Historic Structure Report

Martinez Adobe

JOHN MUIR
National Historic Site • California
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PREFACE

The Martínez Adobe, located at John Muir National Historic Site in Martínez, California, is one of only a few remaining California-Mexican style adobes that were constructed in northern California during the mid 19th century. Since first constructed in 1849, the adobe survived several earthquakes including the most recent 1989 earthquake centered in Loma Prieta, California. As a result of the 1989 earthquake, a special National Park Service task force was called to the bay area to inspect and evaluate earthquake damaged structures. The Martínez Adobe was included as part of this effort. Inspection of the adobe revealed earthquake damage and other structural deficiencies and raised a level of concern on whether visitors and staff would be safe in the adobe during an earthquake.

This Historic Structure Report was undertaken to address the seismic and safety issues mentioned above, as well as to document the history and develop preservation treatment recommendations for the Martínez Adobe. The two-story adobe is located on a narrow plot of land bordered by State Highway No. 4 on the south, Canyon Road on the west, a housing subdivision on the north and the John Muir House on the east. This structure, along with the John Muir House, is one of the two primary historical structures located within the park.

The Martínez Adobe was constructed in 1849 on a portion of what was then Rancho El Pinole. Don Vicente inherited the ranch from his father for whom the town of Martínez, California was named. In 1874 John T. Strentzel, father-in-law of early naturalist and conservationist, John Muir purchased the property and used the adobe as an outbuilding on the ranch. Between 1906 and 1915, John Muir’s daughter, Wanda Hanna, and her family made the adobe their home.

The Martínez Adobe is of state significance, as a fine example of a California - Mexican style rancho. This informal building with its medieval additive quality is important in the local history of the town of Martínez. The adobe was built by the son of the original grantee on a portion of the Spanish land grant.¹

John Muir National Historic Site was authorized in August, 1964, with the passage of Public Law 88-547. This law designated the John Muir National Historic Site to be "set aside as a public national memorial to John Muir in recognition of his efforts as a conservationist and crusader for national parks and reservations."² The 8-plus acre unit originally included the Muir home, the Martínez Adobe, a veterinary clinic, now used as the park headquarters, and several acres of vineyards and orchards. In November, 1978, Public Law 95-625 was passed establishing land acquisition and development ceilings for the site of $224,000 and $1,285,000 respectively.

According to the General Management Plan, "Section 5 of Public Law 100-563, approved October 31, 1988, expanded the boundary of the historic site to approximately 340 acres....The legislation


also provided authority for a cooperative agreement covering East Bay Regional Park District maintenance of regional trails on the added lands.\textsuperscript{3}

The Martínez Adobe is listed on the National Register of Historic Places, as part of John Muir National Historic Site. The adobe has California Historic Landmark status, number 511, and has been documented by the Historic American Building Survey, number CAL-1913. The structure is to be investigated at a level of \textbf{exhaustive} (class A), and has a management category of \textbf{category A} both as described by NPS-28.

This report includes not only the history but the construction chronology, architectural and landscape existing conditions and recommendations. Electrical and structural existing conditions and recommendations are also included. The report also includes existing condition drawings and photographs, recommendations for structural stabilization and preservation treatment to assure continued stability and protection of this historic resource.

It is important, at this point, to extend appreciation to those who contributed to this project. Special thanks goes out to Superintendent Phyllis Shaw and her staff at John Muir National Historic Site; Craig Kenkel, Regional Historical Architect, Western Regional Office; Hank Florence, Historical Architect, and Tom Mulhern, Chief, Park Historic Preservation, Western Regional Office; Harlan Unrau, Project Historian, Branch of Planning, and Gary Higgins, Section Chief, Historical Architecture Section, Western Team, Denver Service Center; Susan Boyle, Historian, Branch of Planning, Central Team, Denver Service Center; Mary Ryan, Visual Information Technician, Graphic Design and Electronic Publishing Section, Denver Service Center; Roger Kelly, Regional Archeologist; Dan Brown, Golden Gate National Recreation Area; G. Douglas Barbee, Senior Plant Taxonomist, California Department of Food and Agriculture; John Vitands, Archeologist, and Marcia Babcock, Archeologist; and all others who contributed with the production of this report.

Also at this time the authors wish to thank the researchers and librarians at the University of California, Berkeley (especially at the Bancroft Library); the University of the Pacific, Stockton; National Archives at San Bruno; the Contra Costa Historical Society in Pleasant Hill; the Martínez Museum; the California Historical Society; and the Pleasant Hill Library.

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\textsuperscript{3} Ibid.
ADMINISTRATIVE DATA
ADMINISTRATIVE DATA

NAME AND NUMBER OF STRUCTURE

The Martínez Adobe, Structure No. 743, John Muir National Historic Site, Martínez, California. The structure is owned and administered by the National Park Service, Department of the Interior, as part of the national historic site.

PROPOSED USE OF STRUCTURE

The structure will be used on a daily basis as a contact station with a restroom accessible for the disabled. The structure will also be used to interpret the historic scene and secondary park themes, and will be utilized in special programs as a view/rest area.

JUSTIFICATION FOR SUCH USE

Use of the building is in accordance with the approved Task Directive, and the legislation which established John Muir National Historic Site.

PROPOSED ACTIVITY

The proposed activity which this study addresses is the need for structural stabilization and preservation of the structure and its immediate site. In this report are detailed structural and architectural recommendations for treatment of the resource to correct the serious structural problems and deterioration that are damaging to this historic structure. Recommendations are also included to bring the structure up to earthquake code requirements.

ESTIMATED COSTS FOR PROPOSED CONSTRUCTION

Detailed cost estimates are included in the appendix.

STATEMENT OF SIGNIFICANCE

As part of John Muir National Historic Site the Martínez Adobe was listed in the National Register of Historic Places on October 15, 1966 (updated May 22, 1978), under Criteria A, B, and C. At this time, it appears that it may not be eligible under Criteria C. The entire national historic site has been designated a National Historic Landmark, and the Martínez Adobe has been listed as a California State Historic Landmark. The adobe’s significance is based in part on its construction by a member of an old Spanish Alta California family after Alta California became an American territory. The adobe is listed in the National Park Service’s List of Classified Structures, Criteria A, representing an excellent example of California-Mexico style rancho architecture.
Figure 1: Park Location Map
JOHN MUIR NATIONAL HISTORIC SITE  MARTINEZ, CALIFORNIA
HISTORIC STRUCTURE REPORT

Figure 2: Park Location Map (Detail)
HISTORY
HISTORY

PREHISTORY OF THE MARTÍNEZ AREA

California has many archeological sites, some dating to perhaps 11,000 years before present. Over the centuries, these early hunting cultures, presumably composed of small roaming bands, gradually expanded their use of the rich and varied food resources along California’s coastal areas. Sites were often located along shorelines of ancient lakes and marshes, especially near old stream channels and estuaries where varied and abundant lacustrine and estuarine resources were available. The lithic technology of these cultures was quite sophisticated and included beautifully crafted spear points, and specialized stone implements. By about 6000 B.C. native peoples in the region had begun to depend increasingly upon plant foods for subsistence, and technological innovations and population growth became characteristic.

About 5000 years ago, more specialized exploitation of selected environments began to evolve, as peoples relied on a combination of hunting, fishing, and collecting. New tools, designed to procure or process specialized local foods, were developed. These included hunting implements like the atlatl (and later the bow and arrow), and various stone and bone tools for processing. Grinding implements like stone-bowl or bedrock mortars were important for use with the rich acorn resources. Marine resources were increasingly harvested.

However, most of these early sites are elsewhere in California, and it is not until about 2500 to 2000 B.C. that Utian (ancestral Costanoan) groups began to occupy eastern Contra Costa County, before expanding westward toward San Francisco. By the time of Christ, there were villages all along the San Francisco Bay and the Central Coast. In this area, these cultural developments are known as the "Berkeley Pattern." Cobble mortars and pestles were used for milling, and specialized bone tools had been developed and were increasingly being used. Much of the subsistence economy was derived from gathering as exemplified by large shell heaps and by the heavy use of acorn gathering and processing sites. Location of villages along the Bay near the outlet of a freshwater stream allowed easy exploitation of the resources within the catchment basin, e.g. "bay, mudflat, marsh, rocky shore, and inland zones."

By A.D. 500 larger populations with more sophisticated social organizations settled larger villages, but utilized the same subsistence procurement system. However, as populations increased, some of the population began to move into the foothills. During this time, roasting ovens to prepare vegetable foods like soaproot became popular. The increase in cultural complexity was evidenced by the construction of large specialized structures like dance houses and sweathouses, by the large quantity and complexity of artifacts, and by the increase in site sizes.

By the time of Spanish contact, some 200 Costanoans living in the Martínez area were recognized as a tribelet or autonomous group known as the Los Carquines who spoke the language known


2. Ibid., p. 282.

as Karkin. Generally these Costanoans had a kinship and social organization very much like the Chumash and other groups to the south. They waged war with other Costanoan groups and with other groups further removed from the area. They traded with inland tribes, supplying sea products like mussels, abalone, salt and olivella shell in return for pinon nuts. The Costanoans carefully managed the land by controlled burning of extensive areas. This helped to prevent disastrous fires, promoted the growth of seed-bearing annuals, and increased grazing for wildlife. Acorns were probably a primary food source, but the Costanoans collected and hunted a wide range of animal and plant foods as well. Costanoan houses were domed thatched structures. Sites might include sweat houses, dance enclosures and plazas, and assembly houses.

After explorations of the Bay region by Francis Drake in 1579 and Sebastián Vizcaíno in 1602, it was over 150 years before missions were established in the area. Once the Spanish occupied the area, native life changed rapidly. Villages were abandoned as Indians were aggregated in the missions, and as disease decimated populations. Indian resistance to Spanish rule began in the San Francisco area about 1793, and by the 1820s most of the native peoples had been subdued. Apparently the five villages in the Martínez area seen by early travelers were no longer in existence by the time Ignacio Martínez received his land grant. However, Martínez—like other grant holders—used the mission Indians as a labor force to run the rancho and build its structures.

RANCHO EL PINOLE: 1823-1853

Introduction

Built in 1849 on the large Mexican California Rancho El Pinole, the Vicente Martínez Adobe is a fine example of rural vernacular architecture of the transitional 1840s period, when Mexican architectural traditions were increasingly influenced by European traditions. The story of the adobe comprises a microcosm of American historical development. During the past century and a half, historical evolution of the structure and its setting reflect the transformation of this simple but graceful adobe, built at the far edge of an isolated Mexican rancho, to a modern 20th century American suburban dwelling. The lives of its owners and residents mirror the history of both Mexico and the United States during a period of extensive political, social, and demographic changes.

Don Ignacio Martínez

Rancho El Pinole was originally part of a large Mexican land grant issued to Don Ignacio (Ygnacio) Martínez in 1823. Martínez was one of Mexican California’s pioneers who would later become one of her most distinguished citizens. Born in Mexico City in 1774 of Spanish parents, Martínez arrived in California in 1799, beginning his military career as a cadet in the Santa Bárbara Presidial company. In 1802 Martínez married Doña María Martina Arellanes at Santa Bárbara where the first two of their eleven children were born. In 1806 Martínez was commissioned second lieutenant in the San Diego garrison where he served as paymaster, postmaster, and prosecuting attorney. Moving to the Presidio de San Francisco sometime during the 1818-1820 period, Martínez served first under Spain, and later, the Mexican government.

After Antonio Luis Arguello went to Monterrey in 1822 to serve as the governor of Alta California, Lieutenant Martínez was named commandant of the Presidio de San Francisco. In
1823 Don Ignacio helped found the Mission de San Francisco de Solano at Sonoma. That same year Governor Arguello recognized Don Ignacio Martínez's contributions to Alta California by granting him provisional title to three sitios (that is, three square leagues of land) in Contra Costa known as the Rancho El Pinole.⁴

Don Ignacio served at the Presidio de San Francisco until 1827 when he was elected to the Alta California legislatura (asamblea). Returning to the presidio late in 1828, he retired some three years later, taking his family to live in the pueblo of San José where Martínez assumed various duties. He supervised the secularization of Mission San Rafael in 1834. He became the third alcalde, or mayor, of Yerba Buena (San Francisco), and was alderman at San José during 1834-1835. In 1836 Martínez moved his family to the headquarters of Rancho Nuestra Señora de la Merced in Pinole where he lived until his death in June 1848.⁵

Despite his many civic and military responsibilities, Martínez continued to manage the large rancho. In 1824 Martínez acquired a cattle brand from the governor, and sent his two sons, José and Vicente, to the Rancho El Pinole to learn the cattle business from his mayordomo Bruno Valencia. They planted a pear orchard and vineyards and built an adobe house and corrals.⁶ In 1828 Valencia reportedly took some 600 to 700 head of cattle to the ranch. Valencia built a house for himself and later ranch managers on the west side of the Rancho El Pinole a short distance from the Straits of Carquinez.⁷

In 1834 after loss of the original land grant papers, Martínez reapplied to the Mexican Commissioners on Colonization and Vacant Lands for the rancho. The commission returned the patent to Martínez "in order that it may be presented in due form and in accordance with the Law in the Subject Territory."⁸

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5. Rancho Nuestra Señora de la Merced or Ranch of Our Lady of Mercy.


8. Case 205 ND, Translation of "Expediente," p. 34.
The Martínez family moved to the Valle del Pinole in November 1836. Shortly thereafter two more adobe houses were built at the Pinole headquarters, one for José and his wife, and the other for Vicente and his family. By this time Martínez owned some 3,000 cattle, 400 horses, 600 sheep, 80 "tame" horses, 300 milch cattle, and 300 goats on the Pinole.

In 1837 Martínez again applied for the Pinole, asking for an additional square league. In his application he noted:

> Although this may appear considerable land the greater part is not fit for pasturage, it being composed of stony hills and swamp which are of no benefit to the cattle. The latter section lies in the direction of the Cañada del Hambre which is the place which the cattle will resort to."

To reissue the grant, the land had to be declared vacant, and not owned by any private person, village, or corporation. In July 1839 another claim to part of the Rancho El Pinole was presented by Felipe Briones. In 1831 Felipe Briones had petitioned to live on the Pinole. Ignacio Martínez had permitted him to do so for one year on condition that Briones assist with the rodeos and that he locate his small house nearby for company. In his claim to the land Briones stated that

> it is some more than ten years that I have possession in said place [Corral de Galindo] the land...upon which I have built a house planted a garden of much consideration and cultivated some lands by which labors the products thereof and some milking cattle then I have there. I maintain my family composed of eighteen persons used as I have no title of ownership whatever and might have to lose the works undertaken by me...his [Martínez's] petition operates injuriously for asking for the Cañada del Pinole.

Ygnacio Peralta, a local official, supported Briones' claim by stating:

> [Briones]...has a house upon it which has cost two thousand dollars a Garden fruit trees...with a quantity of four thousand head of wild cattle with more than three hundred tame cattle and horses...three hundred goats oxen and...horses.


11. Ignacio Martínez, 10th November 1837, Case 205 ND, "Expediente," p. 35. Another version of this same statement appears on pp. 332-33.

12. Vice President of the Republic of Mexico, 26 December 1837, Case 205 ND, "Expediente," p. 36.


Eventually these lands were signed over to Briones' widow, Señora Manuela Valencia. Another claim to the Rancho El Pinole was made by José Estrada. The matter was referred to the Justice of the Peace of Contra Costa, and in June 1842 Governor Juan Bautista Alvarado granted four square leagues of land (17,786.49 acres) to Ignacio Martínez. The boundaries of the grant were defined as:

commencing from the mouth of the Cañada [El Pinole]...easterly by the same until it adjoins with the corral de Galindo from this place to La Cañada de la Hambre and from thence to the Straits of Carquinez emptying into at the mouth of the said Cañada el Pinole into the Bay of San Francisco.

The name "El Hambre" was coined in 1808 when a body of Spanish soldiers, suffering from hunger, camped near the arroyo upstream from the Straits of Carquinez. Later the same name was "applied to the Bolsas towards its upper waters, and to the Cañada or narrow valley of...level land through which it flows." Earlier five large native villages had been located in the Alhambra area, the vestiges of which were no longer extant by the 1840s. Although the grant was confirmed by the Surveyor General of the United States for California, Samuel D. King, in January 1852, the vague land description would ultimately lead to years of litigation.

Governor Alvarado placed conditions on the grant. Martínez was required to

mark out the boundaries on which premises he will place other than the land marks, some front trees or shrubbary [sic] of some utility...within one year he must have a house built upon it which shall be inhabited.

Vicente Martínez

Upon Ignacio Martínez's death, his entire estate descended to his children. On June 17, 1849, Ignacio's widow María and nine of the Martínez children entered into a written agreement whereby the second son, Vicente José Ramón Martínez, would receive one-eleventh (1/11) of the

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17. Juan B. Alvarado, Governor of the Department of California, 1 June 1842, Case 205 ND, "Expediente," p. 40.
22. Fowler Mallet suggests that Don Ignacio Martínez wanted to leave the property to his eldest son José, but that José persuaded him to divide it equally among the children. Fowler Mallett, "Genealogical Notes and Anecdotes," Ms. California Historical Society, San Francisco, California, 1953, p. 29.
entire rancho, equivalent to some 1600 acres. This agreement was not strictly legal because several of the heirs were married women at the time, and their husbands did not sign. However, it appears that all the heirs apparently recognized Vicente’s right to the land. This share of the land, known as the Cañada del Hambre, was along the eastern border of the Rancho El Pinole, and included the land upon which Vicente had been living since about 1847 (figure 1). Vicente also purchased lands from his siblings in the town of Martinez.

Vicente Martínez was born on August 8, 1818, at Santa Bárbara, and went with his parents when they moved to the Rancho El Pinole. At the age of 17, he married Guadalupe Moraga, granddaughter of José Joaquín Moraga, a lieutenant under Captain Juan Bautista de Anza and one of the grantees of Rancho Laguna de los Palos Colorados. Vicente Martínez served as a militiaman at San Francisco in 1837, and was in the San José District in the following year.

Guadalupe Moraga Martínez died in November 1845, probably as the result of giving birth to twins. The John Marsh Papers contain a frantic letter from Vicente Martínez to Dr. Marsh, begging him to come to the Pinole: "Hasten. Nothing else is of importance." The first of the twins had arrived, but the second would not come and Guadalupe was suffering.

About 1846 Vicente built a frame house "by himself" on the eastern side of the Rancho El Pinole land at the mouth of the small tributary valley variously called the Cañada Ciscal, Ciscar, Siscal, Siscar, by the Mexican Americans. (The valley is now known as Franklin Canyon.) Vicente married sixteen year old María Nieves Soto on May 20, 1848, and moved his wife and family to the Cañada del Hambre. According to testimony in the Pinole land claims case, Vicente had already developed his ranch holdings. He had a corral for the horses and tame cows in the Cañada del Hambre, and cultivated a portion of land; and on the west of his house, in the Cañada Siscal, he had a corral for wild cattle, and rodeo cattle.

When Vicente Martínez first moved to the Cañada del Hambre late in 1846 or early 1847, it was largely uninhabited and isolated, the only other residents being Teodora Soto and her family.


27. Deposition of José Santos Berreyesa, November 1, 1860, Case 205 ND, p. 108. In the aforementioned Feasibility Report, p. 18, the authors suggest that the frame house was probably a wattle or "palizada" structure.


Figure 1: Plat of the partition of Rancho El Pinole, April 1870. Redrawn from original on file in Bancroft Library, University of California, Berkeley.
The character of the valley would soon change. A horse-powered ferry boat had begun operating between Benicia and Martínez by 1847, and a second ferry, powered by sails, was operating in the straits by 1848. Much of the Martínez ranch produce, such as hides, meat, and tallow, may have been shipped via one of these vessels, and bricks, glass, and other building materials may have been brought to the Martínez area in similar fashion.

Some two years after building the frame house, probably in 1849, Vicente erected the adobe about 20 varas (55 feet) west of the frame structure. No description of the building are available except that the Cañada del Hambre was "similar to any other Spanish rancho settlement." It is likely that Martínez used Indian laborers to build the adobe, because one biographer indicates that the "Martínez family depended upon Digger Indians for all routine and menial work on the Rancho." Vicente Martínez may have consulted his brother-in-law, Captain William A. Richardson, an accomplished builder who felled trees and built boats on the Marin shore.

Vicente Martínez occupied the Cañada del Hambre for some seven to 10 years. Little information is available about his life during this period, and some of the testimony in the land claims case for the Rancho El Pinole is conflicting. Dr. Samuel J. Tennent, Ignacio Martínez's son-in-law, testified that in 1850 Martínez and his family had a two-story adobe house and a shack about a mile and a quarter from Carquinez Bay. The land around the adobe was under cultivation. There were "corrals for cattle, and "for two years successively he cultivated...[the land] and had a house upon it in which his men lived." In 1860 Francisco Galindo testified that Vicente Martínez lived in the adobe until about 1852 before selling it to a Chilean named José Manuel Gallojas. This reference is the only mention of Gallojas in the testimony and is at variance with other depositions. It is possible that Martínez rented or leased portions of the property to Gallojas sometime in the 1850s.

In his deposition in 1852, Bruno Valencia, Ignacio Martínez's mayordomo, stated that Vicente Martínez was living in the Cañada del Hambre and had been for seven to eight years. José Berreyesa, testifying in the same case, stated that Vicente occupied the adobe "from 1849 to 1855,

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31. Deposition of Berreyesa, Case 205 ND, p. 110.
34. Lumley Franklin vs Pasqual Mitchel [Mitchele], Draft Amendments to Plaintiff's Statement on Motion for New Trial, September, 1857, District Court, 7th Judicial District, Contra Costa County, File No. E9B, Contra Costa County Historical Society, Pleasant Hill, California.
35. Deposition of Francisco Galindo, Case 205 ND, p. 149.
I believe, and afterwards one Franklin occupied it." G.W. Hendry and J.N. Bowman also suggested that the Martínez family occupied the adobe until 1855.  

According to testimony in the land claims case, the Cañada del Hambre had been under cultivation "piece by piece" throughout Ignacio Martínez's ownership of the property. The largest piece to have been cultivated by Martínez was some 24 acres, but the exact location of this land is not clear. One area called "the Gardens," all of which was fenced, had been cultivated for some 25 years. Testimony made it clear, however, that local residents considered the Rancho El Pinole primarily a cattle ranch. A bond for deed from Vicente Martínez to Messrs. Weld and Lewis, dated May 17, 1852, described a 10-acre plot adjoining the town of Martínez, westward of the "Martínez House & Blacksmith Shop," thus suggesting that Martínez had built a blacksmith shop somewhere in the immediate vicinity of his adobe home.

Vicente's move to the Cañada del Hambre from the Valle del Pinole was likely prompted by several factors. Construction of the ranch buildings and corrals in the Cañada del Hambre may have helped satisfy the Mexican government's land grant requirements. Several of the Martínez children had married, and the homestead on the Rancho El Pinole undoubtedly was too small for his growing family. The Cañada del Hambre provided good grazing and excellent farm lands, and the new home and ranch buildings may have been more conveniently located for management of ranching activities in the eastern portion of the large grant. In a time when there were virtually no roads and cross country travel was difficult, the Cañada del Hambre afforded easy access to the Bay of Carquinez for shipment of the hides, tallow, and meat that were the mainstays of the Martínez ranching operation.

It is likely that conflicting land claims may also have strongly influenced Vicente's move. One member of the Briones family had run cattle on lands claimed by Martínez during the early 1840s, removing them after an untimely range fire. Around 1846 Teodoro Soto and her husband Desiderio Briones built a house on the east side of the Cañada Ciscal. This house consisted of poles set into the ground with a Tule roof, with the sides plastered over with mud, it being a Spanish home such as was common in the country at that time, and a Bake oven.

Soon thereafter, the Briones built an adobe house at the same location, and by 1847 were raising "some very fine melons" in the Cañada del Hambre. According to Contra Costa resident Stephen Cooper:

36. Deposition of Valencia, 7 August 1852, Case 205 ND, p. 8; Deposition of Berreyesa, 6 November 1860, Case 205 ND, p. 109; and G. W. Hendry and J. N. Bowman, "The Spanish and Mexican Adobe and Other Buildings in the Nine San Francisco Bay Counties 1776 to about 1850" (7 vol., typescript, California State Library, Sacramento), Vol. 5, p. 450.


38. Undated abstract of title for the Pinole Ranch, John Muir Papers, University of the Pacific, Stockton, California (hereafter referred to as "Undated Abstract").


40. Deposition of Stephen Cooper, [date illegible] July 1858, Docket 334, p. 0889. This structure is of what the Spaniards referred to as "palizada" or palisade design, sometimes referred to in English as a "picket log" structure.
About the time that I first went there a contest was between the Old Lady [Teodoro Soto] and Vicente Martínez as to the land on the West side of the creek. The Old Lady claimed the land...on both sides of the Creek [Franklin Creek], and raised a crop of grain on the West side, after which Vicente Martínez took possession of the field on the West side and planted a crop on the same ground the next year.⁴¹

California Becomes United States Territory

The years 1848 through 1850 embraced enormous change in the old Mexican province of Alta California. The Treaty of Guadalupe Hidalgo, signed in 1848 terminating the Mexican War, ceded California to the United States and opened the area and much surrounding territory to American speculators and squatters, thus ending Mexican hegemony over the American Southwest. The discovery of gold in 1848 triggered a massive rush of miners and fortune seekers to California. Food prices soared and investors sought land to raise cattle and produce and procure wood and supplies for the burgeoning boom towns. In 1849 one of Ignacio Martínez’s sons-in-law, Colonel William Smith, engaged Thomas Brown to survey and lay out the Martínez townsite on the Straits of Carquinez. By 1850 investors were selling newly-platted lots in Martínez, hotels and other businesses were under construction, and the steamer lone was calling regularly at the downtown wharf area. Soon Contra Costa County was organized with Martínez as its county seat.

Lands set aside for the town of Martínez were rapidly settled by Anglos, resulting in numerous incidents of cattle rustling, squatting, and theft of wood and hay from the ranchos. Most of the wealth accumulated by the Mexican ranchers was involved with hides, tallow, and land, and they had little experience with a monetary economy. Crafty Anglo newcomers repeatedly loaned them money on mortgages, and later foreclosed, or acquired, the property through dubious means.

Beginning in 1849 American settlers wishing to gain access to the vast holdings of the Mexican grantees, generally the best and most fertile lands in California, exerted considerable pressure on the Mexican landholders. After an investigation, U.S. Department of the Interior appointee William Carey Jones reported that most of the Mexican grants were in accord with the law. In 1851 Congress established the Land Commission to verify the validity of the Mexican land titles. The establishing act placed the burden of proof of ownership on the landholders, and stipulated that claims must be presented within two years or the grantees would forfeit their rights to the property. Many of the Mexican grantees lost their ranchos, because the Land Commission members could not speak Spanish, the original boundaries were poorly defined and marked, squatters removed markers, and English-speaking lawyers were paid in land for their services representing Mexican Grantees.⁴²

⁴¹. Ibid., p. 0889.
⁴². This discussion was abstracted from Shaw, “Spanish Land Grants in Contra Costa County.”
Land Claims

To resolve the conflicting claims regarding their land, Ignacio Martínez' heirs filed a petition with the U.S. Board of Land Commissioners on July 8, 1852, to confirm title to Rancho El Pinole. The board reviewed the proofs and allegations and ruled on October 24, 1854, that the claim was valid. A survey was completed and returned to the U.S. Surveyor General for California, but that same day Samuel J. Tennent objected to the survey, resulting in the order for a new survey.

Challenges to the survey included charges that it did not follow the boundaries described in the original deposition, excluded lands originally within the boundaries (especially those originally petitioned for and granted to Ignacio Martínez by the Mexican government), included lands not in the original deposition, and failed to follow the natural boundaries defined in the original grant and landmarks referred to in the confirmation decree. This survey "tended to substitute quantity for quality without reference to boundaries designated" or to metes and bounds, and it ignored lands within boundaries described by William A. Richardson. Most importantly, this survey omitted the tract of land known as the Cañada del Hambre from the Rancho El Pinole.43 The boundaries of Rancho El Pinole as defined by the plaintiffs embraced about seven square leagues, nearly double the land delineated in the 1842 grant.

In 1862, after some years of testimony and deliberation, Judge Hoffman of the U.S. District Court for the Northern District, California, issued a decision concerning the ranchos in Case 205. In his opinion he stated that

neither the previous ruling of this court, nor the ruling of the Supreme Court would authorize the confirmation of this claim for a greater quantity than four leagues.44

Judge Hoffman recommended that the survey be accepted, and that the grant be confirmed to the extent of four leagues. The decision was appealed to the U.S. Circuit Court, but that court dismissed the appeal on September 29, 1866. President Andrew Johnson signed the patent on August 22, 1868, thus awarding the Martínez heirs a parcel of land comprising 17,760.64 acres.45

Unfortunately for the Martínez heirs, there were many instances in which portions of the Rancho El Pinole grant had been occupied by squatters or had been "conveyed to strangers...on the supposition that the claimants were entitled to the whole land within the extension limits."46 American speculators had acquired conveyances of interest in lands across the creek and presumably were attempting to acquire Pinole land.47

45. Ibid., p. 5.
46. Case 205 ND, pp. 534-35.
Sale of the Adobe

In December 1850 Vicente Martínez mortgaged some 1,600 acres, including the adobe, for $1500 received from his neighbors Napoleon B. Smith, Warren Brown, and Thomas Brown. Although records do not indicate that this loan was repaid, Martínez mortgaged the same property to Miguel Vilas Teo in June 1852, the collateral to include "the house and improvements where said Vicente Martínez...now resides...consist[ing] of one thousand four hundred and ninety acres." This mortgage was released in mid-July 1853 by Miguel Vilas to the extent of two thirds of its total. Martínez mortgaged property in the town of Martínez and in the San Pablo Ranch to Felipe Fierro during 1852, these mortgages being eventually assigned to Selim and Lumley Franklin. Between November 1851 and November 1854, Vicente Martínez and his wife Nieves Soto also sold or conveyed at least seven parcels of Rancho El Pinole containing about 175 acres.

On July 23, 1853, Martínez again mortgaged all his interests in the Pinole Ranch to secure $1900 from Domingo Arábalo. Two months later Vicente and his wife sold to Edward Franklin of San Francisco the one-eleventh share of the Rancho Nuestra Señora de la Merced at Pinole known as the Cañada del Hambre for $6000. This property was described as including the Cañada del Hambre adjoining the Town of Martínez and on which the dwelling house built by Vicente Martínez is situated and in which the said Vicente Martínez...now resides...said eleventh part or share said to contain Seventeen hundred acres more or less.

Vicente Martínez Moves to Pinole

The date when Vicente, Nieves, and their children left the Cañada del Hambre has not been determined, but they probably occupied the adobe up to at least 1853. After they left the Cañada Siscal, they returned to the Rancho El Pinole to live with Vicente's mother. Eventually the Martínez family fell upon hard times, losing the Valle del Pinole houses in 1866 for unpaid...

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48. Contra Casta County Deeds (hereafter cited as "Deeds"), Book 1, p. 180, recorded 19 December 1850. No release was found for this mortgage. See also Undated Abstract, p. 31.


51. The note to Arabelo was assigned first to Selim Franklin in October 1853, then to Lumley Franklin on December 26, 1854. It was released by him in October 1859.

52. Contra Costa County Mortgages, Book 1, p. 265. Also see Deeds, Book 3, p. 407.

53. Deposition of Berreyesa, Docket 334, p. 0878.
In his later years, following the death of his second wife, Vicente returned to Martínez to live with his sons Vicente and Ygnacio, both local barbers.55

THE VALLE DEL HAMBRE: 1853-1874

Retracing the chain of title for the Martínez Adobe from 1853 to 1874 is difficult, complicated by transfers of property for which there are no clear titles, sheriff’s sales, numerous mortgages, and litigation. Often the deeds do not specify which sections of the rancho were being transferred, and plat maps for the period are missing.

Franklin Family Manages the Cañada del Hambre

Little is known about the property’s new owner Edward Franklin for whom Franklin Canyon is named. He and his brother Selim later managed the firm of Selim and Edward Franklin, a mercantile business in San Francisco. Lands were transferred back and forth among Franklin family members Selim, Edward, and Lumley under various power of attorney documents, and apparently one or more of the family members served both as attorneys and land agents.

Edward Franklin apparently had high hopes for the Cañada del Hambre. When Franklin acquired the land, it was under cultivation. In 1854 he set out 4,000 vines, apparently grapes, on the Rancho El Pinole lands. These vines were expected to yield an average of six pounds each by 1860.56

However, it is unclear whether Edward, Lumley, and/or Selim occupied the adobe for any length of time during the period of Franklin family ownership. Several legal documents negotiated during this time period list their addresses as the city and county of San Francisco.

At least part of the ranch was rented or leased out by the Franklins. In 1854 Franklin permitted H.B. Smith to cut hay from the property, and the following year a man named Frank conducted similar activities.57 Neighboring landowner Napoleon B. Smith knew persons occupying it [the Cañada Ciscal] as tenants of Vicente Martínez. In 1855 there was an Irishman living there holding [renting or leasing] I suppose under Selim or Edward Franklin. I cut hay upon this same ground by permit of Mr. Franklin. In 1854 or 1855...the land described...is a portion of the Siscares – I got it from Edward Franklin and from Henry that he Henry was holding under Edward Franklin.58

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54. Contra Costa Gazette, 18 May 1867.
57. Lumley Franklin vs Pasqual Michele, p. 1.
58. Ibid., p. 2.
According to testimony in an 1857 court case, James Henry occupied and lived in the house which is upon it [Franklin's land]...he built a ditch around a small piece of land and plowed it. He leased the land and lived there six months; at the expiration of which time he renewed it with the privilege of cutting wood at the head of the [illegible] valley.59

The Franklins faced difficulties with squatters and trespassers who exploited the ranch's rich resources. In May 1854, Edward Franklin sought an injunction against a number of persons (some named and some "John Does"), claiming that they

did commit divers acts of waste to wit, cut off and remove large quantities of wood...timber...and Grass and are now engaged in cutting down and destroying the wood & Grass growing upon said...Share of...Rancho...Pinola without any right.60

When this action failed to deter the trespassers, Franklin brought suit against them in the amount of $500 each. He lost the case, but appealed it. In October 1854 he lost his appeal and was forced to pay court and sheriff's costs, lawyer's fees, and costs to each of the seven defendants.

After one of Franklin's renters moved out in December 1855, Pasqual Michele, a Mexican trader, apparently moved onto the Rancho El Pinole, cultivated some of the land, and built a corral and stable. Franklin's lawsuit against Michele does not make it clear, however, where the house, fields, or timber were located. It is possible that the area under litigation did not include the adobe property.

Franklin had trouble paying his taxes as well as debts arising from the various lawsuits.61 These problems likely resulted in his decision to sell the property, consisting of 1,800 acres of land, to his brother Lumley Franklin on September 21, 1855, for $12,000, an extraordinary rise in valuation.62

The Franklins borrowed considerable sums of money against the Rancho El Pinole during the 1850s, and the same lands were mortgaged repeatedly to different persons. Several of the loans were eventually assigned to Benoit V. Merle, a French trader and Vicente Martínez' brother-in-law who moved to Martínez in 1849.

59. Ibid.

60. Edward Franklin vs John H. Livingston et al., 18 May 1854 [hereafter Franklin vs Livingston], Transcript, District Court of the 7th Judicial District for the County of Contra Costa, Document No. 3, E-9B, Edward Franklin, Contra Costa County Historical Society.

61. Handwritten notes on the cover of the District Court records for this case state that "Sale set for 13th Nov. at 10 am. Notices stayed until December 15th, 1854." Franklin vs. Livingston, Document no. 13.

62. Undated Abstract, page 7; 1861 Abstract of Title for the Pinole Ranch, John Muir Papers, University of the Pacific (hereafter referred to as "1861 Abstract") p. 5; and Deeds, Book 5, p. 5. One author asserts that the property was eventually sold because the Franklin brothers had found life "too lonely" on this isolated ranch. Application for Registration of Historical Point of Interest (hereafter cited as Application for Registration), Vicente Martínez Adobe, July 15, 1953, typescript, in California Division of Beaches and Parks File, Sacramento, p. 1.
The Franklins failed to pay the 1855 taxes ($119.56) on their Pinole property, consisting of 1578 acres. Thus, early in 1856 the Cañada del Hambre rancho was seized by Sheriff John Smith and sold to the aforementioned. Although the deed to Merle included the entire 1/11 share of the Pinole, it appears that Franklin was able to retain, or redeem, at least part of the property. Apparently, it was common to sell only a portion of the seized property, sufficient to cover the taxes and costs.

Merle was married to Vicente Martínez’s sister Susannah. Merle kept a grocery and liquor store at Pinole for some two years, after which he ranched about half a mile from Martínez.

Franklin Family Loses the Cañada del Hambre

The Franklins failed again to pay their taxes on the remaining Pinole lands in 1857. On January 2, 1858, a small portion of Vicente Martínez' Cañada del Hambre rancho, amounting to 12 acres, was sold to Henry Cook for $88.38 in taxes. This parcel included a two story adobe house & being within about 200 yards from the dam at the commencement of the Cañada de Siscases & being about 2 miles distant South from the Town of Martínez through which the road to Oakland passes...the lines running from the center of said house in a Northerly, Easterly, Southerly and Westerly direction.

Shortly thereafter, in February 1858, Lumley Franklin filed a formal protest over the official survey of the Rancho El Pinole conducted the previous year by the U.S. Deputy Surveyor, "Colonel Coffee." The survey included the Pinole, but marked out two other ranchos which Franklin claimed, if located, would "unjustly" encroach upon the Pinole. To add to the confusion, in January 1858, Martina de Martínez, widow of Ignacio Martínez, received $1,000 from Benoit V. Merle, loaned against half of the 1/11th of the Rancho El Pinole, "the intention being to include in these boundaries the...part of the Pinole Ranch as formerly occupied by Vicente Martínez."

In 1859 Cook sold the 12-acre parcel, including the adobe, improvements, garden, and vineyard, to Peter Turner of San Francisco for $450. The deed was recorded by Edward Franklin who had been designated attorney for Turner. Two months later Turner sold the adobe and the 12 acres to Charles Newhouse for $500. The deed, not filed for some time, also conveyed to Newhouse

63. This transaction was recorded twice: Deeds, Book 6, pp. 214-215, and Deeds, Book 5, p. 352.


65. Undated Abstract p. 10. Although Cook purchased the adobe for taxes in January 1858, and sold the property to Turner the following January, the deed was not recorded until September 2, 1859. Deeds, book 7, pp. 357-59.


67. The deed for the transaction was recorded twice. See Deeds, Book 6, pp. 242-43; Deeds, Book 7, pp. 361-62.

68. The indenture was made January 3, 1859. Deeds, Book 8, pp. 199-200.

"by metes and bounds" a 25-acre plot Turner would acquire later that spring from the tax sale of Edward Franklin’s property. This acreage was located in the Cañada del Hambre, adjoining the adobe property.

Meanwhile, Lumley Franklin had lost his lawsuit to Pasqual Michele, and on July 16, 1859, Franklin’s property was seized and sold at sheriff’s auction to satisfy the judgment of $77.45. This settlement included all property owned by Lumley Franklin on September 11, 1857, especially his 1/11 share of the Rancho El Pinole. This judgment should have taken into consideration the earlier land sales, but apparently it did not. Pasqual Michele signed the property over to Benoit V. Merle the same day.

Late in 1859 Lumley Franklin issued his general power of attorney to Edward Franklin with authority to sell and convey real estate. By this time Lumley Franklin had moved from San Francisco to Victoria, British Columbia.

On February 6, 1860, for the consideration of $500, Lumley Franklin, through his brother Edward, deeded all his rights, titles, and interest in the Rancho El Pinole to Peter Turner. Despite the previous land seizures and sales, the acreage of the 1/11 portion of Vicente Martínez’ original inheritance purchased by the Franklins had grown to some 1,800 acres of land as delineated in the deed. The land was described as:

about Eighteen hundred acres of land lying and being situate in the Valley known as Del Hambre on which an adobe dwelling house built by Vicente Martínez stands with its enclosures including also the Valley of “Siscares” and “Luces” situate near the Town of Martínez & also all lands situate elsewhere on the said Rancho Merced del Pinole undivided, together with all...appurtenances...farming utensils carts horses furniture lumber harness.

The Merles Acquire the Cañada del Hambre

Peter Turner may have owed Benoit V. Merle money or had a private agreement with him, because Turner sold the Cañada del Hambre property to Merle five months later in early July 1860 for $1.00. During the transaction Edward Franklin acted as Turner’s attorney in fact. A week later on July 10, Charles Newhouse deeded Merle all his interests in the Rancho El Pinole for the consideration of $1.00. Merle spent $4,000 to pay off the two mortgages made by Lumley


74. Abstract, p. 12. On page 19 of this document, the same deed is described again but in somewhat different terms: "an adobe dwelling house built by Vicente Martínez stands with its enclosures including also the valley of ‘Liscares’ and ‘Suces’". Also see Deeds, Book 7, pp. 577-78.

Franklin and assigned to Robert Holford. Merle and his wife Susannah thus controlled considerable property in the vicinity of Martínez.

It is virtually certain that the Merles did not live in the adobe during this period because their own ranch house was near Alhambra Creek, about a mile south of the Straits of Carquinez. Census records for 1860 list B.V. Merle, age 41, farmer, his wife Susannah, age 35, and various children, relatives, and farmhands residing in Township 1.

However, the lawsuit over the ownership of the Rancho El Pinole had yet to be decided. In September 1860 the Martínez heirs raised a legal objection to the survey and location of the Rancho El Pinole, and all parties were directed to appear before the district court to defend their interests.

The Redfern Ranch

In January 1861, working through land agents Sweeney and Stoneman, Benoit V. Merle accepted a $100 deposit after agreeing to sell part of the Rancho El Pinole to Thomas Redfern for $3,400. According to the deed the ranch was

situated at the Cannon [sic] near Martínez enclosed by Fence and to contain not less than Forty acres of Valley land and if not to be made up from adjoining Valley together with House Fruit Trees vines & e&c."

Merle also agreed that

Mr. Thos. Redfern is to have the Runn [sic] for eight cows and Four Horses and all the board required for his House to which said B.V. Merrill [sic] agrees...to send a man at his expense to cut the vines and furnish horses to Plough all required of said land.

This deed suggests that Redfern planned to convert the vineyard to farm land. The deed from Merle to Redfern made on January 30, 1861, mentioned the adobe house as part of the legal description of the property. The tax rolls for 1861 listed this property under Redfern’s name, valuing the land at $480, improvements at $300, and household furniture at $20. The following year the land was valued at $950 while improvements were only $200.

78. Contra Costa Gazette, September 8, 1860.
81. Contra Costa County Assessment Roll, 1861, p. 481. The county assessment rolls are on file at the Contra Costa County Historical Society.
In October 1862 Benoit and Susannah Merle mortgaged some of the remaining portions of the Rancho El Pinole to Alexander Halphen (also known as Halphern, Halpern, Halpen) of San Francisco. Meanwhile, Merle borrowed money from Theodore Martin. Failing to pay his debts, Merle was sued. Much of the Pinole land, excluding the adobe property, was seized and sold to satisfy his creditors.

Intent on enlarging his holdings, Redfern paid Alexander Halphen $100 in gold coin in 1867 as part payment for the purchase of 198 acres of the Rancho El Pinole. This acreage was "bounded easterly by Redferns line & the road - to be surveyed by the County Surveyor." This 198-acre parcel was part of an 1869-1870 court case brought against Merle and Alexander Halphen by Samuel J. Tennent, whose wife was a sister to Susannah Merle. Tennent claimed that Merle, "having acquired title to said Rancho by & through sundry misue [sic] conveyances from Vicente Martinez" prior to 1862, mortgaged the land to secure $5000 Merle owed Halphen. Tennent further charged that Merle and Halphen secretly agreed that Halphen should initiate a foreclosure of the mortgage for the full amount including interest, and that Halphen should bid off the property, taking the sheriff's deed in his own name. Halphen would then hold the land in trust for Merle and sell portions for the best price and terms possible. Halphen would reimburse himself for the mortgage but forward the residue of the land to Merle.

According to Tennent, following the sheriff's sale on January 9, 1866, Halphen took the sheriff's deed. Keeping some of the land in trust for Merle, he sold parcels to various individuals, including John Strentzel and Thomas Redfern.

While there are no records concerning any work done on the adobe during this period, storms and earthquakes may have necessitated replacement of windows or roofing. Earthquakes were reported in the local newspaper during 1865, 1866, and 1868, but no description of damage was given. A severe storm, however, destroyed the local Catholic church in December 1867.

Redfern’s farming operations were small-scale. By 1870 county assessment records stated that Redfern’s 238 acres of Rancho El Pinole land were worth $1,369, with improvements valued at $550. His property included 6 horses, 3 cows, poultry, 2 dogs and farming tools (value $210).

82. Little information concerning Alexander Halphen is available. Apparently, he was a Frenchman who died in 1881 or 1882 in San Francisco, shortly after marrying Celestine J. Paudelle. Ignoring the terms of a marriage contract with Celestine, Halphen left his estate to a "dear friend" in Germany and to his siblings.

83. Contra Costa Gazette, November 25, 1865, and December 16, 1865. B.V. Merle was involved in numerous lawsuits throughout the 1860s as evidenced by reading the Contra Costa Gazette during 1864-1865. According to an announcement in the newspaper on May 6, 1865, Merle's interests in the Rancho El Pinole property as of June 21, 1864, were to be sold at sheriff's sale on May 23, 1865, to satisfy his indebtedness to T.B. Martin.

84. Deeds, Book 14, pp. 484-86. Undated Abstract, p. 27. Halphen also sold 5 acres of the Rancho El Pinole to Dr. John Strentzel in May 1867 for the sum of $50. Ibid, p. 26. Halphen is identified in the deed as living in the city and county of San Francisco.


86. One article in the Contra Costa Gazette on February 24, 1866, noted: "A sharp and distinct earthquake felt here Sunday last [February 18, 1866] at about 4 p.m." Another tremor occurred on an unspecified date in October 1865 according to the same newspaper on December 22, 1866.
Evidently, he still had some producing grape vines, and he may have been producing wine, because his 1871 assessment included taxes on 100 gallons of wine. Local rumor reported that "Thomas Redfern...ran an inn catering to those traveling to Dr. Semple's ferry boat on the road to the mines." 87

In May 1873, Redfern was charged and convicted for assault with a deadly weapon, and was ordered to pay a fine of $300, or face imprisonment in the county jail for 150 days. 88 On June 21, 1873, following several days of "convivial indulgences" at the adobe, Redfern quarreled with his acquaintance Michael Duffy. Redfern picked up a shotgun and with "30 and more pieces of [lead] shot" did

feloniously willfully did strike penetrate and wound him the said Michael A. Duffy in and upon the neck...[inflicting] one mortal wound of the length of two inches and of the breadth of one inch and of the depth of six inches. 89

The seriously wounded Duffy died on July 4, and Redfern was arrested for manslaughter. After a jury trial, he was declared not guilty on May 14, 1874. 90

Redfern's Land is Conveyed to His Lawyers

On August 13, 1873, Redfern conveyed 198.68 acres of land, including the adobe, to his lawyers Lansing Bond Mizner and Josiah Sturgis for the sum of $1.00. This property included land received from Alexander Halphen in June 1867 and from Benoit and Susannah Merle in 1861. 91 Less than a year later, Mizner and Sturgis reconveyed the property to Redfern by deed. 92 These property exchanges can be explained by the details of Redfern's "peace bond" of $500 put up by Mizner and the $8,000 bail provided by Mizner and Sturgis. The title to Redfern's farm evidently provided collateral for the fees charged by Mizner and another lawyer in Redfern's "two certain criminal cases heretofore tried." The deed would be held in escrow by Judge Brown until Redfern's bond had been "cancelled or held null." 93

87. Perry, "The Family of Don Ygnacio Martínez."

88. County Court, March Term, Monday, May 12, 1873. Contra Costa Gazette, May 17, 1873.

89. Transcript of indictment for manslaughter, The People of the State of California against Thomas Redfern, in the County Court of the County of Contra Costa, August Term, 1873, Redfern Doc. No. 13, May 15, 1874, Contra Costa Historical Society.


91. Deeds, Book 25, pp. 170-73. The other sales were recorded in Deeds, Book 14, pp. 484-86 and Book 8, pp. 450-51, respectively.


93. Redfern Peace Bond re Mizner 29 [month missing] 1874, John Muir Papers, University of the Pacific. Another author states that Redfern was an impractical man whose family returned to Australia following Redfern's loss of the adobe to his lawyer, Mizner, due to debts for litigation. Mizner supposedly resold the adobe to Dr. Strentzel for $7,000. Application for Registration, p. 1. This information appears to be at odds with the legal records for the property.
One of the new owners, Josiah Sturgis, was an early settler in Contra Costa County, having arrived in San Francisco from Massachusetts in 1850. Sturgis built the Alhambra Hotel in Martinez and was "the proprietor of considerable property in the conterminous districts."94 Sturgis was listed in the county registers during the late 1860s and 1871: "Age 50, Massachusetts, hotel keeper residing in Martinez."

The other part interest in the adobe was held by Lansing Bond Mizner. Mizner was a member of the Illinois Volunteers during the Mexican War who traveled to California in 1849. Fluent in Spanish, he settled in Benicia, purchasing an interest in a local mercantile firm. Active in California politics and the law, he served as Collector of Customs for the Northern District of California, and as U.S. Minister to the Central American republics.95

By January 1874 the valuation of the Redfern farm had increased to $4,185, $1,000 of which was for "Improvements thereon." The value of "impts on Real estate assessed to persons other than owners of Real Estate" was $505, thus making the total valuation $4,690.96

THE CAÑADA DEL HAMBRE: 1874-1915

Redfern Ranch Sold to Dr. John Strentzel

Redfern occupied the adobe from around 1861 until its sale in 1874.97 On December 1, 1874, Elizabeth Redfern of Ballarat, Victoria, British Columbia, sold her rights to the "farm and residence of...Thomas Redfern" to Dr. John Strentzel for $5 in gold coin. Eight days later her husband Thomas Redfern sold his interest in the 40.48 acres to Strentzel for $6,500 in gold coin.98

Strentzel, a Polish exile and pioneer who emigrated to California in 1851, eventually acquired extensive holdings in the Alhambra Valley through purchase and litigation. These land holdings encompassed much of the original Cañada del Hambre portion of the Rancho El Pinole grant. Louisiana Erwin Strentzel, the doctor's wife, recorded the purchase of the adobe property in her diary:

Dec. 1, 1874: Mr. Holden and Ford came today to close the sale of the Red fern place with the Dr. Dr. is to pay 6,000 for it. This will be 21,000 he has invested this year in real estate.99

94. Munro-Fraser, History of Contra Costa County, p. 678.
95. Munro-Fraser, 1879, The History of Solano County (San Francisco: Wood, Alley and Company, 1879), pp. 444.
96. Contra Costa County Assessment Book, 1873.
99. Louisiana Erwin Strentzel, Diary, John Muir Papers, University of the Pacific.
Over the years the Strentzels' vineyards and orchards received considerable publicity, and he came to be known as the "Father of California Horticulture." Strentzel encouraged the transition from grain growing to fruit orchards in California, and as a result of his efforts the "Alhambra Valley became the center of fruit growing in Contra Costa County."

An active participant in local community affairs, especially the Grange, Louisiana Strentzel shared her husband's enthusiasm for horticulture, and provided and arranged fresh cut flowers for virtually every wedding, funeral, or shut-in in the Martinez area.

During the next several years Strentzel managed the Redfern property as part of his extensive land holdings, which were devoted primarily to fruit production. In 1877 valuation of the property totalled $3,660 ($15/acre for 244 acres) with the improvements assessed at $500. Within two years the value of the land had increased to $4,148, but "improvements" were now valued at $252. These figures suggest that Strentzel was using the Redfern place for agriculture, and that the adobe was probably being used as a farm outbuilding.

**John Muir Comes to the Alhambra Valley**

During the spring of 1880 conservationist John Muir married the Strentzel's only daughter, Louie, and the newlyweds moved into the Alhambra Valley ranchhouse with her parents. Within a year or two, the Strentzels began construction of a large new home for themselves on a knoll overlooking and to the east of the adobe and Franklin Creek. They visited the site often, eagerly watching the building take shape.

The Strentzels were equally concerned with the landscaping around their new home. Their love of plants and attention to detail is evident in Mrs. Strentzel's description:

> The Dr. and I drove over to the new place...everything is growing beautifully...many of the young trees are already full of fruit. The appricots [sic] planted last year (when the baby was born) have made a fine growth, and quite a sprinkling of fruit. We drove down the avenue between the trees and grapes to the cypress hedge, the sun was low in the west, and shining thru the trees making the pink tips of the young apricot shoots appear gloriously transparent, and the trees all seemed as if varnished in silver. It was a magnificent [sic] sight, one never to be effaced from my memory.

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100. Thomas Brill, "The Vicente Martínez Adobe," undated ms, JOMU files.
102. Contra Costa County Assessment Books, 1877 and 1879, v. 2, M-Z.
103. The large ranch house was situated about a mile up the valley, south of the adobe.
The local newspaper, the *Contra Costa Gazette*, also described Strentzels' property. The "old Redfern ranch" was "beautifully situated [and] is covered with a young and flourishing orchard and vineyard."\(^{105}\)

Some of the present-day vegetation was likely planted during the Muir-Strentzel ownership, a period when more than 120 species of plants, including many exotics imported for their beauty or novelty, were set out on the ranch.\(^{106}\) An entry in Mrs. Strentzel's diary for February 1877 notes that "...last week the men were planting eucalyptus trees on the Redfern place."\(^{107}\) In March 1881 John Muir helped cut down the trees and shrubs along the creek; these were later burned. He also planted buckeyes in this area, getting poison ivy in the process.\(^{108}\)

It appears that, prior to 1880, little landscape planting was done in the vicinity of the adobe with the exception of

a large black locust tree, several smaller trees, and possibly some fruit trees. The dominant vegetation at the time the large house was built was the riparian vegetation along the creek.\(^{109}\)

Other historic trees in the vicinity of the adobe included the row of fig trees along the north side of the lane leading to Franklin Canyon Road. In June 1882 following a visit to their still uncompleted new home, Mrs. Strentzel mentioned that they "went to the old house, all getting on nicely, ducks born and L. [Louie] went to Mr. Barbers. Wind mill grand." It is not clear whether the windmill was on the Strentzel property, or if it belonged to Mr. Barber. A "Mr. Davis" had dug a well at the new place the previous month so the windmill may have been associated with it.\(^{110}\)

By mid-August 1882 John Muir was working on a new gate on the place, possibly across the lane which led from Franklin Canyon Road to the new house. That fall a "large and commodious barn" was built for Dr. Strentzel just across Franklin Canyon Road from the adobe.\(^{111}\)

Once the new house was completed, the Strentzels planned to turn the old ranchhouse over to John and Louie. This was not an easy decision for Louisiana:

The Dr. told Louie a few days ago that he would give her and John this place as their own, and he and I will go over to the other place to live. They seem to be well pleased

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107. Louisiana Erwin Strentzel, Diary. Entry for February 24, 1877, John Muir Papers, University of the Pacific.

108. *Ibid.*, Entries for March 8, 1881 and January 18, 1882. Also see excerpts from letters by Helen Muir Funk April 2, 1957, JOMU files.


110. Louisiana Erwin Stentzel, Diary, Entry for February 24, 1877, John Muir Papers, University of the Pacific.

111. *Contra Costa Gazette* September 2, 1882.
with the proposition...but the tho’t of us separating makes me feel very sad, for I have always hoped that we could remain together as one family.

The Strentzels Move to the Redfern Ranch

When the wood frame and brick Victorian house was completed, probably some time late in 1882, the Strentzels moved down the valley, leaving their Alhambra home to John and Louie Muir and their infant daughter Wanda. Although Dr. Strentzel sold some of his property to John Muir, and Muir leased other portions, the adobe and the surrounding acreage (known as either the Redfern or the Franklin place) remained in Dr. Strentzel’s name.\(^{112}\)

For the next several years, John Muir, ably assisted by Louie Muir, served as ranch manager for Dr. Strentzel. Muir supervised operation of the ranch which produced a prolific variety and quantity of fresh fruits and grains. A successful and talented horticulturist, Muir set aside a large percentage of the profits from the ranch.

The Adobe During the Muir Years

From 1874 to the early 1890s the adobe was apparently used as a storehouse and a "sort of manager’s ranch and headquarters for the Muir ranch," and the "workmen reported there in the mornings for the assignment of their daily tasks."\(^{113}\) Although some authors suggest that the Strentzels may have occupied the adobe for a time, no evidence has been found to support this claim. Louisiana wrote in her diary that:

\[\text{We have given up this our home place to Louie and John, and made a deed, and now poppa and I will go to live on the Franklin place as soon as we can build a house.}\]\(^{114}\)

Contra Costa County assessment records list some of Dr. Strentzel’s property. Stock, crops, and improvements for the adobe cannot be separated from the rest of his holdings. In the 1879 records, however, Lot G in Division No. 1 of the Pinole Grant known as the Redfern Ranch, comprised 244 acres valued at $17 per acre with improvements worth $252. In 1882 this lot was assessed at $16 per acre with improvements valued at $796. For tax purposes the plot of land surrounding the adobe was divided from the other property sometime during the 1880s. Tax records for 1889 showed that the 122 acres surrounding the adobe were worth $40 per acre (total $4,880), and improvements were valued at $2,500. By 1890 the same property had improvements valued at $3,000.\(^{115}\) The increases in valuation may suggest the improvement of existing structures (such as the adobe, corrals, etc.) or they may have been based on construction of new barns and farm buildings.

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\(^{112}\) The Strentzel-Muir ranch was composed of many land parcels purchased between about 1853 and 1900.


\(^{114}\) Louisiana Erwin Strentzel Diary, Entry for February 15, 1882. Bancroft Library, University of California, Berkeley.

Photographic evidence provides considerable data on the adobe and its surroundings during the 1880s. A photograph taken ca. 1885 showed part of Dr. Strentzel's extensive holdings, including the adobe, sited on what was still thought of as "the Franklin place" (figure 2). The wood shingled, hip roofed, stuccoed adobe structure with a two-tiered veranda along the front was flanked on the east side by a large lean-to shed having a long axis that extended about half the length of the adobe. The shed, its wide vertical wood siding painted white to match the adobe, had what appear to be ivy vines climbing its east wall (figure 3). The shed was attached to the adobe just below the top of the upper veranda railing. The large shed door opened to the north.

On the second story front of the adobe, four openings were visible. The two centrally located apertures appeared to be doorways, the doors having at least six panels of glass in their upper portion. The bottoms of the two outer openings were obscured, but at least nine panels of glass were visible in the northernmost window. The second-story veranda of the adobe appeared to be much the same as it does today, although vines or loose boards were visible just below the roof line along the southern half of the building. What appeared to be a piece of machinery or furniture is visible above the lean-to roof on the north end of the upper veranda. The shadowy north end of the veranda appeared to be somewhat different than at present, but the photograph was not sufficiently clear to distinguish details.

