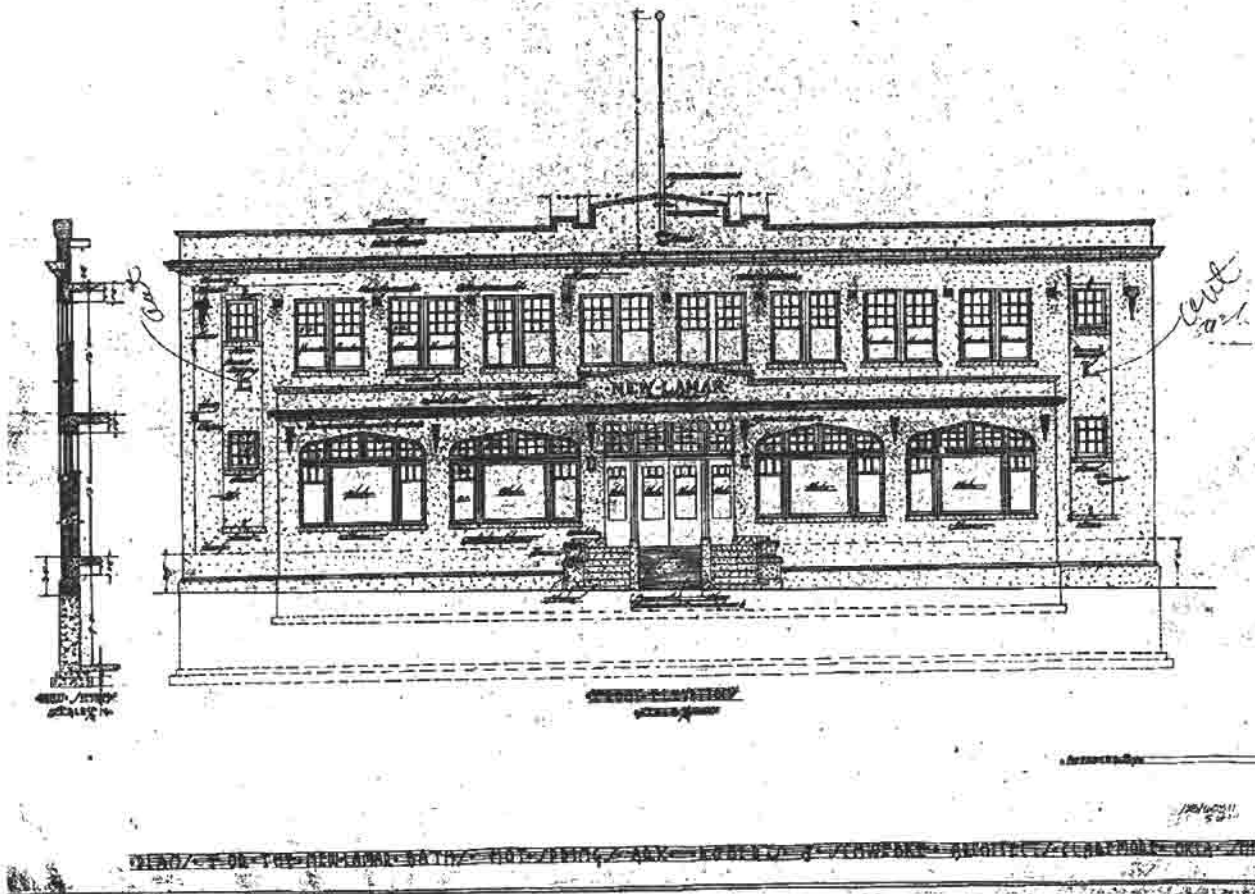


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Lamar Bathhouse

Historic Structure Report



HOT SPRINGS

National Park • Arkansas

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July 12, 2004

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Superintendent, Hot Springs National Park

September 27, 2004

Cover: Front elevation Lamar Bathhouse from original construction documents, 1922

Lamar Bath House

Historic Structure Report

prepared for the
National Park Service

prepared by
Chamberlin Architects
Grand junction Colorado

The Collaborative
Boulder, Colorado.

HOT SPRINGS

National Park • Arkansas

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EXECUTIVE SUMMARY

This Historic Structure Report on the Lamar Bathhouse, one of the eight bathhouses remaining on Bathhouse Row, is intended to edit, augment, and revise any existing documents as well as provide additional information. No previous HSR was completed on the Lamar Bathhouse, so the research and design completed during the current phase will comprise the majority of the report. The report will provide a thorough description of the background, physical development, and significance of the structure and its environs in order to assist in scheduling the most appropriate use of this historic building.

A. RESEARCH DONE

Research completed to produce this HSR primarily included accessing two main archives: The National Park Service Archives at the Hot Springs National Park, and Technical Information Center (TIC) archives at the Denver Service Center. Numerous documents were utilized which included: Bathhouse Row Adaptive Use Program, Technical Report 1, 1985; Cultural Landscapes Inventory 2001; A Chronology of Hot Springs Events, 2000; Olmsted documents; General Management Plan, 1986; background information on numerous hot spring sites; Native American information; historic drawings and photos; National Register Nomination Form; National Historic Landmark nomination form; and maintenance records 1990-2003. Internet searches also provided historical background information as did several books written specifically about Hot Springs.

Physical information on the structure was gathered during two site visits made by the architectural conservator, one site visit made by the architects, paint conservator, the landscape historian, and additional personnel. Maintenance staff at Hot Springs National Park also provided information. Subsequent trips were made by architectural conservators, a metal conservator and the architects to further address the conservation issues.

B. MAJOR RESEARCH FINDINGS

The first Lamar Bathhouse was built in 1888. The current Lamar structure was built after the Department of the Interior required all bathhouses on Bathhouse Row to be upgraded. Architect Harry Schwebke was hired to design the new bathhouse, and construction was complete in 1923. The grand opening was held on April 16, 1923. In 1925 the Lamar had a thermal water meter installed on the water supply line to record water use of the bathhouse, and the water tanks were enclosed. In April 1952, the cooling tower was removed. In 1974, the building was placed on the National Register of Historic Places, as part of the historic district of Bathhouse Row. The Lamar closed to the public in 1985, and the bathhouse is still vacant today. Stabilization work is currently underway.

The Lamar's structural integrity remains intact, despite the humid environment and years of

disuse. The original footprint remains the same, as do the majority of the interior walls. However, general maintenance of the building, such as lead abatement, has removed much of the original historic fabric, thus making it appropriate for rehabilitation.

C. MAJOR ISSUES FROM TASK ORDER

The task order identifies the major issues to be addressed. It states that the focus of the HSR effort will be to develop an historical background, chronology of physical changes and development through the building's history, and the historic use of the structure. The HSR shall clearly define the elements that give this property its architectural character, define primary and secondary historic spaces and convey their significance. Character defining features of both interior and exterior shall be defined as described in Preservation Briefs 17 and 18. The historical research portion of the report shall be based on existing historical source material at the Park and other materials made available by the National Park Service.

D. RECOMMENDATIONS FOR TREATMENT AND USE

Recommendation for treatment and use is the following. The Lamar Bathhouse rehabilitation will consist of shell and core rehabilitation and final finish for Hot Springs National Park administration offices and curatorial storage. The level of finish will be typical of lease office space except rooms determined to be primary historic spaces, which will be rehabilitated. These primary historic spaces include the Lobby, the Men's and Women's Stair Halls, and the second floor Gymnasium. Historic Bathhouse fixtures will be removed and stored to allow the spaces to be adapted to other uses, except in the Curatorial Storage areas where they will remain in place.

ADMINISTRATIVE DATA

A. NAMES, NUMBERS AND LOCATIONAL DATA

The Lamar Bathhouse is located in Bathhouse Row at the Hot Springs National Park in Hot Springs, Arkansas. The structure is the south-most bathhouse and faces west toward Central Avenue. The number assigned to this Classified Structure is 00717. The building is a two story reinforced concrete structure finished with stucco on the exterior. A one story enclosed sun porch spans nearly the entire length of the front elevation. The two story portion is rectangular in plan.

The Lamar is located on land owned by the U.S. government and is part of Hot Springs National Park. Bathhouse Row is located in the downtown area of Hot Springs. The bathhouse was completed in 1923 and remained open until November, 1985.

B. PROPOSED TREATMENT

The Lamar stands empty, as do many of the structures along Bathhouse Row. It is proposed for use as Hot Springs National Park administrative offices and curatorial storage. Rehabilitation work completed on the building up to this point includes window rehabilitation on the first and second floors. In addition, all of the original custom features of the women's bathing facility – such as tubs, showers, and steams – have been removed. The proposed treatment for the Lamar Bathhouse is rehabilitation of the exterior and primary historic interior spaces. Other areas of the bathhouse will be finished to basic core and shell with final finish for Park administration use. New features, such as lighting, will be compatible, but distinctive. Missing elements will not be restored unless abundant documentation exists, i.e. an original fixture, original plans or photographs, or documentation of similar quality.

Definitions used are as follows:

Rehabilitation - an historic structure may be rehabilitated for contemporary use if:

- 1) It cannot adequately serve an appropriate use in its present condition; and
- 2) Rehabilitation will retain its essential features and will not alter its integrity and character or conflict with approved park management objectives.

Preservation - a structure will be preserved in its present condition if:

- 1) That condition allows for satisfactory protection, maintenance, use and interpretation; or
- 2) Another treatment is warranted but cannot be accomplished until some future time.

The source document for the proposed treatment is Schematic Design/Hot Springs National Park/Hot Springs, Arkansas/HOSP-056091C/Phase C prepared by Chamberlin Architects, PC dated June 23, 2003.

C. RELATED STUDIES

Related studies being used to prepare this document include primarily the following: Bathhouse Row Adaptive Use Program, Technical Report 1, 1985; NPS Cultural Landscapes Inventory, Bathhouse Row, Hot Springs National Park, 2001; The Hot Springs of Arkansas Through The Years: A Chronology of Hot Springs Events, 2000; National Register of Historic Places Inventory – Nomination Form; National Historic Landmark nomination form.

D. CULTURAL RESOURCE DATA

Bathhouse Row and its environs were nominated as an Historic District in 1973. Bathhouse Row was placed on the National Register of Historic Places on November 13, 1974 and included the Lamar Bathhouse as a contributing structure. The Historic District received designation as a National Historic Landmark on May 28, 1987. In 2003, Bathhouse Row was listed as one of the 11 Most Endangered Historic Places by the National Trust for Historic Preservation.

E. RECOMMENDATIONS FOR DOCUMENTATION

It is recommended that all materials related to this Historic Structure Report be cataloged and stored at the archives of the Hot Springs National Park. It is also recommended that a separate Historic Structure Report be completed on the Creek Arch.

I - DEVELOPMENTAL HISTORY

HISTORICAL BACKGROUND AND CONTEXT OF HOT SPRINGS NATIONAL PARK

INTRODUCTION

The history of hydrotherapy appears to date back thousands of years with cultures worldwide making use of hot springs for both spiritual and physical health. Social bathing was an important cultural process practiced by Mesopotamians, Egyptians, Minoans, Greeks, and Romans whenever they sought relief from pains and diseases.(1) The oldest known mineral bath still in existence is in Merano, Italy where there is evidence of organized use of the spring dating back 5000 years. It is believed that the Egyptians used baths for therapeutic purposes as early as 2000 B.C. There is also evidence of baths being constructed by Phraortes, King of Media, in 600 B.C. The history of the Romans' use of hot mineral springs is well documented. Roman baths became more recreational over time, used by hundreds of citizens, rather than mainly for hygiene or aquatic therapy. The largest Roman bath was the Diocletian completed in A.D. 305, which could hold 6,000 bathers and covered 130,000 square yards.(2) Mineral baths were scattered throughout the Roman Empire from Africa to England. Asian culture as well, from Japan to China, revered the healing power of water. The Japanese have a saying known as "mizu no kokoro", mind like water, which refers to a peaceful state of harmony.(3)

In North America, Native Americans used numerous mineral springs for healing purposes. Although, there is no written history, traditions passed down through generations suggest the practice. In the area comprising present-day New York State, the Mohawks are known to have used hot springs for their healing properties, the best known being Saratoga Hot Springs, whose name means "place of the medicine waters of the great spirit." George Washington was only 16 years old when, as part of a surveying party, he recorded finding warm springs now known as Berkeley Springs, West Virginia. During the Revolutionary War, Washington, other generals, half a dozen members of the Continental Congress, and assorted signers of the Declaration of Independence all bought property in Berkeley Springs (then called Bath). Washington and his family members came to enjoy the hot springs numerous times during his life.(4)

As European settlement moved westward, a number of hot mineral springs were found. "Taking the cure" was a custom many settlers brought with them from Europe where a long tradition existed of the curative properties of thermal spring water. The cure often consisted of daily soaks in hot pools and drinking many glasses of spring water to gain additional benefits of the benevolent minerals. Those seeking to satisfy their scientific curiosity analyzed

waters for their chemical and physical properties. Great variety was found among springs, with water being labeled as hot or cold, sulphur, lithia, soda, iron, and so on.(5) Different springs were said to have different curative qualities. Diseases said to be affected by hydrotherapy included high blood pressure, premature aging, kidney and bladder ailments, gall bladder conditions, many chronic stomach and intestinal disorders, arthritis, rheumatism, post-polio problems, chronic respiratory infections, general lassitude, and others. In France, circa 1860, it was noted that most of the famous French spas specialized more or less in one disease and advertised their physicians' proficiency in handling this condition. For example, Vichy, the Queen of Thermal Waters, was said to be the mecca for sufferers of gout and kidney disease, because of the stimulating property of its water.(6)

In the United States, some of the hot springs in the East and Midwest became well-known health resorts in their early years. Several of the more notable were Saratoga Springs, New York; Berkeley Springs, West Virginia; West Baden Springs, French Lick, Indiana; as well as Hot Springs, Arkansas. In 1941, it was reported that, "No other country in the world today is so richly endowed with natural resources...as our own United States. Within its borders..., 8,826 health giving mineral springs are reported in 2,717 different locations." (7) The culture of regularly visiting hot springs for a health-giving respite was not ingrained deeply enough to weather the social and medical changes taking place in the U.S. in the 1940s and 1950s. The heyday of America's hot springs came to an end in the 1940s, and only the buildings and memorabilia remain to represent this significant era.

PRE-HISTORIC USE OF THE HOT SPRINGS

Early human use of the region around Hot Springs National Park is known to extend back in history nearly 12,000 years. The area's natural springs are a result of their topography and geologic setting and of an estimated 4,000 year-long hydrogeologic process. Proven occupation and use of resources within the park area goes back at least 3000 years, perhaps more. Archaic cultures existed at that time, and inhabitants lived as hunters and gatherers. During this period, quarrying of novaculite along the upper Caddo Ouachita drainages for the manufacture of tools took place, and remnants of such tools have been found in this area and beyond.

Archaeologists have identified the period in the American Southeast from A.D. 1000 to the time of the first contact with Europeans as the "Mississippian period"--an age in which there was significant reordering of Indian society. The native peoples became farmers and organized themselves politically into chiefdoms. They built large earthen mounds, which are considered a distinguishing characteristic of the period.(8) This is the culture that developed into a confederation of tribes known as the Kadohodocho.(9) The French created their own version of the name and this developed into the name Caddo, which is the term used today. It was one of the Caddo tribes that most archaeologists believe lived at the site of Hot Springs at the time Hernando de Soto was rumored to have visited. Burial mounds and remnants of early villages are scattered along Hot Springs Creek beginning several miles downstream from the park area. Another mound is located under what is now Lake Ouachita,

west of Hot Springs. Any remains nearer to town were most likely destroyed by Euro-American settlement. Pre-historic use had little impact on the valley. Though there is no archaeological evidence of people using the hot springs prehistorically, they certainly may have done so.(10)

EXPLORATION

According to Grant County History – Discovery: 1541, “The first white man to enter Grant County was a Spaniard named Hernando DeSoto. With about 500 men, several hundred horses, bloodhounds, hogs, and cattle, DeSoto had sailed from Cuba to Florida in 1539. He spent the next two years roaming through the south. In May of 1541 DeSoto reached the present city of Helena on the Mississippi River. He had found no gold or silver and had lost many men and horses to the Indians and the elements. He made his way to present day Benton and followed the Saline River south. It was during this part of his journey that he entered Grant County. According to the 1939 Swanton Commission, he probably followed the river to the Jenkins Ferry area and from there headed west to Hot Springs, and then south to Camden and Calion on the Ouachita River. From here the ill-fated expedition entered Louisiana where DeSoto died of a fever. The remainder of his expedition made their way back to Cuba.”(11) An alternative route for de Soto’s expedition, mapped in the 1990s by Charles Hudson based on extensive research, takes the Spanish expedition north and east of the hot springs. Hudson states:

On October 22 [1541] they arrived at Quipana, a town situated near the river and among very steep mountains. Quipana was in the vicinity of present-day Nimrod Lake, Arkansas. For this entire leg of their journey they traveled through very rough ridges....

The Spaniards evidently spent four or five days resting in the province of Quipana. Then from the main town of Quipana, they proceeded eastward, down the valley of the Fourche La Fave River, coming to the village of Anoixi, which possibly was located in present-day Saline County or northern Garland County, Arkansas, near where they would pass through the Ouachita Mountains.... On October 30 the rest of the army crossed through the mountains to the plains beyond, bivouacking perhaps in western Saline County. On October 31 the entire army reached the town of Quitamaya, in the vicinity of present-day Benton, and they bivouacked in an open field near the town....

The next day, November 2, they reached Utiangue, which they found to be not on an arm of the Gulf of Mexico, but on the River of Cayas, the Arkansas. Utiangue appears to have been located a few mile down stream from present day Little Rock.(12)

Although the expedition spent two years in Arkansas, no sites of encampments have been firmly established in the state, possibly because by then the Spanish were running out of things to leave behind. A bit of tantalizing evidence in the form of a glass bead and a brass bell suggest that de Soto may have been in the general area of the Park in site in east called Casqui, but that’s all researchers have found to date.(13)

It is generally agreed today that although de Soto may have been in the area he did not visit the hot springs. For many years, however, it was believed that he had come in 1541 and spent several weeks resting by the springs. One of de Soto's men wrote about "hot pools" or "brackish lakes" depending on the translation, and descriptions of other landscape features were sometimes used to place de Soto at Hot Springs. However, the accuracy of the translations are questionable and it is interesting to note that de Soto was not mentioned in connection with these hot springs until after the Mexican-American War, when American society's interest in Hispanic culture was heightened. The belief that de Soto visited the springs has had an influence on the development of the area as seen in numerous place names.

In 1803, the area of the hot springs became part of the United States with the purchase of the Louisiana Territory from France. The Spanish and French had mapped much of the area, but President Thomas Jefferson wanted more information and requested that William Dunbar and Dr. George Hunter lead an expedition along the Red and Arkansas Rivers. In 1804, the two men led a group from Natchez, Mississippi down to the mouth of the Red River, upstream to the Black River, and on to the mouth of the Ouachita River. They recorded plants, wildlife, and mineral resources as well as taking readings for mapping. From December 9, 1804 until January 8, 1805, the group camped at the hot springs. Dunbar and Hunter improved a cabin already on the site for their use. Dunbar reported that "the hot springs themselves are indeed a great curiosity; the temperature of their waters is from 130 to 150 of Fahrenheit's [sic] thermometer. The heat is supposed to be greater in summer, particularly in dry weather. In water of 130 degrees which was comparatively in a state of repose to one side of the spring run, I found by the aid of an excellent microscope, both Vegetable and animal life..." He continued, "I shall only mention that from our analysis of the water of the hot springs, it appears to contain lime with a minute portion of iron dissolved [sic] by a small excess of Carbonic acid: this is indeed visible upon first view of the Springs. An immense body of Calcareous matter is accumulated upon the side of the hill, by the perpetual depositions from the hot waters, and the bed of the run is coloured [sic] by red oxid [sic] of iron or rather Carbonated iron. Every little spring which rises up in a favorable situation, forms its own calcareous cup, considerably elevated in form of a Crater." (14)

By the time of Dunbar and Hunter's visit, the Caddo had long since left the Hot Springs area. Other tribes had moved into the area as they were forced to leave their established lands. One such group was the Quapaw, which oral tradition says came to Hot Springs to trade horses.(15) They were also believed to have come to bathe in the hot water, and [plaster] themselves in mud to bake out the aches of arthritic joints. In addition, it was believed that the waters were used to speed the healing of arrow wounds.(16) For a brief period the Quapaw were given territorial rights to the land by the Federal in 1818. In 1820, a Cherokee was employed to point out the trace to Hot Springs for Major Stephen Long's second expedition through the area.(17) All Native American groups were soon forced out of Arkansas to areas further west.

EARLY SETTLEMENT

The earliest recorded settlement by Europeans in what is now the park is estimated to have been about 1800. As mentioned above, Dunbar and Hunter found log cabins and huts in 1804 that were built for summer use and utilized by settlers. Manuel Prudhomme was the first known to build a cabin for permanent residence, which he did in 1807, though John and Sarah Perceful controlled the springs at this time. Cabins provided public lodging until about 1820 when a double log cabin was constructed to serve as a hotel. Also in 1820, the Territorial Assembly of Arkansas approved a petition to the U.S. Congress asking that Sections be granted to the local Legislature that included all the hot springs. The Assembly felt this was necessary "for the benefit of that watering place." They also stated that "land about the Hot Springs is extrem[e]ly poor and worth very little for farming purposes." (18)

Beginning about this time, more people arrived in the area to settle and the number of visitors increased. Emigrants from Louisiana settled around the springs and hosted both the adventurous and the sick who came to bathe. Hotels came and went fairly quickly during this period and changed hands often. Ludovicus Belding's hotel was the first building recorded as a hotel, and he placed an advertisement in the July 1, 1828 Arkansas Gazette. This was soon followed by a gristmill, several hotels, and crude bathing houses built over and near the springs at the base of Hot Springs Mountain. (19) 1835 brought a marked change in local architecture due to the construction of a nearby sawmill. Cut lumber became available, which provided more materials for new construction and allowed buildings to have more sophisticated decorative features.

By 1832, two events occurred that highlight the rate of growth in the area. The general Assembly of the Territory of Arkansas asked the U.S. House of Representatives to appropriate \$5000 for a hospital and additional funds for maintenance and for a physician. Secondly, Congress, fearing abuse of the hot springs, set aside 2529.1 acres as a United States government reservation on April 20 of this year. (20) President Andrew Jackson signed the legislation that set aside "four sections of land including said springs, reserved for future disposal of the United States (which) shall not be entered, located, or appropriated, for any other purpose whatsoever." (21) This reservation, although not the first to be set aside, was the earliest for which a Federal act stated its purpose was to protect the natural environment for use of all citizens. It was a significant milestone in U.S. conservation history, predating the creation of Yellowstone National Park by forty years. Formation of the reservation was probably in part a response to the 1820 Petition from the Territorial Assembly and its subsequent political pressure thereafter.

The site was under the jurisdiction of the General Land Office, which was established as a part of the General Treasury in 1812 and its functions related to public domain. The General Land Office was subsumed by the Department of the Interior upon its founding. Despite the Act of Congress making a reserve of the springs, the site was not strictly administered by any governmental agency and the area developed quickly. At first visitors outnumbered facilities with records listing Hiram Whittington's 1836 Hot Springs hotel as one of the few

1A-1: Early development at the hot springs. Photo from the archives at Hot Springs National Park, c. 1870s.



early establishments. About this time, ambitious businessmen began moving to the growing town, and in 1848 the two principle hotels were Mitchell's and Altig's. There were appar-

ently a number of small boarding houses as well. John C. Hale was in the area off and on from the 1820s prospecting businesses, and finally came with his family about 1838. He built one of the early bathhouses, which opened in 1854. Henry M. Rector settled in the area five years later and opened the Rector House. By 1860, the Hale House and Rector House were the two main hotels, several smaller bathhouses were present, and the population had grown to 201.(22) Hotels and bathhouses were built both around and over the springs to serve the many visitors who came into the valley largely by stagecoach.

The idea of setting up a separate department within the federal government to handle domestic matters was put forth on numerous occasions. It was not until the last day of the 30th Congress, March 3, 1849, that a bill was passed creating the Department of the Interior. This department had a wide range of responsibilities including construction of the national capital's water system, colonization of freed slaves in Haiti, exploration of the western wilderness, as well as management of public parks and more. Anything that had to do with internal development of the nation or welfare of its people was placed within this department. Thus, Hot Springs Reservation came under its auspices. During the American Civil War most of the buildings in Hot Springs were burned during raids, and growth, of course, halted. By 1865, former residents were returning to rebuild, and numerous sick and wound-

ed war veterans were coming to bathe in the springs.

DEVELOPMENT OF THE SPA RESORT

By the early 1870s, the area was rapidly becoming a resort, with bathhouses, fashionable hotels, and a variety of entertainment. (See Photo 1A-1) Built on reservation land, which still enclosed a one-square-mile area with the springs in the center, the buildings largely followed the creek in a linear pattern on both banks wherever the topography allowed it. Development was also taking place in the valleys between the various mountains and in the relatively flat area just south of present-day Bathhouse Row. One report stated that at this time 1,276 people were part of the bathing industry in Hot Springs.(23) The first hotel that records show was completed after the Civil War was the Hot Springs Hotel erected by William H. Gaines and opened in around 1890. This was immediately followed in 1871 by the opening of the Grand Central Hotel. Also in 1891, a street railway was built through town and horse drawn coaches were also available to serve travelers going to and from the baths. A dramatically improved and enlarged Rector House and bathhouse appears in historic stereographs from the early 1870s, and others quickly followed. Between 1870 and 1874, the Rector House and bathhouse, the Hot Springs Hotel, and the grand Central Hotel and bathhouse were built. These were well patronized despite the difficulties of traveling to the area. According to Morrison's Handbook of the Hot Springs of Arkansas published by J. M. Morrison in 1875, Bathhouse Row at this time included five bathhouses: the Rector; the Staat's near the current site of the Fordyce; the Weir and George on the current site of the present Ozark building; and the Hamilton probably on the current site of the Lamar Bathhouse.(24) This same year Charles Leland of New York had a building constructed over the Mud Hole (the largest Ral pool), for the use of indigent bathers. Earlier, he had excavated the pool, building a rough shelter to use in treating his own health problem. When he improved and returned to New York, he left the building for the indigent. This later became the site of the first Government Free Bathhouse. Most of the 1875 bathhouses were not yet of the same caliber as the hotels. They were rough timber board-and-batten style shotgun houses, almost all unpainted. The Arlington Hotel, erected in 1875, provided more luxurious bathing services and accommodations for the visitor. The two-story Rector Bathhouse, which was larger than the other bathhouses and with a painted exterior, was incorporated into the Arlington Hotel. It was connected by stairs running to the Arsenic Springs pavilion on the Arlington's south end.

By 1874 there was still no railroad connected directly to Hot Springs. Travelers could take a train to Malvern and then take a stagecoach on to Hot Springs that was said to be of "dubious comfort". A visitor commented that invalids seeking the healing springs were unable to undergo the hardships and fatigue of the journey. In addition, Hot Springs had no banks, so travelers often carried a large amount of money. Robberies along the isolated trails occurred much too often making stagecoaches to and from Hot Springs unsafe.(25)

Joseph Reynolds first came to Hot Springs in 1874, forced to take a hack over the rocky roads from Malvern. Classified as a minor robber baron, he decided to construct a rail line

between Malvern and Hot Springs using his personal funds. He built a narrow-gauge railroad line between the two towns in 1875, and it was known as the Diamond Jo line. The advent of rail connections with Hot Springs accelerated the economic expansion that had already begun in Hot Springs and allowed the population to grow from 3,554 to 8,096 between 1880 and 1890.(26) The Arlington became the area's first world-class hotel (27) and took lodging to a much higher degree of comfort and elegance than had been available before in Hot Springs.

After the railroad connected Hot Springs and Malvern, bathhouse construction began improving. Between 1875 and 1878 a brick bathhouse was built on the current site of the Buckstaff Bathhouse, and W.H. Gaines erected a bathhouse between it and the Huffman-Hamilton Bathhouse. The Huffman-Hamilton served as the bathhouse for the Hot Springs Hotel.(28) In 1877, the ironclad Big Iron Bathhouse was completed at a cost of \$18,400. Although it was situated on the Big Iron Spring, a spring that already had a greater flow than any of the others, the owners felt blasting was necessary to further increase the flow. This was the first blasting ever done at the springs, and many observed that it caused some of the smaller, higher springs to disappear. The cost of a single bath at the Big Iron was 50 cents, the owners paid a monthly water rent of \$5 per tub, and attendants were paid about \$1 a day. Construction of the Rockafellow Bathhouse followed in the same year.(29)

A number of longstanding private claims on the reservation land were still in impediment to the spa's development. The principle litigants were the Belding heirs, Albert Gaines, Governor Rector, and John Hale. In 1876 the Court of Claims decided against all the claimants, and the U.S. Supreme Court affirmed their decree. The Hot Springs Commission was authorized by a March 3, 1877 Act to survey the reservation land and settle all remaining private claims. The Commissioners surveyed and formally laid out the town of Hot Springs, settled claims, condemned buildings, and sold unneeded lots. Some of the litigants who lost their case against the government subsequently became primary stockholders in bathhouse leases granted on the Reservation.(30) A fire on March 5, 1878 destroyed many of the buildings slated for removal by the Commissioners as well as many of the buildings mentioned above, leaving the Arlington Hotel and a few bathhouses.

In October 1877, Benjamin F. Kelley was appointed first superintendent of Hot Springs Reservation by the Secretary of the Interior. During his tenure, Kelley established regulations for bathing at the springs, built a carriage road to the top of Hot Springs Mountain, began maintenance of the grounds, and actively administered bathhouse leases as new buildings were constructed after the 1878 fire. The Hale Bathhouse, rebuilt in 1879, was the first of the Victorian bathhouses to appear after the fire. The Big Iron Bathhouse (1877) was spared by the fire when the wind changed, driving the flames back down the valley.(31) Various Secretaries of the Interior have taken interest in the development of the Reservation. They all seemed to share a vision of the area as a spa resort set in a mountain park with carriage drives, walking paths, summit overlooks, and seats for resting. This vision required repair of damage from early settlement and imposing order to the wild vegetation to create a park. Underbrush and fallen trees were cleared and hundreds of new trees were planted.(32)



1A-2: Development of Bathhouse Row, Hot Springs, Arkansas. Photo from the archives at Hot Springs National Park, c. 1883.

Upon Kelley's appointment in 1877, conditions in Hot Springs were considered below standard. There were still squatters scattered throughout the area at this time, and Kelley aroused a great deal of controversy as he tried to clear them out of the Reservation. A near riot occurred when he removed indigent squatters from their make-shift quarters around the springs and relocated them to Kelletown on the other side of Hot Springs Mountain. Eventually a free bathhouse was constructed at the site of one of the dugout pools that had been frequented by the squatters.

The early 1880s saw the continuation of construction with numerous buildings rising along the creek. (See Photo 1A-2) Changes continued to be made in the area covered by the reservation and regulations were put in place to control development. An Act of Congress on June 16, 1880 reserved portions of the mountainous district adjacent to the reservation from sale, dedicating it to public use as a park. The reservation was now named the Permanent Reserve and was comprised of only 911 acres of the original land. Another 700 acres were awarded to existing businesses and residents, 348 were set aside for streets and alleys, and 570 were platted for town lots to be sold at public auction.(33) A number of novaculite quarries continued to operate adjacent to reservation land and provided material to produce quality whetstones. Once the change in acreage brought the reservation to 264.93 acres, no further sites were taken away until a boundary adjustment was made in 1993. Numerous additions, however, were made over the years, which periodically increased the total number of acres included in the reservation. These increases included: the mountains around the springs, 1880; Whittington Park, c. 1896; the new Government Free Bathhouse site, 1919;

Gulpha Gorge campground, 1924; part of Indian Mountain, 1935; and areas contiguous to the reservation mountains, 1938.

Need for more organized control of the water supply was becoming apparent to both private and governmental concerns. An arched brick reservoir was completed in late 1880 and is still in place behind Superior Bathhouse. A second reservoir was completed in 1881 above the old Arlington Hotel, now the Arlington Lawn. These reservoirs, both for storage of thermal spring water, were built so that 1) the distribution of water would no longer be affected by the differing flow rates and varying temperatures of the individual springs, and 2) less water would be wasted in the collection and distribution process. Corn Hole spring and others dried up possibly due to blasting, and other open springs were covered to prevent them from becoming polluted.

In 1882, records show that discussions were underway regarding the condition of Hot Springs creek and any actions the government should take to make improvements. It was felt change was needed to improve sanitation, eliminate numerous footbridges over the creek, and provide level topography for new bathhouses and formal landscaping. In a letter to the Secretary of the Interior, Capt. Thomas H. Handbury, Corps of Engineers states:

The creek is now the common depository of all offal and refuse of every description whatever that is thrown out upon its banks. The waste from the baths, the contents of water-closets, privies, and cesspools all eventually find their way into its bed. I am told that during the summer months the odors that assail the nostril while in its vicinity are anything but pleasant. . . .

The remedy for this is, I think, in general terms, to wall up the banks of the creek with a good substantial vertical wall of cut stone laid in cement, suitably shape the bottom, cover over with an arch or perhaps a series of iron girders which would support a roadway, thus making so much more street space available. Behind each wall I would lay an earthen sewer-pipe of perhaps ten or twelve inches in diameter. Into these should be conveyed all the waste water from the houses, such as comes from the baths, water-closets, kitchens, pantries, & c. The surface water should be conducted directly into the creek. Everything in the way of refuse, offal, or sewerage should be strictly forbidden being deposited there, at least in any portion where it would be liable to give offense. In this way the creek could be restored to its primitive purity. . . . (34)

The first project design was submitted in 1883 by Capt. Handbury, and called for parallel granite side walls spanned with wrought iron beams filled in with brick. In August 1883, Supt. Samuel Hamblen amended this design by specifying masonry walls and an arch of range rubble-work laid in cement, with single block skewbacks to be used at the springs. Stone from the mountainside above the creek was to be used rather than granite.(35) The arch ran from Whittington to Malvern Avenues, spanning 3,500 feet, and Valley Street, which ran next to the creek, was covered when fill was placed over the arch. At the time the arch was completed, Bathhouse Row was comprised of the following rent-paying establish-

ments running from north to south: Little Rockafellow, Big Iron Bathhouse, Old Hale Bathhouse, Independent Bathhouse, Palace Bathhouse, Ozark Bathhouse, and Rammelsburg Bathhouse. Two years later a sewer line was laid along the creek arch, completing the improvements in sanitation. By 1892, the area in front of the bathhouses was planted with a grass and clover lawn and nearly 300 small trees. Poplars lined the gravel path between the lawns and Central Avenue. A number of new bathhouses had been built to serve an increasing clientele drawn by a popular social circuit as well as the bathing facilities.

The Bathhouse Row Adaptive Use Program lists the buildings present on Bathhouse Row in 1891. Structures included: the Arlington Hotel (1875, expanded in 1885, rebuilt 1893); the Rector (1881, reconstructed in 1892) (See Photo 01915); the Big Iron (1877, removed in 1891); the new brick Superior (1888); the Hale (1879, demolished and rebuilt in 1892); the Independent (1880 remodeled and renamed the Maurice in 1892); the Palace (1880); the Horseshoe (1888); the Magnesia (1888); the Ozark (1880); the Rammelsberg (1880); and the Lamar (1888). The new brick Government Free Bathhouse (1891) was directly above and behind the Horseshoe and the Magnesia Bathhouses; the government pumphouse and reservoir occupied the far southwestern corner of Bathhouse Row.⁽³⁶⁾ With the addition of the Imperial Bathhouse in 1893, the Victorian Bathhouse Row was complete.

Through the years at least 20 scientific investigations have been done involving the hot springs. Their purpose varied from trying to explain the origin of the water, the source of the heat, or the chemistry of the water. Early descriptions have accounts of as many as 72 spring openings in a stretch about one-fourth mile long and a few hundred feet wide.⁽³⁷⁾ Results of these investigations began to be recorded in the Annual Report of 1891. Most early investigators felt the water was of meteoric origin, although others felt it came from the earth's interior. Composition of the hot springs seemed to differ in only two ways from cold ground water - the increased temperature and the higher levels of silica dissolved by the heat. The chemical basis behind any therapeutic affect of the water was the subject of much of the early bathhouse promotional material.

FEDERAL IMPROVEMENT OF THE RESERVATION

In April of 1892 Secretary of the Interior, John W. Noble obtained funding to improve the Reservation, and a massive beautification project was undertaken. Noble selected a young army engineer, Lt. Robert R. Stevens, to supervise the project and outlined his requirements for the improvements. The main thrust was to improve the character of the "National Health Resort," heightening the beauty of the mountainside scenery by placing a decorative park in the foreground. Bathhouse Row was to be transformed into a formal landscape containing walks, drinking fountains, rest spots, shrubbery, and so on. The surface network of pipes was to be removed and wooden cooling tanks replaced by more decorative ones. The foreground area above the bathhouses was to become a natural park, again with walks and rest spots, and winding roads and walks of gentle grade for invalids were to lead to the mountain summit.

Lt. Stevens contacted Olmsted and Company requesting Frederick Law Olmsted's personal services in planning the improvements. In his letter, Lt. Stevens stated: "The watering-places of any country are recognized as being entitled to the highest attention of a landscape artist, and stand out as master-pieces of decorative improvement. The field afforded for landscape work here would, I think, be fully appreciated by Mr. Olmsted, and for many reasons besides the actual result of the work as shown on the plan, I would like to have his personal interest and name associated with the work." (38) Plans submitted by Olmsted's company were rejected several times due to differences in vision and changes in specifications. Requests for designs were left unfinished causing project delays on several occasions. Olmsted's firm eventually proposed an ornate Spanish style stone arcade with an open timber roof covering a broad promenade along Bathhouse Row. Sect. Noble rejected the design feeling that the arcade would create a visual barrier between the reservation and the town, block the sun from people strolling during cooler weather, and block access of deliveries to the bathhouses. The only features used from the Olmsted and Company plan were the entrance pylons, which were actually designed by the Boston firm of Andrews, Jacques, and Rantoul. Edward Kemeys, the well-known animalier, designed and cast the eagles.

Ultimately, almost all the design came from Lt. Stevens with the guidance of Sect. Noble, who had a definite vision of improvements to be implemented. Stevens designed the entrances to the reservation, including the historic main entrances. He also designed the Magnolia Promenade in front of the bathhouses, the meandering upper terrace, a series of pathways and carriage roads, and pocket parks. By 1900 the reservation landscape contained characteristics of an informal Victorian landscape in addition to more formal post-1880s style. The most significant features of the current Bathhouse Row landscape were constructed during this period. (39) All but four hot springs (numbering 73 in the 1890s) were sheltered at this time and their water piped to reservoirs and bathhouses.

GOLDEN AGE OF THE SPA

Even with the magnitude of the improvements made at the end of the 19th century, climate and increased use took their toll on the bathhouses. Steam and minerals from the hot springs caused wood and plaster to deteriorate, and pipes and mechanical features became encrusted. Medical science was developing an understanding of the bacterial theory of illness, and Americans expected the government to provide clean and safe bathing facilities. Even with ever-increasing numbers of visitors and deteriorating building conditions, the bathhouse owners did not take it upon themselves to do more than superficial repairs. This was partially because bathhouses within the reservation were constructed and upgraded with private funds, operating as concession operations. The government provided only the leased use of land and the provision of thermal water for bathing purposes. For bathhouses constructed outside the reservation, the government's role was limited to water sales. Water-use fees were based upon the number of tubs within the respective bathhouse. In 1915, for example, twenty-five bathhouse water-use leases were in force, eleven of which were within the reservation. Altogether, the thermal springs fed almost 600 tubs at that time.

Expectations from patrons of updated equipment, trained attendants, proper sanitation and medical direction prompted the government to make a number of policy changes. A medical director, Harry Hallock, was appointed in 1909 to assist in providing a more scientific administration of bathhouse hygiene. The position lasted four years, and during this time common themes in the yearly reports were poor ventilation, mildew, ineffective equipment for monitoring water temperature and bathing time, contamination of water through open cooling tanks, and staff inefficiencies. In 1910, following an inspection of bathhouses that revealed filthy conditions and antiquated equipment, the Secretary of the Interior set up a new policy. There would be no lease renewals for individual bathhouses unless the applicant agreed to build a new, sanitary building that included all the essential, up-to-date equipment. No upper limit was put on bathhouse cost, but it was expected that new buildings would be large and luxurious with the most modern heating, plumbing, and ventilation as well as the most technologically advanced equipment and furnishings. Since all bathhouse leases were to expire between 1910 and 1920, this ruling affected all of Bathhouse Row.

To comply with Departmental policy, the bathhouses along the Row were systematically razed and most were replaced with new structures, starting with the Maurice and the Buckstaff in 1912. The Hale Bathhouse, the last and best built of the old Victorian bathhouses, was extensively remodeled, enlarged and reopened to the public in 1915. The Palace was removed and the new Fordyce rose in its place in 1915. The new Superior opened in 1916, the Ozark and the Quapaw in 1922, and the Lamar in 1923. Some of these new bathhouses were large, expensive and exquisitely appointed. Drawing heavily on European examples, they incorporated expanses of stained glass, paneling, and marble. Other new bathhouses were more modest in order to appeal to a less wealthy clientele. One of the key elements of this great federal spa was to serve all economic classes, including the indigent who were served at the Government Free Bathhouse. During construction of the bathhouses, new springs were discovered, others were rediscovered or renamed, and several were kept as display springs in the bathhouse basements.

Encouraged by its success in Europe, the government installed the Oertel Graduated Exercise Plan in 1914-15. This involved a self-guided booklet and 87 markers set in concrete and placed 300 feet apart along a trail. Markers were painted to match the appropriate color on the Oertel map: yellow for flat terrain, green for slight incline, blue for moderately steep, and red for very steep. The mountainside walks, many built of tufa, were upgraded and landscaped, and new walkways were added to accommodate the increasing numbers of visitors.

The creation of the National Park Service in 1916, placed the administration of the Hot Springs Reservation under a new agency. Director Stephen Mather took a strong personal interest in the Reservation, urging beautification on an elaborate scale. Mather, wanting to surpass the European resorts, invited noted landscape architect Jens Jensen from Chicago to help lay out some of the plantings – in particular colorful raised beds composed of thousands of spring-flowering bulbs. Jensen may also have been instrumental in the layout and installation of new electric lights along the promenade in front of the bathhouses, which increased

the appeal of evening walks. Fifteen ornamental steel cluster light standards, with five globes each, were erected and the area was nicknamed the "white way".

Reservation superintendents and departmental officials had been advocating continued comprehensive development for Hot Springs since the early 1900s. Unfortunately, no updated general development plan had been written for the Reservation when the first of the new bathhouses was built. Although the Department of the Interior did have to approve the bathhouse plans, and in fact made changes to some of them, much of the bathhouse design was left to the individual lessees. The large new structures encroached upon the buffer space behind them and adjacent to the foreground area, closing in the space visually and overshadowing the 1890s entrances. Concerned that much of the work was being done without proper direction, the Department secured a \$10,000 appropriation and employed Little Rock architects George R. Mann and Eugene John Stern in 1917 to draft a comprehensive overall plan for the Reservation.

Mann and Stern visualized an entire row of bathhouses in the soon-to-be-popular Spanish Renaissance Revival style, set among formal lawns, massed shrubbery, vine-covered walls, and surrounding trees. A backdrop of concert gardens, secluded spaces and walkways were also part of the general plan. At the same time, the city of Hot Springs was planning a gigantic sanitarium to be located several blocks southwest of the Reservation. According to one article, the slogan for this project was "Make Hot Springs the Greatest Health Resort in the World". The city plan, as well as the elaborate Mann and Stern scheme for the "Great American Spa" that would have cost \$2 million, were both doomed by the advent of World War I. Following the war, costs were boosted by inflation, materials were in short supply, and the Reservation proposal was shelved, never to be completed. Mann and Stern, however, had a significant impact upon Bathhouse Row. They designed a number of the new bathhouses and influenced features of others. A scaled back version of their comfort station design was implemented in the 1920s and the comprehensive plan, on file at the park, influenced subsequent planning on a subtle level.(40)

HOT SPRINGS NATIONAL PARK

The Hot Springs Reservation was formally designated a national park on March 4, 1921. A description of policy shifts and changes, especially those affecting landscaping, has been written and reworked in several previous reports. This section is an overview largely taken from those prior reports. For further details on the development of the park landscape, see the Bathhouse Row Adaptive Use Program from 1985 and the National Park Service Cultural Landscapes Inventory 2001.

During the fifteen years following the designation of Hot Springs Reservation as a national park, administrators slowly shifted their emphasis toward less formal landscaping, increase in recreation, and conservation of natural resources. Major landscaping changes along Bathhouse Row were triggered when the Arlington Hotel burned in 1923. Various groups provided suggestions and site plans for the now vacant area, the majority of which focused

on recreational use, noting its convenient location near the central business district. At the insistence of NPS Assistant Director Arno Cammerer, however, the area was kept as an open, grassy expanse. Additional magnolias were planted along the new sidewalk, aligned with the promenade in front of the bathhouses. White gravel walkways were laid out across the open lawn, and trees and flowering shrubs were planted along the inside of the walk. In 1931, a law was passed to preserve the area for park and landscaping purposes and to forbid its leasing for bathhouses or other structures. The lawn soon began to be used by various local groups for assemblies, pageants, holiday programs, and special ceremonies – a use that continues today.

Other changes to Bathhouse Row during this period were generally limited to the repair, replacement, or removal of various landscape features and structures. The electric lighting system and the sewer system were renovated. Spurred by criticism of the forced rebuilding of the bathhouses along the Row, the Park Service finally removed the old Government Free Bathhouse and built a new, modern public facility off Bathhouse Row in 1922.

To complete the renovations begun at the turn of the century, a new hot water collection system was finally constructed during the early 1930s. The centralized system included new reservoirs, piping, pumps, electrical equipment, meters, and manholes. This construction resulted in significant changes to the Bathhouse Row landscape. After being damaged by the heavy equipment, the Magnolia Promenade was redone and the adjacent curbs and gutters were replaced. A new lawn – complete with sprinkling system, shrubs, and trees – was installed on top of a reservoir constructed between the old pump house/office and the old Imperial Bathhouse. Oak, pine, cedar, gum, and hickory trees were also planted in a random pattern over the other new reservoirs on the mountainside, and shrubbery was set in strategic areas to conceal the exposed manholes.

Other changes that occurred at Hot Springs after 1921 were the result of broader influences and philosophies. Based largely on experience with the large western parks, NPS officials had gradually developed a conceptual picture of the national park as an area to be preserved in its natural state, free from the inroads of modern civilization. Harold Ickes, appointed Secretary of the Interior in 1933, was concerned that parks had been over-developed in the past and supported the philosophy of keeping national parks in their natural state from that point on. This led to several instances when the Park Service considered removing Hot Springs from its roster of National Parks.

Prior to Ickes appointment, visitation patterns had begun to change, spurred by the new Little Rock highway and auto camping. These trends were intensified by the Great Depression, which saw thousands of people flock to Hot Springs to take advantage of the free auto camp, bathhouse, and clinic. All of these changes combined to create an identity crisis for Hot Springs National Park. Despite the long history of federal ownership and formal “park” designation, the developments at Hot Springs began to be viewed as part of the “non-park” category. The 1930s concept, of what a national park should be, guided design of Hot Springs development during this period and for the next half century.

Early in the 1930s, a comprehensive general development plan was completed for the entire park. The plan proposed formal development of the west slope of Hot Springs Mountain, including a hot water cascade and a new promenade with large entrances on either end. The greenhouse, the old superintendent's house, and ancillary structures on the northern end of the row were to be removed. The private property across Central Avenue west of Bathhouse Row was to be purchased and returned to natural conditions more appropriate to a national park. Park boundaries would be expanded to include the balance of the upper slope of North, West, and Sugarloaf Mountains to give Hot Springs the space, character, and atmosphere of a "real national park." Due to the Depression, however, there were no funds available for land acquisition, so this part of the plan was postponed indefinitely. The postponement of plans for the hot water cascade was affected by two other factors as well. At this time an awareness was growing among geologists that the recharge area for the hot springs might be rather limited in areas relating more to the local aquifer than a deep geologic process, and would be adversely affected by overuse. Also, park management may have become uncomfortable with the idea of using a large amount of water for the cascades when the possibility existed that the bathing industry might once again blossom. If this occurred a situation might be created where the demand for water could not be met.

Planning for development of the lower portion of Hot Springs Mountain immediately behind the bathhouses was turned over to designer Charles Peterson, then a junior landscape architect in the NPS. Peterson's plan divided the area into two parts, each to be developed differently. The lower portion of Hot Springs Mountain, which extended from Reserve Avenue to Fountain Street, was to receive formal development in the construction of a "Grand Promenade," while the wooded slope above was to be helped back to its "natural" state as soon as possible. The rest of Bathhouse Row and the Magnolia Promenade were not substantially affected by the plan.

Construction of the Grand Promenade was begun in the early 1930s, but despite repeated requests from the superintendent, funding for the promenade was omitted from the 1935 and 1936 programs. The Grand Promenade project was hindered throughout the 1930s by numerous design changes and delays occasioned by a variety of engineering problems. About this same time, Department of Agriculture employee E.B. Meinecke wrote an outspoken report critical of past park development policies. While proposing his own ideas for yet another massive park development program, Meinecke urged that measures be taken to divorce the park from the city and restore the natural forest and native flora. There are also numerous indications that NPS personnel were concerned over the integrity of the area as a national park, and it is probable that this report created a stir among NPS officials, helping to make the future of the Grand Promenade uncertain. Nevertheless, work continued, beginning with the removal of the New Imperial Bathhouse and the old pump house/administration building to make way for the Reserve Street entrance to the promenade. The landscape plan for the new structure was correlated with the nearby promenade entrance design, and the building itself was designed to be compatible with the rest of Bathhouse Row. Work on the Grand Promenade was not completed until July 1958.

A great deal of construction and maintenance work was done along Bathhouse Row during the 1930s. A new sewer system was installed by the city of Hot Springs. The underground cable for the Bathhouse Row lighting system was replaced in 1938 and the overhead street-car lines on Central Avenue were removed about the same time. The main entrance columns, the Pagoda pavilion, and other architectural elements were sandblasted in the mid-1930s. The main entrance exedra walls and the fountains were removed and replaced by a curved row of shrubbery. The Stevens Spring fountain and the balustrade bandstand were removed.

During this same period, it was proposed that a well between the Fordyce and Quapaw Bathhouses be used to supply water for an elaborate glass and iron fountain so visitors could see a "natural" spring in action. After some debate, the idea of a formal fountain was dropped and designs were completed for a display spring between the Maurice and Fordyce Bathhouses. Two seeps were led together to run over small cascades of tufa masonry into a small pool and from there into the Hot Springs Creek arch. The temporary pool was to be removed when the promenade was completed, but became so popular with the public that new walks had to be installed to accommodate the crowds. It is still a Bathhouse Row attraction today.(41) (42)

BATHING EXPERIENCE AND MYTHS

One of the first written reports describing a visitor's experience at the hot springs was recorded by G.S. Featherstonhaugh in 1832. His published account stated that, "four wretched-looking log cabins, in one of which was a small store, contained all the accommodation that these springs offered to travelers." (43) In 1835 an advertisement was placed in the Gazette for a House of Entertainment, but services available were not specified.(44) It was mentioned by one traveler that a well stocked bar was available. Accommodations varied from one month to the next as crude, wooden facilities were erected, burned, and re-erected. In 1856 it was noted that there were seven bathhouses and a resident physician. Harry Baldwin was proud to announce in 1869 that the "New Bath House" was thoroughly modern. He boasted about the iron pipes throughout the building, the bathrooms furnished with oil cloth mats, and the dressing rooms with rugs and mirrors. Baldwin stated that he intended to "keep up with the Progress of the Age." (45)

Congress first addressed therapeutic bathing in 1872 by directing that free baths be provided to "the invalid poor." (46) The federal government continued to assume greater regulatory control of bathhouse facilities and operations, and in 1877 Superintendent Kelley established regulations for bathing. Rates were set by the government for the first time on May 3, 1883.⁴⁷ The first printed set of rules and regulations for Hot Springs bathhouses was published by the Government Printing Office in 1908.

Bathing in the Hot Springs was generally seen as a therapeutic experience, undertaken for the health benefits gained. Before regulation, travelers came to soak away their pains or to

take advantage of curative results reported to come from hot springs. This continued after government control was established as the government supported the view that thermal and mineral springs were quite effective in relieving and even curing a large list of complaints. Physicians and chemists came to the area to serve potential patients who were coming in large numbers to use the springs. The Superintendent's Annual Report in 1911 stated that Hot Springs was "the greatest health resort in all the world, and proved beyond doubt that the sick and afflicted from all over the known universe looked upon these thermal waters as a Mecca, and a panacea for nearly all the ills the human flesh is heir to."(48)

The idea of using the springs for simple recreation was not often expressed. As government regulation developed, it became necessary to have a written prescription from a doctor to gain access to the baths. Any visitor, however, could obtain a prescription to provide relief from life's stresses, relaxation being considered a valid reason for taking the cure. Prescriptions designated the number of visits needed, the length of each visit, and other factors. Regardless of the actual medical condition or lack thereof, it apparently was not difficult to get a prescription for bathing. There were many qualified physicians providing services over the years, but there were also doctors that worked in conjunction with "drummers" to provide business for the competing bathhouses. "Drummers", whose purpose was to drum up business, intercepted visitors on the trains, at the train and stage stations, and at other advantageous locations to convince visitors to use a particular facility. Numerous regulations were passed, by both the federal and local authorities, to end this practice. From about 1880 through 1915, the city and Hot Springs Reservation fought drumming with a mixture of weapons: city ordinances, reservation regulations, train inspectors, and a registered board of physicians regulated by the federal government. The coup de grace was a 1916 grand jury indictment of twenty men, including the mayor of Hot Springs, involved in drumming. After that, drumming became a rarity instead of the norm.

There were many activities available to visitors in addition to bathing, so many people came to Hot Springs for the social experience. Within the bathhouses were gymnasiums, hair dressers and barbers, card rooms, and eventually music programs. Bathers were also encouraged to take advantage of the numerous trails and vistas within the Reservation if they were able. Outside the reservation, gambling and horse racing were available for a number of years as well as dining, dancing, bars, and brothels. The Maurice-Palace Bathhouse, built in 1878-79, was only used as a bathhouse until 1880 when it became the Monarch Saloon and Gambling House.(49)

Visitors to the bathhouses heard numerous legends about the Hot Springs, their benefits, and their use through the years. In 1880, a compilation of Indian myths was written by J.W. Buel of St. Louis on behalf of the Iron Mountain Railroad. It is likely that he created many of the stories himself to promote travel to Hot Springs via this rail line. Titles, which largely reflect 19th century taste, include The Mysterious Cave, Teponah's Fatal Wooing, The Old Indian's Vision, and more. Many of the literary flourishes Buel included were removed over the years, as more modern listeners would recognize their non-Native American origins.(50)

The myth of "neutral ground" was a common theme in stories that were associated with a variety of springs. The idea that all animosity was set aside when various Indian tribes met at natural springs was a romantic idea appreciated by Victorian era visitors along with some of the earliest Euro-American visitors. At Hot Springs this myth takes the form of the "Valley of Peace." This idea was first published in a letter in 1804, the author's source being Major John Ellis. The letter stated: "The Indians have, time immemorial, resorted to [the hot springs] on account of their medicinal virtues. The ground around them is called by the aborigines, the land of peace. Hostile tribes, while there, remain at harmony with each other."⁽⁵¹⁾ A plaque on the Fordyce Bathhouse perpetuated this idea stating: "THE FIRST WHITE SETTLERS REPORTED THAT THE INDIAN TRIBES LAID ASIDE ALL FEUDS WHEN THEY ARRIVED HERE AND CALLED THIS PLACE THE VALLEY OF PEACE." Neutral ground may have been a reality at some locations in the U.S., but there are no facts to substantiate this at Hot Springs. By the time the first Euro-American settlers were arriving in the vicinity of Hot Springs, Native American tribes were being forced to migrate westward. For this reason, members of different tribes were occasionally seen visiting Hot Springs simultaneously. None were in a position to be territorial, and their lack of animosity toward other tribes may have furthered the myth.

Across the country in Manitou Springs, Colorado it was written in *The Springs of Manitou* that, "The Indians made their pilgrimages to the springs, recognizing the spot as neutral ground where they could heal their wounds of battle and cure their sick with life-giving waters."⁽⁵²⁾ It may be coincidental that William G. Maurice was "the president of the Manitou Baths at Manitou, Colorado"⁽⁵³⁾ as well as being involved with the Red Springs and Bathhouse at Saratoga, New York and, of course, the Maurice Bathhouse in Hot Springs. Common themes may have been presented by Maurice in his various advertisements.

Another legend that persisted in materials advertising Hot Springs was the legend of Quapaw Cave. Early in 1921, as excavation was taking place for the new Quapaw Bathhouse, workmen discovered what they called a "cave" containing a hot spring, with Indian relics scattered on the floor of the "cave". It was in reality a small pocket in the tufa rock, quite common in this area. Artifacts were described as tufa-encrusted projectile points and turtle shells. Soon, however, bathhouse brochures were making much of the Quapaw gods of the bath found in an old Indian cave. Early bathhouse owners were entrepreneurs alert to any circumstance that would distinguish their bathhouse from others. A display of little ceramic gods, actually Hopi figures purchased from Arizona, created a great deal of interest as their story was interwoven with the discovery of the pocket cave and with popular local legends.⁽⁵⁴⁾

The bather's experience became enhanced as licensed bathing attendants and masseuses, as well as other professional services, became available in the 1920s and 1930s. In September of 1937, President Truman wrote to his daughter Margaret from Hot Springs:

Your dad's in a hospital but not sick --- to keep from getting sick. They are taking me over the hurdles though.

Kiss Mama and you can write me at Army & Navy Hospital Hot Springs.(55)

1946 was the record year for visitation to Hot Springs National Park baths. In the pay bathhouses, 952,467 baths were given. An additional 25,000 free baths were given at the free bathhouse, at Levi Hospital, and as complimentary services at pay bathhouses.(56) The total number of bathers (both Park and town) reached its peak in 1947 after the conclusion of World War II. Wartime travel restrictions were lifted bringing the general public to the bathhouses, as well as bringing back former military personnel who had experienced thermal waters during the War or during rehabilitation. That year saw a total of 1,052,000 baths given in Hot Springs overall, with 649,270 baths given on Bathhouse Row.

Based on the history of Bathhouse Row to this point, it is recommended that the period of significance cover the time period beginning with construction of the earliest "new" bathhouse and ending after the peak year of business. The recommended period of significance, therefore, is 1911-1947.

THE DECLINE

Following the 1947 peak in visitors, a steady decline began. Contributing factors were medical advances in a variety of treatments and particularly the advent of antibiotics, which sharply cut the number of visitors seeking help for venereal disease at the Free Bathhouse. By 1957, the Free Bathhouse was converted to a physical medicine facility, and indigent bathers were referred to the other bathhouses where their fees were paid by the government. In addition, the economics of this labor-intensive industry began to force the bathhouses to close. The Fordyce closed in 1962, and the Maurice closed in 1974. Beginning in 1974, the next eleven years saw the closure of the Superior, Hale, Ozark, Quapaw, and Lamar bathhouses. By 1984, the total number of baths given in Hot Springs was 167,910. 44,130 of which were administered by the remaining two bathhouses on Bathhouse Row. In 1985, only the Buckstaff remained in operation as a traditional bathhouse. Four hotels outside the park boundaries – Arlington, Majestic, Downtowner, and Hilton – as well as the Leo N. Levi Hospital had bathing facilities that continued to be used and drew water from the hot springs.

After World War II, the trend toward increased recreational use of the area continued. Proposals for completion of the promenade were justified on the grounds that this would add to the recreational possibilities of the park. In addition, after over fifteen years of negotiations, the old power poles belonging to the Hot Springs Power Company were removed from Bathhouse Row during the late 1940s. A new centralized cooling system was finally completed in 1950. It was placed in the southern part of Arlington Lawn near the tufa cliffs and involved a great deal of ground disturbance. Following construction, the antiquated cooling towers belonging to the individual bathhouses, some dating from the beginning of the century, were finally removed. The foundation of the Superior Bathhouse cooling tower still remains behind the bathhouse.

During the 1950s, the proposals for work on the Grand Promenade were revived, additional changes were made in the plans, and the project was finally completed in 1959. For the most part, a simplified version of the 1930s and 1940s alignment plans was used. Proposals were made at various times during this period to improve the rear view of the bathhouses as seen from the new Grand Promenade. These plans were never implemented and the vegetation along the Promenade was simply allowed to grow, closing off the view in all but a few areas. The completion of the Grand Promenade came too late to fulfill the purpose for which it was designed. By the time Bathhouse Row's carefully planned landscape and architectural scheme was complete, society's needs had changed.

