated modifications from 1977 – present are addressed in the following section, *Modern Improvements*.

Site:

- Water tank installed on the south side of the Hermit's Rest, after 1962⁶⁰
- Stone corbel arch's log bell support replaced with railroad track, before 1976
- Stone wall constructed on the south side of the west path, before 1983
- Two telescopes added to the porch area, before 1987
- Paved walkway (constructed 1936) under the corbel arch removed, before 1990
- Stone stairs on the east and west sides of the Hermit's Rest removed, era unknown
- Stone oven mortared closed, era unknown

Exterior:

- South stone retaining wall, before 1962
- Wood members painted, after 1936/ before 1969
- Most horizontal log porch members cut short and flat, before 1969
- Lowest level of porch floor filled with concrete, before 1969
- Original log porch roof covering removed, after 1936 / before 1969
- Earth and stone removed from the roof, after 1969 / before 1983
- Wood trim painted green, after 1969 / before 1983
- Sheet metal installed over horizontal log porch members, before 1983
- Roof covered with black tar, before 1983
- White elastomeric roof applied, after 1983 / before 1988
- Exterior door to Secondary Room rebuilt, before 1994

Interior:

- Mounted eagle and animal skins removed from Great Room, after 1940 / before 1960
- Floor waxed in Great Room, 1974⁶¹

⁵⁹ Grand Canyon National Park, Draft Environmental Statement, Proposed Development Concept Plan, Grand Canyon Village (Unpublished, 1974), 82.

⁶⁰ This water tank replaced a water tank that previously existed in the same area. It is unknown when the first water tank was installed. 61 Diana Wadsworth. Email to author, 18 September 2007.

- Women's restroom converted into Office, before 1984
- Propane heaters installed in Great Room, before 1987
- Doors removed between Great Room and Secondary Room, before 1987
- Candelabras relocated from Great Room posts to fireplace wall, after 1950 / before 1994
- Guest register removed from location on Great Room post, before 1994
- Dropped ceiling installed in Great Room entrance area, before 1994
- Secondary Room fireplace rebuilt, before 1994
- Carpet installed in the Secondary Room, before 1994
- Propane heater removed from southeast corner of Great Room, after 1994
- Hall partition wall between Kitchen and women's restroom (Office) removed, after 1994
- Pantry removed from Kitchen, era unknown
- Board and batten wall and ceiling covering removed from Kitchen, era unknown
- Original cabinets on north and west walls removed from Kitchen, era unknown
- Vinyl tile installed on Kitchen floor, era unknown

Modern Improvements

The Hermit's Rest and other Mary Jane Colter buildings began to receive attention and praise after the publication of Virginia Grattan's book, *Mary Colter*, in 1980. Together with the Indian Watchtower, Lookout Studio and Hopi House, the Hermit's Rest was listed as a National Historic Landmark on May 28, 1987.

The Fred Harvey Company undertook a number of improvement projects on the Hermit's Rest and its site. These improvements included:⁶²

- Removed 250 cubic yards of earth from behind the Hermit's Rest to restore original grade (1977)⁶³
- Removed abandoned concrete water tank and foundation (1977)⁶⁴
- Constructed asphalt-roofed porch addition to the west of the original porch (1980)
- Re-roofed building (1982)
- Remodeled Kitchen (1983)⁶⁵
- Installed sewage lift station for Kitchen to deliver grey water to septic system instead of over the rim (1992)

In the early 1980s, Thomas Bredlow, a Tucson metalworker, repaired a number of features in Colter's Grand Canyon buildings for the Fred Harvey Company. Repairs at the Hermit's Rest included:

- Made and installed the letters "H" and "T" on the corbel arch (1982)
- Made dragon head-handled fireplace tongs (1982)
- Repaired andiron by straightening arm and bad crane hinge (1983)
- Made a trivet for the copper tea kettle in the Great Room (1983)
- Fixed the drooping Office door (1984)⁶⁶
- 62 Northern Arizona University, Cline Library, Fred Harvey Collection, 1936-1995, NAU.MS.289
- 63 The exact nature of this work is unknown.
- 64 This concrete tank was located near the present septic tank.
- 65 The extent of the remodeling is unknown.
- 66 Specific documentation as this work does not exist. According to Thomas Bredlow, it is likely that he repaired the door hinges. Bredlow, Thomas. Interview by author. 10 July 2007.

- Installed switches on the lamp cords (1984)
- Made a replacement for the missing porch bear trap (1984)⁶⁷
- Tightened the candle cups on the candelabras (1984)
- Made steel hangers and installed ceiling fans (1984)⁶⁸
- Made and installed a missing section of punched zinc for lamp at the lamppost (1984)
- Stabilized a wood chair and replaced cowhide seat in-kind (1985)
- Replaced the missing handle on the Dutch oven (1985)
- Installed a screen within the Great Room chimney (1985)
- Installed a damper for Secondary Room fireplace (1985)

It is unknown when the original use of the Hermit's Rest as a rest place with limited refreshment service was modified into a curio shop.⁶⁹ By the mid-1990s, the building was far overshadowed by its modern function as a curio shop. Merchandise shelving was placed against all available surfaces, including doors and windows, around the Great Room's wood posts and in the fireplace area. A total of three cashier counters were installed, including two in the Great Room and one in the Secondary Room. Views of and within the Hermit's Rest were impaired by the dense display.

By 1995, park staff recognized the importance of the Hermit's Rest and the aesthetic damage inflicted upon it by the extensive merchandise display. The *General Management Plan* (1995) called for the above-mentioned Colter buildings, including the Hermit's Rest, to be converted back to their original uses and characteristics, and their gift shops reduced in size. The *Plan* said:

Hermit's Rest will once again be a rest area with a small gift shop and limited food service in spaces that were historically used that way.⁷⁰

In the same year, the Hermit's Rest site was rehabilitated. Planned work included painting and restoring the building exterior, striping the parking lot, rehabilitating the rock wall, and realigning the entrance path, recycling and trash. Due to the increased threat of vandalism, the entrance path was not realigned to pass through the stone corbel arch as planned. No further documentation of the rehabilitation work exists.

Other improvements and work continued throughout the late 1990s. In 1997, changes were made to the menu at the Hermit's Rest to minimize onsite food preparation and, for the first time, park staff identified retailing themes for its historic facilities, presumably including the Hermit's Rest. In the same year, park staff prepared a Cultural Landscape Report for the Hermit's Rest site.⁷¹

⁶⁷ The bear trap replica was based on historic photographs. The original bear trap was stolen or removed at some point between 1970 and 1982, according to Thomas Bredlow. Bredlow, Thomas. Interview by author. 10 July 2007.

⁶⁸ The ceiling fans were installed to bring warmth into the Secondary Room where staff worked at a sales counter. The lamps that are currently suspended from the ceiling fans were located in this area prior to the installation of the fans. Bredlow, Thomas. Interview by author. 10 July 2007.

⁶⁹ The Hermit's Rest functioned, at least in part, as a curio shop by 1959. *The Grand Canyon of Arizona*, 1959, Special Collections, The University of Arizona.

⁷⁰ Grand Canyon National Park, General Management Plan (1995), 40.

⁷¹ The Project Statement (dated 12 November 1996) stated that a draft Cultural Landscape Report had been prepared by park staff with the aid of a landscape architect. This report has not been located by the project team or National Park Service staff. It is unlikely that the report was finalized.

In the following year, Grand Canyon National Park Lodges (now Xanterra Parks & Resorts), the successor company to the Fred Harvey Company, continued to reduce the excessive merchandise displays and make other improvements. A drop ceiling in the entrance area of the Great Room was removed and a non-original log slab ceiling exposed.⁷² When the dropped ceiling was removed, ceiling-mounted fluorescent light fixtures were replaced with unobtrusive track lighting in the Great and Secondary Rooms. To the west of the Hermit's Rest, a small stone wall was constructed on the north side of the path. A Formica countertop on the exterior below the north Kitchen window may have been removed at that time.

Since 1999, Xanterra has electronically tracked all maintenance on the Hermit's Rest. Electronic records reveal regular repairing of heat and plumbing issues, painting of the building exterior and porch steps and patching of the roof. Moisture penetration to the interior was a recurring problem and has been treated by multiple methods. In 2001, the roof edges were tarred to prevent leaking in the Great and Secondary Rooms and the Kitchen. In the years since, Henry's 208, Magicrete 10 and foam life were applied to the roof to prevent leaks in the Great Room fireplace area. In 2004, the drains were restructured to prevent water penetration into the Kitchen. The roof was last patched in 2006. Other work included:

- Patched holes to prevent rodent access (1999, 2003)
- Installed a slat wall in the Secondary Room (2000)
- Installed weather-stripping on doors and windows (2002)
- Replaced the front door handle (2003)
- Installed a folding tray on the exterior of the Kitchen door (2003)
- Replaced chinking above the Great Room door (2003)
- Removed the Kitchen screen door (2004)
- Installed a handle on the Kitchen door (2004)
- Replaced a fallen stone in the fireplace wall (2004)
- Replaced several latilla in the ceiling, blending as well as possible (2005)
- Repaired the stone wall under the porch (2005)
- Installed a new conduit and outlet for the cookie oven (2006)
- Installed heat tape and black insulation on the septic water line to prevent freezing (2006)

In 2006, the National Park Service constructed modern comfort stations in the same location as the previous comfort stations. Eight toilet rooms are contained within four buildings.

Contemporary Use

Xanterra continues to own and operate the Hermit's Rest under contract with the National Park Service. The current contract (CC-GRCA001-02) is effective 1/1/2002 – 12/31/2011. The contract required Xanterra to further scale back their merchandise displays at the Hermit's Rest and develop site-specific retail items.⁷³

⁷² The original ceiling treatment resembled the clerestory ceiling, with large log beams running east-west and latilla running perpendicular between the beams. It is likely that the existing log slab ceiling was installed sometime prior to the (since removed) dropped ceiling. It is unknown when the log slab or (since removed) dropped ceilings were installed.

⁷³ The contract specifies that merchandise should relate to the Hermit's Rest theme of early history of the area, including the stagecoach destination and trails development. The overall ambiance should be that of a gathering and resting place. Under the contract, the sale of other merchandise is allowed to meet visitor needs.

Xanterra has a limited merchandise display in the Great Room and a denser display in the Secondary Room. A sales counter in the west side of the Great Room helps block visitor access to the Kitchen and Office. A snack shop is operated out of the Kitchen, with a sales window on the north elevation. Xanterra generally employs ten people at the Hermit's Rest, with the manager residing in the Caretaker's Residence.

In 2006, a List of Classified Structures update listed the Hermit's Rest in *fair* condition. The impact level was low, with the primary negative impact to the building stated as *visitation*, and *weather* and *erosion* also mentioned. The ultimate treatment was *rehabilitation*.

Future Goals

The National Park Service plans to repave Hermit Road (previously known as West Rim Drive) in 2008, necessitating the closure of the Hermit's Rest. The road will likely be closed for up to one year, and maintenance of the Hermit's Rest is planned to coincide. This *Historic Structure Report* will outline rehabilitation needs and propose treatments to occur at that time.

As part of the maintenance project, Xanterra intends to complete roof replacement and HVAC (heating, ventilation and air cooling) work.⁷⁴ At this point, Xanterra plans to remove the built-up roof and install a membrane system. To remedy the warm summer temperatures in the Secondary Room, they wish to either install an exhaust fan or evaporative cooler in its chimney, which is no longer functional. These proposals are addressed in the *Treatment & Use* section of this report.

⁷⁴ The Concession Contract CC-GRCA001-02 obligates Xanterra to complete a facilities improvement program at the South Rim. This program includes renovation at Hermit's Rest, specifically the replacement of a storage building and septic system at a cost of \$451,575. Work was to start approximately January 2003.



FIG. CD1: Entrance to Hermit Rim Road, circa 1927 (Source: GRCA, Museum Collection, Photograph 18132).

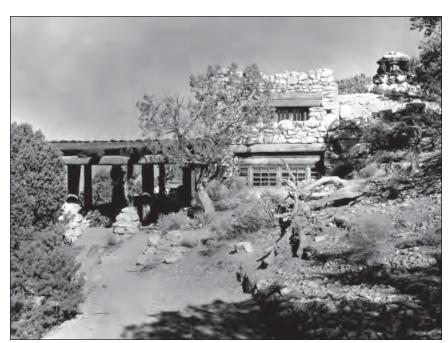


FIG. CD2: West elevation, 1936 (Source: GRCA, Museum Collection, Photograph 7514).



FIG. CD3: Porch area facing west. Note two steps in porch floor, projecting horizontal log beams, and concrete footing for log post, circa 1920-1930 (Source: Northern Arizona University, Cline Library, Mrs. Carl Springer Collection, NAPHS.PH.670.34).

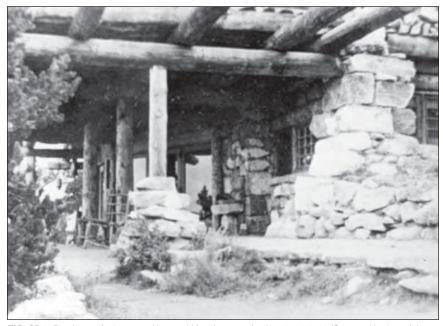


FIG. CD4: Porch area facing east. Note multi-level approach, circa 1914-1929 (Source: Northern Arizona University, Cline Library, Dorothy Steege Collection, NAPHS.PH.679.141).



FIG. CD5: The Hermit's Rest facing northeast, circa 1920-1930 (Source: Northern Arizona University, Cline Library, Emery Kolb Collection, NAU.PH.568.5687).



FIG. CD6: View of the Great Room chimney facing northwest showing the original roof configuration, circa 1920 (Source: Northern Arizona University, Cline Library, Fred Harvey Collection, NAU.PH.95.44.45.2).



FIG. CD7: View of the Hermit's Rest facing southwest showing (non-extant) staircase down the canyon to the hidden overlook, circa 1914 (Source: GRCA, Museum Collection, Photograph 11432).



FIG. CD8: View of the Great Room facing south. Note beams and latilla of original ceiling configuration near entrance, circa 1916 (GRCA 22664).



FIG. CD9: View of the Great Room facing southwest, circa 1916 (GRCA 22643).



FIG. CD10: View of the Great Room facing southwest, circa 1916 (GRCA 22665).



FIG. CD11: View of the Great Room facing northwest, circa 1916 (GRCA 22646).



FIG. CD12: View of the Great Room facing northeast, circa 1916 (GRCA 22644).



FIG. CD13: View of the Secondary Room facing southeast. Note original fireplace configuration, circa 1916 (Source: GRCA Museum Collection, Photograph 11431).



FIG. CD14: View of the Kitchen facing west, circa 1916 (GRCA 22645).



FIG. CD15: View of Hermit Rim Road facing west. Note location of road and corbel arch before relocation at arrow, circa 1920 (GRCA 34279a #11432).

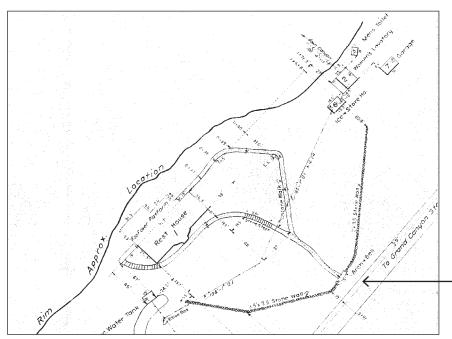


FIG. CD16: Site plan of the Hermit's Rest showing the original approach. Note location of corbel arch before relocation at arrow. Full drawing is contained in Appendix B, October 1934 (Kansas State Historical Society, Santa Fe Collection).

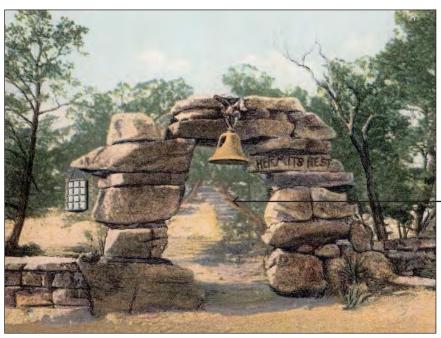


FIG. CD17: Postcard showing the corbel arch in its original location. Note stairs ascending the southern side of the hill to the Hermit's Rest at arrow, circa 1914-1935 (GRCA 21315).



 $FIG.\ CD18:\ (Non-extant)\ walkway\ through\ the\ corbel\ arch\ after\ relocation,\ 1936\ (Source:\ GRCA,\ Museum\ Collection,\ Photograph\ 7512).$



FIG. CD19: Aerial photograph of the Hermit's Rest area. Note earth and stone roof covering at arrow, circa 1962 (Source: Northern Arizona University, Cline Library, P.T. Reilly Collection, NAU.PH.97.46.193.96).



FIG. CD20: View of the Hermit's Rest facing east. Note visitors on roof, unpainted wood members and two steps in porch floor, circa 1950-1960 (Source: Northern Arizona University, Cline Library, Wells Collection, AHS.PH.706.519).

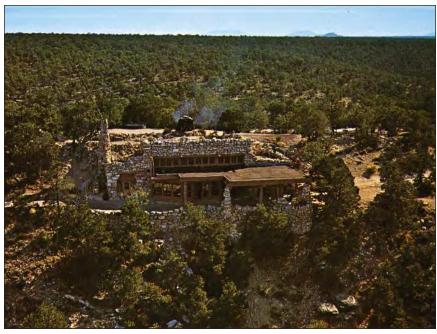


FIG. CD21: North elevation showing earth and stone covered roof, before 1969 (Source: Fred Harvey Postcard, Mike Roberts Production, Berkeley, California).



FIG. CD22: View of the Hermit's Rest facing east showing the west porch addition over the soda machines, 1988 (Source: GRCA, Museum Collection, Photograph 15918).



FIG. CD23: Windows blocked by merchandise display on interior, 1994 (GRCA 62427).



FIG. CD24: Extensive merchandise diplay around post at left and window at right, 1994 (GRCA 62427).

PHYSICAL DESCRIPTION

The following contains a systematic inventory of all features, materials and spaces according to significance, condition and impact level.

Significance is defined as the quality of being important, or the feature's association with the historical themes expressed in the *Historical Background and Context* section of this report. Significance is exemplified in the character defining features. It is evaluated as High, Medium, or Low.

Condition is the feature's state at the time of assessment with respect to performance, stability and integrity. It is evaluated as Good, Fair or Poor, as specified by the List of Classified Structures.

Good	The structure and significant features are intact, structurally sound and performing their
	intended purpose. The structure and significant features need no repair or rehabilitation,
	but only routine or preventative maintenance.
Fair	a.) There are early signs of wear, failure, or deterioration though the structure and its
	features are generally structurally sound and performing their intended purpose, OR
	b.) There is a failure of a significant feature of the structure.
Poor	a.) The significant features are no longer performing their intended purpose, OR
	b.) Significant features are missing, OR
	c.) Deterioration or damage affects more than 25% of the structure, OR
	d.) The structure or significant features show signs of imminent failure or breakdown.

An impact is a detectable result of an agent or series of agents having a negative effect on the significant characteristics or integrity of a structure, and for which some form of mitigation or preventative action is necessary. It is evaluated as Severe, Moderate, or Low as defined by the List of Classified Structures. At least one of the criteria must be met for the declared impact level.

Severe	a.) The structure will be significantly damaged or irretrievably lost if action is not taken
	within two (2) years.
	b.) There is an immediate severe threat to visitor or staff safety.
Moderate	a.) The structure will be significantly damaged or irretrievably lost if action is not taken
	within five (5) years.
	b.) The situation caused by the impact is potentially threatening to visitor or staff safety.
Low	a.) The continuing effect of the impact is known, and will not result in significant damage
	to the structure.
	b.) The impact and its effects are not a direct threat to visitor or staff safety.

The physical description is divided into three sections: site / setting, exterior and interior. Within each section, both character-defining features and deficiencies are outlined. Treatment recommendations, rated according to priority, are outlined for each deficiency; a summary of recommended treatments is presented in the *Treatment & Use* section of this report. Drawings of the Hermit's Rest as it currently exists can be found in Appendix C.

Summary

The Hermit's Rest is located at the terminus of Hermit Road, approximately eight miles west of the Grand Canyon Village Historic District. An asphalt path links the shuttle stop and parking lot to the Hermit's Rest. A number of cohesively designed site features remain on site, as well as modern alterations to accommodate the growth in visitor use.

The Hermit's Rest is a one-story stone building with a clerestory that is nestled into a hill on its south side. In contrast, the Hermit's Rest is exposed and extended toward the canyon on its north side. Its native stone and wood building materials integrate sympathetically to the surrounding landscape.

The interior is composed of a central Great Room, dominated by a fireplace in the rear, and three other support rooms, each unique in design.

The Hermit's Rest is generally in fair condition. Water damage is the most severe impact to the building and site, causing ground erosion that undermines the north stone wall and wood decay that is pervasive among horizontal beams. Other deficiencies include impeded accessibility and alterations which impact the historic character. Visitors once approached the building from the stone staircases on either side and were encouraged to explore the earth and stone roof, a significant part of the experience at the Hermit's Rest that has since been altered.

Code and structural engineering assessments were completed by qualified contractors. Where appropriate, code and structural issues have been integrated below. Detailed evaluations of code and structural deficiencies can be found in Appendices D and E.

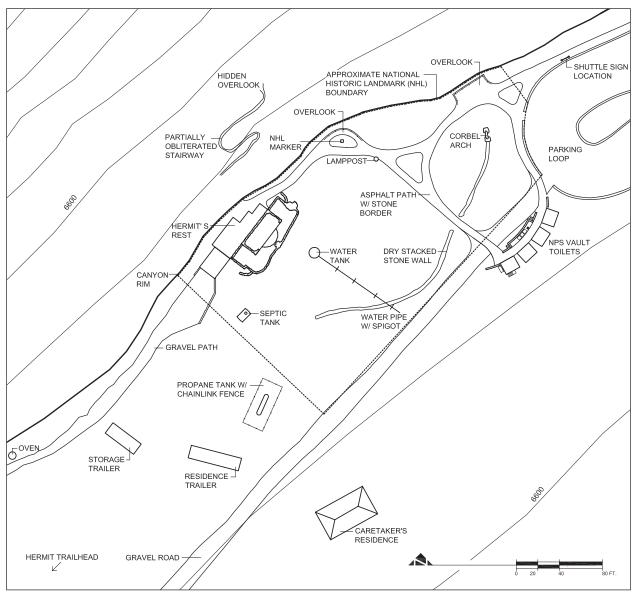


FIG. S1: Site Plan, 2007.

Site / Setting

Significance: High Condition: Fair Impact: Moderate

Character Defining Features: Stone corbel arch with a cracked bell suspended from a steel railroad track; iron "Hermits Rest" lettering; stone lamppost with punched zinc lamp; stone oven; drystacked stone wall running from the corbel arch to the southwest around the Hermit's Rest; hill in which the Hermit's Rest is situated; view over Grand Canyon's rim to the north

The Hermit's Rest is located just west of the terminus of Hermit Road, approximately eight miles west of the Grand Canyon Village Historic District. Hermit Road terminates in a loop parking area which serves a free public shuttle bus during most of the year and private automobiles in the winter months. National Park Service and Xanterra employees, as well as visitors with the proper handicapped documentation and visitors taking overnight hikes down the Hermit Trail, are able to utilize the parking area year-round. A stone corbel arch, discussed later in this section, is visible from the parking area and shuttle stop.

A gravel road continues from the southwest portion of the parking loop traveling west, past the modern comfort stations and the Caretaker's Residence, to the Hermit Trailhead.

Modern comfort stations (Buildings 1148-1151; 2006) are accessible from the parking area, southeast of the Hermit's Rest. These comfort stations provide eight private toilet rooms within four buildings. A modern concrete block wall, clad with stone, separates the comfort stations from the gravel road.

Asphalt pedestrian paths link the parking and comfort station areas to the east side of the Hermit's Rest. These paths are approximately 6' wide and are bordered by Kaibab limestone. Stones are displaced in some locations. Both paths pass a stone lamppost, discussed later in this section. A modern bicycle rack is situated near the intersection of these paths. The asphalt surfacing continues to two scenic overlooks where guardrails protect visitors. A National Historic Landmark plaque is situated on a stone base in the center of the west overlook.

An additional guardrail is located at the site of the non-extant stairs down the canyon to the hidden overlook, just northeast of the Hermit's Rest. The area of the removed stairs is now fully vegetated and the steps no longer visible from the Hermit's Rest. The guardrail is no longer needed to prevent access down the canyon at this location.

However, beyond the view from the Hermit's Rest, the stone stairs continue to the hidden overlook. In some locations, the stairs are overgrown with vegetation and the route precarious. Nevertheless, they lead to a unique hidden overlook with an integrated stone overhang and a remarkable view. Considerable masonry work exists at this location to enhance the viewing areas.

A gravel path, approximately 1/8th mile long, extends from the west side of the Hermit's Rest porch to the Hermit Trailhead. A stone retaining wall has been constructed on the south side of this path, and a small stone wall constructed on the north side. The path passes a storage trailer, historic stone oven (discussed later in this section) and a picnic area before reaching the Hermit Trailhead.

A trailer (Building 864; 1965), located on the south side of the west path, houses surplus merchandise sold at the Hermit's Rest. The Hermit's Rest staff regularly access the storage trailer and transport merchandise by wheelbarrow or dolly to the Hermit's Rest. These are regularly left near the northwest corner of the Hermit's Rest.

A residential trailer is located south of the storage trailer.⁷⁵ A dumpster is located nearby.

The Caretaker's Residence (Building 866) provides housing for the manager of the Hermit's Rest. It is located on Hermit Basin, southwest of the Hermit's Rest and on the opposite side of the gravel road. This one-story residence, banked into the side of a small canyon, has a stone foundation and clapboard siding.

Numerous social paths are present on the hill encompassing the Hermit's Rest. Wood signs are posted on all sides of the roof urging visitors to stay off the roof.

A gravel path, approximately 10' wide, exists on the hill directly above the Hermit's Rest. A cylindrical water tank, approximately 10' in diameter and 16' tall, is located directly behind the Hermit's Rest, on the other side of the path. Its volume capacity is unknown. The tank is directly behind the Hermit's Rest, on the opposite side of the path. The water tank rests on a concrete pad and is flanked by two trash cans containing water meters. Above the meters, the words "NPS" and "Fred" are scratched into the tank, likely differentiating the two historic users of water at the site. The ground has eroded under the tank's concrete foundation on the south side. A pipe extends from the water tank to the gravel road south of the Hermit's Rest where a faucet provides water for visitor use.

A 2,000 gallon septic tank used for grey water storage is situated southwest of the Hermit's Rest and northwest of the water tank. The septic tank is cylindrical in shape and horizontal in orientation. It is approximately 7' wide and 11' long. Various words have been scratched into the tank, but none are fully legible. The west elevation contains a painted figure and a date; the date is unclear.

Trash receptacles are located near the comfort stations, along the asphalt path and on the Hermit Rest porch. They vary in color, shape and size and, in some locations, mar the view and character of the Hermit's Rest.

The site around the Hermit's Rest is dominated by pinyon pine trees, sparse grasses and barren earth. A number of trees are in contact with the western side of the porch roof, creating a potential fire hazard.

With the building's setting in a hill on the edge of the Grand Canyon, water is generally moved away from the building. The ground slopes down the hill on the east and west sides, and down the canyon on the north side. However, site walls and walkways prevent water from being fully diverted away from the building site. A modern stone wall on the north side of the west walkway does not have a drainage opening and the wall traps water in this area. Despite integrated stone drainages on the building and adjacent poured concrete drainages intended to move water away from the roof, water continues to collect on the south end of the roof.

The stone corbel arch, lamppost and oven, historic features with a cohesive design, are addressed below.

⁷⁵ This trailer does not have a building number.

Corbel Arch

From the shuttle bus stop, most visitors first encounter a stone corbel arch before any other site features. The corbel arch signifies one's arrival at a unique destination, and is the backdrop to many photographs. The corbel arch is constructed of Kaibab limestone, and although each stone is unique in shape, most are massive and rectangular. Mortar is darker in color than the buff stone, but is not dominant.

The corbel arch has an overall width of approximately 14' and a height of approximately 10'. It spans an area of approximately 3' to 5' and its opening is approximately 8' high. A steel beam, situated between stones above the opening, helps support a bell. The bell is connected to the steel beam by chain and is oriented with a cracked opening to the south. The bell does not have a clapper.

To the right of the bell, iron lettering spells out "Hermits Rest." The letters, each approximately 6" tall by 4" wide, are playful in character and not installed on a straight baseline.

Lamppost

As one continues westward past the corbel arch, a stone lamppost is encountered approximately 100 feet away. It is cylindrical in shape and approximately 4' in diameter and 6 ½' tall. Constructed of Kaibab limestone, its stones vary in shape with some rounded and others rectangular. The lamppost protects a lamp at approximately 4 ½' from the ground. Around the lamp, the stones are oriented vertically. Modern mortar is visible in this area and is darker and smoother than the historic mortar.

The lamp is cylindrical in shape and constructed of an iron frame. Punched zinc panels are situated within the iron frame. Originally, the lamp would have housed a candle that could be lit through a small flap in one of the zinc panels. This has since been wired shut. The lamp has not been electrified.

<u>Oven</u>

A stone oven is situated on the north side of the gravel path between the Hermit's Rest and the Hermit Trailhead, approximately 250 feet away from the Hermit's Rest. The oven is shaped like a mound and composed of irregularly-shaped Kaibab limestone. It is approximately 7' in diameter by 5' tall. There is a ground-level opening on the east side, approximately 2' wide by 1' tall. A stone lintel that extends over the opening at the base is cracked. Loose stones have been piled on top of the oven to prevent visitors from using it as a trash receptacle. The oven has been excessively mortared between stones and, in some places, mortar nearly entirely covers the stone. Mortar varies in color from medium to dark gray and varies in texture from a medium texture to smooth.

Site Deficiency/Modification	Recommended Treatment*	Impact
Damaged features:		
Ground erosion undermining building on north elevation.	Evaluate site in consultation with landscape architect. Re-	Severe
See FIGS. E16, E17 in the Exterior section (pages 68-	grade as required in consultation with landscape architect.	
69).		
Inadequate protection on outlet to septic tank. See FIG.	Waterproof outlet to meet code.	Severe
S24.		
Trees in close proximity to building, including roof and	Thin trees for required defensible space.	Severe
walls. See FIG. S27.		
Stones in bordered asphalt path displaced. See FIG.	Secure displaced stones in the proper location.	Moderate
S4.		
Excessive mortar on stone oven. See FIG. S14.	No treatment required. If stones become further displaced,	Moderate
	secure with compatible mortar. Compatible mortar should	
	match the historic mortar in texture, color, strength and	
	placement with the joints.	
Cracked stone lintel over oven opening. See FIG. S14.	No treatment required.	Moderate
Ground erosion undermining water tank foundation. See	Evaluate site in consultation with landscape architect. Re-	Moderate
FIG. S19.	grade as required in consultation with landscape architect.	
Minding footunes		
Missing features:		
Staircases up the east and west sides of the building	No treatment required. Ideally, create an exhibit display	Low
removed. See FIGS. CD16, CD17 in the <i>Chronology of</i>	detailing the history of the Hermit's Rest, including the	
Development & Use section (pages 32-33).	historic approach on these staircases.	
Staircase down to the north side of the Hermit's Rest to	No treatment recommended. Stairs to hidden overlook	Low
hidden overlook removed. See FIGS. S9, S10, CD7 in	were a safety hazard.	
the Chronology of Development & Use section (page		
27).		
Modern alterations:		
Unburied water lines. See FIG. S21.	Secure water lines in the ground and properly bury.	Moderate
Stone corbel arch relocated. See FIGS. CD15-CD18 in	No treatment required. Corbel arch relocated when Hermit	Low
the Chronology of Development & Use section (pages	Rim Road replaced with realigned West Rim Drive.	
32-33).		
Modern comfort stations constructed south of the	No treatment required. Modern comfort stations are	Low
Hermit's Rest. See FIG. S3.	needed for visitor comfort.	
Modern asphalt walkways. See FIGS. S4, S5.	No treatment required. Smooth asphalt paths provide an	Low
	accessible route of travel.	
Modern bicycle rack situated near stone lamppost. See FIG. S6.	Relocate bicycle rack near road and parking lot.	Low
Modern guardrails at overlooks. See FIGS. S7, S8.	No treatment required. Overlook guardrails, installed as	Low
	part of West Rim Drive construction, ensure visitor safety at	
	overlooks.	
		I

Site Deficiency/Modification	Recommended Treatment*	Impact
National Historic Landmark plaque mounted on stone	No treatment required. National Historic Landmark plaque	Low
base. See FIG. S8.	relates importance of the Hermit's Rest.	
Modern guardrail at location of removed steps to hidden	Remove guardrail. The area in which the stairs were	Low
overlook. See FIG. S11.	removed is now fully vegetated and no trace of the stairs	
	remain in this area. The guardrail is no longer needed to	
	discourage access in this area.	
Modern stone retaining wall installed on south side of	No treatment required. Stone retaining wall discourages	Low
west walkway. See FIG. S12.	roof access and prevents site erosion.	
Modern stone retaining wall installed on north side of	Evaluate site in consultation with landscape architect. Re-	Low
west walkway. Stone wall prevents water from draining	grade and/or alter modern stone retain wall as required in	
away from the gravel path. See FIG. S13.	consultation with landscape architect.	
Wheelbarrow and dolly, regularly situated at northwest	Cease situating wheelbarrow and dolly at the Hermit's Rest.	Low
corner of the building, impair the view of the Hermit's	Immediately return the wheelbarrow and dolly to the storage	
Rest. See FIG. S13.	trailer after use.	
Stone oven covered with additional stones. See FIG.	Modern stones should be removed from their placement on	Low
S14.	top of the stone oven. A sign should be installed in front of	
	the stone oven noting the historic purpose of this feature.	
	Additionally, an interpretive display should be installed at	
	the shuttle stop detailing the history of the Hermit's Rest	
	and its related site features, including the stone oven.	
Water tank installed. See FIGS. S18-S20.	No treatment required. Water tank needed for supply to the	Low
	Hermit's Rest.	
Septic tank installed. See FIGS. S22, S23.	No treatment required. Septic tank needed for grey water	Low
	from the Hermit's Rest.	
Modern trash receptacles impair view of the Hermit's	Remove trash receptacles. Install trash receptacles that	Low
Rest. See FIGS. S25, S26.	are cohesive in design. Install in locations that are effective	
	at preventing litter and do not impair the view of the Hermit's	
	Rest.	
Pathway relocated from position under corbel arch. See	No treatment recommended. Pathway relocated to prevent	Low
FIGS. S28 and CD18 in the Chronology of Development	visitor damage to bell and corbel arch.	
& Use section (page 33).		
Replicated lettering installed on corbel arch to replace	No treatment recommended. Lettering is in character and	Low
missing/incompatible "Hermit's Rest" letters. See FIG.	materials of original lettering.	
S30.		
Wood support for corbel arch bell replaced with railroad	No treatment required. Steel beam supports weight of bell	Low
track. See FIG. S31.	and does not require replacement.	
Lamppost candle holder wired shut. See FIG. S33.	If lighting the lamppost is determined desirable, remove	Low
	wiring. Lamppost can be re-used in its historic function	
	willing. Earnippost can be re used in its historic function	
	as a candle holder or fitted with an LED flickering candle	
Shuttle sign missing.	as a candle holder or fitted with an LED flickering candle	Low



FIG. S1: Free shuttle bus at the Hermit Rest's stop. Note corbel arch at left, 2007.



FIG. S2: View of the shuttle bus and parking lot facing east, 2007.



FIG. S3: View of the comfort stations facing west. Note road to Hermit Trailhead at right, 2007.



FIG. S4: View of the asphalt path and stone lamppost facing east from the shuttle bus stop and parking lot. Note displaced stones bordering asphalt path, 2007.



FIG. S5: View of the asphalt path facing north from the comfort stations, 2007.



FIG. S6: Inappropriately located bike rack, 2007.



FIG. S7: Overlook and guardrail east of the Hermit's Rest, 2007.



FIG. S8: Overlook and guardrail. Note National Historic Landmark plaque mounted on stone base at left, 2007.



FIG. S9: Remaining stone stairs leading to the hidden overlook below the Hermit's Rest, 2007.

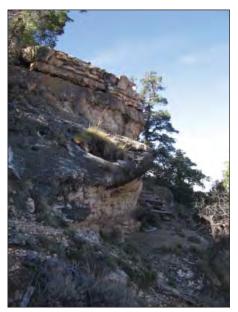


FIG. S10: Hidden overlook below the Hermit's Rest. Note the short stone masonry wall at the top, and the stone masonry bench in the more enclosed area at the bottom, 2007.



FIG. S11: Guardrail at the location of removed stairs to the hidden overlook, 2007.



FIG. S12: Modern stone retaining wall on the north side of the path to the west of the Hermit's Rest, 2007.



FIG. S13: View of the Hermit's Rest porch facing east showing the modern retaining walls on the north and south sides of the path. Note the wheelbarrow and dolly at right, 2007.



FIG. S14: View facing northwest showing the unpaved path to Hermit Trailhead at left and the historic stone oven with excessive mortar at right, 2007.



FIG. S15: Storage trailer for merchandise sold at the Hermit's Rest, 2007.



FIG. S16: Residence for Xanterra employee, 2007.



FIG. S17: Caretaker's Residence, 2007.



FIG. S18: View of the water tank facing west. Note the stone fireplace chimney and the Hermit's Rest roof at right, 2007.



FIG. S19: Detail of the water tank with meters inside trash cans. Note "Fred" etched onto the tank, 2007.



FIG. S20: View of the water tank facing north showing water pipe and spigot and drystacked stone wall, 2007.



FIG. S21: Exposed water pipes, 2007.



FIG. S22: View of the grey water tank facing southwest, 2007.



FIG. S23: Detail of west side of the grey water tank. Note date and figure, 2007.



FIG. S24: Potentially hazardous outlet at the septic tank, 2007.



FIG. S25: Trash receptacles and safety bollards impair the view of the Hermit's Rest, 2007.



FIG. S26: Historic lantern impinged upon by trash receptacles, 2007.



FIG. S27: Tree in contact with the porch addition roof creating a potential fire hazard, 2007.



FIG. S28: Stone corbel arch with drystacked stone wall at left and asphalt path at right, 2007.



FIG. S30: Detail of Hermit's Rest lettering on the corbel arch, 2007.



FIG. S31: Railroad track support for the bell on the corbel arch, 2007.



FIG. S32: View facing west showing historic stone lamppost and asphalt path leading to the Hermit's Rest at right, 2007.



FIG. S33: Close up of punched zinc lantern. Note flap wired shut at bottom left, 2007.

Exterior

Significance: High Condition: Poor Impact: Moderate

Character Defining Features: Random rubble Kaibab limestone; wood lintels; wood door and window trim; wood windows and doors; wood Dutch doors; wood porch beams and posts; latilla on underside of porch roof; level changes on porch floor; stone post supports on porch; stone wall at north side of porch

The Hermit's Rest is a one-story stone building with a clerestory that is nestled into a hill on its south side. The building seems to disappear into the hill, with the stone walls, roof and hill becoming one towards the south elevation.⁷⁶ Quite the opposite, the north elevation lurches forward, exposing itself to the canyon on whose edge it sits. An integrated porch helps both extend the building north to the canyon and provide shelter and security.

The Hermit's Rest appears to be both irregular and engineered with precision. While its materials emphasize irregularity, the actual building is thoughtfully planned and nearly symmetrical. Although it was constructed to appear as if crafted by a local pioneer from available materials, the Hermit's Rest was constructed with the (hidden) aid of 20th century technology, including steel posts and concrete reinforcement.

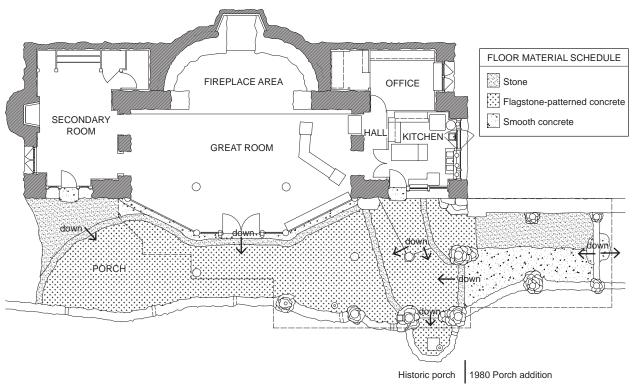


FIG. E1: Plan of the Hermit's Rest showing building perimeter and porch floor, 2007.

⁷⁶ The building elevations do not face the actual cardinal directions. For the sake of simplicity, the northwest elevation that faces the canyon is referred to as the north elevation, and all other elevations correspond with that orientation.

Stone

Constructed of Kaibab limestone, the Hermit's Rest blends easily with its environment. Each stone is irregular in shape and vary greatly in size from each other. Generally, the lower stones are larger and rectangular. The stones above are more irregular in shape and smaller in size, although large, rectangular stones exist in these areas as well. A large stone lintel is present above the east elevation window opening. Stone chimneys appear as outgrowths of the building, with the Secondary Room chimney appearing precarious and the Great Room chimney sturdy.

The Secondary Room chimney extends up from the east elevation wall. It is fully integrated with the stone wall below and gently narrows as it rises. It is generally cylindrical in shape and the individual stones decrease in size as it rises. Rectangular stones, oriented vertically, cap the top. Wire mesh, intended to prevent rodent access, is present at the top of the chimney. The mesh has large holes and is not fully secured to the chimney.