The north end of the adobe appeared to be stuccoed, while the exterior portion of the brick chimney was fairly shallow, apparently consisting of somewhat light colored brick that was perhaps one course deep. The visible portion of the chimney was straight and rectangular, unlike the present T-shaped chimney base. The lower portion of the chimney was obscured by a piece of machinery that resembled a large cog wheel, and what appeared to be vines clung to the crack between the house and the chimney. The upper portion of the chimney above the roof was straight and lacked trim and a cap. A long straight piece of what appeared to be wood was leaning against or supporting the chimney and/or north side of the house. A single second-story window was visible just to the left or east of the chimney; the other window, beyond the chimney, was probably obscured by the chimney.

The south end of the adobe was shadowed by trees and vines that obscure a view of the edge of the roof. Because other California adobe buildings of this period and style occasionally had two chimneys, one at either end, it has been suggested that there may have been a second chimney at the Martínez Adobe. However, archeological investigations under the south porch and inside the foundation under the large window showed no evidence of any base or rubble debris associated with a second chimney.116 Apparently, the south veranda had not yet been added to the building in the mid-1880s.

A small one-story or story-and-a-half building with what may have been vertical wood framing and wood shingled gable roof was visible just southwest of the adobe (figures 2 and 3). It appeared to be in fairly close proximity to the adobe. This building was painted white, and its long axis paralleled the adobe.

The immediate foreground east and northeast of the adobe appeared to be covered with piles of dirt or compost. A large deciduous tree was growing north-northwest of the house.117 Smaller evergreen tree(s) were behind the adobe. Fruit trees paralleled the south side of the east-west roadway leading into the property from Franklin Canyon Road. Fig trees lined the north edge of the two-track lane. The lane alignment was similar to the extant roadway except for a slight detour around a large tree about one-third of the way from the adobe to the low bridge across Franklin Creek.

A circular wood structure, possibly a cistern, and a large white two-story building (probably related to fruit packing) were located northwest of the adobe and the entry lane. These structures appeared to be east of present-day Canyon Way. On the other side of the road and due west of the entry lane were board fence corrals, a large white barn with vertical wood siding, and a smaller pyramidal roofed open structure, possibly a hay barn. Vineyards dotted the hill slopes westward beyond the outbuildings.

The machinery, piled up soil or compost, and the attached shed at what is now the front of the adobe suggested that the building was being used more as a farm outbuilding than a residence during the mid-1880s. The entryway receiving most use may have been on the west side of the house, adjacent to the barns and other buildings across the road.

The Muirs Move to the Big House

Shortly after Dr. Strentzel's death in October 1890, the Muirs moved out of the old Strentzel place and into the big house with Louisiana Strentzel. The nearby adobe, part of the property inherited by Mrs. Strentzel, was transferred to her daughter Louie Muir in May 1897.118

From the 1880s until Dr. Strentzel’s death John Muir served as the ranch manager, overseeing the work of up to 40 men, working to plant and harvest hundreds of tons of fruit. Louie Muir assumed much of the responsibility for day-to-day ranch affairs when John was away, helping to supervise the workers, hiring and paying the ranch hands, and keeping the ranch books. The birth of their daughters Wanda and Helen in 1881 and 1886, respectively, Dr. Strentzel’s death, and Muir’s increasingly heavy travel and writing schedule soon made it imperative that additional help be secured to manage the ranch.

In the spring of 1892 John Muir’s sister Maggie and her husband John Reid abandoned their struggle to raise crops in the drought-stricken Midwest and moved to California. The Reids moved into the old Strentzel home in the Alhambra Valley, and John Reid took over the ranch work. About a year later, Muir’s brother David, ill and bankrupt, moved to California with his wife Juliette to start over. John Muir offered his brother

117. It has been suggested that this was a black locust. Agee and Ryan, "Historic Trees of John Muir National Historic Site," p. 42.

118. John Muir served as Administrator of the Strentzel estate. Contra Costa County, Distributions at Death, Book 1, p. 142ff, September 21, 1892, and Deeds, Book 76, p. 149ff.
a portion of the ranch on a share-the-profits basis. A born farmer, David brought the land to new peaks of production and prospered.\textsuperscript{119}

During 1895-1897 Muir hired his nephew A.B. Coleman to help David Muir oversee the myriad planting, harvesting, processing, and shipping activities associated with the ranch.\textsuperscript{120} Coleman later leased some of Muir's vineyards. It is possible that one or more of the Muir relatives occupied the adobe for a short period of time between Dr. Strentzel's death and 1906. However, no documentation has been found to support this possibility.

The small two-story frame house behind the adobe was occupied during the 1890s by the Firth family.\textsuperscript{121} Mr. Firth, an English immigrant, made crates and packed fruit for John Muir. After Mrs. Firth's death in March 1897 following a long illness, and an injury suffered by Mr. Firth, the family moved to Nebraska. The adobe was unoccupied during the time the Firths lived at the ranch from perhaps 1894 through 1897.

As a child Lillie Firth Thomas played with the Muir girls. In reminiscing about her childhood she remembered the adobe. The ground floor was used as a store room, while the upstairs had four or five small empty rooms with no connecting doors. The extant porch across the east side has not been changed since that time. The upstairs closet was "different," and the boards (presumably the redwood paneling) had not yet been installed. The steps (to the lower porch?) were missing, and there was no kitchen in the house.\textsuperscript{122}

A Historic American Buildings Survey study states that there were probably fireplaces on the north end of both floors of the adobe. Lillie Thomas, however, refuted this suggestion, and investigations of the structure by the park staff support her claim.\textsuperscript{123}

During the 1890s there was no lawn around the adobe, but a pomegranate tree grew in the front of the structure, and orange and cherry orchards encircled the house to the south and the east.\textsuperscript{124} Turkeys ran loose among the orange trees, and chickens roosted in a coop north of the orchard. An 8-foot-high board fence having four or five strands of barb wire enclosed the property.

\begin{footnotes}
\item[120] \textit{Oakland Tribune} November 12, 1967.
\item[121] Remnants of the basement foundations of the small house were still evident in 1967. Lillie Thomas to John E. Jensen, October 2, 1967, JOMU files. Other details regarding the adobe may be found in a March 19, 1968, interview with Mrs. Thomas by John Jensen, and a September 12, 1967, letter from Mrs. E. F. Hall to John Jensen.
\item[122] Lillie Thomas to John E. Jensen, October 2, 1967, JOMU files.
\item[123] Historic American Buildings Survey (HABS), Photographic Data Book Report, Cal-1913, WODC, San Francisco (on file at the California Historical Society, San Francisco). This undated survey was completed with Mission 66 funding. Thus it probably dates from the late 1960s or early 1970s. See also the March 19, 1968, interview with Mrs. Thomas by John Jensen, JOMU files.
\item[124] The orange trees may have been the ones Helen and John Muir planted near the entrance road.
\end{footnotes}
In May 1897 Louisiana Strentzel transferred her property interests, including the adobe, to her daughter, Louie Strentzel Muir.\textsuperscript{125} Eight years later, Louie conveyed these Muir-Strentzel holdings to Wanda and Helen Muir for $1, "in consideration of the love and affection...towards...her daughters."\textsuperscript{126}

In 1897 John Muir transferred a 60-foot right-of-way to the San Francisco and San Joaquin Valley Railroad. Within two years the tracks were laid, but it was not until 1902 that the trestle was completed.\textsuperscript{127}

Following Louie Muir's death in August 1905 John Muir continued to live in the large Victorian house alone. Because of her poor health, Helen moved to the California desert, and Wanda, who had attended college in Berkeley, went to care for her sister.

The earthquake that devastated San Francisco on April 18, 1906, shook Martinez as well. Wanda, then staying with the Coleman family and getting ready for her wedding, wrote her father to describe the damage:

> At five o'clock this morning the worst earthquake ever known here struck Alhambra Valley...Every one of our five chimneys (our own at the big house) are down....The only house in the valley that is not hurt is the adobe. Didn't hurt it at all except a little plaster in front.\textsuperscript{128}

**The Hannas Move into the Adobe**

Wanda Muir married engineer and fellow student Thomas Hanna in June 1906. The Hannas apparently lived with John Muir in the big house while the adobe was rehabilitated and remodeled. Some researchers have concluded that remodeling continued at least until 1907, based upon a January 1907 letter from Muir to his daughter Helen in which he reported that the "old house" was "mended and partially remodeled."\textsuperscript{129} However, Muir clearly referred to the big house in this letter. A photograph taken during the summer of 1907 showed that the missing plaster on the front of the adobe had yet to be repaired. After the newlyweds moved into the adobe, John Muir, with his daughter Helen who had returned from the desert, continued to occupy the large Victorian home across the creek.

\textsuperscript{125} Deeds, Book 76, pp. 149-52. The legal description included portions of Part F and G of Division No. 1 of Rancho El Pinole. The "Redfern Adobe House" was still mentioned as a reference point.

\textsuperscript{126} Deeds, Book 112, pp. 415-21.

\textsuperscript{127} Information provided to Linda M. Stumpff by Peg Plummer. Also see Helen Muir Diary, transcription, November 17, 1901 through March 25, 1902, JOMU files. Railroad data taken from U.S. Geological Survey map, Carquinez quad, July 1901.7.5'.


Confusion over the structural history of the adobe apparently derive from an early, and inaccurate, interpreters' talk, and from local legend which hold that the chimney and the north wall of the adobe fell during the 1906 earthquake and were rebuilt that summer and fall. Later documents such as the Historic Structures Report by John E. Jensen and A. Lewis Koue and the Historic American Buildings Survey report apparently drew from these sources, compounding the confusion over remodeling dates.\textsuperscript{130}

Photographic evidence presents a more accurate documentation of the sequence of changes to the north end wall of the house. In an 1885 photograph the brick chimney, the attached shed, and the plastered adobe of the north side of the house were clearly visible (figures 2 and 3). The chimney extended up through the interior of the house, with a small portion exposed on the exterior. Thus, the chimney extended through the roof, unlike the present chimney which abuts the outside edge of the roof.

A later photograph, probably taken around the turn of the century, showed the same plastered adobe wall and attached shed (figure 4). A circular wooden tank, probably a cistern, was in front of the shed, and a wooden superstructure had been added over or had replaced the upper part of the chimney.

The remnants of the lower portion of the brick chimney were visible below the wood frame cover. The frame over the chimney was composed of variable width boards, apparently held in place by strapping iron or some other vertical support. The purpose of this addition is unknown, but it appeared to be a makeshift support to keep the remains of the chimney in place. It is possible that the upper portion of the chimney may have collapsed outward, and the boards may have been used to cover the gaping hole in the exterior wall left by removal of the interior chimney.

By 1907 the shed and the cistern had been removed, and a large wisteria vine, at least five years old, had overgrown the entire northeast front corner of the adobe (figure 5). V-board horizontal redwood siding, painted white, covered the north wall. The upper portions of the chimney and fireplace had been removed and in their place was a long window, probably a double-hung sash. Stylistically, the new lower story window appeared identical to the two upper story windows on that end of the building.

Another photograph showing the same side of the adobe was taken sometime after 1902 (figure 6). It showed the nearby orchards, a small tree growing close to the north wall of the house, and the lane leading into the Muir property from Franklin Canyon Road.\textsuperscript{131} The earlier location of the chimney is visible on the north end of the adobe's roof.

Thus, the 1885 chimney and fireplace apparently were removed or were nonfunctional by the early 1900s. Some time between 1902 and 1907 a new window, matching those on the second story, replaced the fireplace and chimney. Horizontal wood siding covered the north wall, including the gaping hole left by removal of the chimney. Architectural investigations of the

\textsuperscript{130} Historic American Buildings Survey, Cal-1913. Drawings numbered 426/27,001, sheet 2 of 3 show "fireplace rebuilt 1906" and "adobe wall on second floor replaced with frame wall, probably after earthquake of 1906."

\textsuperscript{131} Note that the lane is northwest of the present entry road.
Figure 4: Martínez Adobe ca. 1900, before occupancy by Wanda Muir Hanna. Collection of Louis L. Stein, Jr., JOMU files.
Figure 5: John and Wanda Hanna in front of the adobe, 1907. View looking southwest. JOMU
Figure 6: The Martínez Adobe, between 1902 and 1907. View looking southeast. Muir-Hanna Collection, Holt-Atherton Library, University of the Pacific.
north wall in the summer of 1991 demonstrated that the wall, although cracked, weathered, and missing some plaster, remained intact. By the early 1900s the adobe likely had no fireplaces, and heating was provided by wood/coal stoves (figure 6).\textsuperscript{132}

The aforementioned photographs illustrated the changes in the ranch as the adobe began its transition from use as a ranch outbuilding to that of a modern family residence. By 1907 the farm equipment and the shed were removed from the front of the structure which was graced with flowers and shrubs. Although the plantings were informal, they were obviously placed with a definite scheme in mind. A "family grove," consisting of orange, cherry, plum, and apricot trees, had been planted at the adobe by 1907.\textsuperscript{133}

The kitchen in the adobe was probably added sometime between 1906 and 1910, about the time that the south veranda was constructed.\textsuperscript{134} Before addition of the kitchen meals were probably cooked in a small separate cookhouse behind the adobe and carried to the dining room. The redwood paneling was probably added during this period, along with the closet in the north upstairs bedroom. (The closet occupies the space vacated when the old chimney was removed.) It should be noted that the interior redwood paneling in the adobe is identical to that used in the big house remodeling which occurred sometime before the turn of the century. The paneling is also identical to that used in other area homes during the 1890s.

It has been suggested that the Martínez Adobe originally had an exterior stair like the earlier Vicente Martínez adobe in the Valle del Pinole.\textsuperscript{135} If this is true, the exterior stair was removed sometime before 1910, and replaced with an interior staircase.

In May 1908 Wanda Muir Hanna sold a portion of her holdings for a nominal sum to her sister Helen. Wanda and her husband Thomas, however, retained title to the property surrounding the adobe where they were living.

The Hanna’s first child arrived in 1907, and two more children were born over the next seven years. The adobe must have seemed cramped and outmoded, because the little boys were soon joined by at least two foster children and a nursery maid. One of the foster children was Leonard Dickey, son of Tom and Wanda Hanna’s cook. After Mrs. Dickey’s death in a flood on Alhambra Creek, the Hannas raised Leonard. He worked at odd jobs on the ranch, and ran errands for John Muir. Another of the foster children Tom and Wanda Hanna raised as their own was José Figuerada. José was a young Portuguese who emigrated to America to join his father, then employed by Tom Hanna. In the meantime, however, the elder Figuerada had returned to Portugal, leaving his son behind. It is likely that a second round of remodeling was undertaken

\textsuperscript{132} Measurements taken during the archeological investigations in May-June 1991 verify that the window and extant fireplace could not have been contemporaneous.

\textsuperscript{133} Lillie Thomas to John E. Jensen, October 2, 1967, JOMU files.

\textsuperscript{134} Mrs. Thomas stated that there was no kitchen in the adobe during the 1890s.

\textsuperscript{135} Letter from Mrs. Nicholas Protopopoff to the Contra Costa County Historical Society, March 14, 1991, JOMU files. Mrs. Protopopoff, a great-granddaughter of Vicente Martínez’ sister stated,

I have believed that the original stairway must have been on the outside of the chimney wall – just like the one in the earlier Vicente Martínez adobe in the Pinole Valley (the last remaining of the three adobes there which I remember well).

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sometime around 1910 to accommodate the expanding household. Photographs of the south end of the house taken during this period showed the new south verandas and second story Grecian Revival roof line (figure 7).

The aforementioned photographs indicate that other changes were made to this part of the ranch after its acquisition by Dr. Strentzel. Stables were added south of the adobe, perhaps to appease Wanda Muir Hanna’s love of horses. John Muir and Helen planted orange trees on the west side of the creek; these were probably the trees shown in the ca. 1910 photograph (figure 7). In addition there were deciduous trees of a uniform size and even distribution south of the adobe. Northwest of the adobe a conifer was nearly twice as high as the house. North-northwest of the adobe was a very large deciduous tree of unknown type, which may be the same tree pictured in the 1885 photograph (figure 2). Utility poles were located along the roadway west of the adobe.

The 1915 deed to the adobe property indicated that it contained an orchard and three outbuildings – a barn, shed, and corral (figure 8).136

The ca. 1910 photograph (figure 7) showed the ranch foreman’s house (occupied during the 1890s by the Firth family). Behind and slightly to the southwest of the adobe, this two story frame building, painted white, had a gable roof and what appeared to be a single double-hung sash window in the upper story. During the years the Hannas occupied the adobe, this frame structure was used as a bunkhouse for ranch hands.

In 1911 Muir wrote to a friend that Wanda was "living on the ranch in the old adobe."137 By this time a small one-story gable roof structure had been moved immediately adjacent to the adobe on the southwest, next to the new kitchen (figure 9).138 This building served the Hannas as a laundry workroom and milk room.

Tom Hanna helped Muir operate the ranch during this period because Muir had "disassociated himself from the everyday ranching work."139 Nearly 100 hogs were kept on the hillside across Franklin Canyon Road, along with some 25 cows. Percheron work horses may have been kept in the stables to the south of the adobe. Muir employed Chinese, Portuguese, and Italian laborers on the ranch. The Chinese workers lived in houses along Franklin Creek, southeast of the adobe.140

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136. Sally Johnson Ketcham, "Historic Furnishings Report, John Muir National Historic Site," prepared under contract, February 1971, revised 1982 (Harpers Ferry, NPS, Harpers Ferry Center, 1982), p. 338. This study quotes José Figuerada as saying: "The pears were on this side of the creek, oranges on the other [the adobe side]. Also, grain was planted around the stables, no doubt among the orchard trees, during 1908. Also see John Muir to Helen Muir, May 12, 1908, JOMU files.


138. This building's windows originally had a different configuration. It also had vertical siding which was later replaced on the south, west, and north sides with horizontal siding.

139. Transcript of oral history with Leonard Dickey, 1975, JOMU files.

140. Summary of Dickey Tape, 1975, JOMU files.
Figure 8: Map of portion of lands of Thomas Hanna et al. by E. C. Brown, September 20, 1915. JOMU files.
Wanda Muir Hanna increasingly became an active participant in community life, various social clubs, and humanitarian activities. Her home reflected her interests in music and family. She had beautiful furniture and Indian rugs, and she played the piano for friends.

Foster son Leonard Dickey recalled that the Hanna babies "slept outdoors on the [second story] balcony, winter and summer, their beds covered against the elements." The south bedroom belonged to Tom and Wanda Hanna, and a guest bedroom and a small bedroom for Julia, the childrens' nurse, were nearby to the north. Dickey remembered that each of the bedroom doors led out to the balcony.\textsuperscript{141} John Hanna also reminisced that he and his brother had to go out the east door of one of the bedrooms to reach the veranda.\textsuperscript{142} This would suggest that before 1910 or 1911, there were no interconnecting doors between the upstairs rooms, and that the Grecian Revival roof line, the French doors and windows, and the door into the south bedroom were not added until those years (figure 9).

According to Dickey the adobe had no fireplaces and no second-floor bathroom before about 1910 or 1911. The stairway was carpeted, and the house had electricity. When the upstairs was remodeled, two floors were found one on top of the other. These recollections suggest that the upper bathroom was added after 1911 by the Hannas, the upstairs rooms remained divided into several smaller bedrooms, and the present chimney and fireplace had not yet been built.\textsuperscript{143}

It has not been determined when electricity was installed in the adobe, but most authors suggest that the wiring was installed by the Hannas. The extant insulators and wooden wiring channels are compatible with equipment that was commonly used during the first two decades of the 20th century.\textsuperscript{144}

Telephone service was completed from Martínez to Walnut creek by November 1881. Thus, it is likely that the service was available to the Hannas. Photographs taken during the early 1900s show what appear to be utility lines running along Franklin Canyon Road behind the adobe (figure 6).\textsuperscript{145}

Leonard Dickey reported that he helped Tom Hanna dig a 30-foot-deep well. This effort probably occurred some time between 1907 and 1910. Mule power was used to haul the dirt from the excavation. Apparently, this well was located a short distance northeast of the adobe. The 1907

\textsuperscript{141} Ibid.

\textsuperscript{142} Diane Rhodes interview with Phyllis Shaw, Superintendent of John Muir National Historic Site, January 4, 1991, regarding her interview with John Hanna.

\textsuperscript{143} Strent Hanna noted that his parents installed the upstairs bathroom. John Jensen interview with Mr. and Mrs. Strent Hanna, June 8 and July 13, 1966, JOMU files.

\textsuperscript{144} By the 1880s Martínez had its own water works, street lights, and sewer mains and Dr. Strentzel served as an official of the local electrical company. However, the Strentzel Ranch was still outside the city limits, and electricity may not have been available until after the turn of the century.

\textsuperscript{145} The Hannas are listed in the Martínez telephone exchange in 1913 and in the Contra Costa County phone directory for 1914. Their phone number remained the same in the 1915-1916 directory, but their address was changed to the end of Smith Road (Alhambra Avenue). The 1916-1917 directory listed them in the Alhambra District. In February 1917 there was no listing for the Hannas in Martínez, because they were living in Crockett. They apparently returned to the Alhambra Valley in 1921.
photographs show what appeared to be a water spigot near the steps, suggesting that the Hannas pumped water for the plantings, and probably had running water in the house.

José Figuerada, one of the Hanna's foster children, worked for John Muir in 1914. One of his duties was to bring Muir's early breakfast from the adobe up to the big house. Muir later had his second breakfast with the Hannas down at the adobe; Mrs. Dick, the Hanna's cook, prepared the food. In his later years, Muir apparently took most of his meals at the adobe. 146

By 1914 Muir had introduced peacocks as snake catchers, and he had 500 cattle fattening for market. Muir's saddle horses occasionally found their way onto the truck gardens farmed by Japanese laborers living on the ranch. 147 According to José Figuerada, the creek area has changed little in the past half century. There was no road in front of the adobe. Southeast of the house was a redwood tree, directly in front were three black locust trees, and a pine was to the northeast.

Additional changes were initiated at the adobe during the period between 1910 or 1911 and 1914. José Figuerada remembered that "the fireplace in the adobe kept going all the time during the winter." 148 It is likely that the wood stove did not adequately heat some parts of the house, so Hanna built, or hired someone to build, the present chimney and tan brick fireplace sometime around 1914.

During the pre-World War I period the former washroom/milkroom was used as a dining room to accommodate about ten ranch hands. During this time the kitchen was apparently expanded to the south, and a bathroom was added upstairs off the west end of the south veranda. 149 By this time a portion of the lean-to area along the rear of the adobe had been screened or otherwise protected from flies and vermin to provide a place for "a sort of milk cooling set up behind the adobe" for milk brought down from the dairy barns. 150 According to John Hanna, who was a child of about five at the time, the milk room extended about two-thirds of the way along the old addition — that is the lean-to area. The eight-foot wide concrete slab underlying the present west bedroom floor may have been added at this time as a floor for this enclosed area. The small white frame house southwest of the adobe was used as a bunkhouse for the ranch workers.

Topographical survey maps prepared in 1913-1914 portrayed the largely rural character of the ranch and its surroundings. Two main roads led northward into Martinez — the Del Hambre Valley Road and the Franklin Canyon Road. The maps showed the railroad viaduct bisecting the Alhambra Valley just south of the adobe, the Muir station being located on the south side of the

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147. Interview with José Figuerada, September 1, 1976, JOMU files. There is some confusion over the nationality of some of Muir's employees; Leonard Dickey talks about Chinese workers, while Figuerada mentions that the workers employed by Muir, and living on the ranch, were Japanese.

148. Ibid.

149. This room has a number of small hand-made racks, hangers, and door pulls. It may be that Tom Hanna or one of his workers performed the carpentry in this room.

150. Ketcham, "Historic Furnishings Report," p. 343. Note that this assertion implies that the area behind the adobe may have been screened in, or protected in some way, to keep flies and dust out of the fresh milk.
viaduct. The hillsides around the adobe remained undeveloped. Franklin Canyon Road was relatively unimproved at the time, because an article in the November 9th issue of the Contra Costa Gazette noted that more than a dozen cars were stuck in the mud on the road. However, this problem was soon to be remedied. The roadway was "rocked" in 1916, and Franklin Canyon Highway was formally opened to traffic in August 1921. Muir planned to macadamize the farm lanes, but it is not known if he did.

THE ADOBE: 1915-1921

Death of John Muir and Sale of the Adobe

Following John Muir's death in December 1914 his two daughters/heirs administer his estate. Within a year the Valona townsitie holdings on the Bay of Carquinez and other Muir properties were sold. In 1915 Wanda Muir Hanna and her husband Thomas sold the adobe and 39.78 acres to Wallace R. and Genoa Pond for $10 in gold coin. The deed to the Ponds included a map of the area showing the adobe, the outbuildings, and some of the plantings (figure 8).

The Pond Development Scheme

After acquiring the adobe property Wallace Pond planned to subdivide and develop the acreage. Late in September 1915 headlines in the Martinez Daily Gazette announced: "POND SOON TO OPEN TRACT, Forty Acres of Hanna Ranch To Be Sold By Druggist." The article described Pond's proposed subdivision which was to front on the county road at the southern end of Smith Street (now Alhambra Avenue) once that street was connected with the main valley road south of the viaduct.

Pond was a physician who had practiced in Pacheco and who, from about 1910 to 1916, owned the Contra Costa Drug Store in downtown Martinez. The Ponds may have been living in Berkeley at this time, because Mrs. Pond's name appears frequently in the local newspaper's society columns and club news, especially for the Twentieth Century Club of Berkeley. The Pond name never appeared in the local Martinez directories other than as proprietor of the drug store. Wallace R. Pond died at age 66 in the Alameda-Oakland area on July 25, 1921.

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151. Contra Costa Gazette, November 9, 1915.
152. Daily Gazette (Martinez), August 29, 1921.
154. Case 3877 in the Superior Court of the State of California in the matter of the estate of John Muir, Deceased, Decree settling first and final account of administratrices and distributing the estate. JOMU files.
155. E.C. Brown Survey, September 20, 1915, map of lands of Thomas Hanna et al. in Division No. 1, Rancho El Pinole attached to Indenture between Wanda Muir Hanna and Thomas R. Hanna and Wallace R. Pond, October 1, 1915. Deeds, Book 257, p. 3. The Hannas had mortgaged part of the Strentzel estate in 1912. They had also carried the mortgage on one of the properties they sold. The new owner sold off lots, and built some improvements. However, he did not pay his bills, and the Hannas were left with the debt.
156. Daily Gazette (Martinez), September 29, 1915.
Documentation as to why the property around the adobe was not developed as planned is not available. Perhaps, the real estate market would not support the development, or possibly the Pond venture ran out of money. Dozens of subdivisions were being advertised in the newspapers during this period, including a 22-acre tract near the Santa Fe viaduct.

The onset of World War I doubtless impacted numerous Californians’ plans. Dr. Pond may have gone elsewhere to pursue his business interests, because advertisements for the Contra Costa Drug Store bearing his name no longer appear on the front page of the local paper by 1917. In any case, Pond and his wife transferred the property to D.L. Thornbury of Oakland for the sum of $10 in December 1917. Exempted from the land transfer was an easement to enter the property to maintain electric lines. Despite suggestions in the local paper that the Ponds “may occupy the property,” they apparently never lived in the adobe, instead renting it out.

The Hannas Move

Wanda and her husband John moved out of the adobe sometime during this period. A note in the Contra Costa Gazette on September 30, 1915, indicated that the “Hannas quit [their] former home” to move to the cottage on the Strentzel ranch in the Alhambra Valley. The local paper described the Hannas’ ambitious plans to build “one of [the] finest country homes in [the] county,” but meanwhile they were refurbishing the Alhambra Valley cottage. By December 1916 the Hannas had moved to Crockett.

The Greertys Rent the Adobe

After the Hannas sold the land and moved up the valley, the adobe was apparently used as a rental. From perhaps 1915 to 1917, Alexander and Katherine Greerty occupied the adobe. Former resident Ray Greerty, one of Alexander and Katherine’s children, later reminisced about the structure:

This [the stairwell] is all changed now – [it was] all open, then. The stairway wasn’t plastered off. Underneath here was a big jug of wine....In those days, this wall was full of pictures....We used to eat in that little place which was then made into a sewing room [the small addition on the southwest corner of the house]. The bathroom was upstairs when we lived there...and the outhouse [was] out back. Tom Hanna put the

158. Daily Gazette (Martinez), September 21, 1915.
160. A post card addressed to Wanda Hanna in December 1916 was forwarded to a Crockett address. Personal Communication, Mrs. Strentzel Hanna, January 1991.
162. During 1915-1916 the Greertys were listed with the same phone number and address as Wanda and Thomas Hanna, suggesting that the Hannas may have been in the process of moving up the valley. By 1917 the Greertys’ address was listed as Smith Road.
Greerty was about six years old when the family moved into the adobe. Thus, some of his reminiscences may have been based on stories he heard as a small child. For example, Greerty observed that the former chimney had "broke[n] down" and then

Tom Hanna built the brick chimney. It darn near fell over and my father had to prop it up. The Spanish people had an adobe one and one at the other end of the building.\[164\]

The present chimney would have been only about four years old when the Greertys moved into the house, and it shows no evidence of reconstruction. There is no evidence that there were adobe chimneys at either end of the house.

While the Greertys lived in the adobe the trim around the windows of the adobe was painted a dark brown, contrasting with the white plaster and wood siding. A large wisteria vine planted during the early years of the century grew over a trellis against the northeast corner of the house. In a ca. 1916 photograph of the Greerty family in front of the adobe (figure 10), the unpruned shrubs and elm trees heavily shaded the front of the house. Hollyhocks bloomed along the front steps of the adobe. Greerty remember that one of the black locust trees died and had to be removed. During the process a wall – or a well – (the interview is unclear) was damaged.\[165\] The area between the orange trees in the two-acre orchard southeast of the adobe was planted in hay. Large fig trees lined the entrance lane into the property.

During the Greerty period the two-story frame house behind the adobe was occupied by the Hirano family. Hirano had been a ranch manager for Tom Hanna, and according to one informant, may have continued to live in the frame house until about 1922.

A surveyor's map prepared in 1915 showed the stables southwest of the adobe, and a small, unnamed structure (possibly the old cook house) to the northwest, but there was no trace of the ranch manager's house/bunkhouse. The building may have been omitted from the map, it may have been moved or torn down, or the location and/or labelling on the various ranch buildings may be incorrect.

Between the frame house and the adobe was a driveway where the Greertys parked their automobile. The drive was located approximately where the concrete patio is today. The farm lane into the big house ran from Franklin Canyon Road eastward, crossing Franklin Creek on a small wooden bridge which, according to Greerty, washed out during the 1915 flood. Willows growing in the creek bottom served like a natural dam, but kept the banks from washing out.

\[163\] Oral history by Ray Greerty, audited by John Jensen, transcript dated June 29, 1966, JOMU files. In the interview, Greerty states that the men's dining hall was located where the cement was stored in the adobe – that is, in the storage room.

\[164\] Ibid. It is not clear where Greerty obtained this information; it may have been part of the local "legend" about the house.

\[165\] Ibid.
Near the adobe was a winery, and the big barns, along with the pig pens, remained on the hill behind the adobe. Japanese and/or Chinese workers lived on the premises near the creek, and after Muir's death the orchards were leased to some Japanese.\textsuperscript{166}

Greerty recalled a well "covered over with boards when we first came here. We never got water out of it."\textsuperscript{167} Instead, the Greertys used a gasoline powered pump at the creek with a line running across the road to a 10,000 gallon tank east of the creek. The water "ran from there for the barn and the rest," presumably to the barn south of the adobe and perhaps to serve the adobe itself.\textsuperscript{168}

**Sale and Resale of the Adobe**

Between 1917 and 1921 ownership of the adobe changed several times. Records held by a local abstract company document a complicated series of mortgages, lawsuits, and other legal actions involving the various owners. Apparently, only one of the owners lived in the adobe.

On December 3, 1917, Wallace and Geneva Pond sold the adobe, along with other properties in the vicinity, to Delmar L. Thornbury for the sum of $10, (but with a $23,000 mortgage to Thornbury). Thornbury and his wife Alpha owned the property as absentee landlords for seven months and then quit-claimed it to F.D. Prettyman of Berkeley for the sum of one dollar.\textsuperscript{169}

Thornbury was a lawyer who had taught physics and science and served as a school principal before settling in California to practice law in San Francisco and Oakland. He was a board member and president of numerous organizations, corporations, and land companies. His interests included composing and writing.\textsuperscript{170}

Prettyman was a farmer and rancher who started buying fruit from orchards and shipping the produce to various markets in the 1890s. Later he established the Watsonville Canning Company, serving as its vice-president and manager.\textsuperscript{171}

Almost immediately after Prettyman and his mother Sarah, then living in Watsonville, California, acquired the property from Thornbury, they conveyed it to T.J. Brooke of Stockton, California,

\begin{itemize}
\item \textsuperscript{166} *Ibid.*
\item \textsuperscript{167} However, a later summary of Ray Greerty's oral history states: "The well put in by Tom Hanna was much depended upon." It may be that these statements referred to two different wells.
\item \textsuperscript{168} *Ibid.*
\item \textsuperscript{169} Deeds, Book 316, pp. 491-92. The Thornburys are not listed in any of the local directories for this time period because they probably rented out the property during their brief ownership.
\item \textsuperscript{171} Edward Martin, *History of Santa Cruz County California* (Los Angeles, Historic Record Company, 1911), pp. 331-33.
\end{itemize}
Figure 10: The Greerty family in front of the adobe, ca. 1916.
for $10. The deed was recorded at the request of the Earl Fruit Company on July 27, 1918.\textsuperscript{172} That same day Brooke and his wife Edith reconveyed the property back to Prettyman.\textsuperscript{173} Several months later in November the Prettymans then sold the property to D.A. Hatfield of Portland, Oregon, for $10 in gold coin. The deed was recorded at the request of the Seaboard National Bank of San Francisco.\textsuperscript{174}

Articles in the \textit{San Francisco Call} describe the nefarious career of a D.A. Hatfield of Washington, Oregon, and California, who \textit{may} be the same person as the short-time owner of the adobe.\textsuperscript{175} Hatfield made a habit of forging land deeds, and then selling them to unsuspecting victims from his prison cell.

In 1919 D.A. and Dora Hatfield conveyed the adobe property to the Earl Fruit Company for $10.\textsuperscript{176} The Earl Fruit Company, founded by Edwin T. Earl, was in operation from at least the mid-1800s through perhaps the 1920s.\textsuperscript{177} Contemporary newspaper articles give evidence of a lengthy series of lawsuits and labor difficulties involving the company, but little other historical data was found on this business concern. It was listed in the Concord phone directory for 1919-1920 through 1923, but the parent company may have been based in Sacramento County.\textsuperscript{178}

Two months later, in early February 1920, the Earl Fruit Company sold its interest in the adobe and surrounding land to James Rennie for $10. Rennie, a vintner, superintended the Stanford wine making operations at Asti.\textsuperscript{179} Active in the Sierra Club, Rennie was also an accomplished mountaineer. Rennie and his wife occupied the adobe during 1920, and probably 1921.\textsuperscript{180} However, Mrs. Rennie reportedly did not like the area and thought the adobe insufficiently comfortable. Thus, they sold it on November 9, 1921, to Daniel L. Parsowith for $10. Six weeks later Lillie L. Parsowith, by deed of gift, gave her interests in the property to Daniel.\textsuperscript{181}

\begin{flushright}
\begin{enumerate}
\item 172. Deeds, Book 316, pp. 479-81.
\item 173. Deeds, Book 322, pp. 163-65.
\item 174. Deeds, Book 359, p. 165.
\item 175. \textit{The Call}, San Francisco, March 2, 1912.
\item 176. Deeds, Book 359, pp. 168-70.
\item 178. \textit{The San Francisco Call}, February 9, 1896; Hatfield to Earl Fruit Company, Deeds, Book 359, pp. 168-170; and Foreclosure (Webster Tract) vs. Arsenath Dormán \textit{et al.}, Documents 1-4 (1893-1894), B14A, Contra Costa County Historical Society.
\item 179. According to a 1967 oral history (John Jenson, JOMU, interviewing Mr. Eddie Mayers of Oakland), Rennie bought the adobe from Muir and "lived there for awhile," JOMU files.
\item 180. Newspapers found in the upstairs closet of the adobe were dated 1920, and bear the name James Remmie [sic].
\item 181. Tax records for 1920 showed that the almost 40-acre plot surrounding the adobe was worth $4,965, with improvements of $800. Parsowith also purchased an adjoining 30-acre tract of land. The deed was notarized in Alameda County, California, suggesting that Lillie Parsowith may have been living there at this time. She may have been Daniel's first wife, or a close relative. Louis Stein suggested that Mrs. Parsowith (nee Connelly) used her money
\end{enumerate}
\end{flushright}
Apparently, the property transfer was made as part of a family arrangement. The deed noted that the transaction was made "in consideration of the love and affection...as also for the better maintenance, support, protection, and livelihood" of Daniel Parsowith.182

**THE PARSOWITH YEARS: 1921-1955**

Although Daniel and Pearl Parsowith probably lived in the adobe longer than any of its other owners, very little is known about them. Long time area residents remember Daniel Parsowith only as a local tailor and a musician. Presumably, the Parsowiths moved into the adobe shortly after their purchase, but they were not listed in the Contra Costa County phone directories until 1923 when their residence was listed as Franklin Canyon Road. Directory listings after that date were sporadic. One informant thought perhaps the adobe was vacant during the late 1930s.183 Daniel's name did not appear among the tailors listed in the yellow pages for Martinez until 1939 when his business address was listed as 653 Main Street, Martinez. During the years from 1921 to 1939 he may have worked out of his Franklin Canyon home, or he may have been employed elsewhere.184

During the 1920s the Parsowiths operated a lunch stand that also served as a dance hall. This establishment, known as Muir Gardens, was situated along the old highway where it crossed the creek south of the adobe. It burned to the ground sometime after 1927.185

It is not known whether the Parsowiths farmed the land or tended the orchards on their adobe property. One Franklin Canyon Road resident, Thomas Duane, owned a nearby nursery. Duane leased a number of area properties, and it is possible that he may have leased some of the Parsowiths' land. According to one informant, Parsowith planted English walnut trees near the adobe during the mid-1920s. These trees have since died and been removed.

There is little available information concerning the numerous changes that the Parsowiths made to the adobe and the surrounding landscape during the next 35 years. It is known, however, that to purchase the adobe. It is not clear if he was referring to Daniel's wife Pearl, or to another family member. Louis Stein, personal interview by Phyllis P. Shaw and Linda Moon Stumpff, October 15, 1990, JOMU files.


Parsowith was not listed in the Contra Costa County telephone directory (Richmond) for 1920-1922, 1925, and 1928. In 1932 he was listed as living on rural route 1, but no occupation was given. In the 1934 and 1937 directories his name was omitted, and there was no listing for him under tailors. In the telephone directory for December 1935 only his residence was listed; there were nine other tailors in town but none at the Main Street address. His name appeared in the directories for 1943-1945 and 1948 at the Franklin Canyon Road address. During this time period, his tailor shop was listed as 653 Main Street, Martinez. Pearl Parsowith's name also appeared sporadically in the directories.

185. Telephone conversation with Louis Stein, July 25, 1991. Muir Gardens was listed in the 1927 Polk's Richmond and Martinez Directory (Microfilm 620, California State Library, Sacramento) under "Parsawith [sic], Danl L. and Pearl E. at Muir Gardens home on the Franklin Canyon Highway."
some time between 1920 and 1955, the house was extensively remodeled and various landscaping changes undertaken. Scattered documentation provides few insights into the adobe's history during the Depression years. Deed records, however, show that Daniel Parsowith transferred the Martínez Adobe property and several other plots of land in Martínez to his wife Pearl in November 1931. The reasons for this transfer have not been determined.

During the 1930s area land values plummeted. The nearby Muir House and surrounding properties, unoccupied during part of this period except by transients, took on a forlorn, shabby appearance. The barns and outbuildings built during the Strentzel-Muir era remained on the property during this time, although they undoubtedly were not well-maintained. Severe floods in 1937 and later in 1958 covered the area just east and below the adobe and around the Muir House.

Louis Stein Jr., believes that Daniel Parsowith undertook considerable landscaping around the adobe during the 1930s. Parsowith built – or had built – the red tinted [painted] concrete patio behind the house in place of the former driveway. The brick retaining walls, concrete walks, and concrete floors on the east veranda have also been attributed to his efforts. Parsowith may also be responsible for the original ramada behind the adobe (figure 11).

However, there is little historical evidence to determine precisely when these changes were made. Manufacturing dates on the reused trim bricks atop the retaining wall immediately west of the house suggest a definite post-1920 date of construction.

During part of the 1920s and 1930s the Curry family lived in the Muir House, and a relative, Charlie Curry, rented and/or occupied a building just behind (west of) the adobe. This building, described as a "shack," could have been the old frame two-story bunkhouse that appeared in the 1885 photograph of the adobe. There are no records to document when the bunkhouse was removed. It was still extant in the 1930s, but by the 1960s only its concrete foundations remained. It is possible that Curry's shack may have been the wood shed that was located to the north of the small gable roof addition to the kitchen. It may also have been the original cookhouse for the adobe. This structure, however, has never been specifically identified in the early photographs, nor described in known documentation. Presumably, it was either removed or converted to other uses after addition of the kitchen to the adobe by the Hannas.

The origins of the small gable roof structure now attached to the southwest corner of the adobe kitchen have never been determined. It is possible that this building may have been the original


187. Mrs. Strentzel Hanna, personal interview by Diane Rhodes and Linda Moon Stumpff, January 11, 1911, handwritten notes, DSC files.

188. Henry Sax and Andrew Kreiss, personal interview by John Jensen, October 19, 1966, typed transcript, JOMU files.


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cookhouse which was moved early in the century from an unspecified location behind and northwest of the adobe.

A series of remodeling efforts on the adobe was undertaken by the Parsowiths during the World War II era. No documentation has been found to date the remodeling endeavors precisely, but structural details and materials appear to date from this period. The Parsowiths removed and replaced the milk cooling room on the west side of the adobe. They raised and lengthened the roofline of the shed roof and enclosed the area, extending it south to meet the old kitchen wall and west to its present depth. This new west room became a bedroom. The old kitchen was enlarged westward to meet the line of the new bedroom, in the process enclosing the entrance door to the small dining room at the southwest corner of the kitchen. This small gable roof addition served as a tailor shop. The Parsowiths built a bathroom from a portion of the enlarged kitchen. Upstairs the walls between the small rooms in the north end of the building were removed, and the east part of the hallway was enclosed to make a closet. Plywood was used to cover the exposed beams and lower the ceiling in the upstairs north bedroom. New tongue and groove oak floors were laid in the downstairs living and dining rooms sometime during the Parsowiths’ ownership. After the new floors were laid, a brick hearth was built atop the flooring in front of the fireplace. During the years from the late 1930s to the late 1940s, Parsowith’s tailor shop was located at 653 Main Street in Martinez.

By 1949 some of the barns and farm structures from the Muir-Strentzel era likely had been removed from the hillside behind the adobe. Franklin Canyon Road continued to be one of the two major access roads to Martínez. At the point where the road emerged from the canyon and started to head northeast, it split; one fork following present-day Canyon Way northward to downtown Martínez, while the other extended east/northeast past the Muir home to intersect East Pleasant Hill Road near Muir station. The entry lane into the Muir home from Franklin Canyon Road passed between the adobe and another unidentified structure to the north. Passing due east the lane was joined at the base and west side of the Muir House hill by a second entry road from the east/west fork of Franklin Canyon Road. The two roads combined to partially encircle the Muir House, providing access to its north entrance. Topographic maps indicate that no other structures remained south or southwest of the adobe, suggesting that the stables had been removed by this time.


192. Louis L. Stein, Jr., personal interview by Linda Moon Stumpff and Phyllis P. Shaw, October 15, 1990, typed manuscript, JOMU files.

193. Newspapers dating to late 1920, addressed to James Rennie, were laid beneath linoleum flooring in the north bedroom closet. The linoleum and the newspaper lining extended beneath the west end of the closet wall, suggesting that this wall was added after the Parsowiths’ purchase of the house.

By J. E. Jensen, 1967. JOMU holds.

Figure II: Vicente Martinez Adobe looking northeast from Franklin Canyon Road. Photograph
Pearl Parsowith transferred title to the adobe to her husband Daniel in 1954. Mrs. Parsowith died shortly thereafter, leading to speculation that she may have been in poor health at the time of the transfer. The following year, Daniel Parsowith sold 3.857 acres, including the adobe, to Louis L. and Mildred R. Stein. After selling the property Parsowith moved away from the Martínez area.

THE STEIN YEARS: 1955-1966

Recognizing its intrinsic historic and architectural values, the Steins purchased the adobe when it was offered for sale early in 1955. The Saxs, then owners of the Muir House, retained access to their home via the lane near the adobe. However, a narrow strip of land along the creek, owned by Walker Built Homes, separated the Sax land and the Muir House from the Stein adobe property. To prevent separation of the two parts of the old ranch by a housing development, Stein purchased the acreage to the east of and between the adobe property and the Muir House.

Stein, a retired Kensington pharmacist with historic preservation interests, conducted little remodeling of the adobe after the purchase. He installed a heater brought from the Richmond shipyard, and added a concrete floor to the small addition on the southwest corner of the kitchen. He removed the threshold from one of the doorways, and dug out piles of debris and soil brought in by skunks and rodents. During the Steins' ownership a large dead tree fell against the north side of the adobe, thus, the tree was cut down.

The Steins never lived in the adobe, but kept it as a rental property. About 1955 they rented the adobe to "a widow & 3 boys ages 6-12." Another family, with a two year old, occupied the adobe some time after that. Lois Lillard, a school teacher at Montecito Elementary School in Martínez, lived in the adobe during 1961 (or alternately, four years during the 1950s, according to some sources).

The Historical Landmarks Committee of the Contra Costa County Historical Society recognized the historic and architectural significance of the adobe. A bronze plaque engraved with a brief history of the building was prepared. This plaque was unveiled, and the adobe site was dedicated as a local landmark with appropriate ceremonies on April 17, 1955.


From 1960 to 1962 the Daniel L. Chase family lived in the adobe, renting it from the Steins.\textsuperscript{201} Daniel Chase made no changes to the adobe and its surrounding grounds and only repaired leaky pipes. The adjacent garage or shed (southeast of the adobe) was used to store Louis Stein's historic records and papers. The Chase family did not use the fireplace because they thought it unsafe. Instead the family used a gas space heater in one room. They picked fruit from the orchard (especially from the orange trees) for their family's use. Stein, who had invested a large amount of his own money in the historic properties, used funds from the sale of the walnuts to pay the taxes on the property.\textsuperscript{202}

During the 1950s attempts were initiated to add the Muir House to the California State Park System, but the adobe, under separate ownership, was not included in the negotiations. In 1956 the John Muir Memorial Association decided to restore the Muir House as a memorial to John Muir and his work, and in January 1957 the organization included the Martinez Adobe in its planning.\textsuperscript{203}

In January 1958 the Contra Costa County Planning Department, in conjunction with the Contra Costa County Historical Society and the John Muir Memorial Association, proposed that both the adobe and the Muir House be included within a county park, and fund raising began.\textsuperscript{204} Under this plan the adobe would be used as a museum operated by the Contra Costa County Historical Society. This plan did not materialize, but subsequent efforts were made by several agencies and organizations. In 1960 U.S. Representative John Baldwin began drafting proposed legislation to establish the properties as a national historic site within the national park system.\textsuperscript{205}

Meanwhile, the area in the vicinity of the adobe was undergoing rapid development. Construction was begun on the San Francisco-Richmond-Oakland road, known as Arnold Industrial State Highway (State Route or Highway 4), replacing the old east/west leg of Franklin Canyon Road. Smith Street, renamed Alhambra Avenue, funneled traffic from downtown Martinez to the new highway and southward toward the Alhambra Valley. The city of Martinez continued to expand southward up the valley around the old ranch, and new subdivisions were built just north of the site.

In 1962 legislation was introduced in Congress to establish John Muir National Monument, and a feasibility study was initiated in 1963.\textsuperscript{206} Charles and Thelma Compton rented the adobe from the Steins, refurbishing the building and making it into a "living museum" open to the public. The Comptons supported interpretation of the adobe as a Mexican period structure. They served

\begin{itemize}
\item 204. Hussey, \textit{et al.}, \textit{Feasibility Report}, pp. 4-5.
\item 205. "Legislative History of John Muir NHS," typescript, JOMU files.
\end{itemize}
as hosts and guides to show visitors the building and exhibits. Mrs. Compton, an accomplished musician, conducted music classes at the adobe, probably using the small addition on the southwest side that had once been the tailor shop.

Photographs taken of the Martínez Adobe in 1963 indicate that the structure appeared much as it does today (figure 12). The white exterior was trimmed in dark blue, contrasting with the red composition shingle roofing. Gutters and drains had been added to the house, and a gatepost and gate, painted dark blue, were attached to the enclosed end of the north veranda, just below the 12-light casement window set in tongue-in-groove vertical wood framing. A television lead-in snaked from the roof-mounted antenna into the upper north window on the veranda. A porch light had been added, and an electrical junction box installed on the front center of the lower facade.

However, NPS investigations of the structure revealed that rehabilitation of the adobe was badly needed. For example, the various utility systems, some built by the Hannas early in the 20th century, were unsafe. A redwood septic tank, located just east of the drive, was being utilized for waste disposal. A shallow well which had provided water for earlier tenants was located only a few feet away. It is not known when the house was connected to city water, but the pump was removed from the wellhouse when the Parsowiths sold the property to the Steins.

Gas and electricity were provided by the local utility company. The electrical system in the adobe consisted of a maze of different types of wiring, some of it dating to the early 1900s. The structure had no fire or burglar alarm systems. Heating was provided by a small gas space heater. The electric stove and refrigerator, left behind by the Parsowiths, would soon be replaced by gas appliances.

During the early 1960s the landscape around the adobe provided an attractive setting for the structure (figure 12). Shrubs and flowers were planted along the front, flanking the entry steps with their white wood railings. A grassy meadow with scattered mixed deciduous trees and shrubs had replaced the earlier fruit orchard and lawn along the front vista of the adobe. Tall trees grew at the sides of the adobe. Louis Stein had planted a row of Modesto trees near the house that he remembered because "they all lose their leaves all at once." Lady Bank’s Rosa banksiae lined the front veranda. A few of the "historic" plantings, like the fig trees, survived from the Muir era.


210. Topographic and historical base maps were developed as part of the 1965 master plan. These maps and contemporary photographs of the site provided documentation for some of the existing conditions of the adobe and grounds during the mid-1960s.
Some landscape features remained from the Parsowith occupancy. A concrete sidewalk, lined on the west by a single row of bricks, paralleled the adobe along the east side. Adjacent to the sidewalk was a driveway leading from the entry lane south to a weatherbeaten wood frame garage southeast of the adobe. A clothes line ran east and west along the south side of the adobe. The wellhouse and pump were located just east of the driveway, northeast of the adobe. An old outhouse – unused except as a pigeon cote - stood south of the adobe. A concrete slab west of the adobe was the sole remnant of the former bunk house/foreman’s house.

Photographs taken of the rear of the adobe during this period show that the back yard was open to Franklin Canyon Road (figure 11). The simple wooden ramada, similar to the extant structure located in approximately the same spot, was open on top, and large vines (probably wisteria) were growing at the ends of the structure. A narrow path linked the mailbox at the roadside to the house.

THE MARTÍNEZ ADOBE UNDER THE U.S. GOVERNMENT

National Park Service Acquisition of the Adobe

Although the act providing for establishment of John Muir National Historic Site was approved August 31, 1964, the adobe property was not transferred to the U.S. government until August 15, 1966. On that date the Steins sold 3.63 acres of land in Parcels 2 and 3 of the Rancho El Pinole property to the federal government, and thereafter the property was administered by the National Park Service.

During the preceding decade a series of development projects had encroached on the site of the old Rancho El Pinole property surrounding the adobe. As a result of reconstruction and upgrading of State Highway 4 to freeway status, completed during the mid-1960s, several small parcels of the larger Stein property were condemned by the State of California for freeway construction and for the interchange at Alhambra Avenue. A temporary easement was also obtained from the Steins for cut and fill slopes amounting to approximately .315 acre along the southern portion of Parcel 2 south of the adobe. Because of the freeway construction the California riding and hiking trail was relocated across the southwest corner of the national historic site, and brackets and barb wire were installed on the existing chain link fence on the north side of the freeway.

211. The date when the old ramada was removed and the present structure was built has not been determined.

212. Public Law 88-547 providing for the establishment of John Muir National Historic Site was signed into law on September 3, 1964. The deed from Stein is recorded in Deeds, Book 5188, pp. 108-09.

213. The People of the State of California vs. Louis L. Stein, Jr., Henry V. Sax, Faire E. Sax, City of Martinez, etc. in the Superior Court of the State of California, Case No. 91734, Final Order of Condemnation, filed March 15, 1965, JOMU files.

Figure 13: Martinez Adobe, 1963, view to the west. Photograph by R. N. Mortinmore, JOMU files.
The Steins granted an easement and right-of-way to Southern Pacific Pipelines, Inc., in November 1965 to install an 8-inch line through the southwest corner of the adobe property. Another easement was conferred to the Union Oil Company in August 1966 for underground pipelines, surface valves, and other associated appurtenances across the same area.\footnote{215}

**National Park Service Plans for the Adobe**

During 1965 the National Park Service began planning for protection, preservation, and interpretation of the national historic site. Many of the planning decisions would have had significant impacts on subsequent treatment of the adobe and its surrounding landscape. In keeping with the management philosophy of the time, acquisition of the adobe by the National Park Service was not based upon the intrinsic historical value of the structure itself, but rather for preservation of the historic setting of the Muir House. The adobe property was viewed as a means of providing a suitable setting for the large Victorian house that had been occupied by Muir, protecting the site from additional encroachment, and to provide space and facilities for administration and interpretive opportunities.\footnote{216}

The aforementioned 1963 feasibility study documented the history of the adobe and made recommendations for its use. The study recommended that the adobe might be adapted for administrative use because the structure was viewed as having secondary historical significance when compared with the Muir House.\footnote{217}

During the next few years numerous recommendations for renovation and use of the adobe were offered. The master plan proposed restoration of both the interior and exterior of the building and its furnishings to the 1906-1914 period when Wanda Muir Hanna and her family lived there.\footnote{218} The 1969 classified structures list supported this proposal, providing estimated costs for restoration of the adobe, including removal of the west bedroom, reconstruction of the lean-to, and rehabilitation of the interior.

Some NPS planning proposals included recommendations for the historic landscape. Some planners felt that the existing but unused privy should be left in place and interpreted (building HB-3). Historic site 9, (HS-9, original site of a cook house, a bunkhouse, or the old ramada), and the wood shed (HS-10) would not be reconstructed, but their locations would be interpreted to

\begin{footnotes}
\footnote{215}{Nearly 30 years later, Southern Pacific requested clearance to build a second 16-inch line.}
\footnote{217}{Hussey \textit{et al.}, \textit{Feasibility Report}, pp. 40, 43.}
\footnote{218}{John Hussey, "John Muir National Monument, Architectural Analysis," January 19, 1965, typescript copy DSC files, pp. 2-4; and Superintendent, JOMU to Regional Director, Western Region, NPS, February 9, 1968, JOMU files. Some of the 1965 proposals included work to ensure proper drainage around the house and removal of the existing patio, walks, and brick retaining wall which would then be replaced with soil cement walks.}
\end{footnotes}
the visitors. Because the old garage southeast of the adobe was of "debateable historic significance," planners concluded that it could be used to store gardening tools and materials.219

During the late 1960s and early 1970s a series of recommendations articulated that the adobe be rehabilitated for use as an employee residence. The exterior would be rehabilitated to approximate its historic appearance. The interior would be remodeled with as much historical accuracy as possible for a park residence with only necessary changes to provide comfortable contemporary living.220

These plans were viewed as the best and most expedient use of the building. Proponents of the plans argued that the (1) national historic site's interpretive program should focus upon Muir and the Muir period; (2) Mexican occupation of the adobe had been relatively short; (3) the adobe had been remodeled several times; (4) and presence of employees on site would help to prevent theft and vandalism.221 In the visitor use and resource management sections of the development plans it was recommended that interpretation of the Martinez Adobe focus on the 1906-1914 period, using a self-guiding tour to interpret the site as an integral part of the historic setting during its use by the Muir family.

The 1965 master plan, however, noted that adequate housing was available in the local community and would not be furnished on site. The master plan included other proposals for the adobe, such as its adaptation for use as a folk museum, and use of its second floor for sleeping space for environmental education personnel.

A historic structure report was initiated in 1969 to resolve some questions relating to the adobe and outline structural rehabilitation endeavors necessary for its protection. The brief 1970 report recommended that the building be used as a residence as well as an exhibit in place, and that the master plan be revised to include such use.222 The report noted that Washington officials agreed with proposals to rehabilitate the structure for employee housing, as long as care was taken to "insure the historic integrity of the exterior." Thus, that it could be viewed as an interpretive exhibit by visitors walking along the historic trail (former access road) through the national historic site. Since the adobe was to be interpreted as part of the Muir era, the presence of children's toys, laundry, and other accoutrements of home life would contribute to the site's interpretive story.

Most of the proposals for restoration and adaptive use of the adobe were never implemented, however, primarily because of protests by concerned local citizens and members of the John Muir Memorial Association. These individuals and groups strongly supported interpretation of the adobe's Hispanic heritage, and felt that "the adobe, too, belongs to the public."223

219. Hussey, "Architectural Analysis," pp. 2-4. Under another plan, the existing sheds were to be demolished and replaced with a garage resembling the outbuildings on the property during the Muir years.

220. Superintendent, JOMU to Director, Western Region, National Park Service, January 27, 1971, JOMU files.

221. Ibid.


During the latter years of the Stein ownership the adobe was open to the public on a limited basis. Local school groups and boy and girl scout troops were permitted to tour the house by special arrangement with the owners. Because the new national historic site did not have administrative facilities, however, the National Park Service decided to use the adobe, at least on a temporary basis, for offices and as the superintendent’s residence. Such use would limit the management facilities to the extreme western portion of the national historic site adjacent to Franklin Canyon Road and the freeway, precluding objectionable intrusions upon the rural, historic setting of the John Muir Home.

Handwritten notes in a draft of the historic structure report recommended removal of the west bedroom (front room), closets, and laundry room on the first floor of the adobe. The word "front room" was later crossed out, and the phrase "living room" substituted. The corrections suggest that this addition may have been used as a living area.

The aforementioned utilization of the adobe was not a satisfactory arrangement for the staff of the national historic site. The adobe proved difficult for visitors to find, parking was inadequate, and because the building lacked central heating, it was often cold in winter. Soon plans were developed to occupy the former veterinary office on Alhambra Avenue for office space and as a visitor contact station.

Because of Muir’s association with the gardens and orchards of the Rancho El Pinole, landscaping of the national historic site became a high priority. In 1965 a proposed planting plan was developed, based partly on an inventory of the trees on the property prepared by the University of California, Davis, several years earlier. The 1965 management and development plans proposed restoration of the citrus groves south of the adobe and land clearing to the east for restoration of the orchards. The proposal also included relocation of the California riding and hiking trail that crossed the southwest corner of the site. A buffer zone consisting of plantings, including a row of fig trees, was recommended for the north side of the entry lane near the adobe.