REVITALIZATION PLAN

Even as the numbers of visitors continued to decline, the historical significance of Bathhouse Row and its structures was recognized. In 1973, Bathhouse Row and its environs were nominated as an historic district. The U.S. Geological Survey completed research on the hydrology of the thermal springs, and the Arkansas Archeological Survey carried out a limited archaeological reconnaissance of the park. In November of 1973, a Native American and settlers cultural exhibit was set up at the top of Hot Springs Mountain. In November of 1974, Bathhouse Row was placed on the National Register of Historic Places. It became a National Historic Landmark District in 1987. As late as 1978, a report from the National Park Service indicated that the intention was to continue using the structures on Bathhouse Row for traditional bathing businesses.

The decline in visitors continued until the early 1980s when the number of baths per year stabilized around 145,000. At this point, the Hot Springs Cascade finally began operating. Throughout the 1980s, local citizens and the National Park Service began exploring ways to return the bathhouses and the Bathhouse Row landscape to the splendor, if not the function, of Hot Springs in its heyday. This resulted in a drive to return the exteriors of the buildings and the exterior landscape features to their original grandeur in hopes of attracting private investment. Attempts were made to lease the buildings for adaptive re-use, but this was unsuccessful. The National Park Service restored the Fordyce, and in May of 1989 opened it as the Visitor Center for the Hot Springs National Park. Since 1989, the Park Service has undertaken to maintain and rehabilitate the structures on Bathhouse Row with the aim of again attempting to lease the bathhouses for adaptive re-use. At the present time, major preservation work is underway, hopefully to be followed by leasing the buildings.

DEVELOPMENTAL HISTORY END NOTES

¹ Jonathan Paul de Vierville, [spas about.com/library](http://spas.about.com/library), 2003.

² History of Spas/Hot Tubs, www.HTTG.com/news_history, 2003.

³ www.hottubsdirectory.com, 2003

⁴ Willa Reinhard, "Ahhhhh...There's the Rub," *Preservation: The Magazine of the National Trust for Historic Preservation*, Nov/Dec 2003, 53.

⁵ Frank Fossett, *Colorado: Its Gold and Silver Mines, Farms and Stock Ranges, and Health and Pleasure Resorts. Tourist's Guide to the Rocky Mountains* (New York: C. G. Crawford, 1880), 107.

⁶ Richard Kovacs, M.D., "Springs of Health," 1939, 4.

⁷ Richard Kovacs, "American Spas," *Medical Record* 153 (2 April 1941): 254.

⁸ Ellen K. Coughlin, "16th Century de Soto Expedition Offers Scholars a Look at Earliest Encounters Between 2 Civilizations," *The Chronicle of Higher Education*, A8.

⁹ "Caddo Indians in Montgomery County, AR," www.geocities.com, 2003.

¹⁰ *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*, U.S. Department of the Interior, National Park Service (June 1985): 4.

¹¹ "Grant County History – Discovery: 1541," www.rootsweb.com, 2003.

¹² Charles Hudson, *Knights of Spain, Warriors of the Sun: Hernando de Soto and the South's Ancient Chiefdoms* (Athens, Georgia: The University of Georgia Press, 1997), 329-330.

¹³ Ellen K. Coughlin, A10-11.

¹⁴ "The Forgotten Expedition of Dunbar and Hunter," www.nps.gov/hosp/expanded/text.

¹⁵ Leonard Smith, Chairman, Quapaw Tribe of Oklahoma, personal communication with Mark Blaeuer, 28 August 1996.

¹⁶ Velma Seamster Nieberding, *The Quapaws (Those who went downstream)*, (Miami, Oklahoma: Dixons, Inc., 1976), 9, 49.

¹⁷ Mark Blaeuer, "Didn't All the Indians Come Here: Separating Fact From Fiction At Hot Springs National Park" [unpublished draft], 2003, as referenced from Edwin James.

¹⁸ Sharon Shugart, Museum Technician, "The Hot Springs of Arkansas Through The Years: A Chronology of Hot Springs Events," Hot Springs National Park, Department of the Interior, National Park Service, 2000, 2.

¹⁹ *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*, 4.

²⁰ Sharon Shugart, "A Chronology of Hot Springs Events," 2-3.

²¹ *Ibid.*, 7.

²² "The History of the Bathing Industry in Hot Springs," asms.k12.ar.us, 2003.

- ²³ Francis J. Scully, *Hot Springs, Arkansas and Hot Springs National Park* (Little: Pioneer Press, 1966), 50.
- ²⁴ Sharon Shugart, "A Chronology of Hot Springs Events," 4-6.
- ²⁵ Dee Brown, *The American Spa: Hot Springs, Arkansas* (Little Rock: Rose Publishing Company, 1982), 17, 19-20.
- ²⁶ Francis J. Scully, 148.
- ²⁷ Creek Arch Hearings, 1884, p. 197.
- ²⁸ Ibid., p. 201.
- ²⁹ Francis J. Scully, 7.
- ³⁰ *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*, 5.
- ³¹ F.C. Stearns, letter to his mother, 3/16/1878.
- ³² *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*, 5.
- ³³ *General Management Plan: Development Concept Plan*, Hot Springs National Park, U.S. Department of the Interior, National Park Service (June 1986): 64.
- ³⁴ Letter from Capt. Thomas Handbury to the Secretary of the Interior, May 9, 1882.
- ³⁵ "Abstract – Testimony Taken Before The Committee On Expenditures In The Interior Department Relative To: Certain things connected with Government property at Hot Springs, Ark., 17 June 1884, 1.
- ³⁶ *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*, 6.
- ³⁷ M.S. Bedinger, et al, *The Waters of Hot Springs National Park, Arkansas – Their Origin, Nature, and Management*, U.S. Department of the Interior Geological Survey, prepared in cooperation with the National Park Service, Little Rock, Arkansas, 1974, 1978.
- ³⁸ Letter to Messrs. F.L. Olmsted & Co., 29 June 1892, from Robt. R. Stevens, 1st Lieut., 6th Inftry, U.S.A. In charge of Hot Springs Improvements.
- ³⁹ *National Park Service Cultural Landscapes Inventory 2001: Bath House Row, Hot Springs National Park*, Part 1, 11.
- ⁴⁰ *National Park Service Cultural Landscapes Inventory 2001: Bath House Row, Hot Springs National Park*, Part 2, 1-2.
- ⁴¹ *Bathhouse Row Adaptive Use Program – The Bathhouse Row Landscape: Technical Report 1*.
- ⁴² *Cultural Landscapes Inventory 2001*.

- ⁴³ Sharon Shugart, "A Chronology of Hot Springs Events," 3. Reference to Featherstonhaugh, "Excursion through the Slave States, Volume II," 1844, 109.
- ⁴⁴ *Arkansas Gazette*, Little Rock, Arkansas, April 7, 1835.
- ⁴⁵ Francis J. Scully, *Hot Springs, Arkansas and Hot Springs National Park*, 51.
- ⁴⁶ *General Management Plan: Development Concept Plan*, 64.
- ⁴⁷ Cron, "The Hot Springs of Ouachita," unpublished manuscript, 1946, 201.
- ⁴⁸ Superintendent's Annual Report, 1911.
- ⁴⁹ Sharon Shugart, "A Chronology of Hot Springs Events," 8.
- ⁵⁰ Mark Blaeuer, "Didn't All The Indians Come Here."
- ⁵¹ "A Description of the Hot Springs and Volcanic Appearances in the Country Adjoining the River Ouachitta, in Louisiana: Communicated in a Letter from Joseph Macrery, M.D. of Natchez to Dr. Miller," *New York Medical Repository*, 1806.
- ⁵² Bettie Marie Daniels and Virginia McConnell, *The Springs of Manitou* (Manitou Springs, Colorado: The Manitou Historical Society, 1973), 8.
- ⁵³ "William G. Maurice," *The Centennial History of Arkansas, Volume 2*, edited by Dallas T. Herndon (Chicago and Little Rock: The S.J. Clarke Publishing Company, 1922), 306.
- ⁵⁴ Sharon Shugart, "The Legend of the Quapaw Cave, Reexamined," unpublished paper, August 13, 1997.
- ⁵⁵ Full-text Letter, dated September 14, 1937, from Harry Truman to his daughter Margaret, Harry S. Truman Presidential Museum & Library.
- ⁵⁶ Sharon Shugart, "A Chronology of Hot Springs Events," 38.

CHRONOLOGY OF DEVELOPMENT AND USE

INTRODUCTION

The Lamar Bathhouse stands at the south end of Bathhouse Row, a collection of eight historic bathhouses built between 1911 and 1923. Bathhouse Row is a focal point of Hot Springs National Park and lies within the center of downtown Hot Springs. This development began as concessioner-constructed and operated bathhouses with the government providing the land and required utility linkage. As a premier example of the early 20th century American spa movement, the area was entered in the National Register of Historic Places on November 13, 1974. Only one bathhouse still operates as such, and the Lamar Bathhouse, along with others, sits vacant. The proposed rehabilitation of the building will allow the Park Service to use the building for approved adaptive re-use with the hope that this action will save the structure. The following history will outline the significant events in the lifespan of the two Lamar Bathhouses that were constructed on Site 2 of Bathhouse Row.

EARLY BATHHOUSE EVENTS

Events on the Hot Springs Reservation began having a direct affect on the future Lamar Bathhouse about the time of the 1878 fire. After this fire, which destroyed most of Bathhouse Row, the Secretary of the Interior initially declared a moratorium on leasing and reconstruction. The moratorium was lifted in 1880, and by 1882 a military complex was planned that would extend from the site of the Army and Navy General Hospital, down to Central Avenue, and terminate with a new bathhouse near the Reservation's southwest corner.¹ This would have included the future Lamar Bathhouse site, but fortunately for the Lamar, the plan never came to fruition. Following the collapse of this plan, construction of additional bathhouses at the south end of the row was further delayed by probable political favoritism. Lessees of the existing bathhouses, including Capt. Maurice and Col. Fordyce, were well connected politically, and it would have been in their best interest to limit the number of bathhouses. In addition, a poor thermal water delivery system and the construction of reservoirs solely at the north end² would have made building on the south end less attractive to investors. Apparently, by the time the Army-Navy Hospital was completed in 1887, public demand called for additional bathhouses and three were completed in 1888, including the first Lamar built on Site 2 near the south end of the Reservation.

The U.S. Congress passed an act on March 3, 1891 to regulate the granting of leases at Hot Springs Reservation. The first Lamar Bathhouse lease based on this new legislation was signed on January 1, 1892 by John W. Noble, Secretary of the Interior and Morris C. Tombler of Hot Springs. This lease applied to "Bath House Site Number Two (2) on the plan submitted to the Department by the Superindendant [sic] of Hot Springs Reservation and filed in the Department of the Interior May 12, 1891."³ The lease covered a five-year period, setting a rate of \$30 per tub per year to be paid in advance in quarterly installments. The lessee agreed "to keep and maintain the said Lamar bath-house and premises continu-

1B-1: First Lamar Bathhouse on site of current Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1910.



ously in complete repair and good order, with Forty (40) bath-tubs and all the necessary appliances for providing baths to the public, with a sufficient number of courteous and skilled attendants and servants and further, in all particulars, as a first class bathing-house.”⁴ The government set the rates to be charged by the bathhouses, and these rates were required to be posted continuously in a conspicuous place. The individual bathhouses could not change the rates charged or make any agreements with other bathhouses regarding rates.

The government was quite specific about its requirements for bathhouse furnishings and fittings. The following was stated in the lease:

[The lessee] shall forthwith furnish said bath-house with new and substantial furniture and carpets, with perfect porcelain lined bath-tubs (with marble partitions and slabs), and the best and most modern style of pipes, faucets, and appointments for bathing, and shall renew, with substantial material, all the decayed and defective portions of the building, replacing decayed or wooden parts, where practicable, with iron, stone, or concrete, and shall render said building practically fire-proof; ... ⁵

The lease further stated that wooden cooling tanks should be replaced with substantial iron tanks; safe sewerage and drainage should be provided; and, in a handwritten addition, vapor baths were required to be metal lined or constructed of marble – all at the lessee’s expense. A final stipulation declared that the lessee “will not employ any agent or drummer to solicit patronage for said Bath House.”⁶ When this lease expired, an almost identical lease was signed on February 24, 1897, which covered the next twenty-year period.

MODERNIZING BATHHOUSE ROW

In 1910, the Secretary of the Interior established a new policy that would insure that all bathhouses provided the most up-to-date facilities. No leases would be renewed on individual bathhouses unless applicants agreed to build a new, sanitary building with the most technologically advanced equipment and luxurious surroundings. Bathhouses along Bathhouse Row were systematically torn down and replaced with new structures, beginning with the Maurice and Buckstaff in 1912. This process was well underway by 1917 when the Lamar lease was to expire.

On November 20, 1916, a reply was written to Messrs. Tombler and Buckstaff, Lessees of the Lamar Bathhouse, regarding a request for extension of their lease. They were granted permission to continue operation under the conditions of their current lease until July 1, 1917. The letter stated that by that date they would "be required to submit to the Department plans and specifications for the construction of a new bathhouse on said bathhouse site, along the lines of instructions given in this respect to the other bathhouse lessees on the permanent reservation."⁷ The requirement was fulfilled at some point in 1917 as indicated in the next available correspondence dated April 15, 1918. In this letter, Superintendent W.P. Parks wrote:

Referring to your plans and specifications for the construction of the new Lamar Bathhouse, I am in receipt of a letter from the Service dated the 9th instant advising that a reconsideration of the plans by the architect and lessees is required, and enclosing memorandum copies covering fourteen items of objection, a copy of which is enclosed herewith."⁸

Further extensions on the lease were apparently granted while the architect and lessees worked out details of the design for the new building. By March of 1919, construction bids had been requested and were being received. A response came from Selden-Breck Construction Co. of St. Louis on March 28, 1919 stating the following:

We wired you that our estimate on the Lamar Bath House would run about \$123,000.00, not including plumbing and heating.

These last two items when added to the balance of the estimate will bring the total to approximately, \$156,500.00.⁹

During this time period while numerous extensions were being granted by the National Park Service, the economy of Hot Springs and the South in general was quite depressed. This situation probably contributed to the delays in starting construction. A letter from Stephen Mather, Director of the Park Service alluded to this situation.

On June 23, 1919, with approval of the Department I addressed a letter to W.T.S. Curtis, attorney at law, in this city, who represented the lessees of the Lamar

Bathhouse, ... in which permission was granted to operate the bathhouse without interruption until June 1, 1920. The reasons and conditions leading to this action were set forth in detail therein.

Such conditions have not changed in any material respect for the better since that date; and upon consideration of the showing made by the lessees, and upon their application in the premises, extension of the operation of the bathhouse is hereby granted until June 1, 1921, upon the same terms as are now in effect, upon which date the hot water supply will be cut off. The lessees must then proceed immediately to remove the present structure and rebuild in accordance with approved plans, or relinquish their claim for renewal of lease.

In consideration of this action, the lessees must present to the Service not later than December 31, 1920, a definite showing in affidavit form of their progress in raising funds with which to rebuild, and of their actual financial condition, to be supported by such assurances of financial support as are available from their records; together with a definite statement of their plans respecting commencement of rebuilding.¹⁰

A letter of acceptance was required, and was written by M.C. Tombler to Superintendent Parks on June 11, 1920 in behalf of the Lamar Bathhouse lessees. By April 1921, however, the required affidavit, giving the financial condition of the lessees with assurances of financial support and a definite statement of plans for rebuilding, had not been received by the government. Stephen Mather wrote to Supt. Parks on April 25, 1921 saying that no further extension would be granted and that the hot water to the bathhouse should be cut off on June 1st. Supt. Parks requested that Tombler inform his office at his earliest convenience of the lessees intentions to rebuild and renew the lease.¹¹ Correspondence is not available describing what occurred on June 1, 1921, but apparently the lessees still retained the option of rebuilding as indicated in the following letter from Tombler to Selden Breck Construction Co.

Do you think the labor situation and market will be more encouraging as to building the first of the year than at the present time? We have been standing off the Interior Department the last two years, on account of the high prices, but now they insist on our making some showing towards a start on our new building.

You have our plans filed in your office. ... I would appreciate if you could give me an idea, approximately, the difference in figures from the time of your letter up to the present time, and if you still would like to submit a bid, when we are prepared to call on you.¹²

M.C. Tombler attempted at this point to get a loan from Security Bank in Hot Springs to proceed with the new construction. The bank president replied that under normal conditions he would have been pleased to provide a loan, but in the summer of 1921 no large loans were possible. He concluded that by January of 1922 the situation might "brighten" and he would

then reconsider the matter.¹³ Tombler wrote to Stephen Mather, on behalf of himself and Buckstaff, to explain the situation as it stood in July of 1921.

Replying to your letter of May 24th, 1921, would state that it seems impossible at the present time to raise the necessary amount to rebuild. On February 21st, Mr. F. Prang, who expected to furnish from 40 to 50 thousand dollars as his part when we decided to re-build, died; and during my visit in Hot Springs in June I found it impossible to get my friends interested in a Stock Company as they all seemed panicky and afraid to make any investments. They expressed themselves willing later on if conditions changed to take a liberal amount of stock. In ordinary times I could borrow \$75,000.00 on my holdings in Hot Springs and in California, but now can hardly get the banks to loan me enough to keep up my business.

For that reason I have not called on the architect to submit any changes on our present plans filed in your office. If we cannot complete an organization or raise the money myself by December first, 1921, we will make no request for another extension and let the property revert to the Interior Department.¹⁴

Arno B. Cammerer, Acting Director replied for Stephen Mather saying that, as the lessees had been notified in June, there would be an extension on the Lamar lease to December 1, 1921 if all the requested records were received. Cammerer concluded by saying:

In accordance therewith, the Service will expect before December 1, 1921 a showing from you that you have made definite arrangements for the rebuilding of the Lamar bathhouse, and that, failing such showing, the water will be shut off on that date. This showing, the Service must insist, shall include modified plans of said bathhouse for the approval of the Department.¹⁵

Tombler and Buckstaff were apparently able to move forward with plans on construction of the new bathhouse in the months following the July correspondence. Tombler wrote to W.P. Parks, Superintendent of Hot Springs, on November 25, 1921 with the following information.

The filing of the heating and ventilating plans completes all tracings for the new Lamar Bath House, and takes the place of the ones now filed in you office. We would appreciate if the Service would print a set from the tracings before returning...

As soon as the plans are completed, we will be prepared to let the contract and commence work on the new House.¹⁶

BUILDING THE NEW LAMAR BATHHOUSE

The original plans for the new Lamar Bathhouse were completed sometime in 1917, and the Park Service requested a number of modifications shortly after receiving the drawings.

Records are not available to describe alterations that were made to the drawings, but shortly thereafter, the construction project was put on hold and was not put back into motion until 1922. On April 19, 1922, Sidney M. Nutt, in behalf of the Lamar Bathhouse Co., sent a letter to Roberts & Schwebke, Architects.

Gentlemen: We agree that you may undertake to furnish us plans and specifications for the construction of a bath house on the site formerly occupied by the Lamar Bath House on the United States Hot Springs Reservation, said bath house to cost not exceeding the sum of \$90,000.00, exclusive of hot and cold water tanks. ...

The plans and specifications to be furnished us as speedily as possible and not to exceed 20 days from the date hereof.¹⁷

It is likely that Harry C. Schwebke prepared the original set of drawings in 1917, but documentation confirming this is not available. Schwebke's office had been located in Hot Springs in 1916 when he prepared drawings for the new Superior Bathhouse, but by 1922 his office was located in Claremore, Oklahoma. In May of 1922, Schwebke wrote to Sidney Nutt asking that "all of the blue prints of the heating and ventilating of the old plans" be called in so that there was no confusion in the work.¹⁸ Another item indicated that the 1922 plans were either based on the 1917 plans or were actually the same plans. This was the fact that a request for bids went out prior to March 1922, before the April request was sent to Schwebke's firm for plans and specifications. Responses were received in March as indicated by a letter received from Ault and Burden, General Contractors from Little Rock with the following bid.

We propose to furnish labor and material and build the two-story and basement bath house for the Lamar Bath House Company, on the site known as the "Old Lamar Bath House" on the Government Reservation in the City of Hot Springs, Arkansas, according to revised plans and specifications and addenda to specifications prepared by Roberts and Schwebke, Architects, of Claremore, Oklahoma, for the sum of \$88580.00.¹⁹

Changes were made to the building plans and a week later another bid came from the same contractor for the amount of \$66,000.00.²⁰ Ultimately, even with a higher bid, the job was awarded to John R. Fordyce, Engineer, Inc. Fordyce's original bid of \$85,558²¹ was reduced by \$14,000 to accommodate changes, leaving a final bid of \$71,558.²² This bid did not include plumbing, heating, ventilating or electrical. Engineer, Inc. stated that a more thorough review of the changes might lead to further reductions in the final cost.

Original specifications, provided by Roberts & Schwebke, called for a poured concrete structure with reinforcing steel. Floors, walls, columns, beams and staircases were all to be poured concrete. Details included that the "first and second floor and ceiling slab shall be first set with 5 x 12 x 12 inch well burned clay tile set 16 inch center leaving a 4 inch space for concrete joist and reinforced in each joist as shown on reinforcing plan with round steel



1B-2: Current Lamar Bathhouse Structure. Photo from the archives at Hot Springs National Park, c. 1938.

(See Photo 1C-20.)

bars.”²³ This type of construction was described in Kidder-Parker Architects’ and Builders’ Handbook. Under a section on Reinforced-Concrete Construction, Combined Floor Systems were described saying, “reinforced concrete is largely used in floor systems of all fire-resistant buildings. ... Ribbed floors are directly developed from the concrete floor slab and treated as a series of parallel T beams. ... For buildings supporting light and medium live loads, such as hotels, hospitals, and apartment-houses, some system comprising reinforced-concrete ribs cast between either steel or wooden forms, or filler blocks, usually proves economical. ... Terra-cotta blocks also make excellent fillers; as the blocks are 12 in square and the ribs normally 5 in wide.”²⁴

The exterior walls of the bathhouse were to be brick “with regular header bonds every 7th course and raked mortar joints left rough to receive stucco finish.”²⁵ All exterior walls except the rear wall were to be covered with two coats of stucco and final paste coat of Medusa applied with brush. The brick cornices were also to be finished with stucco and run with moulds. Exterior woodwork was to be painted with three coats of Collier’s white lead in linseed oil. All exposed sheet metal was to be painted with two coats of Princess mineral paint in linseed oil, with a small portion of Japan drier. The roof deck was to be covered “with 3 ply built up asbestos roof ... mopped on with full coats of asphalt cement, [and] extend 6 inches up parapet wall.”²⁶ All double hung and casement window frames and sashes were to be of clear cypress, as were the door frames. The doors themselves, both exterior and interior, were also to be cypress, except the front doors. All vapor baths were to have metal doors constructed of 14-ounce nickel plated copper.

Cypress was again specified for dressing room panels, stair railings, and interior trim. Interior walls were to be plastered with Acme or Agitite cement plaster. Floors in the sun parlor, lobby and front platform, and two bath halls were to be finished with “1 inch white hexagon mosaic tile.”²⁷ There were to be no colored borders on the main floors. The sun room and lobby were to have wainscoting of 3 x 6 inch white glazed tile. This same tile was to be used on portions of the bathroom walls. Light gray Tennessee marble was specified for “bath and vapor room partitions, showers and head vapors counter base and rails.”²⁸ The same marble was to be used for the lobby counter and rail. Interior woodwork to be “stained

one coat of Standard Varnish Works Keystone dark mahogany, oil stain ... [finished with] one coat standard varnish"²⁹ included doors, dressing room stalls, newels, handrails and balusters. All other woodwork was to be painted first with one coat of Carter's white lead in linseed oil and finished with Satinette glass white enamel. Walls were to be painted with three coats of Keystone paint, the final coat to have tints or colors selected by owner.

Plumbing was a separate bid, and specifications called for all bath tubs to be J.L. Mott solid porcelain. Exposed fittings on first and second floors were to be heavy nickel plated fittings. Specifications called for Sitz Baths to be manufactured by Mott Company fitted with brass fixtures.

Records show that excavation for the new bathhouse was underway in May 1922.³⁰ In early June the foundation was finished and was ready for the basement slab.³¹ Change orders came through regularly, some affecting the interior layout and materials, and others changing the exterior. On July 17 a change order stated:

1. Omit all stucco except on walls of sun parlor and all places where cut stone is shown on plans.
2. Finish front and sides back to offset in Flemish bond with cut joints using colored mortar...
3. Balance of side walls and rear walls to be finished with brick using a common bond with header course every seventh row, rough cut joints, no color, no selection of shades of brick.
4. Above changes apply only above first floor level.³²

On August 23, interior changes were requested that affected the tile work.

Place blue dots in bathhouse floor
Place border in lobby and sun room
Place design in lobby floor³³

It was decided shortly thereafter to extend the designed floor tiles into the sun room as well. The architect, H.C. Schwebke, inspected the first floor construction on September 16 with the recommendation that the roof be placed as soon as possible.³⁴ By October 15 "trimming hardware" was being dealt with, and by December the "cashier counter" was being completed.

As the deadline for completion drew nearer, there was still much finish work to be done and delays grew in importance. Sidney M. Frink, the Superintendent of Construction for the Lamar Bath House Company, wrote to John Fordyce on December 5th.

This is to officially notify you that your sub-contractor, Mr. Donnelly, doing the plaster work has delayed so long that the owners of the Lamar Bath House company are entirely dissatisfied...

Also to inform you that the character of work being done by Mr. Donnelly in the woman's cooling room and hot pack room is unworkman-like and entirely unsatisfactory.³⁵

A second letter, sent to H.C. Schwebke concluded that: "Work on the job is practically at a stand still for want of Plasterers. Don't look like we will get in the new house before March or April."³⁶ This was unwelcome news for all concerned.

By mid-February, S.M. Frink wrote to J.R. Fordyce telling him that certain items "must be done in order that we may open the house at the very earliest possible date."³⁷ H.C. Schwebke, the building architect, carried out a building inspection on February 26, and he also sent his observations and ultimatums to John Fordyce.

On the 2-23-23 I gave the Lamar Bath house, Hot Springs, a thorough inspection and while I am well pleased with the exterior I am very much disappointed with the workmanship on the interior. ...

I give you this final notice that you shall proceed to finish [with] competent workmen and proper material ... as per contract, plans and specifications. ... [If this fails] Then the finishing and completion of your contract shall be taken out of the hands of John R. Fordyce Eng. Inc. and proper material and competent men will be employed and the expense of same plus expense of delays shall be charged against your contract.³⁸

As problems were dealt with and work continued through the month of March, letters flowed freely between Fordyce and representatives of the Lamar Bath House Company each assigning responsibility to the other. Finally on April 16, 1923, the new Lamar Bathhouse opened for business. As with many new buildings, a myriad of problems were left for the contractors to resolve, ranging from a variety of leaks to improper painting to an unfinished linen chute and more. It appears that even with some issues remaining with the building, business got off to a good start in April and proceeded at a steady pace.

BATHHOUSE BUSINESS

On January 30, 1923, an agreement was signed between E.C. Finney, First Assistant Secretary of the Interior and Sidney M. Nutt for the Lamar Bath House Company to cover a twenty-year period. The agreement covered the lease of "bath house site No. 2" and "sufficient hot water from said hot springs for twenty-six (26) tubs."³⁹ The agreement was signed with the understanding that a "modern first-class bath house" would be erected on the site at the cost of approximately \$120,000, and would be completed "not later than March 1, 1923."⁴⁰ The lease was not to be finally executed until the bathhouse was completed and opened to the public. The March 1st date was an extension to the agreement made in 1922 that required the bathhouse to be completed by January 1st.

On April 30, 1923, after being open for about two weeks, J.F. Manier, Secretary La Mar Bath House Company received a letter, which said in part:

Referring to your application for lease on Bathhouse Site No. 2 on the Hot Springs National Park for a period of twenty years, and for hot water sufficient for twenty-six tubs, will state that the Director of the National Park Service has advised that the granting of such lease will be withheld until the cooling tanks erected in the rear of the bathhouse have been properly masked, according to agreement. ⁴¹

By mid-1925 there was still no signed lease between the government and the Lamar Bath House Company. On July 9, 1925, J.F. Manier wrote to Joseph Bolten, Superintendent of Hot Springs National Park, saying that additional requirements had been complied with and requesting that a lease be granted for Bath House site #2. (42) The letterhead used for this correspondence listed all the officers of the La Mar Bath House Company at this point in time: Sidney M. Nutt, President; M.S. Tombler, Vice President; Jack F. Manier, Secretary; Directors – Geo. R. Belding, Hamp Williams, E.F. Woodcock, R.A. Jones, M.C. Tombler, S.M. Nutt, and J.F. Manier.

Apparently, shortly after sending the above letter, the Lamar officers received a lease, which contained clauses that they greatly objected to. The Lamar officers wrote to Supt. Bolten saying that the lease contained "new and drastic provisions, which would greatly impair, if not entirely destroy the financial confidence in any commercial organization."⁴³ The clause most objected to read as follows:

It is further agreed that upon the forfeiture of this lease for a failure to observe the terms and conditions hereof, all the buildings and fixtures situated on the premises herein described shall become the property of the United States. ⁴⁴

The argument presented by the Lamar Bath House Company stated:

It must be obvious to you that some slight infraction of the rules or regulations, whether true or imaginary could be committed in a hundred different ways, by some enemy who could have false affidavits sworn to, or some stockholder or employee could unintentionally commit some offense that would come within the range of this ruling. Many things could happen, which would mean absolute confiscation of property belonging to innocent stockholders scattered throughout this country.

We feel quite sure that we could never have disposed of a dollar's worth of stock, or executed a loan in a bank, had it ever been contemplated that such a provision be contained in this lease. ⁴⁵

The Lamar officers felt that the lease form used previously contained ample safeguards for the government without being unfair to the lessees, and thought that they were being unfairly



1B-3: Needles shower found at Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1939.

(See Photos 1C-59 through 1C-62; Men's Bath Hall, Room 101.)

singled out. They appointed George R. Belding to act as their representative in resolving the matter. Two days after being appointed, Belding received a telegram from Sidney Nutt and Jack Manier informing him that both the Ozark and Quapaw agreements contained these clauses, so the Lamar was not singled out. They added that regardless of this "we consider same too drastic (STOP) Move every effort to have same modified." ⁴⁶

1B-4: A bath at Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1938.

(See Photos 1C-59 through 1C-62; Men's Bath Hall, Room 101.)



Belding apparently engaged the services of Wm. T.S. Curtis, Attorney, to handle communications with the Department of the Interior. Curtis had a conference with Arno B. Cammerer of the Interior Department and was informed that these new provisions were now standard in leases and had been accepted by the hotels in both Yosemite and Yellowstone. Curtis responded by saying: "If they committed an error in other cases, it was no reason why they should expect the Lamar Company to consent to an error or wrong in their case."⁴⁷

During all the negotiations, the Lamar Bathhouse was operating without a lease. At a meeting of Directors and stockholders later in 1925, the stockholders were not pleased with the situation. The Directors put pressure on John Manier, Lamar Company secretary, to see that Curtis resolved the issue. Finally, on January 23, 1926, Curtis received a phone call from the Interior Department saying that the Department had approved the lease as submitted by Curtis. He wrote to Manier saying: "You have a good strong lease, not encumbered with harsh and troublesome provisions, which cannot be said of certain other leases."⁴⁸ The new lease was dated February 13, 1926, and covered the period from January 1, 1926 through December 31, 1945. Curtis congratulated Manier on the dates covered by the lease saying: "This gives you twenty (20) years up to January 1946. In some cases the twenty year term runs from the dates of cancellation of the old lease."⁴⁹ The rental rate agreed upon in the lease was \$80 per tub per year, subject to change at the discretion of the Secretary of the Interior.

Specific records of Lamar Bathhouse business from the time it opened in 1923 are unavailable. In general, however, the Hot Springs bathing industry prospered during the 1920s until 1929 when a business decline resulted from the Depression economy. In 1933, the U.S. government reduced the water rate charged to the bathhouses by 15% and encouraged bathhouse operators to reduce the number of tubs in service. Business improved in the second half of the 1930s, and continued its upswing, reaching a peak in business during and right after World War II.



1B-5: Exercise in the Gymnasium at Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1938.

(See Photos 1C-122 through 1C-132; Gymnasium, Room 204.)

Minor changes may have been made to the building during the 1920s and early 1930s, but the first changes documented by available records were proposed to the park superintendent in 1937. A letter from Supt. Libby to John Manier, manager of the bathhouse, stated:

Receipt is acknowledged of your letter of June 14, enclosing blueprints of the first and second floors of the bathhouse, with red pencil tracing showing the changes as requested in your communication.

Since the changes requested are of a minor nature and are all of a character to facili-

1B-6: The Lamar Sun Parlor. Photo from the archives at Hot Springs National Park, c. 1950s.

(See Photos 1C-80 through 1C-81; Sun Parlor and Lobby, Room 107.)



tate bathhouse operation, sanitation, etc., approval is granted for the changes as desired.⁵⁰

No information is available to document changes made at this time. However, the original plans call for glass wainscoting, caps and moulding along the stair hall walls, these were never documented or recorded as having been added or removed. A list of other undocumented changes can be found along within Appendix K. Original Building Drawings.

Not until 1945 are the next changes documented. The initial request included placement of marble work and an iron balustrade on the two main stairs, one on the men's side and one on the ladies'. Also included was the installation of a glass wainscot at each stairway. Supt. Libby responded that, "Since the plans and specifications, as transmitted, conform to the original approved plan of April 19, 1922, and do not alter the exterior appearance of the bathhouse, it appears that it is within the jurisdiction of this office to approve your request."⁵¹

Specifications for the marble work called for "1-inch marble treads and 7/8-inch risers" to be placed over the concrete stairs already in place. Stairs were to have:

... an inside marble wall string and a closed outside string with a cap member on



1B-7: Check-in desk in the Lobby of Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1950s.

(See Photos 1C-78 through 1C-79; Lobby and Sun Parlor, Room 107.)

which will rest the new ornamental iron balustrade. ... All marble shall be Tennessee marble. Treads and marble tile for landings shall be Grannox special Champion Pink.

The wall strings and outside strings shall be of Grannox Royal Rouge Fleuri class "C" marble, ... At the bottom of the stairway there shall be 30" slab of precast terrazzo width of the stairways, also on the floor at the top of the stairways. This terrazzo shall ... [have] edges rounded to 1/8" radius. It shall be 1" thick ... and shall be highly polished.

The tread and landing tile shall have a rough hone finish and the risers and wall strings shall have a polished finish.⁵²

The 1922 specifications, approved by Arno B. Cammerer, were similar.

The stair shall have an inside marble wall string and a closed outside string with a cap member on which shall rest the new ornamental iron balustrade. ... All marble shall be Tennessee marble. Treads and marble tile for the landings shall be Grannox special gray with a light gray body, and dark gray veins or Lawson gray with streaks of pink ... At the bottom of the stairway there shall be a 12" strip of Asbury marble the full width of the stairways, also on the floor at the top of the stairways. ... The marble shall be 7/8" thick.⁵³

1B-8: Bathing at
Lamar Bathhouse.
Photo from the
archives at Hot
Springs National Park,
c. 1950s.

(See Photos 1C-90
through 1C-98;
Women's Bath Hall,
Room 110.)



The December 1945 specifications for Mirrored Glass read as follows:

There shall be a wainscot up the sides of both stairways and around landings to a point 5' past the point of landing on the second story, and at the bottom it shall

extend around the walls on the stair side up to and around the entrance to the lobby and around the walls to where lockers are shown at entrance to cooling rooms. Said glass shall be Flutex glass with mirror on the fluted side.⁵⁴

Additional alterations were requested the same week approval came for the marble and glasswork and were also accepted with the following comments:

It is suggested that consideration be given to a larger glass window so as to permit light from the skylight in the sun balcony to illuminate the enlarged women's massage room.

In the additional installations in the ladies' toilet, additional dressing rooms, and the change in the partition of the present ladies' lounge, it is suggested that all be on the same floor level and of similar floor material.⁵⁵



1B-9: Treatments in the Pack Room of the Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1950s.

(See Photos 1C-84 through 1C-87; Women's Pack Room, Room 109.)

The contractor for the additional project was L.C. Miller. Work included repair of exterior stucco; alterations in Women's Massage Room; alterations to Sun Balcony involving expansion of Women's Cooling Room and Men's Hall; extension of Ladies Toilet; alterations to Ladies Lounge; alterations to Dressing Rooms; and air duct work. Among other items, the doorway from the Men's Dressing Room to the Cooling Room was to be removed and replaced with an arched entrance 6 feet wide and 8 feet high. A summary of costs was sent to Supt. Libbey, stating that the total cost of the project was \$14,363.79. Handwritten notes on a copy of the letter state: "Taken From Ledger - Actual Cost of Improvements, & Maint. & Repairs, and the total cost written in is \$34,094.67." It is uncertain how these totals correspond.

The final aspect of the project involved painting, which was completed in February of 1946. Painting the entire bathhouse, interior and exterior, required 1272 hours of work at a total cost of \$2,254.00.⁵⁶ Painting details varied by room, but several examples are as follows:

The Hall [both first and second floors] to have 6 (six) foot wainscot, painted as follows: One coat special undercoat, one coat of half undercoat, and one half Special Enamel and then one coat of pure white enamel. All this wainscot to be topped with (1 1/2) one and one-half inch, Gold Border Baer Bros. Light Klondike Pale Gold Bronze Powder mixed with varnish. The Dressing Booths in this Hall ... to be enameled white same manner as Wainscot. ... and above that with Light Green Lindex mixed two parts white one part light green. ... Men's Pack room, (first floor) ... Color light pink (two parts white, 1 part pink).⁵⁷

1B-10: Cooling room at the Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1950s.

(See Photos 1C-82 through 1C-83; Women's Cool Room, Room 108.)



The Men's Cooling Room (first floor) and the Gymnasium were also to be light green.

On March 31, 1945, the Lamar Bath House Company applied for renewal of their twenty-year lease that was to expire December 31, 1945. Superintendent D.S. Libby sent a copy of the proposed contract to J.F. Manier on October 31st. At this point, Manier was manager of the bathhouse and President of the Lamar Bath House Company. If accepted, the lease was to go into effect January 1, 1946. It is probable that much of the work involved in the above project was undertaken due to the upcoming new lease.

Manier asked for clarification on several points in the contract, and Supt. Libby went to St. Joseph's Infirmary to discuss these items with him. Libby wrote to the Director of the National Park Service after the meeting.

On November 25, 1945, I had a conference with Mr. Manier at the St. Joseph's Infirmary (Hospital) and he indicated that he was agreeable to the proposed new contract which in preliminary form had been submitted to him for review and when if the necessary copies of the new contract are received, he is ready to sign.

In view of Mr. Manier's commitment, it does not appear necessary to await the transmittal of a clarification of the items in question prior to the submission of the contract in final form for signature. Mr. Manier is quite ill and he is very anxious to receive the new contract form and thereby expedite the approval of the same prior to January 1, 1946.



1B-11: A changing room at the Lamar Bathhouse. Photo from the archives at Hot Springs National Park, c. 1990.

(See Photos 1C-136 through 1C-143; Women's Dressing Room, Room 207.)

This memorandum is being written to you with a copy to the Regional Director in order to hasten the necessary action.⁵⁸

Manier added a handwritten note to a copy of this letter that stated: "I did not indicate nor agree to sign. Must have directors meeting." He apparently did not feel the same need to expedite the matter.

The next mention of the lease was not until July 1947. It came in a response to the National Park Service, sent by John Manier, regarding notification received about public hearing to be held September 8 and 9. These hearings were to address the water leasing policy and requests from new establishments for a supply of hot water. Manier wrote: "We are indeed pleased to learn this, as the directors and stockholders of the Lamar Bath House Company

have been greatly concerned in the delay occasioned in submitting to our company a satisfactory lease.”⁵⁹

As of November 19, 1947, the report with results of the hearing had not been made available to anyone in Arkansas, and an inquiry into the matter was sent to Washington, D.C. by Judge J.S. House of Little Rock. A reply was received from Attorney William M. Boyle, Jr. of Washington, who reported the committee findings as he understood them. He explained how the committee had determined rates of water usage and availability of water for current and possible new lessees. Boyle concluded his three-page letter saying:

... tentatively we expect to file our reconsideration by the Secretary of the Interior, setting forth as our main argument the fact that the surplus now available has only come about through the cooperation and the denying to existing facility owners what was rightfully theirs, as you have outlined in your December 1st letter. There should be included in this application for reconsideration all information which you have regarding those tubs on which rental is being paid but are not being used on account of the water shortage.

At the same time we have been advised to make application for these tubs and also applications for additional tubbage rights by existing facility owners which have been discussed with the Park Department officials in the past and turned down because of alleged shortages of water supply. In other words, we should like to have our applications considered at the same time these three new applicants are receiving consideration. We can not stress this point too strongly. If necessary, affidavits should be prepared, setting forth Park Department officials conversations, dates, etc., proving the denial of these applications because of alleged water shortage.⁶⁰

In an additional effort to resolve both the request for four additional tubs and the need for renewal of the Lamar Bathhouse lease, John Manier wrote to Thomas Boles, Superintendent of Hot Springs National Park on January 27, 1948.

On December 5, 1947, we addressed a communication to the Director of National Park Service, Washington, D.C. through the courtesy of your Office making an application for four additional tubs in the Lamar Bath House, supplementing our communication of March 31st, 1945 for a renewal of a twenty year lease for the Lamar Bath House, which is now supplied with twenty-six tubs, and I had no reply relative to the communication of December 5th.⁶¹

Supt. Boles forwarded the response to Manier's inquiry, which came from Newton B. Drury, Director of the National Park Service. It said in part:

... the Assistant Secretary indicated his willingness to approve an extension which will “(a) include an appropriate rental payment which the Government is entitled to, and should receive from the company for the use of the buildings which now belong to the Government, as well as rental for the use of the land and hot water, and (b)

eliminate the restrictive language which in 1942 was held to prevent the adoption of a basis other than per tub payments for franchise fees." The Assistant Secretary submitted with this a memorandum from the Solicitor of the Department advising that "the title to all the buildings and fixtures erected and installed by the concessioner passed to the United States upon the expiration of the contract."

A study has been made by the Superintendent of the Park and the Regional Director, Region Three, as a result of the Secretary's directive. It has been concluded that, inasmuch as title to the bathhouse and fixtures passed to the United States upon the expiration of the contract on December 31, 1945, a rental charge of \$3,500 per annum should be required for the use of the bathhouse and fixtures.⁶²

The announcement that the bathhouse title had passed to the U.S. government was not well received by officers of the Lamar. Several unsigned notes exchanged hands.

1 - Had the Lamar Bath House Co. anticipated any such action on the part of the Government, it certainly would not have expended the dollars in Improvements, Betterments, and repairs to the Building & Fixtures, as they did in the years - 1945, 1946, 1947, 1948.

2 - It is quite evident that the Dept. did not intend to impose the Rent propositions until a very late date, as the tentative contract submitted in 1945 did not contain same.

3 - If Government takes ownership, do we pay taxes and Insurance and if house burns who collects.⁶³

The federal government reached its decision on water allocation in early 1948. The Lamar received written notification, dated March 25, 1948, that they would be allowed to install two additional tubs instead of the four they had requested. The government felt that additional competition, i.e. allowing several new establishments to receive hot water from the springs, was in the best interest of the public and would not substantially impair the business of the present concessioners. The approved allocation of hot water is summarized as follows:

<u>APPLICANT</u>	<u>APPROVED</u>	<u>DISAPPROVED</u>
Buckstaff Bathhouse	2 Tubs	1 Tub, 2 Sitz tubs, 1 shower
Fordyce Bathhouse		4 Tubs
Hale Bathhouse	1 Tub	
Lamar Bath House	2 Tubs	2 Tubs
Maurice Bathhouse		2 Tubs
Ozark Bath House		4 Sitz Tubs
Quapaw Bath House	1 Tub	2 Sitz Tubs
Superior Bath House	2 Tubs	2 Tubs, 2 Sitz Tubs
Alhambra Bath House	2 Tubs	

Rockafellow Bath House		2 Sitz Tubs
Pythian Bath House	7 Tubs	
Majestic Hotel Bathhouse		15 Tubs
Moody Hotel Bathhouse	1 Pack Bowl	2 Sitz
Methodist Hospital	2 Hubbard Tubs	
	1 Therapeutic Pool	10 Tubs
<u>NEW USERS</u>	<u>APPROVED</u>	<u>DISAPPROVED</u>
Roanoke Baptist Church	10 Tubs	2 Tubs
Sherman Hotel		6 Tubs
Nat'l Arthritis Research Found.		6 Hubbard Tubs, 2 Whirlpools, 2 Sitz Tubs,
D.G. Saad		1 Swimming Pool, Drinking Fountains and Taps
Jack Tar Courts	10 Tubs	29 Tubs
Como Hotel		10 Tubs
DeSoto Hotel	8 Tubs	6 Tubs
Hotel Goddard		12 Tubs, 2 Sitz Tubs, 2 Vapor Cabinets
Park Hotel	8 Tubs	4 Tubs ⁶⁴

As the extended lease was about to expire, a new contract was finally sent to the Lamar officers on October 28, 1948. It was to cover a twenty-year period from January 1, 1949 to December 31, 1968. Several major changes were written into the lease that differed from all previous leases. One such change affected the fees for water use. The lease stated that the concessioner would pay \$30 per tub per annum with an additional fee dependent on the amount of water used. If hot water use in one month did not exceed an average of 135 gallons per bath, a charge of twenty-five cents per thousand gallons would be assessed. If total gallons exceeded the average of 135 gallons per bath, an additional surcharge was assessed.⁶⁵

A second major change was in the assessment of a rental fee for the bathhouse and fixtures, which the federal government now claimed ownership of. The rent followed a graduated scale beginning at \$4,300 in 1949 and increasing to \$6,000 in 1968. If the concessioner made improvements to the "Government-owned buildings and fixtures" they could recover the investment through annual amortization charges.⁶⁶

In October of 1951 all bathhouses received a questionnaire from the National Park Service that they were required to return in triplicate. A summary of basic information on the bathhouse was included along with sketches of the layout of each floor. The estimated replacement cost for the bathhouse was given at \$259,092. The condition of the building was said to be "generally good," and equipment listed was 26 Bath Tubs, 5 Sitz Tubs, 10 Steam Cabinets (Head In), 7 Steam Cabinets (Head Out), 2 Showers, and 2 Pack Sinks. The form was signed by C.M. King, Manager.

The last available documentation on the Lamar is an inventory of sundries completed on December 31, 1951. The value of towels, paints, advertising materials, tickets, supplies, etc, came to \$11,284.62.⁶⁷ At this point, business was still going well, but the decline had begun. By the mid-1950s, a steady decline in business was causing various bathhouses to retire shares of stock in an effort to deal with increased operating expenses.

By the 1960s, business was down, expenses were up, and building deterioration was creating the need for improvements. Bathhouse concessioners were reluctant to pay for improvements with the federal government claiming ownership. Even more significant was the government's refusal to sign any further twenty-year, or long-term, leases. Sometime between the original construction and the early 1970s, undocumented changes were made to Lamar. The removal of the penthouse skylight occurred during this time, if it was built at all, and the closing up of the chimney.

With uncertainty about the future of the bathhouse business in general and in particular about the government's changing policies, the bathhouses one by one let their leases expire or ceased operation. The Lamar Bathhouse was one of the last to close, with operations ceasing in November of 1985.

At some point after 1985, management of the Lamar property was turned over to the National Park Service. Since then several major work projects have been undertaken to maintain and rehabilitate the bathhouse. In 1985, repairs were made to the front porch, and masonry was patched and repaired. At some point, all glass from the original skylights was removed and openings were covered either with plywood or "bubble" covers. In November 2000, roof repairs were made and the back wall was flashed. In 2001, rehabilitation was carried out on the lobby plaster. A comprehensive lead abatement and window rehabilitation project was undertaken in 2003. The current plan is to rehabilitate the Lamar Bathhouse for use by the Hot Springs Park Administration and Curatorial Storage.

For a list of building changes, please see Appendix D.

LAMAR CHRONOLOGY OF DEVELOPMENT AND USE ENDNOTES

¹ Creek Arch hearings, 201.

² Ibid., 209-13.

³ Lease: Bath House – Hot Springs Reservation, January 1, 1892, Hot Springs National Park Archives.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

⁷ Letter from B.F. Bayley, Acting Supervisor, Hot Springs Reservation to Messrs. Tombler & Buckstaff, November 20, 1916, Hot Springs National Park Archives.

⁸ Letter from W.P. Parks, Superintendent, Hot Springs Reservation to Tombler & Buckstaff, April 15, 1918, Hot Springs National Park Archives.

⁹ Letter from Selden Breck Construction Company per H.C. Schuyler to Mr. Jos. F. Koehler, March 28, 1919, Hot Springs National Park Archives.

¹⁰ Letter from Stephen T. Mather, Director, National Park Service to Dr. Wm. P. Parks, Supt., Hot Springs Reservation, May 27, 1920, Hot Springs National Park Archives.

¹¹ Letter from W.P. Parks, Superintendent to M.C. Tombler, May 2, 1921, Hot Springs National Park Archives.

¹² Letter from M.C. Tomber to Selden Breck Construction Company, July 5, 1921, Hot Springs National Park Archives.

¹³ Letter from Jno. B. Foote, President, Security Bank to Mr. M.C. Tombler, July 20, 1921, Hot Springs National Park Archives.

¹⁴ Letter from M.C. Tombler to Hon. Stephen T. Mather, July 23, 1921, Hot Springs National Park Archives.

¹⁵ Letter from Arno B. Cammerer, Acting Director, Department of the Interior, National Park Service to Mr. M.C. Tombler, The Lamar Bathhouse, August 8, 1921, Hot Springs National Park Archives.

¹⁶ Letter from M.C. Tombler to W.P. Parks, Supt., November 25, 1921, Hot Springs National Park Archives.

¹⁷ Letter from Lamar Bathhouse Co. by Sidney M. Nutt to Messrs. Roberts & Schwebke, Architects, April 10, 1922, Hot Springs National Park Archives.

¹⁸ Letter from H.C. Schwebke to Sidney Nutt, May 3, 1922, Hot Springs National Park Archives.

¹⁹ Letter from Ault and Burden, General Contractors, by W.F. Ault to Lamar Bath House Co., March 31, 1922, Hot Springs National Park Archives.

²⁰ Letter from Ault & Burden, General Contractors, by W.F. Ault to Lamar Bath House Co., April 8, 1922, Hot Springs National Park Archives.

²¹ Letter from R. Rutter, Secretary, John R. Fordyce, Engineer, Inc. to Lamar Bathhouse Company, 3-30-22, Hot Springs National Park Archives.

²² Letter from J.R. Fordyce, President, John R. Fordyce, Engineer, Inc. to Lamar Bathhouse Company, 4-10-22, Hot Springs National Park Archives.

²³ Specifications. Specifications for the construction of the Lamar Bath House, to be located on the present Lamar Bath House site on the United States Government Reservation, in the city of Hot Springs, Arkansas, to be built for the Lamar Bath House Company, according to the plans and specifications made by Roberts & Schwebke, Architects, of Claremore, Oklahoma, 12.

²⁴ The Late Frank E. Kidder and Harry Parker, Kidder-Parker Architects' and Builders' Handbook: Data for Architects, Structural Engineers, Contractors, and Draughtsmen (New York: John Wiley & Sons, Inc., 1904, Corrected Printing 1936), 1167-1169.

²⁵ Specifications, 16.

²⁶ Ibid., 17.

²⁷ Ibid., 21.

²⁸ Ibid., 22.

²⁹ Ibid., 23.

³⁰ Letter from Sect'y Lamar Bath House Co. to H.C. Schwebke, May 17, 1922, Hot Springs National Park Archives.

³¹ Letter from Sect'y Lamar Bath House Co. to H.C. Schwebke, June 9, 1922, Hot Springs National Park Archives.

³² Letter from R. Rutter to Lamar Bath House Company, 7-17-22, Hot Springs National Park Archives.

³³ Letter from R. Rutter to Lamar Bathhouse Company, 8-23-22, Hot Springs National Park Archives.

³⁴ Letter from H.C. Schwebke to John R. Fordyce, Engineering, Inc., 9-16-22, Hot Springs National Park Archives.

³⁵ Letter from Supervisor of Construction to Jno. R. Fordyce Construction Company, Inc., December 5th, '22, Hot Springs National Park Archives.

³⁶ Letter from Sect'y. Lamar Bath House Company to H.C. Schwebke, Architect, December Nine, 1922, Hot Springs National Park Archives.

³⁷ Letter from S.M. Frink to J.R. Fordyce, Eng. Inc., Feb. 16, 1923, Hot Springs National Park Archives.

³⁸ Letter from H.C. Schwebke to John R. Fordyce, Eng. Inc., Feb. 26, 1923, Hot Springs National Park Archives.

³⁹ Articles of Agreement, 30th day of January, 1923, Hot Springs National Park Archives.

⁴⁰ Ibid.

⁴¹ Letter from C.H. Waring, Superintendent, Hot Springs National Park to J.F. Manier, Secretary La Mar Bath House Company, Hot Springs National Park Archives.

⁴² Letter from Jno. F. Manier to Superintendent [sic], Joseph Bolton, July 9, 1925, Hot Springs National Park Archives.

⁴³ Letter from Lamar Bath House officers to Dr. Joseph Bolten, Supt., July Twenty-fifth 1925, Hot Springs National Park Archives.

⁴⁴ Ibid., 1.

⁴⁵ Ibid., 2.

⁴⁶ Telegram – To George R. Belding, July 27, 1925 from Sidney – Jack, Hot Springs National Park Archives.

⁴⁷ Letter from Wm. T.S. Curtis to George R. Belding, August 13, 1925, Hot Springs National Park Archives.

⁴⁸ Letter from Wm. T.S. Curtis to John F. Manier, February 2, 1926, Hot Springs National Park Archives.

⁴⁹ Letter from Wm. T.S. Curtis to John F. Manier, February 15, 1926, Hot Springs National Park Archives.

⁵⁰ Letter from D.S. Libbey, Superintendent to John F. Manier, June 18, 1937, Hot Springs National Park Archives.

⁵¹ Letter from D.S. Libbey, Superintendent to John F. Manier, November 28, 1945, Hot Springs National Park Archives.

⁵² Specifications Of Alterations To The Lamar Bath House Hot Springs, Ark., Revised December 12, 1945, Commission No. 1416, Hot Springs National Park Archives.

⁵³ Specifications for placing marble treads and iron balustrade on stairs, and glass wainscot instead of tile approved by Arno B. Cammerer, Acting Director, April 19th, 1922, as shown on original plans, Hot Springs National Park Archives.

⁵⁴ Specifications Of Alterations To The Lamar Bath House, December 12, 1945.

⁵⁵ Letter from D.S. Libbey to J.F. Manier, Manager, Lamar Bath House, December 4, 1945, Hot Springs National Park Archives.

⁵⁶ Invoice from Maner & Kimery to Lamar Bath House, February 16, 1946, Hot Springs National Park Archives.

⁵⁷ Specifications For Painting Lamar Bath House, Hot Springs National Park, accepted by Jno. F. Manier, Mgr., 5-8-46, Hot Springs National Park Archives.

⁵⁸ Memorandum for the Director (Tillotson) sent by D.S. Libbey, Superintendent, November 27, 1945, Hot Springs National Park Archives.

⁵⁹ Letter from President, Lamar Bath House Company to Mr. Hilary A. Tolson, Acting Director, National Park Service, July 25, 1947, Hot Springs National Park Archives.

⁶⁰ Letter from William M. Boyle, Jr. per Max Siskind to J.W. House, Esq., December 2, 1947, Hot Springs National Park Archives.

⁶¹ Letter from President, Lamar Bath House Company to Thomas Boles, Superintendent, Hot Springs National Park, Jan. 27, 1948, Hot Springs National Park Archives.

⁶² Letter from Newton B. Drury, Director, National Park Service to Mr. John F. Manier,



PHYSICAL DESCRIPTION

LAMAR SITE

The primary construction materials on the site are concrete and metal. Concrete has been used for sidewalks, ramps and stairs, areaway retaining walls, cheek walls, and stair platforms (landings). Metal has been used for pipe railings and for cast metal drains in areaways. A metal shed roof canopy has been placed over the north areaway. It is attached to the building and used to divert rainwater away from the building.



1C-1: Aerial photo of Bathhouse Row, Hot Springs National Park, circa 2000; Lamar Bathhouse is denoted.

North Areaway & Approach

Description:

The concrete walk leads east directly from the primary sidewalk. A flight of concrete stairs (5 risers, 4 treads) descends from the northwest corner of the building to a lower level along the north building elevation. This sunken walkway is contained by a concrete retaining wall to the north that runs the distance of the areaway. Approximately two thirds of the distance to the east elevation, the walkway has a second flight of concrete steps descending to a concrete floor with metal drain. The east end of the areaway is contained by a short section of concrete retaining wall that meets the main wall. A metal pipe rail, with an outside diameter of 1 1/2", is set along the top of the concrete retaining wall. In addition, a thin gauge metal shed roof covers a portion of the areaway at the east end.

Conditions:

The north retaining wall is cracked and displaced inward toward the building. This wall has three vertical cracks, one of which is significant, and a horizontal crack underneath the cap, which has a parge coat. At the head of the lower set of stairs, the wall cap is missing. The east retaining wall is not as severely cracked.

It appears that the areaway drain can become easily blocked, and there is no curb in front of the door. Evidence of a clogged drain is seen in the photo, which shows the presence of dried, cracked mud (See Photo 1C-3). The riser second from the top on the upper set of stairs is cracked.

1C-2: North Site.
11/2003



1C-3: North Site.
11/2003





1C-4: North Site. 11/2003



1C-5: North Site. 11/2003

West: Ramp & Paired Stair Entries

Description:

Located north of the enclosed porch extension is the current gas meter and an abandoned gas sub-station, colored gray and white respectively (See Photo 1C-6). The central concrete ramp is flanked by concrete cheek walls. The ramp extends from the east edge of the public sidewalk to a concrete entry platform, which extends from the porch floor. The platform has a tiled surface, quarry tiles on the exterior portion and small squares and boxes at the alcove (See Photo 1C-12). The entry platform extends beyond the width of the ramp, to the north and south, and serves as the top landing for two flanking staircases of 6 risers each. The staircases are contained by the ramp cheek walls on one side, and stand alone cheek walls on the exterior edges with a terminating pedestal at the base. Each staircase has a concrete entry walk running from the public sidewalk.

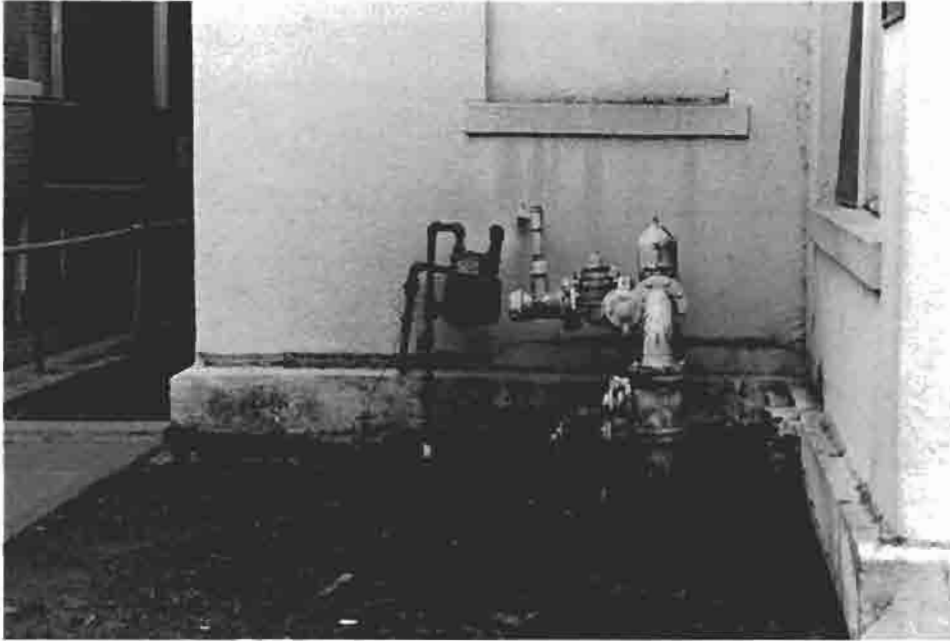
Steel pipe rails with an outside diameter of 2" are present at the top of each cheek wall for both stairs and ramp. The railings are 28" in height at the ramp, and 32" to 35" above the stair tread heights.

Conditions:

The entry sidewalk on the north side of the ramp has some settlement, and the cheek wall between this walk and the ramp has vertical cracks. A series of cracks, both horizontal and vertical, is present in the cheek wall at the stairs of the north walk. The north set of stairs has cracks in the first, fourth, fifth, and sixth step as well as at the top and bottom riser.

The ramp has a crack across the entire width of the concrete, located in the second panel in from the public sidewalk. The concrete retaining wall to the south of the ramp is spalling and has a minor crack at the point of greatest settlement, about 25% in from the west end.