The Great Room chimney appears as a stone outcropping rising from the ground on the south side of the building. It is generally cylindrical in shape and the stones are stained by soot. It is likely that this soot is a mixture of both an applied patina that Colter may have used to make the building appear aged and soot that has accumulated through years of use. At approximately 3' in height from the ground, a course of stones project out from the chimney. Above them, rectangular stones are oriented vertically and the gaps between them provide openings for the exhaust. The holes facing the south side have been blocked by additional stones. The stones in this course are rounder in shape. Thin, rectangular stones are situated above the openings and span the diameter of the chimney. No wire mesh is visible on the Great Room chimney.

A stone lookout on the clerestory's north parapet frames a view of the canyon. Historically, visitors accessed the roof via a set of stairs on each side of the building. The rooftop stone lookout consists of smaller stones stacked on the east side with a larger, vertically-oriented stone on the west side, topped by a large rectangular stone that acts as a lintel and caps the opening. A patch of mortar on the top of the lookout appears to have once secured something.⁷⁷ Corner depressions in the top parapet stones suggest purposeful design as planters and contain native vegetation today.

Gaps between stones and between stone and wood members allow rodent access into the building interior. There are holes between the stones on the west side of the Secondary Room chimney, and many of the surrounding stones appear loose. A displaced stone has left a large hole on the west elevation at the clerestory. Other stone deficiencies include the application of tar between stones under the clerestory windows and the application of white roofing material on the stone at the clerestory. There is paint on the stone on the north elevation between the Great Room windows and the Kitchen door. Lichen is present on the east elevation stone wall.

In most places, the mortar is deeply recessed within the stone joints and is not noticeable. Its buff-grey coloration and somewhat gritty texture blend with the surrounding stones. Modern mortar, applied on the Secondary Room chimney and on the walls at the roof, is a darker grey color and smoother texture. Modern mortar has been applied between and over these stones. Modern mortar is built up on the top stone over the roof lookout and on the sill under the east elevation window.

⁷⁷ Santa Fe publicity on Hermit's Rest reported that a sundial was present on the site. The sundial may have been mounted at this location.

Wood Members

Massive wood logs help enhance the rustic aesthetic and provide a warm contrast to the stone.

Massive log lintels span the width above the windows as well as the exterior doors into the Great Room, Secondary Room and Kitchen. In all fenestration openings except the Office window and the north clerestory, log lintels are stacked two or three high. Above the Office window and the north clerestory windows, which are farther removed from sight, lintels are limited to one log.

Originally, the wood members were unfinished, which blended with the natural stone and wooded environment. All major wood members are currently painted a dark reddish brown (Pittsburgh Paint, PA00014), and some green detailing (Pittsburgh Paint, PA00021) is present around the doors and windows. The painting of the wood members has made them more prominent than originally designed. The paint is worn on most log members.

All of the log members are peeled. With the exception of the easternmost porch post, all log members are smooth. The easternmost porch post is further distinguished by evidence of limbs, which project approximately 1" to 3" from the post.

Vigas project from the clerestory on the north elevation. They are presently deteriorated. Sheet metal installed over the vigas no longer mimics the shape of the logs and may be trapping moisture and accelerating decay.

Additional wood members are discussed in the *Porch* section below.

Porch

The porch, constructed of log beams and posts, has a jagged profile on the east side and an addition on the west side. The porch addition on the west side is evident in both the ceiling treatment and roof materials.

Porch log beams, oriented north-south, project from the north elevation. On the underside, they are joined to wood or stone posts. North-south beams support east-west log beams above. Porch roofing rests upon these east-west oriented beams. Wood slabs cover the fascia of the porch roof. Historic bark beetle damage is present on these fascia boards.

The underside of the original porch roof is composed of latilla with natural fibers between. Some of these small latilla logs are currently displaced and expose dimensioned lumber above. Historically covered with unfinished log slabs running east-west, the original porch roof is now covered with a white elastomeric coating.

The porch addition extends west and is not connected to the building. It has the same configuration of log posts supporting north-south log beams with east-west log beams above. On the addition, the underside of the porch roof is beadboard. The roof covering is sheet asphalt, which is deteriorated.

Exposed to moisture from above, most log roof beams suffer decay at their ends. Various methods have been attempted to halt decay, including epoxy treatment and the installation of sheet metal over the projecting logs. Where present, epoxy is clumpy and does not have the character of wood. As with the vigas discussed above, sheet metal over the horizontal log beams no longer mimics the shape of the logs and may be trapping moisture and accelerating decay.

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Unlike the other projecting north-south running log porch beams, the eastern-most beam is not supported by a wood post or stone base. Instead, it is seemingly supported from above by two irregularly shaped logs attached to the viga above. These irregularly shaped logs rest at an approximately 50° angle from the roof and sandwich the viga and the north-south running beam below. They suffer decay from moisture penetration. Although this arrangement may be designed to appear structural, it is most likely cosmetic. The north-south running beam is connected to the east-west running beam above by a large bolt. The north-south beam is sagging and displaced approximately 4" at its north end.

With the exception of the two posts nearest to the north elevation window-wall, all log porch posts visibly rest upon stone bases or concrete footings. It is presumed that these two posts rest upon footings that were covered when the lowest level of the porch was filled in with concrete. Without footings that raise their bases above the floor level, these posts are more susceptible to water and termite damage.

A wooden box extends downward at an angle from the northern side of the original porch roof to the stone base of a log post below. This box contains a downspout that currently appears to serve little function. This downspout box is evident in the earliest photographs of the Hermit's Rest. The downspout may have delivered water to a cistern under the semicircular area of the porch floor. It is unknown how water was removed from the cistern.

The porch floor has a number of level changes, the edges of which are painted yellow to minimize potential trip hazards. The original porch floor resided two steps below the east walkway and Great Room and Kitchen entrances, which added to the semi-enclosed feeling of the porch area. There historically existed one step at the porch's western end, which met the building at the stone wall near the Kitchen door. Most of the porch was historically poured concrete, scored with a flagstone pattern. Areas of historic flagstone are present at the upper level near the Secondary Room and Kitchen.

The majority of the porch floor was raised one step with poured concrete, scored with a flagstone pattern likely in the 1960s. Additional steps and level changes were later added to the west side of the porch. A portable wheelchair ramp is available to provide access into the building when needed.

Stones are displaced at grade beneath the porch's north retaining wall. This stone wall provides support to the porch and acts as a retaining wall between the building and the canyon's edge. At its north edge, the ground has eroded away from the wall causing stones to become displaced. In some areas, modern mortar has been applied for stability and in other areas, the stones are missing.

Roof

A stone retaining wall on the south elevation, which was constructed sometime after 1962, presumably concurrent with the removal of the earth and stone covering from the roof, helps prevent visitors from walking on the hot-mopped, built-up roof, but also has the effect of trapping moisture on the flat portions of the roof. Aside from the rounded dome, the roof is generally flat. The highly variable slopes of the different parts of the roof encourage ponding in some areas. A stone lookout and built-in planters, discussed in the *Stone* section above, are present on the clerestory roof. Stone chimneys, also discussed in the *Stone* section above, provide ventilation to the Great and Secondary Rooms.

All but the porch addition is covered with a white elastomeric coating, last applied in 2005 and patched in 2006. The white elastomeric coating is visually dominating and impairs the character and subtlety of the Hermit's Rest. The white coloration prevents the building from blending with its environment as originally designed.

Deteriorated asphalt covers the porch addition roof. A displaced gutter is present on the porch addition roof.

Other roof deficiencies include an unsecured propane pipe, a concrete block covered with roofing material and several cup-shaped protrusions that seem to serve little purpose. Asbestos is likely present in some of the built-up roof layers.⁷⁸

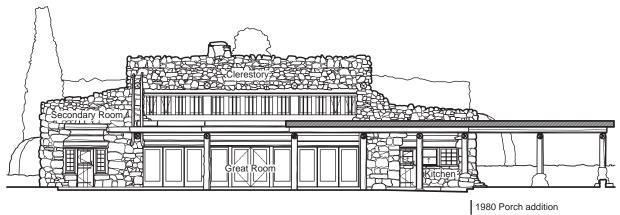


FIG. E2: North elevation, 2007.

North Elevation

Because of its location at the rim of the canyon, the north elevation of the Hermit's Rest cannot be seen in its entirety, except perhaps by air. However, portions of it can be seen from the front and both sides, and it is detailed with all of the attention deserved of a main elevation.

The north elevation is visually separated into three segments. An approximately 35 foot wide double-height central area is flanked by two approximately 18 foot wide areas on the east and west sides.

The central area, which encompasses the Great Room, extends to a clerestory. On the clerestory, there are thirteen windows into the Great Room. Five central wood windows are flanked by four wood windows on each side which are separated by vertical logs of approximately 1 ½ width. Each window is separated from the next by a 10" vertical log. Two square wood posts, approximately 1 ½ wide are evenly spaced in front of each window. A single log lintel spans the length of the clerestory windows.

On the parapet of the clerestory, a stone lookout is located just east of center. The lookout consists of smaller stones stacked on the west side with a larger vertically oriented stone on the east side, topped by a large rectangular stone that acts as a lintel and caps the opening.

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⁷⁸ Chuck Easton. Interview by author. 7 June 2007.

At the ground level of the central area, double wood doors are flanked by single fixed wood windows on both sides, all of which project approximately 6' from the plane of the elevation. This set of windows and doors runs parallel to the elevation and is flanked by a set of three wood windows on each side that are angled at 30° from the central set in order to meet the main elevation plane. A vertical log separates the central set from the flanking windows on each side. While these flanking windows are currently fixed in place, historically the middle window was fixed and the two adjacent openings were operable as doors. It is unknown when these doors were fixed in place.⁷⁹ Each pane of glass is approximately 5' tall x 2' wide. A National Register of Historic Places plaque is mounted over the central doors at a height that makes it difficult to read.

At the ground level, a wood Dutch door provides entry into the Secondary Room on the east side of the north elevation. The door is composed of dimensioned lumber oriented vertically and has iron strap hinges and a glass panel in the top section. Additional hinges are present where a screen door was presumably located. The door jamb is decayed at the point of contact with the ground. The door is flanked by fixed 10-lite wood windows. The doors and windows, painted green, are separated from each other by wood trim painted brown. Vertical logs are present on the outside of the windows. Four stacked massive log lintels span the opening.

A wood Dutch door provides entry into the Kitchen on the west side of the north elevation. The door is the same as that leading to the Secondary Room but has the addition of a modern folding wood ledge. The original wood window within the upper portion of the Dutch door has been replaced by a modern double-hung aluminum window. The door is separated by wood trim from two windows to the west. The easternmost of these windows is a modern double-hung aluminum window. The westernmost window is an original fixed 12-lite wood window. The door and windows are painted green. Vertical logs are present between the windows and to the west of the windows; they are also painted green. Massive log lintels span the opening.

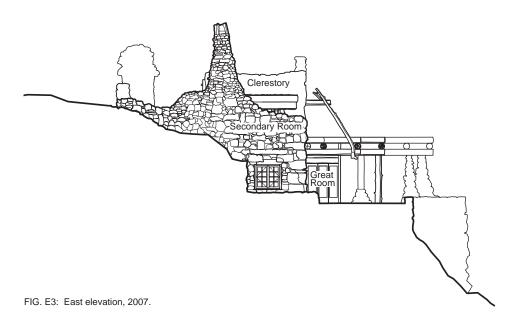
The Kitchen door and adjacent window are used to serve light refreshments to visitors. The stone sill just below the windows is discolored from visitor use. An original stone ledge, now used for condiments, is present to the east of the Kitchen door.

The porch extends from the central Great Room area of the north elevation to the west beyond the Kitchen. The north stone retaining wall extends to the ground level below the porch. This stone wall is rounded at the west end, where the original drawings suggest a cistern may be present. Stones are displaced at the bottom of this retaining wall due to erosion undercutting.

The porch contains a number of features, including a replica of the original iron bear trap situated in its original position, two modern floor-mounted telescopes and a modern sign inscribed with Psalm 68:14. The Psalm sign was installed in the early 1960s by the Evangelical Sisterhood of Mary of Phoenix, Arizona without the permission of the National Park Service and does not add to the character of the site. The telescopes were likely installed at some point since the 1960s. A modern, low floor-mounted sign on the east end discourages visitors from feeding wildlife.

⁷⁹ The doors appear closed in all historic photographs uncovered by the project team. The doors were blocked by furniture in photographs dated as early as circa 1916.

⁸⁰ The window is original to the building but was relocated from the nearby windows on the west elevation.



East Elevation

The east elevation is the first glimpse of the Hermit's Rest the visitor receives upon approach. Perhaps more than any other elevation, it has the appearance of a stone outcropping protruding from the earth. Whereas the south side of the east elevation is low and disappears into the ground, the north side opens itself to the canyon.

The sturdy Great Room chimney is visible in the background. A stone retaining wall extends along the south elevation. The slender Secondary Room chimney towers above the rest of the elevation and partially masks the rounded roof and clerestory behind.

The clerestory is visible on the east elevation and has four wood windows which are separated by vertical logs of approximately 10" in width. Two square wood posts, approximately 1½" wide are evenly spaced in front of each window. Two stacked log lintels span the length of the clerestory windows.

Two eight-lite wood casement windows provide natural light into the Secondary Room. White putty is visible on the glass under the mullions. The windows are flanked by vertical log trim and have three log lintels above. The windows are painted green and the trim brown. A stone wall and concrete-lined drainage channel help direct water away from this window opening and toward the north side of the building.

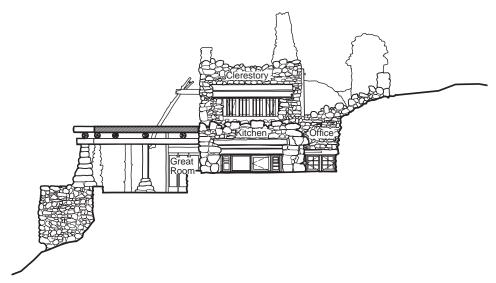


FIG. E4: West elevation, 2007.

West Elevation

The clerestory has four wood windows which are separated by vertical logs of approximately 10" in width. Two square wood posts, approximately 1½" wide, are evenly spaced in front of each window. A propane supply pipe enters the building through the south side of the window trim. Two stacked log lintels span the length of the clerestory windows.

Windows into the Kitchen are centered below the clerestory windows. The Kitchen window configuration consists of two one-lite windows (one of which is operable) that are flanked by two, two-lite operable wood windows. The one-lite wood windows are not original and are covered with an inappropriately applied reflective film. The flanking operable windows were modified with the installation of vents and a septic water line that penetrates the southern window's trim. The windows are separated by vertical log trim. The windows are painted green and the trim brown. Three stacked log lintels span the length of this window opening.

Two six-lite wood windows provide natural light into the Office. These casement windows were painted shut. One of the glass panes on the southern window was removed and replaced with Masonite. A small piece of trim is missing from the top corner of the southernmost window. The windows are flanked by vertical log trim and have one log lintel above. Duct tape and plastic are applied to the southern window trim and electrical conduit pierces the trim to the north. A damaged 2 x 4 is attached to the log lintel. The windows are painted green and the trim brown.

Because of the site grading in this area, both the Kitchen and Office windows are nearly at ground level. A stone wall and concrete-lined drainage channel help direct water away from the Office window.

The Great Room chimney is visible as the southernmost part of the building. A stone retaining wall is present along the south elevation at this point.

The rounded Great Room roof is visible from the east elevation. The application of white roofing material makes the roof a dominant feature that detracts from the character of the building.

South Elevation

The south elevation is the most altered of all elevations. This area was once a large part of the designed experience at the Hermit's Rest and was made accessible by stone stairs on the east and west sides of the hill. Visitors were encouraged to explore the earth and stone covered roof as well as the upper clerestory roof. The stone lookout and built-in planters remain from this period.

The southernmost portion of the roof, including the dome area, was once at grade and covered with earth and stone. After the earth and stone covering was removed, a stone retaining wall was constructed to the south of the building.

The view of the south elevation is currently dominated by white elastomeric coating. This material extends up the south wall of the clerestory and extends over the stone at the wall perimeters.

Two air intake holes for the Great Room fireplace are present on the south elevation clerestory.

Exterior Deficiency/Modification	Recommended Treatment*	Impact
Damaged features:		
Displaced stone causing hole in stone wall. See FIG.	Install stone in-kind with compatible mortar. Compatible	Severe
E14.	mortar should match the historic mortar in texture, color and	
	placement within the joints.	
Displaced stones at the base of the north retaining wall.	Evaluate site in consultation with landscape architect.	Severe
See FIGS. E16, E17.	Regrade as required in consultation with landscape	
	architect to ensure stability of the ground adjacent to the	
	Hermit's Rest. Secure stones using compatible mortar.	
	Compatible mortar should match the historic mortar in	
	texture, color and placement within the joints.	
Displaced latilla and infill on underside of porch roof	Restore porch. See Alternatives for Treatment for more	Severe
exposing board above. See FIG. E21.	information.	
Decayed wood members, including vigas and porch	Remove and replace vigas. Restore porch. See	Severe
beams, caused by moisture. See FIGS. E23, E24, E36.	Alternatives for Treatment for more information.	
Displaced/sagging porch roof beam. See FIGS. E24,	Restore porch. See Alternatives for Treatment for more	Severe
E25.	information.	
Unsecured water pipe and/or electrical conduit, propane	Secure water pipe, electrical conduit and propane supply to	Severe
supply. See FIGS. E33, E56.	roof.	
Porch addition roof damaged with age. See FIG. E35.	Restore porch. See Alternatives for Treatment for more	Severe
	information.	
Sheet metal installed over wood vigas and porch beams	Remove sheet metal. Install sheet lead over horizontal	Severe
likely traps moisture. See FIG. E36.	wood members after porch restoration. See Alternatives for	
	Treatment for more information.	

Exterior Deficiency/Modification	Recommended Treatment*	Impact
Base of Secondary Room door jamb is decayed due to	Remove area of decay and repair with wood splice. Paint	Severe
excess moisture. See FIG. E38.	to match existing.	
Paint worn on wood members. See FIGS. E48, E54.	Establish and implement a regular painting schedule for all	Severe
	exterior wood features.	
South section of Office window in poor condition with the	Replace boarded pane with glass. Install mullion trim in-	Severe
bottom right pane missing and replaced with board, and	kind. Paint to match window.	
the mullion trim missing in places. See FIG. E57.		
Porch posts do not rest on above-grade footings. See	Restore porch. See Alternatives for Treatment for more	Moderate
FIGS. E5 and CD3 in the Chronology of Development &	information.	
Use section (page 25).		
White elastomeric roof treatment visually distracting and	Restoring the earth and stone roof is not recommended as	Moderate
impairs view of the Hermit's Rest. See FIGS. E7, E31.	the excess weight of an earth and stone roof may cause	
	structural concerns. Additionally, repairs to the structure	
	below would prove difficult with the addition of earth and	
	stone covering. Remove and replace the visually obtrusive	
	white elastomeric roof coating. Replace with a single ply or	
	built up roof of a more compatible color, using ballast where	
	possible.	
Excessive and/or incompatible mortar applied to stone.	No treatment required. If stones become further displaced,	Moderate
See FIGS. E10, E18, E19, E32.	secure with compatible mortar. Compatible mortar should	
	match the historic mortar in texture, color and placement	
	within the joints.	
Secondary Room chimney missing stones/mortar	Install stone in-kind where missing. Secure new and loose	Moderate
creating holes. See FIG. E10.	stone with compatible mortar. Compatible mortar should	
	match the historic mortar in texture, color and placement	
	within the joints.	
Unsecured wire mesh over Secondary Room chimney.	Remove wire mesh from the chimney. Install animal-proof	Moderate
See FIG. E10.	screen on the inside of the chimney, out of view.	
Lack of animal-proof screen on Great Room chimney	Install animal-proof screen on the inside of the chimney, out	Moderate
(unless present inside chimney). See FIG. E11.	of view.	
Mortar applied on top of stone roof lookout with unknown	No treatment required.	Moderate
purpose. See FIGS. E12, E13.		
Gaps between building materials allowing rodent access	Seal gaps between building materials in consultation with	Moderate
to the interior. See FIGS. E14, E15.	park Historical Architect.	
Porch posts and stone bases not anchored. See FIG.	Restore porch. See Alternatives for Treatment for more	Moderate
E16.	information.	
Excessive epoxy applied at ends of porch roof beams.	Restore porch. See Alternatives for Treatment for more	Moderate
See FIG. E23.	information.	
Elastomeric roofing material applied on stone walls.	Remove roofing material from stone simultaneous with roof	Moderate
3 11		

Exterior Deficiency/Modification	Recommended Treatment*	Impact
Asbestos likely present under top roof coat. See FIGS.	Remove and replace roof, following abatement process as	Moderate
E31, E33.	required.	
Tar applied between stones under clerestory windows.	No treatment required. If stones become further displaced,	Moderate
See FIG. E34.	secure with compatible mortar. Compatible mortar should	
	match the historic mortar in texture, color and placement	
	within the joints.	
Displaced gutter on porch addition roof. See FIG. E35.	Determine utility of gutter. Re-install or dispose of as	Moderate
	appropriate.	
Improper drainage channels, unsightly and in poor	Evaluate site in consultation with landscape architect.	Moderate
condition. See FIG. E52.	Regrade site and install proper drainage channels as	
	required in during roof replacement.	
Propane / electrical conduit installed through window	Remove conduit and patch window trim. Install conduit	Moderate
trim. See FIGS. E53, E58.	through existing mortar joint.	
Reflective film applied to west Kitchen windows. Film is	Remove reflective film. If sun protection is required,	Moderate
creased and bubbly. See FIG. E55.	properly install new tinted window film.	
Vents installed in west Kitchen windows. See FIGS.	Vents provide needed ventilation for the Kitchen interior.	Moderate
E55, E56.	Evaluate alternatives to window vents with commercial	
	kitchen specialist. Ventilation alternatives must respect the	
	character and significance of the building.	
Grey water pipe installed through the window trim and	Remove grey water line from drainage channel and bury in	Moderate
on a west elevation drainage channel. See FIG. E56.	ground. Remove water pipe from window and install new	
J	glass pane. Install through existing mortar joint.	
Duct tape and plastic applied to Office window trim. See	Remove duct tape and plastic. If gaps are revealed upon	Moderate
FIG. E57.	removal, seal gaps in consultation with park Historical	Moderate
1.0. 207.	Architect.	
Damaged 2 x 4 attached to Office window trim. See	Remove 2 x 4. If required, paint lintel in the area of	Moderate
FIG. E58.	removed 2 x 4.	moderate
Lichen present on stone. See FIG. E6.	Lichen may be result of water pooling near stone. Evaluate	Low
	site in consultation with landscape architect. Regrade	
	as required in consultation with landscape architect to	
	effectively move water away from the building.	
Historic bark beetle damage to fascia on porch roof.	No treatment required.	Low
See FIGS. E23.	Tro troutilent required.	LOW
Elastomeric roofing material unnecessarily applied over	Remove roof and concrete block. Replace roof.	Low
single concrete block situated on roof. See FIG. E33.	Tromove roof and confercte block. Treplace roof.	LOW
Single collete block situated Off 1001. See FIG. ESS.		
Paint on stone wall between main entrance and Kitchen.	Remove paint using gentlest means possible.	Low
See FIG. E42.		
Excessive putty between mullion and glass on east	No treatment required.	Low
window. See FIG. E51.		

Exterior Deficiency/Modification	Recommended Treatment*	Impact
Modern alterations:		
Yellow painted stripes at level changes visually	Cease painting the floor level changes yellow upon	Moderate
distracting. See FIGS. E26, E28.	completion of porch restoration. See Alternatives for	
	Treatment for more information.	
Modern shelf installed on Kitchen Dutch door. See FIG.	No treatment required.	Moderate
E40.		
Porch floor raised one step on east side. See FIGS. E5,	Restore porch floor to original configuration. See	Low
E26, E29 and CD3 in the Chronology of Development &	Alternatives for Treatment for more information.	
Use section (page 25).		
Some exhaust holes in Great Room chimney blocked to	No treatment required. Holes presumably blocked to	Low
direct smoke. See FIG. E11.	prevent smoke from blowing to the path behind the Hermit's	
	Rest, which was a historic route of travel around the site.	
Porch extended westward. See FIGS. E22, E26, E35	Porch provides needed shelter for visitors. See Alternatives	Low
and CD2, CD4, CD5, CD21, CD22 in the Chronology of	for Treatment for more information.	
Development & Use section (pages 24-26, 35-36).		
Modern wood benches placed on porch. See FIG. E29.	No treatment required. Wood benches provide needed	Low
' '	seating for visitors.	
Replicated bear trap on porch post. See FIG. E43.	No treatment required. Modern bear trap is in character	Low
	and materials of original.	
National Register of Historic Places plaque detailing	Remove plaque from building and reinstall in a location that	Low
building's history mounted above door making it difficult	allows greater readability.	
to read. See FIG. E44.		
Psalm 68:14 signage mounted on porch post impairs	Remove religious plaque; it is not original and was installed	Low
view of the Hermit's Rest. See FIG. E46.	without the permission of the National Park Service.	
Modern signage to discourage feeding of wildlife	Remove signage. Install in a location that is both affective	Low
mounted on ground at porch impairs view of the Hermit's	at discouraging the feeding of wildlife and does not impair	
Rest. See FIG. E47.	the view of the Hermit's Rest.	
Telescopes mounted on porch floor. See FIG. E45.	No treatment required. Telescopes provide entertainment	Low
	for visitors and are in keeping with the character of the	
	Hermit's Rest.	
Kitchen window replacements on west elevation. See	No treatment required. When windows require	Low
FIG. E55.	replacement, install replicas of original windows.	
* Note: See the <i>Ultimate Treatment & Use</i> section of this report for additional information on each recommendation.		



FIG. E5: View of the north elevation facing west, 2007.



FIG. E6: East elevation, 2007.



FIG. E7: West elevation, 2007.



FIG. E8: View facing south showing the roof coat in foreground, stone retaining wall and water tank 2007.



FIG. E9: Southern portion of the Hermit's Rest facing west. Note Secondary Room chimney at right and Great Room chimney at center, 2007.



FIG. E10: Missing stones and mortar creating holes in the in Secondary Room chimney. Note unsecured wire mesh, 2007.



FIG. E11: View of the Great Room chimney facing north showing blocked exhaust holes, 2007.



FIG. E12: View of the stone roof lookout facing northeast, 2007.



FIG. E13: Mortar applied on top of the roof lookout, 2007.



FIG. E14: Missing stone on the west elevation allowing rodent access to the building interior, 2007.



FIG. E15: Gap between a lintel and stone allowing rodent access to the building interior, 2007.



FIG. E16: View of the Hermit's Rest porch facing west. Note displaced stones at arrow, 2006.



FIG. E17: Erosion at the base of the north retaining wall. Note pipe in wall. This rounded wall is presumed to cover a cistern, 2007.



FIG. E18: Excessive and incompatible mortar applied to the Secondary Room chimney, 2007.

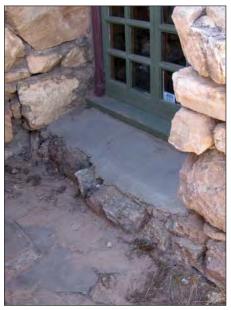


FIG. E19: Mortar applied on the stone outside of the east Secondary Room window, 2007.



FIG. E20: Porch roof facing west, 2007.



FIG. E21: Displaced latilla revealing boards on the underside of the historic porch roof, 2007.



FIG. E22: View under the porch roof facing southwest showing the ceiling treatments of the historic porch at upper left and the addition roof at right, 2007.



FIG. E23: Historic bark beetle damage on the porch fascia and epoxy on the log end at right, 2007.



FIG. E24: Faux-structural detail at the east side of the porch roof, 2007.



FIG. E25: Displaced porch beam at arrow, 2007.



FIG. E26: Porch floor facing west, 2007.



FIG. E27: Downspout (right of log post) encased in a wood box which is presumed to lead to a cistern beneath the porch floor at left, 2007.



FIG. E28: Seemingly unnecessary steps at the west end of porch, painted yellow which detracts from the character of the site, 2007.



FIG. E29: Modern wood bench on porch, 2007.



FIG. E30: Detail of porch floor facing north, 2007.



FIG. E31: View of the roof facing northwest, 2007.



FIG. E32: Roofing material and excessive mortar applied to the stone at southeast corner of the building, 2007.



FIG. E33: View of the roof showing the concrete block and unsecured propane pipe, 2007.



FIG. E34: Roof tar applied as mortar between the stones under the clerestory windows, 2007.



FIG. E35: View of the porch roof facing northwest showing the treatment of the historic roof in the foreground and the damaged addition roof at center, 2007.



FIG. E36: Decayed vigas covered with sheet metal at the north elevation clerestory, 2007.



FIG. E37: Entrance to the Secondary Room on the north elevation, 2007.



FIG. E38: Decayed door jamb and trim on the Secondary Room entrance, 2007.



FIG. E39: Walk-up snack shop service at the Kitchen windows on the north elevation, 2007.



FIG. E40: Kitchen Dutch door with modern alterations including double-hung aluminum frame window and fold down shelf, 2007.



FIG. E41: Stone ledge between the Great Room windows and the Kitchen on the north elevation, 2007.



FIG. E42: Paint drip on the north elevation stone wall between the Great Room and Kitchen, 2007.



FIG. E43: Porch post with bear trap replica, 2007.



FIG. E44: National Register of Historic Places plaque above entrance doors. Note: boarding on door was replaced April 2007.



FIG. E45: Modern telescope on porch, 2007.



FIG. E46: Modern Psalm 68:14 sign on stone porch support, 2007.



FIG. E47: Modern signage to discourage feeding of wildlife, 2007.



FIG. E48: East clerestory. Note the elastomeric roofing material on the stones and the peeling paint on lintels, 2007.



FIG. E49: View facing southwest showing the window alcove on the east elevation, 2007.



FIG. E50: East elevation casement windows into the Secondary Room, 2007.



FIG. E51: White putty between the mullion and glass on the east elevation Secondary Room window, 2007.

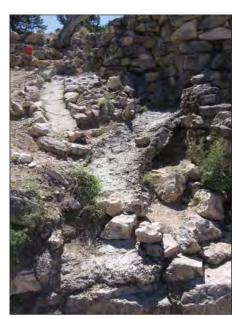


FIG. E52: Improper drainage channels to the east of the building, 2007.



FIG. E53: West clerestory showing the electrical conduit through the window frame at bottom right, and propane conduit through mortar adjacent to window frame at center, 2007.



FIG. E54: Peeled paint on the lintels above the west elevation clerestory window, 2007.



FIG. E55: Kitchen windows on the west elevation showing reflective film on center windows and vents on flanking windows. Note grey water line entering the building through the window at right, 2007.



FIG. E56: Unburied water pipes and electrical conduit in front of the west elevation. Note grey water pumps upward in pipe situated on the drainage, 2007.



FIG. E57: Office window on west elevation. Note the duct tape and plastic applied around the window and masonite boarding in the bottom right glass pane, 2007.



FIG. E58: Damaged 2×4 applied on the lintel above the Office window on the west elevation. Note electrical conduit entering the building through the window trim at left, 2007.

Interior

The interior is dominated by a central Great Room, which has a large a fireplace in the rear. The fireplace area is differentiated by a level change and domed wall/ceiling treatment. The Great Room is flanked by the Secondary Room on the east and a Hall to the Kitchen and Office on the west.

Each room is uniquely designed and the level of integrity varies among them. The Great Room, Secondary Room and Office retain most of their original materials and finishes. The Kitchen has been extensively altered.

Originally, the Great Room was the only public area of the Hermit's Rest, except for a women's restroom that is now a private Office. The Kitchen remains in use for the preparation and sale of food and beverages. The Secondary Room, once the caretaker's private living quarters, is now open to the public and contains sales items.

Merchandise is displayed for purchase in both the Great and Secondary Rooms. The display is denser in the Secondary Room.

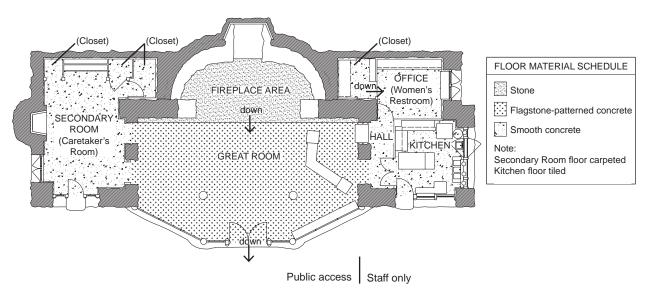


FIG. INT1: Floor Plan. Historic uses in parenthesis, 2007.

Great Room

Significance: High Condition: Fair Impact: Low

The Great Room is dominated by the fireplace area centered in the rear of the room. As the smell of fireplace soot wafts toward the visitor, even in the summer season, one quickly understands the purpose of the Hermit's Rest as a place to greet and comfort the weary traveler.

The feeling of space and openness is manipulated as one moves about the Great Room. Upon entering the building from the exterior, one is comforted by a low ceiling. But approximately 8' into the room, the ceiling gives way to a clerestory with windows on three walls, flooding the room with natural light. As one moves towards the fireplace, the room again shrinks in size to maintain the warmth of the fireplace and the intimate atmosphere.

The Great Room is approximately 36' x 30' (from exterior doors to fireplace).

With the exception of the central log posts, which are painted with a decorative design, all wood in the Great Room is unpainted.

Ceiling

Character-defining Features: domed stone ceiling; unfinished wood beams; unfinished wood slab boards; latilla; hair/natural fibers between wood members

The ceiling in the entrance area is composed of non-original log slabs oriented east-west. Rodent damage is visible on this ceiling. Rodents have carried trash through the ceiling and in some locations trash is visible between the log slabs. Originally, this ceiling consisted of east-west log beams with latilla running perpendicular between them, similar to the existing clerestory ceiling. The original ceiling configuration is likely still present above the log slab ceiling.

The clerestory ceiling is composed of massive log beams oriented north-south and spaced approximately 3 ½' on center. Above, latilla is oriented east-west with natural fibers placed between.

In contrast to the clerestory height in the central part of the Great Room, the ceiling is lower in the fireplace area. In this area, the stone wall and ceiling are integrated into a dome shape. The stone is stained with soot in this area, which photographic evidence suggests was part of architect Mary Colter's original design intent.

Walls

Character-defining features: exposed stone walls; (2) stone niches; arched doorways to east and west rooms; built-in stone bench in fireplace area; painted wood posts; stone fireplace with large keystone; unpainted wood detailing; wood door and window trim

All of the walls are composed of irregularly-shaped Kaibab limestone. In most places, the mortar is deeply recessed within the stone joints and is not dominant. Its buff-grey coloration and somewhat gritty texture blend with the

surrounding stones. Both stone and mortar are discolored due to the use of the fireplace. Photographic evidence suggests that this discoloration may have been part of the original design intent.

The Great Room is symmetrical along the north-south axis. Two log posts support the entry ceiling. The posts are decoratively painted and the paint is faded. The posts mask steel pipes reinforced with concrete that help support the clerestory wall above. Candelabras are mounted on the south side of posts. Additional candelabras were mounted on the north side of these posts but were relocated to the fireplace area. Holes are present in the posts where the candelabras were once installed.

The east and west walls have two archways each that open into the side rooms. The east archways lead to the Secondary Room and the west archways to the Hall. All archways are bordered with stone. The south archway on the west wall is currently blocked by a non-original safe and burlap covering.⁸¹

The south wall has an enormous arched opening to the fireplace area. The archway is bordered by stone, slightly projected from the rest of the wall. Centered on the back of this wall is the actual fireplace, nearly 5' wide and bordered by stones, projecting slightly forward from the rest of the wall. A large keystone holds its place at the top of the fireplace. A chimney sweep maintains the fireplace twice a year.

An integrated stone bench flanks the fireplace in the fireplace area. A stone is loose on the bench just east of the fireplace. The bench's depth projects near the step to accommodate firewood storage. Iron straps were originally located on both sides of these projections to contain the firewood. Only one iron strap remains and is located on the north side of the east bench. Modern mortar has been applied on the stone bench in this location.

Although differently shaped from the traditional inglenook, this fireplace area has the feeling of encapsulating the visitor in an area of warmth near the fireplace. The stone in this area is especially stained with soot from the fireplace, further enhancing its sense of place.

Small niches on the east side of the stone fireplace wall and the west side of the south wall provide display areas.

Floor

Character-defining Features: scored concrete floor; step up to fireplace area; flagstone floor in fireplace area; large circular-shaped flagstone centered in fireplace area

With the exception of the fireplace area, the floor is poured concrete scored to imitate flagstone. It is waxed every two weeks and stripped once a year.

Flagstone flooring, approximately 6" higher than the rest of the room, covers the fireplace area; it is waxed and stripped on the same schedule. A white strip of paint is regularly applied to the edge of the upper level as a safety measure. The white paint is visually distracting and detracts from the character of the interior. The Hermit's Rest staff have never observed anyone trip at this level change, even when the white paint becomes worn. A circular-shaped flagstone is centered in the fireplace area floor.

⁸¹ This safe, manufactured by the McNeale & Urban Company of Cincinnati, Ohio, was relocated from the Office. It is unknown when the safe was originally placed in the Hermit's Rest and when it was moved to this location.

Fenestration

Character-defining Features: (8) operable and (13) fixed wood clerestory windows; chains for operable windows; operable glazed wood doors; fixed wood windows

The east wall archways to the Secondary Room originally had wood doors; no doors currently exist.

The Great Room is flooded by natural light from the north, east and west walls. At the center of the north wall, double wood doors are flanked by single fixed wood windows on both sides, all of which project approximately 6' from the plane of the wall. This set of windows and doors runs parallel to the wall, and is flanked by a set of three wood windows on each side that are angled at 30° from the central set in order to meet the side walls. A vertical log separates the central set from the flanking windows on each side. While these flanking windows are currently fixed in place, historically the middle window was fixed and the two adjacent openings were operable as doors. It is unknown when these doors were fixed in place; hinges and latches remain on the interior. Each pane of glass is approximately 5' tall x 2' wide.

Three massive, stacked logs span the length of the north wall where the clerestory rises from the lower ceiling. The lowest log is the largest in diameter. The top log is the smallest in diameter. Above them are 13 wood clerestory windows. Five central windows are flanked by four on each side, which are separated by vertical logs of approximately 1 ½ width. Each window is separated from the next by a 10 vertical log. Two square wood posts, approximately 1 ½ wide are located behind each window; they are not connected to the window but are visible from the interior. The two windows on each the east and west sides are operable and a chain is present on the trim to secure them. A massive log lintel spans the length of the north wall above the clerestory windows.

The east and west walls have four wood clerestory windows each. Each window is separated from the next by a 10" vertical log. Two square wood members, approximately 1 ½" wide, are located behind each window; they are not connected to the window but are visible from the interior. The end clerestory windows on each wall are operable and a chain is present on the trim to secure them. A massive log lintel spans the length of the east and west walls above the clerestory windows. A massive log sill spans the length of these walls below the windows.

Furniture

Character-defining Features: (2) painted wood chairs with woven leather seats; (2) log barrel chairs; (1) log bench; (2) painted wood folding table/chairs, one of which is missing a seat; (1) circular painted wood table; (1) rectangular wood table; (1) painted wood clock with hanging pendulum; (2) andirons; (2) in-fireplace iron runners (1) Dutch oven; (1) copper tea kettle; (1) iron firewood rail; (4) iron candelabra; (9) iron hooks for animal furs and skins at fireplace

Historic wood furniture is present in the Great Room, including two log barrel chairs with modern vinyl seats, two painted wood chairs with wicker seats, two painted wood tables that convert into chairs, one log bench, one rectangular wood table and one smaller painted wood chair. One of the painted wood tables that convert into chairs is missing its seat.

⁸² The doors appear closed in all historic photographs uncovered by the project team. The doors were blocked by furniture in photographs dated as early as circa 1916.

Massive andirons are situated in the fireplace. A copper tea kettle, Dutch oven and other fireplace accourrements are located near the fireplace.

Two iron candelabras (approximately 1 ¾' wide x 4' tall), relocated from the wood posts, flank the fireplace and are mounted in the stone. Iron rings, nine in total, are mounted at various heights above the stone bench. These rings were historically used to hang animal furs and skins over the bench for seating.

A painted wood clock is mounted on the east side of the south wall.

Fixtures

Character-defining Features: (3) cylindrical lamps on iron hooks, one of which is missing copper covering; (1) triangular lamp

Modern track lighting is installed on the entrance area ceiling.

Three modern ceiling fans are suspended from the clerestory ceiling by chain. Suspended from each is a modern light fixture.

Iron lamps are mounted on iron hooks in the stone wall above the firewood storage. There is one lamp on each the east and west sides. These cylindrical lamps have an orange translucent material behind the iron. The lamps are now electrified.

Additional iron lamps are mounted on iron hooks on the east and west walls between the two archways. The lamp on the west wall varies from the other iron lamps in the Great Room in that it does not have orange translucent material behind the iron frame.⁸³

An iron lamp, triangular in shape, is mounted from the ceiling in the fireplace area. This lamp was once mounted on the stone corbel arch near the Hermit's Rest. It was installed in this location sometime between the 1950s and 1990s.

Other

Character-defining Features: N/A

The Hermit's Rest currently functions as a retail shop with light refreshments. Merchandise is displayed throughout the Great Room, with the exception of the fireplace area. A retail counter is located in the west side of the room.