After grappling with various planning and development issues related to the adobe, NPS personnel began other needed development projects. In June 1967 a new Hartman grapestake ("Rustake" 7-foot chain link) fence with concrete post foundations was installed behind and along the adobe. A locked 6-foot chain link fence had been erected some time earlier by the Union Oil Company to keep vandals out. In February 1968 the National Park Service and the oil company agreed that a second fence, with locked gate, should be installed inside the existing fence in the general form of a rhomboid. This fence is still in place.

224. During his tenure as superintendent of the national historic site from January 1966 to February 1969, Paul E. Schulz moved into the adobe, using it for a residence and an office. No documentation was found in park files relative to rehabilitation work on the adobe before Schulz moved in.


226. See the Physical History and Analysis chapter, Existing Site Characteristics and Conditions, for a further discussion of the landscaping around the adobe during this period.

Although it had been proposed to restore and interpret the shed and the outhouse as part of the Muir era landscape, these and other small frame buildings adjacent to the adobe were removed during the late 1960s. The pumphouse northeast of the adobe was removed prior to September 1968, along with the concrete slab beneath it. The well was filled and covered. The former bunkhouse foundations were removed or covered over, and their exact location is presently unknown.

The old garage, now known as the shop and equipment building (HB-4), contained an office, bathroom, shop, equipment and tractor storage space, and a garage for the tenants of the adobe. After researching the history of the building, NPS personnel concluded that it was "a Jerry built, nonhistorical structure put up in the late 1920s or '30's by a tailor who lived in the Martinez Adobe."228 In June 1969 the shed was demolished and burned by the Martinez Fire Department at the request of the National Park Service.229

The plan stated that the foundations on the west side of the adobe (shown as HB-9 on the 1965 development maps) were "probably in early times the site of a cook house, and in later years quarters for cook and/or servants. Little is known of the structure."230 The post and beam ramada, open to the elements, remained extant west of the adobe.

The newly established national historic site was annexed by the city of Martinez in 1969. Thus, municipal services, such as police and fire protection, and water and sewer services could be provided to the area.231

National Park Service Rehabilitation of the Adobe

The adobe suffered from several major structural problems by the late 1960s. The mineral coated composition roofing, installed during the Parsowiths' ownership, had been patched and tarred repeatedly. It leaked badly, however, threatening the underlying adobe walls. After some preliminary structural investigations, work began on the roof in December 1967. The composition shingles were torn off, exposing wood shingles that were also removed. The roof was tied with new fire retardant braces, and the sheathing boards were replaced. New sawn shingles, resembling the original roof as closely as possible, were installed on the main part of the adobe, while new grey composition roofing was placed on the shallow pitched section of the roof.232

228. Memorandum, P.J. Ryan to Denver Service Center Planning Team, May 30, 1974, JOMU files.

229. Ibid. This building was actually a gabled roof shed with two attached lean-tos on either side. It had been used for a variety of purposes, was thought by some to date to Muir's day, and was known variously as the garage, implement shed, tractor shed, shop and equipment building, or storage shed.


231. A memorandum from J.W. Dernetz, Asst. City Manager to Local Agency Formation Commission, February 7, 1969, discussed annexation of the national historic site to the city. JOMU files.

232. According to the contract, grey mineral coated roofing replaced red roofing of the same general type. However, photographs in the park files show the southwest portion of the building covered by a tin roof. Photograph B4-3, December 8, 1967, JOMU files.
New gutters and hangers were installed, and the chimney was braced and tied into the rafters.\textsuperscript{233} A drain pipe was installed at the north side of the house to carry run-off water from the roof past the fieldstone foundation and into a shrub bed.

Once the roofs had been removed, earlier construction details were documented. For example, it was discovered that the rafters and variable width sheathing boards probably predated 1900.\textsuperscript{234} The existing composition shingles had been installed over a sawn shingle roof laid in rows with a 5-inch center exposure. These wood shingles were fastened with wire nails. Photographs substantiated that the shingle roof was in place during the Muir’s occupancy.\textsuperscript{235} Cut nails penetrating the sheathing boards at approximately 24-inch centers suggested that prior to application of the wood shingle roofing, the adobe roof was covered with long wood shakes.\textsuperscript{236}

Installation of the fire alarm system for the site began during the summer of 1967 and was completed by the winter of 1968. The system included a fire alarm warning panel in the adobe and small round heat risers installed in the ceilings of all the rooms and outside porches.

During its first years under federal administration, the adobe served multiple functions. One of its principal uses was storage. The small addition at the southwest corner of the kitchen had been converted from a tailor shop to a laundry and storage room during the Stein ownership, and the park staff continued to use it for storage.

Although the new roof had stopped leaking, architectural investigations of the structure during the summer of 1968 and in September 1969 revealed various other problems. Termites and dry rot had damaged wood elements, and parts of the building had settled, widening cracks in the adobe walls.

One of the investigators concluded that "the North wall was damaged by the 1906 earthquake and is only about 4 feet high."\textsuperscript{237} In 1991, however, after removal of part of the north wall siding and examination of the adobe walls from the attic, architects concluded that the north wall was still intact, although cracked and showing signs of water damage at the base.

During the structural investigations in the 1960s, portions of the interior walls as well as the adobe bricks were checked for deterioration. Areas along the exterior foundations, particularly along the north and east walls, were excavated by shovel to a depth of about 2 feet. Although the fieldstone foundations were in relatively good condition, plans were developed to work on


\textsuperscript{234} Cut nails had been used in the variable width rafters and sheathing boards. General use of these nails predates the 1890s.

\textsuperscript{235} H.V. Sax to John Jensen, 21 August 1967. Sax indicated that in the Muir House addition, thought to predate 1897, the nails were all square cut in the rough and exterior construction. The interior lath mostly square cut lathe nails, but, some round wire nails were used. The interior trim is almost 100% round wire finish nails a very few square cut finish nails. The tin roof all square cut nails and also square cut roofing tacks. Some patch work had been done with the nails with the tin washer.

\textsuperscript{236} A. Lewis Koue to the Office of Archeology and Historic Preservation September 1, 1967, DSC files.

\textsuperscript{237} John Jensen to NPS Regional Director, Western Region, September 26, 1969, JOMU files.
drainage in this area to prevent further deterioration. The 1970 historic structures report recommended that the stone foundation be underpinned, the first floor veranda reconstructed of wood, and the north room on the second floor strengthened and leveled.

As part of the structural investigations, John E. Jensen, who became superintendent of the national historic site on April 20, 1969, listed the adobe's structural elements and some of the materials used in its construction. For example, he noted that in all but the second floor south bedroom, the original ceilings had been covered with gypsum board or plywood. Jensen ventured that the ceilings were originally open beams, with tongue and groove paneling added to the downstairs ceilings at a later date. Gypsum board had been used on the walls of all the rooms except the south bedroom on the second floor. The electrical lines ran between the adobe bricks and the plaster board. Some wooden channels for wiring had been installed in the north bedroom, possibly by Tom Hanna.

Jensen concluded that the first floor oak flooring was relatively recent, and that the original floor had consisted of wide boards over dirt. The second-story floors had three levels of flooring. The fireplace on the downstairs north wall consisted of tan brick covered with four sequential coats of paint - buff, tan, green, and white. The doors and windows were described as "variable."

A gas line had been installed through the north wall of the adobe for the gas heater located in the main part of the structure, the stove in the kitchen, and the hot water heater (in "questionable condition") in the southwest addition. The hipped, variable pitch roof had not been remodeled, and was covered with composition shingles and tarpaper. The porches, originally of wood, had been covered on the lower east veranda by concrete.

Jensen estimated the dates of construction for the various rooms in the adobe. Some of his estimates do not agree with historic documents or architectural analysis. For example, the south kitchen was supposedly added in 1922 by Parsowith, as was the laundry, closet, and storage room. Yet, the upstairs bathroom, remembered by former residents Claude and Ray Greerty, was in place by 1915. This bathroom is built over and supported by the south part of the kitchen. According to Jensen's list, the west bedroom and the downstairs bath were built by Daniel Parsowith in 1925. Yet the wallboard and other structural elements postdate 1930.

National Park Service Maintenance and Use of the Adobe During the 1970s

Photographs of the area in 1970 showed that the area east of the adobe remained relatively open and possessed rural landscape features (figures 14 and 15). Additional work was conducted on the Union Oil Company's easement south of the adobe during 1970, installing a manhole and valve box. The north boundary fence was temporarily moved to facilitate construction of a retaining wall on the adjacent property. By the end of the year several grounds improvement projects had been completed, including signing, boundary survey, and erection of additional fencing.

238. Despite assertions that the adobe originally had dirt floors, the 1991 archeological investigations showed that this was never the case.

Figure 14. Martínez Adobe, view looking northwest, July 1970. Photograph by Peter B. Allen.
Figure 15: Matthes Adobe, view looking southwest, July 1970. Photograph by Peter D. Allen.
In 1971 plans were developed to turn the adobe into employee housing, a proposal that was in line with NPS policies that called for continued adaptive utilization of historic structures. The proposal drew the "vociferous" displeasure of a small group of local citizens, and the plan was dropped or postponed.\textsuperscript{240}

During the 1970s school children enrolled in the Environmental Living Program of the State and National Parks of Arizona and California periodically stayed overnight in the adobe. During their visits they worked in the nearby orchards and gardens under NPS supervision.\textsuperscript{241}

Early in the spring of 1972 a community cleanup campaign was organized to "spruce up" the adobe and its immediate surroundings. The adobe was repainted white with a bright blue trim.\textsuperscript{242} The John Muir Memorial Association defrayed the costs of the "highly successful" reopening of the Martínez Adobe later that year with more than 2000 visitors in attendance the first day. Five separate living history displays and exhibits, including a demonstration of book binding, were installed in the adobe. The adobe site was formally dedicated by John E. Cook, NPS Assistant Regional Director, Western Region, in December 1972.

Landscape improvements to the adobe property continued during 1972. Water lines were replaced, a sprinkler system was installed in the lawn area, and a drip irrigation system was put in the orchards. Although the majority of the existing utility and irrigation lines around the adobe are shown on the 1991 topographic map (figure 16) there are older lines that have not been mapped. Also, it is probable that some of the irrigation lines shown on this map were not installed during the 1972 project. The historic planting plan included an irrigation plan. The lines extended from the alley just south of the entry gate and ran eastward along the entrance road and south paralleling the west fence behind the adobe. Lateral lines were designed to water the oranges and lemons east and south of the adobe.\textsuperscript{243}

Several maintenance jobs, such as treating an infestation of carpenter ants, were undertaken at the adobe during 1973. More importantly, nearly 2000 pounds of fruit drying racks were removed from the north bedroom on the second floor after it was discovered that the floor joists were either nonexistent or improperly secured.

\textsuperscript{240} Superintendent, JOMU to NPS Director Western Region, January 27, 1971, National Park Service, Western Regional Office files.

\textsuperscript{241} National Register of Historic Places Inventory – Nomination Form, John Muir National Historic Site, October 10, 1975, pp. 8-2 and 8-3.

\textsuperscript{242} This paint is now visible beneath weathered white paint on the exterior window sills of the house. The historic furnishings report for the Muir House notes that the underside of the porch roof of the Muir House was painted in a bright blue. It is possible that park personnel used this same color trim on the adobe. Sally Johnson Ketcham, Historic Furnishings Report, John Muir National Historic Site, Martínez, California. (Harper's Ferry, West Virginia: National Park Service, Harper's Ferry Center. Prepared under contract, February 1971; revised 1982.)

\textsuperscript{243} Historic Planting Plan, John Muir National Historic Site, Drawing no. 426/80000A, January 1969, DSC files.
Figure 16: Location map, 1991 archeological investigations, Martínez Adobe.
Safety inspections of the adobe in 1973 revealed additional structural and safety problems, among them inadequate wiring. In 1974 the electrical system was upgraded to meet National Electrical Code Standards and eliminate safety and fire hazards and code violations.

During 1974 the adobe was used for changing exhibits, some of which interpreted a 24-hour period in the lives of the Chinese laborers who had once worked on the property. Space was allocated in the adobe for "Women for the Waterfront," an exhibit on Martínez's regional waterfront park. During this period the adobe was opened on weekends. The adobe was staffed by volunteers, and at times was used for various social functions.

During the mid-1970s plans were formulated to restore the adobe to the 1906-1914 period. To give the building a "human, lived in feeling," former residents were canvassed for information on the childhood pets of the Hanna children, as well as the types of livestock raised. Some animals were acquired, and pens and cages were built near the creek adjacent to the adobe.

Early in 1974 architectural investigations of the adobe revealed structural weaknesses in the south porch caused by settling of the foundation. The floor in the upstairs north bedroom was inspected and found to be unstable. Because of the poor condition of these two parts of the adobe, plans were developed to stabilize them as soon as possible.

During the spring of 1975 stabilization work began on the south porch and the kitchen of the adobe. This work involved replacement of the old brick post footings with a continuous concrete foundation poured around the south wall of the kitchen and the east and south edges of the south porch. Structural elements were replaced throughout this part of the building, and it was strengthened by the addition of six joists between the second-story floor and the first-story ceiling. At the second floor of the south porch a new beam was inserted, and porch posts were made plumb. The upper course of flooring was removed, revealing the original wood porch deck. Once the flooring and the brick supports were removed, archeological investigations were conducted in the area beneath the porch. Scattered artifacts dating mostly to the mid-20th century were discovered, but no significant features were uncovered.

Decking to match the original was installed to replace the unsound original wood. The existing kitchen wall was removed, and a new wall built between a porch post previously enclosed in the kitchen wall and a pilaster that had remained in the kitchen. The porch was restored to its original dimensions. A French drain was installed along the foundation. Stabilization of this part of the adobe also included shoring up the upper porch and the second-floor bathroom and replacing the sills and floor framing of the kitchen and porch.

Replacement of the flooring system in the upper north bedroom was completed by November 1975. During the architectural investigations of the second floor bedroom, NPS personnel removed the worn top layer of the three-level floor, exposing the original floor joists and the next older wide board floor below. The existing north/south sleepers, well over a hundred years

244. P.J. Ryan to John Hanna, March 8, 1974, JOMU files. Among the pets were white rats and tumbler pigeons.

245. For the archeological findings see Kelly, "Archeological Investigations Under the South Porch, Martínez Adobe" and Sensitivity Maps for Historical Archeological Resources: John Muir National Historic Site and Eugene O'Neil National Historic Site, California, typescript, DSC files.

old and badly warped, were removed and extra joists inserted between and above the existing east-west joists. The contractor removed most of the tongue and groove flooring (the second floor), but the closet area remained untouched. Photographs of the work in progress showed the partially removed flooring, suspended above the top of the redwood tongue and groove paneling that formed the ceiling of the room below, and which was, for a time, thought to be a third floor. The bases of earlier closets or temporary dividing walls of redwood beadboard paneling were visible along the sleepers after removal of the flooring.

As part of this project the north end of the bedroom floor was raised slightly less than 5 inches, and the closet and exterior doors were trimmed to fit the new floor level. New flooring was laid in the closet, but the several levels of old flooring beneath were left in place. The salvaged flooring was reused, along with some new materials, as the present floor.247

By 1975 a rectangular metal maintenance shed had been erected by the National Park Service southeast of the adobe, replacing the old shed. The new structure was used for vehicle storage. West of the adobe the ramada had been repainted and repaired by adding new structural members.248

A new master plan for the national historic site was prepared in 1975. Among other issues, the plan discussed continuation of the Environmental Living Program. Several alternatives proposed restoration of the adobe to the Hanna period. It was recommended that administrative functions be relocated to the second floor of the building, safety codes permitting.249

Early in 1976 the outhouse/dovecote, built of salvaged tongue and groove boards set on a preformed concrete slab base, was demolished. Historians opined that this small structure was probably not present during the Hanna or Greerty years, and architectural evaluation indicated late construction. An outhouse for the ranch hands had been located somewhere to the southwest of the adobe, "seemingly outside present park boundaries."250 The privy could have been brought in or built during the depression era when the septic tank required replacement. A rupture in the sewer system resulted in rerouting the line in 1976-1977. Backhoe excavation for the new line destroyed a panel of wire fencing and part of the concrete walkway, and a 35-year-old Monterrey pine was removed. The new 6-inch diameter vitrified clay sewer line extended from the adobe to an existing sewer manhole on Florence Drive. Almost a year later the old redwood septic tank was removed from the front lawn of the adobe, and the area


248. The open wood frame ramada west of the adobe was covered by a roofed structure in 1988. However, no documentation was found concerning the original construction of the ramada nor its concrete pad. It is probable that the ramada was built sometime during the Parsowith era.

249. Haward Chapman, Director, Western Region to Herb Rhodes, Director, California Department of Parks and Recreation, March 26, 1975, JOMU files.

250. According to former residents John Hanna and Raymond Greerty, the privy was moved to the site at a later date. Superintendent, John Muir NHS to Chief, Division of Historic Preservation, September 15, 1975, JOMU files.
covered with top soil. Archeological investigations conducted during the sewer project located scattered historic artifacts, but no major features.  

Work was undertaken on the interior of the adobe during 1976. New linoleum with a traditional brick pattern was laid in the kitchen and bathroom, and the kitchen walls were repaired and repainted. Other small projects included an inventory of plants at the site, and employment of a lawn service firm to maintain the lawns.

During the 1970s the adobe continued to be used for special programs and exhibits, and was generally staffed by individuals under the National Park Service’s Volunteers in the Parks program. In 1976 the Ballet Folklorico performed at the adobe and, in 1977, original California gold rush paintings were exhibited.

Routine inspections of the adobe in 1976 revealed the existence of termites in the roof boards at the adobe wall, and some of the roof boards were rotted at the eaves. In January–February 1977 the adobe was partially reroofed with wood shingles, and rotted or insect damaged roof sheathing boards were replaced. The nearly flat roofs which flanked the south porch gable and covered the back addition were overlaid with rolled roofing. The surfaces were painted along with a new undercoat and covered by strips of roofing.

Further inspections of the building in 1977 indicated that the framing of the south porch on the second floor had dry rot and the post members were out of plumb. Minor stabilization was conducted prior to repainting during the months of March–May 1977. The work included removal of corner sections of the second-story veranda floor and stabilization of the framing members. Attempts were made to realign the southeast corner post of the porch. Molding missing at the base of the posts was apparently replaced. Photographs taken at the time showed the new shingled roof over the "Dairy Room" [storage room] and the twisted downspout above it.

In 1977 the exterior of the house was repainted. Safety glass was installed in some downstairs windows. The front steps were rebuilt. Photographs taken during these projects showed neatly trimmed shrubs along the foundations. The view from the front of the house was open and unrestricted by the small trees and shrubs.

In 1977 the adobe was fumigated with "Vikane," killing many of the foundation plantings. The superintendent’s report for that year noted that plants were to be replaced with "historic" plantings. Eventually, cuttings and donations were used to replant the area. Four young redwood and Monterrey pines were removed from the crowded boundary fence line near Florence Drive.

Historic landscaping plans developed during the mid-1970s found that the fig trees and some of the quince, wisteria, orange, locust, and Lady Banksia rose near the adobe were "historic." The historic landscaping plan called for retention of the "old timey" shrubs and flowers already in existence such as roses, hollyhocks, scotch broom, lilacs, firepokes, lilies, sedges, and privets.

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251. Archeologist, Historic Preservation Team, Western Region to Acting Chief, Division of Historic Preservation, NPS, dated August 15, 1974, JOMU files.

Walnut trees were planted by Daniel Parsowith in 1925. During the Hannas’ time the orange, cherry, plum, and apricot trees dominated the orchard, but it included a few walnut trees.

During 1974-1979 Doris I. Omundson was superintendent at the national historic site. In 1979 the adobe was opened to the public for the first time on a daily basis. A new exhibit of historic photos, titled "A Walk into the Past at the Martínez Adobè," was placed on free-standing partitions in the old part of the house.

A security system, consisting of electric eyes and door contacts, was installed in the adobe during 1977. Underground piping was used to encase the security system wiring. Another irrigation (sprinkler) system was installed in the lawns around the Martínez Adobè in fiscal year 1978.

Prior to 1978 animal pens had been installed to house ranch pets used in the site interpretive program. The pets were provided with homes off-site that year, and the cages (with the exception of the chicken coop) were dismantled.253

During 1979-1980 several minor changes were made to the interior of the adobe. Metal striping along the nosing of the stairs to the second floor was removed, and the linoleum flooring was covered by carpet. The plywood ceiling was removed from the north bedroom, and the walls, then painted pink, were repainted off-white. Cyclic maintenance on the adobe during fiscal year 1979 included refinishing the floors and painting the two front rooms.254

National Park Service Maintenance and Use of the Adobe During the 1980s

During the 1980s the Park Service conducted few preservation treatment efforts at the adobe except for routine maintenance activities. The various projects include: (1) installation of new grounded electrical outlets and lighting fixtures; (2) replacement of the fire alarm system; (3) installation of a modern telephone system; (4) placement of screen-wire mesh along foundations to foil burrowing animals; (5) installation of new wood shingles on the rear "creamery" room and kitchen roof; (6) refurbishment of the ramada; (7) repainting of both the ramada and the adobe; (8) installation of new doorknobs on an upstairs door; (9) removal of the gas heater; (10) leveling and asphaltling of roadways; (11) installation of paths accessible to the handicapped; (12) repair of the second floor balcony; (13) planting of Cherokee roses along the boundary fence; (14) installation of fencing and repairs to the new line and terminal fence posts; and (15) installation of an underground cable and conduit.

In 1983 the national historic site personnel requested permission to cut away a portion of the wallboard in the adobe so that visitors could view the adobe bricks. Although this request was rejected, newly made adobe bricks were later used to cover the interior south wall in the southeast corner of the dining room. The new wall was partially covered with sheetrock, while allowing the new adobe to be visible. The wall on the opposite side of the window was also extended inward by the same distance to provide a balance to the room.


During the latter part of the 1980s the Park Service removed portions of the red-tinted concrete walks that led around the north side of the adobe from the patio area to the front driveway. The walks, probably built by Daniel Parsowith, were at least 18 inches wide and from 6 to 8 inches deep. They were poured over and around water pipes, and on the north had molded depressions to channel water away from the adobe. A small portion of the concrete covered brick retaining wall south of the adobe was removed.

To protect the Muir House from overuse the adobe continued to be used for many of the special functions at the national historic site. Posadas, featuring a Christmas tree and Spanish refreshments, were held in the adobe, along with meetings, weddings, and anniversary celebrations. Self guiding tours were commenced, and the exhibits in the adobe were upgraded and expanded to include agricultural themes.

In July 1983 the public dedication ceremony for installation of the California Historic Landmark plaque for the Muir House and the adobe was held. E. Clampus Vitus, a unique California historical society with both serious and humorous aspects, led the ceremonies.

In 1989 the superintendent's annual report noted that a structural engineer had examined the adobe and found it unsafe for use by overnight environmental living classes. Although this program continues to operate, the children no longer spend the night in the adobe. Instead they use the kitchen and bath areas and store tools and supplies for gardening and candle-making activities in the small room off the kitchen. An area south of the adobe, near the gas line easement, was excavated and is used by the youngsters for making adobe brick.

In 1989 negotiations were begun between the National Park Service and Southern Pacific Pipe Lines regarding installation of a new 16-inch pipeline in the company's easement across the national historic site south of the adobe. The installation was permitted with certain restrictions and stipulations.

In 1990 personnel from the National Park Service's Williamsport Training Center crew removed and replaced the old sill and the bottom part of the rotted structural members supporting the siding on the northeast corner of the adobe. A major earthquake on October 17, 1989, further widened the cracks in the northeast corner of the adobe, and the severe drought of 1990-1991 probably exacerbated stresses to the structure. As a result of the adobe's deterioration, this Historic Structure Report was undertaken to respond to the need for rehabilitation of the structure to meet seismic and other safety standards.
ARCHEOLOGY
ARCHEOLOGY

RESEARCH METHODOLOGY

Introduction

At the beginning of this project, archival research was conducted to provide the historical background of the building. Because the documentary research produced few details of the adobe’s structural history, archeological research was included as part of the HSR. The archeological research focused narrowly on enhancing and explaining historical and architectural details of the building and the surrounding landscape.

This project was a limited archeological testing program designed to assess the integrity and extent of archeological resources associated with the adobe. Because of the specific research focus and the limited nature of the investigations, the following sections will comprise the formal archeological report for the 1991 archeology project.

Research Design

Significance. Many of the questions about the structural history of the adobe and the significance of various additions to the building remained unanswered following history research and architectural investigations. A combined archeological statement of problem and research design was drafted to identify primary questions and concerns, and to guide archeological investigations.¹ The research design outlined the significance of the adobe as presently understood, based upon its architectural and historical values. That is, the adobe is listed on the National Register as part of John Muir National Historic Site, and is of state significance as a fine example of a California-Mexican style rancho. Architecturally it is one of only a few adobes of this type in public ownership that are still extant in northern California. Its historical significance is derived from the association with the Martínez family of early-day Mexican California, with Dr. John T. Strentzel (known as the “Father of California Horticulture), and with conservationist John Muir. However, because of its location and its association with Muir, the adobe’s intrinsic architectural values and its Hispanic heritage have received less acknowledgment.

Specific Research Questions. A number of questions were posed regarding the construction history of the adobe to help determine how and where archeological tests were placed. For example, did the present fireplace, mantle, and chimney replace earlier heating devices? Did the adobe have a chimney or chimney(s) originally? If so, was it exterior or interior? Where was it located? What materials and technology were used? Was there a fireplace in the second floor space now occupied by a closet? Were there packed earth floors in the building like those found in some early Mexican homes? Are the present doorways and window openings original to the structure? Typically, Mexican adobe houses did not have windows on the upper end walls; the adobe presently has two upper windows flanking the chimney on the north end. Stylistically (architecturally) features on the south end of the adobe suggest a twentieth century remodeling project. Was there an earlier exterior stair, characteristic of the Mexican period architecture?

The original roof line on the west side of the adobe has been lengthened to cover the present bedroom addition. The hand hewn redwood roof beams evidently supported a porch, lean-to, or ramada along the exterior west wall. What activities occurred in this area? There was a blacksmith shop somewhere in the general vicinity. Could any traces be found of this or other activities?

Archeological testing was designed to answer as many of these questions as possible while avoiding areas of recent disturbance that could diminish integrity of data recovery. Excavation units 91A and 91B were placed immediately adjacent to the chimney and the north wall of the house (figure 1). Because this area had been covered with a concrete sidewalk from perhaps the 1930s until the late 1980s it was hoped that undisturbed strata could provide information relating to the construction history of the chimney and the north wall of the house.

Excavation of unit 91C (figure 1) was conducted beneath the west bedroom to encompass portions of the probable dripline of the shed roof. The unit was also positioned to reveal the ground surface close to the original part of the house. It was hoped that this excavation would reveal earlier features like exterior entrances, stairways, paths, foundations, or flooring as well as providing clues to the uses of this area prior to construction of the bedroom.

Another test unit (unit 91D) was placed inside the dining room to reveal the ground surface beneath the house (figure 1). This area was excavated to verify whether the adobe originally had dirt floors, to check for the presence of undisturbed pre-1849 deposits, and to gauge the extent of previous remodeling efforts.

Because John Muir National Historic Site maintains an active horticultural program, and because there are many questions about what sorts of plants and landscaping were used at different periods of the adobe’s (and the site) history, archeological investigations sought retrieval of data on landscape features, plant materials, berms, placement of trees and shrubs etc. to complement history research. Before placement of shovel tests around the periphery of the house, historic and modern site maps, photographs, and data were reviewed and the ground service in the vicinity of the house was examined. The tests were strategically placed to try to encounter historic landscape and structural features while avoiding modern disturbances. Samples of the brick, concrete, and mortar used in the various landscape features were saved and identified as to probable general period of manufacture where possible.

Field Work Methodology

Introduction. Before the beginning of field work, details of the adobe’s historical context, structural problems, proposed architectural investigations, and possible engineering solutions were analyzed by the project architect, landscape architect, archeologist and engineer, and a research design (see above) was developed.

Past archeological work at the park was also reviewed. Surveys of land adjacent to the adobe were conducted in 1965, 1967, and 1968. Other than historic refuse deposits found in cultivated areas near the house, archeological findings were generally negative. Karen Lundquist and
Marion Riggs re-inspected the site in August, 1974, reporting that heavy and continued cultivation of the areas southeast and east of the adobe had scattered the historic deposits.²

In June, 1975, Roger Kelly and Cindy Orlando conducted archeological investigations beneath the south porch of the adobe.³ This work was done in conjunction with architectural preservation work on the first floor kitchen and the south porch. No well defined strata were found, although the upper 10 centimeters of earth were looser and less compacted than deeper soils. The recovered artifacts included faunal remains (mostly domestic animal bone), hardware and building materials, and a few isolated household artifacts and children's toys. Most of the assemblage was thought to post-date 1940, although a few items suggested an early 20th century occupation. Kelly's excavations also revealed the unshaped blocky pieces of sandstone that make up the south foundation wall of the adobe.

Kelly later developed an archeological sensitivity map for John Muir National Historic Site.⁴ In this brief summary, he indicated that materials found in the immediate vicinity of the adobe appear to be early 20th century items related to the Martínez Adobe occupants. Scattered historic materials of unknown original origin were found in the plow zone east and south of the adobe.

During excavations for a sewer project in 1976, a number of artifacts, including old nails, broken glass, china, and a couple of obsidian chunks were found in the shallow trenches south of the adobe.⁵ Cindy Orlando, the archeologist monitoring the project, concluded that there the recorded deposits had little apparent historic significance because natural erosion and prior construction had destroyed evidence of any previous assemblage or grouping. She also suggested that the obsidian may have been introduced by Muir or the park in their Environmental Living Program, "as prehistoric finds are rare in the area."⁶ Other surveys done for special park projects (moving the carriage house, installation of the windmill, etc.) appear not to be relevant to the excavations at the adobe.

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² Information from a file maintained by former Regional Archeologist Paul J. F. Schumacher documents several visits to the park. On January 12, 1965, "Schumacher, Sager, and Rackerby visit John Muir House and Adobe and check grounds for Indian sites." Two years later (11/14/67) "Lundquist and Riggs visit site, search for Indian materials; nothing found." Archeologist Schumacher revisited the adobe on February 13, 1968 with C.E. Holmes "re: pencapsula presentation." No other information was available on these early surveys.

³ Kelly, Roger E., Archeological Investigations Under the South Porch, Martínez Adobe, John Muir Historic Site, Martínez, California (San Francisco: National Park Service), 1981.

⁴ Roger Kelly, Sensitivity Maps for Historical Archeological Resources; John Muir National Historic Site and Eugene O'Neil National Historic Site, California (San Francisco: National Park Service), 1981.

⁵ Memorandum from Cindy Orlando to Regional Archeologist, Western Region, 16 November 1976. On file, Western Regional Office, NPS.

⁶ Ibid. However, it should be noted that a partial metate was found in Franklin Creek by a member of the park staff. Herb Thurman, personal communication, June, 1991.
Field Work. During the week of May 12, Carpenter Dan Brown from Golden Gate NRA removed sections of flooring, wallboard, and siding from the adobe to allow investigations beneath the floor and to facilitate examination of the structural elements. Small sections of wood flooring in the first floor west bedroom at the north end wall, and in the closet at the south end of the bedroom were removed. Flooring was also removed in the northeast corner of the dining room; the door sill between the living room and the west bedroom was taken out; and siding was removed from the northeast exterior corner of the adobe. Photographs and/or drawings were made of these areas.

Once these hidden surfaces were uncovered, it became necessary to revise excavation strategies for the interior of the house. Originally the research design proposed excavation of a trench running parallel to the long axis of the house, beneath the floor of the west bedroom. However, this was not feasible because the tongue and groove flooring had been laid on joists which were closely spaced at 6-inch intervals. The east-west joists were in turn supported by north-south sleepers which rested directly on the ground surface. These flooring elements effectively blocked access to the ground surface; their removal was not feasible.

Instead, archeological investigations were conducted beneath the floor in the west bedroom closet, and in the northeast corner of the dining room. Detailed measurements were taken of the chimney and the fireplace, and drawings were made of the chimney. Linoleum in the upstairs north bedroom closet was rolled back, revealing 1920s newspapers addressed to a former occupant. These papers were inventoried and removed to park museum storage. Oral histories were done with former residents of the adobe (Claude Greerty and Jack DeGraff), and with descendants of the Martinez and Muir families (Carmel Grace Martinez, Anne Tennant Protopopoff, and Sherri Hanna).

Between May 13 and June 12, 1991, archeologists Diane Rhodes, John Vittands, and Marsha Babcock excavated four test units and four shovel tests in and adjacent to the Martinez Adobe (figures 1, 2, and 3). Placement of the test units and shovel tests was designed to maximize recovery of information related to the structure and to avoid areas of previous disturbance.

Test units 91A and 91B, each measuring 5.0 feet square, were placed immediately adjacent to each other at the base of the chimney along the north wall of the adobe (figures 1 and 2). Unit 91C, measuring 2.50 feet by 1.55 feet was excavated beneath the closet floor in the west downstairs bedroom (figures 1 and 2). Another similar unit (91D) was dug beneath the northeast corner of the dining room, and extended 3.20 feet by 1.16 feet. Four-1.5 foot square shovel tests were placed at strategic spots around the adobe (figure 1). The size of the units dug inside the house (91C and 91D) was limited to the area of the ground surface that could be readily accessed between the floor joists and the sleepers.

Although it was planned to dig the excavation units stratigraphically, the color and texture of the adobe clay soils remained remarkably consistent throughout all levels. Changes in soil density appeared to be related to recent disturbances and could not be used as a guide to strata. Therefore, the units and shovel tests were excavated in arbitrary 6-inch (.5 foot) levels. The units were divided into four quadrants, and soils from each level in each quadrant were screened separately, and artifacts were bagged in a corresponding manner. The excavation units were dug by trowel, and the shovel tests by shovel, trowel, and auger. The natural slope of the ground was maintained in each of the units throughout all levels. Large tree roots were found in excavation units 91A and 91B. The larger roots apparently belonged to an adjacent live tree, and were not removed. Smaller roots were cut away to allow excavation. Soils that had been
Figure 1: Location map, archeological investigations, Martinez Adobe, John Muir National Historic Site, Spring 1991.
Figure 2: Soil profiles, units 91A and 91B and feature 91-A-1.
Figure 3: Soil profiles, unit 91C.
disturbed recently by excavation of a skunk barrier along the exterior of the north foundation wall were screened separately and artifacts bagged separately.

Each arbitrary level was numbered sequentially from ground surface down. Features and artifacts were given a unique number related to the unit(s) in which they were found. The top of each unit level was mapped and photographed prior to excavation. Written records were kept for each unit on forms devised for Denver Service Center archeology projects. At the base of the excavation units, measured drawings were made of all four profiles. Black and white and color photographs were taken of features, all four profiles, and the base of the unit. Because of space limitations, a 28 mm lens was used in most of the photographs.

All engineering, landscape, and architectural measurements were taken in feet and inches. All measurements documenting site levels, features, and artifacts were made in feet and tenths of feet. Fixed points with measured elevations that had been identified on the topographic survey map were used as datum points (figure 1). The datum for units 91A and 91B was established at the base of the northwest corner of the chimney. Units 91C and 91D used existing floor joists at the northwest corner of the floor opening as a datum. Shovel test STP-1 was measured from the concrete extension at the southwest corner of the storeroom. The drinking fountain served as a datum for STP-2 and STP-3. Shovel test STP-4 was measured from the established elevations at the northwest corner of the ramada.

The extremely dry compacted soils made it impossible to dig with a trowel so the area was wet down as necessary with a light spray of water. Most of the excavated soils could be dry screened, but some areas required water screening to facilitate artifact identification.

Excavated materials were screened through 1/4 inch mesh, and artifacts recovered from the screens were bagged by quadrant and by level. All cultural material, including shell, bone, seeds, and plant materials, was collected except for crushed gravels, which were sampled. Soil samples were collected from each level of the test units. The soil was allowed to dry before it was analyzed for Munsell color, texture and particle size. Terminology used for the range of dimensions for sediments (i.e. cobbles, pebbles, etc.) generally conforms to the Tyler Scale of Grades of Clastic Sediments.

Laboratory Methodology. Artifacts were cleaned by dry brushing or washing and were sorted, inventoried, and labeled in a field lab. Construction materials including brick fragments, mortar, concrete, and mineral coated roofing were analyzed, weighed, and recorded in the field. Representative samples were taken from each type of material and from each provenience. These samples and the rest of the artifacts were packaged and, along with the soil samples, shipped to the Denver Service Center for further analysis and archeological cataloging. Cataloging was done using a dBase III+ inventory and analysis program compatible with ANCS. Artifacts were given a unique number composed of locational data and a discrete artifact number. Wherever possible during the cataloging and classification process, the manufacturing date and place, and the probable artifact function were identified. If they could not be identified, the artifacts were

7. See Rhodes, Statement of Problem, addendum.
described for future reference. Generally, artifact classification followed the format set out in a report done for archeological investigations in Skagway, Alaska. Following project and report completion, the artifacts will be stored at the park.

ARCHEOLOGICAL CONTEXT

Geology and Soils

The Alhambra valley is bracketed by faults. The Franklin Fault, which runs in a generally northern direction, is a short distance west of the site. The probable southward extension of the Southampton fault runs parallel to and is near the north-south Pleasant Hill highway. The Vine Hill Fault is also poorly defined but probably loops south and eastward up the valley from the vicinity of Muir Station. The Muir Fault runs northeast-southwest a short distance north of John Muir NHS.

The geology of the Martinez area includes Paleocene and Eocene formations. Several thousand feet of Cretaceous and Tertiary marine sediments are exposed along the north and south sides of Carquinez Bay; formations are also exposed along both sides of the foothills east and west of Alhambra Creek. The sandstone cobbles used in construction of the Martinez Adobe foundations may have come from any of these sources, or even from Franklin Creek.

Soils in the valley near the Martinez Adobe are in the Botella Series which consist of "moderately well drained and well drained soils on alluvial fans and flood plains." These soils are formed from sedimentary rock in alluvium. The dark gray acid clay loam and silty clay loam may extend to depths of more than 60 inches, and permeability is moderately slow.

To the west of the adobe are the Los Gatos series. These well-drained soils lie over interbedded sedimentary rock. Chiefly light clay loam, they are moderately acidic, and shallower than the Botella Series.

Descriptions of Stratigraphy and Features

Test Units. As mentioned in the earlier section on methodology, the color, texture, and particle size of undisturbed soils throughout the units were remarkably uniform. Observable differences among units and/or levels (i.e., slight changes in color and density, organics, and


10. Weaver, 1953, plates 2C and 2E.


12. Ibid., p. 31-32.

13. Using a Munsell soil chart and dry soils, the color was determined to be dark brown, 10YR, 3/3.
scattered native sandstone pebbles) were related to previous disturbance of the area. Disturbance was due to recent human and rodent activities, and to the presence of tree roots--both live and decayed (figures 4 and 5). Disturbed soils contained clods of adobe in a less dense matrix. Soils were a fine adobe clay throughout.

During excavation of units 91A and 91B it became apparent the area around the chimney had been heavily disturbed during the recent past (figure 2) but excavation was continued to sterile soils to ascertain that no intact deposits lay beneath the disturbed zone (figure 6). Most of this disturbance was related to human activities during the recent past. During the 1980s topsoil had been removed and/or replaced to channel drainage away from the building, and for landscape plantings. Removal of the sidewalk which formerly covered most of this area left large chunks of concrete in an uneven disturbed context. About six feet away from the north wall of the house, an irregular hole or trench, possibly related to drainage problems, had been excavated.

This disturbed area, backfilled with broken chunks of concrete and rocks, was visible in the northeastern corner of unit 91A (figure 2).

A former water line, parallel to the north wall of the house, extended from the handicapped walkway northwest of the building to the roadway in front. This line bisected the northernmost quadrants of units 91A and 91B about 4.5 feet from the house. The pipe, originally buried just under the ground surface, had been removed by the park in January, 1991, and the shallow trench backfilled.

A 1-foot to 1.5-foot deep trench had been dug immediately adjacent to and along the north wall foundation (figure 2). Wire netting was buried in the trench and anchored to the house to discourage skunks from digging beneath the structure. Rodent burrows and large tree roots, both living and dead, criss-crossed the entire area.

Figure 4: Plan view of unit 91A and feature 91-A-1.
Figure 5: Plan view of unit 91B and feature 91-A-1.

Figure 6: Ground surface of units 91A and 91B before excavation.
Apparently, drought conditions had also contributed to the mixing of deposits. Large cracks—now filled in—were visible in several places along the wall profiles (figure 2). Pieces of window glass and wire nails were found in a vertical position at the base of unit 91A. These artifacts were found along the center of a filled-in crack in otherwise sterile soils. In the lower levels of unit 91C, several wire nails were found in a vertical position.

Feature 91-A-1, which includes both the pre-1900 chimney base and the present chimney, extended along the south edge of units 91A and 91B (figures 2 and 7). The chimney base, which was buried just below present ground level, is slightly off-center from the present chimney (figure 7). It is obvious from the different construction materials and techniques that the chimney and the base were built at different times by different people. The base is built of three courses of hard red-orange bricks laid in lime mortar in a random pattern that apparently allowed the builder to avoid cutting any of the brick. The joins between the bricks were poorly pointed, and the spacing is somewhat uneven.

The present chimney is slightly offset on the old base, and is built of hard red-orange bricks measuring .70 by .33 by .21 foot each (figures 2 and 7). Unlike the base, the present chimney was skillfully done. The bricks are laid in a 1/3 running bond pattern, and have been cut to fit where necessary. The mortar is of fine and coarse sand and Portland cement. The newer chimney was probably offset to position the chimney and fireplace directly over the previous window opening.

Unit 91C was excavated inside the house, beneath the west bedroom closet floor (figures 1, 3, and 8). Although this area had been covered over for perhaps 50 years, it had been badly disturbed by rodent activities. The ground surface just beneath the closet floor was covered with leaves, bits of construction material, bones, and rodent feces. Skunk tunnels criss-crossed the area, leaving gaping holes and mixed strata.

An 8-foot wide concrete pad was discovered beneath the west bedroom floor at the top of unit 91C (figures 3 and 9). This concrete was fine-grained, lacked large gravel inclusions, and had been poured in wood forms. It was designated feature 91-C-1. Although its exact length could not be determined, the concrete floor extended southward at least to the south closet wall and northward at least to the doorway into the living room. Judging by the length of the original hand-hewn redwood beams above this area, the west edge of the slab ended at the dripline of the original shedroof.

The function of another feature (91-C-2) in this same unit is unknown. This feature (figures 3 and 10) consisted of native sandstone cobbles dry laid along and below the edge of the concrete slab to a depth of about 1.5'. Because of rodent tunnels among the rocks, it was impossible to determine whether there had been a builder's trench, or if so, its extent. It is possible that these stones were put here to improve drainage below the original dripline of the roof, or placed beneath a down spout. Or, they may have been part of an earlier feature of unknown origin and use. Along the west 1/3 of the unit, the stalks of several dead plants were found on the ground surface.

Although unit 91D had been disturbed to a lesser degree, there were still traces of rodent activity. Virtually all of the artifacts were concentrated on the surface and in the upper 6" of the unit. There was no observable strata in this unit.

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14. A nail and a small piece of glass were found near the base of the unit but were, apparently, from the sidewall.
Figure 7. Section drawing through the base of the existing chimney.
Figure 8: Plan view of unit 91C and feature 91C-1.
Figure 9: Photograph of feature 91-C-2 (concrete slab) beneath the west bedroom addition.

Figure 10: Photograph of feature 91-C-2 showing dry laid native sandstone cobbles.
Shovel Tests. Shovel test 91-1 was placed in a relatively undisturbed location close to an area where excavations by the park staff had turned up a variety of historic artifacts. The top 4 or 5 inches of this shovel test consisted of disturbed fill over a grey crushed gravel layer that may represent an old driveway or path. Below this gravel lay a 6-inch deep pile of broken glass, ceramics, and other domestic and structural materials. This assemblage appears to be part of a broader dump area.

Testing near the southeast corner of the addition to the adobe (shovel test 91-2) was done to test for traces of an earlier structure shown in historic photographs but which has never been located or mapped.

Shovel test 91-2 contained a number of artifacts in a mixed context. An unmapped cast iron pipe (circa 5-6 inches in diameter) was intersected at about .5' below ground surface along the south side of the test. Disturbance in this test was probably related to excavation for the pipe, and to gardening activities. The soil was very moist from the surface down to the base of the test (about 3.5 feet below present ground surface.) This moisture appeared to be coming from the pump which is located uphill and to the southwest of the test.

Because the ground surface west of the adobe is quite a bit higher than the adjacent roadway, it appeared that fill had been brought into this area. Shovel test 91-3 was dug into the raised area – away from known subsurface utilities – to determine if old ground surfaces were present beneath fill soils. This test also sought to locate features associated with an earlier structure thought to be in this general vicinity.

Shovel test 91-3 was dug through mixed fill, reaching an undisturbed ground surface about a foot below the present surface. This shovel test was almost sterile—the only artifacts were a handful of cut nails found on the old ground surface. The test was extended to a little over 3 feet using an auger but no more cultural materials were found and the soil appeared to be completely undisturbed.

Shovel test 91-4 was excavated south of the adobe addition, beyond the sidewalk and retaining wall. Numerous artifacts, including both domestic and structural items, were found here. However, the area had been badly disturbed by plantings and the artifacts were mixed, with both modern and historic materials in lower levels. The previous ground surface could not be distinguished even though the test was dug to about 3 feet below present ground surface. Shovel test 91-4 was dug behind the retaining wall to determine if there were undisturbed deposits beneath the imported fill. This test was also located in the vicinity of earlier landscape features and farm structures.

Summary and Conclusions

The original strata in all the tests and units has been disturbed except in shovel tests 91-1 and 91-3. The dump found in shovel test 91-1 has a nice assemblage of late nineteenth century artifacts that had been covered over by fill sometime during the 20th century.
DESCRIPTION OF ARTIFACTS

Introduction

The 1991 excavations at the Martínez Adobe uncovered a variety of artifacts representing several time periods and a number of different functions. Where possible, the artifacts were classified by function, using a system devised by Catherine H. Blee. Fifteen broad artifact groups were defined: Structural, Domestic, Personal, Activities, and Unclassified. Within each of these functional groups, artifacts are further subdivided into more specific classes such as structural materials, hardware, food serving, and so on. These categories are fairly self-explanatory but for further description and definition the reader is referred to reports on the Klondike Gold Rush.

Because all of the tests except perhaps shovel tests 91-1 and 91-3 were disturbed and had mixed deposits, artifacts from all levels of the units and tests were combined in the summary tables (tables 1-9) and in the following discussions.

Artifact Analysis

Structural Artifacts. This group of artifacts includes three classes: Structural Materials, Hardware, and Utilities. The Structural Materials class includes a long list of building materials (table 1). Most of these materials are not diagnostic, and have changed very little in form or function since the turn of the century.

Structural Materials. Large quantities of masonry products found in units 91A and 91B included lime and portland cement mortar, lime and concrete waste products, parts of the former concrete sidewalk, and pieces of what appeared to be a pink tinted, preformed concrete drain. The matrix of the pink tinted preformed concrete was sandy and fine-textured. Generally the pinkish-red tint extended throughout the piece, although occasional pieces have a grey interior. In profile these pieces of concrete are somewhat like an elongated triangle with one side indented. These "tiles" apparently functioned as a drain along the edge of the walkway to channel water away from the patio and west bedroom vicinity.

The exact installation date of the patio and sidewalks around the adobe is unknown, but apparently they were installed during the Parsowith era. The section of walk that ran along the north side of the house was removed by the park in 1989, leaving behind numerous chunks of red tinted concrete. This debris was mixed into the soil by later disturbances, and was encountered during excavation of units 91A and 91B. This concrete contained large inclusions of grey and white chert pebbles (some up to 2" in length), in a grayish tan sandy Portland matrix. Although faded by the sun, it is apparent that the top 3/16 inch of concrete had originally been colored a dark red. A sand coat had been added while the colorant (probably paint) was still damp.


The Portland cement mortar fragments found in the excavations appear to be the result of pointing waste from chimney construction. These bits of sandy tan-grey mortar had only a few small inclusions.

During the cataloging process, attempts were made to separate the plaster, lime mortar, lime waste, and other similar products and catalog them separately. This was not feasible because of the numerous combinations of products found, so all the lime-based masonry products were lumped into one category. The grayish-white lime mortar was very fine-grained and contained sand and tiny pieces of shell. It was badly deteriorated. This mortar probably came from demolition of the previous chimney.

The excavations uncovered occasional pieces of exterior and interior lime plaster, some with adobe mud visible on the reverse side. A few nodules of pure lime found in the tests may have been waste or may have occurred naturally in the soil. Spalled pieces of plaster stucco were observed in tests both inside and outside the house.

The wall around the patio and the retaining walls south and west of the adobe contained a variety of used brick (appendix A, following this chapter). Judging by the manufacturing dates of these brick, the wall postdates 1920. The chimney, thought to have been built around 1914, is of hard red-orange bricks measuring .33' by .20' by .70'. Because the broad face of these bricks is hidden beneath the mortar, their method of manufacture could not be determined.

The base of the chimney (feature 91-A-1) is constructed of hard orange bricks measuring .33' by .22' by .70'. These bricks appear to have been manufactured using the stiff-mud technique. Faint curvilinear lines are across the face of the brick, marking the path of the wire used to cut the brick mud. This brick and that used in the present chimney both have smoothed sides and ends.

A total of 633 pieces of brick, some bearing lime mortar, were found in units 91A and 91B (table 1) and represent three or four different brick types. Some of these fragments are very similar to the bricks in the present chimney base, and were manufactured using the stiff-mud process. The interior of the brick is very hard, and has few inclusions. The paste has a contorted look, and fragments are rough and highly irregular in shape. The sides are smoothly finished as if washed; the sides show the pull marks where the cutter drug across the stiff brick mud, pulling small imperfections with it. These excavated brick fragments may have been from an earlier chimney, they may have been discarded during construction of the present chimney, or they may have been associated with some other landscape feature.

Small pieces of what appear to be a much older brick were also found in this area. These soft orange brick fragments have a very smooth, uniform paste, with occasional shell inclusions (table 1). They appear to have been sand-struck. That is, during the manufacturing process, the wooden molds were dampened, then sprinkled with sand. Clay was forced into the molds, compacted, trimmed, and then dumped out of the mold in the drying yard. These brick fragments closely resemble the type used in building the original state capitol building in Benicia, dating to the

18. Ibid., p. 16.
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Table 5: Artifact Summary, Personal, Unclassified, and Prehistoric Groups
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Table 9: Summary of All Artifacts
clear whether these bricks came from an earlier chimney, a walkway, or some unknown landscape feature.

Fragments of a coarse, tan firebrick with a smoothed face were also found in the units adjacent to the chimney. These appear to be remnants of the brick used in the current fireplace.

Small pieces of milled wood appeared in several of the tests. Mostly short trim pieces, these artifacts probably had been cut away while fitting the board or woodwork in place. Milled wood fragments included pieces of identifiable items like flooring, redwood paneling and siding, cedar shingles, and wooden pegs.

Numerous pieces of red mineral coated roofing on a black backing were found in units 91A and 91B (table 1). A folded piece of the same roofing was used as a shim beneath the west bedroom floor sleepers and feature 91-C-1 (figure 3). Occasional pieces of black and white mineral coated roofing appeared in the excavations. This roofing may have come from the 1970s roof repairs or from earlier roof patching projects. It is thought that the red mineral coated roofing was installed sometime during the Parsowith ownership of the house. This roofing was still in place when the adobe became part of John Muir NHS, but has since been replaced with a wood shingle roof.

So far as could be determined, the majority of the paint chips found in the excavations were oil-based paint in red, white, and bright blue. The red paint probably came from the painted patio and sidewalks, the white from the outside wall of the adobe, and the bright blue from the trim paint used in the 1960s.

Most of the window glass was found in units 91A and 91B (tables 1 and 2). Forty-six percent of the glass was 5/64 inch thick, and 42 percent was 4/64 inch thick. Although the sample is too small to attempt to correlate glass thickness with date of manufacture, these thicknesses and the condition of the glass suggest a fairly late date, probably 20th century.

Several artifacts date to more recent times. The spray foam insulation was used in the recent past to repair holes in the siding of the adobe along its north side. The fragment of aluminum screen also dates to at least the 1950s.

**Hardware.** Nails found in the excavations ranged in size from 3d to perhaps 50d, and a little less than one and a half times as many wire nails were found as cut nails. Types of nails include roofing nails of several sizes, common nails, and occasional finishing nails. Those found in shovel test 91-3 were all cut nails of the same size, suggesting that they were deposited together. Approximately one-third of the nails were bent, suggesting discard—either while building or during demolition.

Only a few other artifacts in this class were found in the 1991 excavations. Items include several screws, miscellaneous fasteners, a handle, and a metal plate.

**Utilities.** An occasional clinker and a few pieces of coal were found in the excavations, along with a number of pieces of charred wood, suggesting that wood may have been the primary fuel used during part of the adobe’s lifetime.

A cream-colored porcelain insulator much like several of those found inside the house was discovered in unit 91B, level 1 (figure 11). Just above the central opening are the raised letters:
P.P. [or R]jig. 5 1/2, followed by the word "ALLIGATOR" below. The base has a cross-hatched pattern surrounding the central recessed aperture. This insulator probably dates to the first half of the twentieth century, but the precise date and name of the manufacturer have not been determined.

Several pieces of a heavy aqua glass insulator were found in unit 91B (figure 12). It is a single petticoat signal threaded style, lacking beading around the base. On the top of the insulator is an embossed "0" with a raised line below. On the side above the groove for the tie wire are very faint embossed letters. They appear to read: "B E C D R F I E L D." Below these letters is a second row of embossing: "L I F S T." which is in turn above the letters "V. Y." This manufacturer and date is as yet unidentified. The size of this insulator suggests it may have been used for electrical lines. Similar insulators are visible in a photograph of the adobe taken early in the 20th century (figure 6 in the History chapter).

A wedge clamp (a mechanical holding device) used on electrical Unes was found in unit 91B (figure 13). Wedge clamps consist of three pieces—the wedge, the bail, and the shell. The bail or loop attaches to an "eye" bolt on the power pole or to the building. The electrical wire is attached to the wedge inside the sliding shell on the other end. The sagging tension of the electrical wire pulls the slide forward, causing the wedge to grip the wire. This device has been in use circa 45 years.\(^\text{19}\)

A small colorless glass rod with a darkened, flattened end (table 7, figure 14) was found in level 2 of unit 91C. This artifact appears to be a support rod from the interior of a tungsten filament electrical light bulb. The tungsten filament would have been attached at the flattened, darkened area at the top of the rod.

Grey crushed gravel was encountered in two of the shovel tests south of the adobe (table 1). This gravel was apparently used for a driveway or path.

**Domestic Artifacts.**

**Food Serving.** Most of the ceramics found during the excavations were undecorated whitewares (table 3). The remains of several whiteware (white earthenware) dinner plates, a pitcher handle, and other miscellaneous pieces were found in level 2 of shovel test 91-1 and in unit 91B (figure 15 and table 3). These sherds have a white paste with a clear glaze. Whitewares have a long period of production from 1820 to present, but this pattern appears to be very similar in design to a style advertised in the Sears, Roebuck and Company catalog for 1902. The Sears' "Adelphi" dinner set (100 pieces for $7.75) was made by W. H. Grindley & Co., Tunstall, England. It was described as

\[
\text{a pure white with a brilliant glaze. Every piece modeled in beautiful outlines. The ware}\]

\[
\text{is embossed with a dainty scroll design which has heretofore been the distinguishing}\]

\[
\text{feature of Haviland china.}\]


Figure 11: "Alligator" porcelain electrical insulator.

Figure 12: Aqua glass insulator.
Figure 13: Assorted electrical and hardware artifacts.

Figure 14: Glass tube and rod.
Pieces of several other whiteware sets were found in the excavations. Some had similar molded designs but flared rims; others had a simple molded edge trim of dots; and the majority lacked decoration (figure 15).

One small annular decorated (black and blue horizontal lines) whiteware sherd was found in unit 91A. This sort of ware may date from around 1830s to the end of the century. Small sherds of blue transfer printed whiteware were found in units 91A and 91B. The design was a floral geometric on the face of the sherds which probably came from a plate or saucer (figure 14). A large whiteware handle found in shovel test 91-1 had molded lines and traces of gilt trim (figure 15).

A tiny, hard white-ware sherd and a small handle, both trimmed with a fine gilt line, may both have come from the same set of dinnerware (figure 15). Many of the whitewares and semi-porcelains described in turn-of-the century catalogs had a gilt trim; these were generally floral decorated and were sometimes more expensive than the plain whitewares.

The term "semi-porcelain" is often used for wares that are thinner, whiter, and finer than utilitarian ironstones commonly called "hotel ware." However for purposes of this report, both wares have been lumped together under the heading "semi-porcelain."

A base sherd from a semi-porcelain bowl bears the words "JOHNSON BRO... ENGLAND" beneath a curvilinear hatched design (figure 16). This mark is known as the "crown and circle"

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and belongs to the Johnson Brothers Pottery, Great Britain, established 1883. The word "England" was added to pottery marks from 1891. The piece is undecorated, and appears to be the sturdy undecorated ware common in the latter part of the 19th century and known as "hotelware."

Other semi-porcelain sherds and whiteware sherds found in the excavations were either undecorated, or had a molded curvilinear design. Judging by their shape and thickness, these sherds were from a range of dinnerware items, including plates, platters, cups, bowls, saucers, and pitchers.

A few fragments of porcelain were found across the site (table 3). Among these were tiny sherds of blue underglaze decorated ware. These appear to be "Chinese Export" porcelains, thick-bodied wares with a granular grey-blue to white paste, decorated in a hand-painted underglaze blue design of a Chinese motif (figure 16). Several pieces of undecorated porcelain with molded holes were found in shovel test 91-1, level 2 (figure 17). These sherds probably came from the interior of a tea pot near the base of the spout. Other fragments of undecorated, thin, white porcelain were found in the same area but belong to another vessel.

One decorated porcelain piece apparently had been part of a tureen (figure 18). The floral decoration appears to be an underglaze decal of pink roses with green leaves, blue and green streamers, and green and red wreaths; the rim is decorated with a narrow gilt trim.

Several sherds of what may have been a hand-made bean pot were found in level 2 of shovel test 91-1 (figure 19). The cream-colored earthenware paste is somewhat coarse in texture, but the product is hard and fairly vitreous. The interior is unglazed; the exterior has a shiny, randomly patterned slip and glaze of tan and dark brown with splotches of white.

Several pieces of a yellowware bowl trimmed with a blue band trim were found in the excavations (table 3 and figure 19). This heavy crockery may have been used both for food preparation and food serving. Yellowware has a yellowish tan paste, transparent glaze, and is often fired at low temperatures. It was frequently used as kitchenware. Some authors indicate that the generally accepted manufacturing dates for this ware are circa 1830-1925. Yellowware with an annular decoration was generally produced between 1840 and 1900.

Some of the colorless glass sherds found in the excavations appear to have come from serving dishes or pitchers. One of these had a fine curvilinear design etched into the glass. There were a number of heavy glass tumbler fragments in shovel tests 91-1 and 91-4. These tumblers had

Figure 16: Semi-porcelain base sherd with Johnson Brothers crown and circle mark.

Figure 17: Assorted porcelain sherds.
Figure 18: Porcelain tureen fragment.