The south cheek wall of the south stairs has a series of cracks.



IC-6: West Site.
11/2003



IC-7: West Site.
11/2003

1C-8: West Site.
11/2003



1C-9: West Site.
11/2003





1C-10: West Site.
11/2003



1C-11: West Site.
Typical damage to the
tile at the front entry
alcove. 11/2003

IC-12: West Site.
Front entry tile at
alcove and at stair
entry platform (quarry
tile). 11/2003



South: Areaway Approach & Runnel

Description:

A concrete walkway, newer than the original walks, approaches the south areaway and stairs from the main public sidewalk. It stops short of the areaway stairs by less than a foot. The south areaway is configured similarly to the north areaway. It does not, however, have a pipe safety railing at the top of the retaining wall, nor does it have a metal canopy. The other critical difference is that at the lowest level by the drain, the south areaway has a raised threshold (2") to restrain water from entering the basement should the areaway drain malfunction. There is a shallow drainage trough or runnel extending along the base of the south elevation from areaway to southeast corner.

Conditions:

The south walkway has a gap of about one foot between walk and areaway stairs where concrete is missing. The top set of stairs has one cracked riser. The treads and risers have a parge coating that is breaking off on the nosing. The short east wall of the areaway has several major cracks. The south wall of the areaway has horizontal cracks, which appear to follow the joint between the main wall that was poured-in-place and a built-up top. This extension was probably executed with bricks. There is a shallow drainage trough on the south side, which parallels the front of the building for 1 1/2 feet.



IC-13: South Site.
11/2003



IC-14: South Site.
11/2003

IC-15: South Site.
11/2003



East: Runnels & Wood Gate & Fence

Description:

The east elevation has very little associated site as the building is quite close to the cliff face and to the stone masonry retaining wall of the promenade.

There are several structures located in this limited area: three concrete pylons or piers, which may have held the cooling tower and are currently supporting a telecommunications satellite receiver (dish); a standby generator enclosure; and a concrete utility shed.

Other features within the five-foot zone are concrete runnels and a wooden gate and fence. The runnels are positioned and sloped to carry roof drainage from the downspouts around the building to the south. The wooden gate is constructed of 2"x 4" dimensional lumber in a picket design. It is hinged on its east end to a single 2"x 4" that is attached to the concrete utility shed. It latches on its west end to a post associated with a short section of fence, which attaches to the southeast corner of the building. The fence and gate are in line with Lamar's south elevation.

Conditions:

A substantial collection of leaves and small twigs is present in the runnels, partially obscuring the surface. The runnels were not examined during rain to determine their effectiveness in removing storm water. It seems likely that joints between horizontal and vertical surfaces of the runnels are leaking. The east elevation wall of the bathhouse forms the west vertical surface of the runnel. The east vertical is a poured-in-place concrete wall, the south vertical is the wall of the utility shed, and the north vertical is the rock face.



1C-16: East Site. 11/2003

LAMAR EXTERIOR

Overall Description:

The Lamar Bathhouse is a two story structure, with a one-story sun porch (the sun parlor) extending from the façade or west elevation. The overall dimensions are approximately 95' along the east/west axis by 90' along the north/south axis. All but the east elevation are finished with a painted stucco. On the east elevation the structure is exposed showing buff to reddish brown brick, which is laid in a common bond with headers every 7th course. Also seen are poured-in-place concrete bond beams at first and second floor window heads, and a brick parapet.

The roof is "flat", with a gentle slope from west to east. At the east edge, storm water is directed to a trough, then through the parapet via four scuppers, to header boxes and downspouts. There is one major skylight of 15' x 30' dimension located over the interior staircase.

North Elevation

Description:

The two story wall is approximately 33' in height from parapet to grade. The wall is partially exposed below grade at the areaway (see the site features description and photos). There are ten sets of paired casement windows and a single casement window at each floor, with the second floor window locations stacked over those of the first floor. The basement has five windows. The west forty-foot portion has the only significant detailing, which includes a band just below the parapet coping, a frieze, and a cornice. This detailing is a series of expressed stringcourses approximately 5' in height. The only other breaks in the plane of the stucco surface are created by slightly projecting window sills. A chimney projects above the parapet.

Condition:

The exterior condition evaluation for each elevation includes: exterior doors; stucco; decorative appurtenances such as lighting and signage; and decorative appointments as applicable. Windows are evaluated as part of the interior.

The north elevation has one door at the basement level. This door was scheduled to be replaced by a new hollow metal door.



1C-17: North Elevation. 11/2003



1C-18: North
Elevation. 11/2003

IC-19: North
Elevation. 11/2003



West Elevation

Description:

This elevation is the building façade and contains the primary entry. This entry is in the sun porch, a one-story mass that projects from the front of the primary mass by approximately 14'. The porch extends to within 9' of each corner (northwest and southwest) of the main two-story structure.

The sun porch has one window opening on each of its north and south elevations, and four windows across the west elevation. The arched openings each contain seven sashes, four above and three below a transom bar. In the lower section, the center sash is one fixed light, which is flanked by tall casement windows. Above the transom bar, four sashes are positioned with one over each casement window, and two over the fixed center window. Those over the casement windows have six lights each (three over three), and the two center sashes have nine lights each (three by three). The arch slope has a fixed radius curve commencing at the spring point (approximately the mid-height of the side transom lights), and connects to a low-rise straight line to the slightly rounded apex. As a result, the outside and upper lights of the transom sash are not rectangular; the shape is defined in part by the arch shape. This

arch type is a Tudor arch or a pseudo-four-centered arch.

The doorway has the same style arch and same glazing configuration. The paired wood doors are mostly glass and are flanked by tall rectangular windows. The doorway is set into an entry alcove, the face of which is inset approximately 2' from the front plane of the sun porch. The entry alcove has a tile floor. The floor pattern contains a rectangular area defined by a dark gray border with "LAMAR" in dark gray letters against the white background. These tiles are rectangular. The remaining tiles outside this area are hexagonal with decorative insert designs in red and reddish brown. The border is in a Greek key design in dark gray with the base being gray marble. The alcove ceiling is plaster. The alcove has windows in the north and south walls, the upper portion of each window have an operable awning window. These are the only operable transom sashes in the sun porch. The stucco on the exterior of the sun porch has detailing as described for the west portion of the north elevation. The parapet coping has a raised center section or pediment, which, in elevation, is a shallow triangle.

The two-story portion of the west elevation has eight pairs of double hung windows (9-over-1) at the second floor level directly above the sun porch. Flanking this center portion there are single nine-light windows at each end, stacked over similar windows at the first story.

The stucco detailing of the upper parapet is nearly identical to the previously described west portion of the north elevation, except that at the mid-point there is a stepped triangular arched pediment. At this location, there is a flagpole, which sits on a small platform projecting from the plane of the elevation. The steel flagpole extends above the roofline.

The stucco surface is decorated by the application of blue mosaic fired clay tiles, in a similar fashion to the north and south elevations – the same color and shapes (not outlined). These decorations appear as follows: downward pointing triangles, or arrowheads, adjacent to the heads of the sun porch windows; squares between the second floor windows; and a combination of square and triangle at the upper outside corners of the building.

Signage appears on the building in two forms and at various locations. First, stand-alone letters are used in the frieze area over the front doors (between stringcourse and parapet), and spell out "LAMAR". Secondly, there are four signage panels applied to the face of the building: two flank the entry door, one to each side; one is on the south elevation at the south west corner of the porch; and one is on the north elevation, at the northwest corner of the porch. There are two light fixtures that flank the front entry. These have a downward facing truncated pyramid shape with diagonal wire reinforced glass, light gauge metal frame, and are topped by a cast metal eagle.

There is metal flashing over the expressed stringcourse, i.e. the intermediate cornice. The flashing is a painted, light-gauge sheet metal, which appears to be set into a reglet behind the stucco layer.

Conditions:

The tile at the front entry exhibits extensive settlement and stress cracks, and repairs are currently scheduled. Individual tiles are missing, and others are broken. The cracks have also caused separation of the grout joints, and appear to penetrate down into the substrate (concrete slab). Vertical cracks indicate settlement, and horizontal cracks indicate stress.

This building was being prepared for jacking to reverse some, if not all, of the settlement that occurred in the northwest portion of the building, and also to stabilizing the structure. Stabilization work is not proposed for the sun porch, which sits directly over the underground creek arch. (See Appendix C - Report on the Creek Arch). Repairs to the tile work should take place after the jacking, which may cause additional cracking. The repairs will be of limited value without stabilization of the foundation and slab support at this location. Strengthening or replacement of the slab would be very beneficial.

Cracks present in the stucco are shown in the crack analysis drawings. Patterns of cracking indicate the following:

1. Differential movement at the bond beam above the second story windows, seen as horizontal cracks. This movement could be due to a number of factors, including - roof loading transferred into the bond beam; the exposed parapet (3 sides) responding to temperature changes more quickly than adjacent materials; the bond beam being adjacent to tempered space; and the flexing of the bond beam as it serves as a lintel for each second story window.
2. Vertical cracks between windows of the second story at the bond beam level at each column. These cracks may be caused by long term shrinkage of the concrete, and/or settlement of the northwest portion of the building. Similar cracking is not seen at this location on the north and south elevations.
3. Cracks in the parapet indicating settlement.
4. A series of "false" cracks, superficial surface anomalies, four at the upper right corner and two at the upper left corner, which seem to be related to the application of an additional layer of stucco at the parapet. Closer examination is warranted.
5. Cracks in the sun porch related to significant settlement of this one story portion. The crack analysis drawings for the north and south elevations clearly show very similar cracking patterns. These cracks appear to indicate that the building has rotated outward and downward.

The front doors and associated woodwork have been recently refinished. Due to U.V. exposure, the lower 1/3 will be particularly subject to coating deterioration. Metal associated

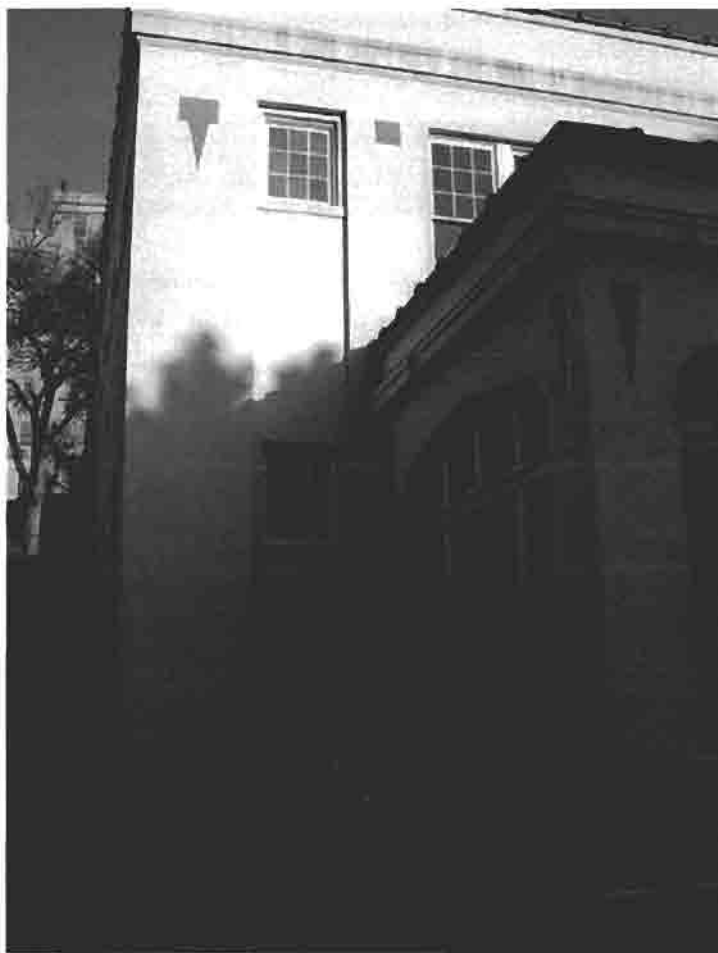
with light fixtures and signage shows signs of metal oxidation. A detailed evaluation by a Metals Conservator will provide specific guidelines for conservation treatments - oxidation removal and restoration of original finish.

The marble base at the front entry tile is in good condition. The plaster ceiling of this alcove is in poor condition, virtually gone, requiring comprehensive replacement. The cause of the plaster damage is likely to have been the same leakage that has extensively damaged the interior plaster.



IC-20: West
Elevation. 11/2003

1C-21: West Elevation.
11/2003



1C-22: West
Elevation, 11/2003





1C-23: West Elevation. 11/2003



1C-24: West
Elevation. 11/2003

1C-25: West
Elevation. 11/2003



1C-26: West Elevation. An
example of the blue mosaic tile
applied decoration. 11/2003





1C-27: West Elevation. Note the ghost of a conduit on the stucco. 11/2003



1C-28: West Elevation. The ceiling of the alcove has lost most of its plaster. Comprehensive restoration is required. 11/2003

1C-29: West Elevation. Note oxidation in the metal of the light adjacent to the front entry. 11/2003



1C-30: West Elevation. Note oxidation at the bronze sign adjacent to the entry. 11/2003



South Elevation

Description:

The south elevation is a mirror image of the north elevation, except for small differences in window location.

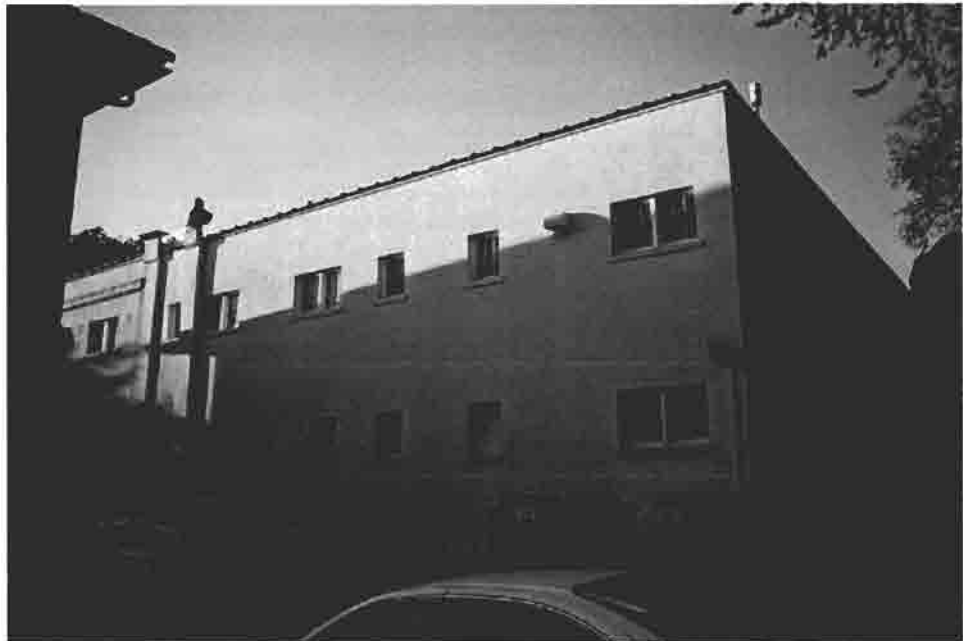
There are two significant appurtenances; these are two vents that run from basement to above the parapet. They are constructed of sheet metal, rectangular in cross-section, and have vent caps - one fixed and one rotating, being sensitive to wind direction.

Conditions:

The front section (west 33.5') has numerous horizontal cracks in the stucco, located at window heads and along the second-story floor level bond beam. Vertical cracks are evident at the intermediary cornice as well as between the two west-most window heads radiating up to the bond beams. These cracks are consistent with the settlement and outward rotation of the west wall.

The portion to the east of this area has what appears to be a crack, but may actually be the change in level created with the addition of an extra layer of stucco at the parapet. (See the crack analysis plan for this elevation.)

1C-31: South
Elevation. 11/2003



1C-32: South
Elevation. 11/2003



East Elevation

Description:

The east elevation has exposed brick in running bond with a header course at every seventh course, a concrete bond beam above the windows of each story, and a brick parapet.

There are eight window openings at the first floor (4 singles, 3 doubles, 1 triple), and seven at the third floor (3 singles, 4 doubles). There are no doors on this elevation.

There are several anomalies on this elevation. The first is a section of the parapet, which has brick and mortar of a decidedly different color. Secondly, the "I" beam has cut-off ends. These beams are located under the parapet coping along a length of wall, from the second window in from the southeast corner to near the fifth window (about 36'). This location parallels the location of the three concrete piers standing to the east of this elevation wall. This leads to the hypothesis that these beams may have extended over to the three piers that supported the cooling tower. These beams might have been part of the "cooling tower enclosure and meshing" of 1925.

There are four scuppers, conductors, and downspouts fairly evenly spaced along the elevation. The locations are indicated on the roof plan.

Conditions:

The brick exhibits stair-step cracking at both upper corners above the conductors. There are dark stains, probably ferrous oxides, below many of the joints in the parapet coping that indicates a history of leaks. There are also dark stains at the west end of the upper bond beam, possibly due to migration of moisture from the roof edge, through the parapet, and out through the bond beam concrete. The affected area is the south 38'.

The conductor boxes exhibit oxidation where the galvanized coating is no longer present.

1C-33: East Elevation. Looking south. 11/2003



1C-34: East Elevation. Looking north, note the "T" beams just under parapet, left half of photo. 11/2003





1C-35: East
Elevation. South end.
Condition:

1. Numerous stair step cracks in brick above conductor, and to the right of it.
2. Moisture stains in bond beam evidence past leaks at back of parapet.

11/2003



1C-36: East
Elevation, North end.
Condition:

1. Numerous stair step cracks above the conductor in the brick.
2. Very porous concrete of the bond beam. Small cracks.
3. Dark stains in a line with parapet coping joints.
4. Rusted conductor.

11/2003

Roof

Description:

The upper roof slopes from west to east. Drainage water is collected in a shallow sheet metal trough at the east interior base of the parapet and is directed to scuppers, conductor boxes, and downspouts. The roofing is asphalt rolled roofing with mineral coat surface in gray. The joint laps are sealed by what appears to be hot tar. There are other cold products, which are used as sealants, and one of these may have been used. The two have a somewhat similar appearance.

Sheet metal flashing is nailed to the inside face of the parapet. The exposed interior face of the parapet varies in height, from less than 1 foot to 4 feet. The vitrified clay tile parapet coping was manufactured by Texarkana Pipeworks. The inside face of the parapet has various exposed materials: stucco, roofing tar, and brick.

The historic skylight over the central stairs has been roofed over, and four Plexiglas bubble skylights substituted. A large ventilator is located to the east of the skylights.

The lower roof, over the sun porch, differs only with respect to its roofing material, which is built-up roofing (BUR). This roof is internally drained.

Condition:

The sheet metal flashing fasteners at the parapet have, in some locations, worked out of the brick. All should be checked, since the presence of loose fasteners might indicate a more prevalent problem.

Other elements of the upper roof appear to be intact. The curb for the ventilator appears to be temporary, as its exposed surface is plywood. This curb, plus the roofing, is scheduled for replacement in the current schedule.

The BUR of the lower roof is torn, rippled, and has alligator cracks in the roofing tar from U.V. degradation. It is scheduled for replacement.



IC-37: Roof. Metal trough at east parapet wall. 11/2003

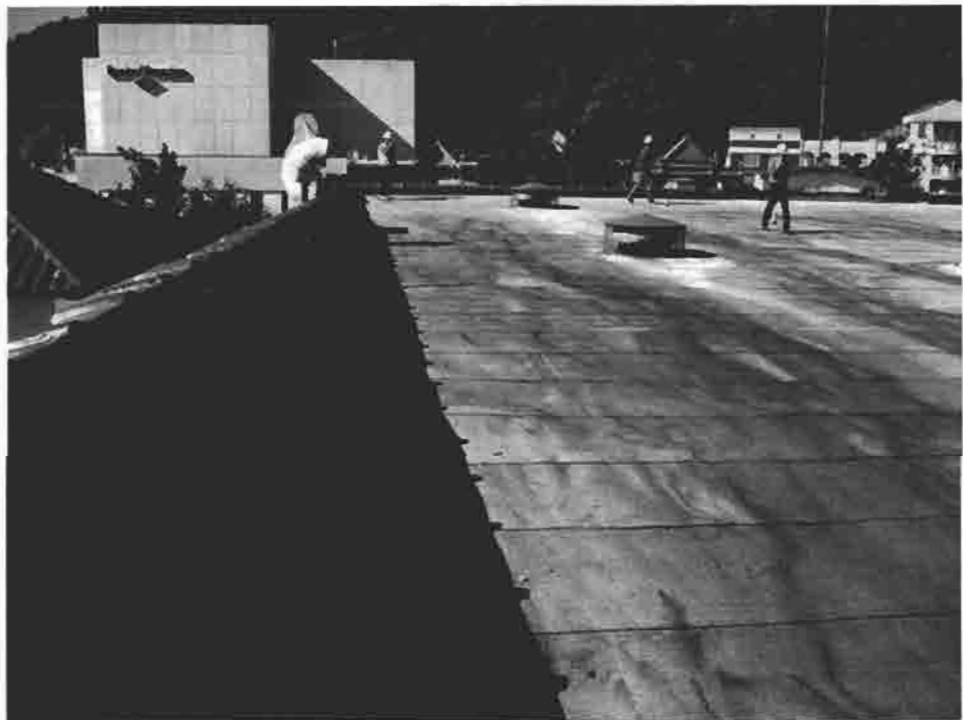


IC-38: Roof. Roofing, flashing (pointed out), and vitrified clay parapet coping tile. 11/2003

1C-39: Roof. NE corner looking west.
11/2003



1C-40: Roof. SE corner looking west.
11/2003





1C-41: Roof. SW corner looking north-east. 11/2003



1C-42: Roof. SW corner looking east. 11/2003

IC-43: Roof. The east parapet wall is mostly covered by roofing tar except where the differently colored brick is present. 11/2003



IC-44: Roof. The interior surface of the west parapet pediment, behind the flagpole, is stucco. 11/2003





IC-45: Roof.
11/2003

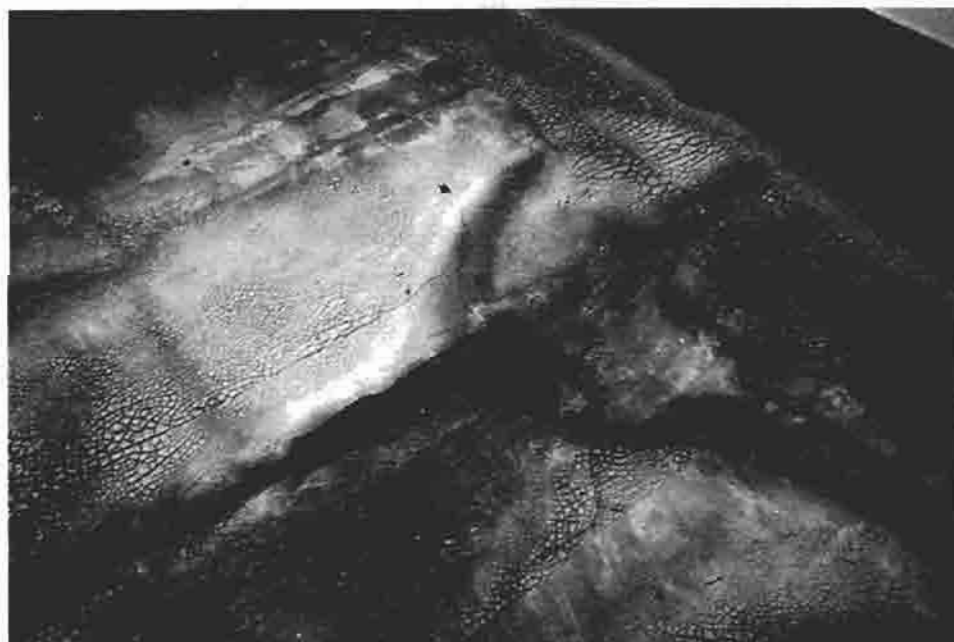


IC-46: Roof. 11/2003

1C-47: Lower roof.
11/2003



1C-48: Lower roof.
11/2003





1C-49: Missing element
from the west elevation.
Historic photos show a
garden urn at this loca-
tion. 11/2003



INTERIOR

The description of interior spaces is arranged in numeric order by room number. Rooms are therefore described beginning in the basement and continuing to the top floor. Materials in each room are described in the following order: floor finish; wall base; wall finish by elevation; ceiling structure (as visible) and finish; windows; doorways; and special features. Condition assessment issues are briefly described for each room. Conditions described on the forms are those that should be addressed in conjunction with materials conservation and adaptive reuse. One additional item should be noted regarding Lamar's interior, which is that the partition walls for the rooms are constructed of gypsum rather than fired clay partition block as seen in the other bathhouses.

In addition, a comprehensive schedule of window conditions is provided for each elevation and for interior windows by floor. Any conditions discussed that reference these schedules will be cross-referenced on floor plans.



ROOM NUMBER:	01
ROOM NAME:	Fuel Room
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	None
KEY CONDITIONS CONCERNS: <p>Jacking procedures were being set up for multiple columns in the basement at the time of the field survey. Archaeological investigations were underway: excavations focusing on fine debris and wall remnants of an earlier bathhouse (the first Lamar was completed in 1888).</p>	

ROOM NUMBER:	02
ROOM NAME:	Boiler & Machinery Room
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<p>Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.</p>	

ROOM NUMBER:	03
ROOM NAME:	Male Attendants Room
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	5 - See "Window Conditions Schedule"
DOORS:	1 - See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<p>Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.</p>	

ROOM NUMBER:	04
ROOM NAME:	Storage
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS: Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.	

ROOM NUMBER:	05
ROOM NAME:	Storage
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<p>Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.</p>	

ROOM NUMBER:	06
ROOM NAME:	Laundry
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS: Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.	

ROOM NUMBER:	07
ROOM NAME:	Storage
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS: Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.	

ROOM NUMBER:	08
ROOM NAME:	Female Attendants Room
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Concrete
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Concrete
WINDOWS:	3 - See "Window Conditions Schedule"
DOORS:	1 - See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<p>Jacking procedures were being set up for multiple columns in the basement at the time of the field survey.</p>	



1C-50: Male Attendants Room, Room 03: North Wall in northwest corner. Note: Typical exposed walls. Window: 01. 11/2003



1C-51: Male Attendants Room, Room 03: North Wall. Typical historic window and associated hardware. Original east wall of room (now removed) was under beam in photo at right. Window: 02. 11/2003



1C-52: Boiler & Machinery Room, Room 02: North Wall. Note: fan has replaced windowpanes. Window: 03. Door: B02. 11/2003



1C-53: Boiler & Machinery Room, Room 02: North wall to northeast corner. Note: exposed structure. Door: B02. Windows: 04, 05. 11/2003



1C-54: Crawl Space: North view: from Fuel Room 01: Note: Exposed underside of the first floor structure & exposed rebar. 11/2003



1C-55: Crawl Space: Northeast view: from Fuel Room 01: Note: Exposed rebar in beams. 11/2003



1C-56: Crawl Space: Southeast view from Fuel Room 01: Note: Exposed rebar & substantial loss of material at the south end of the third beam. 11/2003



1C-57: Lamar Basement, Female Attendants Room 08: South wall to southwest corner. Door: B08. Windows: 06 and 07. 11/2003



IC-58: Laundry Room 06: Archaeological investigation of ash/charcoal layer near Room 06, to the Southeast. 11/2003



ROOM NUMBER:	101
ROOM NAME:	Men's Bath Hall
FLOOR FINISH:	The floor is made up of hexagonal tiles mostly white with a blue dot every so often in a regular pattern.
WALL BASE:	
WALLS:	6'1" Wainscot wall tile - Wainscot, walls and column wraps are covered with 3" x 6" white ceramic tiles.
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	The outside walls are wire-cut brick which is excellent for adhering plaster, and the inside surface is plaster.
CEILING:	Painted plaster
WINDOWS:	One of the single, middle windows on the south wall is missing, and has plywood over it.
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	Marble partition system
KEY CONDITIONS CONCERNS:	
<p>This bath hall has just had the sitz-tubs removed. The 6'1" wainscot wall tile is still in place.</p>	



1C-59: Room 101, Men's Bath Hall: Northwest Corner. Windows: 108 & 109. 11/2003
(See historic photos 1B-3 and 1B-4)



1C-60: Room 101, Men's Bath Hall: North wall to northeast corner. Windows: 109, 110, 111 & 112. 11/2003



1C-61: Room 101, Men's Bath Hall: East wall to southeast corner. Windows: 114 & 115. 11/2003



1C-62: Room 101, Men's Bath Hall: Southwest Corner. 11/2003



1C-63: Room 101, Men's Bath Hall: Typical windows. 11/2003

ROOM NUMBER:	102
ROOM NAME:	Men's Pack Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	See "Window Conditions Schedule"
DOORS:	See "Door Conditions Schedule"
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



IC-64: Room 102, Men's Pack Room: North Wall. Windows: 104, 105 & 106. 11/2003



IC-65: Room 102, Men's Pack Room: East Wall. Window: 107. Door: 102B. 11/2003



1C-66: Room 102, Men's Pack Room: Southeast Corner. Note: stored skylight glass.
11/2003



1C-67: Room 102, Men's Pack Room: West Wall. Southwest corner beyond column.
Door: 102A. 11/2003



ROOM NUMBER:	103
ROOM NAME:	Men's Hall
FLOOR FINISH:	Concrete slab
WALL BASE:	Marble
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	See "Window Conditions Schedule"
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<p>Terrazzo flooring at the base of the stairs has a warm brownish gray background. The predominant chip is butterscotch with secondary flecks of white and black.</p>	



1C-68: Room 103, Men's Hall: Southeast Corner. Staircase: Door: 101A. 11/2003



1C-69: Room 103, Men's Hall: South wall to southwest corner to west wall. Window: 141. 11/2003



1C-70: Room 103, Men's Hall: Southwest corner to south wall. Note pass through to lobby/front desk. Window: 141. 11/2003

ROOM NUMBER:	104
ROOM NAME:	Women's Hall
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-71: Room 104, Women's Hall: North wall to northeast corner. Door: 110A. 11/2003



1C-72: Room 104, Women's Hall: West wall to northwest corner. Storage Room 105 at the base of steps. Windows: 143 & 142. 11/2003



1C-73: Room 104, Women's Hall: Detail: Terrazzo landing at base of staircase. Note matching terrazzo landing in the Men's Hall. 11/2003



1C-74: Corridor: Leading from Room 104 to Room 107 (Lobby). Note: Marble base and concrete slab floor. 11/2003

ROOM NUMBER:	105
ROOM NAME:	Storage
FLOOR FINISH:	Concrete
WALL BASE:	None
WALLS:	Plaster
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



ROOM NUMBER:	106
ROOM NAME:	Men's Cool Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	See "Window Conditions Schedule"
DOORS:	None in place
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



IC-75: Room 106, Men's Cool Room: Northwest Corner. Windows: 140 & 101.
11/2003



IC-76: Room 106, Men's Cool Room: North wall to northeast corner. Window: 103.
11/2003



1C-77: Room 106, Men's Cool Room: Southeast Corner. Doors: 102A & 106B. 11/2003



ROOM NUMBER:	107
ROOM NAME:	Lobby & Sun Parlor
FLOOR FINISH:	3/4" Border tile, 1" hexagonal tile, white with flower pattern
WALL BASE:	3 x 6" white ceramic tile wainscot, 42" in height
WALLS:	
NORTH:	Decoratively painted.
EAST:	Decoratively painted - faux masonry wall. Sun parlor walls have murals.
SOUTH:	Decoratively painted.
WEST:	
OTHERS:	
CEILING:	Painted plaster
WINDOWS:	Ornate windows along the west wall have segmented tudor arches.
DOORS:	
SPECIAL FEATURE:	Murals on the north and south walls of the lobby, murals on the east wall of the sun room. Decoratively painted east wall behind counter. The reception desk is Tennessee marble, with key holders behind the counter.
KEY CONDITIONS CONCERNS:	



IC-78: Room 107, Lobby and Sun Parlor: East Wall. Marble counter and key holder against wall. 11/2003 (See historic photo 1B-7.)



IC-79: Room 107, Lobby and Sun Parlor: Detail of consierge's side of counter with west wall in background. Windows: 131, 132, 134. Door: 107A. 11/2003



1C-80: Room 107, Lobby and Sun Parlor: Detail of Mural, found on the south portion of the east wall. 11/2003 (See historic photo 1B-6.)



1C-81: Room 107, Lobby and Sun Parlor: Detail of base at west wall. 11/2003



ROOM NUMBER:	108
ROOM NAME:	Women's Cool Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



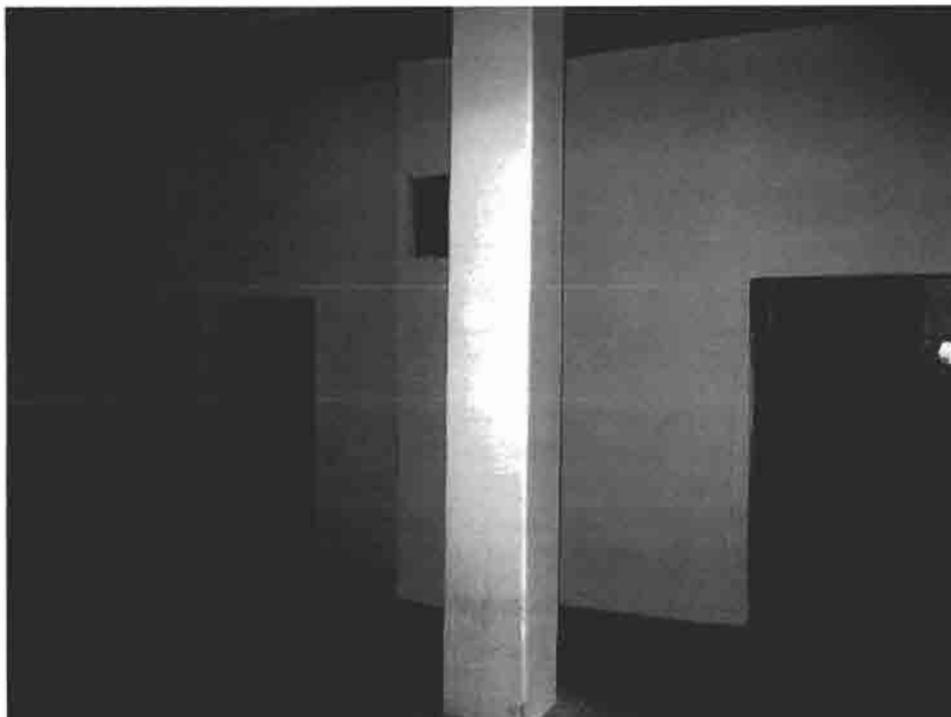
1C-82: Room 108, Women's Cool Room: Northwest Corner. 11/2003
(See historic photo 1B-10.)



1C-83: Room 108, Women's Cool Room, Northeast Corner: Note original door along east wall. Doors: 108A & 108B. 11/2003



ROOM NUMBER:	109
ROOM NAME:	Women's Pack Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with paint.
NORTH:	
EAST:	White 3 x 6" ceramic tile wainscoting at south corner.
SOUTH:	White 3 x 6" ceramic tile wainscoting at east corner around sink.
WEST:	
OTHERS:	
CEILING:	Plaster.
WINDOWS:	
DOORS:	Original doors at west wall.
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-84: Room 109, Women's Pack Room: Northeast Corner. Door: 109A. 11/2003
(See historic photo 1B-9.)



1C-85: Room 109, Women's Pack Room: South end of east wall. Door: 109B. 11/2003



1C-86: Room 109, Women's Pack Room: Southeast Corner. Door: 109B. Windows: 123 & 124. 11/2003



1C-87: Room 109, Women's Pack Room: South wall to southwest corner. Windows: 123, 124 & 125. Door: 108B. 11/2003



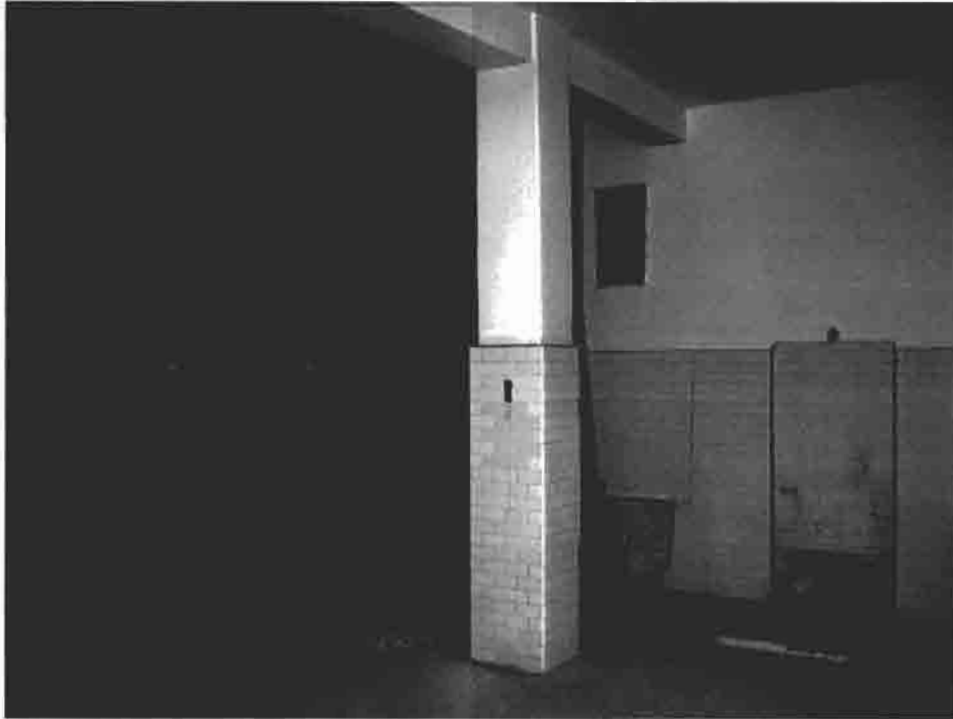
1C-88: Room 109, Women's Pack Room: Marble panel found stored in room 109.
Deterioration due to exposure to spring water and steam. 11/2003



1C-89: Room 109, Women's Pack Room, Marble Panel. Deterioration due to exposure to spring water and steam. 11/2003



ROOM NUMBER:	110
ROOM NAME:	Women's Bath Hall
FLOOR FINISH:	1" White hexagonal tile with select gray tiles interspersed.
WALL BASE:	6' White ceramic tile wainscoting
WALLS:	6' White ceramic tile wainscoting with painted plaster.
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Painted plaster.
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-90: Room 110, Women's Bath Hall: Northwest Corner. Doors: 109A & 110A.
11/2003 (See historic photo 1B-8.)



1C-91: Room 110, Women's Bath Hall: North wall in northeast corner looking into adjoining restroom. Note: Ceramic tile wainscot in restroom is lower than Bath Hall: Door: 110B. Window: 117. 11/2003



IC-92: Room 110, Women's Bath Hall: East wall to southeast corner. Door: 110B, Windows: 117, 118 & 119. 11/2003



IC-93: Room 110, Women's Bath Hall, South Wall: Note: White tile wainscot & ghosts of removed baths and steam cabinets. Windows: 119, 120 (boarded up), & 121. 11/2003



1C-94: Room 110, Women's Bath Hall: Southwest corner to west wall. Windows: 120 (boarded up) & 121. 11/2003



1C-95: Room 110, Women's Bath Hall, East Elevation: The remainder of the steam cabinet's tile bases. Door: 108. 11/2003



1C-96: Room 110, Women's Bath Hall: Detail: Northeast corner on west end of north wall. 11/2003



1C-97: Room 110, Women's Bath Hall: Southwest alcove near Door 109A to Women's Pack Room. 11/2003



1C-98: Room 110, Women's Bath Hall: West Wall. Door to Room 109, Women's Pack Room. Door: 109A. 11/2003

ROOM NUMBER:	201
ROOM NAME:	Men's Dressing Room
FLOOR FINISH:	Concrete Slab
WALL BASE:	None
WALLS:	Plaster, painted white
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster, painted white
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-99: Room 201, Men's Dressing Room: North wall at northwest corner adjoining with Room 211, Men's Massage. Windows: 203, 204 & 205. 11/2003



1C-100: Room 201, Men's Dressing Room: Northwest Corner. Windows: Clerestory to stairwell, 203, 204, 205, 206, 207 & 208. 11/2003



1C-101: Room 201, Men's Dressing Room: North Wall, stair case to left. Windows: 207, 208, 209, & 210. 11/2003



1C-102: Room 201, Men's Dressing Room: North wall at northeast corner. Windows: 207, 208 (concealed behind column), 209, 210, 211, 212 213. 11/2003



1C-103: Room 201, Men's Dressing Room: Northeast Corner. Windows: 209, 210, 211, 212 & 213. 11/2003



1C-104: Room 201, Men's Dressing Room: North wall to northeast corner. Windows: 206, 207, 208, 209 (concealed behind column) 210, 211, 212 & 213. 11/2003



1C-105: Room 201, Men's Dressing Room: North wall to east wall. Windows: 205, 206, 211, 212, 213 & 214. 11/2003



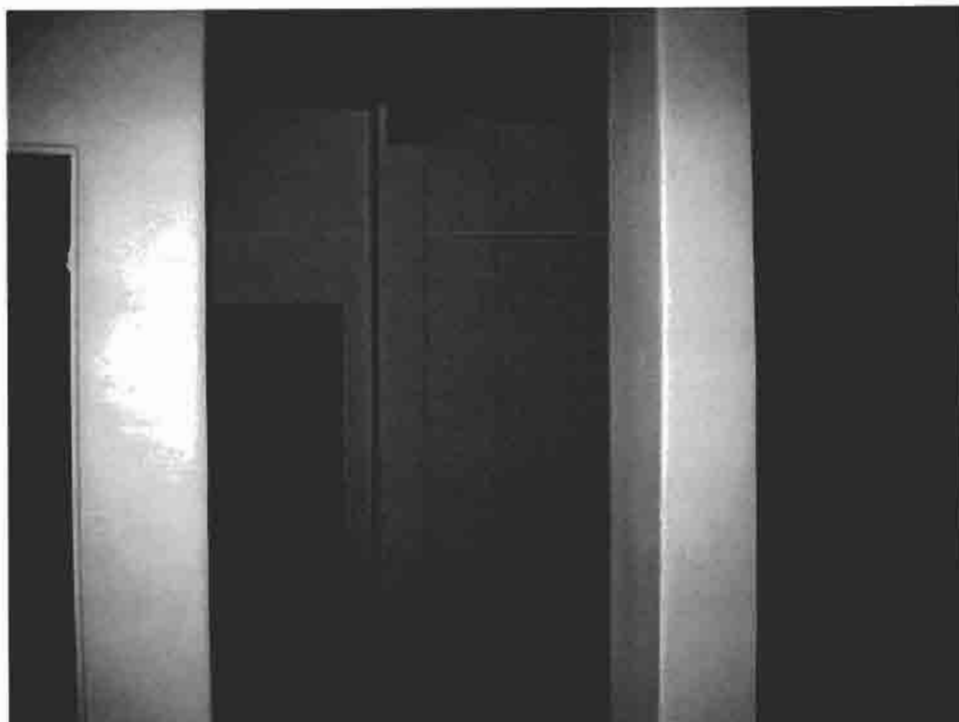
1C-106: Room 201, Men's Dressing Room, Southeast Corner. Windows: 212, 213, & 214. 11/2003



1C-107: Room 201, Men's Dressing Room: East wall at southeast corner in front of Room 202. Note: Marble steps up to room 202. Windows: 213 & 214. 11/2003



1C-108: Room 201, Men's Dressing Room: Southeast corner into Room 202, Toilet. Windows: 212, 213, & 214. Door: 202. 11/2003



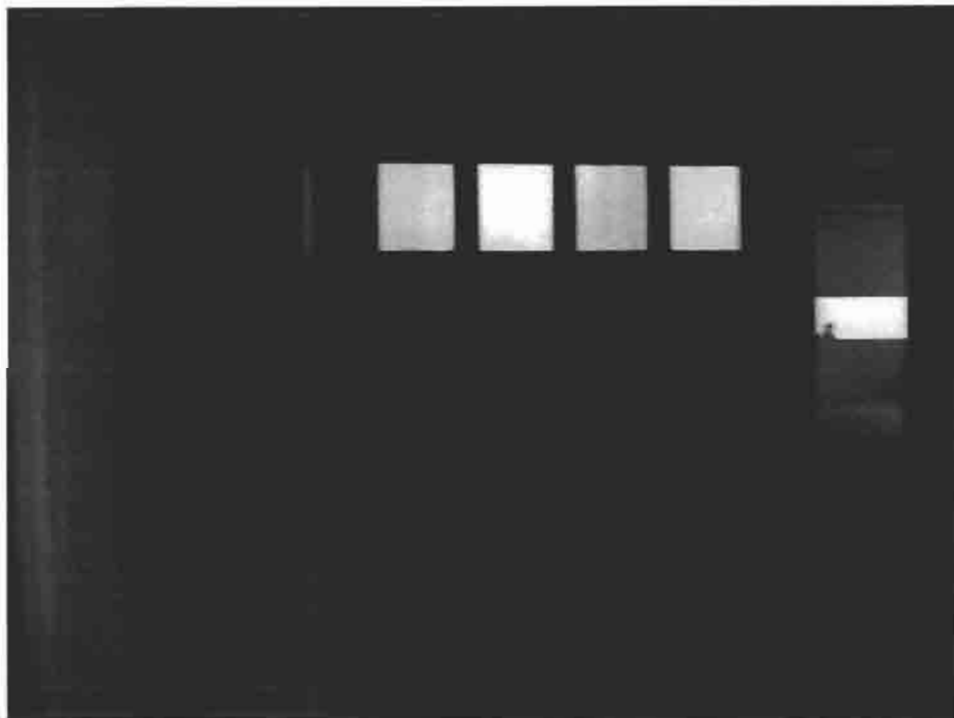
IC-109: Room 201, Men's Dressing Room: South wall looking into Gymnasium and Storage Room. Note: the original door. Doors: 204 & 203. 11/2003



IC-110: Room 201, Men's Dressing Room: South wall at southwest corner. Doors: 210B & 211A. 11/2003



1C-111: Room 201, Men's Dressing Room: Southwest Corner. Windows: Clerestory leading into stairwell. Door: 210B. 11/2003



1C-112: Room 201, Men's Dressing Room: West Wall at stairwell: (Windows: clerestory windows). 11/2003



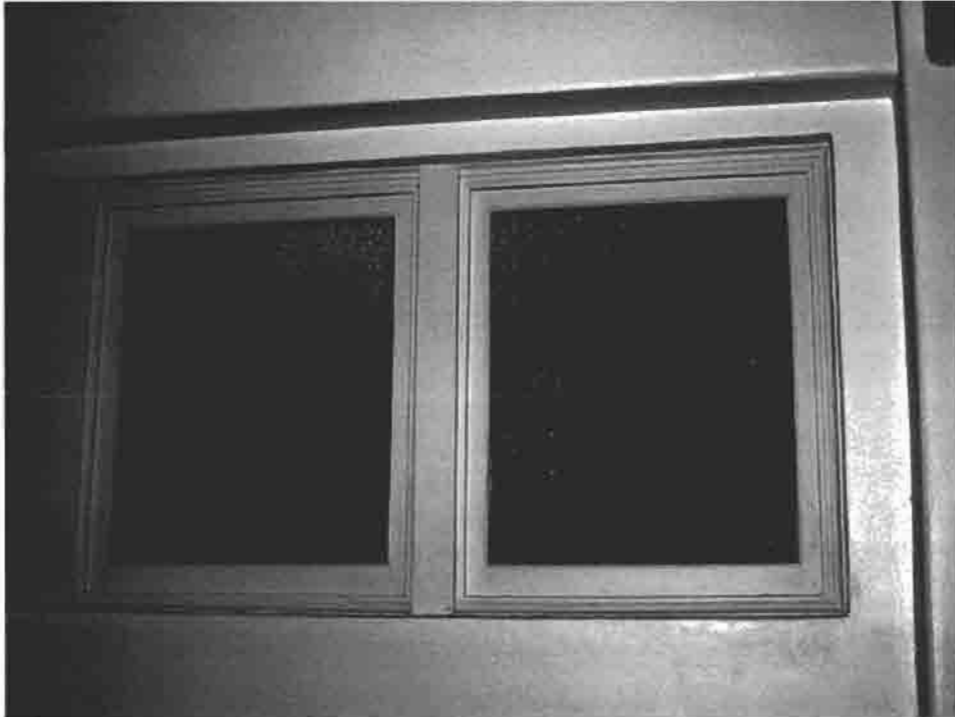
1C-113: Room 201, Men's Dressing Room: West Wall to northwest corner. Doors: 210B & 211A. Windows: 207 & 208, and window to room 211. 11/2003



1C-114: Room 201, Men's Dressing Room: Looking into stairwell. Clerestory windows can be seen on far wall. 11/2003



1C-115: Room 201, Men's Dressing Room: Window 203, bisected at the muntin by the wall of the Men's Massage Room. Window sash & hardware are typical of windows on this floor. 11/2003



IC-116: Room 201, Men's Dressing Room: Detail: Clerestory windows in upper stair hall. 11/2003



IC-117: Room 201, Men's Dressing Room: Marble steps into Room 202, Toilet. Note: Room 202 floor has hexagonal tiles. 11/2003

ROOM NUMBER:	202
ROOM NAME:	Toilet
FLOOR FINISH:	Hexagonal ceramic tiles
WALL BASE:	None
WALLS:	Plaster
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster
WINDOWS:	2 - See "Windows Condition Schedule"
DOORS:	Wood door in walnut finish with glass panel
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-118: Room 202, Toilet: North wall through Door 202 to northeast corner. 11/2003



IC-119: Room 202, Toilet: East wall to southeast corner: Windows with complete hardware. Window: 215. 11/2003



1C-120: Room 202, Toilet: South wall to southwest corner. Note: Original door. 11/2003



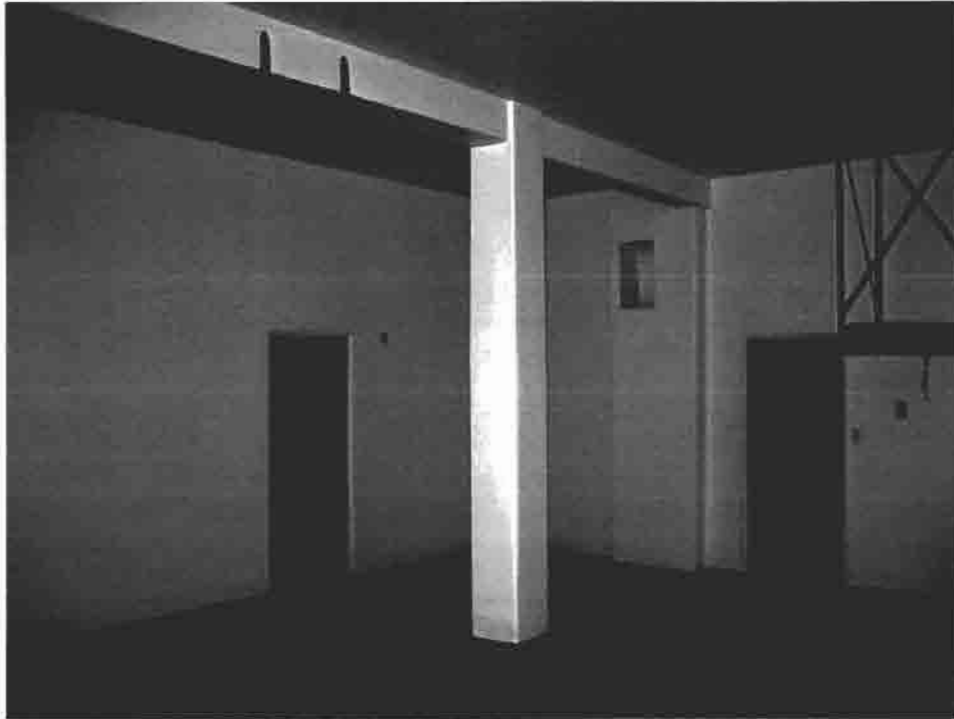
1C-121: Room 202, Toilet: West wall to northwest corner. Door: 202. 11/2003



ROOM NUMBER:	203
ROOM NAME:	Storage
FLOOR FINISH:	
WALL BASE:	
WALLS:	
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



ROOM NUMBER:	204
ROOM NAME:	Gymnasium
FLOOR FINISH:	Wood floor, tongue & groove, varnished long-leaf yellow pine is likely species
WALL BASE:	
WALLS:	
NORTH:	Plaster
EAST:	Plaster
SOUTH:	Plaster
WEST:	Plaster
OTHERS:	Partition walls are plaster over fired clay hollow tiles
CEILING:	Plaster
WINDOWS:	4 - See "Window Conditions Schedule"
DOORS:	2 - See "Door Conditions Schedule"
SPECIAL FEATURE:	The door to the gymnasium is varnished and has wire reinforced translucent glass in a rib pattern. The hardware includes glass entry doorknobs, and a nickel finish push plate. Suspension plates on beam. Platform suspended from ceiling from which "speed bag" was hung. Also remnant signage text, east wall.
KEY CONDITIONS CONCERNS:	
<p>The gymnasium has a varnished wood floor, with damaged wood in the northeast corner of the room.</p>	



1C-122: Room 204, Gymnasium: Northwest Corner. Door: 204. Windows: 216 & 217.
11/2003 (See historic photo 1B-5.)



1C-123: Room 204, Gymnasium: North wall to northeast corner. Door: 204. Window:
216. 11/2003



1C-124: Room 204, Gymnasium: Northeast corner to east wall. Note: Remnant signage.
Door: 204. Windows: 216 & 217. 11/2003



1C-125: Room 204, Gymnasium: East wall to southeast corner. Windows: 217 & 218.
11/2003



IC-126: Room 204, Gymnasium: East wall to southeast corner. Windows: 217 & 218. 11/2003



IC-127: Room 204, Gymnasium: South Wall. Windows: 217, 218 & 219. 11/2003



IC-128: Room 204, Gymnasium: South Wall to southwest corner: Note: Suspension plates on beam. Window: 219. Door: 207. 11/2003



IC-129: Room 204, Gymnasium: Southwest Corner. Windows: 218 & 219. 11/2003



1C-130: Room 204, Gymnasium: Southeast corner. Note: Suspension Plate. Window:
219. 11/2003



1C-131: Room 204, Gymnasium: West Wall to northwest corner. Doors: 207 & 204. 11/2003



1C-132: Room 204, Gymnasium: East Wall. Note: Remnant text. Window: 217. 11/2003



ROOM NUMBER:	205
ROOM NAME:	Women's Massage
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	1 - See "Window Conditions Schedule"
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-133: Room 205, Women's Massage: South Wall. Window: 220. 11/2003

ROOM NUMBER:	206
ROOM NAME:	Toilet
FLOOR FINISH:	Hexagonal ceramic tile
WALL BASE:	6" White ceramic tile
WALLS:	3" x 6" White ceramic wainscot
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with paint
WINDOWS:	
DOORS:	Original
SPECIAL FEATURE:	Beautiful stall partitions, mostly intact, with hardware
KEY CONDITIONS CONCERNS:	



IC-134: Room 206, Toilet: South Wall through door. Door: 206. Window: 221.
11/2003



1C-135: Room 206, Toilet: Detail of Stall. 11/2003



ROOM NUMBER:	207
ROOM NAME:	Women's Dressing Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	
DOORS:	Wood with glass panel
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	



1C-136: Room 207, Women's Dressing Room: Northwest Corner. Doors: 208 & 209.
(See historic photo 1B-11.) 11//2003



1C-137: Room 207, Women's Dressing Room: East Wall. Door: 207. 11/2003



1C-138: Room 207, Women's Dressing Room: Southeast Corner. Looking at Room 206, Toilet. Door: 206. Window: 222. 11/2003



1C-139: Room 207, Women's Dressing Room: South Wall. Room 206 at photo left. Door: 206. Windows: 222, 223 & 224. 11/2003



1C-140: Room 207, Women's Dressing Room: Southwest Corner. Windows: 224, 225, 226, 227 & 228. 11/2003



1C-141: Room 207, Women's Dressing Room: Southwest Corner. Windows: 222, 223, 224, 225, 226, 227 (obscured by column) & 228 (obscured by wall). 11/2003



1C-142: Room 207, Women's Dressing Room: West Wall. Windows: 223, 224, 225, 226, 227 & 228. 11/2003

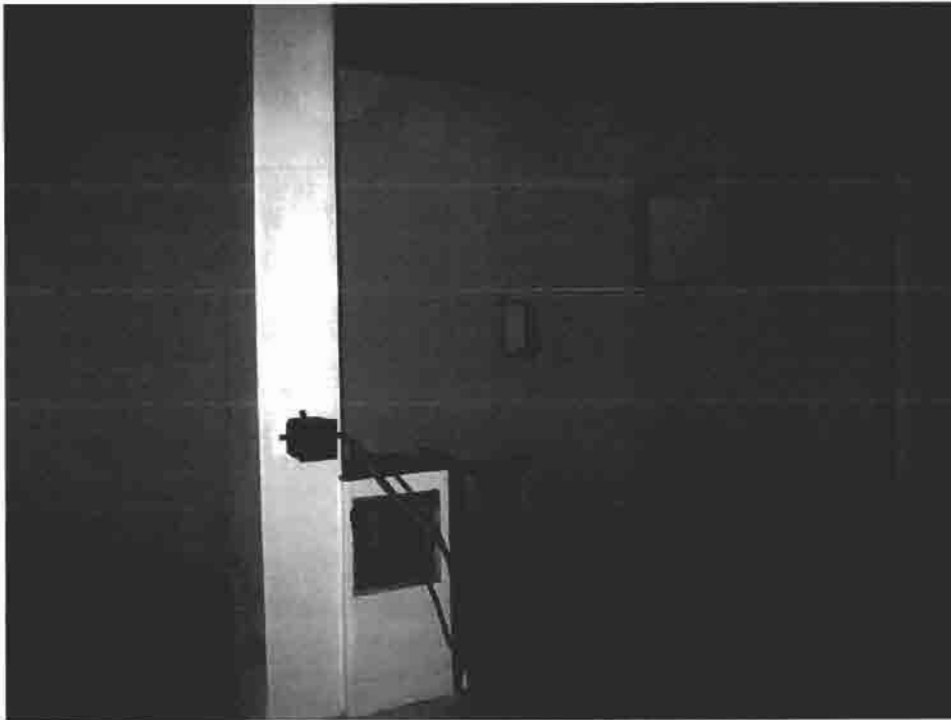


1C-143: Room 207, Women's Dressing Room: West Wall: Door into Room 209, Women's Massage. Windows: 225, 226, 227 & 230. 11/2003



ROOM NUMBER:	208
ROOM NAME:	Women's Cool Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	Clerestory windows into both upper stair halls
DOORS:	
SPECIAL FEATURE:	Access hatch to roof

KEY CONDITIONS CONCERNS:



1C-144: Room 208, Women's Cool Room: Northeast Corner. Windows: Celestory to stairwell. 11/2003



1C-145: Room 208, Women's Cool Room: East Wall to Southeast Corner Stairs. Windows: Celestory to stairwell. 11/2003



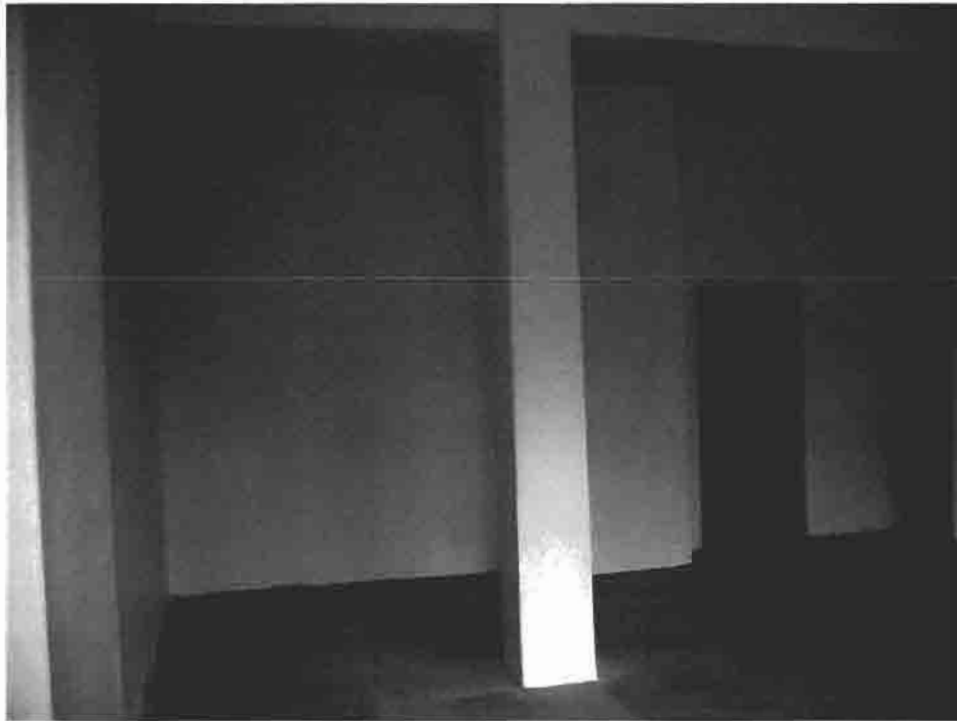
1C-146: Room 208, Women's Cool Room. Detail: Ceiling with access hatch to roof.
11/2003



ROOM NUMBER:	209
ROOM NAME:	Women's Massage
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	
DOORS:	
SPECIAL FEATURE:	
KEY CONDITIONS CONCERNS:	
<ol style="list-style-type: none"> 1. Slab cracks, general minor. 2. Cracks in north wall, next to window. 	