A modern propane heater is mounted in the southwest corner of the room on a steel C-channel. An additional steel C-channel remains in the southeast corner of the room where a propane heater was removed. Rodents enter the building interior at the location of the removed propane heater.

Two modern speakers are mounted on the west wall. They are mounted at different heights and a cord is draped along the stone wall between them.

⁸³ Photographic evidence from 1994 shows both of these lamps with the translucent material and both electrified.

A wood shelf is located below the three western windows on the north wall. It is approximately 5" from the ground.

Exposed electrical conduit and propane piping is installed through the window frame on the west clerestory window. The electrical conduit runs the length of the north wall above the clerestory windows, and along the east wall under the clerestory windows. This exposed conduit provides electricity to the east side of the building. Electrical outlets are present in the fireplace area. The eastern outlet is used during the holiday season; the western outlet is never used.

Great Room Deficiency/Modification	Recommended Treatment*	Impact
Damaged features:		
Log slab ceiling at entrance damaged by rodents. See	Remove modern log slabs. Restore latilla and log beams	Severe
FIGS. GR8, GR9.	above modern log slabs. Seal gaps between building	
	materials in consultation with park Historical Architect.	
Trash left by rodents visible in ceiling. See FIGS. GR8,	Remove modern log slabs. Restore latilla and log beams	Severe
GR9.	above modern log slabs. Seal gaps between building	
	materials in consultation with park Historical Architect.	
Loose stone on integrated bench. See FIG. GR12.	Secure stone using compatible mortar. Compatible mortar	Severe
	should match the historic mortar in texture, color and	
	placement with the joints.	
Level change from exterior. See FIG. GR1.	No treatment required. A wheelchair ramp is available	Moderate
	when needed. See the Alternatives for Treatment section	
	for more information.	
White painted stripe at fireplace area level change	Cease painting the floor level change white. The Hermit's	Moderate
visually distracting. See FIGS. GR1, GR2.	Rest staff have never observed anyone trip at this level	
	change, even when the white paint becomes worn.	
Floor regularly waxed giving it a shiny appearance. See	Evaluate other surface finishes that do not appear shiny but	Moderate
FIGS. GR1-GR4.	still protect the floor from increased visitor traffic.	
Incompatible mortar applied on built-in stone bench.	If stones become further displaced, secure with compatible	Moderate
See FIG. GR11.	mortar. Compatible mortar should match the historic mortar	
	in texture, color and placement with the joints.	
Table/chair missing seat. See FIG. GR19.	Restore seat in-kind.	Moderate
Electrical conduit and propane pipe installed through	Remove conduit and patch window trim. Install conduit	Moderate
window frame. See FIG. E53 in the Exterior section	through existing mortar joint.	
(page 78).		
Decorative paint faded on wood posts. See FIGS.	No treatment required. Evaluate options to enhance the	Low
GR13, GR14.	original color scheme and only repaint the wood posts if	
	paint analysis can determine the original coloration and	
	issues of workmanship can be adequately resolved.	
Holes in posts from removed candelabra. See FIG.	No treatment required.	Low
GR14.		

Great Room Deficiency/Modification	Recommended Treatment*	Impact
Missing features		
Missing features: Rodent access at location of removed propane heater.	Seal gaps between building materials in consultation with	Severe
See FIG. GR7.	park Historical Architect.	Ocvere
Doors to Secondary Room missing. See FIG. GR4.	No treatment required.	Low
Three iron firewood holders missing. See FIG. GR11.	Restore missing firewood holders in-kind.	Low
Historic light fixture missing shade covering. See FIG.	Restore missing covering in-kind.	Low
GR26.		
Modern alterations:		
Modern merchandise displays obscure character-	Consult with merchandise display specialist. Replace	Moderate
defining features. See FIGS. GR3, GR4, GR13.	large sales displays with compact units that do not obscure	
	windows, doors and circulation routes.	
Archway blocked with non-original safe and burlap. See	Remove burlap and install on stretcher to be placed behind	Moderate
FIGS. GR3, GR16.	arch. Burlap should have the appearance of being taut and	
	to the dimensions of the archway.	
Modern log slab ceiling at entrance. See FIGS. GR6,	Remove modern log slabs. Clean and restore latilla and log	Moderate
GR8, GR9 and CD11, CD12 in the Chronology of	beams above modern log slabs.	
Development & Use section (page 30).		
Modern steel C-channel present for removed propane	Remove steel C-channel. Seal gaps between building	Moderate
heater in southeast corner. See FIG. GR7.	materials in consultation with park Historical Architect.	
Candelabras relocated to fireplace wall from posts. See	No treatment required.	Low
FIGS. GR2, GR14, GR15 and CD8 in the Chronology of		
Development & Use section (page 28).		
Modern speakers installed on west wall and cords	Haphazard mounting of speakers and draping of cords is	Low
draped between them. See FIG. GR3.	visually distracting. Replace with cordless mini speakers.	
Modern track lighting installed. See FIGS. GR3, GR4,	No treatment required. Modern track lighting is not visually	Low
GR6, GR9.	intrusive and does not appear falsely historic.	
Modern ceiling fans with hanging light fixtures. See FIG.	No treatment required.	Low
GR5.		
Modern conduit on north, east and west walls See FIG. GR7.	Obscure conduit by painting to match log members.	Low
Historic lamp fixtures electrified. See FIG. GR24.	No treatment required.	Low
Modern electrical outlets at fireplace. See FIGS. GR24,	Remove exposed conduit and outlet on the west side of the	Low
GR25.	fireplace that is unused. Retain electrical outlet on the east	
	side.	
Modern propane heater mounted on steel C-channel.	No treatment required.	Low
See FIG. GR27.		
Modern shelves below west windows and between west	Remove shelves.	Low
windows and Kitchen archway. See FIG. GR28.		
* Note: See the <i>Ultimate Treatment & Use</i> section of this report for additional information on each recommendation.		
110.0. 333 and Shamato Troubling a 300 300 and of this report for additional information on cash reconfinediation.		



FIG. GR1: Level changes from the exterior into the Great Room and from the main floor level to the fireplace area, 2007.



FIG. GR2: Great Room fireplace showing domed stone ceiling, historic furniture, white-painted step and waxed flagstone floor, 2006.



FIG. GR3: Great Room facing west showing merchandise display and retail counter, 2007.



FIG. GR4: Great Room facing east, 2007.



FIG. GR5: Great Room ceiling showing log beams, latilla, clerestory windows, propane heater, modern ceiling fans and modern light fixtures, 2007.



FIG. GR6: View facing northeast showing ceiling and window configuration, 2007.



FIG. GR7: View of the southeast corner of the Great Room showing the stone walls, wood ceiling and windows, painted clock and steel c-channel for the removed propane heater. Note conduit in corner, 2007.



FIG. GR8: Modern log slab ceiling at the entrance showing the debris collected by rodents, 2007.



FIG. GR9: View of the modern log slab ceiling at the entrance showing the track lighting and damage caused by rodents, 2007.



FIG. GR10: Stone niche on the west side of the south wall, 2007.



FIG. GR11: Built-in bench showing the iron firewood holder and incompatible mortar, 2007.



FIG. GR12: Loose stone in the fireplace area bench, 2007.



FIG. GR13: View of a log post showing the faded paint and adjacent merchandise displays, 2007.



FIG. GR14: Post showing etched lines, faded paint and holes where candelabra was once mounted, 2007.



FIG. GR15: Iron candelabrum installed on the fireplace wall, 2007.



FIG. GR16: View of the south arch on the west wall, blocked by non-original safe and covered with burlap. Note stone niche and modern speaker at left, 2007.



FIG. GR17: Log barrel chairs with vinyl seat covering and painted wood table that converts into chair in front of the built-in stone bench, 2006.



FIG. GR18: Painted wood chairs and table in front of the built-in stone bench, 2006.



FIG. GR19: Missing seat on the painted wood table that converts into chair. Note scored concrete floor treated with wax, 2007.



FIG. GR20: Historic wood table, 2007.



FIG. GR21: Andirons, 2007.



FIG. GR22: Copper tea kettle on modern iron trivet, 2007.



FIG. GR23: Light fixture suspended from the domed ceiling. Note this light fixture was originally hung from the corbel arch to the east of the Hermit's Rest, 2007.



FIG. GR24: Electrified lamp fixture on an iron hanger and modern electrical outlet, 2007.



FIG. GR25: Unused electrical outlet and conduit on the west side of the fireplace area, 2007.



FIG. GR26: Lamp fixture on an iron hanger missing translucent screen, 2007.



FIG. GR27: Propane heater and modern speaker in the southwest corner of the Great Room, 2007.



FIG. GR28: Shelf below the windows on the west side of the double entrance doors, 2007.

Secondary Room

Significance: High Condition: Fair Impact: Low

The Secondary Room, approximately 13' x 21', was originally private quarters for the caretaker of the Hermit's Rest. It now functions as merchandise display. The merchandise display is denser in the Secondary Room than in the Great Room. Merchandise is displayed along each wall and on free-standing units.

The Secondary Room has neither heat source nor ventilation, making its temperature difficult to control. The room is uncomfortably warm in the summer.

Two closets are located in the southwest corner of the room.

All wood in the Secondary Room is unpainted.

Ceiling

Character-defining Features: log beams; wood boards; hair/natural fibers at junction of wood beams

The ceiling is composed of massive log beams oriented east-west. They are spaced approximately 3 ½' on center. At approximately the middle of the room, one log beam does not span the length of the room and is cut near the west wall. A small portion of another beam projects from the west wall, only slightly askew from this cut beam. There is an additional beam projecting from the west wall that does not continue across the length of the room. In the center of the room, two log beams span the length of the room and are spaced closer together than the others. Rodent footprints are visible on the log beams in the southwest corner of the room.

Above the beams, there is a reverse board-and-batten ceiling consisting of 2 x 12s spaced 3" apart.

Natural fibers are visible in the connections between the ceiling beams and walls. In some locations, gaps between these building components allow rodent access.

Water damage is present on the ceiling in the west closet. The south closet ceiling is lowered to accommodate the log beams above.

Walls

Character-defining Features: light board and dark batten wood walls; wood trim; historic closet configuration; (partly non-original) stone fireplace; wood closet supports with carved finials

All of the Secondary Room walls are composed of vertical wood board-and-batten. Vertical wood battens, approximately 1' wide, are spaced approximately 3" apart. Battens are darker in color than the boards. The battens span the height of the room between the wood ceiling and baseboard trim. A presumably missing batten has been replaced with a modern batten on the south side of the east window.

The ceiling and baseboard trim are approximately 6" wide, as are wood door and window trim. The trim is dark in color. Wood trim is missing around the north door. An additional wood trim piece runs the length of each wall at the height of the top window trim. It has the same dimension and color as other battens and trim. A modern white trim board is mounted on the ceiling near the north door.

The east wall has a stone fireplace which has been partially replaced. The reason for the alteration, which was executed sometime before 1994, is unknown. The lower stones as well as the brick at its base are original. Originally, the fireplace featured an iron spherical-lune shaped hood, which is no longer present. The fireplace is approximately 6' wide x $4\frac{1}{2}$ tall. A small stone shelf projects above the opening. The fireplace is no longer operable.

The south wall has original wood partition walls with carved finials. These partition walls once separated a central open area from closets on both sides. The east closet has been converted to merchandise display. The west closet remains in use as a closet. A false wall was installed in the central area for merchandise display.

An additional closet is located in the south corner of the west wall. Both closets are regularly accessed by the Hermit's Rest staff.

An area of the west wall projects into the room at approximately the center of the room. The wall projects approximately 1' and is approximately 3' wide.

The west wall has two arched doorways into the Great Room. Both arches are bordered by wood trim. Around the south arch, the trim is approximately 6" wide and light in color. The north arch trim is modern and is both smaller in size and darker in color. A horizontal trim piece above the north arch is also modern. It has been painted light brown and is larger in size than the adjacent trim.

A modern slat wall was installed on the north wall to the west of the window and displays mugs for sale.

Floor

Character-defining Features: concrete floor (under carpet and in closet); (original) brick hearth at the fireplace.

Carpet was installed in the Secondary Room in 2007. Carpet existed in this location prior to the installation of this new carpet. It is unknown when carpet was first installed, but it was prior to 1994.

Wood thresholds are located at the arched doorways. They are approximately 4" wide.

The carpet does not extend into the south closet. This closet floor is poured concrete. It is not waxed.

Fenestration

Character-defining Features: (non-original) wood Dutch door; wood door on the south closet; iron strap hinges and wood hardware on south closet door; eight-lite wood casement windows; fixed ten-lite windows

The windows and exterior door are currently blocked by merchandise displays.

On the north wall, a wood Dutch door to the exterior is flanked by fixed ten-lite wood windows. The unfinished quality of the interior side of the door suggests that the Dutch door is a modern replacement. It is unknown when the door was replaced.

The arched doorways on the west wall originally had wood doors. These doors are no longer present.

The east closet door on the south wall is also missing.⁸⁴ The west closet door on the south wall remains. It is composed of vertical wood boards and has iron strap hinges and wood hardware.

A wood door is present on the closet on the west wall. It is composed of vertical wood boards and has a small iron handle. The door is similar to the other closet door, with strap hinges and wooden hardware. However, the strap hinges and wooden hardware are oriented toward the interior of the closet.

Two eight-lite wood casement windows are present on the north side of the east wall.

Furniture

Character-defining Features: (2) andirons, iron fire poker; iron hook for fire poker

Two large andirons are located in the fireplace. An iron hook is mounted in the stone on the left side of the fireplace and holds an iron fire poker.

Except the merchandise displays, no other furniture is located in this room.

Fixtures

Character-defining Features: N/A

. IN/A

Modern track lighting is mounted on the north-south ceiling boards.

A modern incandescent light fixture is mounted on the west closet's ceiling. A modern lamp is clamped to the historic closet area on the east side of the south wall.

A security camera is installed in the northwest corner of the room and its cord is draped across the north wall.

⁸⁴ This door has been removed from its original location and is stored in the merchandise storage trailer nearby.

Secondary Room Deficiency/Modification	Recommended Treatment*	Impact
Damaged features:		
Exterior door blocked by merchandise. See FIG. SR8.	Remove merchandise display from the area in front of the	Severe
	door. See Alternatives for Treatment for more information.	
Water damage on closet ceiling. See FIG. SR13.	See Site and Exterior sections for recommended treatments	Severe
	to prevent moisture penetration to the interior.	
Rodent access gained through gaps between wall	Seal gaps between building materials in consultation with	Severe
boards, ceiling boards, and connections between wall	park Historical Architect.	
and ceiling. See FIGS. SR13, SR14.		
Rodent footprints on ceiling logs. See FIG. SR17.	Clean footprints from ceiling logs. Seal gaps between	Severe
	building materials in consultation with park Historical	
5 11 11 11 11 11 11 11 11 11 11 11 11 11	Architect.	
Daylight blocked by display in windows. See FIGS.	Consult with merchandise display specialist. Replace	Moderate
SR2, SR8.	large sales displays with compact units that do not obscure windows, doors and circulation routes.	
Room temperature is warm in the summer.	Open windows for ventilation. See Alternatives for	Moderate
The same of the sa	Treatment for more information.	
	L	
Missing features:		
Closet door missing. (Located in storage trailer.) See	Retain door and re-install if additional closet storage is	Low
FIG. SR5.	desired.	
Doors to Great Room missing. See FIGS. SR9, SR10.	No treatment required.	Low
Modern alterations:		
Modern merchandise displays. See FIGS. SR2, SR3,	Consult with merchandise display specialist. Replace	Severe
SR5, SR8, SR20.	large sales displays with compact units that do not obscure	- Low
	windows, doors and circulation routes.	
False wall installed on south wall for display. See FIG.	Remove false wall. If necessary, display can be placed	Moderate
SR3.	along the back wall and lighting integrated or provided	
	above.	
Slat board installed on north wall. See FIG. SR8.	Remove slat board.	Moderate
Carpet installed over concrete floor. See FIGS. SR11, SR12.	No treatment required.	Moderate
Missing battens in closet. See FIG. SR18.	Install battens in-kind to prevent rodent access into the	Moderate
	room.	
White board on ceiling near north door. See FIG. SR19.	Remove white board.	Moderate
Write board on ceiling hear north door. See 116. Six 19.		
Stone fireplace reconfigured. See FIGS. SR1 and CD13	No treatment required.	Low
	No treatment required.	Low

Secondary Room Deficiency/Modification	Recommended Treatment*	Impact
Fireplace plugged.	No treatment required.	Low
Modern track light fixtures installed. See FIGS. SR2,	No treatment required. Modern track lighting is not visually	Low
SR17.	intrusive and does not appear falsely historic.	
Reversed door to west wall closet. See FIG. SR7.	Re-orient door so that iron strap hinges face the Secondary	Low
	Room.	
Modern trim over north arch on west wall See FIG.	Remove modern trim and install trim to match historic trim	Low
SR10.	over the other arch.	
Modern battens where original battens missing. See	Remove modern battens and install battens to match	Low
FIG. SR15.	historic.	
Security camera installed in northwest corner with cord	If security camera required, mount cord to corner and run	Low
draped across north wall See FIG. SR16.	cord down the wall at the corner.	
Modern Dutch door. See FIG. SR19.	No treatment required. See Alternatives for Treatment for	Low
	more information on exterior access into this room.	
* Note: See the <i>Ultimate Treatment & Use</i> section of this report for additional information on each recommendation.		



FIG. SR1: Stone fireplace on the east wall of the Secondary Room, 2007.



FIG. SR2: East wall of the Secondary Room showing the fireplace, merchandise display over wood window, board and batten wall, and ceiling-mounted track lighting, 2007.



FIG. SR3: South wall of the Secondary Room showing the original partition wall with a modern false wall at center, 2007.



FIG. SR4: Detail of a finial on the south partition wall, 2007.



FIG. SR5: Southeast corner of the Secondary Room showing the missing closet door and modern merchandise display, 2007.



FIG. SR6: Wood closet door, hardware and iron hinges on the west side of the south wall, 2007.



FIG. SR7: Closet door on the south side of the west wall currently oriented with the iron strap hinges facing the closet interior, 2007.



FIG. SR8: North wall of the Secondary Room showing the merchandise display blocking the exterior Dutch door and windows. Note the modern slat wall at left, 2007.



FIG. SR9: South arch on the west wall showing the original trim, 2007.



FIG. SR10: North arch on the west wall showing modern trim, 2007.



FIG. SR11: Modern carpet, 2007.



FIG. SR12: Threshold between the Secondary Room and Great Room, 2007.



FIG. SR13: Water damage on the closet ceiling and a screen over a hole in the wall, 2007.



FIG. SR14: Gap between a ceiling beam and wall, 2007.



FIG. SR15: Modern batten to the right of the window on the east wall, 2007.



FIG. SR16: Northeast corner of the Secondary Room showing a security camera, 2007.



FIG. SR17: Southwest corner of the Secondary Room showing the closet wall configuration, ceiling treatment and animal footprints at right, 2007.



FIG. SR18: Missing batten in the storage closet, 2007.



FIG. SR19: White board near the exterior Dutch door. Note the unfinished quality of door, 2007.



FIG. SR20: Protruding area of the west wall, 2007.

<u>Hall</u>

Significance: High Condition: Good

Impact: Low

The Hall functions as a corridor to both the Kitchen and Office from the Great Room. It is approximately 3 ¾' wide x 11' long. It is also used for merchandise storage.

An east-west partition wall was originally located between the arches on the east wall of the Hall, separating the entrances to the public women's restroom and private Kitchen. The partition was most likely removed when the women's restroom was converted into an Office, the date of which is unknown.

Ceiling

Character-defining Features: wood boards; log beams; hair/natural fibers at junction of wood beams

The ceiling treatment varies on either side of the removed partition wall. On the north side, east-west oriented logs span the width of the Hall with north-south oriented boards above. The logs are approximately 4" in diameter and spaced approximately 2' on center; they are cosmetic only. The boards are approximately ½" apart. The north portion of the ceiling has water damage.

The south side of the ceiling has substantial log beams oriented east-west with board and batten, oriented north-south, above. The more finished, southern portion of the ceiling coincides with the historic public use of this section of the Hall.

Walls

Character-defining Features: stone on the north and east walls; wood board and batten on south and west walls; wood shelves; partition wall from ceiling

A remaining section of the wood board and batten partition wall extends downward from the ceiling. A wood shelf is located on the north side of this partition wall. An additional wood shelf is located over the Kitchen doors.

The north and east walls are composed of Kaibab limestone. On the north wall, a gap between the ceiling and stone wall is filled with burlap. The south and west walls are wood board and batten.

A vertical log separates the south side of the west wall from the Kitchen doors.

Floor

Character-defining Features: unfinished concrete floor

The Hall floor is poured concrete. It is not waxed.

Fenestration:

Character-defining Features: see associated rooms below

The Hall is open to the Great Room through two stone archways. The south archway is blocked by a non-original safe and burlap covering. The north arch remains accessible for passage.

The Kitchen is accessed through double wood doors on the west wall. Information on these doors is contained in the Kitchen section below.

The Office is accessed through a wood door on the south wall. Information on this door is contained in the Office section below.

Fixtures:

Character-defining Features: N/A

Lighting is provided by two modern incandescent flush-mounted fixtures.

Exposed conduit is haphazardly mounted on the ceiling and walls.

Two control boxes for alarm systems are mounted on the south side of the west wall.

Hall Deficiency/Modification	Recommended Treatment*	Impact	
Damaged features:			
Water damage on ceiling. See FIG. H4.	See Site and Exterior section for recommended treatments	Severe	
	to prevent moisture penetration to the interior.		
Modern alterations:			
Archway to Great Room blocked with safe and burlap.	Remove burlap and install on a stretcher to be placed	Moderate	
See FIG. GR16 in the <i>Great Room</i> section (page 90).	behind arch. Burlap should have the appearance of being		
	taut and to the dimensions of the archway.		
Partition wall removed. See FIG. H1.	No treatment required.	Moderate	
Exposed wiring haphazardly mounted. See FIGS. H2,	Bundle wiring and mount to ceiling and walls in straight	Moderate	
H4, H6, H7.	lines along the corners.		
Modern fluorescent ceiling fixtures. See FIGS. H3, H4.	No treatment required.	Low	
* Note: See the <i>Ultimate Treatment & Use</i> section of this report for additional information on each recommendation.			



FIG. H1: View of the Hall facing north, showing merchandise storage at right and the Kitchen door at center. Note the portion of the original partition wall at the top of the photograph, 2007.



FIG. H2: Alarm control boxes on the south side of the west wall, 2007.



FIG. H3: Ceiling treatment on the north side of the Hall, 2007.



FIG. H4: Ceiling treatment on the south side of the Hall. Notice water damage behind light fixture at right, 2007.



FIG. H5: View facing south showing partition wall extending downward from the ceiling. Note wood shelves, 2007.



FIG. H6: North wall showing conduit. Note burlap in-fill between wall and ceiling, 2007.



FIG. H7: View facing northwest showing conduit, 2007.

Kitchen

Significance: Low

Condition: Fair Impact: Low

The Kitchen, approximately 11 1/2' x 12', is used only by the Hermit's Rest staff for the preparation and sale of food and

beverages. With the exception of freshly baked cookies, all food is pre-packaged. A refrigerator contains soft drinks,

and staff prepares coffee, tea and hot chocolate. Visitors order and pay for food and beverages from the exterior.

The Kitchen, already small in size, is made all the tighter with the addition of modern counters, shelves and appliances.

The Hermit's Rest staff finds the small space manageable, but only two to three employees can comfortably work in the

Kitchen at one time.

Ceiling

Character-defining Features: N/A

The Kitchen ceiling is gypsum board painted white. It originally consisted of board and batten oriented north-south.

It is unknown when the original ceiling treatment was removed.

Walls

Character-defining Features: wood board and batten on east and south walls; wood cabinets on south wall;

wood door and window trim

With the exception of the area behind the cabinet on the south wall, all of the walls are gypsum board painted white.

The walls originally consisted of board and batten oriented vertically. It is unknown when the original wall treatment

was removed.

The original board and batten wall treatment remains on the east and south walls, except where covered by a Formica

finish between the upper and lower cabinets.

Above- and below-counter wood cabinets are located on the south wall. They are painted white on the outside and

stained on the inside. Above-counter shelves and below-counter drawers are located on the east wall. It is unknown

if the shelves and drawers are original or added later. Modern Formica countertops are present on both the east and

south walls.

Additional shelving is located on the south wall and in front of a window on the west wall.

The wall configuration was modified at some point by the removal of a pantry in the southwest corner of the Kitchen.

Floor

Character-defining Features: N/A

The floor is covered with vinyl tile which is white with multi-colored speckles.

Fenestration

Character-defining Features: wood Dutch door with iron strap hinges; double wood doors to hall; 12-lite

wood window

The Kitchen is accessed through the Hall to the east and the exterior to the north. Two wood doors separate the

Kitchen from the Hall. The south door generally remains closed and the north door open.

A wood Dutch door provides exterior access on the north wall. This historic door was modified by the installation of

a modern double-hung aluminum window in the top section. The top section of the Dutch door is generally open for

service when weather permits.

A modern double-hung aluminum window is located to the west of the door and is used to place orders. Its Formica

sill projects into the Kitchen and serves as a shelf. An original 12-lite wood window is located to the west of the modern

aluminum window.

On the west wall, two one-lite wood windows are flanked by 2-lite wood windows. The south one-lite window is

operable, the others are fixed. Both one-lite windows are covered with a reflective film. Both 2-lite windows have

louvered vents and fans installed in the top half.

The storage of food in the windows blocks light to the interior. It also negatively affects the character of the building

by marring the west exterior elevation.

Fixtures

Character-defining Features: N/A

A ceiling-mounted fluorescent light fixture provides light into the Kitchen.

Other

Character-defining Features: N/A

Staff experience difficulty obtaining hot water as quickly as desired through the coffee machine. A small hot water

heater is located in the southwest corner of the room and both its size and the machine's capabilities may be inadequate

for the demand for warm beverages during the colder months.

A refrigerator, located near the center of the room and close to the ordering window on the north wall, is loud and staff

have difficulty hearing customers over its running cycle.

Single and three-compartment sinks are both located on the west wall. A Jabsco pump, located under the three-

compartment sink, is used to transfer grey water out of the building and up the hill to the septic tank. Staff must drain

only one sink compartment at a time. The sinks often clog and are slow to drain.

A fire extinguisher is located in the southwest corner of the Kitchen, above the hot water heater. It is partially blocked

by wiring to an oven.

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Kitchen Deficiency/Modification	Recommended Treatment*	Impact
Damaged features:		
Daylight blocked by food storage and display in	Remove food display and storage in front of the windows.	Moderate
windows. See FIGS. K1, K12.	Consult with commercial kitchen specialist on food storage	
	and display.	
Loud refrigerator impairs employee hearing. See FIG.	Consult with commercial kitchen specialist on refrigerator	Moderate
K4.	replacement.	
Inefficient hot water for coffee and tea machines. See	Consult with commercial kitchen specialist on hot water	Moderate
FIG. K9.	treatment.	
Septic pipe installed through window frame. See FIG.	Remove septic pipe from window frame. Patch frame and	Moderate
K10.	paint to match existing. Install pipe through existing mortar	
	joint.	
Frequent clogging and overflowing of sink. See FIG.	Consult with commercial kitchen specialist on sink	Moderate
K11.	treatment.	
Missing features:		
Original sink, wall treatments and most cabinets	No treatment required.	Moderate
removed. See FIG. CD14 in the Chronology of		
Development & Use section (page 31).		
Modern alterations:		
Wall configuration modified by removal of original pantry.	Consult with commercial kitchen specialist to determine	Moderate
See FIG. CD14 in the Chronology of Development &	functionality of pantry. If pantry storage space is desirable,	
Use section (page 31) and original drawings in Appendix		
В.		
Oven wiring interferes with access to corner fire	Remove and reroute wiring.	Severe
extinguisher. See FIG. K9.		
Modern counter installed under north window. See FIG.	No treatment required.	Moderate
K2.	·	
Replaced wood window with aluminum on north wall	Replace with double-hung wood window.	Moderate
See FIG. K2.	3	
Replaced Dutch door window with aluminum-framed	Remove aluminum window and replace with glass pane to	Moderate
window. See FIG. K3.	match original configuration.	
Modern cabinets, counters and backsplashes. See	No treatment required.	Moderate
FIGS. K5, K6.		
Exhaust fans and louvered vents installed in side	Vents provide needed ventilation for the Kitchen interior.	Moderate
windows on west wall. See FIGS. K10, K12.	Evaluate alternatives to window vents with commercial	Moderate
Wildows off West Wall. 666 F100. 1010, 1012.	kitchen specialist. Ventilation alternatives must respect the	
	character and significance of the building.	
Window covered with improperly adhered reflective film		Moderate
Window covered with improperly adhered reflective film.	Remove reflective film. If sun protection is required, then	wouerate
See FIG. K12.	properly install new tinted window film.	

Recommended Treatment*	Impact
Remove shelves. Consult with commercial kitchen	Moderate
specialist on food storage and display.	
No treatment required.	Low
No treatment required. When windows require	Low
replacement, install replicas of original windows.	
No treatment required.	Low
	Remove shelves. Consult with commercial kitchen specialist on food storage and display. No treatment required. No treatment required. When windows require replacement, install replicas of original windows.

^{*} Note: See the *Ultimate Treatment & Use* section of this report for additional information on each recommendation.



FIG. K1: North window covered with product display, 2007.



FIG. K2: Aluminum window on the north wall with modern shelf, 2007.



FIG. K3: Dutch door on the north wall showing the modern aluminum window, 2007.



FIG. K4: Refrigerator facing north. Note vinyl tile floor, 2007.



FIG. K5: East wall showing modern cabinets and the back of the refrigerator at right, 2007.



FIG. K6: Southeast corner of the Kitchen showing wood cabinets and drawers, 2007.



FIG. K7: Historic wood finish on the cabinet interiors on the south wall, 2007.



 $\label{eq:FIG.K8:West side} \textit{FIG.K8:West side of the south wall showing conduit,} freezer and modern shelves, 2007.$



FIG. K9: Southwest corner of the Kitchen showing the freezer at left, hot water heater at center, and sink at right. Note the exhaust fan in the window in the corner and wiring over the fire extinguisher, 2007.



FIG. K10: South side of the west wall, 2007.



FIG. K11: West wall showing sinks, Jabsco pump and storage, 2007.



FIG. K12: West windows showing window film, exhaust fan, storage shelf and blocked daylight, 2007.

Office

Significance: High Condition: Fair Impact: Moderate

The Office, approximately 10 $\frac{1}{2}$ 'x 10', is used as an additional storage area for merchandise and as the office of the store manager. It has a closet, approximately 6' x 6 $\frac{1}{2}$ ' on the east side. The Office was originally used as a women's restroom and its closet was the toilet area.

Ceiling

Character-defining Features: wood boards; log beams; hair/natural fibers at junction of wood beams

The ceiling is composed of massive log beams oriented east-west. They are spaced approximately $3\frac{1}{2}$ on center. Above the beams, there is a reverse board-and-batten ceiling consisting of $2 \times 12s$ spaced 3 apart.

Natural fibers are visible in the connections between the ceiling beams and walls. In some locations, gaps between these building components allow rodent access.

Water damage is present on the ceiling.

The closet ceiling is painted with a yellow wash which tested positive for lead.

Walls

Character-defining Features: exposed stone on south, east and west walls above wainscoting; wood board and batten on north and east walls above wainscoting; light wood wainscoting with dark horizontal battens; wood cabinet with dark battens on south wall; gas stove elements within cabinets on the south wall; wood-burnt paintings on wainscoting; recessed nook at window; dark wood floor trim; yellow paint in area of historic toilet in closet; wood door, window, floor and ceiling trim

With the exception of the north wall and an area of the east wall above and to the south of the doorway, all of the walls are Kaibab limestone. The north wall and this section of the east wall have unpainted wood board and batten above the wainscoting.

Wood wainscoting is located on the lower 4'-10" of the east, west and south walls. The wainscoting is unpainted wood with dark horizontal battens spaced approximately 1' on center. Battens are approximately 2" wide. In the area between the top two battens, stylized painted flowers are bordered with wood-burnt lines. A bench seating area is integrated into the wainscoting on the west wall. This area is now occupied by file storage. Although no documentation of the Office as it originally existed has been located, it is presumed that the wainscoting and decorative painting date to the original construction.

Original wood cabinets, approximately 2 ½' high, are located along the length of the south wall. These cabinets are unfinished wood, except on the top surface where they are dark in color. The cabinets have vertical battens that are approximately 1' apart and dark in color. At the east end of the countertop, there are three holes, each approximately

11" in diameter, over gas stove elements located below. These stoves were likely used to heat water in a wash basin. The east two holes are covered by a wood board fastened to the countertop and the west hole is covered with an unsecured

board.

Modern wood shelving is located above the original cabinets on the south wall and above the wainscoting on the north

wall.

Wood baseboard trim is dark in color to match the wainscoting battens and is approximately 9 1/4" wide. Wood door trim is also dark in color. The wood window trim is unfinished. Electrical conduit enters the building through the window trim.

Wood ceiling trim is located on the east board and batten wall. It is dark in color.

The closet was once two areas, the front area for the toilet and the rear area presumably for storage. The partition wall has since been removed. The difference between these two areas is visible in the wall coloration. The historic toilet area is painted with a yellow wash which tested positive for lead. The rear area is unpainted.

Chicken wire is attached to gaps in the closet walls to prevent rodent access.

Floor

Character-defining Features: unfinished concrete floor

The Office floor is poured concrete. It is not waxed. The closet floor is approximately 6" above the Office floor.

Fenestration

Character-defining Features: wood door; wood door hardware; wood windows

The back of the wood door from the Hall into the Office has wood-burnt paintings that match those on the wainscoting. It has wood hardware but is missing a horizontal latching member.

The closet door is missing.

Two six-lite wood windows are located on the west wall. They are currently fixed in place. Thick wire mesh is located in front of the windows, presumably for security. The Hermit's Rest now has a drop safe.

Fixtures

Character-defining Features: N/A

Fluorescent light fixtures are mounted on the underside of ceiling log beams.

Other

Character-defining Features: N/A

An electric baseboard heater is located under the west windows. It provides sufficient heat for the Office.

Office Deficiency/Modification	Recommended Treatment*	Impact	
Damaged features:			
Water damage on ceiling. See FIG. 08.	See Site and Exterior section for recommended treatments	Severe	
	to prevent moisture penetration to the interior.		
Rodent access gained through gaps between wall	Seal gaps between building materials in consultation with	Severe	
boards. See FIG. O9.	park Historical Architect.		
Electrical conduit installed through window frame. See	Remove conduit and patch window trim. Install conduit	Moderate	
FIG. O2.	through existing mortar joint.		
Lead-based paint present in Office closet. See FIG.	No immediate treatment required. Follow abatement	Moderate	
O10.	process as required.		
Missing features:			
Closet door missing. See FIG. O1.	No treatment required.	Low	
Office door missing part of wood latch. See FIG. O6.	No treatment required.	Low	
Modern alterations:			
Security wire installed over window. See FIG. O2.	Remove wire. The Hermit's Rest now has a drop safe.	Moderate	
Modern fluorescent lighting installed on ceiling. See	No treatment required.	Low	
FIG. 01.	The accumulation required		
Baseboard heater installed on west wall. See FIG. O2.	No treatment required.	Low	
	'		
Modern shelving installed in office and closet for	No treatment required. Original wainscoting and cabinets	Low	
merchandise storage. See FIGS. O2-O5.	should not be damaged by the addition of any modern		
	shelving. Nothing should be attached to the original		
	wainscoting and cabinets.		
Partition wall removed and original toilet room and	No treatment required.	Low	
storage area combined into single closet. See FIG.			
O10.			
* Note: See the <i>Ultimate Treatment & Use</i> section of this report for additional information on each recommendation.			



FIG. O1: View facing east showing the wainscoting over the stone wall at left and over board and batten at right. Note the missing closet door and fluorescent lighting, 2007.



FIG. 02: View facing west showing wainscoting, storage and wire over windows, 2007.



FIG. O3: East side of the south wall showing historic cabinets and modern shelves for merchandise storage, 2007.



FIG. O4: West side of the south wall showing historic cabinets and modern shelves for merchandise storage, 2007.



FIG. O5: West side of the north wall showing wainscoting and modern shelves for merchandise display, 2007.



FIG. O6: Wood door with wood hardware on the east side of the north wall. Note wainscoting on the east wall at right, 2007.



FIG. O7: Detail of a painted image with wood-burnt lines on the wainscoting, 2007.



FIG. O8: View facing west showing water damage on the ceiling and wire over the windows, 2007.



FIG. 09: Gaps between a ceiling member and the wall covered with a screen, 2007.



FIG. O10: Office closet showing yellow paint in the historic toilet area and unfinished wall. Note the screen over a hole in the wall, 2007.



FIG. O11: One of three gas stove elements located within the cabinets on the south wall, 2007.

TREATMENT & USE

ULTIMATE TREATMENT AND USE

The following section recommends rehabilitation of the Hermit's Rest. The Secretary of the Interior defines rehabilitation

the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.85

The Hermit's Rest continues to function as required by Xanterra Parks and Resorts, the owner and occupant of the building. For the most part, the exterior retains all its original features. However, many of the porch's protruding log beam ends have been cut flush with the porch roof edge due to deterioration, significantly changing the expression of the porch. The roof, once covered with earth and stones which served to blend the building into the hillside, was a significant part of the original visitor experience at the Hermit's Rest. Since the 1960s, the earth and stones have been removed and visitors are discouraged from ascending the hill.

Rehabilitation of the Hermit's Rest will maintain its existing form and materials where possible. Its rehabilitation will allow both its continued use and ability to function as a testament to early tourism development by the Santa Fe Railway, Mary Colter's site-specific romantic architecture and the Fred Harvey Company's renowned service.

Rehabilitation treatment of the Hermit's Rest is generally supported by park management actions and plans, including the List of Classified Structures (2006). The General Management Plan (1995) specified that the Hermit's Rest be converted back to its original use and "once again be a rest area with a small gift shop and limited food service in spaces that were historically used that way."86 Effort has been made by Xanterra to forward these goals but much yet remains.

To complete rehabilitation would elevate the condition status of the Hermit's Rest from fair to good, and guarantee its continued functionality.

Recommended Improvements

This section presents components of rehabilitation treatment, and details the order in which they should occur. Recommendations respect the character-defining features of the Hermit's Rest and are intended to retain and preserve those features. For a comprehensive list of deficiencies, and the exact location of their occurrences, please see the Physical Description section and the related drawings in Appendix C, the code-related deficiencies discussed in Appendix D and the structural deficiencies discussed in Appendix E.

Treatment recommendations, intended to stabilize the Hermit's Rest and extend its utility, will undoubtedly impact historic building materials. Although the overall emphasis is to retain original materials, it is recommended that some damaged original materials, specified below, be replaced to ensure structural stability.

⁸⁵ National Park Service, The Secretary of the Interior's Standards for Rehabilitation: http://www.cr.nps.gov/hps/tps/standguide/rehab/ rehab_standards.htm (accessed 13 September 2006).

⁸⁶ Grand Canyon National Park, General Management Plan (1995), 40.

When original/historic materials are to be moved off-site for repair, they should be properly marked so that they may return to their original location. All work, whether it is repair or replacement, should be documented by written summary and location mapping.

The ultimate treatment of rehabilitation has three categories: Site / Setting Treatments, Exterior Treatments and Interior Treatments. Within each category, deficiencies have been organized by impact. Deficiencies listed as 'Severe' across the three categories should be addressed before deficiencies listed as 'Moderate,' and those listed as 'Moderate' before those listed as 'Low.'

Site / Setting Treatments

Severe

Evaluate the site in consultation with a landscape architect. Regrade as required for positive drainage.

Thin the trees and branches in contact with the building and within its defensible space.

Waterproof the inadequately protected electrical outlet at the septic tank.

Moderate

Secure the displaced stones flanking the asphalt paths. If displaced stones are available, return them to their original locations. If they are missing, replace with like stone.

Bury the water lines that are currently exposed near the southwest corner of the building.

Low

Install an interpretive display north of the shuttle stop that details the history and significance of the Hermit's Rest, highlighting the original approach and site features.

Replace the missing shuttle sign adjacent to the shuttle stop.

Remove the guardrail installed to discourage visitors from descending down the canyon's rim to the historic hidden overlook. The area has been re-vegetated and the stairs are no longer an attractive nuisance.

Remove the signage discouraging the feeding of wildlife from the porch area. Relocate the sign to an area that minimizes obstructions between the Hermit's Rest and the canyon while still effectively conveying its message.

Remove the modern stones from their placement on top of the stone oven. Install a sign in front of the stone oven noting the historic purpose of this feature.

Remove the wiring currently sealing the lamppost candle holder, if lighting the lamppost is desirable. The lamppost can be re-used in its historic function as a candle holder or fitted with an LED flickering candle powered by battery.

Evaluate trash receptacle locations and install trash receptacles that are cohesive in design. Trash receptacles should not be located where they obstruct views of the Hermit's Rest. Appropriate locations include the shuttle stop and the area west of the Hermit's Rest.

Relocate the bicycle rack currently near the stone lamppost to the area near the road and parking lot.

Cease situating the wheelbarrow and dolly at the Hermit's Rest and instead, immediately return them to the storage trailer after use.

Exterior Treatments

Severe

Evaluate building drainage. Coordinate with the findings of the landscape architect on site drainage issues. Make changes as required in consultation with the landscape architect to ensure the stability of the ground adjacent to the Hermit's Rest.