Figure 19: Assorted stoneware and earthenware sherds.
a starburst pattern impressed into the base. Some had plain rims; others had a narrow impressed linear band with vertical line trim a short distance below the edge of the rim.

Very few pieces of amethyst colored glass were found in the tests, suggesting that most of the colorless glass found on the site postdated World War I. Several pieces of amethyst glass from shovel test 91-1 appear to have been from a large pitcher.

Beverage Storage. Assorted sherds of amber, olive green, light green, and "black" glass were found throughout the excavations in relatively small numbers (table 3). These sherds were probably from beer, wine and other alcoholic beverages. A wine bottle seal, bearing an embossed design of a bunch of grapes and the words "JULIEN MEDOC" was found in unit 91-B (figure 20). This wine probably came from the Medoc region of France.

A portion of a bitters bottle was found in unit 91 (figure 21). The embossed lettering on this amber sherd reads: "LANTAT.../ X / BITT" The maker of this product has not been identified.

In Unit 91B close to the surface was found a large amber liquor bottle sherd bearing the raised letters "CONT... BO.." (figure 22). This logo has not been identified as to maker, place, or date.

A partial bottle base of dark amber glass found in unit 91B was embossed with the letters "B & G" above the numeral 1 (figure 23). This bottle may have been made sometime between 1881 and 1905 by the Streator Bottle & Glass Co. of Streator, Illinois. It was probably used to hold beer or some other alcoholic beverage. 26

Several ferrous, pressed cork-lined crown caps came from the tests. A skirt depth of .30 inches suggests they predate 1955. 27 An earthenware sherd that appears to have been part of a jug was found in unit 91A. This thick sherd has a shiny dark brown glaze on both sides (figure 18).

Food Storage. A number of pieces of colorless and aqua glass were found in the various tests (table 3). Several of these were embossed but most were so small that the lettering and designs could not be identified. One sherd from the surface of unit 91C bore the embossed letters "A C" above "L. L &" but has not been identified as to maker or date. Most of the aqua sherds appear to have been from canning jars. A small fragment of a colorless glass canning jar lid was found in the upper levels of shovel test 91-2.

Food Remains. A number of animal bones and vegetal materials were recovered from the excavations. Most of the faunal material came from units 91A and 91B and shovel test 91-4. The majority of the plant materials were found on the ground surface and in the upper levels of units 91C and 91D. Analysis of these materials revealed that a number of these "food remains" exhibited evidence of human use or consumption. However, virtually all items lacked good provenience due to the disturbed nature of the deposits. In addition, it appears that many of the items found beneath the house (on the ground surface and in upper soil levels) may have been imported by rodents in the recent past. For these reasons, no detailed discussion of the floral and


Figure 20: Wine bottle seal, "Julien Medoc."

Figure 21: Bitters bottle sherd.
Figure 22: Embossed amber sherd "CONT.../BO...."

Figure 23: Embossed base sherd, Streater Bottle & Glass Company.
faunal remains will be included here. Instead, basic data are presented in tables 4 and 6 and appendices B and C, following this chapter.

**Macrofloral and Pollen Analysis.**

Two adobe bricks from the structure were also analyzed—one for structural characteristics, and the other for pollen, macroflorals, and phytoliths. The analytic macrofloral report is attached as appendix B, following this chapter. This analysis identified a number of species, including grasses, composites, sagebrush, conifers, and other plants. Abundant Festucoid phytoliths suggest the presence of grasses that prefer moist locations and grow during the cool season. No doubt many of these plant materials (especially the grasses) were incorporated into the adobe to strengthen and temper the adobe mixture. Other plant materials may have been present in the soils from which the adobe was taken or in the water used to mix the adobe.

It is logical to assume that the adobe was made on-site; analysis of the adobe brick appears to substantiate this assumption. No archeological evidence was found to document the location of the borrow source although it is suggested that the borrow pit may have been close to the creek where water was easily accessible. The presence of bulrush seeds and grasses indigenous to moist areas in the samples would further bolster this assumption.

Of the numerous plants identified in the analysis of the adobe brick, only one—Phoenix or date palm—was definitely not native to the area. This pollen may have come from date palms introduced onto the ranch by the Mexican settlers. It is also possible that the pollen was brought in with imported dates, or as palm leaves used in religious ceremonies (Palm Sunday observances), basketry, or shipping materials. According to historical records, date palms were introduced into the San Diego area as early as 1769. These plants were brought in by Father Serra for church "ceremonial purposes."28

It should be noted that the pollen lists (appendix B, following this chapter) include common plant names. These listings are not meant to be all inclusive but were included as illustrations of the family type. For example, Rhus radicans/integrifolia (appendix B, page 5, following this chapter) includes poison sumac and poison oak as well as poison ivy.

Unfortunately many of the items could not be identified beyond the family or genus level. However, aside from the date pollen, the list of pollens, phytoliths, and macrofloral remains found in the adobe sample appears to be consistent with present day native plants found in uncultivated areas near the adobe.29

The presence of "carbon balls" was noted during the analysis. These carbonized particles were about the size of Chenopodium seeds and probably result from natural processes in the soil, including heat and fungus. However, little is known about their source or development.

**Pharmaceutical.** Only a few items in this class were found in the excavations (table 4). The upper parts (neck and finish) from two colorless glass bottles were found in shovel test 91-1 (table 7

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28. Diane Rhodes, telephone conversation with G. Douglas Barbee, Senior Plant Taxonomist, California Department of Food and Agriculture, Sacramento, January 9, 1992. For further discussion of changes in vegetation and the cultural landscape, see Cultural Landscape History.

and figure 24). This type of finish (shaped with a lipping tool) was commonly used with a cork stopper for patent medicine bottles. The rest of the items included in this class were generally non-diagnostic, although several aqua and clear glass panelled fronts from medicinal bottles were found in the excavations.

**Furnishings.** A green glass screw-top "ANTROL" bottle was found in level three of unit 91B (figure 25). One side of this "U" shaped bottle is flattened, and there is a hole in the lid. This design allows the bottle to be laid flat so ants can crawl inside to reach the poison bait. The bottle was manufactured by Boyle-Midway, Inc. of Los Angeles and Clifford, New Jersey. This insecticide is still manufactured and sold under this brand name using the same type of bottle.

A number of thin colorless glass sherds were found in the excavations. Judging by their configuration, these sherds were from lamp chimney(s).

**Personal Artifacts.**

**Ornamentation.** Personal artifacts found in the excavations are summarized in table 5. Several pieces of a bracelet were found in the units near the chimney. The bracelet links are of yellow metal plated with white metal, covered with some sort of enamel. Each link is a single stylized block letter, including an L, A, B, E, F, P, and I (table 5 and figure 26). Because some of the letters are missing, the full name or caption has not been determined. Also found in this same area was a tiny white round ceramic bead.

![Figure 24: Prescription bottle finish.](image-url)
Figure 25: Antrol bottle.

Figure 26: Partial bracelet.
Clothing. Unit 91B had a large white metal fastener, probably from a woman's purse (figure 27). A fragment of a white metal hook (hook and eye variety) was found in the adjacent unit 91A. A ferrous metal button found in unit 91B was too badly corroded to identify the pattern (figure 28). A dome-top button with a raised floral design on the face was found on the surface of unit 91C (figure 28). The three-piece button is of yellow metal (on the face) and the back is of ferrous metal; the shank is missing. It closely resembles the small buttons described in Luscomb as gilt buttons, cheaply made and worn on women's clothing beyond the time it was fashionable for men to wear fancy buttons. These buttons postdated 1850. A bone button found in unit 91B is typical of those used on underwear or men's shirts during the late 1800s (figure 29).

Grooming. Pieces of a composition material comb were found in unit 91B, and a fragment of a bone brush was found on the surface of unit 91D (figure 30). Its exact dimensions are unknown, but it was evidently larger than a toothbrush, and may be part of a hair or clothes brush.

Activities Artifacts.

Bulk Storage. Only a few items from this group were found in the excavations, and the majority were anomalous pieces of plastic bag or tape.

Leisure-Time Class. A number of items were connected with smoking, especially cigarette filters (table 8). A small Kaolin or white clay pipe stem was found in level 1 of unit 91A (figures 31 and 32). It has an impressed dotted linear design and the letters "M'DOUGA..." on one side and "GLASGO..." on the other. This logo belonged to the McDougall Company of Glasgow, Scotland, a manufacturer in existence from either 1810 or 1846 until 1967. The interior bore of the stem measures 1/16" in diameter, suggesting a fairly late manufacture date.

Toys and Games. Although it is possible that the tiny red ceramic "marble" found in the excavations had another use, it was assumed that it was at one time part of a toy or a game (table 8 and figure 33) A colorless glass marble with a swirl or heat treated design was found in the same area. A tiny white metal cannon was found in shovel test 91-1 (figure 33). The date of this toy has not been determined.

Unclassified Artifacts. Most of the unclassified artifacts (table 9) were items that had been changed so that their original form could not be discovered. Such items included melted glass and hunks of rusted ferrous metal. Other items were simply too small to identify, or may have had a number of possible original functions. For example, a small piece of embossed yellow metal found in unit 91B was not classified as to function because it could have come from a number of different items, including a candy box, an ink set, an album, and so on. This piece bears the letters " THE FL..." which appear below a floral and geometric edge trim (figure 27). Another item that was not classified was a fragment of a small glass tube (3/8 inch in diameter), found in what appeared to be a rodent burrow directly below the chimney base (figure 23). A circa 1903 glass catalog shows similar items under "Lamp Work—test tubes" but this small tube may have been used for a variety of medicinal or scientific purposes.

32. Putnam, Bottle Identification, 118.
Figure 27: Embossed metal detail and metal snap from purse.

Figure 28: Metal buttons.
Figure 29: Bone button.

Figure 30: Bone brush.
Figure 31: Kaolin pipe stem, McDougall Company, Scotland.

Figure 32: Kaolin pipe stem, McDougall Company, Scotland.
Prehistoric Artifacts. Several possible prehistoric artifacts were found in the excavations (table 9). There were three small unworked chert flakes. A small fragment of a quartzite cobble, ground on one face, was found in unit 91B (figure 34). It appears to have been used as a hand-held mano. Unfortunately the degree of disturbance in this area prevents any meaningful interpretation of this item. While it may have been left by prehistoric peoples living in this area, it also may have belonged to the Martínez family. It is also possible that it was collected by one of the area residents.

Summary and Conclusions

With the exception of shovel tests 91-1 and 91-3, most of the area around the adobe has been heavily disturbed. Thus, only limited conclusions can be drawn from the artifact analysis, and the potential scientific integrity of the area has been diminished.

Comparison of relative numbers of artifacts among units and tests indicates that construction activities account for the majority of the artifacts, and most of these were obviously structural materials associated with the chimney on the north side of the adobe (table 9). Domestic artifacts comprise the next largest group, while activities and personal groups include only a modest number of artifacts. The range of domestic, personal, and activities artifacts is consistent with deposits from a family residence (or residences) rather than a business establishment. In shovel test 91-3, a handful of badly corroded cut nails was found on the previous ground surface. None of the nails were bent, and all were the same size, suggesting that they were dropped or lost at one time. The nails may have been associated with a nearby structure or with construction activities elsewhere on the ranch.
The dump southwest of the house contained mostly domestic artifacts. Although few of the items in shovel test 91-1 could be dated precisely, the presence of lamp chimney glass, prescription finish bottles, semi-porcelain ceramics, amethyst glass, and decal-decorated dinnerware suggest a date somewhere between 1885 and 1925. The dump appears to have been covered over shortly after deposition. It appears the dump was located adjacent to one of the farm buildings away from foot traffic and livestock. These conclusions are based on the location of the dump relative to the adobe, and upon the condition of the artifacts. The glass and ceramics sherds found in shovel test 91-1 were large and in good condition. Similar items from other tests and units were much smaller in size, and were badly scratched or covered with a heavy patina.

It is suggested that more than one household contributed to the dump located by shovel test 91-1, and to the mixed deposits found in the other tests. Considering the relatively modest numbers of ceramic artifacts overall, a rather broad range of ceramic types was found at the site. The ceramic assemblage from the excavations also represents a fairly wide economic range—from the more expensive decorated whitewares and porcelains to the sturdy, inexpensive undecorated hotelware and yellowware utility vessels.

The presence of toys in the deposits suggests that children lived in the household(s) that deposited the trash. When compared to other turn of the century sites, the relative numbers of food and beverage storage artifacts were fairly modest. This could suggest that much of the food was prepared fresh rather than purchased in containers. While no definitive evidence links the deposits directly to the Hanna family or to the ranch hands who occupied the small house adjacent to the adobe, the dates and types of artifacts appear to be consistent with the Hanna era, and with what is known of the economic status of the families residing in this area.
The archeological investigations provided a few clues to former site use. Below the fill soils, shovel test 91-1 encountered a layer of crushed grey gravel marking a former roadway or path. The same layer was found in shovel test 91-4 in a more disturbed context. Previously undocumented sewer and irrigation lines were found during excavations. The presence of several large utility-related artifacts in units 91A and 91B may indicate that fill soils from the vicinity of Franklin Canyon Road (behind the house) may have been deposited adjacent to the north side of the house. No trace of the former blacksmith shop was found in the excavations, suggesting that it and other farm buildings were located some distance away from the adobe.

Questions about the adobe's original chimney(s) remain largely unanswered. Some authors have suggested that the adobe—as originally constructed—may have had two chimneys (one at either end). Examination of the ground surface inside the foundation at the south end of the structure failed to reveal a chimney base or masonry debris connected with chimney construction, so it is assumed that there was no chimney at this end of the building.33

Photographic and archeological evidence suggests that the chimney at the north end of the house has been replaced at least once (circa 1914), and perhaps twice (pre-1885 and circa 1914). The presence of copious amounts of lime mortar and small fragments of soft sand-struck brick in the excavations suggests that there may have been a brick chimney on the adobe at an early date, perhaps as part of the original construction. (The sand-struck bricks appear to be virtually identical to those used in construction of the capitol at Benica in the 1850s). If built as part of the original structure, the first chimney may have been demolished sometime before 1885, and the chimney visible in the 1885 photograph rebuilt in its place.34 The 1885 chimney—removed sometime around the turn of the century—probably was of the same brick as that used in the present chimney base.35 The lime mortar and the hard, contorted brick fragments found in the excavations closely match the materials used in the present base, and probably represent demolition of the old chimney. In summary, it appears that Feature 91-A-1, the chimney base, was probably in place by 1885 when the first known photograph of the adobe was made. The date of construction of the chimney base is unknown, but the use of lime mortar suggests it predates 1900, and it is likely to be considerably earlier.36 The chimney (or chimneys) dating to the 19th century were partially interior chimneys. Removal of the chimney(s) left a gap in the north adobe wall now filled by the fireplace and the upper level closet.

No information was found regarding the original fireplace in the adobe. It is apparent, however, that the previous fireplace on the north end of the adobe was removed sometime before 1907, and was not replaced until about 1914.

The top portion of feature 91-A-1 (the present exterior chimney), the tan brick fireplace, and some of the concrete and brick detritus found in the excavations are obviously a product of the twentieth century, and generally reflect circa 1914 construction efforts.

33. Also see Kelly, Archeological investigations.

34. It is also possible that the original chimney was of adobe or adobe and brick.

35. Evidently the old base was not removed when the chimney was rebuilt in 1914, but was reused.

36. There were lime kilns present in Contra Costa during and after the 1850s.
The adobe did not have packed earth floors. Visual inspection and archeological excavations of units 91C and 91D showed that the ground surface beneath the house sloped gently from west to east. That is, the floor sleepers almost touch the ground on the west side of the house. On the east side there is a gap of about 12 inches from the base of the sleeper to the ground surface which is level with the ground surface outside the foundation. Although twentieth century reconstruction of the flooring apparently involved modest ground modification along the east interior foundation wall of the adobe, there appears to have been no major modification of the old ground surface, and no indicators of a previous floor level on the stone foundation. The original slope of the hillside beneath the house has generally been retained, and excavations failed to produce any evidence of packed living floor or treated earth.

Architectural and archeological investigations suggest that the original construction of the west side of the adobe included an 8-foot wide enclosed ramada or shed-roofed porch. Excavation unit 91C revealed the presence of a concrete slab extending out from the west wall of the adobe about 8 feet. The slab was bordered by a narrow rock feature. This slab may have been poured sometime just after the turn of the century to replace or upgrade porch flooring. The age and exact function of feature 91-C-2 (the shallow, dry-laid rock "foundation") are unknown, but it may be contemporaneous with the concrete slab. The sandstone rocks may have been laid in a shallow trench at the drip-line of the porch roof to prevent erosion, to drain water away from the foundations, or to line a flower bed. The rocks may also be some sort of crude foundation for an enclosed room on the west side of the house—a room that predated the present bedroom.

Only a few window glass sherds, thought to date to at least the 20th century, were found in excavations along the north wall of the house. There were no other indicators to suggest whether the existing window openings on the north side of the house were original to the structure.

During the architectural investigation a previously unknown doorway and lintel were uncovered adjacent to the present doorway from the living room into the west bedroom. There may have been another doorway, now replaced by a bay window, in the south wall of the house. A portion of the foundation is missing beneath the present south-facing bay windows, and a heavy beam of recent vintage extends across the gap. This curious architectural detail could be explained by the former presence of a doorway in this area. Foundations below the existing doors are indented outward beneath the "V" shaped doorways. If a south-facing door had been replaced by the present windows at about the time the south porch was installed, the outward extension of the foundation beneath the doorway could have been removed to provide space for the porch floor supports.

In summary, most of the features and artifacts located during the 1991 excavations were most likely associated with the twentieth century occupancy of the adobe and neighboring structures by the Hanna, Firth, Greerty, and Rennie families. While several of the ceramics such as the annular dishes and stoneware containers could represent earlier occupation of the area, their widespread distribution across the United States, and the long period of production could argue equally well for late nineteenth or early twentieth century use and disposal. Thus, few additional clues were found regarding the Martínez family use of the property, and definitive details of this era remain hidden in the recesses of time.

37. Smooth, clean interior plaster appears on the exterior of the west wall of the adobe beneath the redwood beams.
RECOMMENDATIONS

Structural elements of the present flooring system limited the size of and access to test 91D. While this test revealed modern disturbance due to rodents and remodeling activities, it is possible that other areas beneath the structure contain stratified deposits dating to the mid-1800s. During rehabilitation of the adobe, ground disturbing activities should be archeologically monitored to ensure that scientific data are recovered.

Although numerous plantings and utility burials have disturbed the upper (fill) levels surrounding the present ramada on the south, west, and north, it appears that intact deposits and features may lie below the fill. It is known that several structures were formerly located in the vicinity, but the exact locations of the former 1840s blacksmith shop, the wood shed, the bunk house, and other farm structures have not been defined. It may be necessary to change the grade in this area to improve drainage patterns around the adobe. If so, modification of the present ground surfaces in these area should be conducted with great care. If grade modification is necessary, it is recommended that vegetation be cut away at ground level using hand tools. The entire area to be graded should be bladed off in thin increments using either hand tools or some sort of light equipment like a bobcat.

Removal of thin layers of soil across a broad area can reveal previously unknown features. A research design and the methodology and scope of this ground modification should be worked out by the project archeologist and the supervising landscape architect once landscape design details are known. The need for further archeological testing can also be determined at this time.

If at all possible, the dump area in the vicinity of shovel test 91-1 should be left undisturbed. If this is impossible, the dump should be archeologically excavated and recorded before damage is incurred by grading.

Tests south of the adobe indicate that the raised area just beyond the sidewalk have been modified by cultivation and other recent activities. However, most of the retaining wall installed in the 1930s or 1940s is still intact, and the raised bed behind this wall may still have undisturbed deposits below the fill. Any ground disturbing work in this area should follow guidelines described above.

According to oral histories, the area now occupied by the patio was formerly a driveway. The present ramada area apparently overlays a former ramada which in turn replaced earlier structures. Judging by these changes, by the present ground topography and by historic records, the area immediately west of the adobe--extending as far as the west edge of the ramada--has undergone a great deal of modification during the twentieth century. The areas north of the house near the chimney and immediately south of the house in the vicinity of shovel test 91-2 are also disturbed. It is likely that very little of archeological interest remains in-situ in these locations, and further testing of these areas is not recommended. However, the regional archeologist may chose to provide construction monitoring for these areas.
APPENDIXES

ARCHEOLOGY
APPENDIX A
BRICKS USED IN RETAINING WALL

1. Maker's mark, GASCO. Yellow-orange fire brick, tempered with coarse sand, dates made 1921-1942.

2. Maker's mark, LIVERMORE PREMIER. Dark red standard brick, dates made 1921-1924.

3. Maker's mark, LINCOLN. Dark red standard brick, dates made 1921-1942.

4. Maker's mark, CARNEGIE. Orange fire brick, dates made 1902-1942.

5. Maker's mark, CARNEGIE. Off-white fire brick, dates made 1902-1942.

6. Maker's mark, "WI." Orange fire brick, no date found.

7. Maker's mark, COWEN. Red standard brick, no date found.

8. Maker's mark, SNOWBALL. Off-white firebrick, no date found.
APPENDIX B
POLLEN, PHYTOLITH, AND MACROFLORAL ANALYSIS

POLLEN, PHYTOLITH, AND MACROFLORAL ANALYSIS AT THE MARTÍNEZ ADOBE

By

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and
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Prepared For

Denver Service Center
National Park Service
Lakewood, Colorado

November 1991
INTRODUCTION

An adobe brick from the Martinez house at the John Muir National Historic Site was examined for pollen, phytolith, and macrofloral remains in order to identify plants growing in the vicinity of the house at the time it was constructed. Several roots or corms were also examined for identification. Numerous other botanical specimens were examined and identified. These include a variety of nuts and nutshell fragments, pits, seeds, cone scales, and other floral remains as well as eggshell and a few varied other non-botanical remains. These results are included as an appendix to this report.

METHODS

A chemical extraction technique based on flotation is the standard preparation technique used in this laboratory for the removal of the pollen from the large volume of sand, silt, and clay with which they are mixed. This particular process was developed for extraction of pollen from soils where preservation has been less than ideal and pollen density is low.

Relatively large quantities of sediment (50 ml) were processed for each of these samples. This sediment was added to a 0.1 molar solution of sodium pyrophosphate, diluted, then sieved through 150 micron mesh. The sample was allowed to settle for four hours, then the supernatant was poured off, which contained clay. This settling time allowed pollen to settle to the base of the beaker. The samples were mixed with water, allowed to settle for four hours, and the supernatant discarded several times, until the supernatant was clear.

At this time, hydrochloric acid (10%) was used to remove calcium carbonates present in the soil. Zinc bromide (density 2.0) was used for the flotation process. The samples were mixed with zinc bromide while still moist, immediately after centrifugation to remove the dilute hydrochloric acid and water. All samples received a short (10 minute) treatment in hot hydrofluoric acid to remove any remaining inorganic particles. The samples were then acetolated for 3 minutes to remove any extraneous organic matter.

A light microscope was used to count the pollen to a total of 100 to 200 pollen grains at a magnification of 500x. Pollen preservation in these samples varied from good to poor. Comparative reference material collected at the Intermountain Herbarium at Utah State University and the University of Colorado Herbarium was used to identify the pollen to the family, genus, and species level, where possible.

Pollen aggregates were recorded during identification of the pollen. Aggregates are clumps of a single type of pollen, and may be interpreted to represent pollen dispersal over short distances, or the actual introduction of portions of the plant represented into an archaeological setting. Aggregates were included in the pollen counts as single grains, as is customary. The presence of aggregates is noted by an "*" next to the pollen frequency on the pollen table. Indeterminate pollen includes pollen grains that are folded, mutilated, and otherwise distorted beyond recognition. These grains are included in the total pollen count, as they are part of the pollen record.
Extraction of phytoliths from these sediments was also based on heavy liquid flotation. Fifty ml of sediment was added to a 0.1 molar solution of sodium pyrophosphate and was then diluted. The sample was sieved through 150 micron mesh and allowed to settle and the clay fraction poured off after four hours. Water was added to the sample, which was rinsed numerous times to remove the clay. Hydrogen peroxide (30%) was used to destroy the organic fraction from the remaining sediment. The sample was rinsed several times and allowed to dry. The dried silts and sands were then mixed with zinc bromide (density 2.3) and centrifuged to separate the phytoliths, which will float, from the other silica, which will not. Phytoliths, in the broader sense, may include opal phytoliths and calcium oxylate crystals. Calcium oxylate crystals are formed by Opuntia (prickly pear cactus), and are separated, rather than destroyed, using this extraction technique. Diatoms also float and are recovered using this technique. Any remaining clay is floated with the phytoliths, and is further removed by mixing with sodium pyrophosphate and distilled water. The samples are then rinsed with distilled water, then alcohols to remove the water. After several alcohol rinses, the samples are mounted in Canada balsam for counting with a light microscope at a magnification of 500x.

After pollen and phytolith samples had been taken, the remaining portions of the brick were floated using a modification of the procedures outlined by Matthews (1979). The sample was added to approximately 3 gallons of water to which Calgon water softener had been added to help break up the clay. The sample was stirred until a strong vortex formed, which was allowed to slow before pouring the light fraction through a 150 micron mesh sieve. Additional water was added and the process repeated until all visible macrofloral material was removed from the sample (a minimum of 3 times). The material which remained in the bottom was poured through a 1mm mesh screen. The floated portions were allowed to dry.

The light fraction was passed through a series of graduated screens (US Standard Sieves with 2mm, 1mm, .5mm and .25mm openings) to separate charcoal debris and to initially sort the seeds. The contents of each screen were then examined. Charcoal and wood pieces larger than 2mm in diameter were broken to expose a fresh cross-section and examined under a binocular microscope at magnifications up to 80x. The material which remained in the 2mm, 1mm, and .5mm screens was scanned under a binocular stereo microscope at a magnification of 8x, with some identifications requiring magnifications of up to 40x. A portion of the finest material in the .25mm screen was also examined under a magnification of 8x. The material which passed through the .25 mm screen was not examined. The coarse or heavy fraction was also examined. Macrofloral remains were identified using manuals (Martin and Barkley 1961; Musil 1963; Schopmeyer 1974) and by comparison with modern and archaeological references. Estimates of seed and seed fragment frequencies were calculated from the sort of a portion of the total volume floated and are represented in the macrofloral table by an asterisk (*). The term "seed" is used to represent seeds, achenes, caryopses, and other disseminules. Remains were recorded as charred and/or uncharred, whole and/or fragments.
DISCUSSION

The Martinez Adobe Structure is the oldest building at the John Muir National Historic Site, constructed in 1849 (Rhodes n.d.). Examination of the micro and macrofloral remains from this brick will assist in establishing extant vegetation at the time the adobe structure was built.

The pollen record from this adobe brick exhibits relatively large quantities of both High-spine Compositae and Gramineae pollen (Table 1). This indicates that a variety of members of the High-spine Compositae group, which includes the majority of the members of the Compositae family, were present in the vicinity where the clay for the adobe brick was collected and portions of these plants were subsequently incorporated into the brick. A relatively small quantity of *Artemisia* pollen indicates that sagebrush was also present in this area. A very small quantity of Low-spine Compositae pollen was present, indicating that plants such as ragweed (*Ambrosia*) or bursage were also present. The small quantity of Liguliflorae indicates that members of the Compositae family, such as dandelion or chicory were also present at the time the adobe was made.

Gramineae pollen was the second most abundant pollen type recovered from the adobe brick. The presence of a large quantity of Gramineae pollen indicates that grasses were abundant in the area where the adobe clay was collected or that grass was incorporated into the adobe. Recovery of Cyperaceae pollen indicates that sedges were also abundant and suggests possible collection near a riparian community and/or inclusion of sedges in the adobe. Small quantities of Cruciferae, *Eriogonum*, and *Euphorbia* pollen are noted, probably representing wind transport of local pollen. The presence of *Erodium* pollen indicates that introduced weeds were established on this property. The presence of *Phoenix* pollen indicates that the adobe brick was made after date palms were introduced onto the property. Other pollen types representing local herbaceous vegetation include Labiatae, Leguminosae cf. *Lathyrus*, Onagraceae, cf. *Clarkia*, and Polemoniaceae. Local shrubs are represented by Rhamnaceae and Rosaceae pollen. *Rhus radicans/integrifolia* pollen may represent either poison ivy or lemonade berry, as the pollen cannot be distinguished. Historic reference to the presence of poison ivy suggests that poison ivy may indeed be represented in the pollen record in this adobe brick.

Very small quantities of fern spores were also recovered from the adobe brick in the pollen sample.

The phytolith sample yielded an abundance of Festucoid phytoliths, and only small quantities of Chloridoid and Panicoid phytoliths (Table 2). These three groups of phytoliths represent short cell phytolith produced by grasses. Elongate phytoliths are of no aid in interpreting either paleoenvironmental conditions or the subsistence record because they are produced by all grasses. Elongate phytoliths are easily broken in the soil, and because each fragment is counted as an individual phytolith, soil movement that serves to break the phytoliths would also increase the relative frequency of this type. For these reasons, Elongate phytoliths were not included in the phytolith count.
<table>
<thead>
<tr>
<th>Pollen Types</th>
<th>Scientific name</th>
<th>Common name</th>
<th>Sample #1 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arboreal Pollen:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Juniperus</td>
<td><em>Juniperus</em></td>
<td>Juniper</td>
<td>2.0</td>
</tr>
<tr>
<td>Pinus</td>
<td><em>Pinus</em></td>
<td>Pine</td>
<td>5.0</td>
</tr>
<tr>
<td>Quercus</td>
<td><em>Quercus</em></td>
<td>Oak</td>
<td>1.5</td>
</tr>
<tr>
<td>Non-Arboreal Pollen:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheno-ams</td>
<td>Includes amaranth and pigweed families</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Artemisia</td>
<td><em>Artemisia</em></td>
<td>Sagebrush</td>
<td>6.5*</td>
</tr>
<tr>
<td>Low-spine Compositae</td>
<td>Includes ragweed, cocklebur, etc.</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>High-spine Compositae</td>
<td>Includes aster, rabbitbrush, snakeweed, sunflower, etc.</td>
<td></td>
<td>28.5*</td>
</tr>
<tr>
<td>Liguliflorae</td>
<td>Includes dandelion and chicory</td>
<td></td>
<td>2.5</td>
</tr>
<tr>
<td>Cruciferate</td>
<td>Mustard family</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Cyperaceae</td>
<td>Sedge family</td>
<td></td>
<td>3.0</td>
</tr>
<tr>
<td>Eriogonum</td>
<td>Wild buckwheat</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Erodium</td>
<td>Filaree/Heron's bill</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Euphorbia</td>
<td>Spurge</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>Gramineae</td>
<td>Grass family</td>
<td></td>
<td>23.0*</td>
</tr>
<tr>
<td>Labiatae</td>
<td>Mint family</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>Leguminaceae cf. Lathyrus</td>
<td>Bean family cf. vetchling, wild pea</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>Onagraceae</td>
<td>Evening primrose family</td>
<td></td>
<td>0.5</td>
</tr>
<tr>
<td>cf. Clarkia</td>
<td>Clarkia</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Phoenix</td>
<td>Date</td>
<td></td>
<td>1.0</td>
</tr>
<tr>
<td>Polemoniaceae</td>
<td>Phlox family</td>
<td></td>
<td>1.0*</td>
</tr>
<tr>
<td>Pollen Types</td>
<td>Sample #1</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Rhamnaceae</td>
<td>Buckthorn family</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Rhus radicans/integriofolia</td>
<td>Poison ivy/Lemonade berry</td>
<td>3.5</td>
<td></td>
</tr>
<tr>
<td>Rosaceae</td>
<td>Rose family</td>
<td>3.0*</td>
<td></td>
</tr>
<tr>
<td>Indeterminate</td>
<td></td>
<td>11.0</td>
<td></td>
</tr>
<tr>
<td>Spores:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monoletie</td>
<td></td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Trilete</td>
<td></td>
<td>0.5</td>
<td></td>
</tr>
</tbody>
</table>

* Indicates the presence of aggregates
### TABLE 2
**PHYTOLITHS RECOVERED FROM THE JOHN MUIR NATIONAL HISTORIC SITE**

<table>
<thead>
<tr>
<th>Phytolith Type</th>
<th>Sample #1 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Festucoid</td>
<td>68.0</td>
</tr>
<tr>
<td>Chloridoid</td>
<td>4.0</td>
</tr>
<tr>
<td>Panicoid</td>
<td>3.0</td>
</tr>
<tr>
<td>Ridged elongate</td>
<td>18.0</td>
</tr>
</tbody>
</table>
The Festucoid class of phytoliths is ascribed primarily to the Subfamily Pooideae, which occur most abundantly in cool, moist climates. However, Brown (1984) notes that Festucoid phytoliths are produced in small quantity by nearly all grasses. Therefore, while they are typical phytoliths produced by the Subfamily Pooideae, they are not exclusive to this subfamily. Chloridoid phytoliths are found primarily in the Subfamily Chloridoideae, a warm-season grass that grows in arid to semi-arid areas and requires less available soil moisture. Chloridoid grasses are the most abundant in the American Southwest (Gould and Shaw 1983:120). Panicoid phytoliths occur in warm-season or tall grasses that frequently thrive in humid conditions. Twiss (1987:181) also notes that some members of the Subfamily Chloridoideae produce both bilobate (panicoid) and festucoid phytoliths.

The abundance of Festucoid phytoliths in this sample indicates the presence of grasses that prefer moist locations and grow during the cool season. The phytolith record for grasses reflects the presence of Festucoid grasses, as Avena and Festuca both belong to this category. The abundance of phytoliths is consistent with the use of grasses as a tempering agent in the adobe. Ridged elongate phytoliths indicate the presence of conifers in this area.

A variety of seeds and other remains were recovered from the floated adobe brick. The sample contained a large quantity of straw, most likely used as temper to bind the adobe (Table 3). One piece of probable Prunus wood and a few unidentifiable pieces of charcoal were also recovered, showing that plum/cherry trees were growing in the area.

The floated sample also contained uncharred Avena fatua, Calandrinia, Erodium, Gramineae, probable Festuca, probable Labiatae, Lactuca, and Scirpus seeds, charred Galium seeds, and charred possible berry fragments. The seeds are indicative of plants growing in the area when the brick was made. The presence of Erodium, Gramineae, and Labiatae seeds corresponds with the pollen record as these pollen types were recovered. Non-floral remains include bone and insect fragments, and three carbon balls. Carbon balls are typically reported in the literature as being present, but no further identification or interpretation is usually made.

Four roots or corms were also submitted for identification. Visual identification was not conclusive; therefore, a small quantity of each root was examined for phytoliths, crystals, starches, and/or other identifiable cells. Specimens B and C contained no identifiable structures. Specimens A and D exhibit a starch that could not be identified. At present, starch keys cover mainly edible food, not roots or corms of ornamental plants. Direct comparison was made with iris corms, but the starch grains were not similar to the modern iris corm examined.
<table>
<thead>
<tr>
<th>Identification</th>
<th>Scientific name</th>
<th>Common name</th>
<th>Part</th>
<th>Charred W</th>
<th>Charred F</th>
<th>Uncharred W</th>
<th>Uncharred F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floral Remains:</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avena fatua</td>
<td>Wild oat</td>
<td>Seed</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calandrinia</td>
<td>Redmaids</td>
<td>Seed</td>
<td></td>
<td>14</td>
<td>11</td>
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<td></td>
</tr>
<tr>
<td>Erodium</td>
<td>Filaree/</td>
<td>Seed</td>
<td></td>
<td></td>
<td></td>
<td>17</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heron's bill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Galium</td>
<td>Bedstraw</td>
<td>Seed</td>
<td></td>
<td></td>
<td>2</td>
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</tr>
<tr>
<td>Gramineae</td>
<td>Grass family</td>
<td>Seed</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gramineae cf. Festuca</td>
<td>Fescue</td>
<td>Seed</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cf. Labiatae</td>
<td>Mint family</td>
<td>Seed</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lactuca</td>
<td>Wild-lettuce</td>
<td>Seed coat</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scirpus</td>
<td>Bulrush</td>
<td>Seed</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unidentifiable</td>
<td></td>
<td>cf. Berry</td>
<td></td>
<td>4</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Straw</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stems</td>
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<td></td>
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<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Charcoal/Wood:</td>
<td></td>
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W = Whole  
F = Fragment
REFERENCES CITED

Broun, D. A.

Gould, F. N. and R. B. Shaw

Martin, Alexander C. and William D. Barkley

Matthews, Meredith H.

Musil, Albina F.

Rhodes, Diane

Schopmeyer, C. S.

Twiss, Page C.
APPENDIX C
FAUNA LIST, 1991 ARCHEOLOGICAL EXCAVATIONS

91 A

Mollusca
  Snail
  Oyster

Aves
  Bird

Mammalia
  Order Lagomorpha
    Family Leporidae
      *Sylvilagus* sp. - Cottontail
      Leporid
  Order Rodentia
    Rodent
  Order Artiodactyla
    Family Suidae
      *Sus scrofa* - Pig
    Family Cervidae
      *Odocoileus hemionus* - Mule Deer
    Family Bovidae
      *Bos taurus* - Cow
      Artiodactyl
      Medium/Large Mammal

91 C

Mollusca
  *Tivela* sp. - Bivalve
  Mollusk

Pisces
  Fish

Aves
  Bird

Mammalia
  Order Lagomorpha
    Family Leporidae
    Leporid
  Order Artiodactyla
    Family Suidae
      *Sus scrofa* - Pig
    Family Bovidae
      *Bos taurus* - Cow
      Artiodactyl
      Large Mammal 148
Mollusca
   Snail
   cf Clam

Pisces
   Fish

Reptilia
   Turtle

Aves
   Order Anseriformes
     Family Anatidae
     cf Cairina moschata - Muscovy Duck
     Bird

Mammalia
   Order Lagomorpha
     Family Leporidae
     Lepus sp. - Jackrabbit
     Sylvilagus sp. - Cottontail
     Leporid
   Order Carnivora
     Family Canidae
     cf Canis familiaris - Dog
     Family Felidae
     Felis cattus - Cat
   Order Artiodactyla
     Family Suidae
     Sus scrofa - Pig
     Family Bovidae
     Ovis aries - Sheep
     Bos taurus - Cow
     Artiodactyl:
     Small/Medium mammal
     Medium mammal
Aves
Bird

Mammalia
Order Artiodactyla
Family Bovidae
Bos taurus - Cow

STS
Aves
Order Galliformes
Family Phasianidae
Gallus gallus - Chicken

Mammalia
Order Lagomorpha
Family Leporidae
Lepus sp. - Jackrabbit
Sylvilagus sp. - Cottontail

Order Carnivora
Family Felidae
Felis cattus - Cat

Order Artiodactyla
Family Bovidae
Ovis aries - Sheep
Bos taurus - Cow

Leporid - Jackrabbit, Cottontail
Artiodactyl - Pig, deer, elk, sheep, goat, cow
PHYSICAL HISTORY AND ANALYSIS
PHYSICAL HISTORY AND ANALYSIS

CULTURAL CONTEXT AND CONSTRUCTION CHRONOLOGY

Various social, cultural, economic and environmental factors are reflected in the building's architecture. It should be recognized that the present-day appearance of the Martínez Adobe and the surrounding grounds are a cumulative product of almost 200 years of human history. The changes in the house (see figures 1 and 2, following this section) and its setting reflect corresponding changes in broader American society. Below is a chronological summary illustrating some of these factors.

It should be noted that few photographs were taken of the adobe since its construction. Only those photographs taken of the east and north sides exist today resulting in a severe lack of important information on the construction sequencing. Only two photographs exist of the south elevation and one or two of the west elevation. Because of this lack of historical information, the construction history includes some conjecture, however, assumptions in this analysis have been based on typical features and construction techniques used on similar northern California adobes during the mid to late 1800's.

1849-1885

The original portion of the Martínez Adobe was constructed in 1849 by Don Vicente Martínez, on a portion of the land referred to as Rancho El Pinole. Martínez owned the adobe and surrounding property until 1853. The original design reflects the continuity of Hispanic traditions as tempered by American and European influences. The house was simple in design, similar to many others built during the same time period. The house was set in an isolated area where construction materials and skilled craftsmen were limited. With the exception of nails, most of the construction materials were probably available locally in the Martínez area. Testing of adobe samples taken from the building and soil samples taken from the site (see test results in the appendix) indicate that the adobe bricks were handmade on site. As was typical of the time, Indian laborers may have assisted in the construction of the adobe which may have taken as long as a year and a half to complete.

Although Indian laborers may have helped construct the adobe, it should be noted that the house was probably well appointed for the time and place. First the adobe was the home of a well-to-do Mexican rancher, from a family important in the political and economic life of early-day California.

Structurally, the Martínez Adobe was characteristic of many adobes built in California during the late 1840s. Originally the adobe had two rooms on each of the two levels. The south elevation may have contained a stair which typically would have provided access to the second story east veranda.

Research indicates that sometime between 1900 and 1915, an interior stair may have been constructed and the two-story veranda was erected on the south side. Because the Hanna Family was growing rapidly, a screened-in south veranda was added as sleeping space for the children.
The two-story east veranda, originally providing the only access to the second floor sleeping rooms, is an original component of the initial construction. Adobes often lacked internal connections between rooms; instead of the American pattern of internal halls and interconnecting rooms, the adobe probably had rooms entered only by doors which opened directly to the outside, sometimes both front and back.

It appears that the Vicente Martínez Adobe was a family home, filled with children. There were probably numerous visitors who, considering the distances and time of travel, probably came to stay for a week or more. Vicente’s 17-year old wife may have had servants to help her care for Guadalupe’s small children. The lack of internal connections between rooms and the multiple external doors would have given the Martínez family and their visitors a modicum of privacy.

The extent to which Euro-American architecture and cultural patterns influenced the original design and spatial arrangement and uses of the Martínez Adobe formed one of the primary research questions. In many ways the adobe was identical to others of its time. Yet, it was unknown whether the house originally had interior or exterior stairways. Did it have dirt floors? Was there a chimney (or chimneys) and fireplaces?

It is likely that the large rooms on the first floor were multi-purpose, and much of the family and ranch activities probably took place outdoors on the veranda, the porch and/or adjacent structures constructed of wood or brush. Although the north wall on the second story of the adobe may have always had windows flanking the chimney, end walls of adobes typically had few openings. Because the west and south sides of the house may have originally had no openings, the east side and north side provided both primary access and natural light to the interior. On other California adobes, doors and windows were asymmetrically placed on the exterior facade, lacking the single, centered front door which had become a characteristic of American architecture. Verandas, often two story, almost invariably extended the length of the main facade.

At the time the adobe was constructed, the cookhouse and other utilitarian areas were probably located to the rear or west of the adobe. Historical research suggests that the cookhouse was a separate building from the adobe but located nearby. The formal entrance to the adobe was probably on the east. The veranda may have served as a convenient place where the women of the family gathered to talk, weave, or sew.

Ranch activities like butchering, hide processing, branding, treatment of sick cows, and blacksmithing were probably done in the general vicinity. It is known that Vicente Martínez kept milk cows and horses in the Cañada del Hambre, and in the corral west of the house he had both wild and rodeo cattle.

Because the corrals and barns were located on the west side of the structure, a back porch was built during the initial construction of the adobe and later served as the milking porch and as the working entrance to the house. This is the location where muddy boots and milk buckets and other farm paraphernalia were probably kept. Although early photographs show the north end of the porch enclosed, the remaining portion was probably open or screened.

By 1853 when the house was sold to the Franklins, the main thrust of the California Gold Rush was over, and California had become an American territory. Americans quickly assumed control of businesses and become major landholders. Mexican influence declined. It was a time of political and social stabilization and corporate consolidation as churches, schools and roads were
built. Americans dominated the economic and cultural life of the area. This period marks the beginning of crops raised for export to other areas; a time when rapid Anglo settlement and development ate away at the Mexican Ranchos. The town of Martinez was thriving, and easy transportation to other areas was offered via water. The area was still predominately rural, although road districts and political jurisdictions were being laid out. The large ranchos were beginning to be broken up into smaller farms supplying grain and fruits and vegetables to the burgeoning American population.

When the Franklins acquired the adobe in August of 1853, no doubt they brought their own furnishings. However, it is likely that few modifications were made to the structure itself because it was almost new. Also, the adobe served as a rental property during the last part of the Franklin ownership up until 1861. After the property was sold to Dr. Louis Strentzel in 1874 the adobe may have been used for storage or as a farm outbuilding. Lacking the presence of women and children, the accommodations would have been fairly rudimentary, and structural modifications limited to basic upkeep of the structure.

Some modest changes may have been made in the house during its occupancy by Thomas Redfern who owned the house between 1861-1874. For example, there were severe earthquakes in the area during the 1860s. It is possible that an earlier chimney was replaced at this time, based on the findings of the soft, sandy red brick in the 1991 archeological excavations in the vicinity of the present chimney.1

By the Civil War, Mr. Redfern began to cultivate the land and introduce domesticated stock (cows and horses). It was at this time that the vineyards may have been removed. Redfern made improvements (type unknown) to the ranch by 1874. However, any renovations to the house were probably minor. The house appears to have been occupied only by Redfern (or by Redfern and his wife at the beginning of the period). Redfern's farming operations were modest, and his finances limited.2

Although the adobe had various owners and occupants during the period extending from 1853 to 1885, few alterations were actually made.

1885-1890

By the time the adobe entered the Strentzel/Muir period its condition appeared to be run-down. Historical photographs from this period indicate that the structure was primarily used as a farm outbuilding. Piles of what appear to be compost are shown nearby. Farm machinery surrounded the building, and a shed was attached to what is now the front of the house. This "casual" architectural feature suggests that the house was generally unoccupied, and that main entry was on the west, close to the barns. The presence of a cistern in the circa 1890-1900 photographs may suggest that the building needed a water supply, perhaps for milking or other farm activities.

1. These brick fragments closely resemble brick used to build the original state capitol building in Benicia, dating to the 1850s. The present chimney base was evidently in place by 1885.

2. It is not clear whether Redfern had anyone living with him; there do not appear to have been any children, and his wife was living elsewhere at the time of the sale. This would suggest that most of the upper portion of the house may have been used for storage, rather than living quarters. Also, Redfern had to deed the property over to his lawyers to cover his various debts.
Or, it may have merely served as a convenient catchment for rainfall runoff from the adobe's gutter and downspout system. The building probably had a variety of uses like temporary housing of farm hands, for storage of grain and feed, as a staging area, and/or to house milk coolers.

On the adobe's west side, a new story-and-a-half bunkhouse was constructed or moved to a site near the original cookhouse. Also during this period, figures 2 and 3 in the History Background chapter show that the original chimney began to fail. These photographs as well as other historical records indicate that the chimney eventually required stabilization by means of a large wooden prop.

1890-1900

During the early 1890s the ground floor was used for storage and the upstairs had four or five small empty rooms with no connecting doors. There was no kitchen in the house. The crude wooden superstructure over the chimney opening also supports oral histories that the building was unoccupied, and suggests that minimal work had been done to protect the interior from weather and rodent damage.

During the latter part of the decade, the Martínez Adobe may have been used either as a farm outbuilding or as a residence. Historical photographs taken during this period show the structure in a state of disrepair making it plausible that it still could have been used as a farm outbuilding. Contrary to this theory, one of the historic photographs discovered shows a blanket hanging out on a line on the east second story veranda suggesting that someone may have indeed been living in the structure. On the building's north side, the majority of the original chimney appears to have been removed and the space in the wall patched with a material other than adobe.

1900-1910

In late 1906 or early 1907, Wanda Muir Hanna and her husband moved into the adobe. Prior to this time, little work was done to bring the building back to a livable condition. Until the time the Hannas moved in, and probably until around 1906, the adobe remained in a deteriorated condition. Because the adobe escaped major damage from the 1906 earthquake, John Muir, being generous to his daughter Wanda, began to have the adobe remodeled. It was during this time that most of the structural changes occurred to the adobe, turning the run-down farm outbuilding into Wanda Hanna's modest family home. These changes were significant because they represent the first major structural modifications in the process of "Americanization" of the building.

Muir began to remodel the adobe by first removing the dilapidated chimney from the north wall. After removal, a new window was added to the center of the north wall replacing the fireplace and to cover damage to the north wall caused by the 1906 earthquake, the north elevation exterior was clad with horizontal wood siding which remains today.

This process of remodeling and constructing additions also occurred in many other old adobe homes in the valley. When compared with typical Mexican homes of the 1850s, the remodeled adobes of the 1900s show a number of similar changes. Americans focused more on their family life within the structure, and enlarged and closed in the open porches and ramadas characteristic
of the Mexican era. The houses were gradually expanded to accommodate increased farm personnel. The detached exterior cookhouses or kitchens were joined onto the main house via additions, and back porches or ramadas were closed in to provide sleeping and eating space for ranch hands.

American influences typically included the addition of internal fireplaces and mantles, changes in internal plans and window types, etc. Americans often divided up the large multi-purpose rooms to provide separate private areas for various family activities like eating, sleeping, bathing, etc. Interior bathrooms were added. Also, there were changes in the ways the various living spaces were used within the main house itself. Multi-purpose rooms were probably set aside for formalized functions: e.g. dining room, bedroom, etc. and doorways were opened between interior rooms. Plaster was covered by wallpaper or paneling, high ceilings were lowered, new interior stairways were constructed, modern flooring was installed and in addition to the existing fireplaces, wood stoves were added to improve the home's heating supply.

By 1910 several major changes were made to modernize the adobe for Muir's daughter. It was at this time that the present two-story veranda on the south end of the building was added as well as a series of small rooms extending the house out to the west. These additions may have incorporated or replaced the former detached cookhouse, and provided space for a kitchen and dining area for ranchhands. The west porch or ramada was walled in, at least on the north end. The second floor bathroom was added, reflecting the twentieth-century lifestyle of its occupants. The interior stairway may have been built during this time. Addition of a formal kitchen next to the large room in the adobe now designated as a dining room was very much a Euro-American tradition. Other modifications that may have been made during this period were the removal of the large cistern, the drilling of a new well, new plumbing, new wiring for electricity, installation of a new interior stair and the addition of modern redwood tongue-and-groove paneling which was installed over much of the existing interior plaster walls.

1910-1920

Wanda Muir Hanna owned the building until 1915. Between 1915 and 1920 the adobe saw various absentee owners and occupants. Few modifications were made to the adobe between 1910 and 1920. Most substantial of the modifications that did occur was the addition of a new chimney on the north side of the house. Built in the location of the original chimney and replacing the window on the first floor, the new fireplace and chimney were constructed of brick different in character than that used on the original chimney. On the north elevation on the second level, the windows remained as well as the closet between.

Also during this period, the kitchen was expanded by enclosing a portion of the south porch. On the second floor, interior walls were added or moved to divide the north bedroom into two separate spaces and a small closet was added to the north wall of the south bedroom. A wall at the top of the stair and in the center of the north bedroom created a third, middle bedroom. Access to the north bedroom and the middle bedroom was achieved by way of the east porch. The south bedroom was entered through either a door at the top of the stairs, a door leading to the east porch or a set of double doors leading to the south porch.

3. The interior of the home was redecorated in the latest style by Wanda Muir Hanna.
1921-1965

Several modern alterations were made to the adobe during the years that Mr. Parsowith owned and occupied the structure (1921 - 1955). During this time, the ranchhand’s dining room became Mr. Parsowith’s tailor shop and an addition was made to the west porch and kitchen forming what is now referred to as the west bedroom. Not only was the porch on the west side of the building enclosed but a new addition extended the space farther to the west. On the south end of the bedroom a closet was installed and the kitchen was made smaller by the addition of a new ‘modern’ bathroom which included a bathtub with a shower, and a toilet. A pedestal sink was installed in an alcove between the kitchen and the bedroom. On the second floor the wall dividing the north bedroom was removed and a new wall added at the top of the stairs to form a closet for the north bedroom.

Also during this period, the current fireplace hearth and mantle were installed as well as the red concrete patio, the brick retaining wall, and possibly the ramada, all constructed on the west side of the house. On the first floor of the east porch, a red concrete pad was poured directly on top of the existing wood decking and several concrete walks were constructed around the outside of the building connecting the patios, entrances and the ramada. In 1956 Mr. Parsowith sold the adobe to Mr. Stein. Mr. Stein made no alterations.

1965-Present

In 1965 the National Park Service became the owner of the Martínez Adobe. With the exception of a few alterations conducted by the National Park Service, the adobe remains unchanged from the Parsowith and Stein periods. The first alteration included rehabilitation of the south veranda including the realignment of the east kitchen wall back to its original location and a new concrete foundation under the south kitchen wall and the south veranda. Also during this period the floor in the second floor north bedroom was removed and deteriorated members replaced. Other than the installation of a new roof and general maintenance, no other remodeling or alterations have been made while the National Park Service has had ownership.

EXISTING CONDITIONS AND MATERIALS ANALYSIS

The purpose of this section of the report is to incorporate historic data and documentation of the structure in its existing condition and provide an analysis of the building materials used in the structure. Also included in this section are those materials that are character defining, meaning contributing to the original adobe portion of the house, and those materials that are also character defining but contribute only as common materials that were typically applied during different periods of modernization.

The Martínez Adobe is a complicated building as far as massing is concerned because of several additions that were added to the building. Originally, the hipped-roof adobe had a simple two-story rectangular form unadorned with ornamentation other than that which still exists on the east veranda. Over the years as the ownership and use of the adobe changed, additions were added to accommodate such changes.
Figure 1: Chronology Diagrams 1849-1910

1849-1853
QUINZE PERIOD
UP
RESIDENCE
1849-1874
VARIOUS OWNERS
RESIDENCE
1874-1885
STRENTZEL PERIOD
RESIDENCE AND/OR
OUTBUILDING

COOKHOUSE

TO CORRALS,
BLACKSMITH SHOP
& OUTBUILDINGS

VINYARDS

LIVESTOCK

COOKHOUSE

OPEN OR
SCREENED PORCH

PORCH ROOF

LARGE ROOM
DIVIDED INTO
MODEL SMALL
ROOMS

DN.

ORCHARDS

FIRST FLOOR

SECOND FLOOR

1885-1890
STRENTZEL/MUIR
PERIOD
FARM OUTBUILDING

UP

COOKHOUSE

BUNKHOUSE

OPEN OR
SCREENED PORCH

CHIMNEY PROP

SHED ADDITION

FIRST FLOOR

SECOND FLOOR

1890-1900
STRENTZEL MUIR
PERIOD
OUTBldG.

UP

COOKHOUSE

BUNKHOUSE

OPEN OR SCREENED
PORCH

TEMPORARY
STABILIZATION OF
CHIMNEY

REDWOOD
CISTERN

SHED ADDITION

FIRST FLOOR

SECOND FLOOR

1900-1910
MUIR/HANNA
PERIOD
RESIDENCE

NEW
SOUTH
VERANDA

UP

NEW WINDOWS
NEW REVAM.
PANELING

NEW KITCHEN
1907

NEW HORIZONTAL
SIDING

NEW DOORS
RED OR
TIl

LARGE
VINE

FIRST FLOOR

SECOND FLOOR

NEW CLOSET

SEVERAL
SMALL Rms
REPLACED
PANELING

BELLO

NOT TO SCALE
Currently, the east elevation remains as the least altered of all the building’s exterior facades. The south side was altered significantly with the addition of a Greek Revival south veranda, new doors, windows, a bathroom and vertical wood siding applied over the original adobe wall. The original appearance of the west side of the adobe is hidden by the west bedroom addition, the storage room building, and the second story bathroom. On the north side of the building the original appearance has also been changed by the incorporation of horizontal wood siding and the addition of a brick chimney.

Exterior Wall Surfaces

The Martínez Adobe consists of several types of wall surfaces some of which are contributing to the original portion of the structure but most of which contribute only in an evolutionary way. The original adobe walls, with an exterior lime plaster finish, are perhaps the most contributing features to the building. The original exterior wall surfaces are still present on both the east elevation and the top of the west elevation above the west bedroom addition. When originally built, the thick walls of the house were constructed solely of adobe bricks. At the present time much of the original adobe remains, however, on the north and south sides major alterations have taken place making it hard to identify the structure as a California vernacular adobe.

As a result of a severe earthquake, the north wall, including the original chimney, suffered structural damage. In an effort to repair the damage, the remains of the original chimney were removed and a first floor window added in its place. Horizontal v-rustic siding attached to wood studs was added to cover the large gaps left in the wall where the adobe fell. Later, a new brick chimney (current) was added which replaced the first floor window.

Horizontal v-rustic siding was also used on the west elevation of the west bedroom addition to match that previously used on the north side. The original plastered adobe on the south side was also covered, but this time with vertical tongue-and-groove siding. All this new siding was added to both cover up the cracked or missing adobe and to modernize the building.

Sometime between 1910 and 1915, a new bathroom was added on the second level of the south veranda. This addition, complete with its wood framed walls and horizontal v-rustic siding, was also part of the major remodeling that occurred before the Hannas moved in.

Windows and Window Hardware

Because the Martínez Adobe was subjected to several alterations since first constructed in 1849, it contains a large number of exterior windows that originally and typically would not have been included on California vernacular adobe structures. Typically the narrow walls of adobes were windowless while entry to each room was gained through doors punctuating one or both of the long walls. As with the case of the Martínez Adobe, the narrow walls (north and south elevations) had few openings and the long west elevation had no openings. All the openings on the east elevation are original as this was considered the front of the adobe which served as the main entry on both levels.

The front (east) elevation of the adobe is punctuated heavily with door openings on the second floor and window and door openings on the first floor. As a result of the two-foot thickness of
the walls, the openings are splayed from narrow on the outside of the wall where the door and window sashes are located, to wide on the inside. In some cases remodeling hides this feature.

The walls of the east elevation primarily contain doors, however, two original double-hung windows, character defining to the original portion of the house, provide natural light to the living room. These 2 over 2 double-hung windows are approximately 3'-2" wide by 4'-6" high and have 1-3/4" wide stiles, 1-3/8" wide meeting rails, 1" wide muntins, 2-1/4" deep bottom rails and a 2" deep top rail. The windows are installed above window seats that are 16-1/2" above the floor of the living room. Original to the windows is their hardware which consists of a crescent lock, painted white, mounted to the top center of the check rail and the counter balancing system consisting of a rope, pulley and weight. Both windows appear to be in good mechanical condition (figure 3).

The east elevation of the storage room also has a window. This fixed, single light window is not character defining to the original portion of the house, however, the window, as well as the other windows on the storage room, is significant in its own right. This particular window, as well as the other windows on the storage room, are important to the evolution (modernization) of the building. This small window is approximately 1'-4" wide by 4'-0" high. No windows exist on the second floor of the east elevation.

Once again, as a result of major remodeling to the south facade, many of the original wall openings have been changed. On the first floor are two side by side windows fixed in the center of the wall. One of the windows is fixed while the other is double-hung. In both cases, though, the 2 over 2 windows are 2'-9" wide by 5'-7-1/2" high and have 1-1/2" stiles, 1-1/4" meeting rails, 1" muntins and 2" top and bottom rails.

Like the windows mentioned above, the two dining room windows are not character defining to the original portion of the adobe. Although the exact installation date is unknown, there is no doubt that they are an addition to the south wall. A 6-1/2" space divides the two windows and the double-hung window is lockable by means of a crescent lock which is mounted at the top center of the check rail. Like the living room windows, the dining room windows are in fair to good mechanical condition (figure 4).