IC-147: Room 209, Women's Massage Room: North Wall at Northwest Corner: Note: Crack next to window. Window: 231. 11/2003



IC-148: Room 209, Women's Massage Room: Northeast corner to east wall. Door: 209. 11/2003



IC-149: Room 209, Women's Massage Room: East wall to southeast corner. Door: 209. 11/2003



1C-150: Room 209, Women's Massage Room: South wall to southwest corner. Windows: 229 & 230. 11/2003



1C-151: Room 209, Women's Massage Room: Southwest corner. Windows: 229 & 230. 11/2003

ROOM NUMBER:	210
ROOM NAME:	Men's Writing Room
FLOOR FINISH:	Concrete slab
WALL BASE:	None
WALLS:	Plaster with white paint
NORTH:	
EAST:	
SOUTH:	
WEST:	
OTHERS:	
CEILING:	Plaster with white paint
WINDOWS:	
DOORS:	Arched doorways
SPECIAL FEATURE:	Arched doorways
KEY CONDITIONS CONCERNS:	



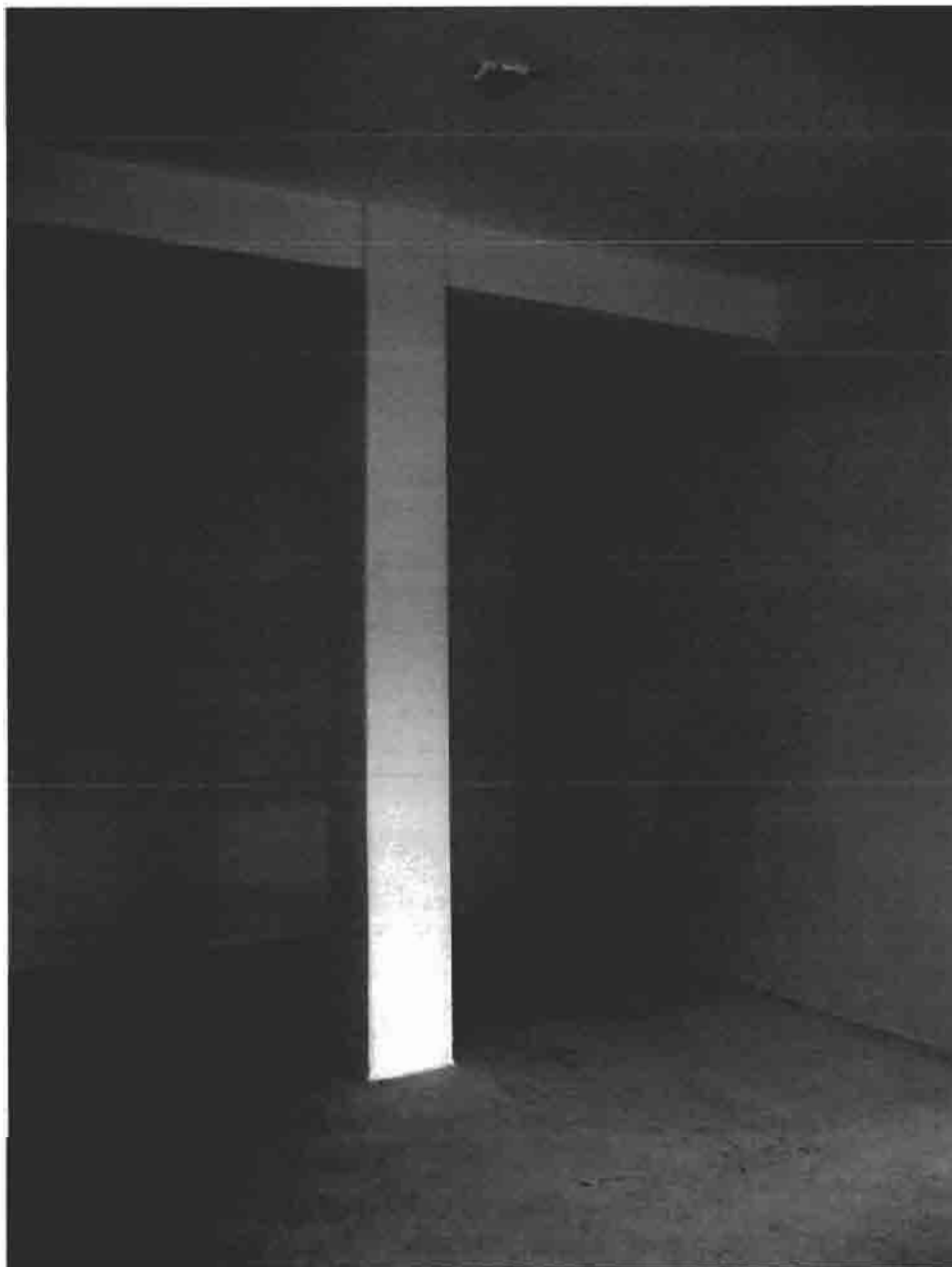
IC-152: Room 210, Men's Writing Room: Northwest corner. Windows: 232 & 233.
11/2003



IC-153: Room 210, Men's Writing Room: Northeast Corner. Door: 210A & 210B.
11/2003



1C-154: Room 210, Men's Writing Room: East wall toward stair hall beyond. Door:
210B. 11/2003



1C-155: Room 210, Men's Writing Room: Southeast Corner. 11/2003



1C-156: Room 210, Men's Writing Room: South Wall. Note: Ventilation shaft. 11/2003



1C-157: Room 210, Men's Writing Room: South wall to southwest corner. Window:
232. 11/2003



IC-158: Room 210, Men's Writing Room: Southwest Corner. Window: 232. 11/2003



1C-159: Room 210, Men's Writing Room: West Wall. Windows: 232 & 233. 11/2003



1C-160: Room 210, Men's Writing Room: Typical pair of windows along west wall. 11/2003

LAMAR EVALUATION OF INTEGRITY

Lamar Evaluation of Integrity

Integrity and historic character are of foremost importance when evaluating the significance of a structure. Historic character is defined by how well the past is conveyed through the structure. Integrity is defined by how much of the original material remains in tact and how well the materials have survived throughout the ages. Should enough of the original structure and its materials remain, the building is considered worthy of a National Register Nomination. The Lamar Bathhouse was placed on the National Register as part of Bathhouse Row. The National Historic Landmark nomination form stated in part:

Bathhouse Row is the largest collection of twentieth century bathhouses remaining in the United States, and it represents the high point of that industry when it reached its peak from the 1920s through the 1940s. Bathhouse Row is also one of the few collections of historic bathhouses remaining in the United States. As an entity, Bathhouse Row represents an area unique to the National Park System – an area where the natural resources historically have been harnessed and used rather than preserved in their natural state. On a regional level of significance, the bathhouses also form the architectural core of downtown Hot Springs, Arkansas. The bathhouses represent a fine collection of varied eclectic architectural styles popular during the 'teens and twenties. ...

All of the buildings on Bathhouse Row have certain architectural elements in common that contribute to the district's unity. All of the buildings are set back the same distance from the sidewalk, and have garden areas and green spaces in front. They are all of similar height, scale, and proportions. The sidewalk and remaining Magnolia Promenade to the west and Grand Promenade to the east, tie the buildings together. What makes that unity successful rather than boring in an architectural sense is the diversity that exists within it. The eclectic combination of styles and materials provides texture and visual interest to the group. The free use of Greek, Roman, Spanish, and Italian architectural idioms emphasize the high style sought after by the planners and create a strong sense of place.

As a part of the historic Bathhouse Row, the Lamar Bathhouse remains in its historic context. Its history has been discussed at length in other sections of this report. The design of the exterior has been altered very little since its original construction, and the same is true of the other structures on Bathhouse Row. This fact contributes greatly to the ability of the Lamar to successfully convey a sense of history.

Determining whether or not remaining building fabric still conveys the intent of the original architectural design requires a closer look. The exterior, as mentioned above, has seen few changes. The Lamar interior has also seen very few changes, and all quite minor, until 1945.

At that point marblework and iron balustrades, which had been called for in the original specifications, were finally put in place. In addition, several interior spaces – Women’s Massage Room, Sun Balcony, Women’s Cooling Room, and Men’s Hall – were somewhat reconfigured. Since these changes occurred within the proposed period of significance, 1923-1947, they are considered to be of importance. No further changes are recorded in available documentation until after the bathhouse closed to the public. Several maintenance projects carried out by the National Park Service, beginning in 1985, have disrupted some original materials.

Chamberlin Architects completed a Schematic Design study in June 2003 in order to determine the amount of historic building fabric that remains. Spaces designated as Primary Historic Interior Spaces are the Lobby; the stair core, including the Men’s Hall and Women’s Hall; and the Gymnasium. The remainder of the first and second floors is historically significant at a lesser level. Original material remaining in the lobby includes decorative painting on walls and ceiling, decorative floor tile and tile wainscot, marble counter, and lock boxes for valuables. The stair core retains the marble stairs and iron balustrades, and glass skylights, currently in storage. The gymnasium has its original wood floor, remnants of equipment, and partial graphic text on one wall. Windows remain largely unaltered. Even with deterioration present in historic materials, it appears that what remains within the largely unaltered spaces does convey a sense of the original architectural design. Thus the importance of the remaining historic fabric is a consideration in making preservation treatment decisions.

II - TREATMENT AND USE

A - ULTIMATE TREATMENT AND USE

This narrative discusses and analyses the ultimate treatment and use of the Lamar Bathhouse as defined by the *General Manage Plan/Development Concept Plan* for Hot Springs National Park and as proposed in the documents prepared for *Schematic Design / Hot Springs National Park / Hot Springs, Arkansas / HOSP-056091C / Phase C* dated June 23, 2003 by Chamberlin Architects. Recommended treatment in general is to preserve the extant historic materials and features, and not to restore missing features except in identified primary historic areas and then only when sufficient documentation exists to accurately reconstruct the missing feature.

The Lamar Bathhouse rehabilitation will consist of shell, core and final finish for Park Administration Offices and Curatorial Storage. The level of finish will be typical of lease office space except that rooms determined to be historic will be rehabilitated. Following the precedent set by the Bathhouse Row Adaptive Use Program Technical Reports prepared for the other bathhouses in Bathhouse Row, rooms with significant historic fabric remaining and unique or highly decorative features were identified as distinguishing historic spaces.

Three Rehabilitation Zones were established to define the level of rehabilitation treatment and each space in the bathhouse was assigned to one of the three zones. The three zones are:

DESIGNATION	DESCRIPTION	TREATMENT
1) PRIMARY HISTORIC AREA	These areas include the most historically significant rooms in the lease space as identified in the BATHHOUSE ROW ADAPTIVE USE PROGRAM - TECHNICAL REPORTS dated June 1985.	<ul style="list-style-type: none">• Historic finishes and fixtures will be repaired or replaced to match as closely as possible the remaining historic fabric and historic photographs.• Historic luminaires currently in storage will be reinstalled and copied if necessary.• Every effort will be made to conceal ductwork, conduits, piping and fire sprinkler systems.• New MEP components, grilles, outlets, etc, will be sensitively fit into the historic fabric.

2) SECONDARY HISTORIC AREA	These are the remaining historic spaces and in addition include the stairs, corridors, restrooms and other “core” spaces that may be added to meet code, accessibility and service.	<ul style="list-style-type: none"> • They will be finished with historic mouldings, walls, floors and ceilings (including skylights where present) to match remaining historic fabric. • Missing historic finishes will be reconstructed if sufficient data exists but historic bathhouse fixtures, such as water closets, partitions and sinks will be removed. Selected character defining features may be retained. • New areas or areas where no historic fabric remains will be finished to harmonize with the historic building but will not include false historic features. • Ductwork, conduits or fire sprinkler systems will be concealed when reasonable. • These will be cleaned, stabilized and finished to a utility level.
3) TERTIARY HISTORIC AREA	These are primarily basement areas that are subject to hot springs seeps and occasional flooding and attic areas not typically accessed.	

HISTORIC SPACES

The Lobby is clearly of historical significance. In the lobby the walls and ceiling are decoratively painted. The walls have a faux-painted stone finish above a glazed tile wainscot with landscape murals set in trompe l’oeil stone arches. The ceiling is also decoratively painted.

The Stair Core, which consists of a Men’s Hall and a Women’s Hall, was also deemed of historic value. While not as elaborately decorated as the lobby they still retain their original marble stairs. They also both contained glass skylights that have been removed for safe keeping by the Park Service. It is intended to rehabilitate and replace these skylights.

In these spaces the historic finishes and fixtures will be repaired. If a high level of documentation exists missing fixtures will be replicated otherwise distinct but compatible fixtures will be installed.

The only other room with any extant significant historic material is the second floor Gymnasium. This room still retains the original wood floor and remnants of the gymnasium

equipment. There is also partial graphic text still visible on one wall. Part of the program for the new Park Administrative Office is a gymnasium so this room is an obvious choice to rehabilitate to its historic use.

The Men's Bath Hall, while not identified as having significant historic value, is planned to be left largely intact while accommodating a new function. The historic bathhouse fixtures will for the most part be left intact and in place.

PROGRAM

The Park Staff provided the initial program requirements for the new Administrative Office. During a design charrette at the Park and discussions afterwards the basic program relationships were determined. It was also decided that preserving the historic fabric of the building was frequently more important than strictly meeting the program requirements. To achieve this some programs were adjusted to fit existing spaces and other program elements were eliminated. Curatorial Storage requirements initially called for a room with very strict temperature and humidity control and with water-impermeable construction. But in order to preserve as much of the Men's Bath Hall as possible, which is still in good condition and contains most of its historic bath fixtures, the historic materials to be stored at this location will be limited so that the strict environmental control requirements could be relaxed and therefore much of the existing space used in its current condition.

The plan allows for the future use of the lobby as a gift shop or other public function. The first floor features library research and curatorial storage areas to take advantage of the higher floor load capacity on this floor. The second floor accommodates administration offices and support areas as well as maintenance offices.



B - REQUIREMENTS FOR TREATMENT

This section outlines applicable laws, regulations and functional requirements. Specific attention is given to issues of human safety, fire protection, energy conservation, abatement of hazardous materials, and handicapped accessibility.

CODES

The development of the ultimate treatment use recommendations were prepared in conformance with applicable codes and NPS policies including: the *2000 International Building Code*, the *2001 NFPA 914 Code for Fire Protection of Historic Structures*, NPS Director's Order 28 *Cultural Resource Management Guidelines*, and *The Secretary of the Interior's Standards for the Treatment of Historic Properties*.

LIFE SAFETY

The *2000 International Building Code (IBC)*, fifth printing, and IBC Chapter 34 *Existing Structures* Section 3409 *Compliance Alternatives* were used to analysis the bathhouse for code compliance. The provisions of Section 3409 are intended to maintain or increase the current degree of public safety, health and general welfare in existing buildings while permitting repair, alteration, addition and change of occupancy without requiring full compliance with other sections of the IBC. Points are determined for 18 different Safety Parameters for three categories; Fire Safety, Means of Egress, and General Safety. Points are added to determine a Safety Score for each category. A mandatory safety score is subtracted from the building score for each category. Where the final score for any category equals zero or more, the building is in compliance with the requirements of this section. Refer to the Code Summary Sheet and Notes in the appendix for the tabulation of the results.

The existing interior stairs, a primary historic area, do not meet code for enclosure or separation on the second floor. Other life safety features can be incorporated to offset this deficiency using Section 3409 *Compliance Alternatives*. Therefore the historic stairs can remain and a second exit from the second floor is not required. Smoke detectors will be installed throughout all floor areas. A fire command station will be added with an emergency voice/alarm communications system. And a fire protection system will be added throughout the building.

A second means of egress must also be added to the first floor. Since the Lamar Bathhouse will be used as new Park administrative offices locating the second exit in the south side of the building closest to the existing Park Administration Building makes the most sense. A walkway will also be provided to connect the two buildings. Refer to the Alternatives for Treatment section for further discussion of exiting alternatives

FIRE PROTECTION

The building is not currently protected by an automatic sprinkler system and an automatic sprinkler system is not required for this building type and occupancy by the *2000 International Building Code*. The Reference Manual to Director's Orders 50B and 58 require buildings undergoing renovation to be equipped with an automatic sprinkler system. Also an automatic sprinkler system was used as part of the Chapter 34 compliance analysis to achieve the mandatory safety score. Therefore, the building will be fully sprinkled with a new wet sprinkler system designed to light hazard per NFPA. The new fire main will tee off of the existing 6" building main. A new fire entry assembly with a double check backflow preventer will be located in the basement. The Fire Department connection will be a freestanding assembly located in a suitable, culturally sensitive location. Sprinkler piping will be concealed where possible in new construction or where reasonable to do so; otherwise piping will be exposed.

For further discussion refer to the Lamar Bathhouse Mechanical Systems analysis in the appendix.

HAZARDOUS MATERIAL

The Park has initiated a program of hazardous material abatement and partial stabilization of the building envelope. National Park Service anticipates completion of this phase in late autumn of 2005.

ACCESSIBILITY

It is the National Park Service's policy to provide persons with disabilities the highest feasible level of physical access to historic properties that is reasonable, consistent with the preservation of each property's significant historical features. Alternatives were studied, in light of this policy, to find a location for elevator access to the second floor with the least impact on the historic fabric of the building while leaving as much flexibility as possible for development of the remaining space as office. Refer to the Alternatives for Treatment section for further discussion of elevator alternatives.

STRUCTURAL

The building is two-story with exterior masonry bearing walls and cast-in-place concrete interior columns and beams supported on concrete spread footings. Interior partitions are clay tile faced with plaster. The exterior walls are faced with plaster on the inside and stucco on the exterior.

In the summer and autumn of 2002 the Midwest Regional office contracted Schemmer Associates to provide Phase A design for all six (6) bathhouses to structurally and environmentally stabilize them. This work would stabilize the buildings but would not make them suitable for occupation. In September of 2003, the Midwest region awarded a contract to implement Schemmer's design for all six (6) bathhouses, including the Lamar Bathhouse.

The work scope includes heating and cooling system components to a stabilization level for all six buildings. The National Park Service anticipates completion of this phase the autumn of 2004.

For further information on the structural system refer to Lamar Bathhouse Structural Systems analysis in the appendix and to the Phase A Stabilization documents prepared by The Schemmer Associates.

MECHANICAL AND ELECTRICAL

Refer to Lamar Bathhouse Mechanical Systems and Lamar Bathhouse Electrical Systems analyses in the appendix.



C - ALTERNATIVES FOR TREATMENT

This section presents and evaluates alternative approaches to realization of the ultimate treatment. Alternatives are presented in both text and graphic form. Analysis addresses the adequacy of each solution in terms of impact on historic materials, effect on historic character, compliance with NPS policy, and other management objectives. The section concludes with elaboration on the recommended course of action and specific recommendations for preservation treatments.

A study was done which concentrated on the alternative ways of meeting accessibility and egress requirements as they relate to exits, stairs and elevators. The complete study is contained in *Value Analysis Report, Hot Springs National Park, Lamar, Ozark and Quapaw Bathhouse* by Chamberlin Architects dated April 28, 2003. A summary of this report follows.

Code criteria used to date is limited to IBC 2000, fifth printing. Further analysis will be performed with NFPA 101 and 914, UFAS and ADA. NPS policies requiring elevators to all floors in NPS occupied buildings, fire sprinklers and smoke detection systems will be accepted as criteria even if not required by code.

Relative to only the stairs, elevators, and exits the buildings do not currently meet the code for the following reasons:

1. Two exits are required from the first floor, only one exists.
2. Two stairs exist from the upper floors but they do not meet the separation or enclosure requirements.
3. The upper floor is not accessible.

There are two exit separation rules in Chapter 10 of the IBC. The first is a minimum 30' separation between any point of an exit enclosure (1004.2.2.1 exception 1) and the second is that with fire sprinklers the exits or exit access doorways shall not exceed 1/3 of the diagonal dimension of the area served (1002.2.2.1 exception 2). This results in a separation requirement of about 43' for Lamar. It is not clear that the first rule applies to non-enclosed stairs. Nor is it clear at what point a measurement is taken in a non-enclosed stair relative to the second rule. Is it taken at the top riser, bottom riser, closest edge of riser or center of riser somewhere else? These distances are shown on sketch L-1 in the appendix and they highlight the effect on stair location.

Compliance with Chapter 34 is an alternative to full compliance with Chapters 2 through 33 (including Chapter 10) per 3409.1. It specifies a point system to be used to evaluate:

1. Fire Safety
2. Means of Egress
3. General Safety

The number of points required and the number of points available vary based on the occupancy and category of the safety parameters to be included. Chapter 34 allows the use of

existing exits that do not meet the separation requirement and also to leave both stairways open where Chapter 10 would require one of them to be enclosed.

ALTERNATIVES

Several alternatives were studied for second exit locations, stair options and elevator locations. Refer to Value Analysis Report for more detail. The alternatives are as follows:

EXIT LOCATION

Two first floor exit locations were studied. The purpose of this exit is to provide a second exit from the building as well as a convenient link to the current Administration Building immediately to the south. Both are located under existing wide windows to take advantage of the existing lintel and to not disrupt the fenestration rhythm. First floor levels of both buildings are within a few inches of each other.

ELEVATORS

Five alternative locations for the elevator were studied. Elevator 1 was eliminated because it impacts the historical mural. The remnant of Woman's Cool Room is difficult to use with #2 and it requires an awkward corridor for access. #3 is in a convenient room but the room is well located for storage or other purposes supporting the historic counter. Also, doors would change the historic stair hall. #4 is the preferred location because it preserves the historic hall, has convenient access to the south exit hall and works well with the preferred stair location. #5 (rotated 90 degrees from #4) is more of an impact on the historic hall.

STAIRS

Three alternatives for the stair were studied. Locations along the south wall were preferred to provide convenient access to the second floor from the south exit.

Stair location 1 provides the greatest separation but it also requires more space for circulation. Stair 3 works well with the preferred elevator location and is preferred if the separation is adequate.

PREFERRED ALTERNATIVE

EXIT LOCATION

Exit 2 was eliminated from consideration because it is further from the back door of the administration building, it is more visible from the street and the access to the stair hall is not as direct as Exit 1.

ELEVATORS

Elevator location #4 was selected as the preferred alternative.

STAIRS

Alternatives for the stair are largely driven the building code. Three options were studied:

1. No new stair
2. Unenclosed new stair
3. Enclosed new stair

The two existing stairs do not meet the separation or enclosure requirements of Chapter 10 of the IBC. Since two exits are required (occupant load of second floor exceeds 50), the available options include adding a third enclosed stair with separation required by Chapter 10 or using the IBC Chapter 34 formula for existing buildings without a third stair or, alternatively, with an open stair for convenience.

No New Stair	
<u>Advantages</u>	<u>Disadvantages</u>
Saved space on two floors Saved expenses Less trauma to historic structure	Not as convenient access to 2 nd Floor Additional expense for other "safety parameter" points

Unenclosed New Stair	
<u>Advantages</u>	<u>Disadvantages</u>
Convenient access to 2 nd floor	Expense Takes up space on two floors Trauma to historic structure

Enclosed New Stair	
<u>Advantages</u>	<u>Disadvantages</u>
Complies with Chapter 10- saves "safety parameter" items	Expense Takes up space on two floors Trauma to historic structure

A Choosing by Advantages analysis was done on the three stair alternatives. Factors incorporated into the analysis were:

1. Improve the Convenience of Building Circulation.
2. Impact to Space Layout.
3. Visual Appearance.
4. Impact to Historical Spatial Character.
5. Impact on Historic Fabric.
6. Structural Impacts.
7. Level of Safety.

The analysis concluded that alternative 1, no new stair, offered the greatest advantage for the amount of money spent. For the complete analysis refer to *Stairs and Elevator Locations Lamar, Ozark and Quapaw Bathhouses at Hot Springs National Park – Value Analysis and Choosing by Advantages Studies May 6-7, 2003* prepared by URS Corporation.

D - CULTURAL LANDSCAPE ASSESSMENT

PHYSICAL EVOLUTION OF PROJECT AREA (LAMAR BATHHOUSE)

EARLY USE OF THE HOT SPRINGS, PRE-1804

Early human use of the area is known to extend back nearly 10,000 years. However, Native American use had no lasting effect on the Hot Springs Creek Valley. The first European incursions into the area probably occurred in the eighteenth century, but also had little impact.

EXPLORATION AND EARLY SETTLEMENT, 1804-1870

Shortly after the beginning of the 19th century emigrants began to settle around the springs, building cabins for lodging that served the adventuresome and the sick who came to bathe. By 1860 the tiny settlement had grown to a respectable village with a number of hotels and bathhouses. During the Civil War, raiders burned most of the City's buildings. However, former inhabitants returned after the war to rebuild the town whose population was swelled by sick and wounded war veterans who came to bathe in the springs. Unfortunately, little information from this period can be related to the area directly surrounding the bathhouse.

EMERGENCE OF THE SPA AND THE RESERVATION, 1870-1892

By the 1870's the area was becoming a spa resort, with many buildings stretched in a linear north-south pattern along Hot Springs Creek. An 1876 government commission formed to resolve the area's land-disputes formally laid out the town of Hot Springs, condemned buildings on government land and outlined the basic shape of the landscape as we know it today. As a result, Bathhouse Row evolved from a jumble of buildings – some built directly over Hot Springs Creek for easy drainage of their baths – to an ordered, more formal arrangement.

The Hot Springs Creek Arch was constructed in 1884-1886 when the U.S. Army Corps of Engineers walled over the creek with a rocky masonry arch/culvert. This provided level topography on which to develop a formal landscape and promenade in front of the bathhouses. A Victorian-style bathhouse – built 1888 – occupied Lamar's site prior to the current building's construction. Despite improvements, bathhouses still used an antiquated system of individual cooling tanks and above-ground pipes to collect and manipulate hot spring water.

DEVELOPMENT OF THE RESERVATION, 1892-1897

Between 1892 and 1897 a massive beautification program was undertaken for the Hot Springs Reservation. Secretary of the Interior John Noble wanted to heighten the natural mountainside scenery with development of a decorative park behind the bathhouses. Bathhouse Row itself was transformed into a formal landscape containing a main walk, rest areas, drinking fountains and shrubbery. A double row of trees (probably elms) was planted in the lawn area in front of the bathhouse, along with a Kentucky bluegrass and clover lawn. The above-ground network of pipes was removed and the old wooden cooling tanks replaced by more decorative ones.

Frederick Law Olmsted's landscape architecture firm was chosen to prepare a design for Bathhouse Row, the main feature of which was a Spanish-style arcade covering a broad level promenade in front of the bathhouses. However, Secretary Noble rejected this plan because he felt the design would create an unnecessary barrier between the city and the bathhouses, and would block the sun during cooler months. Instead, Noble selected Army Lieutenant Robert Stevens to complete a formal landscape plan that was implemented in later periods.

CREATION OF THE PREMIER AMERICAN SPA, 1897-1922

Despite extensive improvements during the 1880s and 1890s, the Hot Springs bathing facilities had become shabby, dirty and inadequate for the turn of the century. In 1910, following an inspection of the bathhouses that revealed filthy conditions, the Secretary outlined a new Department policy: there were to be no lease renewals unless the applicants agreed to build new, sanitary, modern buildings. Existing buildings were systematically razed over the next 12 years, and most replaced with new structures.

In 1916 Stephen Mather hired noted landscape architect Jens Jensen from Chicago to lay out Reservation plantings – in particular colorful raised beds composed of thousands of spring-flowering bulbs. However, the locations of these bulbs were not documented. Jensen probably also laid out new electric lighting along the Magnolia promenade, which increased use of the area into the evening hours.



Figure CLA-1: Postcard of the original Lamar bathhouse in the 1890s shows elm trees and ornamental plantings set in turf. Note narrow sidewalk and lack of clipped hedge (HOSP Archives).

An elaborate comprehensive plan was prepared in 1917 by Little Rock architects George R. Mann and Eugene John Stern. They visualized a row of Spanish Renaissance Revival style bathhouses set among formal concert and upper gardens with secluded space, massed shrubbery, vine-covered buildings and trees all around. However, most of this plan was never implemented due to its high cost.

THE RESERVATION BECOMES A NATIONAL PARK, 1922-1947

The new Lamar bathhouse opened in 1923, constructed in Spanish Colonial Revival style. The new building occupied a much larger portion of the site than the former buildings, and was partially built into the hillside. Entry to the building became much more formal, with a central ramp and/or staircase, with the ramps being an early example of universal access. Plantings remained formal, with a row of Winged elm trees (*Ulmus alata*) in front of the building and beds of deciduous shrubs and flowers at its base.

DECLINE AND RESURGENCE OF BATHHOUSE ROW, 1947 – PRESENT

Most of the bathhouses on Bathhouse row closed amid declining business following World War II. The concessioner using the Lamar bathhouse went out of business in 1985. After this

date, landscape-related activities at the bathhouse focused on maintenance of existing facilities. Plantings were altered significantly during this period. During the late 1980s, trees flanking the bathhouse entry were removed and most of the foundation plantings were removed around 2000. Separation of the public promenade from the more private bathhouse fronts disappeared as a result.

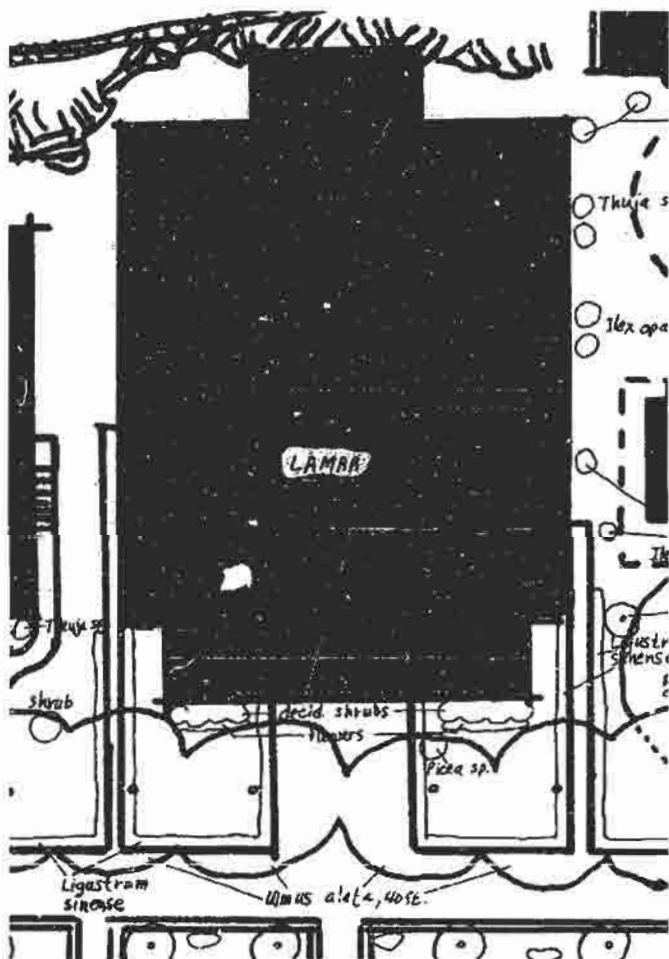


Figure CLA-2:
Probable
planting layout
during the
1930s. (TIC
item 20028).

CHRONOLOGY OF DEVELOPMENT AND USE

EARLY USE OF THE HOT SPRINGS, PRE-1804

- No Relevant or Surviving Features

EXPLORATION AND EARLY SETTLEMENT, 1804-1870

- No Relevant or Surviving Features

EMERGENCE OF THE SPA AND THE RESERVATION, 1870-1892

	<i>Landscape Feature</i>	<i>Contributing</i>
Spatial Organization		
Creek/Western Orientation	Bathhouse oriented to Hot Springs Creek, which after construction of the Creek Arch became the front lawn and Magnolia Promenade	Contributing
Linear Organization	Unified linear space in front of and including Victorian bathhouses	Contributing
Topographical Constraint	Rear of bathhouse bounded by hillside	Contributing
Circulation		
Main Access	Convenient bathhouse access through central main entrance and sidewalk from Magnolia Promenade	Contributing
Service Access	No formally designated access to sides/back of bathhouse	Contributing
Topography		
Level Front Area	Linear, level strip of land in front of bathhouses created by enclosing Hot Springs Creek in a masonry arch	Contributing
Mountainside Cut	Slope behind bathhouse cut into to provide space for constructing bathhouse	Contributing
Land Use Practices and Resulting Patterns		
Recreation	Landscape around bathhouse provided a link in the setting for passive recreation (ie walking, etc.)	Contributing
Views and Vistas		
Architecture	Building façades were the dominant view, reinforced by foreground of lawn and vegetation that didn't obstruct view	Contributing

EMERGENCE OF THE SPA AND THE RESERVATION, 1870-1892 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Vegetation		
Lawn	Creek Arch provided level ground plane in front of bathhouses, which was planted with Kentucky bluegrass and clover	Contributing
Buildings and Structures		
Bathhouses	Victorian-style Lamar bathhouse occupies site (built 1888)	Missing
Façade	Building façade limited views and established strong vertical edge. It also defined a more Victorian style for landscape planting	Original Façade is Missing
Creek Arch	Creek Arch provided level ground plane in front of bathhouses, and enabled a larger building footprint	Contributing
Retaining Walls	Retaining walls behind and adjacent to bathhouse allowed a larger building footprint	Contributing
Water Features		
None	No constructed water features within the landscape area of the bathhouse during this period	
Small Scale Features		
None	No small scale features within the landscape area of the bathhouse during this period	
Connection between Building and Landscape		
Bathhouse Main Entrance	Sidewalk connecting the Magnolia Promenade and the building entrance provided the main connection between the building and landscape. The original bathhouse's sidewalk was much narrower than the current one	Original Sidewalk is Missing

DEVELOPMENT OF THE RESERVATION, 1892-1897

	<i>Landscape Feature</i>	<i>Contributing</i>
Spatial Organization		
Western Orientation	Bathhouse originally oriented to Hot Springs Creek, which after construction of the Creek Arch became the front lawn and Magnolia Promenade	Contributing
Linear Organization	Unified linear space in front of and including Victorian bathhouses	Contributing
Topographical Constraint	Rear of bathhouse bounded by hillside	Contributing
Circulation		
Main Access	Convenient bathhouse access through central main entrance and sidewalk from Magnolia Promenade	Contributing
Service Access	No formally designated access to sides/back of bathhouse	Contributing
Topography		
Level Front Area	Linear, level strip of land in front of bathhouses created by enclosing Hot Springs Creek in a masonry arch	Contributing
Mountainside Cut	Slope behind bathhouse cut into to provide space for constructing bathhouse	Contributing
Land Use Practices and Resulting Patterns		
Recreation	Landscape around bathhouse provided a link in the setting for passive recreation (ie walking, etc.)	Contributing
Views and Vistas		
Architecture	Building façades were the dominant view, reinforced by foreground of lawn and vegetation that didn't obstruct view	Contributing
Vegetation		
Victorian-Style Plantings	Plantings were Victorian-style, with a double row of trees set in lawn, with interspersed shrubs and possibly circular flowerbeds – although this was not well documented. Vegetation was generally exotic, as opposed to native	Missing
Lawn	Creek Arch provided level ground plane in front of bathhouses, which was planted with Kentucky bluegrass and clover	Contributing

DEVELOPMENT OF THE RESERVATION, 1892-1897 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Tree-row	Trees (probably elms) along sidewalk planted to form arched canopy	Missing
Buildings and Structures		
Bathhouses	Victorian-style Lamar bathhouse occupies site (built 1888)	Missing
Façade	Building façade limited views and established strong vertical edge. It also defined a Victorian style for landscape planting	Original Façade is Missing
Creek Arch	Creek Arch provided level ground plane in front of bathhouses, and enabled a larger building footprint	Contributing
Retaining Walls	Retaining walls behind and adjacent to bathhouse allowed a larger building footprint	Contributing
Water Features		
None	No constructed water features within the landscape area of the bathhouse during this period	
Small Scale Features*		
Street Lamps	By 1897, four iron gas street lamps had been installed along the front of Bathhouse Row	Contributing
Connection between Building and Landscape		
Bathhouse Main Entrance	Sidewalk connecting the Magnolia Promenade and the building entrance provided the main connection between the building and landscape. The original bathhouse's sidewalk were much narrower than the current one	Original Sidewalk is Missing

**Although two sources (Burt and Young 1998; EDAW 1998) list 50 rustic benches as being added to Bathhouse Row in 1896, a review of photographs for the following 30 years yields no evidence of them. If they existed, this number of benches in front of only 6 bathhouses should be easily seen. More likely, they were placed elsewhere on the reservation for pedestrian circulation development.*

CREATION OF THE PREMIER AMERICAN SPA, 1897-1922

	<i>Landscape Feature</i>	<i>Contributing</i>
Spatial Organization		
Western Orientation	Bathhouse originally oriented to Hot Springs Creek, which after construction of the Creek Arch became the front lawn and Magnolia Promenade	Contributing
Linear Organization	Unified linear space in front of and including Victorian bathhouses	Contributing
Topographical Constraint	Rear of bathhouse bounded by hillside	Contributing
Circulation		
Main Access	Convenient bathhouse access through central main entrance and sidewalk from Magnolia Promenade	Contributing
Service Access	No formally designated access to sides/back of bathhouse	Contributing
Topography		
Level Front Area	Linear, level strip of land in front of bathhouses created by enclosing Hot Springs Creek in a masonry arch	Contributing
Mountainside Cut	Slope behind bathhouse cut into to provide space for constructing bathhouse	Contributing
Land Use Practices and Resulting Patterns		
Recreation	Landscape around bathhouse provided a link in the setting for passive recreation (ie walking, etc.)	Contributing
Views and Vistas		
Architecture	Building façades were the dominant view, reinforced by foreground of lawn and vegetation that didn't obstruct view	Contributing
Vegetation		
Victorian-Style Plantings	Plantings were Victorian-style, with a double row of trees set in lawn and interspersed shrubs. Vegetation was generally exotic, as opposed to native	Missing
Lawn	Creek Arch provided level ground plane in front of bathhouses, which was planted with Kentucky bluegrass and clover	Contributing
Tree-row	Trees (probably elms) along sidewalk planted to form arched canopy	Missing

CREATION OF THE PREMIER AMERICAN SPA, 1897-1922 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Border Hedge	Low hedge – originally Chinese privet – divided lawn into compartments to imply a separate space dedicated to each bathhouse while also unifying the row of bathhouses	Contributing
Foundation Plantings	Plants were placed along the base of the bathhouse to soften and conceal its foundation	Missing
Raised Beds	Raised beds with flowers and flowering bulbs (tulip, hyacinth and narcissus) are referenced in research materials. However, their location is unknown	Missing
Buildings and Structures		
Bathhouses	Victorian-style Lamar bathhouse occupies site (built 1888)	Missing
Façade	Building façade limited views and established strong vertical edge. It also defined a Victorian style for landscape planting	Original Façade is Missing
Creek Arch	Creek Arch provided level ground plane in front of bathhouses, and enabled a larger building footprint	Contributing
Retaining Walls	Retaining walls behind and adjacent to bathhouse allowed a larger building footprint	Contributing
Water Features		
None	No constructed water features within the landscape area of the bathhouse during this period	
Small Scale Features*		
Street Lamps	Incandescent lights began to replace the older gas street lamps after 1897. In 1914, 15 ornamental electric light standards (five-cluster globe-type) street lamps were installed in front of the bathhouses to light the Magnolia Promenade. These replaced the previous light poles	Contributing

CREATION OF THE PREMIER AMERICAN SPA, 1897-1922 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Connection between Building and Landscape		
Bathhouse Main Entrance	Sidewalk connecting the Magnolia Promenade and the building entrance provided the main connection between the building and landscape. The original bathhouse's sidewalk was much narrower than the current sidewalk	Original Sidewalk is Missing

**Although two sources (Burt and Young 1998; EDAW 1998) list 50 rustic benches as being added to Bathhouse Row in 1896, a review of photographs for the following 30 years yields no evidence of them. If they existed, this number of benches in front of only 6 bathhouses should be easily seen. More likely, they were placed elsewhere on the reservation for pedestrian circulation development.*

THE RESERVATION BECOMES A NATIONAL PARK, 1922-1947

	<i>Landscape Feature</i>	<i>Contributing</i>
Spatial Organization		
Western Orientation	Bathhouse originally oriented to Hot Springs Creek, which after construction of the Creek Arch became the front lawn and Magnolia Promenade	Contributing
Linear Organization	Unified linear space in front of and including newly built bathhouses	Contributing
Topographical Constraint	Rear of bathhouse bounded by hillside	Contributing
Circulation		
Main Access	Convenient bathhouse access through central main entrance and sidewalk from Magnolia Promenade	Contributing
Service Access	Concrete sidewalks provide service access from the Magnolia Promenade to the building's basement	Contributing
Topography		
Level Front Area	Linear, level strip of land in front of bathhouses created by Hot Springs Creek arch in 1880s	Contributing
Mountainside Cut	Slope behind bathhouse cut into to provide space for constructing bathhouse	Contributing
Land Use Practices and Resulting Patterns		
Recreation	Landscape around bathhouse provided a link in the setting for passive recreation (ie walking, etc.)	Contributing
Views and Vistas		
Architecture	Building façades were the dominant view, reinforced by foreground of lawn and vegetation that didn't obstruct view	Contributing
Vegetation		
Lawn	Creek Arch provided level ground plane in front of bathhouses, which was planted with Kentucky bluegrass and clover	Contributing
Tree-row	Trees (probably elms) were planted in a line along the Magnolia Promenade's sidewalk	Missing

THE RESERVATION BECOMES A NATIONAL PARK, 1922-1947 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Border Hedge	Low hedge – originally Chinese privet – divided lawn into compartments to imply a separate space dedicated to each bathhouse while also unifying the row of bathhouses	Contributing
Foundation Plantings	Plants – deciduous shrubs and flowers – were placed along the base of the bathhouse to soften and conceal its foundation	Missing
Raised Beds	Raised beds with flowers and flowering bulbs (tulip, hyacinth and narcissus) are referenced in research materials. However, their location is unknown	Missing
Buildings and Structures		
Bathhouses	Lamar bathhouse constructed in Spanish Colonial Revival style (1922)	Contributing
Façade	Building façade limited views and established strong vertical edge. It also defined a style for landscape planting	Contributing
Creek Arch	Creek Arch remained in place from the 1880s, which provided level ground plane in front of bathhouses, and enabled a larger building footprint	Contributing
Retaining Walls	Retaining walls behind and adjacent to bathhouse allowed a larger building footprint. The Lamar's retaining wall incorporates a buttress just north of the bathhouse	Contributing
Water Features		
None	No constructed water features within the landscape area of the bathhouse during this period	
Small Scale Features*		
Street Lamps	Beginning in 1914, five-cluster globe-type street lamps were installed in front of the bathhouses to light the Magnolia Promenade. These numbered 20 by 1929.	Contributing

THE RESERVATION BECOMES A NATIONAL PARK, 1922-1947 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Signs on Bathhouse	Up until the 1930s the role of signs along Bathhouse Row was to identify bathhouses and advertise their facilities. This includes "Lamar" sign above the main entrance and the "Lamar Bathhouse" plaque next to the front door	Contributing
Sprinkler System	The first sprinkler system for the lawns was installed in 1928. It has since been replaced with newer components.	Missing
Connection between Building and Landscape		
Bathhouse Main Entrance	Sidewalk, ramps and stairs connecting the Magnolia Promenade and the building entrances provides the main connection between the building and landscape	Contributing

**Although two sources (Burt and Young 1998; EDAW 1998) list 50 rustic benches as being added to Bathhouse Row in 1896, a review of photographs for the following 30 years yields no evidence of them. If they existed, this number of benches in front of only 6 bathhouses should be easily seen. More likely, they were placed elsewhere on the reservation for pedestrian circulation development.*

DECLINE AND RESURGENCE OF BATHHOUSE ROW, 1947 – 2003

	<i>Landscape Feature</i>	<i>Contributing</i>
Spatial Organization		
Western Orientation	Bathhouse originally oriented to Hot Springs Creek, which after construction of the Creek Arch became the front lawn and Magnolia Promenade	Contributing
Linear Organization	Unified linear space in front of and including bathhouses	Contributing
Topographical Constraint	Rear of bathhouse bounded by hillside	Contributing
Circulation		
Main Access	Convenient bathhouse access through central main entrance and sidewalk from Magnolia Promenade	Contributing
Service Access	Concrete sidewalks provide service access from the Magnolia Promenade to the building's basement	Contributing
Topography		
Level Front Area	Linear, level strip of land in front of bathhouses created by Hot Springs arch in 1880s	Contributing
Mountainside Cut	Slope behind bathhouse cut into to provide space for constructing bathhouse	Contributing
Land Use Practices and Resulting Patterns		
Recreation	Landscape around bathhouse provided a link in the setting for passive recreation (ie walking, etc.)	Contributing
Views and Vistas		
Architecture	Building façades became the dominant view, reinforced by foreground of lawn and vegetation that didn't obstruct view	Contributing
Vegetation		
Lawn	Level ground plane in front of bathhouses continued to have turf-lawn of Kentucky bluegrass and clover	Contributing
Border Hedge	Low hedge – originally Chinese privet, but now Chinese holly – divided lawn into compartments to imply a separate space dedicated to each bathhouse while also unifying the row of bathhouses	Contributing

DECLINE AND RESURGENCE OF BATHHOUSE ROW, 1947 – 2003 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Foundation Plantings	Plants were placed along the base of the bathhouse to soften and conceal its foundation	Missing
Holly Tree-Row	Winged elms in front of the bathhouse were replaced with American Hollies in the 1950's. They were considered to be inappropriate historically, and removed sometime in the 1990s. This change revealed the entire building façade to passers-by, and eliminated the separation of public/private space of the Magnolia Promenade and front bathhouse lawn	Missing
Buildings and Structures		
Bathhouses	Lamar bathhouse constructed in Spanish Colonial Revival style (1922)	Contributing
Façade	Building façade limited views and established strong vertical edge. It also defined a style for landscape planting	Contributing
Creek Arch	Creek Arch remained in place from the 1880s, which provided level ground plane in front of bathhouses, and enabled a larger building footprint	Contributing
Retaining Walls	Retaining walls behind and adjacent to bathhouse allowed a larger building footprint. The retaining wall at Lamar includes a buttress just north of the bathhouse	Contributing
Water Features		
None	No constructed water features within the landscape area of the bathhouse during this period	
Small Scale Features*		
Street Lamps	Beginning in 1914, five-cluster globe-type street lamps were installed in front of the bathhouses to light the Magnolia Promenade, and are still in place	Contributing

**Although two sources (Burt and Young 1998; EDAW 1998) list 50 rustic benches as being added to Bathhouse Row in 1896, a review of photographs for the following 30 years yields no evidence of them. If they existed, this number of benches in front of only 6 bathhouses should be easily seen. More likely, they were placed elsewhere on the reservation for pedestrian circulation development.*

DECLINE AND RESURGENCE OF BATHHOUSE ROW, 1947 – 2003 (CONTINUED)

	<i>Landscape Feature</i>	<i>Contributing</i>
Signs on Bathhouse	Up until the 1930s the role of signs along Bathhouse Row was to identify bathhouses and advertise their facilities. This includes "Lamar Bathhouse" sign above the main entrance	Contributing
Signs - Other	Modern identification, directional and interpretive signs in front of Lamar do not detract from the landscape's historic character, but are not considered contributing. These include the restroom signs and the interpretive sign in front of the bathhouse	Non-Contributing
Trash Receptacles	Trash receptacles have been recently added along the sidewalk, but do not distract from the historic landscape	Non-Contributing
Sprinkler System	The current sprinkler system is a replacement of the original	Non-Contributing
Utility Covers	Utility manhole covers, outlets and electrical facilities in lawn area are mostly recent additions, and do not detract from the overall historic landscape	Non-Contributing
Connection between Building and Landscape		
Bathhouse Main Entrance	Sidewalk, ramps and stairs connecting the Magnolia Promenade and the building entrance provides the main connection between the building and landscape	Contributing
Auxiliary Access	North and south sidewalks/basement stairs provide convenient service access	Contributing

EVALUATION OF INTEGRITY

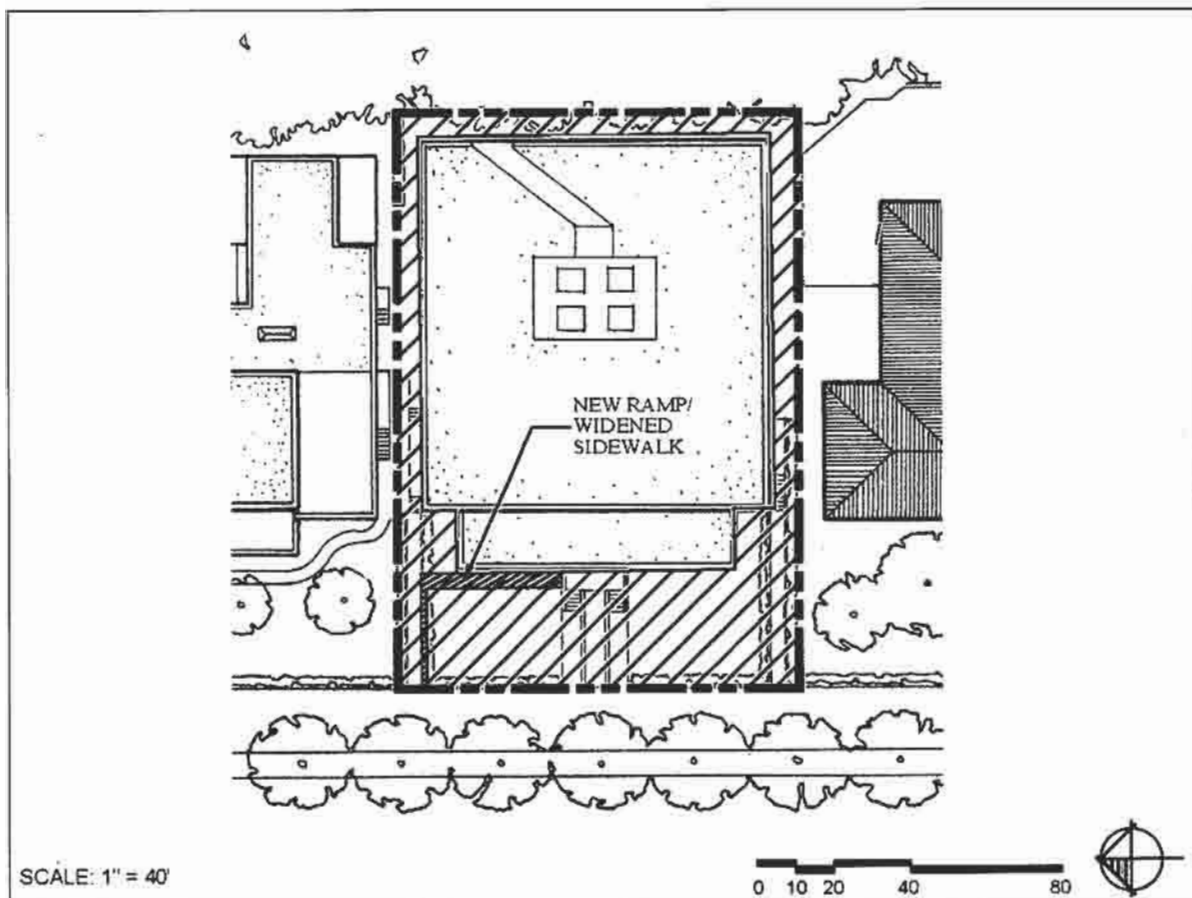
Overall, landscape characteristics of the Lamar bathhouse have retained their essential historic character. However, certain aspects have been altered somewhat reducing the landscape's integrity.

The bathhouse and its positioning in the landscape, the manner in which it is accessed, the topography both in front of and behind the bathhouse, the circulation system's role in passive recreation, the size and scale of the front lawn, and the dominant view of the bathhouse from the landscape are essentially unchanged from the historic period. Furthermore, architectural features such as the bathhouse facade, comfort stations, the Creek Arch and retaining walls have been essentially unaltered since built, and have a high degree of integrity within themselves. Important small-scale features, such as street lamps and building signs date from the historic period. More recent additions of signs, benches and trash receptacles do not detract from the historic landscape.

As to vegetation, much has been lost or altered over the years. The row of elms that ran parallel to the Magnolia Promenade was removed and replaced with American hollies – also now mostly removed. Furthermore, most foundation plantings have been removed. The clipped hedge that outlines the bathhouse lawn is now composed of Chinese holly (*Ilex cornuta*), which is different from the original species (Chinese privet). Generally, this does not pose a problem because the evolution of vegetation on Bathhouse Row has been somewhat haphazard without the benefit of an overall master plan to guide selection and placement. There are few records of vegetation as it has existed over time. Thus, other than the row of magnolias and the continuous hedges along the edges of the bathhouse lawns, there is currently no grouping or placement of vegetation that can be proven historically accurate. From analyzing historic photographs, however, one has the sense that the bathhouse's landscape reflected its resort character – a character that has now been lost.

RECOMMENDATIONS TO RESTORE INTEGRITY

Although visitors to the area still experience the same overall sense of time and place provided throughout the historic periods, the overall integrity of the landscape is only moderate. In order to restore integrity, the following changes should be implemented: Landscape Plantings: A 1987 vegetation study (Wright/O'Gwynn) can assist with interpretation of the type and placement of vegetation over time (1890s, 1930s, 1987). This should be used to restore plantings to a historic configuration. Planting restoration would include both rehabilitation of damaged Chinese holly hedges, as well as replacing plantings in front of the bathhouses with appropriate species. This would reestablish Bathhouse Row's lush resort feeling, allowing park visitors to better experience the area as it was during its historic period.



----- **PROJECT BOUNDARY**



ZONE OF MODERATE INTEGRITY

CULTURAL LANDSCAPE CONTINUES TO MEET HISTORICALLY PLANNED FUNCTION AND RETAINS CHARACTER DEFINING ELEMENTS. HOWEVER, PLANT MATERIALS SPECIES AND LOCATIONS HAVE BEEN MODIFIED OVER TIME. FURTHERMORE, THE NEW RAMP WILL CHANGE THE BUILDING'S RELATIONSHIP TO THE LANDSCAPE.

Figure CLA-3

EVALUATION OF IMPACT FROM SHELL AND CORE REHABILITATION

Modifications to the Lamar bathhouse during the 2003 shell and core rehabilitation project will not affect its cultural landscape's integrity. These modifications are limited to construction of a universally accessible ramp at the bathhouse entrance, and repair of the concrete entrance ramps/stairs. Damage to vegetation should be assessed and repaired immediately after project completion, to maintain integrity of the cultural landscape.



Figure CLA-4: Location of proposed universal access ramp would alter the building's strict symmetry. Note the flat lawn would be regraded to slope upward toward the entrance. (Shapins Associates, 2003)

UNIVERSALLY ACCESSIBLE RAMP

This new ramp will extend along the northern side of the building front, and will be constructed in the style of that building. This change will interrupt the strict symmetry of the building façade, and being a dominant landscape feature it will affect the landscape's formal feeling. The sloping ramp will also create a distraction from the building's dominant lines, and its will create a non-historic design element on the façade.

It will not markedly change the size and scale of the front lawn against which the building is seen, or other current vegetative features. The landscape's spatial organization, circulation, topography, land use patterns, and small scale features will be essentially unaltered.

In order to mitigate the interruption of symmetry, changes to the building should be symmetrical. In the case of the ramp, a corresponding ramp should be added to the south side of the building.

Vegetation restoration can mitigate the ramp's distraction from the building's dominant lines. The building's planting scheme in the 1930s – as shown in the 1987 Wright/O'Gwynn vegetation study – indicates foundation plantings of deciduous shrubs and flower beds. There was also a line of Winged elm (*Ulmus alata*) trees on the east side of the Magnolia Promenade. These plantings can focus visitor's attention away from the ramp and toward historic building features.

Figure CLA-5:
Original entry's
rigidly symmetrical
ramps emphasize
the building's
symmetry. The lawn
on the left is
planned to be
sloped toward the
new accessible
ramp. (Shapins
Associates, 2003)



FRONT LAWN REGRADING

As part of the universally accessible ramp modification, plans call for regrading the northern quadrant of the front lawn to accommodate the new ramp. Because the most-often described feature of the landscape is the broad, flat lawns in front of the bathhouses, this change will result in a loss of integrity to the cultural landscape and should not be implemented. Instead, the lawn should be left relatively flat in order to remain in character with its historic configuration.

ENTRANCE RAMP/STAIR REPAIRS

Concrete that forms the main entrance ramps, stairs and landings has deteriorated and will be removed/replaced. Plans call for replicating existing stair profiles including stair tread lips. Finish of stairs and top of walls is specified to be light broom finish to match existing. Insofar as these repairs match the original construction profiles, they will have no impact on the cultural landscape.



Figure CLA-6: Repair of degraded stairs and walls should replicate the existing profiles and finish. (Shapins Associates, 2003)

VEGETATION DAMAGE

The Chinese holly (*Ilex cornuta*) clipped hedge that outlines the bathhouse lawn has been removed in places, or has become damaged due to construction activities. Once the building rehabilitation project is complete, these areas should be replaced so that the hedge once again forms a seamless border to the lawn. The areas most damaged by construction are those along the sidewalk to the basement stairs and the sidewalk to the comfort stations.

Areas of the front lawn also have become damaged from soil compaction by construction equipment and foot traffic. These areas should be assessed, decompacted if necessary, and planted with fresh seed or sod.



Figure CLA-7: Damaged hedges should be rehabilitated or replaced. This entire row of hedges was removed in order to widen the sidewalk and install a new entrance ramp. (Shapins Associates, 2003)

RESOURCES

Stevens, Robert R. 1893. Report on Hot Springs Improvements to the Secretary of the Interior. Washington: GPO.

EDAW, Inc. 1993. Landscape Management Plan Implementation Guidelines, Bathhouse Row. Washington: National Park Service.

Cowley, Jill et al. 1989. Landscape Management Plan, Bathhouse Row. Arkansas: Hot Springs National Park.

Williams, Sherda and Marla McEnaney. 2001. Cultural Landscapes Inventory: Bathhouse Row. Washington: National Park Service.

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Appendix A. BIBLIOGRAPHY



BIBLIOGRAPHY FOR DEVELOPMENTAL HISTORY SECTION

Bedinger, M.S., et al. The Waters of Hot Springs National Park, Arkansas – Their Origin, Nature, and Management. Little Rock, Arkansas: United States Department of the Interior Geological Survey/National Park Service, 1974.

Blaeur, Mark. "Didn't All the Indians Come Here?" Separating Fact From Fiction At Hot Springs National Park. Unpublished manuscript, 2003.

Fossett, Frank. Colorado: It's Gold and Silver Mines, Farms and Stock Ranges, and Health and Pleasure Resorts. Tourist's Guide to the Rocky Mountains. New York: C.G. Crawford, Printer and Stationer, 1880. Reprinted – Glorieta, New Mexico: The Rio Grande Press, Inc., 1976.

General Management Plan, Development Concept Plan. Hot Springs National Park, Garland County, Arkansas: U.S. Department of the Interior/National Park Service, 1986.

Kovacs, Richard. "American Spas." Reprinted from Hygeia, The Health Magazine, March 1939.

McClellan, Walter S., M.D. "American Spas." Read at the Seminar on the Progress of Physical Medicine, New York Polyclinic Medical School and Hospital, New York, Dec. 1, 1947.

National Register of Historic Places Inventory – Nomination Form. Bathhouse Row. Nov. 13, 1974.

National Historic Landmark Nomination Form. Bathhouse Row, Hot Springs National Park. 1987.

National Park Service Cultural Landscapes Inventory 2001. Bath House Row, Hot Springs National Park.

Olmsted Archives, assorted papers. Frederick Law Olmsted National Historic Site, Brookline, MA. National Park Service, United States Department of the Interior.

Program: Sixth Annual Meeting of the Association of American Spas at Hot Springs, Arkansas. October 19, 20, 21, 1960.

Reinhard, Willa. "Ahhhhh ... There's the Rub." Preservation: The Magazine of the National Trust for Historic Preservation, November/December 2003.

Shugart, Sharon. "The Hot Springs of Arkansas Through the Years: A Chronology of Hot Springs Events." Hot Springs National Park: Department of the Interior, National Park Service, 2000.