Replace the missing stones at the base of the north retaining wall. Secure stones using compatible mortar. Compatible mortar should match the historic mortar in texture, color, strength and placement within the joints.

Remove the entire porch structure and restore to its historic roof and floor configuration. Preserve all original porch stonework and retain all intact wood members for re-use. Repair deteriorated wood members where possible and replace in-kind where necessary. Install posts on footings. Install beams to extend beyond the porch roof line. Remove the lower area of concrete floor infill, the inappropriate concrete work near the Kitchen area and the modern steps at the west side of the porch. Restore the porch floor to its original stepped configuration with poured concrete scored in a flagstone pattern. Sufficient documentation, including original drawings, historic photographs and extant members exist to ensure that restoration efforts can be executed with accuracy in regards to original intent. See the *Alternatives for Treatment* section for further discussion of the porch restoration.

Paint the restored porch wood members to match existing and install sheet lead on the horizontal logs. While the original porch roof structure, as well as all exterior wood, was unpainted, the subsequent painting of all exterior wood members and the proposed reuse of painted members dictates that any new wood members also be painted. While not the original design intent, paint will help prolong the life of the wood members. Additionally, sheet lead installed over the horizontal wood members will conform to the knots and irregularity of the wood and extend their life span. Sheet lead should be installed with lead-headed nails, oriented within a 120° arc and painted to match the wood members to limit visibility.

Convert the Secondary Room exterior door into an accessible entrance. See the *Alternatives for Treatment* section for further discussion on providing an accessible entrance.

Remove the sheet metal installed over vigas and wood beam ends, as it likely traps moisture and hastens decay. Install sheet lead as specified above.

Replace the wood vigas on the clerestory in-kind as needed.

Replace the missing stone in the west elevation of the clerestory in-kind with compatible mortar. Compatible mortar should match the historic mortar in texture, color, strength and placement within the joints.

Secure the water pipes and electrical conduit on the roof with appropriate and unobtrusive fasteners.

Replace the missing pane of glass and missing mullion trim in the Office window with in-kind trim, painted to match.

Remove the area of decay on the Secondary Room door jamb and repair with a wood splice, painted to match.

Seal all gaps between building materials to eliminate rodent access in coordination with the park Historical Architect.

Establish and implement a regular painting schedule for all exterior wood features.

Moderate

Remove and replace the visually obtrusive white elastomeric roof coating. Follow the proper asbestos abatement process, if required. Replace the roof with a single-ply or built up roof of a more compatible color, using ballast where possible. Remove all unnecessary roof protrusions, such as the concrete block, when reroofing.

Remove the roofing material where it is applied to the stone, simultaneous with the roof replacement. Clean the stone with non-abrasive materials. Where flashing is required, sawcut a groove in the stone parapet walls, installing a reglet with counter flashing to hold the new roofing.

Determine the utility of the gutter currently displaced on the porch addition roof. Re-install or dispose of as appropriate.

Install stones where missing in the Secondary Room chimney in-kind. Secure new and loose stones with compatible mortar. Compatible mortar should match the historic mortar in texture, color, strength and placement within the joints.

Remove the wire mesh from the Secondary Room chimney. Install an animal-proof screen on the inside of the chimney, out of view.

Install an animal-proof screen on the inside of the Great Room chimney, out of view.

Remove the propane and electrical conduits currently installed through window frames. Patch the window trim and install the conduit through existing mortar joints.

Remove the grey water line from the drainage channel on the west elevation and bury in the ground. Remove the water line from the Kitchen window and install a new glass pane. Install the water line through an existing mortar joint.

Remove the reflective film on the west Kitchen windows. If sun protection is required on the interior, properly install unreflective tinted window film.

Evaluate potential alternatives to the Kitchen window vents with a commercial kitchen specialist. Ventilation alternatives should respect the character and significance of the building.

Remove the duct tape, plastic and 2 x 4 from the Office window. If gaps are revealed upon removal, seal gaps in consultation with the park Historical Architect.

Low

Remove the paint on the stone between the main entrance and Kitchen area using the gentlest means possible.

Remove the National Register of Historic Place sign currently located over the main entrance and reinstall in a location that allows greater readability.

Remove the Psalm sign from the porch support, carefully removing all epoxy material from the stone. If it is impossible to remove all epoxy from the stone, replace the Psalm sign with the National Register of Historic Places sign currently located over the main entrance.

Interior Treatments

Severe

Remove the modern log slab ceiling and restore the latilla and log beams above. Seal the gaps between building materials in consultation with the park Historical Architect.

Secure the loose stone at the integrated fireplace bench in the Great Room using compatible mortar. Compatible mortar should match the historic mortar in texture, color, strength and placement within the joints.

Remove the merchandise display from the area in front of the Secondary Room door and convert the doorway into an accessible entrance. See *Alternatives for Treatment* section for further discussion on providing an accessible entrance.

Remove the wiring in the Kitchen that interferes with access to the fire extinguisher and reroute along the wall.

Seal the gaps between building materials in all rooms in consultation with the park Historical Architect. Clean rodent footprints from the ceiling logs in the Secondary Room.

Moderate

Evaluate other surface finishes that do not appear shiny but still protect the Great Room floor from increased visitor traffic.

Cease painting the floor level change at the fireplace in the Great Room. The Hermit's Rest staff have never observed anyone trip at this level change, even when the white paint becomes worn.

Remove the burlap installed on the south arch between the Great Room and the Hall. Install on a stretcher to be placed behind the arch. Burlap should have the appearance of being taut and the dimensions of the archway.

Remove the steel C-channel located at the southeast corner of the Great Room and seal gaps behind.

Restore the missing woven leather seat on the wood table/chair in the Great Room.

Remove all propane, electrical and water conduits currently installed through the Great Room, Office and Kitchen window frames. Patch the window frames and install the conduit through existing mortar joints.

Consult with a merchandise display specialist for the Great Room and Secondary Room retail. Replace the large sales displays with compact units that do not obscure windows, doors and circulation routes.

Remove the merchandise display from in front of the windows and door in the Secondary Room.

Improve the ventilation in the Secondary Room to increase comfort during the summer months. See the *Alternatives for Treatment* section for ventilation options.

Remove the slat board from the north wall of the Secondary Room.

Install missing battens in-kind in the Secondary Room closet to prevent rodent access into the room.

Remove the white board on the ceiling near the north door in the Secondary Room.

Remove the false wall at the south side of the Secondary Room. If necessary, display can be obtained along the back wall and lighting integrated or provided above.

Bundle all haphazardly placed wiring in the Hall and mount to the ceiling and walls in straight lines along the corners.

Consult with a commercial kitchen specialist regarding appropriate food storage and display, ventilation, refrigerator replacement, and hot water and sink treatments.

Remove the food display and storage in the Kitchen windows.

Remove the reflective film on the west Kitchen windows. If sun protection is required, properly install new tinted window film.

Replace the double-hung aluminum window on the north wall of the Kitchen with a double-hung wood window.

Remove the aluminum window from the Kitchen door and replace with a glass pane to match the original configuration.

Remove the modern shelves over the Kitchen sink.

Remove the security grate at the Office window. The Hermit's Rest now has a drop safe.

Low

Restore the missing firewood holders and light fixture coverings in the Great Room in-kind.

Remove the speakers on the west wall of the Great Room and replace with a cordless mini speaker system, hiding speakers from view if possible.

Remove the unused exposed conduit and electrical outlet on the west side of the fireplace in the Great Room.

Obscure the exposed conduit on the north, east and west walls of the Great Room by painting it to match the adjacent log members.

Evaluate options to enhance the original Great Room color scheme and only repaint the wood posts if paint analysis can determine the original coloration and issues of workmanship can be adequately resolved.

Remove the modern shelves below the west windows and between the west windows and the Kitchen archway in the Great Room.

Reverse the west closet door in the Secondary Room so that the iron strap hinges face the Secondary Room.

Remove the security camera in the Secondary Room if unnecessary. If necessary, mount at the corner and run the cord down the corner of the wall.

Remove the modern trim over the north arch on the west wall of the Secondary Room and install trim to match the historic trim over the other arch.

Remove the modern battens in the Secondary Room and install battens to match the original battens.

REQUIREMENTS FOR TREATMENT

Rehabilitation of the Hermit's Rest must conform to National Park Service cultural policies and guidelines. It will be reviewed for compliance with the General Management Plan (1995), National Environment Protection Act (NEPA), Section 106 of the National Historic Preservation Act (NHPA), and all applicable codes and standards required by law and National Park Service policy.

As stated in the Director's Order on Cultural Resource Management (DO-28) and according to federal law and National Park Service policy, "all historic structures in which the Service has a legal interest are to be managed as cultural resources. Regardless of type, level of significance, or current function, every structure is to receive full consideration for its historical values whenever a decision is made that might affect its integrity." ⁸⁷

Section 106 of the National Historic Preservation Act (NHPA) mandates that all federal agencies, including the National Park Service, take into account the effects of their actions on properties listed, or eligible for listing, in the National Register of Historic Places. The Advisory Council on Historic Preservation must be given a reasonable opportunity to comment on any actions affecting federal properties.

Rehabilitation treatment should follow the Secretary of the Interior's Standards for the Treatment of Historic Properties, and the guidelines for applying those standards. See Appendices F and G for rehabilitation standards and guidelines.

Additionally, all treatments must comply with the requirements of the following codes and standards:

International Building Code 2006

International Existing Building Code 2006

Minimum Design Loads for Buildings and Other Structures (ASCE 7-98)

National Design Specifications for Wood Construction (NDS-2005)

National Fire Protection Agency 101 Life Safety 2006

National Fire Protection Agency 914 Code for Fire Protection of Historic Structures 2007

National Park Service, Director's Order 58: Structural Fire Management

Seismic Evaluation of Existing Buildings 2003 (ASCE 03-031)

UFAS/ADA Accessibility Guidelines 2002

Compliance with appropriate codes must be addressed at the time of the work related to those materials.

Accessibility

Treatments that address accessibility for the disabled must comply with the Americans with Disabilities Act/Architectural Barriers Act Accessibility Guidelines (2004) and the Uniform Federal Accessibility Standards (1998).

There are several impediments to accessibility at the Hermit's Rest. First, a portion of the path from the parking lot to the building exceeds the minimum slope requirements for accessibility.⁸⁸ Second, there is currently no accessible

⁸⁷ National Park Service, Director's Order #28: Cultural Resource Management: http://www.cr.nps.gov/history/online_books/nps28/28chap8.htm (accessed 13 September 2006).

⁸⁸ Consideration of this path as a trail under the Guidelines for Federal Outdoor Developed Areas (draft) would offer alternatives to the slope requirements of the ADA/ABAAG.

entrance into the building. If the slope of the entrance path was lessened, and the door into the Secondary Room modified slightly, an accessible route of travel could be gained into the building. In some areas, merchandise displays would have to be moved slightly to allow for accessible passage. There is greater difficulty in making the employee areas accessible. For further discussion of compliance related to accessibility, see Appendix D. See the *Alternatives for Treatment* section for further discussion on providing an accessible entrance.

Egress

The building can be exited at three locations: the double doors in the Great Room, the Kitchen door and the Secondary Room door. Only two of these—the main entrance and Kitchen door—are currently in use, and only the main entrance can be accessed by the public. The current configuration of a single exit for the public does meet code. Primary code compliance issues related to egress include inadequate door widths and irregular stone walking surfaces that pose potential trip hazards. The hardware on interior doors that requires two separate actions to unlock and open the doors poses another issue.

The exterior door into the Secondary Room is currently blocked by merchandise display and not used as part of the egress system. As noted above, use of this door could provide an accessible entrance; it would also provide a secondary means of egress for the public. For further discussion of code compliance related to egress, see Appendix D.

Hazardous Materials

Hazardous materials must be remediated when repair or replacement of affected building materials is necessary.

The Hermit's Rest contains hazardous materials, including lead-based paint in the Office closet, and likely asbestos materials in the built-up roofing. A HazMat study should be carried out with proper testing for public safety. For further discussion of code compliance related to hazardous materials, see Appendix D.

Fire Safety

The Hermit's Rest is not currently protected from potential fire damage. The National Park Service requires that all buildings undergoing rehabilitation or other alterations have an automatic sprinkler system and automatic smoke detection system installed. The need for such systems at the Hermit's Rest should be evaluated with careful consideration and analysis to determine which measures can be implemented without loss or damage to the historic fabric and character-defining features. If determined necessary, they should be installed in a manner appropriate to the building's historic character and significance, as well as public safety. The current fire protection system consists of fire extinguishers in four locations.

A fire protection assessment by a contractor for the Regional Structural Fire Management Office identified the following deficiency:

Interior walls appear to be covered with combustible surfacing which does not meet Class A, B or C interior finish requirements. Remove and/or cover with Class A, B or C rated surfacing material such as gypsum wall board or treat surface with an approved fire retardant.⁸⁹

⁸⁹ Fire Deficiencies Report, contracted by National Park Service Regional Structural Fire Management at Xanterra's request, date unknown.

This likely refers to the board and batten ceiling and wall coverings in the Secondary Room, Office and Hall. Although most solid wood materials, at a minimum, do meet Class C requirements, the rough-sawn character of the ceiling and wall surfaces in the Hermit's Rest may increase their flame spread rating to below Class C. Without actual analysis of the species, cut, density and finish of the boards, a fire spread rating can only be estimated.

The wood ceiling and wall surfaces contribute to the overall character of the building and removal or covering is not recommended. The application of an approved fire retardant could reduce the fire spread potential of these materials. However, care must be taken to avoid the application of anything that would alter the appearance of the wood surface. For further discussion of code compliance related to fire safety, see Appendix D.

Recommendation for Further Action

The foundation, floor and roof systems were evaluated by a structural engineer as part of this *Historic Structure Report*. The evaluation was limited to what was observable without the removal of any finish materials and resulted in cursory structural calculations. When further restoration work necessitates the removal of any finish materials, a structural engineer should evaluate those otherwise concealed connections and complete vertical and lateral load analyses.

Currently, water from the building drains from the roof and several porch drainages to the north side of the building. This action is causing ground erosion that is undermining the north retaining wall and will eventually lead to significant structural damage. A landscape architect should evaluate the site and building holistically to determine how to best guide water away from the building.

A merchandise display specialist should be consulted to develop a cohesive display plan for the Great and Secondary Rooms. The specialist should recommend compact display units that only minimally obscure windows, doors and circulation routes.

The current Kitchen configuration does not provide for adequate storage space and its appliances no longer function as required. A commercial kitchen specialist should be consulted to evaluate the Kitchen and provide recommendations on these issues.

ALTERNATIVES FOR TREATMENT

There are several treatments listed in the *Ultimate Treatment and Use* section for which alternate treatments exist, including repair of the porch area, cooling of the Secondary Room and accessible public entrance into the building.

Porch Configuration

In the original configuration of the porch area, the visitor descended two steps upon approaching the building and then ascended two steps to enter the building. This provided a protected, semi-enclosed experience within the porch area. Since its original construction, the lowest level of the porch has been raised with poured concrete.

Additionally, the log beams that support the porch roof historically extended past the roofline an additional 3' to 4', suggesting the extension of the roof plane. Most of these beam ends were cut off at the porch roof edge, likely as a result of irreparable water damage. In some cases, unsightly epoxy has been applied to the exposed ends of the roof beams. In several areas, sheet metal was affixed to the top of the beam ends, in theory to prevent moisture damage, but in actuality increasing moisture damage by trapping water against the beams. The eastern-most roof beams, which are supported from above by two irregularly-shaped logs attached to a viga, are separated from each other by approximately 4".

In 1980, a porch addition was constructed to the west side of the original porch. The addition is similar in character, as it is constructed from large pealed logs, but lacks the latilla present on the underside of the original roof and has a different roof treatment. Its beam ends are in similarly poor condition.

Porch Alternative One: Restore Porch

This report recommends restoration of the porch roof and floor to their historic configuration, as specified in the *Ultimate Treatment & Use* section of this report. Restoration will return the porch to its original design intent and would offer holistic repair to the badly compromised porch roof structure. Executed properly, restoration of the porch will ensure the continued and enhanced enjoyment of this matchless architectural experience. Sufficient documentation, including original drawings and historic photographs, exists to restore the porch with a high degree of accuracy. There are several options for porch restoration as well as alternatives to restoration, listed below.

It is unlikely that Mary Colter predicted that her remote little building would now host over 2 million visitors a year.⁹⁰ While the west porch addition is somewhat unsightly and in only fair condition, it provides much needed shaded space for a multitude of visitors. Any porch roof restoration should take this additional area into consideration. Several options for the treatment of this component of the porch restoration are presented below and illustrated on the following pages.

Design Options for Porch Restoration

In *Option A*, the historic porch roof would be restored and the west porch addition not rebuilt. This would be the most historically accurate restoration, but would eliminate shaded space that is regularly utilized. This option IS recommended.

In *Option B*, the historic porch roof would be restored and the west porch addition rebuilt, but not in-kind. The west porch addition would be constructed with compatible materials that are differentiated from the original, such as a

⁹⁰ Grand Canyon National Park, "Passenger Statistics 1974-Present: Visitor Transit System," January 20, 2004.

ramada with open vigas. This alternative would provide needed shade but may create an awkward connection with the historic porch, potentially interfering with the protruding beam ends, and may blur the line between historic and non-historic porch areas.

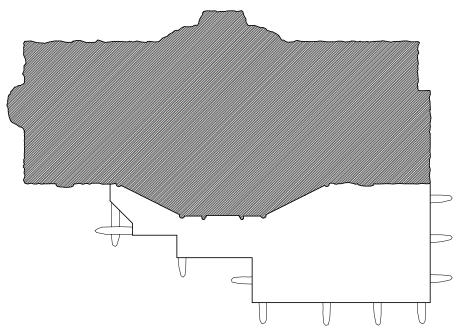


FIG. AT1: Option A for Porch Restoration. The west porch addition would be removed and the historic porch restored.

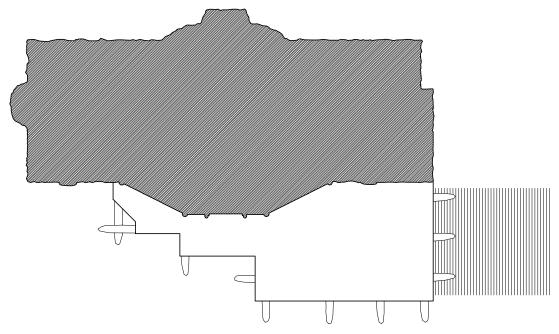


FIG. AT2: Option B for Porch Restoration. The historic porch roof would be restored. The west porch addition would be replaced by a porch roof constructed with compatible materials that are differentiated from the historic roof.

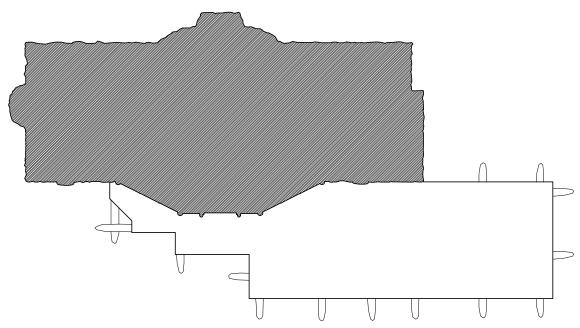


FIG. AT3: Option C for Porch Restoration. The entire roof porch would be reconstructed in the style of the original porch roof with protruding horizontal porch beams.

In *Option C*, the historic porch roof would be restored and the west porch addition integrated. This alternative would provide a unified design for the entire porch, but may blur the line between the historic and non-historic porch areas.

Porch Alternative Two: Preserve porch more or less as is

Deteriorated material would be cut back as far as possible on the beam ends, and a judicious amount of epoxy or sealer would be applied to forestall water damage. All sheet metal would be removed from the beams. The separation occurring at the eastern-most beam confluence would be repaired. No changes would be made to the porch floor.

This alternative only serves to prolong the porch's inevitable structural failure. Most of the log beam ends are badly deteriorated and cannot be cut back far enough to remove damaged material. These beam ends are unsightly and if moisture damage has penetrated far enough to deteriorate the logs at points of connection, the structural stability of the porch roof is compromised. This alternative maintains the porch floor in its muddled configuration of an odd collection of different materials, such as smooth concrete, concrete with flagstone shaped scoring and actual flagstone, and a number of seemingly useless steps at the west side. This alternative is NOT recommended.

Porch Alternative Three: Replace beam ends

The decayed portion of the log beams would be removed and replaced in-kind with new beam ends, secured with hidden steel or fiberglass all-thread reinforcement. No changes would be made to the porch floor.

Because the porch roof beams can not be spliced in such a way as to leave the seams hidden, and because of the difficulty in matching irregular wood logs that would differ greatly in age, this treatment is inappropriate. This alternative is NOT recommended.

Secondary Room Cooling

The lack of ventilation in the Secondary Room results in excessive summer temperatures. Several alternatives are available for the cooling of the Secondary Room.

Cooling Alternative One: Restore window to operable condition

Cross ventilation may be all that is needed in the Secondary Room to improve comfort during the summer months. It is recommended that merchandise be removed from in front of all windows, particularly the east windows of the Secondary Room. This window was designed to be operable and could easily be restored to that condition.

This alternative would necessitate the installation of a non-historic window screen. A window screen should be constructed to match the opening and installed without damaging historic material. The installation of a thin, painted metal-framed screen window would be less visible than a wood-framed screen and consideration should be given to a frame that does not detract from the exterior. Bronze screen cloth should be installed within the frame. Since this alternative requires no alteration or potential damage to historic material, and may meet user needs, this alternative IS recommended.

This alternative should be executed, and if determined ineffective, only then should Alternatives Two through Four be further evaluated.

Cooling Alternative Two: Install Split System Air Conditioner

The installation of a small split system air conditioner would adequately cool the Secondary Room while not necessitating ductwork. Although the unit could be placed in the least obtrusive location, it would likely be visible and detract from the character of the building. This alternative is recommended if Alternative One fails to adequately ventilate and cool the Secondary Room.

Cooling Alternative Three: Install Fan in Chimney

Chuck Easton, Xanterra Chief of Engineering recommended the installation of a fan in the chimney to increase air circulation through the room. If this could be accomplished without damaging the chimney and without a visual presence on either the interior or the exterior, then this alternative may be acceptable. However, since it will require alteration to historic material, it is NOT recommended.

Cooling Alternative Four: Install Evaporative Cooling System in Chimney

Alternately, Chuck Easton recommended the installation of an evaporative cooling system within the chimney. This would require a large, noisy system and the use of potentially damaging dripping water in a historic character-defining feature. This alternative is NOT recommended.

Accessible Public Entrance

The Hermit's Rest currently has no accessible public entrance. Section 4.1.7(3) of the ADA Accessibility Guidelines (ADAAG) requires that one accessible entrance be provided.⁹¹ Currently, wheelchair access is gained by a portable

⁹¹ Section 4.1.7(1) of the ADA Accessibility Guidelines (ADAAG) requires alterations to historic structures to comply with the requirements for other existing buildings unless it is determined that compliance with the requirements would threaten or destroy the historic significance of the building.

metal ramp stored inside the building. One must notify the Xanterra employees at the Hermit's Rest to provide the ramp. This solution is not convenient for either wheelchair users or Hermit's Rest staff members.

Two alternatives are presented for wheelchair access into the Hermit's Rest. Both solutions presume the alteration of the eastern approach path to a slope that complies with code requirements.⁹²

Accessibility Alternative One: Alter the Secondary Room Door

The Secondary Room door is currently wide enough to accommodate wheelchair access and could easily be altered to meet code. The removal of merchandise from this area is recommended to facilitate public use of this door. The threshold may need to be altered to meet code and the door fitted with appropriate push/pull hardware. Hardware should match the character of the existing door hardware as closely as possible.

This alternative is the simplest and least destructive to historic fabric and IS recommended.

Accessibility Alternative Two: Raise the Porch Floor

If the lowest level of the porch were in-filled with concrete, it would create a level surface from the eastern path to the main entrance. This would also eliminate the awkward steps that currently exist near the Kitchen. This solution would require the lowering of the main entrance threshold to lower than ½", and would require the historic doors be fitted with code compliant door hardware. With the removal of the steps at the western end of the porch, a continuous level surface could be provided across the entire north side of the Hermit's Rest.

This alternative would further alter the original depressed condition of the porch area and would lessen the height of the north wall to a greater degree. This alternative is NOT recommended.

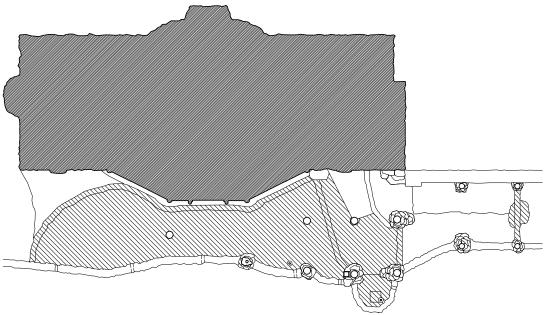


FIG. AT5: Accessibility Alternative Two. In order to create a level surface in front of the Hermit's Rest and provide compliant access through the Great Room entrance, concrete would be poured where hatched, except in the area of the west steps where the concrete steps would be removed.

⁹² As previously noted, consideration of this path as a trail under the Guidelines for Federal Outdoor Developed Areas (draft) would offer alternatives to the slope requirements of the ADA/ABAAG.

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APPENDICES

APPENDIX A REST HOUSE PROPOSALS

All existing drawings of early rest house proposals are collected here. The following are contained in this section:

Shelter at Hermit Point, Louis Curtiss Architect, n/d (3 sheets; MM-9489, Kansas State Historical Society, Santa Fe Collection)

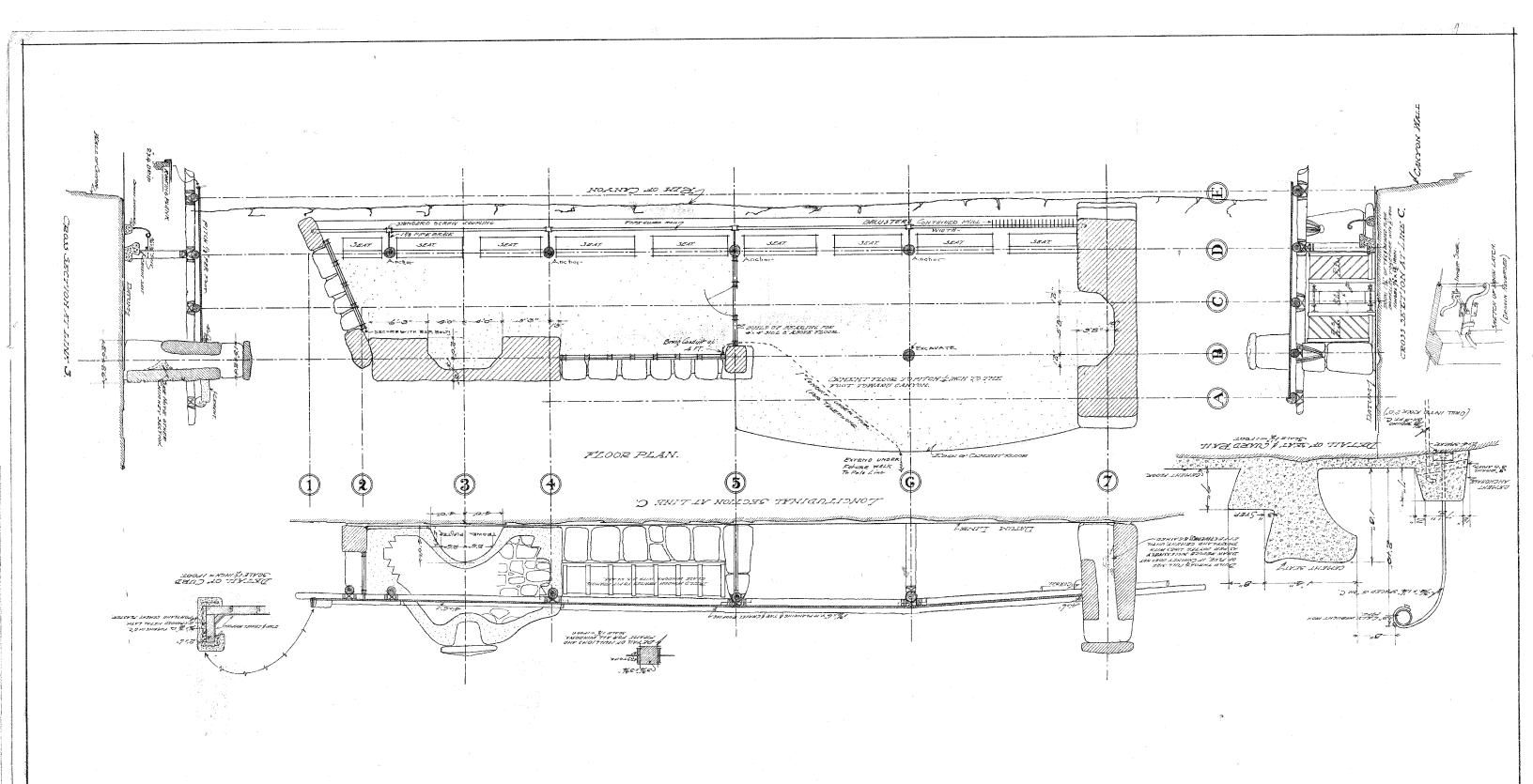
Proposed Rest House, Hermit Point, n/d (3 sheets; TIC: 113_60642)

Sketch for Rest House, Hermit Point, n/d (TIC: 113_60646)

Proposed Rest House, Hermit's Point, n/d (2 sheets; MM-34957, Kansas State Historical Society, Santa Fe Collection)

Proposed Rest House, Hermit Point, n/d (TIC: 113_60645)

Proposed Shelter Near Head of Hermit Trail, 11/9/1911

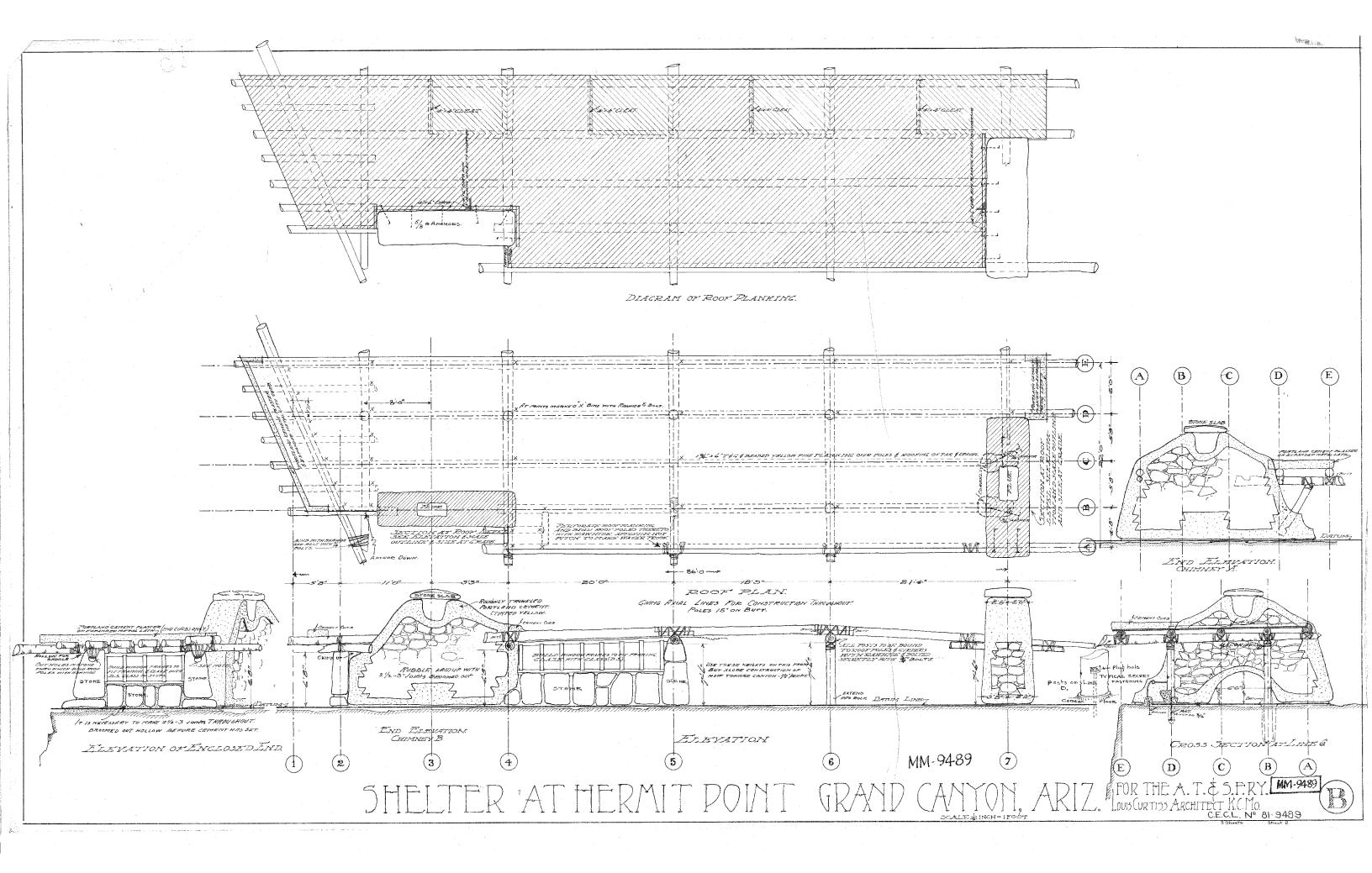


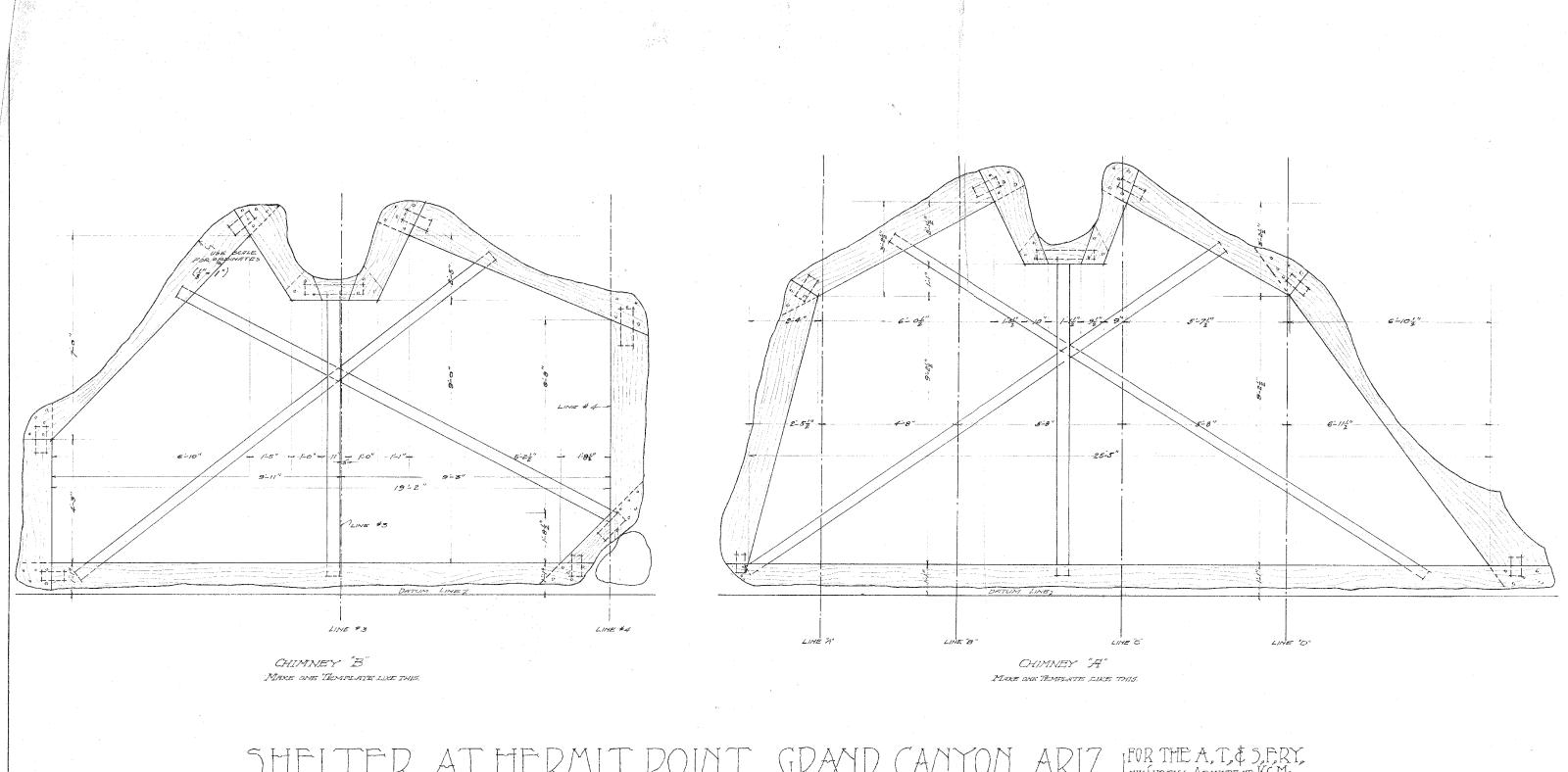
THELTER AT HERMIT POINT GRAND (ANYON, ARIZ, LOUIS (URTISS ARCHITECT KCMO,

MM-9489

CECL Nº 81-9489



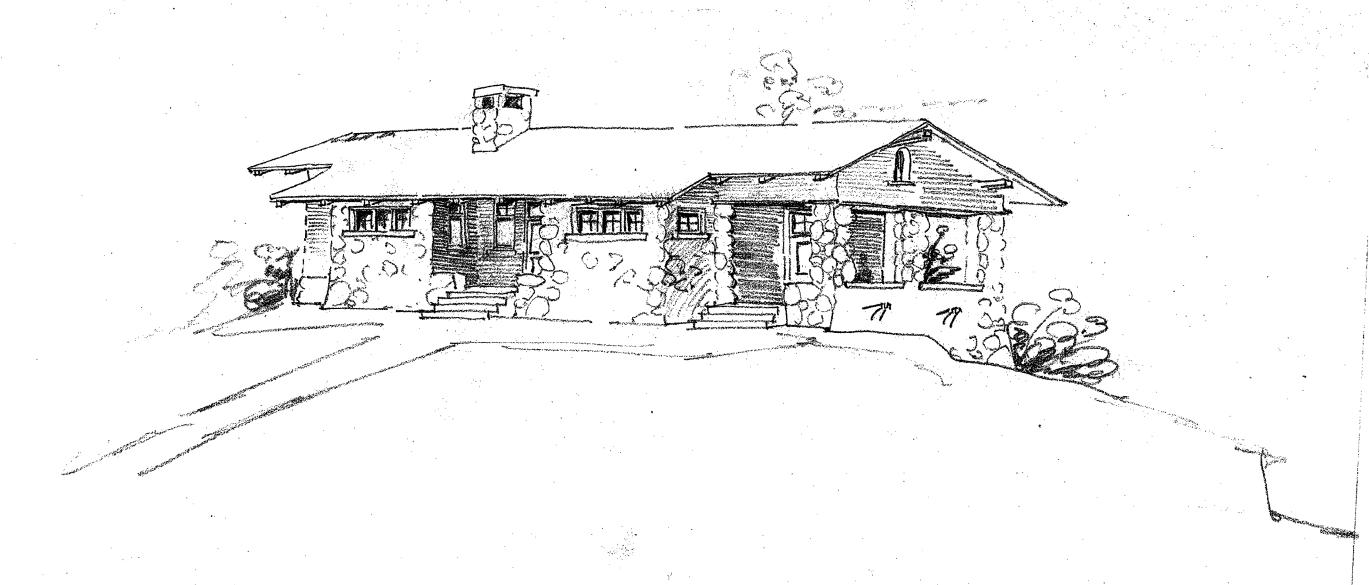


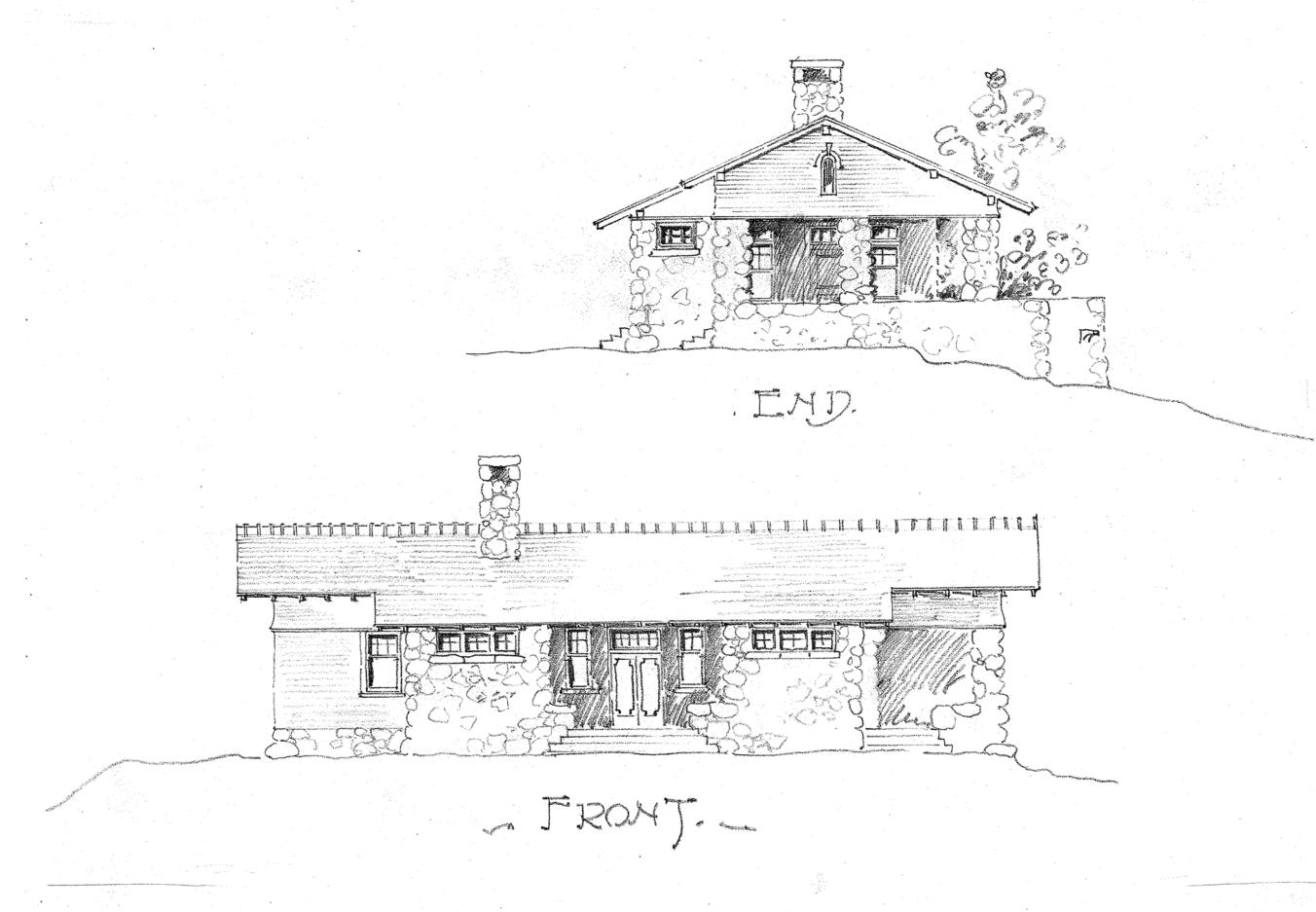


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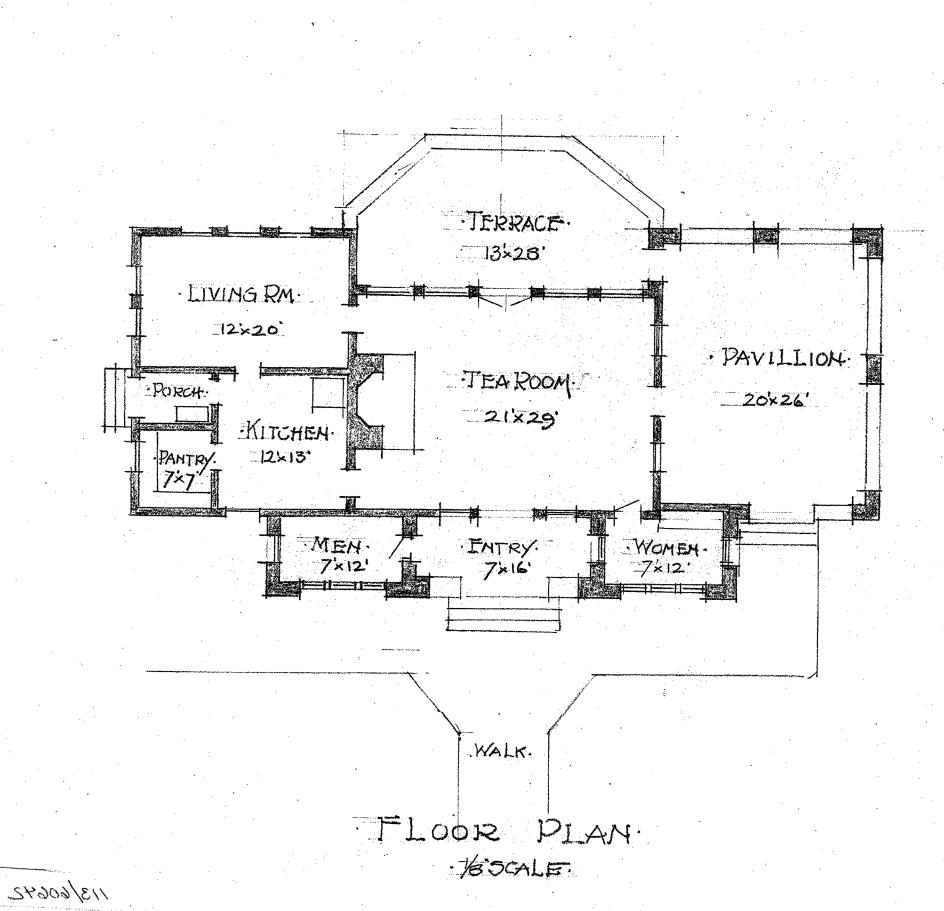
MM - 9489

REST HOUSE HERMITS PT.