On the south elevation of the kitchen are two 2'-5" wide by 2'-10" high 1 over 1 double-hung windows, in good condition, installed approximately 1'-0" above the counter top. These windows are part of a remodeling and contribute nothing to the character of the original portion of the house. On both windows, the upper stile extends below the upper meeting rail resulting in a decorative appearance. The windows have brass crescent locks mounted to the center of each of the check rails and a counter balancing system consisting of ropes, pulleys and weights (figure 5).

Historical photographs show that originally the south elevation of the storage room had just two windows. Currently, this wall has four 2'-2-1/2" wide by 2'-11-1/4" high nine light fixed windows that appear to be in fair to good condition (figure 6). Because several kinds and multiple layers of wood trim surround the four windows, it is easy to see that the windows are not original to the storage room.

Although the French doors and sidelights on the second floor of the south veranda are historic and visually pleasing, they are not character defining to the original portion of the adobe. The
Figure 3: Double-hung window located on the east wall of the living room.

Figure 4: Dining room windows on the south elevation of the adobe.
Figure 5: Double-hung window located on the south wall of the kitchen.

Figure 6. Fixed multi-pane windows located on the south wall of the storage room.
sidelights are in very good condition and measure about 11" wide and 6'-11-1/2" high, divided into five equal lights (figure 7).

The remaining window on the south elevation that needs mentioning is located on the south wall of the second floor bathroom addition. This non-contributing window is comprised of a fixed, single-light window which measures approximately 3'-0" wide by 2'-0" high.

Like the east elevation, the west elevation of the adobe is heavily punctuated with doors and windows of which none contribute to the original adobe portion of the house. These windows are part of the remodeling that included the west bedroom addition (figure 8). The windows are character defining in only that they are part of the building’s evolution. All of the windows on this addition appear to be in good mechanical condition. No windows exist on the west elevation of the storage room.

Next to the door that leads from the back patio into the kitchen is a double-hung window measuring approximately 3'-0" wide by 4'-0" high. This window has 2 over 2 sashes divided horizontally.

Like the kitchen windows on the south elevation, this window has decorative upper stiles and hardware including a crescent lock and a counter balancing system comprised of ropes, pulleys and weights. This window is in fair condition and will probably require rehabilitation (figure 9).

Next to the kitchen window, in the bathroom, a small 1 over 1 double-hung window was installed. This window measures about 1'-11" wide by 2'-11" high and has 1-3/8" stiles, a 1-3/8" meeting rail, a 2" top rail and a 2-1/4" bottom rail. Like several other double-hung windows in the building, this window has a brass crescent lock mounted to the center of the check rail and a counter balancing system consisting of a rope, pulley and weight (See figure 9).

North of the bathroom window, on the west elevation of the west bedroom addition, are two identical 3'-0" wide by 4'-6" high double-hung windows in good condition. The 3 over 3 window sashes, which should eventually be rehabilitated, are divided horizontally. The windows have 2-1/4" stiles and top rails, a 1-1/4" meeting rail, 3/4" muntins and a 2-1/2" bottom rail. Like several other windows in the house, these windows have decorative upper stiles and brass crescent locks mounted to the center of the check rail.

The last set of windows on the west facade define the northwest corner of the bedroom addition. This group of fixed windows, currently in good condition, consist of three tall windows on the west elevation and three matching windows on the north elevation (figure 10). All six of the windows are 6'-2" high, 1'-10-3/8" wide and consist of four 1'-3-1/2" square lights. Top rails are 4" deep, bottom rails are 3-3/4" deep, intermediate muntins are 1-1/8" wide and the side rails are 3-3/4" wide.

Few openings grace the north elevation of the Martinez Adobe. Two windows on the second floor flank the chimney, three tall narrow windows were installed on the north facade of the west bedroom addition, a multi-pane fixed window remains on the north elevation of the east veranda and a large double-hung window is installed in a small opening on the north side of the storage room. Figure 3 in the history chapter indicates that the two casement windows, or at least the openings which flank the chimney, are original and character defining to the adobe.
Figure 7: French doors and side windows on the second floor of the south veranda.

Figure 8: Window and door openings on the west wall of the west bedroom addition.
Figure 9: Windows on the west bedroom addition.

Figure 10: North and west windows on the west bedroom addition.
portion of the house. All other windows on the north elevation were installed as the building was modernized.

Because the second floor windows are the only casements in the house, it may be reasonable to believe that the sashes are not original to the adobe. The two windows are 3'-0" wide by 4'-6" high with a 2" deep top rail, a 4" deep bottom rail, 2" wide side rails and 1" wide muntins which divide each leaf into two lights. Hardware on the windows includes extension flush bolts installed at the top and bottom on the inside of the sash, instead of the edge, and a cupboard latch in the center of the middle stile which holds the two windows firmly closed (figure 11).

As mentioned, a multi-pane fixed window was installed in the north wall of the east veranda on the first floor. It is hard to understand why the window was installed in this location as it encloses nothing. One explanation may be that it was provided to shield the porch from the prevailing northerly winds. The twelve light window, also requiring some rehabilitation, has 2" deep rails, 2" wide stiles and 3/4" wide muntins (figure 12).

On the north elevation of the storage room is a large double-hung window which appears to have been installed in an opening much smaller than the sash. This odd looking window is approximately 2-10" wide by 2'-10-3/4" high. The bottom sash is about 2'-1/2" high while the 10-1/4" high top sash has been altered to fit the opening. Although the existing sash appears to be in good condition, a new sash which correctly fits the opening should be installed (figure 13).

Exterior Doors and Door Hardware

As previously mentioned, the building's east elevation contains several doors while the south and north sides have none. The west bedroom addition has two exterior doors, one of which leads from the patio into the bedroom and the other from the patio into the kitchen. An additional door leads from the west side of the house into the storage room.

Like many of the windows, most of the doors are not character defining to the original portion of the house. Several door openings were added or changed in both height and width, and new doors were added.

Like the windows on the east elevation, the door openings appear to be original to the adobe. Two large doors, not original to the adobe, lead from the east veranda directly into both the living room and dining room. The two doors are nearly identical in design with raised panels on the bottom portion and four divided lights on the top. The primary difference between the doors is their size with the living room door measuring 3'-0" wide by 5'-10" high and the dining room door measuring 3'-0" wide by 6'-2" high (figure 14).

Hardware on the living room door includes a lockset with a black floral designed escutcheon plate and round black knob. Above the lockset is an old surface mounted deadbolt. The door is attached to the frame with two butt hinges. With the absence of the escutcheon plate, it appears that the hardware on the dining room door has been changed. What remains is a simple black knob with a modern surface mounted slide bolt above. Like the living room door, the dining room door swings into the room and is attached to the frame with two butt hinges.

Both the living room and dining room doors have exterior screen doors. Currently in good condition, the screen doors have three vertical panels on the bottom half, and a screen, divided
Figure 11: Casement windows on the second floor of the north elevation.

Figure 12: Fixed window on the north elevation on the first floor of the east veranda.
Figure 13: Double-hung window on the north elevation of the storage room.

Figure 14: Raised wood paneled living room door.
vertically by a narrow muntin, on the top half. Both doors have a simple metal latch that slides to the side for opening and both have three spring hinges (figure 15).

On the second floor of the east elevation are four doors, similar in size but different in design. The doors are all about 2'-6" wide by 5'-10-1/2" high and swing to the inside. The doors have raised wood panels below the lock rail and a nine light window above. The top rail and stiles are 2-1/2" wide and the lock rail and bottom rail are 6" wide. All of the doors as well as their hardware will require future rehabilitation (figure 16).

Hardware on the second floor east doors vary. The door farthest to the north has butt hinges, a surface mounted rim lock, a surface mounted slide bolt and cabin hook-and-eye above. The other three doors also have butt hinges, surface mounted rim locks and a variety of surface mounted locking devices. All four doors have screen doors similar to those found on the living room and dining room doors of the first floor.

Only one set of doors exists on the south elevation of the adobe. The French doors, not original to the building, consist of two leafs, approximately 1'-11-1/2" wide by 6'-11-1/2" high, that open out onto the second level south veranda. Each of the two leafs are in good condition and are equipped with ten lights measuring 7-1/2" wide by 12-1/2" high. The stiles are 4" wide, the horizontal and vertical muntins are 1-1/2" wide, the top rails are 3" deep and the bottom rails are 11" deep. On either side of the doors are tall, narrow side lights, as previously mentioned in the Windows section.

Hardware on the French doors consists solely of a mortise bolt with a small oval shaped knob and two butt hinges on each leaf. On the inside of the doors are several surface mounted slide bolts, one on each door at the bottom, one above the mortise bolt and one at the top of one leaf (figure 17).

The door to the second level bathroom is completely different from any other found on the building. This door, original to the addition but not character defining to the adobe, is crudely constructed with horizontal tongue-and-groove boards and is currently in poor condition. The door swings into the small bathroom, and although the floor and ceiling of the south veranda slope considerably, the door remains level. Hardware on the door appears to have been altered several times over the years. Originally the door may have had a surface mounted rim lock, however, only butt hinges, a cabin hook-and-eye and a door pull remain (figure 18).

Several other doors, currently in good condition, provide access into the kitchen, storage room and west bedroom addition. The door leading from the first floor south veranda to the kitchen measures 2'-6" wide by 6'-6" high and consists of a solid bottom panel with one light above. The door opens into the kitchen and has two butt hinges, a simple round black knob and the door is lockable from the inside (figure 19).

The last exterior door to be mentioned leads from the west side of the building into the storage room. This 2'-6" wide by 6'-8" high door has five raised wood panels and hardware including butt hinges, a decorative oval knob and oval escutcheon plate. The door is lockable from either the outside or inside with the use of a skeleton key.
Figure 15: Screen door on exterior of living room door on east elevation.

Figure 16: Exterior door on the east elevation of the north bedroom.
Figure 17: South bedroom French doors on the second story of the south veranda.

Figure 18: Exterior door on the second floor bathroom addition on the south veranda.
Around the corner of the building, to the north, a door leads from the west concrete patio into the kitchen. This 2'-6" wide by 6'-7-1/2" door has three raised wood panels on the bottom with a single light above. The door is attached to the frame with butt hinges and has a round knob on an art deco escutcheon plate. Above the knob is a modern deadbolt. This 3'-0" wide by 6'-8" high door has six 1'-7-3/4" high by 11-3/8" wide raised wood panels, 5" stiles and top rail, 3-3/4" center muntin and a 9" bottom rail. The door swings into the room and is attached to the frame with two butt hinges. Hardware includes a black round knob on an art deco escutcheon plate with a mortise bolt above.

Similar to the living and dining room doors, this door has a wood screen door with a raised wood panel on the bottom and a single screen above. The screen door, also in good condition, has the same type of opening device as the other screen doors; a lever moved to one side for opening. Naturally the screen door swings out onto the west patio and is attached to the frame with three spring hinges (figure 20).
The roof of the Martínez Adobe is complex. The current hip roof is character defining in that at least the style is original to the house. Although some of the structural members have been changed, the existing roof appears to be constructed of some of the original framing members. A multi-sloped shed roof covers the west bedroom/kitchen addition, a gable roof covers the storage room, a shed roof with a stove pipe protruding through it covers the second story bathroom addition and another shed roof with a Greek Revival dormer covers the second story south veranda (figures 21 and 22). Only the main hip roof is character defining to the adobe portion of the house, however, the other roofs are certainly significant as part of the evolution of the building.

As previously shown on the building chronology drawings, the storage room, with a gable roof running in the north south direction, was probably a separate building that at one time was moved to its present location. Although the storage room was moved close to the back of the house, it was not actually connected to the kitchen.

Around 1910 when the adobe was being remodeled for Wanda Hanna and her family, a new bathroom was added to the second story, south veranda on the west end. A shed roof, connected to the south veranda roof and sloping down to the west, was constructed to cover the area of the bathroom not already covered by the south veranda roof. The bathroom addition was primarily built over the newly expanded kitchen and more than likely was also separate from the storage room (figure 23).

When there was no longer a need for a milking porch, the west side of the house was expanded to include a bedroom and a new kitchen. When the bedroom/kitchen addition was added, its
Figure 21: Photograph from west side of adobe showing the complex roof configurations.

Figure 22: Greek Revival dormer roof on south veranda.
Figure 23: Shed roof over bathroom addition on second floor of the south veranda.

The original milking porch roof still includes its original hand-hewn roof framing members (character defining to the original adobe) that are set directly into the west adobe wall. With the widening of the original porch, a multi-sloped appearing roof was created which butts directly into the north elevation of the second floor bathroom addition and the north elevation of the storage room creating an odd looking and very complex roof system (figure 24).

Currently the adobe portion of the house and the east and south veranda roofs, including the Greek Revival dormer and the second story bathroom addition, are covered with wood shingles that seem to be in good condition. Evidence found in the attic indicates that at one time this entire roof may have been replaced or at least moderately rebuilt. The storage room roof is the only other roof covered with wood shingles. The roof of the west bedroom/kitchen addition is covered with white asphalt roll-roofing, also in good shape, laid horizontally.

Gutters and Downspouts

Several types of gutters and downspouts have been installed on the Martínez Adobe. On the roof of the adobe portion of the house and on the west side of the second story bathroom addition are the original heavy duty metal round gutters. These gutters and their downspouts are character defining to the adobe portion of the building and may have at one time provided water to a wood cistern located at the northeast corner of the building. The gutter system is working properly and drains itself through 2" metal downspouts located at the southeast and northwest corners of the structure (figure 25).
Figure 24: Photograph from west elevation of adobe showing a variety of roof shapes.

Figure 25: Round metal gutter and downspout on adobe portion of the house.
The second story bathroom addition has a separate gutter with a complicated 2" metal downspout that winds its way down and dumps the water into a modern gutter connected to the fascia on the east elevation of the storage room (figure 26).

The west bedroom addition and the storage room addition both have new, modern, square gutters on their west elevations. In both cases the gutters dump water into 2" metal downspouts that are in good working order. The new downspout from the west bedroom addition gutter is located on the south end of the addition and is attached directly to the north wall of the storage room. The storage room downspout is located on its extreme southwest corner (figure 27).

**Chimney**

Historical research, photographs (although limited) and archeology provide evidence that the current fireplace, hearth and chimney are not original to the adobe. Typically, adobes of the same period had chimneys on either or both ends of the structure. Some chimneys were built directly into the adobe wall. Figure 3 in the History Background chapter shows that this was the case at the Martínez adobe as the photograph shows the top of the chimney protruding through the roof. Often, built-in chimneys produced a significant amount of stress on the short wall causing the wall to fail. Figures 2 and 3, also included in the History Background chapter, show the chimney on the north wall being held in place with a wooden prop confirming that indeed the original chimney was failing. Figure 4 in the History Background chapter shows that by 1910 the original chimney had been removed and replaced with a window on the first floor.

Between 1911 and 1914, a new brick chimney and fireplace were added to the center of the north wall replacing the first story window that had previously replaced the an earlier chimney. A new hearth was built sometime after 1921, probably in the 1930s or 1940s.

The current chimney stands 4'-0" wide at the base and 2'-2" wide from 6'-0" high where it tapers in, up to the top. The chimney is constructed of 2-1/2" x 4" x 8-3/4" red bricks with 1/2" wide mortar joints that currently need repointing. The chimney extends out beyond the north wall about 1'-0" and at the base of the chimney is a metal access door providing a cleanout. Near the top is a rusted steel strap which encircles the chimney and ties it directly into the hip roof. Archeology provided no clues to the age of the red brick or the yellow fire brick used on the inside of the fireplace although the current fireplace and chimney probably date to this century (figure 28).

**Verandas and Patios**

**East Veranda.** The two story veranda on the east elevation of the Martínez Adobe is both character defining to the original portion of the house and is definitely one of the few original and historical features remaining on the exterior of the house. Originally, the floors of the veranda were covered with typical tongue-and-groove decking, however, during the Parnawith period, a 4" red concrete slab (detrimental to the wood decking) was installed directly over the wood deck on the first floor (figure 29). Although the second floor original wood deck remains intact as well as the tongue-and-groove ceilings on both the first and second levels, they are all in need of rehabilitation.
Figure 26: Downspout from second story bathroom to gutter at east elevation of storage room.

Figure 27: Gutter on west bedroom with downspout attached to the north wall of the storage room.
The first and second floor veranda posts are similar in design but differ in size. On the first story, the 8" wood posts have square bases which extend up to the bannister’s top rail, and above the bannister, the post’s edges are chamfered producing an octagonal appearance (See figure 29). At the top of each post is a series of octagonal plates, some in a deteriorated condition, forming a 1'-0" wide by 3" high column capital (figure 30).

The balustrade on the first floor of the east veranda consists of a 3" wide by 3" deep bottom rail, a 5-1/2" wide by 2" deep slightly rounded top rail and 1-3/4" wide by 3/4" deep balusters spaced 3-5/8" apart. The top of the balustrade, in need of rehabilitation, is attached 2'-2" high on either side of the veranda posts. As previously mentioned in the windows section, a multi-pane window exists on the north end of the east veranda, probably for wind protection (figure 31).

The railings that extend from the first floor balustrade down either side of the red concrete steps are also in good condition but will eventually require rehabilitation. The railings are constructed of wood and consist of a top rail similar to the balustrade and a 2-1/2" wide by 5-1/4" deep lower rail. Both the top rail and the lower rail are attached to a 5-1/2" square post at either end. The posts are attached to a 3/4" deep by 8-1/2" square wood plate that in turn is attached with bolts directly to the concrete stair slab (figure 32).

Although the east veranda’s second story balustrade, including the posts, have the same appearance as that which was installed on the first story, they differ slightly in design. The posts which support the roof of the veranda are only 6" square instead of the 8" posts that are giving once again an octagonal appearance. At the top of each post is a 10" wide by 3" high column capital similar to the capitals on the posts below (figure 33).
Figure 29: Concrete slab over wood decking on the first floor of the east veranda.

Figure 30: Octagonal capital on first floor, east veranda post.
Figure 31: Balustrade on first floor of east veranda.

Figure 32: Wood railings and posts on the east veranda stair.
The 2'-6" high balustrade on the second story is deteriorating rapidly. The balustrade consists of a 2-3/4" high by 1-3/4" deep bottom rail, a 3-1/4" wide by 2" deep rounded top rail and 1" square balusters turned forty-five degrees. On this balustrade only a 2-3/4" space exists between balusters.

South Veranda. The south veranda is similar in design to the east veranda but has 8" posts on the first level and 6" posts on the second level (figure 34). The posts are square at the base, chamfered in the middle and have no capital at the top (figure 35).

On the south veranda's first level, the original balustrade may have at one time been removed and replaced with the current solid balustrade which will require future rehabilitation. Below the top rail, and down to the floor, the balustrade consists of vertical tongue-and-groove boards approximately 3-1/4" wide with no reveal (figure 36). On the second story, the deteriorated balustrade matches the one on the east veranda in every way except the top rail is rounded more and the balusters are not turned on a forty-five degree angle.
Figure 34: Photograph showing the south veranda.

Figure 35: Typical post on the south veranda.
In 1975 the National Park Service undertook an extensive rehabilitation of the south veranda. As part of the rehabilitation, the east wall of the kitchen was relocated a few feet west to its original location. Also, as part of the rehabilitation, some of the structural members on both the first and second floors of the south veranda were replaced and some of the original decking was reapplied.

**West Patio.** On the west side of the Martínez Adobe is a large red concrete slab, scored to look like flagstone, extending the length of the west bedroom addition and west to a low brick retaining wall (figure 37). To the west of the brick wall is a large wooden roof structure referred to as the ramada. This structure is primarily used for gathering and is popular for picnicking. The concrete patio, brick walls and the ramada are not character defining to the adobe itself, but are significant in that they contribute to the building’s remodeling evolution.

Although the red concrete patio and the brick retaining wall are in good condition, they are contributing to drainage problems on the west and north sides of the house.

**Exterior Woodwork and Trim**

The original portion of the house is constructed of adobe and the additions as well as all the yellow painted trim around the doors and windows are constructed of wood. Trim on the doors and windows on the east elevation is perhaps the most interesting found on the structure. At the base of the wall, both at the first floor and the second floor, a 9" high wood base spans between each door. Wood trim around the doors and windows measures approximately 3-1/2" wide by 1" deep. Under the window sill, resting directly on top of the wall base, is yet another trim board that measures approximately 6" deep. At the location where the base meets the
vertical door trim, a separate small board is applied to the front of both the base and the door trim to hide the joint (figure 38).

The doors on the second story of the east veranda have the most ornate and character defining wood trim of any found on the adobe. Like the first story, a wide base at the floor line spans between each of the four doors on the east elevation. The 5" wide beaded edge trim at the sides of the doors continues down to the floor line and a separate trim board is applied on top of the door trim and base trim to cover the joints.

The wood trim at the top of the doors is especially decorative and unique. However, because the woodwork above the doors resembles the detailing of the Greek Revival style of the south veranda roof, it may be possible that they too were added during that heavy remodeling period.

This trim can best be described as consisting of pilasters on either side of the door which carry a decorative wood entablature above. The top of the wood entablature protrudes about 6" from the wall while the entire detail, consisting of all the components, is about 7" high. All woodwork and trim on the east elevation is in good to excellent condition (figure 39).

When the Greek Revival details and wood siding were added to the south elevation of the Martínez Adobe, its "adobe" was hindered. Unlike the east elevation, the south elevation does not have base trim at the bottom of the walls, however, the window and door trim is similar to the east elevation. Five-inch-wide trim is applied to the sides and the top of the first floor dining room windows while a narrower trim was applied at the sides of the second story French doors. An 8" trim board was used at the top of the French doors. All the wood trim on this elevation is in good condition.
Figure 38: Wood base and door trim on first floor, east veranda.

Figure 39: Wood trim above the east elevation exterior doors on the second level of the east veranda.
Continuing on the south elevation is the wood trim around the window on the second story bathroom addition and the trim on the kitchen and storage room windows. Trim on the bathroom addition window consists of a 3" wide trim applied at the sides and top of the window. No trim exists under the window sill.

The trim on the kitchen windows is in fair condition and consists of approximately 3" wide side trim boards and a 4" deep top trim board. Under the sill is another piece of trim about 3" deep.

Because the storage room windows were at one time altered, several types of trim exist. Surrounding the four windows on the south side of the storage room are two sets of approximately 2-1/2" wide trim boards currently in fair condition (figure 40).

The single window on the east side has narrow trim on the sides and the top and no trim under the sill. The trim on this window is deteriorating and will require attention in the near future.

Because the storage room was a separate structure from the adobe, and moved to the current location, it boasts wood trim different from anywhere else on the house. At the top of the north and south walls, just under the soffit, is a wood frieze measuring about 6" wide. The frieze is in very good condition. The storage room has horizontal wood siding and narrow wood trim on the corners.

Since the west elevation of the house consists of several wood additions, with several different types of windows and doors, the wood trim varies greatly. Wood trim on the west elevation of the storage room consists of simple moldings under the soffit and narrow wood trim around the door. The wood trim details on the north elevation of the storage room match the trim on the south elevation with the exception of the window trim which is about 4" wide on the sides and the top and only about 2" deep under the sill.

Like the woodwork on the window on north elevation of the storage room, the windows on the west bedroom addition have about 4" wide side and top trim with about a 2" trim under the 2" sill. The doors on this elevation have similar trim to that seen on the windows. All trim on this elevation is in good condition (figure 41).

Wood trim on the north elevation is in good condition and includes a 9" deep wood frieze under the soffit. The corners are trimmed with 6" wide boards in good condition and 5" wide trim boards, in fair condition, applied around the base and step-back of the chimney (figure 42). Window trim on the second floor consists of 5-1/2" wide jamb trim on the sides and top and a 2" sill with no trim below. Trim consisting of 2 x 4's is all that surrounds the multi-pane window on the north side of the first story of the east veranda.

Site Features and Ancillary Structures

Although the Martínez Adobe is the primary focus of this report, some site features and ancillary structures do impact the adobe itself. For a more thorough description of the site features and ancillary structures at the adobe, refer to the Landscaping section of the report.
Figure 40: Trim around windows, at corners and under soffit of storage room.

Figure 41: Window and door trim on the west bedroom addition.
Building Volume

When the Martínez Adobe was constructed in 1849, it was simple in plan, consisting of only four rooms. Two large rooms were located on the first floor with an additional two rooms on the second floor. Today, the adobe still retains some of its original character and volume.

Room Descriptions

The first floor of the original portion of the adobe consists of a large living room on the north end and a moderately sized dining room on the south end. West of the living room is a large bedroom addition with a sizable closet and bathroom complete with a tub and toilet. West of the dining room is a kitchen, and in an alcove between the kitchen and the bedroom is a pedestal sink. Accessible from the west side of the kitchen is a large room now being used for storage. The south and east porches should also be mentioned as they were often used as an extension of the interior living space.
The second floor of the house is accessible by a narrow stair which is located in the southwest corner of the living room. The stair winds its way up to the second floor landing where the second floor bedrooms are accessed.

The large north bedroom consists simply of a large open room with a set of shelving above the stairs, a closet in the wall where a void was left by the original chimney and a larger closet on the southeast corner of the room.

The south bedroom, detailed better as a result of previous remodeling, consists of a large open room with a moderately sized closet in its northeast corner. French doors lead out to a veranda on the building’s south side and four doors lead from the bedrooms out to the east veranda. Located on the southwest corner of the second story of the south veranda is a small bathroom addition which at one time included a sink and toilet. On the west end of the bathroom is a small storage room. Room dimensions can be found in Appendix A, Existing Condition Field Notes.

Walls and Ceilings

First Floor, Living Room and Dining Room. Several changes have taken place to the original lime plaster walls and ceilings in the living and dining rooms. Originally, the interior surface of the exterior walls and the wall separating the two main rooms were simply finished with lime plaster. As the adobe was remodeled, most of the original interior finishes were hidden behind more modern materials or totally removed.

Currently, from the inside out, these walls consist of one layer of 5/8" thick gypsum board applied over a layer of 7/8" thick by 3-1/4" wide tongue-and-groove redwood vertical beaded paneling which, in-turn, is attached to furring strips applied directly to the original lime plastered adobe walls (figure 43). Only the original plastered adobe walls remain as character defining to the adobe portion of the structure. The redwood tongue-and-groove paneling as well as the modern gypsum board are significant in there own right but are simply common products which were added as the building underwent its remodelings.

The ceiling system in the living room and dining room consists of a 1/2" thick layer of gypsum board applied directly to 2-1/4" deep furring boards with the 7/8" thick by 3-1/4" wide redwood beaded tongue-and-groove siding above. The siding is attached to the 2" x 10" second floor joists which were added as part of the 1975 remodeling. Above the 2"x10" floor joists are approximately 2"x3" sleepers which in turn support the existing wood floor above.

In 1983 the park put in a request to remove a portion of the adobe wall in the dining room for the purpose of interpreting the adobe material. Although the park was denied its request, some time later an additional wall was constructed inside of the original wall in the southeast corner of the dining room. The interior plaster was cut away exposing the new adobe material which has been an interpretive display every since. Although not original to the adobe, both the interior wall and ceiling surfaces in the living room and dining room appear to be in good condition.

Other Rooms. Walls and ceilings in the west bedroom addition, the bathroom and the kitchen are drastically different than those in the living and dining rooms. Naturally these materials are
not character defining to the adobe. On the west wall of the west bedroom addition (on the west original adobe wall) modern gypsum board is applied to 2"x6" furring boards applied flat to the adobe wall. The other walls on the additions have modern gypsum board attached to wood framing. Ceilings in these areas consist simply of one 1/2" layer of gypsum board applied to the ceiling joists above.

In the bathroom, the lower portion of the gypsum board walls are covered with a masonite wainscot. Linoleum baseboards are attached to the base of the bathroom walls with aluminum strips, chrome towel bars, a recessed mirror and a recessed medicine cabinet were installed on the walls.

When the milking porch was first enclosed to house the kitchen a ceiling was not added, leaving the space open to the roof above. During a later remodeling, a finished ceiling was added leaving an attic space above. A ceiling which slopes slightly to the south was installed directly under the second floor bathroom. On the west wall of the kitchen, near the cabinets, a wood stove pipe and a gas line at one time protruded through the wall (figure 44). In the attic, on the west wall of the adobe is what remains of the smooth 1/8" plaster finish which at one time covered the adobe wall in the kitchen. Both the plaster finish and what remains of the kitchen's original wall covering are certainly character defining to the adobe portion of the house. Because the plaster finish is thin, it may be possible that the area where the current kitchen is located was covered or enclosed. In the attic of the kitchen some plaster with the original wall covering has begun to spall off the west wall of the adobe wall leaving it exposed and in a venerable condition.

The center portion of the west wall of the adobe is in a deteriorated condition where a large vertical crack has appeared (figure 45). Also near the north end of the west adobe wall, the wall
Figure 44: Smooth textured gypsum board walls and ceiling in the kitchen.

Figure 45: Large vertical crack in the west adobe wall showing fabric deterioration.
has settled due to erosion of the lower adobe bricks. After removal of wall board, several cracks in the adobe wall were discovered as well as the original door lintel that once spanned the top of the door which now leads from the west bedroom addition into the living room. As previously believed, this door has been enlarged in height and the original lintel cut off. It is fortunate, though, that at least part of the hand-hewn lintel remains.

The interior walls of the storage room, located west of the kitchen, are finished with the same 7/8" thick redwood tongue-and-groove paneling that was heavily used throughout the rest of the house. This material, also used on the ceiling, is painted a creme color. Like the paneling in the rest of the adobe, the material in the storage room is in very good condition (figure 46).

Second Floor, North Bedroom and Closet. The walls of the north bedroom are covered with the same redwood tongue-and-groove vertical siding that is seen throughout the house. The windows are set to the outside of the walls creating a window seat. The doors are also set to the outside of the walls. The walls and ceilings of the window areas and the door locations are clad with the same vertical siding material that was used on the walls (figure 47). At one time the north bedroom room was converted into two spaces. A cover plate is now attached to the east and west walls to hide where the partition was attached. Missing is a trim board which originally went around the room at the top of each wall.

The ceiling of the north bedroom is comprised of exposed 3" wide by 5" deep wood beams, beaded on the bottom edges, running in an east west direction. The ceiling above the beams consists of random width boards butted together running in a north south direction. The ceiling boards, beams and the vertical paneling are all painted white. The first ceiling beam on the north side of the room had at one time failed. The east end of the beam was repaired with the attachment of bolts through wood strengtheners on each side. It also appears that some alterations were made to the east wall in the northeast corner of the room below the repaired beam (figure 48). The exposed beams and ceiling boards in the north bedroom are the only character defining (to the original adobe) features left in the north bedroom.

The closets are located in the north bedroom. A closet on the north wall was created in a space vacated by the original chimney. The closet located in the southeast corner of the room is a later addition. The south closet walls are constructed from the same vertical redwood siding that exists throughout the adobe. The ceiling in the south closet is the same as that in the north bedroom except access to the attic is provided through a small wood ceiling hatch.

Second Floor, South Bedroom and Closet. Because the south bedroom was at one time occupied by Wanda Hanna and her husband, the remodeling job was much nicer than that done in the north bedroom. In this room, the walls consist of vertical paneling, although different than that used throughout the rest of the house. The paneling consists of 3-1/4" wide tongue-and-groove boards butted together with no reveal creating a very smooth and finished look. The walls and the ceiling are painted cream. The ceiling beams in this room differ from those in the north bedroom. The beams are 2-3/4" wide by 5" deep with rounded edges on the bottom instead of beaded edges and are rougher in appearance than the beams in the north bedroom. The ceiling above the beams consists of random width boards laid together in a north south direction. Like the north bedroom, the exposed beams and ceiling boards are all that remain of the features that are character defining to the original adobe portion of the house. In the southeast corner of the ceiling, a covered hole remains where a stove pipe protruded (figure 49).
Figure 46: Vertical tongue-and-groove paneling on the walls and the ceiling of the storage room.

Figure 47: Tongue-and-groove vertical paneling and exposed beam ceiling in the north bedroom.
Figure 48: Repaired ceiling beam in the north bedroom.

Figure 49: Vertical paneling and exposed beam ceiling in the south bedroom.
A moderately sized closet, located in the northeast corner of the south bedroom, also has walls constructed of the same smooth siding as found in the rest of the room. The ceiling in the closet also matches that which currently exists in the bedroom. This room is painted pink.

Stairway. The walls and the ceiling of the enclosed stair are clad with the same redwood tongue-and-groove vertical beaded siding as found in other locations of the house (figure 50). At the top of the east wall of the stair is an opening, currently closed with a small wood door. The opening was installed to provide ventilation to the north bedroom.

Second Floor Bathroom. The east, south and west walls of the bathroom, located on the south veranda, are sheathed with 6" wide vertical siding. This siding has a decorative bead running down the center of each board. The interior wall on the north side of the room is covered with random width boards attached horizontally. The ceiling consists of masonite or plywood sheathing attached to the top side of 2" by 4" exposed beams (figure 51).

Floor Surfaces and Finish

First Floor. Currently the living room and the dining room both have 2-1/4" tongue-and-groove oak flooring laid in a north to south direction. The oak floor, not original to the adobe, is protected by several coats of a floor sealer. The original flooring still exists under the oak flooring and is still exposed in the closet under the stairway. This character defining material consists of 3-1/4" tongue-and-groove douglas fir, laid north to south.

Near the fireplace, in the northeast corner of the living room where the floor has settled, and near the doorway leading from the living room to the dining room, portions of the oak flooring has separated at the joints leaving sizable cracks. These cracks are caused from settlement of the north adobe wall. In the dining room where the door to the kitchen is located, the oak flooring slopes slightly up to the kitchen floor making a smooth transition between these rooms. Other than in these areas the oak flooring remains in good condition.

Flooring in the west bedroom, closet and hallway consists of 3-1/4" tongue-and-groove fir laid north to south (figure 52). Floors in the west bedroom, bathroom and sink areas are about 4" higher than in the living room and dining room. To make the transition, a sloping wood sill was installed at both the doors leading from the bedroom to the kitchen and from the bedroom to the living room (figure 53).

The douglas fir flooring, installed in the bedroom addition, was used because it matched the floor in the living and dining rooms. Although the bedroom flooring material is in good condition, it does show more wear than the oak floor because of the nature of the soft wood. Like the oak floors, the bedroom floors were also sealed with some type of sealer.

Over the years the flooring material in the kitchen and the bathroom has probably been changed several times. Photographs taken prior to the work done in 1975 show that the kitchen originally had linoleum on the floor which was curved and attached to the wall to form a base. At the edge of the floor was a black accent stripe. Although the kitchen and bathroom floors are currently covered with modern brick patterned sheet vinyl flooring, original linoleum flooring may still exist under it. The sheet vinyl flooring in both these rooms is in poor condition.
Figure 50: Vertical beaded tongue-and-groove redwood paneling on the walls and ceiling of the stairway.

Figure 51: Wall and ceiling materials on the second floor bathroom addition located on the south veranda.
Figure 52: Tongue-and-groove douglas fir flooring in the west bedroom addition.

Figure 53: Wood threshold in doorway between the living room and the west bedroom addition.
Little can be said about the floor in the storage room near the kitchen as this room was at one time a separate building, and the floor system has probably undergone many changes.

Presently, the floor consists of a concrete pad with a red finish similar to that seen on the west patio or the east veranda. The red concrete slab is in good condition.

**Second Floor.** At the present time both the mid and top landings of the stairway are covered with a low pile, wall to wall carpeting. The floor system in the north bedroom was part of the major stabilization work that occurred in 1975. At that time the entire floor was removed, joist were repaired or replaced and existing flooring laid. The existing floor, character defining to the adobe, consists of 3-1/4" wide tongue-and-groove fir, with no reveal, laid in the east to west direction. The floor is painted brown and appears to be in good condition with the exception of normal wear. This floor should be refinished at some time in the future. Flooring in the closet of the southeast corner of the north bedroom presently consists of linoleum over the fir floor (figures 54 and 55). During a building investigation conducted in June, 1990, several different newspapers dating to the 1920's were discovered under the linoleum. The newspapers and the linoleum were installed under the west wall of the closet suggesting that the closet may have been added after that time (figure 56).

The south bedroom floor, including in the closet, was not part of the stabilization efforts conducted in 1975. At the present time, this floor remains in its original condition and is also character defining to the original portion of the adobe. Like the north bedroom floor, this 3-1/4" wide tongue-and-groove fir floor was also laid in a east to west direction and, although the finish is probably not original, the floor is currently painted brown. Also like the north bedroom floor, the south bedroom floor shows some wear and tear and will eventually require refinishing.

![Figure 54: Linoleum flooring in the north bedroom closet on the south end of the room.](image-url)
COLOR CODE

W = WHITE
T = TAN
N = NAVY BLUE
RB = ROYAL BLUE
LB = LIGHT BLUE (PALE)

Figure 55: Pattern from the linoleum flooring found laid over newspapers dating to the 1920's.
Figure 56: 1920s newspapers found under the linoleum in the north bedroom closet.

A floor other than the deck of the veranda was never added as part of the bathroom addition on the south veranda. Currently this wood, tongue-and-groove decking remains in fair condition but will require refinishing some time in the future.

Stairs. As mentioned previously, the only set of stairs leading to the second story of the house is located in the living room of the adobe. The stairs, located in the southwest corner of the living room, are constructed of 1" thick by 10" deep treads and 7" high risers. The lower portion, and presumably the upper portion of the stairway is supported by two 2" by 12" rough sawn stringers. Ten risers above the first floor is a landing which measures 3'-0" by 3'-4". At this point, the stairway turns 45° to the east. The 1-3/8" diameter wood handrails are attached to the walls with metal brackets on either side of the stairway. Wall, ceiling and flooring materials have been mentioned in other sections of this report (figure 57).

Woodwork, Trim and Cabinetry

First Floor. Because of the adobes' large size and because it has been added to several times, many different types of woodwork and trim were installed. Because the oak flooring in the living room and dining room is not original to the adobe, the baseboards in these rooms may not be original or may be original but were moved up on the wall with the addition of the oak flooring. The living room baseboards, which appears to be in good condition, are comprised of a 9/16" wide by 2-1/8" high base, painted white, with 3/4" quarterround trim at the floor. The quarterround trim is stained to match the floor. The dining room baseboards are similar to that found in the living room with the exception of its height. The baseboards, painted white and in good condition, stand 4-/2" high and are 1" wide and also have 3/4" stained quarterround moldings at the floor.
Windows and doors in the dining room and living room are surrounded by several different widths of wood casing, all painted white. As a result of the exterior walls being constructed of adobe, deep recessed areas exist in the walls where the windows and doors are located. Where the wall turns the corner at the living room windows and door locations, two quarterround moldings were applied directly to the outside corner of the walls and head of the window creating a soft, more rounded edge. In the dining room, the gypsum board walls are much straighter and the edges, with no moldings, are hard. As previously mentioned, the door leading from the dining room to the kitchen was probably not original. The wood casing around this door is 7/8" thick and 5-1/2" wide.

At both living room windows, window seats have been constructed and rise about 1'-4" above the floor. Below the south windows in the dining room is a wood window seat, with a hinged top, constructed 1'-6" above the floor. The inside of the seat is used for storage (figure 58).

Woodwork in the west bedroom addition and the hall, leading from the bedroom to the kitchen, is much more modern and simple in design than that in the living room and dining room. Baseboards consist of 1" wide by 5" high wood boards with 3/4" quarterround moldings at the floor. The same baseboards are found in the west bedroom closet. A wood shelf is attached to
the closet wall about 2'-0" below the ceiling; 3/4" quarterround trim, painted white, also graces the top of the wall at the ceiling. Modern, 2-1/4" wide casing is installed around all the doors and the windows in this part of the house. Unlike any other opening in the house, the door which leads from the west bedroom to the living room has both the wide wood casing and the modern wood casing. Like in the living room and the dining room, all the woodwork in the west bedroom addition is painted white (figure 59).

Very little wood trim or other woodwork is found in the bathroom. A thin wood trim board is installed around the bathtub and a wider window casing surrounds the window. No other wood trim exists in the bathroom.

Baseboards in the kitchen consist of 1/2" wide by 3-1/2" high wood baseboards, painted white with no quarterround molding at the floor. A 1" by 2" wood trim board is installed at the top of the wall at the ceiling just above the counter.

A 1-3/4" wide by 5/8" thick rounded profile wood casing, painted white, surrounds the doors which lead to the hallway and the south veranda, and around the kitchen windows on the south
Figure 59: Two types of trim on door leading from west bedroom to living room.

and west sides. The door leading from the kitchen into the dining room has wide wood trim on the right-hand side and top and no trim on the left-hand side. A small painted wood shelf is attached to the wall in the corner, just above this door.

The only built-in cabinets that currently exist in the building are those which are located in the kitchen. The wood cabinets, simply constructed of both hardwoods and plywood, are all finished with white paint. The cabinet stands approximately 3'-0" high off the floor and includes two cabinet doors under the sink and two doors to the right of the sink. Above one of the cabinet doors is a single drawer with a simple chrome drawer pull. Hardware on the other doors consists of round chrome knobs and the doors are held in place with two chrome cabinet hinges each.

The top of the cabinet, as well as the counter surround, is covered with 4" square yellow ceramic tile, with green ceramic tile trim. An enamel finished double sink was installed in the counter top and the faucet is attached to the wall above. Above the counter, attached to the wall west of the sink is a single cabinet with a wood door that matches the cabinet below. Its hardware also matches that seen below. Three 1" thick shelves, round in front, are located in the corner where the upper cabinet and the wall meet.
The design of the kitchen cabinets appear to be of the 1940’s or 1950’s period. In 1975 when the south veranda was rebuilt and the east wall of the kitchen was relocated, the kitchen cabinets and counter were altered. Currently the counter and cabinets are in poor condition (figure 60).

Unlike the rest of the house, the storage room has no wood baseboards. Wide wood casings surround the door openings, however, windows have narrow casings at their sides and tops with wide casings under the sills. Quarterround trim is found where the walls meet the ceiling.

**Second Floor and Stair.** Similar to the first floor, the woodwork on the second floor varies greatly from room to room. Because the rooms on the second floor have been altered it may be safe to assume that the wood work around the doors and the windows and the doors themselves have also been changed. With this in mind it may also be safe to say that the wood work on the second level is not character defining to the original portion of the adobe. Although the north bedroom has a 1" thick by 6" high wood baseboard with a 3/4" quarterround molding at the floor, the closet in the southeast corner of the room has a baseboard measuring about 6" high with the top edge having a beaded detail. Trim which once was applied to the top of the walls at the ceiling in the north bedroom is currently missing.

As with the doors and windows in the adobe walls of the first floor, second floor units are set in the deep wall openings toward the outside of the wall. On the inside wall of these openings, are wide wood casing with quarterround moldings. The doors and windows have no independent casing. A narrower wood casing is applied to the wall around closet doors on the south and north sides of the room. A similar type of casing is seen on the small ventilation opening above the stair and around the door leading to the stair. Two wood shelves are attached to the wall in the southwest corner of the room, just above the stair.

Several types of woodwork and trim are located adjacent to the stair. On the east wall of the stair near the first step, a 3-7/8" by 3-1/8" rectangular post with chamfered edges was installed to act as a structural support for the floor above. The post at the bottom of the stairway resembles those located on the south veranda (figure 61).

Although the lower portion of the stairway has no baseboard, a wide trim board covers the area where the stairway protrudes through the second floor creating a small 7" wide shelf. This area is covered with linoleum, on both sides of the upper portion of the stair (figure 62). At mid-landing, a wood baseboard is introduced. Midway up the east wall of the stairway on both the first and second floor is a 6" wide trim board. The purpose of this board is unknown. Also on the east wall, running vertically near the bottom step, is a wood raceway molding used to hide the surfaced mounted wiring that leads to a rotary switch and duplex outlet below. At the top and in the corners of the stairway walls, 3/4" quarterround moldings, similar to that found at the ceiling in the west bedroom addition, have been added.

Probably the most ornate of all the woodwork in the house is that found at the top of the stairs over the door which leads to the south bedroom. This interesting detail can also be seen above all of the doors leading to second floor rooms on the east elevation of the adobe. Similar to the exterior detail, the wood detail can best be described as consisting of pilasters on either side of the door which carry a decorative wood entablature above. The top of the wood entablature protrudes about 6" from the wall while the entire detail, consisting of various components, is about 7" high. As mentioned earlier, this detail is very much in character with the Greek Revival details added to the south veranda and although no reason exists as to why this detail was
Figure 60: Photograph showing the existing kitchen cabinets and tile countertop.

Figure 61: Chamfered post at base of stair.
installed above an interior door, speculation suggests that it may have been added to the south room when it was remodeled for Wanda Hanna and her husband (figure 63).

Like the north bedroom, the south bedroom has no wood baseboards, however, the molding at the top of the walls does exist. This 5" deep wood molding is attached to the top of the wall at the ceiling between each of the exposed beams. Just below the molding and the beam is a 3/4" quarterround molding running horizontally around the room.

Wood trim around the doors and windows in the south bedroom also resembles that found in the north bedroom. Surrounding the door which leads to the stairway is wood casing measuring approximately 6" wide. The casing around the closet door measures approximately 4" wide. The door on the east exterior wall and the French doors with sidelights on the south wall all have casings similar to that found in the north bedroom. The door on the east wall is set to the outside of the wall. A wide casing is applied to the inside of the wall at this door opening and on the inside corner a 3/4" quarterround molding is applied. The French doors have similar trim details. Quarterround moldings were used to soften both the outside and inside corners of the opening. The width of the trim around the French door varies from approximately 3" to 6".

The woodwork and trim in the second story bathroom addition consists of quarterround trim at the top and bottom of the walls. Other trim in the bathroom includes a 2" wide trim board surrounding the sides and bottoms of each of the exposed beams (where the beams meet the wall), beaded door trim matching that which exists on the exterior of the door and wood trim measuring approximately 5" wide surrounding the window. Other woodwork consists of a built-in shelving unit attached to the south wall and two 1" single shelves attached with curvilinear brackets mounted to the east wall (figure 64).
Figure 63: Greek Revival decorative wood entablature above door leading from the stair into the south bedroom.

Figure 64: Woodwork, trim and shelving in the second floor bathroom addition.
Interior Doors and Door Hardware

First Floor. The door which is located between the living room and west bedroom addition likely dates from the 1920s. This door, consisting of raised wood panels, measures 3'-0" wide and stands 6'-0" high. The solid wood door has 4-1/2" wide stiles and top rail, 3-5/8" wide muntin, 6-3/4" wide lock rail and a 7-1/4" deep bottom rail. The door has two small raised panels below the lock rail and two larger vertical raised panels above the lock rail. This door swings into the living room and is in good condition. The door is attached to the frame, on the north side of the opening, with two butt hinges (figure 65).

Like several other doors on the first floor, the living room/west bedroom door has a round black knob inscribed with several circles in the front with a black detailed escutcheon plate with a skeleton key hole. It appears that this hardware is original to the door and that it may have been installed, because of its art deco design, in the late 1920's to early 1930's (figure 66).

The door which encloses the closet under the stairway is very similar to that just mentioned with the exception of the size and the escutcheon plate. This door measures 2'-7" wide by 5'-8-3/4" high and has 4-1/8" wide stiles, a 4-3/8" deep top rail, a 3-7/8" wide muntin, a 6-7/8" deep lock rail and an 8-1/2" deep bottom rail. This door is in good condition and also has a 2" diameter knob with an Art Deco escutcheon plate.

The door which leads from the living room to the dining room differs greatly from both of the doors previously mentioned. This door has a single large panel surrounded by a 5" wide stile on one side, a 4-1/4" wide stile on the other side, a 5" deep top rail and a 7" deep bottom rail. Hinged on the west side of the opening, this 2'-11-1/4" wide by 6'-2" high door, currently in good condition, swings into the dining room. Hardware consists of two butt hinges with ball tips and a 2" diameter black knob with circles inscribed in the front, similar to the first door described. This door has an escutcheon plate that may also be of the Art Deco Period.

The door which leads from the dining room to the kitchen is different from any of the doors previously mentioned. This door is probably not original to the opening and may have hung elsewhere. It consists of a large raised wood panel on the bottom half with a glazed opening above. The solid wood door measures 2'-6-1/2" wide and is 6'-1" high and has 5" wide side rails, a 4-5/8" deep top rail, a 4-5/8" deep lock rail and a 10" deep bottom rail. Hardware on the door consists of two butt hinges, a 2" round black knob and an Art Deco escutcheon plate. The door, in fair condition, swings into the kitchen (figure 67). The door from the kitchen to the storage room is similar to the one just described and is 2'-7-1/2" wide by 6'-2" high. It has a solid panel in the bottom portion and a glazed opening in the top portion. The solid wood door has a 4-5/8" wide side rail on one side, a 5" wide side rail on the other side, a 4-3/4" deep lock rail and a 5" deep bottom rail and top rail. The door is attached to the east side of the frame with two butt hinges and swings into the storage room. This door appears to be in good condition (figure 68).

The doors which lead from the kitchen into the sink area (near the bathroom), from the bedroom alcove to the sink area and into the bathroom are similar in design to the door located between the dining room and living room. These doors measure 2'-6" wide, 6'-5-1/2" high, have 5" wide stiles and 5" deep top rails and 10-1/2" deep bottom rails. The center of the doors consists simply of a large recessed wood panel. All three of the doors are attached to their frames with two butt hinges and all three have round knobs with Art Deco escutcheon plates. The door from the kitchen swings into the sink area, the door from the bedroom alcove swings toward the bedroom...
Figure 65: Wood paneled door between living room and west bedroom.

Figure 66: Art Deco escutcheon plate and round black door knob, typical on several doors.
Figure 67: Wood paneled and glazed door between the kitchen and the dining room.

Figure 68: Wood paneled and glazed door between the kitchen and the storage room.
and the door to the bathroom swings into the bathroom. All three of these doors including their hardware are in relatively good condition and are painted white.

The last door to be described is the one on the closet in the bedroom. This door, complete with a modern Best brand lockset, consists of a flush hollow core door measuring 2'-6" wide by 6'-8" high. This door, is in very good condition, is attached to the west side of the frame with two brass butt hinges and swings into the bedroom.

**Second Floor.** Starting in the north bedroom, the door which leads into the room from the stairway consists of a solid core raised wood paneled door measuring 2'-6" wide by 6'-6" high. The door has five raised panels, all the same size with side rails, intermediate rails and a top rail measuring approximately 4" and a bottom rail measuring about 9" deep. This door, not original to the opening, is currently in good condition. The door swings into the bedroom, has two brass butt hinges, a lockset with deadbolt and a hasp and padlock (figure 69).

The matching doors to both the closet in the southeast corner of the north bedroom and the closet in the center of the north wall of the north bedroom are solid core with four raised wood panels each. The doors have two panels below the lock rail and two vertical panels above the lock rail. Although the construction and design of the doors are the same, the size and hardware differ. The door in the southeast closet measures 2'-6" wide by 6'-5-1/2" high and has a surface mounted rim lock with a black knob, while the other closet door measures 2'-6" wide by 6'-2" high and has a simple round black knob. Both of these doors appear to be in good condition, are attached to their frames with two butt hinges each and swing into the bedroom (figure 70).

The door from the stairway to the south bedroom does not appear to be original to the opening. This door, same in design as the exterior doors of the south bedroom, consists of two vertical panels under the lock rail with nine panes of glass above. The door, in fair condition, is stained on the stairway side and painted white on the bedroom side. Hardware includes a simple white knob with a hasp and padlock above. Two butt hinges attach to the east side of the frame. The door swings into the bedroom and measures approximately 2'-6-1/2" wide by 6'-1" high.

The closet door in the northeast corner of the south bedroom door measures approximately 1'-11" wide by 5'-11" high and swings into the bedroom from two strap hinges mounted to the frame on the east side. The door is in fair condition, and made of vertical tongue-and-groove boards with a typical z-brace behind. Hardware includes a surface mounted rim lock with a black knob.

**Fireplace**

The fireplace in the living room was installed during the period when the Hanna's owned the house and is 4'-6" high from the finished floor to the top of the mantle and 6'-1" wide below the mantle. Just below the brick mantle, an egg and dart detail running the width of the fireplace is found. The firebox, 2'-4-3/4" high by 2'-8-1/4" wide, is constructed of firebrick laid horizontally. The fireplace surround, including the outer hearth, is constructed of brick that is painted. The outer hearth was added during the Parsowith period. With the exception of some cracks that have formed on the east side of the fireplace surround and mantle caused by structural problems with the north adobe wall, the fireplace is in fairly good condition (figure 71).
Figure 69: Wood paneled door between the stair and the north bedroom on the second floor.

Figure 70: Wood paneled closed door located on the north wall in the north bedroom.
Figure 71: Brick fireplace and outer hearth located on the north wall in the living room.

Finishes

**Exterior.** The exterior finishes on the building vary greatly. The lime plaster finish on the original adobe walls still remains on the east elevation. The majority of the plaster is in good condition with the exception of a series of cracks that have developed near the northeast corner of the wall caused by deterioration of adobe in the lower portion of the north wall. Currently, all of the building's exterior plaster is painted white, the woodwork around the doors and windows is painted a mustard color and all the exterior decking is painted grey (figure 72).

The remaining elevations of the house are either covered with horizontal v-rustic siding or vertical tongue-and-groove siding (figure 73). All of these walls, as well as the balustrades on the verandas and all of the fascia and soffits are painted white. As mentioned earlier, most of the concrete around the building is painted red.

The current condition of the exterior finishes on the building vary. Trim finishes are in good condition, walls are in fair condition and decking and balustrades are in poor condition (figure 74).

**Interior, First Floor.** As previously mentioned, the hardwood floors in the living room, dining room and west bedroom are finished with a clear sealer while the fir floors in the upstairs bedrooms are painted brown.

In the living room and dining room, the walls and ceilings are heavily textured and painted white. In the west bedroom, the walls and the ceiling are also textured, although not as heavily as in the living room and dining room, and are also painted white. The walls and ceiling in the closet of the bedroom are painted green and lightly textured to match the walls in the bedroom.
Figure 72: Cement plaster over original adobe wall on the building's east elevation.

Figure 73: Horizontal v-rustic siding on the north elevation of the adobe.
In the kitchen and the bathroom, the walls and ceilings are smooth and painted white, while nearby in the storage room the tongue-and-groove paneled walls, trim and ceiling are painted off-white. With the exception of the storage room and the upstairs south bedroom, all trim, door casings and window casings are painted white.

**Interior, Second Floor.** The stairway walls and ceiling have tongue-and-groove vertical paneling. All of these surfaces, including trim, are painted white.

The two bedrooms have different finishes. In the north bedroom, the tongue-and-groove paneled walls and the plank ceiling are painted white while in the south bedroom the tongue-and-groove walls and the plank ceiling are painted the same off white color that was used downstairs in the storage room. The interior walls of both the bedroom closets are painted pink and the walls and the ceiling of the second floor bathroom are painted white. In this particular room, finishes are in poor condition.
EXISTING STRUCTURAL ELEMENTS

Description and Conditions of Existing Structural Systems

Foundation. The adobe portion of the building has a sandstone rubble foundation with a mud mortar. The framed additions on the west side of the building have a concrete foundation.

The base of the north adobe wall has been severely eroded by water (See Section B on Sht. S2). Surface drainage in the area does not direct water away from the base of the wall. The maintenance staff reported the roof downspout at the northeast corner was broken at one time. The first course of adobe starts at or slightly below grade. Code requires a minimum of 6 inches clearance between the base of the adobe and adjacent ground. The mortar in the rubble foundation has been eroded and the stones are loose. The adobe on the interior of the west wall was observed to have only 3 inches clearance from the ground. This observation was made through an opening in the living room closet floor. The adobe and rubble foundation appeared to be in good condition. The sandstone rubble foundation viewed at the north end of the east porch appeared to be in good condition.

Walls. The perimeter adobe walls are constructed of two wythes of adobe brick and are approximately 24 inches thick. The interior adobe crosswall is constructed of a single wythe of adobe brick and is approximately 12 inches thick. The walls for the west additions are wood framed.

The condition of most of the adobe walls could not be determined because of the various finishes applied, i.e. siding, beaded tongue-and-groove boards, and gypsum board applied over beaded tongue-and-groove boards.

The upper portion of the west adobe wall is visible from the kitchen and bedroom attic and also from the exterior. Cracks in the adobe were found where the shed roof rafters frame into the wall. The cracking was probably caused by the seismic force of the shed roof transferred into the adobe wall. These cracks vary in width from 1/2 to 1/16 inch. A large 2-inch wide vertical crack was found approximately where the interior crosswall occurs. This crack is visible from the exterior (See west elevation C on Sht. S2). It is assumed to continue the full height of the wall and through the entire thickness of the wall. The causes of the crack may be settlement and/or out-of-plane seismic motion. Rain entering the crack from the exterior is probably widening the crack by eroding the adobe.

Other cracking is evident on the exterior of the east adobe wall. The most severe crack occurs on the north end of the wall and is approximately 1/2 inch wide. Other cracks emanate from the corners of openings and propagate at approximately a 45-degree angle (See east elevation D on Sht. S2). The probable cause of the cracks on the east wall is in-plane seismic motion. It appears the east wall has a portland cement stucco applied on the exterior. Technical reports do not recommend this practice because the stucco separates from the wall, traps moisture, and disguises structural problems in the adobe. Portland cement stucco has a different coefficient of expansion than adobe. This is why Portland cement stucco and adobe do not bond well together.

A stud wall with horizontal siding has been added to the exterior of the north adobe wall. Legends suggest that a portion of the north wall, including the chimney, collapsed in the 1906 earthquake, however, some of the wall survived because adobe was observed in the attic and at the base of the wall. The beaded tongue-and-groove boards on the east and west walls near
the north wall in the upstairs north bedroom have separated, indicating possible outward movement of the north wall.

The framed additions including the kitchen, bedroom, laundry and second floor bathroom show minor signs of lateral distress, i.e. minor cracks in the interior gypsum board. A nailed connection of the roof and wall framing has separated in the second floor bathroom. The framed additions lack seismic resistant connections.

**First Floor.** The first floor framing in the living room is independent from the adobe walls. The joists are supported by a 4x4 inch post and beam system. The posts bear on 2x12 inch cribbing (See Section A on Sht. S2). At some time, 2x6 rough sawn joists were added between the older 3x7 inch hewn joists. This reduced the joist spacing from 32 inches to 16 inches on center. The floor consists of 1 inch sheathing for the subfloor and 1/2 inch oak for the finish floor. The dining room and kitchen floor framing are similar to the living room. The floor framing of the bedroom consists of 2x6 members laid flat at 12 inches on center. These members are supported by 2x6 members layed on the ground. The flooring is 1 inch sheathing. The floor in the laundry area is a concrete slab on grade.

The floor framing was observed through an existing opening in the living room closet floor. The joists, posts, beams, and cribbing are assumed to be California Redwood. The members that were probed appeared to be in sound condition. There was only 5 inches between the bottom of the joist and the ground. There were no vents observed in the living room area. The 1991 UBC requires a minimum of 18 inches between the ground and the bottom of joists unless the wood has a natural resistance to decay or is treated. Redwood meets this criterion. The species of the members would have to be verified and should be further inspected for decay. The northeast corner of the living room floor is 1-1/4 inch lower than the floor at the crosswall. This may be related to the intrusion of water from runoff or the previously broken downspout at the base of the north adobe wall.