Shugart, Sharon. "The Legend of the Quapaw Cave, Reexamined." Unpublished paper, prepared for Ray Yunk, Architectural Engineer, coordinator of the Hot Springs National Park Bathhouse Leasing Program. August 13, 1997.

Testimony Taken Before the Committee on Expenditures in the Interior Department Relative To: Certain things connected with the Government property at Hot Springs, Ark. June 17, 1884.

Truman, Harry S. Letter from Harry Truman to his daughter Margaret, September 14, 1937. Harry S. Truman Library & Museum, Independence, MO.

Witsell, Evans & Rasco. Ozark Bathhouse: Historic Structure Report. Little Rock, Arkansas: April 13, 1990.

Witsell, Evans & Rasco. Quapaw Bathhouse: Historic Structure Report. Little Rock, Arkansas: April 13, 1990.

Internet Web Sites:

Asms.k12.ar.us. "The History of the Bathing Industry in Hot Springs, Arkansas." 2003.

Http.com/news.history. "History of Spas/Hot Tubs." 2003.

Nps.gov/hosp. "The Forgotten Expedition of Dunbar and Hunter." 2003.

Appendix B. LAMAR MURAL CONDITION ASSESSMENT



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PRELIMINARY CONDITIONS ASSESSMENT

OF

LAMAR BATHHOUSE:

LOBBY, SUN PORCH MURALS, PLASTER, & DECORATIVE PAINT & SKYLIGHTS

And

QUAWPAW BATHHOUSE:

SKYLIGHTS

AT

HOT SPRINGS NATIONAL PARK

FOR

CHAMBERLIN ARCHITECTS

Grand Junction, Colorado
and Lakewood, Colorado

&

THE NATIONAL PARK SERVICE

Denver Service Center
Lakewood, Colorado

By

John D. Feinberg

Architectural Conservator
the Collaborative inc
Boulder, Colorado

Tony Karlsonas

Material / Art Conservator
EverGreene Painting Studios
Chicago / New York

JUNE 18, 2003

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EXECUTIVE SUMMARY:

SKYLIGHTS

More discovery required, as the panels are all packed in crates. Based on condition expectations, the conservation of the skylights at Quapaw will cost:

\$60,420.00 - \$194,580.00

The conservation of the skylights at Lamar will cost:

\$2,000.00

PLASTER: LAMAR

Repair and skim coat the entire sun porch ceiling repair and decorative plaster, three walls of the sun porch (South, West, and North), and small repairs to other surfaces. Cost Estimate:

\$7,850.00

MURALS CONSERVATION: LAMAR

Subject to results from laboratory analysis of the paint binder component, the six murals will be cleaned, cracks filled, areas of missing paint infilled, treated to stabilize paint and help adhere it to the surface, and clear coated. The Mural Conservator's range of costs is:

\$7,000.00 - \$8,000.00

Conditions may change after the structural stabilization jacking has occurred; more or less cracks, and more or less areas of plaster damage. However, due to the jacking, estimates of cost are not likely to change significantly.

DECORATIVE PAINTING: LAMAR

Repaint the south, west, and north walls of the sun porch; either the entire wall or from faux stone's mortar joints at arch spring points upwards. The sun porch ceiling is to be redone in the original technique and colors, as it is currently not original, nor is it a quality replication (wrong colors, and wrong sponging technique). Touch-up other areas where the paint is loose by securing paint when possible, or redo the entire "stone block" where it is more feasible to do so. Cost Estimate:

\$10,000.00 - \$17,500.00

SKYLIGHT CONDITION ASSESSMENT:

A cursory investigation of skylight panel conditions was undertaken on June 5 and 6, 2003 at Quapaw and Lamar Bathhouses. The skylights were all contained in wooden crates. Each crate was set on end without external markings, and contained a layout diagram taped to the first panel on the interior. Each crate contained as many as 28 panels, and all were quite heavy. The top of each crate was removed for observation purposes, as was one crate's front to observe a complete skylight panel (please see the photo below). The glass panels were laid on edge, in an upright position. Some loose pieces were present; these were possibly from broken panel sections that were encountered when the original removal was undertaken.

The panels in general were not removed from the crates for condition evaluation at this time. Removal of the panels will be a time consuming task: uncrate, remove, layout, evaluate, replace, and recrate. The proper examination of the skylight conditions is necessary to fully and comprehensively ascertain the extent of the work to be performed, and to provide input for contract documents for remedial treatments. The budget estimates provided at this time are made based upon very limited observation. The projections of typical problems and suggested remedial treatments are summarized below. A summary overview of the skylights in Lamar and Quapaw is provided in the "Skylight Survey" hereinafter.



WOOD FRAMED PANEL: NOTE THAT THIS IS AN END PANEL, & EXHIBITS A TYPICAL LAYOUT DIAGRAM TAPED TO THE PANEL. THIS IS AN EXAMPLE OF A REPAIRABLE PANEL; IT IS IN GOOD CONDITION.

WOOD FRAMED SKYLIGHTS: MEN'S & WOMEN'S BATH HALLS AT QUAPAW

Lay-in operable panels were found in the Men's and Women's Bath Halls at Quapaw. The remaining hardware indicates that the original intent of these panels was to provide ventilation. There were seven panels in two crates. Based upon a review of the skylights' current configurations, three panels per skylight was expected. The diagram found with the crates indicates that two out of three skylights had wooden center panels. These were most likely later replacements of the original leaded glass, the design for which was present in one panel (the "run" piece). Six end pieces were found, along with the one "run" piece. Two more run pieces need to be constructed to replace the missing ones.

The overall design has a border of two narrow amber opalescent strips surrounding a series of individually painted colored glass pieces. Textured pieces of clear glass ("obscured glass") are typical of the remaining field pieces. For the end pieces, the border defines their position; it is a squared "c" shape, and the opposite end contains a mirror image of this design. The "run" piece has the border on two opposing parallel sides.

WOOD FRAMED PANEL:
DETAIL OF RUN PANEL
FROM THE OUTER
EDGE; OPALESCENT,
PAINTED BLUE, GREEN,
& OBSCURED GLASS.



These pieces appeared to be fairly intact, and the assumed remedial treatments for the frames are as follows:

1. Paint samples should be taken from the wood frame for color matching.
2. Strip the paint.
3. Repair the wood frame, Dutchman, and apply Bondo or another permanent filler.
4. Prime and repaint.
5. Install new replacement hardware for missing hardware to match existing.

Due to loss and cracking, the glass will need to have 10% to 15% of the panes replaced, and assume infill of painting, and refiring of the pieces. Reworking of the came will be necessary to accomplish replacement. Recement the entire panel, and expect to resolder 15% of the joints. Restore the wood frames per above description. Refinish the ferrous metal support system at the skylight opening (by others), redo outer skylight (by others), and reinstall (by others). The woodwork and painting may be an extension of the stained glass conservation studios staff, but one should be prepared to divide up these tasks if their capabilities do not extend to these tasks, and/or it would be more cost effective.

BARREL VAULT SKYLIGHTS: MEN'S & WOMEN'S BATH HALLS AT QUAPAW

The Quapaw site has three barrel vaulted skylights in in the Men's Bath Hall, and one in the Women's. The panels are all frameless and have been stored flat, actually on edge, in crates. While reinforcing bars are present and have helped with their integrity, the panels are expected to be in only fair condition; the stress in change from curved to flat being a significant cause for condition problems.

Based upon limited observation, the problems and treatments for them are expected to be as follows:

1. Deteriorated cement is present, and should be replaced.
2. There are broken solder joints, broken came, and deterioration due to age, environment and handling. Replace the came, if the came is not replaced, then resolder the broken joints.
3. Replace the broken and missing glass (15% to 20%), to match.
4. Infill and refire the deteriorated applied painted decoration (fired).
5. Reinforcing rod with a loose connection, after recaming, reconnect with solder or wire twists, as the individual case dictates.



SOME TYPICAL
CONDITION PROBLEMS:
LOSS OF PAINTED
FINISH (1), LOOSE CAME
(2); CORROSION OF
CAMES (TYPICAL).



DETAIL OF PAINTED
FINISH LOSS

FLAT, LAY-IN SKYLIGHT: STAIR HALL AT LAMAR

At Lamar, the lay-in panels were found in a case. These were believed by National Park Service staff to have been from the Stair Hall skylight. Each panel was one piece of 1/4" thick "obscured glass" measured at 24" x 48", of which seven pieces were found. The frame work for the lay-in panels was not checked to ascertain if it had seven, or more, panel positions. If there are missing panels, these will need to be cut from matching glass.

SKYLIGHT BUDGET ESTIMATE:

The primary concern here is the lack of field documentation of the skylight panel conditions. A conservative, or somewhat pessimistic position would increase the costs substantially to cover these unknowns. The estimate must be based on assumptions, these are:

	REPLACE BROKEN & MISSING GLASS	RESOLDER JOINTS	RECAKE	RECEMENT
REPAIR:	15% to 20%	25%	25%	100%
RESTORE:	15% to 20%	100%	100%	100%

The variability factors are:

1. Amount of glass to be replaced, now broken or missing.
2. Amount of damaged painted (applied) glass; to be replaced if broken, and infilled where applique is missing.
3. Amount of recaming of panels.
4. The availability of the specific glass found in the panels - "obscured glass" patterns, green glass, and opalescent glass.
5. How many panels will exhibit conditions where repair is possible and how many will require comprehensive restoration?
6. National Park Service input regarding budget, timing, preservation philosophy, and timing.
7. How the project is bid and whether outreach efforts can be made, such as prequalification of the stained glass repair contractor. A national bid, only, may yield just urban area studios who respond with prices likely reflecting their labor market conditions. For example, Arkansas labor rates are significantly less than Chicago's.
8. Finally, the extent of work beyond the actual skylight panel repairs is unknown; for example, will the firm performing the skylight repairs be reinstalling the skylights, and if so, will the general contractor provide the necessary access equipment? Who will be responsible for repair and refinishing of the skylight frame work in which the panels will lay, etc.?

BUDGET ESTIMATE

1. Unit prices for wood frames were calculated at \$6.00 per perimeter foot, \$23.00 for hardware, and \$115.00 per square foot for new glass to replace the missing two panels.
2. Unit prices for repair and restoration were \$40.00 to \$160.00 per square foot.

The budget numbers for each skylight are provided in the "Skylight Survey" in this report.

PRELIMINARY SKYLIGHT SURVEY OF HOT SPRINGS NATIONAL PARK: LAMAR & QUAPAW

JUNE 12, 2003

BUILDING	LOCATION	SKYLIGHT TYPE	WITH FRAME	GLASS TYPE	INDIVIDUAL PANEL RIMS	# OF PANELS	GROSS SQUARE Ft.	PROJECTIONS OF CONDITIONS	REMEDIAL TREATMENTS	EST. OF REMEDIAL TREATMENT COST
Lamar	Stair Hall	Flat, lay-in	No	Obscured Clear	24" x 48"	7	56	Existing complete; 1 missing?	Clean, reinstall	\$2,000.00
Quapaw	Men's Hall (2); & Women's Hall (?). 1	Flat, lay-in Leaded, in frames, operable 3 panels per opening. 45" x 196" (1 x 3)	Yes Wood	Obscured Clear, Painted, & Colored	45" x 62" approximately	7 Two Missing?	136 Existing 39 Missing	Wood frame; material loss, paint, hardware. The glass; some breakage, some loss of applique, missing pieces. Loose came to glass connection, some loss of sol- dered joints, & "cement" poor	Recondition frames. Resolder joints as required, some new comes, re-cement, replace/infill miss- ing areas of applique & refire. Replace 2 missing panels.	Repairs: \$9,300.00 to \$10,500.00 Replace Missing 2 Panels: \$4,800.00
Quapaw	Women's Bath Hall	Barrel Vault, 18 panels (3 x 6)	No	Obscured Clear, Painted, & Colored	42" x 43"	18	226	The glass; some breakage, some loss of applique, missing pieces. Loose came to glass connection, some loss of sol- dered joints, & "cement" poor	Due to curvature, recame, re- cement, infill miss- ing areas of paint- ed applique & refire. Replace broken & Missing glass to match.	Repairs: \$9,000.00 to \$36,000.00
Quapaw	Men's Bath Hall; 3: North (N), Middle (M), & South (S)	Barrel Vault, 28 panels (4 x 7) each	No	Obscured Clear, Painted, & Colored	36 1/2" x 41 1/2"	28 North 27 Middle 28 South 83, & 1 is in archival storage, is it the missing 1?	883	The glass; some breakage, some loss of applique, missing pieces. Loose came to glass connection, some loss of sol- dered joints, & "cement" poor	Due to curvature, recame, re- cement, infill miss- ing areas of paint- ed applique & refire. Replace broken & missing glass to match.	Repairs: \$35,320.00 to \$141,280.00

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PLASTER CONDITION ASSESSMENT:

OVERVIEW OF SUN PORCH:
NOTE THE PLASTER
DAMAGE AT PHOTO LEFT
(WEST WALL & CEILING),
DECORATIVELY PAINTED
CEILING, & FAUX STONE
TREATMENT ON WALLS &
ARCHES.



OVERVIEW OF LOBBY:
NOTE CRACK THROUGH
MURAL, DIFFERING
COLORS ON BACK WALL
(RIGHT) WHICH ARE
LIGHTER, & DECORATIVE
PAINTING IN GENERAL.

LAMAR SUN PORCH & LOBBY

The plaster is of two general types: plain and decorative. The decorative plaster is executed with a companion decorative paint finish, the whole intended to represent a stone wall, laid in ashlar coursing, with arches highlighted by voussoired stones, and mortar joints "picked-out" with a light brown color which contrasts with the rough textured medium brown stones. The stone texture may be described as approximating a natural limestone tending toward travertine. Textural differences in the surface rarely exceed 4 mm in depth, so the large voids of a travertine are not present. Indents appear to have been made in the wet plaster by an object such as a pencil eraser (please see photo).



THE TREATMENT OF
ARCH FACES AT
BEAM LINE IS FAUX
STONE

Rougher areas of texture could have been made by any of a number of tools, and likely were, which could have varied from stiff bristle brushes to pointed and rounded sticks dragged through the wet plaster. Replication will require some creative experimentation.

PLASTER: FAUX STONE TEXTURE



The brown coloration to the wall stones does not appear flat because of two techniques, the above described texture and underpainting. By careful removal of the brown paint layer at the southeast corner of the sun porch, underlying paint layers were exposed (please see the photograph below). The first theory considered the possibility that these underlying layers were an earlier decorative paint scheme. But, the seeming randomness of the colors applied did not support the theory. While further exposure windows are necessary for corroboration, the second theory is deemed to be most likely: the underlying colors were expected to create more naturalness (randomness) in the overlying finish brown color coat.



PLASTER/DECORATIVE PAINT JUNCTION: EAST & SOUTH WALLS AT
SUN PORCH, LOCATION WHERE LOOSE PAINT WAS REMOVED TO
REVEAL UNDERPAINTING.

The plain plaster covers all ceilings, and beam surfaces of the lobby area, and mural areas. The sides of the beams at the arches has the special stone texture decorative finish. The areas covered by the murals have a smooth finish, while the other plain plaster areas display a sand finish.

PLASTER CONDITION SURVEY

The condition survey reviewed the walls separate from the ceiling. To aid in identifying, each wall portion is identified by a number (1 - 13), as shown on the accompanying graphic entitled "Plaster Condition Survey: Key Plan & Ceiling Conditions". On this same plan each ceiling section, or bay, is identified by a letter (A - E).

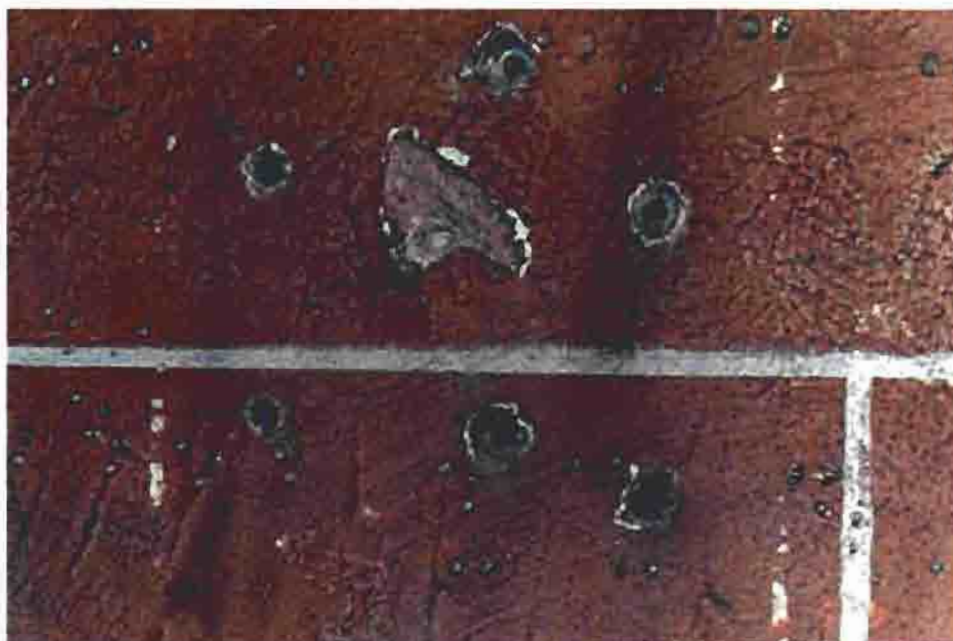
All of the surfaces have either murals or decorative paint treatments. Consequently, the decorative treatment of the walls is missing in areas of plaster damage, loss, or repair plaster. Damage is evident in scattered areas, as noted in the wall-by-wall analysis below, and in concentrated areas of the sun porch's West wall, and this wall's corners with adjoining walls. One large patch is present in the center bay of the lobby ceiling, which area is decoratively painted as described above for ceiling surfaces.



PLASTER: PATCH IN CEILING SECTION C, CENTER OF LOBBY. ALSO, NOTE MOISTURE DISCOLORATION SPOTS.

Other types of plaster damage encountered included edge chips at outside corners, arch face to intrados corners, and door heads; holes left from mounting hardware (signs, fire extinguishers, and the like); powdered areas due to water saturation; and cracks. Most of the cracks are due to building movement. Some ceiling cracks are the result of downward deflection. Building movement cracks range from barely visible to significant (2.5mm).

PLASTER CONDITION PHOTOGRAPHS



PLASTER: HOLES &
CHIPS, NOTE
TEXTURE OF
ADJACENT
FACE - THE FAUX
STONE.

PLASTER: DISCOLORATION OF RIGHT
HAND WALL, WITH POWDERED PLASTER,
EVIDENTLY MOISTURE RELATED.



PLASTER: LOOSE &
FLAKING PAINT, LIKELY
DUE TO LOCATION
ABOVE HVAC SUPPLY
GRILLE.

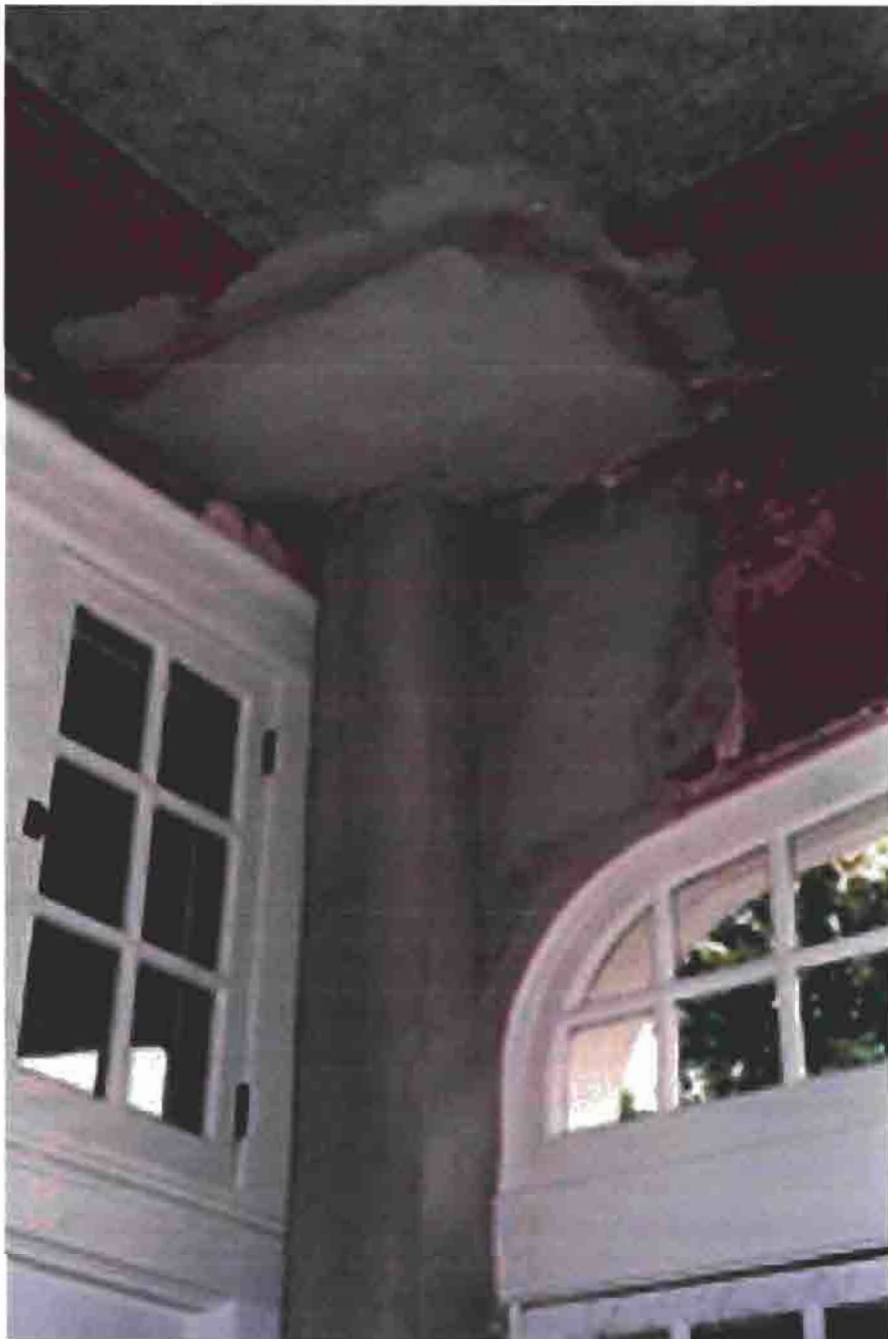


PLASTER: DAMAGE IS
EVIDENT IN SUN PORCH
WEST WALL (SOUTH END)
& CEILING. SOME
PRELIMINARY PATCHING
HAS OCCURRED.

PLASTER: SUN PORCH
WEST WALL, NORTH OF
ENTRY.



PLASTER: SUN PORCH,
WEST WALL (NORTH END),
HAS SLIGHTLY LESS
DAMAGE THAN SOUTH
END.



PLASTER: SOME PREVIOUS REPAIRS MAY NEED TO BE REDONE.

PLASTER CONDITION SURVEY & TREATMENTS: WALLS OF THE LAMAR SUN PORCH & LOBBY

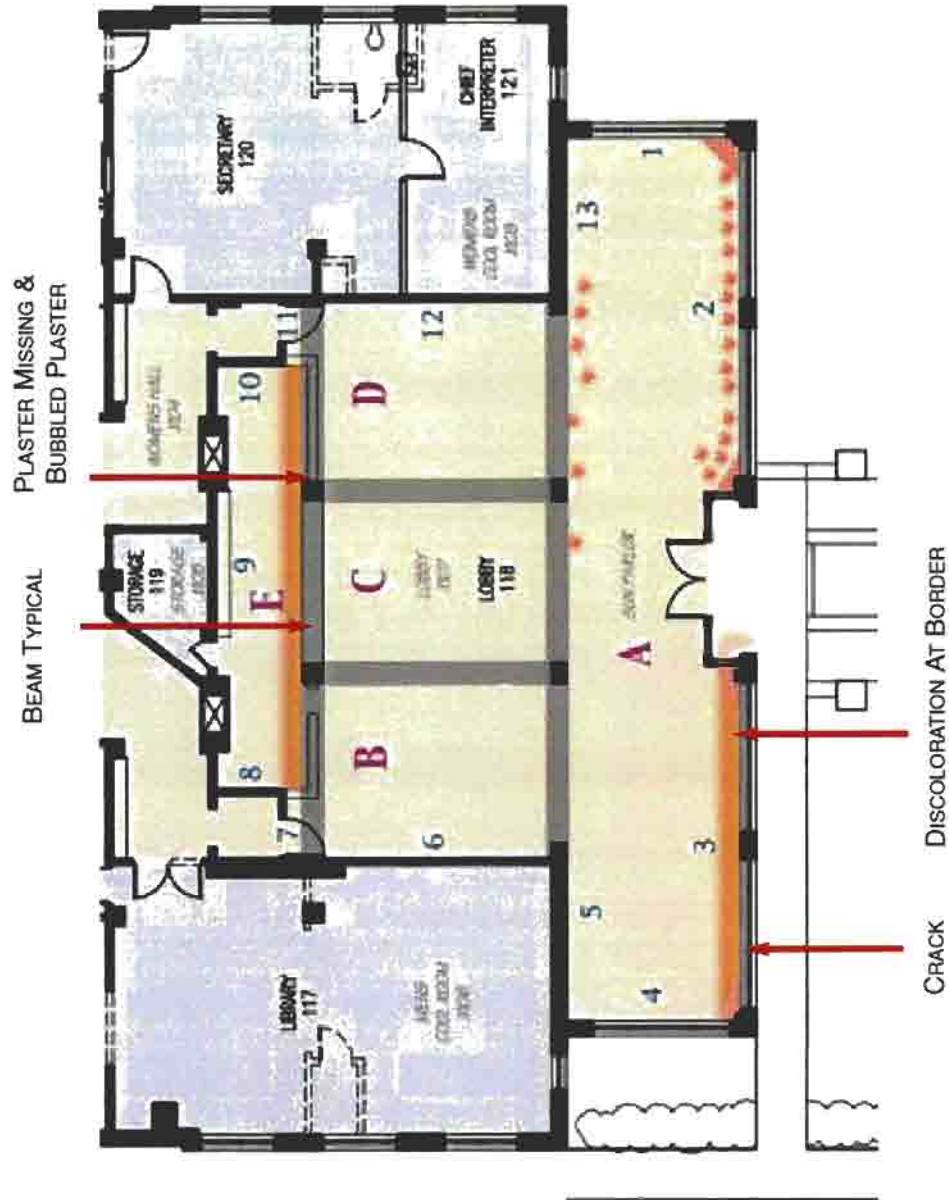
WALL KEY	CONDITIONS & REMEDIAL TREATMENTS	REPAIR AREA
1	Combination of replacing (multi-coats) & skimming, spot repairs, & chips for the upper portion of the wall.	14 feet
2	Base and corners finish coat, skim upper portions, & returns.	79 feet
3	Base/finish coat south corner & north corner from wainscot to ceiling. Skim over windows.	38 feet
4	Repair (base/finish), west edge.	12 feet
5	Fill crack (3') outside mural area, fill holes (13), & edge chips at the wainscot.	
6	Repair crack outside of mural area (7'). Patch at beam, WALL STABILIZATION REQUIRED.	1 foot
7	Repair cracks (12'), chips (2), & hole (1).	0
8	Repair cracks (1.5'), & holes (7).	0
9	Repair cracks (23'), small holes (10 +/-), big outlet box hole, & chip.	0
10	Repair cracks (2'), + crack at ceiling joint (5.5'), & holes (2).	0
11	Repair cracks (4'), + crack at ceiling joint (5').	0
12	Repair cracks (up to 40'). Repair area of flashing above right mural (1 s.f.), WALL STABILIZATION REQUIRED.	1 feet
13	Repair cracks (up to 12'), 50% of area to right of mural may have powdering plaster under paint.	
Arches: Face/Intrados	Repair cracks (7'), "blocks" repair (7 s.f.).	7 feet

PLASTER CONDITION SURVEY & TREATMENTS: CEILINGS OF THE LAMAR SUN PORCH & LOBBY

WALL KEY	CONDITIONS & REMEDIAL TREATMENTS
A	Patches present & needed at the west wall/ceiling intersection. Discoloration, as noted at northwest wall (hachured area). Missing paint at south section borders. Tight & long crack at northwest edge, as noted.
B	No patches, some moisture discoloration, but subtle, along joist lines, & three small spots at east end of panel. Very small cracks present at east end of panel, and west, viewing west/south.
C	Center patch, signs of moisture discoloration along joist lines (east/west), & at edge (light purple in color), & in bottom of beams, particularly the north edge. Cracks, mostly small, in line with joists (east/west & parallel). REPAINT all but stencil, same for beam sides & face.
D	No patches, no discoloration, lots of cracks, many perpendicular in direction, some diagonals: typical of some bowing from plane downward.
E	No patches, moisture discoloration of paint is mostly at border (see hachured area); with some at isolated spots & some along joists toward south end. Multiple minor cracks, perpendicularity is common.

KEY:

- 1 = WALL DESIGNATION
- B = CEILING PANEL DESIGNATION, BOUNDED BY WALL(S) OR BEAM(S)



REMEDIAL TREATMENTS

1. Cracks:

For small cracks which are wide enough to accept fill, force finish plaster into the crack in stages to avoid shrinkage problems. For large cracks (1.0 - 2.5mm), such as at wall numbers 6 and 12, the wall needs to be stabilized first to mitigate on-going movement "popping" the repair. The cracks through the mural which have different sides at different levels, e.g. they exhibit rotation, and should be filled only, not feathered-out. Crack repair should only be undertaken after structural stabilization/jacking efforts are complete, as is true for all of the repair work to the interior finishes.

2. Chips and Holes:

Fill similarly as stated above for cracks, carefully match the final finish.

3. Two Coat Areas Of Plaster Replacement:

When plaster has been soaked repeatedly, powdering at the surface results, causing an eventual total loss of adherence to substrate. Deteriorated plaster in, or adjacent to the subject sun porch walls and ceiling have areas that will need to be cut back and built up with a two coat system.

TYPICAL DAMAGE TO
PLASTER IN SUN PORCH;
CRACKS & POWDERING
DUE PRIMARILY TO
WATER INTRUSION FROM
A PREVIOUSLY LEAKING
ROOF.



COST

The budget estimate for plaster repair is: **\$7,850.00**

MURALS CONDITION ASSESSMENT:

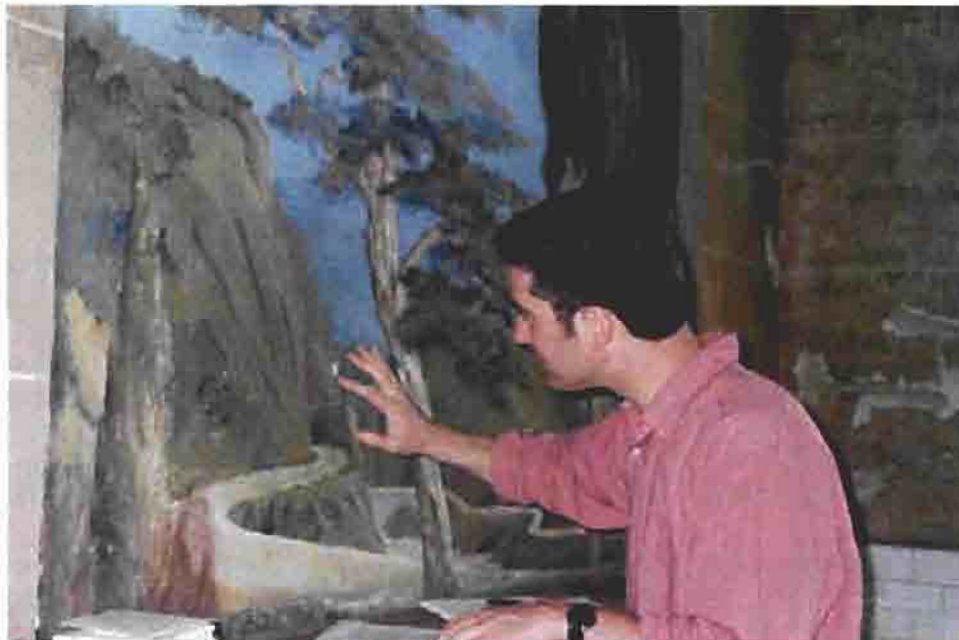
MURALS CONDITION SURVEY: LAMAR BATH HOUSE

A cursory examination of the murals in the Lamar Bath House at Hot Springs National Park was executed on June 5th and 6th, 2003. The examination was carried out by Anthony Kartsonas of EverGreene Painting Studios, Inc. and John Feinberg of The Collaborative Inc. The purpose of this examination was to ascertain the condition of the murals and based on a cursory examination only, provide recommendations for treatments to conserve and stabilize the murals.

The two murals are on the walls of the sun porch area, and four are in the reception lobby of the bath house. There are six murals in total and they are all 75" wide x 87" in height. Each mural has been assigned a key number with them progressing clockwise, in plan view, commencing with the northeast wall of the sun porch as number one. The only signature found on the murals is on the number six mural on the lower left hand corner, signed 'J.W. Zelm'. No information is known about the artist at this time and there is no confirmation or record that the murals were completed when the bath house was originally built in 1923.

The murals are painted directly onto the plaster walls, which is a sand float texture. The paint medium appears to be a type of distemper paint. Distemper is a water based paint that is bound with a natural glue resin and pigmented with chalk(calcium carbonate) and dry powder pigments.

Each of the murals depict landscape scenes within rural settings. Most of them show mountains and forest scenes while one of the murals contains a seascape. They appear to be very generalized but may be renderings of actual sites. The way the scenes are depicted is slightly primitive and contain a folk-like quality.



DECORATIVE PAINT: EXAMINING THE MURAL, PALPATING THE SURFACE TO CHECK FOR LOOSE PAINT.

Mural #1: Landscape scene with low blue mountain
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. Small fissures can be seen in the plaster but upon sound testing they seem stable. Large areas of crazing are beginning to appear on the paint surface, mostly in the sky and low landscape area. In the lowest section of the mural, there is severe flaking paint and delamination mostly contained within a 12" horizontal band above the radiator. The paint that is flaking of the surface layer, the ground layer is still adhered well to the plaster. Also immediately above the radiator is some surface abrasion of the paint layer, probably from routine cleaning. The colors on the surface are slightly muted from surface dirt and dust. The faux painted arch soffit within the mural is a purple color instead of the tan found in the others of the lobby (#'s 2 - 5).

RECOMMENDED TREATMENTS

1. Stabilize flaking paint with a synthetic adhesive.
2. Dry clean surface with soft haired brush and vacuum.
3. Remove surface dirt with vulcanized rubber sponges.
4. Infill areas of paint loss with a synthetic filling emulsion.
5. Inpaint areas of loss with a matt paint such as high load acrylics.



FLAKING PAINT

PAINT ABRASION & FLAKING PAINT

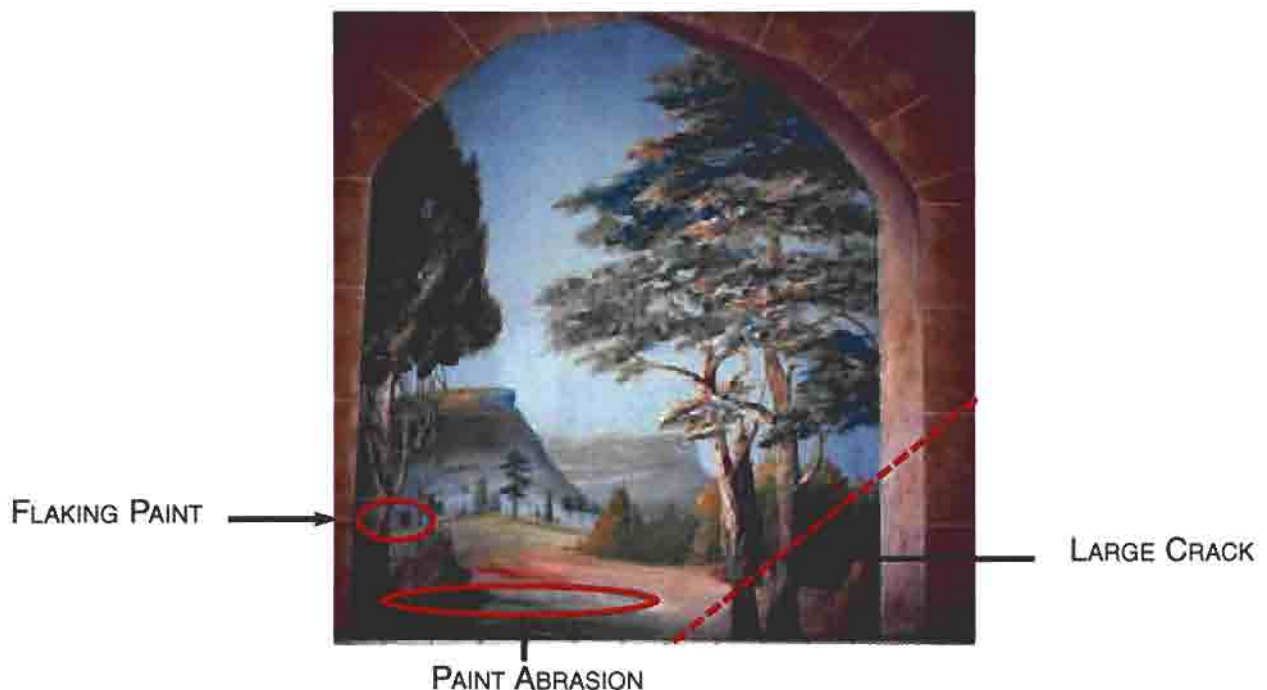
Mural #2: Landscape with mountains and two large trees
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. Very small fissures can be seen in the plaster but upon sound testing they seem stable. There is a large diagonal crack in the right bottom corner that has opened quite substantially. The crack runs over two feet and is approximately 1/16" wide. The bottom section of the crack has been forced slightly proud from the original surface. There are some small isolated areas of crazing but not nearly as severe as the first mural. Immediately above the tile wainscot is some minor surface abrasion of the paint layer, probably from routine cleaning. The colors on the surface are slightly muted from surface dirt and dust.

RECOMMENDED TREATMENTS

1. Consolidate the plaster crack by injecting an acrylic resin dispersion.
2. Stabilize flaking paint with a synthetic adhesive.
3. Dry clean surface with soft haired brush and vacuum.
4. Remove surface dirt with vulcanized rubber sponges.
5. Infill areas of paint loss with a synthetic filling emulsion, cracks will not be filled.
6. Inpaint areas of loss with a matt paint such as high load acrylics.



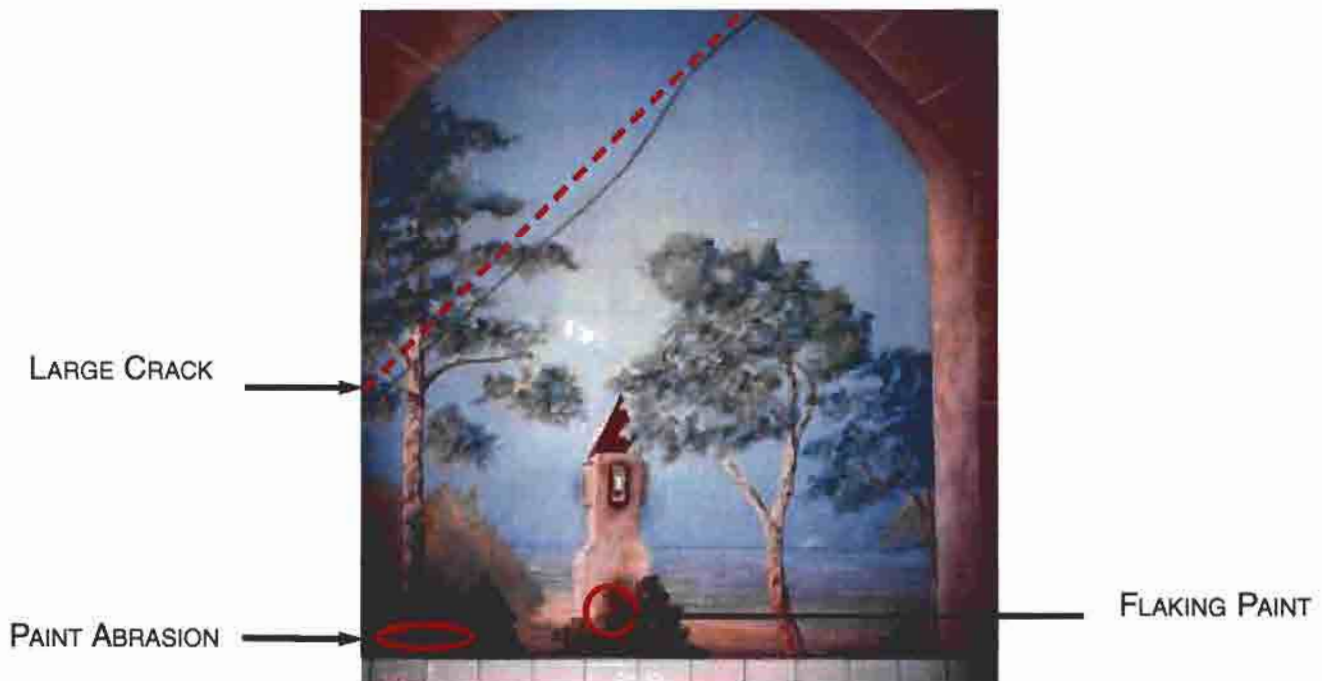
Mural #3: Seascape with tower
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. Very small fissures can be seen in the plaster but upon sound testing they seem stable. There is a large diagonal crack running through the mural and has opened substantially. The crack runs over 8 feet and is approximately 1/16" wide. The section above the crack has been forced proud from the original surface (approximately 1/8"). A thermostat has been installed in the tower on the mural to hopefully make it appear as one of the windows. It appears to be an original thermostat. Upon removal a paint edge could be seen up to it. Immediately above the tile wainscot is some minor surface abrasion of the paint layer, probably from routine cleaning. The colors on the surface are slightly muted from surface dirt and dust.

RECOMMENDED TREATMENTS

1. Consolidate the plaster crack by injecting an acrylic resin dispersion.
2. Stabilize flaking paint with a synthetic adhesive.
3. Dry clean surface with soft haired brush and vacuum.
4. Remove surface dirt with vulcanized rubber sponges.
5. Infill areas of paint loss with a synthetic filling emulsion, cracks will not be filled.
6. Inpaint areas of loss with a matt paint such as high load acrylics.



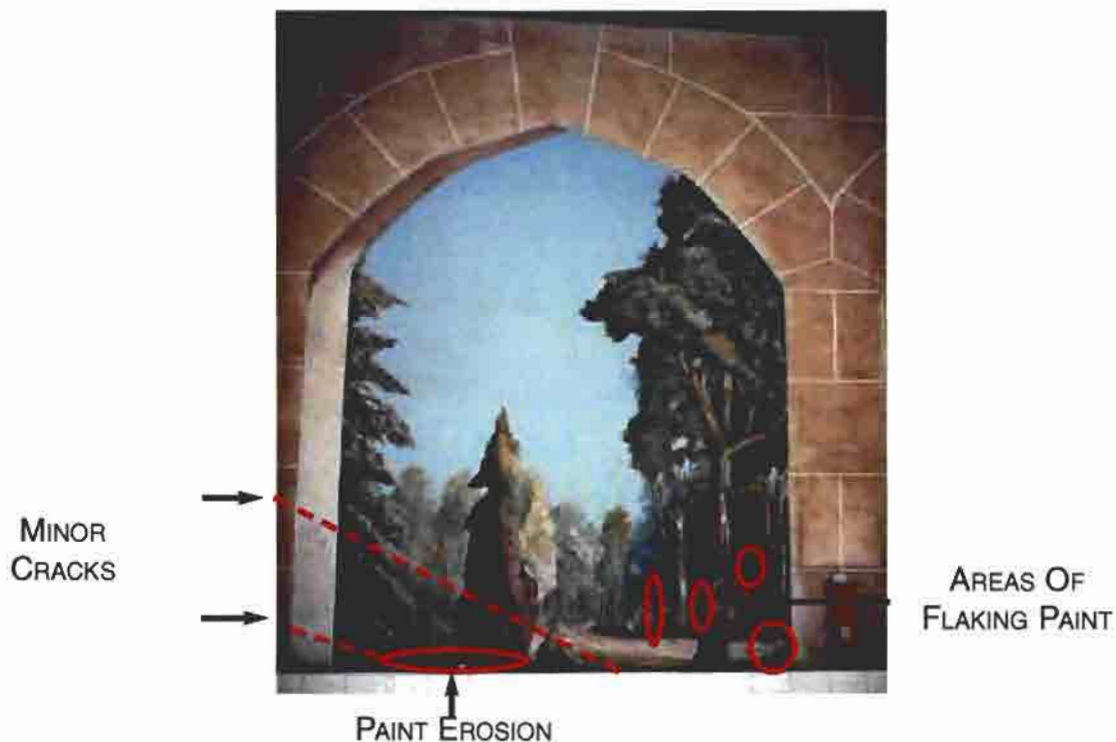
Mural #4: Landscape with pine tree
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. There are two minor cracks at the lower left hand side of the mural. Upon sound testing the cracks appear stable. There are some small isolated areas of crazing in the paint. The crazing has caused some minor paint delamination. Immediately above the tile wainscot is some minor surface abrasion of the paint layer, probably from routine cleaning. The colors on the surface are slightly muted from surface dirt and dust. The paint surface is in good condition.

RECOMMENDED TREATMENTS

1. Consolidate the plaster crack by injecting an acrylic resin dispersion.
2. Stabilize flaking paint with a synthetic adhesive.
3. Dry clean surface with soft haired brush and vacuum.
4. Remove surface dirt with vulcanized rubber sponges.
5. Infill areas of paint loss with a synthetic filling emulsion, cracks will not be filled.
6. Inpaint areas of loss with a matt paint such as high load acrylics.



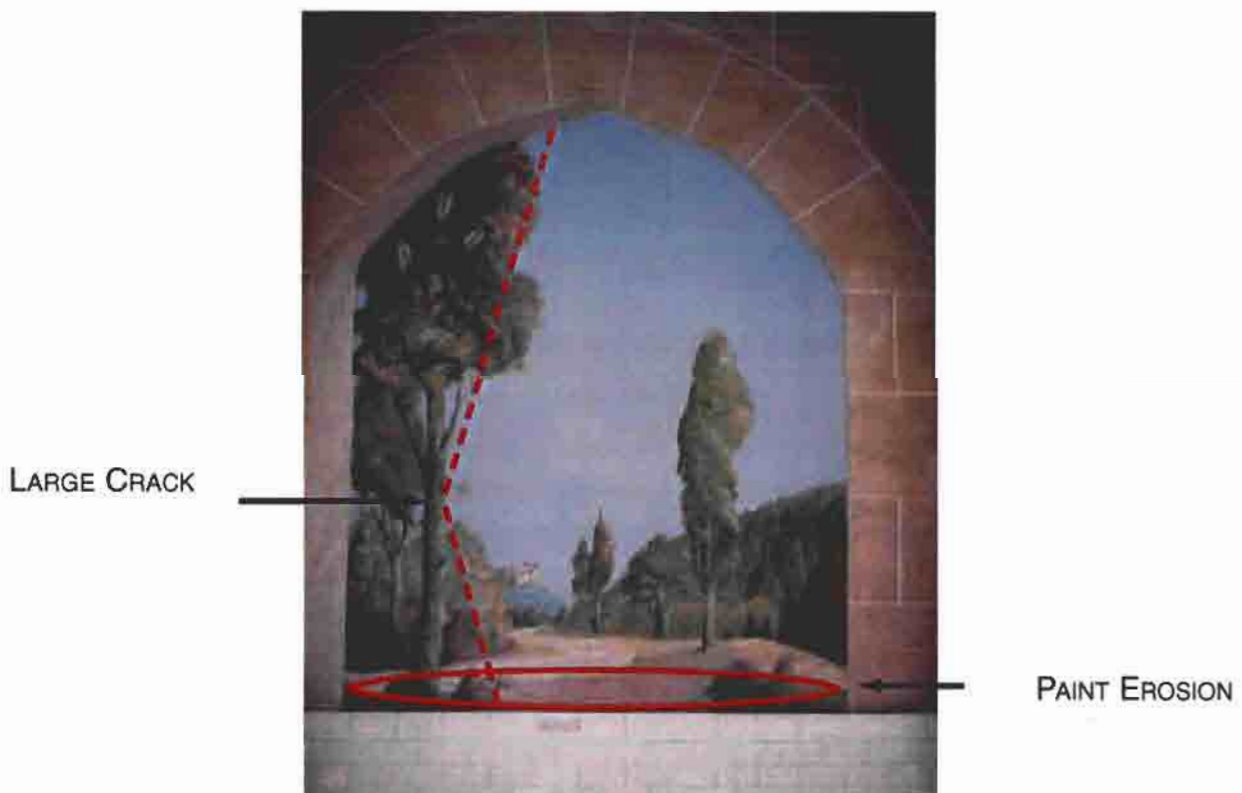
Mural #5: Landscape with castle in background
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. A large and long vertical crack runs through the entire mural towards the left hand side. The crack has not opened severely or shifted out of plane. Upon sound testing it appears to be stable. Immediately above the tile wainscot is some minor surface abrasion of the paint layer, probably from routine cleaning. The colors on the surface are slightly muted from surface dirt and dust. The paint surface is in good condition.

RECOMMENDED TREATMENTS

1. Consolidate the plaster crack by injecting an acrylic resin dispersion.
2. Dry clean surface with soft haired brush and vacuum.
3. Remove surface dirt with vulcanized rubber sponges.
4. Infill areas of paint loss with a synthetic filling emulsion, cracks will not be filled.
5. Inpaint areas of loss with a matt paint such as high load acrylics.



Mural # 6: Landscape scene with winding road
Size: 75" W x 87" H
Substrate: Plaster
Medium: Distemper

CURRENT CONDITION

The overall condition of the mural is relatively stable. A series of diagonal cracks run through the entire mural. They begin at the right bottom corner and follow to the top left corner. The cracks have not opened severely or shifted out of plane. Upon sound testing they appears to be stable. There is a small divot (about the size of a dime) dug into the plaster, probably from some physical impact. Small areas of crazing are beginning to appear on the paint surface. In the lowest section of the mural, there is severe flaking paint and delamination mostly contained within a 12" horizontal band above the radiator. The paint that is flaking is the surface layer, the ground layer is still adhered well to the plaster. Also immediately above the radiator is some surface abrasion of the paint layer, probably from routine cleaning. There are some small drops of brown paint splattered on the surface on the lower right side. The colors on the surface are slightly muted from surface dirt and dust. The faux painted arch soffit within the mural is a purple color instead of the tan found in the others of the lobby (#'s 2 - 5).

RECOMMENDED TREATMENTS

1. Stabilize flaking paint with a synthetic adhesive.
2. Dry clean surface with soft haired brush and vacuum.
3. Remove surface dirt with vulcanized rubber sponges.
4. Infill areas of paint loss with a synthetic filling emulsion.
5. Inpaint areas of loss with a matt paint such as high load acrylics.



DECORATIVE PAINT CONDITION SURVEY & TREATMENTS: LAMAR SUN PORCH & LOBBY WALLS

WALL KEY	CONDITIONS & REMEDIAL TREATMENTS	REPAIR AREA
1	Redo entire wall	55 square feet
2	Redo entire wall	96 square feet
3	Redo entire wall	96 square feet
4	Redo entire wall	55 square feet
5	Murals repair/conservation ONLY, except crack touch-up	Touch-up Cracks, etc.
6	Touch-up cracks & patch at beam	Touch-up Cracks, 1 square foot
7	Right of door; hand-oil saturation	3 square feet
8	Touch-up cracks & holes	Touch-up Cracks, etc.
9	Two "stones", blend-in holes, chips, & cracks	3 square feet
10	Cracks & holes	Touch-ups
11	Touch-up cracks & area of hand-oil saturation	Touch-up Cracks, 3 square feet
12	Extensive cracks & flaking areas for repairs	Touch-up & Consolidate
Arches:		
Face/Intrados	Flaking paint, repair "block" faces	7 square feet

PLASTER/DECORATIVE PAINT SUMMARY:

CEILING	PANELS	PLASTER	DECORATIVE PAINTING
A	13.75' x 70.25' = 966 square feet	Skim	Redo
B	14.00' x 1800' = 252 square feet	Connections	Spots
C	14.00' x 1800' = 252 square feet		Redo, Except Stencil
D	14.00' x 1800' = 252 square feet		Spots
E	7.00' x 34.00' + 12' = 250 square feet		West Border Redo
Total:	1,972 square feet		

CONDITION EVALUATION: CEILING PLASTER & DECORATIVE PAINTING

The condition of both the plaster and the decorative paint is evaluated as an entire system, as all of the plastered surfaces are also decoratively painted, and repairs to the plaster will consequently require decorative paint repairs.

DECORATIVE PAINT SCHEME DESCRIPTION

In addition to examining the murals, the decorative painting on the ceilings and wall were also investigated. It is not known exactly when the extant decorative painting was carried out. The existing surfaces could be original from 1923 but there is some mention in some documentation provided by the curator for the National Parks Service in Hot Springs that some significant work was ordered and specified in 1941 for the Lamar Bath House.

The description of ceiling and wall decorative paint schemes is provided below, after which are photographs of the described elements and schemes.

DESCRIPTION: CEILING DECORATION

The ceiling is decorated with an unusual decorative scheme. There is an 18" perimeter band of a mauve color to the outside of the panel. Within the band is a hand brushed organic leaf design that is approximately 3" wide. The colors in the design are a red, light yellow, ochre, dark blue, and light blue. To the inside of the mauve band, is a flat panel in a light green with a painted texture (sponged) surface of yellow, pink and light blue. In the center of the flat panels are medallions of a mauve color with the same organic leaf design associated with the outside perimeter mauve bands.

The three rear ceiling panels (B, C, & D) are divided with two beams with three connecting beams across the check-in desk. On the side face of the beams is a one color stylized flora stencil (white) on a medium brown base. The beam soffit have a single repeat stencil in a light blue at the ends of the beam (please see the photographs on the following page).

A small area was test cleaned and the paint surface was soluble with water. The paint utilized for the ceiling is probably distemper, as found in the murals. The entire front ceiling at the sun porch has been repainted with an interpretation of the other ceiling. A small area was stripped to confirm the existence of the earlier scheme.

DESCRIPTION: WALL DECORATION

The walls are currently covered with a faux painted textured surface to mimic natural stone. The individual blocks are divided with painted white grout lines. The blocks are approximately 15" x 19" but vary at certain locations. The technique used to create the faux stone affect is quite unorthodox. It seems that a light green ground was first painted on the original plaster surface. Then a darker green and a purple were randomly modeled on the light green base. A light weight plaster was then applied and modeled while leaving small open areas to the paint coats underneath. Finally, the plaster was then modeled with a color wash of light to medium warm browns. The white grout lines were then painted-in to delineate the individual blocks.

The paint on the block surface was partially water soluble, and could possible be distemper paint. A small exposure window was opened at a damaged area to confirm the procedures for this technique. However, there appears to be some additional coatings under the scheme. The plaster coating underneath has some color which could mean that the original finish was an integral color plaster or simply that a colored sand was used.

DECORATIVE PAINTING:
WHITE STENCIL ON
SIDE OF BEAMS,
MAUVE BORDER OF
PANEL, FLORA STENCIL,
SPONGED CENTER
SECTION.





DECORATIVE STENCIL
APPEARS ON BOTTOM
OF BEAM AT EACH END
OF BEAM. NOTE:
DARKENED AREAS ARE
DUE TO WATER
DAMAGE.

DECORATIVE PAINT:
MOISTURE STAINING OF
DECORATIVE PAINT AT
PANEL EDGE &
UNDERSIDE OF BEAM.

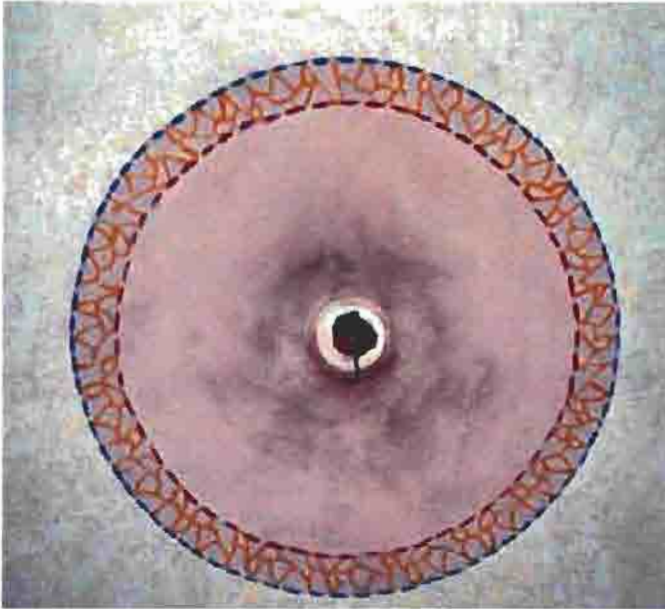


DECORATIVE PAINT: EXTENSIVE
STAINING AT EDGE OF EAST CEILING
PANEL.

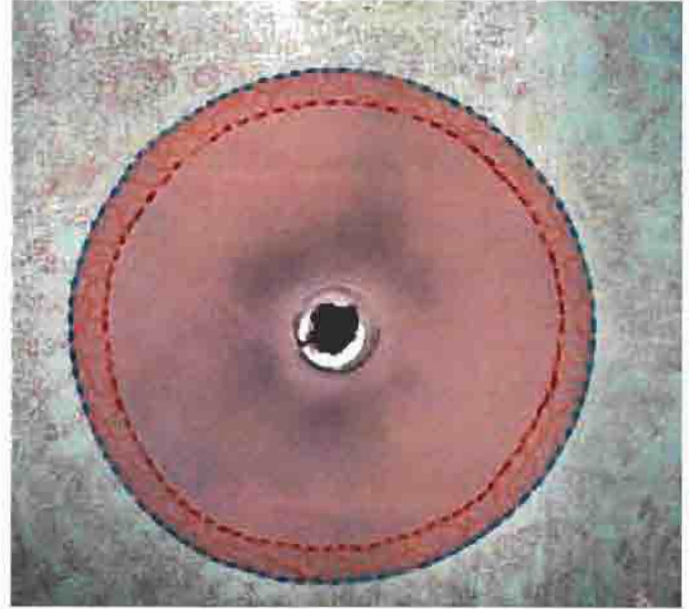


CONDITIONS & REMEDIAL TREATMENTS

The sun porch ceiling (panel A) is a later scheme executed without the finesse of the original scheme seen in panels B-E. The sponging does not appear as random and the colors do not match the other panels.



DECORATIVE PAINT: CENTER MEDALLION IN ORIGINAL COLORS & STYLE, NOTE RANDOMNESS IN SPONGING OUTSIDE THE BORDER.



DECORATIVE PAINT: COMPARE THIS MEDALLION WITH THE ORIGINAL - COLORS & EXECUTION. ALSO, OBSERVE THE CRUDENESS OF THE SPONGING TECHNIQUE, SUN PORCH LOCATION.

The ceiling plaster exhibits large areas of damage, and there are large areas of paint loss. These problems, coupled with the poorly executed later design and the tremendous difficulty in matching through infill any sponged areas, would suggest a comprehensive renewal of the design in the original colors and with the original techniques.

The ceiling panel "C" has an extensive plaster patch previously discussed in the plaster section. This panel, as well as areas of the adjacent beams, exhibits darkening of the paint likely due to water saturation. These appear in areas which can be separately overpainted, such as the mauve perimeter band.

The ceiling panel "E" also has water spots along its west edge, at the mauve perimeter band. This area will require overpainting.

The walls require new decorative painting in areas of plaster repair as articulated in the previous section on plaster. As the design is subdivided into blocks replicating stone, the joint lines provide an excellent terminus for any repairs – edge-to-edge is simplified.

Most of the renewal of the wall decorative painting will occur in the sun porch: south wall, west wall, and north wall. The remaining repairs are small in scale and area scattered. The walls, as described under plaster repairs, will require associated in-fill painting at the plaster repairs.

COST

The budget estimate for the decorative painting repair is: **\$10,000.00 - \$17,500.00**

Repaint the south, west, and north walls of the sun porch; either the entire wall or from faux stone's mortar joints at arch spring points upwards. The sun porch ceiling is to be redone in the original technique and colors, as it is currently not original, nor is it a quality replication (wrong colors, and wrong sponging technique). Touch-up other areas where the paint is loose by securing paint when possible, or redo the entire "stone block" where it is more feasible to do so.

Appendix C. CREEK ARCH



THE CREEK ARCH

THE STONE MASONRY TUNNEL CARRYING HOT SPRINGS CREEK, THE COMBINED FLOW OF THE HOT SPRINGS, AND DOMESTIC SEWAGE.