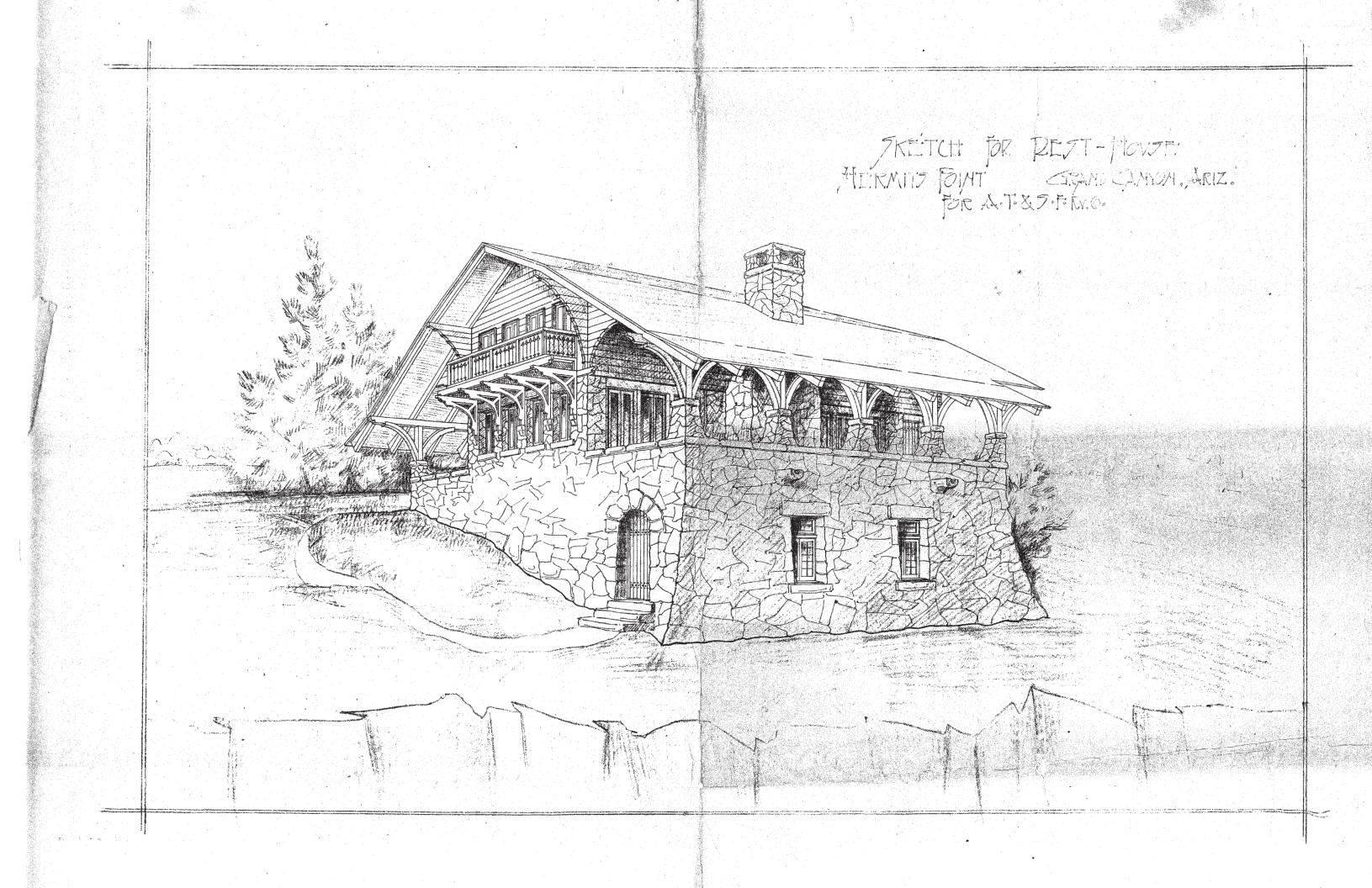


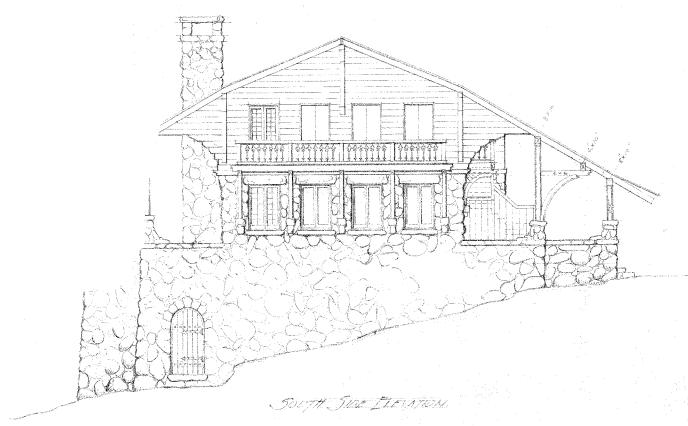


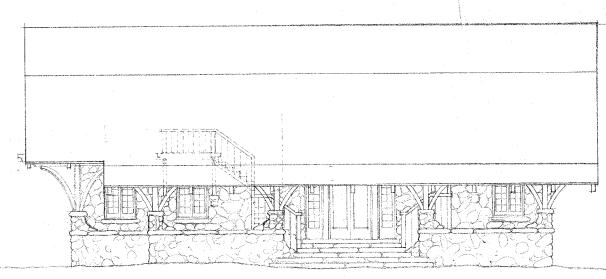
113/60643



RIM







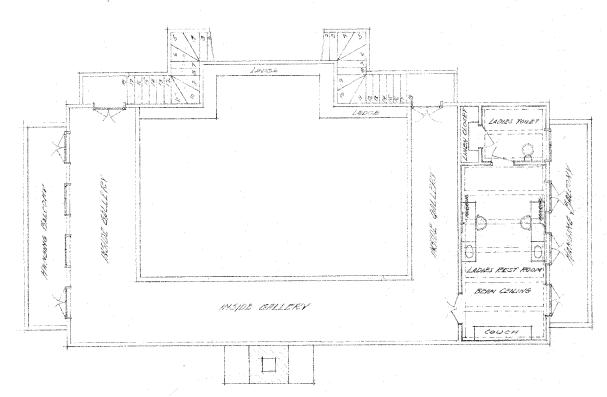
ERST ON MERT ELLVATION

PROPOSED REST HOUSE.
MERMITS-POINT, GRAND GANGA

PROPOSED REST HOUSE.

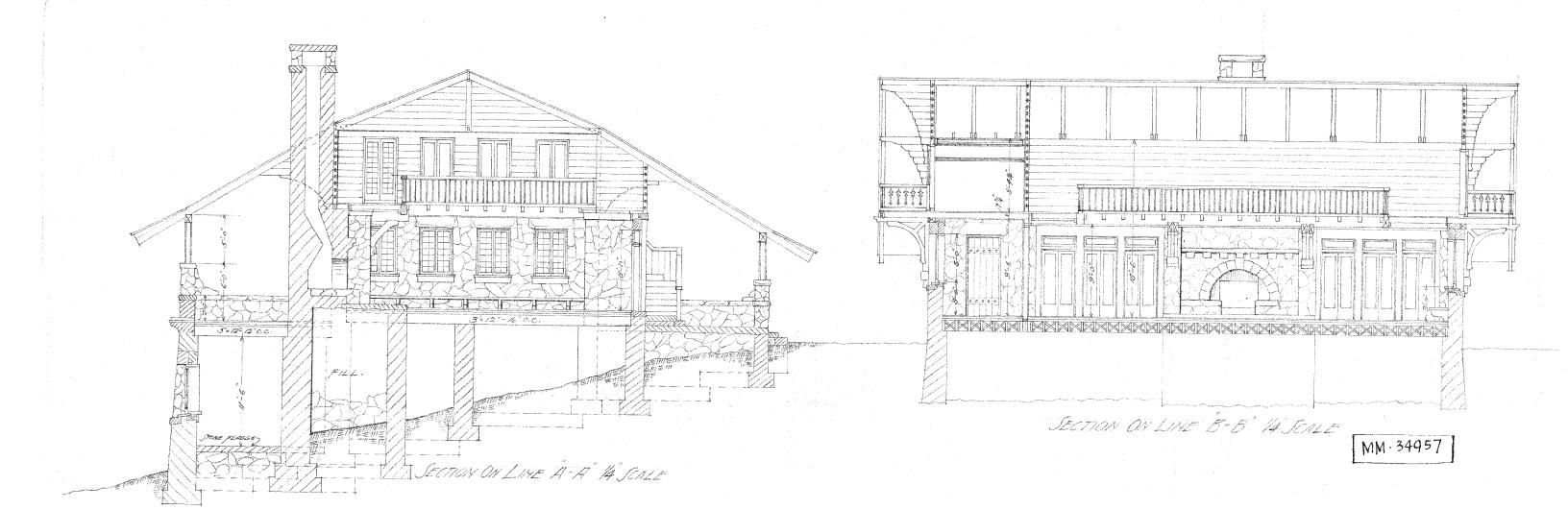
MERMITS-POINT, GRAND GANGA

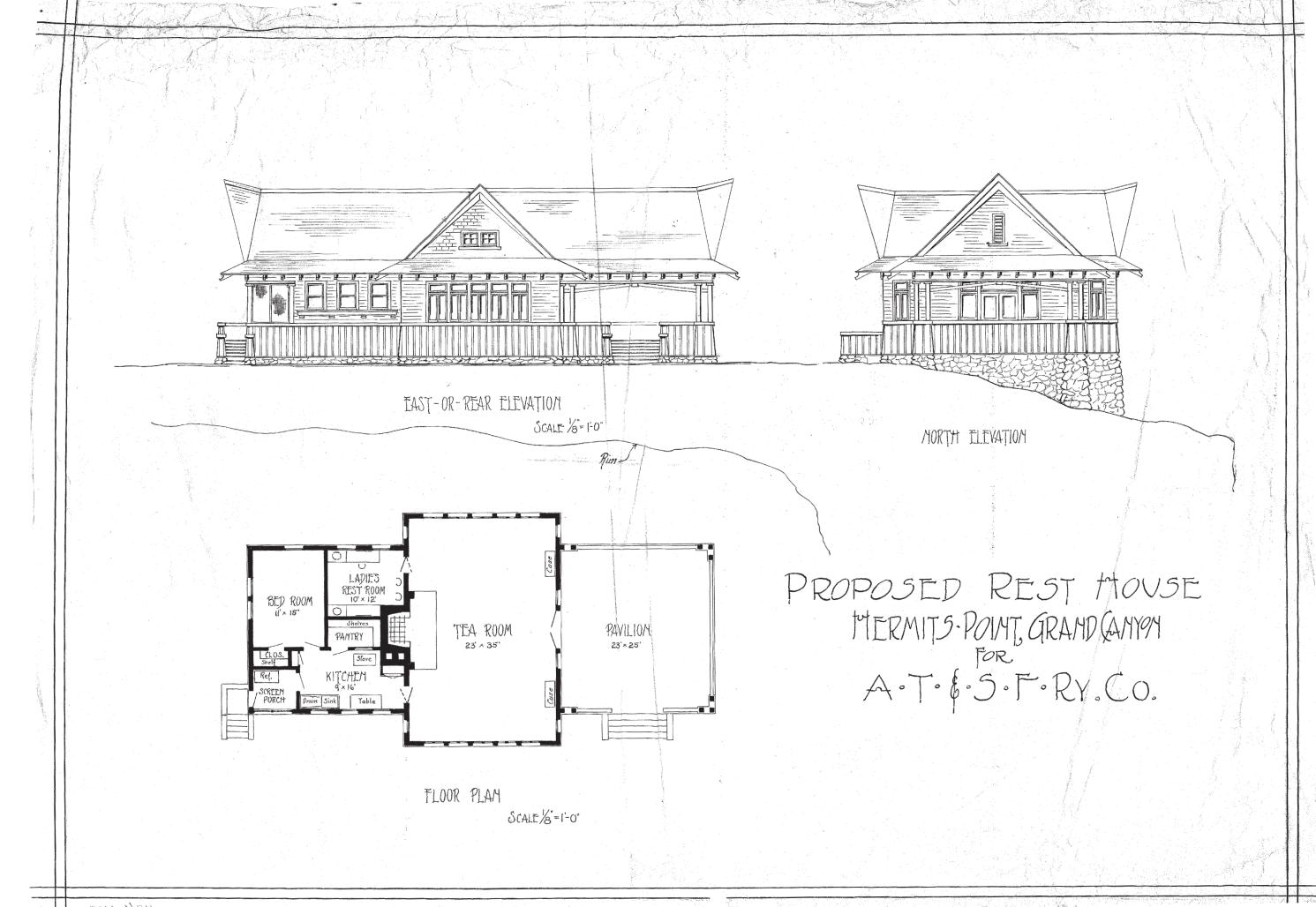
PROPOSED REST HOUSE.



VIPPER TROOK OR GALLERY PLAN

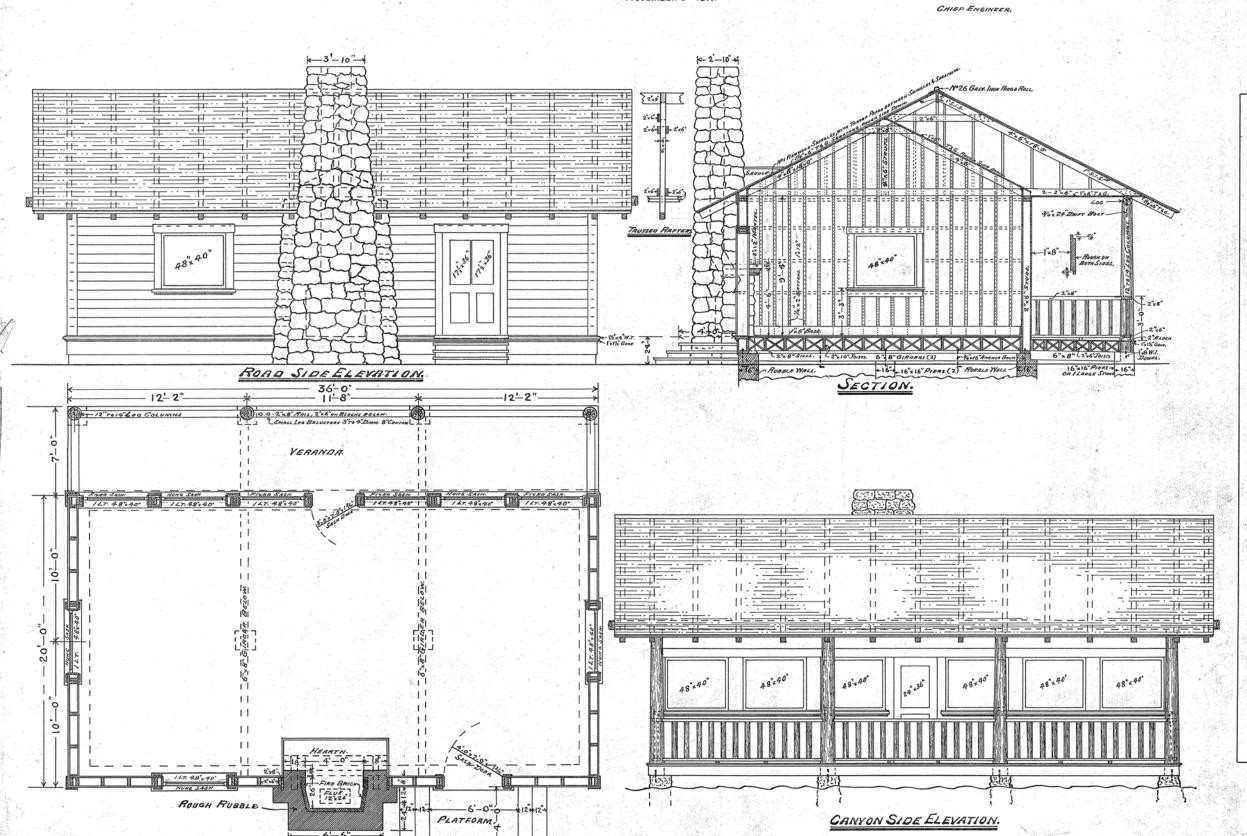
MM · 34957





THE GRAND CANYON RAILWAY CO. DRAWING Nº 184_ 9514 PROPOSED SHELTER NEAR HEAD OF HERMIT TRAIL GRAND CANYON, ARIZONA.

Los Angeles, Cal.
November 9TM/911.



SCALE 1/4 INCH = 1 FOOT.

PLAN.

BILLOF MATERI 6 Bbls. Portland Cement			\$ 10.50
6 Bbls. Portland Cement 12 Cut. Vas. Foundations 1 Large Chimney 7 Pieces 2 x8 x 20.0" Sills 26 2 x8 x 16.0 Porch Joists 32 2 x 10 x 12.0 Floor 16 2 x 10 x 14.0 66 2 x 6 x 18.0 Studdy & Girls 22 2 x 6 x 16.0 Collar & Celly & Grant 34 2 x 6 x 16.0 Collar & Celly & Grant 30 4 x 6 x 18.0 Rafters		6.00	72.00
/ Large Chimney	, i - 1		100.00
7 Pieces 2'x8x20.0 Sills	185 F	B.M.	
20 . 2x8x/6.0 Porch Joists	416 "		
16 2 10 10'0 "	272		
66 2 6 18 0. Studdes Girte	1100		
22 " 2 6 16 OCALLAR Ceiler	3.52		
34 " 2'x 6 x 20.0 Ceile Beams	680		
30 " 4x6x18:0 Rafters	1080 .		
13 " 4"x 6x 12.0 Ratters	624 -		1.7
30 " 4x6x18.0 Patters 13 " 4x6x12.0 Patters 2 " 6x8x20.0 Girders	160		
2 " 6x8x14-0 " _	112"	2	
	5810.	25.00	145.25
1000 Ft. B.m. 1"S.I.S. Sheathing	1000 -	26.50	26.50
1000 1x6 7x6	1000 .	35.00	35.00
100 Pier 1.12 10'0 Change	1150 .	35.00	40.25
100 Pieces 1 x 12 x 10.0 Clear S.1.5. 7	140.	35.00 25.00	35.00 3.50
6 " /"x 8'x 20.0 /nsido Bace	80	35.00	2.80
6 . 1'x12'x20.0 Outside	120 .	35.00	4.20
6 /x12x20.0 Outside 1000FLBMIx8" Ship Lap	1000	35.00	35.00
1200 1"0" NOITEC Classics	1200 .	35.00	42.00
100 Pieces 1/2 2 x 10'0 Ballens	100.	.20	20.00
" 3x12x8_0 ///anrec S.4.5	24.	35.00	.84
326 . 1/2 4" Noter lable	100 -	.05	5.00
162 - 1"x 1/2" Core	326 - 162	.01/2	4.89 3.24
7 Pieces 1"x9: 20-0 Friese	105.	35.00	3.68
9 Windows 1 LT. 48x40" Comple	7e)	55.00	0.00
1 Sash Door 3'x7'x13/2" "	Bid.		100.00
" " 4×7×/3/6" ")		
16 Pieces 1x3x12-0 Bridging	7 48.	25.00	1.20
5 Rolls Tarred Building Paper	5	1.50	7.50
1 6'x4"L.6.0 Long for Fire Place 6 Pieces 2'x12'x12'.0" Plat fm & Ste,	74*	.05	3.70
			3.58
7 Loos 12" to 14" Diam for Very	80 Li	S.50	52.50
7 Logs 12" to 14" Diam. For Verand 55" 3" to 4" "3" long, Balust	rade 165.		8.25
			30,00
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p.,	c2 -	7.	852.13
Add 11/2 %	Storehouse	Charges =	/2.78
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" " Doors&Windows 11	2.00	22.00	
" Shingles 15 Sq		18.75	
Applying Stain 5085	Yds .10_	50.80	374.96
없는 하다는 호텔 그리는 경기가는 시간에 모습니		0 \$	239.87
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Flooring, L.A. To Williams 3240	x 1.34 h.	. 43.42	
Windows	1.50	8.10	
1100rs 1 /43	1.34	3.28	
Hardware 975 Tarred Paper 250	/ 20	12.05	
		3.35	
Stain	1.34	70.35	
Sana Istojave Cap 7	10ns 0.00	24.00	
C 2 100' 2	" 4.20_	500	175.75
Cement, Winslove " 1.3			
	For Conting	# #	585.62 79.28

APPENDIX B HISTORIC DESIGN DOCUMENTS OF THE HERMIT'S REST

All existing drawings of the Hermit's Rest are collected here in chronological order. The following are contained in this section:

Plat of Proposed 25 Acre Tract of Land Located on East Rim of Hermit Creek Canyon, circa 1908 (TIC: 113_8255)

Plans of Rest House at Hermit Rim, 5/9/1914 (6 sheets; Kansas State Historical Society, Santa Fe Collection)

Floor Plan

Roof Plan

Transverse Sections

West/East Elevations, Cross Sections

Detail Sheet 1

Detail Sheet 2

Map Showing Area, and the Location and Description of Buildings, Fixtures and Improvements at Hermit Rest, 4/22/1921 (GRCA 66970)

Hermit's Rest Site Plan, 10/1934 (Kansas State Historical Society, Santa Fe Collection)

Electric Light Plant for Caretaker's House at Hermit's Rest, 3/9/1939 (TIC: 113_9021)

Minor Developed Areas - South Rim, Part of the Master Plan, 3/1950 (TIC: 113_2106B)

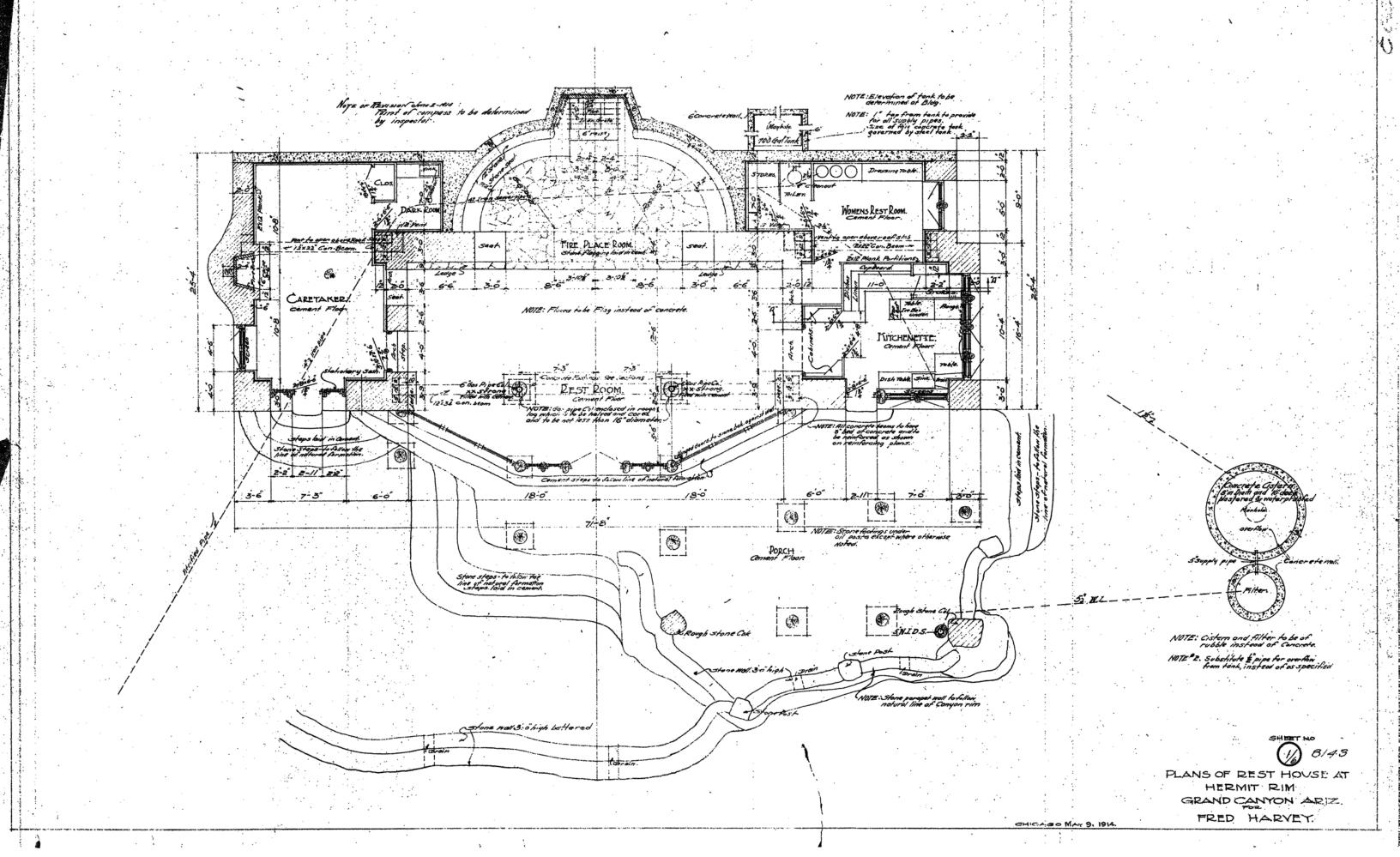
Layout Plan: Sewage Disposal and Building Location, Hermit's Rest, n/d (circa 1950s) (TIC: 113_60541)

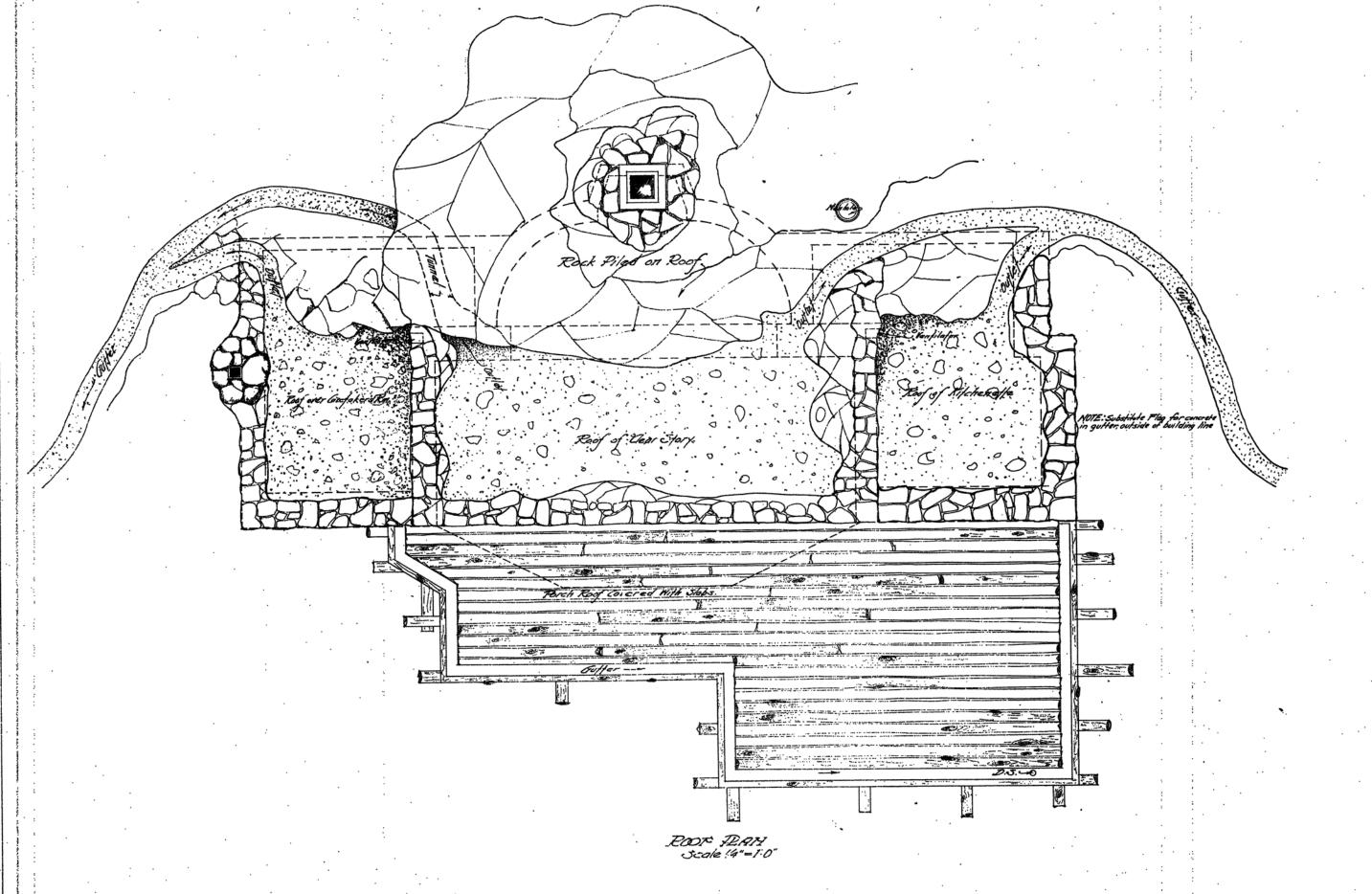
Hermit Rest Rehabilitation, 10/5/1960 (TIC: 113_2285A) Land Assignments, Hermit's Rest, 1960 (TIC: 113_2285Z1)

PROPOSED (25 ACRE TRACT OF LAND LOCATED ON EAST RIM OF HERMIT CREEK CANYON GRAND CANYON OF ARIZONA SCALE 100'= //NCH. Surveyed by F. M. Morsh between Oct. 74 & Dec. 26th 1908. SMALL CANYON