**Second Floor.** The floor framing in the north bedroom was strengthened in 1975. The rehabilitation consisted of adding 2x10 joists between the existing joists, decreasing the spacing between joists from 32 inches to 16 inches on center (See Section A on Sht. S2). The average size of the existing joists is 2-1/2 x 7-3/4 inches. On top of the joists are sleepers, with 1 inch sheathing for the floor. The sleepers are assumed to be 2x3 at 32 inches on center. The south bedroom floor framing was not verified, but was assumed to be similar to the original framing in the north bedroom. It was assumed the original joists frame onto a sill plate at the second floor similar to the one found in the attic.

The condition of the second floor framing was not determined because destructive investigation was required. The code requires a bond beam at the second floor. The existence of a bond beam was not verified because destructive investigation would have been required. With this assumption the second floor connection to the adobe wall cannot be reliably used to transfer seismic forces into the floor diaphragm or into the adobe walls (See Section A on Sht. S2).

**Attic.** The attic floor framing consists of 3x5 inch hewn joists at 32 inches on center (See Section A on Sht. S2). The flooring consists of 1x12 tongue and grooved sheathing. The joists bear on a 3x6 inch sill plate on top of the adobe wall.

The joists have approximately 1-inch permanent deflection or set. A joist in the attic above the north bedroom has a splice. This splice is inadequate and should be repaired. The joists are toe-
nailed to a 3x6 inch redwood sill plate on top of the adobe wall. The 3x6 inch redwood sill plate is not continuous around the top of the adobe wall. An 18-foot section of the sill plate on the east wall has extensive termite damage. The sill plate sits on the interior wythe of the adobe wall; no connections were observed anchoring the sill plate to the top of the wall.

**Roof.** The roof over the adobe portion of the structure is a wood framed hip type. Framing members consist of 3 x 4 inch hewn rafters at 32 inches on center (See Section A on Sht. S2). At some time, 1x6 collar ties, 2x4 bracing of the east rafters to the top of the east adobe wall, and 2x4 bracing of the ridge board have been added to the original construction. The roof diaphragm consists of 1 inch sheathing.

The roof over the bedroom and kitchen is a wood framed shed roof with a change in slope (See Section A on Sht. S2). The framing consists of 3x4 inch hewn rafters at 32 inches on center with 2x6 rafters nailed on the side to create the change in slope. The roof diaphragm consists of 3/8 inch plywood applied over 1 inch sheathing.

The nailed connection of the rafters to sill plate on top of the adobe walls has separated. Two probable causes are:

The connections are not adequate to resist the horizontal outward force created by gravity loading. If the rafters were connected to the attic joists, the system would act similar to a truss.

The connections are not adequate to resist the loads required by the 1991 UBC for wind or earthquake forces.

The rafter connections to the ceiling joists over the east porch have separated because the porch has settled.

There were no signs of over-stress or deflection observed in the rafters over the adobe portion of the structure. Some splitting at the nailed connections was observed.

The slope change in the west addition roof indicates the roof has been added onto in the past. The boundaries of the roof are not adequately attached to the walls. This condition does not allow the roof and walls to act together in resisting wind or seismic forces.

**East Porch.** The first floor is framed with 2x6 rough sawn joists at 16 inches on center. The joists are supported by 4x4 inch beams and posts. The posts bear on cribbing. There is a 4-inch concrete slab over the sheathing. The second floor is assumed to be framed with joists similar to the interior second floor framing (See Section A on Sht. S2). The attic of the porch is framed with 2x3 inch joists at 32 inches on center. The west end of the attic and second floor joists frame into the adobe wall. The roof and east end of the attic frame into a built-up beam supported by 4x4 posts at 8'-8" (max.) on center. These loads and the east end of the second floor porch are carried by a beam supported by 6x6 posts at 8'-7" (max.) on center.

The east porch has settled. The probable cause of the settlement is the dead load caused by a 4-inch concrete topping at the first floor level. The settlement has caused the columns at the first and second floor levels to separate. The sheathing supporting the concrete is probably rotted because of moisture trapped by the concrete slab. Some destructive investigation would need to
be done to verify the condition and construction of the framing at the first and second floor levels. The east porch framing lacks seismic resistant connections.

**South Porch.** The first floor of the porch was reconstructed in 1975. A reinforced concrete foundation was placed around the outside edge of the porch. The first floor joist size and spacing was not determined. The floor consists of 1 inch sheathing. The roof and second floor are framed similar to the east porch.

The first and second floor framing was not determined because destructive investigation was required. The south porch framing lacks seismic resistant connections. The second level porch slopes severely. It was probably constructed with some slope but settlement may also be a contributing factor. The settlement is assumed to be halted by the construction of the foundation walls under the columns in 1975.

**Fireplace and Chimney.** The fireplace and chimney are constructed of brick. The foundation under the fireplace is brick, probably from a previous fireplace.

The chimney has some minor cracking. The mortar shows signs of deterioration. Some settlement of the chimney was also observed. At some time, a steel strap was added to tie the top of the chimney to the roof.

**Load Analysis and Code Check**

**General Information.** The following building codes were incorporated into the structural analysis of this building:

- California State Historical Building Code, Title 24, Part 8, 6/1/90

Live-load requirements for the Martínez Adobe are as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Live Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>First floor and Porch</td>
<td>50 psf</td>
</tr>
<tr>
<td>Second floor and Porch</td>
<td>40 psf</td>
</tr>
<tr>
<td>Attic floor</td>
<td>10 psf</td>
</tr>
<tr>
<td>Roof</td>
<td>16 psf</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lateral Loads</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>15 psf</td>
</tr>
<tr>
<td>Seismic</td>
<td>Zone 4</td>
</tr>
</tbody>
</table>

**Foundation.** Based on a test of the existing soil, the soil is classified as an inorganic clay (CL). Using the 1991 UBC, the allowable soil bearing pressure is 1000 psf. The calculated maximum soil pressure under the adobe walls is 1560 psf. This includes full live loading. Considering the empirical nature of the UBC allowable soil pressure, the foundation pressures are acceptable. Calculations for other areas of the structure could not be completed without destructive investigation.
Walls. Assuming the adobe walls are uniform and undamaged the walls could carry the required vertical loads. The required compressive strength is 18 psi. Two areas of the adobe walls were sampled and tested for compressive strength (see above test results in appendix B of this chapter). The average strength of a sample taken from the top of the east wall was 880 psi. The average strength of a sample taken from the bottom of the west wall was 880 psi. The adobe walls do not meet the following code seismic requirements:

1991 UBC, section 2407(i) 9: "Masonry of stabilized unburned clay units shall not be used in any building more than one story in height....All footing walls which support masonry of unburned clay units shall extend to an elevation not less than 6 inches above adjacent ground at all points."

1990 California State Historical Building Code, section 8-904(c) "Adobe: Unburned clay masonry may be erected or re-erected pursuant to the following stipulations: (1) Unreinforced adobe masonry shall not exceed a height or length to thickness ratio of 6 or 5 for the most hazardous earth quake zone, for exterior bearing walls and must be provided with a reinforced bond beam at the top, interconnecting all walls. Minimum beam depth shall be 6 inches and a minimum width of 8 inches less than the wall width. No adobe structure shall exceed one story in height unless the historic evidence indicates a two story height. In such cases the height thickness ratio shall be as above for the first floor based on the total two story height and the second floor wall thickness shall not exceed the ratio by more than 20%. Bond beams shall be provided at the roof and second floor level."

Considering the historical significance of the Martínez Adobe, the California State Historic Building Code would be applicable.

The wood framed walls on the west additions are adequate to carry required vertical loads.

First Floor. The required live load used for analysis of the first floor was 50 psf, based on office use. This loading seemed appropriate considering the displays and probable size of tour groups. The flooring and joists in the living room will meet the required loads. Further investigation is required to determine if the 4x4 inch post and beams meet the required loads.

Second Floor. The design live load used for analysis of the second floor was 40 psf, based on residential use. Calculations show the reconstructed north bedroom floor can support the required loads. It was assumed the south bedroom floor is framed similar to the original north bedroom floor. Calculations show that the south bedroom floor is over-stressed under the required loads. It can support 15 psf allowable live load. This was based on the assumption the joists were No. 2 California Redwood. Framing conditions for both areas need to be verified.

Attic. The required live load used for analysis was 10 psf, based on an uninhabitable attic without storage. The joists were assumed to be No. 2 California Redwood. Calculated stresses were acceptable. The joist splice in the north bedroom was not adequate to transfer vertical loads.

Roof. The required live load used for analysis was 16 psf. The rafters over the adobe portion of the structure can support the required loads. The nailed connection of the common rafters to the hip rafter are over-stressed. The nailed connection is not capable of carrying any live load. The connection of the rafters to the sill plate is not adequate to transfer calculated forces. The rafters are assumed for analysis to be No. 2 California Redwood.
The framing for the roof over the bedroom and kitchen can support the required loads. The design load on the nailed connection at the change in slope exceeds the allowable load. The nailed connection is capable of carrying 11 psf live load.

**East and South Porches.** Destructive investigation needs to be completed before structural calculations can be performed to determine allowable loading.

**Fireplace and Chimney.** The chimney probably does not meet the 1991 UBC, section 3704 requirements regarding reinforcing and ties to the various floor levels.

**Lateral-Load Analysis**

**Walls.** The construction of the adobe walls along with the structural cracking noted previously, makes the wall's resistance to seismic forces indeterminate. The addition of interior sheathing and exterior siding on the walls does not provide enough shear strength to resist the required lateral forces.

**Roof Diaphragm.** The nailed connections of the roof to the top of the wall are not adequate to resist the required lateral forces.

**Attic Diaphragm.** The attic joists are toe-nailed to a 3x6 inch redwood sill plate on top of the adobe wall. This connection is not adequate to resist lateral forces. The 1-inch floor sheathing does not provide enough shear resistance for lateral forces in the attic floor diaphragm. The size and construction of the sill plate does not meet code requirements of the California State Historical Building Code, and cannot be used to transfer lateral forces to the walls.

**Second Floor Diaphragm.** The second floor 1-inch tongue-and-groove floor sheathing does not provide the required shear resistance for a horizontal diaphragm.

**EXISTING MECHANICAL AND ELECTRICAL SYSTEMS**

**Mechanical System**

The Martínez Adobe has no mechanical system other than running water and indoor plumbing. Several factors attributing to the lack of a mechanical system include the following: 1) The adobe walls are several feet thick creating a natural ability for the building to be cool in the summer and warm in the winter. 2) The Martínez Adobe is located in a mild climate, generally free from freeze and thaw. 3) Fireplaces and wood stoves were used as a back-up heating source. 4) The structure was used as a farm outbuilding for a number of years requiring no heat.

Two bathrooms are located in the adobe. The oldest bathroom is located on the second story, in the south west corner of the south veranda. It appears that nothing remains of the original fixtures in the bathroom. The existing sink and toilet date to the 1950s. At the present time the upstairs bathroom is not in working condition.

On the first floor, between the west bedroom addition and the kitchen, is a bathroom that was added sometime between 1940 and 1955. Fixtures include a toilet, bathtub with a shower and
a sink in the hall just outside of the bathroom. The plumbing in this room is still in good working order but may require future rehabilitation.

The only other area of the house equipped with plumbing fixtures and piping is in the kitchen. A double kitchen sink is located in the center of the cabinets, and the hot and cold water supply fixture is mounted to the wall directly above the sink. Like plumbing in the bathroom, the kitchen plumbing is in working order although future rehabilitation may be required. A hot water heater was removed prior to 1977, however, hot water is piped to the adobe, but presently capped.

**Electrical System**

The Martínez Adobe electrical system was first installed around 1910. The adobe is currently connected to an aerial distribution line which is owned and operated by Pacific Gas and Electric (PG&E). This aerial distribution line runs along the west side of the Franklin Canyon Road which borders the park on the west. An aerial triplex service drop, for the Martínez Adobe, originates from PG&E power pole number 360 located on the west side of Franklin Canyon Road (figure 75).

The electrical service consists of an aerial 120/240 volt single phase service drop which connects into a weatherhead mounted atop an aerial service mast on the storage room roof. From there, a 1-1/2" conduit connects into a meter enclosure containing a Pacific Gas and Electric (PG&E) meter. Directly below the meter socket is a 60 amp main disconnect fused at 45 amps (figure 9). The interrupting current of the bussman type fuses is 22,000 amps at 240 volts.

The service ground system consists of an exposed #8 wire running from the service disconnect to a point about 6 inches above grade where it attaches to a piece of driven aluminum conduit via a clamp fitting. This arrangement is unacceptable and should be corrected. There is an existing driven half inch ground rod which has been abandoned in place (figure 76). This rod could be reused provided adequate testing was performed to ensure that the resistance to ground is not greater than 25 ohms.

The original interior wiring system consisted of cloth wrapped conductors strung between porcelain insulators which is commonly referred to as knob and tube wiring. Most of the cloth covering has deteriorated and fallen off the copper conductors. Judging by the older non-metallic braided sheathed cable, the adobe’s electrical system was expanded around the mid 1940’s which might correspond to the time the west porch was added. Most of the older non-metallic braided sheathed cable seems to be localized in the areas around the kitchen and west porch.

Although the structure has been rewired several times, the remnants of the older conductors have never been removed. In the attic space, the knob and tube wiring and older non-metallic braided sheathed cable have been disconnected and abandoned in place (figure 77). Currently, the entire structure appears to be wired primarily with 3-wire non-metallic sheathed cable (romex) (figure 78). According to the park staff, the electrical system was rewired with romex in 1968, however, without removing the wallcoverings it is impossible to verify whether or not splices to older conductors have been made.
Figure 75: Overhead distribution and service.

Figure 76: Existing service ground.
Figure 77: Abandoned conductors in attic.

Figure 78: Exposed romex wiring in attic access area.
Judging by the routing and support of the romex conductors in the attic space, the electrical installation was not done with much consideration for historical preservation. Ceiling and wall penetrations are not well concealed and the wiring is exposed. Many circuits appear to be fed from the attic space down to the first and second floors, however, the west porch and living room do have exposed conductors routed horizontally along the baseboards.

All overcurrent protection for the electrical system in the adobe is provided by an existing fuse panel with a capacity of six circuits. The fuse panel is flush mounted in the north wall of the storage room (figure 79) which is directly behind the main disconnect on the building exterior.

At some point after the fuse panel was installed, two additional circuits were added to the adobe. These two circuits are tapped off the main lugs of the fuse panel and each circuit is protected by a fused disconnect. A surface mounted 30 amp disconnect located on the South Porch which is fused at 20 amps serves the small garage to the southeast of the adobe. The other circuit was added for the Fire and Intrusion Alarm System and is protected by a 30 amp disconnect fused at 15 amps.

Predominantly, most of the electrical loads are lighting loads since there is no mechanical system in the building. There are two exhaust fans in the adobe, however, they no longer function and have been disconnected from the electrical system.

There is no lightning or transient voltage protection in the adobe which does not appear to be a problem since there is very little solid state equipment in the building with the exception of the fire/intrusion alarm system.

Currently, all of the light fixtures in the adobe are incandescent type fixtures. There are numerous junction boxes in the ceiling which appear to have been used for lighting fixtures. Most of these junction boxes have been covered with flat metal coverplates. Patent numbers on the pendant mounted light fixture in the west bedroom were run through indexes of U.S. Patents to determine the date of manufacture. According to the index, the patent was issued October 31, 1933. This time period would correspond to the time which the older non-metallic braided sheathed cable was installed.

Both color enhanced compact fluorescents and halogen type fixtures should be utilized for any future interpretation or other building uses. In conjunction with energy efficient lamps, occupancy sensors should be used to control all task lighting in exhibit and public areas.

There is a rotary operated switch in the first floor staircase which controls a pendant mounted incandescent light fixture above the upper stair landing. The rotary switch is in good operating condition and should be preserved for historical purposes. All of the other wall switches in the adobe are standard toggle type switches with ivory plastic coverplates. Most of the receptacles in the adobe are recessed mounted and consist of duplex receptacles with ivory plastic coverplates.

**Telephone System**

The existing telephone system has two aerial service drops which attach to and enter the adobe at two separate locations. One service cable attaches to the adobe on the northwest corner, just under the soffit/gutter and is routed down along the northern exterior of the adobe. This service
entrance appears to no longer be operational. The other aerial service cable follows the alignment of the electrical service and attaches to the aerial service mast on the storage room as an undercarriage (figure 80).

Currently, the telephone system facilitates one park telephone located in the kitchen and a line for Fire and Intrusion Alarm notification.

Fire Alarm System

The fire alarm system in the adobe was originally installed in 1968, at which time a number of dome-type heat detectors were installed both on the interior and exterior of the structure. In 1987, a new 8-zone fire alarm panel was installed and a combination photoelectric/heat detector was installed atop the main staircase. The fire alarm panel is a Radionics type D8112 in a D1809 enclosure and will activate a fire alarm bell when triggered. The panel has the capability of handling eight zones and the adobe is currently wired as shown in the listing below.

Zone 1 - First Floor Fire
Zone 2 - Second Floor Fire
Zone 3 - Alarm Bell Tamper
Zone 4 - Pull Station in Kitchen
Zone 5 - West End Intrusion
Zone 6 - East End Intrusion
Zone 7 - Spare
Zone 8 - Alarm Panel
In 1987, when the fire alarm system was upgraded, an intrusion alarm system was added. The system consists of two sets of light beam/mirror arrangements, one pair supervising the west entrance of the building and the other pair supervising the east entrance. Once the light beam is broken, an alarm signal is emitted to the control panel and an alarm bell is activated. The intrusion system is tied into two zones on the Radionics fire alarm control panel.

Currently, there is no protection against intrusion into the storage room or the second story.

EXISTING SITE CHARACTERISTICS AND CONDITIONS

Landscape Setting

The John Muir National Historic Site is nestled against the east side of Alhambra Valley at its junction with Franklin Canyon. The adjacent landscape, now largely urbanized on the valley floor, is surrounded with rolling hillsides of annual grasses punctuated with clumps of oak woodlands and chaparral. The Martinez Adobe is located on the west side of the John Muir National Historic Site within a 3.8 acre parcel of land bounded by Franklin Creek on the east, residential housing on the north, Canyon Way on the west and the large earth embankment of State Highway #4 on the south (figure 81).
Soils throughout the site are generally clay or clay loam and are deep and rich with a long history of cultivation. In some areas these soils have a lack of permeability, are subject to erosion and can slide in areas of higher slopes. Franklin Creek, located east of the adobe, has historically flooded, but drainage improvements have alleviated the problem. Vegetation consists of native and some exotic species along the creek, cultivated fruit and nut trees east of the adobe and some native but mostly exotic ornamental vegetation adjacent to the adobe. Climate is mild-warm with summer highs of 109 degrees F to winter lows of 56 degrees F. Mean temperature is approximately 60 degrees F with annual rainfall of 11 to 32 inches averaging 16 inches. The majority of rainfall occurs from the months of November to February.

Cultural Landscape History

The present condition of the Martínez Adobe and the surrounding grounds is a result of a dynamic history of use that spans 150 years. In addition to its significance as part of the monument to John Muir, the adobe and its landscape is a vestige of the major cultural forces which shaped the region and speaks clearly of our evolving relationship to the land. The
following is a chronological summary of some of the major periods in the history of the site and their reflection on the present landscape.

**Prehistoric Period.** During prehistoric times, landscapes in the Martinez vicinity featured a mosaic of plant communities. These communities ranged from redwood forests and saltmarsh to mixed-evergreen woodland and grassland. West of the Alhambra Valley, the semiarid foothills were probably covered with typical Upper Sonoran vegetation types like oak woodland and grass. In the valley below, Lower Sonoran plant communities like grassland and marshes blandeted the landscape along the stream courses.⁴

Although little is known of the composition of California grasslands before the Spanish entrada, it has been postulated, on the basis of fragmentary historic records and "relict" stands, that perennial bunch grasses, mainly the needle grasses (*Stipa* spp.), were dominant.⁵

Concentration of settlements in coastal areas and in valleys along waterways focussed most human activity in these areas. It appears that the upland plant communities like the oak woodlands were less affected by prehistoric use.

However, prehistoric peoples did have a hand in modification of these natural ecosystems through selective gathering practices and resource consumption. These groups used a seasonal round to gather local resources as they became available, and burned the grasslands to maintain certain resources. This process redistributed seeds and plant materials across the landscape, and burning altered composition of the grasslands. As villages grew, the ecology of nearby areas was changed due to compaction, imported seeds, wood cutting, and so on.

**The Spanish Period (1769-1822).** Arrival of the Spanish settlers rapidly accelerated changes in the landscape. Permanent Spanish settlements – usually sited in oak savannah or grasslands – were based on a pastoral way of life and replaced traditional seasonal hunting and gathering practices. The grasslands appear to have suffered the most rapid change through Hispanic introduction of domestic alien plants and livestock, and elimination of traditional burning practices.⁶ Many of the native species were exterminated and were replaced by less desirable or alien plants. The sedimentation rate increased through run-off from denuded hillsides.

The invader plant species that crowded out native species were generally from the Mediterranean area where they had already adapted to severe grazing pressures. Several of the 18 alien weed species identified from studies of adobe bricks may have been in place in California prior to 1769. Many of these species are members of the geranium family (*Geraniacea*), including sorrels and docks (*Rumex crispus*, *Erodium circutarium*, and *Sonchus apser*).⁷

⁴ These data are taken from Michael J. Moratto, *California Archaeology* (Orlands: Academic Press, 1984).


⁶ "The greatest degree of change appears to have taken place within the grasslands, in which alien species now account for 50 to 90 percent of the plant cover." West, ibid., p. 335.

⁷ West, ibid., p. 335.
The Mexican Period (1823-1853). By about 1824 Ygnacio Martínez was running cattle on Rancho Pinole, and had introduced a number of domesticated species into the Pinole Valley. Within two decades, the Alhambra Valley also had grazed and cultivated lands and a number of introduced species, including melons, grain, and other crops. Building activities for the new community of Martínez required adobe, stone, and wood. No doubt these demands severely impacted the vegetation and soils of the foothills surrounding the valley.

The setting of the Martínez Adobe is very similar to many other Mexican rancho houses of the period; on a gentle slope overlooking an arable valley, near a source of water. The associated outbuildings (corrals, etc.) were an essential part of the ranch. The sloping terrain gave good drainage during rainstorms (to keep the adobe from dissolving) and helped keep the corrals from getting too mucky. The location helped catch favorable breezes on a hot day, and occupied land that was perhaps less arable than the bottom land in the valley beyond.

This cultural landscape could, in effect, be divided into several zones. The upper zone consisted of the hills to the west which were covered with grasses and timber. This area was probably not cultivated, and was likely used for grazing (milk cows and horses) and as a wood lot. The gently sloping east face of the hillside contained the built landscape: the house, corrals, outhouse, trash dump, blacksmith shop, old shack, and other farm buildings. The buildings were probably clustered in a cleared area, perhaps in some sort of "U" or "L" shaped configuration that retained the Mexican courtyard idea (part of the "domestic space" mentioned above).

This built landscape was probably set in or surrounded by a cultivated zone which extended generally eastward towards the creek. Because Mexican land grants required "front trees or shrubbery of some utility" there may have been fruit trees and/or grape arbors near the house. Beyond this was a broader, more level zone consisting of a cultivated area, where hay and grain were raised for cattle.

The original design of the adobe and its setting reflects the continuity of Hispanic traditions as tempered by American and European influences. It is likely that the rooms within the adobe were multi-purpose, and much of the family and ranch activities probably took place outdoors on the veranda, the porch and/or adjacent structures of simple design. No doubt the cooking was done in an adjacent structure. As one author describes the Californianos use of space:

In contrast to the nineteenth-century American conception of domestic space, the area surrounding the adobe house was part of the building itself, almost serving as an open-air room.8

The American Period – The Early Years (1854-1907). Changes were brought about by the acquisition of the adobe and part of the Rancho El Pinole by the Franklin Family was characteristic of the broader social changes occurring in California during this time. The Franklins began to develop areas of the ranch as a vineyard. Other areas were leased out for hay production, and quite a bit of wood was cut from the area. It is unlikely that there were any sort of formal landscape plantings close to the structure during this time (figures 82 and 83).

Figure 82: Martínez Adobe and ranch structures during Strentzel era, looking west, c.1880-1890.

Figure 83: Martínez Adobe, east porch c.1907.
By the time of the Civil War, the adobe, then occupied by Thomas Redfern, was surrounded by a fence, and had fruit trees and vines. Redfern had domesticated stock (cows and horses), and planned to open additional lands near the adobe for cultivation. During this time, the adobe continued to be used as a residence in a rural setting.

By the 1870's, the area had changed from an isolated rancho to a rural farm valley with neighboring farms, buildings and dirt roads. By now, much of the large rancho had been cut up into smaller parcels, and developed into crop lands. The transition from feed grains and hay to fruit ranching was well underway regionally, and it is likely the area immediately surrounding the adobe reflected this transition. However the revolution in California agriculture was well underway as the large fruit ranches assumed increasing importance in the state’s economy and trade. After its acquisition by Strentzel in the 1870s until 1907, the adobe functioned as a farm outbuilding. The dominant plantings depicted in photographs were a large black locust tree north of the adobe, large shrubs climbing the east side of the structure, several smaller ornamental trees and numerous nut and fruit trees in the vicinity (figures 84 and 85).

**Americanization of the Adobe (1907-1915).** In late 1906 or early 1907, Wanda Muir Hanna and her husband moved into the adobe. With extensive renovations it was turned from a shabby farm outbuilding into a family home. It was during this time that the use of the area surrounding the adobe as outdoor living space probably diminished, and the focus of household activities previously conducted outdoors was directed inward to the building itself. Flowers and shrubs were planted around the base of the structure, probably reflecting a move away from the bare foundations characteristic of the 1800s. In addition, the landscaping practices of the Strentzels and the Muirs were probably continued by the Hannas.

**California Urban Growth (1915-1965).** The next series of changes to the Martinez Adobe occurred as the Martinez area – like much of California – underwent the gradual transformation from fruit ranching to urban residential community. The Parsowith era saw the addition of concrete patios and retaining walls, extensive landscaping, and changes in the uses of interior living space characteristic of this period.

**Site Analysis**

The following is a description of the existing landscape features found in the vicinity of the Martinez Adobe including walls, buildings, walks, drainage structures, utilities and landscape plantings (figure 86).

**Landscape Walls and Buildings.** The majority of the structural landscape features are found on the west side of the adobe. Adjoining the adobe to the west is a 10×43 foot concrete slab patio. The concrete surface is scored and painted red to resemble flagstone paving. Light-gauge metal grates (possibly to vent the foundation of the bedroom addition) are located along the edge of the patio next to the bedroom addition. The concrete slab has a continuous crack that runs from midway along an adjacent brick wall, east to the bedroom addition. Other than the crack and an abraded red-painted surface, the concrete patio is in generally fair condition (figure 87).

The patio is bordered on the west by a 2 foot tall, red and blond double-brick retaining wall laid in a running bond pattern. The wall encloses the patio and retains a 10 foot by 50 foot planting bed behind it (figure 88). Settling and possible hydrostatic pressure have contributed to two full height cracks in the wall and structural stability of the wall is uncertain. The retaining wall and
Figure 84: Martínez Adobe, east elevation and landscape, c.1910-1920.

Figure 85: Franklin Canyon Road (Canyon Way) and Martínez Adobe, looking southeast, c.1910-1920.
northwest wall of the bedroom addition form a 3 foot opening to the patio on the north and a set of concrete steps penetrates the retaining wall on the south. A small planter is formed by the space between the patio steps and the wall of the storage room addition to the adobe. The north portion of the retaining wall forms an 8 foot radius, curving around and deceasing in height as it approaches grade to a terminus at the northeast corner of a covered picnic area.

West of the planting bed is a picnic area consisting of a 12x25 foot red painted concrete slab. The slab is edged on the west by a 6 inch curb and covered by a white, flat-roofed "ramada" structure (figure 89). The ramada is a sturdy structure standing eight feet tall and constructed of 4x4 wood posts set on cylindrical concrete footings. The posts, located around the perimeter of the structure, support 4x4 beams with angle bracing at each post topped by a system of 2x4 joists and plywood roof decking. The ramada’s concrete floor is in good condition showing only wear to the red painted surface. Two heavily-constructed wood picnic tables are placed under
Figure 87: Concrete patio on west side of the adobe.

Figure 88: Brick retaining wall/planter.
the ramada and two barbecue grills (half 55 gal. drums set on wood stands) are located adjacent to the structure on the west edge of the concrete slab and curb. Twenty five feet west of the ramada structure, a woven wire and wood slat fence demarks the western park boundary and provides security from Canyon Way (a public road).

Two lengths of concrete-parged brick "decorative" retaining walls, one 35' long, the other 50' long, both 8"-10" in height are located on the southwest side of the adobe (figure 90). These walls, one crescent shaped and the other, bordering a concrete walk (with flared ends) appear as decorative additions to define past planting areas. East of the walls, 20 feet from the southeastern corner of the adobe is a corrugated metal tractor shed used by the park for storing maintenance equipment.

The building materials and construction style for all landscape walls, concrete walks and ramada structure indicate a construction date of between 1920 to 1950. The metal shed and fencing are both over ten years old.

Pedestrian Walks and Maintenance Vehicle Paths. The circulatory landscape features around the adobe consist of poured concrete walks, an asphalt roadway, a gravel roadway, concrete stepping stones, turf rings and unstabilized earth paths.

The main park trail/maintenance road is a 10 foot wide asphalt route originating at the Park Headquarters/Visitor Center, passing 30 feet north of the adobe and terminating at the west gate of the park. Intersecting this road is an 8 foot asphalt paved section extending south 60 feet to the steps on the eastern side of the adobe. Beyond the steps a gravel path continues to the south, past the metal shed then turns east toward Franklin Creek as a compacted earth path.
A 2 foot wide concrete walk connects the south porch of the adobe around the southwest corner of the building to the ramada and patio area on the west. This walk also has the red painted finish that characterizes all the concrete slab work around the adobe. A 5 x 5 foot concrete landing forms the intersection of the concrete steps leading up from the patio and the short curved walk to the ramada. This landing also abuts a short, enclosed concrete stairwell that leads down to the door to the storage room on the southwestern addition of the adobe. A concrete retaining wall forms the lower portion of the building wall along the western and southern side of the storage room addition.

Plastic "turf rings" (a product usually installed in turf areas to provide a stable surface for occasional vehicular traffic) have been installed to form a 4 foot wide pedestrian pathway extending south from the main asphalt park trail to the western patio area and around the north side of the curved planter wall (figure 91). The turf rings were originally installed to stabilize a path for handicapped access to the adobe while allowing for turf growth. However, due to the discontinuance of irrigation in 1990, no turf remains.

Pedestrian paths formed by concrete stepping stones exist at two locations, one at the southwest corner of the ramada extending west and the other extending from the corner of the concrete walk between the two retaining walls toward the southwest.

**Drainage Structures.** Drainage from the adobe and its immediate landscape is accomplished by a combination of roof runoff piping, surface grading, infiltration and evaporation (figure 92). Soils are high in clay and low in permeability and no evidence of high groundwater around the foundation or in the immediate landscape was found.
Figure 91: Turf rings on north side of planter wall.

Figure 92: Roof drainage piping.
Previously-identified structural problems along the north wall of the adobe have led to improvements that include the diversion of roof drainage and the regrading of slopes to drain away from the building. A concrete apron with a narrow drainage gutter that formally carried water from the roof downspout on the northwest corner of the bedroom addition has been abandoned. In its place, the downspouts on the northwest and northeast corners of the adobe have been diverted into two 4" polyethylene pipes that outfall 20 feet away from the structure. Also a new surface channel has been dug to drain a downspout in the middle of the north wall. The downspout that drains the west bedroom roof drains into the small planter on the southwest corner of the patio. Downspouts attached with drain pipes are used along the southern side of the adobe in conjunction with a subsurface perforated pipe drain to keep the foundation dry.

Surface drainage is accomplished by sheet runoff on the south, east and north sides of the adobe. As previously mentioned, a subsurface perforated pipe drainage system supplements the sheet runoff on the south side. On the western side, drainage is more complex and potentially problematic, particularly around the ramada, planter, concrete walks, patio and the adobe structure itself. Drainage water has largely infiltrated in areas around the paving although some signs of ponding are evident on the patio against the retaining wall. Due to the poor drainage grades and limited drainage capacity on the west side, the introduction of runoff water around the foundation of the adobe additions is highly probable.

**Underground Utilities and Irrigation System.** Municipal water service is from a main and meter along Canyon Way near the western park gate. The service main connects with the adobe from the west through the service room addition. Main (pressurized) water lines also extend from the meter to valves controlling lateral irrigation lines around the adobe including one lateral line serving the southwest corner of the park and a drinking fountain. Additional water lines along the northern and southern park boundaries carry water pumped from the park’s two wells.

An irrigation system exists for the landscape planting around the adobe. Irrigation heads are located on the north side of the adobe, to the east across the asphalt road and on the south side of the adobe between the metal shed and the decorative retaining wall. The combination of park staff reducing irrigation water near the foundation of the adobe and the fact that the irrigation system no longer corresponds to the location of the existing landscape plantings has caused the abandonment of most of the system. Watering is now done manually by the staff with hose connections located along the north, west and south sides of the adobe.

Sewer service connects from the southern side of the adobe and extends east across the gravel road and northeast to a residential trunk line under a residential street (Florence Drive) north of the park boundary. A sewer cleanout is located west of the south porch.

Electric and telephone service is from overhead lines originating along Canyon Way connecting to the adobe on the north side of the service room addition and the tractor shed. A utility pole is located 15 feet from the southwest corner of the ramada structure (see existing condition drawing 2).

**Landscape Planting.** From simple origin as a ranch house, the adobe now reflects over 75 years of residential use in the character of its landscape plantings. Few landscape plantings of the Mexican rancho and the stark utilitarian landscape of the ranch days remain today. Many varieties of ornamental plants now grace the adobe’s surrounding landscape (see existing condition drawing 4).
The east side of the adobe includes a foundation planting of perennial shrubs including rose, geraniums, lilac, spirea, oregon grape, california poppy and black eyed susan just below the concrete porch (figure 93). East of the paved road are three young 15-20 foot spruce trees, an 8’ privet shrub/tree, a 2’dbh (diameter @ breast height) redwood tree and a 6’quince shrub. Beyond the spruce are a grove of orange trees planted in rows, two large pecans (c.1950) and a large walnut tree, possibly a sprout of an original tree planted prior to 1914.

A highly sensitive area for planting exists on the north side of the structure where past drainage runoff and turf irrigation had contributed to damage of the stone foundation and adobe brick wall. The area, formally planted in turf is no longer being irrigated. A 20’tall multi-stemmed elderberry tree is located 12 feet from the northeast corner of the adobe with a 30’douglas fir and a row of 5’ privet shrubs edging the south side of the main park trail. A row of fig trees on the north side of the main park trail have been identified from photographs dating from the 1880’s. Although core samples were inconclusive in determining age, some existing fig trees are either historic or sprouts from historic stock. California buckeye, toyon and Pacific wax myrtle are also located between the main trail and the fence of the neighboring residential homes to the north.

The large planting bed west of the patio, supported by the brick retaining wall, is planted with a dense stand of 3’ pyracantha shrubs bordered on the north by trumpet vine and the south by wisteria. A smaller planter adjacent to the storage room addition is planted with iris. To the west of the ramada is an open area containing a 18” dbh redwood tree, a very large 3 foot dbh monterey pine tree (c.1940s) and a 35’ tall mature english walnut. Twenty five feet west of the ramada structure, A woven wire and wood slat fence planted with pyracantha, sage and cherokee rose bushes demarks the western park boundary.

Figure 93: Foundation planting on east side of the adobe.
The south side of the adobe is the shady side of the structure. The setting is dominated by two large 2’ dbh deodar cedars (c.1940s) with spreads of over 25 feet each located 30 and 50 feet to the south of the storage room addition to the adobe. Two 15 foot orange trees and a honey locust are also located to the south of the building. A foundation planting of pittosporum, privet and oregon grape grow along the base of the south side of the adobe (figure 94).

![Figure 94: Foundation planting on the southwest side of the adobe additions.](image)

**Park Planning Background**

**1990 Draft General Management Plan.** The primary focus of the 1990 general management plan is the discussion of the acquisition of new lands to the south of the existing park and S.H.4. In summary, these new properties would be added to protect the historic visual scene, add new opportunities for the park’s interpretive program and provide a recreational link in the regional trail system. A portion of these new lands would also accommodate needed overflow visitor parking and administrative and maintenance facilities. Acquisition and development of these areas would directly impact the Martinez Adobe and its environs because of its location near the west gate of the existing park land. These new properties will be connected to the present park lands through an existing tunnel under S.H.4. The GMP’s preferred alternative proposes that the west gate serve as a new visitor access point and pedestrian linkage with the new properties. The plan also proposes either a new visitor contact kiosk or use of the adobe additions (kitchen, bathroom, west bedroom) as visitor contact facilities.
Historic Trees of John Muir NHS (1978). This document describes a study undertaken to determine the existence of "historic" (planted prior to 1914) trees within the park. Extensive tree trunk borings were taken and historic photographs were analyzed to determine age and location of such trees. The only historic trees that are still in existence near the adobe are figs that line the north side of the main park trail. Walnut and pecan trees east of the adobe are post 1914, but could be sprouts from old stumps. A large black locust tree found in historic photographs just north of the adobe, has since been cut down. The document recommends replanting a new locust in the former location and supplementing the historic row of fig trees.

John Muir NHS Landscaping Plan 8-22-1989. The John Muir National Historic Site maintains an active horticultural program. The park's landscaping plan shows existing plants and plants to be added in the future. The plan shows the following "Trees, Shrubs and Plants" to be added:

- 4 figs to the area north of the main park trail
- 5 toyons to the retaining wall planter west of the adobe
- 12 spanish broom to the western fenceline
- 3 orange and 4 lime trees to the orchard east of the adobe
- 6 osage orange to the utility easement south of the adobe

The plan shows no existing plants to be removed.

Current Archeological Studies. To provide the best historical information available for ongoing site improvements, archeological investigations have focused on the retrieval of data that helps to locate, identify and date past and present landscape features. To establish the age of landscape structures, samples of the brick, concrete, and mortar used in the original construction were sampled and dated. To determine the distribution and variety of plants that formally grew in the landscape, samples were taken of surrounding soil and the adobe brick used in the construction of the original structure. These samples were analyzed for their component plant remnants that would identify historical plant populations that probably grew before large numbers of exotic species were imported. The specific findings of these studies are included in the appendix of this report.

Archeological testing uncovered a household dump southwest of the adobe. This dump was probably created during the Muir-Hanna ownership of the property. Archeological excavations also helped pinpoint locations of gravel walkways, fill soils, and features related to earlier use of the structure. Combined architectural, archeological, and historical studies provided details of the chimney construction and structural additions, substantiated that the adobe never had dirt floors, and provided better dating for landscape features.

Present Use of the Adobe and Its Grounds. The park presently offers visitors self-guided walking tours of the structures and grounds within the park. After being oriented in the visitor center near Alhambra Avenue, the visitor usually begins with a tour of the Muir House and the ornamental gardens surrounding it. Many visitors then continue their tour walking down the main paved park trail stopping at the restored carriage house, passing through orchards and vineyards, over Franklin Creek toward the adobe. As visitors walk the main trail, they are actually following the historic road between Canyon Way (formally Franklin Canyon Road) and the Muir House. This landscape is interpreted to the visitor as the "orchard trail". The grounds have been replanted and maintained in orchards and vineyards to represent and interpret the historic agricultural landscape of Muir's time.
The adobe is used primarily as a museum to interpret the many historic periods of the structure itself and to display historic artifacts. In addition, various programs and occasional events are hosted in the structure. The park also uses the upstairs rooms for miscellaneous storage.

To the immediate west of the adobe is an outdoor picnic ramada and this area and the surrounding grounds are used by the park to support educational and youth-oriented programs. The metal shed located to the southeast of the adobe is used for vehicle and equipment storage. Future plans of the park include the removal of this shed when alternative facilities can be established on new park lands south of the Highway.

Park grounds approximately 100 feet southwest of the adobe are impacted by two major right-of-way corridors, a State of California hiking and riding trail and a three private underground fuel pipelines. The hiking and biking trail comes out of a tunnel under S.H. 4 and veers west, crossing the southeastern corner of park property, continuing up the hill toward the northwest. The pipeline corridors are evidenced by surface warning stakes and a 500 sf. fenced utility station containing below-ground valves and controls.

As previously mentioned, the proposed park expansion south of Highway 4 will be linked to the existing park lands through the tunnel under S.H.4. Initial development plans designed by the NPS Western Regional Office in July of 1991 call for improving the access trail from the tunnel to Canyon Way and developing a sidewalk and parking along the east side Canyon Way. The park would maintain a visitor gate near the location of the existing west service gate for admitting park visitors. This development would potentially alter the function and circulation patterns around the adobe.

**COMPLIANCE WITH REGULATIONS**

To accomplish the cultural resource management mission of the National Park Service, compliance with several standards and regulations is required by NPS policy. "Cultural Resources Management" (NPS-28, release number 3, August 1985) expands and clarifies NPS policy and amplifies the legal hierarchy of laws, executive orders, and regulations with which this HSR and the subject preservation project must comply. Several areas of concern, specifically identified by NPS-28 and/or the Secretary of the Interior’s "Standards and Guidelines for Archeology and Historic Preservation" (48 FR 44737-44740, September 29, 1983) are addressed below. These considerations are aspects of the design program for the treatment scope of work and are incorporated, in summary, in the "Recommendations" subsection and in the "Effect of Recommended Treatments" subsection, where mitigation is appropriate.

**Preservation/Rehabilitation Standards**

The Secretary of the Interior’s Standards for Rehabilitation denote several requirements applicable to the treatment level proposed for this project. The relevant standards are quoted in part below, and a statement follows each quotation describing the method of compliance being followed.

"Every reasonable effort shall be made to provide a compatible use...that requires minimal alteration..., or to use a property for its originally intended purpose."
In the case of the Martínez Adobe, it will not continue to be used in its historic manner. The building’s use will change to a park contact station and exhibit space upon implementation of the treatments recommended herein; however, the new use will be generally compatible and will require minimal alteration of significant aspects of the building.

Distinguishing original qualities...shall not be destroyed.

The "Character Defining Features and Existing Conditions and Materials Analysis" subsection above delineates the significant features and character defining qualities of the Martínez Adobe. None of these features would be destroyed as a result of the recommended treatments.

All buildings...shall be recognized as products of their own time. Alterations which have no historical basis and which seek to create an earlier appearance shall be discouraged.

The Martínez Adobe should be recognized as a product of change through time and no attempt is proposed to return it to an earlier appearance, with the following exceptions:

[Physical] changes may have acquired significance in their own right, and this significance shall be recognized and respected.

Changes and additions have, indeed, become significant to the distinguishing character of the Martínez Adobe. The "Summary of Construction History and Graphic Chronology" subsection above describes these changes and their significance. The recommended treatments will preserve the significant aspects of the history and development of the building with no attempt being made to return to (or restore) an earlier period that would require removal of later "historical" additions.

Distinctive...features...shall be treated with sensitivity.

Recommendations are made to preserve all distinctive features and to initiate a program of ongoing preservation maintenance to assure their survival unimpaired (see "Recommended Treatments" sub-section below).

Deteriorated architectural features shall be repaired rather than replaced, wherever possible. [Where] replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities.

Every effort has been made to recommend treatments of least impact and to stipulate appropriate duplication of historic material appearance where replacement is necessary. At the final design phase, indepth research will be conducted as necessary to specify all products and procedures to comply with this standard.

Stabilization shall reestablish...stability...through reinforcement...[and] by arresting material deterioration..., shall also reestablish weather resistant conditions...

and

Stabilization shall be accomplished in such manner that it detracts as little as possible...[and] so as not to intrude upon or detract from the aesthetic and historical quality...
Stabilization treatments are recommended for the building’s north and west adobe walls as well as other structural components. The recommended treatments (see "Recommended Treatments" sub-section below) comply with these stabilization standards in terms of method and minimization of impact.

Preservation shall maintain the existing form, integrity, and materials... Substantial reconstruction or restoration...are not included in a preservation undertaking.

and

Preservation shall include...a program of ongoing maintenance.

Stabilization of the Martínez Adobe is a basic part of the treatment scope as is the ongoing preservation and maintenance of all distinguishing features. The recommendations were selected to comply with these standards and focus on stabilizing and preserving existing form, integrity and materials rather than restoring earlier periods with the exceptions cited above.

Contemporary design for alterations and additions...shall not be discouraged when...[they] do not destroy significant historic, architectural, or cultural material and such design is compatible....

and

Wherever possible, new additions or alterations to structures shall be done on such a manner that if such additions or alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.

The primary purpose of the recommended treatments is to rehabilitate the Martínez Adobe as necessary and in compliance with these standards to accommodate adaptive usage. Treatments will result in no destruction of the building’s significant exteriors.

Protection Systems (Life Safety)

The proposed use of a historic structure helps establish the necessity of protection systems while the cost effectiveness of such systems and the physical impact of these systems are also considerations. The appropriateness of several protection systems is analyzed and recommendations regarding each are given below.

Egress. Because the use of the building will change, egress considerations in the Martínez Adobe will be required under current code.

Fire-Rated Materials. The Martínez Adobe currently has a type V, combustible, fire rating requiring no additional action.

Fire Detection System. "[A] fire detection [system]...shall be used in all Service historic structures...when they can be justified cost-effective, and not destructive to the physical or historic integrity of the structure." (NPS-28, 5.33, 8/85). Currently a fire detection system exists in the adobe, however, the installation of a fire detection system, monitored at the visitor center, could be installed with a minimum impact on historic integrity. A new fire detection system
should be designed and installed according to the Life Safety Code, NFPA 101 (see "Mechanical and Electrical Recommendations" sub-section under the "Recommended Treatments" sub-section.

**Fire Suppression System.** Consideration of a fire suppression system for the Martínez Adobe (as part of the rehabilitation) is required under NPS-28 as stated above: if not destructive and if cost-effective or if necessary for the protection of the cultural resources. As an integral part of the rehabilitation of the adobe, a dry or wet pipe system could be installed in a non-destructive and reasonably nonintrusive manner. However, the life safety hazard potential is low and the cost may be unwarranted. Additional hand-held extinguishers could also be provided around the adobe for increased building protection.

**Intrusion Alarm System.** Both the Muir House and the Martínez Adobe are proposed for day use only. During the day, NPS personnel will be present on the site. Because security will not be provided on the site after hours, and because some irreplaceable artifacts susceptible to burglary may be housed in the Martínez Adobe, there appears to be justification for the installation of a good security detection system as part of this project. The design and installation of an intrusion system shall be certified by regional cultural resource specialists using the form xxx, assessment of effect.

**Handicapped Accessibility**

Current Accessibility: A checklist taken from "Accommodation of Disabled Visitors at Historic Sites in the National Park System" produced by the Park Historic Architecture Division, Cultural Resource Management, National Park Service, U. S. Department of the Interior, 1983. The checklist is provided to give an overview of the areas and features on the site which currently do not meet accessibility requirements.

**Energy Conservation**

"Law and regulation require that Federal agencies reduce energy use" (NPS-28, 3.27, 8/85). Under this directive it is entirely appropriate to install energy conserving measures wherever reasonable as part of the rehabilitation of the Martínez Adobe. Adobe, the primary material used in the main portion of the house, provides excellent energy conservation. Naturally, the windows and doors in the house will require some rehabilitation and repair work including caulking and weatherstripping. The west additions may require adequate insulation and other energy conservation measures. The house may require addition heating. Measures to reduce the energy needs for heating are consistent with NPS policy and should be designed with a minimum of intrusiveness and wherever they will be cost-effective in the long run.

**EXISTING CONDITION DRAWINGS**

The following eleven drawings were produced and are provided to illustrate the adobe’s existing condition. The existing utilities, landscaping, architectural, structural, mechanical, and electrical are all provided as not only documentation of the structure in its present state but also to present deficiencies and seismic weaknesses, and to provide a base or starting point for rehabilitation.
Existing Condition Drawing 1: Cover Sheet
Existing Condition Drawing 2: Existing Utilities Plan
Existing Condition Drawing 3: Topography and Grading
Existing Condition Drawing 4: Existing Landscape Planting
Existing Condition Drawing 5: First and Second Floor Plans
Existing Condition Drawing 7: Building Sections
Existing Condition Drawing 8: Miscellaneous Details
Existing Condition Drawing 9: First and Second Floor Plans
Existing Condition Drawing 10: Framing Section and Building Elevations
RECOMMENDATIONS

General

Recommendations for the treatment of a building are a major component of any historic structure report. Recommendations should be consistent with the building's significance, integrity, condition, and future use while complying with the policies and management goals of the National Park Service. The building's significance and integrity issues are located in the "Cultural Context and Construction History" and "Existing Conditions and Materials Analysis" sections of this report. The current condition of the building is also included in the "Existing Conditions and Materials Analysis" section. The "Compliance with Regulations" section provides treatment requirements that are necessary to accomplish the project objectives and to comply with specific NPS policies. Information that succeeds this portion of the report includes a treatment strategy and recommended treatments (organized by discipline). A cost estimate is also provided for the recommended work. The existing condition drawings and the proposed treatment drawings include graphic illustrations of the existing conditions and the preliminary treatment design.

Treatment Strategy

Level of Treatment. The most appropriate level of treatment for the Martínez Adobe is rehabilitation, as defined in NPS-28, Chapter 3, Page 8 as stated below:

Rehabilitation is a treatment that improves the utility or function of a structure and often involves life safety and other code improvements. Rehabilitation does not apply to prehistoric structures, ruins, monuments, statuary, or buildings that serve as historic house museums. Its use should be limited to structures that are being adaptively used and that do not play a primary role in a park's interpretive program. In instances where preservation tax credits may be claimed, the Secretary of the Interior's "Standards for Rehabilitation" will be the minimum requirement.

Under the rehabilitation approach, both preservation and stabilization measures are appropriate as well as on-going preservation maintenance. Rehabilitation "improves the utility...of a structure...[while allowing] contemporary design for alterations and additions...." while "Preservation shall maintain the existing form, integrity and materials of a structure." Stabilization includes treatments necessary to "reestablish the structural stability" and "weather-resistant conditions for a structure". In addition to the above treatments, preservation maintenance is important for the continued upkeep of the building. All preservation maintenance should be performed by "qualified technicians." The adobe will be rehabilitated in its current state, with all additions. See Compliance with Regulations on page 246.

Treatment Phasing. According to policy, life-safety and basic maintenance must be initiated as soon as possible to facilitate the utility of the Martínez Adobe. Immediate recommended treatments including seismic upgrades are listed below. When funding becomes available, the appropriate rehabilitation (including additional stabilization and comprehensive preservation) treatments should be undertaken. Upon completion of the rehabilitation, the adobe should be served by an ICAP Feature Inventory. While some treatment recommendations in this report

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may seem incomplete or vague, all treatments of the adobe will be clearly articulated in a formal preliminary design phase.

Depending on available funding, the total rehabilitation of the Martinez Adobe, realistically, could take years. If this is the case, it would be inappropriate to wait for several years before implementing the items listed in the "Immediate Stabilization and Preservation Treatment" section of this report. A scope of work should be written immediately so that stabilization, preservation and seismic retrofit work could begin as soon as funding is approved.

Scope of Treatments

**Treatment Summary.** The items listed in the "Recommendations" section are divided into four categories: Site Recommendations, Structural Recommendations, Architectural Recommendations and Mechanical and Electrical Recommendations. Each of these categories is divided again into two categories: Immediate Stabilization and Preservation Treatment Recommendations including Seismic Retrofit; Future Stabilization and Preservation Treatment Recommendations. Although not recommended in this report, Future Stabilization and Preservation Treatment Recommendations could be phased further.

**Architectural Recommendations: Immediate Treatment Recommendations Including Seismic Retrofit.** The Martinez Adobe was inspected for damage after the 1989 Loma Prieta earthquake. Earthquake damage, mainly exterior wall cracking as well as other structural deficiencies, was discovered which raised considerable concern for visitor safety and protection of the resource. This section of the report will provide treatment recommendations as well as recommendations for seismic retrofit. These recommendations should be given immediate attention to prevent further damage or destruction of the resource and to protect visitors and staff from the potential collapse of the structure during an earthquake.

**Roof Repair.** The Martinez Adobe underwent extensive reroofing in 1967. At that time the main roof was stripped and new sawn shingles were installed. Grey composition roofing was installed on the west bedroom addition. In 1977 a partial reroofing occurred. Portions of the wood shingle roof on the adobe were replaced with like materials. In 1981 the laundry room and the kitchen were reroofed with sawn wood shingles.

As previously mentioned, total rehabilitation of the adobe could take several years, depending on funding. Because a major amount of roofing will be removed for installation of a wood bond beam at the top of the adobe walls, and because it may be years before the building is totally rehabilitated, it is recommended that the entire roof (over the adobe portion of the building) be removed and replaced. When reroofing occurs, during the seismic retrofit phase, 24 inch wood shakes (original to the building) shall be used instead of sawn wood shingles.

If damage occurs to the top of the wall as a result of the installation of the bond beam, repair or replace damaged adobes and replaster with a lime based material. Replace sheathing and install new wood shingles to match existing (see structural drawings for more information). Repair all leaks in existing roofs including the west bedroom addition and kitchen. If total replacement is necessary in these locations, rolled roofing shall be used.
**Wall Repair.** Remove interior finishes on both sides of the west adobe wall at the location of the large open crack. Remove wall finishes on the north end of the west adobe wall (in the living room and the bedroom) for wall repair. Remove ceiling in west bedroom and sink area. Removal of additional ceiling may be necessary in the kitchen, all to accommodate seismic work. Repair all cracks in the west adobe wall with adobe mud (the same used to hold the fiberglass rods in the top of the wall) and plaster the wall with lime plaster. Reinstall or replace interior wall finishes and install new gypsum board ceilings.

Remove existing horizontal siding and trim on the north side of the adobe portion of the building. Chimney mortar and exterior wall plaster samples were taken and have been analyzed. A decision as to the treatment of this fabric will be made before construction begins (Appendix L). Install a new concrete footing and remove and replace deteriorated adobe bricks on the lower portion of the north wall. Replacement adobe bricks should consist of the composition, physical properties and durability of the existing original adobes (see adobe tests in the appendix). When adobe repairs are conducted, National Bureau of Standards Technical Note 934, Preservation of Historic Adobe Structures-A status report should be used. After repair of the north wall reinstall the horizontal siding and trim. Replace deteriorated siding.

Remove enough of the fir flooring in the north and south bedrooms to expose at least 4'-0" of floor framing members on the north, east and south walls and at the center adobe cross wall. Install new blocking and sheathing as shown on the structural drawings and reinstall original flooring. Install new steel straps around chimney and tie into second floor and attic. Repair existing steel chimney strap at roof. Straps must be installed before siding is reapplied to north wall. Apply new lime plaster over adobe wall. Install new 2x4 pressure treated studs with plywood sheathing on the exterior of the wall. Reinstall horizontal siding. Refer to the structural recommendations for seismic retrofit work.

Access must also be provided from the exterior of the adobe for installation of the tension ties and blocking mentioned above. On both the east and the south verandas, decking and ceilings must be removed. After installation of the seismic components, the decking and ceiling materials must be reinstalled. It may be beneficial to reinstall the decking upside down to alleviate paint removal.

**Architectural Recommendations: Future Treatment Recommendations.**

**Paint Renewal.** After further analysis of historic and existing paint schemes, the interior and exterior of the entire building should be painted. The verandas, including decking, posts and balustrades; adobe walls and wood siding; and trim should be painted in a scheme approved by the Regional Historical Architect.

**Carpentry and Miscellaneous Repairs.** Remove concrete from first floor of the east veranda and replace decking; repair balustrades on the first and second floors of the east and south verandas; replace all missing woodwork and trim on the interior and exterior of the building; replace all insect infested materials on both the interior and the exterior of the adobe; test a sample of the exterior plaster and, if the material is a cement plaster remove it and replace with a lime based plaster; clean and repair the fireplace and the chimney and install a flue liner, rain guard and spark arrestor of compatible design; repair damaged interior and exterior vertical tongue-and-groove paneling by filling holes and replacing missing millwork (reproduced to match existing profiles); rehabilitate all windows and hardware, return to original operable or fixed condition, remove excessive layers of paint, clean and functionally restore hardware, and repair or replace...
broken or missing elements; rehabilitate or replace doors as indicated on the "Proposed Treatment Drawings" and rehabilitate all historic door hardware; refinish all existing wood floors and install new handicapped accessible thresholds at the west bedroom and the living room and at the west bedroom and the kitchen; install new handicapped accessible thresholds at main entrances (west bedroom addition); repair oak tongue-and-groove floor at door between living room and dining room; recarpet or refinish and paint existing stairs; repair damaged wall board and gypsum board; repair second floor bathroom walls and ceiling and refinish floor; repair spliced beam on the ceiling of the second floor north bedroom.

Thermal and Moisture Protection. The first floor, including the west bedroom, living room and dining room will house exhibits. Temperature and humidity requirements will have to be considered for proper storage of archival materials. The performance of the building could be improved and building materials better protected without damage to historical integrity by installing sealants, caulk, insulation and weatherstripping. This is a general recommended treatment which would reduce moisture infiltration through walls, windows and doors, and reduce drafts, and potentially damaging temperature fluctuations and insect access.

Masonry Repair. Because of mortar deterioration and the presence of voids in the existing chimney, repointing is recommended. Tests should be conducted to determine the composition of the existing mortar and that composition should be duplicated for repointing. Joints should be finished to match the existing condition. The brick fireplace surround is cracked due to the deteriorated foundation and adobe wall on the building's north side. After the north wall is repaired and the floor returned to its original elevation, the fireplace bricks and egg-and-dart trim should be repaired and repointed. Materials used for this repair should also be consistent with original materials. After repair the surround should be painted in an approved paint scheme, the chimney cleaned and the fireplace made usable.

Modify Wall Partition Layout. As required under the current General Management Plan, the first floor of the adobe will be used as a contact station for those visitors who enter the park from the back gate. The back gate will be considered as one of the main entrances into the park. Because the park is a fee collection area, the new contact station in the adobe will be manned during normal park operating hours. The park has a small staff making it likely that volunteers will be used to run the contact station and man the back gate. The door leading from the back patio into the west bedroom addition will become the main entrance. The existing patio will be enlarged and seating areas will be provided. This entrance will be totally accessible to the physically disabled. The doors on the front (east side) of the adobe will also serve as entrances for those visitors arriving from the from the front gate. Adequate signage will be necessary on the site to direct visitors to the proper entrances.

As previously mentioned the adobe will serve as a contact station. Space will be provided in the adobe for a handicapped staff toilet, exhibits, a small book sales area and information desk. Use of the adobe for general storage needs is not recommended. Interior rehabilitation will include minor alteration of existing walls in the west additions only. Some new wall partitions and doors will also be required. The "Proposed Treatment Drawings" illustrate walls to be retained, and walls, features and other equipment which will be removed. These minor changes will not have an adverse affect on the historic integrity of the house.

Sustainable Design. It is recommended that alternate wood materials (to redwood) be used where appropriate, where such materials especially use as replacement materials that are to be painted or do not serve in a structural. Reuse of existing wood materials is also appropriate.
Preservation Maintenance. As a final recommendation, a preservation maintenance program should be initiated as soon as the rehabilitation is started on the Martínez Adobe. An ongoing program of preservation treatments would be directed by an ICAP Feature Inventory and the work performed by appropriate preservation specialists. By starting the ICAP Feature Inventory early, at the time of rehabilitation, optimum data including documentation of materials and procedures employed could be easily obtained. The ICAP Feature Inventory should be done so historic maintenance work procedures can be developed for use with the Management Management System.