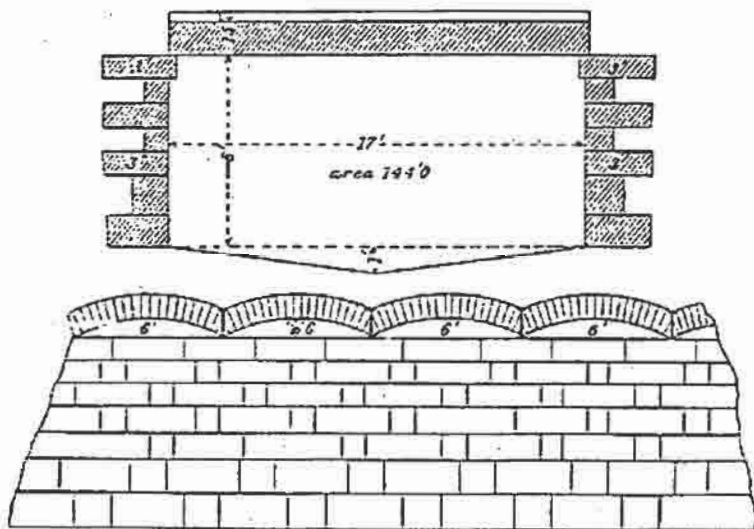
HISTORICAL BACKGROUND

The settlement of Hot Springs in a narrow valley crowded together on the valley floor a commercial district, a road, a trolley line, the hot springs, and Hot Springs Creek. Flat real estate was at a premium and the untrammelled creek undermined buildings, overran its banks in times of flood, and collected all manner of the detritus of human settlement. The creek was decreed to be a hazard, a health problem, and an impediment to the growth of the community.

The creek was to be tamed by placement into a large underground tunnel. Congress approved an appropriation of \$33,744.78 in 1882, and plans were subsequently prepared and sent out to bid on August 14, 1883. One plan, which was proposed and rejected, was to build two parallel walls of eight foot height, bridged between for the roof by the wrought iron 15 inch deep I beams at 6' oc with shallow brick arches between. This alternative was proposed by Captain Thomas H. Handbury of the US army Corps of Engineers.

Samuel Hamblen, Superintendent and engineer, developed the accepted plan. He proposed parallel walls of 5 feet in height, with a five foot width at the base and three foot at the tops, and the span was bridged by an arch of five feet in height above the side walls. Further features included at the spring points skew backs of three foot depth, a key stone at the arch center point, and arch thickness of 2 feet 9 inches at the spring point (at the top of the skewbacks) and 18 inches at the key. Lime mortar and local rubble stone was specified for the masonry. Overall width of the enclosed space was to be 17 feet.

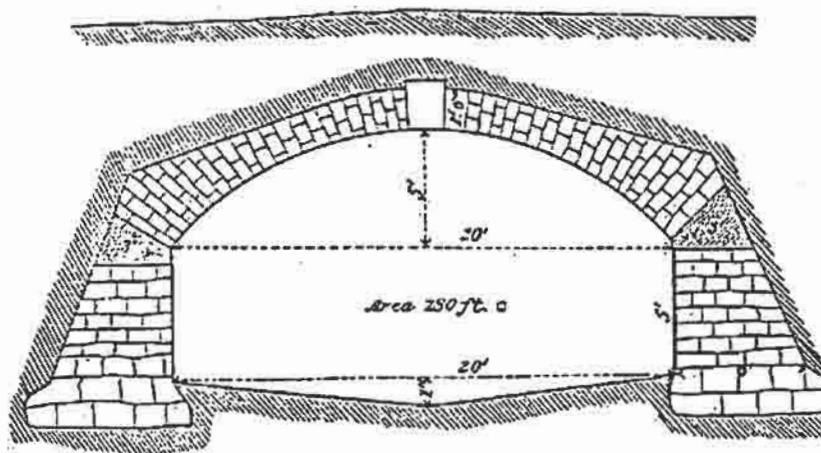
Handbury's design would support 6.5 tons per lineal foot for tunnel, while the selected design of Hamblen would support 27.2 tons per



Scale - $\frac{1}{2}$ " to the foot.

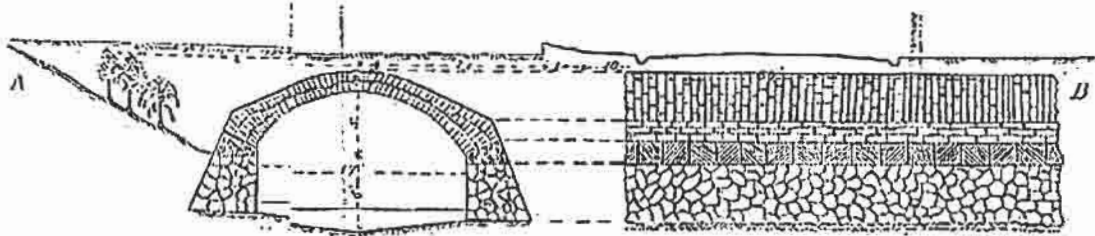
According to Cooper, Hewitt & Co.'s book (1882), page 33, the "limit of elasticity" of iron beams is from 2.7 to 4.2 of the safe load given in their tables.

CA-1: Handbury's Arch. Provided by Hot Springs National Park.



CA-2: Hamblen's Arch as Analyzed for load capability. Provided by Hot Springs National Park.

CA-3: Elevation of Hamblen's Arch. Provided by Hot Springs National Park.



"running square foot", obviously a much stronger design. The calculations are seen in a report by a special committee appointed by the US House of Representatives to investigate work on the Arch, dated March 17, 1884.

CONDITION EVALUATION

On November 6, 2003, a field investigation of the Arch masonry condition was undertaken by three members of the field investigation team and the Superintendent of Utilities for the Hot Springs National Park. Visual observations, only, were made of the length of the Arch from Headquarters Building to Superior. The team was equipped with flashlights, cameras, tape measures, and the necessary gear for wet wading (waders and wading staff). The weather at the time was light intermittent rain. Light to heavy rain had fallen for the previous 14-16 hours.

The following general conditions were found:

1. The cast iron sanitary sewer pipe is located about two feet, on average, above the juncture of tunnel floor and east sidewall. The bells for several pipe sections were split, the crack extending some 12 to 18 inches.
2. The hot springs collection pipe is located about 4 1/2 feet above the juncture of

tunnel floor and east sidewall. The iron pipe is mostly covered by an outer wood stave pipe in poor condition and wrapping of roofing tar impregnated cloth material. The latter is discontinuous. The extent of the pipes' problems were not the primary subject of the investigation.

3. Side pipes entered the tunnel to flow into the sewage pipe, generally two from each of the eight bathhouse structures; one at the downhill corner of the building and one at about the halfway point. Side flows also enter the hot water pipe from springs to the east.

4. Storm drains enter at many locations.

5. Manholes are spaced at irregular intervals.

6. Hot springs water flows enter in two ways, by pipes and by seepage. Examples of the piped flows included the drainage from the fountains, from sump pumps in the basements, and from the Buckstaff. Seepage can be seen coming through both the walls and the arched roof. Defining these flows as hot springs water is both the heat of the water and the deposits, calcium carbonate principally. Unfortunately these deposits obscure the condition of the masonry beneath.

7. Portions of the tunnel surfaces have been shotcreted or shot with gunnite. These areas tend to be mostly on the west (city) side of the tunnel. These treatments also obscure the underlying masonry's true condition.

8. Surface water has percolated down from above and penetrates the masonry. Some areas were simply damp, but most of these areas had constant drips to streams of water.

9. Cracks were infrequently observed in the masonry, ran mostly in the joints, and were from side to side. No longitudinal cracks were seen.

10. One stone had dropped a considerable distance.

11. The most prevalent problems were the loss of mortar. This loss can be observed to extend deep into the joint, at least ten inches to a foot back into the masonry.

This evaluation must be considered quite limited. A more complete evaluation would include:

1. More light
2. Step ladders (three legged, as the stream bed is quite uneven).
3. Sounding hammers to tap the stones
4. Probes to determine the intactness of the mortar
5. Survey instruments to locate more precisely stations, and thereby reference problem areas.

During this investigation, pinpointing the location of problem areas was of notable difficulty. It appears that there may be three different stations marking systems in place. The freshest appearing was used as the primary reference. Secondary references were other wall markings designating the buildings, such as "OZI" meaning beginning of the Ozark building, i.e. southeast corner, and known sewer lines/fountain drains, etc.

The locations, conditions, and amount of the problem are set forth in the accompanying graphic titled "Arch Masonry Conditions Assessment: Visual Assessment Only"

The importance of the condition of the Arch's masonry is magnified for not only does it need to carry out its principal functions as a drainage conduit and pipes tunnel, but it also runs both under and adjacent to many of the west facades of the bathhouses. The integrity of the Arch's masonry is thus doubly critical.

Excavations between the center top of the arch and the building facades, which were underway at Maurice, confirm the flow of hot springs water by the steam and the soil saturation. Both springs and surface water flows may carry sediment on the way to the tunnel. Over time these flows can remove enough bearing soil to cause settlement. Further investigation is warranted.



CA-4: The Creek Arch. The feel of the tunnel.

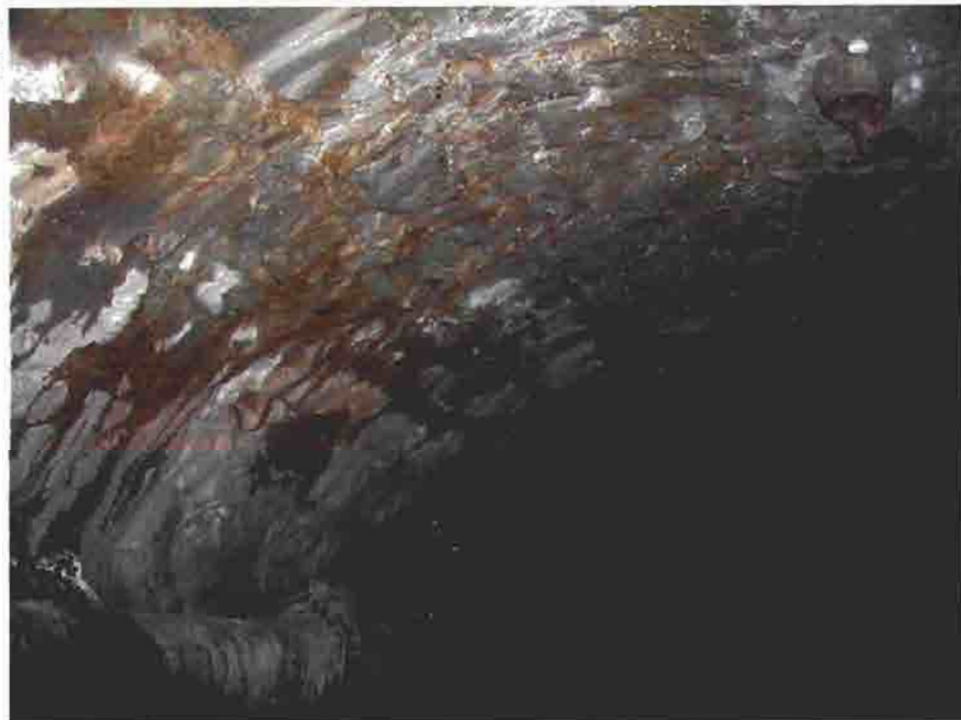


CA-5: The Creek Arch. The hot springs collection pipe.

CA-6: The Creek Arch. Collection pipe above, sewage pipe below, and other hot springs and storm water pipe discharge into the Arch from above and beside.



CA-7: The Creek Arch. The droplets glisten on the surface, indicating the passage of water through the masonry.





CA-8: The Creek Arch. A building up of stalactites from the arch surface. This is evidence of a steady drip.



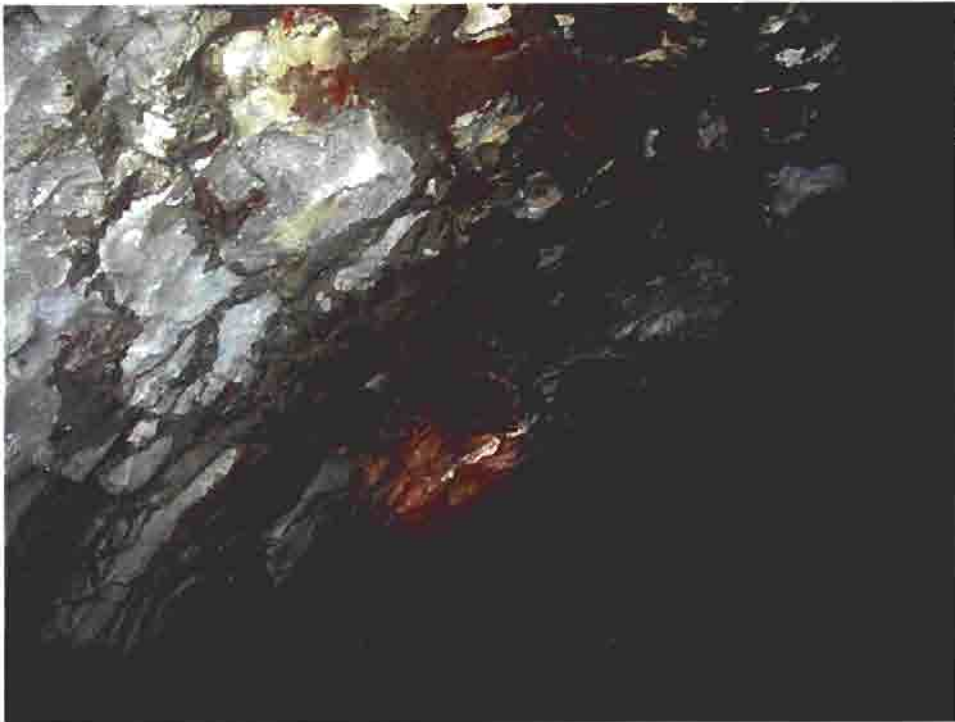
CA-9: The Creek Arch. The "void" designation was the only one found, but it did coincide with areas of mortar loss deep within the joints.

CA-10: The Creek Arch. The end of the hot springs collection pipe, with valves



CA-11: The Creek Arch. Note the abundance of faded and overlaid markings on the wall beside this part manhole. These markings make location of problems difficult.





CA-12: The
Creek Arch. Fallen
rock in roof of the
arch.



CA-13: The
Creek Arch. The
lower one-third to
two-thirds of the
pipe's diameter
has been blocked
by hot springs
mineral deposits
which can build
up quite rapidly.



Appendix D. 2003 EXISTING CONDITION DRAWINGS

- C1 BATHHOUSE ROW AERIAL PHOTOGRAPH
- C2 BATHHOUSE ROW SITE PLAN
- L1 LAMAR BATHHOUSE BASEMENT AND FIRST FLOOR PLANS
- L2 LAMAR BATHHOUSE SECOND FLOOR AND ROOF PLANS
- L3 LAMAR BATHHOUSE ELEVATION CRACK DIAGRAMS



DATE UNKNOWN (1980s?)

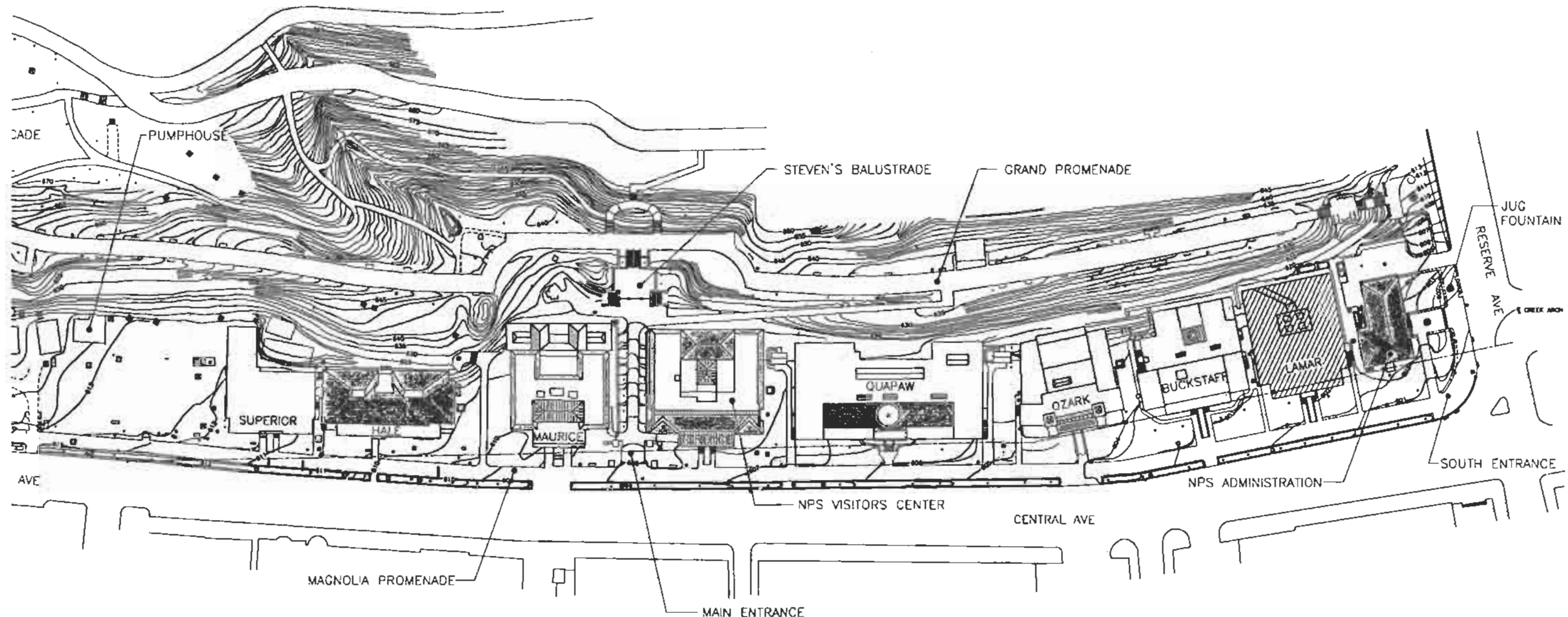
1
C1

BATHHOUSE ROW AERIAL PHOTOGRAPH

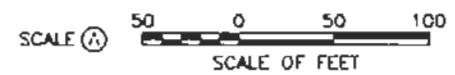


DESIGNED: ASD Paul M. Long TECH. REVIEW: DATE:	SUB SHEET NO. C1	TITLE OF SHEET AERIAL PHOTOGRAPH BATHHOUSE ROW REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 PND NO. HOSP 150 SHEET 1 OF 2
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4/1/04 16:09 PAUL R16 P:\02-0402\VISOR FINAL LAMAR\BATHHOUSE SITE.DWG XREFS: P:\02-0402\VISOR FINAL LAMAR\BATHHOUSE.DWG

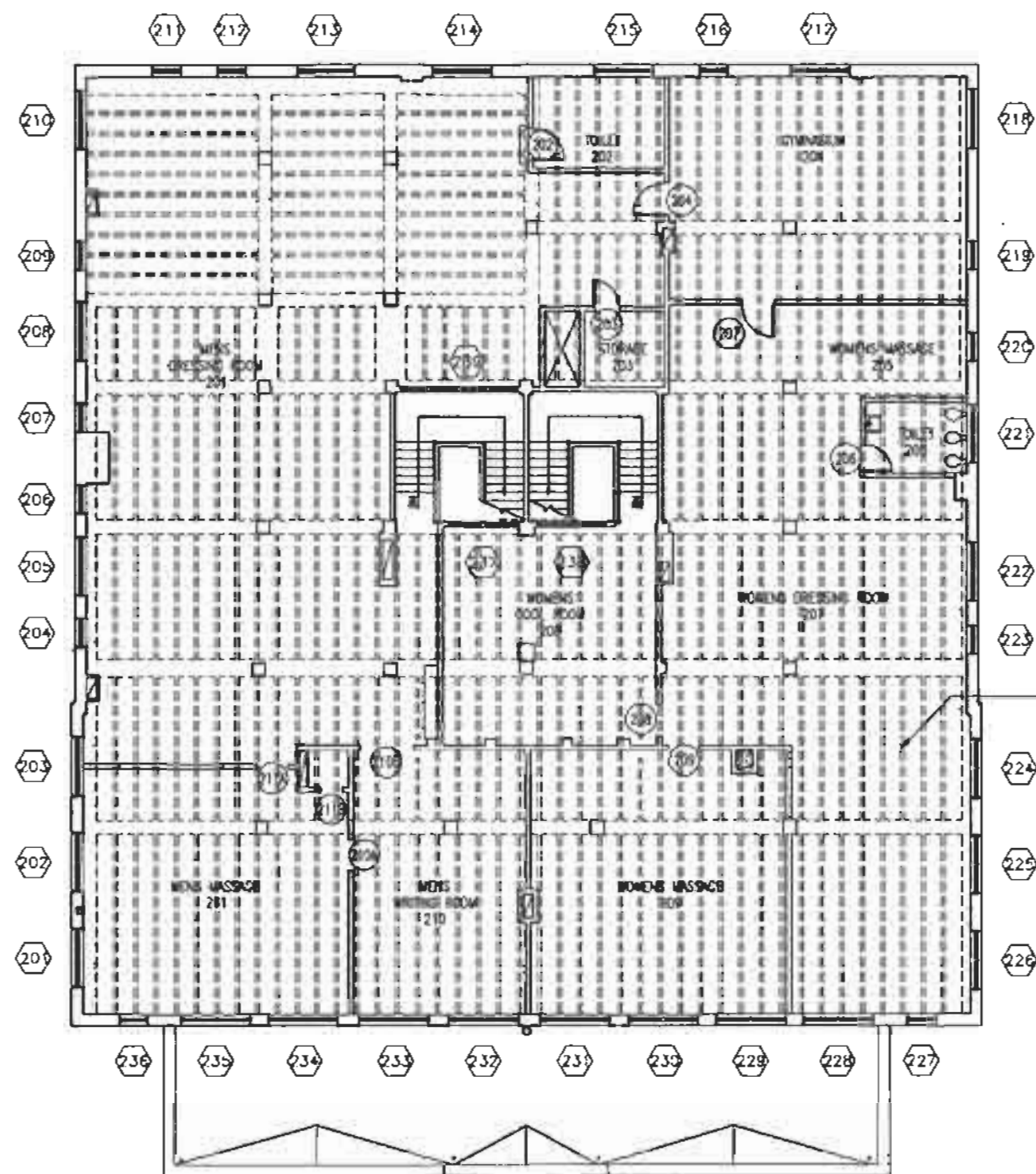


1
C2 CENTRAL AVENUE SITE PLAN
SCALE (A)

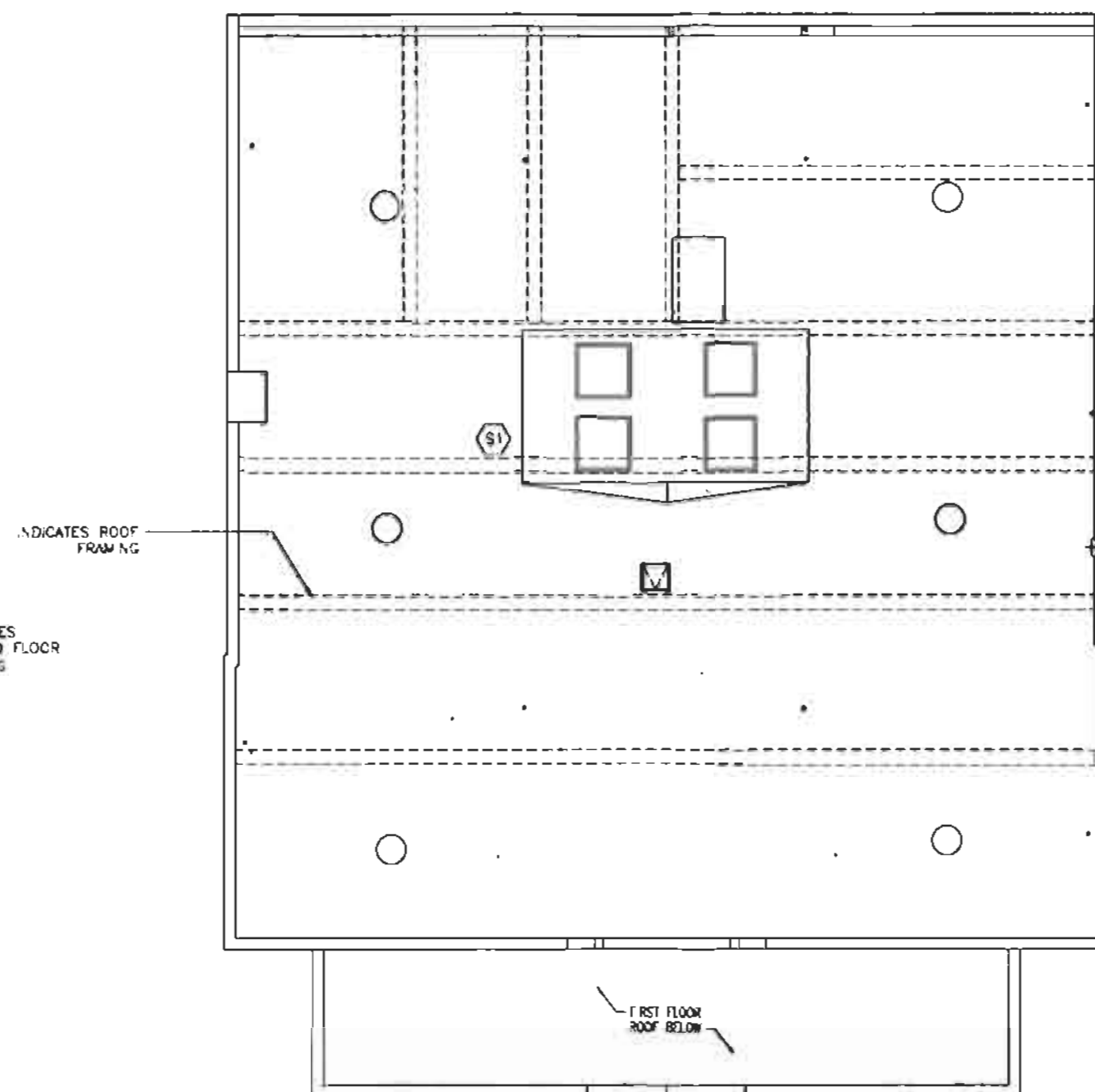


DESIGNED: PROJECTED: Paul W. Long TECH. REVIEW: DATE:	SUB SHEET NO. C2	TITLE OF SHEET SITE PLAN BATHHOUSE ROW REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 PAG. NO. 100SP 150 SHEET 2 OF 2
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DESIGNED:	SUB SHEET NO.	TITLE OF SHEET	DRAWING NO.
SEAL:	L1	LAMAR BATHHOUSE	128
Paul W. Long		2003 CONDITION	41,064
TOTAL REVIEW		DRAWINGS	PKG. NO.
		REHABILITATE BATHHOUSES	1
DATE:		HOT SPRINGS NATIONAL PARK	150
			SHEET
			1
			OF 3



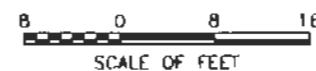
LAMAR SECOND FLOOR PLAN
SCALE (A)




2 LAMAR ROOF PLAN
L2 SCALE (A)



SCALE (A)



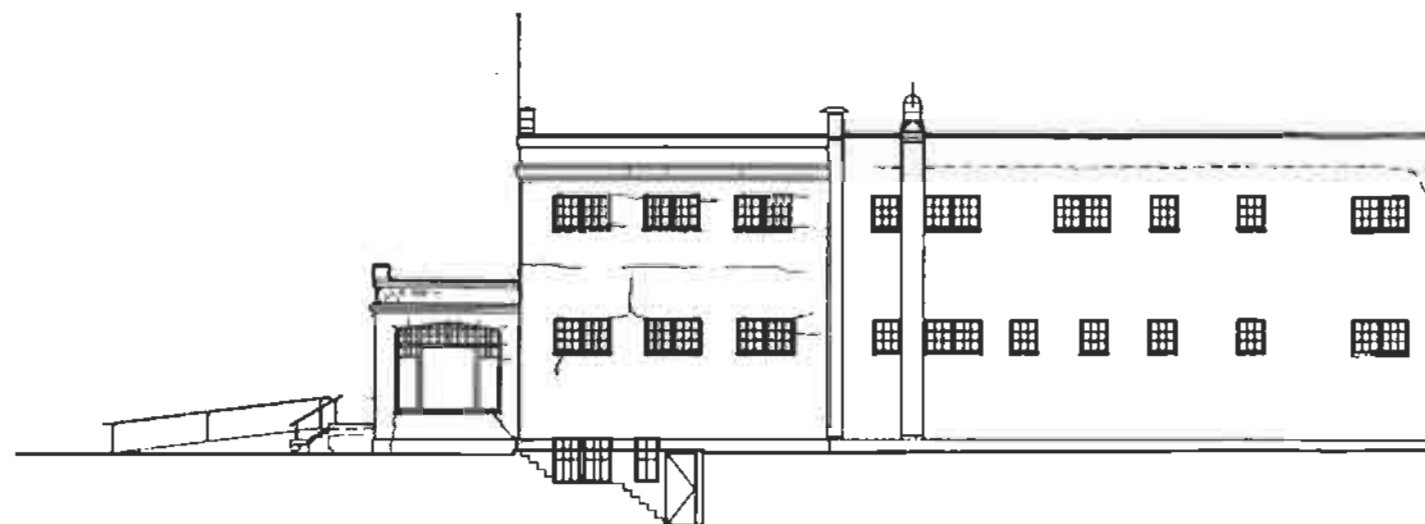
DESIGNED:

 Paul W. Long
 TECH. REVIEW:
 DATE:

SUB SHEET NO.
L2

TITLE OF SHEET
LAMAR BATHHOUSE
2003 CONDITION
DRAWINGS
REHABILITATE BATHHOUSES
HOT SPRINGS NATIONAL PARK

DRAWING NO. 128 41,064	
FIG. NO. HOSP 150	SHEET 2 OF 3

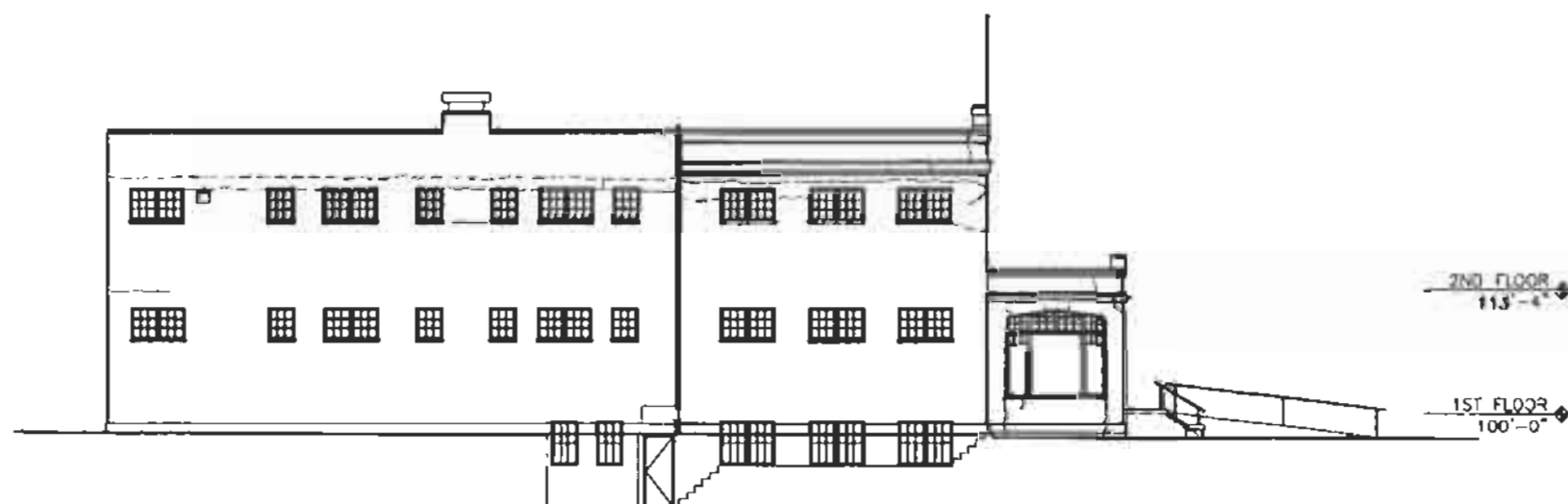
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1
L3 LAMAR SOUTH ELEVATION-CRACK DIAGRAM
SCALE (A)



2
L3 LAMAR WEST ELEVATION-CRACK DIAGRAM
SCALE (A)



3
L3 LAMAR SOUTH SECTION-CRACK DIAGRAM
SCALE (A)

LEGEND

- PATCHED CRACK
- CRACK
- WIDE CRACK

SCALE (A) 10 0 10 20
SCALE OF FEET

DESIGNED: REVIEWED: Paul W. Long 100% REVIEW	SUB SHEET NO. L3	TITLE OF SHEET LAMAR BATHHOUSE 2003 CONDITION DRAWINGS REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,054 PNC. NO. 105P 100 SHEET 3 OF 3
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Appendix E. DOOR AND WINDOW CONDITIONS SCHEDULE

LAMAR DOOR CONDITIONS

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
Basement	B01A					removed
Interior	B01B					removed
	B03					removed
	B07					removed
	B08					removed
Basement	B02				x	
Exterior	B08	x				
First Floor	101A					removed
Interior	101B					removed
	102A					removed
	102B					removed
	103B					removed
	104B					removed
	105	1.5				
	106A					removed
	106B					removed
	107B		x			
	107C		x			
	108A		x			
	108B	1.75				
	108C	1.5				
	109A					removed
	109B					removed
	110A					removed
	110B	1.75				
First Floor	107A		x			
Exterior						
Second Floor	202		x			
Interior	203					removed
	204					removed
	206		x			
	207		x			
	208					removed
	209					removed
	210A					removed
	211A					removed
	211B					removed

LAMAR WINDOW CONDITIONS-NORTH

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
Basement	01					removed
	02		x			
	03		x			1/2 is replaced by a fan
	04		x			
	05		x			
First Floor	101			x		
	102			x		
	103			x		
	104			x		
	105			x		
	106			x		
	107			x		
	108			x		
	109			x		
	110			x		
	139			x		
Second Floor	201			x		
	202			x		
	203			x		
	204			x		
	205			x		
	206			x		
	207			x		
	208			x		
	209			x		
	210			x		

LAMAR WINDOW CONDITIONS-EAST

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
First Floor	111			x		
	112			x		
	113			x		
	114			x		
	115			x		glass cracked
	116			x		
	117			x		
	118			x		
Second Floor	211			x		
	212			x		
	213			x		
	214			x		
	215			x		
	216			x		
	217			x		

LAMAR WINDOW CONDITIONS-SOUTH

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
Basement	06	x				
	07	x				
First Floor	119			x		
	120			x		
	121			x		
	122			x		
	123			x		
	124			x		
	125			x		
	126			x		
	127			x		
	128			x		
	130			x		
Second Floor	218			x		
	219			x		
	220			x		
	221			x		
	222			x		
	223			x		
	224			x		
	225			x		
	226			x		

LAMAR WINDOW CONDITIONS-WEST

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
First Floor	129			x		
	131			x		
	132			x		
	133		2.5			
	134		x			
	135		x			
	136		2.5			
	137			x		
	138			x		
	140			x		
Second Floor	227			x		
	228			x		
	229			x		
	230			x		
	231			x		
	232			x		
	233			x		
	234			x		
	235			x		
	236			x		

LAMAR WINDOW CONDITIONS-INTERIOR

Floor	#	Condition Level			Replaced	Comments
		1	2	3		
First Floor	141			x		
	142			x		
	143			x		
Second Floor	237			x		
	238			x		

Appendix F. PROPOSED TREATMENT DRAWINGS

A101 LAMAR BATHHOUSE BASEMENT PLAN

A102 LAMAR BATHHOUSE FIRST FLOOR PLAN

A103 LAMAR BATHHOUSE SECOND FLOOR PLAN

A104 LAMAR BATHHOUSE FIRST FLOOR LIFE SAFETY PLAN

A105 LAMAR BATHHOUSE SECOND FLOOR LIFE SAFETY PLAN

A201 LAMAR BATHHOUSE BUILDING ELEVATIONS

A301 LAMAR BATHHOUSE BUILDING SECTION

A600 LAMAR BATHHOUSE FINISH SCHEDULE

FINISH SCHEDULE - LAMAR BATHHOUSE														
ROOM #	ROOM NAME	FLOOR	BASE	WALL SURFACES								CEILING		REMARKS
				MATERIAL				FINISH				MAT.	FIN.	
				NORTH	EAST	SOUTH	WEST	NORTH	EAST	SOUTH	WEST			
101	CURATORIAL STORAGE	VCT/P	RUB	GWB	GWB	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
102	WORKSHOP	HT	HS	HS	HS	PLS	PLS	-	-	PNT	PNT	PLS	PNT	
103	WET SPECIMEN	HT	HS	PLS	HS	HS	PLS	PNT	-	-	PNT	PLS	PNT	
104	MECHANICAL/STORAGE	HT	HS	PLS	PLS	PLS	GWB/PLS	PNT	PNT	PNT	PNT	PLS	PNT	
105	LIBRARY READING ROOM	CPT	WD	PLS	PLS	GWB	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
106	CURATORIAL OFFICE	CPT	WD	GWB	PLS	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
107	LIBRARY STORAGE	CONC	RUB	GWB	GWB	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
108	NORTH STAIR HALL	TER	HS	PLS	PLS	PLS	PLS	REH	REH	REH	REH	PLS	REH	HISTORIC CORE
109	SOUTH STAIR HALL	TER	HS	PLS	PLS	PLS	PLS	REH	REH	REH	REH	PLS	REH	HISTORIC CORE
110	CUSTODIAL STORAGE	CONC	RUB	PLS	GWB	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
111	CUSTODIAL	CONC	RUB	PLS	PLS	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
112	STORAGE	CONC	RUB	GWB/PLS	PLS	GWB/PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
113	FIRE COMMAND ROOM	CONC	RUB	GWB/PLS	PLS	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
114	HALL	CT	CT	-	GWB	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
115	MEN'S RESTROOM	CT	CT	CT/GWB	CT/GWB	CT/GWB	CT/PLS	CT/PNT	CT/PNT	CT/PNT	CT/PNT	PLS	PNT	
116	WOMEN'S RESTROOM	CT	CT	CT/GWB	CT/GWB	CT/GWB	CT/PLS	CT/PNT	CT/PNT	CT/PNT	CT/PNT	PLS	PNT	
117	LIBRARY	CPT	WD	PLS	PLS	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
118	LOBBY	HT	HS	PLS	PLS	PLS	PLS	REH	REH	REH	REH	PLS	REH	HISTORIC CORE
119	STORAGE	CONC	RUB	PLS	PLS	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
120	SECRETARY/COMMON AREA	CPT	WD	PLS	PLS	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
121	CHIEF INTERPRETER	CPT	WD	PLS	GWB	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
201	MEETING/TRAINING ROOM	CPT	WD	PLS	PLS	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
202	MEETING STORAGE	CONC	RUB	GWB	PLS	GWB/PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
203	FITNESS STORAGE	HT	HT	PLS	PLS	PLS	PLS	PNT	PNT	PNT	PNT	PLS	PNT	
204	GYMNASIUM	EWD	WD	PLS	PLS	PLS	PLS	PNT	PNT/REH	PNT	PNT	PLS	PNT	HISTORIC CORE
205	HALL	CPT	WD	GWB	GWB/PLS	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
206	COMPUTER ROOM	CPT	WD	GWB	GWB	GWB/PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
207	WOMEN'S RESTROOM	CT	CT	CT/GWB	CT/GWB	CT/GWB	CT/PLS	CT/PNT	CT/PNT	CT/PNT	CT/PNT	PLS	PNT	
208	MEN'S RESTROOM	CT	CT	CT/GWB/PLS	CT/GWB	CT/GWB/PLS	CT/PLS	CT/PNT	CT/PNT	CT/PNT	CT/PNT	PLS	PNT	
209	OFFICE STORAGE	CONC	RUB	PLS	GWB	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
210	HALL	CPT	WD	GWB	PLS	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
211	BREAK ROOM	CPT	WD	GWB	PLS	PLS	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
212	HALL	CPT	WD	GWB	GWB	GWB	-	PNT	PNT	PNT	PNT	PLS	PNT	
213	NORTH STAIR	HS	HS	PLS	PLS	PLS	PLS	REH	REH	REH	REH	SKYLIGHT	REH	HISTORIC CORE
214	SOUTH STAIR	HS	HS	PLS	PLS	PLS	PLS	REH	REH	REH	REH	SKYLIGHT	REH	HISTORIC CORE
215	CONTRACT SPECIALIST	CPT	WD	PLS	GWB	GWB	GWB	PNT	PNT	PNT	PNT	PLS	PNT	
216	HALL	CPT	WD	-	GWB/PLS	GWB	GWB	-	PNT	PNT				

CONC - SEALED CONCRETE
CPT - CARPET
CT - CERAMIC TILE
EWD - EXISTING HISTORIC WOOD FLOOR - REFINISHED
GWB - GYPSUM WALL BOARD
TEXTURE TO MATCH PLASTER WALLS
HS - HISTORIC MATERIAL
HT - HISTORIC TILE
PLS - EXG PLASTER
PNT - PAINT
REH - REHAB HISTORIC FINISH
RUB - RUBBER
TER - TERRAZZO
VCT - VINYL COMPOSITE TILE
VCT/P - VCT ON PLYWOOD SUBFLOOR
OVER HISTORIC TILE
WD - WOOD

DESIGNED:
ADD
 Paul M. Long
 TECH. REVIEWER:
 DATE:
 6/23/200

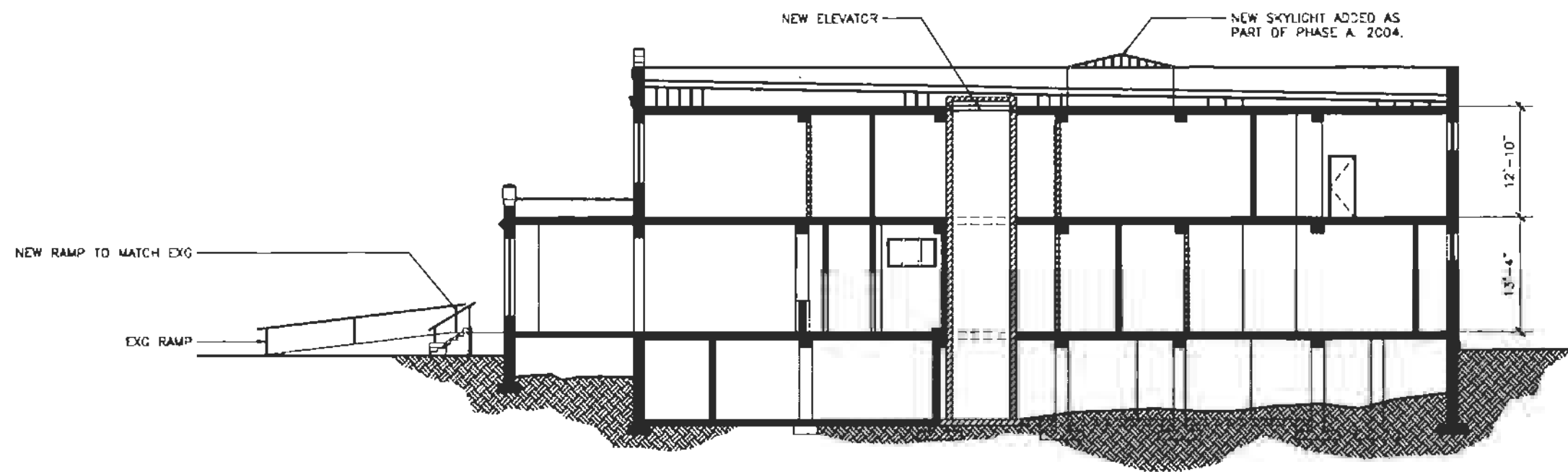
A600

TITLE OF SACKET
LAMAR BATHHOUSE
FINISH SCHEDULE

REHABILITATED BATHHOUSES
HOT SPRINGS NATIONAL PARK

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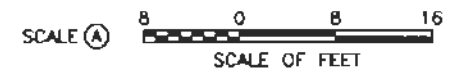
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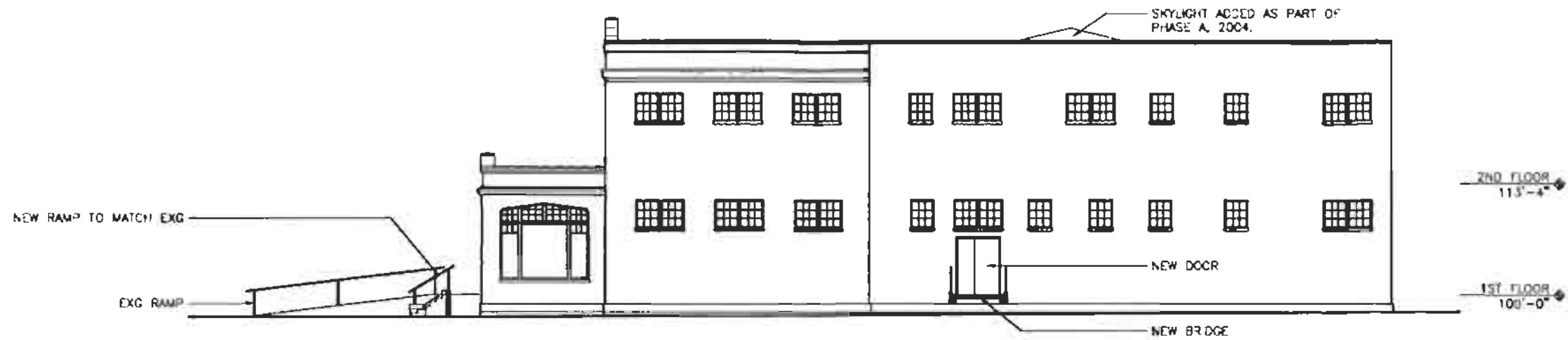
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	EXC WALL
	NEW WALL
	ADDED PHASE A, 2004
	DEMOLITION

1 LAMAR SECTION
A301 SCALE (A)



DESIGNED: Paul W. Long TECH. REVIEW:	SUB SHEET NO. A301	TITLE OF SHEET LAMAR BATHHOUSE BUILDING SECTION REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 41,084 PKG. NO. HOSP 1301 SHEET OF
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1 LAMAR SOUTH ELEVATION
A201 SCALE (A)



2 LAMAR WEST ELEVATION
A201 SCALE (A)

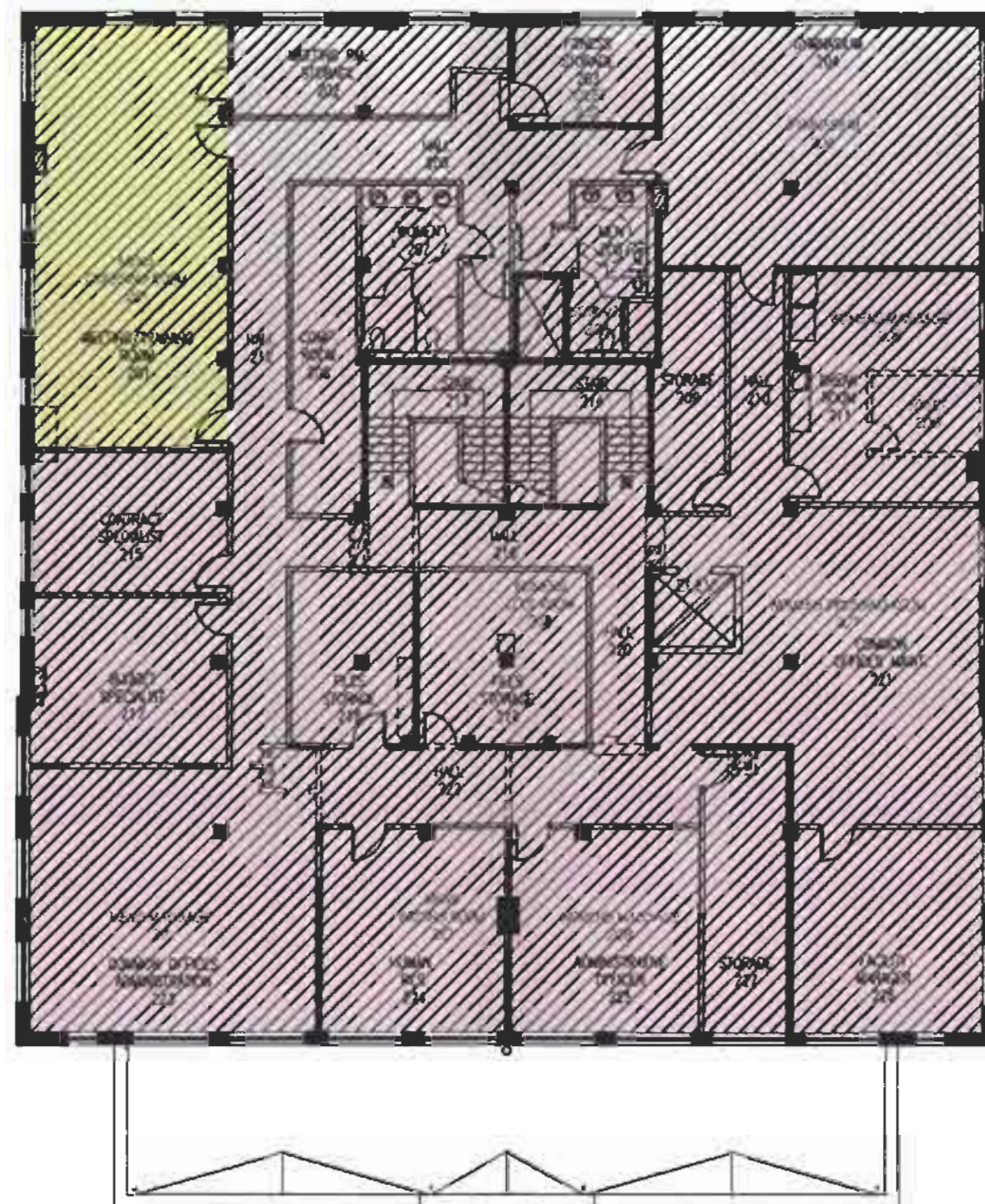


3 LAMAR ROOF/EAST ELEVATION
A201 SCALE (A)

SCALE (A) 8 0 8 16
SCALE OF FEET

DESIGNED: HOSP Paul W. Long TECH. REVIEW	SUB SHEET NO. A201	TITLE OF SHEET LAMAR BATHHOUSE ELEVATION AND EXISTING CONDITIONS REHABILITATE BATHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064
DATE: 6/23/2003			PKG. NO. HOSP 100 SHEET OF

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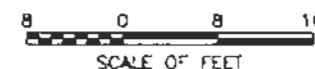
LEGEND

	EXG WALL
	NEW WALL
	ADDED PHASE A, 2004
	DEMOLITION
	1-HR RATED CONSTRUCTION
	50 PSF LIVE LOAD CAPACITY
	B OCCUPANCY GROUP-50 PSF LIVE LOAD REQ'D
	A-2 OCCUPANCY GROUP-100 PSF LIVE LOAD REQ'D
	HISTORIC ROOM NAME
	ROOM NAME

1 LAMAR SECOND FLOOR LIFE SAFETY PLAN
A105 SCALE A

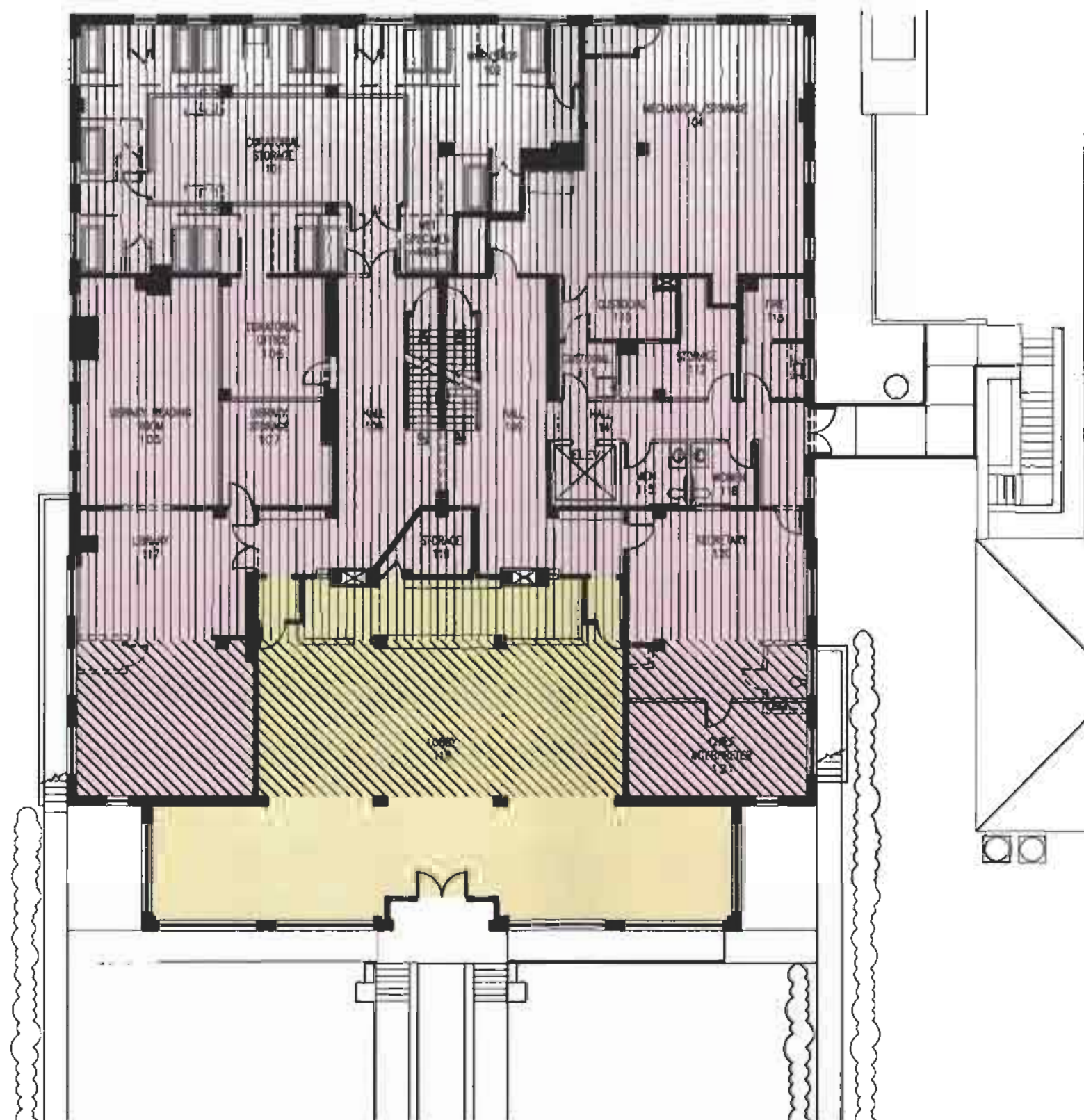


SCALE A



DESIGNED: CHECKED: Paul W. Long TECH. REVIEW: DATE: 6/23/2003	SUB SHEET NO. A105	TITLE OF SHEET LAMAR BATHHOUSE SECOND FLOOR LIFE SAFETY PLAN REHABILITATE BATHHOUSE HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 PLOT NO. 100 SHEET 1
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LEGEND

	EXG WALL
	NEW WALL
	ADDED PHASE A, 2004
	DEMOLITION
	1-HR RATED CONSTRUCTION
	70 PSF LIVE LOAD CAPACITY
	100 PSF LIVE LOAD CAPACITY
	B OCCUPANCY GROUP-50 PSF LIVE LOAD REQ'D
	A-2 OCCUPANCY GROUP-100 PSF LIVE LOAD REQ'D
	HISTORIC ROOM NAME
	ROOM NAME

NOTES

BUILDING CLASSIFICATION: II-B
 FIRE RESISTANCE REQUIREMENTS
 EXTERIOR BEARING WALLS - 2 HR
 ALL OTHER BLDG ELEMENTS - 0 HR

FIXTURE CALCULATIONS

B OCCUPANCY LOAD	111 MEN/111 WOMEN
WC MEN @ 1:50	3
WC WOMEN @ 1:50	3
LAUNDRY MEN @ 1:80	2
LAUNDRY WOMEN @ 1:80	2
DRINKING FOUNTAINS @ 1:100	3

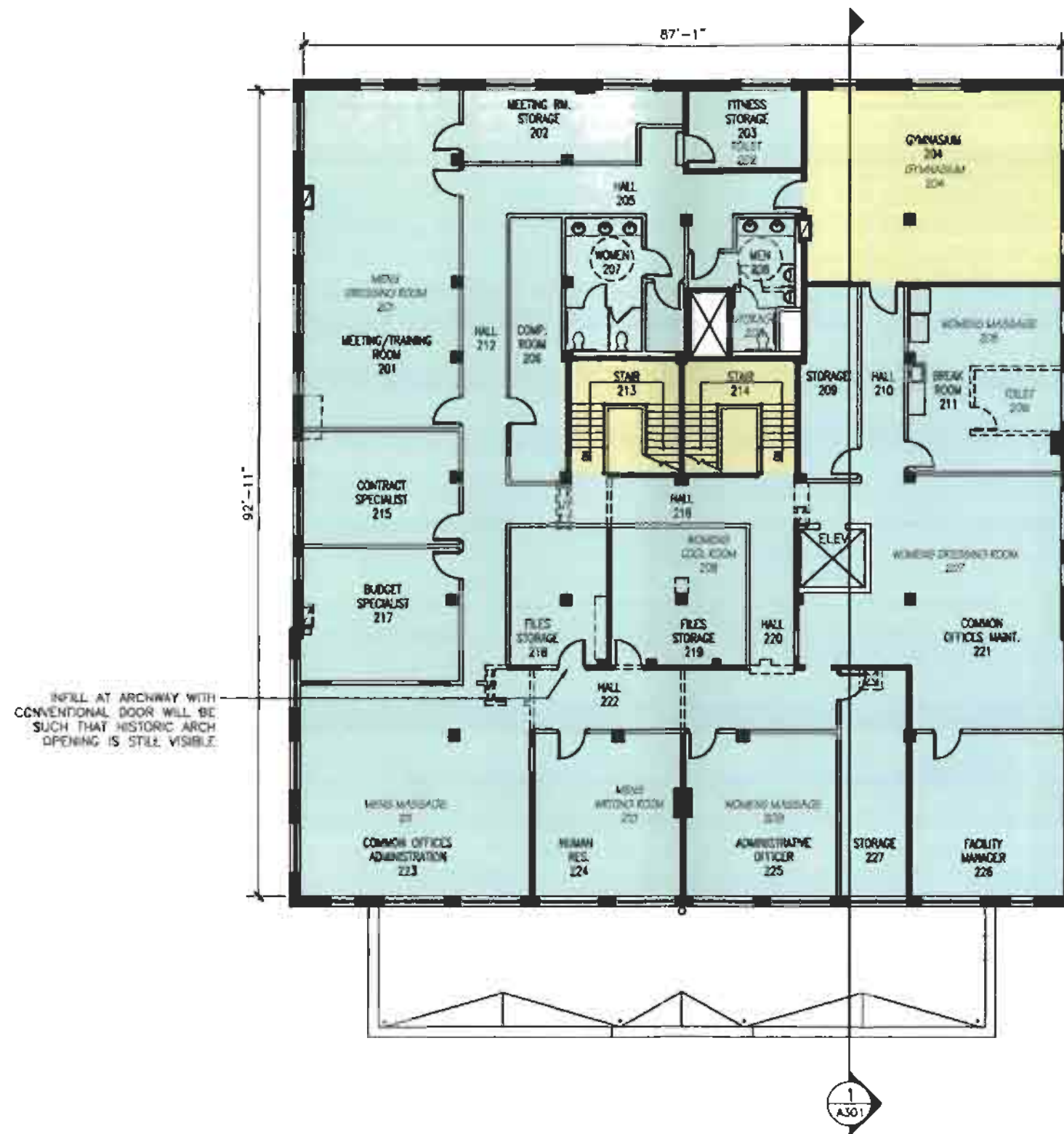
1 LAMAR FIRST FLOOR LIFE SAFETY PLAN
 A104 SCALE A



SCALE A 0 8 16
 SCALE OF FEET

DESIGNED: Paul M. Long TECH. REVIEW: DATE: 8/23/2003	SUB SHEET NO. A104	TITLE OF SHEET LAMAR BATHHOUSE FIRST FLOOR LIFE SAFETY PLAN REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 PAGE NO. 150 OF
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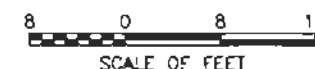
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1
A103 LAMAR SECOND FLOOR PLAN
SCALE (A)