CHIEF ENGINEER'S DrawING Nº115-8255

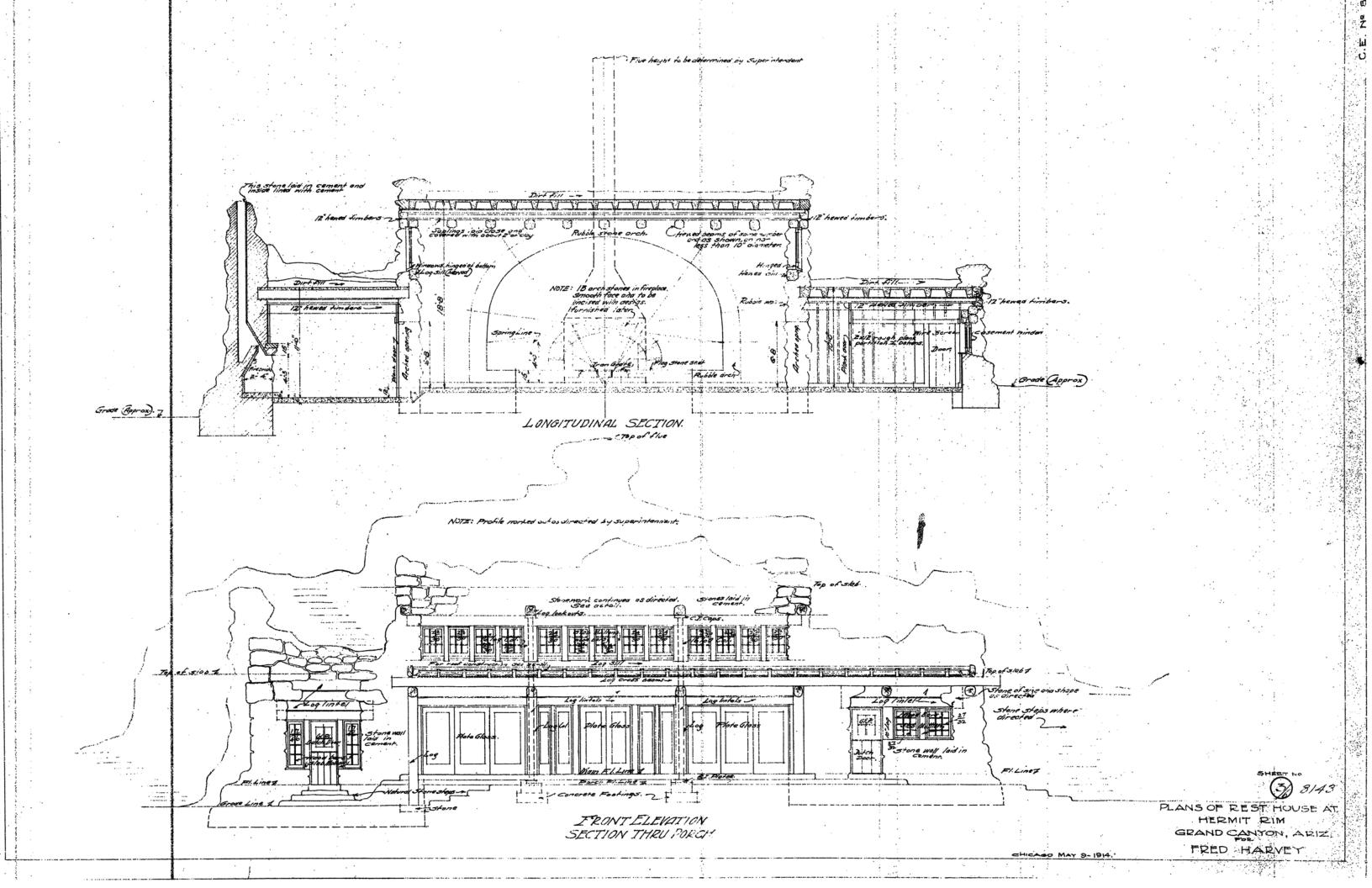
เเร-8255

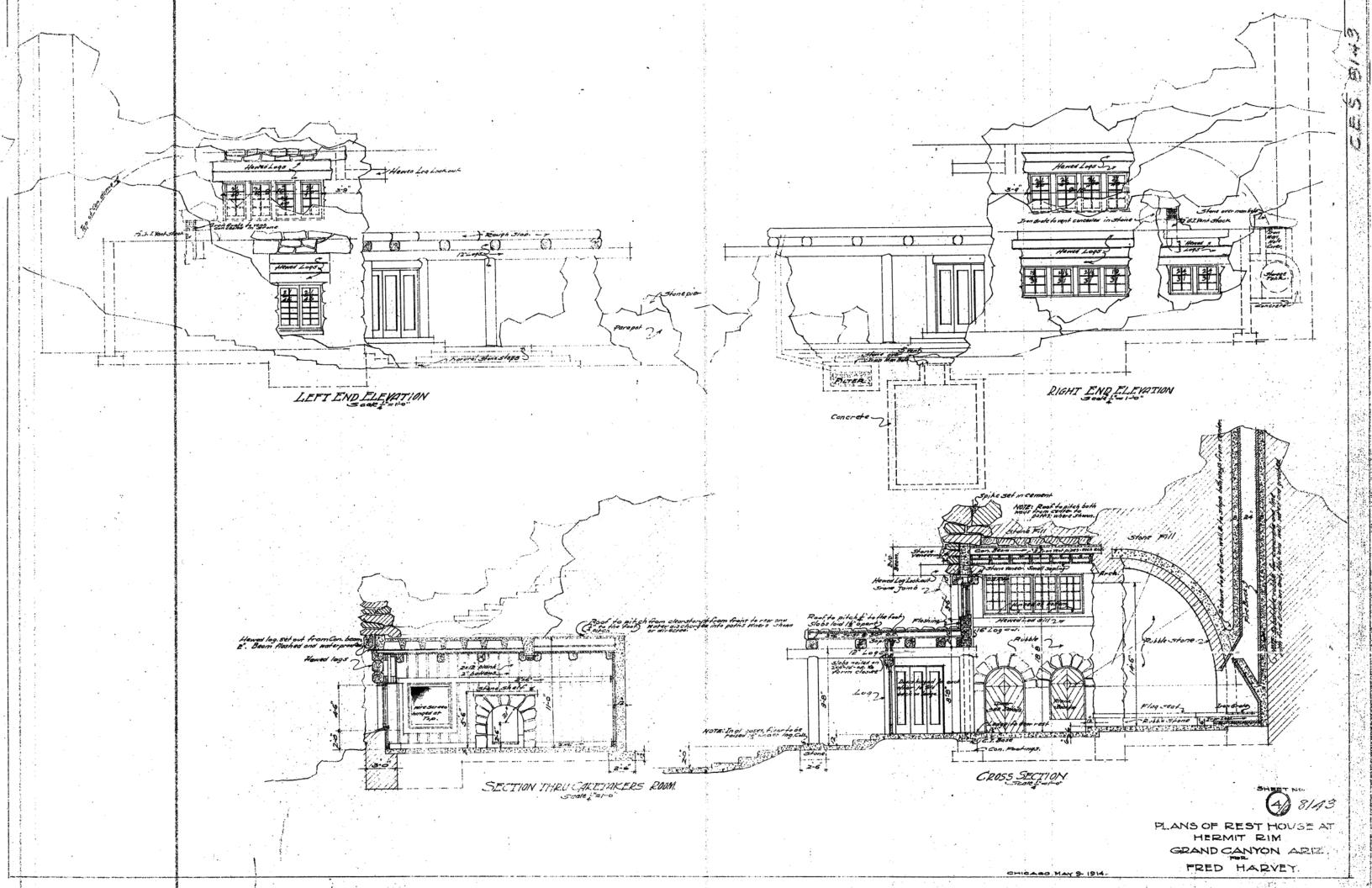


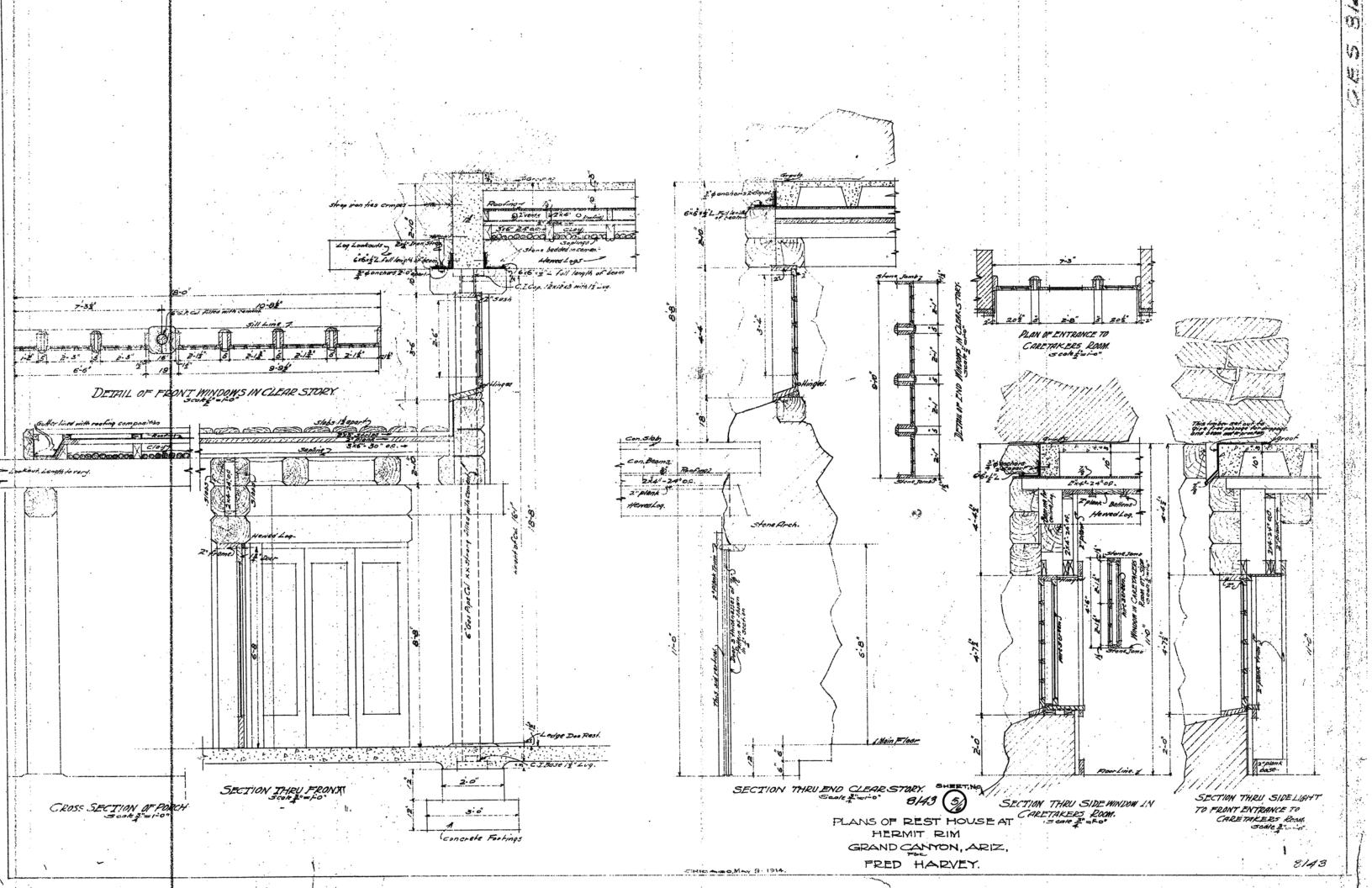


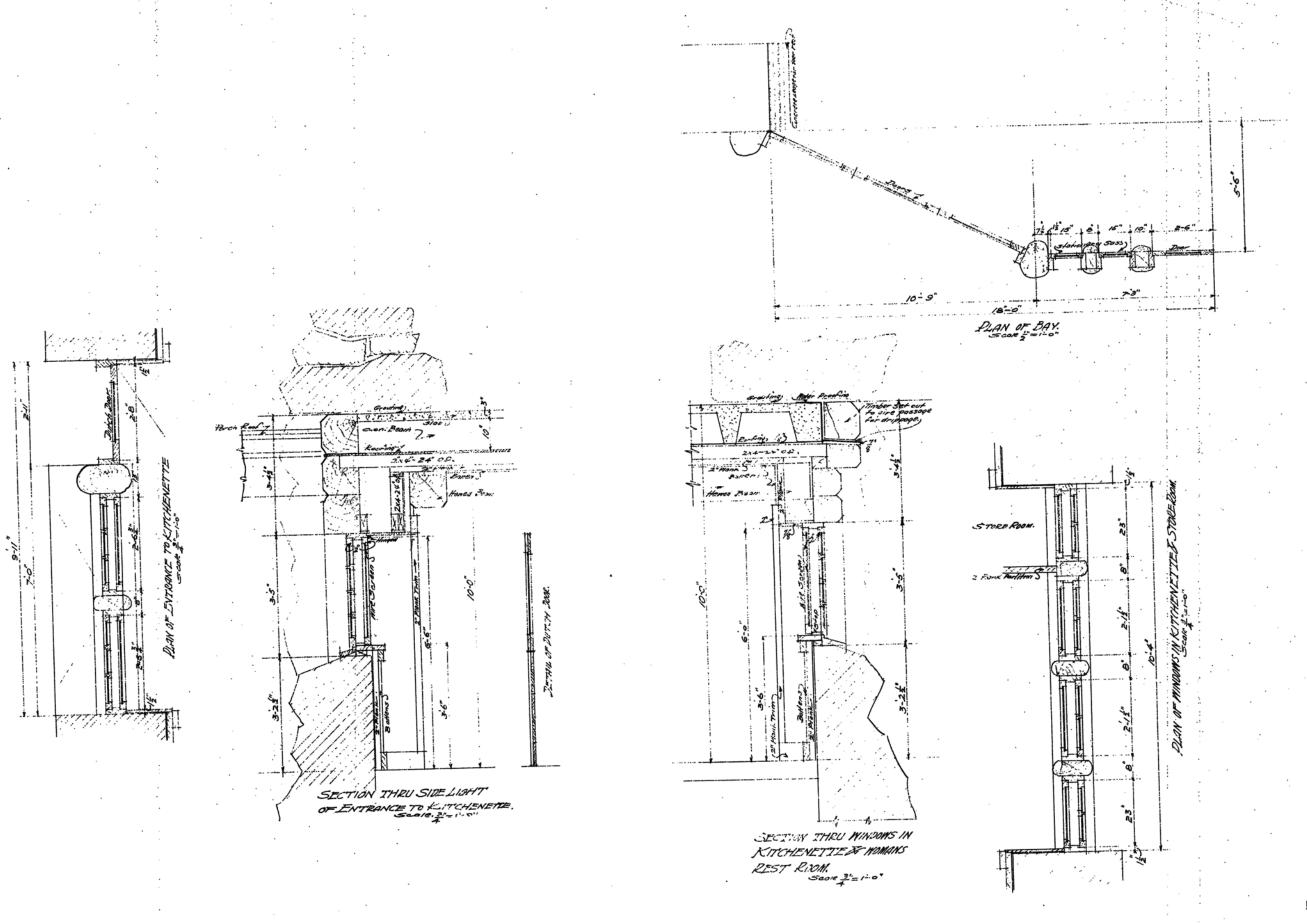
SHEET NO. 8143 NS OF REST HOUSE AT

PLANS OF REST HOUSE AT HERMIT RIM GRAND CANYON ARIZ. FRED HARVEY.



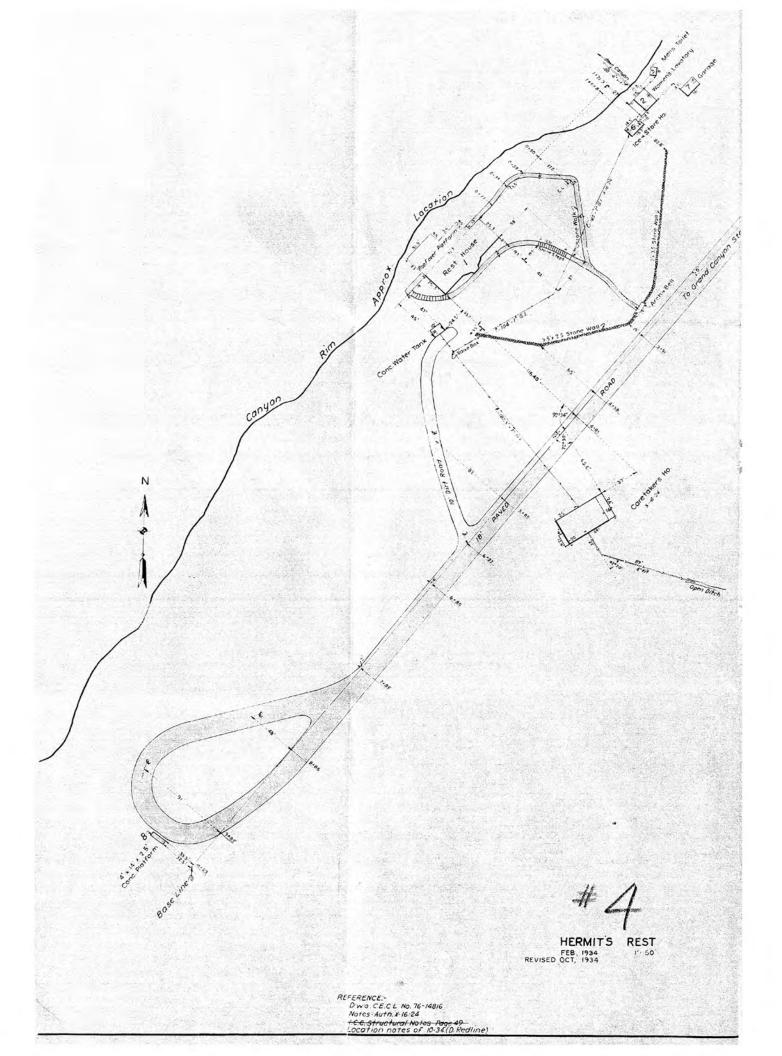


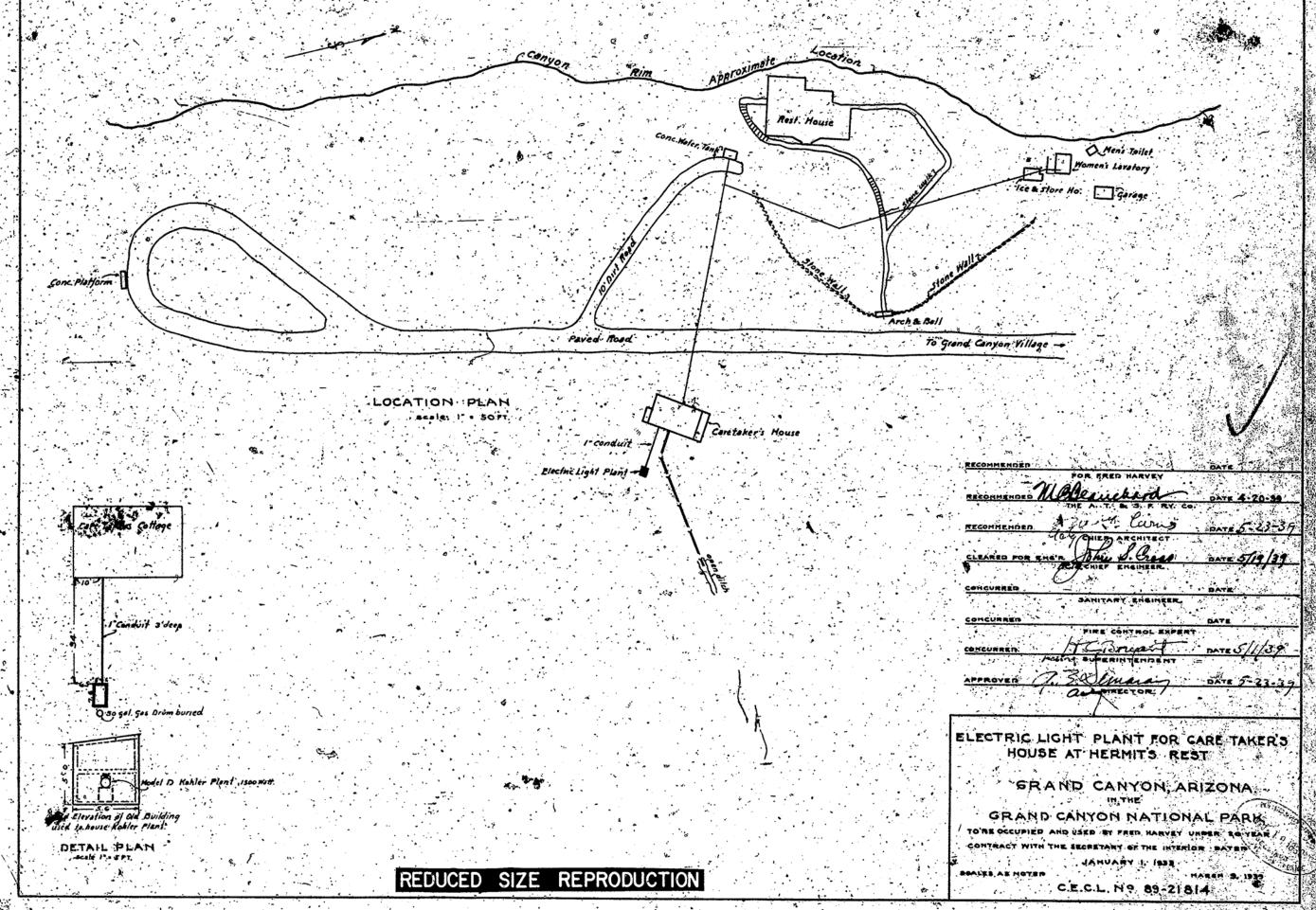




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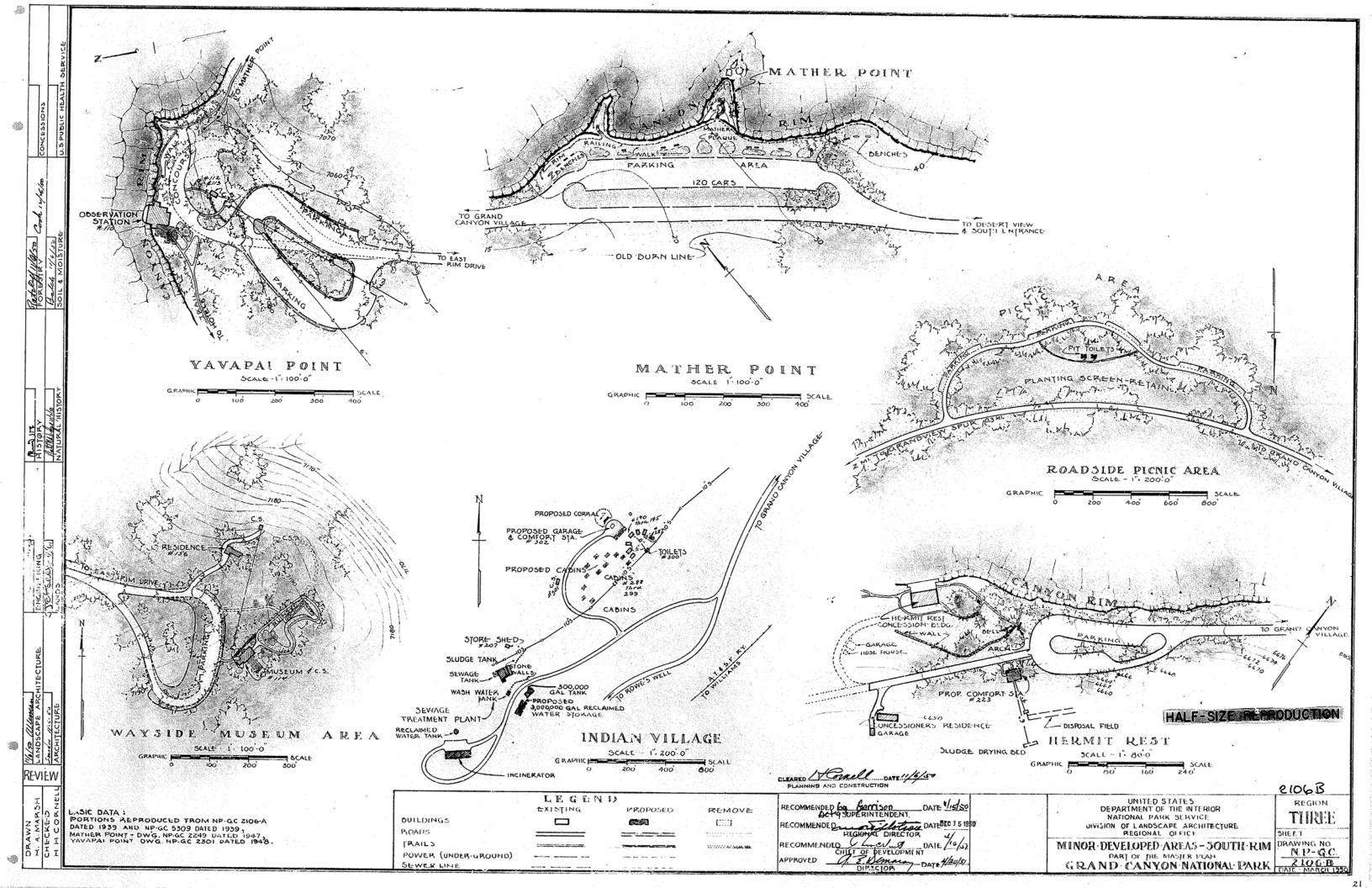
PLANS OF REST HOUSE AT HERMIT RIM GRAND CANYON ARIZ FRED HARVEY

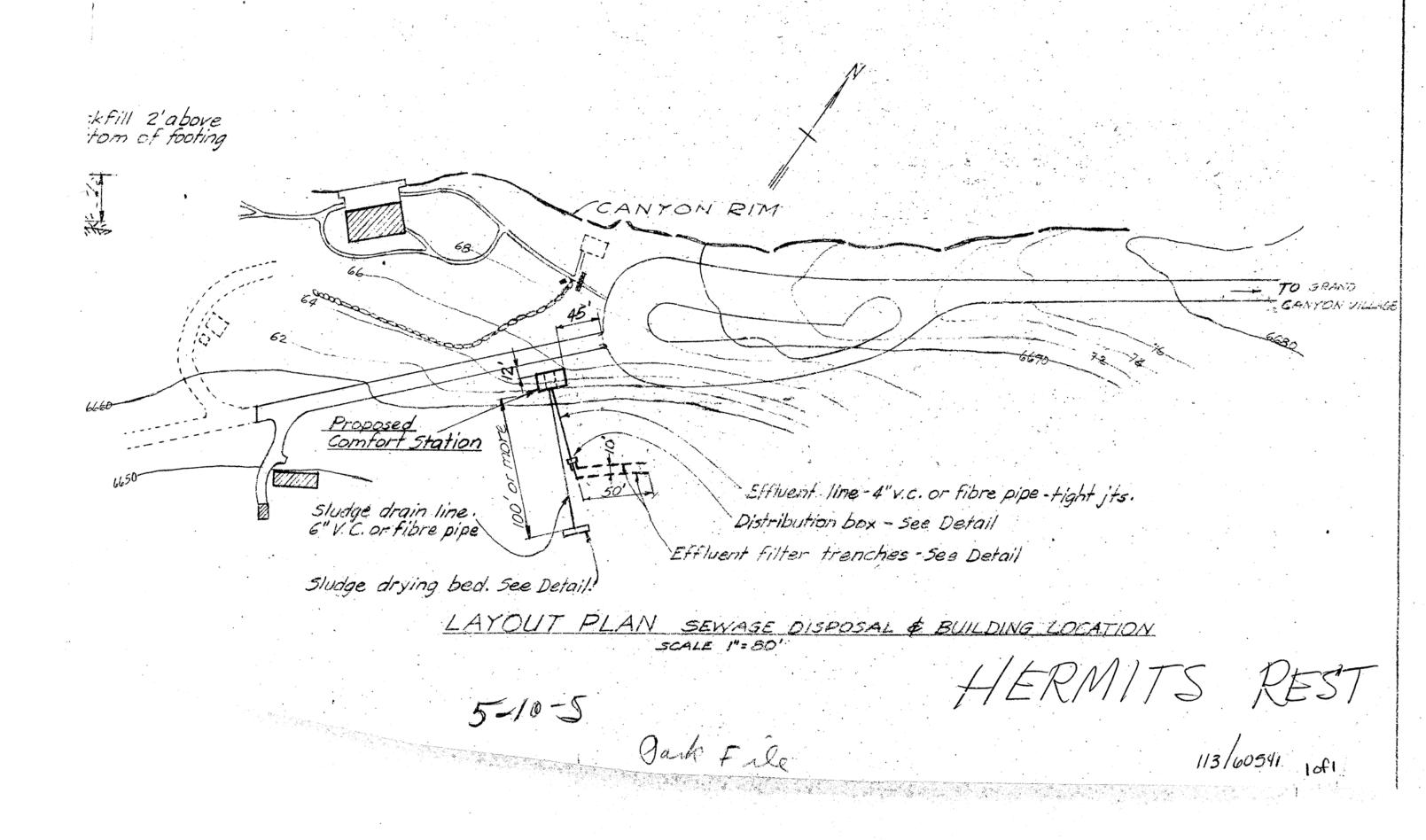


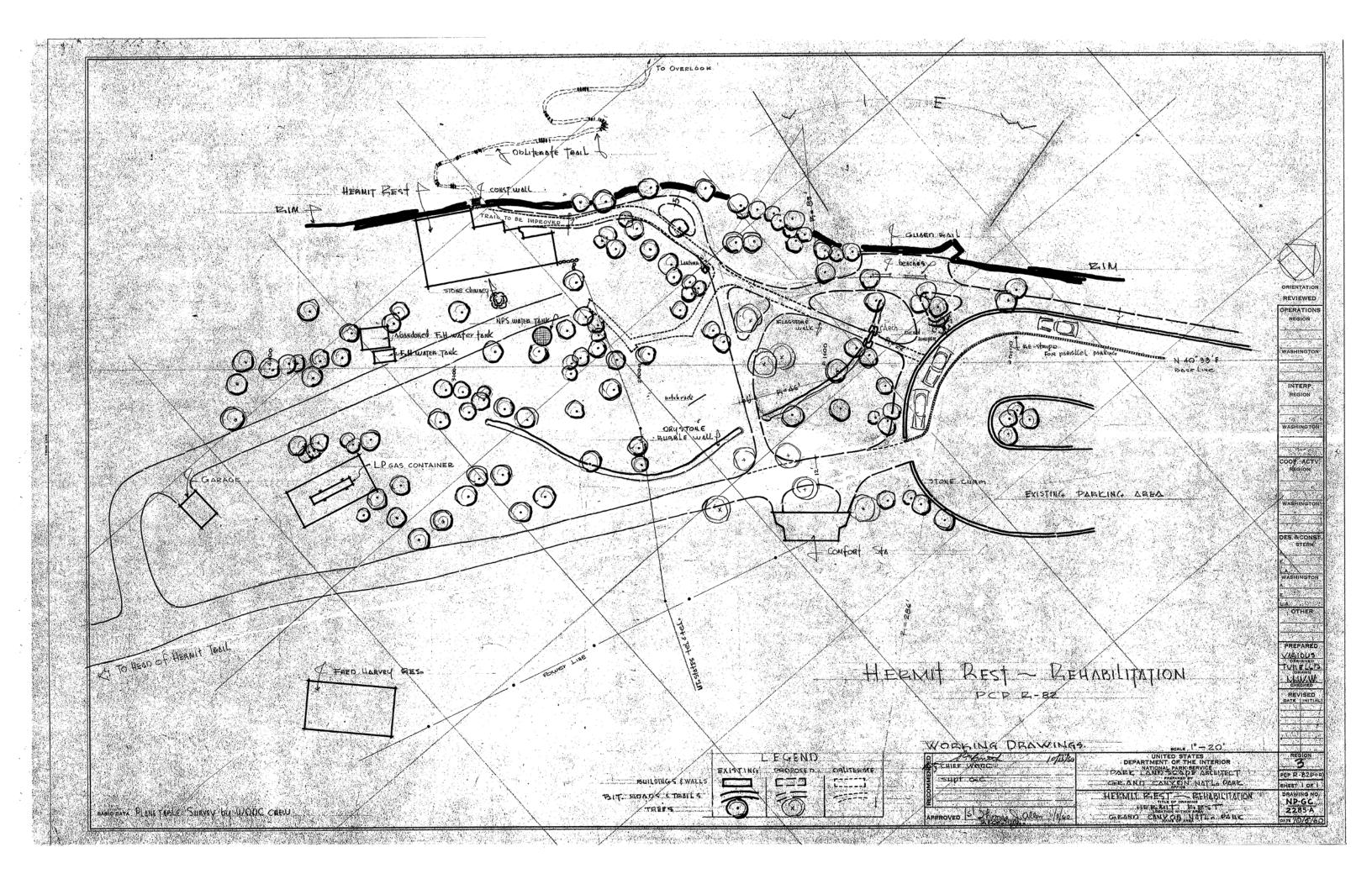


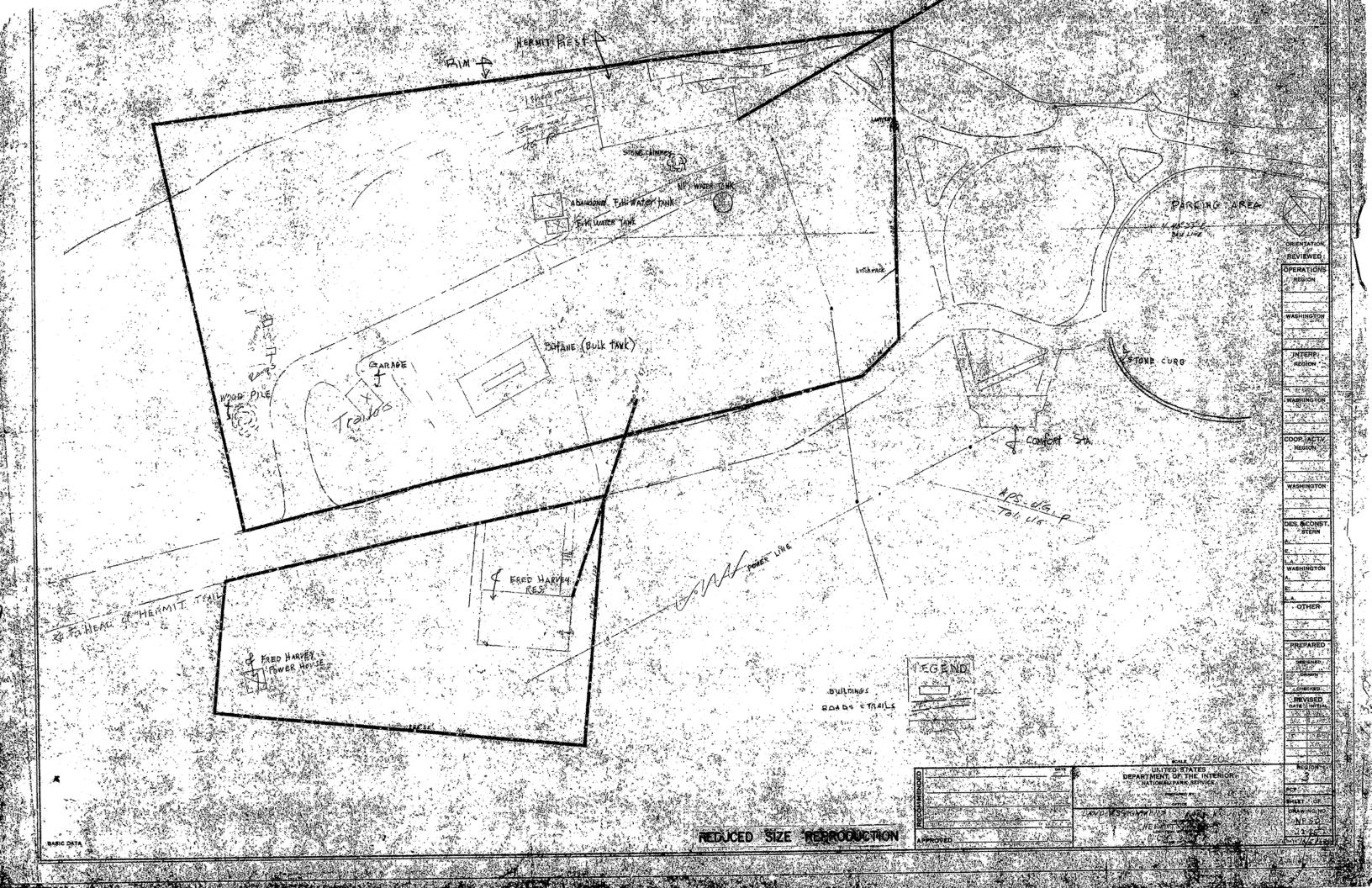
NP-60-,9021

G C 9021









APPENDIX C ARCHITECTURAL DRAWINGS & PHOTOGRAPHIC DOCUMENTATION OF EXISTING CONDITIONS

Drawings of the Hermit's Rest as it currently exists were created by the project team based on field measurements. The following drawing sheets are contained in this section:

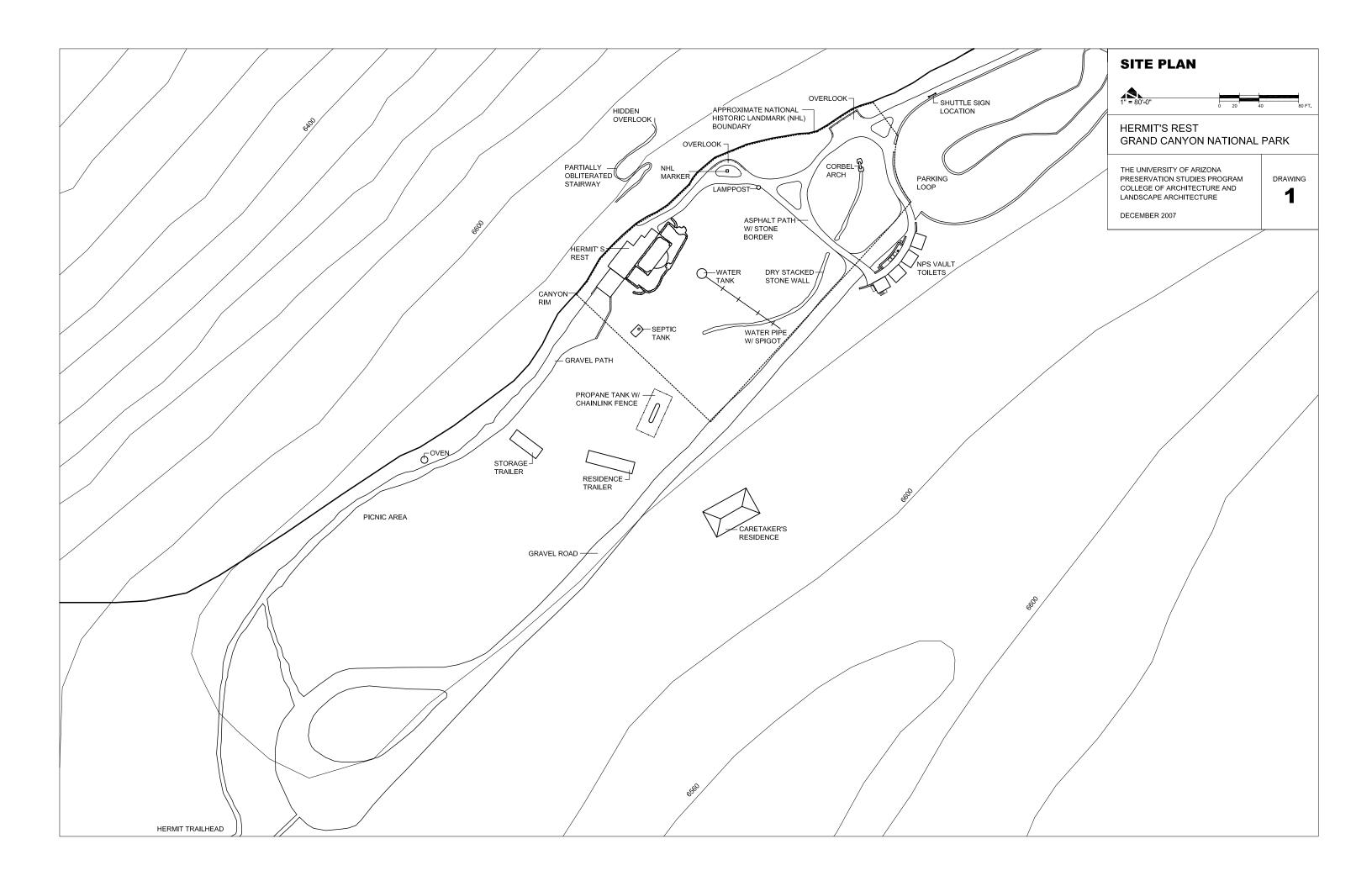
- 1. Site Plan
- 2. Roof Plan
- 3. Floor Plan
- 4. North Elevation
- 5. East Elevation
- 6. West Elevation
- 7. Site Features

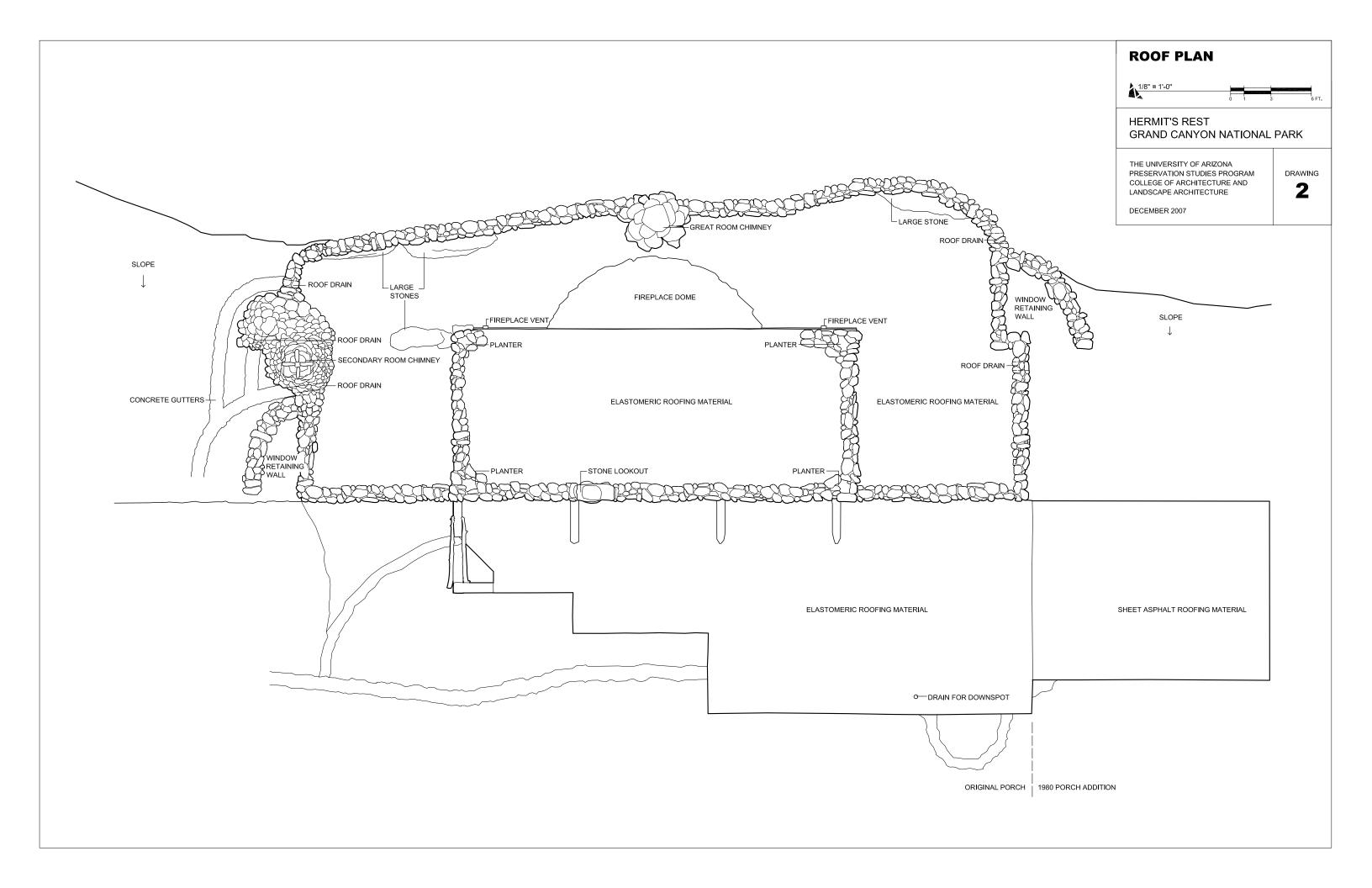
Additionally, the following condition assessment drawing sheets are marked with deficiencies:

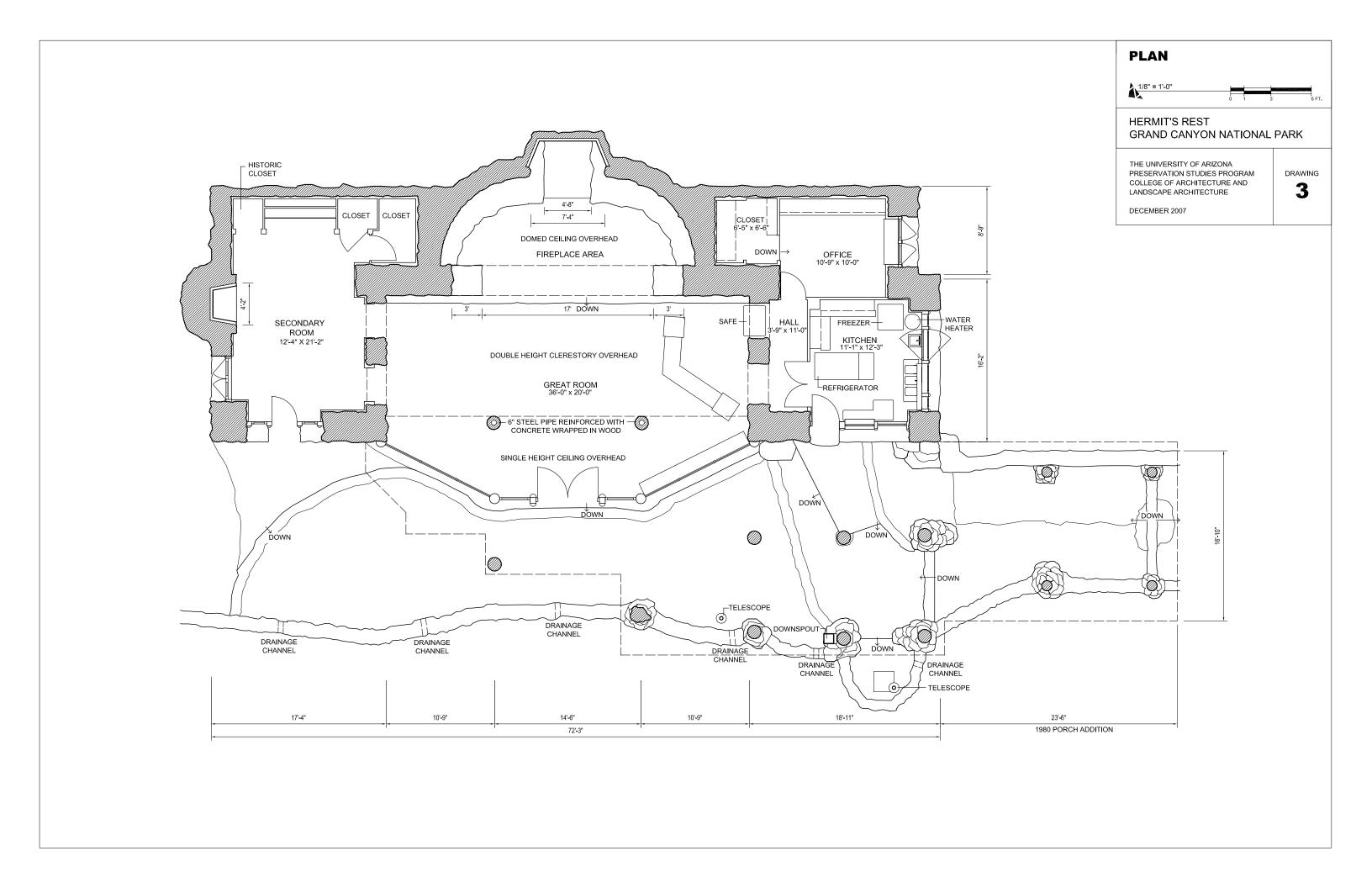
- 8. Site Plan
- 9. Roof Plan
- 10. Porch Floor Plan
- 11. North Elevation
- 12. East Elevation
- 13. West Elevation
- 14. Great Room
- 15. Secondary Room
- 16. Kitchen, Office & Hall

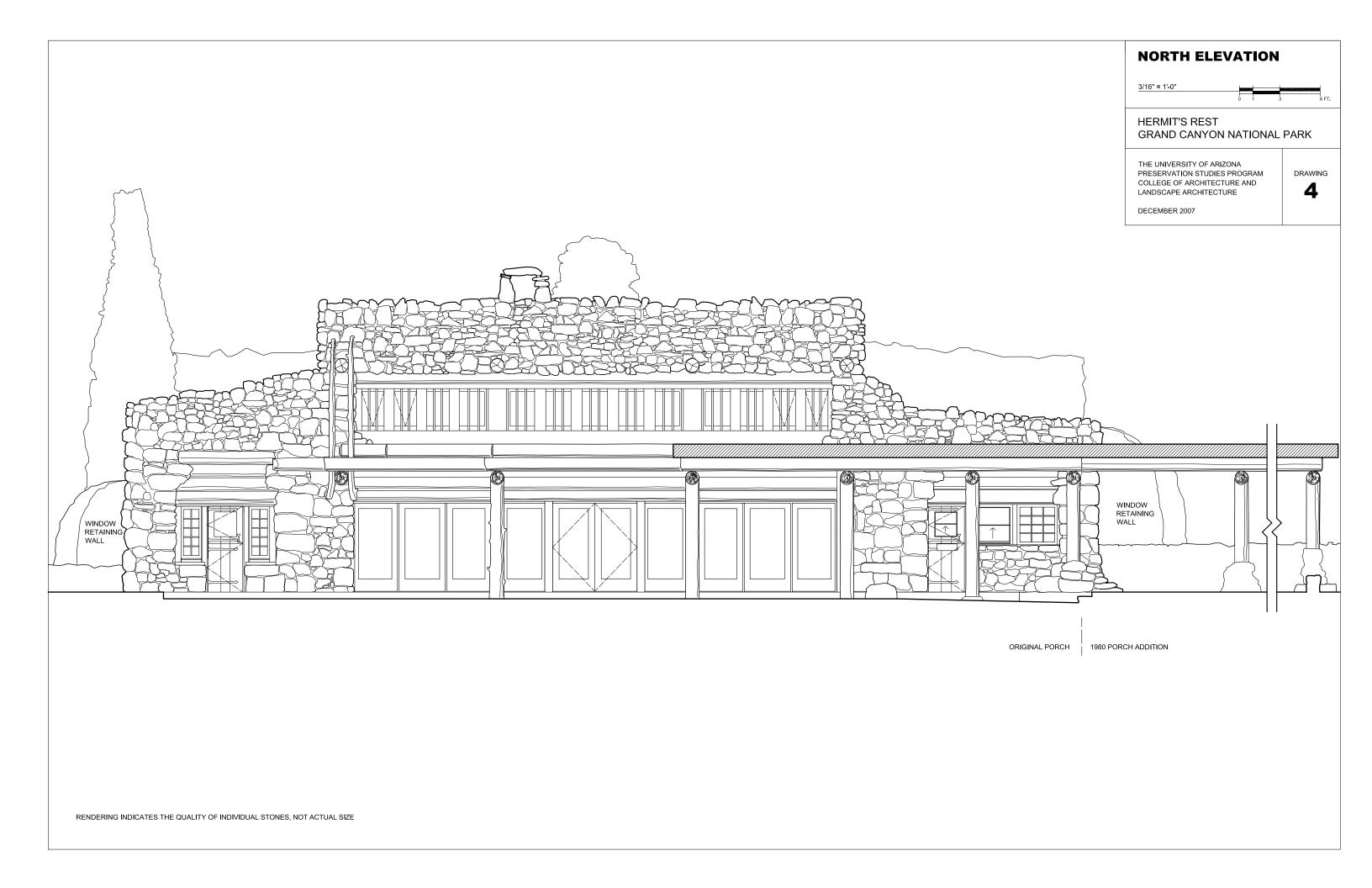
A disk containing contemporary photographic documentation of the Hermit's Rest was provided to Grand Canyon National Park with this report. Photographs were taken by The University of Arizona project team in October 2006 and April - August 2007. They show both character-defining features and deficiencies.