Compatibility Guidelines. To promote the building as a visitor contact station, new finishes, exhibits, furnishings and other miscellaneous equipment will be installed in the Martínez Adobe by the time the rehabilitation is complete. During the design development phase, an exhibit specialist from HFC should be contacted for additional input to develop and refine exhibit details. The approved HSR will serve as the basis for that stage in the design process and the park and region should be consulted regarding the architectural modifications, additions, methods of display, color scheme, etc. As the last element of the "Recommendations" section, design guidelines have been listed that will require conformance with all parties involved with exhibits and the total rehabilitation. The proposed use of the Martínez Adobe is provided as part of these design guidelines.

Design. During the final design stages of the rehabilitation, several considerations are recommended to realize design compatibility and uniformity of character in new construction, new equipment, furnishings and exhibits, new colors, fenestration, signage and lighting.

New Construction. New partitions installed in the west additions of the adobe should be sheathed with gypsum board and finished and painted to match the rest of the house. New trim should also match that which currently exists and also should be painted. Doors to new areas should be wood, exhibiting a panel design similar to other historic doors on the house. Flooring materials installed in the staff toilet room shall meet code requirements consisting of a non-porous material providing the highest sanitary conditions possible. Other floors shall be hardwood tongue-and-groove to match existing conditions.

New Equipment, Furnishings and Exhibits. Modern water heaters, conduit, electrical fixtures and alarm panels, store and exhibit display cabinets, shelving and appliances etc. should be constructed of wood where possible or masked behind wood covers. The interior furnishings should be simple, traditional and sympathetic with the historical character of the building. Steel (or chrome) furniture should not be used but instead, wooden chairs and other furniture would be more in-character. Vinyl or ceramic tile flooring should be installed in the staff toilet and counters and cabinets should consist of wooden related hues and tones. Bright colored, molded plastic is not in-character.

New Colors. On the interior of the Martínez Adobe, all wood surfaces and wall board shall be painted. Floors in the west bedroom addition, living room and dining room shall remain natural. After refinishing, the wood floors should be cleaned and waxed regularly. The vertical beaded paneling and miscellaneous trim in the house shall also be painted. Only after a thorough paint analysis is conducted on interior surfaces of the building, should new colors be selected and applied. Colors selected should match what currently exists or what historically existed if appropriate for the character of the structure. Light colors are recommended and by no means should stark primary colors or bright modern colors like orange, purple, bright yellow, deep blues and red, be used.
**Fenestration.** By no means should the pattern of exterior window and door fenestration be interrupted by new construction. New construction on the building’s interior may, in some instances, be visible from the building’s exterior. Windows should not be blocked or covered and partitions and equipment installations should not intersect windows. Ceilings should not be lowered decreasing the vertical area of a window or door. The approach taken should leave the exterior historic appearance unimpaired.

**Signage.** The size and number of new signs should be the minimum necessary to achieve the purpose, such as exits, handicapped signs and symbols, restroom signs, etc. Signs should be small and in-character with the furnishings and historical feeling of the building.

**Lighting.** Exterior porch lighting is appropriate and should remain in its current unobtrusive manner. Flood lighting and other intense exterior area lighting is not appropriate. General interior lighting should be of the incandescent type, ceiling or upper wall mounted, not recessed and fixtures should be selected from historical styles in character with each area in the adobe. Special modern area lighting, with the exception of fluorescent tubes should be allowed. Modern fixtures should be used for contemporary purposes only. Rehabilitation and reuse of existing fixtures, if appropriate to the character of the space, is recommended.

**Structural Recommendations: Immediate Stabilization/Seismic Upgrading.** Historic preservationists are using a more light-handed approach when trying to retrofit adobe structures, in lieu of trying to meet all code requirements. One approach has been called "bolts plus". The adobe walls are connected to the various diaphragms to allow the building to act as a structural system and transfer lateral loads to the cross walls. During a seismic event the adobe will crack and by doing so some energy will be dissipated. The following recommendations will not bring the building into total code compliance, but will allow the building to act as a structural system. By using the "bolts plus" approach it is hoped that under the design seismic event the building will sustain moderate damage but not totally collapse, thus ensuring the life safety of inhabitants.

**Foundation.** The base of the north wall should be underpinned with a reinforced concrete footing (See Section A on Sheet S3). Temporary shoring will be required for the north wall stabilization. The site drainage needs to be improved so that water is directed away from the adobe wall. The underpinning will provide 6 inches of clearance between the base of the adobe and the adjacent ground. A foundation drain should be added to prevent percolating water from reaching the underfloor space. Roof gutters and downspouts need to be inspected for deficiencies and repaired where needed. The downspouts should be connected to drains so that the water can be discharged away from the building. Some underground drainage is being used currently and has probably corrected water problems (For site drainage improvements refer to landscape drawings).

**Walls.** The eroded and deteriorated adobe at the base of the north wall should be replaced. Temporary shoring will be required for the north wall stabilization. Replacement adobe mix design should be similar to the original. Tests conducted on the existing adobe and soil samples taken on the site indicate the existing adobe was constructed of material found in the immediate area. The studs on the exterior of the north wall should be replaced with pressure treated studs and plywood sheathing (See Sections A, B, and C on Sheet S3). The 2 inch crack on the west wall should be grouted. The wall finishes will need to be removed and replaced or reinstalled as necessary.
First Floor. The existing flooring will need to be removed and reinstalled as necessary to underpin the north wall. The floor along the north wall could be leveled at this time. Current policies regarding public use of the first floor could be changed to allow a maximum of 30 people in the three first floor exhibit rooms, providing egress is not restricted. This number was based on the 1991 UBC, Chapter 33 - Exits and was calculated as follows:

- Occupancy Classification: Exhibit Rooms
- If 50 people - Minimum of 2 exits required
- Occupant Load Factor: 15
- First Floor Area: 876 S.F.
- Occupant Load = 876 S.F. = 58.4 people
  
Because the "bolts plus" retrofit does not bring the building into structural code compliance an occupant load of 30 people was chosen. This relates to a factor of safety of 1.9.

Second Floor. The second floor diaphragm should be connected to the adobe walls. The connection should be made by bolting through the adobe and sandwiching the wall between interior and exterior blocking (See Sections B and D on Sheet S3). The existing floor sheathing should be removed and reinstalled as necessary. The second floor should not be used for storage because the south bedroom joists are not adequate to carry the required loads. Also, the weight of stored materials increases forces developed during an earthquake. The current policy of denying public access to the second floor should continue.

Attic. At the top of all adobe walls install a pressure treated glue laminated (glulam) "bond beam". Temporary shoring will be required for the installation of the glulam "bond beams". Bolt the glulam to the tops of the adobe walls using threaded fiberglass rods grouted into place. Framing anchors should be used to connect the attic diaphragm to the glulam. The existing floor sheathing will need to be removed and reinstalled as necessary. Plywood needs to be installed over the existing floor sheathing (See Sections C and E on Sheet S3). The 2x4 studs supporting the roof above the east wall need to be replaced with a plywood sheathed pony wall (See Section E on Sheet S3). The spliced connection in the north bedroom attic joist should be improved. No storage should be allowed in the attic.

Roof. The roofing and sheathing will need to be removed as necessary. Framing anchors are required to connect the roof joists to the top of the walls (See Sections C and E on Sheet S3).

East and South Porches. The bolted connection at the second floor diaphragm will tie into the porch framing to help resist any outward seismic forces. Public use of the second floor porches should not be allowed.

Fireplace and Chimney. Metal straps should be installed around the chimney at the roof, attic, and second floor levels. The metal straps will be connected to the structural system at each level to help prevent collapse of the chimney during an earthquake.

Structural Recommendations: Future Treatment and Seismic Upgrading.

Walls. If Portland cement stucco was used on the east and west walls it should be removed and the walls inspected. Cracks in the adobe should be filled and patched with material similar to the existing adobe. After repairs are made, a mud or lime stucco should be applied. A mud or
lime stucco is preferred because it bonds better to the adobe, is historically correct, and does not mask problems. This type of finish requires more maintenance than a Portland cement stucco.

**East Porch.** The 4-inch concrete slab should be removed, the wood sheathing and framing inspected and replaced if it is deteriorated. Due to settlement, the foundations under the columns should be replaced with reinforced concrete and the porch raised back to its original height. This will correct the separations at the tops of the columns at the first and second floors. Temporary shoring will be required for the footing installation.

**Structural Recommendations: Future Seismic Upgrading.** Future seismic upgrade recommendations are based on bringing the building into full compliance with the 1991 UBC (See Section A on Sheet S2). These recommendations would result in a higher occupancy limit and use of the second floor. They would also reduce the damage to the structure when compared to the "bolts plus" retrofit recommendations.

**Foundation.** A reinforced concrete footing should be constructed on the interior of the adobe walls. The subgrade under the dining room, living room, and bedroom should be excavated to meet separation requirements between wood and earth.

**Walls.** Assuming the interior finishes, i.e. gypsum board and beaded tongue-and-groove boards are desired, stud walls could be constructed on the inside of the adobe. The stud walls would have plywood on one or both sides enabling them to act as shear walls. The walls would be designed to carry the loads from the level above in the event the adobe walls collapse. The walls would also help resist out-of-plane bending of the adobe walls. The east stud wall of the first floor bedroom and kitchen would be reconstructed so it extends up to the shed roof. This is required for the shed roof diaphragm and will allow the wall to act as a shear wall. It will also resist out-of-plane bending of the adobe wall. The use of stud walls on the interior will reduce interior dimensions and affect door and window returns. The wood framed walls in framed additions should be strengthened by adding plywood, blocking, and seismic anchors.

**First Floor.** The living room floor could be leveled by either framing into the new concrete foundation or constructing new concrete footings under the existing posts. Existing framing members could be reused if structurally sound and without a permanent set or deflection.

**Second Floor.** The diaphragm at the second floor should be strengthened by adding plywood to the bottom of the floor joists. Blocking and seismic anchors will be required to transfer the loads into the structure. If the south bedroom on the second floor is similar to the original framing of the north bedroom floor, it will need to be strengthened. This could be accomplished by adding 2x10 joists between existing joists similar to the north bedroom stabilization in 1975.

**Attic.** If "bolts plus" retrofits are completed no further work is required.

**Roof.** If "bolts plus" retrofits are completed no further work is required.

**East and South Porches.** Provide seismic connections tying the east and south porches into the building. If "bolts plus" retrofits are completed some additional strengthening would still be required. The south porch lateral resistance would be provided by a shear wall concealed between the existing siding and adobe wall.
Fireplace and Chimney. Take down the chimney and reconstruct it with a concrete footing and reinforce the chimney according to the 1991 UBC. The chimney connections to the various levels provided in the "bolts plus" retrofit could probably be incorporated. This would eliminate the visual impact of straps proposed in the "bolts plus" retrofit.

Mechanical and Electrical Recommendations: Future Treatment.

Space Heating. A supplemental space heating system will not be required and is not recommended for the adobe. A supplemental heating system would be complicated to install and would likely be obtrusive and incompatible with the existing character and historical integrity of the structure. Exhibits or artifacts requiring climate control shall not be installed in the adobe.

Open Duplex. On the west porch, there is an existing duplex receptacle which has an open ground condition. This outlet is located toward the north end of the west wall and should be corrected.

Grounding. Ground all devices per NEC 250.

GFCI Devices. Provide GFCI protective devices for the garage and all outdoor loads served as well as the bathroom and kitchen areas.

Disconnects and Conductors. The existing 30 amp safety switch serving the garage is a 3 pole disconnect which is currently being used as a 1 pole disconnect. The conductors serving the garage are also undersized for the 20 amp fuses in the disconnect. They are currently #14 and should be #12, however, since the load in the garage is so small, I recommend changing the fuse size to a 15 amp.

Underground Service. Underground both the telephone and electrical service to the Adobe. This would allow all of the aerial electrical service equipment located on the north wall of the storage building to be removed along with the power pole directly south of the picnic area. An overhead to underground transition point could be located further to the west along the property line and could easily be concealed in the landscape. In addition, PG&E could have easier access to their metering equipment as long as the meter was visible from Franklin Canyon Road which runs directly along the west property line.

Fire Alarm. Expand Fire Alarm system. System should be point addressable.

Conductors and Circuits. All exposed conductors should be in raceway. Whenever possible, circuits should be top fed from the attic space to avoid long horizontal runs of raceway.

Demolition. Remove all abandoned conductors in attic space or wherever accessible, including knob and tube. The knob and tube wiring in the Martínez Adobe does not lend itself to interpretation as is the case with the exposed knob and tube wiring on the top story of the John Muir house.

Service Upsizing. Recommend upsizing existing 60 amp service fused at 45 amps to a 60 amp service fused at 60 amps.
Telephone Service. Remove the aerial telephone service drop on the northwest corner of the Adobe. Consolidate and expand the telephone service to at least a four pair cable which would allow for possible expansion.

New Panelboard. Replace the existing fuse panel with a circuit breaker panelboard with a provision for at least 12 and preferably 20 circuits. This would alleviate the problem of having to store spare fuses in various sizes and types. The adobe currently has both screw in type fuses in 45, 25, 20 and 15 amp ranges and plug in fuses in 20 and 15 amp sizes. Also, the two surface mounted disconnects could be removed and their loads served from the new circuit breaker panelboard.

Site Recommendations: Treatment After Seismic Retrofit. The following findings and recommendations represent factors that will help protect the structural integrity of the Adobe structure and promote functional utility and maintainability of the Adobe’s historic landscape. Overall, there were no conditions found in our survey of the landscape that present an unsafe condition for visitors or immediate danger to the structures in the area. In a longer term view, remedial work recommended in this section will lead to savings in maintenance costs and better service to the visitors. The recommendations are divided into three categories: drainage improvements, functional improvements and historic setting enhancement.

Drainage Improvements. Remove Structures Inhibiting Drainage. Drainage problems on the north side of the adobe are complicated by runoff from landscape structures on the west side of the building. These structures, including the concrete patio and retaining wall/planter, are not designed for adequate drainage and contribute to the potential for introduction of water into the building foundation on both the west and north side of the adobe. The patio has inadequate slope to shed water, and shows evidence of drainage ponding. The retaining wall/planter lacks a drainage system and has full height cracks that may compromise its structural integrity. Removal of the retaining wall and concrete slab on the western side of the adobe will allow the construction of an adequate drainage system and a new, structurally sound retaining wall.

Provide Improved Drainage System. The park’s repair and replacement of gutters, downspouts, drains and slope improvements around the foundation of the north wall of the adobe appear to have arrested the damaging effects of water runoff on the adobe brick and stone foundation. These remedies appear to be sufficient for the short-term, but their performance must be monitored to verify continued effectiveness. For the long-term protection of the adobe, a subsurface and/or improved surface drainage system is recommended to handle drainage from the northern and western sides of the building.

Remove Obsolete Irrigation Lines. Numerous irrigation lines with sprinkler heads are present on the north, south and east of the adobe. Based on our site survey, few of these lines correspond to existing landscape planting and park staff indicates many lines have been abandoned. Irrigation heads that could spray the vicinity of the northern foundation of the adobe should be capped at their source and removed to ensure that they will not be used or leak in the future. Consider installing new low-flow or drip irrigation lines to correspond to present landscape plantings. No new main or lateral lines should not be placed within 4 feet of the foundation and new heads should not be placed where they will spray within this 4 foot clear zone.

Relocate Foundation Plantings. The irrigation of foundation planting around the adobe introduces water into the vicinity of the structure. The relocation of foundation planting a minimum of 4 to 6 feet away from the adobe structure would prevent potential damage from supplemental
irrigation and would facilitate the installation of drainage rock and a subsurface drainage system if required. Existing trees and large shrubs that have roots extending into the foundation zone of the adobe should have their roots severed not less than 3 feet from the foundation. If such root pruning will cause decline or death of the plant than complete removal and replacement should be considered.

**Functional Improvements.** Redesign Western Patio Area. The draft GMP indicates that new functional uses will be possible for the adobe when additional lands are added to the park south of S.H.4. We must address the needs of visitors entering the park from the west gate and recognize the outdoor implications of a possible new visitor contact station and rest room facilities located in the adobe's western additions. It is recommended that the western patio area be redesigned to accommodate improved access to the adobe and the provision of a visitor gathering/seating area to prevent crowding within the adobe's planned visitor contact station. This redesigned patio should also serve the needs of regular park programs and special events held at the adobe.

**Historic Setting Enhancement.** Drought Tolerant Native Plants. It is recommended that all new and replacement planting around the adobe be drought tolerant (xeriscape) plants to minimize irrigation needs. The historical and archeological record provides some guidance about particular plant varieties although exact plantings in the historical period will always be based on conjecture. Source data does indicate however, that the best selections would be California natives, particularly those that have freeze hardiness. See appendix F for plant list.

**Open Eastern Viewshed.** It is recommended that views to the adobe from the east be preserved. Historic photographs of the adobe from the Muir House show a large locust tree to the north of the adobe and some possible smaller coniferous plantings to the south and west. The east side of the adobe was primarily lower-growing orchard trees. The sightline from the adobe to the east was relatively clear in the historic period due to the low profile of these orchards. In the present, this open sightline has a unifying effect on the eastern and western sides of the park and the continuous orchards between the Franklin Creek and the adobe convey the strong agricultural image that characterized the scene in the historic period. Consequently, it is recommended that the orchard planting continue to supplemented in this area and that non-orchard specimens to the east of the structure, particularly the younger spruce plantings, be relocated.

**Remove Turf Rings.** The turf rings that were installed to provide handicapped access to the west side of the adobe detract from the historic setting. Other surfacing methods and materials that would be more appropriate such as brick, stone or concrete.

**Supplement Fig Tree Plantings.** Planting of fig trees north of the main park trail is consistent with the location of these trees in the historical period. This planting provides vegetative screening along the northern park boundary and should be continued and expanded.

**Remove Asphalt Driveway & Shed.** The removal of asphalt paving on the eastern side of the adobe would have two advantages; to restore the historical character of the surrounding landscape and aid in positive drainage away from the structure. The paving should not be removed until the tractor shed is removed and alternate access is provided for the adobe storage areas. (See proposed drawings 3 and 4.)
PROPOSED DRAWINGS

The following proposed drawings provide recommendations for general rehabilitation and seismic strengthening of the adobe. The adobe will be used as a contact station and will house cultural exhibits. The west bedroom addition has been redesigned to accommodate the new use, and the recommended design is included as part of these drawings.
Proposed Drawing 1: Cover Sheet
Proposed Drawing 2: Symbols and Abbreviations
Proposed Drawing 5: First and Second Floor Plans
Proposed Drawing 6: Building Elevations
GENERAL NOTES

1. AFTER ANALYSIS OF HISTORIC PAINT SCHEMES, INTERIOR AND EXTERIOR OF ENTIRE BUILDING SHALL BE PAINTED. AFTER EXISTING PAINT REMOVAL, REPAINT THE VERANDAS, INCLUDING DECKING, POSTS AND BALUSTRADES. PAINT ALL WOOD SIDING AND TRIM. PAINT SCHEMES SHALL BE APPROVED BY THE REGIONAL HISTORICAL ARCHITECT.

2. REPAIR OR REPLACE INSECT DAMAGED MATERIALS ON BOTH THE INTERIOR AND EXTERIOR OF THE ADOBE.

3. REPAIR OR REPLACE DETERIORATED OR MISSING TONGUE-AND-GROOVE PANELING AND OTHER MILLWORK ON EXTERIOR, WATCH ORIGINAL PROFILES.

4. PROVIDE CAULKING, WEATHERSTRIPPPING, AND INSULATION AS NECESSARY TO CONTROL TEMPERATURE AND HUMIDITY FOR PROPER STORAGE OF ARCHIVAL MATERIALS.

5. INSTALL MECHANICAL VENTILATION SYSTEM IN STAFF TOILET. HEATING SYSTEM IN THE WEST BEDROOM ADDITION. NEW SYSTEMS TO BE FUNCTIONALLY AND AESTHETICALLY COMPATIBLE WITH PROPOSED USES AND APPEARANCES.

6. INSTALL NEW ELECTRICAL AND LIGHTING SYSTEMS APPROPRIATE FOR PROPOSED USES AND COMPATIBLE CHARACTER.

7. AFTER REMOVAL OF SELECTED INTERIOR AND EXTERIOR FINISHES, STORE FOR POSSIBLE REUSE. REUSE SALVAGED MATERIALS WHEN PRACTICAL AND COMPATIBLE.

8. REPAIR AND REPLACE PLUMBING PIPING AND TOILET FIXTURE. REMOVE EXISTING BATH/SHOWER AND PEDESTAL SINK. PROVIDE NEW FIXTURES IN STAFF TOILET. MEET CURRENT UNIFORM FEDERAL ACCESSIBILITY STANDARDS. RETAIN SINK IN KITCHEN. NO WATER TO BE PROVIDED TO SECOND FLOOR BATHROOM. RETAIN FIXTURES IN SECOND FLOOR BATHROOM.

Longitudinal Section

Proposed Drawing 7: Building Sections

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Proposed Drawing 8: First, Second, and Attic Floor Plans
Proposed Drawing 10: Seismic Upgrade Sections

SECTION C

- REMOVE EXISTING SHEATHING AS NECESSARY
- PLYWOOD
- EXISTING SHEATHING
  - Gypsum @ 2x10
  - WD. LEVELING BED
- 1/2 TURD SHEATHING FIBERGLASS ROOF, SEE DETAIL 5 ON SHEET 32
- BEVEL TOP PLATE UNDER Rafter
- FRAMING ANCHORS
- SHOVEL EXISTING STRUCTURE TO FACILITATE 0.5 X 1.5 PLACEMENT
- PLYWOOD
- 2x4 @ 18
- FRAMING ANCHOR

SECTION D

- REMOVE EXISTING SHEATHING AS NECESSARY
- PLYWOOD
- FRAMING ANCHOR
- 2x4 BLOCKING TO REPLACE SMALL SUPPORTING RAFTERS
- JOIN BLOCKING TO CEILING JOISTS WITH FRAMING ANCHORS

SECTION E

- REMOVE EXISTING SHEATHING AS NECESSARY
- FRAMING ANCHOR
- 4x4 BLOCKING CONNECTED TO EXISTING JOISTS WITH JOIST HANGER

SECTION F

- REMOVE EXISTING SHEATHING AS NECESSARY
- FRAMING ANCHOR
- 4x4 BLOCKING TO REPLACE SMALL SUPPORTING RAFTERS
- JOIN BLOCKING TO CEILING JOISTS WITH FRAMING ANCHORS

NOTE
ALL SECTIONS ON THIS SHEET REPRESENT WORK TO BE COMPLETED UNDER THE MINIMAL SEISMIC UPGRADE OPTION. SECTIONS MAY VARY FOR TOTAL SEISMIC UPGRADE OPTION.
Proposed Drawing 11: Electrical Recommendations
EFFECT OF RECOMMENDED TREATMENTS

Because of the significance of the Martínez Adobe, the objective is to stabilize, provide seismic upgrades and rehabilitate the building in such a way as to cause the least amount of disturbance or destruction of the historic fabric. The proposed treatments will have an effect on the building, however, that effect will not be adverse.

The recommended treatments listed above will result in the rehabilitation and future continued use of the Martínez Adobe. Continued use of the adobe as a contact station will assure proper maintenance, provide an opportunity for interpretation and generally conserve a historic scene for the benefit and enjoyment of park visitors.

The scope of the proposed work is designed with a respect for what remains of the adobe's historic fabric. To assure the proper execution of the treatments and ongoing use of the buildings, the following cultural resource management requisites—taken from NPS-28 Version 3—are applicable.

1. Historic structure construction contract documents shall be prepared for this undertaking that are (a) based on the recommended scope of work presented in the historic structure report (HSR) as approved by the regional director and (b) these drawings and specifications shall be prepared under the direction of a historical architect, and shall comply with NPS policy and regulations (see "Compliance with Regulations" section);

2. The proposed project shall be submitted for review using the Assessment of Effect form (xxx) by the regional cultural resource specialists and other professionals (engineers, etc.) before implementation;

3. The construction work itself shall be performed under the direction of a historical architect or preservation specialist or under the supervision of a qualified technician in consultation with a historical architect;

4. Where ground disturbance as a result of construction is anticipated to extend beyond the limits of that area cleared by archeological survey, additional archeological clearance and monitoring will be required;

5. Upon completion of the project, the Martínez Adobe shall be maintained by qualified technicians in accordance with an approved historic structure preservation guide (HSPG). The HSPG should be prepared on a time schedule to be ready for implementation at the close-out of the construction effort and shall address specific issues identified in the HSR.

The five requisites listed above are identified as specific mitigation for the impact on the Martínez Adobe and surrounding landscape. The impacts include removal of both historic and nonhistoric materials in order to accomplish both seismic and stabilization repairs as well as to upgrade and modify the building to function as a contact station at today's standards. The result of the recommended treatments will mainly be reflected on the interior of the adobe, in the west additions. The exterior of the adobe will also be rehabilitated, however, the form, materials and historic style and integrity will be retained.
RECOMMENDATIONS FOR FURTHER STUDY

Information gathered from studies including paint, mortar, plaster and adobe analysis, with emphasis on adobe building techniques, historic paint types to be used in preservation work and maintenance, paint colors and plaster and mortar composition will be required for the recommended treatment and preservation work. A paint study is needed to establish recommendations for a paint scheme compatible with the historic structure.

Historic Structure Preservation Guide, prepared as part of the preservation effort.

Research in adobe and plaster repair and replacement techniques to determine the appropriate method for stabilization, repair and replacement of adobe bricks on the north elevation and repair of the large crack on the west elevation.

ADDITIONAL RECOMMENDATIONS

Care should be taken to protect surrounding historic fabric adjacent to where the stabilization or preservation treatments are being conducted. All furnishings and exhibits should be removed from the structure, and all visitors should be kept a safe distance away from the structure during the stabilization or preservation period.

Because the Martínez Adobe is constructed of unstabilized adobe bricks, not a common building material, stabilization and preservation treatments and techniques could be interpreted to the visiting public.

Significant architectural artifacts, like the newspapers found under the linoleum in the north bedroom closet, and historic fabric too deteriorated for restoration, should be preserved in a secure park collection. Significant historic fabric installed in the park collection could be utilized in museum exhibits or for other interpretation of the Martínez Adobe.

COST ESTIMATES

The following cost estimate was prepared by the Branch of Estimating, Denver Service Center. Costs are net, include the contractors overhead and profit, and include inflation costs to 1993.
<table>
<thead>
<tr>
<th>ITEM/ACTION</th>
<th>MATERIALS/METHODS</th>
<th>QUANTITY</th>
<th>UNITS</th>
<th>COST/UNIT</th>
<th>EST. COST</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IMMEDIATE PRESERVATION AND STABILIZATION TREATMENTS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1. General Requirements</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Scaffolding Rented</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,000.00</td>
</tr>
<tr>
<td><strong>2. Site Work</strong></td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td>420.00</td>
</tr>
<tr>
<td>Archeologist, GS-07, one week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3,000.00</td>
</tr>
<tr>
<td><strong>3. Concrete</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Underpin north wall with reinforced concrete footing</td>
<td>3.33</td>
<td>C.Y.</td>
<td>1,000.00</td>
<td>3,300.00</td>
<td></td>
</tr>
<tr>
<td><strong>4. Masonry/Adobe</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove deteriorated adobe bricks on north wall</td>
<td>80</td>
<td>C.F.</td>
<td>30.00</td>
<td>2,400.00</td>
<td></td>
</tr>
<tr>
<td>Install new adobe bricks on north wall (adobe to come from site or nearby)</td>
<td>80</td>
<td>C.F.</td>
<td>10.00</td>
<td>800.00</td>
<td></td>
</tr>
<tr>
<td>Grout large cracks west adobe wall</td>
<td>8</td>
<td>C.F.</td>
<td>10.00</td>
<td>80.00</td>
<td></td>
</tr>
<tr>
<td>Replaster interior and exterior of west wall at large crack</td>
<td>72</td>
<td>S.F.</td>
<td>7.00</td>
<td>504.00</td>
<td></td>
</tr>
<tr>
<td>Apply new plaster over north adobe wall</td>
<td>Remove all portland cement plaster and replaster with lime plaster</td>
<td>350</td>
<td>S.F.</td>
<td>10.00</td>
<td>3,500.00</td>
</tr>
<tr>
<td><strong>5. Metals</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install steel straps around chimney at second floor, attic, and roof locations. Secure into the building’s framing system</td>
<td>3</td>
<td>EA.</td>
<td>150.00</td>
<td>450.00</td>
<td></td>
</tr>
<tr>
<td><strong>6. Wood and Plastics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove all wood shingles on main roof</td>
<td>Complete tear-off of main hip roof</td>
<td>1,200</td>
<td>S.F.</td>
<td>1.00</td>
<td>1,200.00</td>
</tr>
<tr>
<td>Remove 4'-0&quot; if sheathing on edge of main hip roof on all sides for installation of wood bond beam</td>
<td>Remove board sheathing and salvage for reinstallation</td>
<td>500</td>
<td>S.F.</td>
<td>1.00</td>
<td>500.00</td>
</tr>
<tr>
<td>Install new shakes on main hip roof</td>
<td>24&quot; cedar shakes</td>
<td>1,200</td>
<td>S.F.</td>
<td>2.60</td>
<td>3,120.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Reinstall original board sheathing at edge of main hip roof</td>
<td>Reinstall existing materials</td>
<td>500</td>
<td>S.F.</td>
<td>1.00</td>
<td>500.00</td>
</tr>
<tr>
<td>Remove int. finishes on both sides of west adobe wall at large crack and</td>
<td>Reuse existing materials but replace deteriorated materials</td>
<td>144</td>
<td>S.F.</td>
<td>15.00</td>
<td>2,160.00</td>
</tr>
<tr>
<td>reinstall after repair of crack</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove int. wall finishes on both sides of west adobe wall near the north</td>
<td>Existing finishes incl. gypsum board or wall board on stud frame</td>
<td>125</td>
<td>S.F.</td>
<td>12.00</td>
<td>1,500.00</td>
</tr>
<tr>
<td>end. After repair of cracks in wall replace or reinstall existing finishes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove wall board ceiling in west bedroom, bathroom and part of kitchen</td>
<td>4'-0&quot; out from adobe wall in kitchen</td>
<td>500</td>
<td>S.F.</td>
<td>1.00</td>
<td>500.00</td>
</tr>
<tr>
<td>Install new gypsum board ceiling in west bedroom, new staff toilet and</td>
<td>1/2&quot; gypsum board prepared for painting</td>
<td>500</td>
<td>S.F.</td>
<td>2.00</td>
<td>1,000.00</td>
</tr>
<tr>
<td>kitchen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove horiz. siding and trim on exterior of north wall on adobe portion</td>
<td>Salvage for reinstallation</td>
<td>325</td>
<td>S.F.</td>
<td>1.00</td>
<td>325.00</td>
</tr>
<tr>
<td>Reinstall siding on exterior of north wall</td>
<td>Reuse existing materials and replace deteriorated materials</td>
<td>325</td>
<td>S.F.</td>
<td>8.00</td>
<td>2,600.00</td>
</tr>
<tr>
<td>Remove flooring near north, south, east and center cross walls on second</td>
<td>Salvage for reinstallation</td>
<td>400</td>
<td>S.F.</td>
<td>1.50</td>
<td>600.00</td>
</tr>
<tr>
<td>floor of adobe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinstall wood flooring on second floor</td>
<td>Salvage for reinstallation</td>
<td>400</td>
<td>S.F.</td>
<td>4.00</td>
<td>1,600.00</td>
</tr>
<tr>
<td>Remove decking and ceiling under deck on both the south and east verandas</td>
<td>Salvage for reinstallation</td>
<td>800</td>
<td>S.F.</td>
<td>1.50</td>
<td>1,200.00</td>
</tr>
<tr>
<td>Reinstall ceilings under deck of east and south verandas</td>
<td>Salvage for reinstallation</td>
<td>400</td>
<td>S.F.</td>
<td>4.00</td>
<td>1,600.00</td>
</tr>
<tr>
<td>Reinstall or replace as necessary decking on east and south verandas on the</td>
<td>Reuse existing materials and replace deteriorated materials</td>
<td>400</td>
<td>S.F.</td>
<td>5.00</td>
<td>2,000.00</td>
</tr>
<tr>
<td>second level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide temp. shoring north wall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install new pressure treated studs on the north wall with plywood sheathing</td>
<td></td>
<td>219</td>
<td>S.F.</td>
<td>3.25</td>
<td>712.00</td>
</tr>
<tr>
<td>and required connections</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove oak and fir flooring in living room along north wall as necessary to</td>
<td>Retain for reinstallation</td>
<td>100</td>
<td>S.F.</td>
<td>2.00</td>
<td>200.00</td>
</tr>
<tr>
<td>underpin wall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level living room flr. north wall</td>
<td>Reinstall flr.</td>
<td>100</td>
<td>S.F.</td>
<td>8.00</td>
<td>800.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
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<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Install &quot;Bolts-Plus&quot; system on second floor (see structural drawings) bolt through adobe wall on north, east and south elevations and sandwich the wall between interior and exterior blocking</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install pressure treated glue lam &quot;bond beam&quot; at top of all adobe walls grout in place with threaded fiberglass rods. Install framing anchors from attic diaphragm to new wood bond beam. Install framing anchors connecting roof joists to top of walls.</td>
<td></td>
<td>132</td>
<td>L.F.</td>
<td>100.00</td>
<td>13,200.00</td>
</tr>
<tr>
<td>Remove attic sheathing as necessary for installation of bond beam</td>
<td></td>
<td>252</td>
<td>S.F.</td>
<td>1.00</td>
<td>252.00</td>
</tr>
<tr>
<td>Provide temp. shoring of roof/attic for installation of wood bond beam</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>2,000.00</td>
</tr>
<tr>
<td>Install 1/2&quot; plywood sheathing over existing sheathing in attic floor</td>
<td></td>
<td>672</td>
<td>S.F.</td>
<td>1.25</td>
<td>840.00</td>
</tr>
<tr>
<td>Install plywood sheathed pony wall above east adobe wall to roof structure</td>
<td></td>
<td>120</td>
<td>S.F.</td>
<td>1.25</td>
<td>150.00</td>
</tr>
<tr>
<td>7. Thermal and Moisture Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reroof west bedroom addition</td>
<td>Roll roofing laid horizontally</td>
<td>650</td>
<td>S.F.</td>
<td>1.00</td>
<td>650.00</td>
</tr>
<tr>
<td>8. Doors and Windows</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Finishes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint exterior plaster at crack repair locations</td>
<td>Use approved color scheme</td>
<td>100</td>
<td>S.F.</td>
<td>1.00</td>
<td>100.00</td>
</tr>
<tr>
<td>10. Specialties</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Equipment</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Furnishings</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Special Construction</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Conveying Systems</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Mechanical</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Electrical</td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SUBTOTAL NET COST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$57,763.00</td>
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<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
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</tr>
<tr>
<td>20% DESIGN CONTINGENCY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>11,553.00</td>
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<tr>
<td>TOTAL NET COST</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>TOTAL GROSS COST - NET COST PLUS 31%</td>
<td></td>
<td></td>
<td></td>
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<td>90,804.00</td>
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<td>FUTURE STABILIZATION AND PRESERVATION TREATMENTS</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. General Requirements</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scaffolding rented</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>3,000.00</td>
</tr>
<tr>
<td>2. Site Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove west conc. slab/walks/steps</td>
<td></td>
<td>710</td>
<td>S.F.</td>
<td>5.00</td>
<td>3,550.00</td>
</tr>
<tr>
<td>Remove irrigation lines/sprinklers</td>
<td></td>
<td>315</td>
<td>L.F.</td>
<td>5.00</td>
<td>1,575.00</td>
</tr>
<tr>
<td>Remove conc. decorative walls</td>
<td></td>
<td>75</td>
<td>C.F.</td>
<td>10.00</td>
<td>750.00</td>
</tr>
<tr>
<td>Remove brick retaining wall</td>
<td></td>
<td>145</td>
<td>C.F.</td>
<td>10.00</td>
<td>1,450.00</td>
</tr>
<tr>
<td>Remove existing turf rings</td>
<td></td>
<td>245</td>
<td>S.F.</td>
<td>3.00</td>
<td>735.00</td>
</tr>
<tr>
<td>Remove asphalt paving</td>
<td></td>
<td>68</td>
<td>S.Y.</td>
<td>12.00</td>
<td>816.00</td>
</tr>
<tr>
<td>Install foundation drain system</td>
<td></td>
<td>338</td>
<td>L.F.</td>
<td>28.00</td>
<td>9,550.00</td>
</tr>
<tr>
<td>Install wood retain. wall/steps</td>
<td></td>
<td>102</td>
<td>L.F.</td>
<td>80.00</td>
<td>8,160.00</td>
</tr>
<tr>
<td>Construct new patio and seating</td>
<td></td>
<td>786/4</td>
<td>S.F./EA.</td>
<td>12.00/850.00</td>
<td>12,832.00</td>
</tr>
<tr>
<td>Install gravel walk w/brick edging</td>
<td></td>
<td>234</td>
<td>S.Y.</td>
<td>24.00</td>
<td>5,616.00</td>
</tr>
<tr>
<td>Remove/relocate tractor shed</td>
<td></td>
<td>1</td>
<td>EA.</td>
<td></td>
<td>1,500.00</td>
</tr>
<tr>
<td>Relocate spruce trees</td>
<td></td>
<td>4</td>
<td>EA.</td>
<td>600.00</td>
<td>2,400.00</td>
</tr>
<tr>
<td>Install drip irrigation lines</td>
<td></td>
<td>1,800</td>
<td>S.F.</td>
<td>.75</td>
<td>1,350.00</td>
</tr>
<tr>
<td>Relocate/add native plantings</td>
<td></td>
<td>1,800</td>
<td>S.F.</td>
<td>2.00</td>
<td>3,600.00</td>
</tr>
<tr>
<td>Install new fig plantings</td>
<td></td>
<td>3</td>
<td>EA.</td>
<td>300.00</td>
<td>900.00</td>
</tr>
<tr>
<td>Archeologist, GS-07, one week</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>420.00</td>
</tr>
<tr>
<td>3. Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove concrete slab on east veranda</td>
<td></td>
<td>2,900</td>
<td>S.F.</td>
<td>1.25</td>
<td>3,625.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Install conc. foundations under posts on the south and east verandas</td>
<td></td>
<td>1.5</td>
<td>C.Y.</td>
<td>5.00</td>
<td>750.00</td>
</tr>
<tr>
<td>4. Masonry/Adobe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove cement plaster east elevation</td>
<td></td>
<td>750</td>
<td>S.F.</td>
<td>1.50</td>
<td>1,125.00</td>
</tr>
<tr>
<td>Remove cement plaster west elevation above the west bedroom addition roof</td>
<td></td>
<td>180</td>
<td>S.F.</td>
<td>1.50</td>
<td>270.00</td>
</tr>
<tr>
<td>Apply plaster east elevation ext.</td>
<td>Lime plaster</td>
<td>750</td>
<td>S.F.</td>
<td>6.00</td>
<td>4,500.00</td>
</tr>
<tr>
<td>Apply plaster top of west elevation</td>
<td>Lime plaster</td>
<td>180</td>
<td>S.F.</td>
<td>6.00</td>
<td>1,080.00</td>
</tr>
<tr>
<td>Rehabilitate fireplace and chimney</td>
<td>Install a flue liner, rain guard and spark arrestor and clean fireplace and chimney</td>
<td>1</td>
<td>L.S.</td>
<td></td>
<td>2,000.00</td>
</tr>
<tr>
<td>Repoint chimney</td>
<td>Match existing mortar</td>
<td>150</td>
<td>S.F.</td>
<td>8.00</td>
<td>1,200.00</td>
</tr>
<tr>
<td>Repair/repaint cracked fireplace surround</td>
<td>Repoint about 2'-0&quot; of brick surround</td>
<td>1</td>
<td>L.S.</td>
<td></td>
<td>250.00</td>
</tr>
<tr>
<td>Repair misc. cracks in ext. adobe walls</td>
<td></td>
<td>75</td>
<td>L.F.</td>
<td>5.00</td>
<td>375.00</td>
</tr>
<tr>
<td>5. Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Wood</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repair balustrades on east veranda</td>
<td>Misc. woodwork</td>
<td>1</td>
<td>L.S.</td>
<td></td>
<td>2,000.00</td>
</tr>
<tr>
<td>Refinish oak flooring</td>
<td>Sand and apply sealer</td>
<td>600</td>
<td>S.F.</td>
<td>6.00</td>
<td>3,600.00</td>
</tr>
<tr>
<td>Provide anchors for structural connections for framing replacement under first floor of east veranda</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>1,650.00</td>
</tr>
<tr>
<td>Repair balustrades on south veranda</td>
<td>Misc. woodwork</td>
<td>1</td>
<td>L.S.</td>
<td></td>
<td>1,500.00</td>
</tr>
<tr>
<td>Replace decking on first floor east veranda</td>
<td>2&quot; wide tongue-and-groove</td>
<td>2,900</td>
<td>S.F.</td>
<td>5.50</td>
<td>15,950.00</td>
</tr>
<tr>
<td>Repair/replace interior T&amp;G paneling</td>
<td>Match existing redwood</td>
<td>100</td>
<td>S.F.</td>
<td>10.00</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Refinish fir flooring</td>
<td>Sand and apply sealer</td>
<td>400</td>
<td>S.F.</td>
<td>6.00</td>
<td>2,400.00</td>
</tr>
<tr>
<td>Install accessible thresholds</td>
<td>Wood</td>
<td>3</td>
<td>L.F.</td>
<td>10.00</td>
<td>30.00</td>
</tr>
<tr>
<td>Repair T&amp;G oak flooring</td>
<td>Repair joints</td>
<td>25</td>
<td>S.F.</td>
<td>5.00</td>
<td>125.00</td>
</tr>
<tr>
<td>Repair T&amp;G paneling in 2nd fir bathm.</td>
<td>General Repair</td>
<td>100</td>
<td>S.F.</td>
<td>10.00</td>
<td>1,000.00</td>
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<tr>
<td>Repair spliced beam in north bedroom</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>250.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Removal of wood partitions</td>
<td>See plans</td>
<td>10</td>
<td>L.F.</td>
<td>30.00</td>
<td>300.00</td>
</tr>
<tr>
<td>Install new partitions</td>
<td>See plans</td>
<td>8</td>
<td>L.F.</td>
<td>30.00</td>
<td>240.00</td>
</tr>
<tr>
<td>Replace partial framing under east veranda</td>
<td>2x6 at 16” o.c., 6-6x6 beams, 12-6x6 posts</td>
<td>220</td>
<td>S.F.</td>
<td>6.00</td>
<td>1,320.00</td>
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<tr>
<td>Provide temp. shoring for east veranda foundation and framing installations</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>500.00</td>
</tr>
<tr>
<td>7. Thermal and Moisture Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install metal flashing on roofs</td>
<td>Metal valley flashing and shed roof flashing</td>
<td>75</td>
<td>L.F.</td>
<td>1.00</td>
<td>75.00</td>
</tr>
<tr>
<td>Connect all downspouts to foundation drainage system</td>
<td></td>
<td>6</td>
<td>L.S.</td>
<td>25.00</td>
<td>125.00</td>
</tr>
<tr>
<td>Provide sealants, caulk, weatherstripping and insulation</td>
<td>Around doors, windows etc.</td>
<td></td>
<td>L.S.</td>
<td></td>
<td>2,500.00</td>
</tr>
<tr>
<td>8. Doors and Windows</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitate all historic windows. Replace missing or cracked glazing.</td>
<td>10 - Double Hung</td>
<td>28</td>
<td>EA.</td>
<td>275.00</td>
<td>7,700.00</td>
</tr>
<tr>
<td>Dismantle/refurbish all windows, repair sashways, replace counterweights,</td>
<td>16 - Fixed</td>
<td></td>
<td>EA.</td>
<td>300.00</td>
<td>3,600.00</td>
</tr>
<tr>
<td>replace ropes and reputy beads and refurbish hardware</td>
<td>2 - Casements</td>
<td></td>
<td>EA.</td>
<td>10.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Rehabilitate interior doors</td>
<td>Remove and refurbish hinges and other hardware. Refinish doors</td>
<td>9</td>
<td>EA.</td>
<td>200.00</td>
<td>1,800.00</td>
</tr>
<tr>
<td>Rehabilitate exterior doors</td>
<td>Remove and refurbish hinges and other hardware and refinish doors</td>
<td>12</td>
<td>EA.</td>
<td>300.00</td>
<td>3,600.00</td>
</tr>
<tr>
<td>Remove existing interior doors</td>
<td>See plans</td>
<td>6</td>
<td>EA.</td>
<td>10.00</td>
<td>60.00</td>
</tr>
<tr>
<td>Install new interior doors and hardware</td>
<td>Wood paneled doors with period hardware</td>
<td>4</td>
<td>EA.</td>
<td>500.00</td>
<td>2,000.00</td>
</tr>
<tr>
<td>9. Finishes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paint exterior wood siding and plaster walls</td>
<td>Approved scheme</td>
<td>2,400</td>
<td>S.F.</td>
<td>1.00</td>
<td>2,400.00</td>
</tr>
<tr>
<td>Paint exterior balustrades, trim and other woodwork</td>
<td>After paint removal and other preparation</td>
<td></td>
<td>L.S.</td>
<td></td>
<td>1,500.00</td>
</tr>
<tr>
<td>Provide historic paint analysis</td>
<td>Prior to painting</td>
<td></td>
<td>L.S.</td>
<td></td>
<td>2,000.00</td>
</tr>
<tr>
<td>Install new carpeting on stair</td>
<td>Low pile, commercial grade</td>
<td>100</td>
<td>S.F.</td>
<td>5.00</td>
<td>500.00</td>
</tr>
<tr>
<td>Paint interior</td>
<td>All walls, ceilings and previously painted wood surfaces. Approved scheme</td>
<td>7,000</td>
<td>S.F.</td>
<td>1.00</td>
<td>7,000.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>-------------</td>
<td>------------------</td>
<td>----------</td>
<td>--------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>10. Specialties</td>
<td>Install shelving in book sales area</td>
<td>Floor to ceiling</td>
<td>12</td>
<td>L.F.</td>
<td>150.00</td>
</tr>
<tr>
<td></td>
<td>Install counter in contact area</td>
<td>Built-in</td>
<td>18</td>
<td>S.F.</td>
<td>50.00</td>
</tr>
<tr>
<td>11. Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Furnishings</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Special Construction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Conveying Systems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Mechanical</td>
<td>Install handicapped accessible fixtures</td>
<td>Toilet, lavatory and grab bars</td>
<td></td>
<td>L.S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove existing bathtub, shower, toilet and pedestal sink</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Install mech. ventilation staff toilet</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
</tr>
<tr>
<td>16. Electrical</td>
<td>Repair exterior duplex receptacle</td>
<td>Grounding receptacle</td>
<td>1</td>
<td>EA.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide GFCI protection in toilet/kit.</td>
<td>GFCI receptacle</td>
<td>4</td>
<td>EA.</td>
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</tr>
<tr>
<td></td>
<td>Provide underground telephone and electrical service</td>
<td>2&quot; PVC conduit, detectable marking tape</td>
<td>120</td>
<td>L.F.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove aerial telephone and electrical service drop</td>
<td></td>
<td></td>
<td>L.F.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove power pole near picnic area</td>
<td></td>
<td></td>
<td>EA.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand fire alarm system-make point addressable</td>
<td>12 addressable detectors</td>
<td>1</td>
<td>L.S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove abandoned conductors and all knob and tube wiring in attic</td>
<td></td>
<td></td>
<td>L.F.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Upsize existing 60 amp fused at 45 amp to 60 amp fused at 60 amp</td>
<td>60 amp meter socket, (3) 60 amp fuses</td>
<td>1</td>
<td>EA.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Expand telephone service 4-pair cable</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remove surface mounted disconnects</td>
<td></td>
<td></td>
<td>EA.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Replace existing fuse panel with circuit breaker panelboard provide 12 to 20 circuits</td>
<td>100 amp panelboard, 120/240 volt, 20 circuit with (12) 20 amp breakers</td>
<td>1</td>
<td>EA.</td>
<td></td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
<td>--------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>SUBTOTAL NET COST - FUTURE WORK</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$150,074.00</td>
</tr>
<tr>
<td>20% DESIGN CONTINGENCY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30,015.00</td>
</tr>
<tr>
<td>TOTAL NET COST</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$180,089.00</td>
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<tr>
<td>TOTAL GROSS COST - NET COST PLUS 31%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$235,916.00</td>
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<td>FUTURE SEISMIC RETROFIT (THIS WOULD BRING THE ADOBE TOTALLY UP TO CODE)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. General Conditions</td>
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<td></td>
<td></td>
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<tr>
<td>Scaffolding Rented</td>
<td></td>
<td></td>
<td>L.S.</td>
<td></td>
<td>3,000.00</td>
</tr>
<tr>
<td>2. Site Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excavate subgrade under living room, dining room and bedroom addition</td>
<td>After removal of all flooring</td>
<td>2,200</td>
<td>C.F.</td>
<td>5.00</td>
<td>11,000.00</td>
</tr>
<tr>
<td>3. Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Install reinforced conc. footing on interior of all adobe walls</td>
<td></td>
<td>9</td>
<td>C.Y.</td>
<td>500.00</td>
<td>4,500.00</td>
</tr>
<tr>
<td>Install new concrete footing under chimney</td>
<td></td>
<td>1</td>
<td>C.Y.</td>
<td>500.00</td>
<td>500.00</td>
</tr>
<tr>
<td>4. Masonry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove existing brick chimney</td>
<td></td>
<td>416</td>
<td>C.F.</td>
<td>3.00</td>
<td>1,248.00</td>
</tr>
<tr>
<td>Rebuild brick chimney using old brick (new chimney shall be reinforced)</td>
<td></td>
<td>416</td>
<td>C.F.</td>
<td>25.00</td>
<td>3,300.00</td>
</tr>
<tr>
<td>5. Metals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remove all wall finishes on interior of adobe walls and store for reinstal</td>
<td>Tongue-and-groove wood paneling and gypsum board</td>
<td>2,500</td>
<td>S.F.</td>
<td>3.00</td>
<td>7,500.00</td>
</tr>
<tr>
<td>Install new plywood sheathed stud walls on interior of adobe walls and provide seismic connections</td>
<td></td>
<td>1,704</td>
<td>S.F.</td>
<td>5.00</td>
<td>8,520.00</td>
</tr>
<tr>
<td>Reinstall or replace original wall finishes</td>
<td>Tongue-and-groove wood paneling to match existing or gypsum board</td>
<td>2,500</td>
<td>S.F.</td>
<td>4.00</td>
<td>10,000.00</td>
</tr>
<tr>
<td>ITEM/ACTION</td>
<td>MATERIALS/METHODS</td>
<td>QUANTITY</td>
<td>UNITS</td>
<td>COST/UNIT</td>
<td>EST. COST</td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-----------</td>
<td>------------</td>
</tr>
<tr>
<td>Remove flooring in south bedroom</td>
<td>Salvage for reinstallation</td>
<td>225</td>
<td>S.F.</td>
<td>5.00</td>
<td>1,125.00</td>
</tr>
<tr>
<td>Remove living room and dining room ceilings</td>
<td>Tongue-and-groove paneling and gypsum board</td>
<td>600</td>
<td>S.F.</td>
<td>3.00</td>
<td>1,800.00</td>
</tr>
<tr>
<td>Provide new plywood sheathed stud wall on east wall of bedroom/kitchen additions up to shed roof</td>
<td></td>
<td>514</td>
<td>S.F.</td>
<td>4.00</td>
<td>2,056.00</td>
</tr>
<tr>
<td>Strengthen all wood framed walls in the additions by adding blocking and plywood and provide seismic connections</td>
<td></td>
<td>1,066</td>
<td>S.F.</td>
<td>5.00</td>
<td>5,330.00</td>
</tr>
<tr>
<td>Apply plywood to living room and dining room ceilings, install blocking between the joists and reapply gypsum board ceilings</td>
<td></td>
<td>607</td>
<td>S.F.</td>
<td>3.59</td>
<td>2,125.00</td>
</tr>
<tr>
<td>Add 2x10 joists between existing joists in south bedroom</td>
<td>five joists</td>
<td>138</td>
<td>B.F.</td>
<td>4.00</td>
<td>552.00</td>
</tr>
<tr>
<td>Remove existing siding on the ext. south wall of the adobe portion</td>
<td>Salvage for reinstallation</td>
<td>360</td>
<td>S.F.</td>
<td>1.00</td>
<td>360.00</td>
</tr>
<tr>
<td>Install shear wall on south exterior wall</td>
<td></td>
<td>244</td>
<td>S.F.</td>
<td>5.50</td>
<td>1,342.00</td>
</tr>
<tr>
<td>Reinstall existing siding on south wall</td>
<td></td>
<td>360</td>
<td>S.F.</td>
<td>5.00</td>
<td>1,800.00</td>
</tr>
<tr>
<td><strong>SUBTOTAL NET COST - FUTURE SEISMIC WORK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$66,058.00</td>
</tr>
<tr>
<td><strong>20% DESIGN CONTINGENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>13,212.00</td>
</tr>
<tr>
<td><strong>TOTAL NET COST</strong></td>
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<td></td>
<td></td>
<td></td>
<td>$79,270.00</td>
</tr>
<tr>
<td><strong>TOTAL GROSS COST - NET COST PLUS 31%</strong></td>
<td></td>
<td></td>
<td></td>
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<td>$103,844.00</td>
</tr>
<tr>
<td><strong>7-16</strong></td>
<td>Not applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>GRAND TOTAL FOR ALL PHASES. NET COST - INCLUDING CONTRACTORS OVERHEAD AND PROFIT AND 20% DESIGN CONTINGENCY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>$328,675.00</td>
</tr>
<tr>
<td><strong>TOTAL GROSS COST - TOTAL NET PLUS 31%</strong></td>
<td></td>
<td></td>
<td></td>
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<td>$430,564.00</td>
</tr>
</tbody>
</table>
APPENDIXES

PHYSICAL HISTORY AND ANALYSIS
APPENDIX A
EXISTING CONDITION FIELD NOTES

Structure recorded on May 13, 1991 by Steven M. Burke, Historical Architect, National Park Service, Denver Service Center. Also included in Appendix A are the existing condition building dimensions which were recorded on July 24-27, 1990 by Historical Architects Randy Conrad and Dave Snow of the National Park Service, Denver Service Center.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Date</th>
<th>Account</th>
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<tbody>
<tr>
<td>Field Notes</td>
<td>5/13/91</td>
<td></td>
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<tr>
<td>Interior. Char. Def. Features</td>
<td></td>
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<tr>
<td>1st floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Living Rm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. double hung wind. with quarterround at inside edges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. 2 over 2 windows. double hung</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hardware on front door, door to closet, door to bedroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Fireplace - egg &amp; dart detail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Tongue-and-groove oak floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Casework on door from living rm. to dining rm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Post at foot of stairway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Plastered walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Smll wd. basebd</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Ceiling Ht's</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Quarterround at floor on baseboard</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dining Rm.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Se. window &amp; woodwork - one wind. is d. h. and the other is fixed.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Wood (oak) tongue-and-groove flooring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hardware on door to living room</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Lg. wd. basebd. w/quarterround at floor</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Ceiling Ht.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. T &amp; G door casing at door to kitchen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Closest Under Stairway
1. Walls are T & G vert. redwood beaded siding
2. Ceiling is also covered w/ the siding
3. 3" doug. fir flooring - this may be the orig. floor under the oak flooring in dining room & living room.

West Bedroom
1. 2 3/4" doug. fir, T & G wood flooring
2. Wood casing around windows & door to living room.
3. Arched doorway into kitchen.
4. Four paneled fixed wood windows in N.W. corner of room.
5. LG wd. raised panel back ext. dr.
6. Double-hung windows on west wall w/ 3 horiz. panes in ea. sash.

Bath
1. Over 1 dbl. hung window.

Kitchen
1. Tile on counters & back splash
2. Over 1 dbl. hung windows
3. West wall double-hung w/ 3 horiz. panes ea.
4. Stor. Rm - 6 over 6 fixed windows
Note: Hardware on Stor. rm. door, back door west wall kitchen, door from kitchen to dining Rm., Door from both sink area to west bedrm. Closet, w. bed- room exterior door, door from west bedrm to living rm., all have the same escutcheon Plate.

STAIR
1. post at btm.
2. beaded paneling both walls inside stairway
3. Wd. trim as conduit
4. Rotary Light Switch
5. Exposed - drop. bulb light fixture
6. Dr. trim on s. bedroom door - from stairway - same trim as seen on outside east elevation - second floor

2ND FLR.
South Bedrm.
1. Beams at ceiling - rounded. - random width boards above
2. T & G Paneling on walls - painted off. white
3. T & G Floor boards - 2 3/4" wide doug fir
4. Doors & hardware. incl. South side French doors w/ sidelights & hardware.

N. Bedroom
1. 2 3/4" T & G douglas fir flooring
<table>
<thead>
<tr>
<th>Feature</th>
<th>Date</th>
<th>Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Beams at ceiling beaded edge</td>
<td>5/14/01</td>
<td></td>
</tr>
<tr>
<td>3. T &amp; G beaded paneling on walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Wide door &amp; window casings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Chamfered wind. openings on N. side</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Nine light exterior Doors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Raised w.d. paneled closet doors.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Lg. w.d. baseboards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Casement wind. on N. elevation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. All door &amp; wind. hardware</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Exterior Character Defining Features**

**East**

1. 2-story veranda Complete w/balustrade, chamfered posts, post caps.  
   Note: banister at first floor & Second floor are not the same

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- First
- Second

2. Wide window and door casing
3. Dbl-hung windows & doors
4. Molding at top. 2nd Floor east veranda doors - Greek Revival

**South**

1. Greek Revival Dormer
2. French doors & Sidelights on Sec. Floor
3. First Floor windows - one fixed, one dowl. hung
<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Vertical T &amp; G wall siding</td>
<td>First floor solid, 2nd floor open</td>
</tr>
<tr>
<td>5. Veranda Belustrades</td>
<td>- Painted grey</td>
</tr>
<tr>
<td>6. T &amp; G Veranda decking</td>
<td>- West</td>
</tr>
<tr>
<td>7. Window on stor. rm.</td>
<td>- Co. light x 4</td>
</tr>
<tr>
<td>1. No windows in Adobe</td>
<td></td>
</tr>
<tr>
<td>2. Several wind. &amp; door styles on bedrm. add.</td>
<td></td>
</tr>
<tr>
<td>3. Red Concrete patio, brick wall &amp; steps.</td>
<td></td>
</tr>
<tr>
<td>4. T &amp; G horiz. V-rustic wall siding on bedrm.</td>
<td></td>
</tr>
<tr>
<td>5. Rd. metal gutters on Adobe</td>
<td></td>
</tr>
<tr>
<td>6. WD shingles on Adobe</td>
<td>Storage rm</td>
</tr>
<tr>
<td>7. Roll roofing on bedroom addition</td>
<td></td>
</tr>
</tbody>
</table>

**North**

1. Red brick Chimney
2. Metal gutters & d.e.s.
3. Casement windows - 2nd level
4. Multipane wind in the end of east porch
5. T & G horizontal siding - V-rustic
6. Windows on N. side west bedrm. addition

**Bldg. Corner**
ROOM DESCRIPTIONS

Living Room

Floor - 2½" oak T & G Finish flooring - N fos. direction over 3½" doug. fir flooring N fos. 9½" x 2½" baseboard w/ ¾" quarterround (oak) at floor. bascket-painted white, C.R. Stained

Walls

5/8" plaster w/ 7/8" x 3½" redwd. beaded siding w/ ± 5/8" airspace w/ plaster then adobe.