SCALE (A)



PROGRAM AREAS

ROOM NO.	ROOM NAME	NET AREA
201	MEETING/TRAINING ROOM	687
202	MEETING RM. STORAGE	186
203	FITNESS STORAGE	117
204	GYMNASIUM	650
205	HALL	289
206	COMPUTER ROOM	187
207	WOMEN	132
208	MEN	113
209	STORAGE	139
210	HALL	173
211	BREAK ROOM	376
212	HALL	297
213	STAIR	126
214	STAIR	126
215	CONTRACT SPECIALIST	230
216	HALL	169
217	BUDGET SPECIALIST	275
218	FILES STORAGE	178
219	FILES STORAGE	247
220	HALL	84
221	COMMON OFFICES MAINT.	648
222	HALL	262
223	COMMON OFFICES ADMIN.	560
224	HUMAN RESOURCES	316
225	ADMINISTRATIVE OFFICER	322
226	FACILITY MANAGER	333
227	STORAGE	200
TOTAL NET AREA		7422
TOTAL GROSS AREA		8538

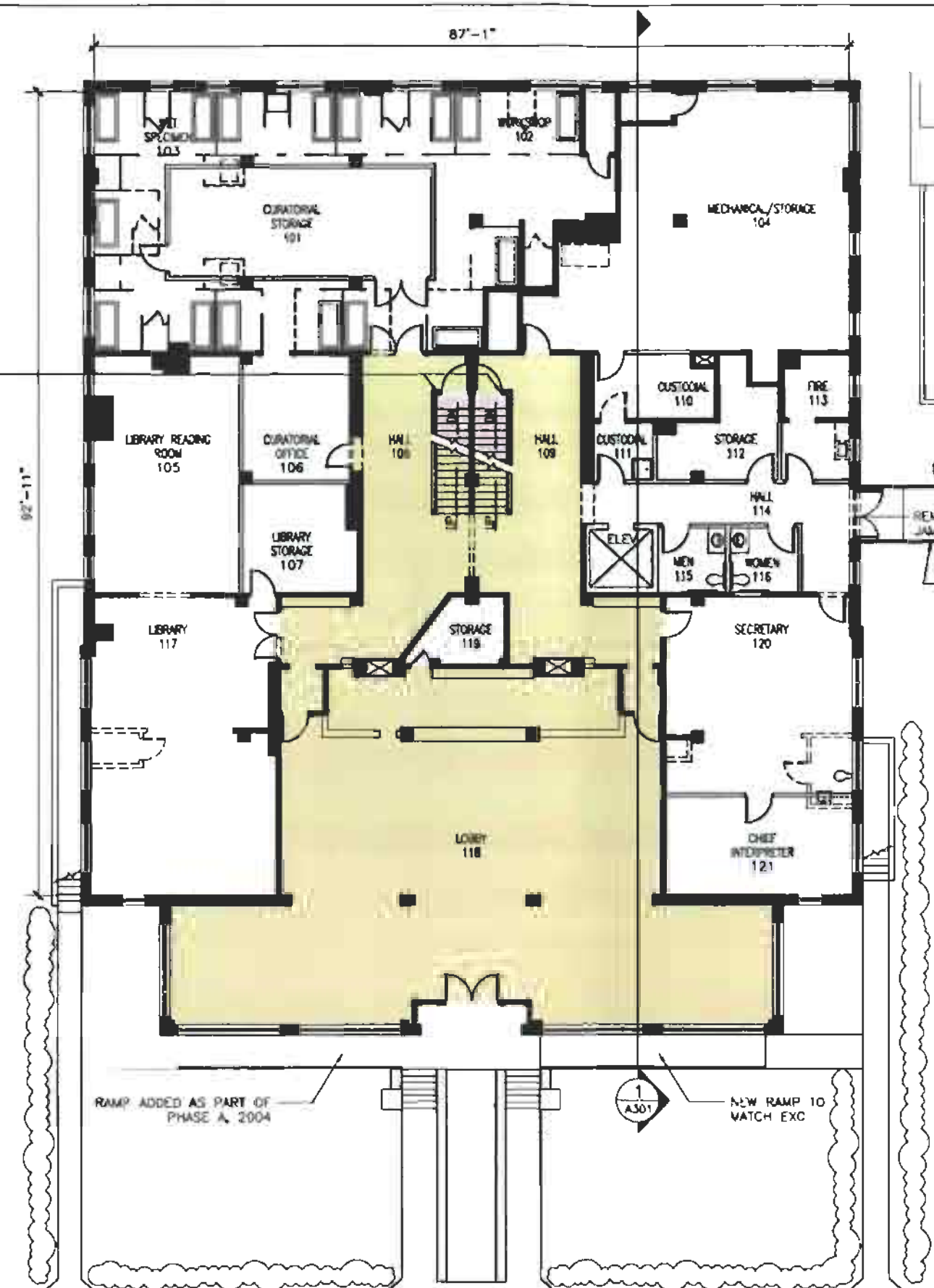
LEGEND

	EXC WALL
	NEW WALL
	ADDED PHASE A, 2004
	DEMOLITION
	PRIMARY HISTORIC AREA
	SECONDARY HISTORIC AREA
	TERTIARY HISTORIC AREA
	HISTORIC ROOM NAME
	ROOM NAME

DESIGNED: P. W. Long TECH. REVIEW: DATE: 6/23/2003	SUB SHEET NO. A103	TITLE OF SHEET LAMAR BATHHOUSE SECOND FLOOR REHABILITATE BATHHOUSES HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 PAGE NO. 150 OF
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NEW WALL AND DOOR ADDED
AS PART OF PHASE A, 2004



PROGRAM AREAS

ROOM NO.	ROOM NAME	NET AREA
101	CURATORIAL STORAGE	1624
102	WORKSHOP	N/A
103	WET SPECIMEN	N/A
104	MECHANICAL/STORAGE	917
105	LIBRARY READING ROOM	441
106	CURATORIAL OFFICE	173
107	LIBRARY STORAGE	160
108	HALL	429
109	HALL	437
110	CUSTODIAL	100
111	CUSTODIAL	111
112	STORAGE	128
113	FIRE COMMAND ROOM	107
114	HALL	187
115	MEN'S RESTROOM	60
116	WOMEN'S RESTROOM	60
117	LIBRARY	718
118	LOBBY	2046
119	STORAGE	68
120	SECRETARY	483
121	CHIEF INTERPRETER	244
TOTAL NET AREA		8493
TOTAL GROSS AREA		9575

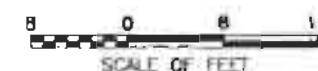
LEGEND

	EXG WALL
	NEW WALL
	ADDED PHASE A, 2004
	DEMOLITION
	PRIMARY HISTORIC AREA
	SECONDARY HISTORIC AREA
	TERTIARY HISTORIC AREA
	HISTORIC ROOM NAME
	ROOM NAME

1 LAMAR FIRST FLOOR PLAN
SCALE (A)



SCALE (A)

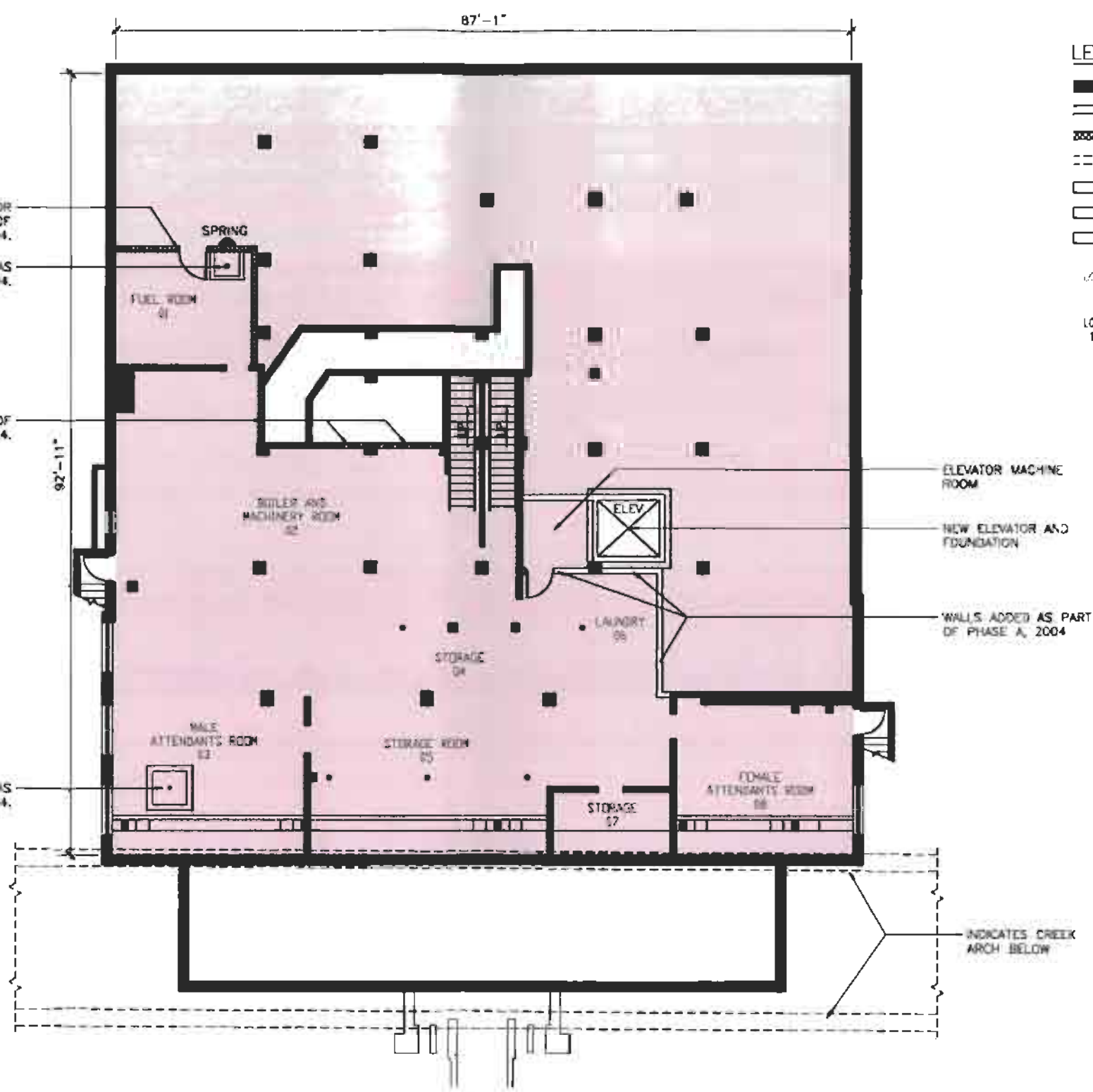


DESIGNED:
REVIEW:
Paul W. Long
TECH. REVIEW:
DATE:
6/23/2003

SUB SHEET NO.
A102

TITLE OF SHEET
LAMAR BATHHOUSE
FIRST FLOOR
REHABILITATE BATHHOUSES
HOT SPRINGS NATIONAL PARK

DRAWING NO.
128
41,064
PAGE NO.
150
SHEET
OF



WALLS AND DOOR
ADDED AS PART OF
PHASE A, 2004.

CATCH BASIN ADDED AS
PART OF PHASE A, 2004.

WALLS ADDED AS PART OF
PHASE A, 2004.

SUMP PUMP ADDED AS
PART OF PHASE A, 2004.

LEGEND

- EXG WALL
- NEW WALL
- ADDED PHASE A, 2004
- DEMOLITION
- PRIMARY HISTORIC AREA
- SECONDARY HISTORIC AREA
- TERTIARY HISTORIC AREA
- HISTORIC ROOM NAME
- ROOM NAME

LAMAR BASEMENT FLOOR PLAN
SCALE (A)



SCALE (A) 0 8 16
SCALE OF FEET

DESIGNED Paul W. Long TECH. REVIEW	SUB SHEET NO. A101	TITLE OF SHEET LAMAR BATHHOUSE BASEMENT REHABILITATE BATHHOUSE HOT SPRINGS NATIONAL PARK	DRAWING NO. 128 41,064 Pkg. No. 150 SHEET OF
DATE: 6/23/2003			

4/10/04 10:13 AM 216 P:\02-0402\WORK\304 LAMAR\BATHHOUSE\A101 LA-100.DWG 2003 P:\02-0402\WORK\304 LAMAR\BATHHOUSE\A101 LA-100.DWG

Appendix G. LAMAR BATHHOUSE STRUCTURAL SYSTEMS ANALYSIS

LAMAR BATHHOUSE
STRUCTURAL SYSTEMS ANALYSIS
SCHEMATIC DESIGN
HOSP-056091C
PHASE C

Existing Description

The building is two-story with exterior masonry bearing walls and cast-in-place concrete interior columns and beams supported on concrete spread footings. The basement extends throughout the entire building footprint except that approximately 1/2 of the rear area is an unexcavated crawlspace accessible from the basement area. The crawlspace "earth" surface rises to within a few feet of the soffit of the concrete structure.

The concrete first floor framing includes formed beams supporting repetitive concrete joists with a fairly thin slab of approximately 2 1/2" to 3" in thickness. Concrete columns support the beams. The second floor and roof framing is similar except that the concrete joists were formed with stacked tile, which was left in place between the joist webs. The bottom of the tile and the joists formed a uniformly flat surface that was then plastered over for the finish ceiling.

Interior partitions are clay tile faced with plaster. The exterior walls are a combination of cast concrete and un-reinforced masonry faced with plaster on the inside and stucco on the exterior.

A structural analysis of this bathhouse was completed during the Phase A bathhouse stabilization project by The Schemmer Associates Inc. Refer to National Park Service document number 128/80030.

Floor Live Load Capacities

See the Proposed Treatment Drawings, Life Safety Plans for the exact layout of the live load capacities. Any occupancy that requires greater floor load capacities will be the responsibility of the tenant to design, obtain NPS approval and implement.

Elevator Shaft Installation

The addition of the proposed elevator shaft is positioned to the corner of a concrete column. This should allow for the cutting of the existing concrete slab such that an existing joist may occur directly in line with the north and south walls of the elevator. The exact placement of the elevator shaft, in the north-south direction should be verified with the existing concrete joists at each level to minimize the number of joists cut.

The procedure for installation of the elevator shaft would be as follows:

1. Excavate the earth directly below the footprint of the elevator shaft to allow the construction of the base pad. This may involve rock excavation where rock is visible in the crawlspace.
2. Construct a flat, 8" thick concrete mat under the elevator. This mat may or may not be set at the same elevation of the basement slab. In fact, we anticipate that it may be some distance above. The actual elevation would be set based upon the actual grade elevation of the crawlspace in this area and upon minimizing rock excavation.
3. Construct an 8" concrete masonry unit (CMU) wall system, forming the shaft of the elevator. Extend the wall up to and grout tight to the underside of the concrete floor structure above. This will involve dry packing grout into the spaces between the top of the walls and the concrete floor.
4. The first floor structure can then be saw cut and removed over the shaft. A temporary access opening in the side of the shaft, within the basement, should be considered for debris removal and future access for elevator maintenance.
5. The saw cutting of the floor will involve the floor slab as well as a number of concrete floor joists. Since the joists are continuous over the supporting concrete beams, there will be some loss of continuity in the joists. This will, in effect, reduce the flexural capacity of the joists on the adjacent spans either side of the elevator. However, the controlling limit state for the joist capacity is in shear and this loss of continuity will not affect the given floor load capacities in this area (100 psf on the first floor and 50 psf on the second).
6. The next level of CMU walls are then constructed and the saw cutting procedure repeated at the second floor.
7. The walls above the second floor may also be CMU or may be light gage steel framing with gypsum board sheathing.

Lintels over elevator openings can be formed, "U" type block lintels. A steel angle elevator door support can be attached to the existing structure with adhesive-type anchors drilled into the joist stems.

Curatorial Storage Support

The anticipated curatorial storage area (Room 101) in the northeast corner of the first floor includes a series of compact storage units (aisle saver units) that are believed to weigh about 18,000 to 19,000 lbs. These figures were provided by Sharon Shugart on May 29, 2003. This includes the estimated weight of the storage system itself and added weight would be expected for the contents. This takes up an area of about 24.5 ft. x 8.2 ft. applying a uniform live load of 92 psf compared with the 100 psf live load capacity. With added contents to the units, we are concerned that the applied live load will exceed the capacity and therefore recommend installation of a structural support below the floor.

This would involve construction of 24 concrete block pedestals between the first floor concrete structure and the crawlspace below. The distance between is estimated to be about

two to three feet. The block would be set on the rock below each pedestal. Some rock excavation would be required. This would involve manual labor, using a chipping hammer to carve out flat areas for each block pedestal.

The pedestals would be extended from the rock up to the underside of each joist and this would reduce the span of each joist, increasing the live load capacity in this immediate area. The Stabilization project currently under bid for Lamar includes placement of a 30 mil vapor barrier across the entire crawlspace. This would require lapping and connecting the vapor barrier around and between the pedestals to effectively seal the ground from the crawlspace.

Exit Door in South Wall

A new exit door will be constructed in the south exterior wall as indicated in the drawings. The opening will be cut through a load-bearing brick masonry wall (multi-wythe) and require a steel lintel. This lintel can be comprised of a dual L6x6x5/16 angle system where the horizontal legs of the angles are cut into the block from either face and the angle extends a minimum of 8" beyond the raw opening edges. Alternatively, a cast-in-place or precast concrete lintel can be constructed and lifted into place after removal of the necessary brick masonry from above the opening.

The Door will be linked to the Administration building to the south with a concrete sidewalk. A portion of the sidewalk extends over a low swale along the Lamar south exterior wall. This will require a structural slab to span from a thickened footing slab to the door threshold. We would anticipate a 5" or 6" slab with reinforcing. Code compliant guardrails on either side will be set in adhesive in small curbs cast with the slab.

Appendix H. LAMAR BATHHOUSE MECHANICAL SYSTEMS ANALYSIS

LAMAR BATHHOUSE

MECHANICAL SYSTEMS ANALYSIS

SCHEMATIC DESIGN

HOSP-056091C

PHASE C

HVAC

The existing (Phase A) nominal 60 ton air handler and condenser unit will remain. The condensing unit located on a concrete pad on the south side of the building will be relocated to allow clearance from the new exit. The refrigerant piping from the condensing unit will be replaced and reconnected to the coil in the existing (Phase A) air handler.

The existing (Phase A) duct mains on first floor and second floor will remain and will be painted for exposed ductwork. New sidewall supply registers will be connected to the supply duct and extended with new sheet metal ductwork to each room. The Curatorial Storage, Curatorial Workshop and Wet Specimen rooms will be supplied from the existing air handler system also. The supply air to these rooms will be filtered through the use of fan assisted HEPA filters. A new dehumidifier unit will be installed in Curatorial Storage 101 and will be controlled from an adjustable humidistat. Existing (Phase A) sidewall supply registers (from the stabilization project) will remain in the historic Lobby, Sun Parlor, Men's Hall, Women's Hall and Storage areas. . All supply air ductwork will be insulated with fiberglass internal duct liner.

Return air will be transferred from each room through transoms over the door or through wall mounted transfer grilles. The return air path will utilize the hallways to reach a common return point on each floor from which the return air will be ducted back to the air handler. On first floor, this is anticipated to be from Hall 114. On second floor, this is anticipated to be Hall 205 and Hall 210. The existing 36" X 32" return duct riser to the second floor is anticipated to remain. The two 36" X 20" branch return ducts will be relocated to accommodate the new room layout. The 32" X 20" return register located above the Curatorial Workshop will be removed and the duct capped to prevent the transfer of dust into the Curatorial Storage area. The Curatorial Storage, Curatorial Workshop, and the Wet Specimen areas will be maintained with a positive pressure in relation to the adjoining spaces. Return air from other areas will not be transferred through these rooms. Return air from the historic Lobby and Sun Parlor will be transferred through the existing (original) return grilles and chases located on the east wall of the lobby and transferring to the Men's Hall and the Women's Hall. A matching salvaged return grille will be installed in the existing chase in the Women's Hall. All return air ductwork will be uninsulated.

The existing historic radiators located in the Sun Parlor on the east wall to each side of the arched entry to the lobby will remain. The radiators will be cleaned and de-scaled. A new

connection will be made to the thermal water loop in the basement with a pumped bridge to supply the radiators. New thermostatic controls will be installed on both radiators with valve assemblies located in the basement below the units. Thermal heating water supply and return piping will be routed down through existing floor penetrations to the basement/crawlspace. The piping will be routed through the basement and turn up to connect to the pump located in the (Phase A) Mechanical room on first floor. New heating water pipes will be type "K" copper with wrought fittings and silver solder. All piping will be insulated.

Two new dome type exhaust fans will be installed on the roof. One approximately 650 cfm exhaust fan for the first floor toilet rooms and custodial areas will be ducted with uninsulated sheet metal ductwork down through Storage 209 to each of the rooms on first floor. One approximately 550 cfm exhaust fan will be located on the roof to serve the second floor Men's and Women's toilet rooms. Each room will have a commercial grade sidewall exhaust register mounted to exposed ductwork. Exhaust fans will be controlled from a time delay occupancy sensor located in each toilet room. A new exhaust vent from the hood located in Curatorial Workshop 102 will be routed through the existing window on the east wall.

The existing (Phase A) ventilation systems in the basement will remain with no changes.

Plumbing

The existing roof drainage system will remain and is not anticipated to be modified.

A new 1 1/2" domestic cold water pipe will be connected to the existing 6" cw entry located in the northwest corner of the basement. The cold water main will be routed through the basement to turn up into the first floor mechanical room. Cold water piping will branch from the mechanical room to serve the new water heater and will be routed exposed along the first floor ceiling to feed up to the second floor fixtures and down to the first floor fixtures. All interior non-buried domestic cold water will be type "L" hard drawn copper, wrought copper fittings and 95-5 (tin/antimony), 96-4 (tin/silver). All piping will be insulated.

A new 20-gallon gas-fired water heater will be installed in the mechanical room on first floor with a new sidewall flue routed through the east exterior wall. Insulated domestic hot water pipes will be routed exposed along the first floor ceiling (parallel with the cold water) and will feed up to the second floor fixtures and down to the first floor fixtures. All interior non-buried domestic cold water will be type "L" hard drawn copper, wrought copper fittings and 95-5 (tin/antimony), 96-4 (tin/silver). All piping will be insulated.

Waste and vent piping will be routed in new stud walls. Waste piping will be routed down to the basement to collect into a new building main, which will tie into the existing 4" sanitary sewer main in the southwest corner of the basement. Each plumbing group will be collected into new vent risers up through the roof. Piping will be coated service weight cast iron with bell and spigot fittings and elastomeric joints or coated service weight hubless cast iron with gasket and clamp fittings.

All toilet room plumbing fixtures will be commercial grade white vitreous china fixtures. ADA compliant floor mounted flush valve water closets and a wall-hung urinal are anticipated. All water closets and urinals will be siphon jet low flow fixtures. Lavatories in the toilet rooms will be counter mounted bowls with ADA compliant low flow faucets and self-closing valves. The Curatorial Workshop and Wet Specimen rooms will have counter mounted single compartment (deep well) stainless steel sinks with gooseneck faucets and wrist blades. The Custodial room will have a molded stone mop service basin with wall-mounted faucet. The faucet will include a threaded spout and an integral vacuum breaker. The Break room sink will be a counter mounted stainless steel single compartment sink with garbage disposer. A lever handle swing spout kitchen faucet with hose spray is anticipated. An ADA compliant electric water cooler is also included.

Fire Protection

The building will be fully sprinkled with a new wet sprinkler system designed to light hazard per NFPA including Curatorial Storage, Curatorial Workroom and Wet Specimen. The new fire main will tee off of the existing 6" building main located near the northwest corner of the basement. A new fire entry assembly with a double check backflow preventer will be located in the basement. The Fire Department connection will be a freestanding assembly located in a suitable culturally sensitive location area of the building. Sprinkler piping will be concealed where possible in new construction or where reasonable to do so; otherwise piping will be exposed sprinkler pipes. There are two options for sprinkling the Historic Lobby and Sun Parlor. One option is to route sprinkler piping into the historic Lobby, Sun Parlor, Men's Hall and Women's Hall and install concealed sprinkler heads above the existing historic ceilings. This will require cutting and patching the ceilings to hang the pipes. Option two is to install extended throw sidewall sprinkler heads through the walls from adjacent spaces. Penetration locations within the wall murals in the Lobby and Sun Parlor would need to be coordinated to fall within the painted stones and the escutcheons painted to blend in with the mural. The sprinkler heads cannot be painted but heads can be custom color by the manufacturer if conditions warrant.

Appendix I. LAMAR BATHHOUSE ELECTRICAL SYSTEMS ANALYSIS

LAMAR BATHHOUSE

ELECTRICAL SYSTEMS ANALYSIS

SCHEMATIC DESIGN

HOSP-056091C
PHASE C

Existing (Phase A) And New Power And Distribution

The existing (Phase A) building Electrical Service consists of a 1200 Amps 120/208V, 3 phase, 4 wire Main Service Entrance Rated Disconnect located at the exterior south/east corner of the building. The Main Distribution Panelboard "LMDP" for the building is rated at 1000 Amps, 120/208V, 3 phase, 4 wire and is served from the Service Entrance Rated Disconnect Switch with 4 sets of (4#350MCM +1#4/0G)4"C. The existing Main Distribution Panelboard "LMDP" serves the following:

- 400/3 circuit breaker at "LMDP" - Branch circuit panelboard "LLM" 400A, 120/208V, 3phase, 4wire, connected with (4#500MCM+1#3G)4"C. This panelboard serves the existing Mechanical equipment, duplex receptacles at the mechanical equipment and the luminaires in the basement.
- 225/3 circuit breaker at "LMDP" - Branch circuit panelboard "LL1"225A, 120/208V, 3phase, 4wire, connected with (4#4/0+1#4G)2-1/2"C. This panelboard serves only the storage room receptacle and luminaire. This Branch Circuit Panelboard will serve the new lighting and power loads on the 1st floor.
- 300/3 circuit breaker at "LMDP" - Air Conditioner ACCU-1L.
- There are two (2) Spare 125/3 circuit breakers and Space for two (2) 200/3 and two (2) 400/3 circuit breakers.

A new 200/3 circuit breaker will be provided in the existing space at the Main Distribution Panelboard "LMDP" to serve a new 200A, 120/208V, 3phase, 4wire panelboard, connected with (4#4/0+1#4G)2-1/2"C This new panelboard will be located on the 2nd level to serve the new lighting and power loads on the 2nd floor.

New general-purpose receptacles will be provided through out the building for house keeping, convenience, and general use. All general-purpose receptacles shall be 20A, 120V, Hubbel #5362I or equal. Three (3) duplex receptacles will be provided per office. Larger rooms will be provided with one (1) duplex receptacle for every 10'-0" of wall space. Workshop type areas will be provided with the number and type of receptacles according to the equipment needs.

Branch circuits/feeders for power distribution shall be copper, and shall be in metallic raceways per the NEC. Only compression type fittings will be used. Conduit seals will be used for all conduits running between floors.

Power connections and local control will be provided to the new exhaust fans in the rest rooms.

Power connections and local controls will be provided to the new HEPA Filters and De-humidification unit in the Curatorial Storage area.

Conduit routing and device mounting will be recessed in walls and ceilings in this building. The Basement level will be utilized to route conduit for power and communication devices to the 1st floor. Conduit will rise from the basement recessed in plaster wall or into new stud wall to the devices on the 1st floor. For the power and communication devices on the 2nd floor, the stud walls will be utilized to route conduit where possible and all other conduit will be recessed in plaster walls and ceilings. The new stud walls will be used as much as possible for power and communication device locations.

The Primary historic common area power and communication devices and conduits will be recessed into the existing plaster walls and ceilings.

Existing (Phase A) And New Lighting

There is existing (Phase A) fluorescent luminaires in the room 104 and minimal existing fluorescent luminaires on the basement level which will remain.

Lighting will be required through out the interior of the building excluding the areas mentioned above. No new exterior lighting will be provided except at the new exterior door on the south side. Local lighting controls will be provided at the entry door into each room. Lighting levels will meet IES recommendations for each room according to the function of the room.

For the offices, Library areas, meeting rooms, restrooms, gymnasium and break room, decorative surface mounted fluorescent luminaires will be provided in rooms with a ceiling height of 9'-0" and lower and decorative pendant mounted luminaires will be provided in room with a ceiling height above 9'-0". For storage, custodial, workshops and wet specimen rooms, industrial type fluorescent luminaires will be provided.

The Primary historic common area will be provided with surface mounted special "Time Period" type luminaries only when documentation of what the historic fixtures looked like. If photos or other documentation does not exist, a contemporary but compatible fixture will be specified. The walls, columns and ceiling will be utilized for mounting of the luminaires to achieve the recommended IES light levels. Conduit in this area will be recessed in the existing plaster wall and/or ceilings.

The conduit and conductors required for the connection of the new luminaires and controls will be recessed in plaster walls and ceilings.

The fluorescent luminaires in the Curatorial Storage will be provided with UV light filtering sleeves.

Emergency battery packs and Exit signs will be provided to meet the Life Safety Codes.

Communications

Raceways will be provided for Data and Communications. Outlets will be comprised of a 4" square j-box with a 3/4" conduit extended to a designated communications room. One outlet per office and/or one outlet every 10'-0" in larger rooms will be provided. No outlets will be provided in workshops, storage rooms etc. unless there are plans for the room to be a future office. Power connections will be provided for all Data and Communications equipment. The Government will provide all Communications and Data cabling.

Grounding will be provided at the new Main Telephone terminal Board in the designated Communications Room.

Fire Alarm System

An automatic Fire Alarm System will be provided with smoke detectors throughout the facility and at least one in each room. Also required will be additional heat detectors and smoke detectors in the elevator equipment room and in the elevator shafts. ADA Speaker / Horn / Strobes will be provided throughout the building and Pull stations at all exits and stairs. The Fire Alarm Control Panel will be located in a designated Fire Command Center. The Fire Command Center will contain all equipment and appurtenances in accordance with IBC.

Security System

Raceway and points of power will be provided to accommodate the Security System. The Government will provide the Security System.

Appendix J. **IBC CHAPTER 34 COMPLIANCE ALTERNATIVES SUMMARY**

Existing occupancy LAMAR BATHHOUSE. Proposed occupancy B/A-3

Year building was constructed _____ Number of stories 2 Height in feet 32

Type of construction III-B Area per floor 9595 S.F./1st floor and 8540S.F./2nd floor

Percentage of open perimeter 50 % Percentage of height reduction _____ %

Completely suppressed: Yes X No _____ Corridor wall rating Not Required

Compartmentation: Yes _____ No X Required door closers: Yes X No _____

Fire resistance rating of vertical opening enclosures None

Type of HVAC _____ Serving number of floors Two

Automatic fire detection: Yes X No _____ Type and location Smoke Detectors

Fire alarm system: Yes X No _____ Type In accordance with Section 907

Smoke control: Yes _____ No X Type _____

Adequate exit routes: Yes X No _____ Dead ends: Yes X No _____

Maximum exit access travel distance 300' allowed, 150' actual Elevator Controls: Yes X No _____

Means of egress emergency lighting: Yes X No _____ Mixed occupancies: Yes _____ No X

SAFETY PARAMETERS - See Notes	FIRE SAFETY (FS)	MEANS OF EGRESS (ME)	GENERAL SAFETY (GS)
3409.6.1 Building Height	3.0	3.0	3.0
3409.6.2 Building Area	12.0	12.0	12.0
3409.6.3 Compartmentation	0.0	0.0	0.0
3409.6.4 Tenant and Dwelling Unit Separation	0.0	0.0	0.0
3409.6.5 Corridor Walls	0.0	0.0	0.0
3409.6.6 Vertical Openings	-14.0	-14.0	-14.0
3409.6.7 HVAC Systems	0.0	0.0	0.0
3409.6.8 Automatic Fire Detection	8.0	8.0	8.0
3409.6.9 Fire Alarm System	0.0 5.0	0.0 5.0	0.0 5.0
3409.6.10 Smoke Control	****	0.0	0.0
3409.6.11 Means of Egress	****	0.0	0.0
3409.6.12 Dead Ends - no dead ends over 50'	****	0.0	0.0
3409.6.13 Maximum Exit Access Travel Distance	****	9.0	9.0
3409.6.14 Elevator Control	2.0	2.0	2.0
3409.6.15 Means of Egress Emergency Lighting	****	4.0	4.0
3409.6.16 Mixed Occupancies	0.0	****	0.0
3409.6.17 Automatic Sprinklers	12.0	÷ 2 = 6.0	12.0
3409.6.18 Incidental Use Area Protection	0.0	0.0	0.0
Building score - total value	23.0 28.0	30.0 35.0	36.0 41.0

****No applicable value to be inserted

Points Required:	24.0	34.0	34.0
Points Needed:	1.0 0.0	4.0 0.0	0.0

NOTES FOR LAMAR BATHHOUSE WITH A PRIMARY B OCCUPANCY AND AN A-3 OCCUPANCY:

- 6.1 The points for the height of the building equal 3.4 and the points for the number of stories equal 3 so the lesser value of 3 must be used.
- 6.2 The points for the building area equal 12, which is the maximum allowed, being one half of the required score for Fire Safety.
- 6.3 There are no points being given for compartmentation, and it would be difficult to achieve given the opening to the second floor.
- 6.4 Assuming one tenant, there are no points for Tenant Separation.
- 6.5 Assuming no requirements for corridors, there are no points for Corridor Walls. 2 extra points are available if corridors are provided with the required fire resistive rating and distance as outlined in this section.
- 6.6 Assuming maintaining the open, existing stairs for egress and not bringing them into total compliance for egress, there are 14 points that are deducted here. There are a number of points that can be gained here by adding a third stairway with a one-hour enclosed exit enclosure and also rating the elevator shaft (which, if concealed within the building construction, needs to be rated anyway) and any other shafts that connect through the floors. Instead of deducting 14 points, 3.5 points can be added so you actually gain 17.5 points by doing this.
- 6.7 Assuming that the HVAC system is designed to serve both floors, there are no points gained. 5 additional points are available if there is a separate HVAC system provided to the second floor.
- 6.8 Assuming that smoke detectors will be installed throughout the entire fire area of the building, there are 8 points included.
- 6.9 Assuming that a fire alarm system in accordance with Section 907 will be installed so that no points are lost. Assuming that we add a voice/alarm system and a fire command station this is worth 5 additional points in all three categories.
- 6.10 Assuming that there will not be any smoke control systems added, there are no points added here. There are two points available for having openings in exterior walls at the rate of 20 S.F. per 50 L.F. in each story and around the building perimeter at intervals not exceeding 50 feet and are readily openable from the inside without a key or separate tool or, if not openable, clearly and permanently marked tempered glass panels are used in lieu of the openable ones. There are other points available under this section that are more demanding in requirements and should be evaluated for feasibility only if found necessary.
- 6.11 Given that the Capacity of the Means of egress complies with Section 1003 and the number of exits complies with the minimum number required by Section 1005, a minimum of two exits

based on occupancy, there are no points lost or gained here, and there are no additional points available in this section for B occupancies.

- 6.12 Assuming that there will be no dead ends over 50 feet, 0 points are added. Providing no dead ends will add an extra 2 points.
- 6.13 For maximum exit travel, 300 feet is allowable and if 150 feet actual is a given, 9 points are given.
- 6.14 Assuming that an elevator is being added and that this elevator will comply with new construction requirements, 2 points are included. If no elevator is installed there is a deduction of 2 points instead.
- 6.15 Assuming that means of egress lighting and exit signs be provided with emergency power in accordance with Section 2702 (battery back-up), the maximum of 4 points are included.
- 6.16 Assuming that the separation between the A-3 training room and B occupancies will have a one-hour fire barrier in accordance with Section 302.3.3 so that no points are lost. An additional 5 points can be picked up for increasing this rating in accordance with this section; however, these points do not apply to the Means of Egress category.
- 6.17 Assuming that automatic sprinklers will not be required for this occupancy but will be provided throughout in accordance with Chapter 9 for and additional 12 more points included.
- 6.18 Assuming that any incidental use area will be protected with sprinklers and rated if required, there are no points gained or lost here.

CONCLUSIONS:

With the basic addition of smoke detectors throughout the building, a new elevator, and an automatic sprinkler system throughout, this building will meet the minimum mandatory safety scores under Chapter 34 of the IBC for B occupancy.

Appendix K. ORIGINAL BUILDING DRAWINGS

LIST OF DISCREPANCIES

DOCUMENT 128-60311 (1922)

SHEET 1 OF 14	FOUNDATION PLAN
SHEET 2 OF 14	BASEMENT PLAN
SHEET 3 OF 14	FIRST FLOOR PLAN
SHEET 4 OF 14	SECOND FLOOR PLAN
SHEET 5 OF 14	FRONT ELEVATION
SHEET 6 OF 14	RIGHT & LEFT ELEVATIONS
SHEET 7 OF 14	LONGITUDINAL SECTION
SHEET 8 OF 14	REAR ELEVATION
SHEET 9 OF 14	DETAILS
SHEET 10 OF 14	DRESSING ROOM DETAILS
SHEET 11 OF 14	BASEMENT COLUMN & CEILING BEAM PLAN
SHEET 12 OF 14	FIRST FLOOR COLUMN & CEILING BEAM PLAN
SHEET 13 OF 14	SECOND FLOOR COLUMN & CEILING BEAM PLAN
SHEET 14 OF 14	WATER TOWER
SHEET 1 OF 3	DETAIL OF MARBLE STAIRS
SHEET 2 OF 3	DETAIL OF MARBLE STAIRS
SHEET 3 OF 3	DETAIL OF MARBLE STAIRS

DOCUMENT 128-60110 (1941)

SHEET 1 OF 1	FIRST FLOOR REPAIR
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DOCUMENT 128-60236 (UNKNOWN)

SHEET 1 OF 1	STAIR RAIL
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LAMAR BATHHOUSE
DISCREPANCIES BETWEEN
2003 EXISTING CONDITION DRAWINGS
AND
ORIGINAL BUILDING DRAWINGS

Sheet 2 of 14 - Basement

Stairs and structural walls the as existing.
General room layout and partition walls have either changed or been removed over time.

Sheet 3 of 14 - First Floor

There is a door shown on South side of Lobby that does not exist.
Tubs and fixtures in Women's Bath Hall removed in 2003.
Partition walls in Pack Room 102 do not exist.
Storage 105 is not shown as constructed. This area indicates the ghost of a shaft for an elevator.
Front counter in Lobby constructed different than shown.
West side of Women's Pack Room constructed in a different configuration than shown.

Sheet 4 of 14 - Second Floor

General layout of rooms different then constructed.
All stalls removed 200?

Sheet 6 of 14 - Side Elevations

Elevations show basement stairs in different locations then constructed.
Elevations do no match historic basement plan with regards to basement windows and basement stair access.
Elevations show elevator penthouse on roof that was not constructed.

Sheet 7 of 14 - Section

Section shows basement different than constructed.
Section does not match historic basement plan nor historic elevations.

Sheet 8 of 14 - Rear Elevation

Air shaft and chimney shown on East Elevation not existing currently.

Sheet 11 of 14 - CLG & Beam Plan

Indicates opening for elevator that does not exist.

Sheet 12 of 14 - CLG & Beam Plan

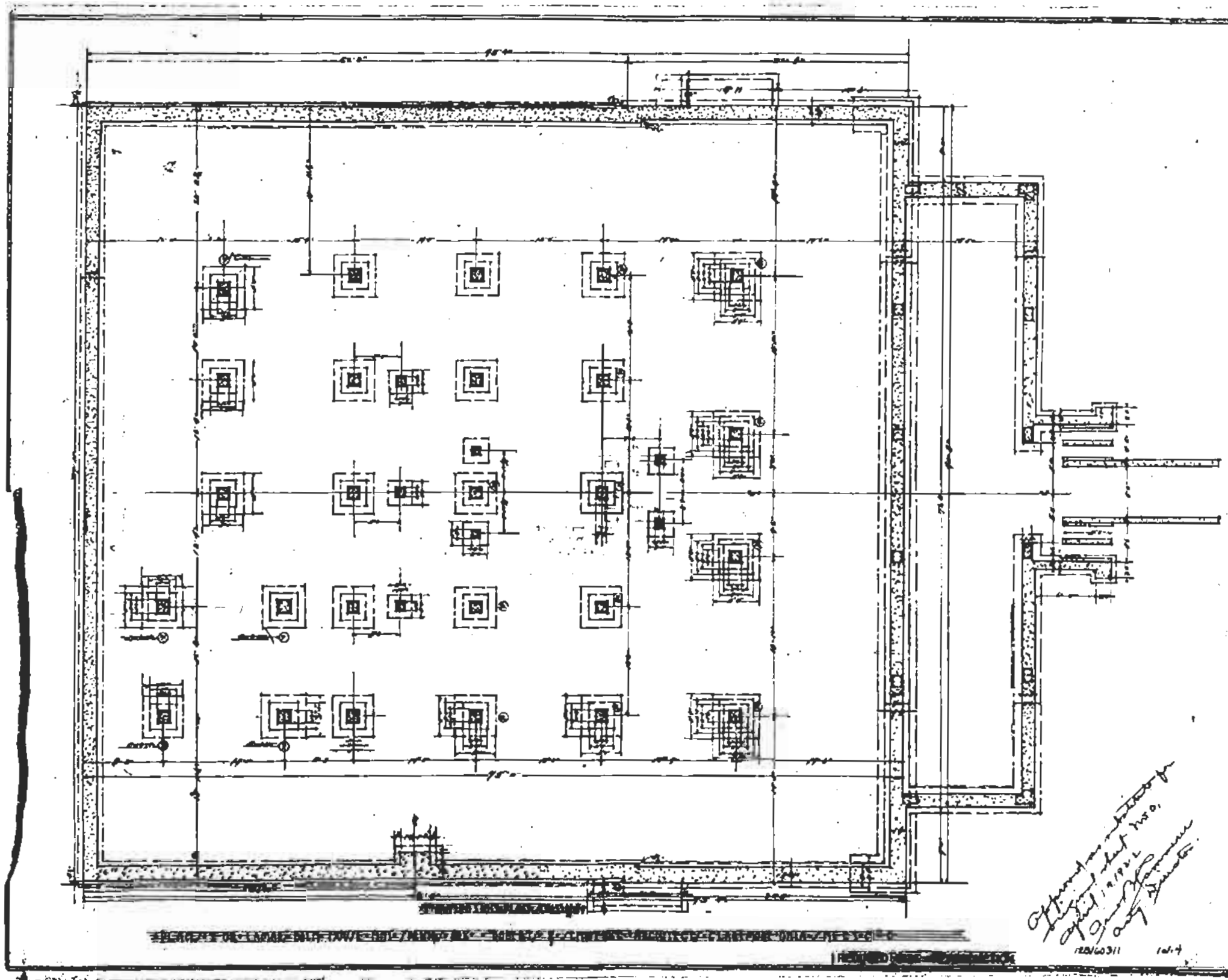
Indicates opening for elevator that does not exist.

Sheet 13 of 14 - CLG & Beam Plan

Indicates opening for elevator that does not exist.

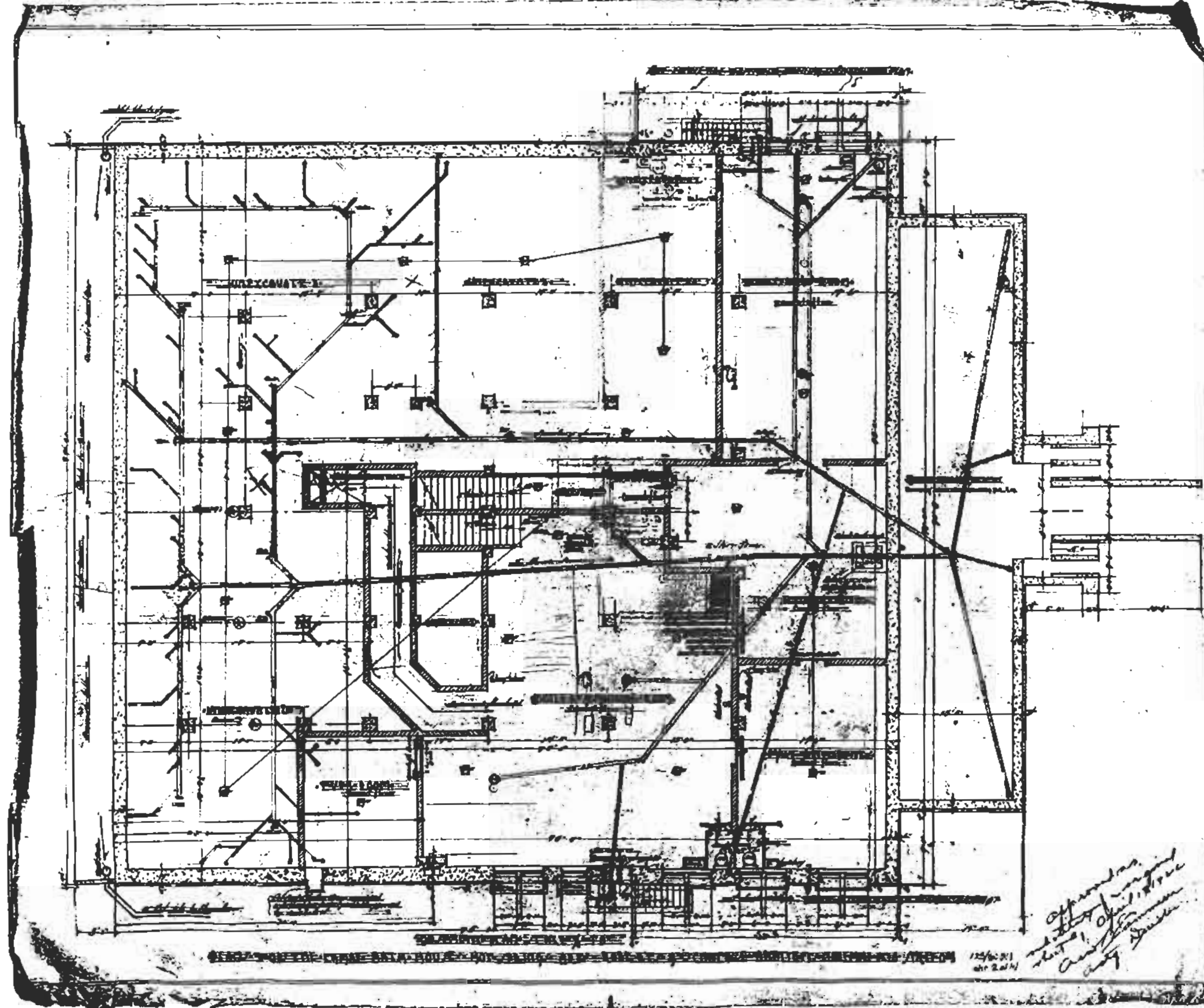
Sheet 14 of 14 - Water Tower

Detail for water tower shown on historic drawings that no longer exists.



Lamar Bathhouse
Hot Springs National Park

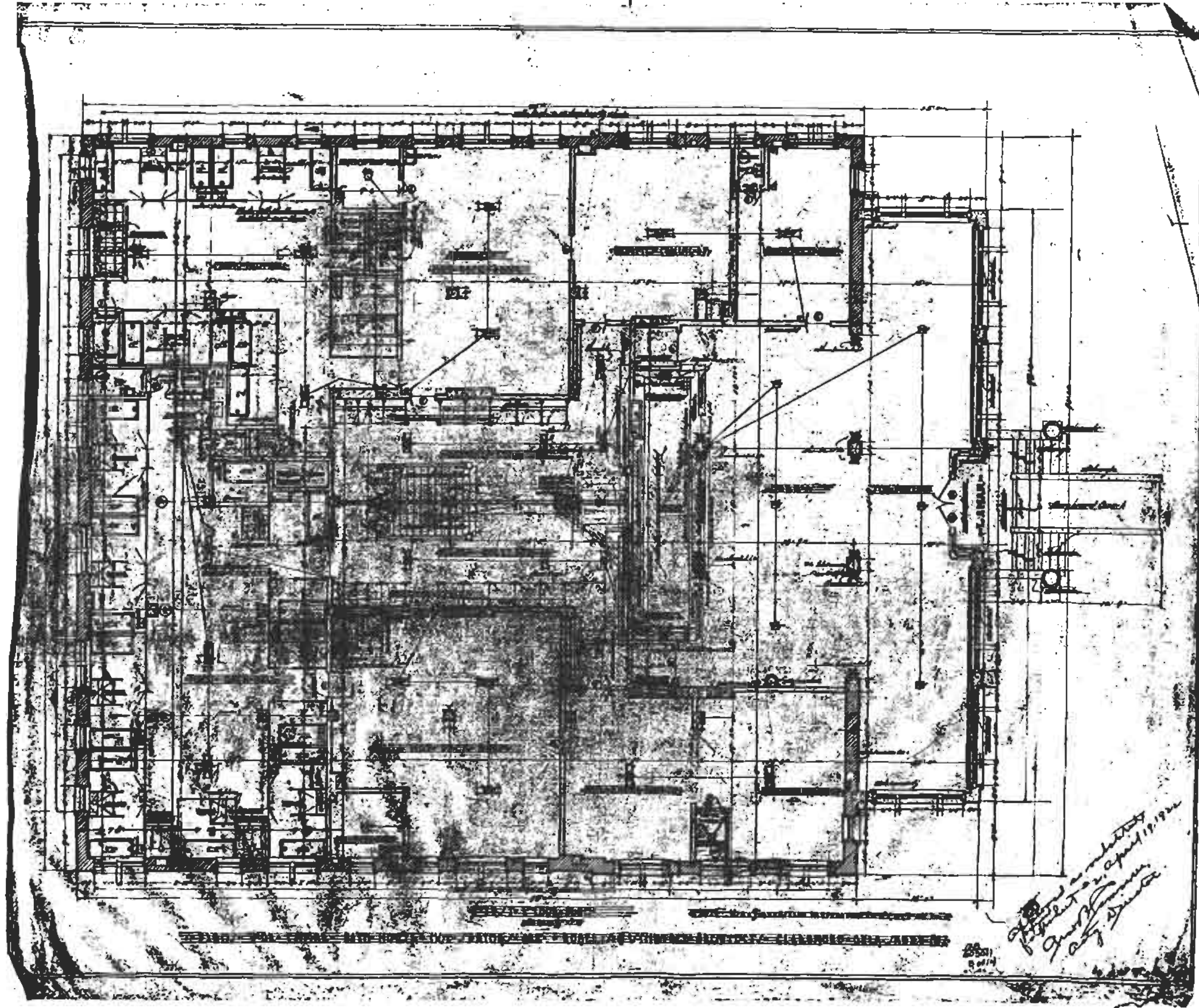
Drawing: 128/60311
Plan: Foundation Plan
Date: 1922
Sheet: 1 of 14



Lamar Bathhouse
Hot Springs National Park

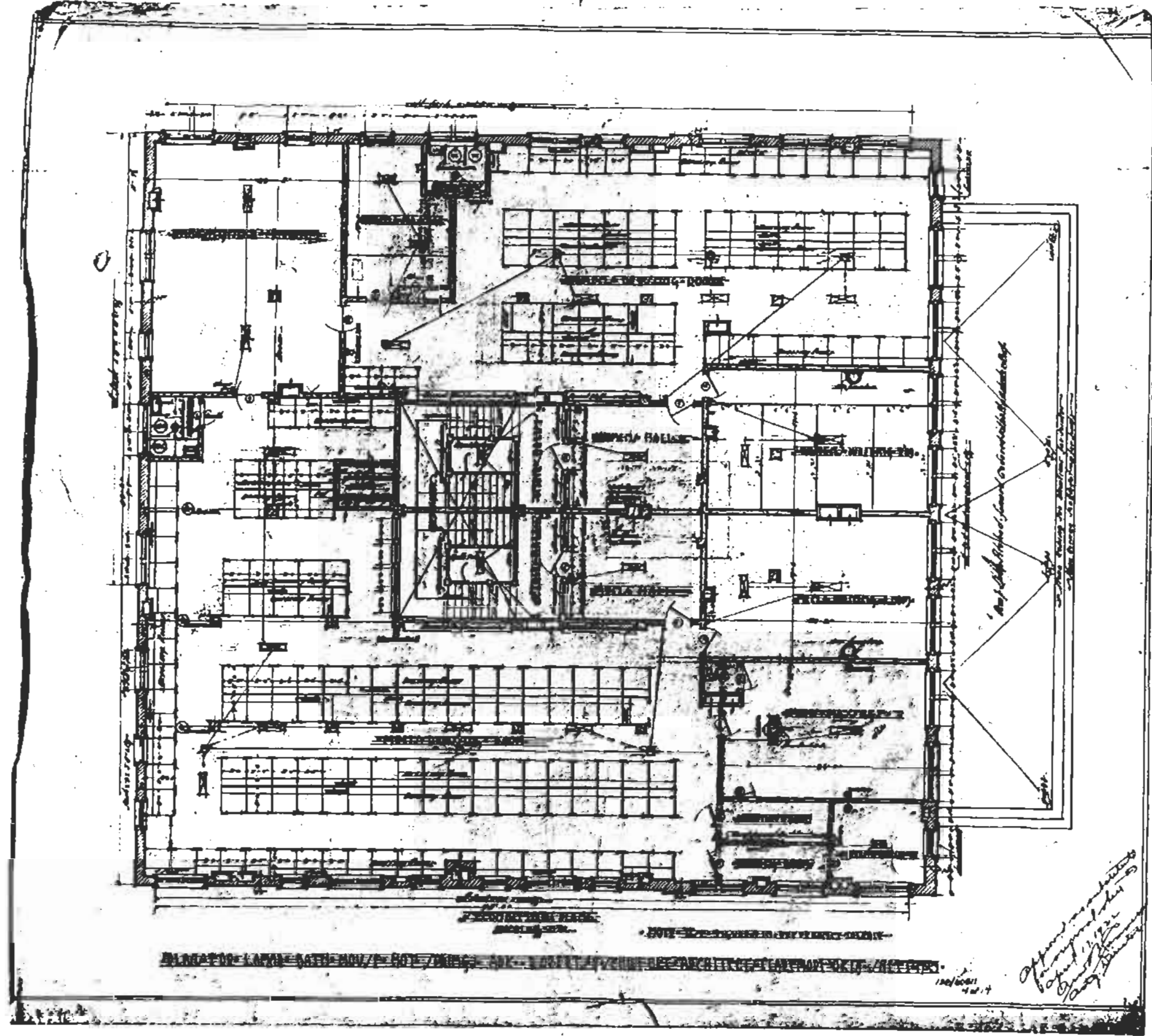
Drawing: 128/60311
Plan: Basement Plan
Date: 1922
Sheet: 2 of 14

Approved by the National Park Service
Director, National Park Service
Washington, D.C.