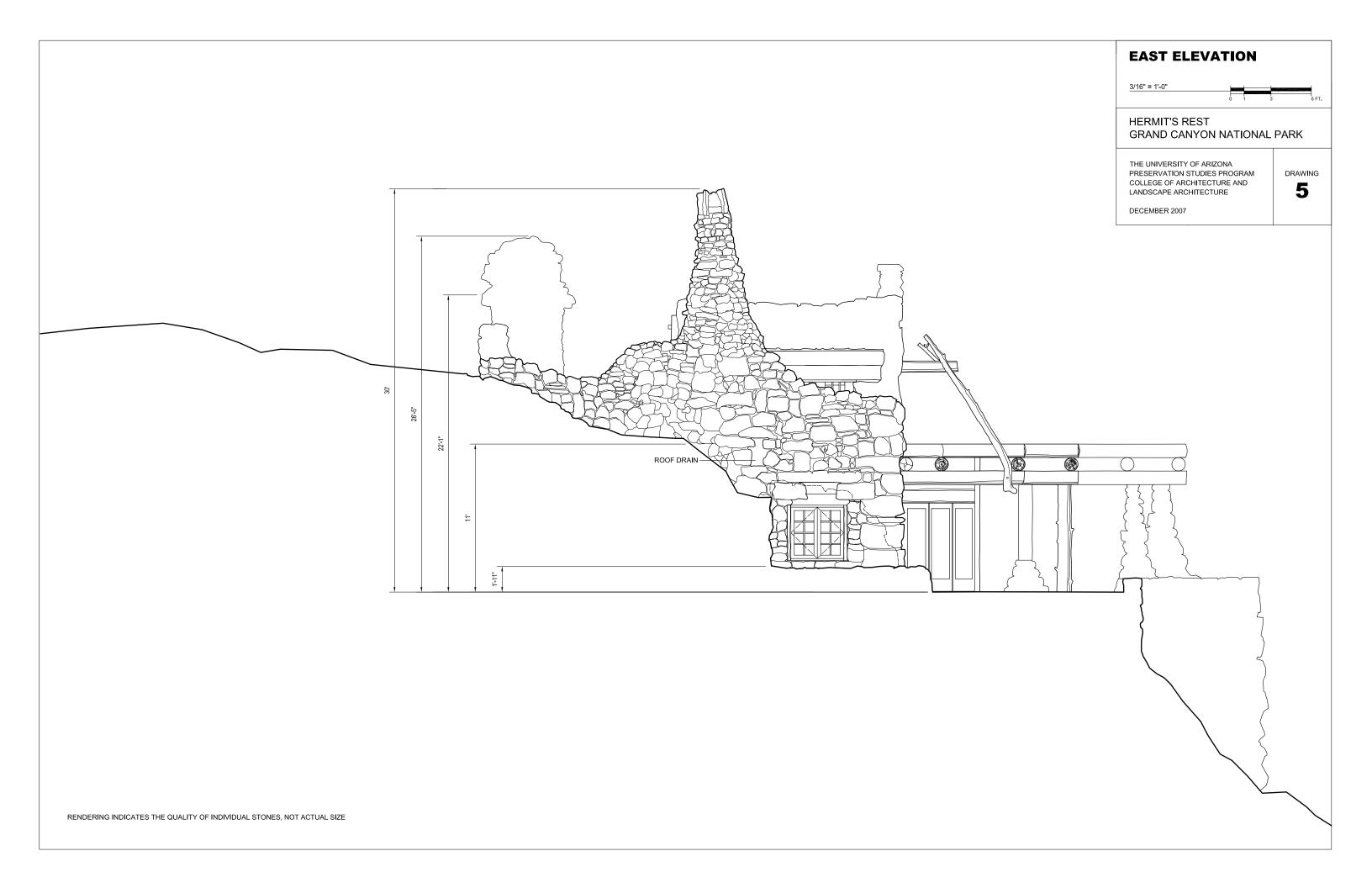
Additionally, historic photographs of the Hermit's Rest contained in the park's museum collection and maintenance files, as well as Northern Arizona University's Cline Library, were scanned and saved to disk. This disk was provided to Grand Canyon National Park with this report.

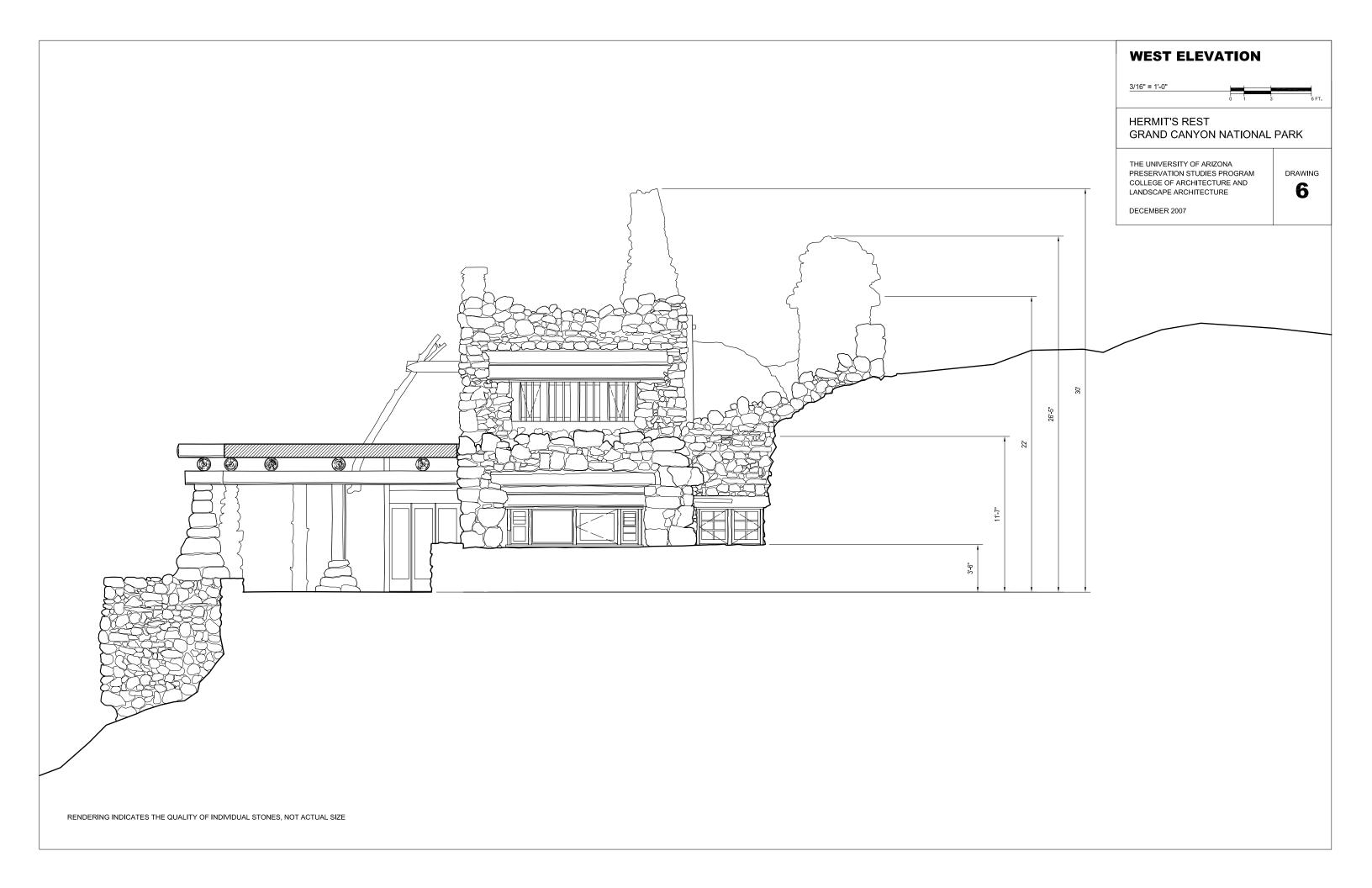














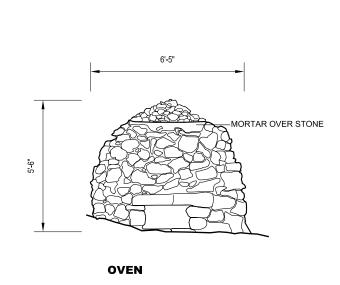
1/4" = 1'-0"

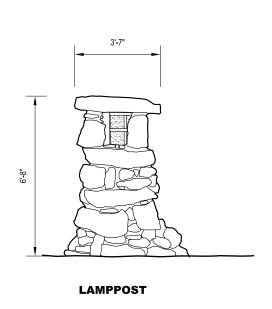
HERMIT'S REST GRAND CANYON NATIONAL PARK

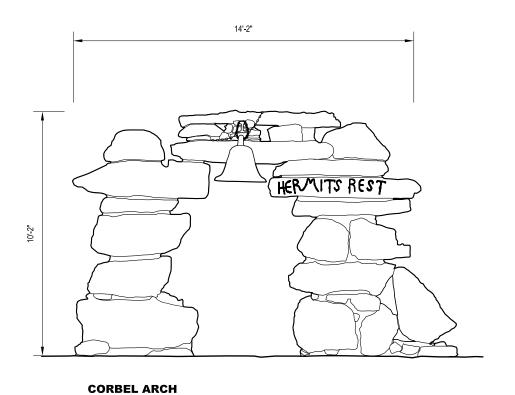
THE UNIVERSITY OF ARIZONA
PRESERVATION STUDIES PROGRAM
COLLEGE OF ARCHITECTURE AND
LANDSCAPE ARCHITECTURE

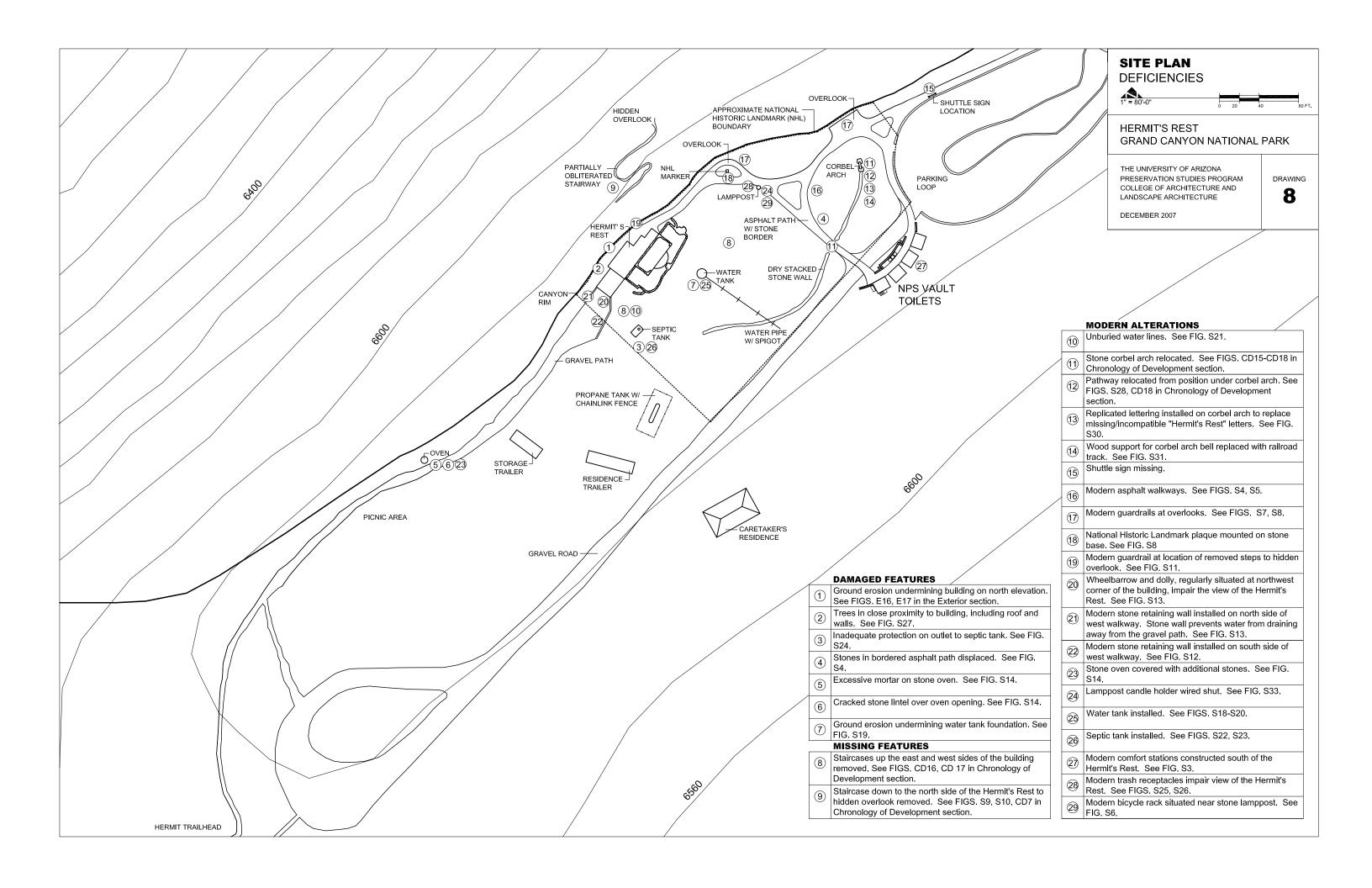
M DRAWING

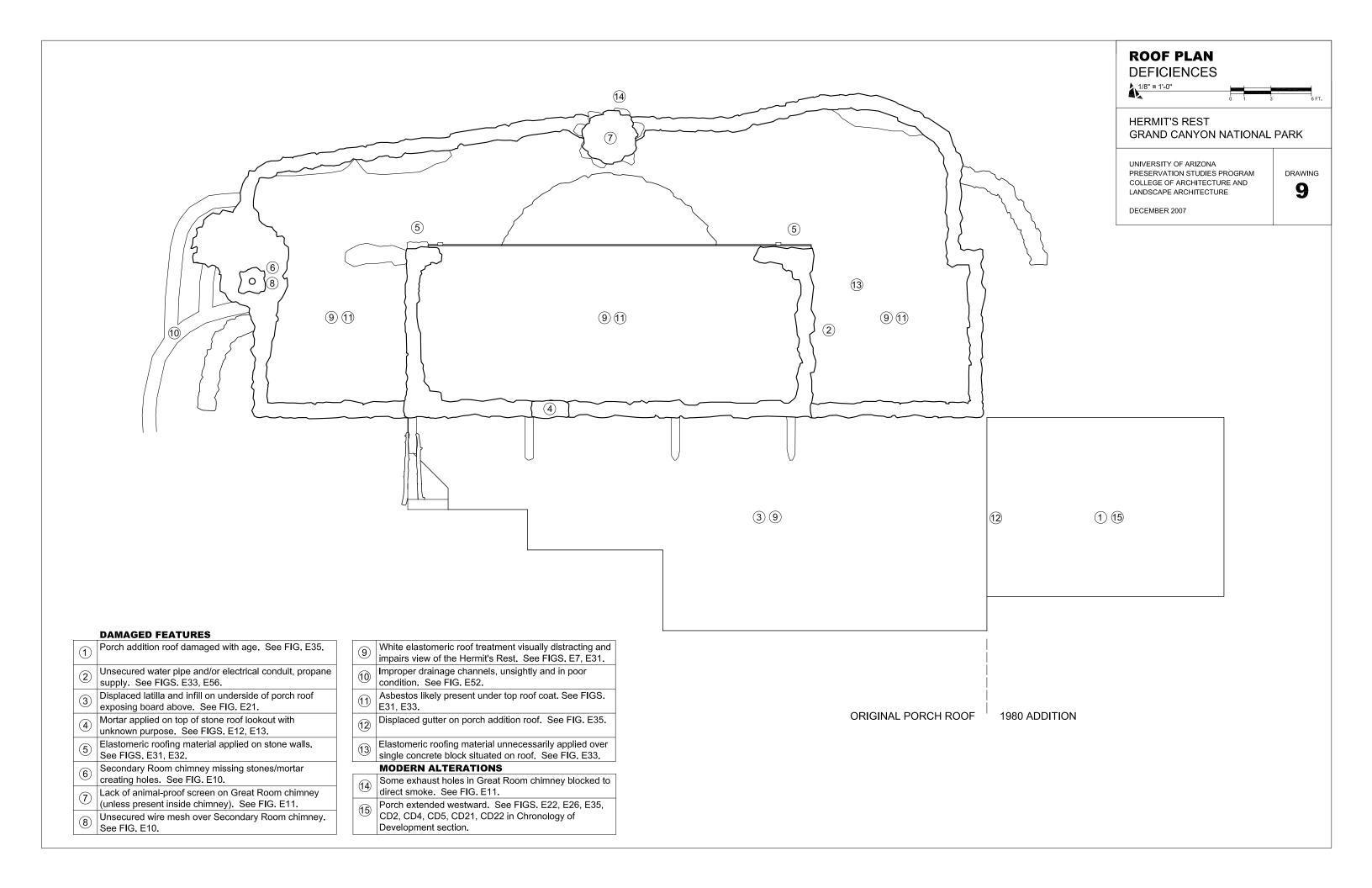
DECEMBER 2007

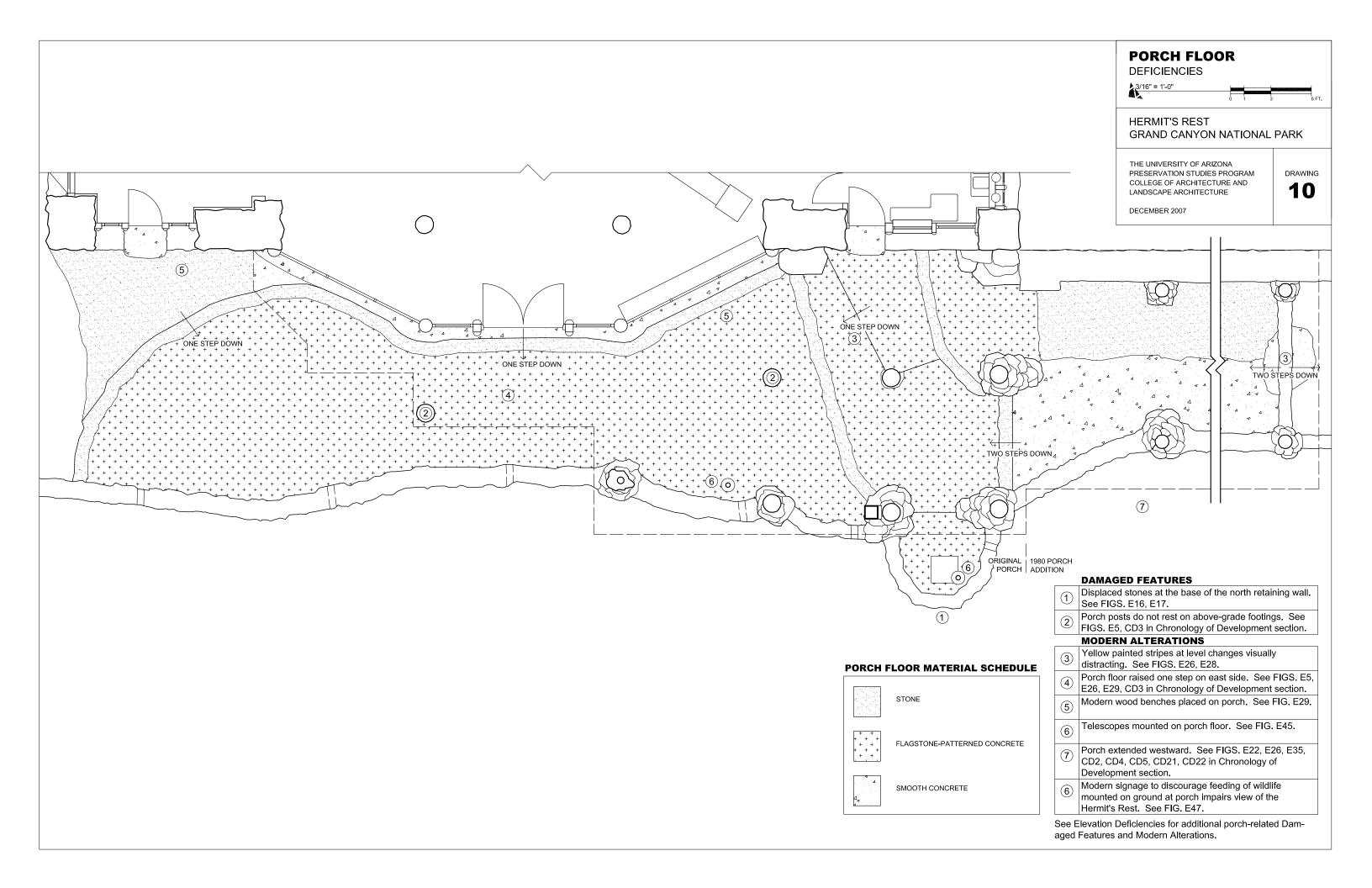


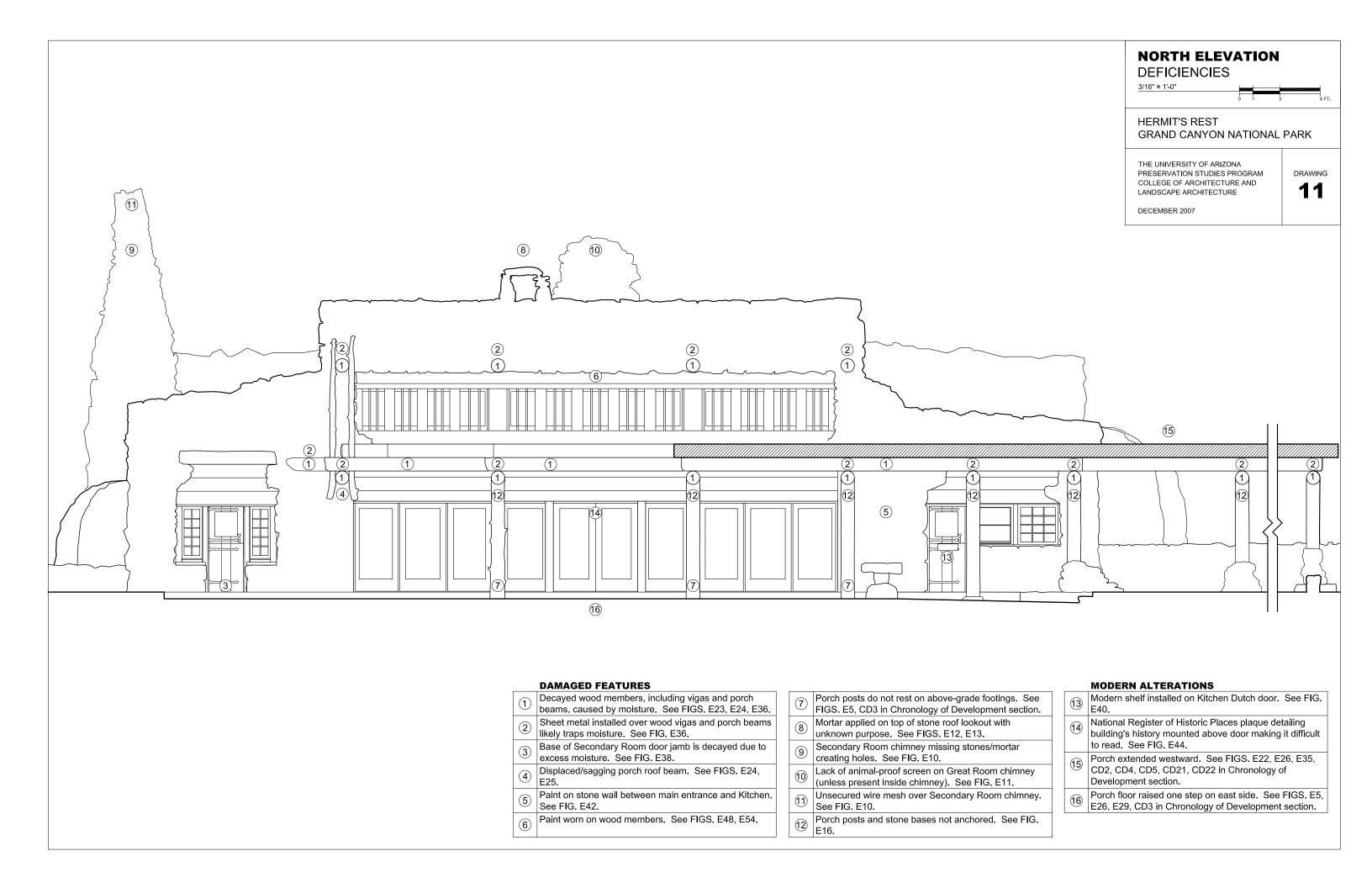


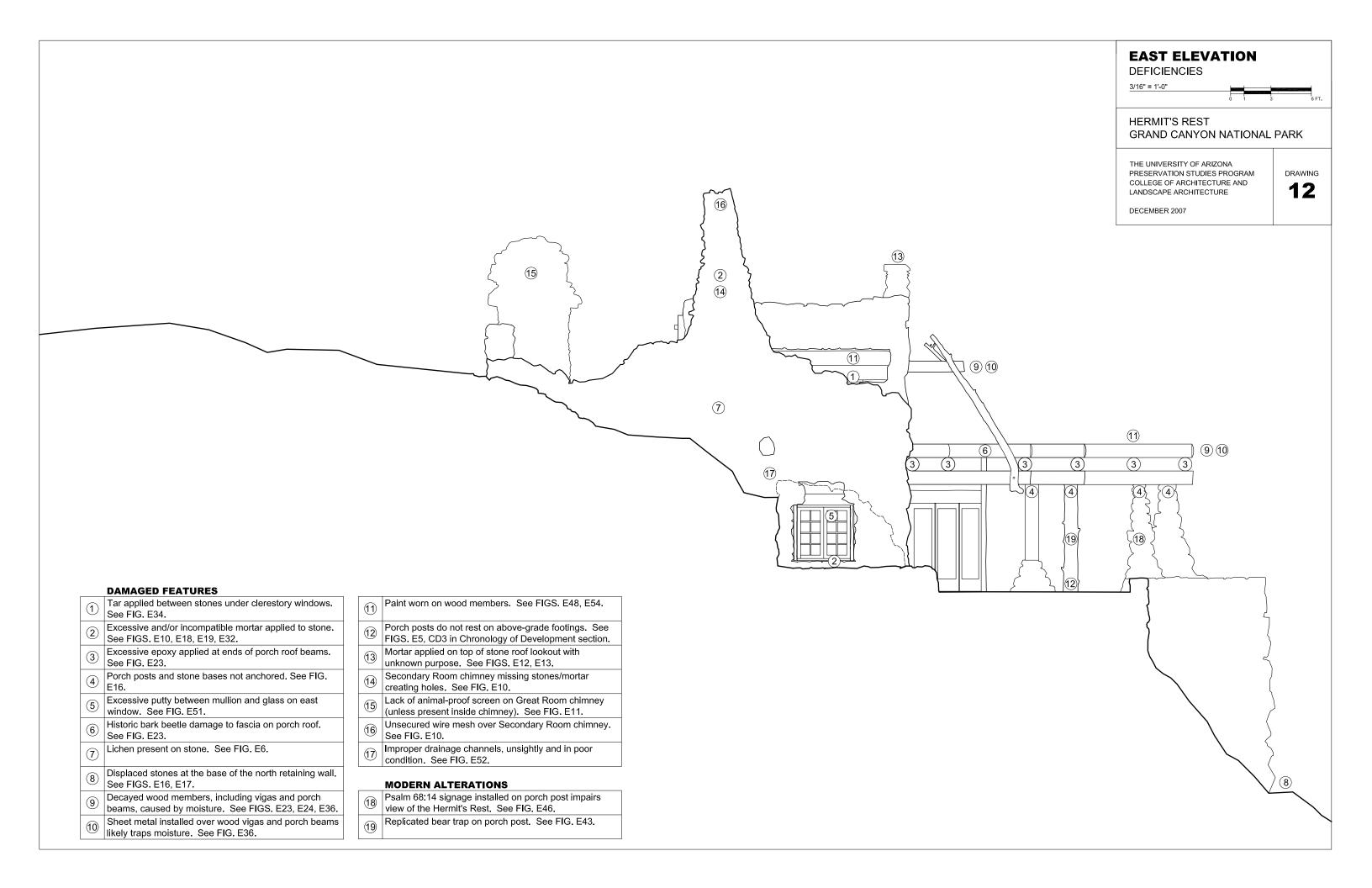


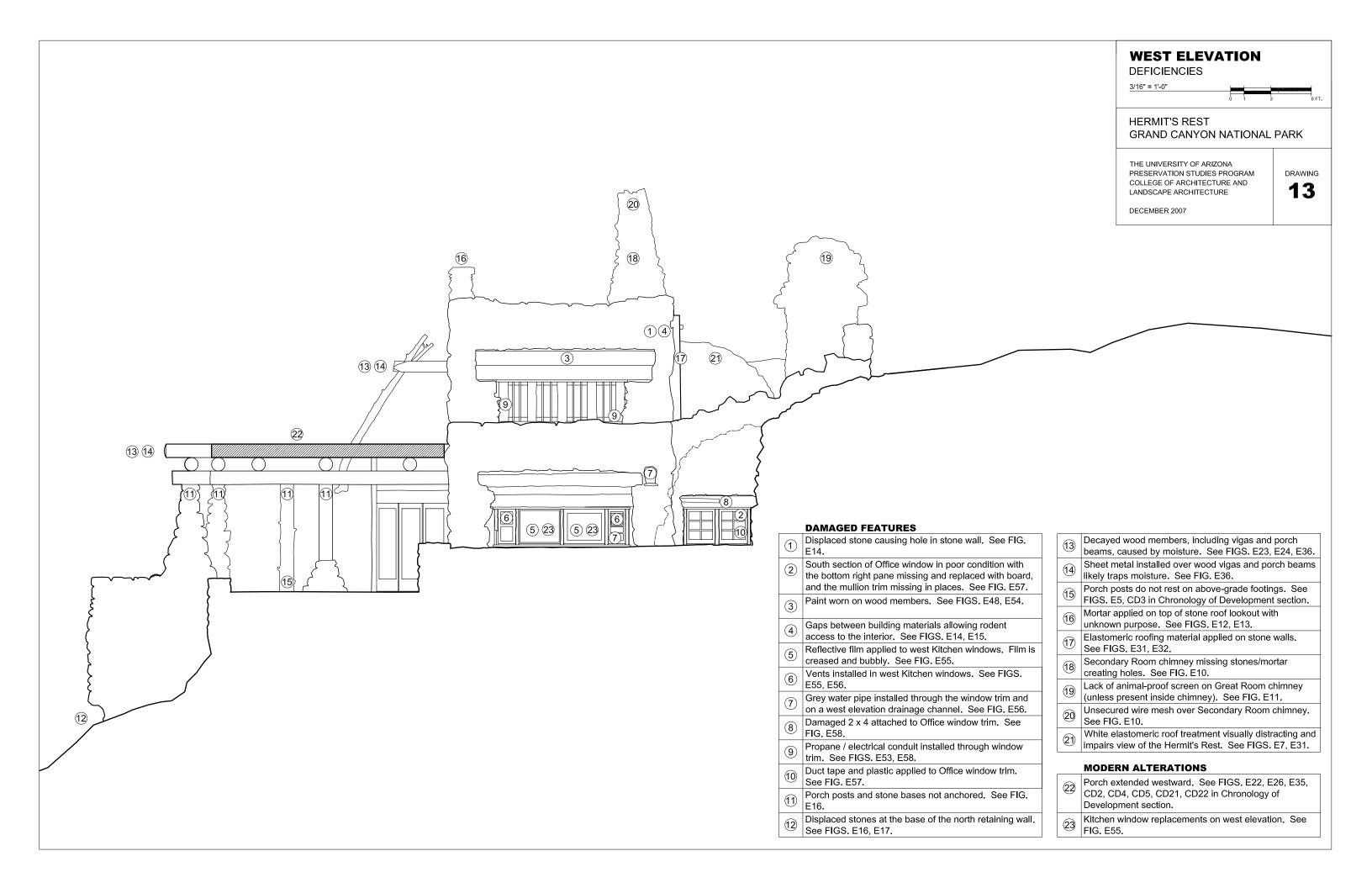


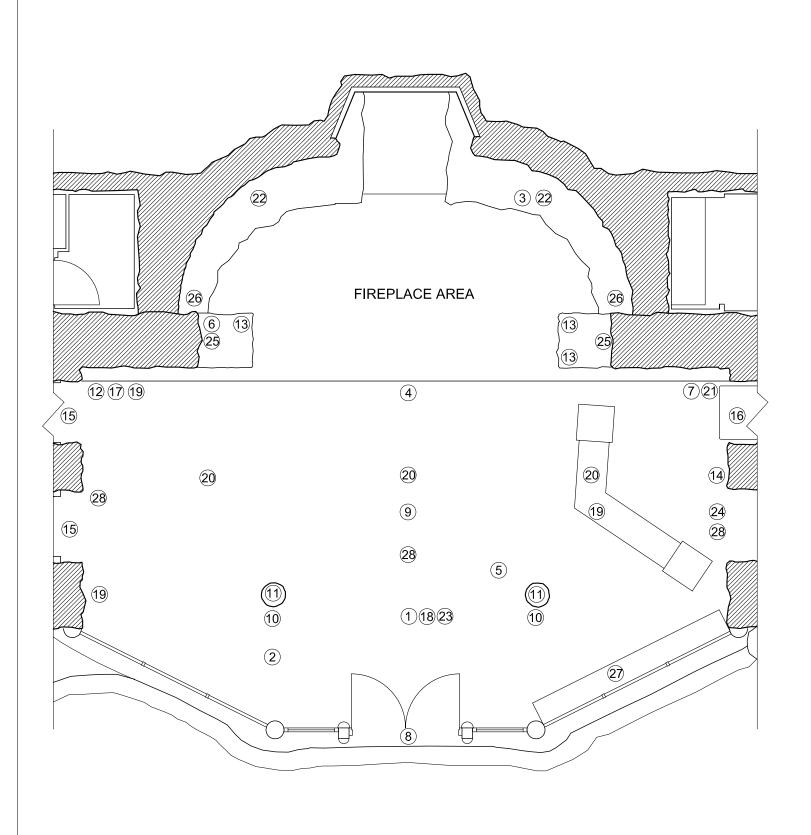












GREAT ROOM

DEFICIENCIES

3/16" = 1'-0"



HERMIT'S REST GRAND CANYON NATIONAL PARK

THE UNIVERSITY OF ARIZONA
PRESERVATION STUDIES PROGRAM
COLLEGE OF ARCHITECTURE AND
LANDSCAPE ARCHITECTURE

DECEMBER 2007

DRAWING

DAMAGED FEATURES

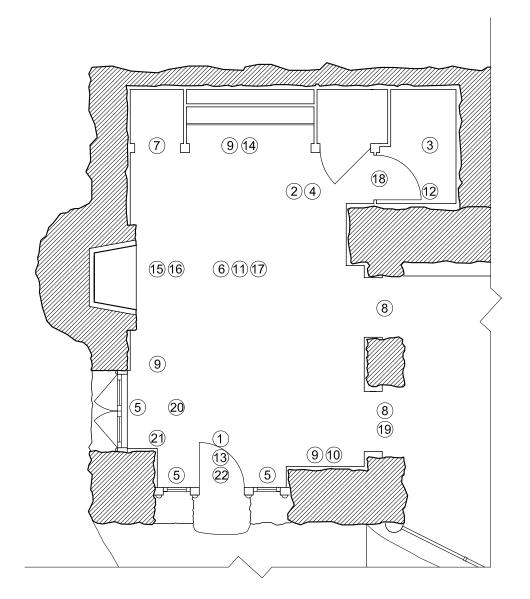
- Log slab ceiling at entrance damaged by rodents. See FIGS. GR8, GR9.
- 2 Trash left by rodents visible in ceiling. See FIGS. GR8, GR9
- Loose stone on integrated bench. See FIG. GR12.
- White painted stripe at level change visually distracting. See FIGS. GR1, GR2.
- Table/chair missing seat. See FIG. GR19.
- 6 Incompatible mortar applied on built-in stone bench. See FIG. GR11.
- Electrical conduit and propane pipe installed through window frame. See FIG. E53 in Exterior section.
- R Level change from exterior. See FIG. GR1.
- 9 Floor regularly waxed giving it a shiny appearance. See FIGS. GR1-GR4.
- Holes in posts from removed candelabra. See FIG. GR14.
- Decorative paint faded on wood posts. See FIGS. GR13, GR14.

MISSING FEATURES

- Rodent access at location of removed propane heater. See FIG. GR7.
- Three iron firewood holders missing. See FIG. GR11.
- Historic light fixture missing shade covering. See FIG. GR26.
- Doors to Secondary Room missing. See FIG. GR4.