Doors

A. ¾" x 6'

raised wd. panel door
Typ. hardware: escutcheon plate on several of the doors as mentioned above.

Round black knob w/ circle inscribed in front. - 2" knob w/ keyhole

B. Similar to Style A.
2 7/8" x 5 3/4"
Doors & Hardware

35 3/4" x 74"

2" knob black w/circles in front

5 joints ball tip

Casing from living room into dining room.

2" Knob

Floral design on escutcheon plate. Black
Living Rm. Ceiling

- bm. R douglas fir flooring
- douglas fir flooring
- Bm.
- 5/8" plaster bed.

Brick Fireplace painted white

Indention in wall above f.p.

Living Room Windows

- Adobe wall
- Window sash 12" x 24" x 24" x 24"
- Window seat 49 1/2"
- 1/2" wind. sash
- 1 1/4" x 3/8" Stop
- 3 1/2" inside trim

Adobe wall
Living Rm. Windows - Cont.

Quarterround trim at top also

Note: 2-windows on east side match. - window sash is 16½" high from f.f. on inside. Window sash is 16½" deep from inside.

Double hung window 2½ 38" wide x 54" high, 1 ¾" stiles, 1½" mtg. rails, 1" muntins, 2½" btm. rail 2" top rail.

Other Notes:
Under Stair:
12" deep bascled.
7½" x 3¾" beaded redwood siding
Shelving on west wall
No oak flooring - just orig. douglas fir - T & G
Access hole to under floor 3½"
Post at stair - chamfered 3½"

Some oak flooring. Separated at joints where living rm. meets dining rm.
Walls & ceilings in L.R. & B.R. heavily textured and painted white; oak floor natural - w/ sealer.
All window sashes and int. doors & trim are painted white except in S. bedrm. & 3rd rm.
Flr. into w. bedrm. 4" higher than L.R. redwood. Sill.
West Bedroom

- Floors - D.F. Natural w/polyurethane
- Walls are plastered - lightly textured - E.R. at ceiling - E. wall of W. bedroom & west & north walls - modern wall bd. lintel found w. wall.
- Woodwork - modern. all painted white
- Wood base bd. with E.R. at floor
- Window sashes painted white
- 1x8 base bd. w/1"a.r. at floor

Exterior Door
West Bedroom

Windows on north & w. walls

30 x 60
same knob and escutcheon plate as door

Arched door way into hall then leading into sink area
No door.

Note. closet door in W. bed-
room is flush:
- hollow Core
- 20 x 60
with best lock
### West Bedroom Contents:

<table>
<thead>
<tr>
<th>Window</th>
<th>3&quot; x 4&quot; Double Hung</th>
<th>2 in bedroom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2 1/4&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 1/4&quot;</td>
<td>- 1/4&quot;</td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>- 2 1/2&quot;</td>
</tr>
</tbody>
</table>

**Closet & Hall Space:**

- Walls in closet are drywall painted green 3 1/2" studs.
- Same basebd. and a.r. as west bedroom addition.
- Shelving in closet is 2' below ceil.
- One ceramic light fixture in closet ceil.

**Hall:**

- Basebd. same as bedrm.
- New modern casing applied directly over old casing.

**Door into Bathroom & Sink Area:**

- Floor in Hall and closet is c.f. - same as w.b.r.
- Same hardware as door A.
- Not orig. casing on door.
Bathroom
- Gypsum board walls & ceiling
- Narrow wood casing at doors
- 1/2" x 3/4" baseboard
- Shower, chrome towel bar, recessed mirrored medicine cabinet, toilet, 1/4 double-hung window.

Fixtures on tub by Mueller

Bathroom Window
- 1/2" oak floor
- 7/8" d.f. floor
- 2x6 R.S. joist
- 4"w x 4 1/2"d R.S. beam
- 2x12" R.S. sleeper
- 4"x4" post
- 4' x 4' post

Dining Room
- Gypsum board walls & ceiling
- Oak T & G flooring over doug. fir t & g. flooring running in the same direction
Dining Rm. Cont.

- Wd. basebd 4½" h. x 1" wide w/ 1" A.R.
- Floor slopes gradually up into kitchen
- No ceiling light fixture
- Fake adobe wall - as interpretive display on S.E. Corner of room
- 2 windows (one d.h., one fixed) on South end

Note:
Door on East side dining room to exterior is same as living room. Door 3' x 6'

Adobe
Vert. ½ paneling - no reveal
Wd. casing - 1½" x 5½" sides & top

Opening size:
30½" x 76" in d.r.
30½" x 78" in kit.

Oak floor - gradually slopes up into kitchen.
Kitchen
- Sh. vinyl brick pattern - on floor
- Gyp. lat. walls & ceiling - ceilly slopes slightly over counter area
- Fire control & alarm panels w/ exp. conduit on N. wall of kitchen
- 1/2" x 3/8" wood basekl's painted white

Door from kitchen to Dining Rm.

Door from kitchen to So. Patio

Windows on west wall of kitchen match those in west bedroom - see window type on pg 12 at top of page.

Cabinets: - looks like 40's or 50's tile on country top - light blue & light yellows - white cabinets.

See photos.
Kitchen Cont:
- 3'-0" high counter - double sink - faucet mounted to 30" wall.
- Gas line coming out of west wall - just above base cabinets.
- 2 windows on south kitchen wall above sink - Double-hung 1/1 29" x 34"
- 2' shelf above door into dining room.
- Same C rounded casing as seen on doors.

Stove pipe in west wall.
- Same vinyl flooring - brick pattern used in the hall to the west bedroom & in the bathroom.
- Wood threshold at kitchen to hall - Same as threshold from living room to west bedroom.

Storage/Laundry Room
- Concrete Floor
- Walls & ceiling - redwood bd. bd. vertical paneling

Diagrams:
- West door out of kitchen 30" x 79 1/2".
- Door from kitchen to living room.
Laundry/Stor. Rm. Cent.
Window on S. wall - 4 total - fixed

Window on East side-Stor. rm.
Rm. white paint-almost yellow
cotton

Door on West side of Storage Rm. to exterior
w/paneling
2'-6" x 6'-8"

D.h. oversized w/d on N. side Stor. rm.
Stair.
. 10" treads, 7" risers. 15 risers, 14 treads
. 10 risers up to the landing
. stair is 351/2" wide, 11/8" wood railings on ea. side
. steps are carpeted, gold indoor/outdoor
. walls - 7/8" beaded bd. + 49 vertical paneling
. painted white
. 2 x 12" r. & s. stringers 1 x treads and risers
. 3" x 3/4" landing - railings are attached w/
. metal brackets

Detail on landing - S. Wall. (Adobe wall)

Note:
New smoke detector
old smoke detector, bare
bulb light fixture, fire
extinguisher on wall
at landing (S. wall)
railings have been
left natural.
Park: JOMU
Area: MARTINEZ
Project: ADOBE

Feature: Door into s. bedroom from stairway

North Bedroom ceilings - random width boards above exposed beams

Floor is T & G 3/4" No reveal painted brown
Walls have T & G redwood beaded siding
Entire rm. painted white except floor which is painted brown

Window in north wall. Casement Sashes.

1" window sills 2 layers.
Plan - North bedroom

A. Door to stairway

2'-6" x 6'-6"

raised wood paneled door

B & F Closet Doors

2'-6" x 6'-5 1/2" (B)

2'-6" x 6'-2" (F)

raised wood panels

C & D Doors to Ext.

2 1/2"

30" x 70 1/2"

glazing 8 1/4" x 12"

raised wood panels

E & G Windows

2" x 4" x 8'4"

Windows used to have inset flush bolts in the sash

2nd ceiling bm from north-spliced together w/ bolts.

Cupboard latch. Various trim boards.

Various trim boards.
2nd Floor S. Bedroom

- Floor - 3/4" t & g painted brown
- Walls are 3/4" t & g No reveal - vertical, painted yellow
- Ceiling - exposed bm's over random width ceiling
- Bed = bm's rounded on btm. Room and ceiling painted off-white - almost light yellow

French Doors.

Note: No base bd in room

Note: Door to E. porch same as doors C & D on page 20.

23½" 3" 83½"

23"

Strap hinges

23"

Wd. door made of T & G paneling with no reveals.
Exterior
E. Side

Roof - wood shingles, not shakes
2 story veranda
ext. walls are plaster over adobe
double hung wind., Screen doors - 2 on the 1st flr.
match

Wood trim on the windows & doors, 6" wind, 7" drs
9" deep wd basebd at base of plaster walls
4" red concrete slab & steps. Slab poured
directly over wtr. deck,

fixed multi-pane window in N. side east veranda
All exterior trim is painted mustard
N. wall - T & G v-rustic horiz wd siding - S. wall
vertical T & G siding - No reveal.

Typ. east side Screen Door

Screen
Wd. panels
Spring hinges

Typ. rail
Plat level E. Veranda

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Typical window frame 1st floor in the living room.

Typical col. cap. on E. veranda

5" chamfered post

Note: ceiling on 1st flr. veranda is beaded t & g. Smoke detectors mounted to ceiling & porch light w/ exp. conduit

Detail 1st floor East veranda

Note:
Veranda - 2nd level t & g beaded ceiling t & g decking w/ no reveal
Top of doors trimmed same as shown on top of pg. 19.

8½" square plate attached to Conc. steps.
FORM DSC-44

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

Sheet 24

Project: LANDSCAPE

Feature: 2ND LEVEL PORCH

2nd Floor column and
capital on east veranda

2nd level screen doors all
match except last one
to the South on east veranda.

Screen doors have various
types of spring hinges.

2ND LEVEL PORCH

railings

round metal

Gutters attached

with metal straps

2" metal c.s.

V-rustic siding on porch
below the slab on the
east side

Porch rail is 30" high

1" square -
turned 45 deg.

at one time both levels
of the south veranda
were screened in.

Greek revival detail
at roof over the
second level

Balustrade - solid on the
1st floor - filled-in w/ t/g 3/8" no reveal -
balustrade is 31" high, 8'-8" c/c between
posts

Balustrade on 2nd level matches east side

There is a large hook
in the ceiling of the
2nd floor east veranda
probably for a swing
or hammock.

Park: JOMU

Area: MARTINEZ

Checked by: BURKE

Date: 5/13/91
South Elevation:

6" square posts walls on the so. side are t & g. 3/4" no reveal, vertical pattern, painted white.

Floor decking is t & g, 3/4" w. no reveal - grey.

V- rustic lap siding, 7" exposure on bathroom addition so. wall.

roof on porches, 3/4" t & g.

Storage Room

Walls are w. stud, with v-rustic 7" exp. siding in horiz. pattern

Stove pipe coming out of so. wall.

No soffit at bathroom addition on so. side.

Detail at Ster. Rm.

North Side

V-rustic siding - 7" exposure red brick chimney, 4'-6" wide at base, 2'-2" at midpoint. Bricks are 8 3/4" x 4" x 2 1/2" w/ 1/2" mortar joint.
N. side Cent.
- Corner trim is 1x6 w/ closed soffits.
- chimney mortar is deteriorated in places - there is a metal clean-out door in btm of chimney.
- Wood entablature under soffit - 9" deep
- Round metal gutters
- 2 casement windows on 2nd floor.
- Indication in siding, on both sides of chimney, that a window once existed. Window size would have been approximately 40"w x 3'-4" high.
- 1x5 wd trim over siding at chimney were 10 steps in - at mid-height.

Framing N. side of E porch - 1st level.
- Decking 2x6 k.s. joists, 16" o.c. running N & S.
- 3 1/4" h. by 4" w. beams spaced 9" apart running E to W.
- Wd. trim on 2nd flr. wind is 5 1/2" wide.

N. Wall of West Bedroom
- 3 tall narrow windows
- V-nustic siding - 7" exp. horizontal
- 2" wind. sills
- 6" fascia
- No soffit siding

Detail at Grade

2-2x4  R.5

0- crack in wall

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

By BURKE  Checked

Date 5/13/91

NATIONAL PARK SERVICE
DENVER SERVICE CENTER

CHECKED

Date

Pkg.

Account


2-2x4  R.5

0- crack in wall

W. Elev.

Orig wall is Adobe and roof has wd. Shingles

Bedroom Addition - White roll roofing - horiz.

walls - V-rustic siding, 7"exp. - horiz

4/8" wide trim around doors & windows - mustard.

decorative upper stile on some

windows on w. side - like point

reyns boathouse - this detail is

on the windows as shown at the

top of page 12 of these notes

Wood shingle roof on stor. Rm. & upper bathrm.

V-rustic siding on west side of stor rm. - random

width bds on north wall of upper bathroom

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Ceiling Details

Living Rm.  
- 2 1/4" space
- 7'-9/4" to floor
- beaded t&g. n.tos.

Dining Rm.  
- 7/8" t&g no reveal - E. to W.
- 10" deep floor joists
- 1/2" gyp. bd ceiling
- 7/8" x 3/4" t&g siding - reveal up.

Other Info.  
- 2'-high brick retaining wall on W. side
- Conc. patio W. side is 9'-2" deep - 2 long brick steps up to ramada level
- Electric meter is mounted on the N. side ext. wall of the storage room.
- There is an old stove pipe protruding through the bathroom roof.
- There is a porch light above the back door to the kitchen on the west side, and another next to the door into the west bedroom.
- 6'-high conc. found. wall wrapped around the walls of the stor. Rm.

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<table>
<thead>
<tr>
<th>Project</th>
<th>ADORBE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Info. Cont.</td>
<td></td>
</tr>
</tbody>
</table>

At west wall of color rm. at door - 3 conc. steps - 2 steps, 3 risers, w/side retaining walls

Old telephone wires above window on s. elevation
- Old doorbell at front door to living rm - E. Side

**Upstairs Bathroom**

- 3/4" decking on floor - painted grey - no reveal
- beaded t & g siding on walls - vertical
- Toilet dated June 16, 1959

**Ceiling**

- 2x beams exposed - running ea. to west. w/ masonite ceiling above
- N. wall is t & g, 6" exposure - vertical bats - No reveal

Smell 18"x 24" window above the sink
- Rest of bathroom - Under porch roof - has orig. t & g porch ceiling - lots of quarter round trim
APPENDIX B
ADOBE TESTS

Samples from the top of the north wall and the bottom of the west wall were taken. Samples were analyzed by Commercial Testing Laboratories in Denver, Colorado.
October 2, 1991

National Park Service  
P.O. Box 25287  
Denver, Colorado  80225-0287

Attention: TWE - Steve Burke

Subject: Adobe Compensation Test  
Your P.O. No. PX-2185-1-1585  
Job No. 6427

Gentlemen:

This letter presents results of test performed on samples of adobe to evaluate similarities of on-site, old construction units, and new construction units. These samples were received at our Denver central laboratory on September 4, 1991.

As you requested, physical properties including particle size analyses, liquid limit, and plastic index were performed. These test results are presented in Table No. 1.

A chemical analysis for the materials including calcium, magnesium, potassium, sodium, chloride, sulfate, carbonate and pH are presented in Table No. 2.

These tests were performed in general conformance with ASTM standards and NBS Technical Note 977 supplied by Mr. Steve Burke.

If we can be of further assistance, please do not hesitate to call.

Very truly yours,

COMMERCIAL TESTING LABORATORIES

Orville R. Werner, II, P.E.,  
Senior Engineer

ORW/nd

Enclosures
TABLE NO. 1

PARTICLE SIZE ANALYSIS

<table>
<thead>
<tr>
<th>Particle Size</th>
<th>Soil Sample % Passing</th>
<th>Top of North Wall % Passing</th>
<th>Bottom of West Wall % Passing</th>
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<td>No. 4</td>
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<td>100</td>
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<td>No. 8</td>
<td>100</td>
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<td>100</td>
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<td>No. 16</td>
<td>99.9</td>
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<td>99.9</td>
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<tr>
<td>No. 30</td>
<td>99.8</td>
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<tr>
<td>No. 50</td>
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<tr>
<td>No. 100</td>
<td>93.7</td>
<td>93.8</td>
<td>94.9</td>
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<tr>
<td>No. 200 (0.074 mm)</td>
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<td>76.8</td>
<td>76.0</td>
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</table>

Hydraulic Analyses

<table>
<thead>
<tr>
<th>Size mm</th>
<th>Soil Sample % Passing</th>
<th>Top of North Wall % Passing</th>
<th>Bottom of West Wall % Passing</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.050</td>
<td>78</td>
<td>72</td>
<td>70</td>
</tr>
<tr>
<td>0.037</td>
<td>74</td>
<td>62</td>
<td>58</td>
</tr>
<tr>
<td>0.019</td>
<td>66</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>0.009</td>
<td>50</td>
<td>34</td>
<td>32</td>
</tr>
<tr>
<td>0.005</td>
<td>40</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>0.002</td>
<td>32</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>0.001</td>
<td>22</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

LL          | 34.0                  | 33.6                       | 31.0                          |
PI           | 16.6                  | 17.2                       | 14.2                          

Compressive Strength, Small Cube Samples

| Sample No. 1 | - | 790 | 885 |
| Sample No. 2 | - | 905 | 1005|
| Sample No. 3 | - | 940 | 745 |

Average: 880 880

Client: National Park Service  
Date: October 2, 1991  
Job No. 6427
### TABLE NO. 2

**CHEMICAL ANALYSIS AND ANALYTICAL REPORT**

**CONCENTRATION, ug/g**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>6427-0 Bottom of West Wall</th>
<th>6427-S Soil</th>
<th>6427-N Top of North Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium</td>
<td>44</td>
<td>57</td>
<td>230</td>
</tr>
<tr>
<td>Magnesium</td>
<td>2.2</td>
<td>2.4</td>
<td>8.0</td>
</tr>
<tr>
<td>Potassium</td>
<td>20</td>
<td>21</td>
<td>66</td>
</tr>
<tr>
<td>Sodium</td>
<td>130</td>
<td>122</td>
<td>80</td>
</tr>
<tr>
<td>Chloride</td>
<td>140</td>
<td>230</td>
<td>60</td>
</tr>
<tr>
<td>Sulfate, SO.</td>
<td>310</td>
<td>330</td>
<td>890</td>
</tr>
<tr>
<td>Carbonate, CO.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Bicarbonate, HCO.</td>
<td>200</td>
<td>180</td>
<td>350</td>
</tr>
<tr>
<td>pH</td>
<td>6.40</td>
<td>6.60</td>
<td>6.50</td>
</tr>
</tbody>
</table>

Three adobe samples were analyzed in accordance with the supplied method with adjustments for the small sample size. The sample extract was analyzed for calcium, magnesium, potassium, and sodium by inductively coupled argon plasma emission spectroscopy (ICAP). Chloride and sulfate were analyzed by x-ray fluorescence spectrometry (XRF), the pH was determined, and the alkalinity relationships were determined.

Client: National Park Service
Job No. 6427
Date: October 2, 1991
Cube Sizes for Compressive Strength Tests:

Sample from Bottom of West Wall:
- 1.52 x 1.26 x 1.915
- 1.66 x 1.50 x 2.50
- 1.63 x 1.62 x 2.64

Sample from Top of North Wall:
- 1.4 x 1.44 x 2.02
- 1.36 x 1.45 x 1.97
- 1.33 x 1.31 x 1.74

Capped Heights:

<table>
<thead>
<tr>
<th>Bottom of West Wall</th>
<th>Top of North Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample 1</td>
<td>1.44</td>
</tr>
<tr>
<td>Sample 2</td>
<td>1.42</td>
</tr>
<tr>
<td>Sample 3</td>
<td>1.48</td>
</tr>
</tbody>
</table>
APPENDIX C
EXISTING HABS DRAWINGS

The HABS Drawings were conducted under the supervision of Melvin M. Rotsch, Architect, Texas A & M University. The Martínez Adobe was recorded in 1958 for and under the direction of the National Park Service and the drawings are classified under Survey Number CAL-1913.
The area was originally a part of Rancho Pinole granted in 1844 to Don Ignacio Martinez. On his death in 1843, this portion of the ranch was inherited by his son, Vicente Martinez, who, the following year, built the Adobe house, one of the oldest remaining houses in the Martinez vicinity. In 1853 the house was sold to Edward Franklin, and then from 1874 until 1918 it was owned by Dr. John T. Streintzel and his descendants. It was the home of John Muir's daughter, Wanda Muir Hannah, beginning in 1906. W. Louis L. Stein, Jr. bought the property in 1955. The National Park Service is acquiring the property in 1965 for the John Muir National Historic Site.

Recorded by the United States National Park Service.

This project was financed from funds of the 'Mission 66' program of the National Park Service project under the direction of Charles S. Pope, supervising architect, historic structures.

Measured and drawn under the supervision of Melvin W. Rotsch, architect, Texas A&M University; by student assistant architects, David T. Jones of Princeton University, H. Randal Roark of Oklahoma State University, David N. Torphy of the University of Illinois, John C. Whitham of the University of Illinois, Nanci E. Stark of the University of Nebraska, Mark W. Steele of the University of Kentucky.
APPENDIX D
CODE ANALYSIS

CODE ANALYSIS

PARK: JOMU     DATE: 10/16/91

PROJECT: MARTÍNEZ ADOBE  PERSON: S. BURKE

PACKAGE: 137-35

ZONING: Located on an approximate 200 acre site along State Highway 19. Property bordered on north by open fields and Rattle Snake Creek, on the south by Sheep Rock Overlook and Picture Gorge, on the west by large hills and on the east by Rattle Snake Creek and Sheep Mountain.

FIRE ZONE: The Martínez Fire Department is the closest to the park and more than likely would respond if the adobe was subjected to fire. The Martínez Adobe, including all porches and additions is not equipped with an automatic fire suppression system. Since the building is located within the locked park boundary, and although not required by code, the installation of a fire suppression system would not be a bad idea.


Chapter 5: Classification of all Buildings by Use or Occupancy and General Requirements for all Occupancies.

Occupancy Classification: Proposed use: Park Contact Station and Museum, Group B-2, Type V N which is noncombustible.

Location on Property: The house is sited well inside of the property lines, therefore, no restrictions apply.

Allowable Floor Areas: 1,235 First Floor, 604 Second Floor which equals 1,839 total actual. Although 8,000 (16,000 total) square feet is allowable per floor, it is recommended for structural reasons that the second floor of the adobe not be used.

Maximum Height: 2 floors actual, 2 floors allowed.

Roof and Floor Loads: Actual unknown.

Increases for Fire Resistive Substitutions: Building area and height will not be increased due to historical reasons.

Area Separations: Not required for special hazards since the house has no furnace or boiler. Heating is by the fireplace only.

Protected Openings: Not required.

Toilet Calculations: Toilet room floors shall have a smooth, hard, nonabsorbent surface extend upward onto walls at least 5 inches. Walls within water closets and within 2 feet of urinals shall have similar finish as walls in the toilet stalls, and shall be 4 feet high. Accessories installed on
walls shall be sealed so as not to affect structural components in the walls. Access to toilets: toilet stalls shall be at least 30 inches wide and 24 inches clear in front of the toilet. All handicap codes applicable. (See Section 511 (a). Currently, the first and second floor toilets do not meet handicapped requirements.

Fire Ratings of Systems (Floors, Roofs, Walls, Structure): No requirements for fire resistance.

**Chapters 6-12**

Requirements for Group B Division 2 Occupancy: Natural light and ventilation required. Natural lights shall be 1/10 of floor area and natural ventilation 1/20 of floor area, or artificial light and mechanical ventilation system required (5 c.f./min/occupant) and complete air change every 15 min. Toilet rooms must have windows 3 s.f in area or mech. ventilating duct (100 s.i. for the first toilet and 50 s.i. thereafter)

**Chapters 17-22**

Classification Based on Type of Construction: Type V-N

Communicating Floors: N.A.

Atriums: N.A.

**Chapter 29**

Excavations, etc.: Existing adobe footings and foundation walls on the perimeter of the adobe and at the adobe's cross wall. The additions on the west side of the original adobe have concrete footings and foundation walls and there respective floor systems are supported with wood posts, beams and floor joists.

**Chapter 30**

Veneer: N.A.

**Chapter 32**

Roof Construction/Material

Wood shingles: The existing roof of the adobe portion of the house is covered with non-treated wood shingles while the west addition roof is covered with horizontal roll roofing. Class C rating required for all replacement roofing.

**Chapter 33: Exits**

3302, Occupant Load: By Code: Shall not exceed 82.3.

3303, Exits Required: By Code: < 30 occupants = 1 exit. > 30 occupants = two exits. Actual Based on Occupant Load: 82.3 which is > 50 so two exits are required for the first floor.
3304, Doors: Since the occupant load of the house will be limited to 30 persons, exit doors will not be required to swing in the direction of exit travel. No exits allowed through storage rooms. Fire rated doors not required. Exit door widths meet requirements but 1/2" max. thresholds are required for accessibility.

3305, Corridors and Exterior Balconies: No corridors in the Martínez Adobe.

3306, Stairways: Under UBC Code the stair may not be less than 3'-0" wide. The actual width of the stair below the mid-landing is 3'-4-1/4" wide but only 2'-7-1/4" wide above the mid-landing. Landing dimensions meet requirements. Interior stairway has only one handrail, meeting requirements. The stair on the east porch of the adobe meets requirements. Although the upper portion of the interior stair does not meet code, it will be recommended that the second floor not be used or open to the public. It is our recommendation, therefore, that the existing stair remain.

Handrails: One handrail required.

3307, Ramps: The west elevation of the adobe will become the main visitor entrance which will be accessible to the physically disabled. A ramp leading to the west patio is indicated on the Proposed Landscape Plan. No other ramps are required.

3308, Horizontal Exit: None.

3309, Enclosures: Not Required.

3310, Smoke Proof Enclosures: Not required.

3311, Exit Courts: None.

3312, Exit Passageways: None.

3313, Exit Illumination: Required; according to the code, "exits shall be illuminated at any time the building is occupied with light having intensity of not less than 1 footcandle at floor level." The power supply may be provided by the premises' wiring system and because the occupant load is < 100 persons, emergency lighting is not required.

3314, Exit Signs: Not Required.

3315, Aisles: 36" min. required; 5'-0" ideal for handicap

3316, Seat Spacing: Not applicable.

3317-21, Group Occupancy: None other than those already stated.

3322, Special Hazards: Not applicable.

3323-24, Miscellaneous: Not applicable.
Chapter 34

Skylights: Not applicable.

Chapter 35

Sound Transmission: requirements for separation - None required.

Chapter 36

Penthouse and Roof Structures: None required.

Chapter 37

Chimneys: Shall be anchored to the roof and since the building is located less than 200' away from brush-covered land it should have an approved spark arrestor designed to meet code.

Chapter 38

Fire-extinguishing: An automatic sprinkler is not required although should possibly be considered.

Chapter 39

Stages: Not applicable.

Chapter 40

Motion Picture Projection Rooms: Not applicable.

Chapter 41-42

Fire Resistive Standards: No requirements for fire resistance

Chapter 47

Wall and Ceiling Coverings: (Flame spread requirement.) Class III required.

Chapter 48 & 50

Special: (If applicable.) Not applicable.

Chapter 51

Elevators, etc.: Not applicable.

Chapter 52 & 54

Plastic and Glazing: (If applicable.)
Appendix: include with major chapters

Historic Structure: N.A.

Handicapped Requirements: Structure shall conform to the Uniform Federal Accessibility Standards.

NFPA: Check for additional requirements above UBC

106: No additional requirements unless building is altered.

Other: None

Variances Requested: None
APPENDIX E
HANDICAPPED ACCESSIBILITY CHECKLIST

Prepared by Steven M. Burke, Historical Architect, National Park Service, Denver Service Center.
HANDICAPED ACCESSIBILITY CHECKLIST

The following handicapped accessibility checklist provides an overview of the areas and features which do not currently meet the Uniform Federal Accessibility Standards. Also included in the checklist are recommendations that would bring the building up to code. This checklist is based on a checklist taken from "Accommodation of Disabled Visitors at Historic Sites in the National Park System" which was produced by the Park Historic Architecture Division, Cultural Resource Management, National Park Service, United States Department of the Interior, 1983. This checklist is simply for guidance. The Martinez Adobe shall meet all accessibility requirements as provided in the Uniform Federal Accessibility Standards.

<table>
<thead>
<tr>
<th>AREA</th>
<th>ELEMENT</th>
<th>MEETS CODE?</th>
<th>DISCUSSION/RECOMMENDATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Walks</td>
<td>Travel paths</td>
<td>No</td>
<td>Paths from the visitor center are much too steep for the disabled. New paths from the back gate to the adobe will be accessible. All accessible paths consist of stabilized materials, will be wide enough for wheel chairs and will be free from curbs, steps and other obstacles.</td>
</tr>
<tr>
<td>Entrance</td>
<td>From back gate into back door of adobe</td>
<td>Yes</td>
<td>Although the physically disabled have access to the building, they have to use the back door. The proposed plan will bring all visitors into the back door after reconstruction of the west patio and walks. No ramps or stairs will be required at this entrance.</td>
</tr>
<tr>
<td>Front of adobe</td>
<td></td>
<td>No</td>
<td>Currently the front of the adobe does not meet code. The front of the adobe has several steps. The proposal suggests that the door into the bedroom addition become the main entrance, however, the doors on the front of the house will remain open for those physically able to climb the front steps.</td>
</tr>
<tr>
<td>Main floor</td>
<td>Floors</td>
<td>Yes</td>
<td>The only area where visitors will be allowed will be in the book sales and contact area and the two exhibit rooms in the main adobe. Floors in these spaces are all hardwood.</td>
</tr>
<tr>
<td>Stairs</td>
<td></td>
<td>No</td>
<td>The stairs to the second floor currently do not meet code, however, use of the second floor by visitors or park staff is prohibited. The stairs will, however, be carpeted for aesthetic reasons. Stairs on the east veranda are not accessible.</td>
</tr>
<tr>
<td>Doorways</td>
<td></td>
<td>Yes</td>
<td>All doorways meet accessibility codes. New doors into storage and the staff bathroom will be accessible.</td>
</tr>
<tr>
<td>Thresholds</td>
<td></td>
<td>No</td>
<td>Currently there are three doors that must meet code. The new main entrance door on the west side of the adobe shall be equipped with an accessible threshold as well as the doorways leading from the bedroom addition to the living room and from the hallway into the kitchen. These two thresholds shall be constructed of wood.</td>
</tr>
<tr>
<td>Travel paths</td>
<td></td>
<td>Yes</td>
<td>All paths shall be free from obstacles to wheel chairs and visually impaired visitors.</td>
</tr>
<tr>
<td>AREA</td>
<td>ELEMENT</td>
<td>MEETS CODE?</td>
<td>DISCUSSION/RECOMMENDATION</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>---------------</td>
<td>-------------</td>
<td>------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Second floor</td>
<td></td>
<td></td>
<td>Prohibited from use by park staff and all visitors</td>
</tr>
<tr>
<td>Convenience Facilities</td>
<td>Toilets</td>
<td>No</td>
<td>The current toilet in the Martínez Adobe is not accessible to the physically disabled. Toilets will not be provided in the building for public use. A new staff toilet will be provided on the first floor and will be accessible by the physically disabled</td>
</tr>
<tr>
<td>Convenience Facilities Cont.</td>
<td>Telephone</td>
<td></td>
<td>An accessible telephone will be available for staff use only</td>
</tr>
<tr>
<td>Convenience Facilities Cont.</td>
<td>Water fountain</td>
<td></td>
<td>A water fountain will not be provided in the adobe</td>
</tr>
<tr>
<td>Warning Signals</td>
<td>Emergency alarms</td>
<td></td>
<td>Audible and visible alarms will be provided</td>
</tr>
<tr>
<td>Identification</td>
<td>Signage</td>
<td></td>
<td>All new signs shall have large letters on a contrasting background, and letters shall be either raised or recessed and shall be located within reach</td>
</tr>
<tr>
<td></td>
<td>Travel paths</td>
<td>No</td>
<td>All accessible travel paths shall be indicated with the International Symbol of Accessibility</td>
</tr>
<tr>
<td>Visitor Interpretation</td>
<td>Exhibits</td>
<td>Yes</td>
<td>New exhibits shall be able to be viewed from wheelchair and appreciated by the visually impaired. Recordings with amplifying devices and written materials shall also be available</td>
</tr>
</tbody>
</table>

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APPENDIX F
LIST OF RECOMMENDED NATIVE PLANTS

List provided by Mark Tabor, landscape architect, Denver Service Center, Western Team Design, January 15, 1992.
NATIVE PLANTS RECOMMENDED FOR PLANTING

Plant Climates:
Sunset Magazine, Zone 14 to 15 coastal climate w/ cool winters

Plant Community:
Northern Coastal Scrub

TREES

Aesculus californica - California Buckeye
Arbutus menziesii - Madrone
Calocedrus decurrens - Incense Cedar
Cercis occidentalis - Western Redbud
Juglans hindsii - California Black Walnut
Pinus contorta - Shore Pine
Pinus ponderosa - Ponderosa Pine
Platanus racemosa - California Sycamore
Quercus agrifolia - Coast Live Oak
Quercus kelloggii - California Black Oak
Umbellularia califomica - California Bay Laurel

SHRUBS

Arctostaphylos densiflora - Manzanita
Artemisia californica - Sage Brush
Baccharis pilularis - Coyote Bush
Ceanothus spp. - Ceanothus
Cercocarpus betuloides - Mountain Mahogany
Dendromecon rigida - Bush Poppy
Eriogonum arborescens - Buckwheat
Garrya elliptica - Coast Silktassel
Gaultheria shallon - Salal
Heteromeles arbutifolia - Toyon
Lupinus arboreus - Lupine
Mahonia spp. - Oregon Grape Holly
Potentilla fruticosa - Cinquefoil
Prunus ilicifolia - Hollyleaf Cherry
Rhamnus croce - Redberry
Rhus integrifolia - Lemonade Berry
Ribes viburnifolium - Evergreen Current
Salvia leucophylla - Purple Sage
Trichostema lanatum - Wooly Blue Curls
GOUNDCOVERS

Arctostaphylos uva-ursi - Bearberry
Baccharis pilularis ‘Twin Peaks’ - Dwarf Coyote Bush
Ceanothus griseus horizontalis - Carmel Creeper
Penstemon heterophyllus - Chaparral Penstemon
Satureja douglasii - Yerba Buena
Zauschneria californica - California Fuchsia

ANNUALS AND PERENNIALS

Aquilegia formosa - Western Columbine
Brodiaea spp. - Brodiaea
Calandrinia ciliata - Rock Purslane
Cleome lutea - Spider Flower
Erigeron glaucus - Beach Aster
Eschscholzia californica - California Poppy
Iris douglasiana - Pacific Coast Iris
Mentzelia Lindleyi - Blazing Star
Phacelia campanularia - California Bluebells
APPENDIX G
SOUTH PORCH AND KITCHEN WALL STABILIZATION DRAWINGS

Drawn by Box Cox, Office of Professional Services, Western Region, February 21, 1975.
CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

1. CONTRACTOR SHALL NOT USE ANY LABOR OR MATERIAL WHICH IS NON-MATERIAL OR WHICH IS NOT IN ACCORDANCE WITH THE SPECIFICATIONS. ANY MATERIALS WHICH ARE NON-MATERIAL OR WHICH ARE NOT IN ACCORDANCE WITH THE SPECIFICATIONS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

2. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

3. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

4. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

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6. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

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25. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

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28. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

29. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, TOOLS AND ANY APPURTENANCES STATED TO BE DONE BY HIMSELF OR HIS SUBCONTRACTORS.

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THE MARTINEZ ADDISON
Architect & Interior Designer, San Antonio, TX, USA
Second Floor, North, Stabilization
APPENDIX H
PATENT INFORMATION ON LIGHTING FIXTURES AND WALL BOARD

Patent information on lighting fixtures and wall board both located in the west bedroom addition of the Martínez Adobe.
PATENTS

Patent numbers on light fixtures in the west bedroom were run through indexes of U.S. Patents in an effort to determine their date of manufacture. The name and patent numbers appearing on the fixtures are:

Silvray Lighting, New York. U.S. Patents 1596725; 1609870; 1,931,100; 90938; 90939; 90940.

Several of these patents were for an earlier design, but the attached illustrations closely resemble the present fixtures, and bear several of the original patent numbers. These patents were issued October 31, 1933. Therefore the light fixtures postdate 1933.

Wallboard in the west bedroom addition of the Martinez Adobe is labeled "Fireproof Gypsum Board" and has the following production patent numbers: 7,791; 1,786,726; 1,813,828; 1,871,____. These patents were registered to the U.S. Gypsum Board Company during the early 1930s and are mostly for wallboard manufacturing machinery and processes. The most recent of these patents (beginning with the numbers 1,871____) dates to no later than 1930 or 1931. Although the actual date of production is probably no earlier than this patent date, it is likely that this product was produced some time after 1930. Also, according to Kurt Peterson of the U.S. Gypsum Company of Chicago, the company discontinued use of the trade name "Fireproof" during the mid-1940s, suggesting that the wallboard in the west bedroom dates after 1930, but before 1950.
APPENDIX I

STANDARD PATTERNS OF WORKED REDWOOD LUMBER

STANDARD PATTERNS

OF WORKED

REDWOOD LUMBER

ADOPTED BY
THE REDWOOD LUMBER MANUFACTURERS
SAN FRANCISCO, CALIFORNIA
APRIL 5, 1917

COPYRIGHTED BY
CALIFORNIA REDWOOD ASSOCIATION
JUNE, 1918
$\frac{3}{4}'' \times 4''$ T & G (Bd. 1S-S2S)

$\frac{3}{4}'' \times 6''$ T & G (Bd. 1S-S2S)

$1'' \times 4''$ T & G (Bd. 1S-S2S)

$1'' \times 6''$ T & G (Bd. 1S-S2S)

$1'' \times 4''$ T & G (Bd. 2S-S2S)
REDWOOD—STANDARD PATTERNS

16

1 x 4" T G Bd. & C Bd. 1S (SIS)  

No 165

3½"  3¼"  3¼"  1½"  1½"  1½"  1½"  1½"

1 x 6" T G Bd. & C Bd. 1S (SIS)  

No 166

5½"  2¼"  2¼"  2¼"  2¼"  2¼"  2¼"  2¼"
APPENDIX J
24-INCH SHAKE MANUFACTURERS

1. Aloha Mill
   Aloha, Washington
   206-276-4562

2. Sol Duc Mill
   Dean Hearn, Owner
   Beaver, Washington
   206-327-3266

3. Shakertown Shingles
   Edward Stanton, Sales Manager
   Winlock, Washington
   206-785-3501
   Manufactures 3/4" and 1/2" x 24" shakes
   Fire treated if required

4. For more information contact:
   The Cedar Shake and Shingle Bureau
   Jack Eddy
   Bellvue, Washington
   206-453-1323
June 18, 1992

Mr. Stanley T. Albright
Regional Director
National Park Service
Western Region
600 Harrison Street, Suite 600
San Francisco, CA 94107-1372

REF: Historic Structures Report for the Preservation and Rehabilitation of the Martinez Adobe, John Muir Historic Site

Dear Mr. Albright:

We have reviewed the Historic Structures Report received on May 18, 1992, regarding the National Park Service's no adverse effect determination for the proposed preservation and rehabilitation of the Martinez Adobe, a property listed on the National Register of Historic Places.

Under procedures set forth in 36 CFR Section 800.5(d)(2), the Council does not object to the finding of no adverse effect. This letter evidences that the requirements of Section 106 of the National Historic Preservation Act and the Council's regulations have been met for this project. It should be retained with all supporting documentation in your agency's environmental or project file.

If you have any questions or require the further assistance of the Council, please contact Andrew Lewis of our staff at (303) 231-5320 or FTS 554-5320.

Sincerely,

Claudia Nissley
Director, Western Office of Project Review
Two mortar samples submitted by the Rocky Mountain Regional Office of the National Park Service were analyzed on August 5, 1992, at the Conservation Laboratory of Community Services Collaborative in Boulder, Colorado. The analysis was completed utilizing the testing methodology developed by E. Blaine Cliver while acting as Regional Historical Architect of the North Atlantic Region of the National Park Service. The results of the investigation indicate the original formula used in mixing the mortar. Variants such as on-site conditions at the time of construction, as well as the curing and aging process affect the samples, such that only an approximation of the original formula can be ascertained.

Sample One consisted of mortar taken from a brick chimney. It revealed a ratio of approximately one (1) part lime to two (2) parts sand.

Sample Two was a 2" x 2-1/2" chunk of stucco removed from an exterior wall. The sample was coated with whitewash, which was removed prior to analysis. The approximate ratio of composition is one (1) part portland cement to two (2) parts lime to ten (10) parts sand.

As portland cement was first manufactured in the United States in 1871, its inclusion in the stucco dates its application at the year 1871 or later.

NOTE: When specifying mortar and stucco mixes to a contractor, lime used is to be ASTM C207, Type S, high plasticity. Sand must match samples provided by mortar analysts in color, size, and type and conform to ASTM C144. Water must be potable. Cement should conform to ASTM C150, Type II and should have no more than 0.60% alkali nor more than 0.15% water soluble alkali content. Non-staining white cement should be used in order to obtain the proper color match.
# MORTAR ANALYSIS

**IDENTIFICATION: **

**Project:**

**Location:**

**Structure:**

**Sample #: 1**

**Date Taken:**

**By:**

**Date Examined:** 8-5-92

**By:** Comm. SERVICES COLLAB. (JEB)

**Location of Sample:** BRICK CHIMNEY

**Sample Description (Before Testing):** WHITE TO LIGHT GREY, BREAKABLE QUARTZ CHunks TO POWDER.

**AGGREGATE:** O-2mm, SUBANGULAR; DARK GREY, B lEIGE, ROSE, LIME IS PRESENT.

**TEST:** SOLUBLE FRACTION

**DATA:**

1. **177.95g** wt. of container A
2. **176.0g** wt. of container A
3. **249.8** barometric pressure
4. **21.7C** temperature
5. **7** l. of CO2 released
6. **Amber** filtrate color
7. **1078.57** fines color

**Computations:**

- **Starting wt. of sample = No. 2 - No. 1**
- **wt. of fines = No. 9 - No. 10**
- **sand density = 1.0 \div \left[ \frac{(No. 13 - No. 14)}{No. 12} \right]**
- **wt. of soluble content = No. 15 - (No. 16 + No. 17)**
- **mols of CO2 = No. 5 \times No. 3 \times 0.016 \div (No. 4 \times C + 273.16C.)**
- **wt. of CaCO3 = 100 \times No. 20**
- **wt. of Ca(OH)2 = No. 19 - No. 21**
- **mols of Ca(OH)2 = No. 22 \div 74**
- **total wt. of C2(OH)2 = 74 \times (No. 20 + No. 23)**
- **wt. CO2 = No. 20 \times 44**
- **wt. total possible CO2 = 44 \times (No. 20 + No. 23)**
- **% CO2 gain = No. 25 \div No. 26 \times 100%**

---

**Community Services Collaborative**

Offering the following preservation services: Architecture - Building Analysis - Federal Programs and Government Liaison - Grantsmanship - Landscape Architecture - Municipal and Local Government Services - Planning - Historic Materials Analysis

1315 Broadway - Boulder, Colorado 80302 - 303 442 3601

Form Date: 7/1/79
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<td>Wt of Container A</td>
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<td>2</td>
<td>Wt of Container A and Sample</td>
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<td>3</td>
<td>Barometric Pressure-millibars</td>
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<td>4</td>
<td>Outside Temp-Centigrade</td>
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<tr>
<td>5</td>
<td>L. of CO2 released</td>
<td>0.70</td>
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<tr>
<td>6</td>
<td>Filtrate Color</td>
<td>amber</td>
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<td>7</td>
<td>Fines Color</td>
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<td>8</td>
<td>Presence of Hair or Fiber-Type</td>
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<td>9</td>
<td>Weight of Fines with Paper</td>
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<td>10</td>
<td>Weight of Filter Paper</td>
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<td>Weight of Sand and Container A</td>
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<td>CCs of Sand</td>
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<td>13</td>
<td>Weight of Grad.Cylinder and Sand</td>
<td>19.50</td>
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<tr>
<td>14</td>
<td>Weight of Grad.Cylinder</td>
<td>6.40</td>
</tr>
<tr>
<td>15</td>
<td>g. Starting Wt. of Sample A2-A1</td>
<td>18.05</td>
</tr>
<tr>
<td>16</td>
<td>g. wt. of fines A9-A10</td>
<td>0.50</td>
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<tr>
<td>17</td>
<td>g. wt of sand A11-A1</td>
<td>13.20</td>
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<td>18</td>
<td>Sand Density [2 part formula]</td>
<td>0.74</td>
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<tr>
<td>19</td>
<td>g. wt of soluble content</td>
<td>4.35</td>
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<td>20</td>
<td>mols of CO2</td>
<td>0.03</td>
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<td>g. wt of CaCO3</td>
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<td>22</td>
<td>g. wt of Ca(OH)2</td>
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<tr>
<td>23</td>
<td>mols of Ca(OH)2</td>
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<td>g total wt of Ca(OH)2</td>
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<td>25</td>
<td>g wt of CO2</td>
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<td>26</td>
<td>g wt total possible CO2</td>
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<td>27</td>
<td>percent CO2 gain</td>
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<td>28</td>
<td>g wt of sample</td>
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<tr>
<td>29</td>
<td>fines parts per vol</td>
<td>3.00</td>
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<tr>
<td>30</td>
<td>sand parts per vol.</td>
<td>58.73</td>
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<tr>
<td>31</td>
<td>lime parts per vol</td>
<td>23.25</td>
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<tr>
<td>32</td>
<td>lime to sand by vol</td>
<td>2.66</td>
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</table>
**MORTAR ANALYSIS**

**IDENTIFICATION:**

NAT'L PARK SERVICE - STEVE BURKE

**Project:**

Location:  
Structure:

**Sample #: 2**

Date Taken:  
By:  
Date Examined: 8-5-92  
By: COMM. SERVICES COLLAB. (ALA)

**Location of Sample:** EXTERIOR WALL (STUCCO)

Sample Description (Before Testing): 2 1/2" x 2" x 3/4" CHUNK, LIGHT GREY, NOT BREAKABLE, LARGE COARSE AGGREGATE, 0.2 mm - 10 mm.

**TEST:** SOLUBLE FRACTION

**DATA:**

1. 220.15g wt. of container A  
2. 240.15g wt. of container A & sample  
3. 842.8 barometric pressure  
4. 26.1C temperature  
5. 0.72 l. of CO₂ released  
6. YELLOW filtrate color  
7. 10YR 8/8 fines color

8. __________ hair or fiber present; type: __________
9. 6.05 wt. of sample fines w/paper
10. 44 wt. of filter paper
11. 239.2 wt. of sand & container A
12. 13.8 cc of sand
13. 78.25 wt. of graduated cylinder w/sand
14. 59.2 wt. of graduated cylinder

**COMPUTATIONS:** [SEE CALCULATIONS ATTACHED]

15. g starting wt. of sample = No. 2 - No. 1
16. g wt. of fines = No. 9 - No. 10
17. g wt. of sand = No. 11 - No. 1
18. sand density = 1.0 ÷ [(No. 13 - No. 14) ÷ No. 12]
19. g wt. of soluble content = No. 15 - (No. 16 + No. 17)
20. mols of CO₂ = No. 5 x No. 3 x 0.016 ÷ (No. 4 C + 273.16C.)
21. g wt. of CaCO₃ = 100 x No. 20
22. g wt. of Ca(OH)₂ = No. 19 - No. 21
23. mols of Ca(OH)₂ = No. 22 ÷ 74
24. g total wt. of Ca(OH)₂ = 74 x (No. 20 + No. 23)
25. g wt. CO₂ = No. 20 ÷ 44
26. g wt. total possible CO₂ = 44 x (No. 20 + No. 23)
27. % CO₂ gain = No. 25 ÷ No. 26 x 100%

---

**Community Services Collaborative**

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Building Analysis - Federal Programs and Government Liaison-  
Grantsmanship - Landscape Architecture - Municipal and Local  
Government Services - Planning - Historic Materials Analysis

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Form Date: 7/1/79

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<td>Wt of Container A and Sample</td>
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<td></td>
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<td>3</td>
<td>Barometric Pressure-millibars</td>
<td>842.80</td>
<td></td>
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<td>4</td>
<td>Outside Temp-Centigrade</td>
<td>26.10</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>L. of CO2 released</td>
<td>0.72</td>
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<td>6</td>
<td>Filtrate Color</td>
<td>yellow/green</td>
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<td>7</td>
<td>Fines Color</td>
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<td>8</td>
<td>Presence of Hair or Fiber-Type</td>
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<td>Weight of Fines with Paper</td>
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<td>Weight of Filter Paper</td>
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<td>Weight of Sand and Container A</td>
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<td>CCs of Sand</td>
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<td></td>
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<td>1.65</td>
<td></td>
</tr>
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<td>g. wt of sand A11-A1</td>
<td>19.05</td>
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<td>18</td>
<td>Sand Density [2 part formula]</td>
<td>0.72</td>
<td>1.38</td>
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<td>19</td>
<td>g. wt of soluble content</td>
<td>-0.70</td>
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<tr>
<td>20</td>
<td>mols of CO2</td>
<td>0.03</td>
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<td>21</td>
<td>g. wt of CaCO3</td>
<td>3.24</td>
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<td>22</td>
<td>g. wt of Ca(OH)2</td>
<td>0.00</td>
<td>-3.94</td>
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<td>23</td>
<td>mols of Ca(OH)2</td>
<td>0.00</td>
<td>-0.05</td>
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<td>24</td>
<td>g total wt of Ca(OH)2</td>
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<tr>
<td>25</td>
<td>g wt of CO2</td>
<td>1.43</td>
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</tr>
<tr>
<td>26</td>
<td>g wt total possible CO2</td>
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<tr>
<td>27</td>
<td>percent CO2 gain</td>
<td>100.00</td>
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<tr>
<td>28</td>
<td>g wt of sample</td>
<td>18.57</td>
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<td>29</td>
<td>fines parts per vol</td>
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<td>sand parts per vol.</td>
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<td>31</td>
<td>lime parts per vol</td>
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<td>32</td>
<td>Lime to sand by vol</td>
<td>5.85</td>
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<td>33</td>
<td>Portland cement parts per vol if</td>
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<td>34</td>
<td>fines from Portland cement</td>
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</tr>
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<td>35</td>
<td>Natural cement parts per vol if</td>
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<tr>
<td>36</td>
<td>fines from natural cement</td>
<td>7.64</td>
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<td>37</td>
<td>lime with cement parts per vol wherein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>cement may not account for total soluble wt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>of lime in such a mix</td>
<td>12.26</td>
<td>2.07</td>
</tr>
</tbody>
</table>
**MORTAR ANALYSIS**

**IDENTIFICATION:**

| Project: | National Park Service - Steve Burke |

| Location: | Structure: |

**Sample #: 2 (2nd run)**

**Date Taken:**

**By:** Community Services Collaborative (CSC) - ALA

**Location of Sample:** Exterior Wall (Stucco)

**Sample Description (Before Testing):** 2 1/2" x 2" x 3/4" chunk, light grey, not easily breakable, large course fine aggregate, 0.2-10 mm

**TEST: SOLUBLE FRACTION**

**DATA:**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>221.5 wt. of container A</td>
</tr>
<tr>
<td>2.</td>
<td>240.5 wt. of container A &amp; sample</td>
</tr>
<tr>
<td>3.</td>
<td>84.7 barometric pressure</td>
</tr>
<tr>
<td>4.</td>
<td>71.7 temperature</td>
</tr>
<tr>
<td>5.</td>
<td>0.22 l. of CO₂ released</td>
</tr>
<tr>
<td>6.</td>
<td>yellow filtrate color</td>
</tr>
<tr>
<td>7.</td>
<td>10 YR fines color</td>
</tr>
</tbody>
</table>

**COMPUTATIONS:**

<p>| | |</p>
<table>
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<tr>
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<tbody>
<tr>
<td>15.</td>
<td>Starting wt. of sample = No. 2 - No. 1</td>
</tr>
<tr>
<td>16.</td>
<td>wt. of fines = No. 9 - No. 10</td>
</tr>
<tr>
<td>17.</td>
<td>wt. of sand = No. 11 - No. 1</td>
</tr>
<tr>
<td>18.</td>
<td>Sand density = 1.0 ÷ [(No. 13 - No. 14) ÷ No. 12]</td>
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<td>Wt of Container A and Sample</td>
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<td>Barometric Pressure-millibars</td>
<td>842.80</td>
<td></td>
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<td>4</td>
<td>Outside Temp-Centigrade</td>
<td>26.10</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>L. of CO2 released</td>
<td>0.72</td>
<td></td>
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<tr>
<td>6</td>
<td>Filtrate Color</td>
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<td></td>
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<td>7</td>
<td>Fines Color</td>
<td>10YR8/2</td>
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<td>8</td>
<td>Presence of Hair or Fiber-Type</td>
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<td>g. Starting Wt. of Sample A2-A1</td>
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<td>17</td>
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<td>18</td>
<td>Sand Density [2 part formula]</td>
<td>0.68</td>
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<tr>
<td>19</td>
<td>g. wt of soluble content</td>
<td>1.70</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>mols of CO2</td>
<td>0.03</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>g. wt of CaCO3</td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>g. wt of Ca(OH)2</td>
<td>0.00</td>
<td>-1.54</td>
</tr>
<tr>
<td>23</td>
<td>mols of Ca(OH)2</td>
<td>0.00</td>
<td>-0.02</td>
</tr>
<tr>
<td>24</td>
<td>g total wt of Ca(OH)2</td>
<td>2.40</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>g wt of CO2</td>
<td>1.43</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>g wt total possible CO2</td>
<td>1.43</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>percent CO2 gain</td>
<td>100.00</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>g wt of sample</td>
<td>37.57</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>fines parts per vol</td>
<td>7.05</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>sand parts per vol.</td>
<td>62.81</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>lime parts per vol</td>
<td>7.03</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>lime to sand by vol</td>
<td>9.94</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Portland cement parts per vol if</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td>fines from Portland cement</td>
<td>5.50</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td>Natural cement parts per vol if</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>fines from natural cement</td>
<td>6.07</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>lime with cement parts per vol wherein</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>cement may not account for total soluble wt</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>of lime in such a mix</td>
<td>5.48</td>
<td>1.87</td>
</tr>
</tbody>
</table>
BIBLIOGRAPHY

BOOKS


*An Illustrated History of Sonoma County, California*. Chicago: Lewis Publishing Company, 1889.


Munro-Fraser, J.P. *History of Contra Costa County, San Francisco*: W. A. Slocum & Co., 1882.


**ARTICLES**


**U.S. GOVERNMENT PUBLICATIONS**


National Register of Historic Places Nomination Form for John Muir National Historic Site, 10 October 1975.[verify]

**U.S. GOVERNMENT MISCELLANEOUS**

John Muir National Historic Site. Superintendent's Annual Reports, 1976 and 1977


**MISCELLANEOUS**


"Brief Historical sketch of Martinez," Undated typescript, JOMU files.

Brill, Thomas, "The Vincente Martinez Adobe." Undated ms, JOMU files.


Hagstrom, Susan, "One Man's Journey," Typescript, JOMU files.


ARCHIVES AND LIBRARIES

Berkeley, California. Bancroft Library, University of California


California Private Land Grant Cases. Case 205, Northern District, U.S. vs Richardson et al., 1852-1868, Docket 334, U.S. National Archives Record Group 49, General Land Office, Film C-I 100 CA.


Fish Family Papers, 1835-1913, Film C-B 388.

Strentzel, Louisiana Erwin, unpublished diary.

Wolfe, Linnie, Land Cases, Rancho Pinole, Manuscript.

Martinez, California. County Recorder’s Office. Contra Casta County Deeds, Books 1, 2, 3, 5-8, 14, 25, 27, 73, 76, 112, 257, 316, 322, 359, 404.

Contra Costa County, Distributions at Death, Book 1.

Contra Costa County Mortgages, Books 1 and 2.


John Muir letters.

Case 3877 in the Superior Court of the State of California in the matter of the estate of John Muir, Deceased. Decree settling first and final account of administratrix and distributing the estate.

Oral Histories: Strentzel Hanna, 06/08/1966; Jose Figurado, 02/22/67; Lillie Thomas, 03/19/68.

Pleasant Hill, California. Contra Costa County Historical Society.

Contra Costa County Assessment Roll, 1861.

Contra Costa County Assessment Book 1873, 1877 and 1879, (v. 2, M-Z); 1889, #3, R-Z; 1890, #3, R-Z; (Pinole & San Felipe Grants, Martinez)

Contra Costa County Assessment List, Township 1, Supervisory List Pinole & San Felipe Grants, 1882, 1887, 1890.
Edward Franklin vs John H. Livingston et al., 18 May 1854. Transcript, District Court of the 7th Judicial District for the County of Contra Costa, Document nos. 3 and 13, E-9B, Edward Franklin. Ms.

Judgments Book, 15th District Court, Contra Costa County, volume 4, 1872.

Lumley Franklin vs Pasqual Mitchel [Mitchele], Draft Amendments to Plaintiff's Statement on Motion for New Trial, September, 1857, District Court, 7th Judicial District, Contra Costa County, File No. E9B.


The People of the State of California against Thomas Redfern, in the County Court of the County of Contra Costa, August term, 1873, Transcript of indictment for manslaughter. Redfern Doc. no. 13, May 15, 1874.

Sacramento, California. California State Library.


John Marsh Papers, Box 240.


Sacramento, California. California Division of Beaches and Parks.

Application for Registration of Historical Point of Interest, Vincente Martinez Adobe, July 15, 1953, typescript.

San Bruno, California. National Archives Records Administration [ck title]

Private Land Claims, Case 205 ND, Docket 334, Record Group 49, Records of the General Land Office.


Stockton, California. University of the Pacific.

John Muir Papers, Ms. 48. Redfern Peace Bond re Mizner 29 University of the Pacific.[month illegible] 1874.

John Muir Papers, Ms. 48. Louisiana Erwin Strentzel, Diary.

John Muir Papers, Ms. 48. Undated abstract of title for the Pinole Ranch, Ms. 48.

NEWSPAPERS

*Alta California* March 22, 1871.

*Contra Costa Gazette,* 8 September 1860, 29 September 1860, 25 November 1865, 16 December 1865, 24 February 1866, 22 December 1866, 18 May 1867, 17 May 1873, 1 July 1882, *The Morning Call,* San Francisco, California

*The Call,* San Francisco

[Obituary, Lansing Bond Mizner in *The Morning Call,* San Francisco, California, get date from CA Pioneers, p. 8, col. 3.]

*Oakland Tribune* 12 November 1967.
As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by Mary Ryan, Visual Information Technician, of the Branch of Publications and Graphic Design of the Denver Service Center. NPS D-15 August 1992.