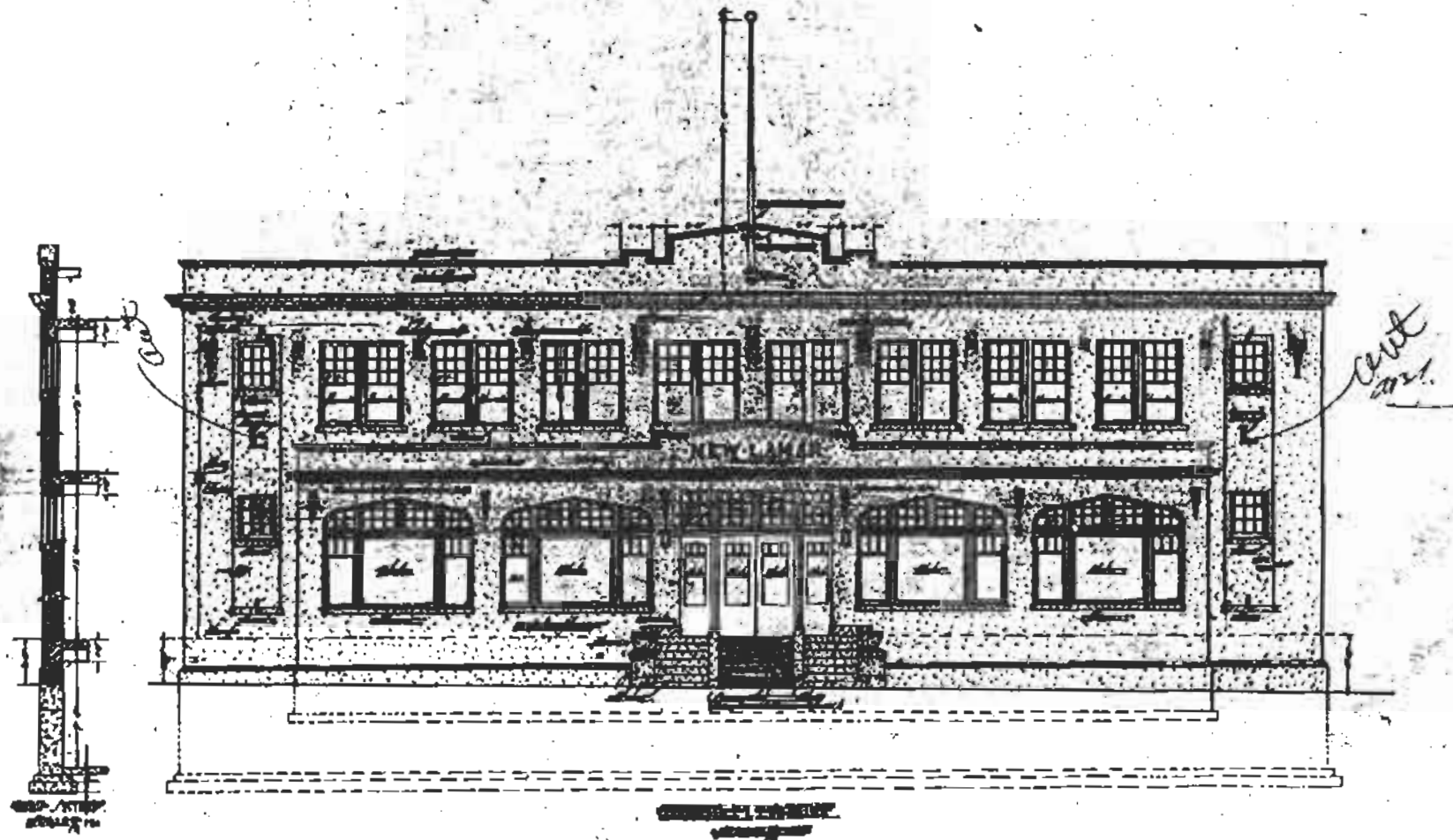
Lamar Bathhouse
Hot Springs National Park

Drawing: 128/60311
Plan: First Floor Plan
Date: 1922
Sheet: 3 of 14



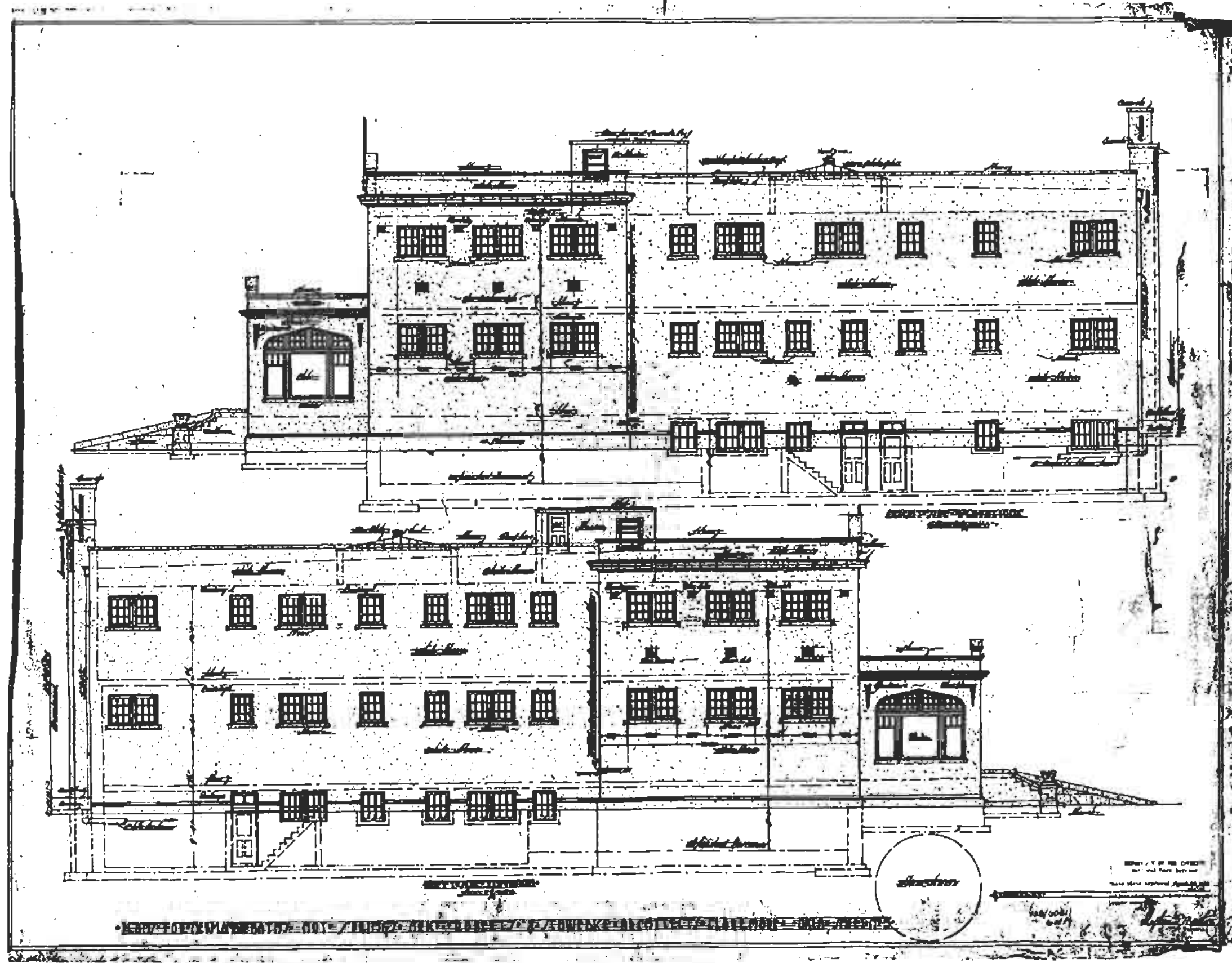
Lamar Bathhouse
Hot Springs National Park

Drawing: 128/60311
Plan: Second Floor Plan
Date: 1922
Sheet: 4 of 14



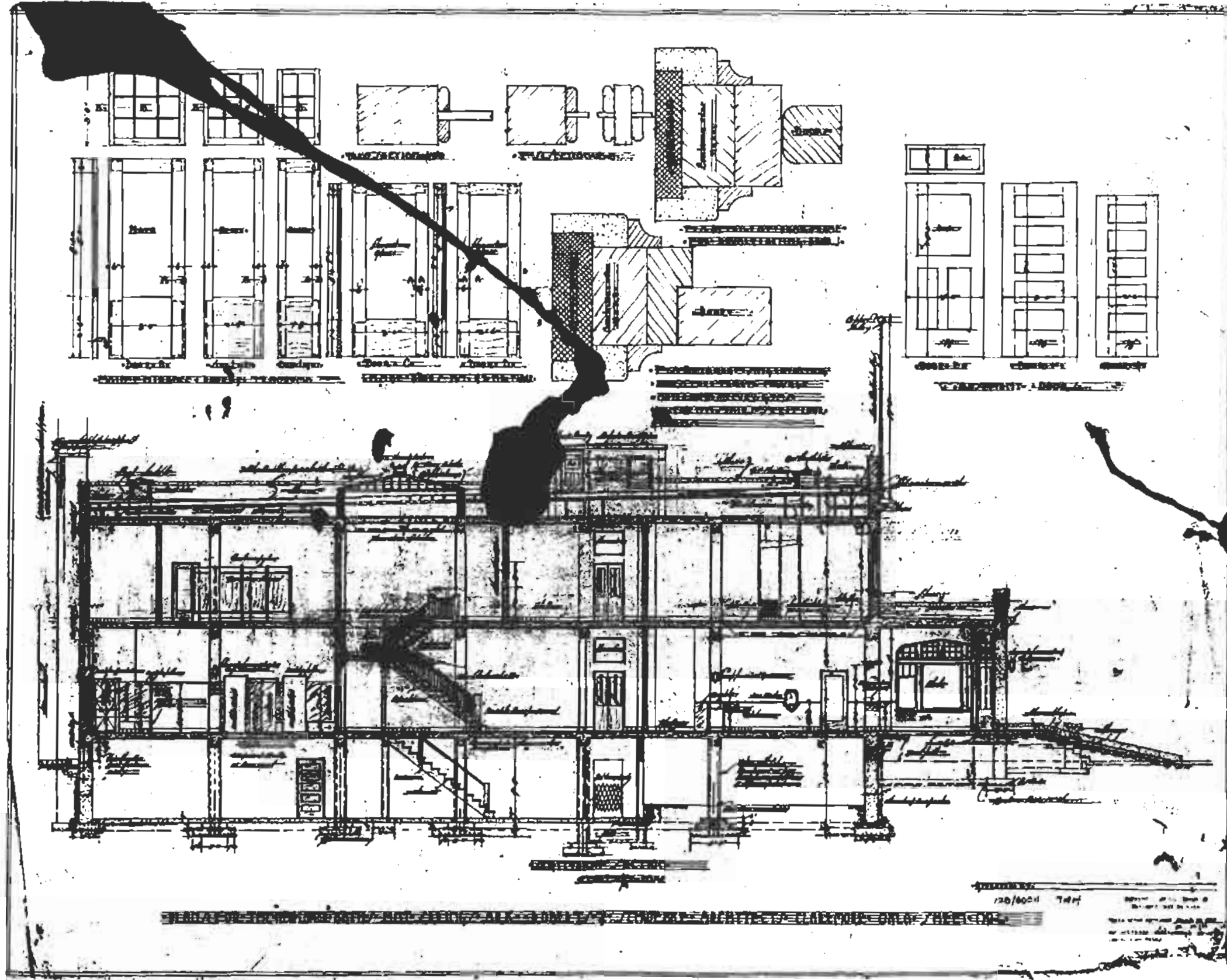
Lamar Bathhouse
Hot Springs National Park

Drawing: 128/60311
Plan: Front Elevation (West)
Date: 1922
Sheet: 5 of 14



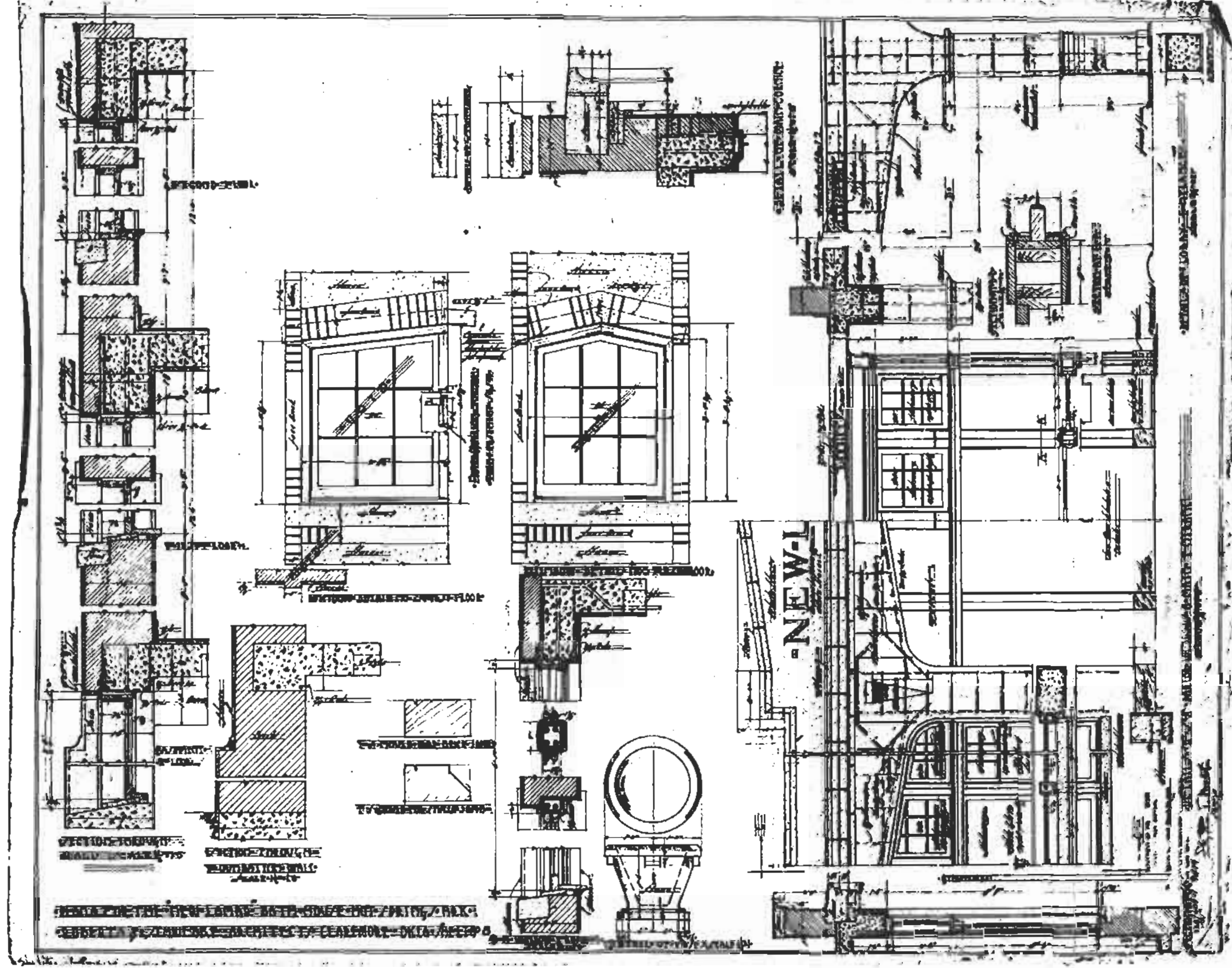
Lamar Bachhouse
Hot Springs National Park

Drawing: 129/60311
Plan: Right & Left Elevation
(North & South)
Date: 1922
Sheet: 6 of 14



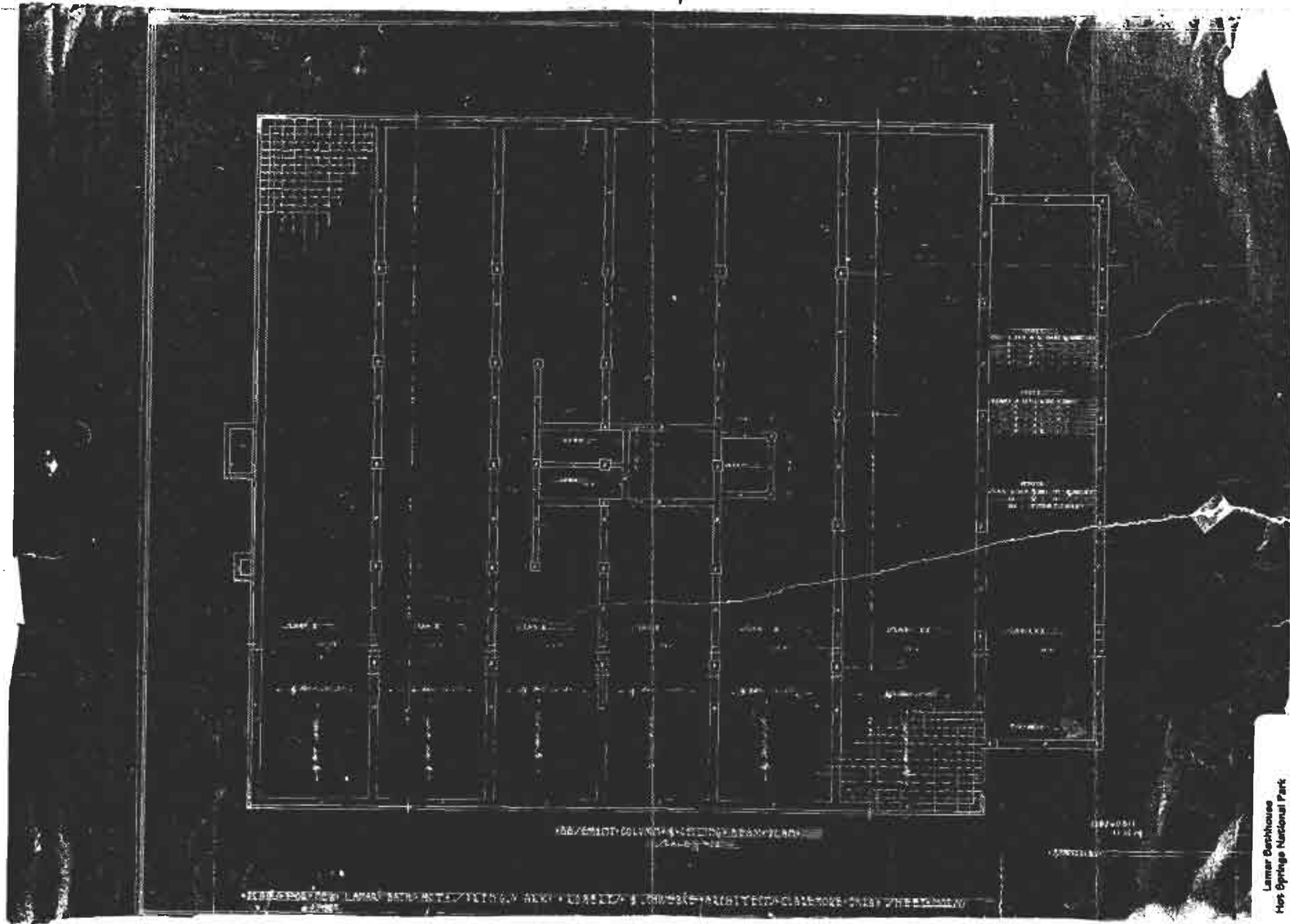
Lamar Bathhouse
Hot Springs National Park

Drawing: 122/60311
Plan: Longitudinal
Date: Section/Doors
Sheet: 1922
7 of 14

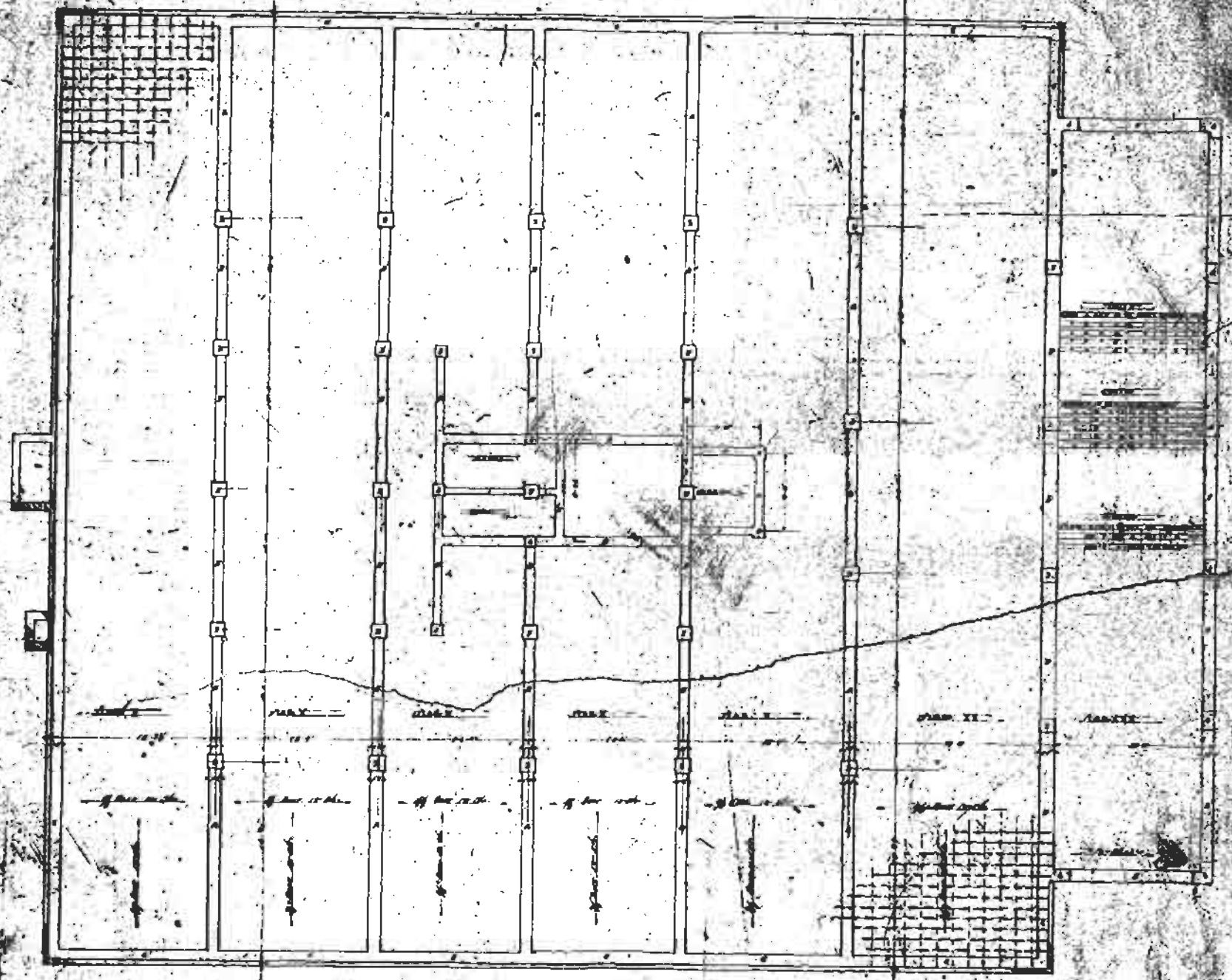


Lamar Bathhouse
Hot Springs National Park

Drawing: 12B/60311
Plan: Details: Sections of
Foundation, Wall Mould/Jamb,
Parlor
Date: 1922
Sheet: 9 of 14



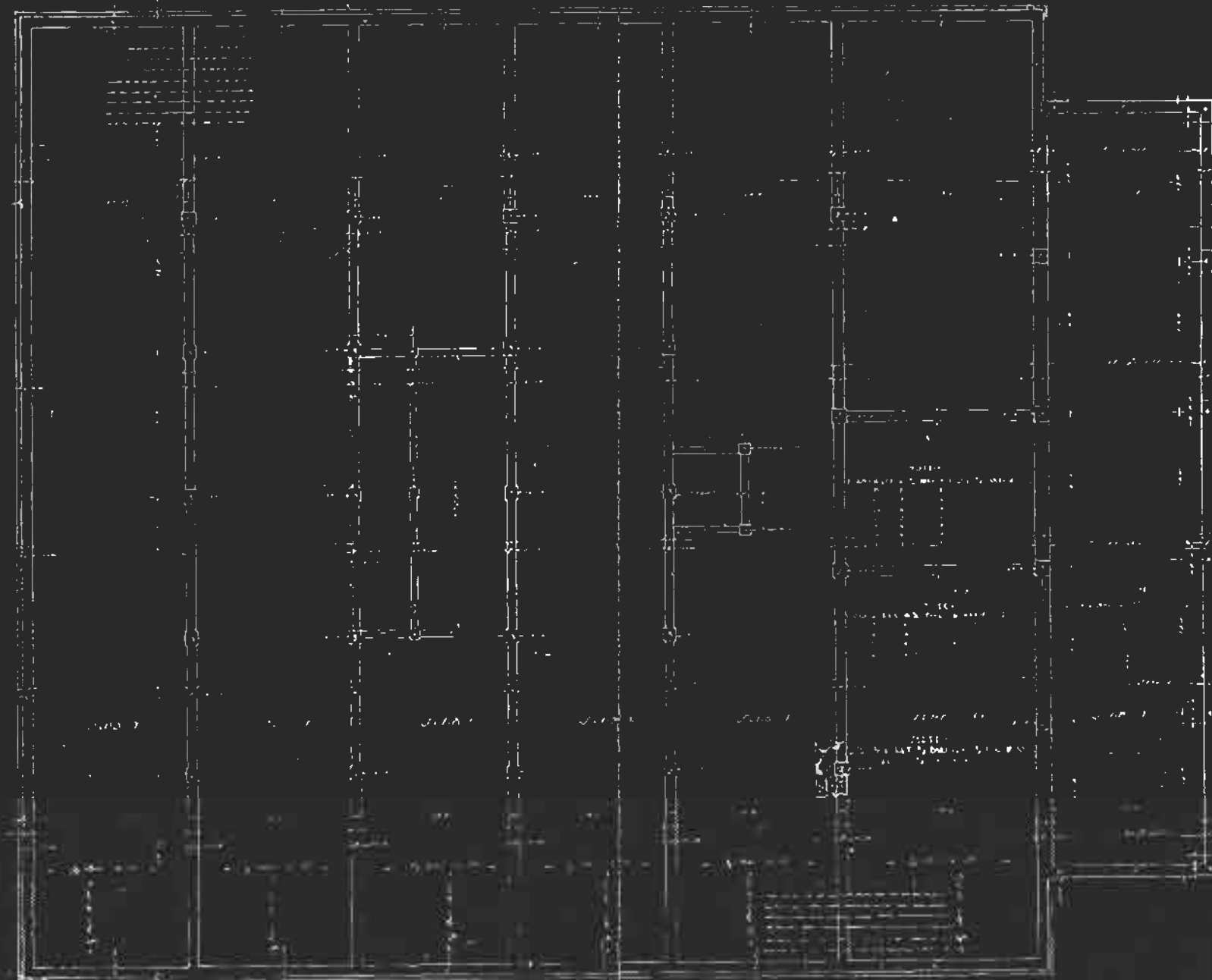
Lamar Bathhouse
Hot Springs National Park
Drawing: 128/6031
Plan: Basement Column
& Ceiling Beam Plan
Date: 1922
Sheet: 11 of 14



REAR PORCH - SEE PLAN - REAR - SEE PLAN

REAR PORCH - SEE PLAN - REAR - SEE PLAN

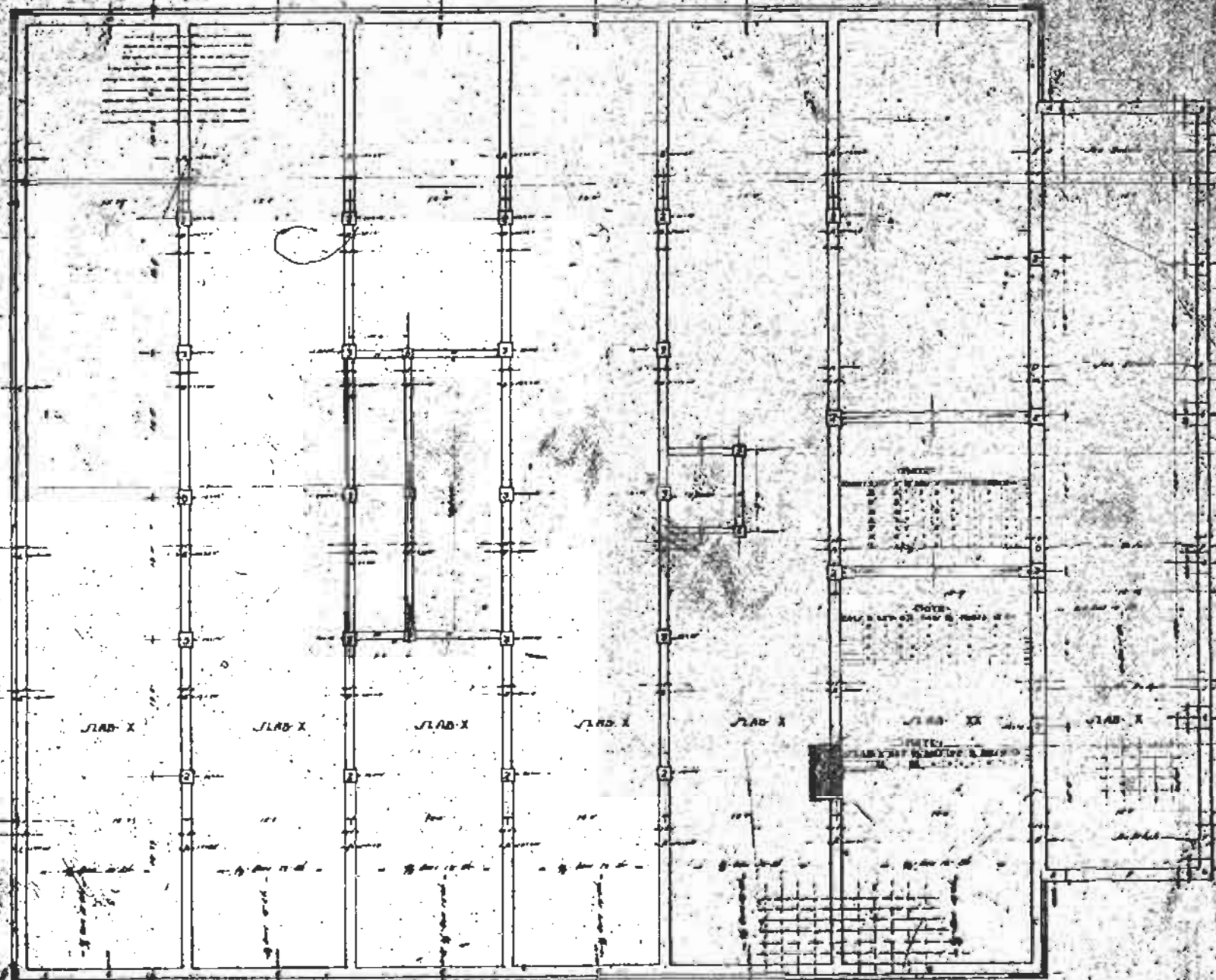
Lamar Building
 Hot Springs National Park
 Drawing
 Plan
 1055-1211
 Architectural Firm
 & Consulting Engineers
 1055-1211
 1055-1211



PLAN OF FLOOR, COLUMNS, BEAMS, CEILING, BEAM PLAN
 LAMAR BATHHOUSE, HOT SPRINGS, ARK.
 DRAWN BY: ROBERT L. SCHWABE, ARCHITECT, CLARKSBURG, CALIF. JANUARY 1922

Lamar Bathhouse
 Hot Springs National Park

Drawing: 1281/60311
 Plan: First Floor Column &
 Ceiling Beam Plan
 Date: 1922
 Sheet: 12 of 14

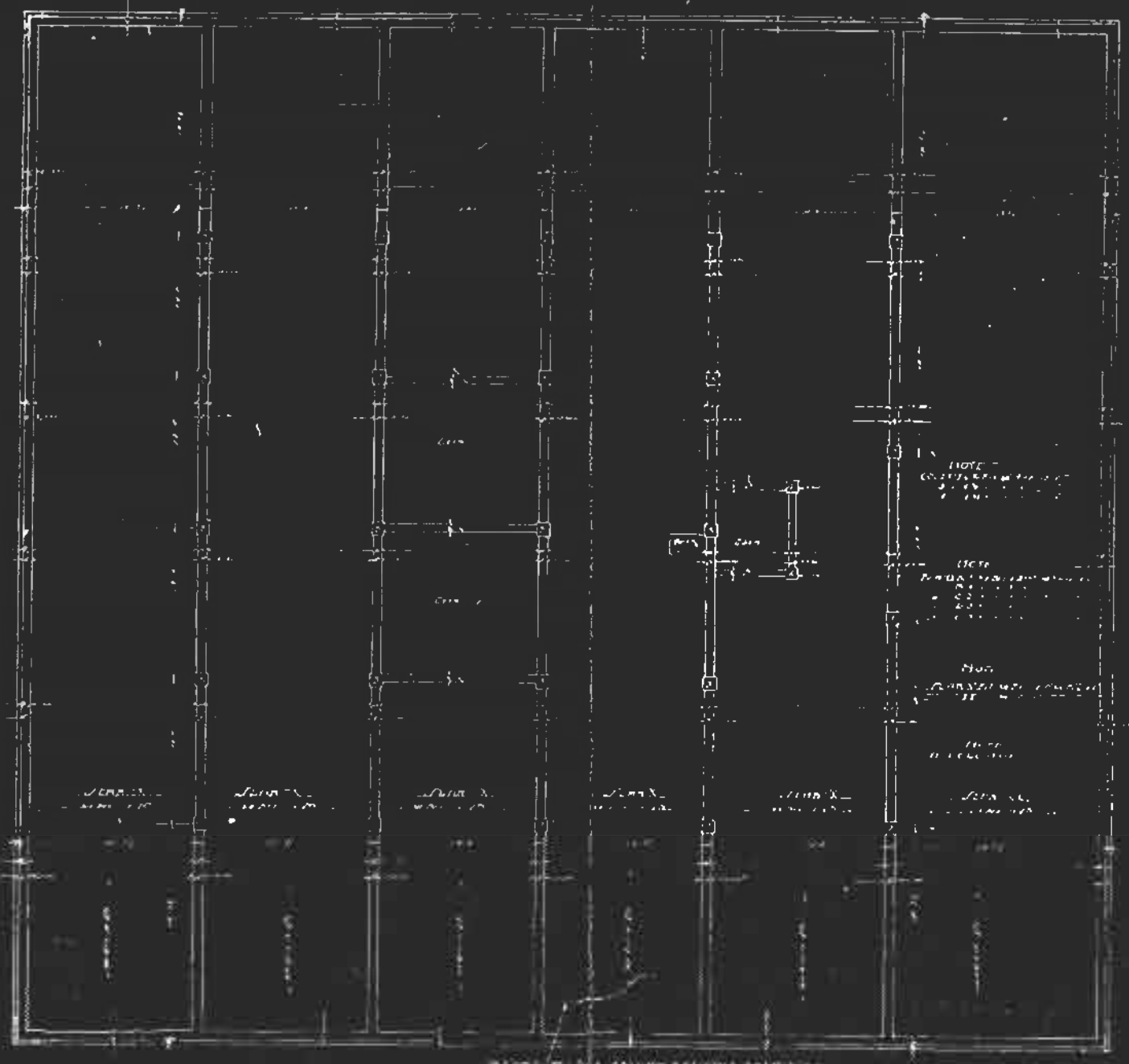


SECTIONAL ELEVATION OF CHIMNEY

REAR PORCH, NEW LAMIN BATH, HOT, DETING, BRK, ROBERT, P. CHWESKE ARCHITECT, CINCINNATI, OHIO, 1920

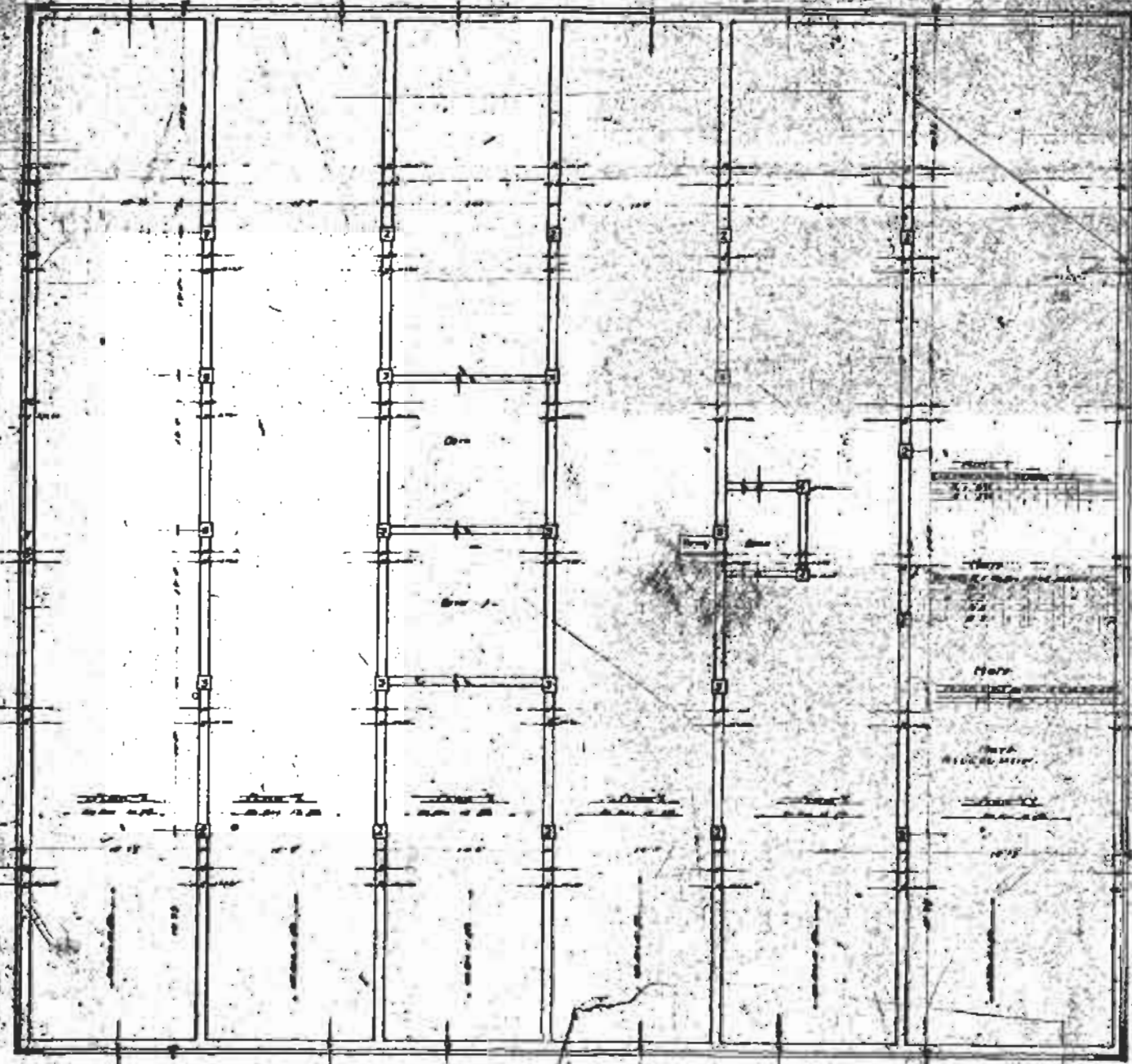
Lower Bathroom
Hot Springs National Park

Drawing
Date
Scale
Sheet
of 1



PLAN FOR THE NEW LAMAR BATHHOUSE HOT SPRINGS, ARIZONA - ROBERT L. TURNER & ARCHITECTS, CHICAGO, ILL. / FEBRUARY 1922

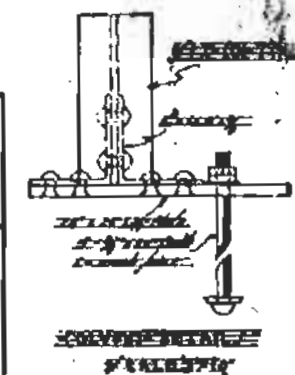
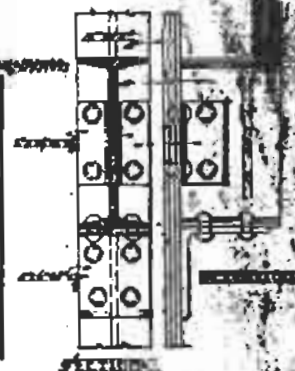
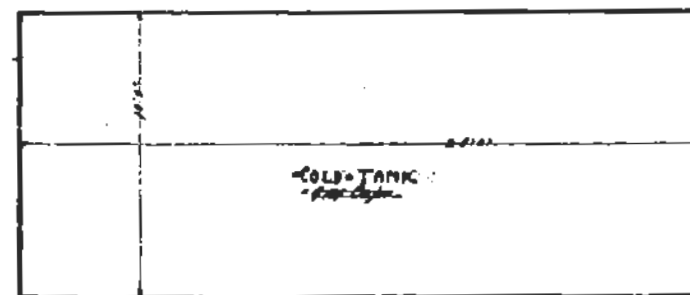
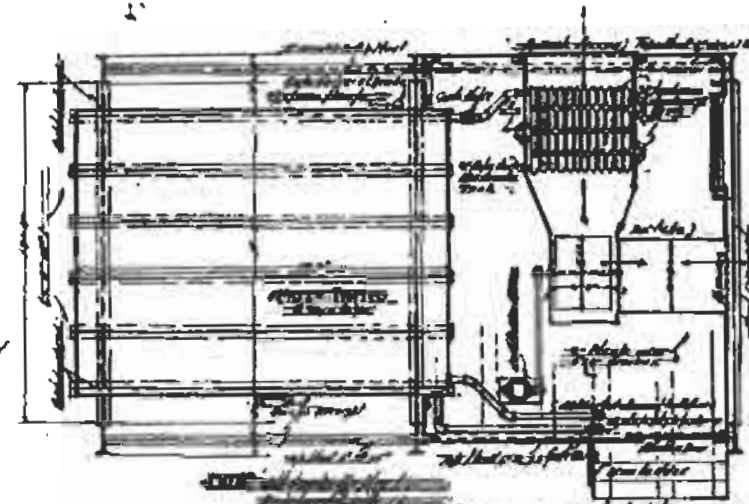
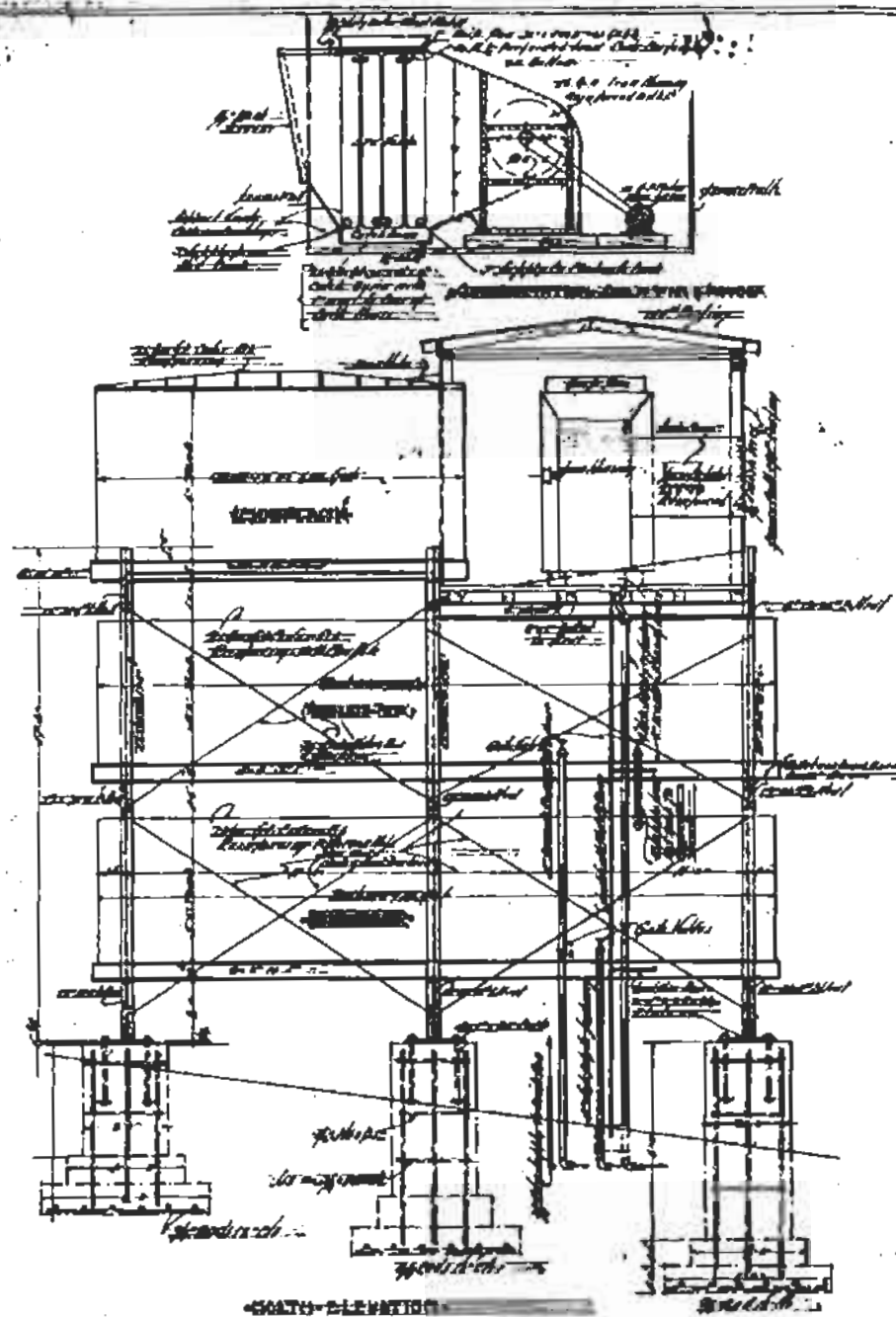
Lamar Bathhouse
Hot Springs National Park
Drawing: 1281600311
Plan: Second Floor Column & Ceiling Beam Plan
Date: (1922)
Sheet: 13 of 14



SECOND FLOOR COLUMN & CEILING DETAIL
SCALE 1/4" = 1'-0"

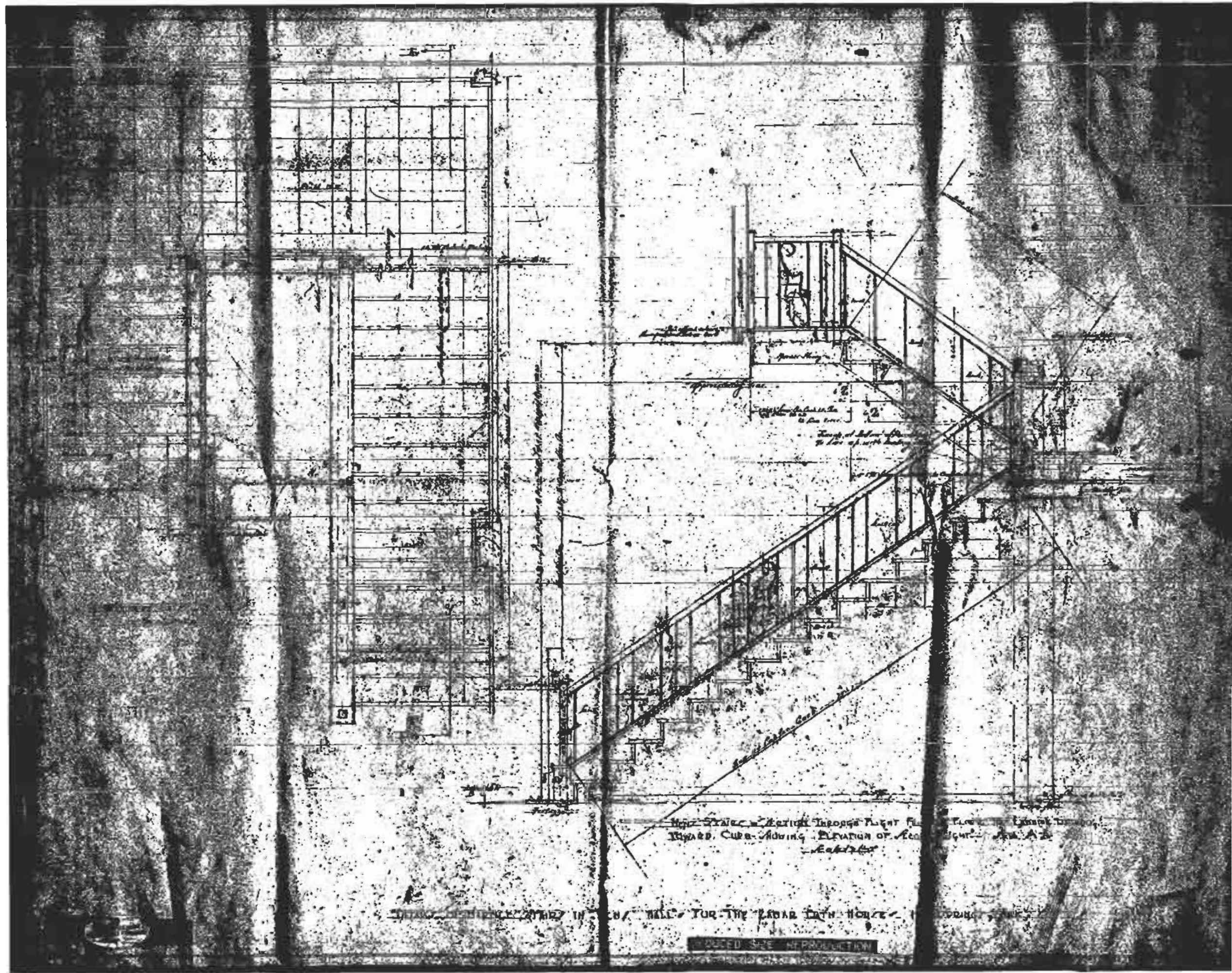
PLAN OF THE NEW LAMAR BATH, HOT-HOT/PRINC. BATH & ROBAT. / THURLOCK ARCHITECTS, CLEVELAND, OHIO - 1912

Lamar Bathhouse
 Hot Springs National Park
 Drawn by: [illegible]
 Plan: [illegible]
 Section: [illegible]
 Detail: [illegible]

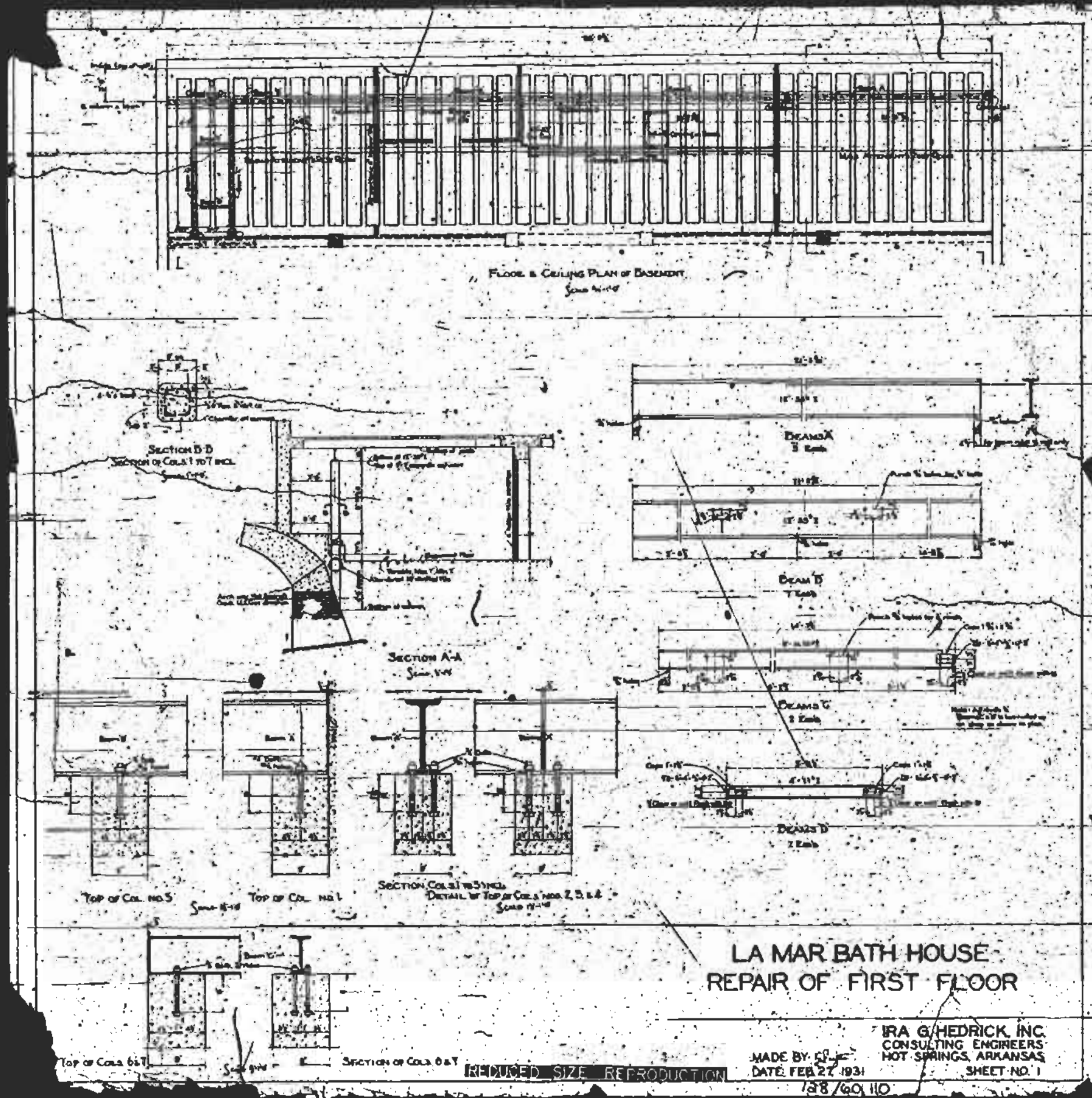


PLAN OF THE TOWER BASE - NOT TO SCALE - SEE ELEVATION FOR DETAILS - SHEET 11-3

Lamar Bathhouse
Hot Springs National Park
Drawing: 126/60311
Plan: H2O Tower/Cooling
System, Hot Tank
Date: 1922
Sheet: 14 of 14



Lamar Bathhouse
 Hot Springs National Park
 Drawing: 1416.1 of 3
 Plan: Detail of Marble Stairs
 Date: circa 1945



Lamar Bathhouse
Hot Springs National Park

Drawing Number: 128-60110

Drawing: First Floor Repair

Date: February 1941

Sheet: 1 of 1

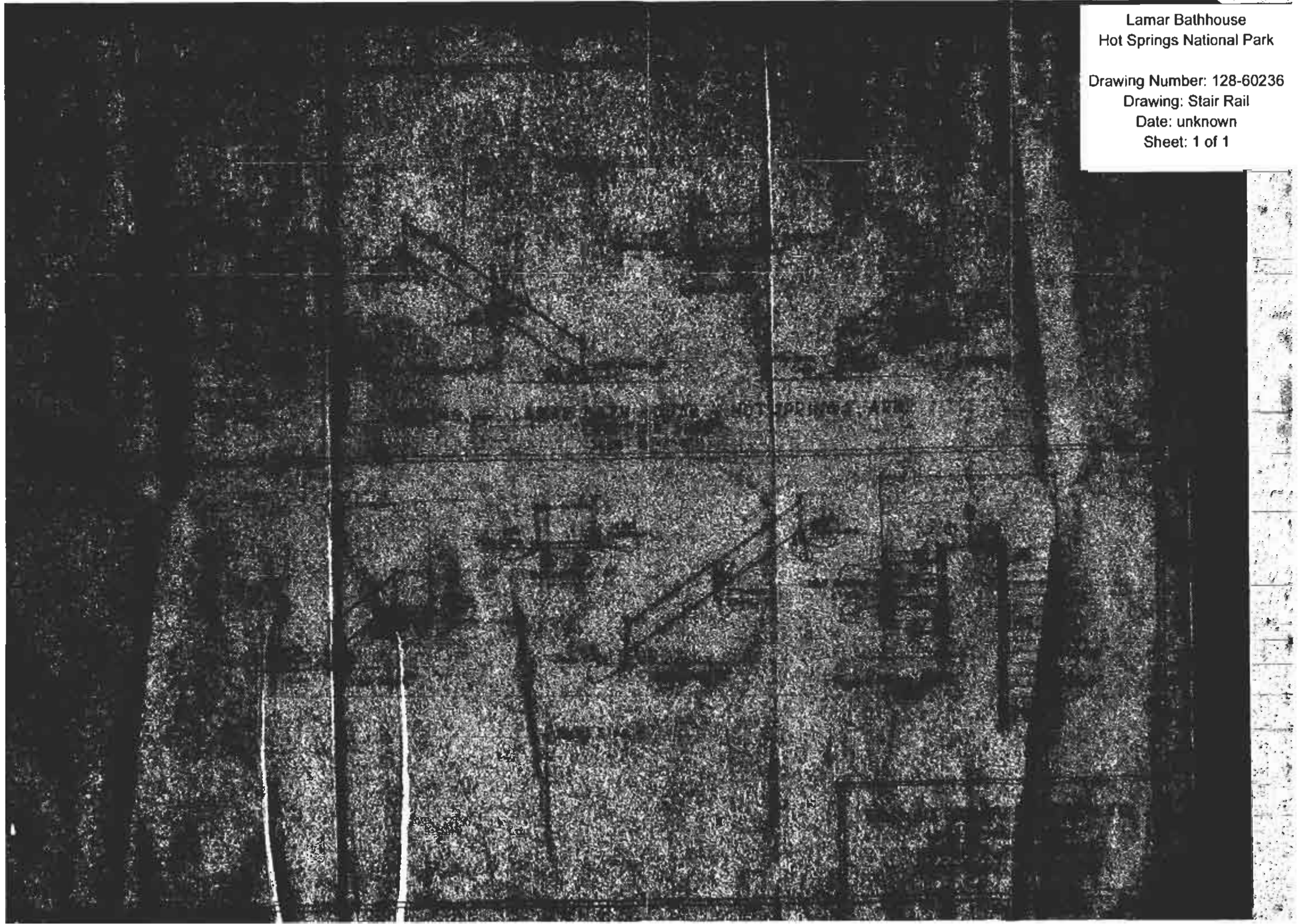
Lamar Bathhouse
Hot Springs National Park

Drawing Number: 128-60236

Drawing: Stair Rail

Date: unknown

Sheet: 1 of 1



Appendix L. MURAL ARTIST – LAMAR BATHHOUSE

MURAL ARTIST – LAMAR BATHHOUSE

Research by Lin Stone, made available in early 2004, reveals information about the artist who created the Lamar Bathhouse murals. An article in The Visitors Bulletin, dated Aug. (c.)1925, stated that, "The decoration was done by J.W. Zelm of Dallas, a native of Copenhagen, who has been doing mural paintings for the last 25 years in the United States." The murals were described as follows: "The mural paintings are worthy of mention. They are a series of six, affording a panorama beginning with seashore, presenting mountain effects and ending with a woodland scene. The paintings are in six arches, two on each of the side walls and two on the front walls, worked in panels."

Lin Stone provides photographs of the Lamar murals and of Zelm, as well as an additional newspaper article on Zelm. All items can be found on Stone's web page, at www.sharey-ourstate.com/Ark/Zelm.htm, along with additional information on the artist and on mural repair. The documents are also printed below. Stone states that Zelm's descendents will be providing other historical documents when they visit the Lamar Bathhouse during the summer of 2004.

THE VISITORS BULLETIN

LAMAR BATH HOUSE BEAUTIFIES LOBBY

Singly fitting in the gorgeous splendor of the spacious lobby of the Lamar bathhouse, patrons of that institution or establishment are enjoying a change due to renovation in connection with walls, ceiling and windows and other openings, the work of interior-decoration having just been executed by an expert who has been engaged in similar labors for many years.

The general effect as to the walls is known as texture, done in Roman travertine, appearing as large blocks of elegant rock of ancient Rome. The ceiling is done in pale cream, stucco, a combination of green, yellow, blue and purple, with purple borders having novelty designs. About the chandeliers, where cauldrons have been changed to coral color, are tape borders with novelty work. The woodwork of the interior front and sides of the lobby have been done in antique bronze, and the floor calls for rich, lustrous yellow gold, draperies on practically all the openings and windows.

The mural paintings are worthy of mention. They are a series of six, affording a panorama beginning with verdant, pre-erect mountain effects and ending with a woodland scene. The paintings are in six arches, two on each of the side walls and two on the front wall, worked in panels.

The decoration was done by J. W. Zeln

of Dallas, a native of Copenhagen, who has been doing mural paintings during the last 25 years in the United States. He recently did interior-decoration for six theatres in Arkansas, and lately embellished the interior and lobby of the Princess Theatre. Jack Manier, manager of the Lamar, realizing the merits of the work which the artist had done, gave him carte blanche, authorizing him to go ahead and do anything which he would deem proper in regard to the embellishment of the bathhouse lobby.

Mr. Manier is ably assisted in the conduct of the affairs of the bathhouse by Mrs. Manier, and also by Mrs. Gertrude Crosby and Mrs. Ida Chapman, all of whom have many friends among both present and former patrons of the Lamar. Mr. Manier has had long and extensive experience in the bathhouse business here.



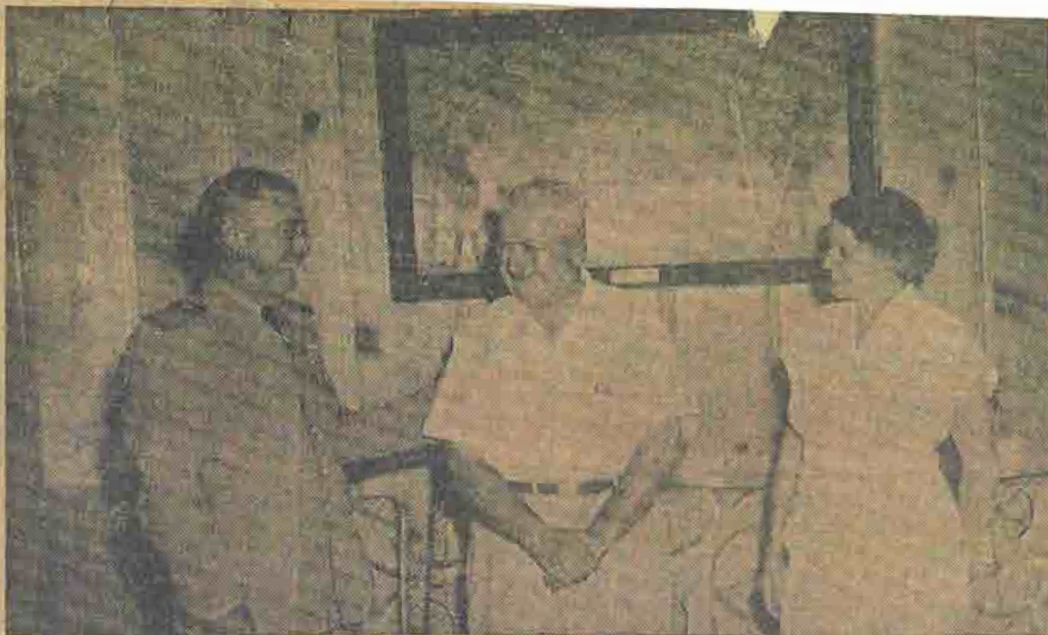
"AT THE HEAD OF THE ROW"

LAMAR BATH HOUSE

UNDER SUPERVISION OF U.S. GOVERNMENT

JACK MANIER, MANAGER

Hot Springs National Park
Arkansas



J. W. ZELM is shown above (center) with Captain and Mrs. William Richter and one of the paintings which Mr. Zelm presented to the United States Navy Mines Countermeasures Station for their recently completed lounge.

Zelm Paintings Presented to USNMCS

Captain and Mrs. W. J. Richter were hosts at a reception which was held recently in honor of J. W. Zelm, who presented two of his paintings which have been hung in the new lounge at the United States Navy Mines Countermeasures Station.

Mr. Zelm, who has gained considerable renown for his work, won the grand award in April this year at the Lynn Haven Lions Club art exhibition.

The two paintings presented to the USNMCS depict the discovery of St. Andrew's Bay and the first ship to fly the American flag. Color and subjects were chosen by Mr. Zelm to blend with the decor of the new lounge.

Mr. Zelm began painting in his native Denmark. After coming to this country, he attended the Pennsylvania Academy of Fine Arts in Philadelphia.

MA-2: Article about the artist, J.W. Zelm. Date unknown. Scan courtesy of www.shareyourstate.com/Ark/Zelm.htm.



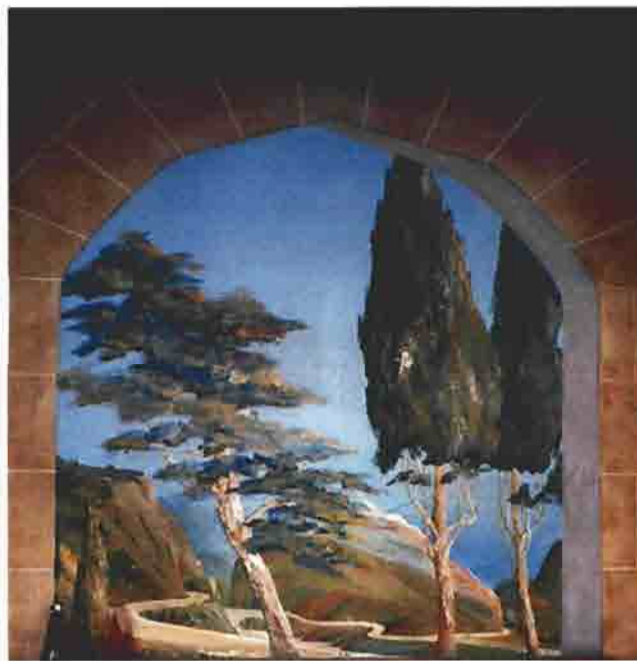
MA-3 and 4: Photos of the artist. Dates unknown. Photos courtesy of www.shareyourstate.com/Ark/Zelm.htm.



MA-2



MA-5: Murals in the lobby of the Lamar bathhouse. Collabortive. 06/03



MA-6: Mural in the lobby of the Lamar bathhouse. Collabortive. 06/03

Appendix M. ORIGINS OF BATHHOUSE NAME

Appendix M. Origins of Lamar Bathhouse Name, Hot Springs National Park, Hot Springs,
Arkansas

The present Lamar Bathhouse replaced an earlier bathhouse by the same name. Both bathhouses were named in honor of the former U.S. Supreme Court Justice Lucius Quintus Cincinnatus Lamar who was Secretary of the Interior when the first Lamar bathhouse was built in 1888.



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; 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 by encouraging stewardship and 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.