MODERN ALTERATIONS

- Archway blocked with non-original safe and burlap. See FIGS. GR3, GR16.
- Modern steel C-channel present for removed propane heater in southeast corner. See FIG. GR7.
- Modern log slab ceiling at entrance. See FIGS. GR6, GR8, GR9, CD11, CD12 in Chronology of Development section
- Modern merchandise displays obsure character-defining features. See FIGS. GR3, GR4, GR13.
- Modern ceiling fans with hanging light fixtures. See FIG. GR5.
- Modern propane heater mounted on steel C-channel. See FIG. GR27.
- Candelabras relocated to fireplace wall from posts. See FIGS. GR2, GR14, GR15, CD8 in Chronology of Development section.
- Modern track lighting installed. See FIGS. GR3, GR4, GR6. GR9.
- Modern speakers installed on west wall and cords draped between them. See FIG. GR3.
- Historic lamp fixtures electrified. See FIG. GR24.
- Modern electrical outlets at fireplace. See FIGS. GR24,
- Modern shelves below west windows and between west windows and Kitchen archway. See FIG. GR28.
- Modern conduit on north, east and west walls. See FIG. GR7.



SECONDARY ROOM

DEFICIENCIES

3/16" = 1'-0"



HERMIT'S REST GRAND CANYON NATIONAL PARK

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LANDSCAPE ARCHITECTURE

15

DRAWING

DECEMBER 2007

DAMAGED FEATURES

- Exterior door blocked by merchandise. See FIG. SR8.
- Rodent access gained through gaps between wall boards, ceiling boards, and connections between wall and ceiling. See FIGS. SR13, SR14.
- Water damage on closet ceiling. See FIG. SR13.
- Rodent footprints on ceiling logs. See FIG. SR17.
- Daylight blocked by display in windows. See FIGS. SR2, SR8.
- (6) Room temperature is warm in the summer.

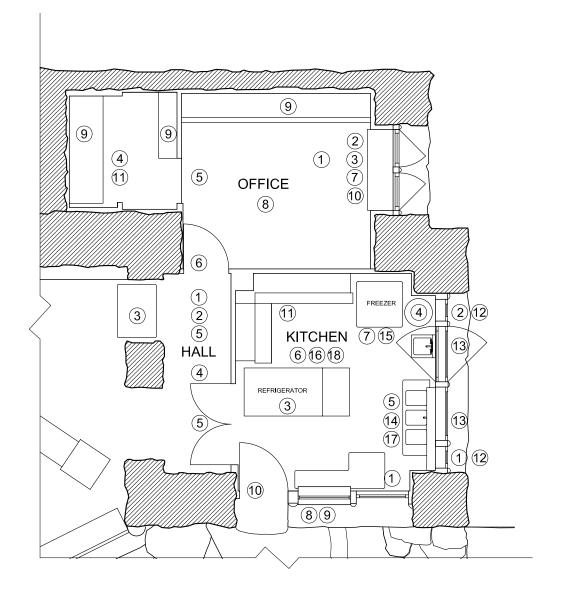
MISSING FEATURES

- Closet door missing. (Located in storage trailer) See FIG. SR5.
- Boors to Great Room missing. See FIGS. SR9, SR10.

MODERN ALTERATIONS

- Modern merchandise displays. See FIGS. SR2, SR3, SR5, SR8, SR20.
- (10) Slat board installed on north wall. See FIG. SR8.

- Carpet installed over concrete floor. See FIGS. SR11, SR12.
- Missing battens in closet. See FIG. SR18.
- White board on ceiling near north door. See FIG. SR19.
- False wall installed on south wall for display. See FIG.
- Stone fireplace reconfigured. See FIGS. SR1, CD13 in Chronology of Development section.
- Fireplace plugged.
- Modern track light fixtures installed. See FIGS. SR2, SR17.
- Reversed door to west wall closet. See FIG. SR7.
- Modern trim over north arch on west wall. See FIG.
- Modern battens where original battens missing. See FIG. SR15.
- Security camera installed in northwest corner with cord draped across north wall. See FIG. SR16.
- $_{\widehat{22}}$ |Modern dutch door. See FIG. SR19.



DAMAGED FEATURES

Daylight blocked by food storage and display in windows. See FIGS. K1, K12.

Septic pipe installed through window frame. See FIG.

Loud refrigerator impairs employee hearing. See FIG.

Inefficient hot water for coffee and tea machines. See FIG. K9.

Frequent clogging and overflowing of sink. See FIG. K11.

MISSING FEATURES

Original sink, wall treatments and most cabinets removed. See FIG. CD14 in Chronology of Development section.

MODERN ALTERATIONS

Oven wiring interferes with access to corner fire extinguisher. See FIG. K9.

Modern counter installed under north window. See FIG. K2.

Replaced wood window with aluminum on north wall. See FIG. K2.

Replaced Dutch door window with aluminum-framed window. See FIG. K3.

Modern cabinets, counters and backsplashes. See FIGS. K5. K6.

Exhaust fans and louvered vents installed in side windows on west wall. See FIGS. K10, K12.

Window covered with improperly adhered reflective film. See FIG. K12.

Modern shelves installed in front of sink window. See FIG. K12.

Wall configuration modified by removal of original pantry. See FIG. CD14 in Chronology of Development section and orignal drawings in Appendix B.

Vinyl tile installed over concrete floor. See FIG. K4.

Window replacements on west wall. See FIG. K12.

Modern fluorescent ceiling fixtures.

DAMAGED FEATURES

OFFICE

Water damage on ceiling. See FIG. O8.

Rodent access gained through gaps between wall boards. See FIG. O9.

Electrical conduit installed through window frame. See

KITCHEN, OFFICE & HALL

GRAND CANYON NATIONAL PARK

DRAWING

16

DEFICIENCIES

HERMIT'S REST

THE UNIVERSITY OF ARIZONA PRESERVATION STUDIES PROGRAM

LANDSCAPE ARCHITECTURE

DECEMBER 2007

COLLEGE OF ARCHITECTURE AND

3/16" = 1'-0"

Lead-based paint present in Office closet. See FIG. 4 O10.

MISSING FEATURES

Closet door missing. See FIG. O1.

Office door missing part of wood latch. See FIG. O6.

MODERN ALTERATIONS

Security wire installed over window. See FIG. O2.

Modern fluorescent lighting installed on ceiling. See FIG. 01.

Modern shelving installed in Office and closet for merchandise storage. See FIGS. 02-05.

Baseboard heater installed on west wall. See FIG. O2.

Partition wall removed and original toilet room and storage area combined into single closet. See FIG.

DAMAGED FEATURES

Water damage on ceiling. See FIG. H4. HALL

MODERN ALTERATIONS

Exposed wiring haphazardly mounted. See FIGS. H2, H4, H6, H7.

Archway to Great Room blocked with safe and burlap. See FIG. GR16 in Great Room section.

Partition wall removed. See FIG. H1.

Modern fluorescent ceiling fixtures. See FIGS. H3, H4.

APPENDIX D CODE EVALUATION

HERMIT'S REST GRAND CANYON NATIONAL PARK BUILDING CODE REVIEW

27 September 2007

prepared by:

J. CHRIS EVANS ARCHITECT

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prepared for:

Historic Structure Report, Hermit's Rest Preservation Studies Program College Of Architecture and Landscape Architecture University Of Arizona





HERMIT'S REST GRAND CANYON NATIONAL PARK BUILDING CODE REVIEW

10 September 2007

Summary

As an existing building and an historic property, Hermit's Rest is generally not required to meet *current* Code standards (The exception to this is the accessibility requirements defined in the Americans with Disabilities Act). Codes for existing structures are generally applied in cases of change of occupancy, or when alterations are made to the facility. Separate code requirements have been created to provide flexibility for protection of existing historic structures, while at the same time addressing issues of life safety. So a status review of code compliance for an existing building (not facing a change of use or alteration) primarily focuses on issues of life safety and accessibility.

Hermit's Rest is also a National Historic Landmark, and therefore consideration of the exceptional significance of the property must be taken into account when making specific recommendations.

The National Park Service and the Grand Canyon National Park have not adopted specific building codes for the Park's facilities, nor have they adopted a specific code for historic structures. Based on review of various codes, NPS directives, and discussions with Robert Powell, Historical Architect for the Grand Canyon, the following codes have been adopted for the analysis of Hermit's Rest.

International Building Code	2006
International Existing Building Code	2006
Uniform Federal Accessibility Standards (UFAS)	1984
ADA-ABA Guidelines	2004
ADA Accessibility Guidelines (ADAAG)	2002
NFPA 914 Code for Fire Protection of Historic Structures	2007
NFPA 101 Life Safety	2006

The International Building Code and International Existing Building Code were selected in part because they are part of the International Code Council, which has been widely adopted across the country in recent years and is intended to bring uniformity to the broad range of codes and jurisdictions.

UFAS, ADA-ABA, and ADAAG codes have been adopted per NPS *Director's Order 28:* Cultural Resource Management Guideline. NFPA codes have been adopted per NPS *Director's Order 58: Structural Fire Management.*

Building Code Review

IBC 2006 (assumes new construction)

Occupancy M—mercantile

Construction Type V-B

Fire Rating 0 hours (<30 feet to nearest structure)
Area Limitation 6000 s.f. maximum (existing OK)

Height Limitation 1 story

Occupancy Load 30 s.f. per person, 200 s.f. per person in kitchen; total load 44

(per 1003.2.2)

of Exits required 1 (when occupant load is less than 50)

Sprinkers required? no (per Chapter 9)
Exit signs required? no (per Chapter 10)
Fire alarm required? no (per Chapter 9)

Accessibility

Section 4.1.7(1) of the ADA Accessibility Guidelines (ADAAG) requires **alterations** to historic structures to comply with the requirements for other existing buildings unless it is determined that compliance with the requirements would threaten or destroy the historic significance of the building. Section 4.1.7(3) of the ADA Accessibility Guidelines (ADAAG) establishes the following minimum requirements for historic structures (significant issues for Hermit's Rest in **bold**):

(a) At least one accessible route complying with 4.3 from a site access point to an accessible entrance shall be provided.

EXCEPTION: A ramp with a slope no greater than 1:6 for a run not to exceed 2 ft (610 mm) may be used as part of an accessible route to an entrance.

(b) At least one accessible entrance complying with $\frac{4.14}{4.14}$ which is used by the public shall be provided.

EXCEPTION: If it is determined that no entrance used by the public can comply with <u>4.14</u>, then access at any entrance not used by the general public but open (unlocked) with directional signage at the primary entrance may be used. The accessible entrance shall also have a notification system. Where security is a problem, remote monitoring may be used.

(c) If toilets are provided, then at least one toilet facility complying with <u>4.22</u> and <u>4.1.6</u> shall be provided along an accessible route that complies with <u>4.3</u>. Such toilet facility may be unisex in design.

- (d) Accessible routes from an accessible entrance to all publicly used spaces on at least the level of the accessible entrance shall be provided. Access shall be provided to all levels of a building or facility in compliance with 4.1 whenever practical.
- (e) Displays and written information, documents, etc., should be located where they can be seen by a seated person. Exhibits and signage displayed horizontally (e.g., open books), should be no higher than 44 in (1120 mm) above the floor surface.

The Department of Justice's guidelines for the implementation of the ADA require alternative methods of access where compliance with the special access provisions in 4.1.7(3) would threaten or destroy the historic significance of a qualified facility. However, this "does not require a public entity to take any action that would threaten or destroy the historic significance of an historic property." (ADA.gov/reg2.html; DOJ implementation guidelines, Section 35.150)

Accessibility at Hermit's Rest is limited by the building's unique character, location and environment. However, minor modifications can be made to meet these minimum requirements for the public. Full accessibility for staff areas is more difficult to achieve, especially in the Kitchen, where space is limited.





Figure 1 : First step down into Front Patio

Figure 2: Exterior door into Secondary Room

Deficiency	Recommended Treatment	Impact
A portion of the path from the parking lot to the building exceeds the minimum slope requirements for accessibility	The path should be modified to conform to the required minimum slope of 1:12, and 1:6 for a maximum length of 2 feet	
The first step down into the Front Patio from the entry path is irregular and does not have a consistent surface for adequate footing	Concrete and asphalt surfaces should be repaired, and stone should be replaced and regrouted to provide smoother walking surface (3 ft. width, min.)	Irregular surfaces are a character-defining feature of Hermit's Rest; final surface should not be perfectly smooth
There is no accessible entrance into the building	The entry to the Secondary Room should be utilized for accessibility to the building; this will require modification of door hardware, including threshold; facility management may consider controlling access at this location and limiting entrance only to those requiring an accessible route	Access into and out of the Secondary Room may pose a security problem for facility management

The wood threshold between the Great Room and the Secondary Room is greater than 1/2" tall and 1:2 slope	The threshold should be replaced or removed to reduce the height and angle to meet code requirements	
Retail displays reduce accessible width to less than 36" between shelving in 2 locations near northwest column in Great Room	Modify existing store fixture layout to obtain 36" min. path of travel in all locations; future fixture arrangements should maintain 36" width	
Main entry door hardware does not meet accessibility requirements	Knob handle should be replaced with hardware that meets accessibility code	Change of hardware is not necessary if exterior door into Secondary Room is utilized to provide accessible entrance; appropriate hardware selection is crucial to retain historic character
Office door wood handle does not meet accessibility requirements	None	Wood handle is a character- defining feature; Office is not a public space and not fully accessible otherwise
Double doors between Great Room and Kitchen are only 27" wide and do not meet accessibility requirement of 32" clear width; Kitchen layout is not accessible	None	Modification to the Kitchen to meet accessibility requirements would impose significant limits on services that could be provided from the existing space
Door into Office is not fully accessible from Hallway side; clear space on hardware side of door is not provided	None	Modification of hallway or door to meet requirements would significantly impact character-defining features of the building

Egress

The building can be exited at three locations: the main entry in the Great Room, the Kitchen door and the Secondary Room door. Only two of these—the main entry and Kitchen door—are in use currently, and only the main entry can be accessed by the public. Primary issues of egress include door sizes and the irregular stone walking surfaces that pose potential trip hazards. Another issue is the hardware configuration that requires two separate actions to unlock and then open the doors.

The exterior door into the Secondary Room is currently blocked by store fixtures and not used as part of the egress system. As noted previously, use of this door would provide an accessible entrance; but it would also increase the safety of the building's egress system by providing a second method of egress for the public. It should be noted, however, that the current configuration of a single exit for the public does meet code.

A fire protection assessment by a contractor for the Regional Structural Fire Management Office identified the following deficiency:

"Main entrance has double doors that swing inward; but doors are propped open during business hours. If doors are closed during colder months, existing doors would be required to swing out."

However, IBC section 1003.1.2 (and NFPA 101, section 7.2.1.4.2) requires doors to swing in the direction of travel (outward) *only if the occupant load is greater than 50*. As currently utilized, the building occupant load is less than 50 (44) and would therefore not require modification to the doors.





Figure 3: Main Entry doors showing landing and door swing

Figure 4: Exterior door into Secondary Room blocked by merchandise and fixtures

Deficiency	Recommended Treatment	Impact
Main Entry and Kitchen door hardware do not meet egress code requirements; knob and deadbolt require 2 separate actions to open door	Install sign that says "Door to remain unlocked while building is occupied" on or adjacent to door	Sign should be removable, and installation should not adversely affect substrate materials
Erosion of concrete and 10" width of step outside main entry doors poses a trip hazard and does not meet code requirement for landing width	Repair erosion on existing concrete step	This does not meet code; the modifications necessary to meet the code requirement would have a significant adverse impact on the character of the exterior patio; an alternative solution (that would also not meet code) would be to repair and expand the step to 12" wide
Stair between Great Room and fireplace area: irregular surface poses a trip hazard in one location (see figure 5)	Replace stone and regrout to provide smoother walking surface	Irregular surfaces are a character-defining feature of Hermit's Rest; final surface should not be perfectly smooth
Office door is 6'-6" tall and does not meet the minimum code requirement of 6'-8"	None	Modification to the existing doors would have adverse impact on the door frame and surrounding trim; 6'-6" height provides adequate headroom for safety

Main entry doors are 6'-7" tall and do not meet the minimum requirement for egress doors	None	Modification to the existing doors would have adverse impact on the door frame and surrounding trim; 6'-7" height provides adequate headroom for safety
Door between Kitchen and Great Room is 6'-5" tall and does not meet the minimum code requirement of 6'-8"	None	Modification to the existing doors would have adverse impact on the door, frame and surrounding trim; door is not a primary egress door
Kitchen door width of 30" does not meet required width for egress door	None	Modifying door width would require extensive modification of door and adjacent window or wall
Stone wall along canyon edge of exterior patio is 12-28" tall and does not provide adequate height as a safety guard	None	NPS waiver in place for alternate methods of protection of open walking surfaces; 18-24" width of wall provides additional protection



Figure 5: Stair into fireplace area





Figure 6 and Figure 7: Stone wall along canyon edge of Front Patio

Building Systems

Electrical, mechanical and plumbing systems generally appear to be in good working order and code compliant. This review was a visual inspection only and did not include an exhaustive investigation into the current condition of existing equipment, wiring or pipes. Chuck Easton from Xanterra Facilities Management indicated that the entire electrical system was upgraded in the late 1990's; it appears to be in good condition, with wiring located in conduit in most locations. The holding tank and pump for the sink drains in the kitchen may or may not meet health code requirements; that is outside the scope of this investigation. A propane fueled heater is located in the Great Room; propane is piped in over the roof and through the window trim.

Deficiency	Recommended Treatment	Impact
Wiring inside kitchen for oven appears to have a splice connection using electrical tape; and interferes with access to fire extinguisher	Modify installation to provide proper, waterproof installation per code; re-route in an unobtrusive manner	
Light above fireplace is not working	Check and repair as necessary	
Exterior outlet adjacent to greywater holding tank poses fire hazard; outlet services 3 plugs that appear to serve permanent installations, and does not have adequate moisture protection	Hard wire systems as appropriate; provide exterior grade, waterproof outlet to meet code	
Propane gas line on roof not properly installed	provide permanent support and installation of pipe, per code; re- route in an unobtrusive manner	





Figure 8: View of Kitchen showing wiring and fire extinguisher

Figure 9: Propane gas line on roof, lower right hand corner of photo





Figure 10: Electrical conduit; board and batten wall surfacing in background

Figure 11: Propane heater in Great Room

Fire Protection

The current fire protection system consists of fire extinguishers in four locations. There are no smoke detectors, fire alarms or sprinklers.

A fire protection assessment by a contractor for the Regional Structural Fire Management Office identified the following deficiency:

"Interior walls appear to be covered with combustible surfacing which does not meet Class A, B or C interior finish requirements. Remove and/or cover with Class A, B or C rated surfacing material such as gypsum wall board or treat surface with an approved fire retardant."

It is unclear which building materials this refers to; it is likely a reference to the board and batten wall coverings in the Secondary Room, Office and Hallway. Our research indicates that most solid wood materials, at a minimum, do meet Class C requirements. However, the rough-sawn character of the surface in some locations may further reduce the flame spread rating of the wood panels to below Class C. Without actual analysis of the species, cut, density and finish of the boards, however, an actual fire spread rating can only be estimated. These wall surfaces contribute to the overall character of the building, and therefore removal or covering of these boards is not recommended. One solution would be the application of an approved fire retardant. However, care must be taken to avoid finishes that would alter the appearance of the wood surface.

Deficiency	Recommended Treatment	Impact
No smoke detectors present	Install smoke detectors; if it is determined that normal functioning of the detector will be adversely impacted by the presence of the fireplace, heat detectors should be installed	Install in locations to minimize visual impact; select color and finishes that closely match underlying substrate

Although a sprinkler system and fire alarm are not required at Hermit's Rest, Director's Order 58 includes the following policy statement regarding the protection of cultural resources:

"In the preservation of historic structures..., every attempt will be made to comply with national building and fire codes. When these cannot be met without significantly impairing a structure's integrity and character, the management and use of the structure will be modified to minimize potential hazards, rather than modifying the structure itself.

Subject to the previous paragraph, when warranted by the significance of a historic structure..., adequate fire detection, warning and suppression systems will be installed. 'Pre-fire plans' will be developed for historic structures...designed to identify the floor plan, utilities, hazards, and areas and objects requiring special protection. This information will be kept current and made available to local and park fire personnel."

The remote location of Hermit's Rest, its unique character and designation as a national historic landmark may warrant the installation of additional fire protection measures beyond code requirements. However, care must be taken to minimize the impact on the existing structure.

Miscellaneous Code Issues

Deficiency	Recommended Treatment	Impact
Glazing in doors and adjacent panels at 1) Main Entry, 2) Secondary Room, and 3) Kitchen do not appear to have appropriate safety glazing installed	When glazing requires replacement, install approved glass to meet safety code requirements; glass should have stamp indicating that it meets safety requirements	Glazing should match existing in color and appearance

Hazardous Materials

Painted surfaces on the interior and exterior of the building were tested for lead. Samples were tested at the following locations:

Location	Result	Recommended Treatment
West-facing clerestory window frame on roof, exterior (green)	no lead detected	
Secondary Room entry door jamb, exterior (green)	no lead detected	
Lintel over west-facing clerestory window on roof, exterior (brown)	no lead detected	
Beam near main entry, interior (brown)	no lead detected	
Beam in Office closet, interior (yellow wash)	lead detected	Additional testing; abatement if necessary

From visual inspection, no other suspected hazardous materials were identified.

APPENDIX E STRUCTURAL ENGINEERING EVALUATION

STRUCTURAL CONDITION ASSESSMENT HERMIT'S REST GRAND CANYON VILLAGE GRAND CANYON NATIONAL PARK

FINAL REPORT

PREPARED FOR
DEPARTMENT OF PRESERVATION STUDIES
UNIVERSITY OF ARIZONA
COLLEGE OF ARCHITECTURE
AND LANDSCAPE ARCHITECTURE

PREPARED BY TURNER STRUCTURAL ENGINEERING CO.

Mark S.

ITURNER 10 12

ARTONA U.S.

SUBMITTED

OCTOBER 12, 2007





October 12, 2007

Mr. Brooks Jeffery University of Arizona College of Architecture And Landscape Architecture PO Box 210075 Tucson, AZ 85721-0075

RE:

HERMIT'S REST

STRUCTURAL CONDITION ASSESSMENT

FINAL REPORT

Dear Brooks:

In accordance with your request Turner Structural Engineering has performed a structural condition assessment of Hermit's Rest located at the west end of the Rim Road in Grand Canyon Village in Grand Canyon National Park.

In the course of preparing this report, we have reviewed available drawing documentation and photographs, that you provided, and performed a site visit to observe the condition of the building.

Our investigation was limited to items that could be readily observed. No removal of building finishes, no testing or structural analysis work was performed.

In general we would characterize the building to be in fair condition. However, there are several structural deficiencies that require attention. Briefly, the areas of most concern are the condition of the roofing, the condition of the exposed heavy timber members, and the condition of the stone masonry retaining wall that supports the front of the porch area and the porch roof.

It is our opinion that the building was well built to support vertical loads and has withstood the test of time for over 90 years. However, given this type of stone masonry construction, the ability of the structure to withstand lateral loads (earthquake) is highly suspect.

In the following pages we list our on site observations, list the structural deficiencies observed, and list our recommendations for repair and upgrade.

If you have any questions, please don't hesitate to contact us.

Sincerely.

TURNER STRUCTURAL ENGINEERING COMPANY

Mark S. Turner, PE

Hermit's Rest Structural Assessment Report October 12, 2007 Page 1

Hermit's Rest Grand Canyon National Park

Document Review:

We reviewed drawings dated 1914 prepared for the Fred Harvey Company for the original construction of Hermit's Rest.

The drawings indicate the building construction over the high main roof and the two side rooms to consist of earth fill over cast concrete pan joists with heavy timber decorative beams and closely spaced wood lattilla rib ceiling exposed to view in the rooms below. The half dome fireplace is shown to be a cast concrete half dome with stone veneer.

The drawings indicate the rear wall of the building to be cast concrete with the side and front walls shown to be stone masonry. The arches over the doorways to the side rooms as well as the arch at the front of the half dome fireplace are shown to be true stone masonry arches.

The two heavy timber posts supporting the high roof, the low porch roof and the front clerestory have steel pipe columns shown buried in the center core of the posts, none of the other heavy timber posts are shown to have buried pipe columns in them.

Concrete footings are shown below the steel pipe columns and also at the concrete retaining wall at the rear. The stone masonry walls indicate the foundations to be stone masonry as well.

There is a note on the floor plan (Sheet 1 of 6) for all concrete beams to have an 8 inch bed of concrete (at supports) and be reinforced as shown on the reinforcing plans. We did not have any sheets showing reinforcing plans.

The roof plan (Sheet 2 of 6) indicates that there is to be rock piled on the roof over the half dome fire place and over the rear half of the two side rooms. The drawings indicate that the porch roof is to be covered with slabs.

Site Observations

A site visit was made on July 27, 2007 and the following observations were made:

The basic building plan and porch layout remains unchanged from the original 1914 construction. The building still functions as a rest house as originally intended.

Exterior and Roof of Building

There were significant changes to the structure from what was indicated on the original drawings. Those changes include the removal of the rock piles on the roof and the addition of a stone masonry retaining wall/parapet wall (approximately 5 feet tall) that aligns with the back of the stone chimney of the half dome fireplace but is approximately five feet beyond the rear wall of the building.

The rock piles on the roof have been replaced with an elastomeric roofing material. In fact the entire roof area including the front porch, high clerestory, the side rooms and the half dome fireplace are all covered with the elastomeric roofing. The elastomeric roofing also extends past the (buried) rear wall and stops at the face of the stone masonry retaining/parapet wall.

Other changes include the addition of a heavy timber patio roof structure at the west end of the existing porch roof. And the extension of the stone masonry retaining wall across the full width of the front edge of the patio and porch area. The retaining wall is approximately 8 foot high.

It is unknown to us, when these changes and/or additions were made.

The elastomeric roofing has failed in several locations. There were various ponding areas, rips, bubbles, soft spots and wrinkles in the roofing.

There is a lot of stone masonry throughout the building. Generally, the condition of the mortar appeared to be good.

Most of the heavy timber outlookers shown on the original drawings had been cut back to the edge of the roof. The exception occurring at the front of the clerestory, the outlookers at this location were deteriorating due to exposure.

The decorative heavy timber members over the clerestory windows and the side room windows have faded, chipped paint, and deterioration due to exposure.

The decorative heavy timbers members above the clerestory windows have shifted and created a gap between the timbers and the lintel above. Some of the mortar has fallen out of the gap.

At the west edge of the original porch as it adjoins the patio addition, there was a gutter loosely set in place. It does not appear as it would drain any area.

The downspout that extends down from the porch roof adjacent to a porch column does not appear to be connected to a roof drain or gutter.

The roofing material on the patio roof addition is in very poor condition, some of the roofing is missing and the decking is exposed.

The retaining wall at the front edge of the patio, at the west end near the location where it adjoins the patio addition, has been undercut at the base by soil erosion. The wall also appears to be settling in some areas. There were gaps in the stone masonry, with void spaces between the stone, and in one location a large stone has fallen out of the wall.

The stone masonry columns supporting the stone roof bear on these stone masonry retaining walls and depend on them for support.

There were two porch columns shown on the original drawings that were not in place. It is unknown how long these posts have been gone, or if they were deleted in the original construction. There was no observable structural deficiency as a result of the posts not being in place. The short beam at the northeast corner of the porch is one location where the post is missing.

Two of the porch beams are supported on the stone masonry columns, that are supported on the stone masonry retaining walls. There were no anchors visible between the heavy timber porch beams and the stone columns.

The porch columns not setting on the stone columns set directly either on elevated bases on the patio stone or were set in in-filled concrete areas. There was no visible connection between the porch columns and the patio stone.

Interior of Building

The stone masonry arches seem to be in good condition.

There was some water staining on the underside of the wood ceiling members located in the hallway between the snack bar and the rear office.

No other structural deficiencies were observed on the interior.

Site Features

Entry Arch with Bell: the stone masonry structure appeared in good condition. The mortar in the stone appeared in good condition.

Lamp Post: the stone masonry structure appeared in good condition. The mortar in the stone appeared in good condition.

Oven: The stone masonry structure appeared in good condition. The mortar in the stone appeared in good condition. The only defect was a crack in the stone lintel over the opening into the oven.

Steel Tank: There was a vertical steel tank (approximately 12' diameter by 20' height) at the rear of the building. The tank was set on a concrete pad. The soil had eroded at the south (rear) edge of the pad and exposed the foundation.

Structural Deficiency Issues:

- 1. Condition of Roofing: The roof appears to pond in several locations; there are soft spots in the roofing; there are some cracks, bubbles, and rips in the roofing (refer to photos 1, 2, and 3
- 2. Roof Leak: Some staining of the ceiling planks was observed in the ceiling in the corridor between the Snack Bar and the Office (refer to photo 4).
- Decorative Beams over Clerestory Windows: Paint has faded, cracked, and peeled off of the heavy timber decorative beams over the clerestory windows (refer to photos 5 and 6).
- 4. Patio Addition Roofing: Roofing in very poor condition; portions of roofing missing and wood decking is exposed (refer to photo 7).
- Gutter on Patio Roof Edge: The gutter has fallen off the edge of the patio roof and is laying on the lower roof of the patio addition. If the gutter were attached it does not appear that it would drain very well (refer to photo 8).
- Heavy timber beam ends: The outlooker beams over the front clerestory windows have deteriorated due to exposure (refer to photos 9, 10, and 11).
- Window at Snack Bar Office: The area outside of the office windows does not appear to drain very well (refer to photo 12).
- Decorative Beams over Snack Bar Windows: The heavy timber decorative beams over the snack bar windows have settled and the mortar has fallen out of the joint between the top of the decorative beams and the underside of the structural lintel (refer to photos 13, and 14).
- Porch Beams bearing on Stacked Rock Columns: No positive means of anchorage of the porch beam to the rocks was observed, and no positive means of connection could be observed between the stacked rocks (refer to photo 15 and 24).
- 10. Porch Columns bearing directly on Porch Slab: The columns have no protective base to protect them from moisture intrusion (refer to photo 16).
- Roof downspout at Porch Column: The roof downspout appears to be no longer in service.
- 12. Stone Retaining Wall at front of Patio Addition: The concrete footing at the base of the wall is exposed.
- 13. Stone Retaining Wall at front of Patio: The portion of the stone masonry retaining wall that has patio columns bearing on the wall has areas that have

eroded at the base (refer to photo 17), has gaps and settlement in the stone work (refer to photos 18, 19, and 20), and a stone has fallen out of the wall (refer to photo 21).

- 14. Stone Retaining Wall at front of Patio: The portion of the stone masonry retaining wall without porch roof columns bearing on it also has settlement gaps in the stone work (refer to photos 22 and 23).
- 15. Water Tank at rear of building: The water tank sits on a concrete pad. The edge of the concrete pad has been undercut and there are gaps in the stonework supporting the pad (refer to photos 25 and 26).





1. Roof Ponding

2. Roof Ponding, Rips, Wrinkles



3. Roof Ponding and Failure



4. Ceiling Water Stain



5. Paint Peeling at Clerestory Window



6. Separation at Lintel and Fascia

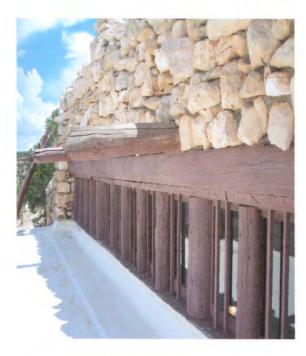


7. Patio Addition Poor Roofing

8. Poor Roofing - Detached Gutter



9. Outlooker - Deterioration



10. Outlooker - Deterioration



11. Outlooker - Deterioration



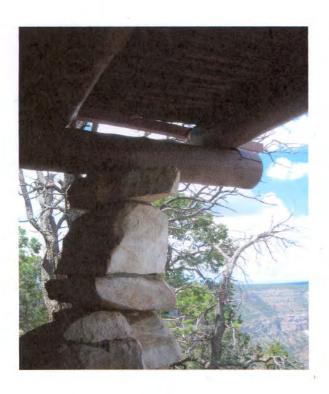
12. East Window - Poor Drainage



13. Lintel / Fascia Separation



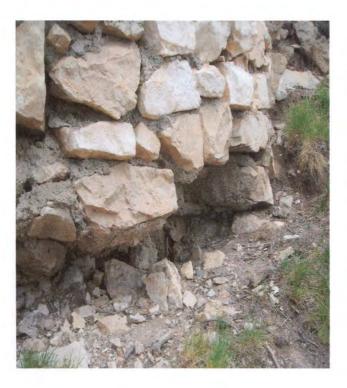
14. Close up of Separation



15. Porch Beams on Stacked Rock



16. Porch Column Base





17. Erosion at Base of Wall

18. Settlement Cracks in Wall



19. Voids in Retaining Wall



20. Close up view of Voids





21. Stone fallen from Wall



22. Settlement Gap in Wall



23. Settlement Gap in Wall

24. Stone Column on Ret. Wall





25. Water Tank - Pad undercut

26. Close up of Pad

Recommendations

The building is in fair structural condition, given its age, but for the building to remain in its current fair condition or to last well into the future several maintenance items need to be addressed immediately and should be maintained over time.

We recommend the following deficiencies be addressed:

- 1. Roofing: A new roof should be installed. Modifications as required to insure proper drainage should be included in the new roofing.
- 2. Decorative Beams over Clerestory Windows: Prep and paint as required.
- 3. Patio Addition Roofing: A new roof should be installed. Any deteriorated decking should be replaced.
- 4. Gutter on Patio Roof Edge: Verify that this gutter is not needed and remove.
- 5. Heavy timber beam ends: The outlooker beams over the front clerestory windows should be repaired or replaced and protected from exposure.
- The heavy timber beam at the northeast corner of the porch that cantilevers from the wall and is missing the heavy timber post that was shown on the original drawings should have the connection at the wall verified to insure it is properly anchored.
- 7. Window at Snack Bar Office: Correct the drainage in this area.
- Decorative Beams over Snack Bar Windows: Determine the cause in the movement between the lintel and the heavy timber decorative beams and fix the problem. Re-mortar gap as required.
- 9. Porch Beams bearing on Stacked Rock Columns: A more thorough investigation of the stacked rock columns should be performed to determine if there is any positive connection between the members (heavy timber beams and the stacked stone) besides mortar. Develop a means of anchorage that will allow the porch roof structure and the stacked columns to survive an earthquake and still be historically acceptable.
- Porch Columns bearing directly on Porch Slab: Protect the column bases by elevating them off of the porch slab with an elevated grout base.
- 11. Stone Retaining Wall at front of Patio Addition: Improve the grading at the wall base to protect the base of the wall from erosion.
- 12. Stone Retaining Wall at front of Patio: Perform a more complete evaluation of the stone masonry retaining wall. Improve the grading at the base of the wall to prevent erosion of the base. Develop and engineered solution that carefully

rebuilds portions of the wall that have appeared to settle. Fill in the gaps with new stone work.

- 13. Water Tank at rear of building: Fill in the area around the tank pad foundation that has eroded. Improve the grading around the water tank to prevent any future erosion.
- 14. A complete vertical and lateral load analysis was beyond the scope of this report. However, we recommend that a complete vertical and lateral load analysis of the structure be performed and recommendations prepared for the implementation of upgrades to the building to increase its ability to survive an earthquake. It is unlikely that the structure, or major portions of it, in its current condition would be able to survive an earthquake.

APPENDIX F

THE SECRETARY OF THE INTERIOR'S STANDARDS FOR REHABILITATION

(copied from the National Park Service website:

http://www.cr.nps.gov/hps/tps/standguide/rehab/rehab_standards.htm)

Rehabilitation is defined as the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values.

- 1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
- 3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
- 4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
- 5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
- 6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
- 7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
- 8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
- 9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.
- 10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

APPENDIX G

GUIDELINES FOR REHABILITATING HISTORIC BUILDINGS

(copied from the National Park Service website: http://www.cr.nps.gov/hps/tps/standguide/rehab/rehab_approach.htm)

Choosing Rehabilitation as a Treatment

In **Rehabilitation**, historic building materials and character-defining features are protected and maintained as they are in the treatment Preservation; however, an assumption is made prior to work that existing historic fabric has become damaged or deteriorated over time and, as a result, more repair and replacement will be required. Thus, latitude is given in the **Standards for Rehabilitation and Guidelines for Rehabilitation** to replace extensively deteriorated, damaged, or missing features using either traditional or substitute materials. Of the four treatments, only Rehabilitation includes an opportunity to make possible an efficient contemporary use through alterations and additions.

Identify, Retain, and Preserve Historic Materials and Features

Like Preservation, guidance for the treatment **Rehabilitation** begins with recommendations to identify the form and detailing of those architectural materials and features that are important in defining the building's historic character and which must be retained in order to preserve that character. Therefore, guidance on *identifying, retaining, and preserving* character-defining features is always given first. The character of a historic building may be defined by the form and detailing of exterior materials, such as masonry, wood, and metal; exterior features, such as roofs, porches, and windows; interior materials, such as plaster and paint; and interior features, such as moldings and stairways, room configuration and spatial relationships, as well as structural and mechanical systems.

Protect and Maintain Historic Materials and Features

After identifying those materials and features that are important and must be retained in the process of **Rehabilitation** work, then *protecting and maintaining* them are addressed. Protection generally involves the least degree of intervention and is preparatory to other work. For example, protection includes the maintenance of historic material through treatments such as rust removal, caulking, limited paint removal, and re-application of protective coatings; the cyclical cleaning of roof gutter systems; or installation of fencing, alarm systems and other temporary protective measures. Although a historic building will usually require more extensive work, an overall evaluation of its physical condition should always begin at this level.

Repair Historic Materials and Features

Next, when the physical condition of character-defining materials and features warrants additional work **repairing** is recommended. **Rehabilitation** guidance for the repair of historic materials such as masonry, wood, and architectural metals again begins with the least degree of intervention possible such as patching, piecing-in, splicing, consolidating, or otherwise reinforcing or upgrading them according to recognized

preservation methods. Repairing also includes the limited replacement in kind--or with compatible substitute material--of extensively deteriorated or missing parts of features when there are surviving prototypes (for example, brackets, dentils, steps, plaster, or portions of slate or tile roofing). Although using the same kind of material is always the preferred option, substitute material is acceptable if the form and design as well as the substitute material itself convey the visual appearance of the remaining parts of the feature and finish.

Replace Deteriorated Historic Materials and Features

Following repair in the hierarchy, **Rehabilitation** guidance is provided for *replacing* an entire character-defining feature with new material because the level of deterioration or damage of materials precludes repair (for example, an exterior cornice; an interior staircase; or a complete porch or storefront). If the essential form and detailing are still evident so that the physical evidence can be used to re-establish the feature as an integral part of the rehabilitation, then its replacement is appropriate. Like the guidance for repair, the preferred option is always replacement of the entire feature in kind, that is, with the same material. Because this approach may not always be technically or economically feasible, provisions are made to consider the use of a compatible substitute material. It should be noted that, while the National Park Service guidelines recommend the replacement of an entire character-defining feature that is extensively deteriorated, they never recommend removal and replacement with new material of a feature that--although damaged or deteriorated--could reasonably be repaired and thus preserved.

Design for the Replacement of Missing Historic Features

When an entire interior or exterior feature is missing (for example, an entrance, or cast iron facade; or a principal staircase), it no longer plays a role in physically defining the historic character of the building unless it can be accurately recovered in form and detailing through the process of carefully documenting the historical appearance. Although accepting the loss is one possibility, where an important architectural feature is missing, its replacement is always recommended in the **Rehabilitation** guidelines as the first or preferred, course of action. Thus, if adequate historical, pictorial, and physical documentation exists so that the feature may be accurately reproduced, and if it is desirable to re-establish the feature as part of the building's historical appearance, then designing and constructing a new feature based on such information is appropriate. However, a second acceptable option for the replacement feature is a new design that is compatible with the remaining character-defining features of the historic building. The new design should always take into account the size, scale, and material of the historic building itself and, most importantly, should be clearly differentiated so that a false historical appearance is not created.

Alterations/Additions for the New Use

Some exterior and interior alterations to a historic building are generally needed to assure its continued use, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. Alterations may include providing additional parking space on an existing historic building site; cutting new entrances or windows on secondary elevations; inserting an additional floor; installing an entirely new mechanical system; or creating an atrium or light well. Alteration may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character. The construction of an exterior addition

to a historic building may seem to be essential for the new use, but it is emphasized in the **Rehabilitation** guidelines that such new additions should be avoided, if possible, and considered only after it is determined that those needs cannot be met by altering secondary, i.e., non character-defining interior spaces. If, after a thorough evaluation of interior solutions, an exterior addition is still judged to be the only viable alterative, it should be designed and constructed to be clearly differentiated from the historic building and so that the character-defining features are not radically changed, obscured, damaged, or destroyed. Additions and alterations to historic buildings are referenced within specific sections of the Rehabilitation guidelines such as Site, Roofs, Structural Systems, etc., but are addressed in detail in New Additions to Historic Buildings (see nav bar, right).

Energy Efficiency/Accessibility Considerations/Health and Safety Code Considerations

These sections of the guidance address work done to meet accessibility requirements and health and safety code requirements; or retrofitting measures to improve energy efficiency. Although this work is quite often an important aspect of **Rehabilitation** projects, it is usually not a part of the overall process of protecting or repairing character-defining features; rather, such work is assessed for its potential negative impact on the building's historic character. For this reason, particular care must be taken not to radically change, obscure, damage, or destroy character-defining materials or features in the process of meeting code and energy requirements.